



North  
Australian  
Diamonds  
Limited  
ABN 86 009 153 119

## **Annual Exploration Report – Year 3**

### **Exploration Lease EL 26206**

19<sup>th</sup> March 2010 to 18<sup>th</sup> March 2011

***Holder:*** North Australian Diamonds Limited

***Operator:*** North Australian Diamonds Limited

***Reporting Period:*** 19<sup>th</sup> March 2010 to 18<sup>th</sup> March 2011

***Sheet Reference:*** Katherine (SD 53-09) 1:250,000 & Urapunga (SD 53-10) 1:250,000

***Due Date:*** 18<sup>th</sup> April 2011

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Date: 18<sup>th</sup> April 2010

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NADL Office

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**SUMMARY**

*This report details exploration activity for diamond bearing kimberlite intrusives carried out by North Australian Diamonds Limited (NADL) over Exploration Lease EL 26206 for the period 19<sup>th</sup> March 2010 to 18<sup>th</sup> March 2011. EL 26206 is located over PPL 1167 (NT Portion 5108).*

*During 2008-2009 a total of 6 reconnaissance exploration samples were collected and returned negative results. Field work during the 2009-2010 reporting period included geological reconnaissance and the collection of 9 reconnaissance gravel samples and 9 stream geochemical samples. Results for these samples were negative.*

*During the current reporting period 16 stream gravel samples were taken plus 7 geochemical samples. Stream gravel results were negative for kimberlitic indicator minerals. Soil geochemical results are currently being interpreted.*

*Exploration expenditure for the reporting period amounted to \$73,000.*

## 1.0 INTRODUCTION

This report details exploration activity carried out by North Australian Diamonds Limited (NADL) over Exploration EL 26206 for the period 19<sup>th</sup> March 2010 to 18<sup>th</sup> March 2011. The target for exploration within this lease is diamond bearing kimberlite intrusive, however non-diamond commodities area also being explored for.

## 2.0 TENEMENT HISTORY

EL 26206 was applied for on the 4<sup>th</sup> June 2007, and has just reached the end of its third year of tenure.

## 3.0 LICENCE DETAILS

EL 26206 is located on the Katherine (SD53-09 and Urapunga (SD53-10) 1:250,000 map sheets. Access to the lease is via the Central Arnhem Highway, however no direct access tracks off the highway exist. A tenement location map is shown as Figure 1.

*Table 1: Tenement Details*

| Project Name | Tenement No | Application Date | Grant Date | Blocks | Area (km <sup>2</sup> ) |
|--------------|-------------|------------------|------------|--------|-------------------------|
| Arnhem Land  | EL 26206    | 04/06/2007       | 19/03/2008 | 87     | 290                     |

## 3.0 GEOLOGY

The tenement is located on the tectonically stable Arnhem Shelf, that part of the northwestern McArthur Basin characterised by comparatively mild deformation and a thin stratigraphic succession relative to the meridional troughs/fault zones. The oldest rocks are Proterozoic age and include laminated, stromatolitic dolostones and cherts and sandstones of the Mount Rigg Group.

## 4.0 PREVIOUS EXPLORATION

Previous exploration for diamonds has been undertaken in this area by Stockdale Prospecting, but no positive results were reported. Six samples were collected during the 2007-2008 a total of 6 reconnaissance exploration samples were collected and results returned negative.

Field Work during the 2009-2010 reporting period included geological reconnaissance and the collection of 9 gravel samples. The samples were processed for indicator minerals through the company's laboratory in Perth. In addition 9 stream geochemical samples were collected from the same locations. Results from all of these samples were negative.

## **5.0 EXPLORATION COMPLETED DURING CURRENT REPORTING PERIOD**

During the current reporting period 16 stream gravel samples were taken plus 7 geochemical samples were also collected from the same location. The stream gravel samples were sent to the company's laboratory in Perth for processing. The soil geochemical samples were sent to Genalysis. Results for the stream gravel samples were negative as no kimberlitic indicator minerals were recovered. Soil geochemical results are currently being interpreted to identify base metal or other anomalous mineralization. Sample information is shown in Table 2.

## **6.0 LABORATORY PROCEDURES**

All gravel samples are processed and observed at the NADL laboratory in Perth, Western Australia. Initial sample processing involves concentration of the heavy mineral fraction by Wilfley Table and liquid separation techniques. The heavy liquid used is tetrabromoethane with a specific gravity of 2.96. The recovered concentrate is then screened into various size fractions and further sorted by magnetic separation method. A comprehensive grain by grain examination is then performed with the aid of binocular microscope to identify any kimberlitic indicator minerals and diamonds that may be present.

