Rio Tinto Exploration Pty. Limited
ABN 76 000 057 125 / ACN 000 057 125

A member of the Rio Tinto Group

First Annual Report
For the Period Ending 8 June 2005,
EL24304 & EL385 Walker River,
SD5307 Blue Mud Bay,
Northern Territory

Exploration Report No. 27368

Tenement Holder: Rio Tinto Exploration Pty Limited

Date: June 2005

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Submitted: I M Clementson

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RTI Perth Information Centre

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<td>1</td>
<td>Soil Samples Ledger and Results</td>
<td>WR_2004_soil_samples.txt</td>
</tr>
<tr>
<td>2</td>
<td>Rock Samples Ledger and Results</td>
<td>WR_2004_rock_samples.txt</td>
</tr>
<tr>
<td>3</td>
<td>Stream Samples Ledger and Results</td>
<td>WR_2004_stream_sediments.txt</td>
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<td>4</td>
<td>Gravel Samples Ledger and Results</td>
<td>WR_2004_gravels.txt</td>
</tr>
<tr>
<td>5</td>
<td>Mineral Chemistry</td>
<td>WR_2004_mineralchemistry.txt</td>
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<td>6</td>
<td>Walker River Mine Management Plan 2004</td>
<td>26851 Walker River MMP.pdf</td>
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<td></td>
<td></td>
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<td></td>
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LIST OF PLANS

<table>
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<th>Plan No.</th>
<th>Title</th>
<th>Scale</th>
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</thead>
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<tr>
<td>WAp46091</td>
<td>Tenement Location Plan</td>
<td>1:500 000</td>
</tr>
<tr>
<td>WAp45609</td>
<td>EL385 MMP 2003 Work Programme</td>
<td>1:50 000</td>
</tr>
<tr>
<td>WAp46351</td>
<td>Walker River 2004 Work Programme</td>
<td>1:50 000</td>
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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).

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 completed during the current reporting period was directed at locating a stratabound base metal deposit and has comprised:

- Soil sampling (274 samples)
- -80# stream sediment sampling (23 samples)
- -1 mm gravel sampling (7 samples)
- Rock chip sampling (8 samples)

Results to date have not identified any anomalous metal levels in any of the samples. Further work in 2005 will be directed at sampling below the transported sand cover present on the eastern (coastal) side of the Coast Range.

2. CONCLUSIONS AND RECOMMENDATIONS

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

It is considered that on the western side of the coast range, residual materials were sampled and that the results reflect the barren nature of the underlying sediment package. The eastern side of the coast range however, is completely blanketed by a thin veneer of fine quartz sand that will obscure any in-situ geochemical signature. An auger sampling programme to sample the underlying bedrock is proposed for 2005.
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.

All exploration was completed in accordance with a Department of Business Industry & Resource Development (DBIRD) lodged and approved Mine Management Plan (Dwyer 2004, RTE Report 26851), and is subject to authorisation number 0230-01 issued under S41 of the Mining Management Act 2001 (NT).

<table>
<thead>
<tr>
<th>Tenement No.</th>
<th>Tenement Name</th>
<th>Ownership</th>
<th>Application Date</th>
<th>Grant Date</th>
<th>Area Applied km²</th>
<th>Area Granted km²</th>
</tr>
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<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>284</td>
<td>63.5</td>
</tr>
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<td>EL24304</td>
<td>Walker River 2</td>
<td>Rio Tinto Exploration Pty Limited</td>
<td>19/01/1972</td>
<td>09/06/2004</td>
<td>3.3</td>
<td></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 are 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 Coat 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 all of the eastern half of EL 385 and all of EL 24304. 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 during the reporting year included:

- Camp and access track construction.
- -40# Soil sampling (274 samples).
- -80# stream sediment sampling (23 samples).
- -1 mm gravel sampling (7 samples).
- Rock chip sampling (8 samples).
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 samples were collected in this area.

At the request of traditional owners, a basic exploration camp was situated at Marrkalawa outstation. The main access track from Numbulwar to Marrkalawa was used, and some preparatory work was done on the section of track between Anandanagki and Marrkalawa outstations, including the crossing of the Walker River. This preparatory work consisted of removing overhanging branches from the track and adding gravel fill to the river crossing. The gravel fill was extracted from an existing excavation on the side of the track. Traditional owners were consulted in these processes.

