EL 23993 'Abner Extended'
MCARTHUR RIVER REGION, NT

ANNUAL REPORT

ON EXPLORATION ACTIVITIES
YEAR THREE OF TENURE
PERIOD ENDING 6 May 2007

Submitted by

GRAVITY DIAMONDS LIMITED
(ABN - 72 009 178 689)
Level 7, Exchange Tower
530 Little Collins Street, Melbourne, Victoria, 3000

EL 23993 'Abner Extended'
Holder: Gravity Diamonds Ltd
Grant Date: 6 May 2004
1:250,000 Sheet: Bauhinia Downs SD53-03
Minerals Sought: diamonds, base metals

SUMMARY

EL 23993 ('Abner Extended') was granted to Gravity Diamonds Ltd ('Gravity') on 6 May 2004.

Gravity, through its wholly owned subsidiary, Diamond Mines Australia Ltd (DMA), has an agreement with BHP Billiton to utilise BHP Billiton's Falcon® airborne gravity gradiometer system in diamond exploration in Australia and Gravity has established a number of diamond projects in northern Australia using this technique. The Falcon® system has proven very effective in detecting kimberlite pipes in Canada, Africa and in Australia. The BHP Billiton – DMA 'Falcon Agreement' allows DMA to conduct exploration using Falcon® and BHP Billiton retains certain buy-in rights to major discoveries.

During the initial year of tenure a review of historic exploration data, including surface sampling focussed on diamonds, was conducted by Gravity and a number of anomalous results were noted in and around EL 23993. As part of Gravity's broad Northern Territory diamond exploration program, Falcon® airborne data was acquired over approximately 52 square kilometres of the EL 23993 tenement area using 100m spaced, north south oriented flight lines, flown at a mean terrain clearance of 80m. Gravity gradiometer, magnetics, and laser scanner data were gathered and compiled. Interpretation identified a number of targets that required follow up field assessment.

Statutory requirements for field access and work programs were submitted to allow testing of targets to commence during the 2005 field season. During the second year of tenure, 7 anomalies selected primarily from the Falcon™ data were field inspected within EL 23993 and sampled where appropriate. A total of 10 heavy mineral samples and 10 geochemical samples were collected. Additionally, new detailed aerial photography of EL 23993 was commissioned during the reporting period. Fugro Spatial Solutions flew these surveys which covered the entire tenement at 1:25000 scale. Results of the sampling during 2005 were not suggestive of the targets tested being the result of kimberlite intrusives.

During the past year of tenure, exploration undertaken within EL 23993 comprised the acquisition of detailed helicopter-borne EM data over an area of approximately 68 km^2 within the tenement at a line spacing of 80 metres (~850 line kilometres). Additionally, a total of 10 indicator mineral samples (comprising 7 gravel samples and 3 loam samples) and 19 soil samples were collected. Track work was also undertaken to enable the passage of drillrigs from the Abner Range Plateau to the 'North Valley'. Further details regarding these exploration activities are outlined in this annual report.

Further sampling and target testing within EL 23993 is anticipated during 2007, predominantly comprising follow up sampling of targets generated from the airborne EM survey. Aircore drilling of a number of targets is likely within the 'North Valley' now that ground access suitable for drillrigs has been achieved.

At the conclusion of year 3 of tenure, 12 blocks were relinquished from EL23993. Application for partial waiver was lodged with DPIFM with respect to another 31 blocks which were required to be surrendered in accordance with statutory 50% reductions at year 3 conclusion.

Expenditure on the tenement during the reporting period totalled $142,300 against a covenant of $35,000.

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INTRODUCTION

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While the principal target in the area is diamonds, some interest is also directed toward base metal deposits.

LOCATION AND ACCESS

EL 23993 is located approximately 80 km southwest of Borroloola and 700 km south east of Darwin, Northern Territory, Australia. The EL comprises part of Gravity's McArthur Diamonds Project located approximately 50 km to the west of the Merlin Diamond Mine.

Land use within EL 23993 is predominantly pastoral leasehold, mainly for cattle grazing. Access to the area is provided by the sealed Carpentaria Highway, the Tablelands Highway and then via station tracks. The Tablelands Highway intersects the Carpentaria Highway next to the Abner Range at Cape Crawford (Figure 1).

GEOLOGICAL SETTING AND ECONOMIC POTENTIAL

EL 23993 overlies a small portion of the Batten Trough of the Mesoproterozoic (1800-1400Ma) McArthur Basin. The project is located proximal to the contact between the Proterozoic McArthur Basin in the north and the unconformably overlying Cambrian Georgina Basin in the south. The 1800-1400Ma stratigraphy and mineralisation of the Batten Trough, from youngest to oldest, can be summarized as follows:

- Roper Group.
- Nathan Group (or Mt Rigg Group).
- McArthur Group.
- Tawallah Group.

EL 23993 overlies the Abner Range syncline that forms a prominent plateau in the surrounding landscape (Figure 2). In the Batten Trough, the older Tawallah and McArthur Groups dominate in outcrop; however, in the Abner Range syncline the younger Nathan Group and lower Roper Group are exposed. The Tawallah and Hot Springs Faults, that trend approximately N-S, lie on the western and eastern margins of the Abner Range syncline, respectively. These two major faults are parallel to, and probably broadly sympathetic to, and coeval with, the Emu Fault that defines the eastern margin of the Batten Trough. The lower Devonian diamond pipes of the Merlin field lie proximal to the Emu Fault.

Remnant outliers of Cambrian sediments are widespread and unconformably overlie the Batten Trough's Proterozoic sequences. In the Abner Range syncline there are mapped remnant outliers of Cambrian Bukalara Sandstone lying on top of the plateau.

Two small, kimberlitic sandstone breccia pipes and 1 kimberlite pipe are known to have intruded the Bukalara Sandstone in the Abner Range. These intrusions are probably of lower Devonian age.

Thin, flat-lying, lateritised Cretaceous sediments belonging to the Dunmarra Basin form outliers on the Abner Range plateau. In the McArthur and Georgina Basins these Cretaceous sediments fill and are locally preserved within karstic sinkholes. They are also known to fill "karst-like" sinkhole depressions overlying kimberlite diatremes. These Cretaceous sediments are also thought to be a potential source of secondary kimberlite indicator minerals.

