



EL 24101 Mount Fisher

FIRST ANNUAL REPORT
FOR PERIOD ENDING

20-08-2005

Submitted to: NT Dept of Business, Industry & Resource Development

Submitted by: Roper Iron Pty Ltd *for Mr. Geoff Fanning*

Author: IK Johnstone

Date: August 2005

TABLE OF CONTENTS

	Page No.
1. Summary and Conclusions.....	1
1.1 Environment	1
2. Introduction.....	2
3. Regional Geology.....	3
3.1 Tenement Geology	3
4.0 Previous Exploration.....	3
4.1 BHP	3
4.2 Roper Resources	3
4.3 N.T. Government Activities	4
5. Exploration Activities.....	4
5.1 Diamonds	4
5.2 Iron	5
6. Planned Exploration Activities.....	5
7. References.....	6
LIST OF FIGURES.....	7
Figure 1: EL 24101 Tenement Location Plan	7
Figure 2: EL 24101 Diamond Indicator Results	7

1. Summary and Conclusions

Exploration Licence 24101 was granted to Geoffrey John Fanning on the 20th August 2004. Roper Iron Pty Ltd, a Darwin based resource sector company, is the designated Project Manager. The tenement covers approximately 589.5 sq km covering a portion of Roper Group stratigraphy in the Bauhinia Shelf tectonic element of the western McArthur Basin.

The tenement lies wholly within the Roper River Iron Field, a part of the Maiwok Subgroup of the Roper Group and the dissected Gulf Fall physiographic division. The tenement is only partially accessible by road with the Roper River flowing east west to the North of the tenement and the north east trending Hodgson River to the South and east of the tenement

The geology is dominated by sandstone of the Sherwin and Moroak Formations throughout with pisolitic and oolitic ironstones within as previously documented by Ferenzi (DME, 2001)

Exploration activities on these resources are first recorded by BHP in 1955. They chose not to develop due to the discovery of their higher grade Pilbara deposits. Exploration recommenced in 1991 by Roper Resources Pty Ltd and by the Northern Territory Government Department of Mines who reconfirmed an inferred resource of approximately 60 million tonnes of moderate grade iron ore at Hodgson Downs to accompany the 30 million tonnes at Sherwin Creek identified by BHP in the 1950's. The ironstones of the Roper Iron deposits are of marine sedimentary origin and occur as extensive beds of pisolite, oolite and ferruginous sandstones interbedded with shales and quartz sandstones within the Sherwin Formation of the Maiwok subgroup (Roper Group) of the McArthur Basin.

Interrogation of the recently produced DBIRD diamond and diamond indicator database reveals sparsely scattered positive results but without and macro or microdiamonds located within the EL confines. The scattered indicators are considered to be secondary sourced and hard rock diamond potential is deemed low as follow-up sampling by previous explorers failed to repeat the positive results.

No on-site field work was undertaken during the past twelve months and an "Authority to Explore" has not been sought at this stage. The resource contained within the tenement is well explored and noted by Ferenzi (DME, 2001) and Roper Iron Pty Ltd has sought to evaluate all past data over the last 12 months along with the on-going development of a Project to oversee the production of a Feasibility document to assess the potential of the area for mining and beneficiation. ProMet Engineers in Perth, Western Australia are the nominated managers for this exercise.

1.1 Environment

All activities were confined to office work and aerial inspections. In consequence, no ground disturbance was undertaken during the term of tenure.

2. Introduction

Exploration Licence 24101 covers an area of 180 sub-blocks (589.5 sq km) in the central southern portion of Urapunga 1:250,000 map sheet SD53-10, centred approximately 220km ESE of Katherine. The tenement application was lodged on 3rd December 2003 by Geoffrey John Fanning and is managed by Roper Iron Pty Ltd; a Darwin based mineral resource sector privately listed company. The tenement was granted for a period of six years on 20th August 2004. Tenement acquisition was based on the regions known iron resources.

Regionally the area lies within the dissected Gulf Fall physiographic division. And geologically within the Maiwok Subgroup and is distinguished by the presence of the oolitic ironstones. The tenement itself covers a sub-province of the Maiwok Subgroup, the Moroak and Sherwin Formations with the oolitic ironstones at the base of the Sherwin Formation. Most of EL 24101 is only partially accessible by road with the Roper River flowing east west to the North of the tenement and the north east trending Hodgson River to the South and east of the tenement. The Roper Highway partially intersects the North of the tenement and numerous station tracks are to be found within.

