ANNUAL REPORT

EXPLORATION LICENCES 25657

CLOUGHS DAM

FOR THE PERIOD 30/8/09 to 29/8/10

YEAR 3

by

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GDA 94 – Zone 53

Target Commodities: Uranium and REE

1:250000 Hermannsburg

1:100000 Macdonnell Ranges

September 2009
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1. EL 25657 – Location plan
SUMMARY

The tenement is located about 50km northwest of Alice Springs in the southern part of the Northern Territory.

EL 25657 was granted to Alistair Mackie on 30th August 2007. The licence was transferred to WDR Base Metals Pty Ltd, a wholly owned subsidiary of Western Desert Resources Ltd, on 17th June 2008. This EL formed part of the “Bushy Park” joint venture with NuPower Resources Ltd between August 2008 and August 2010. In late August 2010 WDR announced that it had entered into a farm-in agreement with Crossland Uranium Mines Ltd over the tenement.

The project area straddles the contact between the Aileron Province and the Warumpi Province of the Palaeoproterozoic Arunta Block.

The Exploration Licence has been little explored in the past. It is prospective for uranium, rare earths and base metal deposits. Previous exploration in the area has included reconnaissance geochemical sampling programmes, bore water sampling, an airborne EM survey and a regional gravity survey.

Little work was done on the EL during year 3 as NuPower were unable to complete the programme which they had committed to due to lack of funding. One stream sediment anomaly was followed up and the anomalous uranium values were found to be due to a bedrock source elevated in uranium.

The proposed exploration programme for year 4 will include a detailed airborne magnetic/radiometric survey and ground follow-up of any anomalies from the airborne survey.
INTRODUCTION

BACKGROUND
The Exploration Licence has been little explored in the past. It is prospective for uranium, rare earths and base metal deposits.

LOCATION AND ACCESS
The tenement is located about 50km northwest of Alice Springs in the southern part of the Northern Territory (Figure 1).

Access is by the sealed Stuart Highway north from Alice Springs, and thence by the sealed Tanami Road to the north east portion of the EL. Access within the project area is by station tracks. Much of the area is inaccessible to vehicles due to the rugged terrain.

![Figure 1. Cloughs Dam EL 25657 – Location Plan](image)

CLIMATE
The climate is semi-arid, sub-tropical with cold winters and hot summers. The average annual rainfall is 300mm with most falls in summer months.

TOPOGRAPHY AND VEGETATION
The topography of the area can be divided into three regions: Chewings Range in the central part of the EL, the MacDonnell Ranges in the south and Burt Plain to the north.
The hills and ridges are lightly to moderately wooded with stunted eucalypts, gidgee, mulga and acacia. The alluvial flats contain open woodland with ghost gums and other eucalypts with some acacias. Burt Plain is poorly vegetated with spinifex and isolated trees.

**TENURE**

**MINING/MINERAL RIGHTS**
EL 25657 was granted to Alistair Mackie on 30th August 2007. The licence was transferred to WDR Base Metals Pty Ltd, a wholly owned subsidiary of Western Desert Resources Ltd, on 17th June 2008. This EL formed part of the “Bushy Park” joint venture with NuPower Resources Ltd between August 2008 and June 2010. In August 2010 WDR announced that it had entered into a joint venture with Crossland Uranium Mines Ltd over the tenement.

**LAND TENURE**
The tenement is located within the boundaries of Perpetual Pastoral Leases 960 (Bond Springs) and 1145 (Hamilton Downs).

**NATIVE TITLE**
The Cloughs Dam project does not currently fall within the area of a registered Native Title Claim.

**ABORIGINAL SACRED SITES**
There are no known sacred sites within the project area.

**GEOLOGY**

**REGIONAL GEOLOGY**
The project area straddles the contact between the Aileron Province and the Warumpi Province of the Palaeoproterozoic Arunta Block. The Aileron Province forms part of the North Australia Craton and is aged between 1865-1740 Ma. The Warrumpi Province is aged between 1690-1600 Ma and is thought to have accreted onto the craton at 1640 Ma.

