EL’s 22740 & 22741
Hodgson Diamonds Project, NT

COMBINED ANNUAL REPORT
ON EXPLORATION ACTIVITIES
YEAR FOUR OF TENURE
9 July 2005 – 8 July 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
&
Rio Tinto Exploration Pty Limited

EL’s: 22740, 22741
Holder: Rio Tinto Exploration Pty Limited
Grant Date: 9 July 2002
1:250,000 Sheets: Hodgson Downs SD 53-14, Larrimah SD 53-13,
Daly Waters SE 53-01, Tanumbirini SE 53-02
Minerals Sought: Diamonds, Base metals
SUMMARY

EL’s 22740 & 22741 (Hodgson Diamonds Project) are located approximately 215 km SE of Katherine, to the east of the Larrimah and Maryfield Station homesteads. The EL’s were granted on 9 July 2002 and are referred to as the Hodgson Diamonds Project.

The tenements form part of a farm-in agreement between Rio Tinto and Diamond Mines Australia Pty Ltd (“DMA”) covering numerous Rio Tinto tenements and applications in the Northern Territory. Gravity Diamonds Ltd (formerly Gravity Capital Ltd) is managing the farm-in arrangement for Diamond Mines Australia and now has 100% ownership of DMA. Under the terms of the farm-in agreement, DMA has been conducting predominantly diamond exploration on tenements covered by the agreement by utilising the Falcon™ airborne gravity gradiometer system. The Falcon™ system has been shown to be effective in detecting kimberlite pipes.

The tenements being reported are considered prospective for commercial sources of diamonds. Historic sampling identified kimberlitic indicator mineral occurrences, including microdiamonds within the tenements, but the source of these remains enigmatic.

During the previous reporting period, 20 Falcon™ anomalies were field inspected and sampled where appropriate. Three loam, 5 gravel and 57 soil samples were collected. Additionally, 19 RC holes & 1 RAB hole for a total of 961 metres were drilled to test 10 Falcon™ anomalies. No kimberlite pipes were discovered and compulsory 50% relinquishments were implemented at the conclusion of the reporting period for both EL 22740 and EL 22741.

Given the disappointing results from the drilling in the previous reporting period, an internal review of the potential for the Hodgson EL’s was conducted with a view to determining what future work programs might be conducted, if any. The internal review process re-affirmed the potential of the area to host diamondiferous kimberlites and that their discovery would likely result from a geophysically driven exploration programs.

Further work programs were proposed for implementation, including those outlined in the previous annual report. However, the companies focus on the Abner Range region, where the diamondiferous ABN021 kimberlite was discovered in late 2004, precluded field activities being undertaken in 2005 while the heavy rains experienced in the Northern Territory during March and April of 2006 have restricted access to the majority of the companies exploration licences this year, including EL 22740 and EL 22741.

As such, no on-ground exploration activities have been conducted during the reporting period, although further work programs are planned. Total Expenditure on EL’s 22740 & 22741 during the reporting period totalled $38,575 against a combined covenant of $68,000. A break-up for each licence is provided at the end of this Report.
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1. Tenement Location - EL’s 22740 - 22741
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INTRODUCTION

EL’s 22740 & 22741 were granted to Rio Tinto on the 9 July 2002 and are referred to as the Hodgson Diamonds Project. Historic sampling had identified kimberlitic indicator mineral occurrences within the tenements. EL’s 22340, 22343, 22742 & 22743, which initially formed part of the Hodgson Diamonds Project, were surrendered during the previous reporting period.

During 2002, Rio Tinto entered into negotiation with Gravity Capital Limited (“Gravity”) 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 2003 (ASX announcement 01/07/2003). Gravity then formed a farm-in joint venture with Rio Tinto, through its then 40% owned associated company, Diamond Mines Australia Pty Ltd (“DMA”), with regard to diamond and base metal exploration over Rio Tinto-controlled tenements in the Northern Territory (ASX announcement 25/07/2003). EL’s 22740 & 22741 form part of the DMA - Rio Tinto joint venture.

In essence, the agreements provide 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. On the basis of these agreements, Gravity (on behalf of DMA) commenced diamond exploration in the Northern Territory during July 2003.

