



**EL 10436 Top Spring
McArthur Diamonds Programme, NT**

YEAR 6 AND FINAL REPORT

ON EXPLORATION ACTIVITIES

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

and

Rio Tinto Exploration Pty Ltd

EL 10436

Holders: Rio Tinto Exploration Pty Ltd

Grant Date: 29 July 2002

Surrender Date: 18 June 2008

1:250,000 sheet : **Bauhinia Downs SE 53-03, Wallhallow SE 53-07**

Minerals Sought: Diamonds, Base metals

SUMMARY

EL 10436 Top Spring forms part of a farm-in agreement between Rio Tinto Exploration Pty Ltd (“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. EL 10427 Spellesie Creek and EL 10428 Lancewood Creek 2, which were previously reported in combination with EL10436, were surrendered during year 4 of tenure.

Under the terms of the farm-in agreement, DMA was conducting predominantly diamond exploration by utilising the Falcon™ airborne gravity gradiometer system. The Falcon™ system has been shown to be effective in detecting kimberlite pipes. Falcon™ data was acquired over the majority of EL 10427 during 2003, and followed up during 2004. No kimberlites were discovered.

EL 10436 is considered prospective for commercial sources of diamonds. Historic sampling has identified kimberlitic indicator mineral occurrences, including diamonds within the tenements. Exploration within EL 10436 during year 4 of tenure comprised a detailed review of historical indicator mineral sampling results within the tenement, the collection of 3 loam samples and field inspection of 2 small, circular spectral anomalies evident in regional Aster satellite data. Results from sampling programs implemented during 2005 were disappointing, however, they confirmed the conclusions reached from the analysis of historic sampling results - which suggested that previous indicator mineral recoveries within the EL were both sporadic and difficult to repeat. Based on the sampling results obtained by DMA in 2005, further detailed sampling has not been recommended within EL 10436.

During Year 5 of the licence, high resolution aeromagnetic data previously collected by Ashton was acquired and reprocessed by DMA. Detailed interpretation of this dataset was completed. Although no high priority targets were identified, a number of recommendations resulted from the interpretation process.

Gravity handed back the licence to Rio Tinto in March 2008 and the licence was subsequently surrendered on 18 June 2008. 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 18 June 2008. Year 6 expenditure totaled \$1212.03.

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INTRODUCTION

EL 10436 Top Spring is located within the McArthur Basin, Northern Territory, Australia. The tenement forms part of a farm-in agreement between Rio Tinto Exploration Pty Ltd (“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.

Historic sampling with EL 10436, predominantly by Ashton Mining, has identified kimberlitic indicator minerals (including diamonds) within EL 10436. To date the source of these indicator minerals remains enigmatic.

EL 10427 Spellesie Creek and EL 10428 Lancewood Creek 2, which were previously reported in combination with EL 10436, were surrendered during year 4 of tenure.

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 10436 forms part of the DMA - Rio Tinto joint venture.

In essence, the agreements provide for DMA to deploy the Falcon™ system at its discretion 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.

During 2003, Falcon™ data was acquired over the majority of EL 10427 (surrendered during year 4). 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 10436 is located near Mallapunyah station in the Gulf region of the Northern Territory (Figure 1). The tenement is predominantly located in the northeast corner of the Wallhallow 1:250,000 map sheet, approximately 120 km SW of Borroloola. Access is via the Carpentaria Highway heading west from Borroloola and turning south along the Tablelands Highway. The Tablelands Highway bisects EL 10436.

GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

EL 10436 is located within the Batten Trough region of the Mesoproterozoic McArthur Basin (Figure 2). Mesoproterozoic outcrops within the McArthur Diamonds Project area are predominantly McArthur Group or Tawallah Group. However, within a few synclines younger Nathan Group and Roper Group are exposed.