The principal vegetation regime is open Eucalyptus woodland ranging from sparsely wooded open grassland alluvial and small black-soil plains scattered throughout with densely vegetated lancewood on high ground and steeply sloping areas. The major watercourses are lined with paperbarks and larger Eucalypts. Spinifex grows predominantly only on the sandy.

This report outlines exploration activities conducted within EL 24101 during the first period of tenure ending 20th August 2005.

3. Regional Geology

The tenement is part a larger Project Area in the central-western shelf (Bauhinia Shelf) of the McArthur Basin. The basin can be viewed as several northerly trending rifts separated by northwest-trending faults and transverse ridges and was subject to repeated cycles of clastic and marine carbonate sedimentation interspersed with volcanic extrusion and sill emplacement (*Tawallah, McArthur and Nathan Groups*) in response to reactivation of older basement structures.

A later, more passive series of sedimentation cycles in response to western basin subsidence occurred with the deposition of suites of blanket quartz sandstones, micaceous siltstones, black shales and glauconitic sandstones (*Roper Group*). Ironstones are prominent on a local stratigraphic level (Roper and Hodgson Iron Deposits). 'A variety of marginal, shallow and deeper marine shelf environments reflect alternating basin-wide sea level rises and falls. Tholeiitic dolerite and gabbro sills were emplaced throughout the Roper group soon after deposition ceased and before regional deformation.' (NTGS).

3.1 Tenement Geology

The geology is dominated by the interbedded sandstone, siltstone and mudstone of the Sherwin Formation Subgroup throughout with extensive pisolitic ironstone lenses. Small exposures of rubbly dolerite sills are mapped on plateau margins where exposed by drainage erosion.

The absence of Cambrian flood basalts and only remnant outliers of Cretaceous sandstones, both of which are extensive to the west and north, suggest a significant exposure to uplift and erosion within the area permitting exposure of the underlying Proterozoic sediments and dolerite sills.

4.0 Previous Exploration

The tenement environs have attracted various Fe related exploration campaigns including:

4.1 BHP

The first significant iron ore find in the NT was made in 1911 at Murphy's prospect near Roper Bar. This small discovery drew BHP Ltd to the area in 1955 and led to an investigation of the Roper River oolitic iron ore deposits. Diamond drilling, bulk sampling and some metallurgical testing of deposits near Hodgson Downs (Deposits T, U, V and W) Mount Fisher (Deposit M) and Sherwin Creek (Deposits A, B, C and E) was carried out between 1956 and 1961.

4.2 Roper Resources

More recent exploration work has been carried out on some of the iron ore deposits by Roper Resources who conducted a five year program from 1991 which included preliminary geological surveys, sampling, metallurgical investigations and evaluation of alternative processing options including detailed discussions with suppliers of various innovative, high technology smelting and processing systems such as Ausmelt, Hismelt and Allis Mineral Systems

4.3 N.T. Government Activities

Due to Roper Resources interest in these deposits, the areas were visited by the Northern Territory Department of Mines and classified as an inferred resource of “several hundred million tonnes”. In the mid 1990s, the NTGS conducted a geological investigation and review of the Roper region iron ore deposits (Ferenczi 1997). Further testing by the DME concurred with BHP’s conclusion that the physical structure within the ore was amenable to beneficiation.

Limited diamond exploration was also conducted by Stockdale and CRA Exploration in the early nineties.

A comprehensive summary of all past exploration is published in the 2nd edition of 1:250 000 Geological Map Series Explanatory Notes for the Roper Region Urapunga and Roper River Special.

5. Exploration Activities

5.1 Diamonds

EL 24101 was selected for exploration targeting known pisolitic and oolitic lenses of hematite. The tenement was also selected for potential diamond exploration as even though no major diamond occurrences are mapped within the Roper environs, it is believed that the major structural corridors including the Walker-Batten Fault Zones and the Urapunga Tectonic Ridge and their associated parasitic fault splays have provided deep-seated conduits for mineralisation focus, notably diamondiferous diatreme emplacement (ie. Merlin and Emu diamond fields near the Emu Fault to the SE and the Packsaddle and Blackjack kimberlite dykes to the west).

