



**EL 10430 ROBINSON RIVER
McARTHUR RIVER REGION, NT**

**RELINQUISHMENT REPORT
ON BLOCKS DROPPED AT THE CONCLUSION
OF YEAR TWO OF TENURE
PERIOD ENDED 9 SEPTEMBER 2004**

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
Ashton Mining Limited**

SUMMARY

EL 10430 forms part of a farmin agreement between Rio Tinto Exploration Pty Ltd (“Rio Tinto”) and Diamond Mines Australia Pty Ltd (“DMA”) covering numerous Rio Tinto-controlled tenements and applications in the Northern Territory. Under this agreement, DMA will conduct predominantly diamond exploration over the tenements and will utilise the newly-developed Falcon™ airborne gravity gradiometer system, which has been shown to be very effective in detecting kimberlite pipes.

Gravity Diamonds Ltd (formerly Gravity Capital Limited) is managing the farmin arrangement for Diamond Mines Australia and owns 40% of DMA.

During the first year of tenure, a review of historic exploration data, including considerable surface sampling focussed on diamonds, was conducted by Gravity and numerous anomalous results were noted in and around EL 10430.

Owing to the timing of the exploration agreement between DMA and Rio Tinto (late July 2003) and prioritisation of field exploration on other tenements in the McArthur River project field based exploration did not extend to EL 10430 during the 2003/04 field season. Field work is planned to commence in late 2005 field season.

This Report is in respect of the one hundred and sixty-nine (169) blocks relinquished from EL 10430 at the conclusion of Year 2.

TABLE OF CONTENTS

INTRODUCTION	4
LOCATION AND ACCESS	4
GEOLOGICAL SETTING.....	5
PREVIOUS EXPLORATION.....	5
WORK COMPLETED ON RELINQUISHED BLOCKS	6
ENVIRONMENT AND REHABILITATION.....	6
CONCLUSIONS AND RECOMMENDATIONS	6

FIGURES

1. EL 10430 Tenement Location
2. EL 10430 Blocks Relinquished and Retained after Year 2

INTRODUCTION

Exploration Licence 10430 was granted to Ashton Mining Ltd on the 10th September 2002. Ashton was acquired by Rio Tinto Ltd in late 2000. As a consequence of the takeover Rio Tinto Exploration Pty Ltd (RTE) gained control of all of Ashton's granted tenements and tenement applications around Australia. The area forms part of a substantial group of tenements in the McArthur River region, controlled by the Rio Tinto Group of Companies. During 2002, Rio Tinto entered into negotiations 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 the year (ASX announcement 01/07/2003) and then Gravity formed a farm in joint venture, through its 40%-owned associated company, Diamond Mines Australia Pty Ltd ("DMA") with Ashton Mining Limited and other Rio Tinto companies, concerning the diamond and base metal exploration over a large number of Rio Tinto-controlled tenements in the Northern Territory (ASX announcement 25/07/2003). EL 10430 and the neighbouring tenements form part of the DMA-Ashton Mining/Rio Tinto joint venture (Figure 1).

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

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.

The flying program in the 2003/04 field season covered areas of strongly anomalous diamond indicator mineral sampling results, obtained from Rio Tinto's prior work. EL 10430, although known from prior exploration to have areas with anomalous diamond samples, was not one of the top priority areas covered in the 2003/04 field season.

LOCATION AND ACCESS

EL 10430 is located 50 kilometres southeast of the Merlin diamond mine in the northeastern part of the Northern Territory (figure 1). It covers parts of the Kiana and Calvert Hills pastoral leases. Access to the area is via the Tablelands Highway and then via roads connecting Walhallow, Robinson River and Calvert Hills.

GEOLOGICAL SETTING

EL 10430 lies on the Wearyan Shelf of the eastern portion of the 1800-1400Ma McArthur Basin. The broad stratigraphy on the Shelf is as follows:

- **Cretaceous sediments** form isolated plateaus.
- **Cambrian Bukalara Sandstone/Wessel Group** (Arafura Basin).
- **Dolerite dyke and sill intrusions.**
- **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 Goup** arenites, black shales and basalts hosting Cu in the Redbank district and U at Westmoreland. There are also a number of Cu occurrences hosted in the Talwallah Group proximal to the McArthur Project area.