Major faults associated with kimberlite fields in the region are interpreted to pass through the Project area. Many of the major diamond prospects identified within the project area are located along, or proximal to, these major faults and/or their interpreted intersections or splays. Various major faults that are associated with, or parallel to, the major structures spatially associated with the Merlin and Abner Range kimberlite fields pass through the EL. There is potential for repetitions of the structure that characterises the Merlin kimberlite field to occur within EL 10436.

The geomorphology of the area around EL 10436 is broadly characterised by the high level, poorly-drained, lateritised Cretaceous Dunmarra Basin plateau to the south and low level, well-drained and eroded (dissected) Neo- to Mesoproterozoic rocks to the north. Between these two extremes is a broad, moderately-drained, intermediate level plateau broadly associated with the outcropping distribution of Neoproterozoic-Cambrian rocks, but also incorporates Cretaceous sediments in the south and Mesoproterozoic rocks in the north. The intermediate plateau probably represents the remains of a Palaeozoic-Mesozoic peneplained unconformity surface and incorporates outlying plateaus in the north that host the Merlin kimberlite field and the Abner Range kimberlite pipes. The geomorphology appears to have had a particularly strong influence on diamond exploration results in the region. There is a relationship between the location of kimberlitic diatremes and the major diamond prospects with the outer margin of the intermediate level plateau. The EL reported here overlies this intermediate plateau.

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, e.g., the Bulman Zn-Pb deposits.
- McArthur Group fine clastics and carbonates that host stratabound 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.

PREVIOUS EXPLORATION

Since the early 1980's exploration for diamondiferous kimberlitic diatremes has been conducted in the McArthur Basin region, including the areas covered by the EL 10436. These exploration efforts resulted in the discovery of the Merlin kimberlite field and two kimberlitic sandstone breccia pipes at Abner Range by Ashton Mining. In 2004, DMA discovered a new kimberlite pipe at Abner Range in close proximity to the smaller, less evolved breccia pipes. The latest discovery was a direct result of the follow-up of a Falcon™ airborne gravity anomaly.

Previous exploration by Ashton within EL 10436 has identified macrodiamonds, microdiamonds and indicator minerals(chromite).

WORK COMPLETED BY GRAVITY

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. Review of available geophysical and sample data was carried out by Gravity (managing the project on behalf of DMA) during year 2 of tenure and this confirmed the potential within EL 10436 (and EL's 10427, 10428) to host diamondiferous kimberlites.

On this basis, a Falcon™ airborne gravity gradiometer survey was planned and acquired in October 2003. The survey was flown on north-south oriented lines, 100m apart at a height of 80m above ground level. Falcon™ coverage was obtained over an area of approximately 264 km² within EL 10427 amounting to around 2900 line kms.

No exploration was conducted within EL10436 during year 2 of tenure.

Work programs completed within the project area during year 3 of tenure were limited to the followup of 13 Falcon™ anomalies within EL 10427. No on-ground exploration activities were conducted within EL 10436 during the period.

Work programs completed within EL 10436 during year 4 of tenure comprised a detailed review of historical indicator mineral sampling results within the tenement, the collection of 3 loam samples and field inspection of 2 small, circular spectral anomalies evident in regional Aster satellite data. The loam samples were collected to confirm the validity and repeatability of previous sampling in the area by Ashton Mining. Ashton historically recovered low numbers of chromite and microdiamonds from large volume loam samples within the tenement.

Results from sampling programs implemented during 2005 were disappointing, with a single chromite recovered from sample 159820. The remaining loam samples were negative. This result confirmed conclusions reached from analysis of historic sampling results, which suggested that previous indicator mineral recoveries within the EL were both sporadic and difficult to repeat. Further details regarding exploration conducted during year 4 of tenure are contained in the previous annual report.

Work programs completed within EL 10436 during Year 5 comprised the review and interpretation of high resolution aeromagnetic data previously collected by Ashton Mining, with a view to generating targets within EL 10436 that may be the result of a kimberlite intrusive. Although no high priority targets were noted, the data quality appears to be of a reasonable standard with responses associated with mapped fence lines and other cultural features evident in the data (eg Bauhinia bore). Minor problems with regard to levelling of the magnetic data between survey lines were noted but were not considered to be a significant issue.

