



**EL 26404 'ABNER NORTH'
MCARTHUR RIVER REGION, NT**

ANNUAL REPORT

**ON EXPLORATION ACTIVITIES
YEAR ONE OF TENURE
PERIOD ENDING 22 May 2009**

Submitted by

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

EL 26404 'ABNER NORTH'
Holder: Gravity Diamonds Ltd
Grant Date: 22 May 2008
1:250,000 Sheet: Bauhinia Downs SD53-03
Minerals Sought: diamonds, base metals

SUMMARY

EL 26404 'Abner North' was granted to Gravity Diamonds Ltd ('Gravity') on 23 May 2008.

Gravity, through its wholly owned subsidiary, Diamond Mines Australia Ltd (DMA), has an agreement with BHP Billiton to utilise BHP Billiton's Falcon® airborne gravity gradiometer system in diamond exploration in Australia and Gravity has established a number of diamond projects in northern Australia using this technique. The Falcon® system has proven very effective in detecting kimberlite pipes in Canada, Africa and in Australia. The BHP Billiton – DMA 'Falcon Agreement' allows DMA to conduct exploration using Falcon® and BHP Billiton retains certain buy-in rights to major discoveries.

During 2004, Falcon® data was acquired over tenements held and accessed by DMA to the south of EL 26404. This survey covered approximately 267 square kilometres with 100m spacings, north south oriented flight lines, flown at a mean terrain clearance of 80m. Gravity gradiometer, magnetics, and laser scanner data were gathered and compiled. Interpretation yielded a number of kimberlite targets and drilling of these targets in late 2004 and 2005 resulted in the discovery of the diamond-bearing ABN021 kimberlite pipe.

EL26404 was applied for immediately to the north of the group of tenements centred on the ABN021 discovery for the purpose of testing for a possible extension of the Abner Range trend to the north of the ABN021 discovery. These tenements have had a considerable amount of work carried out on the since the original FALCON® survey including geochemical and indicator mineral sampling, new colour aerial photography at 1:25,000 and an helicopter borne Hoistem MkII survey. All of this work identified a number of new targets to be tested and implied potential for the Abner Range kimberlite cluster to extend to the north. As such Gravity Diamonds applied for EL26404 when the ground became available for application.

The company planned to carry out an extensive sampling programme in year one in conjunction with field activities on the adjacent Abner Range tenements to the south. In the event that encouragement was obtained airborne geophysics was planned possibly helicopter borne gravity gradiometry to generate specific geophysical targets. However, coincidental with the granting of the tenement there was a rapid decline in the world capital markets which brought about a change of strategy by Gravity's parent company. Fieldwork was delayed pending the arrangement for new funding. Work was restricted to data review and compilation.

Expenditure on the tenement during the reporting period totalled \$16,758

CONTENTS

1. Introduction
2. Location and Access
3. Geological Setting and Economic Potential
4. Previous Exploration
5. Work Completed in Year 1
6. Environment and Rehabilitation
7. Conclusions and Recommendations
8. Proposed Exploration and Budget
9. Expenditure Statement

FIGURES

1. EL 26404 - Tenement Location
2. EL 26404 - Regional Geology

INTRODUCTION

EL 26404 'Abner North' was granted to Gravity Diamonds Ltd ('Gravity') on 26 May 2008.

Gravity, through its wholly owned subsidiary, Diamond Mines Australia Ltd (DMA), has an agreement with BHP Billiton to utilise BHP Billiton's Falcon® airborne gravity gradiometer system in diamond exploration in Australia and Gravity has established a number of diamond projects in northern Australia using this technique. The Falcon® system has proven very effective in detecting kimberlite pipes in Canada, Africa and in Australia. The BHP Billiton – DMA 'Falcon Agreement' allows DMA to conduct exploration using Falcon® and BHP Billiton retains certain buy-in rights to major discoveries. The application of Falcon® by DMA has led to the discovery of the ABN021 kimberlite pipe at Abner Range 30 kilometres to the south. Since then Gravity/DMA has been carry out extensive follow-up in the region.

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

LOCATION AND ACCESS

EL 26404 is located approximately 80 kilometres southwest of Borroloola and 700 km south east of Darwin, Northern Territory, Australia. The EL has been incorporated into Gravity's McArthur Diamonds Project located around 40 km west of the Merlin Diamond Mine.

Land use within EL 26404 is predominantly pastoral leasehold (PPL1051 McArthur River), mainly for cattle grazing. Access is provided by the sealed Carpentaria Highway, which connects the Stuart Highway to the HYC (McArthur) mine and station tracks. The Tablelands Highway intersects the Carpentaria Highway next to Abner Range at Cape Crawford, immediately west of the EL (Figure 1).

GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

EL 26404 lies within the Batten Trough of the Mesoproterozoic (1800-1400Ma) McArthur Basin. The project area lies near the contact between the Proterozoic McArthur Basin in the north and the unconformably overlying Cambrian Georgina Basin in the south. The 1800-1400Ma stratigraphy and mineralisation of the Batten Trough, from youngest to oldest, can be summarized as follows:

- Roper Group.
- Nathan Group (or Mt Rigg Group).
- McArthur Group.
- Tawallah Group.

