



Titleholder	Auvex Georgina Pty Ltd	
Operator	Auvex Manganese Ltd	
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Corporate Author	Auvex Manganese Ltd	
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Contact Details	Chris Bryans, Auvex Manganese Ltd	
Postal	Level 4, Kirin Centre 15 Ogilvie Road	
	Mt Pleasant WA 6153	
Fax	08 9316 4448	
Phone	08 9317 9700	
Email for further Technical Details	chris.bryans@auvex.com.au	
Email for Expenditure	chris.bryans@auvex.com.au	



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1. EXECUTIVE SUMMARY

EL27315 is part of the Auvex Georgina PL Georgina Basin Project, located in the southern Georgina Basin. The Project area is prospective for base metals, manganese and phosphate mineralization.

302 of the 372 graticule blocks which constitute EL27315 were nominated for relinquishment 9 March 2012.

During the reporting period exploration activities within the relinquished portion of EL27315 included interpretation of the available geological and geophysical data, the interpretation of satellite imagery, reconnaissance field visits including outcrop sampling for element analysis, the development of exploration models and the definition of exploration targets.

The exploration activities did not locate any significant exploration targets within the relinquished portion of the lease.

2. INTRODUCTION

Auvex Manganese Ltd currently operates eleven Exploration Licences, including EL27315, as the Georgina Basin Project, located in the southern portion of the Georgina Basin. The tenements are held by Auvex Georgina Pty Ltd (a subsidiary of Auvex Manganese Ltd) and South Boulder Mines Ltd. The Project area is prospective for base metal, manganese and phosphate mineralization.

3. LOCATION AND ACCESS

The Project area is situated approximately 400 kilometres east north-east of Alice Springs, in the southern Georgina Basin (Figure 1). Access to the Project area is gained via a network of station tracks and fences extending from the Plenty Highway.

EL27315 was granted 15 January 2010, and consisted of 372 minute graticule blocks. 302 blocks have been nominated for relinquishment on 9 March 2012 (being the subject of this report), leaving 70 blocks retained (Figure 2).

Tenement	Blocks for Relinquishment	Blocks to be Retained
EL27315	SF53-1788 abcdefghjklmnopqrstuvwxyz	SF53-1860 abcdefghjklmnopqrstuvwxyz
	SF53-1789 abcdefghjklmnopqrstuvwxyz	SF53-1861 abcdefghjklmnopqrstuvwxyz
	SF53-1790 abcdefghjklmnopqrstuvwxyz	SF53-1932 abcdefghjk
	SF53-1791 abcdefghjklmnopqrstuvwxyz	SF53-1933 abcdefghjk
	SF53-1792 abcdefghjklmnopqrstuvwxyz	
	SF53-1793 abcdefghjklmnopqrstuvwxyz	(70 Blocks)
	SF53-1794 abcdefghjklmnopqrstuvwxyz	
	SF53-1795 abcdefghjklmnopqrstuvwxyz	
	SF53-1796 aflqv	
	SF53-1862 abcdefghjklmnopqrstuvwxyz	
	SF53-1863 abcdefghjklmnopqrstuvwx	
	SF53-1864 abcdefghjlmnoqrst	
	SF53-1865 abcde	
	SF53-1866 abcde	
	SF53-1867 abcde	
	SF53-1868 a	
	SF53-1934 abcdefghjk	
	SF53-1935 abcfgh	

