E.L.23521

EXPLORATION REPORT

Year 1

OPEN FILE

LICENCEES: D J Langley and S. Davis
OPERATORS: As Above
PERIOD: Year 1: 26/2/2003 – 26/2/2004
MAP SHEET: PINE CREEK 1:50,000
AUTHOR: D J Langley

25/03/04

E.L.23521: EXPLORATION REPORT: YEAR 1.

APPENDICES: Sample coordinates and information sheet.
Heavy mineral analysis report by DIATECH
E.L. Sample location map (Pine Creek 1:50K Topographical).

SUMMARY: This minerals sought on this E.L. are gold and diamonds. A gem quality diamond was found in 1880 close to the old track crossing the Cullen River. Other possible diamonds and gemstones were also reported. These historical finds are reported in the old "Warden's Reports" and are available in the library. Our sampling has not recovered any diamonds or their indicator minerals. An area of anomalous gold mineralisation has been located on the southwest side of the E.L. It is on strike with the Pine Creek gold mineralisation.

REPORT:

(Diamonds) Seven stream samples were taken from the Cullen River and its tributaries upstream from the historical diamond finds. The samples were taken from coarse waterworn gravel in good traps in the creek beds. The sample weight was thirty kilograms of minus 6mm material, screened from the coarse gravel. The samples were then carefully panned to a concentrate. Most samples contained visible gold and cassiterite. Small zircons were also visible and can be mistaken for diamonds when panning. One sample (93665) from the Cullen, showed visible mercury and amalgam. This probably came from the Pine Creek, which is a tributary of the Cullen and passes through the Pine Creek gold field.

The panned concentrates were submitted to DIATECH in Perth for diamond and key indicator mineral analysis. No diamonds or indicator minerals were reported. It appears that the historical diamonds have travelled from outside the area of this E.L. The Cullen appears to be a relatively young river. I saw no evidence of elevated bench gravels. In this instance diamonds are not good indicator minerals for pipe location.

(Gold) Several of the stream sediment samples on the western side of the E.L. showed anomalous gold values, with the highest being twenty-one specks of medium coarse gold in sample number 93677. This sample was taken from a creek that crosses the old overland telegraph line track about 1.5 km southeast of Bonrook. The creek drains a group of hills about one kilometre to the west and has its headwaters in a low-lying area about 1.5 km west of the hills. This low-lying area is on strike with the old Lucknow gold mine about 2.5 km to the NNW. The Lucknow is also on strike with the Pine Creek gold mineralisation about 3 km to the NNW.

A 10 kg grab sample (93684) was taken from a small (5m x 1m) outcrop of haematite and quartz situated on a small hill, five hundred metres SSE of the southern end of the Lucknow diggings. It showed a small tail of very fine gold when milled and panned. I estimated its grade at about 5 g/t.

Another sample (93673) was taken from a small creek that drains an area up to a kilometre to the SSE of grab sample 93684. It showed seven medium coarse specks of gold. I consider the ground to the SSE as highly prospective for gold.

We also allowed two husband and wife teams of metal detector prospectors to detect the E.L. for nuggets. Both groups spent a week in the area but didn't find any nuggets. This is not unusual because the Pine Creek mineralisation is not known for being a good nugget producer. Our policy with detector operators is to let them keep all the gold found as long as they provide coordinates of their finds and show the gold to us for inspection. They must also comply with rules regarding permits, landholder notification and fires etc. This method has previously been successful for me in other areas.

Most of the E.L. is covered by the Cullen Granite and cannot be described as prospective. It is also difficult to prospect because most of the creeks are silted up with no visible bedrock or alluvial gravel. I intended to take a stream sediment sample in the Bonrook Creek before it enters the Cullen, but could not find a reasonable sample site. Most of the area had been burnt by the landholder in early 2003 and we travelled extensively by vehicle and foot over a large area of the granite. No mineralised veins were seen within the granite and we didn't samples any of the numerous, small, barren quartz veins that we saw. We have the magnetics of the area on computer, as well as satellite imagery and Topo maps, although we have only looked at one magnetic anomaly so far.

