

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5409222
(Nad27)	Easting	547641.3
Elevation (m):	389.7	
Dip at Collar:	-44.6	
Azimuth:	28.91	
Total Depth:	75	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

## DDH: FD-13-07

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	25-May-13
Date finish:	26-May-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Julien Meric

## DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-44.6	28.91

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE		INTERVAL	WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job	
From	To	Maj Rock	Min Rock	Comments																				NO.
0.00	10.42	OB - Overburden					N504001		10.4	12	1.6	0.005	0.009	0.005		1		3690	188	>10000	1.27			TB13097085
							N504002		12	14	2.0	0.006	0.014	0.003		1.2		3820	169	9470	1.38			TB13097085
10.42	13.04	2f - Medium to coarse grained		oxide augite melatroctolite	0.5% to 1% disseminated sulphides		N504003		14	16	2.0	0.005	<0.005	0.001		0.6		2830	110	8810	1.29			TB13097085
				moderately to strongly altered rock is dominated by pyroxene, magnetite, apatite and	10.42-10.9 m. overall, pyrrhotite and chalcopyrite below 1%		N504004		16	18	2.0	0.003	<0.005	0.001		0.7		3010	125	9830	1.41			TB13097085
				plagioclase with minor olivine and biotite, strongly magnetic, biotite as alteration mineral likely	Po:Cpy		N504005		18	20	2.0	0.003	<0.005	0.001		0.5		2460	95	7920	1.14			TB13097085
				replaces pyroxene. >20% Mag.			N504006		20	22	2.0	0.004	0.005	0.002		0.7		2910	115	>10000	1.3			TB13097085
				2b - Coarse grained olivine gabbro with modal layering	3-5% disseminated sulphides		N504007		22	24	2.0	0.005	<0.005	0.002		0.8		3250	121	8980	1.43			TB13097085
				10.9-11.06m. gradational with the above unit. Strongly magnetic. Moderately altered. Slightly	10.9-11.06m. 2.5% po. 1%Cpy (Po:Cpy=2.5:1). Cpy commonly		N504008		24	26	2.0	0.006	<0.005	0.002		0.8		3700	121	9320	1.65			TB13097085
				layered rock mainly composed of medium to coarse grained pyroxene and plagioclase with lesser	rimms Po.		N504009		26	28	2.0	0.002	<0.005	0.001		0.3		1520	51	8690	0.84			TB13097085
				biotite and chlorite.	0.5% to 1% disseminated sulphides		N504010		28	30	2.0	0.004	<0.005	0.002		0.7		3410	93	8340	1.9			TB13097085
				Pyroxene is partially replaced by biotite and chlorite.	11.06-13.04 mainly Po, 0.5- 1 % Po.		N504011		30	32	2.0	0.002	<0.005	0.001		0.5		2030	54	9290	1.3			TB13097085
13.04	18.95	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides		N504012		32	34	2.0	0.004	0.005	0.002		0.6		2750	85	8520	1.68			TB13097085
				same as the unit from 10.90 to 11.06 m. Gradational contact with the above 2f. Moderately altered.	13.04-18.95. 2.5:1. po:Cpy		N504013		34	36	2.0	0.001	<0.005	0.001		<0.2		93	1	9410	0.3			TB13097085
				The layering is defined by variations in Ol and Mag contents.	3-5% disseminated sulphides		N504014		36	38	2.0	0.012	<0.005	0.001		<0.2		64	1	9820	0.3			TB13097085
					15.2-15.34 3.5:1 po:Cpy relatively coarse grained.		N504015	mpg1				0.279	0.97	3.4		3.2		7160	386	1320	1.05			TB13097085
					Chalcopyrite commonly mantles pyrrhotite.		N504016		38	40	2.0	0.001	<0.005	0.001		<0.2		79	<1	>10000	0.31			TB13097085
					3-5% disseminated sulphides		N504017		40	42	2.0	0.001	<0.005	0.003		<0.2		66	1	8150	0.23			TB13097085
					17.1-17.3 3.5:1 po:Cpy. Sulfide-rich segments are moderately		N504018		42	44	2.0	0.001	0.005	0.01		<0.2		27	3	1930	0.04			TB13097085
					to strongly altered and chlorite is the common mineral,		N504019		44	46	2.0	0.001	<0.005	0.003		<0.2		216	8	7430	0.32			TB13097085
					possibly replacing pyroxene.		N504020		46	48	2.0	0.001	<0.005	<0.001		<0.2		136	4	9500	0.36			TB13097085
18.95	19.53	5b - Augite syenite			Trace to 0.5% disseminated sulphides		N504021		48	50	2.0	<0.001	<0.005	<0.001		<0.2		95	1	9060	0.26			TB13097085
				rock type not sure. Augite syenite? Apparently sharp contact with the above unit. Overall dark	18.95-19.53m. sulfides not obviously visible		K004151		50	59	9.0										0.21	0.05		TB13118918
				in color. Rock texture is chaotic. Strongly magnetic and altered. Mainly composed of K-spar,			K004152		59	68	9.0										0.22	0.05		TB13118918
				apatite, chlorite, and carbonate stringers. K-spar is coarse grained and partially replaced by			K004153		68	75	7.0										0.23	0.06		TB13118918
				chlorite. Apatite is medium grained and disseminated.																				
19.53	41.21	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides																			
				sharp contact with the above unit. Overall same as the unit from 13.04 to 18.95 m.	19.53-33.71m 4:1.5 po:Cpy																			
				Moderately altered. Locally medium altered (chloritisation-epidotisation) to altered(chloritisation-	Trace to 0.5% disseminated sulphides																			
				epidotisation-pinkitisation). The rock becomes fine grained and strongly altered. 20.42 - 20.79 m.	33.71-41.21 m. Sulfides in trace amounts.																			
				40.22-41.21 alternation of 2b (60%) and 2f (40%) with magnetite cumulate in 2f																				
				strong pinkitisation in 2b(40.29-40.87 m)																				
41.21	44.63	2g - Gabbroic anorthosit																						
				Abrupt into this unit. The rock is dominated by Pl with mafic minerals (Cpx, Mag) in pathces.																				
				2b - Coarse grained olivine gabbro with modal layering																				
				43.88- 43.93 m Abrupt into this unit from 2g. Same as previous 2b.																				
44.63	75.00	2b - Coarse grained olivine gabbro with modal layering			Local blebs to 1-2% sulphides																			
				slightly layered rock shows variation in alteration extent and mafic and sulfide contents.	44.63-47 begin at the end of anorthosit, and medium to																			
				Overall similar to 2b unit from 19.53 to 41.21 m.	coarse grain sulfide in fractured zone, predominantly Po																			
					Trace to 0.5% disseminated sulphides																			
				45-45.67m. The rock is slightly altered. Chl is the predominant alteration mineral.	47-74.40 1:1 po:Cpy. Low sulfide content.																			
				45.67-46.6m. The rock becomes strongly altered and shows chaotic textures in a	Sulfides are predominantly chalcopyrite.																			
				fracture zone. Alteration minerals include biotite, chlorite and possibly serpentine (?).	Sulfides are not obviously visible.																			
				46.6- 55.84 m. The rock is the same as the unit of 45 - 45.67 m.	Trace to 0.5% disseminated sulphides																			
				55.84-74.4 m. The rock becomes dark and relatively mafic. Greenish euhedral to subhedral	74.40-74.88 not obviously visible and grain in a																			
				mineral is likely altd olvine that is replaced by sericite (?).	fracture at the end of the hole																			
				59.35 - 59.39 m. 4 cm wide plagioclase - rich gabbro. within this part.																				
				74.4-75m.layered coarse grained rock consists of plagioclase-rich and mafic mineral-rich layers.																				
				Moderately altered. Low sulfide content. Biotite is the common alteration mineral and replaces																				
				igneous mafic minerals (pyroxene?).																				



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5409188
	Easting	547626.1
Elevation (m):	396.5	
Dip at Collar:	-59.28	
Azimuth:	25.45	
Total Depth:	75	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-08

Lease/Claim:	1240552
Property:	Coldwell complex
Zone:	Four Dams South
Date start:	26-May-13
Date finish:	27-May-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Renata Smoke (0-44.4m), Julien (44.4-EOH)
Assistant:	

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-59.28	25.45

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments					FROM	TO														
0.00	2.27	OB - Overburden					N504022		2.28	4	1.7	0.005	0.007	0.003			0.6		2060	114	>10000	0.57		TB13097084
							N504023		4	6	2.0	0.003	<0.005	0.001			0.3		802	71	>10000	0.24		TB13097084
2.27	33.43	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides		N504024		6	8	2.0	0.004	<0.005	0.001			0.5		1260	126	>10000	0.36		TB13097084
				Weakly layered with approximately 10% plag rich layers. Layers are 15 cm to 1m wide		6.75-9.21m 1% pyrrhotite, trace chalcopyrite	N504025		8	10	2.0	0.007	0.01	0.001			0.8		3100	176	9830	1.13		TB13097084
				Mafic layers contain up to 60% magnetite.		3-5% disseminated sulphides	N504026		10	12	2.0	0.009	0.013	0.004			1.4		5120	217	>10000	2.05		TB13097084
				biotite and chlorite veinlets (1-20mm wide) dispered throughout interval. Wider veins are associated with an increase in chalcopyrite proportions (relative to pyrrhotite). Specific intervals noted below.		9.21-32.24m 5-8% pyrrhotite, trace chalcopyrite	N504027		12	14	2.0	0.012	0.009	0.004			1.2		4720	197	>10000	1.92		TB13097084
							N504028		14	16	2.0	0.01	0.012	0.004			1		4160	213	>10000	1.83		TB13097084
						19.3-21.06m 5% pyrrhotite, 1% chalcopyrite	N504029		16	18	2.0	0.01	0.009	0.004			1.2		4220	225	9440	1.78		TB13097084
				20.13-20.40m zone of intense epidote alteration in plag rich layer		2-3% disseminated sulphides	N504030	d	16	18	2.0	0.009	0.007	0.004			1.2		4200	219	>10000	1.72		TB13097084
				19.3-22.6m unaltered to intensely altered (chlorite biotite and talc), controlled by intermittant faulting		32.24-37.06m 3% pyrrhotite, trace chalcopyrite	N504031		18	20	2.0	0.011	0.008	0.005			1.1		4330	214	>10000	1.72		TB13097084
				20.47-20.6m fault gauge			N504032		20	22	2.0	0.01	0.008	0.003			1.1		3960	204	>10000	1.56		TB13097084
				21.67-22.03m fault gauge			N504033		22	24	2.0	0.006	0.005	0.006			0.7		2410	197	>10000	0.93		TB13097084
33.43	37.06	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504034		24	26	2.0	0.011	<0.005	0.007			1.2		4280	264	9400	1.57		TB13097084
				Contact between 2b and 2f (upper) is almost indistinguishable (gradational) and is marked by the start of pegmatic poikilitic cpx, with the plag content lowering further away from the contact and into this unit. This is a medium grained (overall) ultramafic unit with: 2-3% apatite (fine, euhedral), 40% magnetite, 20% olivine, 5-10% plag, 5% biotite, 20% cpx (pegmatic, poikilitic)		2% pyrrhotite, 1% chalcopyrite commonly intergranular with magnetite.	N504035		26	28	2.0	0.009	<0.005	0.006			1.1		3970	196	8020	1.64		TB13097084
							N504036		28	30	2.0	0.005	<0.005	0.003			0.9		2840	134	6840	1.05		TB13097084
							N504037		30	32	2.0	0.01	<0.005	0.007			1		4090	206	9290	1.68		TB13097084
							N504038		32	34	2.0	0.006	0.005	0.004			0.4		1525	134	>10000	0.68		TB13097084
37.06	38.82	3d - Very coarse grained to pegmatic, ophitic gabbro			Local blebs to 2-4% sulphides		N504039		34	36	2.0	0.005	0.009	0.004			0.7		1885	186	7410	0.46		TB13097084
				Contact between upper 2f and 3d is gradational, and the start is marked by 4cm thick apatite and actinolite rich layer/alteration vein, and below this a biotite and sulfide rich vein.		3% pyrrhotite, 1% chalcopyrite: exclusively forms pseudomorphs of CPX, cg	N504040		36	38	2.0	0.006												

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5409206
	Easting	547662
Elevation (m):	384.5	
Dip at Collar:	-45.65	
Azimuth:	30.9	
Total Depth:	66	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-09

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	27-May-13
Date finish:	27-May-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Katrina McLean, Renata Smoke
Assistant:	Renata Smoke

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45.65	30.9

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments			NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	7.60	OB - Overburden				N504059	mpg2	7.6	9	1.4	0.005	0.009	0.005			0.7			1940	222	9470	0.46		TB13097086
7.60	45.00	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides	N504060					0.062	0.34	0.787			1.3			2730	277	1630	1.07		TB13097086
				layered with sericitization and minor actinolite/chlorite alteration. Overall alteration is weak-mod.	7.6-9.44, 3:1, Po:Cpy, more mafic, obvious banding	N504061		9	11	2.0	0.003	<0.005	0.003			0.4			1130	130	9510	0.26		TB13097086
				Alteration of plag to sericite fades in and out.	Local blebs to 1-2% sulphides	N504062		11	13	2.0	0.004	<0.005	0.001			0.4			1870	85	>10000	0.43		TB13097086
				7.6-13.55m. More and larger mafic bands that have higher magnetite content. This seems to	9.44-10.1, 5:1 Po:Cpy, fine grained small zones of net	N504063		13	15	2.0	0.001	<0.005	0.001			0.4			2160	96	9550	0.48		TB13097086
				correlate to mineralization. Mafic bands contain increase olivine (in comparison to	textured po. Cpy often associated with Po	N504064		15	17	2.0	0.001	<0.005	0.001			<0.2			434	21	9770	0.12		TB13097086
				leucocratic layers.	0.5% to 1% disseminated sulphides	N504065		17	19	2.0	<0.001	0.005	0.001			0.2			362	15	9890	0.12		TB13097086
				27.4-29.35m contains 3 irregular syenite intrusions (<10cm each)	10.1-12.5m, 3:1 Po:Cpy	N504066		19	21	2.0	<0.001	<0.005	<0.001			<0.2			355	12	9890	0.13		TB13097086
				30.8-33.5m. Alteration increases with addition of potassic (sodic?) and very minor epidote.	3-5% disseminated sulphides	N504067		21	23	2.0	0.001	<0.005	0.001			<0.2			309	9	9030	0.12		TB13097086
				Alteration is less patchy than above	12.53-13.5m, 3:1 Po:Cpy	N504068		23	25	2.0	<0.001	<0.005	0.001			<0.2			326	1	9550	0.16		TB13097086
				33.5-45 alteration is more consistent and has "dalmation" look.	Trace to 0.5% disseminated sulphides	N504069	25	27	2.0	<0.001	<0.005	0.001			<0.2			102	1	9920	0.25		TB13097086	
				2f - Medium to coarse grained oxide augite melatroctolite	13.5m-22.8m, widely spreadout, fine grained. Both Cpy and po	N504070	27	29	2.0	0.001	<0.005	0.001			<0.2			43	1	9520	0.25		TB13097086	
				33.2-33.43m 2f mafic band with sulfide increase, sharp contacts but doesn't look intrusive. The	0.5% to 1% disseminated sulphides	N504071	29	31	2.0	0.001	<0.005	0.001			<0.2			29	<1	9670	0.26		TB13097086	
				rock is dominated by med grained Ol, Cpx and Mag. Mag-rich. Mag is typically interstitial to	22.8-27.55m, 1:2 po:Cpy	N504072	31	33	2.0	0.002	<0.005	<0.001			<0.2			51	1	9220	0.23		TB13097086	
				subhedral Ol.	0.5% to 1% disseminated sulphides	N504073	33	35	2.0	<0.001	<0.005	0.001			<0.2			41	1	9390	0.23		TB13097086	
					27.65-29.4m, 2:1 po:Cpy fine grained disseminated	N504074	35	37	2.0	0.001	<0.005	<0.001			<0.2			60	1	9550	0.25		TB13097086	
					Trace to 0.5% disseminated sulphides	N504075	35	37	2.0	<0.001	<0.005	0.001			<0.2			62	1	>10000	0.26		TB13097086	
					29.4-45 small zones with trace-5% vfg sulphides. Often	N504076	37	39	2.0	0.001	<0.005	<0.001			<0.2			63	<1	8000	0.21		TB13097086	
					in the more mafic layers	N504077	39	41	2.0	0.001	<0.005	<0.001			<0.2			71	<1	8450	0.21		TB	

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5409206
	Easting	547660.5
Elevation (m):	385.3	
Dip at Collar:	-85.19	
Azimuth:	22.41	
Total Depth:	102	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-10

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	27-May-13
Date finish:	28-May-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Julien Merc, Katrina McLean

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-85.19	22.41

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments			NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	4.50	OB - Overburden				N504087	b	4.5	6	1.5	0.002	<0.005	<0.001			0.2		635	107	>10000	0.2			TB13103748
4.50	63.20	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides	N504088		6	8	2.0	0.001	<0.005	<0.001			0.2		468	92	>10000	0.15			TB13103748
				Coarse grained, layered gabbro with thick layers (0.5-2 m) of magnetite-olivine cumulate and 1-5 cm Pl-rich layers. Overall moderately altered. Rock is mainly composed of Pl, Py, Ol, Bt and Mag.	4.5-63.2m mineralization is apparently related to moderately altered Mag-Ol cumulate where Po dominates sulfides.	N504089		8	10	2.0	0.002	<0.005	<0.001			0.2		931	138	7810	0.26			TB13103748
				Bt is interstitial to and replacing Py and Ol.	3-5% disseminated sulphides	N504090					0.001	<0.005	<0.001			<0.2		4	1	70	0.01			TB13103748
				30-47.04m rock is relatively fractured. Chl is the infilling mineral in fractures. Rock is overall dark	9.5-10.8 m 3-5% Po + Cpy (4:0.5). Cpy not obviously visible	N504091		10	12	2.0	0.004	0.007	0.002			0.5		1685	202	8430	0.41			TB13103748
				and shows no typical layering. Moderately to strongly altered.	3-5% disseminated sulphides	N504092		12	14	2.0	0.004	<0.005	0.002			0.4		1430	136	8290	0.33			TB13103748
				47.04-47.09 m Pl-rich layer.	11-11.1 m 3% Po + Cpy (3:0.5). Cpy not obviously visible	N504093		14	16	2.0	0.002	<0.005	0.001			0.4		1615	92	>10000	0.37			TB13103748
				2g - Gabbroic anorthosite	2-3% disseminated sulphides	N504094		16	18	2.0	0.002	<0.005	<0.001			0.6		3340	118	9060	0.8			TB13103748
				51.27-51.95 m. Fine grained anorthosite shows gradational contact with the previous unit. White	12.5-13.0 m 2% Po + Cpy (4:1)	N504095		18	20	2.0	0.002	<0.005	<0.001			0.2		1110	50	>10000	0.29			TB13103748
				rock is dominated by >90% Pl with mafic minerals in minor amounts.	2-3% disseminated sulphides	N504096		20	22	2.0	<0.001	<0.005	<0.001			<0.2		431	32	9970	0.13			TB13103748
				51.95-63.2 m, gradational into this unit (2b). Apparently unmineralized.	14.5-14.6 m 2% Po + Cpy (5:1)	N504097		57	59	2.0	<0.001	<0.005	<0.001			<0.2		104	<1	9180	0.31			TB13103748
					2-3% disseminated sulphides	N504098		59	61	2.0	0.001	<0.005	<0.001			<0.2		122	<1	8730	0.29			TB13103748
					16.0-16.24 m 1-2% Po + Cpy (1:1) in Pl-rich layer	N504099		61	63	2.0	<0.001	<0.005	<0.001			<0.2		94	<1	7280	0.24			TB13103748
					2-3% disseminated sulphides	N504100		63	65	2.0	0.001	<0.005	<0.001			0.2		176	<1	8800	0.38			TB13103748
					16.24-16.54 m 3% Po, invisible Cpy	N504101		65	67	2.0	<0.001	<0.005	<0.001			<0.2		269	1	>10000	0.56			TB13103748
					2-3% disseminated sulphides	N504102		67	69	2.0	<0.001	<0.005	<0.001			<0.2		214	<1	9540	0.5			TB13103748
					16.54-17.0 m 2-3% Po + Cpy (1:1)	N504103		69	71	2.0	<0.001	<0.005	<0.001			<0.2		103	<1	9190	0.32			TB13103748
					2-3% disseminated sulphides	N504104		71	73	2.0	0.001	<0.005	<0.001			<0.2		80	<1	7890	0.27			TB13103748
					18.4-19.2 m 1-2% Po + Cpy (2:1)	N504105					0.422	0.785	3.04			3.4		7030	373	1370	1.1			TB131



