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**EL 3725** 

**MULGARIA** 

## FINAL REPORT AT LICENCE SURRENDER FOR THE PERIOD 15/3/2007 TO 14/3/2008

Submitted by Uranium Oil and Gas Ltd 2008

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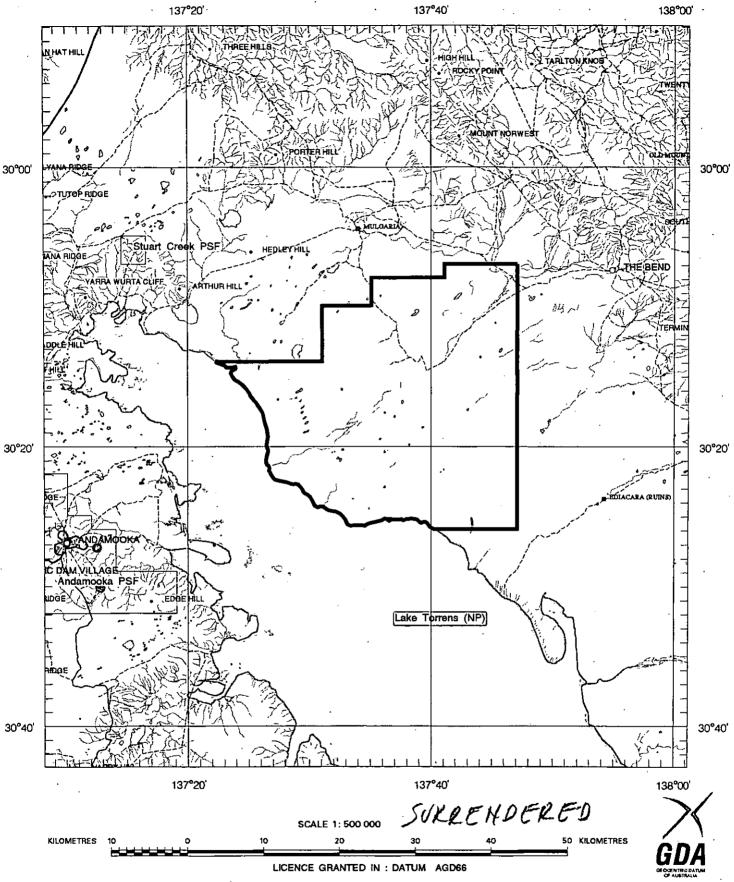
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# SCHEDULE A



APPLICANT: SWANCOVE ENTERPRISES PTY LTD

FILE REF: 207/06 TYPE: MINERAL ONLY AREA: 975 km² (approx.)

1:250000 MAPSHEETS: ANDAMOOKA

LOCALITY: MULGARIA AREA - Approximately 50 km ENE of Andamooka

DATE GRANTED: 15-Mar-2007 DATE EXPIRED: 14-Mar-2008 EL NO: 3725

# Tenement Operator: Uranium Oil and Gas Limited

Report Type: Final Technical Report

Report Period: 15-3-07 to 14-3-08

Tenement Number: E3725

Project Name: Lake Torrens East

Tenement Holder: Swancove Enterprises Pty Ltd

Author: W.E.Bannister

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Company Reference Number: E3725\_2008\_F\_01\_Report.pdf

Keywords: Data research

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#### **Summary**

**Location:** Exploration Licence 3725 is located on the north eastern shore of Lake Torrens

Geology: The Exploration Licence has a surficial cover of silcrete, and windblown sand underlain by Quaternary and Tertiary limestones and clays. These are followed at depth by Jurassic and Cretaceous sandstones with occasional carbonaceous shales. Below the Mesozoic sediments are sediments of the Neoproterozic Adelaidian Wilpena Group

**Target(s)** Three targets were looked at. The Beltana zinc mine is to the south east of the licence; however the stratigraphy did not trend into the granted ground therefore was no longer considered. The second target was the Roxby Downs type but Western Mining had already explored the eastern shore of Lake Torrens and failed to drill through to the basement. The hole was terminated at 762.10meters. The last target was uranium in surficial silcrete. A small amount of work had been done to the north of the tenement with samples returning up to 490 ppm U. However many of the samples were less than 150ppm and it was decided the target was too difficult and the expenditure too onerous to continue.

**Work Done:** A detailed data search was completed.

**Results:** The results are covered in the section on targets

**Conclusions:** The ground was surrendered

#### 2.0 Introduction

The licence was applied for in the name of Swancove Enterprises Pty Ltd and granted for a term of 1 year commencing on 15 March 2007. Swancove gave an option to joint venture the property to Uranium Oil and Gas Ltd. if the licence entered into its second year. The condition being that UOG would explore the licence in the first year. This UOG did but determined that the area was not prospective enough to commit the required funds to maintain the licence in good standing.

UOG did a detailed literature search on past exploration activities.