The manager of Bonrook, Mr Sam Fullwood, was very helpful.

Expenditure incurred: Year 1. (Direct Costs)

Research:	$350.
E.L. Application & Fees	$1500.
Photos & Maps	$150.
Satellite & magnetic data:	$400.
Field Work	$9,300.
Sample Preparation:	$480.
Assaying:	$608.
Report:	$240.
	Total. $13,028.

Proposed Exploration: Year 2

Most of the exploration for year two will be carried out in the S.W. side of the E.L. This will consist of stream and chip sampling to attempt to locate the source of the gold mentioned above. The magnetics, satellite imagery and air photos will also be studied.

A larger sample of the Cullen River gravel will be taken to assess its value regarding coarse granite sand and gravel, gold, cassiterite and gemstones.

Other areas around the edge of the granite contact will also be prospected.

Proposed Expenditure: Year 2

Because most of the E.L is covered by granite, which is not very prospective, our proposed expenditure for year 2 will be $12,000.

25/02/04

D J Langley

E.L.23521

SAMPLE INFORMATION: YEAR 1.

Map Sheet: PINE CREEK 1:50,000
Coordinate Datum: WGS84

LEGEND:
S/S = Stream sediment (30 kg – 6mm).
R/C = Rock Chip (10 kg) milled & panned.
D/I = Diamond or Key Indicator minerals.
N/S = Not submitted for analysis.

SAMPLE No.	EASTING	NORTHING	TYPE	D/I	GOLD	COMMENT
93663	20178	69338	S/S	Nil	3 specks	Coarse gravel
93664	18875	70164	S/S	N/S	2 specks	Med. gravel
93665	20166	71155	S/S	Nil	2 specks	Coarse gravel
93666	20725	71897	S/S	N/S	Nil	Coarse gravel
93667	20630	71570	S/S	Nil	Nil	Coarse gravel
93668	16142	69201	S/S	Nil	1 speck	Coarse gravel
93669	14374	74717	S/S	Nil	10 specks	Coarse gravel
93670	10908	73425	S/S	N/S	Nil	Coarse gravel
93671	8293	65441	R/C	N/S	Fine. 5 g/t ?	Qtz/Fe
93672	8304	65441	R/C	N/S	Nil	Qtz.
93673	8780	65757	S/S	Nil	7 specks	Coarse gravel
93674	8888	65101	R/C	N/S	Nil	Qtz/Fe/Pyrite
93675	9708	66392	S/S	N/S	4 specks	Coarse gravel
93676	10597	65189	S/S	N/S	Nil	Coarse gravel
93677	11315	64401	S/S	Nil	**21 specks**	Coarse gravel
93678	11515	63975	S/S	Nil	4 specks	Coarse gravel
93679	12094	63844	S/S	Nil	Nil	Coarse gravel
93680	15097	61009	S/S	Nil	Nil	Coarse gravel
93681	12204	62351	S/S	N/S	Nil	Coarse gravel
93682	11895	62598	S/S	N/S	Nil	Coarse gravel
93683	12254	61678	R/C	N/S	Nil visible	Qtz/ As/Pyr.
93684	8293	65440	R/C	N/S	Fine 5 g/t?	Qtz/Fe
93685	7885	65723	R/C	N/S	Nil	Qtz/Fe.Pyr
93686	10461	69484	S/S	N/S	4 fine specks	Med. gravel

Note: Samples 677 – 680, (Tot. 4) submitted as one sample (93680) for D/I analysis by DIATECH. Refer to the attached DIATECH report for full mineral analysis of submitted samples.

D J Langley. 25 Feb. 04

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Sample Summary

Job Number: 03080

Client: D J LANGLEY

Order No.: Letter: Dave Langley

Project: Northern Territory

Date Received: 11/11/03

Total Samples: 7

Job Description: 1. TBE (SG > 2.96) each panned concentrate.
2. Observe each panned concentrate down to 250 micron for diamonds and key indicator minerals.