Interrogation of the recently produced DBIRD diamond and diamond indicator database reveals sparsely scattered positive results (indicator minerals) but not one single macro-diamond within the EL confines. Follow-up sampling failed to repeat the positive results and the scattered indicators and diamond are considered to be secondary sourced. Hard rock diamond potential is deemed to be low but the search continues.

5.2 Iron

Open file reviews have shown previous exploration in the EL environs having comprised regional drainage stream sediment and gravel sampling programs targeting stratabound base metals and diamonds along with the extensive Fe work carried out by BHP, Roper Resources and the Department of Mines and Energy. These exploration programs and subsequent follow-up ground surveys led to the Department of Mines and Energy classifying these undeveloped iron resources with an “inferred” status under the J.O.R.C. Code to comprise some several hundred million tonnes (Ferenzi, *Report 13*, NTG, 2001) of low to moderate grade ores which would appear to now be in an increasingly favourable location in relation to existing and potential infrastructure and Asian markets.

During the last 12 months the following work has been carried out to assess the potential for a fully funded exploration program during the 2005-2006 exploration season and to allow Roper Iron to complete and be granted the required “Authority to Explore”:

- submission of samples held by Geoff Fanning to ProMet Engineering in Perth, WA for beneficiation studies to confirm BHP results and assessment of resource development strategies.
- discussions with the Mines Department re ore estimates
- discussions with the Port Authority re access to ship loading facilities and provision of bulk storage and handling methods
- scoping study by SKM on stacker/reclaimer and ship loaders
- discussions and negotiations with various mining equipment suppliers to gain information on mining techniques suited to the deposits
- Interpretation of results from all previous exploration.
- Appointing ProMet Engineering as overall Project Managers
- Finalising the requirements and funding allocations to a Project Feasibility Study with ProMet Engineers

6. Planned Exploration Activities

Roper Iron Pty Ltd acting as manager for Mr Geoffrey John Fanning will in the 2005-2006 exploration year begin the following studies and in-ground exploration.

- Desktop Study of all available data to select a series of exploration targets
- Commission ProMet Engineering to finalise the Feasibility Study to develop the resource. This study will concentrate on ore reserves and beneficiation methodologies and will include diamond drilling, surface and bulk sampling for beneficiation test-work and the design of a pelletising plant to produce iron pellets of between 63.5 and 65% Fe.
- The field work component including costs and environmental concerns of this exercise will be fully documented within the application for an “Authority to Explore”.

7. References

Abbott ST, Sweet IP, Plumb KA, Young DN, Cutovinos A, Ferenzi PA, Brakel A & Pietsch BA, 2001. Roper Region: Urapunga and Roper River Special, Northern Territory (Second Edition), 1:250 000 Geological Map Series Explanatory Notes, SD 53-10 & SD 53-11. Northern Territory Geological Survey.

BHP Report. 02 June 1957, *Summary Report Roper River Iron Deposits*, DME Library Pamphlet SUM. Mines Library, DBIRD

CR1958-0006, *Final Report activities Mount Vizard Prospect*, BHP, Darwin Mines Library, DBIRD

CR1958-0010, *Graphic logs of diamond drill hole at Roper Bar*, BHP, Darwin Mines Library, DBIRD

CR1958-0011, *Metallurgical Testing of Samples from the Roper River Area of the Northern Territory*, 1958, Salami (BHP), Darwin Mines Library, DBIRD

CR1959-0001, *Report No 23. Determination of the Liberation Characteristics of Roper River, Hodgson Downs Drill Core Samples*, Wainwright and Salami (BHP), Darwin Mines Library, DBIRD.

Roper River Oolitic Ironstone Formations., 1960, Cochrane & Edwards, Mineralagraphic Investigations Technical paper No 1, CSIRO, Australia, Mines Library, DBIRD

CSIRO Report Number 535, *Ore Dressing Investigations, Table Concentrations of Oolitic Iron Ore from Roper Bar, NT 1*, Darwin Mines Library, DBIRD.

CSIRO Report Number 640, *Mineragraphic Investigations, Oolitic Iron Formation from Roper River Area, NT*, Darwin Mines Library, DBIRD

CSIRO Report Number 662, *Mineragraphic Investigations, Oolitic Iron Formation from Roper River Area, NT II*, Darwin Mines Library, DBIRD.