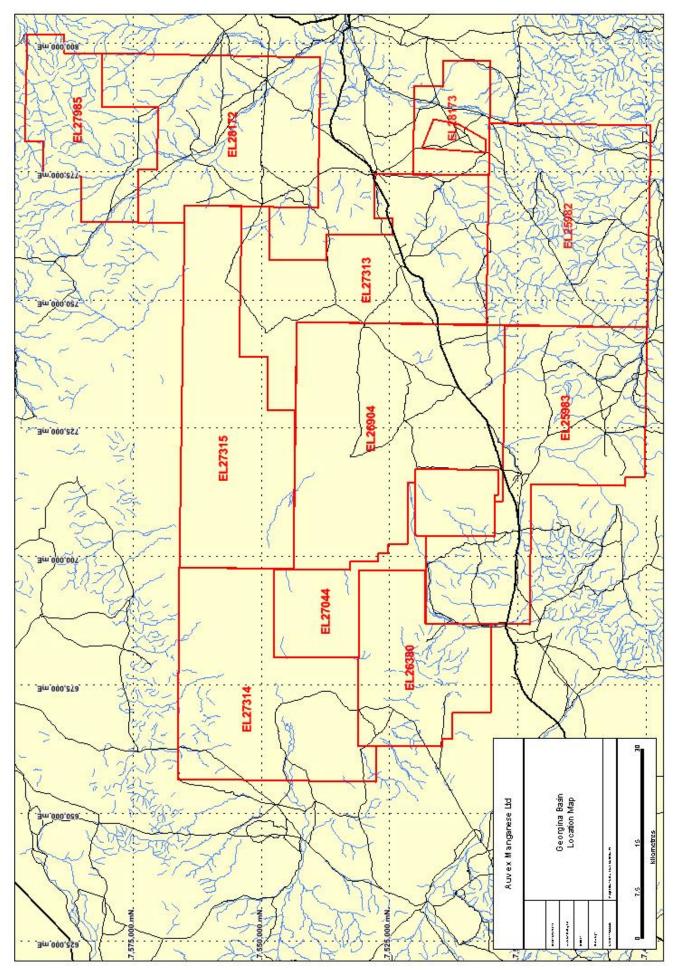


Figure 1: Georgina Basin Project Location Map

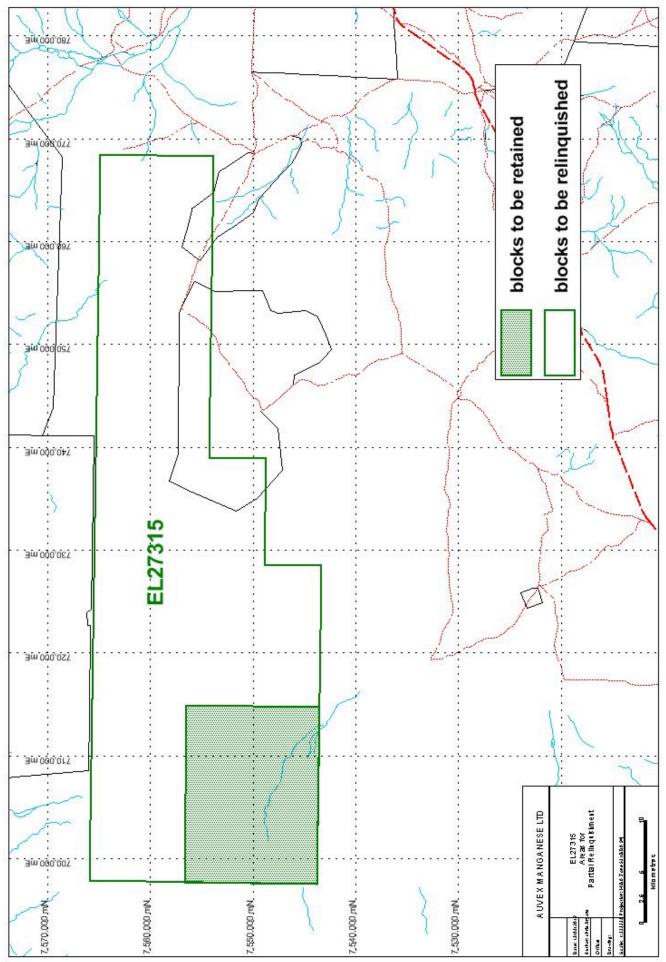


Figure 2: Areas for Partial Relinquishment, EL27315

4. **REGIONAL GEOLOGY**

The 330000km² Georgina Basin is an erosional remnant of a series of central Australian intracratonic basins of Neoproterozoic to Palaeozoic age (Dunster et al, 2007).

Over 1.5km of Neoproterozoic sedimentary rocks are preserved in downfaulted blocks and half-grabens on the southern margin of the Georgina Basin, while up to 2.2km of Cambrian to Devonian sediments are preserved within depocentres and synclines. In the Project area, the seismic basement consists of relatively undeformed mafic—intermediate intrusive bodies and younger non-magnetic granitoids of the Altjawarra Domain.

The complex evolutionary history of the Georgina Basin began during the Neoproterozoic breakup of the Rodinia supercontinent, when a northwest trending transcontinental rift system developed. In the southern Georgina Basin, Neoproterozoic siliciclastic rocks were deposited in small grabens and half-grabens, and on rift shoulders.

By 550Ma, a major dextral strike-slip zone developed between the northern and southern blocks in central Australia (the Petermann Orogeny). In the southern Georgina Basin, up to 360m of Early Cambrian sediments were deposited in a distal foreland-sag basin. After the Petermann Orogeny strike-slip faults locked, more stable conditions led to deposition on a carbonate platform (including the Arthur Creek, Arrinthrunga and Tomahawk Formations). A hiatus in deposition between the Arrinthrunga and Tomahawk Formations reflects localized relative uplift corresponding to the Cambro–Ordovician Delamerian Orogeny.

The Early Ordovician Larapinta Event exposed a basement core complex south of the Georgina Basin. Sedimentation in the southern Georgina Basin was dominated by marine siliciclastic deposition. Synsedimentary normal faulting occurred in what are now the Toko and Dulcie Synclines. The synclines dominate the broad-scale structure of the southern Georgina Basin. The fold axes of both structures are parallel to the adjacent basin margin. Gravity and magnetic modeling of basin thicknesses indicates the synclines are amplifications of preexisting basin depocentres.

