OVERBURDEN DRILLING MANAGEMENT LIMITED
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D A T A T R A N S M I T T A L R E P O R T

DATE: 24-Jun-10

ATTENTION: **Mr. Donald Elsenheimer**

CLIENT: **Minnesota Department of Natural Resources**
500 Lafayette Rd
St. Paul, MN
55155-4045 USA

E-Mail: **donald.elsenheimer@dnr.state.mn.us / dennis.martin@state.mn.us**

NO. OF PAGES:

PROJECT: **Bigfork Greenstone Belt**

FILE NAME: **MDNR - Elsenheimer (BF-BFT) - Jun 2010**

SAMPLE NUMBERS: **BF-103,105 to 108, 110, 112 to 116, 119, 120, 122, 125 to 128 and 131 and BFT-22**

BATCH NUMBER: **4986**

NO. OF SAMPLES: **19**

THESE SAMPLES WERE PROCESSED FOR: **GOLD**
HMCs

SPECIFICATIONS:
1. Submitted by client: ±15 kg till and sand/gravel samples.
2. Heavy liquid separation specific gravity: 3.20.

REMARKS:

Remy Huneault, P.Geo.
Laboratory Manager

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY

Project: Bigfork Greenstone Belt
Filename: MDNR - Elsenheimer (BF-BFT) - Jun 2010
Total Number of Samples in this Report = 19 Batch Number: 4986

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
BF-103	6	3	3	0	23.3	118	29	89	0
BF-105	36	29	5	2	57.2	413	397	14	2
BF-106	10	7	3	0	23.4	45	44	1	0
BF-107	8	6	2	0	20.2	22	21	1	0
BF-108	8	8	0	0	45.3	156	156	0	0
BF-110	2	1	0	1	47.1	1	1	0	1
BF-112	1	0	1	0	6.7	29	0	29	0
BF-113	15	13	1	1	32.1	241	240	1	1
BF-114	5	5	0	0	18.1	68	68	0	0
BF-115	17	17	0	0	43.0	114	114	0	0
BF-116	14	13	1	0	12.3	165	165	<1	0
BF-119	16	16	0	0	35.8	3540	3540	0	0
BF-120	6	6	0	0	41.2	789	789	0	0
BF-122	6	6	0	0	40.8	141	141	0	0
BF-125	0	0	0	0	24.7	0	0	0	0
BF-127	3	2	0	1	34.7	5	5	0	1
BF-128	17	12	4	1	31.4	71	50	21	<1
BF-131	40	19	20	1	45.3	292	271	20	2
BFT-22	5	2	2	1	22.0	142	137	5	<1

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
DETAILED GOLD GRAIN DATA

Project: Bigfork Greenstone Belt
Filename: MDNR - Elsenheimer (BF-BFT) - Jun 2010
Total Number of Samples in this Report = 19

