EL 23994 'TANABURS NE'
McARTHUR RIVER REGION NT

ANNUAL REPORT

ON EXPLORATION ACTIVITIES
YEAR 2 OF TENURE
8 September 2005 – 7 September 2006

Submitted by

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

EL 23994 Tanaburs NE
Holder: Gravity Diamonds Ltd
Grant Date: 08 Sept 2004
1:250,000 Sheet: **Bauhinia Downs SE 53-03,**
Minerals Sought: Diamonds, Base metals

SUMMARY

EL 23994 "Tanaburs NE" was granted to Gravity Diamonds Ltd ("Gravity") on 8 September 2004. The EL forms part of broader project area where Gravity is conducting diamond exploration, much of which is under an exploration agreement with Rio Tinto group companies and Diamond Mines Australia (DMA), which is a 100%-owned subsidiary of Gravity.

During 2003 and 2004, DMA had an exclusive arrangement with BHP Billiton to deploy the Falcon® airborne gravity gradiometer system in diamond exploration in Australia. The Falcon® system has proved an effective diamond exploration tool since its development by BHP Billiton in the late 1990's.

During the first year of tenure Falcon® data was acquired over part of EL 23994. The system includes airborne gravity gradient data, high resolution magnetics and accurate elevation data derived from on-board differential GPS and laser scanner devices. The area of coverage amounted to approximately 27 km² (~295 line kms) .

During the second year of tenure, detailed targeting based on the acquired gravity gradiometer data within the southwestern part of EL 23994 was completed. Although some second order preliminary targets were proposed, no priority targets were identified for follow-up within the portion of the EL covered by the Falcon survey. A single gravel sample was collected within EL 23994 as part of a broader sampling program in the Tanaburs project area. The sample reported negative for kimberlite indicator minerals.

A detailed review of previous diamond exploration within the whole tenement was subsequently conducted. This review suggested that previous heavy mineral sampling coverage was adequate, with the generally negative results from these samples indicating there generally appears to be limited potential for undiscovered kimberlites to be located within the EL. However, it was noted that aside from the sporadic single microdiamond recoveries, one historic Ashton Mining sample reported 4 chromites. Despite this result, the tenement that Ashton Mining held was surrendered in the same year.

As no follow-up was completed on this result and no further details regarding the provenance of these grains given, a number of check samples have been proposed for this drainage, with a view to recovering chromite for probing. Further work will be dependent on the outcome of this proposed sampling, with surrender of the EL likely if encouraging results are not obtained.

Expenditure on the tenement during the reporting period totalled **$ 8,059**

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INTRODUCTION

EL 23994 "Tanaburs NE", which lies approximately 75 kilometres west of Borroloola in the Gulf Region of the Northern Territory, was granted to Gravity Diamonds Ltd ("Gravity") on 8 September 2004. The EL lies within a general area where Gravity is operating a large diamond exploration program, much of which is under an exploration agreement with Rio Tinto group companies and Diamond Mines Australia (DMA), which is a 100%-owned subsidiary of Gravity.

During 2003 and 2004, DMA had an exclusive arrangement with BHP Billiton to deploy the Falcon® airborne gravity gradiometer system in diamond exploration in Australia. The Falcon® system has proved very effective in diamond exploration since its development by BHP Billiton in the late 1990's.

The southwestern part of EL 23994 was included in the Falcon® flying program which covered seven areas in the Northern Territory and focused on areas of strongly anomalous diamond indicator mineral sampling results, obtained from prior work by Rio Tinto and others.

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

LOCATION AND ACCESS

EL 23994 is located near old Bauhinia Downs homestead, approximately 75 kilometres west of Borroloola in the Gulf Region of the Northern Territory. The tenement lies in the central part of the Billengarrah pastoral lease (administered by the Northern Territory Land Corporation) and is accessible via station tracks (Figure 1).

GEOLOGICAL SETTING & ECONOMIC POTENTIAL

EL 23994 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 40km east of the tenement and is associated with McArthur River Zn-Pb mine and the Merlin diamond mine, which lies 75km to the south east of the tenement.

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

- Roper Group arenites, shales, iron formations and dolerite sills.

- Nathan Group (or Mt Rigg Group) carbonates that host Zn-Pb mineralisation, eg, the Bulman Zn-Pb deposits.

- McArthur Group fine clastics and carbonates that host strata bound Zn-Pb-Ag and Cu deposits, eg, the HYC (McArthur) Zn-Pb-Ag mine, Batton 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 outcrops within the project area are predominantly Tawallah Group.

