

(Receivers and Managers Appointed)

(In Liquidation)

ANNUAL REPORT

EXPLORATION LICENCES 25688 & 27143

MOUNTAIN CREEK GROUP REPORTING GR322

FOR THE PERIOD 20/08/2014 to 19/08/2015

by

Andy Bennett

October 2015

Target Commodity: Iron Ore

1:250,000 Mapsheets: SD53-10 URAPUNGA; SD53-14 HODGSON DOWNS

1:100,000 Mapsheets: 5867 St Vidgeon; 5868 Urapunga

ABSTRACT

The Mountain Creek Project is located approximately 40 kilometres south of Ngukurr in the gulf country of the Northern Territory. The project group comprises EL 25688 and EL 27143, and covers an area of 715.37 square kilometres.

EL 25688 was originally granted to Tianda Resources (Australia) Pty Ltd (Tianda) for six years on 20/8/2007. Tianda entered into a farm-in agreement with Western Desert Resources Ltd (Receivers and Managers) ("WDR") on 1/6/2010. During the second half of 2013, EL25688 was transferred to WDR in full.

EL 27143 was granted to WDR Iron Ore Pty Ltd, a wholly owned subsidiary of WDR, on 24th August 2009 for a period of six years. The tenement, at time of grant covered an area of 1,027 sq km (320 sub blocks). 134 blocks for 409.6 sq km were relinquished in August 2011.

Both tenements are prospective for sediment hosted iron ore deposits. Some base metal potential for McArthur River style mineralisation also exists in the northern portion of EL 27143.

The project area is underlain by the Maiwok Subgroup of the Roper Group of the McArthur Basin. The Roper Group of sediments consists of two sub groups, the Collara Subgroup and the Maiwok Subgroup. Sedimentary oolitic ironstone is present at several intervals within the upper part of the Roper Group, and best developed within the Sherwin Formation in the Maiwok Subgroup. Oolitic ironstone within the Sherwin Formation is the target of exploration for iron ore within the project area.

No work was completed during the term, as WDR's assets were placed into external administration on 5 September 2014. The asset is now also liquidation and is being managed by Ferrier Hodgson as Receivers and Managers of WDR.

COPYRIGHT

The contents of this report may remain the property of Western Desert Resources Limited (Receivers and Managers appointed) and its subsidiaries and may not be published in whole or in part nor used in a company prospectus without the written consent of the company. The report was compiled by Western Desert Resources Limited (Receivers and Managers appointed) for submission to the Northern Territory Department of Mines and Energy as part of tenement reporting requirements in accordance with the Minerals Titles Act. All relevant authorisations and consents have been obtained. Authorisation is hereby given for the department to copy and distribute the report and associated data.

Contents

1		INTR	RODUCTION	6		
	1.1	1	LOCATION AND ACCESS	6		
	1.2	2	CLIMATE	6		
	1.3	3	TOPOGRAPHY AND VEGETATION	6		
2		TENU	IURE	7		
	2.1	1	MINING/MINERAL RIGHTS	7		
	2.2	2	LAND TENURE	7		
	2.3	3	NATIVE TITLE	7		
	2.4	4	ABORIGINAL SACRED SITES	7		
3		GEOLOGICAL SETTING				
	3.1	1	REGIONAL GEOLOGY	9		
	3.2	2	LOCAL GEOLOGY	10		
4		PREV	VIOUS EXPLORATION	12		
	4.1	1	MINING HISTORY	12		
	4.2	2	EXPLORATION BY PREVIOUS COMPANIES	12		
	4.3	3	EXPLORATION BY TIANDA/WDR	12		
		4.3.1	1 Year 1: 2007- 2008	12		
		4.3.2	2 Year 2: 2008 - 2009	12		
		4.3.3	3 Year 3: 2009 - 2010	12		
		4.3.4	4 Year 4: 2010 - 2011	12		
		4.3.5	5 Year 5: 2011 - 2012	12		
		4.3.6	6 Year 6: 2012 – 2013	13		
		4.3.7	7 Year 6: 2014-2015	13		
5		EXPL	LORATION DURING CURRENT TERM	13		
6	CONCLUSIONS AND RECOMMENDATIONS					
R	EFE	RENC	ICES	14		

List of Figures

Figure 1: Mountain Creek Project Location	8
Figure 2: McArthur Basin regional geological setting (Abbott et al 1992)	9
Figure 3: Local Geology (250K Hodgson Downs)1	.1

List of Tables

Table 1: Tenement Details

1 INTRODUCTION

1.1 LOCATION AND ACCESS

The project is located approximately 40 kilometres south of Ngukurr in the gulf country of the Northern Territory (Figure 1). The project group comprises EL 25688 and EL27143, and covers an area of 715.37 square kilometres.

