# Hale Energy Limited

# EL 25378

# Bundey River

# Alcoota SF53-10 & Huckitta SF53-11
# 1:250,000 Map Sheets

# Year 1 Annual Report

# February 15th 2007 – February 14th 2008

Distribution: 1. Hale Energy Limited (THOR Mining PLC Perth Office)

2. Mining Titles Division
Department of Primary Industry, Fisheries and Mines - Darwin, NT

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## 1.0 SUMMARY

The Bundey River Project is located in the Plenty River area about 125km northeast of Alice Springs. The project is part of two contiguous tenements that cover about 1,200km$^2$ of the Tertiary Waite and Huckitta Basins within the Proterozoic Arunta Block, which are prospective for palaeo drainage hosted uranium mineralisation. The Bundey River passes through the west and the Little Frazer Creek to the east of the Bundey River project area. The prospective areas within the tenement are topographically flat and are covered by scrubland and grassland.

The project area covers part of the Tertiary Waite and Huckitta Basins which are relatively shallow sedimentary basins; the central portions of which were probably lakes during most of the time of deposition of their sediments. The basins were fed from both the Harts Range metamorphic rocks in the south and by various channels that drain areas of Proterozoic granitic and metamorphic rocks to the north. The sedimentary sequence within the basin is dominated by clays and sandy clays, with lesser amounts of sands. Lignite and evaporite horizons are also present. The sediments were subject to slight uplift during the late Pliocene and the upper parts of the sequence have been eroded in part. The sequence is poorly known, with the approximate 1,200km$^2$ of basin within the project areas having been tested by only about 15 drill-holes. Within the Plenty Highway tenement basement was reached in only one hole and the basin is known to be in excess of 200m vertical depth at it's deepest point.

Early stratigraphic information was obtained by the BMR, which drilled two holes into the basin during the 1960s.

Alcoa explored the basins for uranium during 1979 and 1980. Alcoa drilled 71 holes to maximum depths of 200m for a total of 6,260 metres. Of these holes, six were drilled within the area of EL24810 and a further six within the adjacent tenement EL25378. Significant uranium intersections were only achieved in four holes, drilled outside Hale Energy's project areas. The best intersection, at a depth of 104m, was of 45ppm $U_3O_8$ within a reducing horizon of pyritic carbonaceous silt.

## 2.0 INTRODUCTION

This report covers all exploration completed on EL25378 in Year 1 for the period 15th February 2007 to 14th February 2008. Exploration Licence EL 25378 is comprised of 396 graticular blocks (1255 $km^2$) and was granted to Hale Energy Limited on 15th February 2007 by the DPIFM NT.

## 3.0 LOCATION AND ACCESS

EL 25378 is located on the Alcoota 1:250,000 (SF53-10) and Huckitta (SF53-11) map sheets 160km northeast of Alice Springs (Figure 1.0). Access is via the Stuart Highway to the Plenty Highway turnoff 70km north of Alice Springs, then east for 90km along the Plenty Highway. The area of the licence is well served by station roads and tracks.

