Annual Report
for
Great Northern
Exploration License 23516
For the year ending
03/04/2010

Project Operator: Thundelarra Exploration Ltd/Element 92 Pty Ltd
Title Holders: Geoffrey Robert Orridge (33.4%) Gary Anthony Clarke (33.33%) Michael Daniel Teelow (33.33%)
Map Sheet: Batchelor 5171 1:100 000
          PINE CREEK SD5208 1:250 000
Distribution: Thundelarra Exploration Ltd (1)
              Department of Regional Development, Primary Industry, Fisheries and Resources (1)

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May 2010
Contents

Summary ............................................................................................................................................. 3

1. Introduction .................................................................................................................................. 4
   1.1 Location and Access .................................................................................................................. 4
   1.2 Tenement Status and Ownership .............................................................................................. 4

2.0 Regional Geology ...................................................................................................................... 4

3.0 Local Geology ............................................................................................................................ 6

4.0 Target Commodities .................................................................................................................. 8

5.0 Previous Mining and Exploration History .................................................................................... 8

6.0 Exploration During Current Tenure ........................................................................................... 10

7.0 Expenditure Statement ................................................................................................................ 10

8.0 Program and Budget .................................................................................................................. 11

9.0 References .................................................................................................................................. 12

Appendices ...................................................................................................................................... 13

List of Figures

Figure 1: Location Map EL 23516

Figure 2: Geology Map EL 23516

Appendix 1

EL 23516 Expenditure Report
Summary

During the current reporting period a desk top GIS review and data compilation commenced using information from open file reports to identify gold and base metal exploration targets for the 2010 field season.

EL 23516 is located within the Pine Creek Orogen and much of the project area is made up of the Paleo-proterozic Burrell Creek Formation (Finniss River Group).

There is a tendency for gold mineralisation to be focused in anticlinal settings within strata of the South Alligator Group and lower parts of the Finniss River Group. Most of the gold mineralisation in the region appears to be related to the I-type members of Cullen Batholith (Bajwah, 1994).

Historical gold workings at Great Northern, Great Western and Star of the North are reported to have produced 112 kg of gold between 1896 and 1920, from small pits and shafts. The gold was found in concordant quartz veins and saddle reefs along the hinge-line of north-plunging anticlines.

Between 1988 and 1993 The Goodall open pit mine of Western Mining produced 4,095 kg of gold, from ore with an average head grade of 1.99 g/t Au. The deposit (750m x 50m) consisted of a stock work of thin, conformable and cross-cutting quartz veins located some 60m east of a major anticlinal axis (Bajwah 2007).

EL 23516 is still considered prospective for Au and base metal mineralisation and has been explored by a number of companies since 1973.

The exploration program for the 2010 field season will include an infill airborne geophysics survey, rock chip and soil sampling programs with additional diamond and RC drilling planned, dependant on results.
1. Introduction

1.1 Location and Access
EL 23516 is located approximately 150km SE of Darwin and 40km ENE of the Adelaide River township (Figure 1). Vehicle access is from the Stuart Highway past Tortilla Flats to Ringwood Station and then south along the Ringwood-Ban Ban Springs road.

The tenement falls on the Pine creek 1:250 000 sheet and the Batchelor 1:100 000 sheet, topography in the tenement is mainly low lying, covered by alluvium and black soil plains, with low hills.

1.2 Tenement Status and Ownership
EL 23516 was granted on 4 April 2003 and expires on 3 April 2011. It comprises 34 blocks that cover approximately 113.7 sq. km. Excluded from the title are mining lease MLN 872, 876 and 1049.

The current expenditure commitment on the license is $20,000.00.

Thundelarra Exploration Ltd and Element 92 Pty Ltd (a subsidiary of Thundelarra) entered into an option agreement to acquire 100% of the exploration license on 3 January 2010 after its joint venture partner Crocodile Gold Australia Pty Ltd allowed its interest in EL 23516 to lapse.

2.0 Regional Geology

EL23516 is underlain by sedimentary rocks assigned to the Burrell Creek Formation, of the Finiss River Group, in the upper section of the Early Proterozoic Pine creek Orogen.

The sediments are dominantly greywacke/mudstone sequence of turbidite facies which have been subjected to green schist facies regional metamorphism, locally with a thermal metamorphic overprint close to granite contacts and are now represented by slates and meta-greywackes, showing a variable degree of slaty cleavage depending on the original lithology. The sedimentary rocks are intruded by pre-metamorphic dolerite and lamprophyre dykes (Orridge 2004).
Figure 1: Location Map EL 23516
The structure on EL 23516 consists of north to north-northeast trending, moderately tight, symmetrical folds, having gentle northerly plunges, there are currently four major anticlinal trends are recognised (Orridge 2004).