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5409222
	Easting	547615.8
Elevation (m):	396.8	
Dip at Collar:	-84.15	
Azimuth:	358	
Total Depth:	102	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

**DDH: FD-13-11**

**Lease/Claim:** 1240552  
**Property:** Coldwell Complex  
**Zone:** Four Dams South  
**Date start:** 28-May-13  
**Date finish:** 29-May-13  
**Contractor:** Chibougamau Diamond Drilling  
**Logged by:** Renata Smoke  
**Assistant:**

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.15	358

complete downhole survey on Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments			Comments	NO.	QC	FROM	TO			ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
0.00	0.38	OB - Overburden					N504117		0.38	3	2.6	0.003	<0.005	0.002				0.2		721	84	>10000	0.26		TB13103749
							N504118		3	5	2.0	0.002	<0.005	0.001				0.2		611	79	>10000	0.23		TB13103749
0.38	6.42	2b - Coarse grained olivine gabbro with modal layering					N504119		5	7	2.0	0.002	<0.005	0.002				<0.2		504	73	>10000	0.2		TB13103749
				minimal alteration, pristine			N504120	d	5	7	2.0	0.002	<0.005	0.001				<0.2		485	73	>10000	0.2		TB13103749
6.42	29.35	2f - Medium to coarse grained oxide augite melatroctolite			3-5% disseminated sulphides		N504121		7	9	2.0	0.003	<0.005	0.003				0.3		735	121	>10000	0.25		TB13103749
				Larger proportion of magnetite rich ultramafic with disseminated po and cpy. Still layered, with		6.42-19.28m fg diss. 3% po, 0.5% cpy concentrated in mafic	N504122		9	11	2.0	0.003	<0.005	0.003				0.2		756	125	>10000	0.23		TB13103749
				approx 10% plag rich layers 2-20cm thick.		layers (none in plag rich)	N504123		11	13	2.0	0.004	<0.005	0.003				0.2		734	114	10000	0.22		TB13103749
				22.3-29.35m, greater proportion of magnetite in layers, 65% (from approx 40-50%)		19.28-29.35m FG-MG diss 6% po, 1.5% cpy concentrated in	N504124		13	15	2.0	0.003	<0.005	0.003				0.3		831	118	9400	0.25		TB13103749
				Alteration:		mafic layers	N504125		15	17	2.0	0.003	<0.005	0.002				<0.2		733	101	>10000	0.2		TB13103749
				18.66-22.5m, moderate potassic alteration of plag (pink to creamy), and chlorite alteration			N504126		17	19	2.0	0.003	<0.005	0.001				<0.2		590	93	>10000	0.17		TB13103749
				especially evident in plag rich layers			N504127		19	21	2.0	0.003	<0.005	0.001				<0.2		792	106	>10000	0.21		TB13103749
29.35	55.20	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides		N504128		21	23	2.0	0.004	<0.005	0.001				0.2		1370	137	>10000	0.36		TB13103749
				Alteration:		29.35-32.91m 4% cpy, 2% po in more plag rich layers	N504129		23	25	2.0	0.008	0.011	0.004				0.6		2930	275	>10000	0.67		TB13103749
				29.35-47.6m strong homogenous potassic (pink) alteration, and patchy and moderate epidote		(associated with intense ser and pink alteration of plag, bi, chlor,	N504130		25	27	2.0	0.006	0.005	0.003				0.5		2250	250	5640	0.42		TB13103749
				alteration alteration of plag, chloritization		and epidote alteration). Magnetite rich bands have a greater	N504131		27	29	2.0	0.004	0.005	0.003				0.5		2130	172	5360	0.41		TB13103749
						proportion of po (6:1 po to cpy in mafic layers and 1:2 in plag rich)	N504132		29	31	2.0	0.004	<0.005	0.001				0.8		3950	143	7950	1.21		TB13103749
					3-5% disseminated sulphides		N504133		31	33	2.0	0.002	<0.005	0.001				0.2		2030	75	9690	0.92		TB13103749
						32.91-43.73m patches of mineralization (2-40cm wide,	N504134		33	35	2.0	0.001	<0.005	<0.001				<0.2		435	19	>10000	0.32		TB13103749
						approx 15% of entire rock within this zone) concentrated in	N504135				2.0	<0.001	<0.005	<0.001											

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5409224
	Easting	547614.8
Elevation (m):	394.9	
Dip at Collar:	-45.11	
Azimuth:	28.69	
Total Depth:	75	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-12

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	29-May-13
Date finish:	29-May-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Julien Meric

## DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45.11	28.69

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments	FROM			TO	ppm														
0.00	2.40	OB - Overburden					N504155	d	14	16	2.0	0.002	<0.005	0.001			0.2	726	97	>10000	0.2				TB13103772
							N504156		16	18	2.0	0.004	<0.005	0.001			0.3	1180	99	>10000	0.32				TB13103772
2.40	18.70	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N504157		18	20	2.0	0.007	0.005	0.002			0.5	2300	199	>10000	0.77				TB13103772
				Obviously layered rock is composed of Pl,Cpx, Ol and Mag. Chl alteration is pervasive. Mafic-rich layers are commonly 10-50 cm. Cpx and Ol are partially replaced by Chl.	2-3% disseminated sulphides		N504158		20	22	2.0	0.007	0.008	0.005			0.9	4150	275	6950	1.13				TB13103772
							N504159		22	24	2.0	0.004	<0.005	0.002			0.6	3550	171	8170	0.91				TB13103772
							N504160		24	26	2.0	0.008	<0.005	0.001			0.4	2640	98	9140	0.99				TB13103772
18.70	22.60	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504161		26	28	2.0	0.001	<0.005	0.001			<0.2	974	36	>10000	0.32				TB13103772
				Dark rock is rich in Ol and Mag. Rock shows strong chl alteration. Serpentine may be present as alteration mineral. Ol is med grained and subhedral. Mag is med grained anhedral and interstitial to Ol.			N504162		28	30	2.0	0.002	<0.005	<0.001			<0.2	729	26	>10000	0.3				TB13103772
							N504163		30	32	2.0	0.005	<0.005	<0.001			<0.2	907	29	>10000	0.5				TB13103772
							N504164		32	34	2.0	0.001	<0.005	<0.001			<0.2	232	5	>10000	0.26				TB13103772
							N504165		32	34	2.0	0.001	<0.005	0.001			<0.2	233	4	>10000	0.22				TB13103772
							N504166		34	36	2.0	0.001	<0.005	<0.001			<0.2	177	2	>10000	0.36				TB13103772
22.60	49.18	2b - Coarse grained olivine gabbro with modal layering			2-3% disseminated sulphides		N504167		36	38	2.0	0.001	<0.005	<0.001			<0.2	153	9	>10000	0.46				TB13103772
				same as the unit of 2.18-17.7m but is slightly pinkish in color. 5-20 cm mafic-rich layers show relatively strong Chl alteration and may also have Kfs and serpentine as alteration mineral.			N504168		38	40	2.0	0.001	<0.005	<0.001			<0.2	312	11	>10000	0.7				TB13103772
							N504169		40	42	2.0	0.001	<0.005	0.001			<0.2	622	17	>10000	1.39				TB13103772
				3d - Very coarse grained to pegmatic, ophitic gabbro	3-5% disseminated sulphides		N504170		42	44	2.0	0.001	<0.005	0.001			<0.2	586	17	9770	0.95				TB13103772
				30.02-30.16 m. Sharp contact with 2b. Likely 3d but mixed with syenite (?). Very chaotic textures.			N504171		44	46	2.0	0.006	<0.005	0.001			<0.2	527	15	>10000	0.76				TB13103772
				Strong Chl alteration in this unit. Pl is partially replaced by Kfs or Ab (?) as pink feldspar typically rims Pl. No visible sulfides in this interval.	3-5% disseminated sulphides		N504172		46	48	2.0	0.005	0.009	0.001			<0.2	926	21	>10000	1.27				TB13103772
							N504173		48	50	2.0	0.002	<0.005	0.002			<0.2	607	12	>10000	1.36				TB13103772



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

<b>NTS:</b>	<b>42 D / 16</b>	
<b>UTM</b>	<b>Northing</b>	<b>5409172</b>
<b>(Nad27)</b>	<b>Easting</b>	<b>547686.8</b>
<b>Elevation (m):</b>	<b>381.9</b>	
<b>Dip at Collar:</b>	<b>-59.9</b>	
<b>Azimuth:</b>	<b>30.37</b>	
<b>Total Depth:</b>	<b>75</b>	
<b>Core Size:</b>	<b>NQ</b>	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-13

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	30-May-13
Date finish:	30-May-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Julien Meric
Assistant:	Yonggang Feng (sampling)

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-59.9	30.37

complete downhole survey in Four Dams masterlist

[illegible]

NTS:42 D / 16

UTM

Northing5409152

Easting547686

(Nad27)

Elevation (m):383.1

Dip at Collar:-70.14

Azimuth:27.85

Total Depth:102

Core Size:NQ

Remarks:Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG

DDH: FD-13-14

Lease/Claim:1240552

Property: Coldwell Complex

Zone: Four Dams South

Date start:30-May-13

Date finish:31-May-13

Contractor: Chibougamau Diamond Drilling

Logged by: Renata Smoke (0-40.40m, Julien Meric 40.40-EOH)

Assistant: Yonggang Feng and Julien Meric

DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-70.14	27.85

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	3.00	OB - Overburden						N504199	d	4	6	2.0	0.002	<0.005	0.002			<0.2		487	52	>10000	0.14		TB13103747
								N504200		6	8	2.0	0.002	<0.005	0.002			<0.2		620	82	>10000	0.15		TB13103747
3.00	27.94	2b - Coarse grained olivine gabbro with modal layering				2-3% disseminated sulphides		N504201		8	10	2.0	0.002	<0.005	0.001			<0.2		849	71	>10000	0.22		TB13103747
				Mag rich layers are up to 0.5m in length, and compose approx 60% of unit.		6.41-9m 2% fg po, 0.5% vfg cpy mostly found in mag rich layers		N504202		10	12	2.0	0.003	<0.005	0.002			<0.2		1195	87	>10000	0.3		TB13103747
				alteration:		3-5% disseminated sulphides		N504203		12	14	2.0	0.003	<0.005	0.001			<0.2		802	80	>10000	0.21		TB13103747
				3-12.93 m Moderate to strong chlorite alteration		9-11.1m 6% fg po, 1% fg-vfg cpy found in a thicker and more		N504204		14	16	2.0	0.003	<0.005	0.003			<0.2		878	74	>10000	0.2		TB13103747
				9-12.93m Abundant (5% total of rock) ch and cal veinlets (1-3mm thick), no textural relationship to		chlorite altered mag rich layer		N504205		16	18	2.0	0.004	<0.005	0.003			<0.2		1115	96	>10000	0.29		TB13103747
				mineralization		3-5% disseminated sulphides		N504206		18	20	2.0	0.003	<0.005	0.007			<0.2		767	97	>10000	0.21		TB13103747
				3-9m Weak pink, ser, ep alteration of plag.		11.1-27.94m 4% fg po, 1% vfg cpy mostly found in mag rich		N504207		20	22	2.0	0.003	<0.005	0.001			<0.2		690	95	>10000	0.2		TB13103747
				12-12.60m Fault (broken, intense ch and cal alteration)		mafic layers		N504208		22	24	2.0	0.002	<0.005	0.001			<0.2		401	79	>10000	0.14		TB13103747
				12.6-27.94 Weak ch, ep, and bi alteration				N504209		24	26	2.0	0.002	<0.005	0.002			<0.2		640	134	>10000	0.17		TB13103747
								N504210		24	26	2.0	0.002	<0.005	0.002			<0.2		628	135	>10000	0.17		TB13103747
27.94	36.30	2f - Medium to coarse grained oxide augite melatroctolite				3-5% disseminated sulphides		N504211		26	28	2.0	0.007	0.014	0.005			0.3		2130	183	>10000	0.51		TB13103747
				Mag rich mafic layers are dominant. Plag rich layers are 2-15cm wide, and compose approx 10% of the unit.		27.94-36.3m 8% fg-mg po, 2% fg-mg cpy associated with		N504212		28	30	2.0	0.008	0.011	0.007			0.5		2630	301	9490	0.55		TB13103747
				alteration:		mag rich layers		N504213		30	32	2.0	0.003	0.007	0.002			0.3		1860	147	9520	0.59		TB13103747
				30.68-30.75m Ap rich (15%, vfg, equant, euhedral) and strongly altered (ch, bi, act) zone or layer within mag rich mafic layer				N504214		32	34	2.0	0.005	0.006	0.003			0.6		3290	132	>10000	0.74		TB13103747
				27.94-36.3m Moderate ch alteration.				N504215		34	36	2.0	0.01	<0.005	0.002			0.3		1865	96	>10000	0.57		TB13103747
								N504216		36	38	2.0	0.004	<0.005	0.002			0.4		3360	115	9640	1.17		TB13103747
								N504217		38	40	2.0	0.002	<0.005	<0.001			<0.2		1120	30	>10000	0.68		TB13103747
								N504218		40	42	2.0	0.001	<0.005	0.001			<0.2		267	12	9950	0.2		TB13103747
								N504219		42	44	2.0	0.001	<0.005	0.001			<0.2		279	8	8900	0.18		TB13103747
36.30	102.00	2b - Coarse grained olivine gabbro with modal layering				3-5% disseminated sulphides		N504220	b	44	46	2.0	0.002	<0.005	0.001			<0.2		299	2	>10000	0.12		TB13103747
				homogenous and continuous 2b >80 plag rich layers.		36.3-40.46m 4% fg-mg po, 2% fg-mg cpy found throughout all		N504221		73	75	2.0	0.001	<0.005	<0.001			<0.2		93	<1	9770	0.17		TB13103747
				35.3-41m Weak to moderate (decreasing downhole) ch and pink alteration.		layers (mafic and plag rich)		N504222		75	77	2.0	0.001	<0.005	<0.001			<0.2		102	1	>10000	0.3		TB13103747
				36.3-39.12m Abundant (2-5% of total rock) ca and ch veins (1-5mm thick). A large concentration of		2-3% disseminate 40.46-41m 1% fg po, 0.5% fg cpy found throughout all		N504223		77	79	2.0	0.001	<0.005	<0.001			<0.2		88	<1	10000	0.27		TB13103747
				sulfides (20% of vein, 2:1 po:cpy) occurs in a ca vein.		layers (mafic and plag rich)		N504224		79	81	2.0	0.001	<0.005	0.001			<0.2		99	<1	>10000	0.28		TB13103747
				few very small mafic layers <5cm with a sharp contact and fine grains (Mag, olivine), and also few		2-3% disseminated sulphides		N504225					0.001	<0.005	<0.001			<0.2		2	<1	70	<0.01		TB13103747
				really rich plag layers (>80%plag0		40.46-41m 1% fg po, 0.5% fg cpy found throughout all		N504226		81	83	2.0	0.001	<0.005	<0.001			<0.2		94	<1	9130	0.28		TB13103747
				40.5-40.75m Pegmatitic syenite dyke, Contacts are highly altered (vcg bi, ch, act) and have 1-2cm		layers (mafic and plag rich)		K004173		46	55	9.0											0.17	0.02	TB13118918
				cpx grains. Vugs are filled by calcite, feldspars are pink. cpx grains.		0.5% to 1% disseminated sulphides		K004174		55	64	9.0										0.23	0.01	TB13118918	
				Vugs are filled by calcite, feldspars are pink.		41-43.32 mostly cpy, present in all layers		K004175		64	73	9.0										0.22	<0.01	TB13118918	
				54-56 more leucocratic part of 2b, 60-70% plag		Trace to 0.5% disseminated sulphides		K004176		83	92	9.0										0.26	0.05	TB13118918	
				75-81 mafic layers (around 50%) with mag cumulate and olivine		43.32-75 unmineralized or trace		K004177		92	101	9.0										0.23	0.02	TB13118918	
				81-102 few pegmatitic syenite dyke with coarse grain feldspath K, biotite,and cpx associated		Local blebs to 1-2% sulphides																			
				with sulfide and altered at the border.		75-81 mineralization in mafic part, content increase close to																			
				41-102 heterogeneous epidotization and pink alteration (<10%)		the fractures, cpy=Po																			
				5a - Quartz syenite		Trace to 0.5% disseminated sulphides																			
				40.5-40.75m Pegmatitic syenite dyke, Contacts are highly altered (vcg bi, ch, act) and have 1-2cm		81-102 , coarse grain sulfide cpy and Po associated with the																			
				cpx grains. Vugs are filled by calcite, feldspars are pink. cpx grains.		syenite dyke, at the border, enclose in a mafic part (mag and																			
				81-102 few pegmatitic syenite dyke with coarse grain feldspath K, biotite,and cpx associated		olivine rich)																			
				with sulfide and altered at the border.																					
102.00		EOH - End of Hole																							



STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG																																											
NTS:	42 D / 16																																										
UTM	Northing	5409140																																									
(Nad27)	Eastng	547721.7																																									
Elevation (m):		383.1																																									
Dip at Collar:		-84.3																																									
Azimuth:		33.31																																									
Total Depth:		102																																									
Core Size:		NQ																																									
Remarks:	Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario																																										
DDH: FD-13-16						Lease/Claim: 1240552						Property: Coldwell Complex						Zone: Four Dams South																									
Date start: 01-Jun-13						Date finish: 02-Jun-13						Contractor: Chibougamau Diamond Drilling						Logged by: Julien Meric																									
Assistant: Renata Smoke																																											
DIAMOND DRILL CORE LOG																																											
Reflex EZ Shot- Diamond Drillhole Survey																																											
Depth		Dip		Azimuth																																							
Casing		-84.3		33.31																																							
complete downhole survey in Four Dams masterlist																																											
GEOLOGY							Mineralization					SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job														
From	To	Major Rock	Minor Rock	Comments		Mineraliz	Comments					NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#														
0.00	1.58	OB - Overburden										N504237	mpg2	2	4	2.0	0.003	<0.005	0.004			<0.2		737	88	>10000	0.27		TB13103746														
												N504238		4	6	2.0	0.003	<0.005	0.003			<0.2		716	96	>10000	0.27		TB13103746														
1.58	2.25	2b - Coarse grained olvine gabbro with modal layering				0.5% to 1% disseminated sulphides						N504239		6	8	2.0	0.027	<0.005	0.002			<0.2		728	103	>10000	0.23		TB13103746														
				Med to crs gr plag, cpx, ol, mag, continuous and homogenous.			1.58-2.25 Mostly Po, trace of cpy					N504240					0.197	0.468	0.916					2780	272	1660	1.12		TB13103746														
												N504241		8	10	2.0	0.003	<0.005	0.002			<0.2		721	112	>10000	0.2		TB13103746														
2.25	23.47	2f - Medium to coarse grained oxide augite melatroctolite				0.5% to 1% disseminated sulphides						N504242		10	12	2.0	0.004	<0.005	0.004			<0.2		875	101	>10000	0.23		TB13103746														
				15% 3-15cm plag rich layers. Med gr ol, cpx, mag plag			2.25-13.70 Mostly Po, trace of cpy, sulfides concentrated					N504243		12	14	2.0	0.004	<0.005	0.006			<0.2		872	113	>10000	0.23		TB13103746														
				20.48-22.2m Thick mg. mag (45%), ol (40%), and apatite (5%) rich layer of 2f (<5%) plag layers and			in mafic layers (mag rich)					N504244		14	16	2.0	0.005	<0.005	0.003			0.2		1245	142	>10000	0.31		TB13103746														
				contain lots of chlorite veins (18-20 times)		2-3% disseminated sulphides						N504245		16	18	2.0	0.004	<0.005	0.002			<0.2		1045	131	>10000	0.26		TB13103746														
				3h - Apatitic clinopyroxenite			13.70-19.2 1-2% po, <0.5% cpy concentrated in mafic layers (mag rich)					N504246		18	20	2.0	0.007	<0.005	0.004			0.3		1735	167	>10000	0.41		TB13103746														
				several intrusive stringer or blebs of 3h (3-10cm wide). Cpx, mag, olivine rich, sometime associated		3-5% disseminated sulphides						N504247		20	22	2.0	0.009	0.014	0.008			0.5		2770	298	9890	0.53		TB13103746														
				with fractures or syenite (looks like a mixing of both ?) . Most of the time these stringer and blebs are mineralized in sulfide.			19.2-23.47 6% fg-mg po, 2% fg cpy found within mag, by					N504248		22	24	2.0	0.004	0.005	0.001			0.5		2400	195	>10000	0.48		TB13103746														
				4.42-5.54m ; 19.16-19.30m			rich outer zone of dyke					N504249		24	26	2.0	0.001	<0.005	0.001			<0.2		588	60	9120	0.12		TB13103746														
												N504250		26	28	2.0	0.001	<0.005	0.001			<0.2		547	53	9950	0.15		TB13103746														
23.47	27.00	2b - Coarse grained olvine gabbro with modal layering				3-5% disseminated sulphides						N504251	d	28	30	2.0	0.001	<0.005	0.001			<0.2		642	48	9720	0.23		TB13103746														
				Med to crs gr plag, cpx, ol, mag, continuous and homogenous.			23.47-24.2 6% fg-mg po, 2% fg cpy					N504252		30	32	2.0	0.002	<0.005	0.001			<0.2		512	48	>10000	0.17		TB13103746														
						0.5% to 1% disseminated sulphides						N504253		32	34	2.0	0.001	<0.005	0.001			<0.2		400	19	9790	0.14		TB13103746														
							24.2-27.0 fine grain in mafic part with 4:1 Po/cpy and cpy ratio					N504254		53	55	2.0	0.001	<0.005	0.001			<0.2		298	4	8270	0.13		TB13103746														
							increase in the 2b part 1:1					N504255		53	55	2.0	0.001	<0.005	0.001			<0.2		302	2	8340	0.13		TB13103746														
27.00	27.85	FZ - fault or shear zone				0.5% to 1% disseminated sulphides						N504256		55	57	2.0	0.001	<0.005	<0.001			<0.2		305	2	9770	0.18		TB13103746														
				lots of chlorite infills, and rubble			27.0-27.85 fine grain in mafic part with 4:1 Po/cpy and cpy ratio					N504257		57	59	2.0	<0.001	<0.005	0.001			<0.2		184	4	9100	0.17		TB13103746														
							increase in the 2b part 1:1					N504258		59	61	2.0	0.001	<0.005	0.001			<0.2		160	5	7480	0.12		TB13103746														
27.85	102.00	2b - Coarse grained olvine gabbro with modal layering				0.5% to 1% disseminated sulphides						N504259		61	63	2.0	0.001	<0.005	0.001			<0.2		124	11	9690	0.23		TB13103746														
				Med to crs gr plag, cpx, ol, mag, continuous and homogenous.			27.85-31.2 fine grain in mafic part with 4:1 Po/cpy and cpy ratio					N504260		63	65	2.0	0.001	<0.005	0.001			<0.2		105	5	9020	0.25		TB13103746														
				27.9-28.09m Pegmatic dyke, labradorite core of feld with pink outer zoning, Vcg to pegmatic			increase in the 2b part 1:1					N504261		65	67	2.0	0.001	<0.005	<0.001			<0.2		104	1	>10000	0.26		TB13103746														
				cpx, mag, and bi at outer rims of dyke			locally associated with stringer and blebs of 3h					N504262		67	69	2.0	0.001	<0.005	0.001			<0.2		95	1	>10000	0.25		TB13103746														
				56.12-58.1m Greater proportion of mafic mag rich layers, with 5% apatite (adjacent to, and at		Local blebs to 2-4% sulphides						K004183		34	43	9.0											0.1	0.08	TB13118918														
				contact with 3h unit directly down hole).			56.4-63.3 closely associated with 3h material in blebs with					K004184																															

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5409097.6
(Nad27)	Easting	547759.2
Elevation (m):	387.6	
Dip at Collar:	-60	
Azimuth:	28.69	
Total Depth:	54	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-17

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	02-Jun-13
Date finish:	02-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Renata Smoke
Assistant:	Julian Meric

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-60	28.69

downhole survey not available

[illegible]



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

<b>NTS:</b>	<b>42 D / 16</b>	
<b>UTM</b>	<b>Northing</b>	<b>5409082</b>
<b>(Nad27)</b>	<b>Easting</b>	<b>547750.8</b>
<b>Elevation (m):</b>	<b>388.1</b>	
<b>Dip at Collar:</b>	<b>-69.81</b>	
<b>Azimuth:</b>	<b>33.43</b>	
<b>Total Depth:</b>	<b>102</b>	
<b>Core Size:</b>	<b>NQ</b>	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-18

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	02-Jun-13
Date finish:	03-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Renata Smoke
Assistant:	Julien Meric

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-69.81	33.43

complete downhole survey in Four Dams masterlist

GEOLOGY						Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments	Mineraliz	Comments	NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	4.13	OB - Overburden					N504280		17	19	2.0	0.001	<0.005	0.001			<0.2		388	44	>10000	0.17		TB13103719
							N504281		19	21	2.0	0.003	<0.005	0.003			0.3		777	84	>10000	0.31		TB13103719
4.13	19.54	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides		N504282		21	23	2.0	0.003	<0.005	0.002			0.2		691	85	>10000	0.25		TB13103719
						trace-1% po, trace cpy	N504283		23	25	2.0	0.005	<0.005	0.004			0.4		1090	126	>10000	0.35		TB13103719
			3c - Coarse grained, ophitic gabbro with leucogabbro lenses		Trace to 0.5% disseminated sulphides		N504284		25	27	2.0	0.004	<0.005	0.005			0.3		857	113	>10000	0.22		TB13103719
				13-13.4m 3cm wide interval of 3h at the upper contact, sharp lower contact		trace fq cpy and po (2:1 po:cpy) as inclusions in pegm mag	N504285	mpg1				0.222	0.867	3.68			3.8		7610	404	1380	1.15		TB13103719
				18.6-18.77m		and/or as inclusions in cpx	N504286		27	29	2.0	0.005	<0.005	0.007			0.3		1130	160	>10000	0.3		TB13103719
				Alteration:			N504287		29	31	2.0	0.005	<0.005	0.009			0.3		1090	167	>10000	0.4		TB13103719
				Intensely altered throughout:			N504288		31	33	2.0	0.003	<0.005	0.005			0.3		812	124	>10000	0.2		TB13103719
				Chlor and bi alteration of 3h			N504289		33	35	2.0	0.003	<0.005	0.001			0.3		725	110	>10000	0.18		TB13103719
				Pink and ser alteration of plag in 3c, with qtz and trem filled vugs			N504290		35	37	2.0	0.003	<0.005	0.001			0.3		771	122	>10000	0.18		TB13103719
19.54	45.10	2f - Medium to coarse grained oxide augite melatroctolite			3-5% disseminated sulphides		N504291		37	39	2.0	0.008	0.015	0.007			0.8		2860	262	>10000	0.52		TB13103719
				30% plag rich layers, 10-50cm thick.		rare (<1% of rock), only in small (<3cm) chlor and act altered	N504292		39	41	2.0	0.007	0.013	0.009			0.8		2880	286	9290	0.51		TB13103719
				32.25-33.45m Several (approx 40% of interval) 3q or 3i stringers. Contains pegm mag (20%).		blebs (within 1.5m uphole from below mentioned mineralized zone)	N504293		41	43	2.0	0.004	0.005	0.003			0.5		1610	160	9920	0.3		TB13103719
				cpx (20%), and plag (20%); coarse ol (20%), fq apatite (15%), and 1-2%cpy	3-5% disseminated sulphides		N504294		43	45	2.0	0.006	0.012	0.004			1		3840	187	>10000	0.74		TB13103719
				Alteration:		38.46-40.1m 3%po, 1% cpy. In mag rich layers, and adjacent to	N504295		45	47	2.0	0.003	<0.005	0.001			0.6		2610	119	>10000	0.63		TB13103719
				21.3-27m moderate chlor alteration		chlor veins (1:1 cpy:po near veins). Throughout unit.	N504296		47	49	2.0	0.004	<0.005	0.001			0.3		1560	56	8850	0.48		TB13103719
				27-30.26m intense chlor alteration, and an increased concentration of chlor bi veins (<8mm, 5% of rock)			N504297		49	51	2.0	0.002	<0.005	0.001			0.3		1600	47	7930	0.54		TB13103719
							N504298		51	53	2.0	0.002	<0.005	0.001			<0.2		309	26	9250	0.15		TB13103719





**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5409066
(Nad27)	Easting	547800.6
Elevation (m):	397.6	
Dip at Collar:	-45.31	
Azimuth:	29.42	
Total Depth:	66	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-19

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	03-Jun-13
Date finish:	03-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Julien Meric
Assistant:	Yongang Feng, Renata Smoke

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45.31	29.42

complete downhole survey in Four Dams masterlist

GEOLOGY						Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments	Mineraliz	Comments	NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	1.83	OB - Overburden					N504306		11	13	2	0.002	<0.005	0.001			<0.2		387	51	>10000	0.14		TB13103718
							N504307		13	15	2	0.006	0.005	0.002			0.4		1330	114	>10000	0.4		TB13103718
1.83	26.70	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N504308		15	17	2	0.003	<0.005	0.001			0.2		636	78	>10000	0.21		TB13103718
				1.83-22.6 med to crs interstitial plag, and cumulate ol, px, mag apatite and biotite. 80-90 % of		8.3-13 unmineralized to trace	N504309		17	19	2	0.002	<0.005	0.001			0.2		612	77	>10000	0.2		TB13103718
				plag rich layers. Locally the mafic layer increase. We can see plag anilgment	0.5% to 1% disseminated sulphides		N504310		19	21	2	0.003	<0.005	0.002			0.2		675	73	>10000	0.2		TB13103718
				22.6-26.7 gradual increase of mafic layers rich in olivine		13-22.59, globally trace, but patchy sulfides occurs and could	N504311		21	23	2	0.003	<0.005	0.003			0.2		700	92	>10000	0.21		TB13103718
						reach 2-3% even 8% (14.24-14.5). Mostly Po 8:1	N504312		23	25	2	0.004	<0.005	0.007			0.3		912	145	>10000	0.26		TB13103718
					2-3% disseminated sulphides		N504313		25	27	2	0.003	<0.005	0.009			0.2		595	110	>10000	0.18		TB13103718
						22.59-26.70 discontinuous mostly fine grain Po	N504314		27	29	2	0.003	<0.005	0.002			0.3		670	103	>10000	0.19		TB13103718
26.70	43.84	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504315	b				0.001	<0.005	0.001			<0.2		2	1	20	0.02		TB13103718
				26.7- 43.84 Gradual contact with 2b at the top		26.70-27.6 discontinuous mostly fine grain Po	N504316		29	31	2	0.003	<0.005	0.002			0.2		636	99	>10000	0.18		TB13103718
				med to crs px, mag, plag, ol, apatite (richer in Px than the mafic layers saw above)	3-5% disseminated sulphides		N504317		31	33	2	0.005	0.005	0.003			0.4		1330	169	>10000	0.34		TB13103718
						27.6-34.45 med to fine grain 6:1 Po, Cpy	N504318		33	35	2	0.004	0.007	0.004			0.7		2290	203	7360	0.47		TB13103718
		2e - Medium to coarse grained olivine gabbro			3-5% disseminated sulphides		N504319		35	37	2	0.003	<0.005	0.003			0.6		2770	105	7900	0.71		TB13103718
				28.08-28.57 ; 28.95-29.55 ; 34.06-34.29 kind of intrusion but diffuse contact, med to crs Plag, px,		34.45-36.93; 5-10% medium to fine grain 8:1 Po, Cpy	N504320		37	39	2	0.001	<0.005	<0.001			<0.2		373	16	7060	0.2		TB13103718
				mag, ol, with split core: definitely without ophitic texture	Trace to 0.5% disseminated sulphides		N504321		39	41	2	0.001	<0.005	0.001			<0.2		340	17	7830	0.17		TB13103718
		2g - Gabbroic anorthosite				36.93-37.77 trace but 0.5% at the end where px increase	N504322		41	43	2	0.001	<0.005	0.001			0.2		733	22	7540	0.33		TB13103718
				36.93 - 37.77, px content increase at the bottom and sharp contact with 2f	3-5% disseminated sulphides		N504323		43	45	2	0.001	<0.005	<0.001			<0.2		282	2	7870	0.18		TB13103718
						37.77- 43.84 fine to med sulfide with patchy richer even	N504324		45	47	2	0.001	<0.005	0.001			<0.2		205	1	8320	0.2		TB13103718
						10 % (41.47-41.76). Globally lot of fine grain with an	N504325		47	49	2	0.001	<0.005	<0.001			<0.2		110	<1	7910	0.21		TB13103718
					homogeneous repartition		N504326		49	51	2	0.001	<0.005	<0.001			<0.2		100	<1	7610	0.21		TB13103718
43.84	66.00	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides		N504327		51	53	2	0.001	<0.005	<0.001			<0.2		78	<1	6540	0.2		TB13103718
				50-60% plag rich layers ; med to crs plag interstitial, med px, mag, ol, apatite, presence of		43.84-54.44 fine to med sulfide	N504328		53	55	2	0.001	<0.005	0.001			<0.2		49	<1	7860	0.25		TB13103718
				biotite and chlorite plag anilgment		globally lot of fine grain with an homogeneous repartition	N504329		55	57	2	<0.001	<0.005	<0.001			<0.2		57	1	7970	0.25		TB13103718
					2-3% disseminated sulphides		N504330	mpg2				0.072	0.194	0.779			1.3		3020	299	1790	1.24		TB13103718
		3b - Coarse grained, ophitic gabbro (>5mm)				from 54.44-66.0m;	N504331		57	59	2	0.001	<0.005	<0.001			<0.2		62	<1	7260	0.24		TB13103718
				62-64.20 intrusion of two duck gabbro 3b ? sharp contact with 2b and stingers at the botom		very fine grain, homogeneous repartion until the end of the hole	N504332		59	61	2	0.001	<0.005	0.001			<0.2		137	3	7210	0.2		TB13103718
				crs grain fedpath, intercumulate Px (ophitic texture), and strong pink and epidot alteration.		within 2b (3b is unmineralized)	N504333		61	63	2	0.001	<0.005	0.001			<0.2		54	<1	7290	0.14		TB13103718
				Presence of a syenite dyke inside with sharp contact with the two duck gabbro crs grain feldsp K, Px			N504334		63	65	2	0.001	<0.005	0.001			<0.2		42	<1	6230	0.14		TB13103718
				and very altered, strong green color.			N504335		65	66	1	0.001	<0.005	0.001			<0.2		58	<1	7200	0.24		TB13103718
66.00		EOH - End of Hole					K004199		2	11	9											0.1	0.09	TB13118918

NTS:  
UTM  
(Nad27)  
Elevation (m):  
Dip at Collar:  
Azimuth:  
Total Depth:  
Core Size:  
Remarks:

42 D / 16  
Northing  
5409064  
Easting  
547799.1  
394.7  
-84.81  
28.35  
102  
NQ  
Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-20  
Lease/Claim:  
Property:  
Zone:  
Date start:  
Date finish:  
Contractor:  
Logged by:  
Assistant:

1240552  
Coldwell Complex  
Four Dams South  
03-Jun-13  
04-Jun-13  
Chibougamau Diamond Drilling  
Rachel Epstein  
Yonggang Feng

DIAMOND DRILL CORE LOG  
Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.81	28.35