EL 26404 lies to the north of the Abner Range syncline that forms a prominent plateau in the surrounding landscape (Figure 2). In the Batten Trough, the older Tawallah and McArthur Groups dominate in outcrop; however, in the Abner Range syncline the younger Nathan Group and lower Roper Group are exposed. The Tawallah and Hot Springs Faults, that trend approximately N-S, lie on the western and eastern margins of the Abner Range syncline, respectively. These two major faults are parallel to, and probably broadly sympathetic to, and coeval with, the Emu Fault that defines the eastern margin of the Batten Trough. The lower Devonian diamond pipes of the Merlin field lie proximal to the Emu Fault.

Much of the area is covered by MacArthur river floodplain that limits the outcrop of basement geology. Nevertheless remnant outliers of Cambrian cover sediments are widespread and unconformably overlie the Batten Trough's Proterozoic sequences. In the Abner Range syncline to the south there are remnant outliers of Cambrian Bukalara Sandstone lying on top of the plateau. A single small, probably lower Devonian, kimberlitic sandstone breccia pipe has intruded Bukalara Sandstone in the Abner Range. It was discovered prior to, and lie proximal to the ABN021 kimberlite discovered by Gravity Diamonds in 2005.

Lateritised, thin, flat-lying Cretaceous sediments (Mullamen Beds) belonging to the Dunmarra Basin form outliers on the Abner Range. In the McArthur and Georgina Basins the Cretaceous sediments fill and are locally preserved within karstic sinkholes. They are also known to fill "karst-like" sinkhole depressions overlying kimberlite diatremes. The Cretaceous sediments are also a potential source of secondary kimberlite indicator minerals.

Cenozoic laterite and transported sediments are widespread over the Abner Range plateau. Lateritisation during the Cenozoic-Quaternary was widespread in the region but mainly affected the flat-lying blanket of Cretaceous sediments.

PREVIOUS EXPLORATION

Exploration by Ashton Mining and CRA Exploration during the last two decades for diamondiferous kimberlitic diatremes in the Batten Trough region resulted in the discovery of the Merlin kimberlite field and the production of commercial-sized gem-quality diamonds by Ashton in 1999.

CRA Exploration originally defined the kimberlitic chromite anomaly that was tracked to a large, fracture-controlled ravine in the Abner Range Plateau, south of EL 26404.

More detailed evaluation by Ashton Mining of the Abner Range kimberlitic chromite anomaly revealed a small, circular fracture/breccia geomorphic feature located on the Abner Range Plateau. Additional sampling and then drilling confirmed the feature was a sandstone breccia pipe, around 50m in diameter, with an ultramafic component and containing abundant kimberlitic chromite, pyrope and micro-diamonds. The pipe is associated with a 020° trending fracture system traversing the Abner Range. As mentioned above, exploration in 2004/2005 by Gravity Diamonds based on the Falcon® airborne gravity system located a kimberlite pipe around 400m south of the breccia pipe.

Prior exploration work reported within the area of EL 26404 has included regional surface sampling for diamonds and airborne geophysical data aimed at both diamond exploration and base metal (McArthur River style lead-zinc). No outstanding anomalies have been reported within the EL area.

WORK COMPLETED IN YEAR 1

The tenement was applied for in 27 August 2007 and granted in May 2008. Gravity had the aim of carrying out field evaluation on the first year with a view to conducting airborne geophysics to generate drill targets. Granting of the tenement coincided with a downturn in capital markets and a refocussing of Gravity's parent company, Mwana Africa, away from its Australian activities. Nevertheless the Australian management of Gravity Diamonds remained confident that it would be able to find a new owner for the Australian programmes that would re-invigorate exploration and entered into advanced negotiations with a potential new owner. The market crash of late 2008 effectively "torpedoed" this arrangement. At the same time Mwana Africa was approached by Legend International Holdings Inc to acquire all of the Australian interests of Gravity Diamonds Limited. An agreement was signed in early 2009 dependent on a third party agreement that involved a number of the tenements operated by Gravity. Completion of this process has taken much longer than anticipated but it will lead to a re-invigoration of the total programme.

The limited funds available meant that only desk studies were possible in year 1. These included a review of available geophysical, geological and sample data EL. This confirmed the potential for diamondiferous kimberlites to be located within the McArthur River region along a hypothesised structural corridor trending north from the ABN021 discovery.

A brief field reconnaissance visit was also conducted during the 2007/08 season to facilitate programme planning.

ENVIRONMENT AND REHABILITATION

On-ground exploration activities comprised was brief and low impact and as such there was no requirement for rehabilitation.