**LOCAL GEOLOGY**
The Aileron Province is represented by the Illyabba Metamorphics, consisting of biotite gneiss, amphibolites and granitic gneiss, and the Strangways Metamorphic Complex, consisting of granitic and basic gneisses. It is separated from the granitic gneisses and quartzites of the Warrumpi Province to the south by the Charles River Thrust/Fault zone. The Warrumpi Province is made up of the Iwupataka Metamorphic Complex, the Teapot Granite Complex and the Madderns Yard Metamorphic Complex. The Redbank Thrust Zone which crosses the northern part of the licence consists of mylonitic rocks and forms a prominent scarp. Tertiary sediments occur north of the thrust with some isolated outliers of Arunta age rocks.
PREVIOUS EXPLORATION

MINING HISTORY
No mining has been carried out in the area.

EXPLORATION BY PREVIOUS COMPANIES
Little previous exploration has been done over the tenement area.

CRA Exploration (1971-72) CR1972/64
CRA Exploration explored the northern and western parts of the area for uranium and base metals. A stream sediment survey was completed and station bores were sampled. Car borne scintillometer traverses were completed during the collection of the station bore samples. No anomalous base metal or uranium values were reported from the stream sediment survey. Anomalous uranium and radon values were found in water samples from the Bulldust and New Well bores within the current EL.

CRA Exploration (1981-82) CR1982/274
CRA Exploration explored EL3100 during 1982 for sedimentary-hosted uranium deposits. This tenement was situated immediately north of the current EL. Two holes were drilled south of Hamilton Downs homestead and did not intersect any uranium mineralisation.

PREVIOUS EXPLORATION BY WESTERN DESERT RESOURCES

Regional stream sediment survey
A regional stream sediment survey with helicopter support was completed during May 2008 with 134 samples collected over the entire tenement area. BLEG analysis for gold was conducted and also a multi-element analysis. The results and locations of the samples were included in the previous year’s annual report. The results of the stream sediment survey showed some anomalous areas for Ce, La, U and Th, which will require ground follow-up. Two creeks in the northern part of the EL showed weakly anomalous base metal values and will require ground checking. The results from the BLEG sampling were not considered to be anomalous.

Water bore sampling
Three water bores in the north eastern part of the licence were sampled by NuPower. Anomalous water geochemistry was reported from two of the water bores sampled which will require follow up.

Airborne Electromagnetic (EM) Survey
Fugro Airborne Surveys completed an airborne EM survey for NuPower in September 2008. The survey was flown over the north and east part of the area at 1 kilometre line spacing and orientated E-W.

Gravity Survey
A regional Geoscience Australia and NTGS gravity survey at 4 x 4 kilometre grid was completed over the area in 2008.
EXPLORATION COMPLETED DURING CURRENT YEAR

Reconnaissance mapping
Anomaly 1 was field checked by NuPower; it is located in the NW corner of the EL. Three stream sediments had anomalous uranium (5.38 – 6.3ppm), with elevated Th, Ce and La.

The area was found to be underlain by gneiss, granulite, amphibolite, muscovite – kyanite(?) schist, dolerite with some pegmatite veins and a broad ESE striking ductile shear zone. The shear zone is an extensive feature, it was traversed across in two locations 1.5km apart and appears to be about 150m wide here. The 1:250,000 geological map shows this to be the Redbank Deformed Zone – on the map very much wider than it appears to be in the field.

Radiometric background was generally around 100-125cpm or 170-230cps. Over the ductile shear zone it was approximately 300cps. Spectrometer determinations showed elevated uranium and thorium in the shear zone – 10eppm U, 44eppm Th and 25eppm U, 19eppm Th. The airborne radiometric maps do not show a uranium anomaly in association with the shear zone, but there does appear to be a weak thorium anomaly correlating with it.

RESULTS AND EXPENDITURE

Discussion of results
The source of the stream sediment uranium at anomaly 1 seems to be the Redbank Deformed Zone. This has elevated uranium and thorium, but this seems to be more of an elevated background rather than mineralization.

Expenditure
The expenditure commitment for EL 25657 for year 2 was $70,000. Actual expenditure was $11,321 as shown on the accompanying exploration expenditure form.

PROPOSALS FOR FUTURE WORK

Proposed work programme for 2010/11 – Year 4
The proposed exploration programme for year 4 will include a detailed airborne magnetic/radiometric survey and ground follow-up of any anomalies from the airborne survey.

The proposed expenditure on EL25657 for year 3 will be $80,000.