8.1 Soil Sampling

A total of 274, -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 97 95μm.</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 Rock Sampling

A total of eight rock grab samples of between 1 kg and 3 kg of material were collected from depths of approximately 10-20 cm in predominantly “A” horizon. Sample ledgers and results are included as Appendix 2. Analysis was undertaken at Amdel Laboratories in Adelaide using the protocols in Table 3.
Table 3: Rock 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>ICPPOES</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

8.3 Stream Sediment Sampling

A total of 23, -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 (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), Ti (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

8.4 Gravel Sampling

A total of seven, -1mm gravel samples were collected from trap sites within active drainages across 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 ledgers and results are included as Appendix 4.

8.5 Mineral Chemistry

No diamonds were recovered in any sample. Grains selected as possibly chromite were micro-probed to determine their chemistry. No chromite or other kimberlitic / diamond indicator mineral was identified. Probe results are included as Appendix 5.

9. Environment

All exploration was completed in accordance with a DBIRD lodged and approved Mine Management Plan (Dwyer 2004). This report is included in Appendix 6.

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

10. Exploration Expenditure

The exploration expenditure attributed to the project by RTE for the first year of exploration is detailed in Table 5.

Table 5: Exploration Expenditure

<table>
<thead>
<tr>
<th>Element Summary Group Description</th>
<th>Total $</th>
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<tbody>
<tr>
<td>Computing Services</td>
<td>6,747.73</td>
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<tr>
<td>Cont Exploration – EXT</td>
<td>25,970.18</td>
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<tr>
<td>Field and Transport</td>
<td>85,335.29</td>
</tr>
<tr>
<td>General Office Support and Comm</td>
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<tr>
<td>Indirect Costs</td>
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<tr>
<td>Laboratory Analysis</td>
<td>13,397.99</td>
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<tr>
<td>Payroll and Benefits</td>
<td>62,668.60</td>
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<tr>
<td>Rent and Property</td>
<td>3,517.98</td>
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<tr>
<td>Sundry Prof and Other</td>
<td>789.64</td>
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<tr>
<td>Tenement Payments</td>
<td>9,243.04</td>
</tr>
<tr>
<td>Travel and Accommodation</td>
<td>10,360.56</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$254,079.18</strong></td>
</tr>
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</table>
11. PROPOSED EXPLORATION

Review of the sampling and mineral chemistry results is on-going. Minor in-fill sampling is envisaged. Further follow up on the Cretaceous plateau area would consist of airborne geophysical surveying (HEM and magnetic) and target drilling.

A notional budget for the project area is listed as follows:

Table 6: Proposed Expenditure

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount $</th>
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<tbody>
<tr>
<td>Auger sampling</td>
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</tr>
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<td>Track preparation</td>
<td>10000</td>
</tr>
<tr>
<td>Field and transport</td>
<td>20000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60000</strong></td>
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REFERENCES

LOCALITY
Blue Mud Bay SD 5307 1:250 000

DESCRIPTOR
Second Annual Report for the Period Ending 22 October 2003, EL 1638 Port Keats 1, EL1639 Port Keats 2, EL1640 Keats, EL1641 Port Keats, EL1923 Keats 2, EL3403 Barwolla, EL3404 Fitzmaurice, EL3406 Keyling, EL6516 Tom Turners Creek, EL6517 Cui-eci Creek, EL6551 Greenwood, EL22218 Fitzmaurice 4. Yambarra Project, Northern Territory located within the Daly River / Port Keats Aboriginal Land Trust, Northern Territory, Australia. Diamond exploration activities consisted of first pass and follow up gravel and loam sampling.

KEYWORDS
Port Keats, Fergusson River, Cape Scott gravel sample, -80# stream sediment sample, rock chip sample, Chromite, Cretaceous, Diamond, Garnet, Indicator mineral, Kimberlite, Loam sample, Proterozoic,
APPENDIX 1

Soil Samples Ledger and Results

WR_2004_soil_samples.txt
APPENDIX 2

Rock Samples Ledger and Results

WR_2004_rock_samples.txt
APPENDIX 3
Stream Samples Ledger and Results
WR_2004_stream_sediments.txt
APPENDIX 4
Gravel Samples Ledger and Results
WR_2004_gravels.txt
APPENDIX 5

Mineral Chemistry

WR_2004_mineralchemistry.txt
APPENDIX 6

Walker River Mine Management Plan 2004
26851 Walker River MMP.pdf
WAp45609.pdf
WAp46091.pdf