OM Manganese Ltd

Title holder (s): OM (Manganese) Ltd (100%)

Operator: As above

Tenement Manager: Australian Mining & Exploration Title Services (AMETS)

EL28843
Helen Springs Project

Annual report for period
2nd March 2012 to 1st March 2013

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Target Commodity: Manganese

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Abstract

Exploration activity on EL28843 during Year 1 (2012/2013) included access track repair and maintenance, RC exploration drilling and rehabilitation of all costeans and remaining RC drill collars.

Contents

Electronic file list

File Name	File type	Content
EL28843_2013_A_01.pdf	pdf	This report
EEL28843_2013_A_02_collars	txt	Drillhole collar data
EL28843_2013_A_03_assays	txt	Drillhole sample data
EL28843_2013_A_04_geol_logs	txt	Drillhole geology log data
EL28843_2013_A_05_DHsurvey	txt	Drillhole downhole survey data
EL28843_2013_A_06_logging_codes	Pdf	Drillhole geology logging codes

1 Introduction

EL28843 was granted to OM Manganese Ltd (OMM) on 2nd March 2012 and consists of 39 blocks covering an area of 126.1 square kilometres. The EL area was initially applied for as a Substitute Exploration Licence over the area previously covered by EL23495 and EL23698 (both since expired) and is referred to by OMM as the Helen Springs Project.

The southwest corner of EL28843 is located 3 km due east of Stuart Highway and is located entirely within the Helen Springs pastoral station. Access is via a station track heading southeast from the Helen Springs homestead and then east, following McKinlay Creek to an area referred to as Milla Milla paddock.