In general the two datasets are characterised by high frequency responses superimposed on deeper, more regional gradients. There is little evidence to suggest a shallow magnetic intrusive source exists within the surveys areas. The high frequency responses evident throughout much of the survey areas are suppressed in areas correlating with mapped blacksoil plains. Higher frequency responses are noted to have a spatial correlation with outcropping units of the Roper and Nathan Group sediments.

In the magnetic survey data over the northern indicator mineral anomaly, some suppression of the magnetic response is also noted in areas where mapped Cretaceous sediments occur, although this does not appear to be the case in the southern survey area, where the mapped Cretaceous sediments cover a greater spatial area. This perhaps infers different units of the Cretaceous being present in each area, or, alternatively that the Cretaceous cover in the southern area may be of limited thickness.

Recommendations arising from the magnetic interpretation of the northern survey area carried out during year 4 of tenure include field inspection and possible scout drilling of 1 moderate priority magnetic target located in an area mapped as blacksoil plain, as well as field inspection and possible scout drilling of the localised occurrences of Cretaceous sediments. Cretaceous sediments are known to form infill sedimentary sequences within the Merlin and Abner Range kimberlite pipes. Additionally, the majority of these kimberlite pipes also display a general lack of magnetic response due to the non-magnetic nature of diatrema facies kimberlite as opposed to more hypabyssal / igneous kimberlite facies. However, it is also noted that Cretaceous sediments are known to backfill karstic sinkholes formed in the Top Springs Limestone, which outcrops within EL 10436, and that proximal historic Ashton sample results are not suggestive of these targets being the result of kimberlite intrusives.

Recommendations arising from the magnetic interpretation of the southern survey area carried out during year 4 of tenure were limited to field inspection and geological investigations to determine the type, spatial extent and probable thickness of Cretaceous sequences mapped in this area.

Other relevant recommendations included locating data related to other spatially extensive geophysical surveys apparently carried out within EL 10436 by Ashton, as well as drill logs etc relating to a number of targets that were subsequently drilled within the tenement. The general lack of kimberlite indicator minerals (chromite) has frustrated the definition of a source area for the considerable number of diamonds recovered within the tenement and it appears that systematic assessment geophysical targets may provide the most likely means of locating this diamond source.