PREVIOUS EXPLORATION

A number of strata-bound and vein-hosted base metal occurrences hosted by Proterozoic sediments are located near the Scrutton Range which lies west of EL 23994. Several base metal prospects lie within the tenement itself.

A substantial amount of historical diamond exploration work has been carried out in the general vicinity of the tenement.

The main diamond prospect identified to date is the Tanaburs Prospect (also known as Leila Creek) which was identified by Ashton in the 1990s.

Tanaburs is centred on a 6km by 1.5km outlier (plateau) of Cretaceous sediments overlying Tawallah Group and McArthur Group. Ashton noted that the Cretaceous sediments contain fossilised wood fragments similar to those found on the Merlin plateau. The prospect overlies the major, N-S trending Four Archers Fault Zone.

Stream sediment, loam and bulk sampling for diamonds, geomorphological studies, detailed airborne magnetics and drilling have been completed around the Tanaburs area. Macrodiamonds, microdiamonds and indicator minerals (chromite) have been reported from drainages sourced from the Cretaceous sedimentary plateau.

WORK COMPLETED IN YEAR 1

On the basis of historic anomalous diamond and base metal results, a Falcon® airborne gravity gradiometer survey program was conducted over a group of tenements in the Tanaburs area. The southwestern part of EL 23994 was included in this program. In addition to the gravity gradiometer data, the Falcon® system records total magnetic intensity and laser scanner data, which is used to construct a very accurate (1m vertical resolution) digital elevation model.

The survey was flown on north-south oriented lines, 100m apart at a height of 80m above ground level. It covered approximately 27km^2 of the tenement, amounting to a total of approximately 295 line kilometres of survey. Digital data from the survey have been lodged with DPIFM.

Data processing, interpretation and targeting were also initiated during the reporting year. Initial target areas have been defined and first pass field reconnaissance was scheduled to commence in 2006. Procedures for access clearance and approval of work programs were being undertaken.

WORK COMPLETED IN YEAR 2

During the past year of tenure, detailed targeting based on the acquired gravity gradiometer data within the southwestern part of EL 23994 was completed. Although some second order preliminary targets were proposed, no priority targets were identified for followup within the portion of the EL covered by the Falcon survey.

A single gravel sample was collected within EL23994 as part of a broader sampling program in the Tanaburs project area. The sample comprised approximately 50 kg of -1.6 mm material collected from suitable trap site.

Heavy mineral samples are sent to Diatech Laboratories in Perth for processing through a micro DMS plant and recovery of kimberlite indicator minerals from the -1.2mm +0.3mm fraction of the DMS concentrate. The sample reported negative for kimberlite indicator minerals.

Details regarding the collected sample are summarised in Table 1 below and contained in Appendix I, including a detailed report from Diatech. The sample location is illustrated by Figure 3.

Table 1: Location of sample collected within EL 23994

SAMPLE	TYPE	EASTING_WGS84	NORTHING_WGS84	RESULT	TENEMENT
159878	GRAVEL	570712	8207604	NEGATIVE	EL23994

A detailed review of previous diamond exploration within the whole tenement was subsequently conducted. This review suggested that previous heavy mineral sampling coverage was adequate, with the generally negative results from these samples indicating there generally appears to be limited potential for undiscovered kimberlites to be located within the EL. However, it was noted that aside from the sporadic single microdiamond recoveries, one historic Ashton Mining sample, collected in 1997, reported 4 chromites (sample 97035-001, refer IRMS report CR1997-0492). Despite this result, Ashton Mining surrendered the tenement in the same year.

As no follow-up was completed on this result and no further details regarding the provenance of these grains given, a number of check samples have been proposed for this drainage, with a view to recovering chromite for probing. The proximity of the Seigal Volcanics (Tawallah Group) and related? dolerite dykes is a possible explanation for the recovered chromite, however other samples collected proximal to these volcanic units did not report chromite.

Further work will be dependent on the outcome of this proposed sampling

ENVIRONMENT AND REHABILITATION

On-ground exploration activities comprised low impact indicator-mineral sampling. Sampling comprised collection of approximately 50 kg of sieved sample at each site. As access to sample sites was achieved using 4WD's (predominantly utilising existing tracks), there was negligible impact on the environment within EL 23994 and hence no requirement for rehabilitation.