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu		Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	1.50	OB - Overburden						N504336	d	1.5	4	2.5	0.004	<0.005	<0.001			<0.2	379	39	>10000	0.12			TB13103715
								N504337		4	6	2.0	0.006	<0.005	<0.001			<0.2	336	41	9600	0.11			TB13103715
1.50	27.15	2b - Coarse grained olivine gabbro with modal layering		Trace to 0.5% disseminated sulphides				N504338		6	8	2.0	0.003	<0.005	<0.001			<0.2	283	39	9230	0.1			TB13103715
				coarse grained pcofA with plag alignment at 70-80deg to ca; modal layering defined by variations		from 4.55-12.30m up to 0.5% very fine gr disseminated po		N504339		8	10	2.0	0.002	<0.005	<0.001			<0.2	297	40	9320	0.1			TB13103715
				of cpx, ol, mt on a cm to 10cm scale		in local pockets		N504340		10	12	2.0	0.002	<0.005	<0.001			<0.2	291	40	>10000	0.1			TB13103715
		2f - Medium to coarse grained oxide augite melatroctolite		0.5% to 1% disseminated sulphides				N504341		12	14	2.0	0.003	<0.005	0.001			0.2	597	79	>10000	0.19			TB13103715
				medium grained OCfpA to COfpA with very fine grained apatite:		from 12.30-22.0m up to 1% very fine to fine gr disseminated po		N504342		14	16	2.0	0.001	<0.005	<0.001			<0.2	330	43	9380	0.1			TB13103715
				from 13.33-14.07, 16.06-16.28, 16.43-16.87, 16.94-17.92, 18.90-19.0, 21.84-22.36, 23.55-23.76		particularly in the 2f lenses (see meterages to left)		N504343		16	18	2.0	0.003	<0.005	<0.001			<0.2	526	72	>10000	0.17			TB13103715
		5a - Quartz syenite		3-5% disseminated sulphides				N504344		18	20	2.0	0.004	<0.005	0.001			0.2	467	62	>10000	0.14			TB13103715
				from 22.36-22.46, 26.16-26.65m pegmatic and both with dark green colouring (epidote alt?)		from 22.0-22.36m up to 5% fine to med gr po, cpy (10:1)		N504345		18	20	2.0	0.003	<0.005	0.001			0.2	499	64	>10000	0.17			TB13103715
						disseminated within 2f		N504346		20	22	2.0	0.003	<0.005	0.001			<0.2	526	69	>10000	0.16			TB13103715
				Trace to 0.5% disseminated sulphides				N504347		22	24	2.0	0.004	<0.005	0.002			0.3	695	82	>10000	0.2			TB13103715
				from 22.46-27.15m up to 0.5% very fine gr disseminated po				N504348		24	26	2.0	0.003	<0.005	0.001			0.2	473	61	>10000	0.14			TB13103715
				in local pockets of 2b, 2f (not 5a)				N504349		26	28	2.0	0.003	<0.005	0.002			0.2	549	73	>10000	0.17			TB13103715
27.15	34.67	2f - Medium to coarse grained oxide augite melatroctolite		0.5% to 1% disseminated sulphides				N504350		28	30	2.0	0.005	0.006	0.004			0.3	883	125	>10000	0.23			TB13103715
				medium grained OCfpA to COfpA; scattered plg-rich intervals (OCpfA) have same plg alignment as		up to 2% fine to med gr po, cpy (10:1) disseminated within 2f		N504351	b	30	32	2.0	0.005	0.007	0.006			0.3	908	155	>10000	0.23			TB13103715
				the 2b major unit				N504352		32	34	2.0	0.005	<0.005	0.007			0.2	777	147	>10000	0.2			TB13103715
34.67	35.02	FZ - fault or shear zone						N504353		34	36	2.0	0.006	<0.005	0.007			0.3	925	150	>10000	0.23			TB13103715
				intense chlorite alteration of 2f as well as chlorite coated fractures; gouge at 35.0-35.02m				N504354		36	38	2.0	0.005	0.008	0.005			0.3	949	138	>10000	0.21			TB13103715
35.02	56.52	2f - Medium to coarse grained oxide augite melatroctolite		0.5% to 1% disseminated sulphides				N504355		38	40	2.0	0.006	0.012	0.004			0.4	1490	170	>10000	0.32			TB13103715
				medium grained OCfpA to COfpA; scattered plg-rich intervals (OCpfA) have same plg alignment as		up to 1% fine to med gr po, cpy (10:1) disseminated within 2f		N504356		40	42	2.0	0.002	<0.005	<0.001			0.2	723	121	8730	0.15			TB13103715
				the 2b major unit EXCEPT FOR:		in local pockets		N504357		42	44	2.0	0.001	<0.005	<0.001			<0.2	423	46	6510	0.1			TB13103715
				from 41.55-48.60m approx 20-30% scattered plagioclase+mt "leucopods" and stringers that				N504358		44	46	2.0	0.001	<0.005	<0.001			<0.2	273	18	5440	0.07			TB13103715
				crosscut the plag alignment (of the 2f); these are possibly TDL gabbro but ophitic texture is not				N504359		46	48	2.0	0.001	<0.005	<0.001			<0.2	362	23	7780	0.1			TB13103715
				recognizable; one anorthositic xenolith is readily distinguishable; disseminated po (with trace cpy)				N504360					0.001	<0.005	<0.001			<0.2	2	<1	30	0.01			TB13103715
				is present in both the 2f intervals as well as the leucopods and stringers: plg-rich 2e confirmed by split core				N504361		48	50	2.0	0.001	<0.005	<0.001			<0.2	321	15	7530	0.11			TB13103715
		2g - Gabbroic anorthositic						N504362		50	52	2.0	0.001	<0.005	<0.001			<0.2	450	12	7570	0.15			TB13103715
				from 44.04-44.48m with cpx and mt oikocrysts				N504363		52	54	2.0	0.001	<0.005	<0.001			<0.2	440	8	8080	0.17			TB13103715
56.52	102.00	2b - Coarse grained olivine gabbro with modal layering		0.5% to 1% disseminated sulphides				N504364	mpg1	54	56	2.0	0.001	<0.005	<0.001			<0.2	386	3	8190	0.15			TB13103715
				coarse grained pcofA with plag alignment at 70-80deg to ca; modal layering defined by variations		from 56.52-69.50m up to 1% very fine gr to fine gr po, cpy (10:1)		N504365		56	58	2.0	0.001	<0.005	<0.001			<0.2	363	2	8260	0.15			TB13103715
				of cpx, ol, mt on a cm to 10cm scale		disseminated within 2b (local pockets)		N504366		58	60	2.0	0.001	<0.005	<0.001			<0.2	247	3	8590	0.19			TB13103715
		2f - Medium to coarse grained oxide augite melatroctolite						N504367		60	62	2.0	0.001	<0.005	<0.001			<0.2	105	2	8050	0.22			TB13103715
				from 84.69-85.63, 85.93-86.27 med gr OCfpA		Trace to 0.5% disseminated sulphides		N504368		62	64	2.0	0.002	<0.005	0.001			<0.2	97	3	7560	0.21			TB13103715
		3h - Apatitic clinopyroxenite				from 84.90-89.20m very fine gr po disseminated within 2b, 2f		N504369		64	66	2.0	0.001	<0.005	<0.001			<0.2	63	1	6810	0.2			TB13103715
				from 89.20-90.13 med to crs gr CCOfpA intermixed with approx 30% very crs gr, ophitic TDL		in pockets		N504370		66	68	2.0	0.001	<0.005	<0.001			<0.2	41	3	7280	0.22			TB13103715
				gabbro stringers; up to 15% fine gr apatite; diffuse upper contact, well defined lower contact with 2b		2-3% disseminated sulphides		N504371		68	70	2.0	0.002	<0.005	<0.001			<0.2	47	1	8270	0.25			TB13103715
		5a - Quartz syenite				from 89.20-91.0m very fine gr to med gr po with trace v. fine gr		N504372		70	72	2.0	0.001	<0.005	<0.001			<0.2	62	2	8330	0.25			TB13103715
				from 94.25-94.47m 2cm thick syenite stringer subparallel to core axis		cpy disseminated within 3h and 2b; med gr po only within 3h		N504373		84	86	2.0	0.001	<0.005	<0.001			<0.2	72	2	8460	0.29			TB13103715
		3b - Coarse grained, ophitic gabbro (>5mm)		Trace to 0.5% disseminated sulphides				N504374		86	88	2.0	0.001	<0.005	<0.001			<0.2	71	2	8360	0.27			TB13103715
				from 101.21-101.42m crs gr, ophitic gabbro with moderate potassic alteration		from 91.0-92.20m trace v. fine gr disseminated po		N504375					0.299	0.946	3.72			3.2	7030	367	1320	1.12			TB13103715
102.00		EOH - End of Hole						N504376		88	90	2.0	<0.001	<0.005	<0.001			<0.2	75	1	9040	0.29			TB13103715
								N504377		90	92	2.0	0.001	<0.005	<0.001			<0.2	68	1	8470	0.28			TB13103715
								N504378		92	94	2.0	0.001	<0.005	<0.001			<0.2	71	1	7610	0.26			TB13103715
								K004200		72	81	9.0										0.2	<0.01		TB13118918
								K008501		81	84	3.0										0.19	0.01		TB13118918
								K008502		94	102	8.0										0.19	0.02		TB13118918

NTS:42 D / 16

UTM

Northing5409044

Easting547851.9

(Nad27)

Elevation (m):388.1

Dip at Collar:-84.9

Azimuth:28.63

Total Depth:102

Core Size:NQ

Remarks:Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:FD-13-21

Lease/Claim:1240552

Property:Coldwell Complex

Zone:Four Dams South

Date start:04-Jun-13

Date finish:05-Jun-13

Contractor:Chibougamau Diamond Drilling

Logged by:Yonggang Feng

Assistant:Julien Meric, Rachel Epstein

DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.9	28.63

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job	
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#	
0.00	2.00	OB - Overburden						N504379	d	2	4	2.0	0.004	<0.005	0.001			0.2		591	69	>10000	0.22		TB13103717	
								N504380		4	6	2.0	0.002	<0.005	0.002			<0.2		639	84	>10000	0.21		TB13103717	
2.00	11.15	2b - Coarse grained olvine gabbro with modal layering		Trace to 0.5% disseminated sulphides				N504381		6	8	2.0	0.003	<0.005	0.002			0.2		662	82	>10000	0.2		TB13103717	
				Rock is composed of coarse grained pco. Slightly layered . Cpx and Ol are partially replaced by Chl		Po in trace amounts, <5%. Cpy is apparently invisible.		N504382		8	10	2.0	0.003	<0.005	0.002			0.2		769	97	>10000	0.22		TB13103717	
				and possibly by Bt. Pl is partially altered to sericite.				N504383		10	12	2.0	0.002	<0.005	0.002			0.2		577	76	>10000	0.16		TB13103717	
		2f - Medium to coarse grained oxide augite melatroctolite		Trace to 0.5% disseminated sulphides				N504384		12	14	2.0	0.004	<0.005	0.006			0.3		931	143	>10000	0.21		TB13103717	
				9-9.4m. Ol-Mag rich layer. Rock is dominated by coarse grained Cof and shows strong Chl		9-9.4m. sulfides are apparently insivible. 2-3% Ap.		N504385		14	16	2.0	0.005	<0.005	0.008			0.3		1080	165	>10000	0.24		TB13103717	
				alteration. Chl generally replaces Cpx. Gradational contact with 2b unit.				N504386		16	18	2.0	0.005	<0.005	0.009			0.3		1050	161	>10000	0.24		TB13103717	
								N504387		18	20	2.0	0.005	<0.005	0.008			0.4		1050	144	>10000	0.23		TB13103717	
11.15	21.80	2f - Medium to coarse grained oxide augite melatroctolite		2-3% disseminated sulphides				N504388		20	22	2.0	0.003	<0.005	0.004			0.3		797	129	>10000	0.17		TB13103717	
				Layered rock is dominated by med-grained CoptA. Ap is roughly 5-8% and disseminated through		11.15-21.80m. 2% Po, <0.5% Cpy (Po: Cpy = 8:1).		N504389	b	22	24	2.0	0.006	0.01	0.004			0.6		1880	211	>10000	0.38		TB13103717	
				the rock. Gradational conact with the rock of 2-11.15m.				N504390		22	24	2.0	0.006	0.01	0.004			0.6		1840	213	>10000	0.41		TB13103717	
								N504391		24	26	2.0	0.009	0.012	0.008			2.6		8180	442	6640	1.44		TB13103717	
21.80	22.04	FZ - fault or shear zone						N504392		26	28	2.0	0.001	<0.005	<0.001			0.2		960	58	6990	0.36		TB13103717	
				Rock is 2f but quite altered. Strong Chl alteration as well as abundant chlorite filled healed fractures				N504393		28	30	2.0	0.001	<0.005	0.001			<0.2		292	20	7060	0.09		TB13103717	
				from 21.92-21.96m gouge (very very soft 2f)				N504394		30	32	2.0	0.001	<0.005	0.001			<0.2		357	17	7600	0.14		TB13103717	
								N504395		32	34	2.0	<0.001	<0.005	0.001			<0.2		209	7	7260	0.16		TB13103717	
22.04	43.00	2f - Medium to coarse grained oxide augite melatroctolite		3-5% disseminated sulphides				N504396		34	36	2.0	0.001	<0.005	<0.001			<0.2		223	4	7650	0.17		TB13103717	
				same as the unit from 11.15 to 21.80 m.		22.04-26.23m. 5% Po, 0.5% Cpy (Po: Cpy=10:1). 15% med-		N504397		36	38	2.0	0.002	<0.005	<0.001			<0.2		190	1	7280	0.15		TB13103717	
				26.23-32.45m. The rock shows Pl-rich pods or stringers (leuco TDL intrusion?)		grained Mag. Po commonly interstitial to Cpx and Mag.		N504398		38	40	2.0	0.001	<0.005	<0.001			<0.2		130	<1	8310	0.2		TB13103717	
				Mineralogy changes to pcAf. No visible Ol. 5-8% Ap is disseminated through this interval.		Semi massive to massive sulphides		N504399		40	42	2.0	0.001	<0.005	0.001			<0.2		131	<1	9310	0.27		TB13103717	
				Gradational contact with 2f unit. Cpx is partially replaced by Chl.		24.96-25.06m. Sulfides are coarse grained and apparently		N504400		42	44	2.0	<0.001	<0.005	<0.001			<0.2		104	<1	8740	0.24		TB13103717	
				Mag is very fine grained and present in Cpx-rich patches.		replaces Bt and Cpx. 10% Po, 5% Cpy (Po: Cpy 2:1). Po and Cpy		N504401		44	46	2.0	0.001	<0.005	0.001			<0.2		100	<1	8400	0.24		TB13103717	
						are intergrown.		N504402		46	48	2.0	0.001	<0.005	0.001			<0.2		93	<1	8010	0.22		TB13103717	
								N504403		48	50	2.0	<0.001	<0.005	0.001			<0.2		64	<1	7840	0.24		TB13103717	
								N504404		88	90	2.0	0.001	0.005	0.007			<0.2		17	1	2500	0.04		TB13103717	
				5b - Augite syenite		26.23-32.45 m. No visible sulfides.		N504405					<0.001	<0.005	0.001			<0.2		2	1	50	0.01		TB13103717	
				24.96-25.06m. Pinkish rock is dominated by Kfs and Cpx. Cpx is paritally to completely replaced by		Trace to 0.5% disseminated sulphides		N504406		90	92	2.0	0.001	<0.005	0.003			<0.2		81	<1	9830	0.23		TB13103717	
				Chl and Bt.		32.45-40m. Sulfides in trace amounts. Hard to estimate Po: Cpy		N504407		92	94	2.0	0.001	<0.005	0.001			<0.2		73	<1	8720	0.26		TB13103717	
				40-40.2m. Pinkish rock is dominated by coarse grained Kfs and Cpx. Kfs: Cpx 5:1. Cpx is partially to		Trace to 0.5% disseminated sulphides		N504408		94	96	2.0	0.001	<0.005	0.001			<0.2		90	1	>10000	0.34		TB13103717	
				completely replaced by Chl. Sharp contact with 2f unit.		40-40.2m. No visible Sulfides.		N504409		96	98	2.0	0.001	<0.005	0.001			<0.2		77	<1	7860	0.25		TB13103717	
						2-3% disseminated sulphides		K008503		50	59	9.0										0.2	0.01		TB13118918	
						40.2-43m. Very fine grained Po anc Cpy. 2% Po, 0.5% Cpy (Po		K008504		59	68	9.0										0.22	0.01		TB13118918	
						:Cpy=4:1).		K008505		68	77	9.0										0.28	0.01		TB13118918	
								K008506		77	88	11.0										0.25	0.04		TB13118918	
								K008507		98	102	4.0										0.19	0.06		TB13118918	



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5409044.4
	Easting	547851.9
Elevation (m):	388.6	
Dip at Collar:	-45	
Azimuth:	25.61	
Total Depth:	51	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-22

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	05-Jun-13
Date finish:	05-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Julien Merc, Rachel Epstein

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45	25.61

downhole survey not available

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments					Comments	FROM		TO	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
0.00	3.00	OB - Overburden					N504410	mpg2	3	5	2.0	0.002	<0.005	0.001			<0.2		557	75	>10000	0.19		TB13106370
							N504411		5	7	2.0	0.003	<0.005	0.002			0.2		629	85	>10000	0.2		TB13106370
3.00	11.18	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N504412		7	9	2.0	0.003	<0.005	0.003			0.2		635	81	>10000	0.18		TB13106370
				Rock is composed of coarse grained poof. Secondary Bt and Chl replace Cpx and Ol. Pl is partially altered to sericite. The fractures are highly oxidized.	3-9.54m. Sulfides <0.5%. Hard to estimate Po. Cpy.		N504413		9	11	2.0	0.004	<0.005	0.006			0.2		883	129	>10000	0.24		TB13106370
					0.5% to 1% disseminated sulphides		N504414		11	13	2.0	0.004	<0.005	0.006			0.2		822	138	>10000	0.21		TB13106370
				2f - Medium to coarse grained oxide augite melatroctolite	9.54-11.18m. 0.5% Po, invisible Cpy.		N504415		13	15	2.0	0.004	0.005	0.006			0.2		918	138	>10000	0.23		TB13106370
							N504416		15	17	2.0	0.004	<0.005	0.005			0.2		780	113	>10000	0.19		TB13106370
11.18	12.00	FZ - fault or shear zone					N504417		17	19	2.0	0.004	0.011	0.003			0.2		1050	132	>10000	0.24		TB13106370
				11.18-11.55 m. Rock is faulted syenite that is composed of coarse grained Kfs and Cpx. Cpx is almost replaced by Bt and Chl. Highly oxidized.			N504418		19	21	2.0	0.009	0.015	0.008			1		3450	324	7820	0.67		TB13106370
							N504419		21	23	2.0	0.003	<0.005	0.004			0.4		1400	144	6020	0.26		TB13106370
				11.55-12m. Rock is broken 2f and highly oxidized			N504420					0.062	0.215	0.891			1.3		2880	288	1880	1.19		TB13106370
12.00	18.55	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides		N504421		23	25	2.0	0.001	<0.005	0.002			<0.2		340	34	6830	0.08		TB13106370
				Rock is dominated by coarse grained poofA. Layering is defined by Cpx and Ol. Bt is secondray and replacing Cpx and Ol. Strongly magnetic. Rich in fine grained Mag.	12-13.11m. 0.5% Po, invisible Cpy.		N504422		25	27	2.0	0.001	<0.005	0.001			<0.2		340	37	7010	0.1		TB13106370
					0.5% to 1% disseminated sulphides		N504423		27	29	2.0	<0.001	<0.005	<0.001			<0.2		271	27	7100	0.1		TB13106370
				2f - Medium to coarse grained oxide augite melatroctolite	13.11-18.55m. 1% Po, invisible Cpy.		N504424		29	31	2.0	<0.001	<0.005	0.001			<0.2		329	16	8280	0.13		TB13106370
				12-13.11m. Gradational contact with 2b. Ol-Mag rich cumulate. Rock is dominated by med grained cofpA. 1-2% Ap disseminated in the rock.			N504425		31	33	2.0	0.001	<0.005	0.001			<0.2		289	<1	8800	0.17		TB13106370
							N504426		33	35	2.0	0.001	<0.005	0.001			<0.2		142	1	9020	0.24		TB13106370
18.55	25.77	2f - Medium to coarse grained oxide augite melatroctolite			3-5% disseminated sulphides		N504427		35	37	2.0	0.002	<0.005	<0.001			<0.2		107	<1	8900	0.24		TB13106370
				The rock is dominated by med grained oFcpA. Ol and Mag form cumulate layered. Rock shows strong Chl alteration. Chl fills fractures.1% Ap disseminated in the rock.	18.55-21.33m. Sulfides are dominated by Po and interstitial to		N504428	37	39	2.0	<0.001	<0.005	0.001			<0.2		94	<1	8360	0.24		TB13106370	
					Mag and Cpx. 4-5% Po, Cpy <0.5% (Po: Cpy=9:1).		N504429	39	41	2.0	0.001	<0.005	0.001			<0.2		51	<1	7910	0.23		TB13106370	
				19.05-19.15. Rubbles. Possibly a fault zone.	Trace to 0.5% disseminated sulphides		N504430	41	43	2.0	<0.001	<0.005	0.001			<0.2		53	<1	8910	0.25		TB13106370	
				24-25.77m. The 2f unit changes to a rock that is characterized by Pl-rich pods and Cpx-Mag rich patches. The texture is apparently chaotic. 2-3% disseminated Ap.	21.33-25.77m. Sulfides in trace amounts. Hard to estimate Po: Cpy.		N504431	43	45	2.0	<0.001	<0.005	<0.001			<0.2		60	<1	8790	0.26		TB13106370	
							N504432	45	47	2.0	<0.001	<0.005	0.001			<0.2		57	<1	9010	0.27		TB13106370	
				2g - Gabbroic anorthosite			N504433	47	49	2.0	0.001	<0.005	<0.001			<0.2		58	<1	8240	0.26		TB13106370	
				22.5-24m. Anorthosite xenolith.White rock is dominated by coarse grained ppc. Cpx is interstitial to Pl. Diffuse contacts with the 2f unit.			N504434	49	51	2.0	<0.001	<0.005	0.001			<0.2		58	<1	8240	0.25		TB13106370	
							N504435	49	51	2.0	0.001	<0.005	0.001			<0.2		59	<1	8080	0.24		TB13106370	
25.77	51.00	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides			d	49	51	2.0	0.001	<0.005	0.001			<0.2							
				Gradational contact with the above 2f unit. The rock is composed of med to coarse grained poof. Layering is defined by variations in Ol and Cpx contents on a cm scale. Bt as alteration mineral replaces Ol and Cpx. Plagioclase alignment is throughout unit at 70-80deg to ca	25.77-51m. Very fine grained sulfides. Possibly 0.5% Po, no visible Cpy.																			
51.00		EOH - End of Hole																						

NTS:

UTM

(Nad27)

Elevation (m):

Dip at Collar:

Azimuth:

Total Depth:

Core Size:

Remarks:

42 D / 16

Northing

Eastng

387.1

-59.93

30.28

153

NQ

Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-23

Lease/Claim:

Property:

Zone:

Date start:

Date finish:

Contractor:

Logged by:

Assistant:

