MINCOR ZINC PTY LTD
GEORGINA BASIN PROJECT
EL 25093

SURRENDER REPORT

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1. INTRODUCTION

Located approximately 225 kilometres northeast of the Northern Territory township of Alice Springs tenement EL 25093 is one of a number of tenements which comprise the Georgina Basin Project area. The main access to the tenement area is via the Plenty Highway. The boundaries of the lease are located within the 1:250,000 scale Huckitta (SF 5311) and Tobermory (SF 5312) map sheets.

Exploration activities within the lease were severely curtailed due to cultural issues, with field activities being restricted to the gathering of only a small amount of stream sediment samples and four short soil sample lines.

2. TENEMENT

Granted on the 2nd October 2006 the exploration licence 25093 originally covered an area of 1,587 km2. Subsequent tenement reduction in 2009 reduced the land holdings down to 730.1 km2 (Figure 1).

![Figure 1: Georgina Tenement Location Plan.](image_url)
3. **REGIONAL GEOLOGY**

The Georgina Basin is a broad, northwest-southeast trending, intracratonic depression which is about 1000km long and 500km wide, underlying an area of some 325,000km² of the Northern Territory and Queensland. Approximately 60 percent of the basin area (195,000km²) lies within the Northern Territory (Figure 2).

The basin contains prospective Cambrian and Ordovician marine carbonate and clastic sediments and Devonian continental sediments, Neoproterozoic (Vendian) clastics are also considered prospective in places. Sediments were deposited in a series of subtidal to supratidal environments over part of an extensive epicontinental shelf. The Palaeozoic sediments progressively thicken in a south-southeasterly direction, rarely exceeding 400 metres in the northern half of the basin and becoming significantly thicker in the southeast (Toko Syncline). The sedimentary sequence of the basin proper appears to have been neither metamorphosed nor intruded by igneous rocks.

The present outline of the Georgina Basin is an erosional remnant of a much larger, early Palaeozoic sedimentary province that once covered much of north central Australia.

![Figure 2: The Centralian Superbasin and the component basins and the project area.](image)

The basin was once contiguous with the Amadeus Basin to the south, but is now separated from it by the Archaean Arunta Block. It is not known at present if, or to what extent the Georgina Basin is
connected to the Wiso Basin to the west and the Daly Basin to the northwest. The northwest and southwest extremities of the basin are concealed beneath Mesozoic and Cainozoic sediments which mask the actual limits of the basin in these localities. The Davenport Range and the Tennant Creek Block, both comprising deformed Early Proterozoic sediments, provide at least partial separation of the three sedimentary basins.

The basin is fully confined by Archaean to Late Proterozoic metamorphic and igneous rocks. In addition to the structural elements described above, the Georgina Basin is bounded by the Mt Isa Block to the east, while to the north, the basin extends as a thin veneer which overlies the Antrim Plateau Volcanics and the potentially prospective Proterozoic McArthur Basin.

The basin has been deformed by minor to moderate folding and faulting, especially in the south and east, with folding, faulting and some overthrusting along the southern margin. Most of the structural deformation occurred during the Late Devonian to Early Carboniferous Alice Springs Orogeny. Work by Pacific Oil and Gas has shown that mainly flat lying, Ordovician sediments can conceal and disguise earlier Palaeozoic structuring. North of latitude 21°S, the Georgina Basin sequence is gently undulating, with no pronounced folding recognised other than the Lake Nash Anticline which is interpreted to be a supratenuous fold. In the north, faults are recognised only along the basin margin.

The most prominent structural elements in the basin are the Dulcie and Toko Synclines, both of which are asymmetric folds with steep dips on their southwestern flanks; the “GMI” linear which has been identified from gravity and magnetics and is believed to be a basement feature; and the “Jinka Feature”, another gravity-magnetic linear, the surface expression of which occurs in the Lucy Creek-Mt Playford Ooratippra Fault Zones.

In the southern portion of the basin, Late Proterozoic-Early Cambrian sediments are now regarded as basal units; elsewhere in the basin, Middle Cambrian rocks are regarded as basal units.
4. **EXPLORATION ACTIVITIES**

Mount Ultim EL 25093, the south western most of the exploration leases of the Georgina Basin project area, has been largely inaccessible due to the concerns the Central Land Council had regarding heritage sensitivities in the area. The death and burial of a senior elder in the area in 2009 resulted in a request by the CLC that there be no access to the area for a twelve month period after this event. Furthermore, most of the proposed soil sample traverses submitted to the CLC have been opposed. A small soil and stream sediment sampling program was conducted in 2008 prior to the heritage issues outlined above. A further brief excursion into the area in late 2010 was also possible, allowing for the examination of outcrops and the collection of a limited amount of soil and rock samples from the south western quadrant of the tenement (Figure 3).

A total of 103 soil samples, 10 rock chip samples and 11 stream sediment samples (Figure 4) were collected during the tenure of the tenement. All samples were sent to ALS Alice Springs where they were subjected to four-acid dissolution, then analysed using ICP spectroscopy for multi-element analysis (see appendix 1 for full analytical data).

No significant mineralisation related to nickel sulphide mineralisation was encountered.
5. CONCLUSIONS

Due to various cultural issues the tenement EL 25093 has been somewhat difficult to explore. What little exploration activities that have been carried out (surface geochemical sampling), has failed to detect any geochemical anomalies which could be associated with a significant base metal deposit. Mincor Zinc Pty Ltd has therefore decided to surrender the tenement in full.