

# ANNUAL REPORT

# **EXPLORATION LICENCES 25658**

# **MUELLER CREEK**

FOR THE PERIOD 30/8/07 to 29/8/08

YEAR 1

by

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## **INTRODUCTION**

## **BACKGROUND**

The Exploration Licence is included in the "Bushy Park" joint venture with NuPower Resources Ltd. It is prospective for uranium, gold, rare earths and base metal deposits.

## **LOCATION AND ACCESS**

The tenement is located about 120km northeast 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 unsealed Plenty Highway and unnamed roads to Alcoota Station. Access within the project area is by station tracks.

#### **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 is subdued and is dominated by alluvial flats of the Mueller and Waite Creeks and their tributaries.

The alluvial flats contain open woodland with ghost gums and other eucalypts with some acacias.

## **TENURE**

## MINING/MINERAL RIGHTS

EL 25658 was granted to Alistair Mackie on 30<sup>th</sup> August 2007. The licence was transferred to WDR Base Metals Pty Ltd, a wholly owned subsidiary of Western Desert Resources Ltd, on 17<sup>th</sup> June 2008.

Western Desert Resources Ltd and NuPower Resources Ltd entered into the "Bushy Park" joint venture on 5<sup>th</sup> February 2008. NuPower have to spend a total of \$1,000,000 on this EL and EL25338 within 3 years from commencement to earn a 51% interest in the tenements.

#### LAND TENURE

The tenement is located within the boundaries of Perpetual Pastoral Leases 972 (Atartinga), 1032 (Alcoota) and 1122 (Bushy Park).

#### NATIVE TITLE/ABORIGINAL LAND CLAIMS

The Mueller Creek project does not currently fall within the area of a registered Native Title Claim.

The project area lies within an Aboriginal land claim pursuant to the *Aboriginal Land Rights* (Northern Territory) Act 1976.

#### **ABORIGINAL SACRED SITES**

There are no known sacred sites within the project area.

## **GEOLOGY**

#### **REGIONAL GEOLOGY**

The project area is underlain by the Aileron Province of the Palaeoproterozoic Arunta Block, see figure 2. The Aileron Province forms part of the North Australia Craton and is aged between 1865-1740 Ma.

#### LOCAL GEOLOGY

The Arunta Block consists of three groups within the area, see figure 3. The Strangways Metamorphic Complex crops out in the south of the tenement and is probably the oldest group of rocks. It consists of felsic and mafic granulite and gneiss. Further to the north rocks of the Reynolds Range Group and the Landers Rock Beds occur. Both these groups consist of metasediments. Proterozoic-age granite/gneiss intrudes the metamorphic sequence in two areas.

The Proterozoic age rocks have been deeply weathered during Cretaceous to early Tertiary times forming a thick lateritic profile over most of the licence, see figure 4. The Late Tertiary Waite Formation consisting of limestone, mudstone and sandstone occurs in two north trending palaeo channels.

#### PREVIOUS EXPLORATION

#### MINING HISTORY

No mining has been carried out in the area.

#### **EXPLORATION BY PREVIOUS COMPANIES**

## Central Pacific Minerals AP 1726 (1968-69) CR1969/010

Exploration of the area was conducted for base metals, uranium and phosphate. No mineral occurrences were noted.

#### Otter Exploration EL 1456 (1977-78) CR1978/143

Otter Exploration explored the north western part of the area for uranium and base metals. Radiometric anomalies from government airborne surveys were ground checked. Some geochemically anomalous uranium values were found in areas underlain by granite/gneiss.

#### Negri River Corporation EL 8710 (1983-84) CR1985/259

Diamond exploration was carried out. No kimberlitic indicators were found.

#### Johannsen EL 8710 (1997) CR1997/562

Exploration for garnet resources was carried out. No economic concentrations were found.

## Tanami Gold EL 9803 and 22916 (2002-2005) CR2004/430 and 2005/552

Exploration was carried out within these ELs for IOCG and Tennant Creek-style copper/gold deposits. Small programmes of surface sampling and aircore drilling were carried out with no significant results.

## **EXPLORATION COMPLETED DURING CURRENT YEAR**

## **GEOCHEMICAL SURVEYS**

## Water bore sampling.

Six water bores were sampled and the results are detailed in appendix 1. The bore locations are shown on figure 5.

## RESULTS AND EXPENDITURE

## **Discussion of results**

The results of the bore water sampling show that the uranium values range between 2.4 and 10.8ppb. These values are not considered to be very anomalous.

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# **Expenditure**

The expenditure commitment for EL 25657 for year 1 was \$52,000. Actual expenditure was \$8386 as shown on the accompanying exploration expenditure form.

#### PROPOSALS FOR FUTURE WORK

# Proposed work programme for 2008/9 - Year 2

The proposed exploration programme for year 2 will include an airborne EM survey over the western part of the EL, gravity surveying and reconnaissance geological mapping. Depending on the results of this initial work further exploration including surface sampling, costeaning and drilling may be undertaken.

The proposed expenditure on EL25657 for year 2 will be \$75,000.

## References

Western Desert Resources Ltd, 2007. Prospectus for IPO dated 31st May 2007