Batch Number: 4986

Sample Number	Panned Yes/No	Dimensions (microns) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
BF-103	No	3	C	15	15	1	1		2			
		5	C	25	25	1			1			
		10	C	50	50		1		1			
		25	M	50	150		1		1			
		15	C	75	75	1			1			
									6	23.3	118	
BF-105	Yes	3	C	15	15	2	1		3			3 grains pyrite (25-50µm).
		5	C	25	25	3	2	1	6			
		8	C	25	50	5	1	1	7			
		10	C	25	75	3			3			
		10	C	50	50	6			6			
		13	C	50	75	3			3			
		15	C	75	75	1	1		2			
		18	C	75	100	1			1			
		22	C	75	150	1			1			
		25	M	75	100	1			1			
		50	M	75	100	1			1			
		50	M	125	150	1			1			
		25	M	150	150	1			1			
									36	57.2	413	
BF-106	No	3	C	15	15		3		3			
		5	C	25	25	1			1			
		8	C	25	50	3			3			
		10	C	50	50	2			2			
		13	C	50	75	1			1			
									10	23.4	45	
BF-107	No	3	C	15	15		2		2			
		5	C	25	25	3			3			
		8	C	25	50	2			2			
		10	C	25	75	1			1			
									8	20.2	22	
BF-108	No	3	C	15	15	1			1			
		5	C	25	25	3			3			
		15	C	75	75	1			1			
		18	C	75	100	1			1			
		20	C	75	125	1			1			
		27	C	100	175	1			1			
									8	45.3	156	
BF-110	No	5	C	25	25	1		1	2			
									2	47.1	1	
BF-112	No	10	C	50	50		1		1			
									1	6.7	29	
BF-113	Yes	5	C	25	25		1	1	2			4 grains pyrite (25-100µm).
		8	C	25	50	4			4			
		10	C	50	50	2			2			
		13	C	50	75	2			2			
		15	C	75	75	2			2			
		18	C	75	100	2			2			
		25	M	100	150	1			1			
									15	32.1	241	
BF-114	No	3	C	15	15	1			1			
		5	C	25	25	1			1			
		10	C	50	50	1			1			
		13	C	50	75	1			1			
		15	C	50	100	1			1			
									5	18.1	68	
BF-115	Yes	3	C	15	15	2			2			No sulohides.
		5	C	25	25	4			4			
		8	C	25	50	4			4			
		10	C	25	75	1			1			
		10	C	50	50	2			2			
		13	C	50	75	1			1			
		18	C	75	100	2			2			
		20	C	100	100	1			1			
									17	43.0	114	
BF-116	Yes	3	C	15	15	2	1		3			2 grains pyrite (50-75µm).
		5	C	25	25	3			3			
		8	C	25	50	2			2			
		10	C	25	75	2			2			
		10	C	50	50	2			2			
		13	C	50	75	1			1			
		15	C	75	75	1			1			
									14	12.3	165	
BF-119	Yes	13	C	50	75	2			2			1 grain pyrite (300µm).
		25	M	75	75	2			2			
		25	M	75	150	1			1			
		25	M	100	150	1			1			
		25	M	100	200	1			1			
		75	M	100	350	1			1			
		25	M	125	200	1			1			
		50	M	125	200	2			2			
		50	M	125	250	1			1			
		25	M	150	250	1			1			
		25	M	200	200	1			1			
		25	M	200	250	1			1			
		50	M	200	300	1			1			
									16	35.8	3540	
BF-120	No	5	C	25	25	1			1			
		10	C	25	75	1			1			
		50	M	75	250	1			1			
		25	M	100	150	2			2			
		50	M	220	200	1			1			
									6	41.2	789	
BF-122	No	8	C	25	50	2			2			
		10	C	25	75	1			1			
		13	C	50	75	1			1			
		22	C	75	150	1			1			
		25	C	100	150	1			1			
									6	40.8	141	
BF-125	No	NO VISIBLE GOLD										
BF-127	No	5	C	25	25			1	1			
		8	C	25	50	2			2			
									3	34.7	5	
BF-128	Yes	3	C	15	15	2	3	1	6			1 grain pyrite (125µm).
		5	C	25	25	4			4			
		8	C	25	50	3			3			
		10	C	50	50	1			1			
		13	C	50	75	1			1			
		15	C	50	100		1		1			
		15	C	75	75	1			1			
									17	31.4	71	
BF-131	Yes	3	C	15	15	2	6		8			No sulphides.
		5	C	25	25	6	7		13			
		8	C	25	50	3	6	1	10			
		10	C	50	50	1	1		2			
		15	C	50	100	4			4			
		18	C	75	100	1			1			
		25	M	75	150	1			1			
		25	M	150	200	1			1			
									40	45.3	292	
BFT-22	No	3	C	15	15			1	1			
		5	C	25	25		1		1			
		8	C	25	50	1	1		2			
		25	M	100	150	1			1			
									5	22.0	142	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
RAW SAMPLE DESCRIPTIONS AND PROCESSING WEIGHTS

Project: Bigfork Greenstone Belt
Filename: MDNR - Elsenheimer (BF-BFT) - Jun 2010
Total Number of Samples in this Report = 19

