

**Thundelarra Exploration**

**Annual Report**

**FOR**

**Exploration License 24931**  
**“Burrundie”**  
**For the year ending**  
**17/07/2009**

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

Harold Mees  
Geologist,  
Thundelarra Exploration Ltd  
[harry.mees@gemin.com.au](mailto:harry.mees@gemin.com.au)  
August 2009

## **Contents**

<b>1. Introduction.....</b>	<b>3</b>
<b>1.1 Project name and location .....</b>	<b>3</b>
<b>1.2 Exploration License Details .....</b>	<b>3</b>
<b>1.3 Operator Details .....</b>	<b>3</b>
<b>2. Geology.....</b>	<b>4</b>
<b>3. Previous Exploration Activity.....</b>	<b>4</b>
<b>4. Target Commodities .....</b>	<b>5</b>
<b>5. Exploration Methods .....</b>	<b>5</b>
<b>6. Work Carried out and Results.....</b>	<b>5</b>
<b>7. Environment.....</b>	<b>5</b>
<b>8. Conclusions.....</b>	<b>6</b>
<b>9. Expenditure statement.....</b>	<b>6</b>
<b>10. Program and Budget.....</b>	<b>6</b>

## **List of Figures**

**Figure 1. Tenement Plan and Rock-chip Sample Locations**

## **Appendix I**

**Rock-chip Assay Results**

## Summary

The Exploration for uranium, gold, tin and basemetals mineralisation was carried out on EL24931. The EL area has previously been explored for gold, basemetals and tin mineralisation. Previous exploration has been restricted to geological mapping and geochemical surveys including soil, rock chip and stream geochemistry.

Work carried out by Thundelarra during the reporting period has been restricted to compilation of historical data, several geological reconnaissance traverses and the collection of 4 rock chip samples. Anomalous Pb values to 9930ppm Pb were returned from ferruginous quartz veining in the northern part of the McKinley Granite.

## 1. Introduction

### 1.1 Project name and location

Exploration license EL24931 “Burrundie” is located on the eastern side of the 1:250,000 Sheet SD5208 Pine Creek, directly south of the locality of Burrundie. Access to the tenement is via the Grove Hill – Mt Wells Road and the Spring Hill Road.

The EL covers parts of pastoral leases PL1111 (Ban Ban Springs), PL903 (Douglas) and PL805 (Mary River West). Two native title claims exist over the area, DC01/21 “Ban Ban Springs” to the east and DC01/06 “Mary River West” to the south west.

### 1.2 Exploration License Details

EL 24931 was granted on 18<sup>th</sup> July 2006 to Imperial Granites and Minerals Pty Ltd (IG&M) for a period of six years. On 17<sup>th</sup> December 2007 Thundelarra Exploration Ltd (Thundelarra) and subsidiary Element 92 Pty Ltd entered into an agreement to purchase the license from IG&M and ownership was transferred.

The original EL covers an area of 34 graticule blocks or approximately 112.4 square kilometres. The EL was reduced to 17 blocks on the last anniversary of the licence.

The EL is in its third year of tenure.

### 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](mailto:admin@gemin.com.au)

## 2. Geology

The Burrundie 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 NW trending axes and metamorphosed to greenschist facies. The meta-sedimentary rocks are intruded by pre-deformational basic igneous rocks and post-deformational granites.

EL 24931 lies over an area of tightly folded meta-sedimentary rocks assigned to the South Alligator Group intruded by broadly conformable sills of Zamu Dolerite. The McKinley Granite intrudes the sediments in the eastern part of the EL, while the Prices Springs Granite intrudes the sediments in the far NW of the EL. The EL covers the strike extension of the Pine Creek Shear-zone which hosts the bulk of the gold mineralisation in the Pine Creek Goldfield.

## 3. Previous Exploration Activity

Several small historical Tin, Copper and Gold workings lie within EL24931, although they are held on separate mining claims excised from the EL. The presence of these workings indicates significant but largely unreported historical prospecting for Sn, Cu and Au.