## **7.0 EXPLORATION EXPENDITURE**

Exploration expenditure for the reporting period amounted to \$73,000 as per the attached Expenditure report.

## 8.0 PROPOSED PROGRAMME AND BUDGET FOR 2010-2011

The initial focus of the proposed work program will include the collection of follow-up traditional indicator mineral and diamond stream samples (40kg each) should positive results report to the initial reconnaissance samples..

Proposed budget breakdown below;

|                            |                 |
|----------------------------|-----------------|
| Administration and Support | \$10,000        |
| Field Logistical Support   | \$15,000        |
| Labour – Field Personnel   | \$20,000        |
| Laboratory Costs           | \$35,000        |
| <b>Total</b>               | <b>\$80,000</b> |

## 9.0 REFERENCES

Sweet I P, Brakel, A T, Rawlings, D J, Haines, P W, Plumb, K A & Wygralak, A S, 1999, Mt Marumba SD53-06 1:250,000: Explanatory Notes, *Northern Territory Geological Survey, Darwin.*

Roper Region: Urapunga and Roper River SD53-10, 11 1:250,000: Explanatory Notes, *Northern Territory Geological Survey, Darwin.*

Reddicliffe, T.R. (2010) Annual Exploration Report for Year 2 2009-2010, North Australian Diamonds Limited Ref: 10-018.

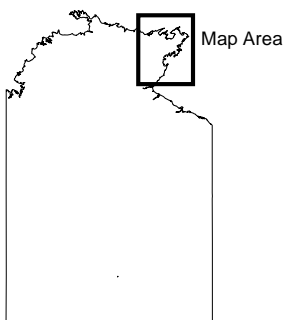
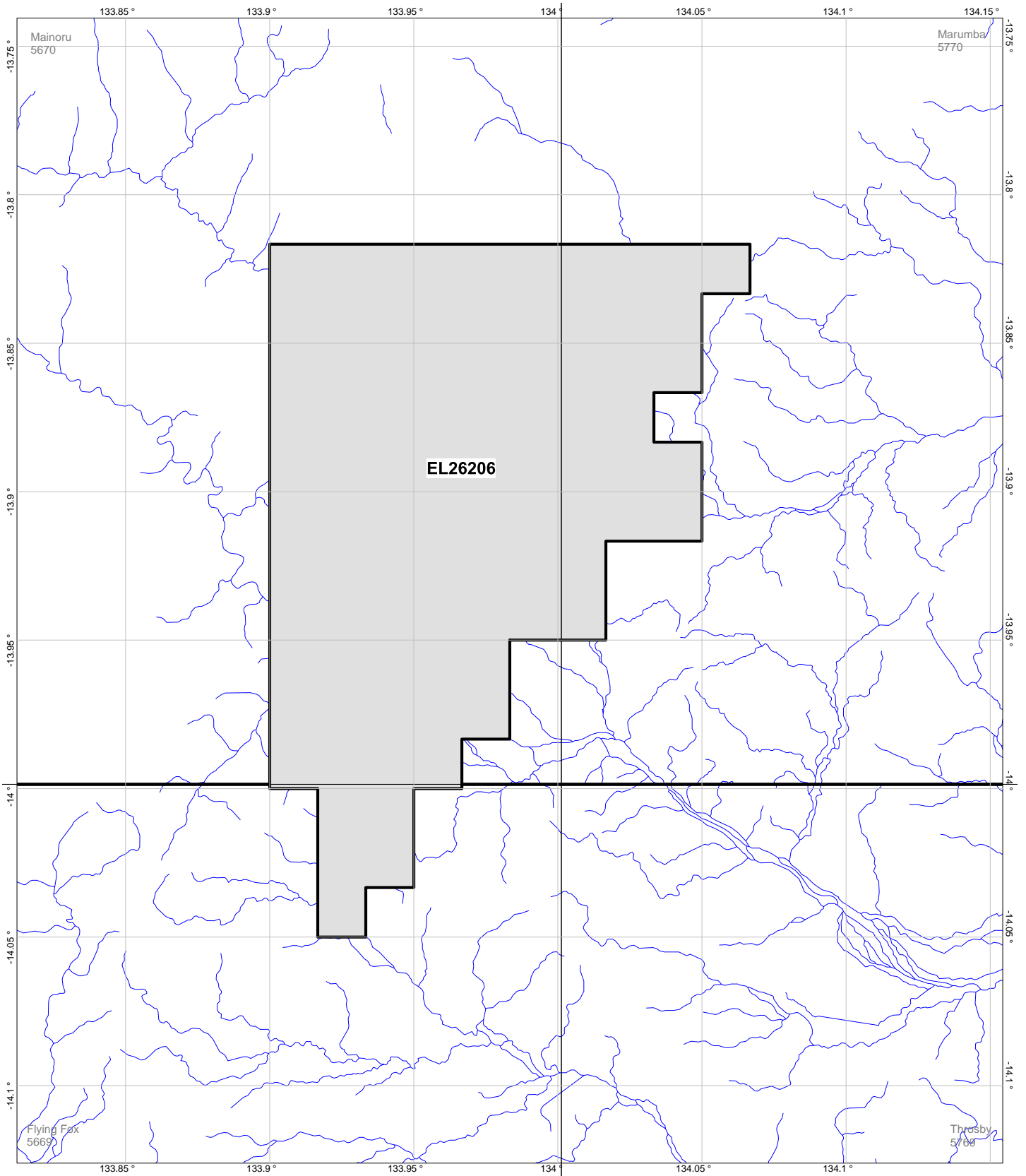
Table 2. Sample Information for Current Reporting Period




