EL 24699 ‘Top Springs Creek East’
McARTHUR RIVER REGION, NT

ANNUAL REPORT

ON EXPLORATION ACTIVITIES
YEAR TWO OF TENURE
01 December 2006– 30 November 2007

submitted by

GRAVITY DIAMONDS LIMITED
(ACN - 72 009 178 689)
Level 7, Exchange Tower
530 Little Collins Street, Melbourne, Victoria, 3000

EL 24699 ‘Top Springs Creek East’
Holder: Gravity Diamonds Ltd
Grant Date: 01 December 2005
1:250,000 sheet: Walhallow
Minerals Sought: diamonds, base metals
SUMMARY

EL 24699 forms part of a major diamond exploration enterprise in the Northern Territory initiated by Gravity Diamonds (then Gravity Capital) in 2003. The foundation of this enterprise has been a farmin agreement between Rio Tinto Exploration Pty Ltd (“Rio Tinto”) and Diamond Mines Australia Pty Ltd (“DMA”, a 100%-owned subsidiary of Gravity Diamonds) covering numerous Rio Tinto-controlled tenements and applications in the Northern Territory. Under this agreement, DMA has conducted diamond exploration over the tenements utilising the recently-developed Falcon™ airborne gravity gradiometer system, which has been shown to be very effective in detecting kimberlite pipes.

Gravity has also acquired a significant tenement holding in its own right in the NT. The initial Falcon™ programs in 2003 resulted in the discovery of a kimberlite pipe within the ‘Abner Range’ survey area, some 35 kilometres northeast of EL 24699, and this led Gravity to apply for a number of areas in proximity to the discovery.

EL 24699 comprising 7 sub blocks was granted to Gravity on 25 November 2005. The area had previously formed part of EL 9926, one of the Rio Tinto-controlled tenements included in the above farmin arrangement. The decision to proceed with a partial relinquishment on EL 9926 was made just prior to the discovery of the Abner Range kimberlite pipe, and subsequently it was agreed that Gravity should re-acquire the ground in its name, but include any new tenure within the terms of the farmin.

During year 2 of tenure the company has collected heavy mineral gravel samples within the few drainages in the tenement area. Both samples returned negative results and further exploration on the licence will be assessed pending outstanding sampling results from adjoining tenements in the Gravity / Rio Tinto farm in area.

Expenditure on the tenement during the reporting period totalled $12,020.00.
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10. Expenditure Statement

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1. Heavy Mineral Analysis Sheets
INTRODUCTION

EL 24699 comprising 7 sub blocks was granted to Gravity Diamonds Limited (‘Gravity’) on 01 December 2005.

The EL forms part of a major diamond exploration enterprise in the Northern Territory initiated by Gravity (then Gravity Capital) in 2003. The foundation of this enterprise has been a farmin agreement between Rio Tinto Exploration Pty Ltd (“Rio Tinto”) and Diamond Mines Australia Pty Ltd (“DMA”, a 100%-owned subsidiary of Gravity Diamonds) covering numerous Rio Tinto-controlled tenements and applications in the Northern Territory. Under this agreement, DMA has conducted diamond exploration over the tenements utilising the recently-developed Falcon™ airborne gravity gradiometer system, which has been shown to be very effective in detecting kimberlite pipes.

Gravity has also acquired a significant tenement holding in its own right in the NT. The initial Falcon™ programs in 2003 resulted in the discovery of a kimberlite pipe within the ‘Abner Range’ survey area, some 35 kilometres northeast of EL 24699, and this led Gravity to apply for a number of areas in proximity to the discovery.

EL 24699 was one such area, but as the area had fallen within the Rio Tinto farmin arrangement immediately prior to the Abner Range discovery, it is included within the farmin.

LOCATION AND ACCESS

EL 24699 is located 30 kilometres south of Cape Crawford and 65 kilometres west of the Merlin diamond mine on the Walhallow 1:250,000 map sheet in the northeastern part of the Northern Territory (figure 1). It lies within the Mallapunyah Springs pastoral lease (PPL1075). Access to the area is via the Tablelands Highway and station tracks on Mallapunyah.

GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

EL 24699 lies within the Batten Trough of the Mesoproterozoic McArthur Basin. The N-S trending Tawallah Fault Zone is the largest scale structure in the district and it is regarded as having similar significance to the Emu Fault, which lies 60km east of the tenement and is associated with McArthur River Zn-Pb mine and the Merlin diamond mine.

The 1800-1400Ma stratigraphy and mineralisation of the Batten Trough, from youngest to oldest, can be summarized as follows:

- Roper Group arenites, shales, iron formations and dolerite sills.
- Nathan Group (or Mt Rigg Group) carbonates that host Zn-Pb mineralisation, e.g. the Bulman Zn-Pb deposits.
- McArthur Group fine clastics and carbonates that host strata bound Zn-Pb-Ag and Cu deposits, e.g. the HYC (McArthur) Zn-Pb-Ag mine, Mariner Zn-Pb and Sly Creek Cu deposits.
- Tawallah Group arenites, black shales and basalts hosting Cu in the Redbank district and U at Westmoreland. There are also a number of Cu occurrences hosted Talwallah Group proximal to the McArthur Project area.
Proterozoic outcrop within the project area is dominated by McArthur Group rocks with minor Nathan Group occurrences and Cretaceous cover rocks in the eastern part of the tenement (Figure 2).