Falcon™ data was acquired over a portion of EL’s 22740 & 22741 in 2003. In October 2004 Gravity Capital changed the name of the company to “Gravity Diamonds Ltd” and acquired the 60 % share of DMA it did not already own. DMA is now 100 % owned by Gravity Diamonds.

LOCATION AND ACCESS

EL’s 22740 & 22741 form a contiguous tenement block centered about 215 km SE of Katherine. The tenement block lies to the east of the Larrimah and Maryfield Station homesteads adjacent to the Stuart Highway (Figure 1). The tenement block overlies pastoral lease land used mainly for cattle grazing. Access is via the Stuart Highway from Katherine and turning east along station access tracks either near Larrimah or Maryfield stations, NT.
GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

The tenements overlie the north east margin of the lateritised Cretaceous Dummarra Basin. The Strangways River, which traverses through the tenements, incises through the Cretaceous rocks down into the underlying Proterozoic rocks. West of the Strangways River the Dummarra Basin plateau is drained by the poorly developed Cattle and Birdum creeks. East of the Strangways River the tenement block is reasonably well drained by the tributaries of the Strangways and Hodgson River catchments.

The lateritised Cretaceous sediments overlie Cambrian Nutwood Volcanics flood basalts, Neoproterozoic Bukalara Sandstone and Mesoproterozoic Roper Group. The Roper Group of the McArthur Basin is exposed along the Strangways River in the north of the tenement block, while the Cambrian flood basalts outcrop in the east and overlie Bukalara Sandstones of the Georgina Basin. Airborne magnetic data indicates that the Nutwood Volcanics are quite extensive beneath the thin veneer of Cretaceous sediments. While no Bukalara Sandstone has been mapped within the tenement block, it is most likely present below the Cambrian Volcanic units.

The tenements are considered prospective for diamondiferous kimberlites by virtue of their location within the North Australian Craton, and also by the recovery of kimberlite indicator minerals from within the tenements themselves. Additionally, major geophysical lineaments which pass through the tenement block are suggestive of major, deeply penetrating structures which may have provided favourable pathways to kimberlitic intrusions.

Some 320 km to the south east of the tenement block, the Merlin kimberlite pipes are hosted by Bukalara Sandstone on a poorly drained plateau capped by lateritised Cretaceous sediments. Cretaceous sediments are known to fill karstic sinkholes and kimberlitic diatreme crater-like depressions developed on the pre-Cretaceous land surface. The Packsaddle and Blackjack kimberlite dykes are located about 50 km to the northeast of the tenement block. The Packsaddle-Blackjack kimberlite dykes are believed to be Jurassic in age and are hosted by Roper Group sediments.

PREVIOUS EXPLORATION

Both CRA Exploration and Ashton Exploration Australia previously explored the area covered by the tenement block for diamondiferous kimberlites. Both companies focussed most of their effort into gravel sampling the well-developed drainages within the eastern half of the tenement block, i.e., within the Strangways River and Hodgson River catchments. The weakly developed Cattle Creek and Birdum Creek catchments draining the western half of the tenement block were not sampled.

The previous gravel sampling by both companies returned numerous samples containing microdiamonds and other indicator minerals, mainly chromite. The results suggested that there were numerous geographic sources to the indicator mineral occurrences. Some chromite was identified as being possibly kimberlitic.
Reviews of historic exploration data for the Hodgson Diamonds Project concluded that the source of the diamonds and indicator minerals within the tenement block remains enigmatic. Cretaceous sediments in the area may be a secondary source of non kimberlitic / kimberlitic chromite while the Nutwood Volcanics are a possible primary source for non-kimberlitic chromite. However, these reviews did also confirm the potential for the tenement block to host diamondiferous kimberlite pipes, qualified by the fact that surface sampling may not be the most effective means for discovering them.

The reviews suggested significant potential exists to discover kimberlitic diatremes/dykes beneath the shallow Cretaceous cover using detailed geophysical surveys, particularly as these methods have not previously been applied to diamond exploration in the area.

**WORK COMPLETED IN YEAR 2**

As mentioned above, an agreement covering much of the Rio Tinto-controlled diamond exploration tenements in northern Australia was finalised in July 2003 between Rio Tinto and DMA. An independent review of previous data was carried out by Gravity during year 2 and this confirmed the potential for diamondiferous kimberlites to be located within the tenement blocks.