Ordovician extension was terminated at 450Ma by the onset of convergent subduction at Australia's eastern margin. During the Alice Springs Orogeny, which intermittently spans the Late Ordovician to Late Carboniferous, basement was thrust over Neoproterozoic–Ordovician rocks to form the present southern margin of the Georgina Basin. Most north-and northwest-trending structures within the Basin were reactivated in a reverse sense.

The eastern and southeastern margins of the Georgina Basin are obscured by Jurassic– Cretaceous sedimentary rocks of the Eromanga Basin. Unconsolidated Cenozoic alluvial and eolian sediments blanket much of the Basin.

The surface geology of EL27315 is displayed in Figure 3.

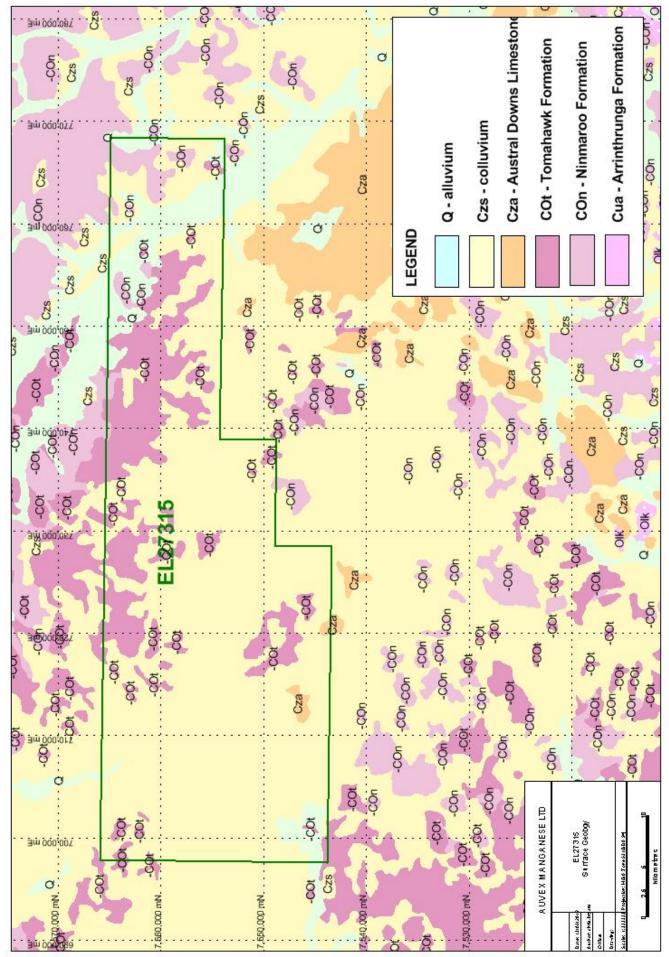


Figure 3: Surface Geology, EL27315

5. EXPLORATION ACTIVITIES 2010-2012

During the reporting period exploration activities within the relinquished portion of EL27315 included interpretation of the available geological and geophysical data, the interpretation of satellite imagery, reconnaissance field visits including outcrop sampling for element analysis, the development of exploration models and the definition of exploration targets.

5.1 Interpretation of Available Geological and Geophysical Data

Consultants Explore Pty Ltd, in collaboration with Southern Geoscience Consultants were commissioned to retrieve existing open file aeromagnetic and radiometric data, process and produce a suite of images over the Georgina Basin Project (including EL27315). The data interpretation indicated that manganese mineralization was associated with northeast trending structures.

5.2 Interpretation of Satellite Imagery

Consultants Remote Sensing and Geological Services (RSGS) were commissioned to undertake a remote sensing study across the Project. Two mosaic Landsat Thematic Mapper strips, composed from six 30 metre resolution bands, were purchased, and processed in ER Mapper to produce TIF files for interpretation and mapping purposes. The interpretation of the images identified 70 absorptive targets (possibly representing manganese mineralization) across the Project.

Point Repose Consulting Pty Ltd was contracted to undertake a further review of the aeromagnetics, previous exploration data and remote sensing targets, and generate priority targets for further reconnaissance exploration. This review identified a further 25 targets (in addition to the 70 RSGS targets).

