

## **Partial Relinquishment Report**

### EL26087

19<sup>th</sup> March 2008 to 18<sup>th</sup> March 2012

**Holder:** North Australian Diamonds Limited

**Operator:** North Australian Diamonds Limited

Reporting Period: 19th March 2008 to 18th March 2011

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

Due Date: 15th May 2012

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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) on the relinquished portion of Exploration Lease EL26087 for the period 19<sup>th</sup> March 2008 to 18<sup>th</sup> March 2012.

EL 26087 is located on the Katherine (SD53-09 and Urapunga (SD53-10) 1:250,000 map sheets. Access to each lease is via the Central Arnhem Highway, however no direct access tracks off the highway exist.

During the reporting period a several programs of stream gravel sampling for diamond exploration and stream geochemical sampling for non-diamond exploration were completed.

Chromite was recovered but not considered to be derived from a kimberlite and hence was of no further interest. The stream geochemical results reported no anomalous results indicative of non-diamond mineralisation.

#### 1.0 INTRODUCTION

This report details exploration activity carried out by North Australian Diamonds Limited (NADL) on the relinquished area of Exploration EL 26087 for the period 19<sup>th</sup> March 2008 to 18<sup>th</sup> March 2012. The target for exploration within this lease is diamond bearing kimberlite intrusives, however non-diamond commodities are also being explored for.

#### 2.0 TENEMENT HISTORY

EL 26087 was applied for on the 23<sup>rd</sup> April 2007, and has just reached the end of its fourth year of tenure.

#### 3.0 LICENCE DETAILS

EL 26087 is located on the Katherine (SD53-09 and Urapunga (SD53-10) 1:250,000 map sheets. Access to each 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	<b>Application Date</b>	<b>Grant Date</b>	Blocks
Arnhem Land	EL 26087	23/04/2007	19/03/2008	101

#### 4.0 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, stromatilitic dolostones and cherts and sandstones of the Mount Rigg Group.

#### 5.0 PREVIOUS EXPLORATION

Previous exploration for diamonds has been undertaken in this area by both Stockdale Prospecting and Normandy Poseidon, but no positive results were reported. Two stream gravel samples and one loam sample were collected in the relinquished area during the 2009-2010 reporting period. The results for these were negative.

During the 2010-2011 reporting period two stream gravel samples were collected in the relinquished area. Sample 10-028-005 reported a positive result containing one chromite grain however it was considered to be derived from a non-kimberlite source and is no interest. Six geochemical samples were also collected with no anomalous results indicative of non-diamond mineralisation. The results are shown in Table 3.

# 6.0 EXPLORATION COMPLETED DURING THE CURRENT REPORTING PERIOD

Three geochemical samples were collected in the relinquished area during the 2011-2012 reporting period. No anomalous results were reported indicative of non-diamond mineralisation. Results from these samples are shown in Table 4.

#### 7.0 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*.

Reddicliffe, T.R. (2009) North Australian Diamonds Limited, Annual Exploration Report - Year 1, 2008-2009 for EL26087, NADL Ref: 09-017.

Reddicliffe, T.R. (2010) North Australian Diamonds Limited, Annual Exploration Report - Year 2, 2009-2010 for EL26087, NADL Ref: 10-017.

Reddicliffe, T.R. (2011) North Australian Diamonds Limited, Annual Exploration Report - Year 3, 2010-2011 for EL26087, NADL Ref: 11-015.

Kammermann, M. (2012) North Australian Diamonds Limited, Annual Exploration Report - Year 4, 2011-2012 for EL26087, NADL Ref: 12-018.

Table 2. Sample Data

SAMPLE	TYPE	<b>EASTING</b>	<b>NORTHING</b>	DATUM	ZONE	RESULTS	<b>DIAMONDS</b>	CHROMITES
09-207-002	STREAM	320035	8443543	GDA94	53	NEGATIVE	0	0
09-207-003	STREAM	323874	8449858	GDA94	53	NEGATIVE	0	0
09-207-009	LOAM	331127	8449516	GDA94	53	NEGATIVE	0	0
10-028-005	GRAVEL	321149	8434486	GDA94	53	POSITIVE	0	2
10-028-006	GRAVEL	321368	8438765	GDA94	53	NEGATIVE	0	0
10-105-005	GEOCHEM	321149	8434486	GDA94	53	N/A	0	0
10-105-006	GEOCHEM	321328	8438778	GDA94	53	N/A	0	0
10-105-008	GEOCHEM	329200	8437107	GDA94	53	N/A	0	0
10-105-012	GEOCHEM	327653	8446295	GDA94	53	N/A	0	0
10-105-019	GEOCHEM	327878	8450111	GDA94	53	N/A	0	0
10-105-020	GEOCHEM	317669	8443937	GDA94	53	N/A	0	0
11-102-008	GEOCHEM	332793	8439217	GDA94	53	N/A	0	0
11-102-009	GEOCHEM	333053	8438925	GDA94	53	N/A	0	0
11-102-011	GEOCHEM	337469	8442671	GDA94	53	N/A	0	0

Table 3. 2011 Geochem Results

ELEMENTS	Au	Ag	As	Ве	Bi	Се	Co	Cu	La	Мо	Ni	Pb	Pd	Pt	Th	U	V	Zn
UNITS	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm
DETECTION	1	0.2	2	0.1	0.01	0.01	0.1	1	0.01	0.1	1	2	1	1	0.01	0.01	1	1
METHOD	FA25/MS	A/MS	A/MS	A/MS	A/MS	A/MS	A/MS	A/MS	A/MS	A/MS	A/MS	A/MS	FA25/MS	FA25/MS	A/MS	A/MS	A/OES	A/OES
10-105-005	1	Χ	Χ	0.2	0.09	23.8	3.2	8	12.53	0.9	5	5	Χ	Χ	6.78	1.29	24	3
10-105-006	1	Χ	2	8.0	0.09	29.51	17	16	14	1.1	11	7	Χ	3	4.85	1.05	139	25
10-105-008	1	Χ	Χ	1.8	0.17	72.71	5.2	14	34.74	8.0	8	9	Χ	Χ	11.13	2.33	45	6
10-105-012	2	Χ	3	0.5	0.24	32.06	6.4	18	15.67	2.1	9	11	Χ	Χ	7.57	1.32	82	15
10-105-019	Χ	Χ	Χ	0.2	0.21	29.82	3.9	8	14	1.1	8	10	Χ	Χ	6.89	0.97	65	7
10-105-020	Χ	Χ	Χ	8.0	0.16	46.32	6.2	14	22.36	0.7	8	5	Χ	Χ	8.93	2.28	44	9

Table 4. 2012 Geochem Results

ELEMENTS UNITS DETECTION METHOD SAMPLE	Au ppb 1 FA25/M	Ag ppm 0.1 S 4A/M	AI ppm 50 S 4A/OI	As ppm 1 E 4A/M	Ba ppm 1 S 4A/M	Be ppm 0.5 S 4A/M	Bi ppm 0.05 S 4A/M	Ca ppm 50 S 4A/O	Cd ppm 0.05 E 4A/M	Co ppm 0.1 S 4A/M	Cr ppm 5 IS 4A/O	Cs ppm 0.1 E 4A/M	Cu ppm 1 S 4A/O	Fe % 0.01 E 4A/O	Ga ppm 0.1 E 4A/M	p O	Ge opm J.1 JA/MS
11-102-008	2	0.7	36781	4	136	1	0.3	516	X	8.5	214	2.3	27	2.56	8.6	1	.2
11-102-009	3	0.1	28214		170	1.6	0.21	804	Χ	9.1	89	1.9	19	5.4	7.1		.9
11-102-011	4	0.2	67865	5 5	302	1.9	0.31	726	X	14.2	50	3.3	32	4.19	16.8	1	.4
ELEMENTS UNITS DETECTION METHOD	Hf ppm 0.1 4A/MS	In ppm 0.05 4A/MS	K ppm 20 4A/OE	Li ppm 0.1 4A/MS	Mg ppm 20 4A/OE	Mn ppm 1 4A/OE	Mo ppm 0.1 4A/MS	Na ppm 20 4A/OE	Nb ppm 0.1 4A/MS	Ni ppm 1 4A/OE	P ppm 50 4A/OE	Pb ppm 1 4A/MS	Pd ppb 1 FA25/MS	Pt ppb 1 S FA25/	Rb pp 0.1 /MS 4A	m	Re ppm 0.05 4A/MS
SAMPLE																	
11-102-008	9.5	0.11	6998	16.8	946	338	1	175	21.6	8	287	15	Χ	Χ	35	.3	Χ
11-102-009	8.7	0.09	3118	13.7	986	562	8.0	284	15.5	5	495	13	1	Χ	21	.8	Χ
11-102-011	5.6	80.0	8426	23.4	2735	782	8.0	310	22.8	13	459	30	Χ	Χ	53	.2	Χ
ELEMENTS UNITS DETECTION METHOD	S ppm 50 4A/OE	Sb ppm 0.1 4A/MS	Sc ppm 1 4A/OE	Se ppm 1 4A/MS	Sn ppm 0.1 4A/MS	Sr ppm 0.5 4A/MS	Ta ppm 0.05 4A/MS	Te ppm 0.1 4A/MS	Th ppm 0.05 4A/MS	Ti ppm 5 4A/OE	TI ppm 0.02 4A/MS	U ppm 0.05 4A/MS	V ppm 1 4A/OE	W ppm 0.1 4A/MS	Y ppm 0.1 4A/MS	Zn ppr 1 4A/	
SAMPLE	110	4.4	1.1	V	0.4	17.0	1.00	V	10.00	0000	0.10	0.00	CC	0	00.7	10	
11-102-008 11-102-009	112 269	1.1 0.9	14 9	X X	2.4 1.8	17.3 16.4	1.28 0.96	X X	13.83 11.97	9932 8189	0.18 0.18	3.36 2.85	66 65	2 1.3	26.7 28	13 19	
11-102-009	175	0.6	16	X	2.8	36.3	1.47	X	13.27	10852	0.16	3.87	85	1.5	31	41	

ELEMENTS	Zr					
UNITS	ppm					
DETECTION	0.5					
METHOD	4A/MS					
SAMPLE						
11-102-008	361.4					
11-102-009	332.9					
11-102-011	215					