**PREVIOUS EXPLORATION**

Historic work in the area has included regional aeromagnetic surveys and reconnaissance sampling for diamonds and base metals.

Within EL 24699 there a single sample was gathered by CRA in the mid 1980’s. While this was negative, the sample size was small and recent work has shown that such sampling may not have been definitive.

On this basis, and owing to the proximity of the area to the Merlin diamond field and Gravity’s recent discovery at Abner Range, the area is regarded as prospective for diamonds.

**WORK COMPLETED IN YEAR 1**

During year 1 of tenure, open file data was gathered and re-assessed. No strong new exploration leads were revealed and a plan to increase the density of heavy mineral sampling was formed.

**WORK COMPLETED IN YEAR 2**

During the current reporting year two Heavy Mineral gravel samples were collected within the tenement from the only suitable drainages within the licence area. Standard gravel sampling techniques were utilized with the samples obtained from the best available trap sites in the target drainages. Approximately 30 kg of -1.6mm sieved material was obtained with the samples transport to and processed by Diatech, Perth. Sampling was conducted as a part of a larger regional sampling program by a team using a helicopter. All helicopter supported surveys have been carried out using JetRanger helicopters and pilots supplied by Jayrow Helicopters, Darwin. Sample teams typically consist of one geologist and one field assistant.

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<thead>
<tr>
<th>Sample No</th>
<th>WGS84 East</th>
<th>WGS84 North</th>
<th>Indicator Minerals</th>
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<td>574013</td>
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Sample HMA sheets are presented in Appendix 1 and sample locations are presented in Figure 3.

**ENVIRONMENT AND REHABILITATION**

No requirement for rehabilitation arose as no ground disturbing exploration was carried out.
CONCLUSIONS AND RECOMMENDATIONS

EL 24699 lies within 35 kilometres of the newly discovered, diamondiferous pipe at Abner Range. Geological reconnaissance suggests the area could contain a concealed kimberlite pipe and prior exploration has been minimal. A program of heavy mineral sampling during the 2007 field season failed to identify anomalous Indicator minerals. Nonetheless the odd shape and small size of the tenement has meant that major areas within the tenement could not be adequately assessed by samples taken within the tenement area. Samples will need to be taken from adjoining tenements to adequately assess these zones and joint venture negotiations are ongoing with the company holding the adjoining tenement.

EXPENDITURE STATEMENT

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<td>Helicopter costs</td>
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<td>Sample transport and assay</td>
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<td>Field Support and consumables</td>
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<td>Travel and accommodation costs</td>
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<td>Tenement maintenance</td>
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<td>Administration/overhead</td>
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PROPOSED EXPLORATION BUDGET

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<td>Tenement maintenance, access, clearances</td>
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<tr>
<td>Office support, computing, cartography</td>
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<tr>
<td>Administration, legal, overhead</td>
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Appendix 1

Heavy Mineral Analysis Sheets
# Detailed Heavy Mineral Analysis

## Overall Sample Assessment

**Negative**

### Sample Details

- **Sample No:** 200005
- **Your Project Code:**
- **Our Job No.:** 07115
- **Disc No.:** -
- **Head Weight:** 44.2 kg
- **Wet Weight:**

### Sample Type

- **Sample Type (as collected):** Stream Sediment
- **Sample Type (as received):** Stream Sediment
- **Observed Sample Type:** DMS Concentrate

### Diamond

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<th>Description of these particles</th>
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### Key Minerals

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<th>Overall Morph. Group</th>
<th>Total particles</th>
<th>No of particles probed</th>
<th>PRIORITY based on Morphology</th>
<th>PRIORITY based on morphology and Probe</th>
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<tbody>
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### Other Minerals

- **Almandine**
  - **Tr**
  - **MW**
- **Biotite**
  - **Tr**
  - **MW**
- **Fe Oxide/Hydroxide**
  - 100
  - 100
  - 100
  - **W**
- **Haematite**
  - **Tr**
  - **MW**
- **Ilmenite**
  - **Tr**
  - **MW**
- **Leucoxene**
  - **Tr**
  - **W**
- **Phosphate**
  - **Tr**
  - **Tr**
  - **MW**
- **Rutile**
  - **Tr**
  - **MW**
- **Tourmaline**
  - **Tr**
  - **W**
- **Zircon**
  - **Tr**
  - **W**

### TOTAL

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### What Has Been Observed?

- **Final Conc Weight:** 93.19 g
- **Weight Observed:** 93.19 g
- **Size Range:** -2+0.3 mm

### Magnetic Fractions vs Size Fraction

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</table>

### Comment about this sample:

- **Date Observed:** 07-Nov-07
- **Technician:** BJG
Detailed Heavy Mineral Analysis

Sample Type (as collected): Stream Sediment
Sample Type (as received): Stream Sediment
Observed Sample Type: DMS Concentrate

Head Weight: 50.54 kg
Wet Weight: [ ] kg

Overall Sample Assessment: Negative

Your Project Code: [ ]

Disc No.: [ ]

Ph: 61 8 9361 2596

Fx: 61 8 9470 1504

Sample No: 200006

Final Conc Weight: 12.370000 g
Weight Observed: 12.370000 g

What Has Been Observed?

Final Conc Weight: 12.370000 g
Weight Observed: 12.370000 g

Magnetic Fractions vs Size Fraction

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<th>All</th>
<th>All</th>
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Comment about this sample:

Technician: BJG
Date Observed: 06-Nov-07