

# Technical Reporting

**Tenure:** EL26412

**Group Report ID:** GR260-12

**Title:** Annual Report

**Report Period:** 28/2/ 2016 to 27/2/ 2017

**Project Name:** Roper Valley Iron Ore Project (previously Roper River Iron Ore Project)

**Title Holder:** Northern Territory Iron Ore (NTIO) Pty Ltd

**Title Operator:** Northern Territory Iron Ore (NTIO) Pty Ltd

**Personal Author:** Anthony Ryall

**Report Type:** Annual

**250K Mapsheet/s:** Urapunga (SD53-10)

**100K Mapsheet/s:** N/A

**Geological Province:** Mesoproterozoic -West Macarthur Basin

**Stratigraphic Name:** Within Mesoproterozoic Roper Group: Sherwin Formation Ironstone

**Target Commodity:** Iron Ore

**Other Commodities:** N/A

**Purpose for which Titles are held:** Iron Ore Exploration

**Title history:** EL26412 was granted to North Australian Iron Ore (NAIO) on 14<sup>th</sup> April, 2008 for a period of 6 years and transferred to Sherwin Iron in early 2010. Sherwin Iron conducted active exploration in 2011 that generated targets for follow up. The tenement was effectively split in 2014, into two ELs of 250 blocks each. The new tenement is EL30518.

**Location, physiography and access:** EL26412 is located approximately 160 kms east of Mataranka and then accessed south of the Roper Hwy near Roper Bar. Most access to date has been by helicopter due to the excessive distance from Sherwin's flagship tenements. The area is broadly flat lying with extensive ridges of iron oxide mineralisation associated with the Sherwin Formation.

**Geology Setting:**

The tenement is dominated by a series of narrow low extensive ridges of Sherwin Ironstone outcrop/ subcrop in generally flat lying to moderately dipping terrain. These exposures form a near circular ring interpreted following a basin margin. Most of the tenement is under soil cover and may include extensive flat lying iron oxide mineralisation at shallow depth.

**Exploration/Mining History:**

The tenement selection was based on NT DME geological mapping supported by the early exploration success of Western Desert Resources in adjoining tenement to the east. Sherwin Iron acquired the tenement but until mid 2011 was focussed on exploring more proximal /accessible and outcropping targets at EL24101 and 24102.

A programme of intense helicopter based rock chip sampling on EL 26412 in late 2011 returned high grade results ( mostly +55% Fe) in ironstones in several prospects: Yumanji East, South, West and North were identified as key target prospects.

This was an extensive programme of reconnaissance rock chip sampling with a number of results exceeding 60% Fe. Detail is provided in existing Annual Reports by Sherwin Iron for the Roper River Iron Ore Project. These ironstones outcrop around the interpreted basin margins. It is uncertain at this stage which stratigraphic horizons in the Sherwin Formation are represented .

**Exploration Rationale:**

Western Desert Resources (WDR) had been actively exploring and mining adjacent to this tenement boundary from 2010 and strike extensions of their ironstone outcrop continue into the Sherwin Lease. Sherwin initially focussed on Deposit C and W as being likely better located resources for initial mining, deferring exploration at Yumanji East drilling being directed to Yumanji East, despite the most obvious target extending from WDR discoveries.

NTIO as new owner plans to conduct infill rock chip sampling ( of the 2011 programme) and mapping, Using helicopter support, to provide targets for future resource drill definition.

The company is aware of the extensive areas under AAPA certification that must be avoided.

**Work Completed:**

No field work was completed during the past 2 years whilst the Project was under Receivership.

**Results:** None ( since 2011)

**Conclusions/Recommendations:**

The tenement is highly prospective because it contains many kilometres of intermittently outcropping Sherwin Formation ironstones confirmed from extensive reconnaissance rock chip sampling in 2011. The high grade results are to be followed up with infill sampling in 2017 as a basis for planning follow up drilling in the future . Drill testing strike extensions from previous WDR operations in adjoining tenement area is likely to result in defining high grade iron oxide resources,.

New owner NTIO intends to advance exploration of EL26412 in 2017 towards planning reconnaissance drilling in 2018 or 2019..

