ANNUAL AND FINAL REPORT OVER THE ADELAIDE RIVER URANIUM PROJECT

18/04/2006 to 10/05/2013

PINE CREEK MINERAL FIELD,
NORTHERN TERRITORY

Adelaide River Project
Exploration Licence: 24880

BY
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DISTRIBUTION
1. Northern Territory Department of Minerals & Energy
2. Eclipse Metals Limited
PROJECT NAME: ADELAIDE RIVER

TENEMENTS: Exploration Licences 24880

MINERAL FIELD: Pine Creek Mineral Field

LOCATION: PINE CREEK SD5208 1:250 000
Batchelor 5171 1:100 000

COMMODITIES: Uranium and Gold

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1.0 ADELAIDE RIVER PROJECT

2.0 INTRODUCTION

The Adelaide River project comprises Exploration Licence 24880 and covers 133.7 km$^2$ of paleoproterozoic rocks of the Pine Creek Orogen and a small area of Daly Basin sediments, approximately 100km south of Darwin. The project is prospective for vein hosted uranium-gold mineralisation similar to the adjacent George Adelaide River uranium deposits.

This report describes the results of all the exploration work carried out during the tenure of the Licence.

During April 2013 consulting geologists Kastellco Geological Consultancy ("KGC") conducted a review of existing historical exploration data within the Northern Territory Geological Survey Database. This was conducted for the Project area in order to identify any potential associated with uranium or gold. The results were negative with no exploration targets identified. Based on the review, it was recommended the exploration licence area was to be relinquished upon very little to no mineral prospectivity.

3.0 LOCATION AND ACCESS

Eclipse Uranium Limited's Adelaide River Project area is located 5km southwest of the locality of Adelaide River in the Northern Territory. Access to the area is provided by a number of sealed and unsealed roads, including the Stuart Hwy, Dorat Road and the Daly River Road – please refer to Figure. 1)

4.0 TENEMENTS

The project is comprised of one granted exploration licence (EL) with the tenement details summarised in Table 1 prior to this relinquishment and their location are shown in Figure 1.

<table>
<thead>
<tr>
<th>Project</th>
<th>Tenement Number</th>
<th>Status</th>
<th>Current Area</th>
<th>Current Holder</th>
<th>Granted Date</th>
<th>Expenditure Covenant ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide River</td>
<td>EL24880</td>
<td>Granted</td>
<td>40</td>
<td>133.7 km$^2$</td>
<td>Eclipse Uranium Ltd</td>
<td>18/04/2006 $35,000</td>
</tr>
</tbody>
</table>

5.0 REGIONAL GEOLOGY MINERALISATION

The Adelaide River project covers ground over the Pine Creek Orogen and a small area of Daly Basin sediments, approximately 100km south of Darwin. (Fig.2)

The Pine Creek Orogen hosts more than 1300 recognised mineral occurrences and is considered the most prospective province of the Northern Territory. (Ahmad, 1998) The region contains about 20% of the world's low-cost uranium resources (including the world class unconformity style Ranger and Jabiluka uranium mines) and also has a significant potential for gold. Considerable resources of lead-zinc-silver, platinum, palladium, tin-tantalum-tungsten and various other commodities also exist in the region. Geologically, the Pine Creek Orogen comprises sedimentary sequences deposited on rifted
Archean basement that were deformed, metamorphosed and intruded by syn and post tectonic granites and mafic plutons during the Barramundi Orogen. The region has a complex history of sedimentary, igneous and metamorphic activity with strong tectonic movement causing large scale folding and faulting and associated mineralisation. (Worden et al, 2006)

Figure 1: Adelaide River Project – Location Map

The Daly Basin is a northwest-trending intracratonic sedimentary basin. It contains the lower Palaeozoic Daly River Group, comprising, the marine Tindall Limestone, mixed peri tidal Jinduckin Formation and carbonate peri tidal Ooloo Dolostone.

6.0 LOCAL GEOLOGY & MINERALISATION

A major north east trending fault considered prospective for vein hosted uranium mineralisation roughly bisects the project area. (Fig. 2) This fault occurs in the siltstones, greywackes and conglomerates of the Burrell Formation which host a number of uranium occurrences in the region. A second fault trending northerly exists in the centre of the tenement and is characterised by a wide zone of brecciation and exhibits low grade iron ore capping at intervals.