CONCLUSIONS AND RECOMMENDATIONS

EL 23994 lies within an area primarily targeted for its potential to host primary diamond sources – ie kimberlites. Results from the Tanaburs project area have generally been disappointing although exploration by the company in EL23994 and adjacent tenements is currently ongoing.

During the past year of tenure, detailed targeting based on the acquired gravity gradiometer data within the southwestern part of EL 23994 was completed. Although some second order preliminary targets had been proposed, no priority targets were identified for follow up within the portion of the EL covered by the Falcon survey. Targets from the Falcon survey in adjacent EL's have been followed up, with 1 target in adjacent EL 22307 recommended for drill testing as soon as a drill rig becomes available.

Due to the lack of obvious targets from the Falcon data, a detailed review of previous diamond exploration within the whole tenement was subsequently conducted. This review suggested that previous heavy mineral sampling coverage was adequate, with the generally negative results from these samples indicating that there generally appears to be limited potential for undiscovered kimberlites to be located within the EL.

However, it was noted that aside from sporadic single microdiamond recoveries, one historic Ashton Mining sample collected in 1997 reported 4 chromites. Despite this result, Ashton Mining surrendered the tenement in the same year. As no follow-up was completed on this result and no further details regarding the provenance of these grains given, check sampling has been proposed for this drainage, with a view to recovering chromite for probing.

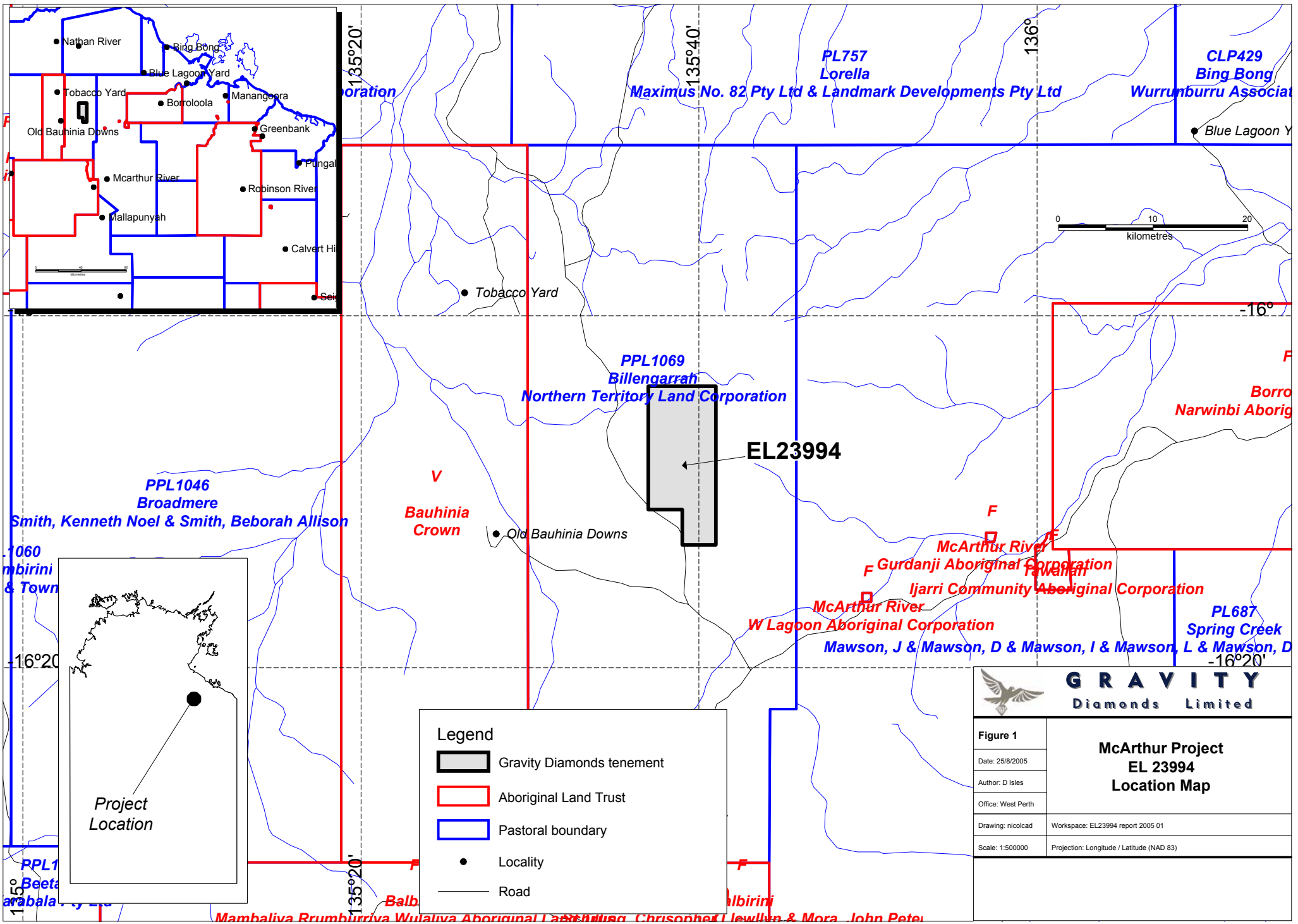
Further work within EL 23994 will be dependent on the outcome of this proposed sampling, with surrender of the EL likely if encouraging results are not obtained.

