Partial Surrender Report
For the Period Ending 8 May 2006,
EL385 Walker River,
SD5307 Blue Mud Bay,
Northern Territory

Exploration Report No. 27648

Tenement Holder: Rio Tinto Exploration Pty Limited

Date: July 2006

Author: G Hartshorn

Submitted: I M Clementson

Distribution: Department of Primary Industry, Fisheries and Mines, NT
RTE Perth Information Centre

This report and its contents are confidential. All rights to the report and its contents (including, without limitation, rights to confidential information and copyright in all works (including photographs, diagrams, charts, maps and graphs) comprised in the report) remain the property of Rio Tinto Exploration Pty. Limited. No part of this report or the information contained in it may be disclosed to any person without the consent of Rio Tinto Exploration Pty. Limited. No part of this report, or the information contained in it may be reproduced (including being stored in any form), transmitted, published or used for any purpose without the prior consent of Rio Tinto Exploration Pty. Limited.
LIST OF CONTENTS

LIST OF CONTENTS ....................................................................................................................ii
LIST OF TABLES..........................................................................................................................iii
LIST OF FIGURES......................................................................................................................iii
LIST OF APPENDICES ................................................................................................................iii
LIST OF PLANS ..........................................................................................................................iii
1. SUMMARY ........................................................................................................................... 1
2. CONCLUSIONS AND RECOMMENDATIONS ................................................................ 1
3. INTRODUCTION ............................................................................................................... 2
4. GEOMORPHOLOGY ........................................................................................................... 2
5. GEOLOGY .......................................................................................................................... 3
6. GEOPHYSICS .................................................................................................................... 4
7. PREVIOUS EXPLORATION ............................................................................................ 4
8. EXPLORATION COMPLETED DURING REPORTING PERIOD ..................................... 4
   8.1 Soil Sampling .............................................................................................................. 5
   8.2 Stream Sediment Sampling ..................................................................................... 5
   8.3 Gravel Sampling ....................................................................................................... 6
   8.4 Auger sampling for base metal ............................................................................. 6
9. ENVIRONMENT .................................................................................................................. 8
REFERENCES ............................................................................................................................. 9
LOCALITY ................................................................................................................................ 9
DESCRIPTOR ............................................................................................................................. 9
KEYWORDS ............................................................................................................................... 9
LIST OF TABLES

Table 1: Tenement Details ........................................................................................................... 2
Table 2: Soil Analysis Protocols ............................................................................................... 5
Table 4: Stream Sediment Analysis Protocols ............................................................................. 6
Table 2: Auger Samples for Base Metals Analysis Protocols ...................................................... 6
Table 3: Summary of Sample Assayed for Bauxite ................................................................. 7
Table 4: Auger Samples for Bauxite Analysis Protocols ............................................................. 8

LIST OF FIGURES

Figure 1: Auger Drill ..................................................................................................................... 7

LIST OF APPENDICES

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Soil Sample Ledger</td>
<td>EL385_R_02_soils_samples.txt</td>
</tr>
<tr>
<td>2</td>
<td>Stream Sediment Sample Ledger</td>
<td>EL385_R_03_stream_sediments.txt</td>
</tr>
<tr>
<td>3</td>
<td>Gravel Sample Ledger</td>
<td>EL385_R_04_gravels.txt</td>
</tr>
<tr>
<td>4</td>
<td>Auger Samples Ledger and Results</td>
<td>EL385_R_05_drillcollars.txt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EL385_R_06_lithology.txt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EL385_R_07_downholegeochem_XRF.txt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EL385_R_08_downholegeochem_ICP.txt</td>
</tr>
</tbody>
</table>

LIST OF PLANS

<table>
<thead>
<tr>
<th>Plan No.</th>
<th>Title</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAp46614</td>
<td>EL385 Tenement Location showing surrendered area</td>
<td>1:100,000</td>
</tr>
<tr>
<td>WAp46613</td>
<td>Location of Surface Samples</td>
<td></td>
</tr>
<tr>
<td>WAp46615</td>
<td>Location of Auger Drill Holes</td>
<td>1:80 000</td>
</tr>
</tbody>
</table>
1. **SUMMARY**

Exploration Licence (EL) 385 was applied for in 1972 by CRA Exploration Pty Limited (CRAE). Partial consent of the application area resulted in the granting of two separate licences (ELs 385 & 24304) in June 2004. The tenements are located approximately 180 km south-west of Nhulunbuy, and 80 km north of Numbulwar in south east Arnhem Land and consequently are processed under the Aboriginal Land Rights Act 1975 (ALRA).