Cenozoic laterite and transported sediments are widespread over the Abner Range plateau. Lateritisation during the Cenozoic-Quaternary period was widespread in the region but appears to have mainly affected the flat-lying blanket of Cretaceous sediments.

PREVIOUS EXPLORATION

Exploration by Ashton Mining and CRA Exploration during the last two decades for diamondiferous kimberlitic diatremes in the Batten Trough region resulted in the discovery of the low grade EMu kimberlites by CRA in the 1980's and the Merlin kimberlite field by Ashton in the early 1990's. Commercial diamond production from the Merlin kimberlites commenced in 1999.

CRA Exploration originally defined the substantial kimberlitic chromite anomaly that was tracked to a large, fracture-controlled ravine in the Abner Range Plateau, immediately southwest of EL 23993.

More detailed evaluation by Ashton Mining of the Abner Range kimberlitic chromite anomaly revealed a small, circular fracture/breccia geomorphic feature located on the Abner Range Plateau. Additional sampling and then drilling confirmed the feature was a sandstone breccia pipe, 80m in diameter, with an ultramafic component and containing abundant kimberlitic chromite and micro-diamonds.

Limited detailed exploration work has been previously reported within the area currently covered by EL 23993 although coarsely spaced regional gravel sampling for diamond exploration has been undertaken.

WORK COMPLETED IN YEAR 1

A review of available geophysical and historic sample data was carried out by Gravity during the current reporting period and this confirmed the potential for diamondiferous kimberlites to be located within the McArthur River region.

During the initial year of tenure, Falcon® airborne gravity data was acquired, processed and interpreted over approximately 20% of the tenement area. This amounted to around 575 linear kilometres of gravity gradiometer, magnetics, and laser scanner data coverage. Images of the various Falcon® datasets are presented in the previous annual report while the Falcon® digital data and acquisition/processing report has been submitted to the DPIFM.

The Falcon® system was developed by BHP Billiton in the late 1990s. The system records gravity gradient data via a system of accelerometers. This gradient data is transformed to produce the vertical gravity gradient ('Gdd') which approximates the first vertical derivative of the vertical component of the gravity field. An integral transformation on 'Gdd' is applied to generate 'Gd', which approximates the vertical component of the gravity field itself. Conventional total magnetic intensity is also acquired as is laser scanner data, which is used to construct a very accurate (1m vertical resolution) digital elevation model.

Field acquisition was done by Fugro Airborne Surveys under a contract with BHP Billiton, with whom Gravity Diamonds has the Falcon® agreement. The survey was flown on north south oriented lines, 100m apart at a height of 80m above ground level. Data was processed by BHP Billiton's Falcon Operations Group and delivered to Gravity in 2004.

Detailed interpretation, anomaly ranking and exploration targeting from the Falcon® data by Gravity was completed in 2004, with several target areas identified for follow-up work. Statutory requirements for field access and approvals for work programs were finalised allowing testing of these targets to commence during year two of tenure.

WORK COMPLETED IN YEAR 2

During the second year of tenure, 7 anomalies selected primarily from the Falcon™ data were field inspected within EL 23993 and sampled where appropriate. Sampling to assess targets comprised either a loam or gravel sample, with a traverse of geochemical soil sampling also completed if considered appropriate. A total of 10 heavy mineral samples and 10 geochemical samples were collected, with the heavy mineral samples comprising approximately 40 kg of -1.6 mm material and the geochem samples being standard -200 micron samples from the 'B' horizon.

Additionally, new detailed aerial photography of EL 23993 was commissioned during the reporting period. Fugro Spatial Solutions flew these surveys which covered the entire tenement at 1:25,000 scale (271 km²).

Results of the sampling during 2005 were not suggestive of the targets tested being the result of kimberlite intrusives. Further details regarding the collected samples are contained in the previous annual report.

WORK COMPLETED IN YEAR 3

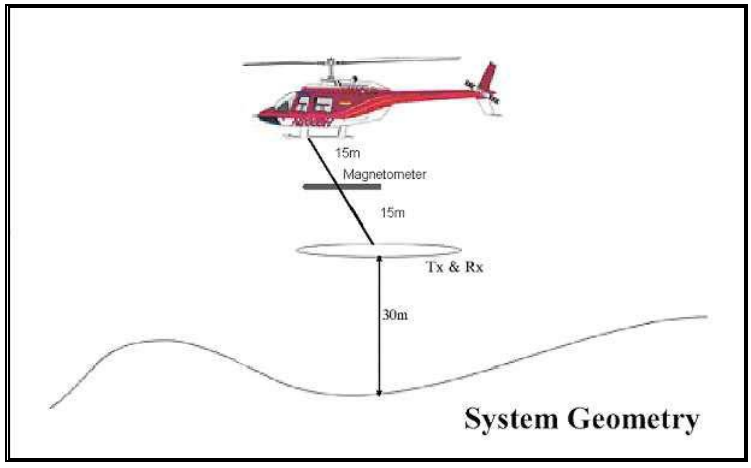
During the past year of tenure, exploration undertaken within EL 23993 comprised the acquisition of detailed helicopter-borne EM data over an area of approximately 68 km^2 within the tenement at a line spacing of 80 metres (~850 line kilometres). Additionally a total of 10 indicator mineral samples (comprising 7 gravel samples and 3 loam samples) and 19 soil samples were collected.

Hoistem Survey

GPX Airborne Pty Ltd were contracted to fly the survey in October 2006. Survey data will be lodged with DPIFM in due course.

The Hoistem MkII helicopter borne time-domain electromagnetic system comprises 21 channels of electromagnetic data, as well as supplementary magnetic (TMI) and digital terrain (DTM) data.

The transmitter loop operates at a base frequency of 25Hz with a single turn receiver coil co-axial and co-planar with the transmitter coil (in-loop configuration) and is towed approximately 30 m below the helicopter as illustrated below.



The transmitter / receiver configuration has a nominal 35 metre terrain clearance. Helicopter survey speed is between 35 and 45 knots, resulting in an along line sample interval of between 8 and 10 metres for the acquired EM data. The primary waveform used is a 25% duty cycle square wave, with a 5ms current on-time (including 1ms cosine ramp on) and 15 ms current off-time. The receiver measures the Earth's response during the current-off time. The maximum pulse current used is 320 Amps.