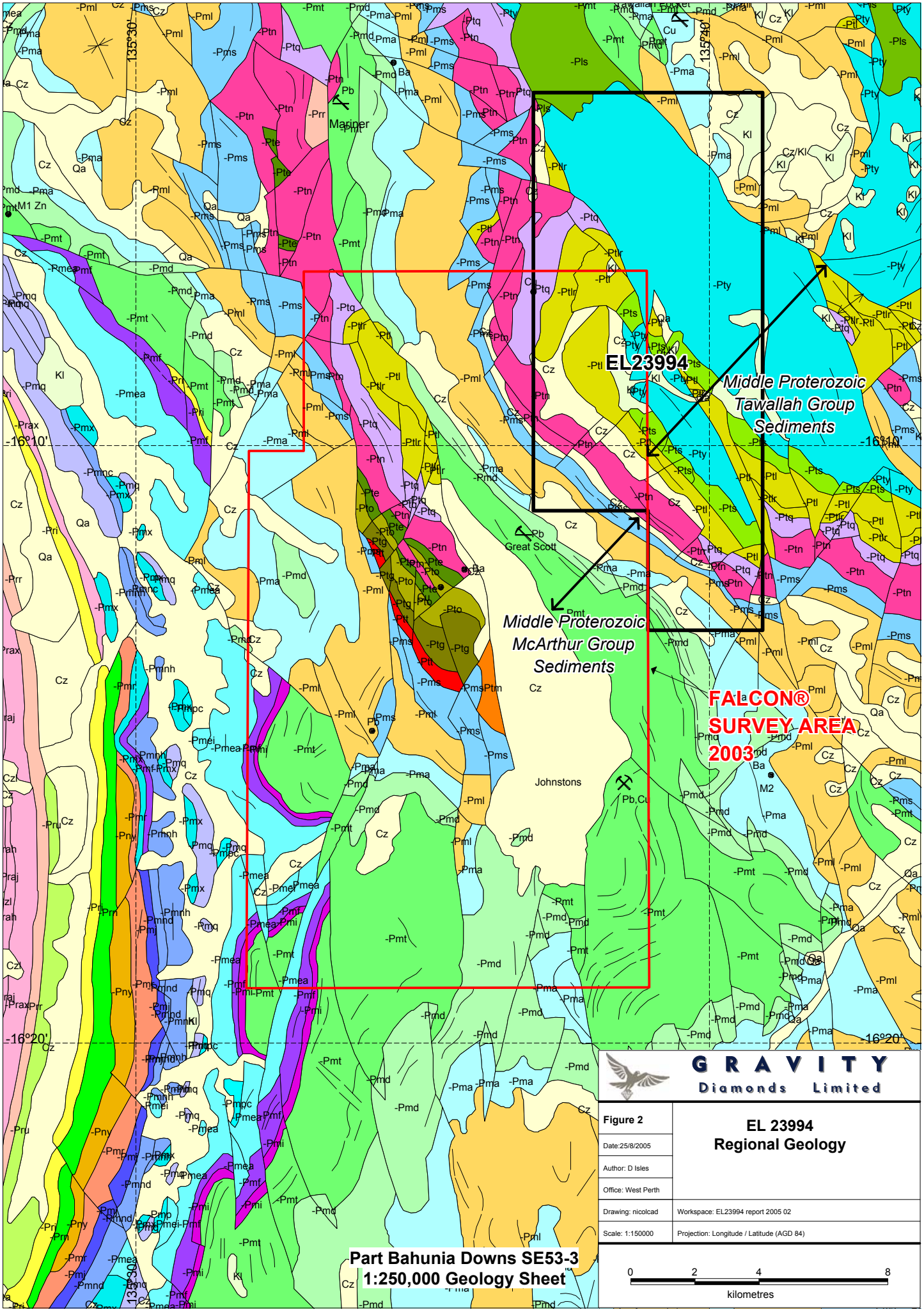
PROPOSED EXPLORATION BUDGET

Professional Personnel costs	$ 5,000
Sampling and sample analysis costs	$ 5,000
Office support/Administration costs	$ 3,000
TOTAL	**$ 13,000**