Proterozoic outcrops within the project area are predominantly McArthur Group or Tawallah Group, the latter being the main suite exposed on the Wearyan Shelf. The Wearyan Shelf is characterised by Cu and U occurrences that cluster mainly along the south of the shelf. Deposits include the cluster of breccia pipe Cu deposits in the Redbank district.

The Merlin diamond mine (inferred resource of 11.75Mt at 0.17 cts/t as at December 2001) encompasses 14 kimberlite pipes located on a fault splay off the Emu Fault Zone that bounds the eastern margin of the Batten Trough, close to the intersection of the Calvert Fault which traverses the Wearyan Shelf and cuts the north eastern corner of EL 10430. The Merlin mine lies 50km to the northwest of EL 10430.

Major faults within the Batten Trough, that parallel the Emu Fault, include the Tawallah Fault and the Hot Springs Fault. The NW-SE trending Mallapunyah Fault has a strike parallel to the Calvert Fault. All of these major faults are interpreted to pass through the McArthur 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.

Cambrian Georgina Basin sediments and volcanics overlie Mesoproterozoic sequences in the vicinity of EL 10430 and particularly to the south. The sequences are dominated by the Bukalara Sandstone.

PREVIOUS EXPLORATION

Historic work in the area has included regional aeromagnetic surveys and reconnaissance sampling for diamonds and base metals. The significant results from this work were compiled by Ashton Mining.

Within and around EL 10430 there a number of sample sites which have returned anomalous indicator minerals and/or micro-diamonds.

On this basis and owing to the proximity of the area to Merlin the area has been regarded as prospective for diamonds.

WORK COMPLETED ON RELINQUISHED BLOCKS

As mentioned above, an agreement covering much of the Rio Tinto-controlled diamond exploration tenements in northern Australia was finalised in July 2003 between Ashton Mining/Rio Tinto and DMA. Review of available geophysical and geochemical data was carried out by Gravity (managing the project on behalf of DMA) and this confirmed considerable potential for diamondiferous kimberlites. EL 10430 and neighbouring tenements which form part of the Gravity Capital – Diamond Mines Australia – Rio Tinto “Northern Australia Diamonds” Joint Venture were confirmed as containing micro-diamonds and kimberlitic indicator minerals.

The 2003/04 field program of the joint venture, which comprised flying Falcon™ airborne gravity gradiometer surveys was focussed on a number of areas to the north and west of EL 10430. The flying program covered areas of strongly anomalous diamond indicator mineral sampling results, obtained from Rio Tinto’s prior work.

EL 10430, although known from prior exploration to have areas with anomalous diamond samples, was not one of the top priority areas covered in the 2003/04 field season.