The Burrundie U occurrence was discovered through prospecting by the BMR during 1954. A single diamond drill-hole was subsequently drilled at the U occurrence by the BMR. This appears to be the only drill-hole to be recorded in open file data as having been drilled on EL24931.

Modern company exploration appears to have commenced in the early 1980's. A number of companies including Geopeko, Anaconda, CSR, Zapopan, Western Gulf Oil, Northern Gold, Billiton, Acacia, North Exploration and AngloGold have carried out low level exploration activities over the EL area. This work consists mostly of stream sediment sampling programs, geophysical surveys, mapping and soil sampling surveys. The most consistent and comprehensive exploration effort was carried out during the late 1990's to 2002 by Acacia Resources and its successor AngloGold. These companies carried out programs of detailed stream-sediment sampling, soil sampling and detailed airborne geophysical surveys and geological interpretations over those parts of EL24931 held by them. However, the latter companies were purely focussed on gold exploration and do not seem to have seriously considered the potential for other commodities.

Previous company exploration has failed to discover significant mineralisation of any kind on EL24931.

During the previous reporting period Thundelarra carried out a program of geological and radiometric prospecting and rock chip sampling.

## **4. Target Commodities**

Thundelarra's focus during the reporting period has been on Uranium exploration, but the EL is also being explored for base metals, gold, nickel, tin and iron ore.

## **5. Exploration Methods**

The EL is being systematically explored by initially carrying out desktop studies of open file reports and compilation of historical data in conjunction with reconnaissance radiometric traverses over and rock chip sampling of uranium anomalies identified from the historical data. These will provide a foundation for ongoing target definition for future more substantial exploration programs.

## **6. Work Carried out and Results**

Work carried out consisted of the capture of historical data in the companies GIS system, geological traversing, radiometric prospecting using a hand-held scintillometer and rock-chip sampling.

No evidence of significant uranium mineralisation was found during the traversing. The traverses essentially confirmed the established geology of the area.

A total of four rock-chip samples were collected during the period. Two of these were collected from a small ferruginous vein system in altered granite on the northern margin of the McKinlay Granite. These samples returned highly anomalous values of 1950 and 9930ppm Pb. The restricted nature of the veining and the style of mineralisation suggest they are of no economic significance.

Some of the more prominent radiometric anomalies and the historical Burrundie uranium occurrence have still not been visited yet due to access issues.

## **7. Environment**

As no environmental disturbance has taken place as a result of exploration activities, no remedial action has been necessary.

## 8. Conclusions

The compilation of historical geochemical data suggests that any Au or base-metal mineralisation if present on the EL will be concealed. Little historical company U, Ni or Sn exploration has taken place, and these elements have generally not been assayed for by modern explorers. The presence of known tin workings in mining claims excised from the EL point to exploration potential for tin. Broad zones of Zamu dolerite may be prospective for Ni-Co, while the margins of the McKinley Granite may host uranium mineralisation.

