EL23687

Lake Woods Project

Annual Report

17 June 2004 to 16 June 2005

Cover Photo: Unusual Columnar joints in sandstone. Diamond Consultant Mr. Dearn C. Lee indicates bedding plane.

Eupene, G.S. and Rowe, B.A.

Tenure Holder: ACN 099 478 074 Pty Ltd
Submitter of Report: Paradigm North Pty Ltd
Date of Report: 2 August 2005

Table of Contents

List of Figures

List of Appendices

1 Summary

The Lake Woods project is located 700km south of Darwin and 200km north of Tennant Creek. The project area is centred on the Ashburton Range which runs north-south along the eastern margin of Lake Woods, a large seasonal lake. The Stuart Highway passes through the centre of the area. Bedrock in the area is Middle Proterozoic Renner Group sediments, intruded by pre-Cambrian dolerite. Previous exploration within the district has focused on the potential for diamonds and base metals but has been limited due to poorly developed drainage and widespread alluvial and aeolian cover.

The area was identified as conceptual target area based on proprietary methods and modelling conducted by Paradigm Geoscience Pty Ltd. Exploration conducted during the reporting period involved the follow-up of earlier favourable results and consisted of:

- Collection of 12 mineralogical samples from stream sediment for diamond/indicator mineral analysis
- Collection of 28 samples from stream sediment, aeolian sand and rock for multi-element geochemical analysis.
- Reconnaissance geological mapping
- Additional data compilation and review of previous exploration
- A review of the size, colour and morphology of the microdiamonds recovered over the broader area.
- Interpretation of results and formulation of future work program
- Native title negotiations

Expenditure for the 12-month period to June 2005 was $38,101, against an expenditure covenant of $30,000.

2 Introduction

The Lake Woods area has been selected as a conceptual target area using confidential technology supplied by Paradigm Geoscience. The aim of the technology is to identify targets for mineral exploration with the same signatures as major mineral deposits. The method offers a means to identify important mineral resources without the need to acquire title to broad areas, with the resultant demanding access and land use challenges. Because of the restricted areas selected, more intensive exploration than would be normal in greenfields exploration can be focussed on the limited area by even junior mineral explorers such as the holders.

The Hubs have responded to the selection process in a similar fashion to major mineral deposits. It is to be expected that in most cases the target deposit does not outcrop, or it would already have been discovered, and it will be necessary to penetrate the overburden to make discoveries. The selection technique does not permit identification of target commodities, and these must be determined by consideration of regional metallogenic factors and field reconnaissance.

3 Location and Access

The Lake Woods project is located 700km south of Darwin and 200km north of Tennant Creek. The project area is centred on the Ashburton Range which runs north-south along the eastern margin of Lake Woods, a large seasonal lake. The Stuart Highway passes through the centre of the area and the recently completed North Australian Railway is located 40km to the west. The small town of Elliot lies immediately to the north and Renner Springs is located 40km to the south.

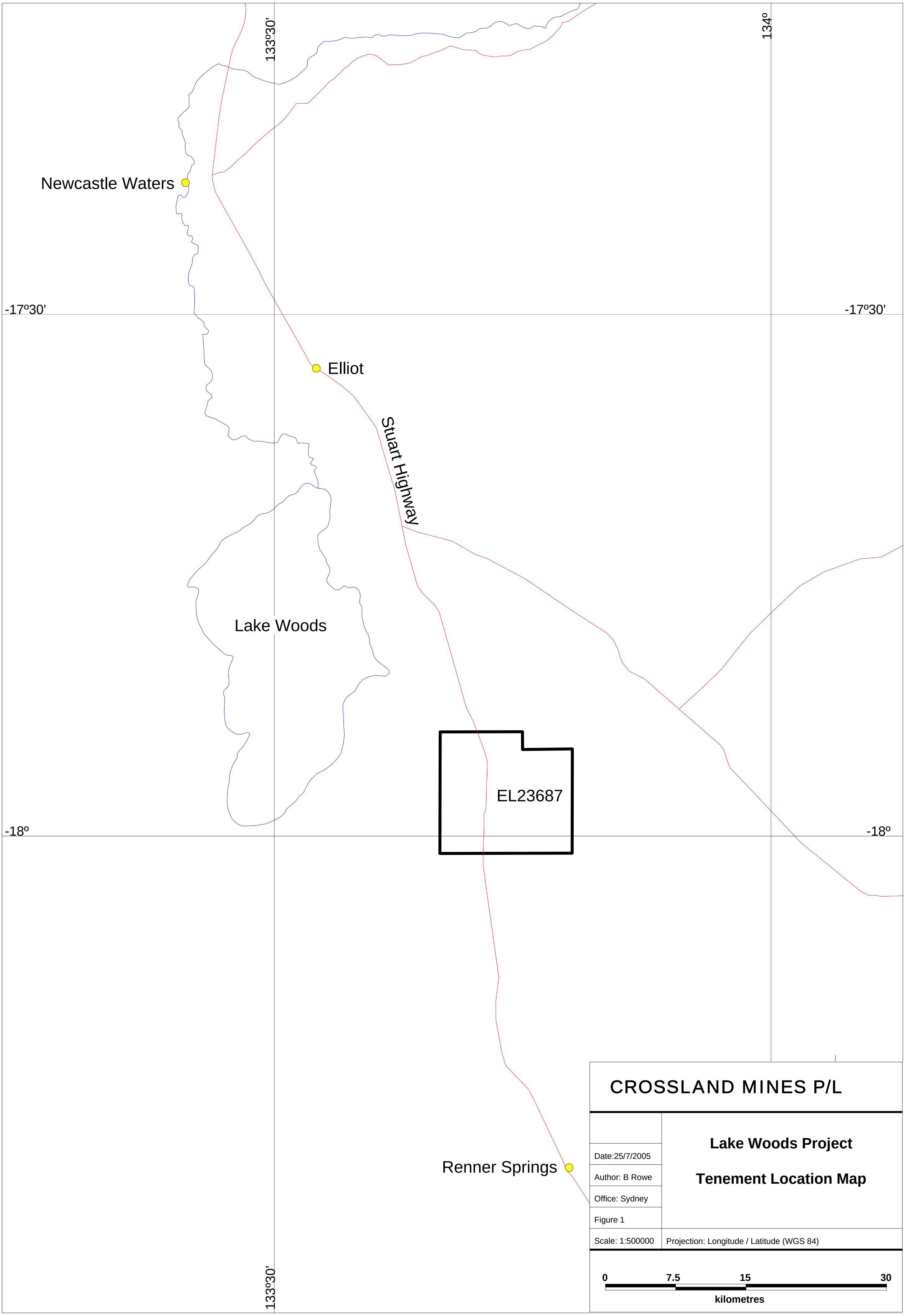
The western portion of the project area is dominated by sandstone ridges of the Ashburton Range, which slope off to the west towards Lake Woods. East of the Highway the land slopes off to the east and into the vast plains of the Barkly Tableland where most of the country is open but generally covered with low, thick scrub. Access to the area is good with a combination of station tracks, disused stretches of the Highway, and good off road conditions between the sandstone ridges.

The tenement lies on Tandyidgee and Powell Creek Stations owned by Consolidated Press Holdings Limited, and Helen Springs Station owned by Stanbroke Pastoral Company Pty Ltd. Two native title claims are present within the area covered by the EL:

- D6038/01 Powell Creek, lodged on 21/06/01, NNTT number DC01/37.
- D6036/01 Tandyidgee/ Powell/ Helen Springs, lodged on 21/06/01, NNTT number DC01/35.

4 Tenure

EL23687 was granted for a six-year term on 23 June 2003 (expiring 10 June 2009). The title covers an area of 64 sub-blocks (209.1km^2). The area included in the title extends between 133°40’E and 133°48’E, from 17°54’S to 18°02’S. The EL is held by ACN 099 478 074 Pty Ltd, a wholly owned subsidiary of Crossland Mines Pty Ltd.



CROSSLAND MINES P/L

Lake Woods Project

Tenement Location Map

Date:25/7/2005

Author: B Rowe

Office: Sydney

Figure 1

Scale: 1:500000

Projection: Longitude / Latitude (WGS 84)

5 Regional Geology

The Target Area is situated within the Ashburton Province (1400-1700Ma), a sequence of unmetamorphosed and weakly deformed predominantly shallow marine sediments. The Ashburton Province overlies the Warramunga Province which is deformed by the Tennant Orogeny (1850Ma) and intruded by granites of the same age. The Ashburton Province is overlain by Palaeozoic sediments of the Georgina and Wiso basins to the east and west respectively.