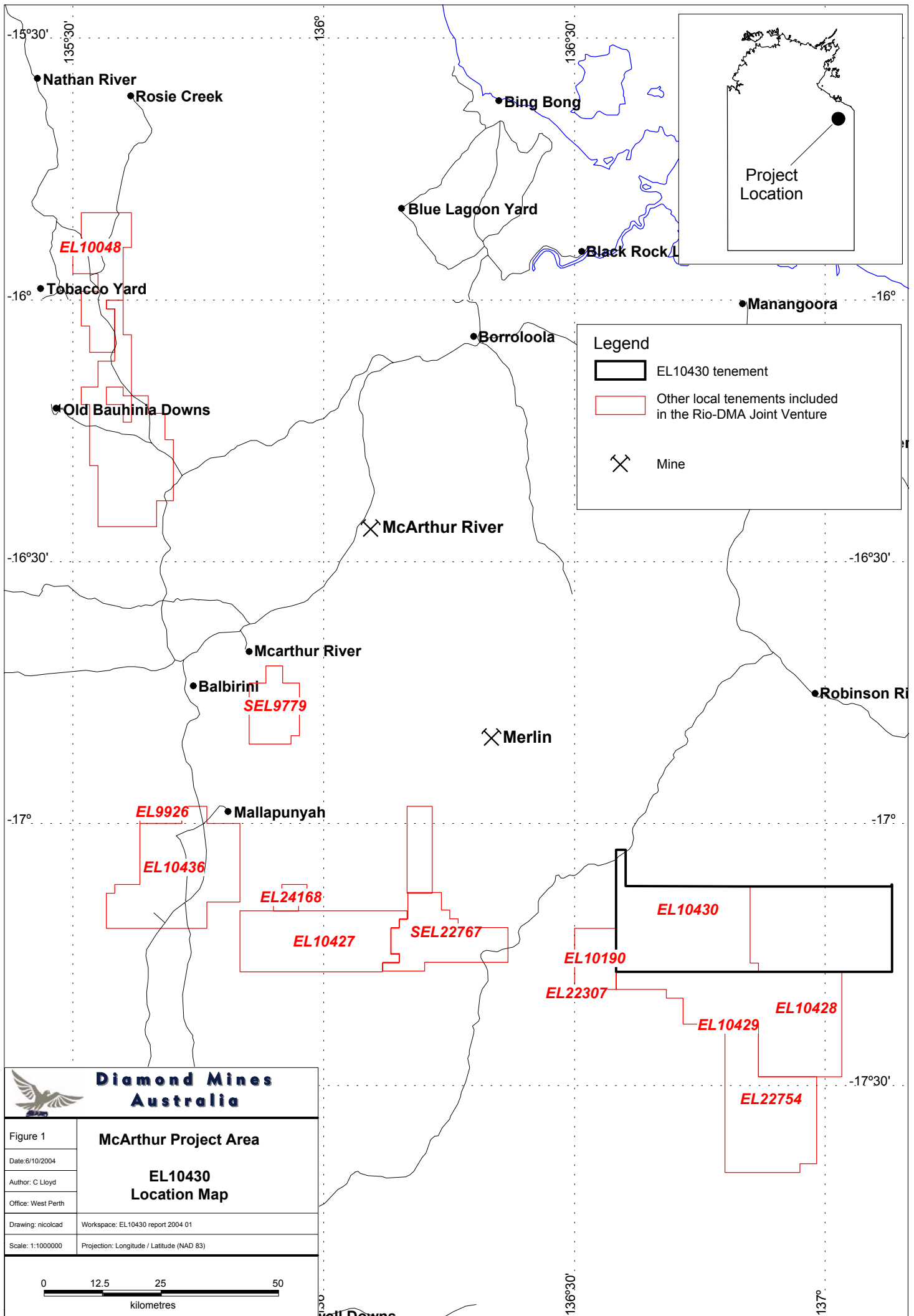
No on-ground work was completed on this licence and the area was reviewed following the results from the Falcon™ surveys on the areas to the north and west of EL 10430. This led to the relinquishment of one hundred and sixty-nine (169) blocks from the licence.

ENVIRONMENT AND REHABILITATION

No requirement for rehabilitation arose on the relinquished area as no field work was carried out.

CONCLUSIONS AND RECOMMENDATIONS

EL 10430 lies within an area of anomalous kimberlitic indicator sampling results and forms part of a large project area centred on the Merlin diamond district. The results of the Falcon™ surveys on the areas to the north and west of EL 10430 downgraded the eastern area of the licence and this was relinquished at the conclusion of Year 2.