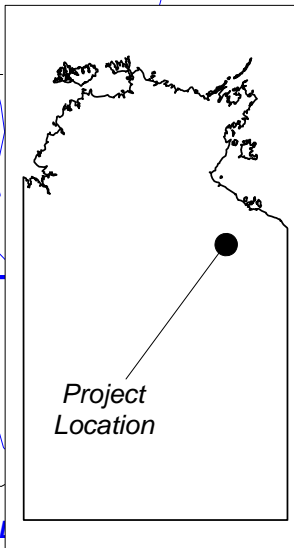
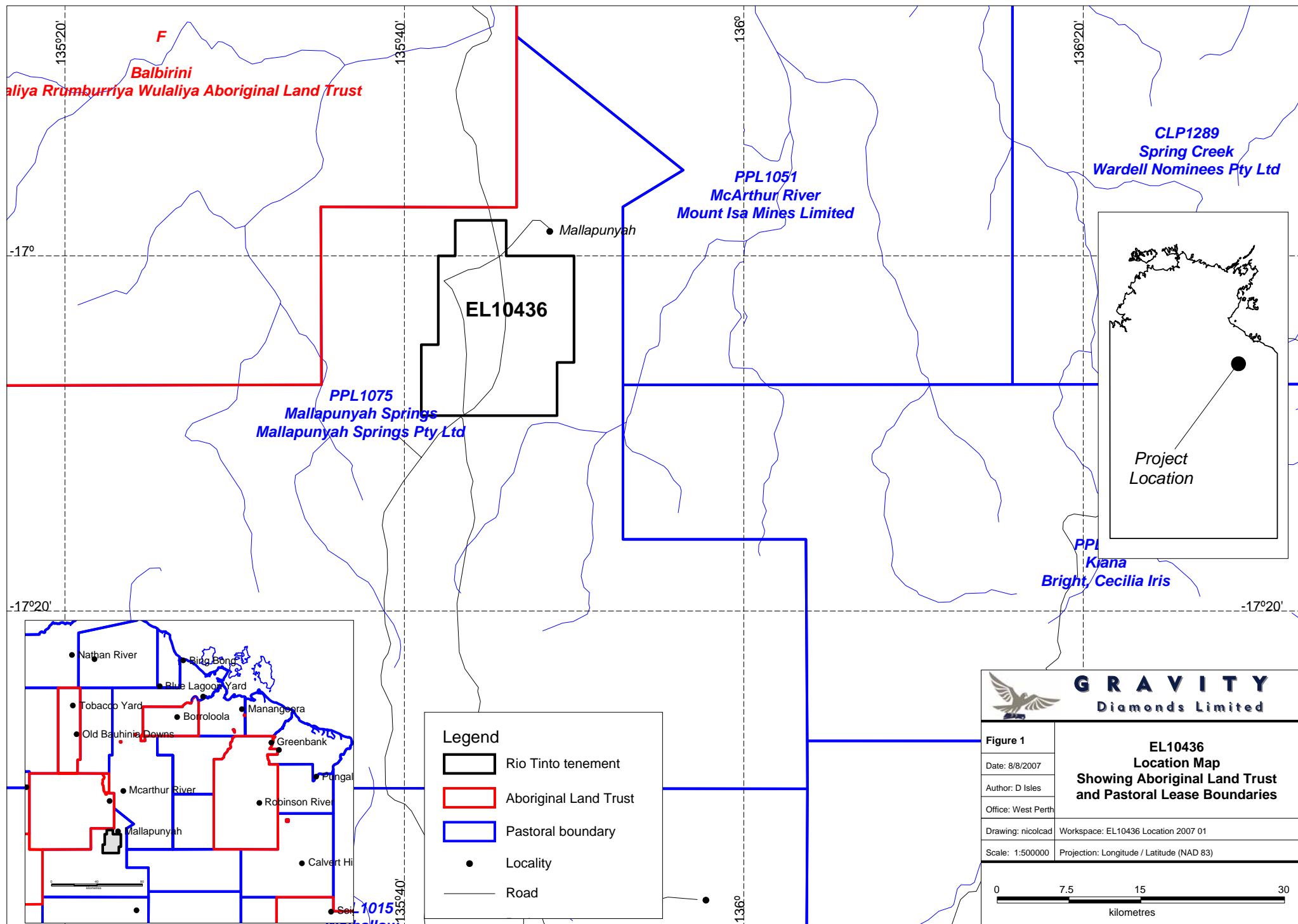
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ENVIRONMENT AND REHABILITATION

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

YEAR 6 EXPENDITURE

Office Costs	251.13
Professional Staff	408.40
Tenement Manager	552.50
Total	\$ 1212.03



Legend

- Rio Tinto tenement
- Aboriginal Land Trust
- Pastoral boundary
- Locality
- Road