Sample No.	Sample Type as Received	Head Weight (kgs)	Wet Weight (kgs)	Observed sample Type	Final conc wt (g)	Weight observed (g)	Overall Sample Assessment
93663	Panned Concentrate	0.049		TBE Concentrate	1.75	1.75	Negative
93665	Panned Concentrate	0.083		TBE Concentrate	3.80	3.80	Negative
93667	Panned Concentrate	0.031		TBE Concentrate	1.45	1.45	Negative
93668	Panned Concentrate	0.041		TBE Concentrate	3.10	3.10	Negative
93669	Panned Concentrate	0.035		TBE Concentrate	1.04	1.04	Negative
93673	Panned Concentrate	0.022		TBE Concentrate	1.33	1.33	Negative
93680	Panned Concentrate	0.035		TBE Concentrate	3.04	3.04	Negative
	Totals	**0.296**			**15.51**	**15.51**	

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No:	93663
Overall Sample Assessment:	Negative
Your Project Code:	Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.049 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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
Anatase				Tr		Tr			MW	ice blue, deep blue	subangular	greasy	transparent, translucent	tabular, blocky
Cassiterite				Tr		Tr			MW	red/black, yellow/brown, banded		submetallic	translucent, opaque	blocky
Corundum						Tr			MF	palest blue		glassy	transparent	tabular
Fe Oxide/Hydroxide				20		Tr			W	brown, tan	subrounded	dull	opaque	irregular
Gold						Tr			MF	golden yellow		metallic	opaque	irregular (3+0.25)
Ilmenite				Tr		10			MW	black	subrounded, subangular	dull metallic	opaque	irregular
Monazite				Tr		30			MW	pale orange, yellow-orange	subrounded	resinous	translucent	irregular
Rutile				80		60			MW	black, cherry red		submetallic	translucent, opaque	blocky
Zircon				Tr		Tr			MW	colourless, pink		vitreous	transparent	ovate

What Has Been Observed?

Final Conc Weight	1.75 g	Size Range	-0.8+0.25 mm
Weight Observed	1.75 g		

Technician: JED
Date Observed: 04-Dec-03
Report Printed: Friday, 9 January 2004 1:24:14

Magnetic Fractions vs Size Fraction

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

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No: 93665
Overall Sample Assessment: **Negative**
Your Project Code: Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.0835 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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
Almandine						Tr			MW	pale pink	subangular	glassy	transparent	irregular
Anatase						Tr			MW	ice blue, deep blue	subangular	greasy	translucent, opaque	tabular, subhedral
Cassiterite				Tr		Tr			MW	red/black/orange/yellow/brown/banded		submetallic	translucent, opaque	irregular, frosted
Corundum						Tr			MW	pale blue	subangular	glassy	transparent	blocky
Fe Oxide/Hydroxide				10		Tr			W	brown, beige	subrounded	dull	opaque	irregular
Gold				Tr		Tr			MW	golden yellow		*dull metallic*	*opaque*	*irregular, (1+0.4) (1+0.25)*
Ilmenite				20		25			MW	black	subrounded, subangular	metallic	opaque	tabular, blocky
Leucoxene						Tr			W	cream	subrounded	polished	opaque	irregular
Phosphate				30		40			MW	yellow-orange, red-brown,	subrounded	resinous	opaque, translucent	irregular, mostly monazite
Rutile				40		35			MW	black, cherry red	subrounded	submetallic	translucent, opaque	irregular
Tourmaline						Tr			MW	brown, black-brown	rounded, subangular	glassy	transparent, opaque	blocky, near spherical
Zircon				Tr		Tr			MW	colourless, pink	subrounded	vitreous	translucent, transparent	ovate, frosted

What Has Been Observed?