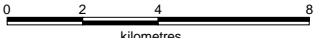
| <b>SAMPLE</b> | <b>TYPE</b> | <b>PROJECT</b> | <b>COLLECTION DATE</b> | <b>EASTIN G</b> | <b>NORTHIN G</b> | <b>DATU M</b> | <b>ZON E</b> | <b>RESULT S</b> |
|---------------|-------------|----------------|------------------------|-----------------|------------------|---------------|--------------|-----------------|
| 10-029-001    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 397779          | 8464080          | GDA94         | 53           | Negative        |
| 10-029-002    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 386194          | 8470862          | GDA94         | 53           | Negative        |
| 10-029-003    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 397524          | 8461821          | GDA94         | 53           | Negative        |
| 10-029-004    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 390933          | 8464770          | GDA94         | 53           | Negative        |
| 10-029-005    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 387109          | 8464990          | GDA94         | 53           | Negative        |
| 10-029-006    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 390844          | 8470199          | GDA94         | 53           | Negative        |
| 10-029-007    | GRAVEL      | ARNHEM LAND    | 9/07/2010              | 387895          | 8470306          | GDA94         | 53           | Negative        |
| 10-042-001    | GRAVEL      | ARNHEM LAND    | 18/10/2010             | 398435          | 8471726          | GDA94         | 53           | Negative        |
| 10-042-002    | GRAVEL      | ARNHEM LAND    | 18/10/2010             | 395800          | 8469449          | GDA94         | 53           | Negative        |
| 10-042-003    | GRAVEL      | ARNHEM LAND    | 18/10/2010             | 394596          | 8467738          | GDA94         | 53           | Negative        |
| 10-042-004    | GRAVEL      | ARNHEM LAND    | 19/10/2010             | 393070          | 8466133          | GDA94         | 53           | Negative        |
| 10-042-005    | GRAVEL      | ARNHEM LAND    | 19/10/2010             | 397088          | 8465904          | GDA94         | 53           | Negative        |
| 10-042-006    | GRAVEL      | ARNHEM LAND    | 19/10/2010             | 396136          | 8454897          | GDA94         | 53           | Negative        |
| 10-042-007    | GRAVEL      | ARNHEM LAND    | 19/10/2010             | 392685          | 8459919          | GDA94         | 53           | Negative        |
| 10-042-008    | GRAVEL      | ARNHEM LAND    | 19/10/2010             | 390212          | 8460954          | GDA94         | 53           | Negative        |
| 10-042-009    | GRAVEL      | ARNHEM LAND    | 19/10/2010             | 393614          | 8462434          | GDA94         | 53           | Negative        |

