

First Annual Report

EL 25574 – Harper Springs Wilora Palaeo-channel Uranium Project Mt Skinner Base Metal Project

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Skinner, Base Metals, VTEMMap Sheets:1:250,000 AlcootaCopy to:1. Mines and Energy Department, Darwin, Northern Territory
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Appendix - digital data files

Drilling collars	- EL25574_2008_A_02_DrillCollars.txt
Lithology Logs	- EL25574_2008_A_03_Lithologs.txt
Lithology Codes	- EL25574_2008_A_04_Lithocodes.txt
XRF data	- EL25574_2008_A_05_DownholeGeochemNiton.txt
VTEM data	– EL25574_2008_A_05_VTEM.zip

Summary

Uramet Minerals Ltd identified the potential for a calcrete-hosted uranium occurrence within the Wilora palaeo-channel located approximately 190km north of Alice Springs, NT. Potential for stratiform copper mineralisation and sandstone-hosted lead mineralisation in the Mt Skinner area has also been recognised (Dunster et al., 2007).

This report details exploration work carried out by Uramet Minerals Ltd within the Harper Springs tenement (EL25574, Fig. 1) in the Northern Territory for the 2007 field season. The tenement was transferred from Elkedra Diamonds NL during the 2007 season and covers an area of 144km².

Exploration consisted of regional reconnaissance work, aircore drilling and geochemical analysis of rock chip and drill spoil samples. A helicopter-borne electromagnetic (EM) survey took place over the eastern part of the tenement in October 2007 with final data products supplied in early 2008.

Regional field reconnaissance was carried out in July and October 2007 with promising anomalous copper and uranium results returned.

An extensive aircore drilling program within the Wilora palaeo-channel and a minor reconnaissance drilling in the general Mt Skinner area was completed during the reporting period. A total of 1 hole with a depth of 47m was drilled within the tenement in October 2007. The drilling revealed no indication of calcrete or potential base-metal potential.



Figure 1. Location map of EL25574

1. Introduction

Exploration License EL25574 covers part of the Uramet Mineral Ltd's Wilora palaeo-channel uranium and Mt Skinner base-metal project areas. This report details all work carried out on the tenement up until 29 July 2008 by Uramet Minerals Ltd.

The Wilora and Mt Skinner Project Areas are located approximately 190km northeast of Alice Springs, NT, with good road access on the sealed Stuart Highway and a network of established minor roads and station tracks. The tenement is approximately 25km in length and 5.6km in width.

An Aboriginal Areas Protection Authority (AAPA) clearance (certificate C2008/152) was conducted in the tenement prior to field work and any area of cultural significance was avoided.

2. Geology

2.1 Regional Geology

The Wilora palaeo-channel consists of Quaternary to Tertiary silicified calcrete that is part of the Ti-Tree Basin sedimentary succession. The Ti-Tree Basin sediments cover Cambrian and Neoproterozoic sedimentary rocks, which comprise sandstone, siltstone, shale, conglomerate and carbonate units. These units crop out along NNE- and W- trending ridges and low hills. The basement is composed primarily of granitoids, with several granite exposures to the southwest and southeast of the Wilora palaeo-channel (Fig. 2).



Figure 2. Simplified geological map showing EL25574 and adjacent tenements held by Uramet Minerals Ltd. Dashed line shows outline of Wilora palaeo-channel

2.2 Tenement Geology

The geology of the Harper Springs and surrounding Mt Skinner area is dominated by Neoproterozoic and Cambrian sedimentary rocks of the Central Mount Stuart and Octy Formations.

Cambrian and Neoproterozoic strike directions mainly trend NW-SE, sub-parallel to regional faults and shears such as the northwest trending Stirling Fault Zone. A secondary set of faults cross-cut the stratigraphy with a northeast strike.

Part of the tenement is occupied by the Wilora palaeo-channel system, the main channel of which is ~3km wide. Multiple generations of calcrete and dolocrete have accumulated since

the Tertiary. The main Wilora palaeo-channel drains towards the northwest and has a catchment area that extends to the Mt Skinner and Strangways Ranges to the southeast.

The Neoproterozoic Central Mount Stuart Formation covers most of the north-eastern and eastern part of the tenement. The Cambrian Octy Formation is unconformable on the Neoproterozoic sandstones. The succession is part of a tilted fault block dipping gently towards a geophysically-defined fault trending NW-SE. The Neoproterozoic sedimentary rocks range in thickness from a veneer at the base of the Cambrian (Dunster et al., 2007) in the north, to an interpreted 1200 m depth to the south.

