Annual Report

FOR

Exploration License 25553
“Hayes Creek”
For the year ending
25/07/2010

Map Sheet 1:250,000 Pine Creek SD52-08

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Summary

Exploration for uranium mineralisation was carried out on EL25553. Previous work over the tenement area has been largely restricted to prospecting and ground geochemical surveys for gold, tin and base-metals. The EL lies adjacent to a number of historical tin mines, known as Bells Tin Mines or Hayes creek Tin Mines. Uranium exploration of the EL commenced after the identification of a strong U-channel anomaly from publicly available airborne radiometric data.

During the first year of tenure ground radiometric surveys, geochemical surveys and trenching were carried out.

During the second year of tenure 3 RC holes for a total of 200m and 70 samples, were drilled below the trenches at the Bella Rose Prospect. Weak uranium mineralisation associated with ferruginous veining in the oxide zone was intercepted in the RC holes. Geological mapping was carried out over the eastern quarter of the EL. An airborne Tempest EM survey was carried out over the EL in collaboration with GA Australia.

During the third year of tenure, the period of this report, 14 RC holes were completed for an advance of 1864m and 184 drill samples. Weak uranium mineralisation was intersected along a structural corridor over 1.5km strike. All 14 drill-holes were down-hole gamma logged. Optical imaging was carried out on two holes. A trial airborne VTEM EM survey of 16.3 line km was flown over part of the EL. This survey was flown at 200m line spacing and 75 m nominal terrain clearance.
1. Introduction

1.1 Project name and location

Exploration license EL25553 “Hayes Creek” is located on the central part of the 1:250,000 Sheet SD5208 Pine Creek, directly north of the locality of Hayes Creek. Access to the tenement is off the Stuart Highway.

The EL covers parts of pastoral lease PL903 (Douglas Station) and NT Portion 455 (Hayes Creek Wayside Inn)

1.2 Exploration License Details

EL 25553 was granted on 26th July 2007 to Thundelarra Exploration Ltd (“Thundelarra”) for a period of six years. The EL is registered in the name of Thundelarra’s wholly owned subsidiary Element 92 Pty Ltd.

The EL covers an area of 2 graticule blocks or approximately 6.7 square kilometres and is in its third year of tenure. A waiver from reduction was applied for on 26/06/2010.

1.3 Operator Details

The operator for exploration on the EL is Thundelarra Exploration Ltd.

Address and contact details for Thundelarra/Element 92 are:

Thundelarra Exploration Ltd
Level 3, IBM Building
1060 Hay Street, West Perth
Western Australia 6005

Telephone 61 8 9321 9680
Fax 61 8 9321 9670
admin@gemin.com.au
2. Geology

The Hayes Creek EL lies in the central portion of the Pine Creek Orogen. The orogen consists of Early Proterozoic meta-sedimentary rocks on an interpreted granitic Archean Basement. The Proterozoic rocks are tightly folded on NE trending axes and metamorphosed to greenschist facies. The meta-sedimentary rocks are intruded by pre-deformational basic igneous rocks and post-deformational granites.

EL 25553 lies over an area of tightly folded meta-sedimentary rocks assigned to the Gerowie Tuff and Mt Bonnie Formations of the South Alligator Group and the Burrell Creek Formation of the Finnis River Group.

Anomalous radioactivity is present over carbonaceous siltstone members of the Mt Bonnie Formation, in close proximity to the contact with the younger Burrell Creek Formation. The radioactivity appears to be related to a zone of shearing and faulting which can be traced over several kilometres.

3. Previous Exploration Activity

The historical Hayes Creek Tin mine workings lie just to the east of EL25553. Numerous shallow prospecting pits on EL25553 are evidence of historical prospecting for tin on the area not recorded in open file reports.

Modern company exploration appears to have commenced in the late 1970’s. The most significant work was undertaken by CRA and Geopeko. During 1977-1979 CRA carried out a program of soil sampling and geological mapping over part of EL25553. CRA’s search was for base-metals and tin. Three wide spaced soil traverses covered part of the eastern block of EL25553.

Geopeko carried out a program of geological mapping, detailed systematic stream sediment sampling and rock-chip sampling during the period 1979-1982. Of some note is a cryptic reference in an annual report that alludes to an assessment carried out of an airborne radiometric anomaly which coincides with Thundelarra’s Bella Rose Prospect. The results or conclusions of this assessment were not given. Geopeko’s exploration target was Mt Bonnie style base-metal/gold deposits.

Nord Resources carried out uranium exploration over part of EL25553 during 1981-1982. However their work was strictly focussed on the Hayes Creek fault and unconformity to the south of the EL, and little or no work was done within the area of EL25553

No substantial company exploration seems to have taken place at Hayes Creek after 1982.

During the first year of tenure Thundelarra carried out compilation of historical data, ground radiometric surveys, soil sampling traverses, rock-chip sampling, geological mapping and costeaneing. Three costeans for a total length of 78m were dug. 9 rock-chip samples, 68 trench channel samples and 27 soil samples were collected during the first year of tenure.
During the second year of tenure Thundelarra carried out geological mapping, a Tempest airborne EM survey and drilled 3 RC holes for a total of 200m and 70 samples.