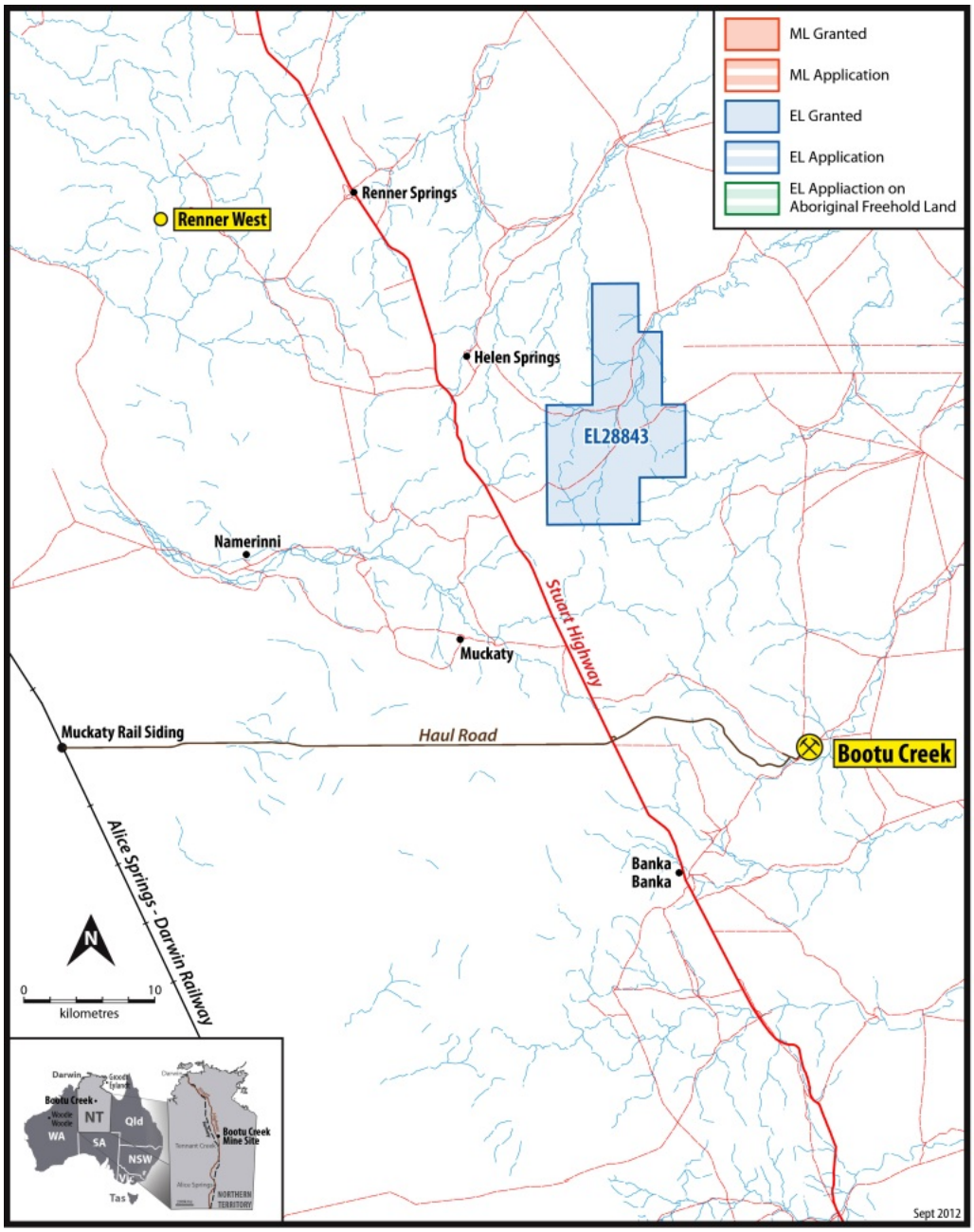

Figure 1. Location plan for EL28843 and access tracks.

2 Geology

The geological map published by the NTGS (Hussey *et al*, 2001) shows the eastern and northern areas of EL28843 (previously covered by EL23495) to be dominated by a north-south striking sandstone and dolomite formations interpreted to be part of the Tomkinson Group (Bootu and Attack Creek Formations) with rocks belonging to the Carruthers Formation (Namerinni Group) and Gleeson Formation (Renner Group) located to the west and east respectively.

Mapping along the western and eastern margins of the Bootu and Attack Creek Formations indicate that these units form an anticline with a possible shallow southerly plunge. The sandstone is largely eroded in the northern part of the licence and a recessive valley has formed, hosting McKinley Creek.

RC drilling within the valley has intersected minor, relatively shallow manganese mineralisation within dolomites of the Attack Creek Formation, with overlying manganiferous gravels at the interface with shallow alluvial cover (see Figure 2). This suggests close proximity to an eroded contact between Bootu Formation (sandstone) and Attack Creek Formation (dolomite and siltstone), the contact which hosts the strata-bound manganese ore horizon mined at Bootu Creek, located 30km to the south.

The western and southern part of EL28843 (previously covered by EL23698) is dominated by rocks of the Palaeoproterozoic Namerinni Group and the Mesoproterozoic Renner Group, overlain by minor occurrences of Cambrian aged Helen Springs Volcanics and Cretaceous sediments.

The potentially prospective Proterozoic rocks are covered in part by Cenozoic alluvium, colluvium and aeolian sand. There are no identified manganese outcrops within this area of the exploration licence.