## REFERENCES

Abbott, S.T., Sweet, I.P., Plumb, K.A., Young, D.N., Cutovinos, A., Ferenczi, P.A., Brakel, A., and Pietsch, B.A., 2001. Roper Region: Urapunga and Roper River Special, Northern Territory (Second Edition). 1:250 000 geological map series explanatory notes, SD 53-10, 11. Northern Territory Geological Survey and Geoscience Australia(National Geoscience Mapping Accord).

Dunn, P. R. Explanatory notes, Urapunga 1:250,000 geological Sheet, Northern Territory. (BMR Explanatory Notes and Map) Published Canberra : Bureau of Mineral Resources, Geology and Geophysics, 1963.

Ferenczi, P.A., 1997. Geological Investigation of the Roper River Iron Deposits Northern Territory Geological Survey Technical Report GS97-004.

Johnstone, I., 2010. Roper River Iron Ore Project EL 24102, Mt Davidson. Interim Third Annual Report.

Orridge, G.R., 1993. Exploration Licences 7137, 7240, 7241 and 7242 Roper River Area Northern Territory. Annual Report 1992. Geonorth Pty Ltd: Northern Territory Department of Mines and Energy Open File Company Report CR1993-0154.

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Figure 1 showing current EL26412 Tenement Area

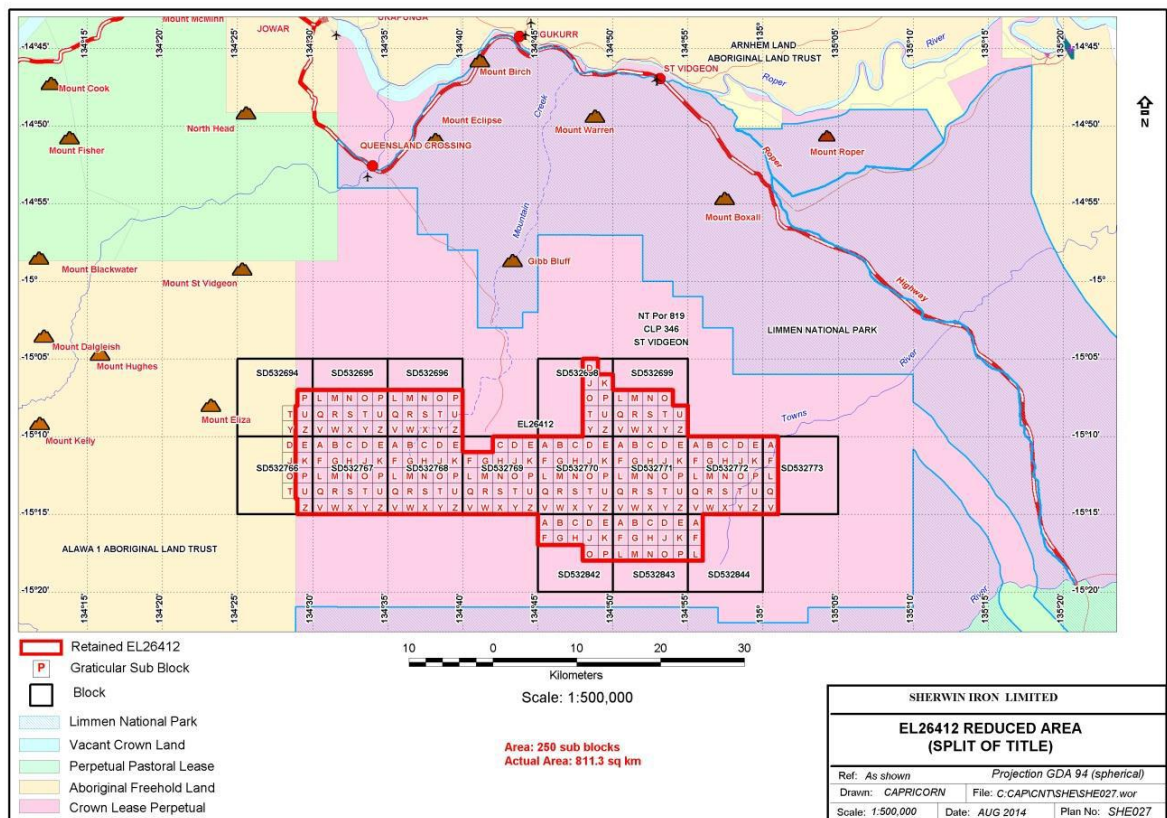


Figure 2: Access to EL26412 Yumanji Targets

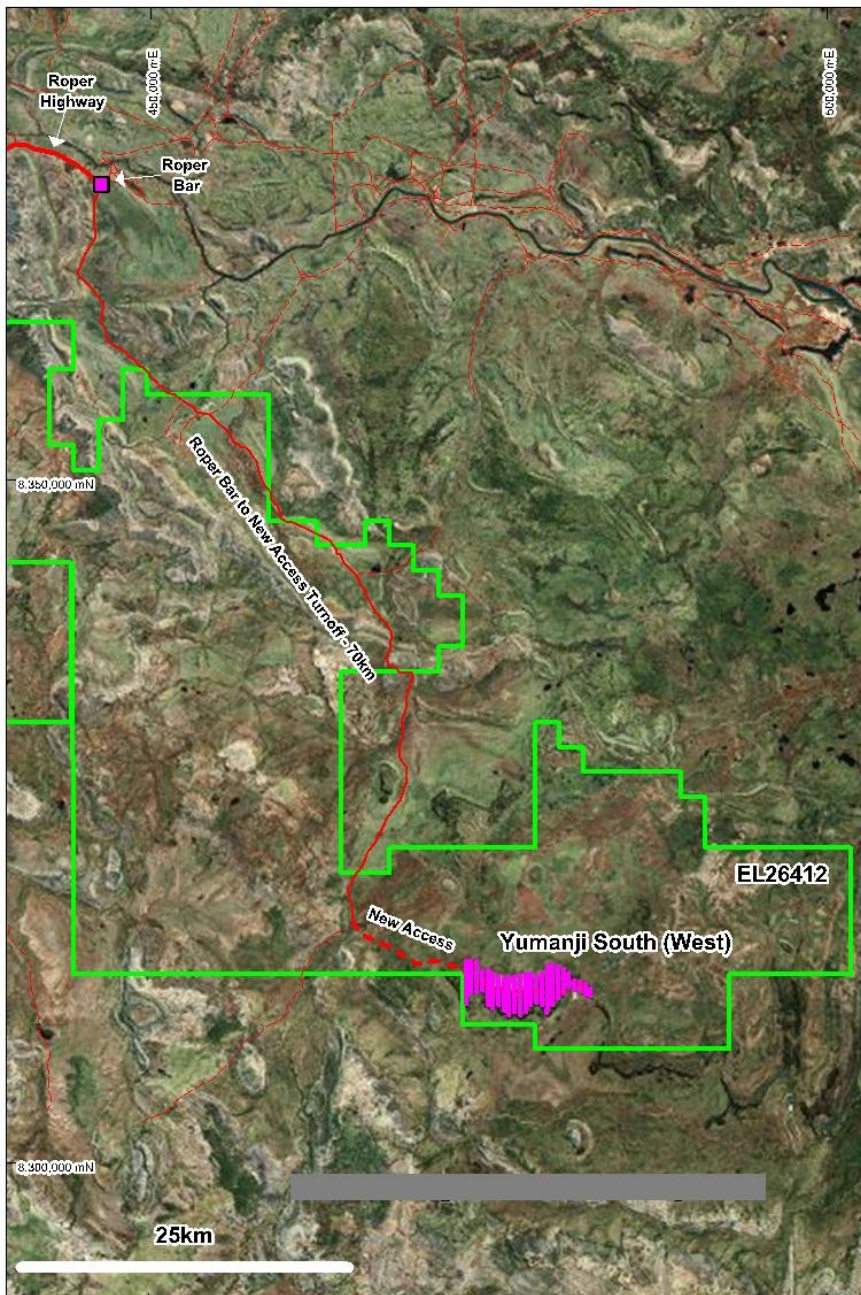


Figure 3 :EL26412 :ock Chip Sampling Locations on Yumanji Targets

