EL's 23047 and 23048

COMBINED PARTIAL RELINQUISHMENT REPORT FOR PERIOD

02-12-2002 to 01-12-2004

Submitted to: **NT Dept of Business, Industry & Resource Development**

Submitted by: **Exploration & Resource Development Pty Ltd**

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1. Summary

Exploration Licences 23047 and 23048 were granted to Exploration & Resource Development Pty Ltd (ERD) on the 2nd December 2002. ERD Pty Ltd, a Darwin based resource sector company, is the designated Project Manager. The two contiguous tenements covered approximately 1,561 sq km (499 sub-blocks) in the southern portion of Urapunga 1:250,000 map sheet. Following rationalisation of tenure holding, a statutory 50% reduction of 190 sub-blocks (EL 23048) and 60 sub-blocks (EL 23047) was made at the end of year 2 (1st December 2004).

The relinquished portions of EL 23047 and 23048 cover approximately 782 sq km of parts of largely concealed Roper Group stratigraphy in the Bauhinia Shelf tectonic element of the western McArthur Basin. The area was considered to have potential for detrital heavy mineral accumulations.

Exploration activities within the relinquished portions incorporated office studies, helicopter supported field reconnaissance and drilling of five auger holes for a cumulative 30.4m.

EL 23047
The relinquished area largely straddles the Roper River floodplain. Published mapping and field inspections reveal a dominance of undifferentiated alluvium, colluvium, gravels and sands together with mud-rich floodplain sediments. Subordinate outcrops of quartz sandstone of the Hodgson and Bessie Creek Sandstone and ferruginous siltstones and fine-grained sandstones of the Munji Member of the Corcoran Formation (Roper Group) are mapped in the eastern sector.

No ground intrusive activities were conducted on relinquished portions of EL 23047.

EL 23048
The tenement largely incorporates Kyalla Formation mudstones and siltstones and alluvial floodplains of the Roper River, Maiwok Creek and Flying Fox Creek in the central-northern area and arenites of the Moroak Sandstone and lutites of the Velkerri Formation in the western sector. Reconnaissance auger drilling (5 holes; 30.4m) was undertaken along a fence line north of the Roper River and on a station track east to north-east of Mt Patterson to test for indications of alluvial HM. Thick (>10m) pughy clay was encountered in the 4 holes north of the Roper River with trace visible HM. Low tenor results (0.1% HM) report from the fifth hole from clayey gravels overlying sandstones and siltstones at 4m depth. Potential for a palaeochannel alluvial play is considered remote.

1.1 Environment

All field activities adhered to the environmental and safety principles and practices outlined in detail in the Small Mining Management Plan which was forwarded to the Department prior to commencement of exploration activities.

Among the initiatives completed are the following:

- Only existing station tracks were employed for access.
- Auger holes were infilled or capped with termite mounds immediately following completion.
- Camp sites were temporary (caravans) and were erected in natural clearings. All sites were cleaned of rubbish and any evidence of habitation. The camp sites were harrowed at cessation of activities.

2. CONCLUSIONS AND RECOMMENDATIONS

Large portions of EL's 23047 and 23048 cover extensive floodplains of major drainage systems with an excessively high component of fine sediment dilution likely to preclude any economic alluvial concentrations. Limited auger drilling testing a portion of this floodplain environment in EL 23047 confirmed this observation. These areas were reviewed and relinquished at the end of tenure year 2.

3. Introduction

Contiguous Exploration Licences 23047 and 23048 cover an area of approximately 1,561 sq km (499 sub-blocks) in the south-eastern portion of Urapunga 1:250 000 map sheet SD 53-10.Tenement applications were lodged by Exploration & Resource Development Pty Ltd (ERD) on 13th February 2001 and subsequently granted on 2nd December 2002. ERD Pty Ltd, a Darwin based resource sector company, is the designated Project Manager.

Following rationalisation of tenure holding, a statutory 50% reduction of 190 sub-blocks (EL 23048) and 60 sub-blocks (EL 23047) was made at the end of year 2 (1st December 2004).

Title	Original Sub Blocks	Sub Blocks Retained	Sub Blocks Relinquished
23047	119	59	60
23048	380	190	190

The tenements are centred approximately 130 kilometres east of the township of Mataranka and are accessible by the sealed Roper Highway (Figure 1). The EL's are interspersed with station tracks leading to the main arterial road. Due to the monsoonal nature of the area the station tracks are well graded every year but are virtually impassable at the height of the monsoon.