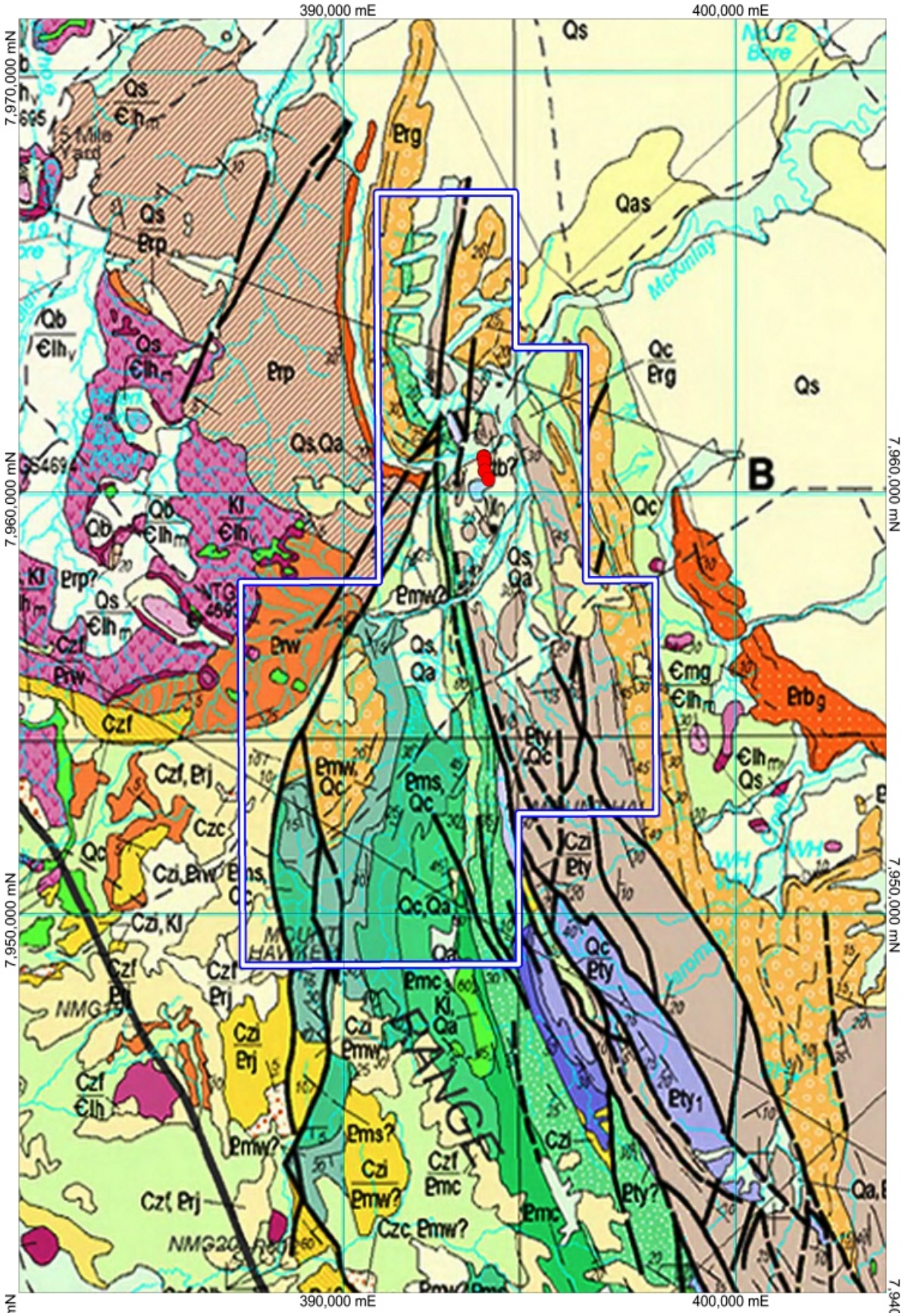

Figure 2. Geology from the NTGS 1:250k Helen Springs sheet, *Hussey et al 2001, with >15% manganese drill intersections shown in red dots.*

3 Exploration Activity

EL28843 exploration activity for 2012/2013 included

- Access track maintenance and drill site preparation
- RC exploration and infill drilling at Helen Springs prospect
- Rehabilitation of 2 costeans
- Rehabilitation of all RC drill collars

3.1 Previous Exploration Activity

Exploration activity conducted on the two previous OMM exploration licences (EL23495, EL23698) includes,

- Ground EM surveys, excavation mapping and sampling of two costeans, and 12 hole RAB drill program by Neil Scriven, owner of EL23495 pre 2006/07.
- Interpretation and report on satellite borne ASTER spectral study by Amit Eliyahu, 2006/07.
- Helicopter borne SkyTEM geophysical survey, Ikonos satellite imagery and 18 hole RC drill program, 2007/08.
- Aerial aeromagnetic and radiometric geophysical survey by GPX, aerial photography and rectification, 2008/09.
- 1:20,000 scale regional alteration and structural mapping by Tim Blake and a 46 hole RC drill program, 2009/10.
- Gradient Array IP (GAIP) ground survey (1,200m x 700m) on 100m spaced east-west lines covering the Helen Springs prospect area, and one follow up dipole-dipole IP (DDIP) survey, 2010/2011.

Details of above exploration activities are discussed in the respective final technical reports for EL23495 and EL23698.

Follow up RC drill testing of the GAIP anomalies generated in 2011 (see Figure 3) was delayed pending grant of EL2884 in March 2012.