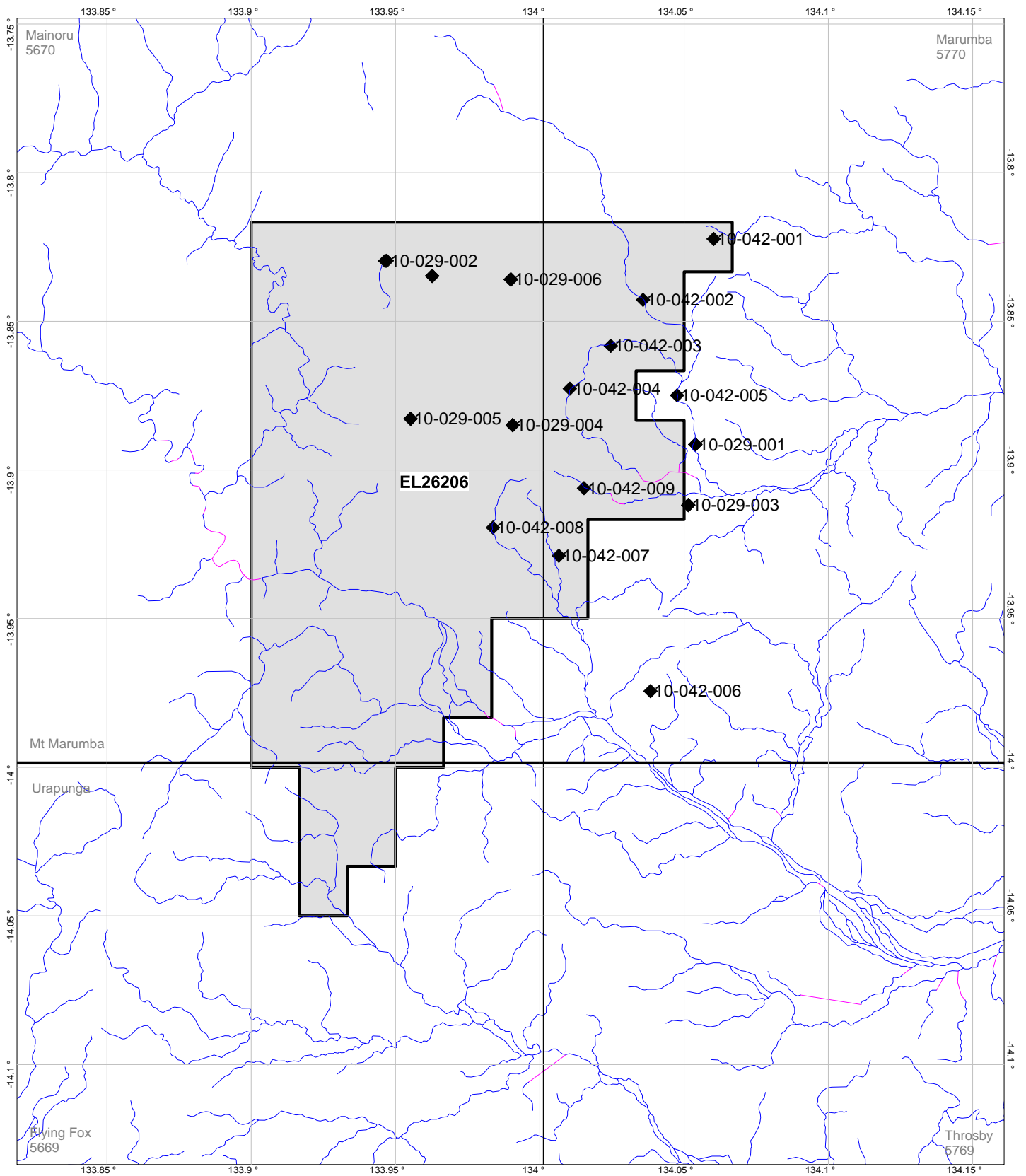


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|            |             |                |           |        |         |       |    |         |
|------------|-------------|----------------|-----------|--------|---------|-------|----|---------|
| 10-106-001 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 397781 | 8464077 | GDA94 | 53 | PENDING |
| 10-106-002 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 386134 | 8470857 | GDA94 | 53 | PENDING |
| 10-106-003 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 397528 | 8461822 | GDA94 | 53 | PENDING |
| 10-106-004 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 390933 | 8464770 | GDA94 | 53 | PENDING |
| 10-106-005 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 387115 | 8464990 | GDA94 | 53 | PENDING |
| 10-106-006 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 390845 | 8470179 | GDA94 | 53 | PENDING |
| 10-106-007 | GEOCHE<br>M | ARNHEM<br>LAND | 9/07/2010 | 387896 | 8470307 | GDA94 | 53 | PENDING |



|   |               |  |  |
|---|---------------|--|--|
| <b>Legend</b>   |               | <b>North Australian Diamonds Limited</b>           |  |
|    | EL 26206      | <b>Figure 1<br/>Location Plan</b>                  |  |
|    | 100k Mapsheet |  |  |
|    | Drainage      |  |  |
| Date: 8/4/2011  |               |  |  |
| Author:   |               |  |  |
| Office:   |               |  |  |
| Drawing:  |               |  |  |
| Scale: 1:200000   |               | Projection: Longitude / Latitude (Australia GDA84) |  |
|  |               |  |  |



| Legend |                  | North Australian Diamonds Limited |  |
|--------|------------------|-----------------------------------|--|
| ◆      | Sample Locations | Date: 18/4/2011                   | <b>Figure 2</b><br><b>Sample Location Plan</b>     |
| —      | Drainage         | Author:                           |  |
| ▭      | 250k Mapsheet    | Office:                           |  |
| □      | 100k Mapsheet    | Drawing:                          |  |
|        |                  | Scale: 1:200000                   | Projection: Longitude / Latitude (Australia GDA84) |
|        |                  |                                   |  |