The oldest rocks that outcrop in the project area are Middle Proterozoic evaporitic sandstones and conglomerates of the Renner Group. These form the ridges of the Ashburton Range. The sequence is intruded by pre-Cambrian dolerite, which may be more widespread than mapped in the area, because it is strongly weathered and recessive. Based on the magnetic patterns, both the Wiso and Georgina Basins are probably represented in the project area. Around the edges of these basins, phosphorites have been found in basal carbonate sequences. Sediments of the Ashburton Ranges have been correlated with those of the McArthur Basin which host the McArthur River base metals deposits. Based on recent mapping, the correlated units are lower in the sequence than those mapped in the project area. The Bootu Creek Manganese deposits are found in the Bootu Formation, somewhat deeper in the stratigraphic succession than is represented in the project area.

6 Previous Exploration

Previous exploration within the district has focused on the potential for diamonds and base metals but has been limited due to poorly developed drainage and widespread alluvial and aeolian cover.

Ashton Mining Ltd explored the area for diamonds between 1983 and 1991 under exploration licences 4337 and 4345. They collected 75 gravel and 30 loam samples covering most of the western half of the project area at a nominal density of one sample every 1-2km along drainage. The gravel samples consisted of 40kg of <4mm material. Many of the samples were collected from the area between the Ashburton Range and Lake Woods where the land is very flat and the creeks are choked with sand. The eastern half of the area was not sampled because of the lack of drainage. Five of the Ashton samples contained single microdiamonds. Two of the microdiamonds were described as clear, colourless stones while the remainder comprised small irregular cubes of pink-brown and grey colour. Whilst Ashton considered the high concentration of diamonds in this area as interesting they decided to focus on other areas in the Northern Territory and relinquished the licences.

In the early 1990's CRA Exploration held tenure over an area totalling 14,800km² and covering the eastern half of the Lake Woods project area. CRA considered the area prospective for diamonds and flew a detailed magnetic-radiometric survey over an area of 10,900km². The survey was flown in 1992 at flight line spacing of 300m and a terrain clearance of 60m. Of the 53 targets CRA selected for follow-up only one falls within Lake Woods project area and it was explained as a cultural feature. No further work was undertaken by CRA within the project area.

In 1999 the NTGS flew the South Lake Woods Survey at a line spacing of 400m and a flying height of 60m. This survey covers most of the project area and when combined with the earlier CRAE survey, full coverage is achieved.

Exploration for base metals was undertaken by Aberlour in 1971-1972 and by Lone Pine Gold/NT Gold Mining/Rosequartz Mining during 1988-1990. The later group undertook geological mapping and limited geochemical sampling but failed to identify any base metal anomalism. Their activities were limited to the Ashburton Range where rock exposure is good. Overall, there has been very limited exploration for commodities other than diamond in the area.

7 Mineral Exploration Activities Completed

7.1 Geochemical Activities

The company collected a total of 28 geochemical samples during the reporting period that comprised 16 stream sediment, 3 pisolite, 7 aeolian sand/soil and 2 rock chip samples. Stream sediment samples consisted of approximately 200g of <180 micron (-80#) material collected from active sites in the stream bed where elements transported in solution could be adsorbed onto fine particles or precipitates. It was hoped that further prospecting would reveal more extensive distribution of the ferruginous shale which returned anomalous geochemical results in 2003. It eventuated that there was no more.suboutcrop of this material anf the previous occurrence seemed to be a window protruding from beneath (?unconformably) overlying sandstone, or aeolian sand. To attempt to map distribution of the anomalous shale, pisolite samples were collected from the >1.2mm fraction of the Aeolian sand, while soil/sand samples were collected from the <1.2mm fraction. It is intended to study the selective leach properties of these fractions in the future.

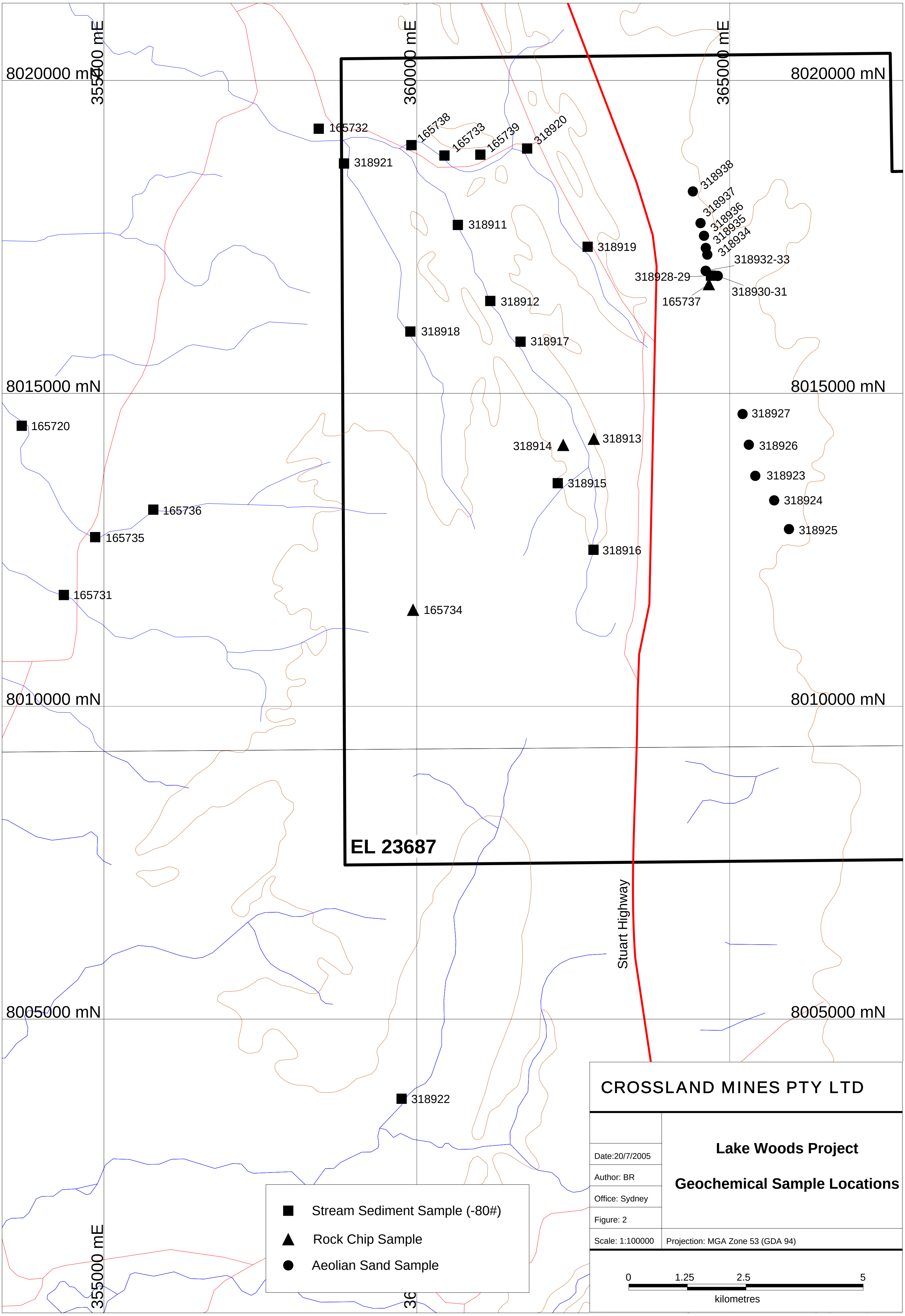
All geochemical samples were prepared by North Australian Laboratories of Pine Creek, and fire assay prills prepared for analysis by ICPMS for Au, Pd, and Pt. The prills and pulps were forwarded to NT Environmental Laboratories and analysed for a suite of 61 other elements by Inductively Coupled Plasma (ICP-MS/ OES). Geochemical data is included in Appendix 1 and sample locations are shown in Figure 2.