The helicopter is also equipped with a bird-mounted Geometrics G822A Cesium vapor, optically pumped magnetometer, continuously sampling at 1200 Hz. Nominal terrain clearance for the bird is 50 metres. The recorded magnetic readings are progressively 'resampled' to produce 25 Hz TMI data in an effort to minimise bias caused by the EM system. The along line sample interval of the acquired magnetic data is 1 metre. Additionally, a Geometrics G856 magnetometer was used as a base station to record diurnal variations in the earth's magnetics field to an accuracy of better than 0.1nT.

A conductivity depth-slice generated from the Hoistem EM data, corresponding to a depth of 35 metres, is shown in Figure 4 and illustrates the survey coverage obtained within EL23993.

Sampling

A total of 10 indicator mineral samples (comprising 7 gravel samples and 3 loam samples) and 19 soil samples were collected within EL23993 during the reporting period. Heavy mineral samples comprised approximately 40 kg of -1.6 mm material and the geochem samples were standard -200 micron samples from the 'B' soil horizon.

The majority of the samples were collected as a first pass follow up to targets generated from the Hoistem survey, while others were collected as part of a regional exploration program undertaken in the Abner Range area.

Heavy mineral samples were sent to Diatech Laboratories in Perth for processing through a micro DMS plant and recovery of kimberlite indicator minerals from the -1.2mm +0.3mm fraction of the DMS concentrate. Indicator mineral grains recovered from the mineral observation process were subsequently probed by Dr Greg Pooley at the University of Western Australia using a JEOL 6400 SEM fitted with link EDS detection and digital pulse processor. A variety of stoichiometric oxides and silicates as well as pure metal standards are used to standardise the instrument while several silicate and oxide standards are used to routinely check the quality of the data. This is performed prior to every analytical session or approximately every 1.5 hours.

Soil geochem samples were sent to Ultratrace laboratories in Canningvale, WA for determination of the following elements: Ba, Ce, Dy, Er, La, Nb, Rb, Sr, Y, Ca, Co, Cr, Cu, Fe, Mg, Mn, Ni, Ti & Zn.

A summary of the collected samples appears as Table 1 while indicator mineral recoveries are summarized in Table 2. Sample locations are illustrated by Figure 3. Digital data, including indicator mineral results, probe data and geochemistry data from Ultratrace, is contained in Appendix I.

Table 1: Location of samples collected within EL 23993

SAMPLE	TYPE	ANOMALY	EASTING_WGS84	NORTHING_WGS84	TENEMENT
163938	GRAVEL		583214	8135155	EL23993
163940	GRAVEL		587069	8132994	EL23993
163941	GRAVEL		590061	8134770	EL23993
159562	GRAVEL		586050	8134597	EL23993
159563	GRAVEL		587763	8133344	EL23993
166480	LOAM	GILBEY01	589493	8147345	EL23993
166482	LOAM	GILBEY01	589626	8147508	EL23993
166488	GRAVEL	NVMAG01	588466	8154512	EL23993
166489	GRAVEL		589547	8154912	EL23993
166490	LOAM		590563	8152171	EL23993
166546	SOIL	GILBEY 01	589800	8147500	EL23993
166547	SOIL	GILBEY 01	589750	8147500	EL23993
166548	SOIL	GILBEY 01	589700	8147500	EL23993
166549	SOIL	GILBEY 01	589650	8147500	EL23993
166550	SOIL	GILBEY 01	589600	8147500	EL23993
166551	SOIL	GILBEY 01	589550	8147500	EL23993
166552	SOIL	GILBEY 01	589500	8147500	EL23993
166553	SOIL	GILBEY 01	589450	8147500	EL23993
166554	SOIL	GILBEY 01	589400	8147500	EL23993
166555	SOIL	GILBEY 01	589250	8147350	EL23993
166556	SOIL	GILBEY 01	589300	8147350	EL23993
166557	SOIL	GILBEY 01	589350	8147350	EL23993
166558	SOIL	GILBEY 01	589400	8147350	EL23993
166559	SOIL	GILBEY 01	589450	8147350	EL23993
166560	SOIL	GILBEY 01	589500	8147350	EL23993
166561	SOIL	GILBEY 01	589550	8147350	EL23993
166562	SOIL	GILBEY 01	589600	8147350	EL23993
166563	SOIL	GILBEY 01	589650	8147350	EL23993
166564	SOIL	GILBEY 01	589700	8147350	EL23993

Table 2: Indicator mineral results summary for samples collected within EL 23993

SAMPLE	DIAMOND	CHROMITE	PYROPE	PICRO
163938	0	0	0	0
163940	0	2	0	0
163941	0	0	0	0
159562	0	0	0	0
159563	0	2	0	0
166480	0	0	0	0
166482	0	0	0	0
166488	0	2	0	0
166489	0	1	0	0
166490	0	0	0	0

Siteworks

Suffren's Earthmoving Contractors from Katherine, NT were engaged to upgrade / construct tracks throughout the companies Abner Range EL holdings during the reporting period, including the establishment of ground access to the 'North Valley' from the Abner Range plateau, suitable to allow the passage of a drillrig.

ENVIRONMENT AND REHABILITATION

No requirement for rehabilitation arose during the third year of tenure as exploration was limited to the acquisition of airborne geophysical data and low impact indicator mineral and geochemical sampling.

Indicator mineral sampling comprised collection of approximately 40 kg of sieved sample at each site. As access to sample sites was achieved using 4WD's and predominantly utilised existing tracks, there was negligible impact on the environment within EL 23993 and hence no requirement for rehabilitation.

CONCLUSIONS AND RECOMMENDATIONS

EL 23993 lies within an area generally held to be prospective for diamonds. Results of the sampling during 2006 were mixed, and further work is required to integrate the recently acquired Hoistem data with previously acquired datasets.

Further sampling and target testing within EL 23993 is anticipated during 2007, predominantly comprising follow up sampling of targets generated from the airborne EM survey. Aircore drilling of a number of targets is likely within the 'North Valley' now that ground access suitable for drillrigs has been achieved.