EXPENDITURE STATEMENT

Legal/Tenement maintenance costs	$ 1,092
Assays	$ 807
Professional personnel costs	$ 3,908
Data processing / computing costs	$ 516
Travel and accommodation costs	$ 632
Administration/overhead	$ 1,104
TOTAL	**$ 8,059**

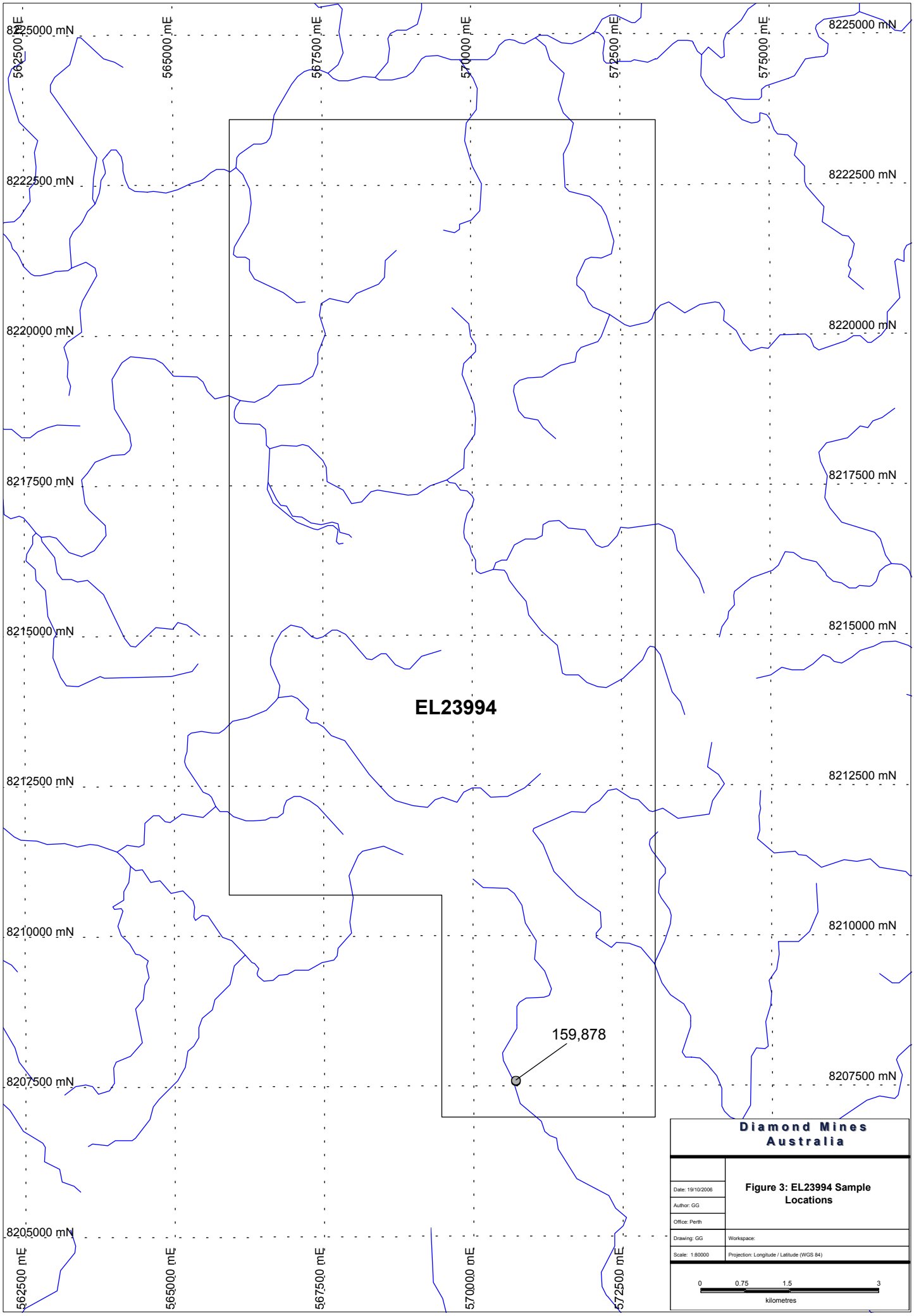

Nathan River
Bing Bong
Blue Lagoon Yard
Tobacco Yard
Manangoora
Borroloola
Old Bauhinia Downs
Greenbank
Mcarthur River
Robinson River
Mallapunyah
Calvert Hi
135°20'
135°40'
136°
PL757
Lorella
Maximus No. 82 Pty Ltd & Landmark Developments Pty Ltd
CLP429
Bing Bong
Wurrumburru Associat
Blue Lagoon Y
Tobacco Yard
-16°
0
10
20
kilometres
PPL1069
Billengarrah
Northern Territory Land Corporation
EL23994
PPL1046
Broadmere
Smith, Kenneth Noel & Smith, Beborah Allison
Bauhinia
Crown
Old Bauhinia Downs
McArthur River
Gurdanji Aboriginal Corporation
Ijarri Community Aboriginal Corporation
McArthur River
W Lagoon Aboriginal Corporation
Mawson, J & Mawson, D & Mawson, I & Mawson, L & Mawson, D
PL687
Spring Creek
-16°20'
Project
Location
Legend
Gravity Diamonds tenement
Aboriginal Land Trust
Pastoral boundary
Locality
Road
GRAVITY
Diamonds Limited
Figure 1
McArthur Project
EL 23994
Location Map
Date: 25/8/2005
Author: D Isles
Office: West Perth
Drawing: nicolcad
Workspace: EL23994 report 2005 01
Scale: 1:500000
Projection: Longitude / Latitude (NAD 83)



GRAVITY Diamonds Limited

Figure 2	EL 23994 Regional Geology
Date:25/8/2005	
Author: D Isles	
Office: West Perth	
Drawing: nicolcad	Workspace: EL23994 report 2005 02
Scale: 1:150000	Projection: Longitude / Latitude (AGD 84)

0 2 4 8
kilometres


8225000 mN
8222500 mN
8220000 mN
8217500 mN
8215000 mN
8212500 mN
8210000 mN
8207500 mN