1240552

Coldwell Complex

Four Dams South

05-Jun-13

06-Jun-13

Chibougamau Diamond Drilling

Renata Smoke

Julian Meric, Yongang Feng

DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-59.93	30.28

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	4.83	OB - Overburden						N504436	b	5	7	2	0.007	0.008	0.004			0.4	1725	179	>10000	0.77			TB13103716
								N504437		7	9	2	0.011	0.01	0.006			1	3630	255	>10000	1.35			TB13103716
4.83	19.34	2f - Medium to coarse grained		oxide augite melatroctolite		2-3% disseminated sulphides		N504438		9	11	2	0.013	0.011	0.008			1	4010	274	>10000	1.67			TB13103716
				Ol content decreases considerably after 10.9m, with cpx, plag, and mag being the dominant		4.83-7.32m 2% po, trace to 1% cpy Throughout (not just in mag		N504439		11	13	2	0.007	0.007	0.006			0.3	1290	144	>10000	0.57			TB13103716
				minerals (also coincides with a lower proportion of plag rich layers which make up approx 5-10% of		rich layers)		N504440		13	15	2	0.006	0.005	0.003			0.7	2940	171	7680	0.98			TB13103716
				entire unit). Below 10.9m ol makes up <5% of rock.		3-5% disseminated sulphides		N504441		15	17	2	0.011	0.006	0.005			0.9	3520	171	7250	1.28			TB13103716
				alteration:		7.32-19.87m 5% po, 1% cpy. Throughout.		N504442		17	19	2	0.009	0.007	0.004			0.9	3360	211	>10000	1.29			TB13103716
				Weak chlor alteration throughout.		12.9-13.5m 10% cpy infilling in chlorite vein (3mm wide)		N504443		19	21	2	0.006	<0.005	0.005			0.6	1740	174	>10000	0.74			TB13103716
				18.36-19.84m Increase in chlor veins (5-15mm wide, approx 10% of rock)				N504444		21	23	2	0.01	0.019	0.005			0.6	2190	223	>10000	0.57			TB13103716
19.34	19.38	FZ - fault or shear zone						N504445		23	25	2	0.009	0.027	0.005			1	3820	292	6480	0.88			TB13103716
				Almost complete chlor and talc alteration of fault gauge (within 2f unit)				N504446		25	27	2	0.007	0.009	0.002			1	4450	214	8330	1.48			TB13103716
19.38	19.84	2f - Medium to coarse grained		oxide augite melatroctolite				N504447		27	29	2	0.008	0.009	0.003			1	4550	163	8900	1.97			TB13103716
				see above description, unit only interrupted by fault gauge				N504448		29	31	2	0.008	0.007	0.001			0.8	4040	135	8730	1.83			TB13103716
19.84	23.25	3b - Coarse grained, ophitic gabbro (>5mm)				2-3% disseminated sulphides		N504449		31	33	2	0.001	<0.005	<0.001			<0.2	349	8	6640	0.31			TB13103716
				Cg to pegm (coarsest at upper and lower contact with 2f). In order of decreasing abundance, cpx,		3% cpy at contact of 2f and 3b (upper). In chlor and bi alteration		N504450					0.001	<0.005	<0.001			<0.2	20	2	50	0.02			TB13103716
				plag, mag, bi. Ophitic texture is not obvious but the pegm cpx makes it distinguishable.		vein. Bi is pegm, pegm cpx almost completely altered to chlor		N504451		33	35	2	0.003	<0.005	0.001			0.2	1495	39	7430	1.11			TB13103716
						3-5% disseminated sulphides		N504452		35	37	2	0.002	<0.005	<0.001			<0.2	141	3	7910	0.21			TB13103716
				Intermingled with 2f (POSSIBLE 3g) , 50% layers of 2f within this unit, sharp to somewhat		19.84-23.28m patches (5% of rock) of vcg 8% po,		N504453		37	39	2	0.001	<0.005	<0.001			<0.2	65	2	7330	0.22			TB13103716
				gradational contacts with it, up to 0.5m wide. Different from typical 2f by low ol and high cpx		trace-2% cpy associated with cg mag and bi. Adjacent to upper		N504454		39	41	2	0.001	<0.005	<0.001			<0.2	45	2	6450	0.22			TB13103716
				abundance and it's somewhat gradational contact with 3b		and lower contact with 2f. COMMONLY forms pseudomorphs of		N504455		41	43	2	0.001	<0.005	<0.001			<0.2	48	<1	7240	0.21			TB13103716
				alteration:		cpx. Higher proportion of cpy at lower contact with 2f.		N504456		43	45	2	0.001	<0.005	<0.001			<0.2	102	2	7760	0.25			TB13103716
				Chlor veins (<5mm) are common (10% of unit) within 2f.		2-3% disseminated sulphides		N504457		45	47	2	0.004	<0.005	<0.001			<0.2	1215	18	7420	1.14			TB13103716
				Chlor alteration in 2f is moderate to intense (almost complete alteration at fault gauge,		19.84-23.28m In 2f mag rich parts, 2-3% po, trace cpy (fg-mg)		N504458		47	49	2	0.001	<0.005	<0.001			<0.2	407	2	7430	0.52			TB13103716
				19.34-19.38m and in some chlor veins)				N504459		49	51	2	0.001	<0.005	<0.001			<0.2	55	<1	6660	0.2			TB13103716
23.25	29.75	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504460	mpg1	51	53	2	0.002	<0.005	<0.001			<0.2	54	<1	6690	0.2			TB13103716
				Plag rich layers compose approx 15% of rock. Mafic mag rich layers are low in ol (<5%) and contain		6% po, 1% cpy (fg-mg), throughout layers.		N504461		53	55	2	0.001	<0.005	<0.001			<0.2	61	<1	7500	0.22			TB13103716
				in order of decreasing abundance; cpx, mag, plag, po, bi, cpy				N504462		55	57	2	0.001	<0.005	<0.001			<0.2	58	<1	7190	0.21			TB13103716
				Upper contact with 3b is sharp.				N504463		57	59	2	0.001	<0.005	<0.001			<0.2	58	<1	7330	0.21			TB13103716
				alteration:				N504464		59	61	2	0.001	<0.005	0.001			<0.2	67	<1	8520	0.25			TB13103716
				Overall, weak chlor alteration.				N504465					0.224	0.932	3.57			3.2	6950	388	1360	1.09			TB13103716
				23.25-24.6m Increase in chlor and act veins (3-5mm wide, 10% of rock), but no sulf associations.				N504466		61	63	2	0.001	<0.005	<0.001			<0.2	72	<1	8130	0.24			TB13103716
29.75	74.77	2b - Coarse grained olivine gabbro with modal layering				3-5% disseminated sulphides		N504467		63	65	2	0.001	<0.005	<0.001			<0.2	60	<1	7170	0.21			TB13103716
						29.75-34.39m 4% po, 2% cpy (fg), in mag rich mafic layers		N504468		65	67	2	0.002	<0.005	0.001			<0.2	56	<1	6950	0.21			TB13103716
				Almost no alteration (VERY weak chlor)		Trace to 0.5% disseminated sulphides		N504469		67	69	2	0.001	<0.005	0.001			<0.2	51	<1	6640	0.2			TB13103716
				2g - Gabbroic anorthosite		34.39-45.6m 1-2% po, trace cpy (fg), throughout layers		N504470		69	71	2	0.001	<0.005	0.002			<0.2	52	<1	7420	0.2			TB13103716
						69.82-70.04m 2g anorth xeno. Pegm cpx at upper contact. Sharp contacts.		N504471		71	73	2	0.001	<0.005	<0.001			<0.2	57	<1	7490	0.24			TB13103716
						45.6-47.6m 5% po, 1% cpy (fg-mg) found throughout layers		N504472		73	75	2	0.001	<0.005	0.001			<0.2	61	<1	8500	0.25			TB13103716
						0.5% to 1% disseminated sulphides		N504473		75	77	2	0.004	<0.005	0.001			<0.2	32	1	4390	0.12			TB13103716
						47.6-74.77m trace-1% po, trace cpy (fg), found throughout		N504474		77	79	2	0.001	<0.005	0.001			<0.2	91	<1	>10000	0.33			TB13103716
						layers		N504475		79	81	2	0.001	<0.005	0.001			<0.2	180	<1	>10000	0.52			TB13103716
74.77	76.70	2g - Gabbroic anorthosite						N504476		81	83	2	0.005	0.03	0.005			<0.2	213	<1	9420	0.35			TB13103716
				Xenolith, sharp upper and lower contact. Contains 25cm wide band of 2b, pegm cpx near this contact.				N504477	d	83	85	2	0.001	0.122	0.005			<0.2	27	3	550	<0.01			TB13103716
				Intermingled with pegm syenite (60% 2g, 40% pegm syenite (5b?) stringer)				N504478		85	87	2	0.001	0.066	0.005			<0.2	39	2	640	<0.01			TB13103716
				Syenite is pegm, composed largely of pink feld (with zoning), and cpx. Cpx is poikilitic with up to				N504479		87	89	2	0.002	0.051	0.005			<0.2	63	3	630	<0.01			TB13103716
				50% apatite.				N504480		87	89	2	<0.001	0.054	0.005			<0.2	67	2	700	0.01			TB13103716
				alteration:				N504481		89	91	2	0.001	0.016	0.009			<0.2	19	18	840	<0.01			TB13103716
				Moderate to intense chlor and ser alteration.				N504482		91	93	2	<0.001	<0.005	0.001			<0.2	106	<1	9790	0.36			TB13103716



STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG

NTS:	42 D / 16	
UTM	Northing	5409004
(Nad27)	Easting	547877.3
Elevation (m):	386.4	
Dip at Collar:	-74.18	
Azimuth:	27.41	
Total Depth:	174	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-24

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	06-Jun-13
Date finish:	07-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Julien Meric
Assistant:	Renata Smoke (quick log) Yongang Feng (RQD )

DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-74.18	27.41

complete downhole survey in Four Dams masterlist

GEOLOGY						Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Major Rock	Min Rock	Comments	Mineraliz	Comments	NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	3.00	OB - Overburden					N504515		6	8	2.0	0.002	<0.005	<0.001			<0.2	886	50		>10000	0.28		TB13111457
							N504516		8	10	2.0	0.001	<0.005	<0.001			<0.2	651	66		>10000	0.34		TB13111457
3.00	9.03	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides		N504517		10	12	2.0	<0.001	<0.005	<0.001			<0.2	268	43		>10000	0.18		TB13111457
				Med to crs gr cpx, plag, ol and mag and heterogeneous 2f you have variation of the content in plag vs mafic parts. Several fractures with chlorite infill and chlorite veins surrounding by a strong chlorite alteration replacing cpx.		3-9.03 fine grain mostly po few trace of cpy.	N504518		12	14	2.0	<0.001	<0.005	<0.001			<0.2	329	62		>10000	0.2		TB13111457
							N504519		14	16	2.0	<0.001	<0.005	<0.001			<0.2	401	58		>10000	0.16		TB13111457
							N504520		16	18	2.0	0.001	<0.005	<0.001			<0.2	878	97		>10000	0.25		TB13111457
							N504521		18	20	2.0	0.002	<0.005	<0.001			<0.2	1325	127		>10000	0.4		TB13111457
9.03	9.30	FZ - fault or shear zone			0.5% to 1% disseminated sulphides		N504522		20	22	2.0	0.012	<0.005	0.006			1	5210	244		>10000	1.55		TB13111457
				chlorite coated slickenside		9.03-9.30 fine grain mostly po few trace of cpy	N504523		22	24	2.0	0.007	0.009	0.006			0.6	3360	180		>10000	1.14		TB13111457
							N504524		24	26	2.0	0.001	<0.005	0.004			<0.2	950	88		>10000	0.34		TB13111457
9.30	36.63	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides		N504525	d	24	26	2.0	0.002	<0.005	0.004			<0.2	924	90		>10000	0.34		TB13111457
				9.3-12.25 Med to crs gr cpx, plag, ol and mag and apatite and heterogeneous 2f you have variation of the content in plag vs mafic parts.		9.30-16.7 fine grain mostly po few trace of cpy	N504526		26	28	2.0	0.001	<0.005	0.003			<0.2	1140	105		>10000	0.5		TB13111457
					2-3% disseminated sulphides		N504527		28	30	2.0	0.004	<0.005	0.004			0.3	2090	169		>10000	0.82		TB13111457
						16.7-20.3	N504528		30	32	2.0	0.001	<0.005	0.001			<0.2	1340	88		8460	0.41		TB13111457
				16.66-35 med gr of cpx, plag and rich in ol and mag, few variations in plag content at the beginning then homegeous typical 2f.	3-5% disseminated sulphides		N504529		32	34	2.0	0.003	<0.005	0.003			0.2	1420	113		>10000	0.49		TB13111457
						5-10% 20.3-23.1 medium to fine gr mostly Po, cpy <1%	N504530		34	36	2.0	0.002	<0.005	0.002			<0.2	904	125		>10000	0.34		TB13111457
					2-3% disseminated sulphides		N504531		36	38	2.0	0.001	<0.005	0.001			<0.2	855	133		>10000	0.25		TB13111457
				35-39 medium mag ol rich, grain size variation med to crs gr		23.1-36.63 fine grain and variation of content, patches could reach 8% (28.5-28.6) mostly Po 8:1 cpy	N504532		38	40	2.0	0.004	0.01	0.006			0.6	2940	277		>10000	0.63		TB13111457
							N504533		40	42	2.0	0.001	<0.005	0.001			<0.2	1200	168		>10000	0.23		TB13111457
		2b - Coarse grained olivine gabbro with modal layering					N504534		42	44	2.0	0.001	<0.005	<0.001			<0.2	839	74		>10000	0.16		TB13111457
				12.25-16.66 more plag rich layers 50-60%, med to crs gr plag, cpx, ol, mag, there is a gradual with the 2f unit at the top and bottom; 15.73 smal leucopod			N504535		44	46	2.0	<0.001	<0.005	<0.001			0.2	1465	63		8460	0.39		TB13111457
							N504536		46	48	2.0	0.002	0.006	0.001			0.4	3050	75		6660	0.62		TB13111457
							N504537		48	50	2.0	<0.001	<0.005	<0.001			<0.2	1645	41		7230	0.89		TB13111457
		5b - Augite syenite			3-5% disseminated sulphides		N504538		50	52	2.0	0.001	<0.005	<0.001			<0.2	2340	32		6090	1.94		TB13111457
				20.9-21.3 and 29.5-29.92 dykes of syenite, crs grain felds K, biotite and px. Chlorite alteration.		very crs. and euhedral grain sulfides associated with syenite, seems replacing biotite and px, located at the border of the dyke Po 2:1 cpy	N504539		52	54	2.0	<0.001	<0.005	<0.001			<0.2	353	5		7490	0.22		TB13111457
							N504540	b				<0.001	<0.005	<0.001			<0.2	10	<1		50	<0.01		TB13111457
							N504541		54	56	2.0	<0.001	<0.005	<0.001			<0.2	116	<1		7850	0.19		TB13111457
36.63	38.46	FZ - fault or shear zone			2-3% disseminated sulphides		N504542		56	58	2.0	<0.001	<0.005	<0.001			<0.2	77	<1		7820	0.21		TB13111457
				Gouge and rubble 2parts rubble (put mesure)		36.63-38.46 fine grain Po:cpy 8:1	N504543		58	60	2.0	<0.001	<0.005	<0.001			<0.2	57	<1		7190	0.21		TB13111457
							N504544		60	62	2.0	0.001	<0.005	0.001			<0.2	46	<1		7230	0.21		TB13111457
38.46	43.66	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504545		102	104	2.0	<0.001	<0.005	<0.001			<0.2	79	1		8010	0.26		TB13111457
				39-42.1 typical 2f olivineand mag rich and apatite		38.46-42.1 fine grain and variation of content, patches could reach 8% (38.7-39.36) mostly Po 8:1 cpy	N504546		104	106	2.0	<0.001	<0.005	<0.001			<0.2	175	<1		>10000	0.49		TB13111457
							N504547		106	108	2.0	<0.001	<0.005	<0.001			<0.2	85	1		7760	0.29		TB13111457
		2e - Medium to coarse grained olivine gabbro			Trace to 0.5% disseminated sulphides		N504548		108	110	2.0	<0.001	<0.005	<0.001			<0.2	118	<1		9040	0.39		TB13111457
				42.1-43.66 med to crs gr plag, cpx ol and mag, no alignment, increase of felsic part since the 2f until the end.		42.1-43.66 trace	N504549		110	112	2.0	<0.001	<0.005	<0.001			<0.2	119	<1		9920	0.39		TB13111457
							N504550		112	114	2.0	<0.001	<0.005	<0.001			<0.2	86	<1		8910	0.32		TB13111457
							N504551		122	124	2.0	<0.001	<0.005	<0.001			<0.2	104	<1		>10000	0.37		TB13111457
43.66	51.10	2l - Med to coarse gr olivine gabbro to melatroctolite with MS intrusions			2-3% disseminated sulphides		N504552		124	126	2.0	<0.001	<0.005	<0.001			<0.2	504	<1		7820	0.6		TB13111457
				med to crs gr gabbro, probably 2e and also 2f and mix with TDL gabbro intrusion, and also anorthosite.		43.66-45.7 but more cpy 2:1	N504553		126	128	2.0	0.003	<0.005	<0.001			0.4	18	<1		500	0.04		TB13111457
					Trace to 0.5% disseminated sulphides		N504554	mpg1	128	130	2.0	<0.001	<0.005	<0.001			<0.2	165	<1		6400	0.19		TB13111457
						45.7-46.35 just small patches in anorthosite verys fine grain mostly Po	N504555					0.239	0.978	3.89			3.3	7340	401		1390	1.12		TB13111457
				46.23-51.10 principally 2f with olivine and mag with around 20% of marathon series (3c ?) contacts are really diffuse and there is probably mixing between them.	3-5% disseminated sulphides		N504556		130	132	2.0	<0.001	<0.005	0.001			<0.2	218	<1		8050	0.23		TB13111457
							N504557		132	134	2.0	<0.001	<0.005	<0.001			<0.2	223	<1		7960	0.23		TB13111457
						46.35-47.2 med to fine grain really rich in cpy 2:1, variation	N504558		134	136	2.0	<0.001	<0.005	0.001			<0.2	219	<1		7390	0.22		TB13111457
		3d - Very coarse grained to pegmatic, ophitic gabbro				content could reach around 8%, mineralization start in the possible two duck	N504559		136	138	2.0	<0.001	<0.005	<0.001			<0.2	237	<1		7660	0.23		TB13111457
				43.66-44.07 pegmatic gabbro with euhedral plag and ophitic cpx and mag trace of apatite.			N504560		138	140	2.0	<0.001	<0.005	<0.001			<0.2	181	<1		7310	0.18		TB13111457
				the beginning present a strong pink alteration, felds K altered cpx texture is less obvious and presence of coarse grain mag and biotite. It is possibly a syenite mixed with the TDL gabbro.	Trace to 0.5% disseminated sulphides		N504561		140	142	2.0	<0.001	<0.005	<0.001			<0.2	294	<1		9050	0.27		TB13111457
						47.2-49.1 very fine grained	N504562		142	144	2.0	<0.001	<0.005	<0.001			<0.2	382	<1		9530	0.28		TB13111457
					3-5% disseminated sulphides		N504563		144	146	2.0	<0.001	<0.005	<0.001			<0.2	192	<1		7310	0.18		TB13111457
		2e - Medium to coarse grained olivine gabbro				49.1-51.1 med to fine grain really rich in cpy 2:1, variation	N504564		146	148	2.0	<0.001	<0.005	<0.001			0.2	558	<1		8910	0.34		TB13111457
				44.07-45.7 med to crs gr plag, cpx ol and mag, no alignment		content could reach around 8%, mineralization principally present in the mixing part	N504565		148	150	2.0	<0.001	<0.005	<0.001			<0.2	441	<1		8510	0.28		TB13111457
							N504566		150	152	2.0	<0.001	<0.005	<0.001			<0.2	279	<1		7480	0.21		TB13111457
		2g - Gabbroic anorthosite					N504567		152	154	2.0	<0.001	<0.005	<0.001			<0.2	517	1		8420	0.32		TB13111457
				45.7-46.23 typical anorthosite xenolith with cpx, ol, mag oikocrysts. Sharp contact at the top but			N504568		154	156	2.0	<0.001	<0.005	<0.001			0.2	599	1		8570	0.34		TB13111457



GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job	
From	To	Maj Rock	Min Rock	Comments					FROM	TO															ppm
				the bottom contact is really diffuse and seems to continue until 46.83m but more altered and mineralized. (maybe mixing with TDL 3c)			N504569	d		156	158	2.0	<0.001	<0.005	<0.001			0.2		628	1	8360	0.34		TB13111457
							N504570		156	158	2.0	<0.001	<0.005	<0.001			0.2		612	<1	8790	0.34		TB13111457	
							N504571		158	160	2.0	<0.001	<0.005	<0.001			<0.2		553	<1	8070	0.31		TB13111457	
			3c - Coarse grained, ophitic gabbro with leucogabbro lenses				N504572		160	162	2.0	<0.001	<0.005	<0.001			<0.2		576	1	8800	0.32		TB13111457	
				46.45-46.83 , 47.88-47.99, 48.06-48.14, 48.28-48.47, 48.52-48.61, 48.7-48.77 possible 3c ?			N504573		162	164	2.0	<0.001	<0.005	<0.001			0.3		892	<1	8860	0.46		TB13111457	
				looks like the anorthosite but you see smal individual grains of plag, presence of sericite and strong mineralization, ophitic texture is not obvious.			N504574		164	166	2.0	<0.001	<0.005	<0.001			0.6		2160	5	8940	0.91		TB13111457	
							N504575		166	168	2.0	<0.001	<0.005	<0.001			0.5		1540	3	6340	0.65		TB13111457	
							N504576		168	170	2.0	<0.001	<0.005	<0.001			0.2		721	<1	8060	0.36		TB13111457	
51.10	98.65	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides		N504577		170	172	2.0	<0.001	<0.005	<0.001			0.2		476	1	8280	0.25		TB13111457	
				40-60 plag rich layers, med to crs grain plag cpx, ol mag . Plag alignment but not obvious.		51.1-52.2 med to fine grain really rich in cpy 2:1, variation	N504578		172	174	2.0	<0.001	<0.005	<0.001			0.2		552	2	9600	0.27		TB13111457	
				presence of few leucopds max 5 cm wide <1%		content could reach around 8%, mineralization principally	K008508		62	71	9.0											0.2	0.02		TB13118918
						present in the mixing part	K008509		71	80	9.0											0.22	0.03		TB13118918
				51.10-64.5, 5% blebs or pods of altered plag with sericite and biotite, they also appear as small veins	0.5% to 1% disseminated sulphides		K008510		80	89	9.0											0.19	0.03		TB13118918
						52.2-98.65 mostly Po trace of cpy, present in all lithologies	K008511		89	98	9.0											0.21	0.01		TB13118918
			2f - Medium to coarse grained oxide augite melatroctolite			very fine grain very continuous and homogenous	K008512		98	102	4.0											0.24	0.02		TB13118918
				74.10-75.79 wide mafic layers with more mag and ol			K008513		114	122	8.0											0.26	0.02		TB13118918
				85.35-87-56, alteration of 2b strong green color (epidot ?) and olivine looks really altered, and also pink alteration.The alteration is maximum around a vein of carbonate with crystals of calcite (vein around 3 cm wide from 86.05-86.33)																					
98.65	99.76	2e - Medium to coarse grained olivine gabbro			0.5% to 1% disseminated sulphides																				
				Possible 3d. No plag alignment, lathlike feld and pink alteration or felds K ?, ophitic textur. Mg-cq.		98.65-99.76 mostly Po trace of cpy, present in all lithologies																			
						very fine grain very continuous and homogenous																			
99.76	104.05	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides																				
				plag rich layers, med to crs grain plag cpx, ol mag . Plag alignment but not obvious.		99.76-104.05 mostly Po trace of cpy, present in all lithologies																			
			3b - Coarse grained, ophitic gabbro (>5mm)			very fine grain very continuous and homogenous																			
				101.2-101.34m Dyke in 2b. Sharp contact. Ophitic texture, intense pink alteration. Lathlike felds med to crs gr.																					
			2g - Gabbroic anorthosite																						
				102-102.22 anorthosite xenolith associated with a part of two duck ophitic gabbro (3b) same color and texture but the contact between them is diffuse, there is probably a mixing between them .																					
104.05	105.85	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides																				
				ol rich (35%), mag, plag, cpx.		104.05-105.85 fine grain very ho:ogenous, could reach 2%																			
						mostly Po trace of cpy																			
105.85	108.97	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides																				
				30-50% plag rich layers, med to crs grain plag cpx, ol mag . Plag alignment but not obvious.		105.85-108.97 very fine gr																			
108.97	111.12	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides																				
				ol rich (35%), mag, plag, cpx.		108.97-111.12 fine grain very homogeneous, could reach 2%																			
						mostly Po trace of cpy																			
111.12	125.70	2b - Coarse grained olivine gabbro with modal layering																							
				45-65% plag rich layers, med to crs grain plag cpx, ol mag . Plag alignment.but variation of the content in mafic and felsic layers.	3-5% disseminated sulphides	124.36-125.7 fine to med gr po trace of cpy																			
125.70	128.27	5a - Quartz svenite			Trace to 0.5% disseminated sulphides																				
				crs gr felds K, and biotite strong alteration (green color) the dyke looks like silicified. Stong pink alteration in the 2b at the contact. Sharp contact it is a big dyke.		few trace of mineralization in the syenite dyke																			
128.27	153.00	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides																				
				50-70% plag rich layers, med to crs grain plag cpx, ol mag . Plag alignment.		128.27-128.6 med to fine grain po trace of cpy,																			
					2-3% disseminated sulphides																				
			2e - Medium to coarse grained olivine gabbro			128.6-130.3 med to fine grain po trace of cpy,																			
				Possible 3d. No plag alignment, lathlike feld and pink alteration or felds K ?, ophitic texture. Same material see at 98.65m. But diffuse contact with 2b and stringer and blebs at the top and bottom.	0.5% to 1% disseminated sulphides	130.3-153 very fine grain																			
			2f - Medium to coarse grained oxide augite melatroctolite																						
				147-148.88 2f mafic unit rich in ol and plag																					
153.00	174.00	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides																				
				rich 20-30% in ol and 10-20 % mag , interstitial plag and cpx		153-174 med to fine grain po trace of cpy,																			
174.00		EOH - End of Hole																							

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408990
(Nad27)	Easting	547921.5
Elevation (m):	392.7	
Dip at Collar:	-45.13	
Azimuth:	29.83	
Total Depth:	156	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

**DDH: FD-13-25**

Lease/Claim:	1240552
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	07-Jun-13
Date finish:	08-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Renata Smoke, Julien Meric

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45.13	29.83

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments					Comments	FROM		TO	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
0.00	1.00	OB - Overburden					N504579		6	8	2.0	0.001	<0.005	<0.001			<0.2		383	49	>10000	0.16		TB13111455
							N504580		8	10	2.0	0.001	<0.005	0.001			0.2		468	63	>10000	0.17		TB13111455
1.00	15.88	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N504581		10	12	2.0	0.003	<0.005	0.001			0.2		872	111	>10000	0.3		TB13111455
				Rock is composed of med grained Pl, Cpx, Ol and fine grained Mag. The layering is defined by variations in Ol and Cpx contents. The mafic layer is a cm to 20 cm.	1-11m. <0.5% Po. Almost invisible Cpy		N504582		12	14	2.0	0.003	<0.005	0.001			0.3		751	98	>10000	0.23		TB13111455
					hard to estimate Po: Cpy.		N504583		14	16	2.0	0.002	<0.005	0.001			0.4		1090	115	>10000	0.25		TB13111455
				Med grained Bt is mainly present as a secondary mineral. Pl is partially altered and likely sericitized.	0.5% to 1% disseminated sulphides		N504584		16	18	2.0	0.004	<0.005	0.001			0.9		3100	169	>10000	0.95		TB13111455
				Cpx and Ol are likely replaced by Bt and Chl. 1% disseminated Ap.	11-15.88m. Predominantly Po. 0.5-1% Po. Almost invisible Cpy		N504585	b	16	18	2.0	<0.001	<0.005	<0.001			<0.2		7	1	50	0.01		TB13111455
				15-15.88. Fractures are very oxidized.	hard to estimate Po: Cpy.		N504586		18	20	2.0	0.009	<0.005	0.005			0.9		3480	176	>10000	1.53		TB13111455
			2f - Medium to coarse grained oxide augite melatroctolite				N504587		20	22	2.0	0.007	<0.005	0.006			1		3740	230	>10000	1.41		TB13111455
				6.27-6.5 m. The rock is dominated by med grained Ol, Mag and Pl. Ol and Mag are subhedral to euhedral. Gradational contacts with 2b.			N504588		22	24	2.0	0.002	<0.005	0.002			0.5		1755	101	8720	0.74		TB13111455
							N504589		24	26	2.0	0.001	<0.005	0.001			0.4		1065	71	>10000	0.44		TB13111455
				8-8.4m. Same as the 2f unit of 6.27-6.5m.			N504590		26	28	2.0	0.003	<0.005	0.002			0.4		913	120	>10000	0.33		TB13111455
				15.68-15.88 m. Same as the 2f unit above.			N504591		28	30	2.0	0.002	<0.005	<0.001			0.3		801	128	>10000	0.33		TB13111455
							N504592		30	32	2.0	0.001	<0.005	0.001			0.4		905	147	>10000	0.31		TB13111455
15.88	16.86	LC - Lost Core					N504593		32	34	2.0	0.004	0.008	0.003			0.6		1775	218	>10000	0.47		TB13111455
				Possibly a fault zone.			N504594		34	36	2.0	0.006	0.01	0.008			1		3030	297	9090	0.58		TB13111455
							N504595		36	38	2.0	0.002	0.005	0.002			0.5		1985	151	7550	0.37		TB13111455
16.86	25.80	2f - Medium to coarse grained oxide augite melatroctolite			3-5% disseminated sulphides		N504596		38	40	2.0	0.001	<0.005	<0.001			0.3		1260	49	6510	0.44		TB13111455
				Dark rock is dominated by subhedral Ol and Mag and ahedral Pl with minor Cpx. Ol and Cpx are likely replaced by Chl. Fractures in the rock have Chl infilling and are 70-80 degree to the core axis.	16.86-23.63m. Predominantly Po. 5% Po, Cpy in trace amount.		N504597		40	42	2.0	<0.001	<0.005	<0.001			0.2		395	22	7250	0.15		TB13111455
					Hard to estimate Po: Cpy.		N504598		42	44	2.0	<0.001	<0.005	<0.001			<0.2		311	21	8040	0.13		TB13111455
			3d - Very coarse grained to pegmatitic, ophitic gabbro		2-3% disseminated sulphides		N504599		44	46	2.0	<0.001	<0.005	<0.001			<0.2		245	12	7990	0.15		TB13111455
				25.1-25.4m. Megacrystic subhedral to euhedral Pl, Cpx and coarse grained euhedral Mag.	23.63-25.80m. 2-3% Po, invisible Cpy.		N504600	mpg2	44	46	2.0	0.089	0.281	0.913			1.3		2950	286	1810	1.19		TB13111455
				Gradational contacts with 2f but the grain size of Mag dramatically changes at the contacts. Pl shows pink rim possibly due to Kfs alteration. Possibly TDL (?).			N504601		46	48	2.0	<0.001	<0.005	<0.001			<0.2		265	8	8330	0.16		TB13111455
							N504602		48	50	2.0	<0.001	<0.005	<0.001			<0.2		132	1	8720	0.25		TB13111455
							N504603		50	52	2.0	<0.001	<0.005	<0.001			<0.2		71	2	9290	0.28		TB13111455
25.80	26.80	FZ - fault or shear zone					N504604		52	54	2.0	<0.001	<0.005	0.001			<0.2		67	2	8960	0.27		TB13111455
				The rock is 2f but very fractured.			N504605		54	56	2.0	0.001	<0.005	<0.001			<0.2		87	2	8040	0.23		TB13111455
							N504606		56	58	2.0	<0.001	<0.005	<0.001			0.2		104	5	7890	0.26		TB13111455
26.80	37.13	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504607		58	60	2.0	<0.001	<0.005	0.001			<0.2		154	8	9420	0.32		TB13111455
				Same as the 2f from 16.86 to 25.80 m but is relatively Pl-rich. Pl alignments are 1 to 10 cm and are 70-80 degree.	26.80-37.13m. Overall, 3% Po, <0.5% Cpy.		N504608		60	62	2.0	<0.001	<0.005	<0.001			<0.2		118	2	>10000	0.33		TB13111455
					2-3% disseminated sulphides		N504609		62	64	2.0	<0.001	<0.005	<0.001			<0.2		76	1	9110	0.28		TB13111455
			3d - Very coarse grained to pegmatitic, ophitic gabbro		34.85-35.5m. Med grained Po and Cpy. 1% Po, 1% Cpy (Po: Cpy=1:1).		N504610		94	96	2.0	<0.001	<0.005	<0.001			<0.2		89	3	9260	0.34		TB13111455
				34.85-35m. Similar to the unit of 25.1-25.4m.			N504611		96	98	2.0	<0.001	<0.005	<0.001			<0.2		86	4	8250	0.33		TB13111455
				35.2-35.5m. Similar to the unit of 25.1-25.4m.			N504612		98	100	2.0	<0.001	<0.005	<0.001			<0.2		89	4	8380	0.36		TB13111455
			5b - Augite syenite				N504613		100	102	2.0	<0.001	<0.005	<0.001			<0.2		98	4	9000	0.36		TB13111455
				29.27-29.47m. Syenite is dominated by megacrystic Kfs and interstitial mafic mineral that is completely replaced by Chl. Some feldspar crystals show labradorite's play of color. Sharp contacts with 2f.			N504614		102	104	2.0	<0.001	<0.005	<0.001			<0.2		69	3	7810	0.26		TB13111455
							N504615	d	102	104	2.0	<0.001	<0.005	<0.001			<0.2		68	3	7740	0.27		TB13111455
							N504616		104	106	2.0	<0.001	<0.005	0.001			<0.2		96	4	9540	0.35		TB13111455
							N504617		106	108	2.0	<0.001	<0.005	<0.001			<0.2		101	3	9780	0.4		TB13111455
37.13	40.87	2g - Gabbroic anorthosite			Trace to 0.5% disseminated sulphides		N504618		108	110	2.0	<0.001	<0.005	<0.001			<0.2		239	4	9670	0.33		TB13111455
				The white rock is dominated by Pl with lesser interstitial pyroxene. Pyroxene is partially to completely replaced by Bt. Fine grained disseminated Mag. Pl-Cpx patches on 3-5 cm scale as at 38.24m and 39.2m. The Pl-Cpx patches seems to be rocks dissolved in the anorthosite (?).	37.13-38.9m. Trace amount of Po and Cpy. Hard to estimate Po: Cpy.		N504619		110	112	2.0	<0.001	<0.005	<0.001			<0.2		240	3	8570	0.27		TB13111455
							N504620		112	114	2.0	<0.001	<0.005	<0.001			<0.2		208	3	7680	0.26		TB13111455
					2-3% disseminated sulphides		N504621		114	116	2.0	<0.001	<0.005	<0.001			<0.2		263	2	9020	0.29		TB13111455
			5b - Augite syenite		38.9-40m. 2-3% Po, 0.5-1% Cpy ( Po: Cpy = 3:1).		N504622		116	118	2.0	<0.001	<0.005	<0.001			<0.2		258	4	8070	0.26		TB13111455
				38.63-38.72. A dike-like syenite (?).	Trace to 0.5% disseminated sulphides		N504623		118	120	2.0	<0.001	<0.005	<0.001			0.2		301	3	8740	0.29		TB13111455
				40.05-40.3m. Same as the unit of 38.63-38.72m.	40-40.87m. Po and Cpy in trace amounts.		N504624		120	122	2.0	<0.001	<0.005	<0.001			<0.2		462	4	8940	0.38		TB13111455
							N504625		122	124	2.0	<0.001	<0.005	<0.001			<0.2		305	3	8580	0.23		TB13111455



NTS:				42 D / 16				STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG																DDH:		FD-13-26		DIAMOND DRILL CORE LOG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
UTM		Northing		5408992				Lease/Claim:		1240554				Reflex EZ Shot- Diamond Drillhole Survey		Depth		Dip		Azimuth																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408977.6
(Nad27)	Easting	547973.3
Elevation (m):	378.7	
Dip at Collar:	-84.76	
Azimuth:	29.02	
Total Depth:	111	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-27

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	09-Jun-13
Date finish:	09-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Julien Meric
Assistant:	Rachel Epstein and Renata Smoke

## DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.76	29.02

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE		INTERVAL			WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments			NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#	
0.00	3.70	OB - Overburden					N504678	mpg2	14	16	2.0	<0.001	<0.005	<0.001			<0.2		511	104	>10000	0.14			TB13111453
							N504679		16	18	2.0	<0.001	<0.005	<0.001			<0.2		694	127	8420	0.18			TB13111453
3.70	18.00	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N504680		18	20	2.0	0.002	<0.005	0.002			0.3		1255	135	8770	0.34			TB13111453
				Alternance of mafic layers and plag rich layers without plag alignment (50/50). It looks like an		3.7-16.54 trace of very fine grain mostly Po	N504681		20	22	2.0	0.006	0.016	0.006			1		2760	299	9790	0.6			TB13111453
				alternance of 2f and 2e. Mafic layers has med to crs gr ol, cpx, mag and plag. Plag ric layers has	0.5% to 1% disseminated sulphides		N504682		22	24	2.0	0.003	0.009	0.008			1		3790	321	8720	0.69			TB13111453
				med to crs gr plag, cpx, ol and mag.		16.54-18.00, around 1% fine grained mostly Po, trace cpy	N504683		24	26	2.0	<0.001	<0.005	0.002			0.4		2300	174	8190	0.42			TB13111453
							N504684		26	28	2.0	<0.001	<0.005	<0.001			0.3		1955	90	8520	0.45			TB13111453
18.00	33.93	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides		N504685		28	30	2.0	0.001	<0.005	0.002			0.5		3050	106	6880	1.26			TB13111453
				Med to crs gr ol, cpx, mag (med to fine gr) and plag.		18.00-19.25, around 1% fine grained mostly Po, trace cpy	N504686		30	32	2.0	0.001	0.006	0.001			0.8		4580	116	6480	2.47			TB13111453
				Gradual contact (plag rich layers increase) with 2b at the top and bottom	2-3% disseminated sulphides		N504687		32	34	2.0	0.001	<0.005	0.002			0.5		2800	73	6800	1.38			TB13111453
				2e - Medium to coarse grained olivine gabbro		19.25-20.54 fine grained mostly Po, trace cpy	N504688		34	36	2.0	<0.001	<0.005	<0.001			<0.2		532	18	6480	0.27			TB13111453
				19.98-20.40 2e more plag content and no alignment, but contact really diffuse with 2f.		19.98-20.40 fine grained but ratio po 2:1 cpy in the 2e layer	N504689		36	38	2.0	<0.001	<0.005	<0.001			<0.2		171	4	6690	0.16			TB13111453
					3-5% disseminated sulphides		N504690					0.072	0.289	0.821			1.2		2830	275	1700	1.08			TB13111453
						20.40-25.35 Med to fine grain po 8:1 cpy	N504691		38	40	2.0	<0.001	<0.005	0.001			<0.2		120	1	6530	0.19			TB13111453
					2-3% disseminated sulphides		N504692		40	42	2.0	<0.001	<0.005	<0.001			<0.2		56	1	6030	0.19			TB13111453
						25.35- 28.41 Med to fine grain po 8:1 cpy and patches richer	N504693		42	44	2.0	<0.001	<0.005	<0.001			<0.2		53	<1	7160	0.22			TB13111453
					3-5% disseminated sulphides		K008528		3	14	11.0											0.16	0.03		TB13118918
33.93	51.92	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides		K008529		44	53	9.0											0.24	0.03		TB13118918
				Med to crs gr interstitial plag, cpx, ol and fine gr mag. Visible plag alignment.		33.93-35.18 Med to fine grain po cpy 5:1	K008531		62	71	9.0											0.31	0.05		TB13118918
					0.5% to 1% disseminated sulphides		K008532		71	80	9.0											0.29	0.04		TB13118918
						35.18- 41.96 very fine grain po 5:1 cpy seems homogenous	K008533		80	89	9.0											0.33	0.04		TB13118918
					Trace to 0.5% disseminated sulphides		K008534		89	98	9.0											0.32	0.05		TB13118918
						41.96-51.92 very fine gr mostly po few trace of cpy	K008535		98	106	8.0											0.29	0.03		TB13118918
51.92	52.30	FZ - fault or shear zone			Trace to 0.5% disseminated sulphides		K008536		106	111	5.0											0.23	0.05		TB13118918
52.30	111.00	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides																				
				Med to crs gr interstitial plag, cpx, ol and fine gr mag. Visible plag alignment.		52.30-104.66 very fine gr mostly po few trace of cpy																			
				53.37-53.50 fracture zone rwith strong chlorite alteration Richer in sulfide (around 1% with sub-euhedral po)	0.5% to 1% disseminated sulphides																				
				54.32-54.46 fracture zone rwith strong chlorite alteration and carbonate infills. Richer in sulfide (around 1% with sub-euhedral po)		104.66-111.0 fine gr mostly po few trace of cpy																			
				56.10 vein of syenite 2mm wide, with felds K and biotite.																					
				70.14-70.28 small diffuse vein (around 1cm wide) of alteration, with sericite and med to crs gr biotite																					
111.00		EOH - End of Hole																							
																	</								