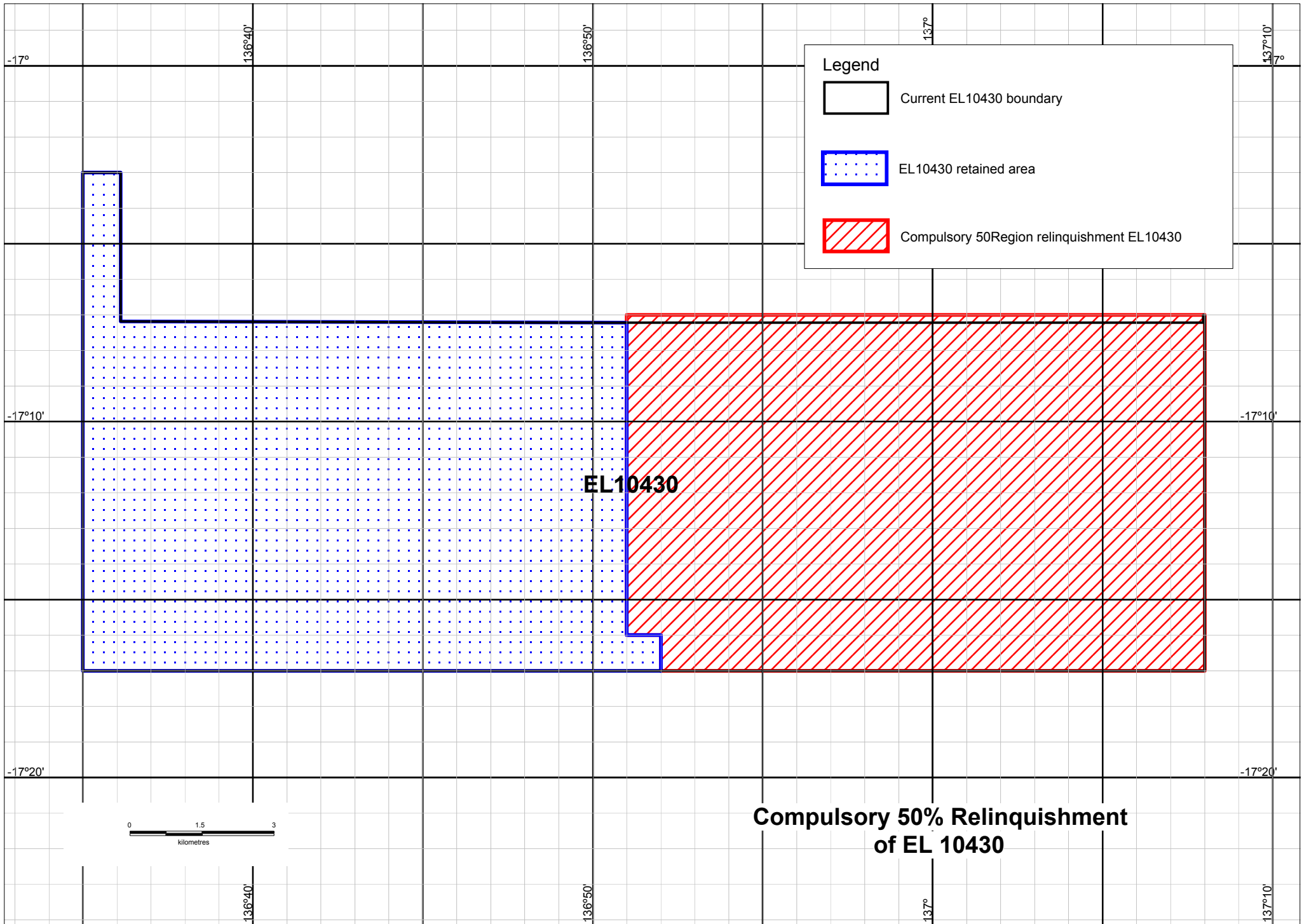


Diamond Mines Australia




Figure 1
McArthur Project Area
EL10430
Location Map

Date: 6/10/2004	
Author: C Lloyd	
Office: West Perth	
Drawing: nicolcad	Workspace: EL10430 report 2004 01
Scale: 1:1000000	Projection: Longitude / Latitude (NAD 83)

0 12.5 25 50
kilometres



Legend

-  Current EL10430 boundary
-  EL10430 retained area
-  Compulsory 50Region relinquishment EL10430

EL10430

**Compulsory 50% Relinquishment
of EL 10430**