5.3 Reconnaissance Field Visits / Outcrop Sampling

Reconnaissance field visits were undertaken in November 2009, March 2010 and October 2010. During the reconnaissance visits, sites known to host manganese mineralization and targets developed from the geological/geophysical/satellite imagery reviews were inspected and sampled. A total of 60 outcrop samples were collected (3 from EL27315), of which 35 were assayed for Al₂O₃, CaO, Cr₂O₃, Fe, Fe₂O₃, K₂O, MgO, Mn, Na₂O, P₂O₅, SiO₂, S and TiO₂ content by SGS Laboratories, using fusion XRF (0 from EL27315). The majority of the manganese mineralisation observed comprised replacement of thin, generally 5cm to 30cm thick, flat-lying horizons with a sandstone unit of the Tomahawk Formation (Figure 4).

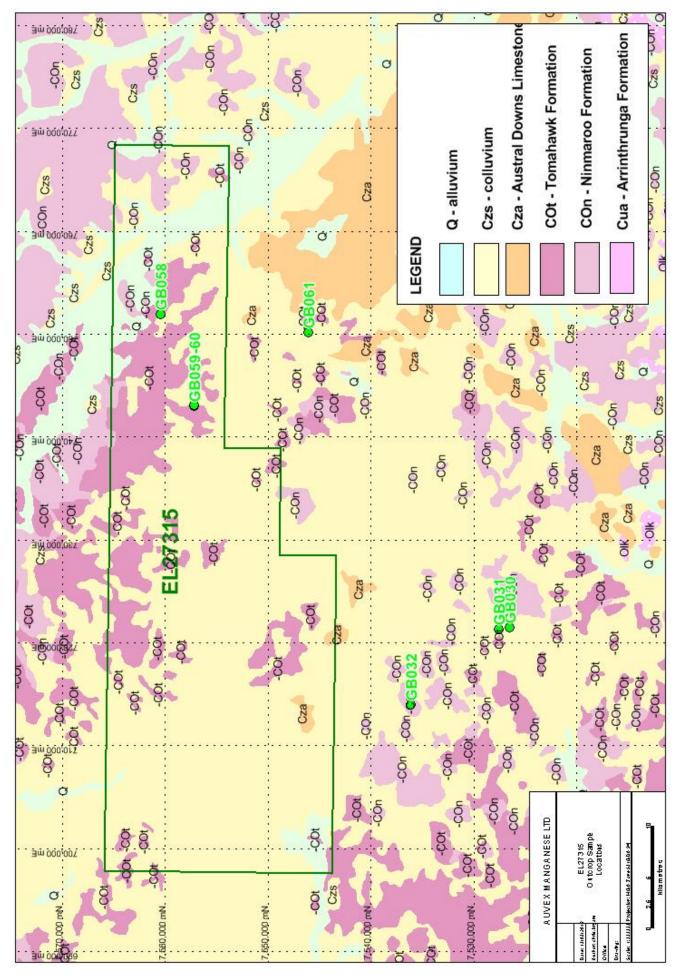


Figure 4: Outcrop Sample Locations, EL27315

Across the Project, a total of six priority targets were identified for further evaluation, showing evidence of hydrothermal brecciation and altered fluid pathways with carbonates. None of these priority targets lie within the relinquished portion of EL27315.

5.4 Base Metal Target Definition

A review examining the potential for base metal mineralization within the Project area was completed. An exploration model was developed to identify base metal mineralization targets, using known occurrences of base metals in the Georgina Basin as a guide. The model indicates base metal mineralization is associated with north or northwest trending structures, positive magnetic anomalism (basement highs) +/- coincident gravity highs, anomalous geochemical trends (including manganese anomalism), and Cambrian carbonate sediment hosts. Application of this model to the Project area identified one priority exploration target within a broad, northwest trending linear zone. This priority target lies outside the relinquished portion of EL27315.

6. CONCLUSIONS AND RECOMMENDATIONS

A review of the available geological and geophysical data for the Project area culminated in the definition of exploration models and the identification of priority exploration targets within the Project. Areas of the Project outside the priority target zones were relinquished (including the portions of EL27315 the subject of this report).

7. REFERENCES

Bryans CE 2012: *Georgina Basin Project Group Report for Period 9 January 2011 to 8 January 2012*. Annual Report to Northern Territory Department of Minerals and Energy

Davis B and Shakleton I 2010: Annual Report for EL26904 Tarlton Downs, Georgina Basin Project, Reporting Period 9/4/2009 - 8/4/2010. Report to Northern Territory Department of Minerals and Energy

Dunster JN, Kruse PD, Duffett ML and Ambrose GJ 2007: *Geology and Resource Potential of the southern Georgina Basin*. Northern Territory Geological Survey, Digital Information Package DIP007.

Kruse PD, Brakel AT, Dunster JN and Duffett ML 2002: *Tobermorey, Northern Territory*. 1:250000 Geological Series Explanatory Notes, SF 53-12. Northern Territory Geological Survey and Geoscience Australia.

Shakleton I 2011: *Georgina Basin Project Group Report for Period 9 January 2010 to 8 January 2011*. Annual Report to Northern Territory Department of Minerals and Energy