4. Target Commodities

Thundelarra is exploring the Hayes Creek EL primarily for uranium mineralisation.

5. Exploration Methods

Thundelarra’s exploration effort during the second year of tenure has consisted of prospect scale geological mapping, ground radiometric traversing and RC drilling. Thundelarra has also contributed to Geoscience Australia’s Pine Creek Airborne EM survey by funding 330m spaced infill lines over EL25553. During the third year of tenure exploration has mainly involved systematic RC drilling of targets defined by earlier work, and an orientation VTEM survey.

6. Work Carried out and Results

A major systematic RC drilling program was carried out over the Bella Rose radiometric anomaly. A total of 14 RC holes for a total of 1864m were completed. A total of 184 drill samples were assayed during the period. A drill-hole collar plan is shown in figure 2.

The drilling contractor was Johannsen Drilling of Howard Springs who supplied a Gemco RC rig with 550psi/1150cf air and a Superrock1000 RC rig with 550/1150cf air. Samples were collected through a cyclone into plastic bags in 1 metre intervals.

RC holes were geologically logged and checked for radioactivity with a scintillometer. Intervals deemed significantly anomalous were riffle split to a 2-3kg sample in 1m intervals; some other selected sections of the holes were spear sampled in 3 or 4m composite sample intervals. Samples were prepared at Amdel (crushed to 3mm and then pulverised) and assayed at Ultratrace Perth. The following elements were assayed for: Ag (5), As(10), Au(1ppb), Bi(1), Ce(0.5), Co(20), Cu(50), Dy(0.5), Er(0.5), Eu(0.2), Gd(2), Ho(0.2), La(0.5), Lu(0.2), Mo(5), Nd(0.5), Ni(50), Pb(10), Pd(5ppb), Pr(0.2), Pt(5ppb), Sc(10), Sm(0.5), Tb(0.2), Th(0.5), Tm(0.2), U(0.5), Y(1), Yb(0.5), Zn(50). All detection limits in ppm unless otherwise noted. Au, Pt and Pd were assayed by fire-assay with a ICP-MS finish, while the remaining samples were analysed by ICP-MS or ICP-OES after peroxide fusion.

A number of anomalous uranium intercepts were obtained from the drilling. Intercepts of greater than 100ppm U are presented in Table 1 below. Generally these intercepts lie within a broader anomalous halo. Limited sampling shows that the general background of the rocks in the Bella Rose area is 4-10ppm U; so that values of 100ppm and more represent a significant concentration indicating ore forming processes were active. Host rocks to the mineralisation appear to be carbonaceous siltstones with minor chlorite alteration, pyrite and quartz-hematite veining.
All holes were down-hole logged by contractor Borehole Wireline Pty Ltd for gamma response, conductivity and magnetic deviation. Several of the holes had collapsed prior to down-hole logging and only incomplete logs were obtained. Two of the holes were logged with an optical imager. See appendix I for down-hole geophysical data and pdf’s.

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Table 1. Significant intercepts >100ppm U

A trial heliborne VTEM survey was flown over EL25553 by contractor Geotech Airborne Ltd. A total of 16.3 line km were flown East-West at 200m line spacing at 75m nominal terrain clearance covering the western half of the EL. Two lines were flown across the entire EL. The VTEM data was processed by Southern Geoscience Consultants. The VTEM has added little to the geological picture; the rocks in the area appear to have generally uniform relatively low EM response.

7. Environment

As the reporting period ends during the middle of the field season and exploration activities on EL25553 are continuing, none of the recently completed drill-holes and pads have been rehabilitated yet. It is anticipated that this will be done before the start of the wet season. All 2009 disturbances have been successfully rehabilitated.

8. Conclusions

Strongly anomalous uranium mineralisation has been identified over a significant strike length at Bella Rose prospect. While the mineralisation discovered to date is not yet of economic significance, the Bella Rose anomaly may represent a major pathway for mineralising fluids which may have led to the formation of uranium deposits elsewhere along strike. The Bella Rose mineralised structure is thought to continue to the north-west for several km outside of EL25553. Further exploration along the Bella Rose structure is considered warranted.

9. Expenditure statement

A total of $333,401 was spent on EL25553 by Thundelarra Exploration Ltd. Expenditure was well in excess of the covenant for the period. A full expenditure report is given in Appendix II.
10. Program and Budget

Additional drilling is being undertaken on EL25553 to further evaluate the Bella Rose trend. At least 500m of RC drilling will be carried out. The provisional budget for the coming period is as follows:

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<td>RC drilling</td>
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<td>Administrative Costs:</td>
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<td>Total Budget</td>
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APPENDIX I

Digital Data EL25553 2010. Assay Results, Drill-hole Data and VTEM Data
APPENDIX II

EL25553 Expenditure Report