

## **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 20 May 2003,
EL 10040 Wave Hill,
Victoria Diamond Programme,
Wave Hill SE52-08 &,
Victoria River Downs SE52-04,
Northern Territory,
Australia

## **Exploration Report No. 26163**

Tenement Holder: Rio Tinto Exploration Pty Limited

Date: July 2003

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Distribution: Department of Mines & Energy - NT

RTE Perth Information Centre

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## **SUMMARY OF ACTIVITIES**

EL 10040 Wave Hill is located in the north west corner of the Wave Hill SE 52-08 1:250,000 map sheet, 310 km south west of Katherine, western Northern Territory, Australia. EL 10040 was granted to Ashton Exploration Australia Pty Ltd on 21 May 2002. Ashton and the EL application were acquired by Rio Tinto Ltd in late 2000. The EL is one of a group of 21 contiguous granted EL's and EL applications held by Rio Tinto Exploration Pty Ltd (RTE) in the region and referred to as the Victoria Diamonds Project.

EL 10040 is located mainly over Antrim Plateau Volcanics. Only limited previous sampling for diamonds was carried out within the area now covered by EL 10040. One sample returned chromite and this occurrence forms part of a cluster of indicator mineral occurrences in the east of neighbouring EL 10044. The source(s) of the microdiamonds and other indicator minerals remain enigmatic.

CRA Exploration and Ashton Mining had previously collected gravel samples from five sample sites exploring for diamonds within the area now covered by EL 10044. The results of the previous sampling suggest that there are no exposed diamond-bearing kimberlites within the drainage catchments sampled. Drainage catchments within the EL remain untested with diamond sampling.

Cambrian basalts traversed by WNW-ESE trending fracture lineaments dominate the geology of EL 10040. Geophysical lineaments also display a strong WNW-ESE trend and define the margin of the Cambrian basalts.

During the current reporting period RTE assessed available geomorphological, geological, geophysical and historical sampling datasets for EL 10040. No field-based exploration was carried out. RTE identified potential target areas for the indicator mineral occurrences and developed various models that might explain their geographic and geological source(s). As no advanced kimberlitic targets were identified it was decided that EL 10040 should be divested along with neighbouring tenement of the Victoria Diamond Project. During the reporting year exploration data was packaged and presented to interested parties. At the time of writing this report the divestment was being finalised with one of these parties.

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## **VERIFICATION LISTING**

Exploration Work Type	File Name	Format
Office Studies		
Literature search		
Database compilation		
Computer modelling		
Reprocessing of data		
General research		
Report preparation	26163 Wave Hill.pdf	.pdf
Other (specify)	WAp45671 (Tenement Location Plan)	.pdf
Airborne Exploration Surveys		7
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
Remote Sensing		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar Other (apacity)		
Other (specify)		
Ground Exploration Surveys		
Geological Mapping		
Regional		
Reconnaissance		
Prospect		
Underground		
Costean		
Ground Geophysics		
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)		
Geochemical Surveying		
Drill sample		
Stream sediment		
Soil		
Rock chip		
Regolith		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis		
Other (specify)		
Drilling		
Aircore		
Auger		
Diamond		
Reverse circulation		
Rotary air blast		
Rotary percussion		
Tungsten carbide bit (coring)		
Groundwater drilling		
All drilling		
File Verification Listing (this table)	26163 Wave Hill V.pdf	.pdf