EL 385 was partially surrendered (19 blocks) on 8 May 2006.

The tenements are considered prospective for base metal mineralisation, similar to that at McArthur River (HYC) in the McArthur Basin. Subsidiary targets are diamonds and bauxite. The tenements contain McArthur Group equivalent sediments adjacent to the eastern margin of the Walker Trough. McArthur Group sediments are host to the McArthur River (HYC) lead-zinc deposit located approximately 300 km to the south.

Exploration was directed at locating a stratabound base metal deposit by soil sampling, stream sampling and shallow auger drilling through sand cover. Testing for bauxite and diamonds was also conducted.

Results of the soil, stream and auger drilling did not show any anomalous geochemistry for either zinc or bauxite mineralisation below the sand cover. The one diamond gravel sample was negative for indicators or diamond.

2. **CONCLUSIONS AND RECOMMENDATIONS**

No anomalous metal levels were returned in any of the soil or auger sampling.

Approximately 50% of EL 385 has been relinquished following the lack of significant results from the auger sampling.

The retained area of EL 385 will be reviewed and close spaced soil sampling and geological mapping may be conducted.
3. **INTRODUCTION**

EL 385 was applied for in 1972 by CRAE. The tenement area is located approximately 180 km south-west of Nhulunbuy, and 80 km north of Numbulwar in south east Arnhem Land and consequently the applications are processed in accordance with the Aboriginal Land Rights Act 1975 (ALRA).

Partial consent of the initial application area was obtained in 2003. The consented land covered two separate areas of land and consequently two exploration licences (EL 385 and EL 24304) were granted to Rio Tinto Exploration (RTE) on 9 June 2004. The tenements were granted on a non-graticule basis. Tenement details are included in Table 1 below. The tenements are located on Plan WAp46091.

EL 385 was partially surrendered on the 08 May 2006 with a total 31.06 km² retained (see plan WAp46570).

All exploration was completed in accordance with a Department of Primary Industry, Fisheries & Mines (DPIFM) lodged and approved Mine Management Plan (Dwyer, RTE Reports 26851 and 27359).

<table>
<thead>
<tr>
<th>Tenement No.</th>
<th>Tenement Name</th>
<th>Ownership</th>
<th>Application Date</th>
<th>Grant Date</th>
<th>Blocks Applied</th>
<th>Blocks Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL385</td>
<td>Walker River</td>
<td>Rio Tinto Exploration Pty Limited</td>
<td>19/01/1972</td>
<td>09/06/2004</td>
<td>102</td>
<td>38</td>
</tr>
</tbody>
</table>

4. **GEOMORPHOLOGY**

The tenement area comprises portions of two major physiographic subdivisions, the Gulf Fall and the Coastal Plain. The Gulf Fall comprises dissected hilly country draining towards the Gulf of Carpentaria and the Coastal Plain comprises low relief areas adjacent to the coast. The Coast Range divides the tenement area. This is a NNE trending line of hills with a maximum elevation of approximately 100 metres (after Haines et al 1999).

The Walker and Marura Rivers and Laurie Creek form major perennial water courses within the general vicinity of the tenements.
5. GEOLOGY

The tenement area covers a small part of the Paleo – Mesoproterozoic McArthur Basin, one of the principal tectonostratigraphic components of the Northern Australian Craton. A second principal unit, the Arnhem Inlier (Paleoproterozoic), is represented within the residual tenement application (ELA 24305) adjacent to the granted title, but as such is not discussed in this report. The geological description below is dominantly taken from Haines et al 1999.