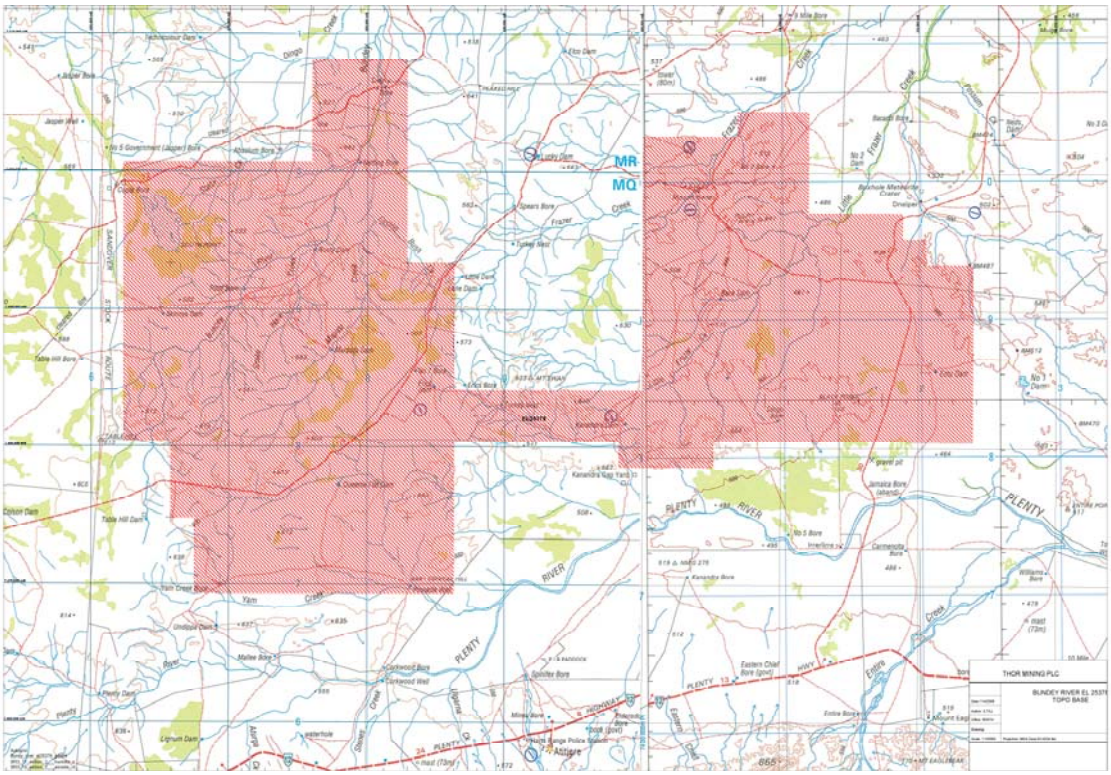


**Figure 1.0 – Bundey River Location Plan**

## 4.0 NATIVE TITLE AND SITE CLEARANCE

A search of the AAPA database has been completed which identified several recorded sites in the area and was referred to the DPIFM in the MMP submission.

## 5.0 GEOLOGY

The Bundey River project area (EL 25378) covers part of the Tertiary Waite and Huckitta Basins which are relatively shallow sedimentary basins; the central portions of which were probably lakes during the majority of the deposition phase of the sediments. The basins were fed from both the Harts Range metamorphic rocks in the south and by various channels that drain areas of Proterozoic granitic and metamorphic rocks to the north. The sedimentary sequence within the basin is dominated by clays and sandy clays, with lesser amounts of sands. Lignite and evaporite horizons are also present. The sediments were subject to slight uplift during the late Pliocene and the upper parts of the sequence have been eroded in part. The sequence is poorly known, with the approximate 1,200km$^2$ of basin within the project areas having been tested by only about 15 drill-holes. Within the Plenty Highway tenement basement was reached in only one hole and the basin is known to be in excess of 200m vertical depth at it's deepest point.

## 6.0 PREVIOUS EXPLORATION

Early stratigraphic information was obtained by the BMR, which drilled two holes into the basin during the 1960s.

Alcoa explored the basins for uranium during 1979 and 1980. Alcoa drilled 71 holes to maximum depths of 200m for a total of 6,260 metres. Of these holes, six were drilled within the area of EL24810 and a further six within on the adjacent tenement EL25378. Significant uranium intersections were only achieved in four holes, drilled outside Hale Energy's project areas. The best intersection, at a depth of 104m, was of 45ppm $U_3O_8$ within a reducing horizon of pyritic carbonaceous silt.

## 7.0 YEAR 1 EXPLORATION

Bundey River (EL 25378) was granted on the 15$^{th}$ February 2007. Geoforce Airborne Services were contracted to complete an airborne electromagnetic survey over the area. Extensive open file and report data was also reviewed.

In late January of 2008, a helicopter borne time domain electromagnetic survey (SkyTEM) was flown over the tenement. The survey consisted of 52 traverses with 500m line spacing, collected in a North-South Orientation for a total collection of approximately 1085 line km of data.