On this basis, a Falcon™ airborne gravity gradiometer survey was planned and acquired in August, 2003. Field survey work was done by Fugro Airborne Surveys under a contract with BHP Billiton, with whom Gravity has the Falcon™ deployment agreement. The Falcon™ system was developed by BHP Billiton in the late 1990s and is considered to have the ability to directly / indirectly detect kimberlite pipes.

The Falcon™ system records gravity gradient data via a system of accelerometers. This gradient data is transformed to produce the vertical gravity gradient (‘Gdd’) which approximates the first vertical derivative of the vertical component of the gravity field. An integral transformation on ‘Gdd’ is applied to generate ‘Gd’, which approximates the vertical component of the gravity field itself. Conventional total magnetic intensity is also acquired as is laser scanner data, which is used to construct a very accurate (1m vertical resolution) digital elevation model. The survey was flown on east-west oriented lines, 100m apart at a nominal clearance of 80m above ground level. Falcon™ coverage was obtained over an area of approximately 466 km² within EL’s 22740 and 22741. Data was processed by BHP Billiton’s Falcon Operations Group and delivered to Gravity in November 2003.

Interpretation and exploration targeting from the Falcon™ data was completed, with 32 target areas defined for possible follow-up work. Statutory requirements for field access and approvals for work programs were finalised to allow testing of these targets to commence during Year 3 of tenure.
WORK COMPLETED IN YEAR 3

Of the 32 anomalies initially selected from the Falcon™ data for potential follow-up within the project area, 20 were rated as high priority and were field inspected and sampled where appropriate. Three loam, 5 gravel and 57 soil samples were collected.

All loam samples were negative for indicator minerals. Conversely though, all gravel samples returned chromite, having been collected proximal to historic RTE sample 6020034, which had reported 21 ‘kimberlitic’ chromites. A total of 23 chromites were recovered from the gravel samples collected in 2004.

Soil sample traverses were collected over a number of the anomalies. The method used comprised the excavation of a small hole to expose the B soil horizon, with approximately 500 grams of -80 mesh was collected. Soil samples were sent to Ultratrace Laboratories in Perth for determination of the following elements: Ba, Ca, Ce, Co, Cr, Cu, Dy, Er, Fe, La, Mg, Mn, Nb, Ni, Rb, Sr, Ti, Y & Zn. Both a standard & a partial extraction method were used, generating two sets of results for each sample.

For a number of anomalies, drilling was the only definitive method of assessment as the effectiveness of surface sampling methods is hampered by the presence of Cretaceous cover sequences, the thickness of which increases westwards from the Strangways River. 19 RC holes & 1 RAB hole for a total of 961 metres were drilled in late 2004 to test 10 Falcon anomalies. Composite drill-spoil samples were collected at 4 metre intervals for each hole and submitted to Ultratrace Laboratories in Perth for determination of the following elements: Ba, Ca, Ce, Co, Cr, Cu, Dy, Er, Fe, La, Mg, Mn, Nb, Ni, Rb, Sr, Ti, Y & Zn using standard procedures.

No kimberlite pipes were discovered from this exploration program and compulsory 50% relinquishments were implemented at the conclusion of the reporting period for both EL 22740 and EL 22741 (Figure 2 and Figure 3).

WORK COMPLETED IN YEAR 4

Given the disappointing results from the drilling in the previous reporting period, an internal review of the potential for the Hodgson EL’s was implemented with a view to determining what future work programs might be conducted, if any. The internal review process re-affirmed the potential of the area to host diamondiferous kimberlites and that their discovery would likely result from a geophysically driven exploration program.

Further work programs were proposed for implementation, including those outlined in the previous annual report. However, the companies focus on the Abner Range region, where the diamondiferous ABN021 kimberlite was discovered in late 2004 precluded field activities being undertaken in 2005 while the heavy rains experienced in the Northern Territory during March and April of 2006 have restricted access to the majority of the companies exploration licences this year, including EL 22740 and EL 22741.
As such, no on-ground exploration activities have been conducted during the reporting period, although further work programs are planned. All pertinent sample data has been reviewed while existing Falcon™ data has been reprocessed to take advantage of new processing techniques developed recently by BHP Billiton to enhance ‘signal’ and reduce ‘noise’ levels in the gravity gradient data.