## 9. Expenditure statement

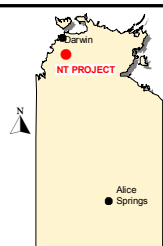
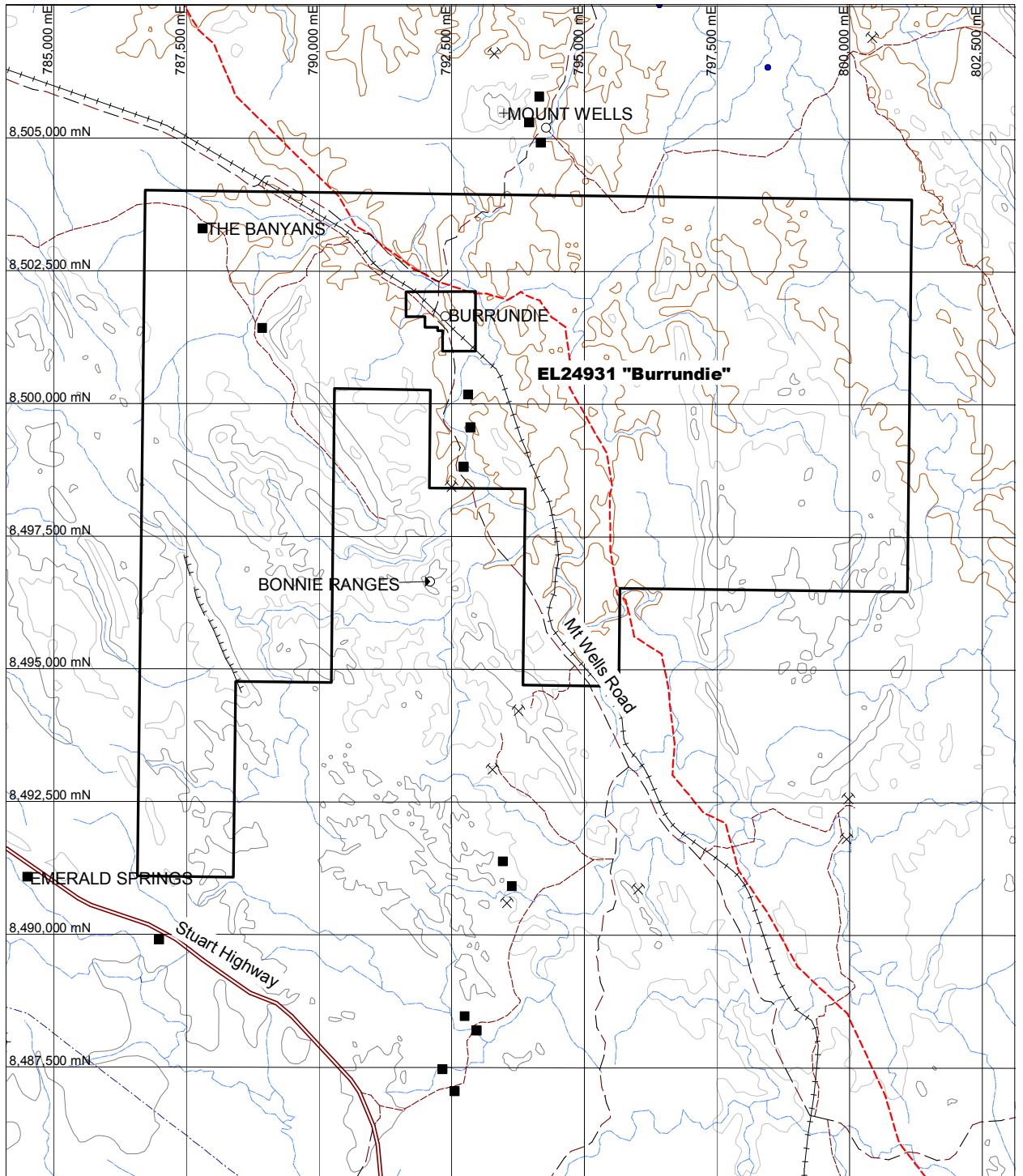
A total of \$16,230 was spent on the tenement during the reporting period. The expenditure fell short of the covenant as exploration to date has failed to indentify drill targets on this EL, and because exploration success elsewhere in the Pine Creek area have caused a diversion of funds and resources to other tenements. The EL has recently been reduced by half.

## 10. Program and Budget

The exploration program to the end of the current dry season will be to continue prospecting radiometric anomalies within the EL and to continue the compilation and assessment of historical data over the wet season. This will allow a more structured exploration program consisting of soil sampling, ground geophysics and limited drilling during the 2010 dry season.

The provisional budget for EL24931 is as follows:

Wages:	\$7,000
Vehicle:	\$3000
Assaying:	\$3000
Geophysical Surveys:	\$5,000
Administrative Costs:	\$2000
Total Budget	\$20,000



**THUNDELARRA**  
EXPLORATION  
WEST PERTH +61 (08) 9321 2152 info@thundelarra.com  
www.thundelarra.com

### EL 29931 "Burrundie" Location Map

Drawn By: HM	Plan No.: Figure 1
Checked by: HM	Date: 12/08/09
Projection: MGA 1994 (GDA 94)	Scale: 1:100,000 at A4