This fault separates rocks of the Burrell Formation from the rocks of the Tolmer Group to the east. Tolmer group formations in the tenement area include the shallow marine sandstones of the Stray Creek Sandstone and Waterbag Creek Formations and the Hindrance Dolostone. A number of springs seep from the eastern side of this fault and flow into the Adelaide River.
Airborne radiometric data has identified a number of discrete bulls-eye radiometric uranium anomalies and areas of broadly elevated anomalism within EL 24880, including a number of high order anomalies that exhibit radiometric, geological and structural similarities to known uranium deposits in adjacent licences, including the George and Adelaide River Mines, located between 3-5 kilometres east of EL 24880. (Fig. 2)

Figure 2: Adelaide River Project – Regional/Local Geology Map
7.0 PREVIOUS EXPLORATION

Previous exploration in the region of EL 24880 was mainly directed toward the identification of vein type uranium and associated base metal mineralisation. A number of uranium occurrences were discovered in the region. Small quantities of uranium (<20 tons) were produced from the Adelaide River mine and George Creek in the 1950’s.

The Adelaide River mine occurs about 3km to the north east of EL 24880 and was discovered in 1954. The geology of the area comprises conglomerates and greywackes of the Burrell Creek Formation folded into a series of tight, upright, north-trending and south plunging folds. Mineralization is related to a north-northeast trending fault set which has been offset by later east-northeast trending faults and uranium is present where faults cross a 15m thick bed of coarse-grained greywacke. Mining prior to 1957 produced a total of 3,860 tonnes of ore, averaging 0.5% U₃O₈, giving a production of about 19.3 tonnes of U₃O₈. During 1959-1960, remaining reserves of 6350t ore @ 0.32% U₃O₈ were calculated by BMR. (http://www.aldershotresources.com)

George Creek is located about six kilometres to the east of EL 24880 and was discovered in 1954 by a BMR geologist. Regional geology in this area is similar to Adelaide River, but here the folds are plunging to the north, instead of south. Uranium mineralisation at George Creek is located in joints and fractures within a banded grey siltstone and greywacke. Reserves of 250 tons at 0.26% U₃O₈ were estimated in 1960. During 1958 and 1959, underground exploration yielded 120 tons of development ore with an average grade of 0.26% U₃O₈. The primary ore consists of pitchblende, in joints and fractures, and is associated with chalcopyrite bearing quartz veins and pyrite. Diamond drilling by Central Pacific Minerals NL encountered torbernite and autunite in the oxidised zone above the water table and located a 30cm wide shear zone containing films of pitchblende at the prospect. (Shields, 1971)

Approximately 1km north of the George Creek Mine is the Toughys Uranium Prospect. An exploratory shaft here encountered torbernite and autunite on joint cracks and cleavage within the siltstone. Mapping and radiometric surveying indicates the presence of uranium mineralisation in a folded banded siltstone. In 1971, Central Pacific Minerals NL took 5 banded siltstone samples from the dump. Uranium assay results included 360ppm U, 280ppm U, 140ppm U, 70ppm U and 20ppm U. (Shields, 1971)

The nearby Ronan’s Uranium Prospect is situated about 3km south of George Creek. A very pronounced radiometric anomaly is present here with readings of up to 40 times background for the area. A sample from this prospect assayed 300ppm Uranium. (Shields, 1971)

During the 1970’s, outcrops of Tindall Limestone in the area were tested by Northern Cement Pty Ltd and Adelaide Brighton Cement for their suitability in cement production. Exploration was deemed to be unsuccessful due to the small quantities, poor quality and unfavourable geological conditions of the dolomite limestones. Two base metal targets were also identified by Northern Cement including the major north trending regional fault and Pb-Zn mineralisation in the limestones. Galena crystals were found in limestone and assayed for lead. (Fisher, 1978)

Exploration for gold in the area occurred during the 1980’s and 1990’s. WR Grace targeted the Lower Proterozoic Burrell Creek Formation and the numerous quartz reefs found in the area in the early 1980’s. (Fisher & McDonald, 1983) During the late 1980’s, GeoNorth discovered gold occurrences at four localities (Possum, Sharon, Sharon North and Happy Valley) about 4km to the east of Eclipse’s EL 24880. The anomalous gold is associated with north-south running anticlinal axes in Early Proterozoic interbedded shales and coarse grained greywackes especially where coarser grained sediments cross the anticline. (Shields, 1989) These prospects were investigated further during the
early 1990’s by Northern Gold NL. RC results included 1m @ 1.6 ppm Au at the Arum Prospect 3km south of the locality of Adelaide River.

In August 2008 Cauldron Energy Limited commissioned GPX Airborne to complete a survey covering 2,070 line kilometres was completed on 100 metre spaced east/west lines, with north/south tie lines on 1,000 metre spacings to collect adiometrics, DTM and magnetic data. This data was re-processed by Resource Potentials in Perth, and analysis and interpretation of this data by Cauldron identified a number of discrete bulls-eye radiometric uranium anomalies and areas of broadly elevated anomalism within EL 24880, including a number of high order anomalies that exhibit radiometric, geological and structural similarities to known uranium deposits in adjacent licences, including the George and Adelaide River Mines, located between 3-5 kilometres east of EL 24880.

Cauldron completed a 10 day reconnaissance field trip in 2009 to investigate these anomalies. Work undertaken included mapping and sampling, including XRF and hand held gamma surveys over a number of the anomalies. A total of 88 XRF samples were taken in the field, utilising a hand held Niton XRF analyser. 91 total count (U, Th, K) gamma readings were also taken in conjunction with the XRF and geochemical sampling. The gamma readings were collected using a Geosensor Spectrometer. A total of 19 rock chip samples were collected from outcrop and submitted to ALS laboratories for multi-element (48 elements) analysis by ICP-MS and gold by fire assay and AAS. The samples returned generally low assay results, although two samples from the main target (Anomaly A) area returned elevated uranium grades up to a peak of 50 ppm uranium.

8.0 ECLIPSE EXPLORATION 2011-2013

Over the past year all data has been transferred and re-collated and reviewed. The licence EL 24880 has become part of the Pine Creek Project which also includes EL27851, EL27853, EL26257 and EL25201. Work completed by Eclipse has included reprocessing of available GIS data and interpreting it with the integration of newly available state data. This is being used to design further GIS programmes for the next tenement year and to aid and refine target generation. An updated search of theAAPA register was also requested in conjunction with other Pine Creek Tenements. Two field trips were completed to the Pine Creek Tenements. An initial reconnaissance trip with the purpose of meeting landowners and establishing relationships in the Darwin region and a second to ascertain the logistics required for forthcoming field programs, to determine access issues and also to ground proof targets and complete minor rock chip sampling and pXRF readings.

Since the completion of this trip Eclipse has requested the Aboriginal Area Protection Authority (AAPA) complete a survey on three of the Pine Creek tenements (including EL24880) to produce a certificate allowing all activities up to and including drilling. On the advice of the AAPA Eclipse has completed no further site work until this certification is received, at present this is anticipated for late April 2012.

Eclipse was currently working with an independent consultant to define geological and structurally favourable locations within EL24880 for a similar style of mineralisation to the surrounding Uranium mines such as Adelaide River.

A Risk Management Plan for the Pine Creek Project Area (which includes EL24880) has been submitted to and approved by NT Worksafe. Eclipse has also submitted a partial surrender from partial drop off as well as a renewal for the tenement. Eclipse proposes to surrender the areas of the tenement which are included in Litchfield National Park.

During January 2013 consulting geologists Kastellco Geological Consultancy (“KGC”) conducted a review of existing historical exploration data within the Northern Territory Geological Survey
Database. The aim was to identify any uranium/gold exploration targets to commence exploration activities within the EL.

Work during this term included literature searches and database compilation. Open file company reports were obtained from the Northern Territory Geological Survey and a review of past exploration data and geological concepts undertaken.

The targeting was undertaken at a high level to identify areas of interest that stand out in the regional re-interpreted geophysical data. Historical prospects were reviewed to determine the effectiveness of the previous exploration and evaluate remaining potential within the Exploration Licence area.

Based on the review, it was recommended the exploration licence area was to be relinquished upon very little to no mineral prospectivity.

9.0 REFERENCE


http://www.aldershotresources.com/project_details.asp?id=12