



ROPER PROJECT

EL 23048

SIXTH ANNUAL REPORT

FOR PERIOD

02-12-2007 to 01-12-2008

Submitted to: NT Dept of Primary Industry, Fisheries and Mines

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1. Summary

Exploration Licences 23047, 23048 and 23111 were granted to Exploration & Resource Development Pty Ltd (ERD) on the 2nd December 2002. ERD Pty Ltd, a Darwin based resource sector company, is designated Project Manager. EL 23047 and 23111 have been relinquished and a partial surrender of EL23048 occurred in 2007. EL23048 now covers 35 sub-blocks and 79.83 sq km. The tenement in conjunction with all other ERD tenement forms a collective but non contiguous Roper Project Area. Group reporting status was approved by the Department of Business, Industry & Resource Development (DBIRD) in 2007. EL23048 abuts EL's 24986 and 24655 to form the Prospect Area "SILL80"

The Project Area overlies Roper Group stratigraphy in the Bauhinia Shelf tectonic element of the western McArthur Basin and envelopes extensively mapped eroded ilmenite-bearing source rocks with considerable potential for large tonnage 'insitu', eluvial, colluvial and downstream detrital heavy mineral (HM) accumulations.

Titaniferous dolerite sills intrude Adelaidean Roper Group sediments at a number of exposed stratigraphic horizons. The dolerites have been subject to prolonged weathering and erosion during the Tertiary and Recent epochs through to modern day wet season cycles.

Due to a company restructure EL 23047 and EL 23111 were relinquished on 03rd December 2007 and EL23048 was reduced from 190 to 35 sub-blocks. A Final and full relinquishment report for EL 23047 and 23111 and a partial relinquishment report for EL23048 have previously been submitted.

On 16th October 2008 the Principal Registrar advised ERD that EL 23048 had been granted for renewal until 01st December 2010.

Year 1 exploration activities incorporated office studies and helicopter supported field reconnaissance, 875 metres of shallow auger drilling (EL's 23048 & 23111), eight shallow test pit excavations with collection of pit wall channel samples (EL 23048).

Year 2 activities included detailed analysis of laboratory results and inferred resource estimations in EL 23048 and rigorous tenement holding rationalisation with subsequent 50% EL reductions for all three EL's.

Year 3 activities focussed on the further re-analysis of the past substantial amounts of exploration and analysis over all three licence areas and in assessing technology solutions to mining and product beneficiation as well as establishing a development and engineering team. Expenditure covenants were exceeded on all three licenses and a request for a waiver of block reduction for the tenements was submitted and subsequently accepted by the Department on 14th November 2005 that will enable these technology assessments to be completed and the deposits developed if suited.

Year 4 activity mainly centered around a greatly enhanced marketing regime in Australia, Asia and Europe with several parties interested to joint venture or purchase the resource and or the company and in discussions with the NLC to grant approval for ELA 23385 which abuts the main resource of BUKA

within EL22478. ERD are currently in the final stages of a joint venture/sale agreement with two of the interested parties and a sale/joint venture would result in the resources being further identified and a mining application submitted in year 5. The negotiations with the NLC still appear to ERD to have stalled and this tenement would greatly enhance the resource under the control of ERD.

ERD is in discussions with two prime organisations to either joint venture or purchase the resource. It is expected that these discussions will conclude favourably within the next six months. Year 5 activities will therefore revolve around mining applications and furthering the resource on adjoining blocks.

Year 5 activity has seen ERD undergoing a company restructure after purchase by Maxwealth International Invest Ltd to satisfy the requirements of the purchaser of resources contained within EL23048 and the remaining EL's within the Roper HM Project. It is anticipated that full scale exploration will resume on this lease in early 2008 to move into a mining lease under a new company.

Year 6 activity saw the companies product contained within EL23048 and adjoining tenements taken to China and Japan as part of the strategy developed and operated by the NT Government Department of Primary Industries, Fisheries and Mines. Several visits to organisations such as Sinosteel, Stone Group, Fushun Titanium and Itochu Group were undertaken and many presentations delivered. The company entered into Confidentiality Agreements with all of these companies and has since begun final discussions with Sinosteel to enter into a Joint Venture for the mining and marketing of the minerals contained within the Roper HM Project.