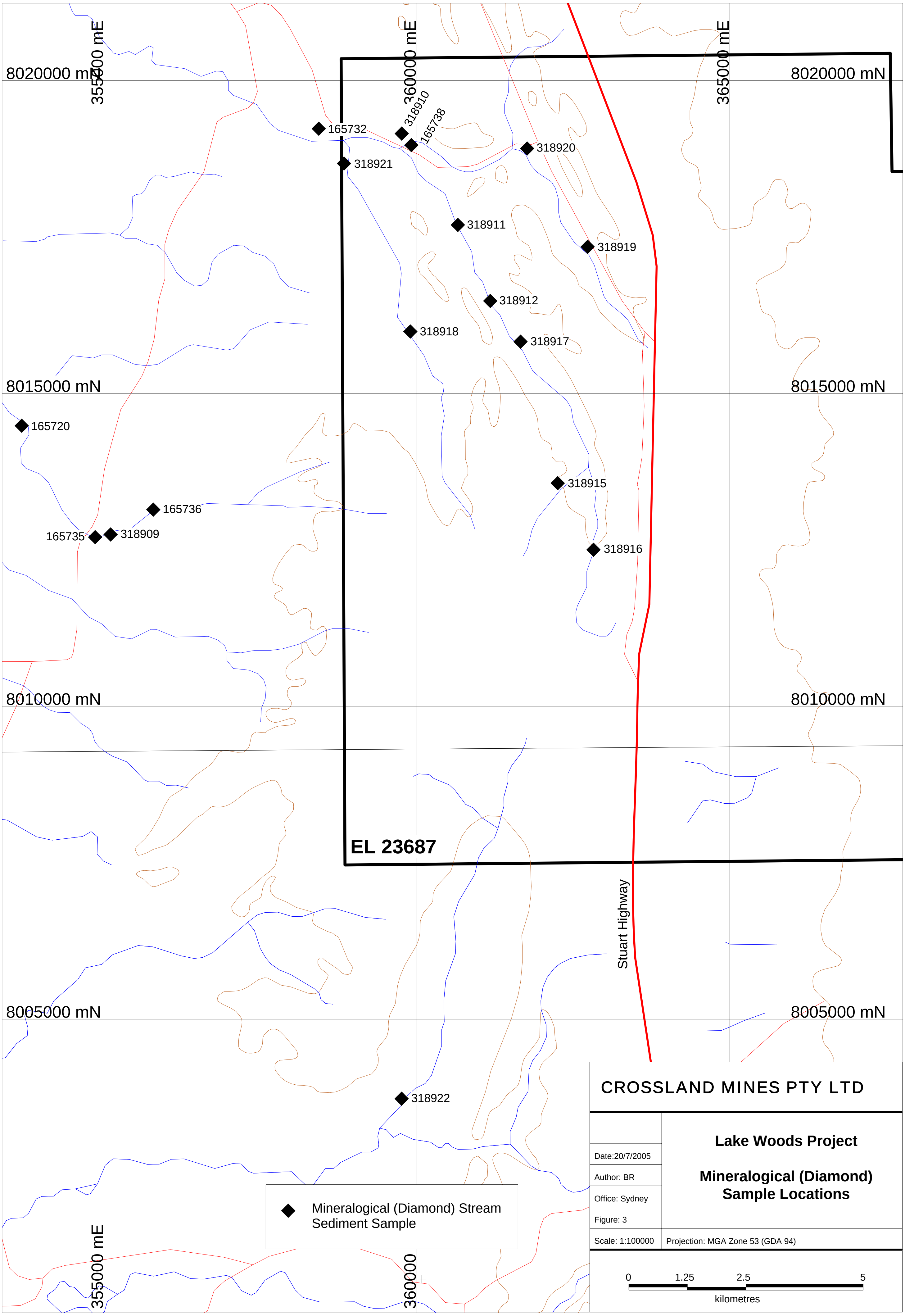
Results from the geochemical sampling generally did not enhance earlier encouraging results.

7.2 Mineralogical Activities (Diamonds)

The company collected an additional 12 follow-up stream sediment mineralogical samples for diamonds and indicator minerals. Samples consisted of 15-20kg sample of -1.2mm screened stream sediment collected from carefully selected heavy mineral trap sites. Samples were submitted to Global Diamond Exploration Services Pty Ltd of Wembley, WA (GDES) for processing and observation. Samples were sent by GDES to a commercial laboratory for processing to produce a heavy mineral concentrate. Sample concentrates were then returned to GDES and checked for indicator minerals, diamonds and microdiamonds.

All samples were pre-concentrated by Wilfley Table, dried and then sieved using a 0.3mm screen. The +0.3mm fraction was analysed for diamond and kimberlitic indicator minerals and the -0.3mm fraction for microdiamond only. For the +0.3mm fraction samples, a heavy mineral concentrate was produced using the Tetrabromoethane (TBE) (density 2.95). Samples containing abundant limonite were treated by acid leaching to remove the limonite prior to TBE. Several samples with large TBE concentrates were retreated using Methylene Iodide (density 3.3) to reduce the size of the concentrate for observing. Highly magnetic minerals were removed from the final concentrate using a hand magnet. Samples were then visually checked for diamond and indicator minerals.


8020000 mN
8015000 mN
8010000 mN
8005000 mN
355000 mE
360000 mE
365000 mE
EL 23687
Stuart Highway
165732
318921
165738
165733
165739
318920
318911
318919
318912
318918
318917
318938
318937
318936
318935
318934
318932-33
318928-29
318930-31
165737
165720
165736
165735
165731
165734
318914
318913
318915
318916
318927
318926
318923
318924
318925
318922
Stream Sediment Sample (-80#)
Rock Chip Sample
Aeolian Sand Sample
CROSSLAND MINES PTY LTD
Lake Woods Project
Geochemical Sample Locations
Date:20/7/2005
Author: BR
Office: Sydney
Figure: 2
Scale: 1:100000
Projection: MGA Zone 53 (GDA 94)
0
1.25
2.5
5
kilometres



8020000 mN
8015000 mN
8010000 mN
8005000 mN
355000 mE
360000 mE
365000 mE
165732
318910
165738
318920
318921
318911
318919
318912
318918
318917
165720
318915
165736
165735
318909
318916
EL 23687
Stuart Highway
318922
Mineralogical (Diamond) Stream Sediment Sample
CROSSLAND MINES PTY LTD
Lake Woods Project
Mineralogical (Diamond) Sample Locations
Date:20/7/2005
Author: BR
Office: Sydney
Figure: 3
Scale: 1:100000
Projection: MGA Zone 53 (GDA 94)
0
1.25
2.5
5
kilometres

The -0.3mm fraction was passed through a high intensity magnetic roll to remove magnetic minerals. A heavy mineral concentrate was then produced from the non-magnetic fraction using TBE. Sodium peroxide was then added to the TBE concentrate and the sample heated to 400-500 degrees Celsius. This final process referred to as 'total digestion' destroys most minerals with the exception of diamond and a few other very resistant minerals such as zircon and rutile.

Samples were then visually checked for microdiamond. Mineralogical sample data is included in Appendix 2 and sample locations are shown in Figure 3. A sample processing flow sheet is included in Appendix 3.

Four of the twelve samples collected each contained a single microdiamond. In total, seven of the seventeen samples collected by Crossland Mines have contained a single microdiamond and two of these are clear/translucent, unresorbed octahedra. The microdiamond distribution suggests a potential source in the central-eastern part of the licence area. Two other samples each contained a single chromite of uncertain origin. The chromite grains are of interest but may be derived from a source other than kimberlite.

7.3 Geological Activities

Of particular interest to exploration for economic mineral deposits is the recognition of an occurrence of outcrops of gypsum in the core of an anticline in the central part of the EL. Coarse (up to 30mm) gypsum twins are contained in a matrix of white clays (Fig. 4). It is likely that the gypsum is an evaporate deposit of Proterozoic age rather than a salt accumulation related to the present weathering cycle.

While the gypsum may not represent a deposit of economic importance in itself, it might well provide a source of sulphur for other deposits such as those described for Pb-Zn deposits (Tompkins *et al., 1994)*, and Nickel platinoid deposits (Naldrett, 2004). In this regard the presence of intrusive dolerite sill in the EL is worth some further attention. There is evidence of some exchange of sulphur from the evaporite with surrounding sediments, as indicated in the evidence for a. mobility, and b. ferruginisation which is observed in the sandstones overlying the evaporite beds (Fig. 5).