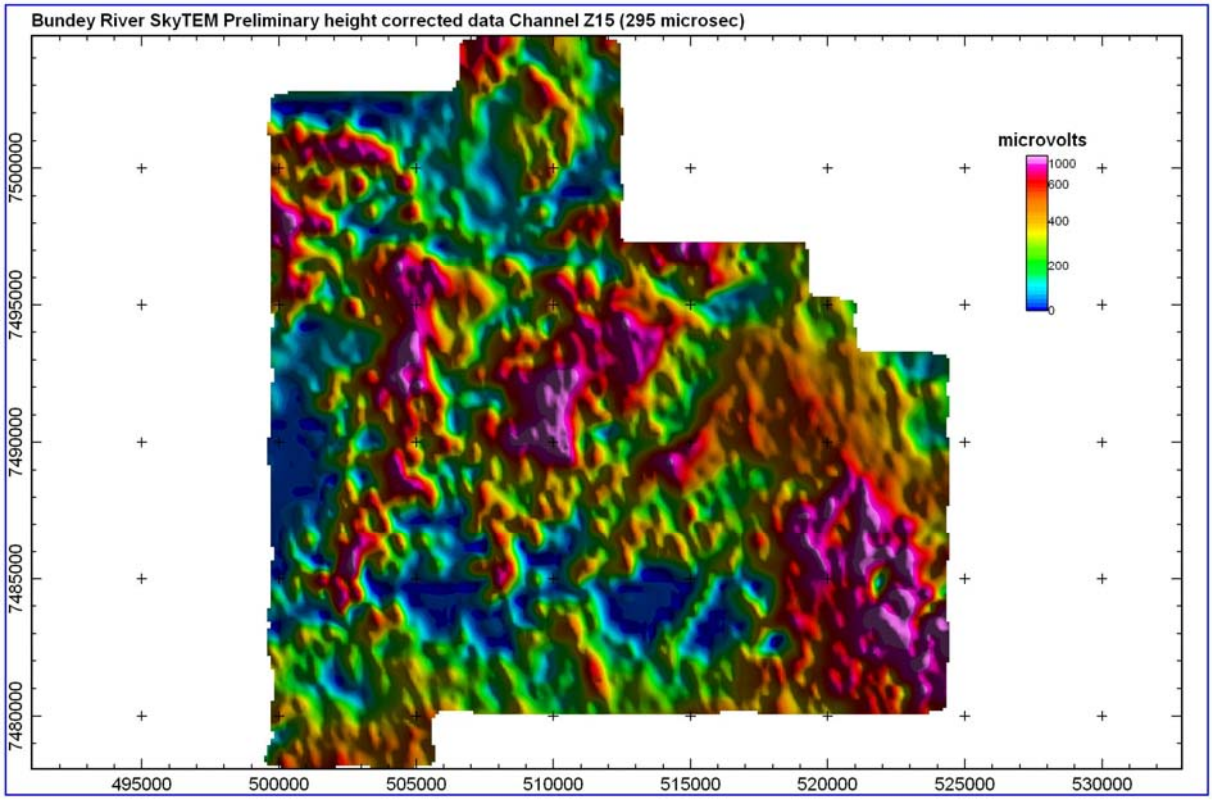


**Figure 2.0 – Bundey River Preliminary SkyTEM image – Channel 15**

The image above is derived from preliminary height corrected data (z component) on the eastern side of the tenement from Channel 15 (295 micro second). The magenta coloured areas indicate conductive areas within the palaeo channels. Drop outs or lows can be interpreted as less conductive areas or possible sites of alteration/mineralisation. The results are encouraging and the raw data is of high quality. Modelling will enhance the quality of the images and interpolate areas where there is data loss.

The SkyTEM Data was then modelled and interpreted by Dave McInnes of Montana GIS Pty Ltd. The report from Montana GIS is yet to be completed and will be reported in the next Annual Report for the tenement.

## 8.0 YEAR 2 EXPLORATION

An air core drill programme to test the anomalies identified from the SkyTEM survey is scheduled for the second quarter 2008.

## APPENDIX 1

Geoforce SkyTEM Report & Data (refer to DVD)

## APPENDIX 2

Bundey River EL 25378 Expenditure Spreadsheet