PROPOSED EXPLORATION AND BUDGET

Drilling	$15,000
Sampling and sample analysis costs	$10,000
Professional Personnel	$10,000
Travel and accommodation costs	$3,000
Data processing / Computing costs / Cartography	$1,000
Administration and overheads	$4,000
TOTAL	**$43,000**

EXPENDITURE STATEMENT

Legal/Tenement Management costs	$2,500
Professional personnel costs	$21,000
Siteworks	$9,000
Assays	$9,000
Data processing / Computing costs / Cartography	$3,400
Support Costs	$400
Hoistem Acquisition	$80,000
Travel and accommodation costs	$4,000
Administration / overhead	$13,000
Total	**$142,300**

APPENDIX I

(Digital Data)

HoistEM System Specifications

Transmitter

Waveform –	25% duty cycle square wave
Pulse on Time -	5 ms (inclusive of 1ms cosine ramp on)
Pulse off Time -	15 ms
Pulse Current -	320 Amps
Switch on Ramp -	1 ms
Switch off Ramp -	40 μs
Tx Loop Area -	~340 m^2
Tx NIA –	108,800
Tx Frequency-	25 Hz

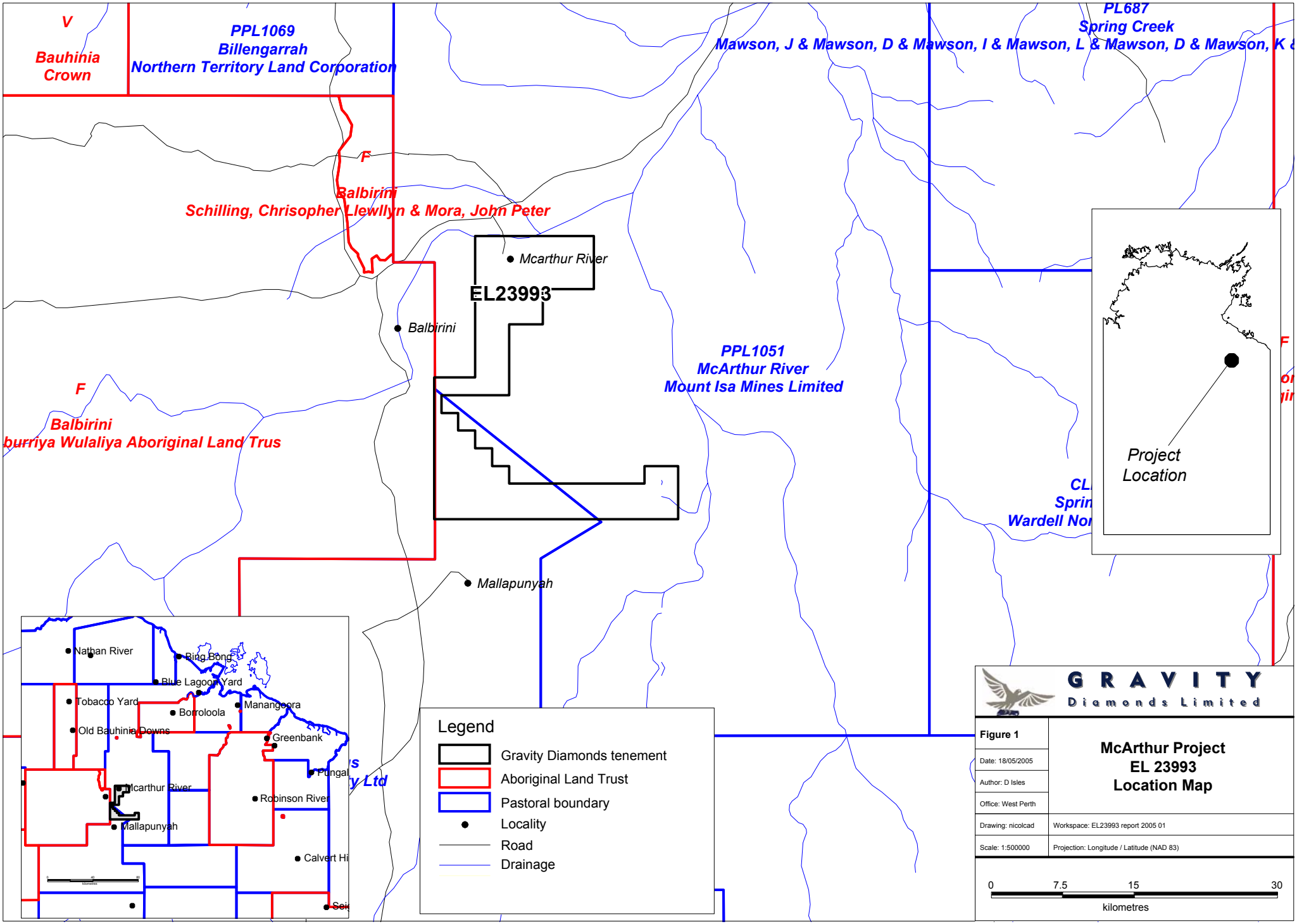
Receiver

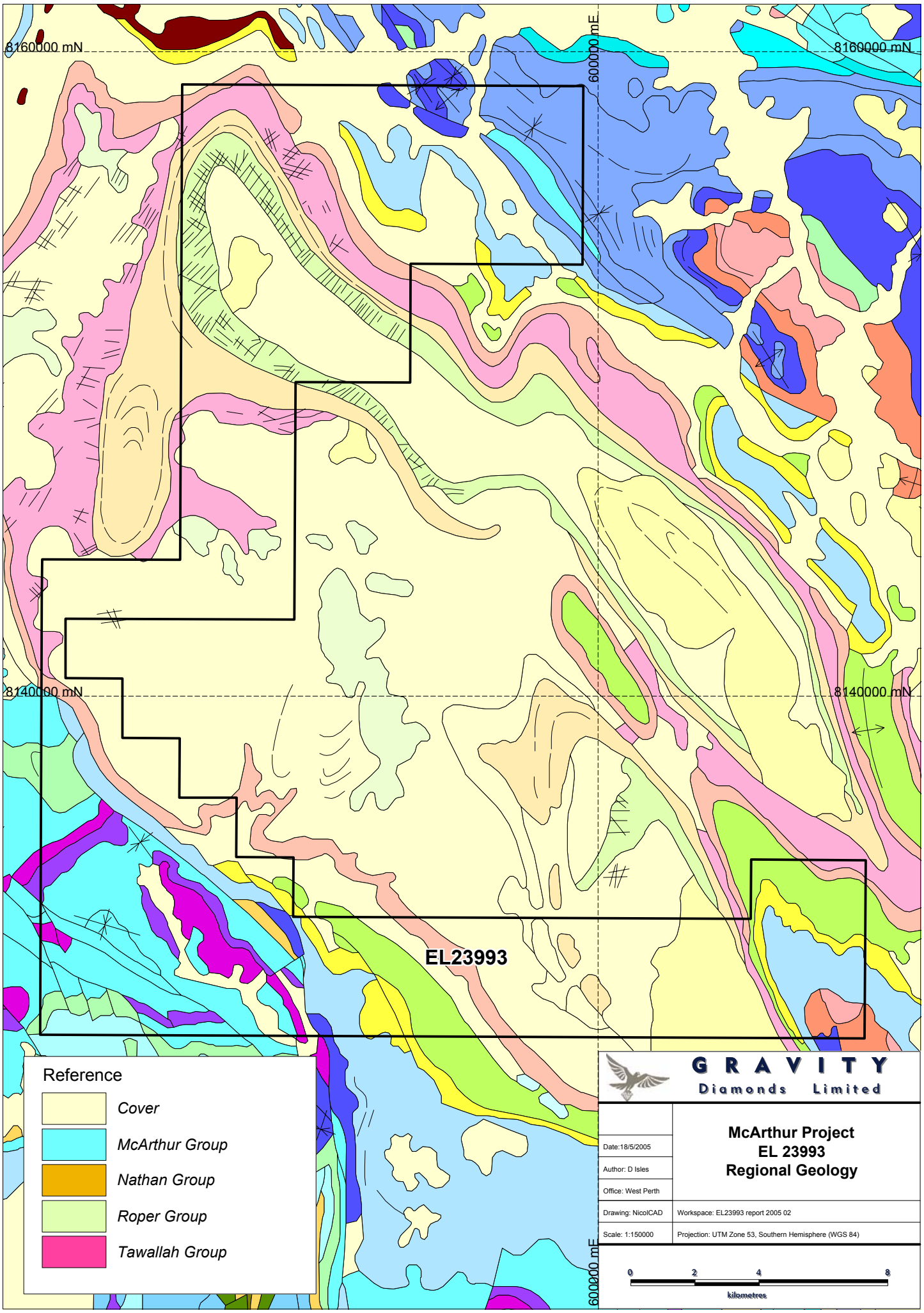
A-D Circuitry -	20 bit
Sample Time -	0 - 13 ms
Sampling -	124 Linear channels

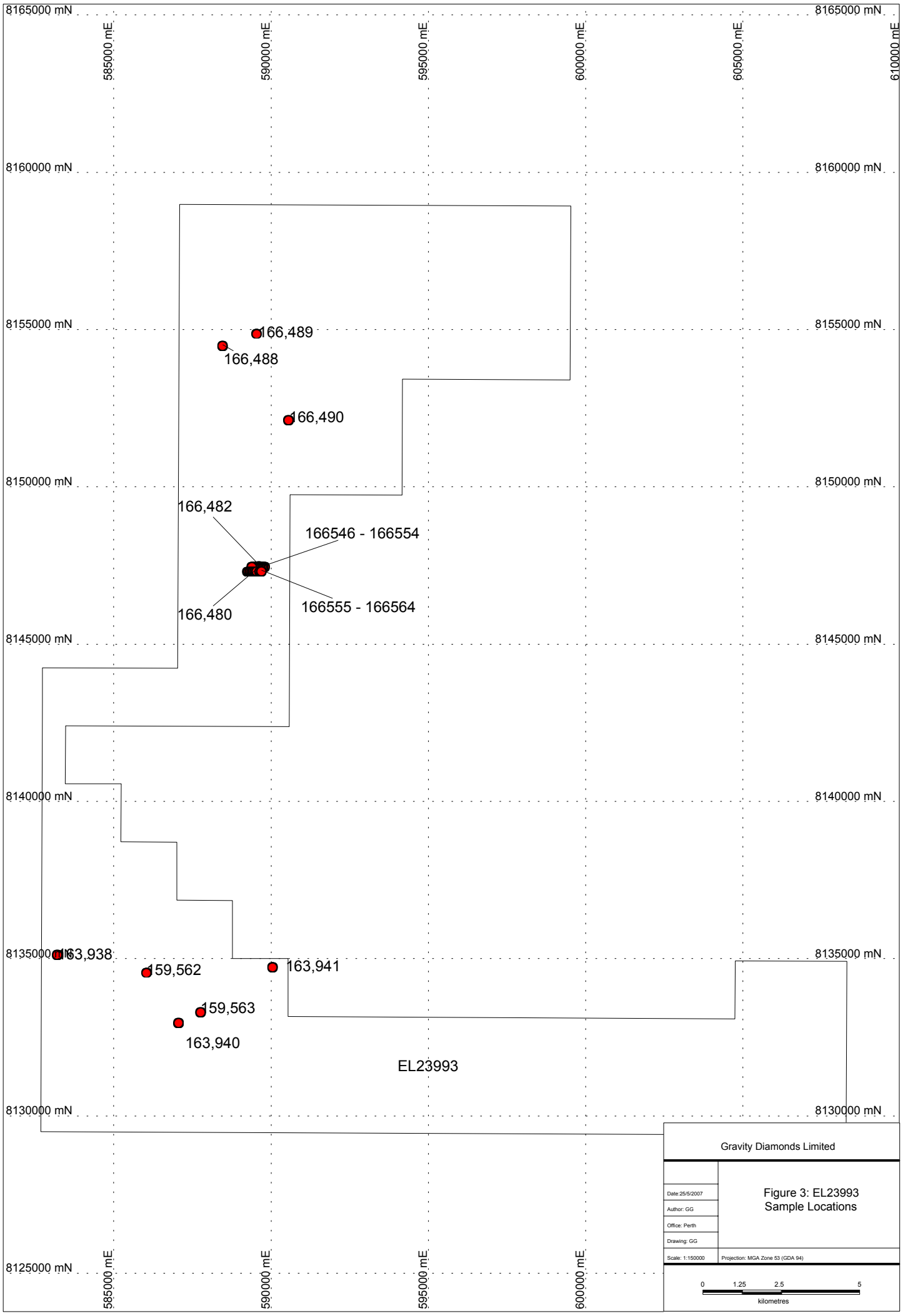
(12 channels from 54 microsecs after switchoff (25 microsecs wide),
then - 112 channels to 13 millisecs (113 microsecs wide).