Geophysical work was undertaken for ERD by Geodiscovery Group in Queensland to ascertain if any anomalous ground was evident over all tenement held and 68 anomalies were discovered of which 78% are classified as "Class 1" anomalies. This has provided a major interest to our joint venture partners as one anomaly visited reflected a possible Channel Iron Deposit of medium/high iron content.

Three non-intrusive visits to the EL 23048 were conducted in 2007 to gain further sample and to visibly express the extent and components of "SILL80" to prospective partners.

This EL is the most promising of the group with a potential 8.4Mt grading 8% ilmenite for 670,000 tonnes of contained ilmenite. The tenement abuts EL 24655/24986 which are currently conservatively thought to hold between 6 and 10 million tonne ilmenite. The regional airborne survey conducted in 2004 supports this reasoning. ERD has been in discussion with a China Industrial Resources Co. Ltd, a Chinese metals producer for the use of this resource and discussions have been held with the Department in 2008 to both introduce the purchaser's requirements and to put forward their ideas and concepts for the resource within the EL. It is anticipated that a bulk sample will be requested by this organisation during 2008-2009.

1.1 Environment

No ground intrusive activities were conducted on EL 23048 during tenure year 5. There were several visits and selective samples taken via helicopter to a previous sample site within the SW portion of EL23048. All sample sites were immediately rehabilitated.

2. Conclusions and Recommendations

Following overall Roper Project data reviews, a large scale tenement rationalisation was undertaken resulting in significant reduction in tenure holding including 50% relinquishment of EL's 23047, 23048 and 23111 in Years 2 and 5.

Due largely to the extremely favourable results received from test pit channel samples collected from dolerite regolith soils in southern EL 23048 and further technological advances being made in the beneficiation of ilmenite no further reductions were seen as necessary and a waiver was successfully submitted and accepted by the Department on 14th November 2005 with a further waiver being requested and granted in November 2006. In 2007 EL's 23047 and 23111 were surrendered and EL23048 reduced to 35 sub-blocks.

The channel samples yielded an average of 8% ilmenite from surface to one metre depth over an area in excess of 5 sq km. Average depth of the eroded sills in the area is maintained at 3.4m giving the potential to triple the resource estimates.

ERD is confident that the remaining portion of EL 23048 contains or has a good to excellent potential for heavy mineral deposits. ERD is currently in the final stages of negotiation for the joint venture of these resources with Sinosteel.

It was anticipated that agreement would have been reached by October 2008 but the Global Financial Crisis has seen Sinosteel delaying any agreements until December 2008.

3. Introduction

Exploration Licence 23048 is included in the Roper HM Project and covers an area of approximately 79.83 km² on the Urapunga 1:250000 mapsheet SD 53-10 and largely flank and infill ERD's large existing tenement holding (EL's 24655 and 24986).

Statutory tenement details for this period (December 2007 to December 2008) are tabled below:

EL Number	Holder	Grant Date	Expiry Date	Area (sqkm)
23048	ERD Pty Ltd	02-12-2002	01-12-2010	79.83

The tenements principally target insitu and remobilised heavy minerals shedding from numerous exposed and variably eroded dolerite sills intruding into Proterozoic Roper Group.

Following a company restructure EL 23048 was partially reduced to 35 sub-blocks. The sub blocks to be retained are tabled in Appendix 1.

The tenements, collectively forming part of the Roper Project, are centred approximately 120 kilometres east of the township of Mataranka and are accessed from the north and south by the unsealed Central Arnhem and sealed Roper Highways respectively (Figure 1). A gazetted station-maintained road is central to the Project Area linking the two highways. All EL's are interspersed with station tracks leading to the main arterial roads. 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 Project Area lies 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, locally still capped by remnant Tertiary laterite. Large components of the new EL's cover the flat-floored valleys which form part of the vast Roper River floodplain and its associated tributaries (Wilton, Maiwok, Jalboi, Flying Fox, Mainoru) and are largely developed on incompetent shales, fine-grained sediments, volcanics and carbonate rocks. The target dolerite sills are prominent in their deep red soil colour and rounded boulder outcrops. Quite a few of the rivers and creeks are perennial or contain large year round billabongs.