Access to the area is by the Roper Highway from Mataranka to Roper Bar; then by the unsealed Savannah Highway for a distance of 20km to the Queensland Crossing over the Hodgson River and then by an unsealed track for a distance of approximately 30km which passes the ruins of the St Vidgeon Homestead. Alternate access is also available from exploration tracks heading west from WDR's Roper Bar campsite.

1.2 CLIMATE

The area has a humid monsoonal climate, with mild dry winters and hot humid summers often with heavy monsoonal rains associated with tropical cyclones. The average annual rainfall is 700 millimetres with most falls between November and April. The wet season renders the area inaccessible for exploration activities.

1.3 TOPOGRAPHY AND VEGETATION

The tenement lies within the Gulf Fall physiographic province of Plumb and Roberts (1992). This is a dissected terrain characterised by alluvial plains and low hills or strike-ridges consisting of resistant rocks such as quartzite. The area is drained by the Little Towns River in the southern part of the EL.

Vegetation consists of open Eucalyptus woodland with local thickets of lancewood. Spinifex is common on sandy and upland soils. Grasses and low shrubs predominate on the extensive alluvial plains.

2 TENURE

2.1 MINING/MINERAL RIGHTS

EL 25688 was originally granted to Tianda Resources (Australia) Pty Ltd (Tianda) for six years on 20/8/2007. Tianda entered into a farm-in agreement with Western Desert Resources Ltd (WDR) on 1/6/2010 over this EL. WDR earned the right to 70% interest in the project by undertaking exploration on the tenement, during the second half of 2013 EL25688 was transferred to WDR in full and an application for renewal of the licence was submitted to the DME before the expiry date.

EL 27143 was granted to WDR Iron Ore Pty Ltd, a wholly owned subsidiary of WDR, on 24th August 2009 for a period of six years. The tenement, at time of grant covered an area of 1,027 sq km (320 sub blocks). 134 blocks for 409.6 sq km were relinquished in August 2011. Application for a Waiver from Statutory Relinquishment was sought from the Department of Mines and Resources as the relinquished area is less than the required 50% at the end of Year 2.

EL#	Name	Grant Date	Expiry Date	Area (sq km)	SBLKS	Holder
25688	Tianda	20/08/2007	19/07/2015*	99.47	30	WDR IRON ORE PTY LTD
27143	Mountain Creek	24/08/2009	23/08/2015*	615.9	186	WDR IRON ORE PTY LTD

Table 1: Tenement Details

*renewal applications submitted August 2015

2.2 LAND TENURE

The project group is located within the boundaries of the former St Vidgeon pastoral lease, now crown land. The northern portion of EL27143 lies within the bounds of the Limmen National Park.

2.3 NATIVE TITLE

Native Title has been granted over the former St Vidgeon pastoral lease and therefore affects the licences. No formal agreement has yet been negotiated with the native title holders.

2.4 ABORIGINAL SACRED SITES

The Aboriginal Areas Sacred Site Authority conducted a survey of EL25688 in 2011. A sacred site and associated exclusion zone is located on flat flood plain country well north of the main mesa, which is outside the area of interest for exploration.

The Aboriginal Areas Sacred Site Authority conducted a survey of the southern part of EL 27143 in 2009. A sacred site and associated exclusion zone is located over the prominent mesa in the south western corner of the EL.



Figure 1: Mountain Creek Project Location

3 GEOLOGICAL SETTING

3.1 REGIONAL GEOLOGY

The tenement is located on the Hodgson Downs 1:250,000 Geological Map sheet. The project lies within the Bauhinia Shelf of the McArthur Basin in north-eastern Northern Territory (Figure 2).

The McArthur Basin is an intracratonic platform basin of Palaeo to Mesoproterozoic age with an aerial extent of 180,000 square kilometres. It unconformably overlies metamorphosed and deformed Palaeoproterozoic rocks of the Pine Creek Orogen to the west, Murphy Inlier to the south and Arnhem Inlier to the northeast. Phanerozoic sediments of the Georgina, Dunmarra, Carpentaria, and Arafura Basins unconformably overlie the McArthur Basin succession.



Figure 2: McArthur Basin regional geological setting (Abbott et al 1992)

3.2 LOCAL GEOLOGY

The eastern portion of EL27143 is underlain by Palaeoproterozoic rocks of the Vizard (Pw) and Nathan Groups (Pn). The Vizard Group are the oldest rocks of the McArthur Basin exposed in the area. The Group comprises the St Vidgeon and Nagi Formations, which consist of a sequence of dolomite, dolomitic sediments, sandstone and siltstone. These rocks correlate with the McArthur Group which hosts significant stratiform base metal mineralisation at the McArthur River deposit.