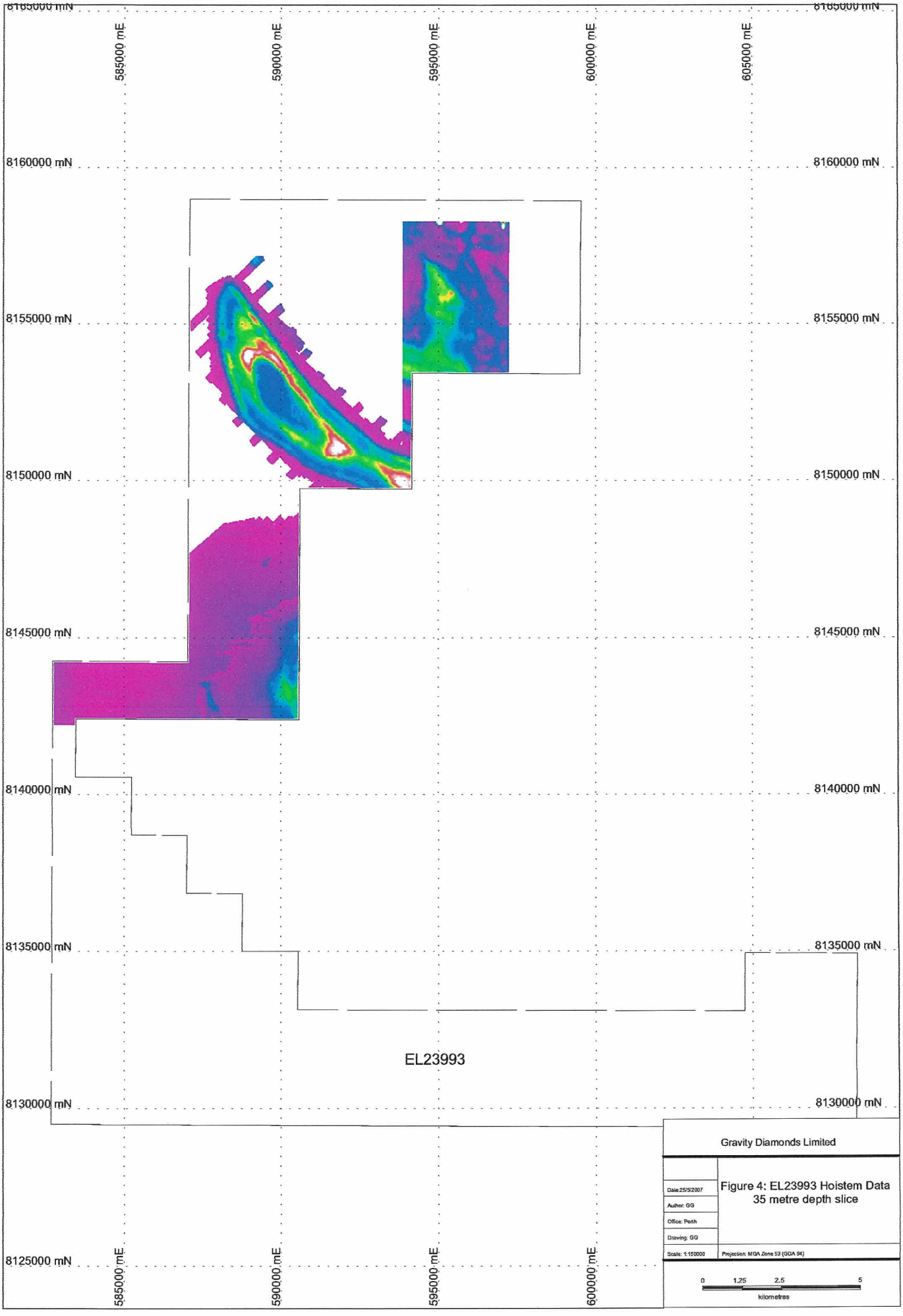
Receiver Coil

Effective NA -	3382 Square Metres
Bandwidth –	45,000 Hz


V
Bauhinia
Crown
PPL1069
Billengarrah
Northern Territory Land Corporation
PL687
Spring Creek
Mawson, J & Mawson, D & Mawson, I & Mawson, L & Mawson, D & Mawson, K &
F
Balbirini
Schilling, Chrisopher Llewllyn & Mora, John Peter
Mcarthur River
EL23993
Balbirini
PPL1051
McArthur River
Mount Isa Mines Limited
F
Balbirini
burriya Wulaliya Aboriginal Land Trus
Project
Location
Mallapunyah
Nathan River
Ring Bong
Blue Lagoon Yard
Tobacco Yard
Borroloola
Manangoora
Old Bauhinia Downs
Greenbank
Pungal
Mcarthur River
Robinson River
Mallapunyah
Calvert Hi
Legend
Gravity Diamonds tenement
Aboriginal Land Trust
Pastoral boundary
Locality
Road
Drainage
GRAVITY
Diamonds Limited
Figure 1
McArthur Project
EL 23993
Location Map
Date: 18/05/2005
Author: D Isles
Office: West Perth
Drawing: nicolcad
Workspace: EL23993 report 2005 01
Scale: 1:500000
Projection: Longitude / Latitude (NAD 83)
0
7.5
15
30
kilometres


8160000 mN
8160000 mN
600000 mE
8140000 mN
8140000 mN
EL23993
600000 mE
Reference
Cover
McArthur Group
Nathan Group
Roper Group
Tawallah Group
GRAVITY
Diamonds Limited
McArthur Project
EL 23993
Regional Geology
Date:18/5/2005
Author: D Isles
Office: West Perth
Drawing: NicolCAD
Workspace: EL23993 report 2005 02
Scale: 1:150000
Projection: UTM Zone 53, Southern Hemisphere (WGS 84)
0
2
4
8
kilometres