The tenements lie principally within the physiographic province of the Gulf Fall, a dissected terrane from which almost all of the old Tertiary land surfaces have been eroded. Topography is characterised by broad alluvial valleys between low rubbly hills and prominent strike ridges of resistant Roper Group strata. Large components of the EL's cover the flat-floored valleys which form part of the vast Roper River floodplain and its associated tributaries (Maiwok and Flying Fox Creeks) and are largely developed on incompetent shales, fine-grained sediments, volcanics and carbonate rocks.

The principal vegetation regime is open Eucalyptus woodland ranging from sparsely wooded open grassland alluvial and blacksoil plains to densely vegetated lancewood on high ground and steeply sloping areas. The major watercourses are lined with paperbarks and larger Eucalypts. Spinifex grows predominantly on the sandy soils close to outcrop.

This report outlines exploration activities conducted within the relinquished portions of EL's 23047 and 23048 during the period 2nd December 2002 to 1st December 2004.

4. Regional Geology

The Project lies in the central-western shelf (Bauhinia Shelf) of the McArthur Basin. The basin can be viewed as several northerly trending rifts separated by northwest-trending faults and transverse ridges and was subject to repeated cycles of clastic and marine carbonate sedimentation interspersed with volcanic extrusion and sill emplacement (*Tawallah, McArthur and Nathan Groups*) in response to reactivation of older basement structures.

A later, more passive series of sedimentation cycles in response to western basin subsidence occurred with the deposition of suites of blanket quartz sandstones, micaceous siltstones, black shales and glauconitic sandstones (*Roper Group*). Ironstones are prominent on a local stratigraphic level (Roper and Hodgson Iron Deposits). 'A variety of marginal, shallow and deeper marine shelf environments reflect alternating basin-wide sea level rises and falls. Tholeiitic dolerite and gabbro sills were emplaced throughout the Roper group soon after deposition ceased and before regional deformation.' (NTGS).

4.1 Tenement Geology

EL 23047:
The central relinquished areas cover extensive deposits of Quaternary/Cenozoic undifferentiated alluvium and colluvium, gravels and sands together with mud-rich sediments associated with the anastomosing and braided floodplains of the Roper River. The eastern area is again dominated by alluvium with subordinate outcrops of quartz sandstones of the Bessie Creek Sandstone and Hodgson Sandstone and ferruginous siltstones and fine-grained sandstones of the Munyi Member of the Corcoran Formation.

EL 23048:
The central and northern relinquished areas are characterised by low relief mudstones, siltstones and fine-grained sandstones of the Kyalla Formation and mud-rich alluvial and colluvial deposits associated with floodplains of the Roper River, Maiwok Creek and Flying Fox Creek. In the west, the NS trending Strangeways Fault juxtaposes older Collara Subgroup sediments with younger Maiwok Subgroup sandstones (Moroak Sandstone) and siltstones/mudstones (Velkerri Formation).

5.0 Previous Exploration

The Roper River area has attracted various exploration campaigns including:

: Evaluation of the oolitic ironstones of the Sherwin Formation by BHP in the 1950's and more recently by Roper Resources (Orridge, 1993) identified potential for large tonnage (>400Mt) variably low grade (27%-52% Fe) iron deposits largely to the south and southeast of the Project Area. No development has occurred with major focus having being diverted to the richer Pilbara WA iron ore deposits.

: Intensive diamond exploration was evidenced in the 1980's and 1990's with large scale stream sediment, loam, magnetics and drilling programs conducted by Stockdale Prospecting, Ashton Mining and CRA Exploration. While a few kimberlitic indicator minerals including micro and macro diamonds were reported, most could not be source traced with the exception of two thin (<2m) steeply dipping kimberlitic dykes (Packsaddle and Blackjack 1) located by Stockdale southeast of the Project Area. The very low grade and small dimensions of the dykes has precluded any further work on them.

: Pacific Oil & Gas undertook detailed investigation of the hydrocarbon potential of the Roper region in the late 1980's and early 1990's. Seismic surveys led to drilling of perceived oil-trap structures incorporating organic shales of the Velkerri and Corcoran Formations. Following only trace encounters of hydrocarbons the petroleum tenements were surrendered in the mid-1990's.