CSIRO Report Number 663, *Mineragraphic Investigations, Oolitic Iron Formation from Roper River Area, NT III*, Darwin Mines Library, DBIRD

CSIRO Report Number 694, *Mineragraphic Investigations, Oolitic Iron Formation from Roper River Area, NT V, Bulk samples*, Darwin Mines Library, DBIRD.

CSIRO Report Number 695, *Mineragraphic Investigations, Oolitic Iron Formation from Roper River Area, NT VI*, Darwin Mines Library, DBIRD

CR1992-0215, ELs 7137, 7240, 7241 & 7242 in the Roper River Area, NT, Annual Report for 1991, Fanning & Orridge, Darwin Mines Library, DBIRD

CR1993-0154, Annual Report ELs 7137, 7240, 7241 and 7242 in the Roper River Area 1992, Fanning & Orridge, Darwin Mines Library, DBIRD

CR1993-0213, Report on Areas Surrendered December 1992 and January 1993 ELs 7137, 7240, 7241 and 7242 Roper River Area, Fanning & Orridge, Darwin Mines Library, DBIRD.

CR1993-0220, Annual Report EL7610 near Hodgson Downs ending 30 January 1993, Orridge, Darwin Mines Library, DBIRD.

CR1994-0217, Annual Report EL7610 near Hodgson Downs Annual Report for the Year ending 30/01/1994, Orridge, Darwin Mines Library, DBIRD.

CR1994-0233, ELs 7137, 7240, 7241 and 7242 in the Roper River area NT Annual Report for 1993, Fanning, Darwin Mines Library, DBIRD.

CR1995-0295, Annual Report for 1994 for ELs 7137, 7240, 7241 and 7242 in the Roper River area NT, Fanning, Darwin Mines Library, DBIRD.

CR1995-0783, EL7610 Hodgson Downs NT Annual Report for the Year ending 30/01/1995, Orridge, Darwin Mines Library, DBIRD.

CR1996-0180, EL7610 Hodgson Downs NT Final Report, Orridge, Darwin Mines Library, DBIRD.

CR1996-0411, Annual Report 1995 for ELs 7137, 7240, 7241 and 7242 in the Roper River area NT, Fanning, Darwin Mines Library, DBIRD.

Geological Survey, Geological Investigation of the Roper River Iron Ore Deposits, Report GS97/004, September 1997, Ferenzi, NTGS, Darwin Mines Library, DBIRD.

Iron ore, Manganese and Bauxite Deposits of the Northern Territory, Report 13, December 2001, Ferenzi, NTGS, Darwin Mines Library, DBIRD

