



**EL 8915 TEE DEE HILL
VICTORIA RIVER REGION, NT**

**RELINQUISHMENT REPORT
ON BLOCKS DROPPED AT THE CONCLUSION OF
YEAR SIX OF TENURE
PERIOD ENDED 6 JUNE 2006**

submitted by

GRAVITY DIAMONDS LIMITED

(ABN - 72 009 178 689)

Level 7, Exchange Tower

530 Little Collins Street, Melbourne, Victoria, 3000

on behalf of

Diamond Mines Australia Pty Ltd

and

Ashton Mining Limited

(a wholly owned subsidiary of the Rio Tinto Group)

EL 8915 'Tee Dee Hill

Holder: Ashton Mining Ltd

Grant Date: 7 June 2000

1:250,000 Sheet : **WATERLOO SE52-03**

Minerals Sought: diamonds, base metals

SUMMARY

EL 8915 forms part of a farmin agreement between Rio Tinto Exploration Pty Ltd (“Rio Tinto”) and Diamond Mines Australia Pty Ltd (“DMA”) covering numerous Rio Tinto-controlled tenements and applications in the Northern Territory. Under this agreement, DMA is conducting predominantly diamond exploration over the tenements utilising the newly-developed Falcon™ airborne gravity gradiometer system, which has been shown to be very effective in detecting kimberlite pipes.

Gravity Diamonds Ltd (“Gravity”) is managing the farmin arrangement for Diamond Mines Australia and owns 100% of DMA.

During the initial stages of the farmin arrangement, a review of historic exploration data, including considerable surface sampling focussed on diamonds, was conducted by Gravity with a number of anomalous results noted.

On this basis, a Falcon™ survey was planned to cover the central part of EL 8915. Flying was conducted in November-December 2003 and results were received by Gravity in May 2004. Interpretation and exploration targeting were completed during 2004 and proposed field programmes were submitted to the Northern Land Council to obtain Traditional Owner approval.

The NLC was not able to process Gravity’s field programme proposal in 2004, but approval to proceed was received in early 2005 and field testing of kimberlite targets was scheduled for August-September 2005.

During the sixth year of tenure, 16 Falcon anomalies from the TeeDee Falcon™ survey were assessed within EL 8915 and sampled where appropriate. A total of 6 heavy mineral samples, comprising 4 gravel samples and 2 loam samples were collected. The kimberlite potential of the majority of anomalies inspected was considered to be low, primarily due to the presence of extensive outcropping Proterozoic sandstone over these anomalies. None of the samples collected were from the area relinquished.

At the conclusion of Year 6 a total of 317 blocks were relinquished from EL 8915, effective 6th June 2006, with a total of 97 blocks retained.

CONTENTS

1. Introduction
2. Location and Access
3. Geological Setting and Economic Potential
4. Previous Exploration
5. Work Completed on Relinquished Blocks
6. Environment and Rehabilitation
7. Conclusions and Recommendations

FIGURES

1. EL 8915 - Tenement Location
2. EL 8915 –Retained and Relinquished Area

INTRODUCTION

EL 8915 was granted to Ashton Mining Ltd on 7 June 2000. Since that time, Rio Tinto has taken over Ashton Mining. During 2002, Rio Tinto was entered into negotiation with Gravity Capital Limited (“Gravity”, since renamed Gravity Diamonds Limited) concerning the deployment of the Falcon™ airborne gravity gradiometer system over Rio Tinto’s diamond tenements in northern Australia. The Falcon™ system is a unique exploration tool developed by BHP Billiton and it has particular application in diamond exploration.

BHP Billiton and Gravity concluded an arrangement on Falcon™ deployment in Australia during the year (ASX announcement 01/07/2003) and then Gravity formed a farmin joint venture, through its then 40%-owned (and now 100%-owned) associated company, Diamond Mines Australia Pty Ltd (“DMA”) with Rio Tinto Exploration, concerning the diamond and base metal exploration over a large number of Rio Tinto-controlled tenements in the Northern Territory (ASX announcement 25/07/2003). EL 8915 forms part of the DMA-Rio Tinto joint venture.

On the basis of these agreements, Gravity (on behalf of DMA) commenced diamond exploration in the Northern Territory during July 2003. In essence, the agreements provided for DMA to deploy the Falcon™ system and earn an interest in any discovery. BHP Billiton retains a right to buy into DMA’s interest in any discovery. Gravity is managing all exploration for DMA.

The 2003 flying program was planned to cover part of EL 8915 and focused on the area of anomalous diamond indicator mineral sampling results, obtained from Rio Tinto’s prior work. While the principal target in the area is diamonds, some interest is also directed toward base metal deposits. The flying program did not cover any part of the relinquished area.

LOCATION AND ACCESS

EL 8915 Tee Dee Hill is located 100 km south west of Timber Creek and 30 km east of the Amanbidji Community, on the Waterloo SE52-03 1:250,000 map sheet, western Northern Territory (Figure 1). The tenement is located within the Nagurunguru Aboriginal Land Trust (NALT) and is subject to the Timber Creek Joint Venture and Deed of Exploration with NALT.