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 during tenure Year 6 for EL 23048.

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 Project Geology

The Roper Heavy Minerals Project is confined to the Roper Group specifically targeting the ilmenite-bearing dolerite sill horizons and their erosional transport trails. The strata are generally flat lying to undulating although secondary folding and reactivation of older faults result in steepening of dips and stratigraphic dislocation in places (WNW trending Urapunga Tectonic Ridge in the central area and N-S trending Strangeways Fault in the southwest).

The absence of Cambrian flood basalts and only remnant outliers of Cretaceous sandstones, both of which are extensive to the south, west and north of the Project, suggest a significant exposure to uplift and erosion within the area permitting exposure of the underlying Proterozoic sediments and dolerite sills. Extensive deposits of Quaternary to Recent sediments comprising alluvium, colluvium, unconsolidated gravel and sand overlain by mud-rich soils are mapped in the project area and reflect material derived from prolonged weathering and erosion during the Tertiary. EL 23048 contains significant areas of these recent valley fill / floodplain deposits which are associated with the Roper, Maiwok, Mainoru and Jalboi Rivers and their tributaries.

Sills of the Derim Derim Dolerite were emplaced at various stratigraphic horizons (Table 1) from a primary magma source at depth. Extensive lateritised outcrops, subcrops and regolithic soils of the dolerite have been mapped over approximately 1,300km². The dolerite outcrops as low-relief medium to coarse grained, variably altered and weathered ('onion-skin' weathering) rounded boulders. Composition is dominated by plagioclase (40%), clinopyroxene (40%), amphibole (7%), opaques (ilmenite & magnetite 5%) and clay (7%). The associated regolith soils are deep red-purple-brown, clay-rich and contain abundant liberated ilmenite and locally with accessory titanomagnetite, magnetite and haematite grains. In some areas these dolerite sills have only been recently exhumed (higher elevations) and in other instances, larger areas of dolerite sills have been exposed for a longer

geological time resulting in pisolitic laterite formation and attendant erosion (lower elevations). These latter areas are considered to have the best potential for higher insitu ilmenite grades in both eluvial and alluvial terrain.

Diamond drillhole intercepts of the dolerite sills show a thickness in the order of 60-70 metres with upper and basal fine-grained chilled margins of 6-10m. Thin section work commissioned by Pacific Oil & Gas in the late 1980's showed the rock to be representative of a small, high-level intrusion of doleritic basic rocks. Ilmenite and magnetite are observed to be primary constituents of the dolerite. A chemical analysis (Cochrane & Edwards, 1960) of fresh dolerite within the Moroak Formation (Prk) near the Sherwin Iron Deposits reported 1.52% TiO₂.

Table 1 - Roper Group Stratigraphy

Stratigraphy	Symb ol	Lithology	Comments
(youngest to oldest)			
Chambers River Formation	Prc	Siltstone, mudstone, fine sandstone	Dolerite sill
Bukalorkmi Sandstone	Prl	Quartz sandstone	Dolerite sill
Kyalla Formation	Pry	Siltstone, mudstone, fine sandstone	Dolerite sill
Moroak Formation	Prk	Quartz sandstone	Dolerite sill
Sherwin Member	Prkz	Sand-silt-mudstone & ironstone	Iron ore horizon
Velkerri Formation	Prv	Mudstone, siltstone (organic in part)	Dolerite sill
Bessie Sandstone	Pre	Quartz sandstone	Dolerite sill
Corcoran Formation	Pro	Siltstone lower; with sandstone upper	Dolerite sill
Munyi Member	Prom	Ferruginous sandstone & siltstone	Dolerite sill
Hodgson Sandstone	Prh	Quartz sandstone	Dolerite sill
Jalboi Formation	Prj	Fine sandstone, siltstone	Dolerite sill
Arnold Sandstone	Prx	Quartz sandstone	
Crawford Formation	Prr	Fine sandstone, siltstone	Dolerite sill
Mainoru Formation	Pru	Undifferentiated	Dolerite sill
Showell Member	Prus	Calcareous mudstone,	Dolerite sill
Wooden Duck Member	Pruw	limestone	
Mountain Valley Limestone	Prut	Mudstone-siltstone-sandstone	
Nullawun Member	Prun	Mudstone, limestone	
Limmen Sandstone	Pri	Quartz sandstone	
Mantungula Formation	Prn	Mudstone, fine sandstone, dolostone	
Phelp Sandstone	Prp	Quartz sandstone	

5.0 Previous Exploration

Previous exploration is summarised in the first, second, third fourth and fifth annual reports previously submitted to the Department.