Batch Number: 4986

Sample Number	Weight (kg wet)				-2.0 mm Table Concentrate Weight (g dry)					Sample Description													
						Heavy Liquid Separation (S.G. 3.3)				Clasts (> 2.0 mm)					Matrix (<2.0 mm)								
							HMC				Percentage				Distribution					Colour			
	Bulk Rec'd	Table Split	+2.0 mm Clasts	Table Feed	Total	Lights	Total	Non Mag	Mag	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	CLASS
BF-103	10.9	10.4	1.1	9.3	404.0	373.2	30.8	23.3	7.5	C	40	60	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BF-105	12.6	12.1	1.3	10.8	417.3	358.5	58.8	57.2	1.6	C	25	75	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BF-106	12.9	12.4	0.6	11.8	311.3	283.0	28.3	23.4	4.9	P	30	70	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BF-107	10.7	10.2	0.5	9.7	377.9	356.8	21.1	20.2	0.9	P	30	70	0	0	U	Y	Y	Y	N	BE	BE	TILL
BF-108	16.5	16.0	0.1	15.9	389.4	343.8	45.6	45.3	0.3	G	20	80	0	0	S	MC	-	N	N	LOC	NA	SAND
BF-110	20.0	19.5	8.7	10.8	372.2	312.6	59.6	47.1	12.5	C	75	25	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
BF-112	12.8	12.3	2.0	10.3	225.2	215.6	9.6	6.7	2.9	P	70	30	0	0	S	C	-	N	N	LOC	NA	SAND + GRAVEL
BF-113	16.0	15.5	5.3	10.2	359.0	314.2	44.8	32.1	12.7	C	20	80	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BF-114	19.9	19.4	11.3	8.1	297.2	272.9	24.3	18.1	6.2	C	50	50	0	0	S	C	-	N	N	OC	OC	SAND + GRAVEL
BF-115	12.3	11.8	2.2	9.6	317.6	260.2	57.4	43.0	14.4	C	40	60	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BF-116	14.4	13.9	4.5	9.4	249.8	230.2	19.6	12.3	7.3	P	20	80	0	0	U	Y	Y	-	N	LOC	LOC	TILL
BF-119	15.2	14.7	1.6	13.1	411.3	358.9	52.4	35.8	16.6	C	30	70	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BF-120	15.0	14.5	2.7	11.8	349.3	289.0	60.3	41.2	19.1	C	40	60	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BF-122	15.2	14.7	3.7	11.0	329.9	271.7	58.2	40.8	17.4	C	20	80	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BF-125	12.3	11.8	1.4	10.4	304.8	272.0	32.8	24.7	8.1	C	30	70	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BF-127	10.8	10.3	0.9	9.4	342.9	297.0	45.9	34.7	11.2	P	20	80	0	0	U	+	Y	-	N	OC	OC	TILL
BF-128	12.9	12.4	1.4	11.0	303.4	268.0	35.4	31.4	4.0	P	50	50	0	0	U	+	Y	-	N	LOC	LOC	TILL
BF-131	12.0	11.5	0.5	11.0	319.9	255.5	64.4	45.3	19.1	P	20	80	0	0	U	Y	Y	Y	N	OC	OC	TILL
BFT-22	12.4	11.9	0.4	11.5	287.3	259.0	28.3	22.0	6.3	P	20	80	0	0	U	Y	Y	Y	N	LOC	LOC	TILL

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY ABBREVIATIONS

SEDIMENT LOG

Largest Clasts Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other Lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
- S/U: Sorted or Unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:
- ORG: Y: Organics present in matrix
- N: Organics absent or negligible in matrix
- +: Matrix is mainly organic

Matrix Colour:

Primary:
- BE: Beige
- GY: Grey
- GB: Grey-beige
- GN: Green
- GG: Grey-green
- PP: Purple
- PK: Pink
- PB: Pink-Beige

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

GOLD GRAIN LOG

Thickness:
- VG: Visible gold grains
- M: Actual measured thickness of grain (microns)
- C: Thickness of grain (microns) calculated from measured width and length

KIM (kimberlite indicator mineral) LOG

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

Adr: Andradite	Cr: Chromite	Ky: Kyanite	Sil: Sillimanite	Ttn: Titanite
Ap: Apatite	Fay: Fayalite	Mz: Monazite	Spi: Spinel	
Ase: Anatase	Gh: Gahnite	Ol: Olivine	Sps: Spessartine	
Ax: Axinite	Gr: Grossular	Opx: Orthopyroxene	St: Staurolite	
Cpy: Chalcopyrite	Gth: Goethite	Py: Pyrite	Tm: Tourmaline	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.