8205000 mN
562500 mE
565000 mE
567500 mE
570000 mE
572500 mE
575000 mE
EL23994
159,878
Diamond Mines Australia
Figure 3: EL23994 Sample Locations
Date: 19/10/2006
Author: GG
Office: Perth
Drawing: GG
Workspace:
Scale: 1:80000
Projection: Longitude / Latitude (WGS 84)
0
0.75
1.5
3
kilometres

APPENDIX I

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 05084
Disc No.: -

Sample No: 159878
Overall Sample Assessment: **Negative**
Your Project Code: Cox Arnold NT

Sample Type (as collected):	Loam	Head Weight	48.92 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)

Other Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Anatase					Tr				MW	silvery-grey	subrounded	submetallic	opaque	blocky.
Barite				10	15				MW	white	subangular	dull	opaque	frosted, granular.
Fe Oxide/Hydroxide			100	90	85				W	brown, red-brown, tan	rounded to subangular	dull	opaque	irregular
Haematite					Tr				MW	black		metallic	opaque	granular, specular.
Leucoxene				Tr	Tr				W	cream	subrounded	polished	opaque	irregular
Tourmaline					Tr				W	black-brown	rounded	glassy	translucent, opaque	near spherical.
Zircon					Tr				W	orange	rounded	glassy	opaque	ovate
TOTAL	%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	29.82000 g	Size Range	-1.2+0.3 mm
Weight Observed	29.82000 g		

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NotMag			All	All	All			

Comment about this sample:

Technician: JED
Date Observed: 15-Dec-05
Report Printed: 12/01/2006 10:05:02 AM

SAMPNO	TYPE	COLLECTION	TENEMENT	EASTING_WGS84	NORTHING_WGS84	LAB_ASSESSMENT	MAPSHEET_100K	MAPSHEET_250K	LONG_WGS84	LAT_WGS84
159878	GRAVEL	25/10/2005	EL23994	570712	8207604	Negative	BATTEN	BAUHINIA DOWNS	135.66160	-16.21106