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

EL 23047 and EL 23111 have been surrendered to the Department dated 03rd December 2007 as the owner does not see these leases being of economic value and EL23048 reduced to allow exploration to concentrate on the areas of known economic value. A map of the remaining reduced lease of this group report is contained at the end of this document. Appendix 1 states the blocks to be retained in EL 23048.

Year 6 activity saw the companies product contained within EL23048 and adjoining tenements taken to China and Japan as part of the strategy developed and operated by the NT Government Department of Primary Industries, Fisheries and Mines. Several visits to organisations such as Sinosteel, Jianlong, Janfull Group, Tianda Resources, Stone Group, Fushun Titanium and Itochu Corporation were undertaken and many presentations delivered. The company entered into Confidentiality Agreements with all of these companies and has since begun final discussions with Sinosteel to enter into a Joint Venture for the mining and marketing of the minerals contained within the Roper HM Project.

Two site visits to EL23048 were conducted for Itochu Corporation and two for Sinosteel. The company also signed a Confidentiality Agreement and had several months of discussions with MAYTAS of India after an introduction from John Carrol, CEO of DPIFM.

Geophysical work was undertaken for ERD by Geodiscovery Group in Queensland to ascertain if any anomalous ground was evident over all tenement held and 68 anomalies were discovered of which 78% are classified as "Class 1" anomalies. This has provided a major interest to our joint venture partners as one anomaly visited reflected a possible Channel Iron Deposit of medium/high iron content. A list of anomalies identified is within Appendix 2.

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6.0 Rehabilitation

No ground intrusive activities requiring rehabilitation were carried out on the three EL's during tenure year 5 and natural rehabilitation by the past few wet seasons has seen total rehabilitation occurring with all past activity traces being completely removed.

