



## **Rio Tinto Exploration Pty. Limited**

ABN 76 000 057 125 / ACN 000 057 125

A member of the Rio Tinto Group

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
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## **SUMMARY OF ACTIVITES**

### **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 of diamond.

**VERIFICATION LISTING**

Exploration Work Type	File Name	Format
<b>Office Studies</b>		
Literature search		
Database compilation		
Computer modelling		
Reprocessing of data		
General research		
Report preparation	27648 Walker River WAp46613 WAp46614	.pdf .pdf .pdf
Other (specify)		
<b>Airborne Exploration Surveys</b>		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
<b>Remote Sensing</b>		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar		
Other (specify)		
<b>Ground Exploration Surveys</b>		
<b>Geological Mapping</b>		
Regional		
Reconnaissance		
Prospect		
Underground		
Coastal		
<b>Ground Geophysics</b>		
Radiometrics		
Magnetics		
Gravity		
Digital terrain modelling		
Electromagnetics		
SP/AP/EP		
IP		
AMT		
Resistivity		
Complex resistivity		
Seismic reflection		
Seismic refraction		
Well logging		
Geophysical interpretation		
Other (specify)		
<b>Geochemical Surveying</b>		
Drill sample		
Stream sediment	EL385_R_03_stream_sediment	.txt
Soil	EL385_R_02_soils_samples	.txt
Rock chip		
Regolith		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis		
Other (specify)	EL385_R_04_gravels.txt	
<b>Drilling</b>		
Aircore		
Auger	EL385_R_05_drillcollars EL385_R_06_lithology EL385_R_07_downholegeochem_XRF EL385_R_08_downholegeochem_ICP WAp46615	.txt .txt .txt .txt .pdf
Diamond		
Reverse circulation		
Rotary air blast		
Rotary percussion		
Tungsten carbide bit (coring)		

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Groundwater drilling		
All drilling		
<b>File Verification Listing (this table)</b>	27648 Walker River V	.pdf