The Nathan Group unconformably overlies the Vizard Group and consists of a sequence of conglomerate and sandstone (Mt Birch Sandstone –Pnb); dolomite and dolomitic sediments (Knuckey Formation –Pnk); mafic volcanic (Yalwarra Volcanics – Pny) and chert, sandstone and shale (Walmudga Formation –Pnw).

The southern and western parts of the project area are underlain by the Maiwok Subgroup of the Roper Group (Pr) of the McArthur Basin. The Roper Group consists of two sub groups; the Collara Subgroup and the Maiwok Subgroup.

The lowest member of the Subgroup is the Corcoran Formation (Pro), which consists of fine grained mudstones, siltstones and thin fine sandstone. The basal portion of the Corcoran Formation has been defined as the Munyi Member (Prom). This unit is up to 25 m thick and consists of ferruginous sandstone, siltstone and oolitic ironstone bands which lie unconformably on the underlying Hodgson Sandstone.

The Maiwok Subgroup consists mainly of shallow marine sandstones and siltstones, and is characterised by the presence of oolitic ironstone. Sedimentary oolitic ironstones are present at several intervals within the upper part of the Roper Group, and are best developed within the Sherwin Formation (Prz) in the Maiwok Subgroup.

The oolitic ironstone within the Sherwin Formation (local name –Sherwin Ironstone Member or SIM) is the target of exploration within the project area.

The Bessie Creek sandstone (Pre) overlies the Corcoran Formation, and consists of cross bedded quartz sandstone which may be up to 100 m thick. It is in turn overlain by the Velkerri Formation (Prv) consisting of poorly outcropping mudstone and siltstone. The unit has been intersected in oil exploration drillholes and is between 300 and 900 m thick. Carbonaceous units, pyritic in part, occur in the middle part of the formation. Live oil and bitumen were encountered in drillholes through this unit.

The overlying Moroak Sandstone (Prk) has a sharp erosive basal contact with the Velkerri Formation. The unit is about 10 m thick and consists of fine to medium quartz sandstone.

Minor oolite beds occur within the unit. The Sandstone forms a prominent scarp in the project area and occurs directly below the Sherwin Formation.

The Sherwin Formation (Prz) consists of interbedded sandstone, siltstone and mudstone together with beds and lenses of oolitic and pisolitic ironstone. The type locality has a stratigraphic thickness of 35 m. The lower contact with the Moroak Sandstone is gradational.

Reconnaissance mapping in the southern part of the exploration licences has shown that the Sherwin Formation (SIM) has been deformed along the trend of the regional Hells Gate Hinge Line.

Locally the thrust fault is named the Nagi Thrust. To the west of the thrust zone the SIM iis gently dipping to the south west, whereas close to the thrust it has a vertical dip.

The Sherwin Formation is overlain by the Kyalla Member (Pry) which consists of fine sandstone to siltstone and mudstone. Locally pyritic carbonaceous siltstones occur within the unit. The upper contact of the SIM with the Kyalla Member is usually sharp with oolite being overlain by siltstone.



Figure 3: Local Geology (250K Hodgson Downs)

4 PREVIOUS EXPLORATION

4.1 MINING HISTORY

No mining has been carried within the area covered by the tenement.

4.2 EXPLORATION BY PREVIOUS COMPANIES

There has been no previous exploration for iron ore in the area. Previous holders of tenements in the area have explored for diamond, base metals and uranium. A summary of the previous exploration activities was given in the annual report for Year 1.

4.3 EXPLORATION BY TIANDA/WDR

4.3.1 Year 1: 2007- 2008

A review of available open-file information on the licence was performed. Airborne radiometric anomalies were checked on the ground and samples were taken for analysis. The maximum uranium value was 5.5ppm U. All of the radiometric anomalies were from areas of brown or black soil.

4.3.2 Year 2: 2008 - 2009

No field work was conducted during the year. The focus of attention changed from uranium exploration to iron ore exploration.

4.3.3 Year 3: 2009 - 2010

WDR carried out a literature review and commissioned digital aerial photography and a subsequent digital terrain model, and an airborne magnetic/radiometric survey. Reconnaissance rock chip sampling and geological mapping was undertaken over two areas in the southern portion of EL27143. Thirty-two samples were collected and analysed for a suite of elements including Fe.