7. References

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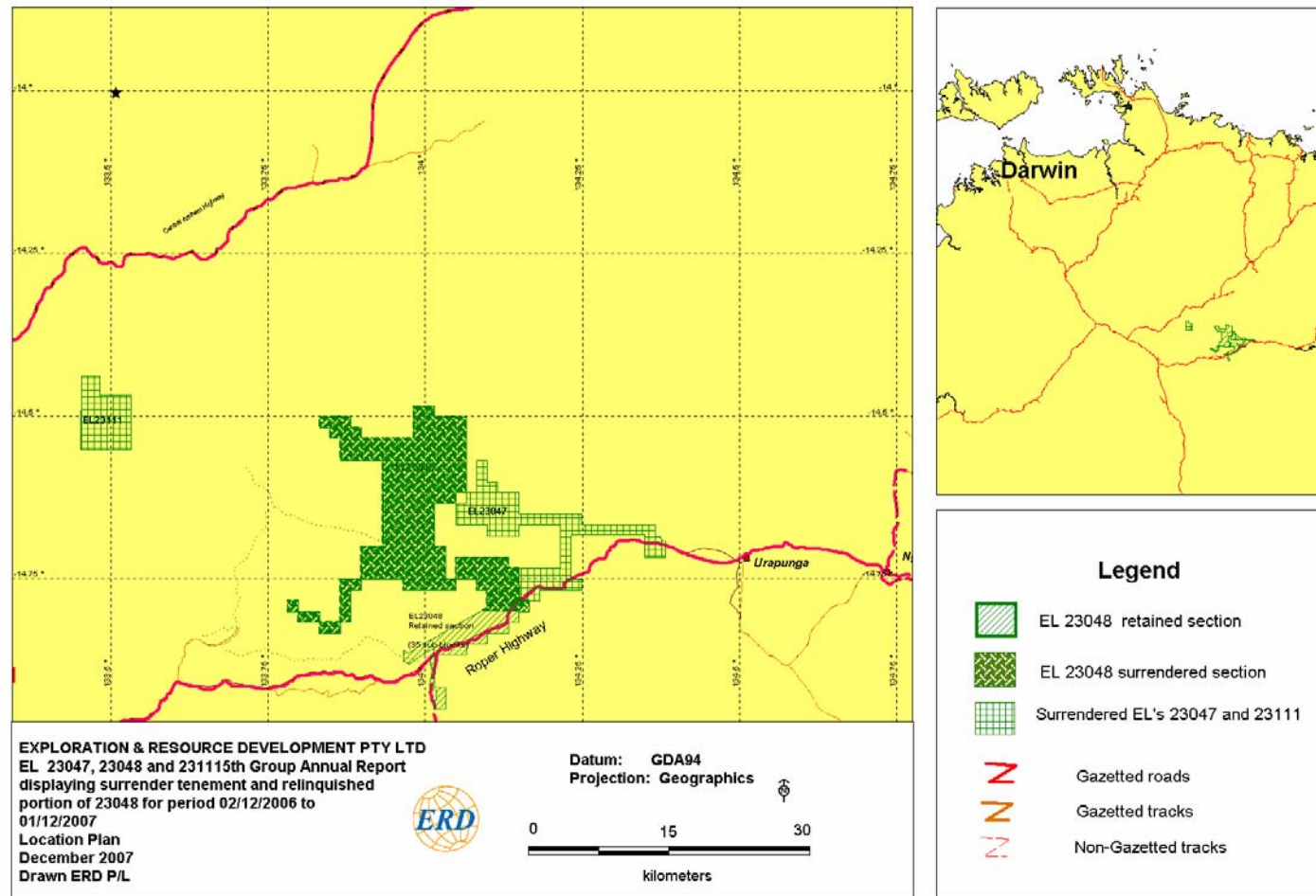
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Figure 1: EL-23048 Location Plan and Local Infrastructure

Figure 1: EL 23048 Location Plan and Local Infrastructure



List of Appendices

Appendix 1. List of retained sub-blocks for EL 23048

"Grid_ID"	"BIM"	"Block"	"Sub_Block"
"SD532401T"	"SD53"	2401	"T"
"SD532401U"	"SD53"	2401	"U"
"SD532402Q"	"SD53"	2402	"Q"
"SD532402R"	"SD53"	2402	"R"
"SD532402S"	"SD53"	2402	"S"
"SD532402T"	"SD53"	2402	"T"
"SD532401W"	"SD53"	2401	"W"
"SD532401X"	"SD53"	2401	"X"
"SD532401Y"	"SD53"	2401	"Y"
"SD532401Z"	"SD53"	2401	"Z"
"SD532402V"	"SD53"	2402	"V"
"SD532402W"	"SD53"	2402	"W"
"SD532402X"	"SD53"	2402	"X"
"SD532472E"	"SD53"	2472	"E"
"SD532473A"	"SD53"	2473	"A"
"SD532473B"	"SD53"	2473	"B"
"SD532473C"	"SD53"	2473	"C"
"SD532473D"	"SD53"	2473	"D"
"SD532473E"	"SD53"	2473	"E"
"SD532474A"	"SD53"	2474	"A"
"SD532472J"	"SD53"	2472	"J"
"SD532472K"	"SD53"	2472	"K"
"SD532473F"	"SD53"	2473	"F"
"SD532473G"	"SD53"	2473	"G"
"SD532473H"	"SD53"	2473	"H"
"SD532473J"	"SD53"	2473	"J"
"SD532472O"	"SD53"	2472	"O"
"SD532472P"	"SD53"	2472	"P"
"SD532473L"	"SD53"	2473	"L"
"SD532473Q"	"SD53"	2473	"Q"
"SD532473V"	"SD53"	2473	"V"
"SD532545A"	"SD53"	2545	"A"
"SD532545B"	"SD53"	2545	"B"
"SD532545F"	"SD53"	2545	"F"
"SD532545G"	"SD53"	2545	"G"