ENVIRONMENT & REHABILITATION

No on-ground activities were conducted during the period and as such there was no requirement for rehabilitation.

CONCLUSIONS AND RECOMMENDATIONS

EL’s 22740 & 22741 cover areas which are considered prospective for commercial sources of diamonds. During the previous reporting period, 20 Falcon™ anomalies were field inspected and sampled where appropriate. Three loam, 5 gravel and 57 soil samples were collected. Additionally, 19 RC holes & 1 RAB hole for a total of 961 metres were drilled to test 10 Falcon™ anomalies. No kimberlite pipes were discovered.

Given the disappointing results from the drilling in the previous reporting period, an internal review of the potential for the Hodgson EL’s was implemented with a view to determining what future work programs might be conducted, if any. The internal review process re-affirmed the potential of the area to host diamondiferous kimberlites and that their discovery would likely result from a geophysically driven exploration program.

The companies focus on the Abner Range region, where the diamondiferous ABN021 kimberlite was discovered in late 2004, precluded field activities being undertaken in 2005, while heavy rains experienced in the Northern Territory during March and April have restricted access to EL 22740 and EL 22741 during the first half of 2006. As such, no on-ground exploration activities have been conducted during the reporting period.

As outlined in the previous annual report, further work programs are required to follow-up anomalies evident in the Falcon™ data which may be representative of a concealed kimberlite intrusive. Anomalies requiring further work include LRF006, LRF07_TH, LRF008_TH, LRF010, LRF016, LRF022, LRF025 & LRF026. Details regarding these anomalies are contained in the previous annual report.

During the current reporting period, activities have been limited to an in-house review of all pertinent sample and drilling data while the existing Falcon™ data has been reprocessed to take advantage of new processing techniques developed recently by BHP Billiton to enhance ‘signal’ and reduce ‘noise’ levels in the gravity gradient data.
PROPOSED EXPLORATION BUDGET

The proposed budget for exploration within the tenement block during the coming reporting period is listed below, and remains unchanged from that proposed last year.

<table>
<thead>
<tr>
<th>TENEMENT</th>
<th>EL22740</th>
<th>EL22741</th>
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<tbody>
<tr>
<td>Field support &amp; logistics</td>
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<td>5,000</td>
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<tr>
<td>Sampling and sample analysis costs</td>
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<td>Personnel costs</td>
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<tr>
<td>Office support, computing, cartography</td>
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<tr>
<td>Administration, legal, overhead</td>
<td>5,000</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>31,000</strong></td>
<td><strong>37,000</strong></td>
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EXPENDITURE STATEMENT

The annual exploration expenditure within the tenement block during the current reporting period is listed below. This compares to a covenant of $31,000 for EL22740 and $37,000 for EL22741.

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<th>TENEMENT</th>
<th>EL22740</th>
<th>EL22741</th>
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<tbody>
<tr>
<td>Legal/Tenement maintenance costs</td>
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<td>Professional personnel costs</td>
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<td>Falcon Reprocessing</td>
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<td>Travel and accommodation costs</td>
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<td>Administration/overhead</td>
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<td><strong>TOTALS</strong></td>
<td><strong>$19,376</strong></td>
<td><strong>$19,199</strong></td>
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REFERENCES


Gravity Diamonds Ltd. Second Annual Report for the Period Ending 8 July 2004, EL 22740 Larrimah 1, EL 22741 Larrimah 2, EL 22742 Larrimah 3, EL 22743 Larrimah 4, EL 22340 Nutwood Downs and EL 22343 Kempsey Creek, Hodgson Diamonds Programme, Hodgson Downs SD 53-14, Larrimah SD 53-13,Daly Waters SE 53-01, Tanumbirini SE 53-02, Northern Territory, Australia.

Gravity Diamonds Ltd. Third Annual Report for the Period Ending 8 July 2005, EL 22740 Larrimah 1, EL 22741 Larrimah 2, EL 22742 Larrimah 3, EL 22743 Larrimah 4, EL 22340 Nutwood Downs and EL 22343 Kempsey Creek, Hodgson Diamonds Programme, Hodgson Downs SD 53-14, Larrimah SD 53-13,Daly Waters SE 53-01, Tanumbirini SE 53-02, Northern Territory, Australia.