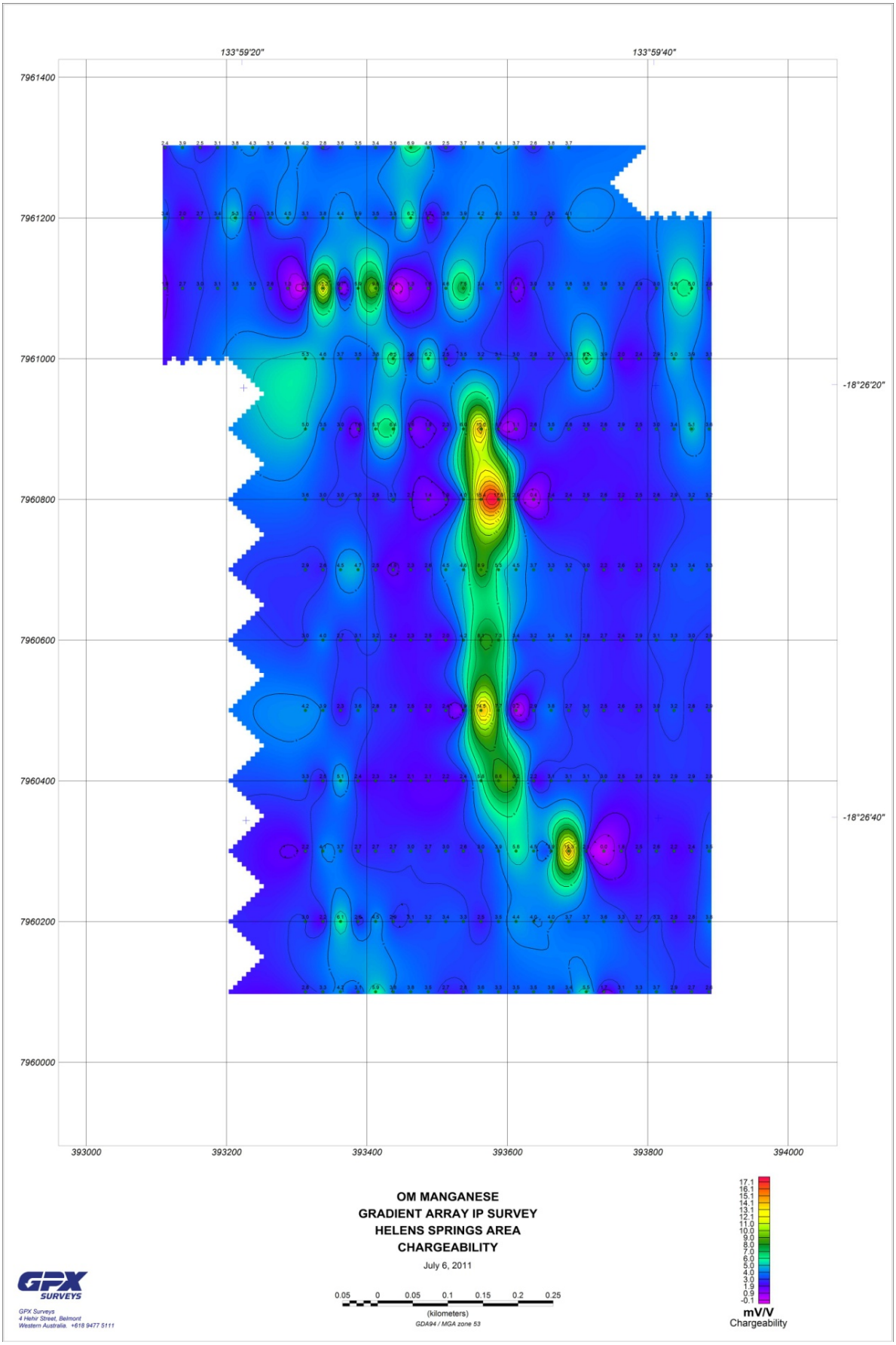

Figure 3. GAIP chargeability image for Helen Springs prospect

3.2 RC Drilling

A total of 18 RC holes (630m) were drilled on EL28843 during the reporting period.

The 2012 RC drilling program at Helen Springs Prospect, testing anomalies outlined in the 2011 Gradient Array IP ground survey and infill drilling adjacent to earlier RC drill intersections, met with limited success.

Infill drilling of the main north-south GAIP anomaly located between 7960800mN and 7960900mN confirms a narrow, steeply dipping moderate grade north-south striking manganese pod extending to a maximum depth of around 20m, with a strike length of less than 100m. Best intersections include 9m @ 24.8% Mn (from 1m), 3m @ 35.5% Mn (from 6m), 2m @ 23.7% Mn (from 9m) and 2m @ 24.1% Mn (from 15m).

Weaker north-south anomalies at 7960500mN and 796300mN returned only near surface manganiferous gravels with a best intersection of 2m @ 15.8% Mn (from surface).