8165000 mN
585000 mE
590000 mE
595000 mE
600000 mE
605000 mE
610000 mE
8160000 mN
8155000 mN
8150000 mN
8145000 mN
8140000 mN
8135000 mN
8130000 mN
8125000 mN
166,489
166,488
166,490
166,482
166546 - 166554
166555 - 166564
166,480
163,938
159,562
163,941
159,563
163,940
EL23993
Gravity Diamonds Limited
Figure 3: EL23993
Sample Locations
Date:25/5/2007
Author: GG
Office: Perth
Drawing: GG
Scale: 1:150000
Projection: MGA Zone 53 (GDA 94)
0
1.25
2.5
5
kilometres


8165000 mN
585000 mE
590000 mE
595000 mE
600000 mE
605000 mE
8160000 mN
8155000 mN
8150000 mN
8145000 mN
8140000 mN
8135000 mN
8130000 mN
8125000 mE
EL23993
Gravity Diamonds Limited
Figure 4: EL23993 Hoistem Data
35 metre depth slice
Date:25/5/2007
Author: GG
Office: Perth
Drawing: GG
Scale: 1:150000
Projection: MGA Zone 53 (GDA 94)
0 1.25 2.5 5
kilometres

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06050
Disc No.: -

Sample No: 163938

Overall Sample Assessment: **Negative**

Your Project Code: Tabaners and Abner Range NT

Sample Type (as collected):	Stream Sediment	Head Weight	53.64 kg
Sample Type (as received):	Stream Sediment	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles
Number of particles in each size fraction										

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
Number of particles in each size fraction														

Other Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
% Percentage of particles in each size fraction														
Almandine			Tr	Tr					MW					
Anatase					Tr				MW					
Barite			Tr	Tr	40				MW					
Biotite				Tr	Tr				MW					
Fe Oxide/Hydroxide			100	100	50				MW					
Haematite			Tr	Tr	10				MW					
Ilmenite				Tr					MW					
Kyanite			Tr	Tr	Tr				MW					
Phosphate					Tr				MW					
Rock Fragments			Tr	Tr	Tr				MW					
Tourmaline				Tr	Tr				MW					
TOTAL	%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	66.86 g	Size Range	-1.2+0.3 mm
Weight Observed	66.86 g		

Technician: DMH
Date Observed: 11-Aug-06
Report Printed: 1/09/2006 9:54:11 AM

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06050
Disc No.: -

Sample No: 163940
Overall Sample Assessment: **Unresolved**
Your Project Code: Tabaners and Abner Range NT

Sample Type (as collected):	Stream Sediment	Head Weight	45.12 kg
Sample Type (as received):	Stream Sediment	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Number of particles in each size fraction

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
Chromite/Cr-Spinel					2				MW	C1	2		C	B
octahedra, dull, iron-stained.														

Number of particles in each size fraction

Other Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Almandine			Tr	Tr	Tr				MW					
Anatase					Tr				MF					
Barite			40	80	90				MW					
Corundum				Tr	Tr				MW					
Fe Oxide/Hydroxide			60	20	10				MW					
Haematite				Tr	Tr				MF					
Ilmenite				Tr	Tr				MW					
Monazite					Tr				W					
Phosphate					Tr				MF					
Pyrite					Tr				MF					
Rutile				Tr	Tr				MW					
Tourmaline			Tr	Tr	Tr				W					
TOTAL	%	%	100%	100%	100%	%	%	%						

% Percentage of particles in each size fraction

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06050
Disc No.: -

Sample No: 163940

Overall Sample Assessment: **Unresolved**

Your Project Code: Tabaners and Abner Range NT

Technician: LK
Date Observed: 10-Aug-06
Report Printed: 1/09/2006 9:55:19 AM

What Has Been Observed?

Final Conc Weight	120.6600	g	Size Range	-1.2+0.3	mm
Weight Observed	120.6600	g			

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06050
Disc No.: -

Sample No: 163941

Overall Sample Assessment: **Negative**

Your Project Code: Tabaners and Abner Range NT

Sample Type (as collected):	Stream Sediment	Head Weight	60.4 kg
Sample Type (as received):	Stream Sediment	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles
Number of particles in each size fraction										

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
Number of particles in each size fraction														

Other Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
% Percentage of particles in each size fraction														
Anatase					Tr				MF					
Barite			Tr	Tr	35				MW					
Corundum				Tr	Tr				MW					
Epidote					Tr				MW					
Fe Oxide/Hydroxide			100	98	65				MW					
Leucoxene					Tr				MW					
Phosphate			Tr	1	Tr				W					
Pyrite					Tr				MF					
Rutile					Tr				MW					
Tourmaline			Tr	1	Tr				W					
Zircon					Tr				MW					
TOTAL	%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	81.51	g	Size Range	-1.2+0.3	mm
Weight Observed	81.51	g			

Technician: LK
Date Observed: 11-Aug-06
Report Printed: 1/09/2006 9:55:53 AM

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06079
Disc No.: -

Sample No: 159562B

Overall Sample Assessment: **Negative**

Your Project Code: Cox Arnold, STV and Teedee

Sample Type (as collected):	Stream Sediment	Head Weight	43.44 kg
Sample Type (as received):	Stream Sediment	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Number of particles in each size fraction

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)

Number of particles in each size fraction

Other Minerals

% Percentage of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Barite			Tr	Tr	Tr				MF					
Corundum					Tr				W					
Epidote				Tr					W					
Fe Oxide/Hydroxide			100	100	100				W					
Haematite				Tr	Tr				F					
Ilmenite				Tr	Tr				MW					
Orthopyroxene					Tr				MF					
Spessartine				Tr					MW					
Tourmaline				Tr	Tr				WW					
Zircon					Tr				WW					
TOTAL	%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	12.59000 g	Size Range	-1.2+0.3 mm
Weight Observed	12.59000 g		

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Comment about this sample:

Technician: LF
Date Observed: 07-Nov-06
Report Printed: 1/12/2006 12:20:58 PM

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06079
Disc No.: -

Sample No: 159563
Overall Sample Assessment: **Unresolved**
Your Project Code: Cox Arnold, STV and Teedee

Sample Type (as collected):	Stream Sediment	Head Weight	47.66 kg
Sample Type (as received):	Stream Sediment	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Key Minerals

	Number of particles in each size fraction													
mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
Chromite/Cr-Spinel					2				W	C1	2		C	B
weathered octahedra, granular.														