A comprehensive summary of all past exploration is published in the 2nd edition of 1:250 000 Geological Map Series Explanatory Notes for the Roper Region Urapunga and Roper River Special.

6. Exploration Activities

Exploration activities within the relinquished portions included incorporated office studies, helicopter supported field reconnaissance and drilling of five auger holes for a cumulative 30.4m.

6.1 EL23047

The relinquished areas of EL 23047 are dominated by the Roper River floodplain and extensive associated mud-rich sediments. The annual inundation by flood waters and predominance of black soils precludes any conceptual alluvial concentrations of heavy minerals.

No ground intrusive activities were conducted on relinquished portions of EL 23047.

6.2 EL 23048

As for EL 23047, the relinquished portions of EL 23048 are dominated by broad valleys of mud-rich floodplain sediments which are not considered prospective for alluvial concentrations.

Limited reconnaissance auger drilling was undertaken along an E-W fence line 1km north of the Roper River and a northerly trending station track east and north-east of Mt Patterson in the central-southern EL (~12km E of Moroak Homestead) to test for indications of alluvial heavy minerals. The drilling was contracted to AG Drilling of Palmerston NT using a trailer-mounted Gemco 210B auger rig with a 3.5" bit and solid auger flights.

Four test holes (cumulative 26.4m) were drilled eastward from the sandstone ridges into a large alluvial black soil plain. The easternmost holes, RT1 and RT2 intersected one metre of desiccated hard black soil underlain by pughy orange brown clays to in excess of auger refusal (10m). The clays were wet at 8m and 10m respectively. Only trace fine heavy minerals were observed and no gravel horizons suggestive of palaeochannels were identified. RT3 and RT4, proximal to the sandstone to the west, encountered sandstone clast dominant gravels, sands and siltstone scree in the upper two metres overlying clays (RT3) and sandstone bedrock (RT4). No visible HM was observed in the drill samples.

A further auger hole YW1 (4m depth) was drilled on a northerly trending station track near the western margin of the alluvial outwash fan 3km north of the RT auger traverses. Bulk auger samples comprising approximately 10 kgs were collected on 1m intervals and submitted to Tristate Research Laboratories in Mildura Victoria for the following treatment: sample drying and weighing; repeated slurrying, agitation and decanting for slime removal; screening at -2mm and tabling for concentrate extraction. Low tenor results (0.1% HM) report from this fifth hole from clayey gravels overlying sandstones and siltstones at 4m depth. Potential for a palaeochannel alluvial play is considered remote.

The auger hole location plan is presented in Figure 2 and the drilling ledgers and laboratory results are tabulated in Appendix 1.

7.0 Rehabilitation

All field activities adhered to the environmental and safety principles and practices outlined in detail in the Small Mining Management Plan which was forwarded to the Department prior to commencement of exploration.

Among the initiatives completed during exploration activities are the following:

- Station tracks and fence lines were re-graded where necessary and employed for access at all times.
- Auger holes were infilled or capped with termite mounds immediately following completion.
- Camp sites were temporary (caravans) and were erected in natural clearings. All sites were cleaned of rubbish and any evidence of habitation. The camp sites were harrowed at cessation of field season.
- As for previous years, a single wet season promotes rapid regrowth in the Project Area with barely discernable sites of ground disturbance evidenced in the following year.

8. References

Abbott ST, Sweet IP, Plumb KA, Young DN, Cutovinos A, Ferenzi PA, Brakel A & Pietsch BA, 2001. Roper Region: Urapunga and Roper River Special, Northern Territory (Second Edition), 1:250 000 Geological Map Series Explanatory Notes, SD 53-10 & SD 53-11. Northern Territory Geological Survey.

Roiko HJ, 2004. Roper Project EL's 23046, 23047, 23048 & 23111 Group Annual Report for Period 02-12-2002 to 01-12-2003 (unpublished).