4.3.4 Year 4: 2010 - 2011

Exploration activities included the interpretation of magnetics, desktop and field mapping, collection of 124 rock samples for assay, the construction of a track from WDR's Roper Bar base camp to the area of interest, the commissioning of an airborne gravity survey and RC drilling in EL27143.

4.3.5 Year 5: 2011 - 2012

WDR has carried out an extensive exploration program consisting of mapping, airborne geophysics, drilling, sampling and wireline logging.

Prospect scale mapping and rock chip sampling were carried out on the western side of the mesa in the vicinity of the drilling target areas at Buffalo Bill, Neddy and Pumbaa. The sample results support previous year's results, with up to 61.5% Fe achieved.

An airborne fixed wing high-sensitivity magnetic and Falcon TM Airborne Gravity Gradiometer (AGG) survey was flown over the southern portion of EL25688 and neighbouring Mountain Creek Project. The gravity data has highlighted a number of areas where there appear to be thicker accumulations of denser rock, which in turn possibly represent mineralised oolitic ironstone.

Eighty-one RC holes were completed for a total program of 2,360m m of drilling over three target areas at Buffalo Bill, Neddy and Pumbaa. Downhole wireline logging of selected drill holes was performed on 9 of the 81 holes for natural gamma, dual density and caliper, dual induction (conductivity), and magnetic deviation (including magnetic vectors).

4.3.6 Year 6: 2012 – 2013

Drilling during the field season comprised 32 reverse circulation drillholes on EL 27143 over the Mountain Creek target, these ranged from a completion depth of 34m to 112m. 1256 drill samples were assayed using XRF for a wide suite of elements and compounds. The best assay result for Fe result was 63.9% from RC drill hole MKRC0052 at 17m.

Twenty five drillholes were logged from previous reporting period for EL25688 and twenty nine holes were logged from the current periods drilling at EL27143 for natural gamma, dual density and caliper, dual induction (conductivity), and magnetic deviation (including magnetic vectors).

4.3.7 Year 7: 2014 - 2015

Drilling comprised 144 reverse circulation drillholes and 3 diamond drillholes on EL 25688. These ranged from a completion depth of 3m to 112m and all drillholes were holes were drilled vertically using the WDR owned dual purpose UDR650 rig. A concentration of drilling occurred over the Pumbaa target, to define the thin high grade layer of iron mineralisation previously encountered. The drilling continued to intersect narrow high grade mineralisation within the Sherwin Formation at the Pumbaa target. However, exploration on the eastern side of the outcropping iron formation only intersected low grade iron mineralisation.

5 EXPLORATION DURING CURRENT TERM

No work was completed during the current term, because the Company was placed into external administration on 5 September 2014.

6 CONCLUSIONS AND RECOMMENDATIONS

The proposed exploration programme will be dependent on finding a buyer for WDR's iron assets. Nevertheless, with low grade iron mineralisation already discovered over a wide area within EL25688 and the possibility of blendable DSO feed at the Pumbaa target, the next step to advance towards production is outlined below:

Further work recommended comprises of the following, however this will largely be dependent upon a potential buyer's view of the project:

- Drill hole validation unfinished work on previous drilling includes DGPS collar pickups, and analysis of RC versus drill core results. Based on previous evidence, there is likely to be a negative bias in RC drilling results due to loss of high grade dust during drilling.
- Complete the collection of wireline data over Pumbaa target, primarily to collect density information

- Complete a JORC mineral resource estimate at Pumbaa.
- Beneficiation testwork using available drill core
- Scoping study integrated with other iron ore resources in the region
- If results of the scoping study are positive, then commence infill drilling to increase resource confidence and understand geological variability

REFERENCES

Abbott, S. T., I. P. Sweet, et al. (2001). Roper Region: Urapunga and Roper River Special (2nd Edition), Sheets SD53-10, SD53-11 1:250,000 Geological Map Series Explanatory Notes. <u>Northern Territory</u> <u>Geological Survey and Geoscience Australia</u>.

Berkman, D. A., Ed. (2001). Field Geologists' Manual (Fourth Edition.). Monograph No. 9. Melbourne, Australasian Institute of Mining and Metallurgy.

Carbone, A. (2011). Mountain Creek and Roper Bar, NT. Acquisition and Processing Report. <u>Falcon</u> <u>Airborne Gravity and Gradiometer Survey</u>, Fugro Airborne Surveys Pty Ltd.

Plumb, K. A. and H. G. Roberts (1992). "The Geology of Arnhem Land, Northern Territory." <u>Australian</u> <u>Geological Survey Organisation</u>(Record 1992/55).