



## **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 22<sup>nd</sup> July 2003,  
EL 10189 Wilkinson Creek,  
Merlin Orbit Diamonds Programme,  
Bauhinia Downs SE 53-03, Wallhallow SE 53-07  
and Calvert Hills SE 53-08,  
Northern Territory,  
Australia

**Exploration Report No. 26179**

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## **SUMMARY OF ACTIVITIES**

EL 10189 Wilkinson Creek is located 100 km south of Borroloola and 20 km south of the Merlin Diamond Mine, Northern Territory, Australia. The area covered by EL 10189 has received a significant amount of historical exploration for diamonds, mainly surface sampling and airborne magnetic surveys. Ashton Mining completed the majority of this work during the late 1990's while the Merlin Diamond Mine was being evaluated and developed. Bulk samples within EL 10189 had returned up to 75 macro diamonds.

Work completed by RTE within EL 10189 during the current reporting period was as follows:

- Compilation and review of existing geophysical, geochemical and drilling data highlighted six, low priority, airborne magnetic targets and the high priority Tingatel Prospect area where an Ashton bulk gravel sample returned 75 macro diamonds.
- Six ~500 kg bulk gravel samples collected around the Tingatel Prospect area did not return any diamonds. Indicator mineral in the samples were identified as being non-kimberlitic. The results were inconclusive.
- A helicopter-borne Hummingbird EM (HEM) survey, totalling 6200 line km, resulted in ten high priority HEM targets being prioritised for follow up.
- Gravity traverses across ten HEM and six airborne magnetic targets returned favourable kimberlitic gravity responses from targets HUM07T and MAG06T.
- -80# auger soil and -2mm lag soil geochemical samples collected over the 16 prioritised geophysical targets returned anomalous "kimberlitic" geochemistry from six targets.
- Heavy mineral (-1mm) loam sampling over the 16 prioritised geophysical targets failed to return any diamonds. Indicator minerals were identified as being non-kimberlitic.

RTE is negotiating with a selected resource company regarding the divestment of EL 10189 at the time of compilation of this report.

## 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	26179 Wilkinson Creek.pdf	.pdf
Other (specify)	WAp45699.pdf (Tenement Location Plan) WAp45700.pdf (Exploration Summary) EL10189 Exploration Summary.txt	.pdf .pdf .txt
<b>Airborne Exploration Surveys</b>		
Aeromagnetics		
Radiometrics		
Electromagnetics	Tintagel_Hummingbird.csv	csv
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		
Costean		
<b>Ground Geophysics</b>		
Radiometrics		
Magnetics		
Gravity	EL10189 Haines Gravity.txt	txt
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		
Soil	EL10189 Soil -2mm Lag.txt EL10189 -80# Auger Soil.txt	.txt .txt
Rock chip		
Regolith		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis	EL10189 SEM Data.txt	.txt
Other (specify)	EL10189 Gravel Bulk.txt EL10189 Loam -1mm.txt	.txt .txt
<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>	26179 Wilkinson Creek V.pdf	.pdf