Granitoid basement crops out in the south-eastern corner of the tenement and to the south just outside the tenement area (Fig 2).

3. **Previous Exploration Work**

Relatively little exploration work has previously been carried out within the Wilora palaeochannel. Uranium exploration adjacent to the tenement was undertaken by CRA in the 1970's (CR19740032) but only low uranium levels were reported.

The NTGS re-evaluated the area as part of the Southern Georgina Basin Geology and Resource Potential Report in 2007 and concluded that Mt Skinner remains prospective for base metals (Dunster et al., 2007).

4. First Year Exploration Program

4.1 Desktop Review

4.1.1. Wilora Palaeo-channel Uranium Project

A review of available literature including open file reports indicates that no significant mineral occurrence has been previously recorded within the Ti-Tree Basin units located within the tenement area.

Airborne radiometric surveys completed by the NTGS (Barrow Creek – 1981 and Alcoota –1997) highlighted the radiogenic nature of the granitoid suite and arkoses in the upper reaches of the palaeo-drainage system, which contain significant uranium levels, generally between 9 to 100 ppm U, based on open file rock chip data. Anomalous levels of uranium were reported from bore water samples (up to 226 ppb U from 8 Mile Bore located west of the tenement area, CR19740032) and from sediments in streams draining the uranium source rocks.

Airborne radiometric data show uranium anomalies over a section of the Hanson River, over the Stirling swamp (both west of the tenement) and parts of the palaeochannel within the tenement (Fig. 3).

Units within the Ti-Tree Basin associated with the Wilora palaeo-channel are considered as favourable for hosting uranium deposits. Calcrete-hosted and sandstone-hosted uranium deposit styles are possible within the palaeo-channel succession.



Figure 3. Radiometric map (equivalent uranium, eU) of the Wilora palaeo-channel area showing calcrete-filled palaeo-channel and modern drainage channels. Geophysical data processed by R. Clifton, NTGS.

4.1.2. Mt Skinner Base Metals Project

A review of open file exploration reports and drill core data indicates that Mt Skinner is prospective for stratiform copper mineralisation (Fig. 4) in the Neoproterozoic Central Mount Stuart Formation and epigenetic base metal mineralisation in the Elyuah Formation. Copper mineralisation occurs on the surface and extends for several kilometres along strike and consists of malachite-stained rocks and float (Dunster et al., 2007; Fig. 4). Visible galena, pyrite, chalcopyrite and fluorite were described by Dunster et al. (2007) in core CMS4 (immediately east outside the tenement) at a depth of 247 m to 260 m. Whole rock geochemistry carried out during the same study confirmed elevated lead, zinc and barium levels and revealed previously unrecognised lead-zinc mineralisation at depth.



Figure 4. Mt Skinner geological map showing cupriferous outcrop, Dunster et al., 2007

4.2 Reconnaissance work

Reconnaissance work was carried out in July and October 2007. Outcropping malachitebearing siltstone and associated float were investigated in the wider project area.

4.3 Aircore Drilling (partly RAB hammer and blade)

Aircore drilling was carried out throughout September and October 2007 within the general project area - drilling a total of 4359 m in 243 holes; of which 1 hole with a depth of 47m is located within the tenement (Fig.5). The aim was to find the subsurface extension of calcrete and penetrate basement rocks.

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No calcrete was found and basement was not intercepted.

Figure 5. Drill location plan for tenement EL25574.

4.4 Helicopter-borne Electromagnetic Survey

A helicopter-borne EM (VTEM = versatile time domain electromagnetic) survey amounting to approx. 52 line-kilometres over the tenement was flown by Geotech Airborne Ltd (www.geotechairborne.com.au) in October 2007. The survey covered the eastern area of the tenement (Fig.6) and adjacent areas on neighbouring tenements. The data mainly represent conductivity features associated with different stratigraphic units and major structural lineaments.



Figure 6. VTEM results – channel 17 overlain on the Woodgreen 1:100K geological map.

5. Conclusions

The Wilora aircore drilling program revealed an extensive low-grade uranium anomaly north of the tenement within the palaeo-channel.

Further field work is planned to map the extent of the basement rocks including granitoids and quartz blows. Further detailed evaluation of the VTEM results are in progress.

6. References

Dunster JN, Kruse PD, Duffett ML and Ambrose GJ. 2007. Geology and resource potential of the southern Georgina Basin, Northern Territory, NTGS