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408979.2
(Nad27)	Easting	547974.3
Elevation (m):	378.1	
Dip at Collar:	-45	
Azimuth:	29.85	
Total Depth:	54	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-28

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	09-Jun-13
Date finish:	10-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Rachel Epstein

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45	29.85

downhole survey not available

GEOLOGY						Mineraliz	Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments			Comments	NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	4.30	OB - Overburden						N504694		13	15	2.0	0.002	<0.005	<0.001			<0.2		589	107	>10000	0.17		TB13111570
								N504695		15	17	2.0	0.008	<0.005	0.002			0.4		1315	160	>10000	0.33		TB13111570
4.30	15.37	2b - Coarse grained olivine gabbro with modal layering					Trace to 0.5% disseminated sulphides	N504696		17	19	2.0	0.009	0.009	0.009			1.1		3530	334	>10000	0.69		TB13111570
				The rock is composed of med grained Cpx, Ol and coarse grained Pl with minor fine grained Mag.			4.3-15m. No visible sulfides	N504697		19	21	2.0	0.006	<0.005	0.008			0.9		3540	236	7340	0.61		TB13111570
				Pl is the most predominant mineral and likely takes up 40-50%.			0.5% to 1% disseminated sulphides	N504698		21	23	2.0	0.003	<0.005	0.001			<0.2		633	35	6510	0.25		TB13111570
				Ap is fine grained and disseminated and likely 0.5% in the rock. Bt and Chl are common alteration minerals, replacing Cpx and Ol. Pl is commonly sericitized. Some pinkish feldspar is like Pl that is partially replaced by Kfs. The layering is defined by variations in Ol and Cpx contents.			15-15.37m. 0.5% Po, 0.5% Cpy (Po:Cpy=1:1).	N504699		23	25	2.0	0.002	<0.005	0.001			<0.2		285	22	7500	0.12		TB13111570
								N504700		25	27	2.0	0.001	<0.005	0.001			<0.2		537	29	7210	0.23		TB13111570
								N504701		27	29	2.0	0.003	<0.005	0.001			<0.2		230	8	6290	0.14		TB13111570
			5a - Quartz syenite					K008537		4.3	13	8.7										0.18	0.03		TB13118918
				9.68-9.82m. Slightly sharp contact with 2b. The rock is dominated by coarse grained alkali feldspar , quartz and Cpx. Qtz is interstitial to feldspar. Cpx is partially replaced by Bt.				K008538		29	38	9.0										0.18	0.03		TB13118918
								K008539		38	47	9.0										0.26	0.03		TB13118918
			5b - Augite syenite					K008540		47	54	7.0										0.25	0.04		TB13118918
				10.87-12.36m. Sharp contact with 2b. The rock is composed of megacrystic feldspar and coarse grained Cpx. Some feldspar crystals show labradorite's play of color. Cpx is replaced by Bt.																					
				Qtz and carbonates are likely secondary and interstitial to and replace Pl and Cpx. At the contact between the syenite and 2b. The 2b unit is Ol-Mag-Ap rich. Ol, Mag and Ap form cumulate-like zones.																					
15.37	20.51	2f - Medium to coarse grained oxide augite melatroctolite					3-5% disseminated sulphides																		
				Gradational into this unit. The dark rock is dominated by med grained subhedral Ol, Cpx and Mag and fine to med grained ahedral Pl. Strongly magnetic. Fractures in the rock are filled by Chl. Mafic minerals Ol and Cpx is partially replaced by Chl.			15.37-20.51m. Fine to medium grained sulfide is dominated by Po. Roughly 5% Po, 0.5% Cpy (Po:Cpy=10:1).																		
20.51	54.00	2b - Coarse grained olivine gabbro with modal layering					2-3% disseminated sulphides																		
				Gradational into this unit from 2f. The rock is dominated by med grained subhedral Pl, Cpx and Ol with lesser Mag. Cpx and Ol are commonly replaced by Bt and Chl. Similar to the 2b unit of 4.3-15.37m.			20.51-22m. 2%Po, 1% Cpy (Po:Cpy=2:1).																		
				Locally, Pl alignments on 2 to 5 cm scale are 70-80 degrees to the core axis.			Trace to 0.5% disseminated sulphides																		
				20.51-23.9m. The rock is relatively Pl-rich and shows roughly 10cm wide Pl-rich pods. Similar to leucogabbro in the Marathon series. Fractures are filled by Chl.			2-3% disseminated sulphides																		
							26-27m. 2%Po, 1% Cpy (Po:Cpy=2:1).																		
			5b - Augite syenite				Trace to 0.5% disseminated sulphides																		
				39.88-40m. Very thin syenite dike, roughly 2cm in width. The dike is 15 degrees to the core axis and mainly composed of med graind alkali feldspar and Cpx. Sharp contac with 2b. Cpx is partially replaced by Chl.			27-54m. Overall, Po and Cpy are <0.5%. Difficult to estimate Po:Cpy. In fractures, secondary Py is present.																		
				42.39-42.65m. Same as the syenite from 39.88 to 40m.																					
54.00		EOH - End of Hole																							
																</									

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408943.2
(Nad27)	Easting	548009.1
Elevation (m):	383.5	
Dip at Collar:	-45	
Azimuth:	34.62	
Total Depth:	51	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-29

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	11-Jun-13
Date finish:	11-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Renata Smoke
Assistant:	Julien Meric, Yongang Feng

## DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-45	34.62

downhole survey not available

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments					Comments	FROM														
0.00	8.17	OB - Overburden				N504702		8.17	10	1.8	0.002	<0.005	0.002				0.2		809	102	>10000	0.19		TB13111452
						N504703		10	12	2.0	<0.001	<0.005	<0.001				<0.2		671	52	9010	0.18		TB13111452
8.17	25.79	2f - Medium to coarse grained oxide augite melatroctolite			3-5% disseminated sulphides	N504704		12	14	2.0	<0.001	<0.005	0.002				<0.2		784	49	7970	0.2		TB13111452
				The entire unit is rich in ol and mag, and low in plag. In the less mafic layers, there is a max of	3-6% po, trace cpy. fq-mg, most concentrated in most mafic	N504705	d	12	14	2.0	<0.001	<0.005	<0.001				0.2		807	47	8080	0.2		TB13111452
				20% plag, generally <15% and 30-40% ol. 60-95% mag in most mafic layers, which compose approx	and mag rich layers	N504706		14	16	2.0	<0.001	<0.005	0.001				0.2		1125	66	5380	0.38		TB13111452
				40% of rock, 10-40cm wide.		N504707		16	18	2.0	0.001	<0.005	<0.001				0.3		1615	90	9810	0.63		TB13111452
				Strong to intense chlor alteration throughout, and abundant chlor veins (< 1cm, 5-10% of rock)		N504708		18	20	2.0	<0.001	<0.005	<0.001				0.2		1085	87	7490	0.43		TB13111452
				18.95-20.2m Most intense chlor alteration associated with very broken rock (FZ7)and chlor coated		N504709		20	22	2.0	<0.001	<0.005	<0.001				0.4		1120	119	5280	0.42		TB13111452
				slickenslides.		N504710		22	24	2.0	0.001	<0.005	<0.001				0.4		1790	103	5670	0.64		TB13111452
25.79	31.66	5b - Augite syenite			Local blebs to 2-4% sulphides	N504711		24	26	2.0	<0.001	<0.005	<0.001				0.3		1025	102	>10000	0.33		TB13111452
				Cg to pegm. MANY replacement textures between main lithology forming minerals, and po and cpy	6% (3.1 to 1:1) in patches (patches are approx 5-10% of unit).	N504712		26	28	2.0	0.002	<0.005	0.004				0.6		2320	141	9660	0.65		TB13111452
				(listed and described below).	MOST common at the contact between 2f and the syenite	N504713		28	30	2.0	<0.001	<0.005	0.001				0.2		626	48	7400	0.2		TB13111452
				Upper to lower contact is sharp.	and associated with, intergrown with, and replacing mag	N504714		30	32	2.0	0.003	<0.005	0.001				0.3		1305	92	9790	0.43		TB13111452
				The overall texture is highly variable, as is modal %'s of main minerals. In sections which are thinner,	and bl. Po:cpy is on average 3-4, but as low as 1:1. Rare in the	N504715		32	34	2.0	0.002	0.007	0.002				1		4600	156	6190	1.55		TB13111452
				sandwiched between 2f xenos, the grain size is 1-3cm, and in order of decreasing abundance	zones which have very large pegm labadorite. See alteration	N504716		34	36	2.0	0.001	0.005	0.002				0.5		2760	76	6810	1.58		TB13111452
				include plag, cpx, bi, and rare ol (although this is found in patches within the thicker section as well)	description for more detailed textural relationships.	N504717		36	38	2.0	0.002	<0.005	0.002				0.5		3320	91	6310	2.26		TB13111452
				The other main texture has a lager proportion of feld (labradorite, 70-80%, 3-7cm), and these	Also as blebs which are intergranular to rock forming minerals.	N504718		38	40	2.0	0.002	<0.005	0.002				0.5		3400	88	6280	2.38		TB13111452
				commonly have a rim of pink alteration on them. The contact between this type and the previous can	2-3% disseminated sulphides	N504719		40	42	2.0	0.001	<0.005	0.003				0.6		3510	88	6500	2.5		TB13111452
				be seen and is somewhat gradational.	3% po, 1% cpy, (3:1)	N504720	b				<0.001	<0.005	<0.001				<0.2		5	1	60	0.02		TB13111452
				81.1-82.4m Intermingling (subparallel contact) of coarse grained (5-10mm) ophitic gabbro with pegm	Virtually devoid in the zones which are composed mostly of feld,	N504721		42	44	2.0	<0.001	<0.005	0.001				<0.2		907	22	6880	0.76		TB13111452
				syenite-like (type that has a greater proportion of cpx), and 2f xenos (slightly gradational). 15% of	and which have very large pegm zoned labradorite. <1% of unit.	N504722		44	46	2.0	<0.001	<0.005	<0.001				<0.2		104	2	6060	0.18		TB13111452
				this interval.		N504723		46	48	2.0	<0.001	<0.005	<0.001				<0.2		86	<1	6140	0.22		TB13111452
				<b>Replacement textures and detailed mineralization textures:</b>		N504724		48	50	2.0	<0.001	<0.005	0.001				<0.2		79	<1	6850	0.24		TB13111452
				Near the contact between 2f and 5b (xenos of 2f, 20-35cm wide, 20% of unit) mag forms psuedos		N504725		50	51	1.0	<0.001	<0.005	<0.001				<0.2		57	1	7220	0.22		TB13111452
				of cpx, which in turn is either replacing or is being replaced by bl. cpy forms psuedos of this mag																				
				(common occurance) type.																				
				cpy and po, commonly replace poikilitic bi which has chadacrysts of mag.																				
				Feld have strong zoning, intensely ep altered, with pink alteration rims, although some have been																				
				altered completely to pink.																				
				A bluish and finely fibrous mineral (reibikite??) forms psuedos of cpx in the zones which have less,																				
				and somehwat smaller feld, which in turn commonly has rims of bi.																				
				Intense chlor, pink, and ep alteration throughout, ca veins cut everything (including all alteration																				
				mins).																				
31.66	32.37	2e - Medium to coarse grained olivine gabbro			3-5% disseminated sulphides																			
				Very plag rich. Up to 70% for 1.5m near the upper contact, and down to 60% after.	31.66-32.37m 4% po, 2% cpy (2:1).																			
				Composed of plag, cpx, and bi.																				
				31.66-37.3m Patchy and intense ser, pink, and chlor alteration. Most intense near chlor and/or																				
				calcite veins (veins and local alteration compose 10-15% within this interval)																				
32.37	33.10	FZ - fault or shear zone			3-5% disseminated sulphides																			
				FZ within 2e unit. Up to 2 cm thick chlor filled veins, very intense to complete chlor, ser, kaol (?), and	32.37-33.1m 4% po, 2% cpy (2:1)																			
				pink alteration of 2e unit, and 10cm up into 5b unit. See description above for 2e.																				
33.10	42.45	2e - Medium to coarse grained olivine gabbro			3-5% disseminated sulphides																			
				Continuation of above 2e unit, see above for detailed description.	33.1-33.85m 4% po, 2% cpy (2:1)																			
				Mineralization continues through this unit.	3-5% disseminated sulphides																			
					33.85-41.84m 6% po, 3% cpy (2:1)																			
					3-5% disseminated sulphides																			
					41.84-42.45m 5%po, trace-1% cpy (5:1)																			





**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5408942
	Easting	548009.1
Elevation (m):	382.4	
Dip at Collar:	-83.33	
Azimuth:	19.99	
Total Depth:	102	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-30

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	11-Jun-13
Date finish:	12-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Rachel Epstein, Renata Smoke, Julien Meric

## DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-83.33	19.99

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments					Comments	FROM		TO	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
0.00	3.49	OB - Overburden					N504726		8	10	2.0	<0.001	<0.005	0.002			0.2		823	88	>10000	0.18		TB13111456
							N504727		10	12	2.0	<0.001	<0.005	<0.001			<0.2		742	54	>10000	0.17		TB13111456
3.49	6.75	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N504728		12	14	2.0	0.001	<0.005	<0.001			0.2		903	49	>10000	0.23		TB13111456
				The overall white rock is dominated by coarse grained subhedral Pl, medium grained anhedral to subhedral Ol and Cpx with lesser disseminated Mag. The layering is defined by variations in Ol and Cpx contents. Also Pl alignments are 5-15 cm wide and generally 60 degrees to the core axis.	3.65-6.75m. Overall, sulfides in trace amounts.		N504729		14	16	2.0	<0.001	<0.005	<0.001			0.2		839	51	9590	0.28		TB13111456
							N504730		16	18	2.0	<0.001	<0.005	<0.001			0.2		949	50	7330	0.32		TB13111456
							N504731		18	20	2.0	0.003	<0.005	<0.001			0.2		1360	81	>10000	0.57		TB13111456
				Cpx and Ol are partially replaced by Bt and Chl while Pl partially by sericite. 45% Pl, 20% Cpx, 25% Ol, 5% Mag, 5% Bt + Chl.			N504732		20	22	2.0	<0.001	<0.005	<0.001			<0.2		800	75	8780	0.34		TB13111456
							N504733		22	24	2.0	0.001	<0.005	0.001			0.2		827	85	9940	0.38		TB13111456
				5b - Augite syenite			N504734		24	26	2.0	0.003	<0.005	0.001			0.3		1130	116	>10000	0.43		TB13111456
				5.8-6.1m. The syenite is cross-cutting 2b. The rock is dominated by megacrystic Kfs and interstitial mafic mineral (possibly Cpx) that is completely replaced by Chl. Chl is also present in fractures in Kfs			N504735	mpg1				0.325	1.065	3.45			3.5		6940	394	1370	1.11		TB13111456
				Carbonates are secondary and interstitial to Kfs and likely replace Chl.			N504736		26	28	2.0	0.004	0.006	0.001			0.8		3350	202	9460	0.98		TB13111456
				6.6-6.75m. Same as the unit of 5.8-6.1m.			N504737		28	30	2.0	0.004	<0.005	0.001			0.4		1480	169	>10000	0.36		TB13111456
							N504738		30	32	2.0	0.007	0.018	0.009			0.7		2660	337	>10000	0.52		TB13111456
							N504739		32	34	2.0	0.001	<0.005	0.003			0.6		1880	249	>10000	0.36		TB13111456
6.75	7.50	FZ - fault or shear zone					N504740		34	36	2.0	0.011	0.027	0.004			0.7		2660	145	9450	0.66		TB13111456
				The rock is syenite. Very altered rock is composed of coarse grained Kfs and Cpx (?)			N504741		36	38	2.0	0.005	0.008	0.002			1.1		5140	194	4200	1.97		TB13111456
				Chl alteration is pervasive. Magmatic mafic minerals have been completely replaced by Chl.			N504742		38	40	2.0	0.002	0.008	0.001			0.4		2390	53	5730	1.62		TB13111456
				The rock is highly broken.			N504743		40	42	2.0	<0.001	<0.005	<0.001			<0.2		160	4	6340	0.16		TB13111456
							N504744		42	44	2.0	<0.001	<0.005	<0.001			<0.2		125	4	6620	0.15		TB13111456
7.50	20.48	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides		N504745		44	46	2.0	<0.001	<0.005	<0.001			<0.2		113	2	6610	0.2		TB13111456
				Dark rock is dominated by medium grained subhedral Mag, Ol and med grained anhedral Pl. 30% Mag, 30% Ol, 25% Pt and 15% other minerals (including Cpx, Bt and sulfides). The rock has millimeter wide fractures sealed by Chl-carbonate infilling. Those fractures are 60 to 80 degrees	7.5-13.1m. 0.5-1% Po, no visible Cpy.		N504746		46	48	2.0	<0.001	<0.005	<0.001			<0.2		82	1	6160	0.19		TB13111456
					2-3% disseminated sulphides		N504747		48	50	2.0	<0.001	<0.005	<0.001			<0.2		209	3	5310	0.26		TB13111456
							N504748		50	52	2.0	<0.001	<0.005	<0.001			<0.2		472	8	5580	0.56		TB13111456
				to the core axis. Ol and Cpx near fractures are completely alitred and likely replaced by Chl.	0.5% to 1% disseminated sulphides		N504749		52	54	2.0	<0.001	<0.005	<0.001			<0.2		251	3	5700	0.34		TB13111456
							N504750	d	52	54	2.0	<0.001	<0.005	<0.001			<0.2		238	2	5770	0.33		TB13111456
					2-3% disseminated sulphides		N504751		54	56	2.0	<0.001	<0.005	<0.001			<0.2		47	<1	6590	0.19		TB13111456
							N504752		56	58	2.0	<0.001	<0.005	<0.001			<0.2		45	<1	6790	0.2		TB13111456
							N504753		58	60	2.0	<0.001	<0.005	<0.001			<0.2		38	<1	6220	0.18		TB13111456
20.48	20.75	FZ - fault or shear zone					N504754		60	62	2.0	<0.001	<0.005	<0.001			<0.2		36	<1	6660	0.19		TB13111456
				The rock is highly broken 2f unit that also shows very strong chl alteration. The fault gauge is dominated by Chl. Slickenside on the fault planes.			N504755		62	64	2.0	<0.001	<0.005	<0.001			<0.2		47	<1	7170	0.21		TB13111456
							N504756		64	66	2.0	<0.001	<0.005	0.001			<0.2		921	18	6960	0.86		TB13111456
							N504757		66	68	2.0	0.001	<0.005	<0.001			<0.2		115	1	6940	0.23		TB13111456
20.75	24.60	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504758		68	70	2.0	<0.001	<0.005	<0.001			<0.2		317	3	7950	0.52		TB13111456
				Same as the 2f unit from 7.5 to 20.48m. Few fractures in this unit. Rock is dominated by medium grained subhedral Mag, Ol and med grained anhedral Pl. 30%Mag, 30% Ol, 25% Pl and 15% other minerals.	20.75-24.6m. Overall, 2% Po, 0.5% Cpy (Po:Cpy=4:1).		N504759		70	72	2.0	<0.001	<0.005	<0.001			<0.2		469	3	9600	0.83		TB13111456
				24.25-24.3m. 5 cm wide Chl-carbonate fracture infilling.			N504760		72	74	2.0	<0.001	<0.005	<0.001			<0.2		226	2	8850	0.35		TB13111456
							K008541		3.49	8	4.5											0.25	0.03	TB13118918
							K008542		74	83	9.0											0.26	0.02	TB13118918
24.60	24.89	FZ - fault or shear zone					K008543		83	92	9.0											0.4	0.03	TB13118918
				Same as the fault zone above. No fault gauge present.			K008544		92	102	10.0											0.32	0.04	TB13118918
24.89	35.95	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides																			
				Same as the 2f unit above. 3% disseminated fine grained Ap throughout this 2f unit.																				
				3d - Very coarse grained to pegmatic, ophitic gabbro	3-5% disseminated sulphides																			
				32.6-32.7m. The rock is composed of megacrystic euhedral Pl and coarse grained euhedral Cpx.																				
				The contact between this unit and 2f is slightly sharp and defined by Mag cumulate-like layer.	0.5% to 1% disseminated sulphides																			
				34.1-35.14m. The rock is very heterogeneous and likely a mixture between 3d and 3i (?). Slightly sharp contact with 2f is defined by Mag layer. The rock is dominated by megacrystic euhedral Pl																				
					2-3% disseminated sulphides																			