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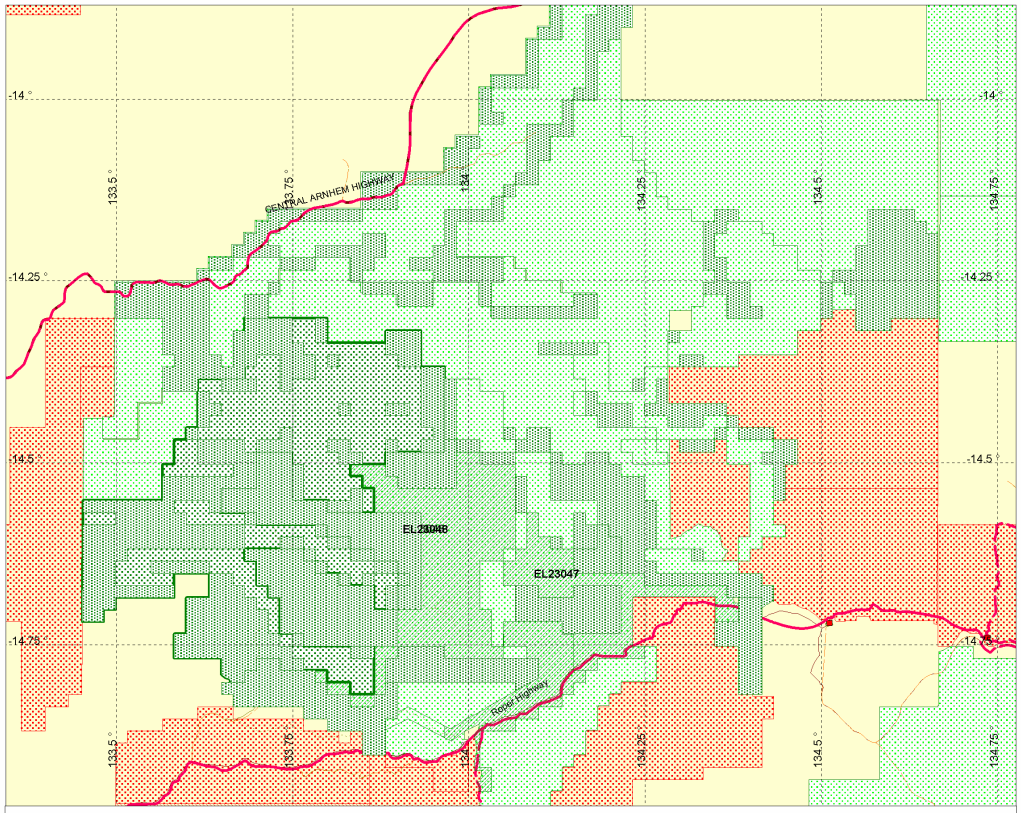
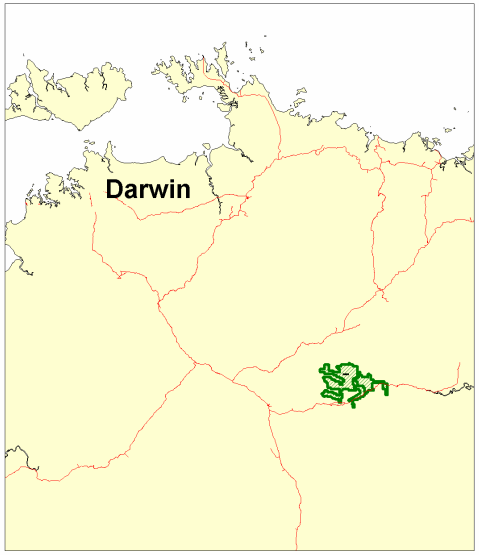




EXPLORATION & RESOURCE DEVELOPMENT PTY LTD
EL's 23047 and 23048 Combined Partial
Relinquished Report
Figure 1: EL's 23047 and 23048
Relinquished Areas Location Plan