There is a tendency for gold mineralisation to be focused in anticlinal settings within strata of the South Alligator Group and lower parts of the Finniss River Group. Most of the gold mineralisation in the region appears to be related to the I-type members of Cullen Batholith, formed during the evolution of hydrothermal fluids as a result of fractionation and differentiation processes (Bajwah, 1994).

### 3.0 Local Geology

EL 23516 is located within the Pine Creek Orogen and much of the project area is made up of the Paleoproterozoic Burrell Creek Formation (Finniss River Group). The Burrell Creek Formation, a sequence of shale, phyllite, siltstone and sandstone was deformed and metamorphosed during the Top End Orogeny (1880-1870 Ma). The sequence is underlain by rocks of the South Alligator River such as the Mount Bonnie Formation, Koolpin Formation and Gerowie Tuff towards the south. In the same area, local sills of Zamu Dolerite are also exposed (Figure 2). Intrusions by the Burnside and Margaret Granites in the southern part of the project area have produced contact aureoles several kilometres wide which are prospective for gold mineralisation.

At least four deformation phases have been recognised in the Pine Creek Orogen, of which the D3 phase appears to be important for the localisation of gold mineralisation. In the project area NW trending anticlinal structures are recognised, although much of the geology in the area is obscured by several metres of recent alluvial (black soil) sediments.

Historical gold workings at Great Northern, Great Western and Star of the North, are reported to have produced 112 kg of gold between 1896 and 1920, from small pits and shafts. The gold was found in concordant quartz veins and saddle reefs along the hinge-line of north-plunging anticlines.

The Goodall open pit mine of Western Mining produced 4,095 kg of gold, from ore with an average head grade of 1.99 g/t Au, between 1988 and 1993. The deposit (750m x 50m) consisted of a stock work of thin, conformable and cross-cutting quartz veins located some 60m east of a major anticlinal axis (Bajwah 2007)
Figure 2: Geological Map EL 23516
4.0 Target Commodities

Thundelarra is exploring EL 23516 primarily for gold and base metals.

5.0 Previous Mining and Exploration History

Orridge (2004) conducted a review of past work done within the tenement area. This work found that the most significant results were found in the NW portion of EL 23516, with gold mineralisation following a hinge line of a major regional anticline.

Central Pacific Minerals explored a large part of the Pine Creek Geosyncline (including the eastern part of EL23516) under AP 1959 between 1968 and 1972. From 1970, the work focussed on identified prospects and explored for U and base metals. None of the prospects are within EL 23516. Central Pacific continued to explore an area north of the Burnside granite (covering the 2 SE blocks of EL 23516) under EL 616 for U and base Metals, unfortunately none of their work can be reliably located within the tenement boundaries.

EL 921 covered 2 of the southern blocks of EL 23516, in the area north of the Burnside Granite, and west of the Margaret Granite. Comalco explored the area between 1973 and 1976 as part of a large group of tenements. Comalco concluded (after carrying out prospecting, mapping in selected areas, sampling and costeanning) that only ‘uneconomical vein and replacement type fluorite mineralisation’ was to be found.

Aquitaine Australia explored a very large area (EL 1653) around Mt Bundey that also covered most of EL23516 on its southern boundary. Exploration focussed around the Mt Bundey granite for uranium and base metals between 1977 and 1981. Aquitaine concluded that the area was still prospective for base metals.

Mines Administration explored EL 1994 for uranium between 1978 and 1980, which included 3 southern blocks of EL 23516. Work consisted of rock chip sampling and geological mapping.

WR Grace Australia (in JV with WMC) explored EL2361 and 2362, focussing on Anomaly 1, Bundey 1, Johns Hill and Goodall mine areas in the 1980’s. Work was done in 2 phases; helicopter-assisted geochem sampling by WJ and EE Fisher, with follow-up work by WMC in later years. Applications for ERL’s and mineral claims were made over prospective areas. Goodall was Anomaly 1, but there were 13 medium-small gold anomalies, plus one small Cu-Pb-Au anomaly also delineated from this work. Anomalies that fall within EL 23516 include C3, C4, and C5.
The WR Grace Australia and WMC JV also explored EL 3320 which covered 3 southern blocks of EL 23516, and EL 3643 which covered the 2 SE blocks during the 1980’s.