LIST OF FIGURES

Figure 1: EL 24101 Tenement Location Plan

Figure 2: EL 24101 Diamond Indicator Results

Figure 1: EL24101 Location Plan

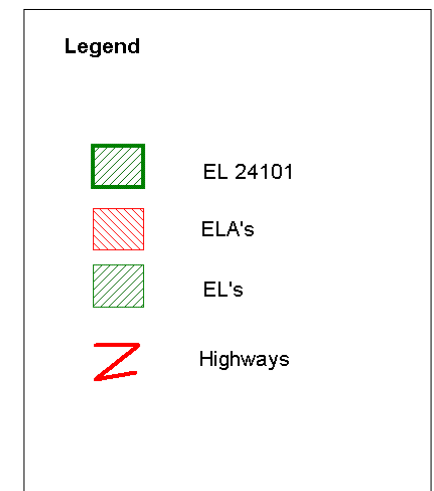
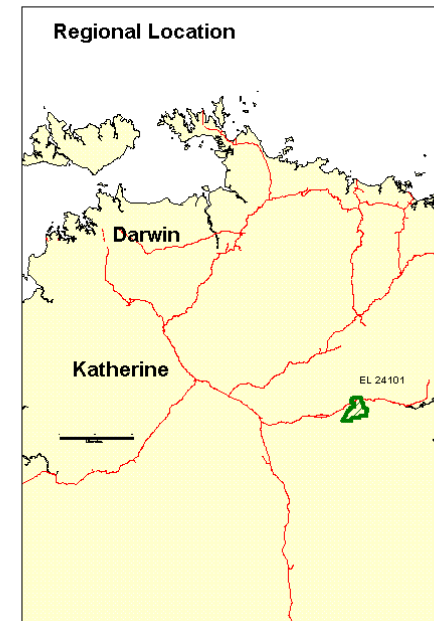
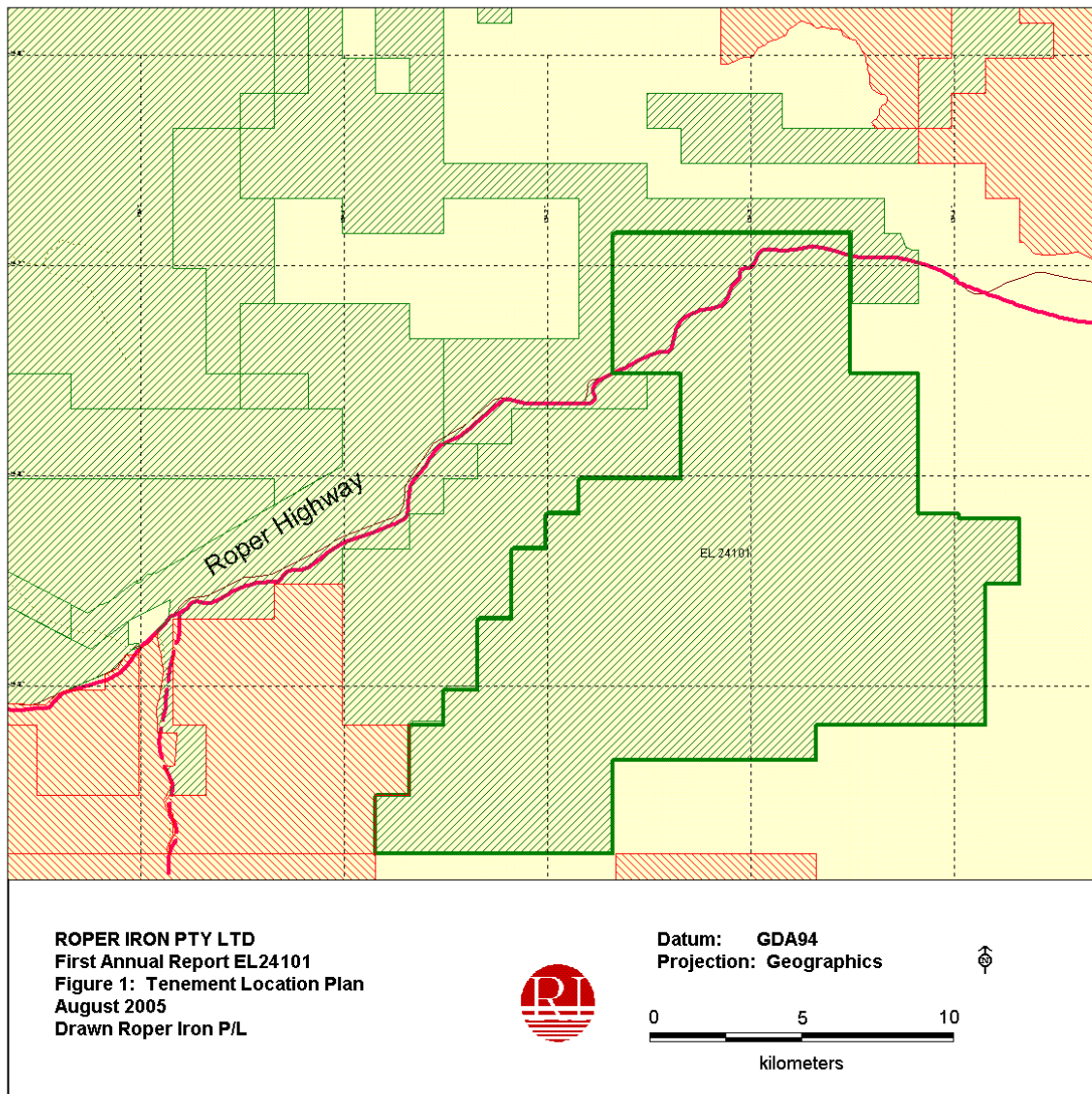


Figure 2: EL 24101 Diamond Indicator Results