Mapped units represented within the granted tenement area include the Paleoproterozoic Grindall Formation, Coast Range Sandstone and Jalma Formation, the Mesoproterozoic Balbirini Dolomite (Nathan Group) and unnamed Cainozoic units.

The Grindall Formation crops out in the central portion of EL 385 and consists of red-brown to grey-green, fine to medium-grained, thin to thick-bedded, graded sandstone interbedded with red-brown to grey-green mudstone. The unit probably forms basement for much of the tenement area, although older units are present within the application covering the Coast Range.

The Coast Range Sandstone consists of white, medium to coarse-grained, thick-bedded, commonly pebbly quartz sandstone with lenticular basal pebble or cobble conglomerate. The unit unconformably overlies the Grindall Formation.

The Jalma Formation consists of brown to purple, medium-grained, thin to medium-bedded, ferruginous; fine-grained, thin-bedded sandstone near the base with local basal conglomerate and an upper recessive unit of laminated claystone. The Jalma Formation unconformably overlies the Coast Range sandstone and locally on Grindall Formation.

The Balbirini Dolomite is described as being up to 100 metres thick and consisting of chert, altered carbonate containing stromatolites, locally common ooids, evaporates and intraclast breccia; lesser interbedded sandstone, chert clast rich and cross bedded. A basal sandstone and polymict, open framework conglomerate are present locally. This unit is presumed to unconformably overlie the underlying units, though the contacts are obscured by alluvium.

Thin Cenozoic units cover the relinquished portion of EL 385. These units consist of pisolitic and massive ferricrete and laterite. Quaternary deposits of alluvial gravel, sand, silt and clay are found in active channels and active deposits are forming on intertidal and supratidal flats.
Active and recently active cheniers and sandy beach ridges are comprised of shelly sand and are present along much of the coastline.

6. **GEOPHYSICS**

The project area is covered by regional gravity and by airborne magnetic and radiometric data. The aeromagnetic data are from the Mitchell Ranges 1990 and Marumba 1988 Surveys. These surveys had east west oriented flight lines with a line spacing of 500 metres and a mean survey elevation of 100 metres.

Data has been acquired and reviewed. No features of interest are recognised within the tenement area.

7. **PREVIOUS EXPLORATION**

Two exploration licences have been held over the tenement area. Both of these existed prior to the grant of the ALRA in 1975. Authority to Prospect (AP) 1138 was granted to BHP Minerals in 1964 and was relinquished in 1972, however it only covered the tenement area between 1964 and 1967. No exploration from the tenement area was reported by BHP.

AP 1967 was held over the tenement area between 1969 and 1970 by Noranda Australia. Again no exploration was reported. Limited exploration comprised an airborne spectrometer survey and ground follow up of 5 anomalies. No economic uranium mineralisation was intersected. Anomalous radioactivity is due to thorium concentrations with minor associated uranium.

8. **EXPLORATION COMPLETED DURING REPORTING PERIOD**

Exploration completed on the relinquished area included:

- Camp and access track construction.
- Soil sampling (147 samples)
- Stream sampling (5 samples)
- Diamond gravel sampling (1 sample)
- Auger drilling (34 holes).
The work programme was subject to a comprehensive work programme clearance facilitated by the Northern Land Council. During this clearance, the traditional owners requested that we avoid entering the portion of the Coast Range covered by the granted titles. Accordingly no work was done in this elevated terrain.

The auger sampling required a low impact access route to be made through the open forest of the coastal plain.

8.1 Soil Sampling

A total of 147, -40# soil samples were collected from depths of approximately 10-20 cm in predominantly “A” horizon. Sample ledgers and results are included as Appendix 1. Analysis was undertaken at Amdel Laboratories in Adelaide using the protocols in Table 2.