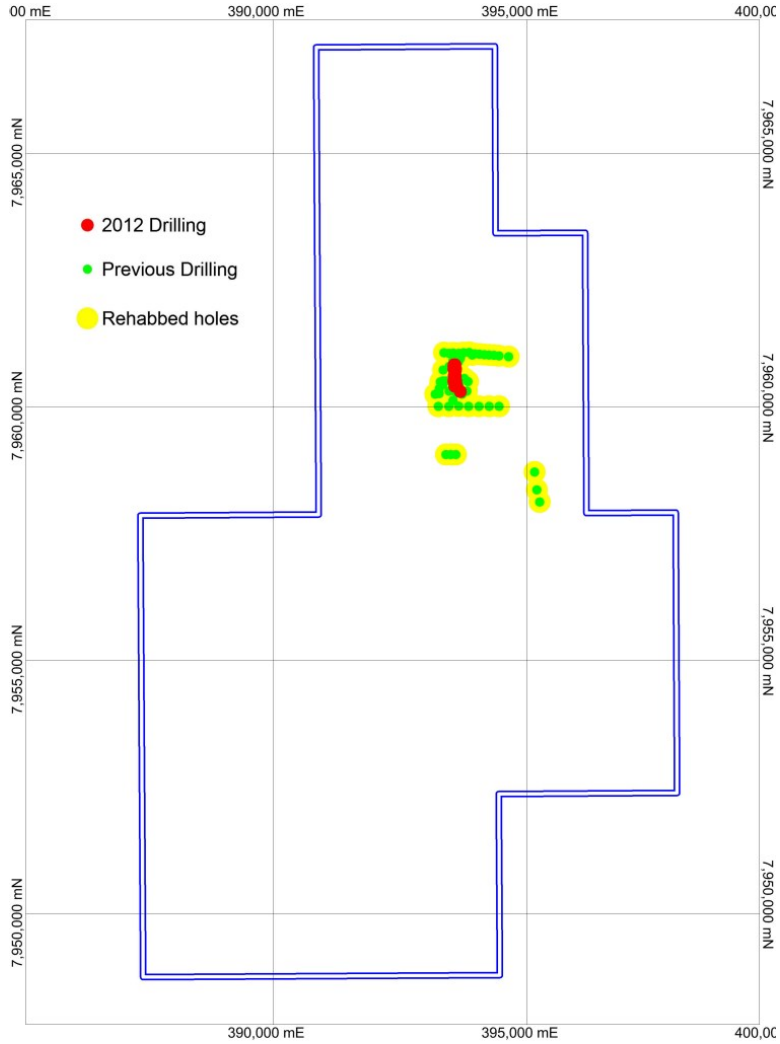

Figure 4. Plan of Helen Springs RC drill collars, holes completed in 2012 in red.

3.3 Rehabilitation

The 2012 rehabilitation program for EL28843 successfully completed rehabilitation of two costeans originally excavated by Neil Scriven in 2007. Rehabilitation consisted of backfilling the two costeans with excavated waste rock and replacing top soil.

Figure 5. Two backfilled costeans, north and south costeans respectively (originally excavated by Neil Scriven in 2007).

Rehabilitation of RC drill collars included 18 holes dating from pre-2012 and the 18 holes drilled in 2012. All drill collars have now been rehabilitated with concrete plugs placed 30cm below ground level, buried, plastic sample bags (rare) disposed of via Bootu Creek mine site waste management and drill pads raked.

In addition to the EL28843 program, rehabilitation was also completed on the 9 RC drill collars located on the adjacent (since expired) EL25042.

4 Conclusions and Recommendations

The Helen Springs Prospect was originally identified from NTGS mapping of manganese float adjacent to McKinlay Creek. Two costeans excavated by Neil Scriven in 2007 exposed around 1-2m of manganiferous gravel covered by a thin veneer of sand.

Several phases of exploration drilling and an IP ground survey subsequently outlined areas of low grade manganiferous gravel and one small pod of manganese mineralisation located adjacent to the northern costean.

Gradient Array IP identified one significant north-south anomaly, around 100m in strike length (7950800-7950900mN). Closely spaced RC drilling has since outlined a narrow, steeply dipping moderate grade, north-south striking manganese pod extending to depth of around 20m. This mineralisation is 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 pod is restricted by adjacent drilling.

Most holes drilled at the Helen Springs Prospect intersect 1 to 3m of alluvium (with occasional manganiferous gravels) before drilling into dolomite. The manganiferous gravels are interpreted as an eroded remnant of a mineralised contact between the Bootu Formation (sandstone) and underlying Attack Creek Formation (dolomite and siltstone), the host contact for strata-bound manganese mineralisation at the Bootu Creek mine site, located 30km to the south.

No further drilling is currently planned within the immediate vicinity of the Helen Springs Prospect. Future exploration will concentrate on identifying other manganese prospects within EL28843.

5 References

Hussey, K.J., Beier, P.R., Crispe, A.J., Donnellan, N., and Kruse, P.D., (2001) Helen Springs, Northern Territory. 1:250,000 geological map series and explanatory notes, SE53-10 (Second Edition) *Northern Territory Geological Survey*

Blake, T. S. (2010), Report following 1:20,000 Scale Mapping of the Helen Springs and Renner Springs Tenement Areas (Northern Territory). *Unpublished report for OM (Manganese) Ltd.*