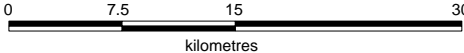
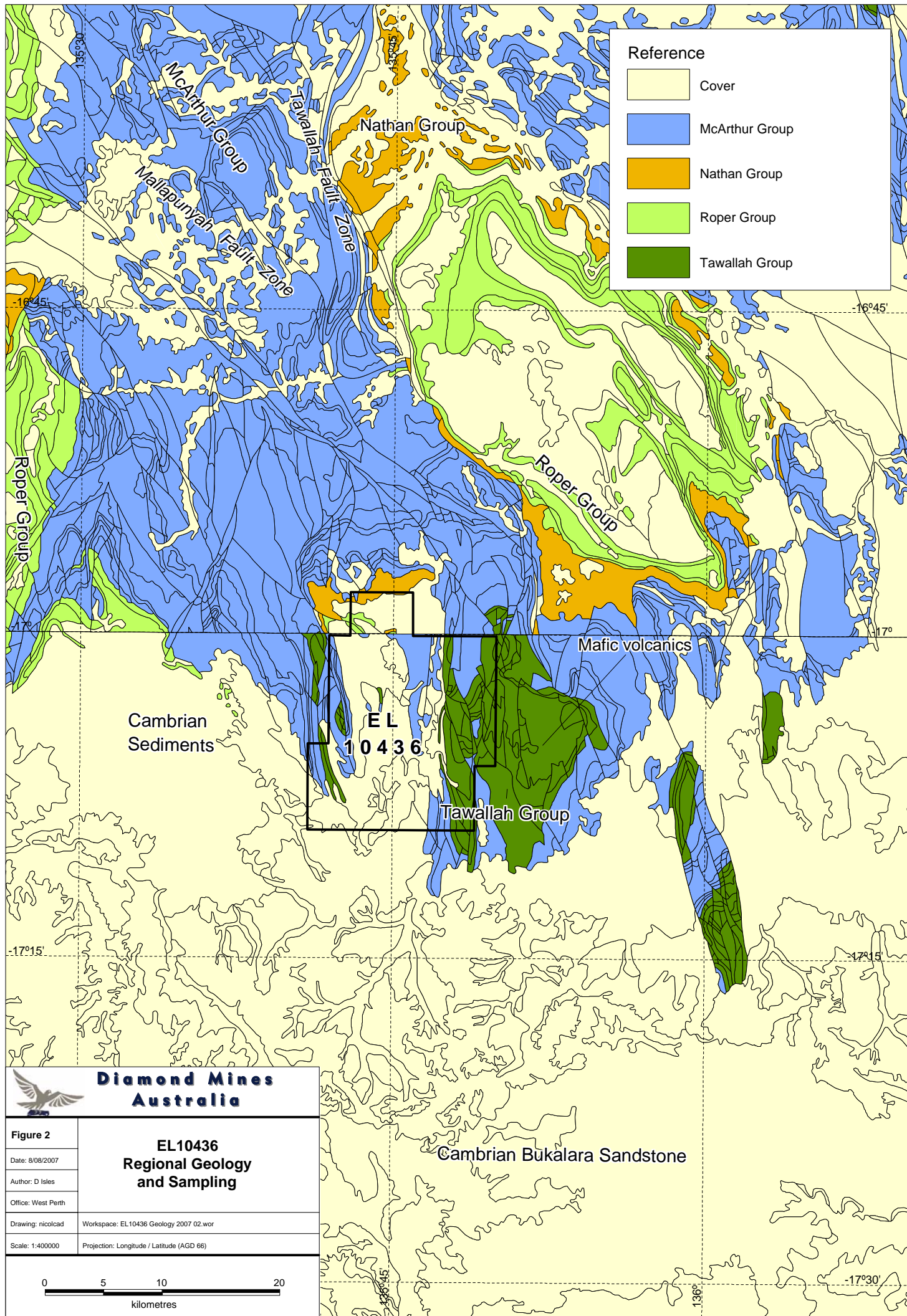
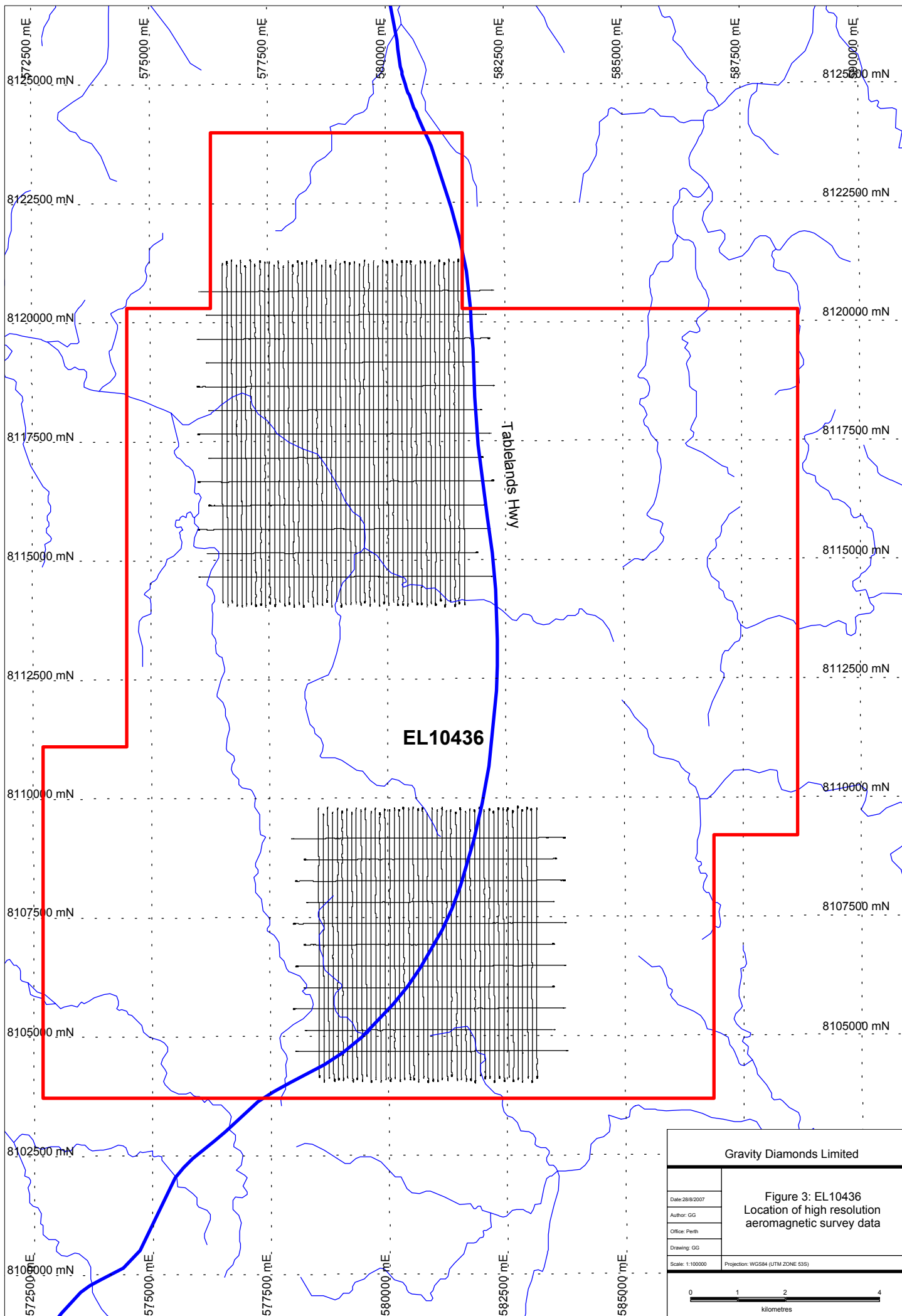
**GRAVITY**
Diamonds Limited

Figure 1	EL10436 Location Map Showing Aboriginal Land Trust and Pastoral Lease Boundaries
Date: 8/8/2007	
Author: D Isles	
Office: West Perth	
Drawing: nicolcad	Workspace: EL10436 Location 2007 01
Scale: 1:500000	Projection: Longitude / Latitude (NAD 83)



0 7.5 15 30
kilometres





Gravity Diamonds Limited	
Figure 3: EL10436 Location of high resolution aeromagnetic survey data	
Date: 28/8/2007	
Author: GG	
Office: Perth	
Drawing: GG	
Scale: 1:100000	Projection: WGS84 (UTM ZONE 53S)
<div>0 1 2 4</div> <div>kilometres</div>	