Work included rock chip sampling, mapping, stream sediment sampling. Some high Au values were found from stream sediment sampling but these were outside of EL23516 area, and later concluded as spurious. RC drilling on EL 3643 found low tenor gold anomalism within Zamu Dolerite in an area south of EL 23516.

EL 4217 covered 2 blocks in the NW part of EL 23516 in the 1980’s. Work involved looking for favourable structures hosting mineralisation. MCN’s 3290-3298 were taken out by Zapopa n over the most favourable area and RAB drilling intersected anomalous Au (to 0.48g/t Au) in 4 holes in the position inferred to be the northern extension of the Goodall anticline.

EL 4218 covered 4 middle blocks within EL 23516. Soil, stream and rock chip sampling plus geological mapping were used to try to locate ‘favourable anticline structures’ hosting gold mineralisation. Disappointing stream sediment sample results in EL 4218 led to the tenement being relinquished.

EL 4919 covered the Goodall area, and covered 2 blocks of EL 23516 between 1986 and 1992. Work done is poorly documented under this licence, and consists mainly of mapping (Goodall held under different tenure).

Oceania Exploration and Mining held EL 5298 for 4 years in the late 1980’s. Work outlined the Little Mary anomaly but was considered to have limited potential. Mapping showed 5 target zones derived from stress/strain mapping (indicating potential dilation zones) which were not followed up. It appears that the Little Mary anomaly and stress/strain zones all lie outside EL 23516.

Work done by WR Grace Australia on EL 5318 outlined the C2, C3, C4 and C17 anomalies. These anomalies were found during exploration under EL2362. The prospective areas were replaced by MLN 1049 (covering Goodall) and MLN 1037. Work done was quite detailed, and included drilling (in local coordinates) and mapping.

Peko Wallsend explored EL’s 7426, 7511 and 7913, targeting a north-trending anticline that was affected by NW-trending shears. EL 7426 extended further north and east of EL 23516, covering only 5 blocks within the tenement. EL 7511 covered 5 blocks in the SE corner of EL 23516, while EL 7913 covered 3 NE blocks. Drilling done by Peko was captured by Acacia, when they held SEL 8335.
SEL 8335 was substituted for EL’s 7426, 7511 and 7913 within the EL 23516 area, and remained active from 1991 to 2001. Acacia did a data capture of all historic geochemistry data within SEL 8335.

Dominion held EL 8139 in the early 1990’s, covering 6 of the southern and central blocks of EL 23516. Dominion drilled 23 RAB holes and collected 82 lag samples within EL 23516, with several zones of weakly anomalous Au geochemistry. The highest result from drilling was 7ppb Au at 7-9m in 94RDVR296.

EL 8504 (one block) is within the central portion of EL 23516. The tenement is masked by black soil plains. Dominion drilled 18 RAB holes and outlined a very low order Au anomaly with a maximum value of 7ppb Au.

Agricola Gold held EL 9306 (covering 5 central blocks in EL23516) in the late 1990’s. Rock chip sampling returned a max value of 7.83g/t Au. Agricola Gold also held EL 9667 (2 central blocks in EL23516) but no work was reported.

Terra Gold expressed interest in exploring the tenement, but in July 2005 Terra Gold was subjected to a reverse takeover by Emerson Exploration Inc (GBS Gold International Inc.) Changes in management and exploration staff during the year impacted on the exploration work being done and much of the time was spent on data review and acquisition (Smith 2006).

GBS Gold Australia PTY LTD (GBS) held the tenement from 2006 to 2008, limited field work was completed and most efforts were focussed on data acquisition and review. The company developed a genetic model that could be used to describe the types of structure, source of mineralisation, and styles that expected to be encountered. GBS went into receivership in late 2008 (Bajwah 2009).

**6.0 Exploration During Current Tenure**

During the current reporting period a desk top GIS review and data compilation commenced using information from open file reports to identify gold and base metal exploration targets for the 2010 field season.

**7.0 Expenditure statement**

A total of $21,000.00 was spent on EL 23516 by Thundelarra Exploration during the reporting period.

A full expenditure breakdown is given in Appendix 1.
8.0 Program and Budget

During the 2010 field season Thundelarra will complete a data review and carry out airborne magnetics and radio-metrics surveys to assist in target generation. Further evaluation and ground follow up will be undertaken by a program of rock chip, soil and stream sediment sampling programs with additional diamond and RC drilling planned dependant on results.

The provisional budget for EL23532 is as follows:

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9.0 References


Appendices

(supplied separately as digital data)