#### 3.0 Tenure

E3725 is situated on the north eastern side of Lake Torrens with the tenements eastern boundary being the shore line of that lake. It has an area of approximately 975 km<sup>2</sup>, is on the Andamooka 1:250,000 mapsheet and the locality is the Mulgaria Area which is about 50 km ENE of Andamooka. The Exploration licence location is shown in Map 1.

The expenditure commitment on the area comprised in the Licence is \$125,000 for the first year.

### 4.0 Geology and Targets

The recent surfical deposits of windblown sand and some silcrete sit on Quaternary and Tertiary limestones and clays. The silcretes have been explored for uranium mineralization by Seaham Exploration Pty Ltd. Ten samples of silcrete were submitted for analysis for uranium oxide and gave results between 70 ppm and 490 ppm and was attributed to fine grained carnotite within the silcrete. The Seaham licence was to the north of E3725 but it appears that similar geologic surfical features are present throughout the eastern shore of Lake Torrens. This did warrant further exploration however the expenditure commitments were large, access to the area was very difficult and half the year had passed before this was offered to UOG. It was too difficult under the circumstance.

Underlying the Quaternary and Tertiary deposits are Jurassic and Cretaceous sandstones with occasional carbonaceous shales. The Electricity Trust of South Australia explored Mesozoic sedimentary sub-basins on the eastern shore of Lake Torrens for coal deposits in what was an untested area immediately to the west of

Leigh Creek. Various geophysical surveys were done followed by drilling 39 holes, some variably carbonaceous sediments, but no coal was intersected.

Below the Mesozoic sediments BHP inferred the Cambrian Andamooka Limestone outcropped on the plain near the lake shoreline just to the north-east of Lake Torrens. The phosphate potential was investigated but due to poor rock exposure it was not possible to define the extent of the Limestone. Very little phosphate material was located. Phosphate was not one of UOGs targets.

Below the Cambrian Andamooka Limestone lies the Neoproterozoic Wilpena Group and below that the Umberatana Group of the Adelaidian sequence. Underlying this is the basement Mesoproterozoic Gawler Range Volcanic and Hiltaba Suite of granitoids. Western Mining explored much of the area for Roxby Downs style mineralization. Abundant geophysical data was gathered and a small number of diamond holes were drilled on or close to the shores of Lake Torrens. Three holes are of interest. Two were drilled on the western side of the Torrens Hinge zone whilst the third was drilled on the eastern side i.e. the side which is covered by E3725.

Nolteneus Hill-WMC NHD1.Located south of the Carrapateena arm of Lake Torrens on the western Shore.

Drilled to 307m of Wilpena group sediments then down to 502 m in Umberatana Group sediments before intersecting basement, in this case weakly altered granite gneiss, but no mineralization.

Murdie- WMC-BP MRD1 Located south east of Andamooka Island on the western side of Lake Torrens.

Intersected the interface between the Wilpena Group and the Umberatana Group at 663m and intersected the basement at 806m. This was logged as an intermediate volcanic with some alteration. The volcanic is thought to belong to the Gwaler Range Volcanics.

West Well- WMC WWD1 Located on the eastern shore of Lake Torrens in a position just south of E 3725 and therefore applies directly to any exploration searching for Roxby Downs style of mineralization in the mesoproterozoic basement

West Well drilled 72m of Quaternary, Tertiary and Cretaceous cover before entering Wilpena Group sediments. The hole was terminated at 762m still in the Wilpena sediments. WMC's conclusions are that the depth to basement in this area probably exceeds 1000m as indicated by geophysical modeling.

The depth to basement is far too great for a small company to explore for Roxby Downs style of mineralization.

#### 5.0 Conclusions

All known available targets were assessed and evaluated but none matched UOG's criteria.

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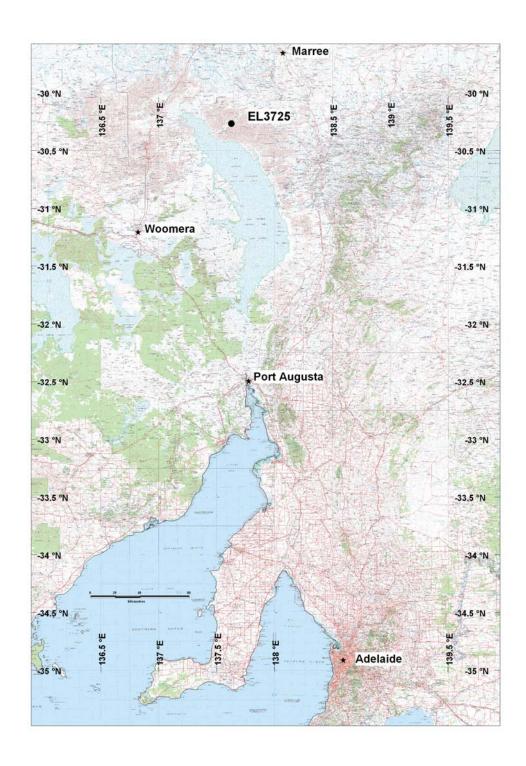


Figure 1. Location of EL3725