Final Conc Weight	3.8 g	Size Range	-0.8+0.25 mm
Weight Observed	3.8 g		

Technician: JED
Date Observed: 29-Dec-03
Report Printed: Friday, 9 January 2004 1:15:57

Magnetic Fractions vs Size Fraction

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

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No: 93667
Overall Sample Assessment: **Negative**
Your Project Code: Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.031 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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
Anatase						Tr			MW	silvery-grey	subangular	greasy	transparent, translucent	tabular
Cassiterite				Tr		Tr			MW	red/black/orange/yellow/brown, banded		*submetallic*	opaque, translucent	irregular
Fe Oxide/Hydroxide				Tr		Tr			W	brown, red-brown	subangular	dull earthy	opaque	irregular
Ilmenite				30		40			MW	black	subangular, subrounded	metallic	opaque	blocky, tabular, irregular
Leucoxene				Tr		Tr			W	cream, brown	subrounded	polished	opaque	irregular
Phosphate				60		50			MW	orange-brown, yellow-orange, red-	subrounded	resinous	translucent, opaque	irregular, mostly monazite
Rutile				10		10			MW	cherry red, black	subrounded	submetallic	translucent, opaque	irregular
Zircon						Tr			MW	colourless, yellow	subrounded	glassy	transparent, translucent	ovate, euhedral

What Has Been Observed?

Final Conc Weight	1.450000 g	Size Range	-0.8+0.25 mm
Weight Observed	1.450000 g		

Technician: JED
Date Observed: 29-Dec-03
Report Printed: Friday, 9 January 2004 1:16:35

Magnetic Fractions vs Size Fraction

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

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No: 93668
Overall Sample Assessment: **Negative**
Your Project Code: Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.0413 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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
Anatase						Tr			MW	powder blue, blue-grey	subangular	greasy	opaque, translucent	blocky
Cassiterite				Tr		Tr			MW	red/brown/orange/yellow/black, banded		submetallic	opaque, translucent	irregular
Corundum						Tr			MW	blue	subangular	glassy	translucent	blocky
Fe Oxide/Hydroxide				45		20			W	brown, red-brown	subrounded	dull	opaque	irregular
Ilmenite				5		20			MW	black	subangular	dull metallic	opaque	blocky
Leucoxene						Tr			W	cream	subrounded	polished	opaque	irregular
Phosphate				50		60			MW	red-brown, orange-yellow	subrounded	resinous	opaque	irregular
Rutile				Tr		Tr			MW	orange-red	subrounded	submetallic	translucent, opaque	irregular
Tourmaline						Tr			MW	black-brown, blue	subangular	glassy	transparent, translucent	blocky
Zircon						Tr			MW	colourless		vitreous	transparent	subhedral, ovate

What Has Been Observed?

Final Conc Weight	3.100000 g	Size Range	-0.8+0.25 mm
Weight Observed	3.100000 g		

Technician: JED
Date Observed: 29-Dec-03
Report Printed: Friday, 9 January 2004 1:17:11

Magnetic Fractions vs Size Fraction

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

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No: 93669
Overall Sample Assessment: **Negative**
Your Project Code: Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.0347 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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
Almandine						Tr			MW	rose pink	subangular	glassy	translucent	irregular, frosted
Anatase				Tr		Tr			MW	blue-grey	subangular	greasy	transparent, translucent	tabular
Cassiterite				40		15			MW	yellow/red/orange/black, banded	subrounded	submetallic	transparent, translucent,	irregular
Corundum						Tr			MW	palest blue		glassy	transparent	tabular
Fe Oxide/Hydroxide				Tr		Tr			W	red-brown, brown	subrounded, subangular	dull	opaque	irregular
Gold				Tr		Tr			MW	golden yellow		metallic	opaque	irregular (1+0.4) (2+0.25)
Ilmenite				10		60			MW	black	subangular	metallic	opaque	blocky, grooved
Leucoxene						Tr			W	cream, brown	subrounded	polished	opaque	irregular
Phosphate				Tr		20			W	orange-yellow, red-brown	subrounded	resinous	translucent, opaque	irregular, mostly monazite
Rutile				50		5			MW	cherry red, black	subrounded	submetallic	translucent, opaque	irregular
Tourmaline						Tr			MW	black-brown	subangular, rounded	glassy	transparent, translucent,	blocky, near spherical
Zircon						Tr			MW	colourless, pale yellow		glassy	transparent	subhedral, ovate

What Has Been Observed?