CONCLUSIONS AND RECOMMENDATIONS

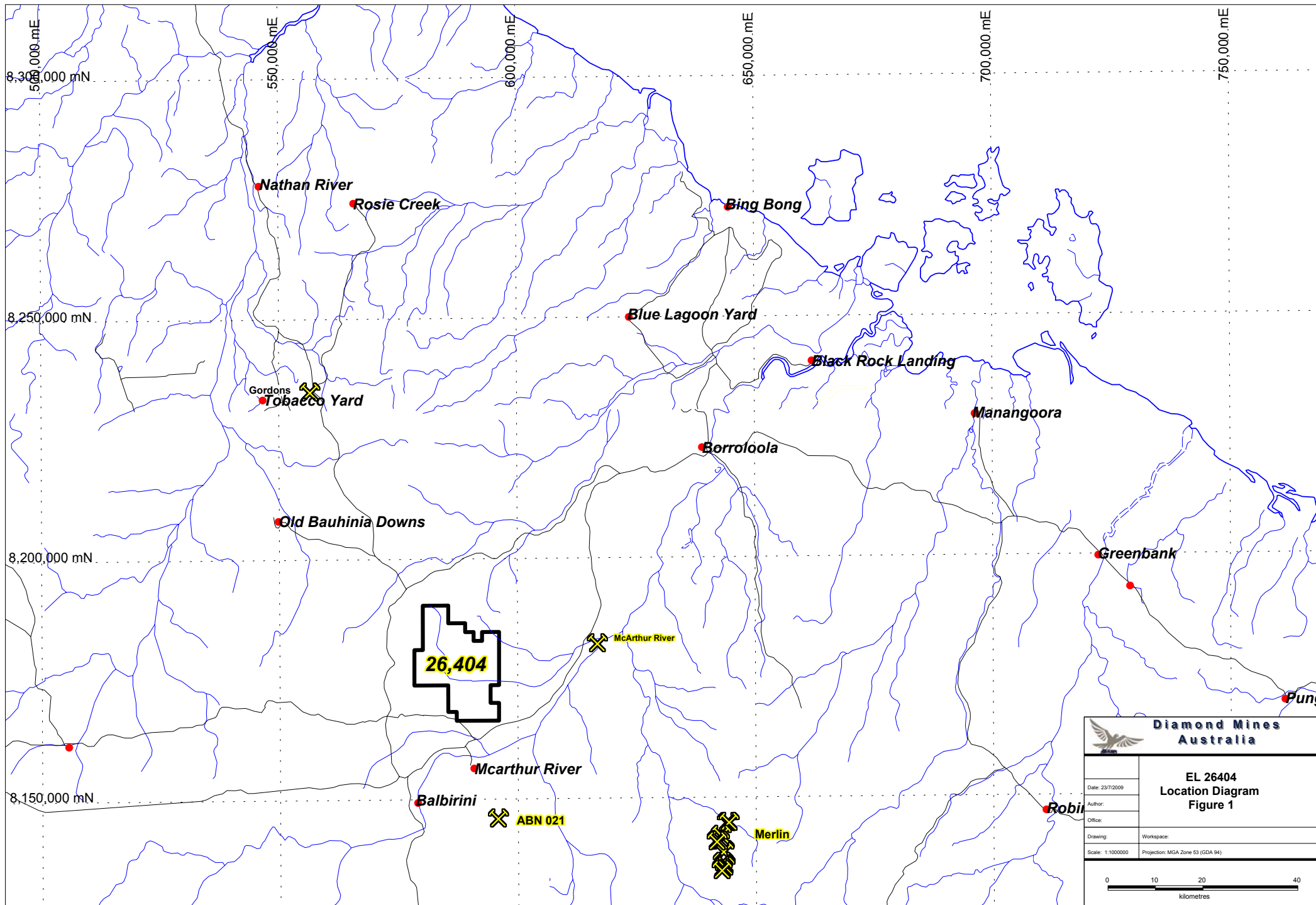
EL 26404 lies within an area generally held to be prospective for diamonds and along a postulated north-south structural corridor that includes the ABN021 kimberlite pipe. Work carried out on EL's immediately to the south and around the ABN021 discovery at Abner Range provides encouragement that diamondiferous kimberlites may be located within the tenement.


PROPOSED EXPLORATION AND BUDGET

Personnel costs	\$ 8,000
Helicopter Costs	\$ 4,000
Sampling and sample analysis costs	\$ 6,000
Data Processing / Cartography	\$1,500
Vehicle Costs	\$3,000
Travel and accommodation costs	\$3,000
Tenement Maintenance	\$1,500
Administration and overheads	\$3,000
Airborne geophysics if warranted	\$100,000
TOTAL	<u>\$130,000</u>

EXPENDITURE STATEMENT

Professional personnel costs	\$6,500
Helicopter costs	\$3,200
Data processing / computing costs	\$891
Cartography	\$165
Travel and accommodation costs	\$2,367
Legal/Tenement Maintenance costs	1,200
Administration / overhead	\$2,435
Total	<u>\$16,758</u>



 Diamond Mines Australia	
EL 26404 Location Diagram Figure 1	
Date: 23/7/2009	Workspace:
Author:	Projection: MGA Zone 53 (GDA 94)
Office:	
Drawing:	
Scale: 1:1000000	
