EL 22328 PEAR TREE CREEK
VICTORIA RIVER REGION, NT

FINAL REPORT

ON EXPLORATION ACTIVITIES

Submitted by

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On behalf of
Diamond Mines Australia Pty Ltd
and
Ashton Mining Ltd

EL 22328 ‘Pear Tree Creek’
Holder: Ashton Mining Ltd
Grant Date: 11 April 2003
Surrender Date: 6 March 2006
1:250,000 Sheets: Waterloo & Limbunya
Minerals Sought: diamonds, base metals
SUMMARY

EL 22328 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 and is 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 DMA which is a wholly owned subsidiary of Gravity.

During the initial year of tenure, a review of historic exploration data, including surface sampling focused on diamonds, was conducted by Gravity and a number of anomalous results were noted in and around EL 22328.

The planned program for EL 22328 during 2004 was contingent on Gravity Diamonds achieving access clearance for follow up of Falcon survey targets in the nearby Tee Dee Hill area which, like EL 22328 forms part of the original Rio Tinto “Victoria Project Area”. Gravity was not able to get the required access clearances and this resulted in the postponement of planned exploration on EL 22328 during the 2004 field season.

Gravity was granted access to the ‘Falcon target areas’ in the Tee Dee EL adjacent to EL 22328 during 2005 and completed sampling on all priority targets during the field season. Results from this sampling yielded limited encouragement and work proposed for EL 22328 was not considered worthwhile.

Gravity handed back the licence to Rio Tinto in February 2006 and the licence was subsequently surrendered on 6 March 2006. There was no further work undertaken by Rio Tinto from the time the licence was handed back by Gravity and the date of surrender on 6 March 2006.
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INTRODUCTION

EL 22328 was granted to Ashton Mining Pty Ltd, a wholly owned subsidiary of the Rio Tinto Group (“Rio Tinto”), on 11 April 2003. Rio Tinto was at that time in negotiation with Gravity Capital Limited (“Gravity”) renamed Gravity Diamonds Ltd, 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 BHPB and it has particular application in diamond exploration.

BHPB and Gravity concluded an arrangement on Falcon™ deployment in Australia during 2003 and then formed a farmin joint venture, through its wholly owned subsidiary 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.

On the basis of these agreements, Gravity (on behalf of DMA) commenced flying Falcon Surveys in the Northern Territory during July 2003.

The flying program carried out in 2003 was focussed on areas of strongly anomalous diamond indicator mineral sampling results, obtained from Rio Tinto. Surveys were conducted in the McArthur, Hodgson and Arnhem Land regions of the NT as well as in the Victoria River region which is the general locality of EL 22328. EL 22328 was not covered in the Victoria River survey, the closest flying being at Tee Dee Hill some 15 kilometres to the north.

While the principal target in the area is diamonds, some interest was also directed toward base metal deposits.

LOCATION AND ACCESS

EL 22328 is located 140 kilometres southwest of Timber Creek and 20 kilometres north of Limbunya. It lies partly on the Waterloo and Limbunya 1:250,000 map sheets in the northwestern part of the Northern Territory (figure 1). Access to the area is via roads connecting the Waterloo and Limbunya districts.

The bulk of the EL lies within the Limbunya pastoral lease (PPL1136) with a small section in the west located within the Waterloo pastoral lease (PPL1047).

GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

EL 22328 lies within the Victoria River District of north-western Northern Territory. Sedimentary rocks of the Neoproterozoic Auvergne Group dominated by the Jasper Gorge Sandstone and the Angalarri Siltstone are the most extensively exposed rock types within the EL.

The Jasper Gorge Sandstone is described as a blocky medium quartz sandstone which is strongly cross-bedded and ripple marked. It lies unconformably over shallow marinesediments of the Wondoan Hill Formation and the Wattie Group. The Angalarri Siltstone is a khaki green siltstone with interbeds of fine sandstone and shale, and minor limestone. It lies conformably on the Jasper Gorge Sandstone.
In the southeastern and southwestern parts of EL 22328 the Neoproterozoic lithologies are in part overlain by the Lower Cambrian Antrim Plateau Volcanics that are described as massive and porphyritic basalt flows averaging 30m thick. Sediments and volcanics within EL 22328 are only gently folded, with bed dips rarely exceeding 10 degrees, except where adjacent to faults.

Significant mineralization is not known to occur within the Auvergne Group. The tenement however is considered to be prospective for diamondiferous kimberlite pipes on the basis of its geological setting, its general proximity to the Timber Creek kimberlites and because positive indicator mineral results have been returned from sampling on neighboring tenements.

PREVIOUS EXPLORATION

Historic work in the area included regional aeromagnetic surveys and reconnaissance sampling for diamonds and base metals. While no strongly anomalous results have been returned from the sampling recorded within the tenement, there a number of sample sites in tenements adjacent to EL 22328 which have returned anomalous indicator minerals and/or microdiamonds.

WORK COMPLETED BY GRAVITY

During the 2004 field season, field testing of specific Falcon gravity and magnetic anomalies was scheduled on the adjacent tenement EL 8915 – Tee Dee Hill where a Falcon survey had been completed. The planned program for EL 22328 during 2004 was contingent on Gravity achieving access clearance for follow up of Falcon survey targets in the nearby Tee Dee Hill area which, like EL 22328 forms part of the original Rio Tinto “Victoria Project Area”.

Despite submitting work programs for traditional owner clearance early in 2004, approval to proceed was not forthcoming before the onset of the wet season. This resulted in the postponement of planned exploration on EL 22328 during the 2004 field season.

Gravity was granted access to the ‘Falcon target areas’ in the Tee Dee EL adjacent to EL 22328 during 2005 and completed sampling on all priority targets during the field season. Results from this sampling yielded limited encouragement and work proposed for EL 22328 was not considered worthwhile.

Gravity handed back the licence to Rio Tinto in February 2006 and the licence was subsequently surrendered on 6 March 2006. There was no further work undertaken by Rio Tinto from the time the licence was handed back by Gravity and the date of surrender on 6 March 2006.

ENVIRONMENT AND REHABILITATION

No requirement for rehabilitation arose during the term of the licence.