Table 2: Soil Analysis Protocols

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Digest</th>
<th>Method</th>
<th>Elements (lower detection limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry, crush and pulverise entire sample to nominal p97 95um.</td>
<td>HF/multi acid (0.5 g aliquot)</td>
<td>ICPMS /ICPOES</td>
<td>Ag* (0.1 ppm), Al (10 ppm), As* (0.5 ppm), Ba (10 ppm), Ca (10 ppm), Cd* (0.1 ppm), Ce (0.5 ppm), Co (2 ppm), Cr (2 ppm), Cs (0.1 ppm), Cu (2 ppm), Bi* (0.1 ppm), Fe (100 ppm), Ga (0.1 ppm), K (10 ppm), In (0.05 ppm), La (0.5 ppm), Mg (10 ppm), Mn (5 ppm), Mo* (0.1 ppm), Na (10 ppm), Nb* (0.1 ppm), Ni (2 ppm), P (5 ppm), Pb* (0.5 ppm), Rb (0.1 ppm), Sb* (0.5 ppm), Se (0.5 ppm), Sr (2 ppm), Te (0.2 ppm), Th (0.2 ppm), Ti (10 ppm), Tl (0.1 ppm), U* (0.02 ppm), V (2 ppm), W* (0.1 ppm), Y (0.05 ppm), Zn (2 ppm), Zr (10 ppm).</td>
</tr>
</tbody>
</table>

*ICPMS

8.2 Stream Sediment Sampling

A total of 5, -80# stream sediment samples were collected from the active channel of selected drainages. Sample ledgers and results are included as Appendix 3. Analysis was undertaken at Amdel Laboratories in Adelaide using the protocols in Table 4.
Table 4: Stream Sediment Analysis Protocols

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Digest</th>
<th>Method</th>
<th>Elements (lower detection limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry and pulverise entire sample</td>
<td>HF/multi acid</td>
<td>ICPMS/ICPOES</td>
<td>Ag* (0.1 ppm), Al (10 ppm), As* (0.5 ppm), Ba (10 ppm), Ca (10 ppm), Cd* (0.1 ppm), Ce (0.5 ppm), Co (2 ppm), Cr (2 ppm), Cs (0.1 ppm), Cu (2 ppm), Bi* (0.1 ppm), Fe (100 ppm), Ga (0.1 ppm), K (10 ppm), In (0.05 ppm), La (0.5 ppm), Mg (10 ppm), Mn (5 ppm), Mo* (0.1 ppm), Na (10 ppm), Nb* (0.1 ppm), Ni (2 ppm), P (5 ppm), Pb* (0.5 ppm), Rb (0.1 ppm), Sb* (0.5 ppm), Se (0.5 ppm), Sr (2 ppm), Th (0.2 ppm), Ti (10 ppm), Tl (0.1 ppm), U* (0.02 ppm), V (2 ppm), W* (0.1 ppm), Y (0.05 ppm), Zn (2 ppm), Zr (10 ppm).</td>
</tr>
</tbody>
</table>

*ICPMS

8.3 Gravel Sampling

One, -1mm gravel sample was collected from a trap site within an active drainage within the relinquished area of the tenement. Sample size was approximately 30 kg. Samples were processed at RTE’s mineral processing laboratory in Perth and heavy mineral concentrates observed for diamonds and diamond indicator minerals. Sample ledger and result is included as Appendix 4.

8.4 Auger sampling for base metal

A total of 34 samples were collected from variable depths depending on how far the auger could penetrate and the interpretation of weathered insitu bedrock. The samples were collected from an average of 6m depth with the maximum being 16m and minimum of 2m. Analysis was undertaken at Amdel Laboratories in Adelaide using the protocols in Table 2.