Final Conc Weight	1.04 g	Size Range	-0.8+0.25 mm
Weight Observed	1.04 g		

Technician: JED
Date Observed: 29-Dec-03
Report Printed: Friday, 9 January 2004 1:17:44

Magnetic Fractions vs Size Fraction

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

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No: 93673
Overall Sample Assessment: **Negative**
Your Project Code: Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.0217 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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		Tr			MW	pale blue-grey, deep blue		greasy	translucent, opaque	tabular, subhedral
Cassiterite				5		5			MW	yellow/red/black/orange banded	subrounded	submetallic	transparent, translucent,	irregular
Fe Oxide/Hydroxide				Tr		Tr			MW	red-brown	subangular	dull, earthy	opaque	irregular
Ilmenite				10		30			MW	black	subangular, subrounded	metallic	opaque	blocky, grooved, irregular
Leucoxene				Tr		Tr			W	cream beige	subrounded	polished	opaque	irregular
Phosphate				80		60			MW	yellow-orange, red-brown	subrounded	resinous	translucent, opaque	irregular, mostly monazite
Pyrite				Tr					MW	brassy yellow		dull metallic	opaque	irregular, globular
Rutile				5		5			MW	cherry red, black	subrounded	submetallic	translucent, opaque	irregular
Tourmaline						Tr			MW	black-brown, brown	rounded, subangular	glassy	translucent, opaque, transparent	near spherical, blocky
Zircon						Tr			MW	colourless, pink		vitreous	transparent	ovate

What Has Been Observed?

Final Conc Weight	1.330000 g	Size Range	-0.8+0.25 mm
Weight Observed	1.330000 g		

Technician: JED
Date Observed: 29-Dec-03
Report Printed: Friday, 9 January 2004 1:18:24

Magnetic Fractions vs Size Fraction

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

Comment about this sample:

DIATECH
Ph 61 8 9361 2596
Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 03080
Disc No.:

Sample No: 93680
Overall Sample Assessment: **Negative**
Your Project Code: Northern Territory

Sample Type (as collected):	Stream Sediment	Head Weight	0.0346 kg
Sample Type (as received):	Panned Concentrate	Wet Weight	kg
Observed Sample Type:	TBE 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
Anatase						Tr			MW	silvery-grey		greasy	translucent	tabular
Cassiterite				5		5			MW	yellow/red/black/orange banded	subrounded	submetallic	translucent, opaque	irregular
Fe Oxide/Hydroxide				5		Tr			W	brown	subrounded	dull earthy	opaque	irregular
Gold				Tr		Tr			MW	golden yellow		metallic	opaque	irregular (9+0.4) (19+0.25)
Ilmenite				Tr		10			MW	black	subangular, subrounded	metallic	opaque	blocky, tabular, irregular
Leucoxene				Tr		Tr			W	cream, beige	subrounded	polished	opaque	irregular
Phosphate				85		70			MW	red-brown, orange-yellow	subrounded	resinous	translucent, opaque	irregular
Rutile				5		15			MW	cherry red, black	subrounded	submetallic	translucent, opaque	irregular
Tourmaline						Tr			MW	brown	subrounded	glassy	transparent	near spherical
Zircon				Tr		Tr			MW	colourless, yellow		glassy	transparent, translucent	ovate, frosted

What Has Been Observed?