August 2004
Drawn ERD P/L

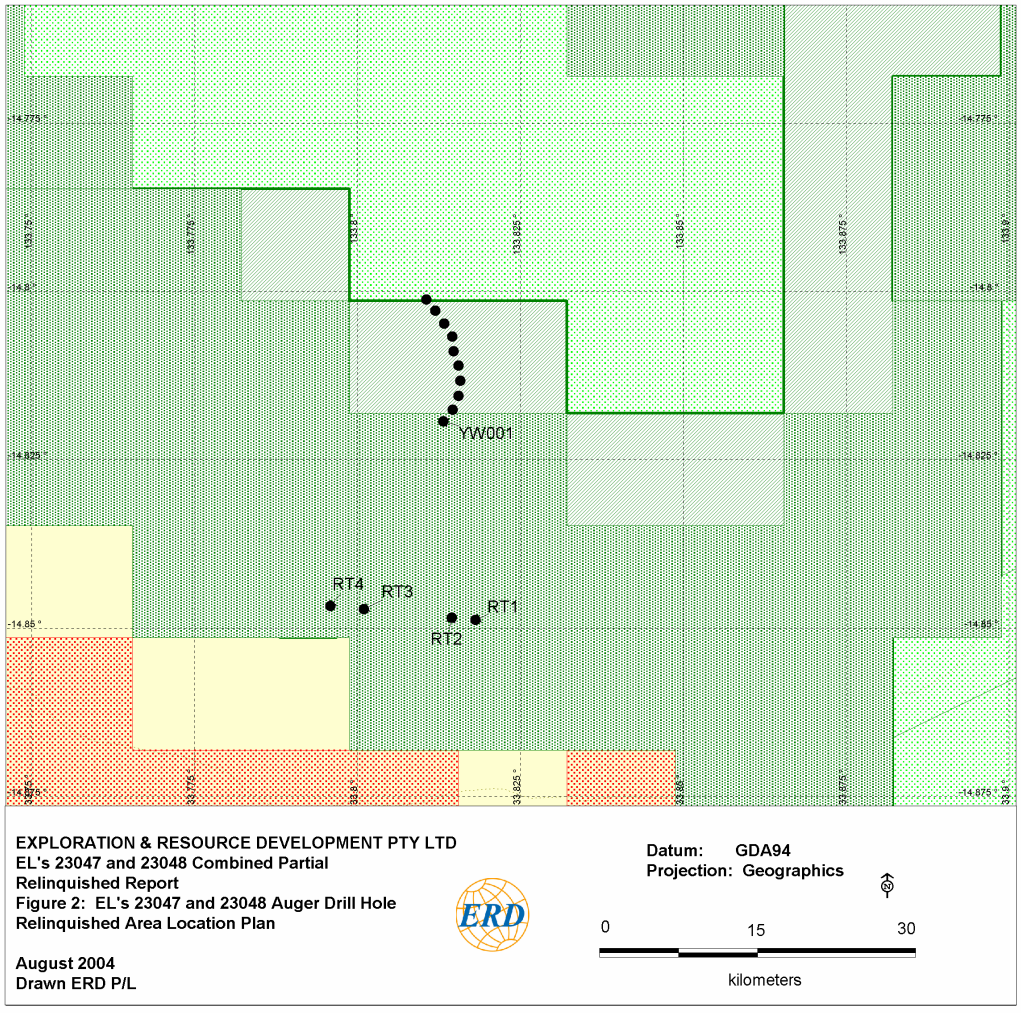
Datum: GDA94
Projection: Geographics

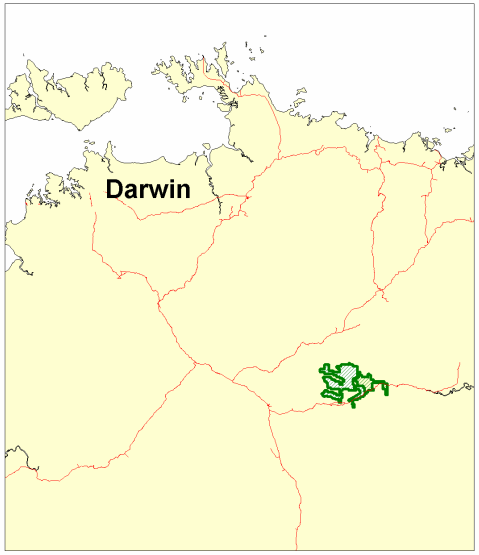
0 15 30
kilometers

Legend

- Retained EL's 23047 and 23048
- EL's 23047 and 23048 Relinquished areas
- EL's
- ELA's

Figure 2: EL's 23047 and 23048 Relinquished Areas Auger Drill Hole Location Plan





Legend

- Retained EL's 23047 and 23048
- EL's 23047 and 23048 Relinquished areas
- EL's
- ELA's
- Auger Drill Holes

Appendix 1

EL 23048 Auger Drill Ledgers and Assay Results