Table 2: Auger Samples for Base Metals Analysis Protocols

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Digest</th>
<th>Method</th>
<th>Elements (lower detection limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry, crush and pulverise entire sample to nominal p97 95um.</td>
<td>Lead fusion fire assay (50 g charge) Aqua regia digest</td>
<td>ICPES</td>
<td>Au (1 ppb), Pt (5 ppb), Pd (1 ppb).</td>
</tr>
<tr>
<td>Dry, crush and pulverise entire sample to nominal p97 95um.</td>
<td>HF/multi acid (0.5 g aliquot)</td>
<td>ICPMS/ICPOES</td>
<td>Ag (1 ppm), Al (10 ppm), As (3 ppm), Ba (10 ppm), Bi (5 ppm), Ca (10 ppm), Cd (5 ppm), Co (2 ppm), Cr (2 ppm), Cu (2 ppm), Fe (100 ppm), K (10 ppm), Mg (10 ppm), Mn (5 ppm), Mo (3 ppm), Na (10 ppm), Nb (5 ppm), Ni (2 ppm), P (5 ppm), Pb (5 ppm), S (50 ppm), Sb (5 ppm), Sr (2 ppm), Th (5 ppm), Ti (10 ppm), U (5 ppm), V (2 ppm), W (10 ppm), Zn (2 ppm) Zr (10 ppm).</td>
</tr>
</tbody>
</table>

*ICPMS
The results of the auger sampling did not show any significant anomalism in metals associated with lead zinc mineralisation. The auger drilling stopped in weathered material in all holes however this was interpreted to be mostly in situ and not a younger cover. The work was therefore considered effective in testing for bedrock geochemical anomalism.

**Figure 1: Auger Drill**

Drill holes that had lateritic material that was possibly bauxitic were sampled and analysed by XRF. This material is indicative of lateritic weathered sandstone and is not considered significant for bauxite.

**Table 3: Summary of Sample Assayed for Bauxite**

<table>
<thead>
<tr>
<th>Hole number</th>
<th>Sample numbers</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG05WR15</td>
<td>6072610</td>
<td>0 - 1</td>
</tr>
<tr>
<td>AG05WR16</td>
<td>6072611</td>
<td>1 - 2</td>
</tr>
<tr>
<td>AG05WR24</td>
<td>6072612</td>
<td>0 – 1</td>
</tr>
<tr>
<td>AG05WR33</td>
<td>6072613</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>
Table 4: Auger Samples for Bauxite Analysis Protocols

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Digest</th>
<th>Method</th>
<th>Elements (lower detection limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry, crush and</td>
<td>Fused bead</td>
<td>XRF-fused bead</td>
<td>Al₂O₃ CaO Fe₂O₃ K₂O MgO MnO Na₂O P₂O₅</td>
</tr>
<tr>
<td>pulverise entire sample to</td>
<td></td>
<td>Thermo-gravimetric</td>
<td>(0.001) SiO₂ SO₃ TiO₂ ZrO₂ V₂O₅ (0.001)</td>
</tr>
<tr>
<td>nominal p97 95μm.</td>
<td></td>
<td>LOI</td>
<td>(detection limit is 0.01% unless otherwise stated)</td>
</tr>
</tbody>
</table>

9. ENVIRONMENT

All exploration was completed in accordance with a DPIFM lodged and approved Mine Management Plan (Dwyer 2004 and 2005).

All exploration activities were completed in accordance with the approved plan and no additional rehabilitation is required.
REFERENCES


LOCALITY

Blue Mud Bay SD 5307 1:250 000

DESCRIPTOR

Partial Surrender Report for the Period Ending 8 May 2006, EL 385 Walker River, Northern Territory located within the Arnhem Land Aboriginal Land Trust, Northern Territory, Australia. Base metal and bauxite exploration consisted of drilling 34 auger holes and selected assaying.

KEYWORDS

Walker River, Blue Mud Bay, base metals, bauxite, auger drilling, XRF analysis, ICP analysis.
APPENDIX 1

Soil Sample Ledger

EL385_R_02_soil_samples.txt
APPENDIX 2

Stream Sediment Sample Ledger

EL385_R_03_stream_sediments.txt
APPENDIX 3

Gravel Sample Ledger

EL385_R_04_gravels.txt
APPENDIX 4
Auger Samples Ledger and Results

EL385_R_05_drillcollars.txt
EL385_R_06_lithology.txt
EL385_R_07_downholegeochem_xrf.txt
EL385_R_08_downholegeochem_icp.txt