



## **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 22 September 2006,  
EL 1638 Port Keats 1,  
Yambarra Project  
Northern Territory**

**Exploration Report No. 27980**

Tenement Holder: Ashton Mining Limited

Date: February 2007

Author: S R Bishop

Submitted: D C Palmer

Distribution: Department of Primary Industry, Fisheries and Mines  
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.

## 1. **SUMMARY**

This report presents the diamond exploration completed by Rio Tinto Exploration Pty Limited (RTE) within the surrendered portion of EL 1638 Port Keats 1, Yambarra Project, Northern Territory, up until 22 September 2006. A total of 105 sub-blocks were surrendered in the far south of EL 1638.

The Yambarra project area covers parts of the Palaeoproterozoic Pine Creek Orogen, the Mesoproterozoic Victoria – Birrinduddu Basin and the Palaeozoic Bonaparte Basin.

Exploration completed within the surrendered portion of EL 1638 by RTE was as follows:

- Nine 30kg -1mm gravel samples processed for microdiamonds and indicator minerals.
- Nine -80# stream sediment samples analysed for a comprehensive multielement suite.

The exploration results provided no encouragement for follow up work in the area surrendered.

**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	27980 Port Keats 1	.pdf
Other (specify)	pDi07_003 Tenement Location Plan pDi07_004 Exploration Index Map D146LSJ07 Partial Surrender EL 1638 map	.pdf .pdf .pdf
<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	Yam_NTSG3_DGLocated2006A Yam_NTSG3_Indicator2006A Yam_NTSG3_Stream2006A	.txt .txt .txt
Soil		
Rock chip		
Regolith		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis	Yam_NTSG3_SEM2006A Yam_NTSG3_SEMSGA2006A Yam_NTSG3_Traceelement2006A	.txt .txt .txt
Other (specify)		
<b>Drilling</b>		
Aircore		
Auger		
Diamond		
Reverse circulation		
Rotary air blast		
Rotary percussion		
Tungsten carbide bit (coring)		
Groundwater drilling		
All drilling		
<b>File Verification Listing (this table)</b>	27980 Port Keats 1 V	.pdf