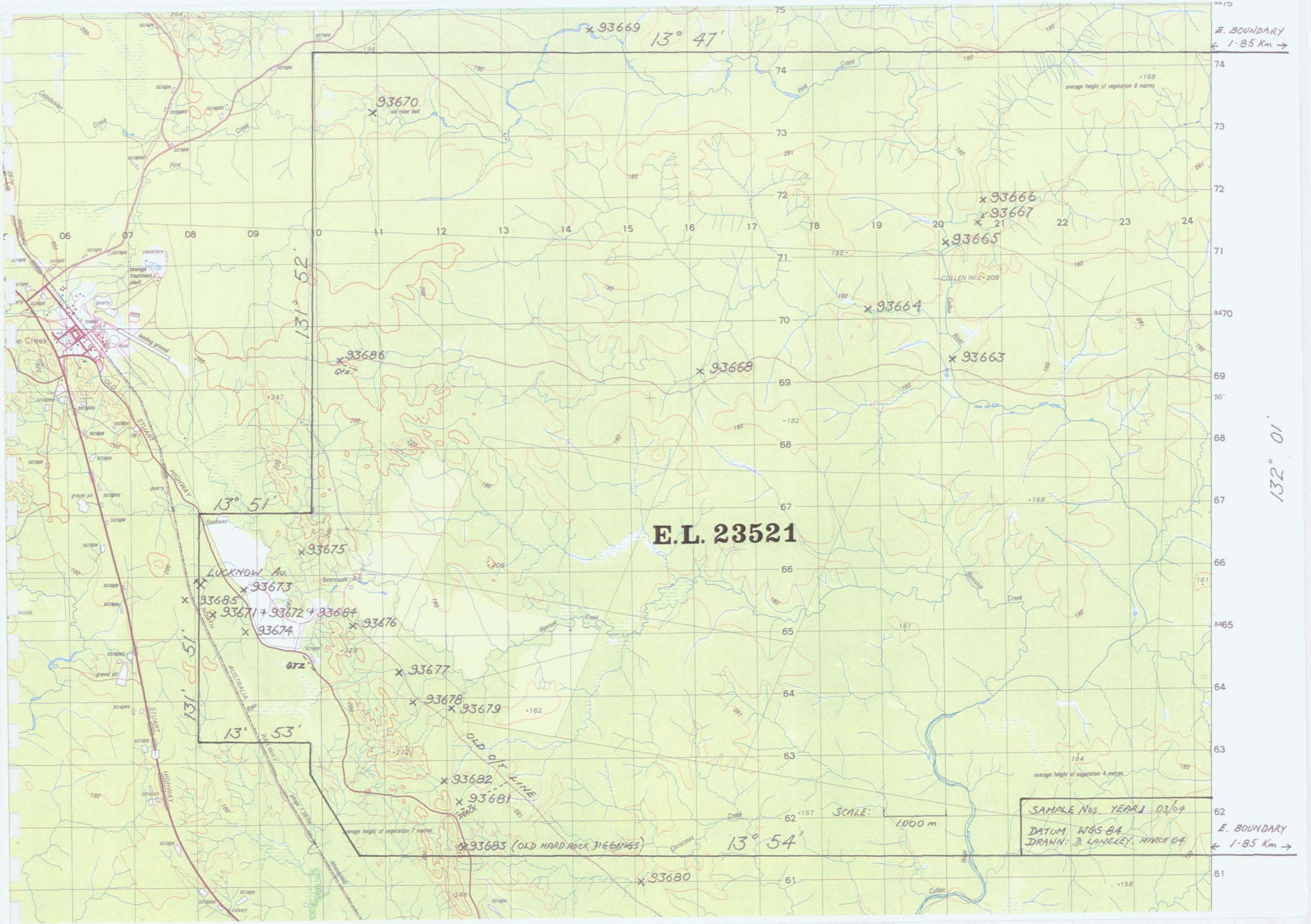
Final Conc Weight	3.040000 g	Size Range	-0.8+0.25 mm
Weight Observed	3.040000 g		

Technician: JED
Date Observed: 29-Dec-03
Report Printed: Friday, 9 January 2004 1:18:56

Magnetic Fractions vs Size Fraction

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

Comment about this sample:



E.L. 23521
93669
93670
93666
93667
93665
93664
93663
93668
93686
93675
LUCKNOW Au.
93673
93685
93671 + 93672 + 93684
93676
93674
93677
93678
93679
93682
93681
93683 (OLD HARD ROCK DIGGINGS)
93680
13° 47'
13° 51'
13° 53'
13° 54'
131° 52'
131° 51'
132° 01'
E. BOUNDARY 1·85 Km
SCALE: 1000 m
SAMPLE Nos. YEAR 1 03/04
DATUM WGS 84
DRAWN: D. LANGLEY. MARCH 04
OLD O/T LINE
TRACK
CULLEN HILL 205
Cullen River
Pine Creek
Bonrook Creek
Christmas Creek
STUART HIGHWAY
NORTH AUSTRALIA RAILWAY
average height of vegetation 8 metres
average height of vegetation 4 metres
average height of vegetation 7 metres
old river bed
Qtz.