Other Minerals

	% Percentage of particles in each size fraction													
mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Almandine				Tr					MW					
Barite			Tr	10	30				F					
Fe Oxide/Hydroxide			100	90	30				W					
Haematite				Tr	35				F					
Ilmenite					Tr				MW					
Leucoxene					Tr				WW					
Rutile					Tr				WW					
TOTAL	%	%	100%	100%	95%	%	%	%						

What Has Been Observed?

Final Conc Weight	61.21 g	Size Range	-1.2+0.3 mm
Weight Observed	61.21 g		

Technician: LF
Date Observed: 07-Nov-06
Report Printed: 1/12/2006 12:21:41 PM

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06103
Disc No.: -

Sample No: 166480
Overall Sample Assessment: **Negative**
Your Project Code: Abner Range NT

Sample Type (as collected):	Loam	Head Weight	59.26 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

Number of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Key Minerals

Number of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)

Other Minerals

% Percentage of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Almandine					Tr				MW					
Anatase				Tr	Tr				W					
Corundum					Tr				W					
Fe Oxide/Hydroxide	100		100	100	100				W					
Leucoxene			Tr	Tr	Tr				WW					
Phosphate				Tr	Tr				WW					
Rutile				Tr	Tr				WW					
Tourmaline				Tr	Tr				WW					
Zircon				Tr	Tr				WW					
TOTAL	100%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	3.350000	g	Size Range	-2+0.3	mm
Weight Observed	3.350000	g			

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NotMag	All		All	All	All			

Comment about this sample:

Technician: LF
Date Observed: 13-Dec-06
Report Printed: 1/02/2007 11:37:24 AM

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06103
Disc No.: -

Sample No: 166482
Overall Sample Assessment: **Negative**
Your Project Code: Abner Range NT

Sample Type (as collected):	Loam	Head Weight	55.32 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

Number of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Key Minerals

Number of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)

Other Minerals

% Percentage of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Anatase					Tr				W					
Corundum					Tr				W					
Fe Oxide/Hydroxide	100		100	100	80				W					
Leucoxene					Tr				W					
Phosphate				Tr	Tr				WW					
Rutile					Tr				WW					
Tourmaline				Tr	20				WW					
Zircon					Tr				WW					
TOTAL	100%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	3.98 g	Size Range	-2+0.3 mm
Weight Observed	3.98 g		

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NotMag	All		All	All	All			

Technician: LF
Date Observed: 13-Dec-06
Report Printed: 1/02/2007 11:38:56 AM

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06103
Disc No.: -

Sample No: 166488

Overall Sample Assessment: **Positive**

Your Project Code: Abner Range NT

Sample Type (as collected):	Loam	Head Weight	52.88 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Number of particles in each size fraction

Key Minerals

Number of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
Chromite/Cr-Spinel							1		W	B1	1		B	C
entirely granular sphere, black-brown, dull														
Chromite/Cr-Spinel				2					W	B1	2		B	A
weathered, entirely granular, dull, irregular masses														

Other Minerals

% Percentage of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Anatase					Tr		Tr		W					
Fe Oxide/Hydroxide	100		100	60	40		Tr		W					
Leucoxene					Tr		Tr		WW					
Rutile					Tr		Tr		WW					
Siderite			Tr	40	50		Tr		F					
Tourmaline				Tr	5		80		WW					
Zircon				Tr	5		20		WW					
TOTAL	100%	%	100%	100%	100%	%	100%	%						

What Has Been Observed?

Final Conc Weight	20.32000 g	Size Range	-2+0.2 mm
Weight Observed	20.32000 g		

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NotMag	All		All	All	All		All	

Comment about this sample:

Technician: LF
Date Observed: 15-Dec-06
Report Printed: 1/02/2007 11:42:33 AM

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06103
Disc No.: -

Sample No: 166489
Overall Sample Assessment: **Unresolved**
Your Project Code: Abner Range NT

Sample Type (as collected):	Loam	Head Weight	56.52 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Number of particles in each size fraction

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
Chromite/Cr-Spinel					1				W	B1	1		B	B
cokey, black-brown, weathered, irregular.														

Number of particles in each size fraction

Other Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Anatase				Tr	Tr		Tr		W					
Barite			Tr	Tr	Tr		Tr		F					
Corundum				Tr	Tr		Tr		W					
Fe Oxide/Hydroxide	100		100	100	85		Tr		W					
Haematite			Tr	Tr	Tr		Tr		W					
Ilmenite				Tr	Tr		Tr		MW					
Leucoxene				Tr	Tr		Tr		W					
Monazite				Tr	Tr		Tr		WW					
Rutile				Tr	15		Tr		WW					
Tourmaline	Tr		Tr	Tr	Tr		80		WW					
Zircon				Tr	Tr		20		WW					
TOTAL	100%	%	100%	100%	100%	%	100%	%						

% Percentage of particles in each size fraction

What Has Been Observed?

Final Conc Weight	42.62 g	Size Range	-2+0.2 mm
Weight Observed	42.62 g		

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NotMag	All		All	All	All		All	

Technician: LF
Date Observed: 15-Dec-06
Report Printed: 1/02/2007 11:43:16 AM

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 06103
Disc No.: -

Sample No: 166490

Overall Sample Assessment: **Negative**

Your Project Code: Abner Range NT

Sample Type (as collected):	Loam	Head Weight	52.16 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS Concentrate		

Diamond

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Total particles	Description of these particles

Number of particles in each size fraction

Key Minerals

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)

Number of particles in each size fraction

Other Minerals

% Percentage of particles in each size fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10	Wear	Colour	Angularity	Lustre	Transparency	Form/Shape
Corundum				Tr	Tr				W					
Fe Oxide/Hydroxide	100		100	100	100				W					
Ilmenite					Tr				W					
Leucoxene				Tr	Tr				W					
Phosphate					Tr				WW					
Tourmaline					Tr				WW					
TOTAL	100%	%	100%	100%	100%	%	%	%						

What Has Been Observed?

Final Conc Weight	0.351	g	Size Range	-2+0.3	mm
Weight Observed	0.351	g			

Magnetic Fractions vs Size Fraction

mm	+1.2	+1.0	+.8	+.4	+.3	+.25	+.20	+.10
NotMag	All		All	All	All			

Technician: LF
Date Observed: 13-Dec-06
Report Printed: 1/02/2007 11:43:59 AM

Comment about this sample: