

ACN 102 912 783

# Scimitar Resources Ltd. Adelaide River Project EL 24880.

Annual Report for the Year Ending 17<sup>th</sup> April 2008.

Author: Andrew Rust Sally McGuinness

Date: 10<sup>th</sup> June 2007

Scimitar Resources Ltd P.O Box 285 West Perth WA 6872 Distribution:

1. DPIFM

2. Scimitar Resources Ltd

# Contents

- 1. Introduction
- 2. Location, Access and Tenure
- 3. Regional Geology
- 4. Project Geology
- 5. Previous Exploration
- 6. Work Completed
- 7. Conclusions and Recommendations

## References.

# Figures.

Figure 1.	Adelaide River Project Location
Figure 2.	Adelaide River Project Geology and Tenure
Figure 3.	Adelaide River Radiometrics

## Tables.

 Table 1.
 Adelaide River Project Tenement Details

#### Summary.

This report details the exploration activities carried out over EL 24880 of Scimitar Resources Ltd. (Scimitar) Adelaide River Project in the Northern Territory, during the period 18<sup>th</sup> April 2007 to 17<sup>th</sup> April 2008.

The project area is considered prospective for vein hosted uranium mineralisation associated with a large north east trending regional fault structure.

The Company is currently awaiting the commencement of an airborne radiometric / magnetic survey, which has been delayed since mid-late 2007, due to contractor scheduling and the onset of the tropical wet season.

## 1.0 Introduction.

The Adelaide River project comprises Exploration Licence 24880 and covers 184 km<sup>2</sup> of paleoproterozoic rocks of the Pine Creek Orogen and a small area of Daly Basin sediments, approximately 100km south of Darwin. The project area is considered prospective for vein hosted uranium mineralisation associated with a large north east trending regional fault structure.

## 2.0 Location, Access and Tenure.

Scimitar Resources 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. (Fig. 1)

The subject of this report, Exploration Licence EL 24880, covers 184 km<sup>2</sup> and is found on the Pine Creek SD52-08 mapsheet, centred on 721300 E / 8522600 N (GDA94).

#### Table 1. Amadeus Project Tenement Details.

Licence	Holder	Date Granted	Expiry Date	Area km²	Expenditure Covenant
EL 24880	Scimitar Resources Ltd 100%	18/04/2006	17/04/2012	184	\$45,000

# 3.0 Regional Geology.

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)

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 Oolloo Dolostone.



# 4.0 **Project Geology**.

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.

Open file airborne radiometric data shows pronounced anomalies within Scimitars EL 24880 in environments and host rocks similar to those of the nearby Adelaide River and George Creek deposits to the east. (Fig. 3)

## 5.0 **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 serious 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  $0.5\% U_3O_8$ , giving a production of about 19.3 tonnes of  $U_3O_8$ . During 1959-1960, remaining reserves 6350t ore @ 0.32% U<sub>3</sub>O<sub>8</sub> were calculated BMR. of by (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%  $U_3O_8$  were estimated in 1960. During 1958 and 1959, underground exploration yielded 120 tons of development ore with an average grade of 0.26%  $U_3O_8$ . 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 Scimitar'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.

During the 2006-2007 reporting period, Scimitar undertook office based studies to research and identify targets within EL 24880. Office studies included acquisition of open file airborne radiometric data, historical reports and associated data. Collation of historical data from hardcopy reports continued throughout the year.

## 6.0 Work Completed.

During the second year of tenure Scimitar commenced field based investigations and contracted GPX Airborne to conduct an airborne radiometric and magnetic survey over the entire licence area (\$57,000). This fixed wing survey of 2,067 line kilometres on 100 metre line spacings was planned to commence during October 2007. Due to the extension of other contracts and aircraft maintenance delays this survey was not able to be carried out before the onset of the wet season. GPX Airborne is currently completing a 170,000 line kilometre survey for Geoscience Australia in the Halls Creek region. Following further discussions with GPX it appears that they will not be able to undertake Scimitars survey until the middle of July 2008.

# 7.0 Conclusions and Recommendations.

Work conducted by Scimitar has highlighted the potential of the Adelaide River Project to host suitable targets for uranium mineralisation. The licence has yet to be fully tested by modern exploration methods and potential exists to identify uranium mineralisation within the licence area.

Exploration undertaken by Scimitar indicates that there is potential for uranium mineralisation to exist within the Adelaide River Project area, especially in the central and western parts of the licence where airborne radiometric imagery indicates the presence of uranium anomalism, associated with a north-east trending regional fault structure. It is thought that this structure may provide a locus for uranium mineralisation within the surrounding sediments. There are a number of uranium occurrences in the surrounding area that are located in a similar structural and lithological setting.

Scimitar intends to continue field based exploration over EL 24880 in the coming year. This work will initially involve the completion of the delayed airborne radiometric and magnetic survey. It is expected that this survey will define target areas for follow up ground based exploration. This field work will include rock chip sampling, mapping and ground based radiometric surveys. Depending on the success of the field investigations, Scimitar intends to undertake a drilling program comprising approximately 500 metres of Reverse Circulation (RC) drilling to follow up on any identified targets.

#### References.

**Ahmad, M., 1998,** Geology and mineral deposits of the Pine Creek Inlier and McArthur Basin, Northern Territory, AGSO Journal of Geology and Geophysics, 17 (3) p1-17.

**Fisher, W, J., 1978,** Annual Report for EL 1373, Year ending 28<sup>th</sup> November 1978, Unpublished report to the Dept. Minerals and Energy, NT, Northern Cement Pty Ltd. (CR1978\_0012)

**Fisher, W, J., and McDonald, I, R., 1983,** Report on EL 2475 1982 Exploration Program Year ending 29<sup>th</sup> December 1982, Unpublished report to the Dept. Minerals and Energy, NT, W R Grace Australia Limited. **(CR 1983\_0116)** 

Lally, J, H., and Bajwah, Z, U., 2006, Uranium deposits of the Northern Territory, Northern Territory Geological Survey, Report 20

Shields, J, W., 1971. Progress report on authority to prospect 1959 Pine Creek, Unpublished report to the Dept. Minerals and Energy, NT, Central Pacific Minerals NL. (CR 1971\_0153)

Shields, J, W., 1971. Progress report on authority to prospect 1959 Pine Creek, Unpublished report to the Dept. Minerals and Energy, NT, Central Pacific Minerals NL. (CR 1971\_0152)

**Shields, J, W., 1989,** Second Annual Report Exploration Licence 5065, Adelaide River Area, Northern Territory, Unpublished report to the Dept. Minerals and Energy, NT, Central Pacific Minerals NL (CR1989\_0797)

Worden, K, E., Carson, C, J., Scrimgeour, I, R., Lally, J, H., and Doyle, N, J., 2006, New SHRIMP U-Pb zircon geochronology for the central Pine Creek Orogen, Northern Territory: Implications for Top End orogenesis, Australian Earth Science Convention, Melbourne

http://www.sea-us.org.au/oldmines/ntabandoned.html

http://www.nt.gov.au/dpifm/Minerals\_Energy/Geoscience

http://www.aldershotresources.com/project\_details.asp?id=12