The sampling program implemented in 2005 utilised a Jet Ranger helicopter hired from Heliworks in Kununurra, with the field crew based at Waterloo Station for the duration of the program.

GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

EL 8915 is located over the southern part of the Neoproterozoic Victoria River Basin. The physiography consists mainly of dissected plateaus, ridges and some alluvial plains. Occasional pronounced linear drainage patterns map the location of faults.

The Victoria River Basin consists of marine and continental sediments (mainly sandstone) up to 3500m thick. The Jasper Creek sandstone of the Auvergne Group comprises most of the Neoproterozoic outcrop. In the southwest of the tenement Angalarri Siltstone overlies the Jasper Gorge sandstone. In the southeast and southwest Lower Cambrian Antrim Plateau Volcanics unconformably overlies the Auvergne Group. Deformation consists of minor tilting to broad open folding and minor faulting. Erosion of the basalt in the more recent geological past has exposed sub-circular domes of the underlying Neoproterozoic sediments.

Regional NW-SE and NE-SW trending lineaments, some of which appear to be intruded by dykes, are evident from airborne magnetics data. Traversing immediately to the south the Tee Dee Hill indicator mineral anomaly is a prominent ENE-WSW drainage lineament interpreted to be a major fault that extends west for over 100 km.

Jurassic diamondiferous dykes that have intruded the Victoria River Basin are located about 100 km to the NE near Timber Creek.

PREVIOUS EXPLORATION

Ashton explored the area in the early 1980s and early 1990s for diamonds. This earlier work consisted of reconnaissance gravel sampling, drainage geochemical sampling, loam sampling, airborne and heliborne magnetic surveys, INPUT surveying and photogeological studies. Airborne magnetic anomalies were selected and some were followed up with surface sampling. Photogeological studies, utilising 1:50,000 scale black and white aerial photographs surveyed in 1948, identified a number of circular and linear features that were further assessed in the field or tested with one or two loam samples.

The drainage sampling identified macrodiamonds, microdiamonds and other indicator minerals clustering within a number of drainage catchments within the tenement. One pronounced indicator mineral anomaly, referred to as “Tee Dee Hill”, consists of a prominent cluster of macrodiamonds, microdiamonds and other indicator minerals largely confined to a single drainage channel.

The previous work completed by Ashton and Rio Tinto within EL 8915 during the current tenure is summarised in Rio Tinto’s 2001 and 2002 Annual Reports to the Mines Department.

Work completed during the first reporting period by Ashton/Rio Tinto was as follows:

- Infill drainage sampling around the tenement. This work continued to highlight the drainage channel of the Tee Dee Hill indicator mineral anomaly.
- SEM probing and assessment of chromite geochemistry of chromite grains from one sample. This work indicated that most of the chromite grains were non-kimberlitic but some were possibly kimberlitic.

- A detailed airborne magnetics survey (100m line spacing) over the Tee Dee Hill indicator mineral anomaly. The detailed aeromagnetic survey highlighted four magnetic anomalies. One of the four magnetic anomalies was associated with a 400m by 200m depression with brecciation-silicification, peripheral concentric fracturing and a coincident EM anomaly. Soil and loam sampling over the feature failed to return any significant results. Ground inspection revealed that the feature was probably a basalt vent.
- Ground magnetic and EM-34 traverses over a coincident airborne magnetic and circular geomorphological feature.

Work completed during the second reporting period consisted of a review of available exploration data, including regional topographic and Landsat Thematic Mapper imagery. The following observations were made from the data review:

- The Tee Dee Hill indicator mineral anomaly lies down hill of a prominent ENE-WSW drainage-defined (geomorphological) lineament that extends for +100 km to the west. Landsat Thematic Mapper (TM) image interpretation highlighted a possible circular “clay anomaly”, about 1 km diameter, adjacent to the lineament. The anomaly is immediately up slope of the Tee Dee Hill indicator mineral anomaly and near the base of an outlier of Antrim Plateau Volcanics. A very subtle magnetic feature was identified associated with the clay anomaly.
- Further to the west, two adjacent gravel sample sites containing picroilmenite are also located proximal to the +100 km long regional lineament.
- There are other gravel sample microdiamond occurrences within the tenement that could be investigated further.

After the exploration agreement between Rio Tinto and DMA was finalised in July 2003, a review of available geophysical and geochemical data was carried out by Gravity (managing the project on behalf of DMA) and this confirmed the potential within EL 8915 to host diamondiferous kimberlites.

On this basis, a Falcon™ airborne gravity gradiometer survey was planned and completed in December 2003. The flying program did not cover any part of the relinquished area.

At the conclusion of Year 6 a total of 317 blocks were relinquished from EL 8915, effective 6th June 2006, with a total of 97 blocks retained (Figure 2).

ENVIRONMENT AND REHABILITATION

There was no rehabilitation required on the blocks relinquished from EL 8915.

CONCLUSIONS AND RECOMMENDATIONS

EL 8915 lies within an area which has previously reported anomalous kimberlitic indicator sampling results. A large area of the tenement was previously flown with the Falcon™ system airborne gravity gradiometer system.

The work carried out enabled a substantial portion of the licence to be relinquished at the conclusion of Year 6.