Figure 4: Exposure of gypsiferous sediment (light coloured areas) in a washout in a valley within the Ashburton Ranges. The lower photo shows the texture of the exposure including visible gypsum crystals

Figure5: Effects of gypsiferous sediments on those overlying it. The upper photo shows the contorted contact between gypsiferous sediment (pale) and overlying sandstone. Note heavy ferruginisation which is caused by limonite after pyrite. The lower photo is taken from near the upper photo, and shows that similar hills are present in the distance in a similar stratigraphic setting in the core of an anticline in the Ashburton Ranges.

7.4 Review of Microdiamonds

Microdiamonds are known to occur in stream sediment and soil over broad areas of Northern Territory and adjacent parts of Western Australia and Queensland. Work conducted by Ashton Mining during the 1980's found that a high proportion of the microdiamonds were opaque cubes and irregular diamonds of poor quality (Lee et. al. 1994). Ashton identified at least one source for the diamonds at Coanjula in the Barkly Tablelands of the Northern Territory, approximately 200km south of Borroloola. Upon further investigation Ashton found the Coanjula microdiamonds were unusual and consisted of:

- 71% by opaque cubes, or aggregates and irregular pieces of opaque fibrous diamond, predominantly unresorbed with sharp edges, pink-brown colour (after heating);
- 4% unresorbed cuboid or cubo-octahedral forms, colourless and yellow;
- 24% transparent, resorbed, octahedral growth forms, predominantly colourless but also yellow, brown and pink.

Lee et. al. (1994) noted that the opaque fibrous cubes were rarely resorbed, whereas the majority of single crystalline diamonds were resorbed. Sharp edged, unresorbed octahedron and dodecahedrons and strongly resorbed translucent cubes are rare in the Coanjula population.

In order to characterise the microdiamonds found around the greater Lake Woods area, the company compiled previous diamond exploration data over an area of 1000km^2 and then reviewed, classified and tabulated descriptions of all microdiamonds found in the area. The results of this work are summarized in Figure 6. Overall, the area is considered anomalous for microdiamonds, with a total of twelve stones recovered to date. Two separate clusters are evident and both contain a mixed population of rare and common forms of microdiamond.

Four of the twelve microdiamonds are unresorbed octahedral forms (or parts thereof) while the remainder of the diamonds are irregular to cube shape, pink-brown to cream in colour. The common type of microdiamond are of interest, but because of their prevalence over larger areas of the NT, are not, on their own, consider indicative of a local source. However, the fact that they occur in anomalous numbers together with rare-type microdiamonds provides much greater evidence for a local source.

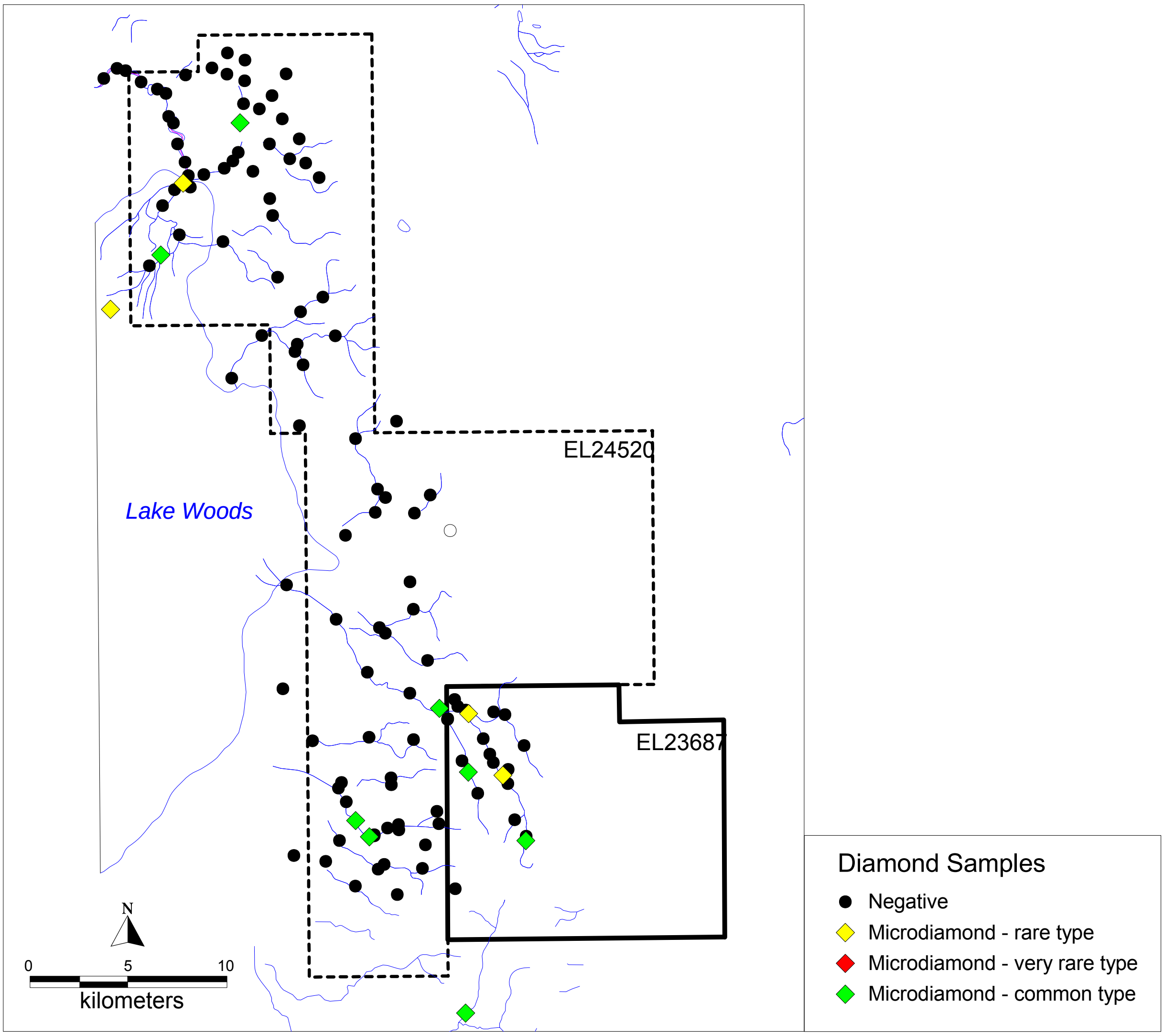


Figure 6. Microdiamond distribution in the Lake Woods area

8 Conclusions

The abundance of microdiamonds together with the high proportion of rare microdiamonds underpins the exploration potential of the area. Follow-up of these occurrences by traditional gravel and loam sampling methods has been hampered by poorly defined, low-energy, sand choked drainages and widespread transported cover. Successful follow-up of the diamonds will require the application of geophysical techniques such as airborne magnetic, electromagnetic and gravity surveys. This data will allow for the identification of discrete targets within the zones of interest defined by the anomalous microdiamonds and will aid in the delineation of old, buried creek beds (palaeo-channels). Sampling of palaeo-channels by auger/drilling techniques may provide more effective sample coverage over flat areas of poor drainage.

The exploration potential of the area has been further highlighted by a recent kimberlite discovery by Gravity Diamonds Ltd in the Abner Range, NT. The region was identified as a zone of great interest many years earlier on the basis of the broad and diffuse distribution of kimberlitic chromite. Whilst the prospectivity of the area was well demonstrated by the chromite, exploration techniques employed at the time by companies including Stockdale Prospecting (De Beers), CRA Exploration and Ashton Mining failed to lead to a kimberlite discovery. It was only through the application of a new technique, in this case airborne gravity, that a source for the chromite has been discovered.

9 Expenditure Statement

Expenditure Category	$
Geological Services	18,525
Geochemical Analysis	1,441
Mineralogical Analysis	6,000
Travel & Accommodation	6791
Consumables	519
Tenure	0
Native Title	
Administration	4,825
TOTAL	38,101

10 References

CR1985-0015: Annual Report ADE Joint Venture EL4337
CR1986-0087: Final Report ADE Joint Venture EL4337
CR1986-0092: Final Report ADE Joint Venture EL4345
CR1988-0229: Final Report DF Ward EL4945
CR1989-0412 Annual and Final Report A. Romanoff Lone Pine Gold NL EL5770
CR1990-0131 Annual and Final Report A. Romanoff Rose Quartz Mining EL6333
CR1993-0155 Annual and Final Report H.J. Roiko, CRAE EL 7591
Lee DC, Boyd SR, Griffin BJ, Griffin BW and Reddicliff (1994). Coanjula Diamonds, Northern Territory, Australia. In Proceedings of the Fifth International Kimberlite Conference, Araxa, June 1991. Edited by HOA Meyer and OH Leonardos. Volume 2. CPRM Special Publication 1B Jan/94.

Naldrett, A.J., (2004): Magmatic Sulfide Deposits: Geology, Geochemistry, and Exploration. Springer. ISBN 3-540-22317-7. 727pages.

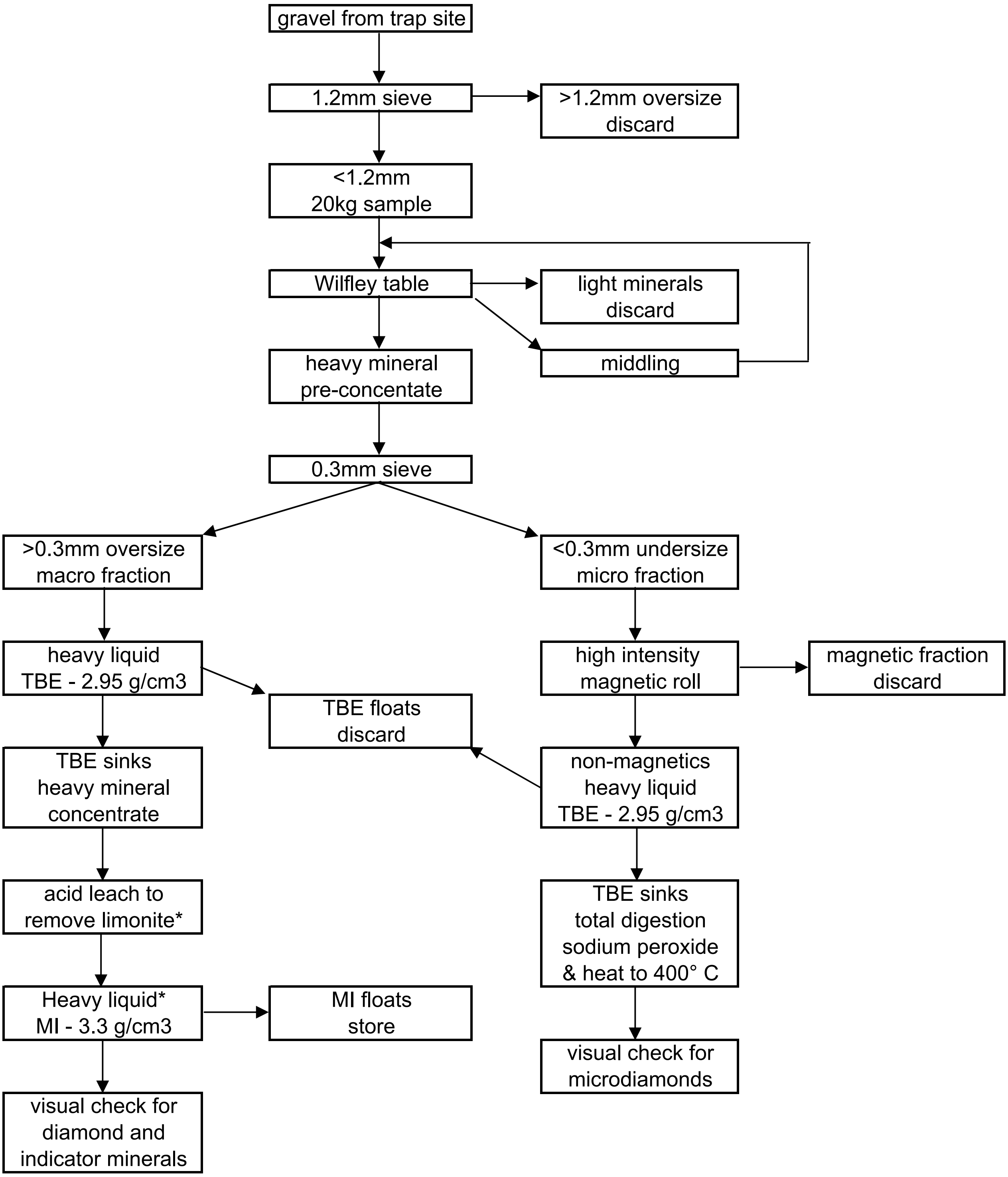
Tompkins, L.A., Rayner, M.J., and Groves, D.I., (1994): Evaporites: In situ sulfur source for rhythmically banded ore in the Cadjebut Mississippi Valley- Type Zn-Pb deposit, Western Australia. Econoomic Geology, V. 89 pp. 467- 492.

SampleID	North	East	Grid	Sample_type	Date	Ag	Al	As	Au	AuR	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er
					Method	**G400M**	**G400I**	**G400M**	**FAPMM**	**FAPMM**	**G400M**	**G400M**	**G400M**	**G400M**	**G400I**	**G400M**	**G400M**	**G400M**	**G400I**	**G400M**	**G400M**	**G400M**	**G400M**
					Units	**ppm**	**ppm**	**ppm**	**ppb**	**ppb**	**ppb**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
					Detection	**0.05**	**50**	**0.5**	**1**	**1**	**1**	**0.05**	**0.1**	**0.02**	**10**	**0.05**	**0.01**	**0.05**	**2**	**0.01**	**0.2**	**0.01**	**0.01**
165720	8014481	353686	MGA Z53	stream sediment	20/10/2003	0.1	43500	3.5	-1		1	155	1	0.1	2460	-0.05	35.2	8.6	50	2.25	27.2	2.72	1.6
165731	8011778	354360	MGA Z53	stream sediment	20/10/2003	-0.05	19200	2.5	-1	-1	-1	49.5	0.4	0.04	360	-0.05	11.8	2.9	30	0.62	10.4	0.86	0.56
165732	8019229	358433	MGA Z53	stream sediment	20/10/2003	-0.05	12800	2.5	-1		-1	90.5	0.4	-0.02	3500	-0.05	13.6	6.45	40	0.66	34.6	1.2	0.71
165733	8018799	360442	MGA Z53	stream sediment	20/10/2003	-0.05	28700	22.5	-1		1	106	1.1	0.36	250	-0.05	24.1	4.35	100	1.45	23.8	1.74	1.01
165734	8011540	359941	MGA Z53	rock chip	21/10/2003	0.1	76900	9	-1	-1	2	238	2.4	0.04	530	-0.05	105	8.05	50	1.21	26.2	2.53	1.55
165735	8012702	354860	MGA Z53	stream sediment	21/10/2003	-0.05	12700	1.5	-1		2	55.5	0.3	-0.02	540	-0.05	10.6	2.85	40	0.57	18.4	0.8	0.5
165736	8013141	355789	MGA Z53	stream sediment	21/10/2003	-0.05	11400	1.5	-1		1	52	0.3	-0.02	610	-0.05	11.7	3.85	60	0.48	50	0.65	0.39
165737	8016850	364717	MGA Z53	rock chip	21/10/2003	0.1	46400	145	-1		2	275	1.5	0.42	370	-0.05	41.4	1.95	120	1.49	13.8	3.39	1.91
165738	8018967	359913	MGA Z53	stream sediment	21/10/2003	-0.05	12000	2	-1	-1	1	71.5	0.3	0.02	520	-0.05	12.3	3.3	30	0.66	39	0.96	0.57
165739	8018814	361015	MGA Z53	stream sediment	21/10/2003	-0.05	11800	3	-1		2	68.5	0.3	-0.02	570	-0.05	10.6	2.55	40	0.72	16.4	0.77	0.45
318911	8017691	360657	MGA Z53	stream sediment	1/08/2004	-0.05	10900	1			-1	64.5	0.3	0.1	290	-0.05	11.2	1.2	30	0.51	11.4	0.88	0.52
318912	8016477	361174	MGA Z53	stream sediment	1/08/2004	0.05	10100	0.5			-1	67.5	0.2	0.12	380	-0.05	10.2	0.95	35	0.49	8.2	0.75	0.47
318913	8014274	362828	MGA Z53	rock chip	1/08/2004	0.1	47500	16			-1	216	0.9	0.6	650	-0.05	67.1	1.75	120	1.58	13	2.59	1.66
318914	8014176	362340	MGA Z53	rock chip	1/08/2004	0.05	45700	1.5			-1	297	0.8	0.4	120400	-0.05	46.3	2.8	45	2.94	16.4	2.6	1.72
318915	8013564	362253	MGA Z53	stream sediment	1/08/2004	0.05	18000	1.5			-1	104	0.3	0.18	810	-0.05	18.3	1.65	25	0.84	9.4	1.79	1.09
318916	8012500	362825	MGA Z53	stream sediment	2/08/2004	0.05	24800	1			-1	108	0.4	0.16	590	-0.05	24	1.35	25	1.09	10.4	1.39	0.85
318917	8015825	361658	MGA Z53	stream sediment	2/08/2004	-0.05	13000	1			-1	77	0.3	0.12	520	-0.05	13.1	1.1	20	0.64	8.2	0.93	0.59
318918	8015987	359897	MGA Z53	stream sediment	2/08/2004	-0.05	21100	-0.5			-1	92.5	0.4	0.08	5090	-0.05	15.9	6.1	25	0.88	11.4	1.33	0.8
318919	8017341	362731	MGA Z53	stream sediment	2/08/2004	-0.05	18800	1			-1	89	0.4	0.16	590	-0.05	18.9	1.7	35	1.27	15	1.05	0.63
318920	8018913	361763	MGA Z53	stream sediment	3/08/2004	-0.05	11500	-0.5			-1	63.5	0.3	0.1	490	-0.05	10.1	1	30	0.82	6.2	0.62	0.39
318921	8018673	358836	MGA Z53	stream sediment	3/08/2004	-0.05	11500	-0.5			-1	80.5	0.3	0.24	4470	-0.05	11	3.8	10	0.51	7.2	0.99	0.59
318922	8003727	359758	MGA Z53	stream sediment	3/08/2004	-0.05	14100	1			-1	53.5	0.3	0.1	470	-0.05	11.6	1.85	10	0.76	9.2	0.88	0.51
318923	8013682	365410	MGA Z53	stream sediment	5/08/2004	-0.05	9750	0.5			2	38	0.2	0.06	290	-0.05	8.04	1	20	0.54	5.2	0.53	0.33
318924	8013289	365712	MGA Z53	stream sediment	5/08/2004	-0.05	14600	1			2	41.5	0.2	0.1	260	-0.05	10.4	1.8	20	0.69	5.6	0.75	0.47
318925	8012831	365948	MGA Z53	stream sediment	5/08/2004	0.05	12600	0.5			-1	48.5	0.2	0.08	370	-0.05	9.76	1.85	30	0.61	7	0.74	0.45
318926	8014179	365306	MGA Z53	stream sediment	5/08/2004	-0.05	17500	1			2	56.5	0.3	0.1	480	-0.05	12.3	2.45	35	0.94	8.2	0.97	0.55
318927	8014670	365207	MGA Z53	stream sediment	5/08/2004	-0.05	20000	1			1	50.5	0.3	0.1	380	-0.05	15	2.45	30	0.96	7.4	1.25	0.71
318928	8016879	364701	MGA Z53	stream sediment	5/08/2004	0.05	18400	1			1	53	0.3	0.1	340	-0.05	12.4	2.4	25	0.88	5.6	1.07	0.63
318929	8016879	364701	MGA Z53	pisolite	5/08/2004	0.1	59100	123			2	65.5	0.9	0.86	960	-0.05	30.6	2.65	150	1.15	17.8	1.89	1.2
318930	8016876	364810	MGA Z53	sand	5/08/2004	-0.05	17700	1			2	46.5	0.3	0.1	170	-0.05	12.5	1.6	30	0.91	5.4	0.91	0.58
318931	8016876	364810	MGA Z53	pisolite	5/08/2004	-0.05	52600	22			1	111	0.9	0.58	430	-0.05	44	2.45	210	1.96	17	2.4	1.4
318932	8016958	364618	MGA Z53	sand	5/08/2004	-0.05	19200	-0.5			2	41	0.3	0.08	310	-0.05	11.8	2	25	0.88	5.8	0.89	0.54
318933	8016958	364618	MGA Z53	pisolite	5/08/2004	-0.05	35200	14			-1	53	0.6	0.34	480	-0.05	18	3.6	205	0.98	22.2	1.11	0.72
318934	8017216	364642	MGA Z53	sand	5/08/2004	-0.05	13600	0.5			-1	35	0.2	0.08	170	-0.05	7.81	1.6	20	0.66	11.6	0.57	0.34
318935	8017323	364619	MGA Z53	sand	5/08/2004	-0.05	10900	0.5			2	50	0.2	0.06	490	-0.05	8.42	2.4	30	0.55	10.2	0.66	0.37
318936	8017518	364591	MGA Z53	sand	5/08/2004	-0.05	12900	0.5			1	37.5	0.2	0.08	230	-0.05	7.6	2	30	0.63	12.8	0.59	0.37
318937	8017720	364535	MGA Z53	sand	5/08/2004	-0.05	13500	1			-1	43.5	0.2	0.08	180	-0.05	9.09	1.9	30	0.66	10.6	0.71	0.42
318938	8018226	364412	MGA Z53	sand	5/08/2004	-0.05	10100	-0.5			-1	40.5	0.2	0.06	320	-0.05	6.66	1.5	30	0.49	7.8	0.51	0.31

SampleID	Eu	Fe	Ga	Gd	Ge	Hf	Ho	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt
	G400M	G400I	G400M	G400M	G400M	G400M	G400M	G400M	G400I	G400M	G400M	G400M	G400I	G400I	G400M	G400I	G400M	G400M	G400M	G400I	G400M	FAPMM	G400M	FAPMM
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppb
	0.01	**20**	**0.05**	**0.01**	**0.1**	**0.01**	**0.01**	**0.01**	**50**	**0.01**	**0.1**	**0.01**	**10**	**1**	**0.05**	**50**	**0.05**	**0.02**	**0.2**	**20**	**0.2**	**1**	**0.01**	**1**
165720	0.77	29200	10.7	2.96	-0.1	2.41	0.57	0.03	4050	17.4	18.5	0.23	3120	293	1.7	250	5.95	18	17.6	140	11.8	-1	4.82	1
165731	0.2	20100	4.17	0.83	-0.1	1.26	0.18	0.01	950	6.4	8.3	0.07	600	95	1.15	-50	2.65	5.6	25.4	80	5.4	-1	1.6	-1
165732	0.36	31700	4.13	1.29	-0.1	1.43	0.24	0.01	1600	6.78	5.8	0.09	1910	327	2.65	800	3.2	7.2	13.2	60	5.8	-1	1.92	-1
165733	0.4	143900	10.8	1.68	-0.1	1.71	0.34	0.06	3500	14.4	8.5	0.14	750	136	2.75	150	3.6	12	45.4	220	20.8	-1	3.48	-1
165734	0.86	322500	23.5	2.63	0.3	3.04	0.53	0.07	1100	62.6	11.7	0.27	880	482	2.6	-50	7.55	28	29	700	17.8	-1	10.4	1
165735	0.19	18100	2.93	0.81	-0.1	1.27	0.17	-0.01	1050	5.79	6.1	0.07	810	155	2.15	100	2.1	5.05	56.8	80	4.6	-1	1.45	-1
165736	0.15	29800	2.95	0.64	-0.1	1.12	0.13	-0.01	650	6.92	6.8	0.05	650	207	4.4	100	1.9	4.6	17.8	60	4.2	-1	1.45	-1
165737	0.91	449900	13.3	3.6	0.6	3.31	0.69	0.11	5100	21.6	4.6	0.31	520	73.5	1.5	200	6.35	25	17.8	180	24.4	2	6.82	1
165738	0.21	23000	3.01	0.99	-0.1	1.25	0.2	-0.01	1700	6.19	5.2	0.07	580	169	3.3	100	2.45	6.25	13.2	60	5	-1	1.69	-1
165739	0.17	20300	2.9	0.77	-0.1	1.11	0.16	-0.01	1550	5.57	5.6	0.06	940	127	1.95	150	2.2	5.15	50	60	6.8	-1	1.44	-1
318911	0.18	8940	2.38	0.87	-0.1	0.67	0.17	0.01	1200	5.53	5.1	0.08	510	39.5	2.3	100	1.2	4.85	3	40	3.8	-1	1.27	-1
318912	0.16	7920	2.17	0.79	-0.1	0.5	0.15	0.01	1400	5.16	4.2	0.07	460	32.5	2.25	100	1.15	4.45	2.4	40	3.4	-1	1.16	-1
318913	0.84	236600	16.7	3.36	2.6	3.56	0.51	0.09	5850	33.9	8.2	0.28	720	37.5	1.05	350	9.3	29.5	7	560	13.4	2	7.99	1
318914	0.62	13600	9.69	2.7	0.3	2.33	0.53	0.04	9650	22.7	11.6	0.28	6300	60.5	1.2	550	5.45	19.5	10.2	100	11	1	5.27	-1
318915	0.34	12600	3.6	1.71	-0.1	1.7	0.36	0.02	2600	9.14	6.1	0.17	660	52.5	0.8	150	1.35	7.85	4	80	5.4	-1	2.07	-1
318916	0.35	13300	5.11	1.6	-0.1	1.24	0.26	0.02	3600	11.8	6.7	0.13	910	35	1.85	200	2.5	10	4	120	6	-1	2.7	-1
318917	0.21	9040	2.76	0.97	-0.1	0.77	0.18	0.01	2000	6.51	4.9	0.09	610	30.5	1.7	100	1.4	5.65	2.6	40	3.8	1	1.49	-1
318918	0.38	25400	5.19	1.47	-0.1	1.13	0.27	0.02	2200	7.57	7.2	0.11	2750	266	0.25	1100	0.5	7.3	6.8	40	5	1	1.85	-1
318919	0.27	11600	4.35	1.18	-0.1	0.78	0.2	0.02	2650	9.64	6.8	0.08	850	47	1.9	150	1.8	7.65	4.4	80	5	-1	2.1	-1
318920	0.15	6860	2.77	0.68	-0.1	0.5	0.12	0.01	1800	5.58	5.4	0.06	730	29.5	1.95	100	1.25	4.05	2.8	40	3.2	-1	1.11	-1
318921	0.28	14100	2.94	1.07	-0.1	0.99	0.19	0.02	1500	5.51	5.1	0.09	1850	197	0.1	1000	0.55	5.35	3.6	-20	4.2	-1	1.33	-1
318922	0.21	7780	3.15	0.91	0.1	1.15	0.18	0.02	1500	5.81	5.9	0.09	800	51.5	0.35	100	1.45	5.05	3.8	40	5	-1	1.32	-1
318923	0.13	6000	2.16	0.55	-0.1	0.73	0.1	0.01	1000	4.29	3.6	0.05	290	31.5	1.75	-50	1.15	3.5	2.8	40	3.4	-1	0.93	-1
318924	0.18	8860	3.25	0.82	-0.1	1.09	0.14	0.01	1100	5.31	5.2	0.07	350	59.5	2	50	1.55	4.55	4.4	40	3.8	-1	1.18	-1
318925	0.19	8300	2.73	0.87	-0.1	0.85	0.14	0.01	1150	5.34	5.6	0.06	410	67.5	2.25	50	1.7	4.8	4.2	40	3.4	-1	1.26	-1
318926	0.24	10500	3.86	1.12	-0.1	1.09	0.19	0.02	1500	6.46	6.9	0.08	540	83.5	2.25	100	2.25	6.1	5.2	60	4.4	2	1.53	-1
318927	0.32	10500	4.12	1.43	-0.1	1	0.24	0.02	1550	8.33	6.9	0.11	490	77	1.6	100	1.8	8.05	5.2	40	4.4	-1	2.05	-1
318928	0.25	9460	4.02	1.08	-0.1	0.85	0.2	0.02	1550	7.06	7.1	0.09	440	124	1.15	100	1.6	6.25	4.6	40	4.2	-1	1.6	-1
318929	0.47	288900	25.9	1.96	2.2	4.71	0.39	0.28	3350	16.9	9.4	0.2	440	129	2.15	100	8.7	13.5	13.4	300	30.8	-1	3.71	-1
318930	0.21	10300	3.89	0.98	-0.1	1.31	0.18	0.01	1450	6.44	5.8	0.08	390	51	2.25	100	1.7	5.6	4.4	40	3.8	-1	1.46	-1
318931	0.66	212800	16.9	2.85	1.9	3.29	0.46	0.08	5750	24.4	6	0.23	670	102	2.55	250	6.8	19.5	16.4	300	25.4	1	5.28	-1
318932	0.23	10200	3.88	0.99	-0.1	0.97	0.17	0.02	1350	6.03	6.2	0.08	430	63.5	1.1	50	1.1	5.6	5	40	3.6	-1	1.44	-1
318933	0.25	94800	12.1	1.16	0.5	2.57	0.22	0.08	2450	10.3	5.9	0.12	480	164	4.2	50	3.55	7.7	29.6	140	17.6	2	2.09	-1
318934	0.13	8460	3.06	0.57	-0.1	0.81	0.11	0.01	850	4.04	5.1	0.05	300	52.5	1.4	-50	1.25	3.35	3.8	40	3.2	-1	0.88	-1
318935	0.16	7360	2.49	0.67	-0.1	0.77	0.12	0.01	900	4.4	4.5	0.05	320	66	2	50	1.5	3.9	3.6	40	3.2	-1	1.01	-1
318936	0.13	8180	2.92	0.59	-0.1	0.89	0.11	0.01	850	4.03	4.7	0.05	330	52.5	1.5	-50	1.25	3.3	3.8	40	3	-1	0.88	-1
318937	0.16	8640	2.95	0.77	-0.1	0.99	0.14	0.01	1050	4.73	4.7	0.07	340	59	2.2	50	1.85	4.2	4	40	3.4	-1	1.09	-1
318938	0.13	6800	2.21	0.55	-0.1	0.42	0.1	0.01	800	3.63	4.2	0.05	310	55	1.9	-50	1.15	3.1	3.2	40	2.8	-1	0.82	-1

SampleID	Rb	Re	Ru	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	G400M	G400M	G400M	G400I	G400M	G400M	G400M	G400M	G400M	G400M	G400M	G400M	G400M	G400M	G400I	G400M	G400M	G400M	G400I	G400M	G400M	G400M	G400M	G400M
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	**0.05**	**0.05**	**20**	**0.05**	**1**	**2**	**0.01**	**0.2**	**0.05**	**0.02**	**0.01**	**0.1**	**0.01**	**10**	**0.01**	**0.01**	**0.01**	**2**	**0.05**	**0.01**	**0.01**	**0.5**	**0.1**
165720	42	-0.05	-0.05	80	0.1	7	-2	3.47	1.4	44.5	0.50	0.54	-0.1	6.48	2880	0.23	0.24	0.9	60	1.1	12.3		20	77.3
165731	9.84	-0.05	-0.05	40	-0.05	-1	-2	1	0.8	15	0.16	0.16	-0.1	2.73	1690	0.06	0.08	0.46	50	1.55	3.74		9	38.3
165732	12.6	-0.05	-0.05	80	-0.05	1	-2	1.47	1	31.5	0.10	0.23	-0.1	2.51	3840	0.07	0.11	0.45	70	0.3	5.51		16.5	44.3
165733	23.8	-0.05	-0.05	160	0.9	2	2	2.14	1.8	25	0.16	0.33	0.1	10.1	1220	0.13	0.16	1.45	270	2.9	7.1		14.5	60.2
165734	6.64	-0.05	-0.05	320	0.15	30	4	4.03	1.6	47.5	0.56	0.54	-0.1	5.12	9370	0.12	0.26	2.78	580	0.65	10.2		26	97.4
165735	9.45	-0.05	-0.05	60	-0.05	-1	-2	0.93	0.8	15.5	0.14	0.16	-0.1	2.27	1050	0.05	0.08	0.39	20	3.15	3.68		5.5	36.7
165736	7.31	-0.05	-0.05	80	0.05	-1	-2	0.78	1.2	16	0.12	0.13	-0.1	1.8	770	0.04	0.06	0.36	20	0.85	2.91		5	34.8
165737	30.8	-0.05	-0.05	560	0.65	4	8	4.73	2.2	69	0.54	0.66	0.4	22.8	2020	0.15	0.31	3.68	750	1.7	13.1		16	104
165738	12.6	-0.05	-0.05	140	-0.05	-1	-2	1.16	1.2	15.5	0.14	0.18	-0.1	2.57	880	0.06	0.09	0.47	20	0.8	4.39		6.5	37.9
165739	12.7	-0.05	-0.05	120	-0.05	-1	-2	0.93	1.6	18	0.14	0.14	-0.1	2.56	800	0.07	0.07	0.45	30	2.85	3.5		7	33.5
318911	9.14	-0.05		60	0.15	1.9	-2	0.97	0.4	11.5	0.06	0.14	-0.1	2.25	880	0.04	0.08	0.47	20	0.2	4.36		8	20.9
318912	8.99	-0.05		100	0.15	1.7	-2	0.87	0.4	10	0.06	0.12	-0.1	2.29	970	0.05	0.07	0.38	18	0.3	3.68		6	15.6
318913	33.1	-0.05		800	0.5	9	2	5.27	3	53.5	0.78	0.45	0.1	20.5	3370	0.16	0.27	1.77	190	2.1	11.7		16	123
318914	55.4	-0.05		97400	0.35	7	-2	3.56	1.8	856	0.42	0.42	-0.1	7.87	1860	0.25	0.26	1.4	42	2.15	13.6		14	75.1
318915	15.8	-0.05		160	0.2	3.4	-2	1.7	0.6	18	0.1	0.28	-0.1	4.1	1520	0.09	0.16	0.85	26	0.25	9.09		14.5	55.4
318916	20.9	-0.05		640	0.2	4.1	-2	1.93	1	24.5	0.1	0.22	-0.1	4.46	1550	0.09	0.11	0.72	34	0.5	6.68		12	43.3
318917	12.3	-0.05		120	0.15	2.2	-2	1.08	0.4	13	0.06	0.16	-0.1	2.73	1010	0.06	0.09	0.47	20	0.3	4.61		7.5	26.3
318918	15.7	-0.05		40	-0.05	5.7	-2	1.53	-0.2	26	0.04	0.21	-0.1	2.77	3410	0.08	0.11	0.4	48	-0.05	6.71		29	32.5
318919	20.4	-0.05		80	0.15	3.1	-2	1.39	0.8	19	0.08	0.17	-0.1	3.44	1180	0.1	0.09	0.51	26	0.3	4.98		12	25.4
318920	14.1	-0.05		40	0.15	1.8	-2	0.74	0.4	9.75	0.06	0.1	-0.1	2.28	710	0.06	0.06	0.38	16	0.25	3.17		7	15
318921	9.62	-0.05		60	-0.05	3.3	-2	1.11	-0.2	26	0.04	0.17	-0.1	2.01	2530	0.04	0.08	0.36	30	-0.05	4.84		14	31.4
318922	13.2	-0.05		40	0.15	2.5	-2	0.98	0.6	12	0.1	0.14	-0.1	2.65	1160	0.05	0.08	0.38	22	0.1	4.29		11	37.3
318923	8.59	-0.05		40	0.1	1.4	-2	0.67	0.4	9.1	0.04	0.09	-0.1	1.82	780	0.03	0.04	0.29	14	0.1	2.58		4.5	23.5
318924	12.3	-0.05		20	0.15	2.2	-2	0.9	0.6	10	0.08	0.12	-0.1	2.33	1150	0.06	0.07	0.38	22	0.1	3.73		6.5	33.4
318925	10.5	-0.05		20	0.15	2.1	-2	0.94	0.6	8.55	0.1	0.12	-0.1	2.21	1060	0.05	0.06	0.33	20	0.15	3.72		10	27.5
318926	14.6	-0.05		40	0.15	2.9	-2	1.21	0.8	11	0.16	0.16	-0.1	2.74	1320	0.08	0.09	0.43	24	0.3	4.81		14.5	34.5
318927	15.3	-0.05		40	0.15	2.9	-2	1.61	0.6	11	0.1	0.2	-0.1	2.85	1360	0.08	0.1	0.43	26	0.2	6.14		8	32.2
318928	13.6	-0.05		40	0.15	2.8	-2	1.25	0.6	12.5	0.1	0.17	-0.1	2.87	1430	0.08	0.09	0.48	24	0.15	5.24		8.5	31
318929	19.2	-0.05		780	1.9	14.6	6	2.46	3.2	56.5	0.7	0.31	0.8	29.4	2840	0.12	0.19	2.6	736	1.95	9.88		9.5	155
318930	13.6	-0.05		40	0.15	2.7	-2	1.13	0.8	10.5	0.16	0.15	-0.1	2.87	1400	0.07	0.08	0.46	22	0.1	4.46		6	41.4
318931	34.6	-0.05		240	0.85	9.1	2	3.65	2.4	52	0.54	0.4	0.3	14.9	2470	0.17	0.21	1.61	292	2.05	10.2		9.5	110
318932	13.9	-0.05		40	0.1	2.5	-2	1.12	0.6	9.6	0.08	0.15	-0.1	2.53	1290	0.07	0.08	0.39	22	0.15	4.65		7.5	33.3
318933	17.6	-0.05		100	1.1	5	-2	1.47	2.2	27	0.28	0.18	0.1	11.8	1520	0.09	0.1	0.92	224	2.55	5.67		7.5	85.5
318934	9.7	-0.05		20	0.15	1.9	-2	0.65	0.6	7.1	0.08	0.09	-0.1	2.07	990	0.05	0.05	0.31	22	0.1	2.81		5	25.3
318935	9.36	-0.05		40	0.1	1.8	-2	0.75	0.4	8.4	0.08	0.1	-0.1	1.98	910	0.04	0.05	0.3	18	0.1	3.18		9.5	23.2
318936	9.65	-0.05		40	0.1	1.9	-2	0.68	0.6	7.3	0.08	0.09	-0.1	2.09	1010	0.04	0.05	0.29	20	0.1	2.84		5	25.6
318937	10.8	-0.05		20	0.15	2.1	-2	0.85	0.6	7.65	0.1	0.11	-0.1	2.27	1130	0.05	0.06	0.33	22	0.2	3.52		5	31.3
318938	8.17	-0.05		40	0.1	1.5	-2	0.6	0.4	6.65	0.04	0.08	-0.1	1.73	790	0.04	0.05	0.25	16	0.05	2.53		5	15.4

SampleID	East	North	Grid	Sample Type	Date Collected	Weight	TBE Weight	Result	Microdiamond	Chromite Kimberlitic	Chromite Indeterminate	Chromite Common	Lab Description
165720	353686	8014481	MGA Z53	Gravel	20/10/2003	35.2	78.6	P			1		chromite subhedral, cokey pitted surface
165732	358433	8019229	MGA Z53	Gravel	20/10/2003	23	376	P	1				diamond 0.12mm cube, pale pink-brown, Type II
165735	354860	8012702	MGA Z53	Gravel	21/10/2003	19.9	28.6	P	1				diamond 0.15mm irregular, pale brown-pink, Type II
165736	355789	8013141	MGA Z53	Gravel	21/10/2003	20.6	61	N					
165738	359913	8018967	MGA Z53	Gravel	21/10/2003	19.4	277	P	1				diamond 0.4mm irreg, part octa, clear with radiation spots, Type I
318909	355107	8012744	MGA Z53	Gravel	31/07/2004		45	N					
318910	359760	8019151	MGA Z53	Gravel	1/08/2004		89	N					
318911	360657	8017691	MGA Z53	Gravel	1/08/2004		148	N					
318912	361174	8016477	MGA Z53	Gravel	1/08/2004		171	N					
318915	362253	8013564	MGA Z53	Gravel	1/08/2004		721	N					
318916	362825	8012500	MGA Z53	Gravel	2/08/2004		426	P	1				>.3mm observed; 1 grey cube- good shape
318917	361658	8015825	MGA Z53	Gravel	2/08/2004		550	P	1				1*+0.1mm yellow octa
318918	359897	8015987	MGA Z53	Gravel	2/08/2004		144	P	1				Conc. Wt >4kg; 1 cream ireglar cube fragment
318919	362731	8017341	MGA Z53	Gravel	2/08/2004		65	P			1		one chromite part of an octahedron fine textured suface indeterminate origin.
318920	361763	8018913	MGA Z53	Gravel	3/08/2004		80	N					most minerals other than limonite occur in 0.3mm fraction
318921	358836	8018673	MGA Z53	Gravel	3/08/2004		138	N					
318922	359758	8003727	MGA Z53	Gravel	3/08/2004		75	P	1				one cream cube aggregate irregular and broken



Notes:
* applies to selected samples where further reduction of large concentrates was necessary
TBE: tetrabromoethane
MI: methylene iodide

Appendix 3
Diamond sample processing flow sheet