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408888
(Nad27)	Easting	548047.7
Elevation (m):	381.5	
Dip at Collar:	-43.88	
Azimuth:	31.36	
Total Depth:	72	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-31

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	12-Jun-13
Date finish:	12-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Julien Meric
Assistant:	Yongang Feng and Rachel Epstein

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-43.88	31.36

complete downhole survey in Four Dams masterlist

GEOLOGY						Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job	
From	To	Maj Rock	Min Rock	Comments	Mineraliz	Comments	NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#	
0.00	6.00	OB - Overburden					N504761	b	6	8	2.0	0.005	0.007	0.003			0.5		1920	119	>10000	0.7		TB13123249	
							N504762		8	10	2.0	0.005	0.005	0.002			0.6		2710	196	>10000	0.72		TB13123249	
6.00	22.30	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides		N504763		10	12	2.0	0.008	0.006	0.004			0.8		3750	188	>10000	1.03		TB13123249	
				standard 2f with crs to med gr cpx, mag, ol and plag , with 10-25% plag rich layers.		6-8.3 fine gr mostly po trace of cpy	N504764		12	14	2.0	0.004	<0.005	0.003			0.2		1130	100	>10000	0.4		TB13123249	
			2b - Coarse grained olivine gabbro with modal layering		3-5% disseminated sulphides		N504765						<0.001	<0.005	<0.001			<0.2		39	4	200	0.02		TB13123249
				6-7.3 and 10.8-12.7 standard 2b with crs to med plag, ol, cpx and mag and there is a gradual contact with 2f in term of plag content.		8.3-12.7 med to fine gr mostly po in mafic part but po 2:1 cpy in 2b part.	N504766		14	16	2.0	0.003	<0.005	0.005			0.2		787	120	>10000	0.3		TB13123249	
							N504767		16	18	2.0	0.004	<0.005	0.006			0.2		760	131	>10000	0.28		TB13123249	
					0.5% to 1% disseminated sulphides		N504768		18	20	2.0	0.004	<0.005	0.006			0.3		878	150	>10000	0.22		TB13123249	
						12.7-22.30 fine gr mostly po trace of cpy	N504769		20	22	2.0	0.003	<0.005	0.005			0.2		726	128	>10000	0.2		TB13123249	
22.30	23.29	FZ - fault or shear zone			0.5% to 1% disseminated sulphides		N504770		22	24	2.0	0.003	<0.005	0.006			0.2		843	146	>10000	0.23		TB13123249	
				Presence of Gouge and rubble stuf. And lot of chlorite alteration.		22.30-23.29 fine gr mostly po trace of cpy	N504771	24	26	2.0	0.003	<0.005	0.005			0.2		816	139	>10000	0.22		TB13123249		
							N504772	26	28	2.0	0.003	<0.005	0.003			0.3		875	121	9660	0.22		TB13123249		
23.29	61.21	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides		N504773	28	30	2.0	0.005	<0.005	0.005			0.3		1230	113	>10000	0.27		TB13123249		
				standard 2f with crs to med gr cpx, mag, ol and plag , with 10-25% plag rich layers.		23.29-27.44 fine gr mostly po trace of cpy	N504774	30	32	2.0	0.002	<0.005	0.002			<0.2		726	73	>10000	0.18		TB13123249		
				37.3-46.19 interval really rich in plag , they occurs in pods between 30-50%. Plag are partially replaced by sericite, and mafic mineral partially replaced by chlorite and biotite.	2-3% disseminated sulphides	27.44-36.5 content variation and patches 5:1 Po:cpy	N504775	32	34	2.0	0.003	<0.005	0.002			0.2		768	103	>10000	0.23		TB13123249		
				The beginning 37.3-38.38 is even richer in plag and looks like anorthosite (2g) beside there is a sharp contact with 2f at 37.3m. This zone seems to be a mixing zone or more altered zone or both.	3-5% disseminated sulphides	36.5-37.3 med to crs grain in mafic part, 5:1 po:cpy, crs gr	N504777	36	38	2.0	0.017	0.026	0.013			1.3		5060	407	7820	0.98		TB13123249		
				50.55-55.64 altered and fractured zone, strong chlorite and pink alteration.		sulfide surrounding biotite they seems to replacing biotite.	N504779	38	40	2.0	0.001	<0.005	0.001			0.2		973	56	7410	0.27		TB13123249		
				54.88-55.10 leucopod		Presence of a smal sulfide vein <1mm at 37.17.	N504779	40	42	2.0	<0.001	<0.005	<0.001			<0.2		434	45	8350	0.15		TB13123249		
			5b - Augite syenite		3-5% disseminated sulphides		N504780	mpg2				0.081	0.213	0.877			1.1		2880	279	1700	1.08		TB13123249	
				34.54-34.65 stringer of augite syenite, crs grained feds K, labrador, biotite and sub-rounded cpx.		37.3-38.38 dans plag rich part, 2:1 po:cpy. cpy is always richer	N504781		42	44	2.0	<0.001	<0.005	0.004			<0.2		261	24	8390	0.1		TB13123249	
							N504782		44	46	2.0	<0.001	<0.005	0.001			<0.2		377	18	8450	0.19		TB13123249	
						in the plag rich part.	N504783		46	48	2.0	0.001	<0.005	0.001			<0.2		890	32	9020	0.4		TB13123249	
					0.5% to 1% disseminated sulphides		N504784		48	50	2.0	0.009	<0.005	<0.001			<0.2		388	17	9070	0.21		TB13123249	
						38.38-45.03 around 1% with few patches 3:1 po:cpy	N504785		50	52	2.0	0.001	<0.005	<0.001			<0.2		249	15	>10000	0.18		TB13123249	
					2-3% disseminated sulphides		K008545		52	61	9.0											0.26	0.02	TB13118918	
						45.03-48.52 fine to med grain, 3:1 po:cpy, and patches richer.	K008546		61	72	11.0											0.22	0.03	TB13118918	
					Trace to 0.5% disseminated sulphides																				
						48.52-61.21 very fine gr mostly po homogenous in mafic part																			
61.21	64.27	FZ - fault or shear zone			Trace to 0.5% disseminated sulphides																				
				Slickenside and strong chlorite and pink alteration.		very fine gr mostly po																			
64.27	72.00	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides																				
				Med to crs grained plg, ol, cpx, mag		very fine gr mostly po; few blebs in 2b																			
72.00		EOH - End of Hole																							

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408888
(Nad27)	Easting	548045.7
Elevation (m):	382.2	
Dip at Collar:	-84.93	
Azimuth:	14.17	
Total Depth:	102	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

**DDH: FD-13-32**

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	12-Jun-13
Date finish:	13-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	Julien Meric, Rachel Epstein, Renata Smoke

## DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.93	14.17

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job	
From	To	Maj Rock	Min Rock	Comments					FROM	TO															
0.00	3.58	OB - Overburden					N504786		3.58	5	1.4	0.002	<0.005	0.001			0.2		946	97	>10000	0.25			TB13118916
							N504787		5	7	2.0	0.007	0.006	0.002			0.6		3060	171	>10000	1.07			TB13118916
3.58	13.40	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504788		7	9	2.0	0.005	0.005	0.001			0.4		1820	156	>10000	0.55			TB13118916
				The rock is composed of med grained Pl, Ol, Mag and Cpx. Ol, Cpx and Mag are mainly subhedral	3.58-6.65m. 2-3% Po, trace Cpy.		N504789		9	11	2.0	0.002	<0.005	0.001			0.2		1195	131	>10000	0.32			TB13118916
				Pl is anhedral. 40-50% Pl, 20% Ol, 20-30% Mag and 10-20% Cpx. Cpx and Ol are partially	0.5% to 1% disseminated sulphides		N504790		11	13	2.0	0.005	<0.005	0.002			0.4		1880	174	>10000	0.47			TB13118916
				replaced by Bt and Chl. Fractures in the rock are 60-70 degrees to the core axis and are filled by	6.65-8.07m. Sulfide content drops. 0.5-1% Po, trace Cpy		N504791		13	15	2.0	0.005	0.007	0.003			0.5		2310	132	>10000	0.61			TB13118916
				Chl-carbonate infillings.	2-3% disseminated sulphides		N504792		15	17	2.0	0.004	<0.005	0.004			<0.2		698	94	>10000	0.29			TB13118916
			2b - Coarse grained olive gabbro with modal layering		8.07-13.4m. 3% Po, trace Cpy.		N504793		17	19	2.0	0.003	<0.005	0.006			<0.2		804	111	>10000	0.27			TB13118916
				3.58-4.7m. Gradational contact with 2f. The rock is dominated by Pl, Cpx and Ol with lesser fine			N504794		19	21	2.0	0.003	<0.005	0.005			<0.2		784	121	>10000	0.26			TB13118916
				grained Mag. Ol and Cpx are commonly replaced by Bt. The layering is defined by variations in Ol			N504795	d	19	21	2.0	0.003	<0.005	0.005			0.2		767	123	>10000	0.25			TB13118916
				and Cpx contents.			N504796		21	23	2.0	0.003	<0.005	0.006			0.2		730	128	>10000	0.21			TB13118916
							N504797		23	25	2.0	0.004	<0.005	0.007			0.2		907	159	>10000	0.24			TB13118916
							N504798		25	27	2.0	0.001	<0.005	0.003			<0.2		592	91	>10000	0.17			TB13118916
13.40	13.67	FZ - fault or shear zone					N504799		27	29	2.0	0.002	<0.005	0.004			0.2		601	98	>10000	0.17			TB13118916
				The broken rock includes 2f and 2b. Mafic minerals including Ol and Cpx are completely altered to			N504800		29	31	2.0	0.003	<0.005	0.002			0.3		1250	132	9930	0.3			TB13118916
				Chl. Slickenside on fault planes. 2f and 2b shows a gradational contact.			N504801		31	33	2.0	0.002	0.005	0.004			0.3		1275	105	>10000	0.39			TB13118916
							N504802		33	35	2.0	0.002	<0.005	0.002			0.2		931	83	>10000	0.4			TB13118916
13.67	15.78	2b - Coarse grained olive gabbro with modal layering			2-3% disseminated sulphides		N504803		35	37	2.0	0.003	<0.005	0.002			<0.2		784	104	>10000	0.37			TB13118916
				Mineralogy and texture are the same as the 2b unit pl 3.58-4.7m. Pl is partially altered and likely	13.67-15.78m. Overall, 2-3% Po, trace Cpy.		N504804		37	39	2.0	0.002	<0.005	0.002			<0.2		606	133	>10000	0.27			TB13118916
				replaced by sericite.	3-5% disseminated sulphides		N504805		39	41	2.0	0.007	0.021	0.009			0.4		1945	222	>10000	0.52			TB13118916
			2f - Medium to coarse grained oxide augite melatroctolite		14.24-14.38m. Short 2f interval shows relatively high sulfide		N504806		41	43	2.0	0.004	0.01	0.009			0.6		2180	255	7780	0.41			TB13118916
				14.24-14.38m. Same as the 2f unit above. Gradational contact with 2b.	Content. 5% Po, Cpy in trace amounts.		N504807		43	45	2.0	0.005	0.007	0.004			0.7		2670	184	9410	0.49			TB13118916
							N504808		45	47	2.0	0.006	0.012	0.006			1		4440	203	>10000	1.13			TB13118916
15.78	55.13	2f - Medium to coarse grained oxide augite melatroctolite			2-3% disseminated sulphides		N504809		47	49	2.0	0.004	0.007	0.004			0.8		3630	126	>10000	1.26			TB13118916
				Gradational into this unit from the 2b above. The rock shows the same mineralogy and texture as	15.78-18.13m. Overall, 2-3% Po, Cpy is not visible.		N504810	b			<0.001	<0.005	<0.001			<0.2		9	<1	40	<0.01			TB13118916	
				the 2f units above. 2-3 cm wide Pl-rich pods are locally distributed.	0.5% to 1% disseminated sulphides		N504811		49	51	2.0	0.004	0.006	0.004			0.8		3170	103	8960	1.05			TB13118916
				38-39m. The rock is relatively Pl-rich.	18.13-18.62m. Medium grained subrounded Po, 0.5%. Very		N504812		51	53	2.0	0.004	0.007	0.002			0.8		3960	114	8240	1.57			TB13118916
				53.5-55.13m. The rock is Pl-rich. Pl is strongly sericitized.	locally distributed.		N504813		53	55	2.0	0.001	<0.005	0.001			<0.2		1590	34	8780	0.98			TB13118916
			5b - Augite syenite		0.5% to 1% disseminated sulphides		N504814		55	57	2.0	0.001	<0.005	<0.001			<0.2		236	5	8100	0.19			TB13118916
				18.13-18.62m. Sharp contact with 2f. The rock is composed of coarse grained Kfs and Cpx. Kfs and	18.62-25.52m. 1% Po, trace Cpy.		N504815		57	59	2.0	<0.001	<0.005	<0.001			<0.2		163	4	8610	0.15			TB13118916
				Cpx are partially to completely replaced by Chl. Carbonates and Qtz are present as secondary	Trace to 0.5% disseminated sulphides		N504816		59	61	2.0	<0.001	<0.005	<0.001			<0.2		395	4	8640	0.36			TB13118916
				minerals and commonly interstitial to Kfs and Cpx.	25.52-26.15m. Med grained anhedral Py associated with Chl.		N504817		61	63	2.0	<0.001	<0.005	<0.001			<0.2		158	3	9720	0.22			TB13118916
				25.52-26.15m. Sharp contact with 2f. The rock is dominated by megacrystic feldpsar and coarse	Py is likely secondary.		N504818		63	65	2.0	0.001	<0.005	<0.001			<0.2		238	6	>10000	0.29			TB13118916
				grained Cpx. Cpx is almost completely replaced by Chl. Feldspar crystals show a labradorite core	0.5% to 1% disseminated sulphides		N504819		65	67	2.0	<0.001	<0.005	<0.001			<0.2		214	5	>10000	0.25			TB13118916
				and pink Kfs rim.	26.15-30cm. 1% Po, no visible Cpy.		K008547		67	76	9.0											0.17	0.04		TB13118918
				47.1-47.37m. 2-10cm in width. Roughly 10 degrees to the core axis. The rock is composed of med	2-3% disseminated sulphides		K008548		76	85	9.0											0.26	0.04		TB13118918
				grained Kfs and Cpx.	30-30.38m. 3% Po, trace Cpy.		K008549		85	94	9.0											0.25	0.03		TB13118918
					2-3% disseminated sulphides		K008550		94	102	8.0											0.11	0.12		TB13118918
			3h - Apatitic clinopyroxenite		30.38-30.54m. 2% Po, 0.5% Cpy (Po:Cpy=4:1). Sulfides are																				
				30.38-30.54m. The rock is dominated by coarse graine subhedral Cpx (60%), anhedral Pl (12%).	interstitial to silicate minerals and Mag.																				
				anhedral Mag (20%) and fine to med grained euhedral Ap (8%). Cpx is partially replaced by Chl.	2-3% disseminated sulphides																				
				The rock is cross-cut by Chl stringers. Slightly sharp contact with 2f.	30.54-38m. Overall, 2% Po, trace Cpy.																				
				53.84-53.96m. Same as the 3h above. The 2f in contact with this unit is Pl-rich and Pl is strongly	0.5% to 1% disseminated sulphides																				
				sericitized.	38-39m. 0.5-1% Po, Cpy in trace amounts.																				
			2b - Coarse grained olive gabbro with modal layering		2-3% disseminated sulphides																				
				45.3-46.7m. Gradational into this unit. Same as the other 2b units. 40-50% Pl, 20% Ol, 20-30%	39-41.2m. 2% Po, 1% Cpy (Po:Cpy=2:1).																				





NTS:

42 D / 16

UTM

Northing

5408855.2

Easting

548085.1

(Nad27)

Elevation (m):

378.2

Dip at Collar:

-60

Azimuth:

28.62

Total Depth:

258

Core Size:

NQ

Remarks:

Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:

FD-13-33

Lease/Claim:

1240554

Property:

Coldwell Complex

Zone:

Four Dams South

Date start:

13-Jun-13

Date finish:

15-Jun-13

Contractor:

Chibougamau Diamond Drilling

Logged by:

Renata Smoke

Assistant:

Julien Meric, Yongang Feng

DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-60	28.62

downhole survey not available

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	3.92	OB - Overburden						N504820	mpg1	3.92	6	2.1	0.007	0.008	0.005			0.5		3370	179	>10000	1.56		TB13118919
								N504821		6	8	2.0	0.009	0.013	0.007			1	4180	227	>10000	1.39			TB13118919
3.92	30.90	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504822		8	10	2.0	0.002	<0.005	<0.001			<0.2		579	74	>10000	0.21		TB13118919
				Med gr Pl-Ol-Mg-Cpx in more leuco layers. 5-20cm thick. 20% of rock in following intervals and		3.92-7.05m fine gr 5% Po, trace Cpy (5:1)		N504823		10	12	2.0	0.001	<0.005	0.001			<0.2		570	78	>10000	0.19		TB13118919
				<5% otherwise (<5cm thick): 7.77-13.5m, 25.6-27.45m, 37.75-38.7m		6-7m fine-med gr 5% Po, 2% Cpy adjacent to Chlor and Ca		N504824		12	14	2.0	0.002	<0.005	0.001			0.2		980	106	>10000	0.34		TB13118919
				3.92-16.3m Fine gr-med gr Mag-Ol-Cpx-Pl in melano layers,		filled veins associated with intense Bi and Chlor alteration (60%		N504825					0.235	1.095	3.63			3.2		6860	372	1350	1.11		TB13118919
				16.3-38.77m Med gr Mag-Cpx-Ol Plag (variable Mag and Cpx) in melano layers		of this interval)		N504826		14	16	2.0	0.006	0.006	0.003			0.6		2690	197	>10000	0.82		TB13118919
				29.5-34.26 Very Mag rich layer (50-55%)		3-5% disseminated sulphides		N504827		16	18	2.0	0.006	0.005	0.004			0.3		1405	135	>10000	0.5		TB13118919
				38.7743.15 Fine-med gr Mag-Ol-Cpx-Plag in melano layers (see change in mineralization to right)		13.6-15.1m fine gr 1% Po, 4% Cpy (1:4)		N504828		18	20	2.0	0.006	<0.005	0.005			0.4		1450	162	>10000	0.4		TB13118919
						3-5% disseminated sulphides		N504829		20	22	2.0	0.005	<0.005	0.004			0.8		2980	191	>10000	0.83		TB13118919
				Alteration:		15.1-30.90m fine-med gr 6-8% Po, tr-1% Cpy (8:1)		N504830		22	24	2.0	0.009	0.009	0.008			0.7		2940	166	>10000	1.12		TB13118919
				Moderate Chlor and Bi alteration throughout. Intense Chlor, Act, Bi alteration in the following		EXCEPT FOR:		N504831		24	26	2.0	0.013	0.007	0.009			1.3		5320	251	>10000	1.91		TB13118919
				Intervals: 5.85-6.6m (also with broken and jointed core), 13.7-17.4m (associated with Chlor veins,		Local blebs to 2-4% sulphides		N504832		26	28	2.0	0.003	<0.005	0.004			<0.2		819	111	>10000	0.39		TB13118919
				20% of interval, Ol psuedos), 33.25-34.28m (10% Chlor veins, increase in Chlor altered joints)		22-24.5m V crs gr Po and Cpy (4:1) blebs associated with cr		N504833		28	30	2.0	0.005	<0.005	0.006			0.4		1570	173	>10000	0.62		TB13118919
				38.85-43.15m Chlor alteration throughout + 5% veins (associated with med-crs gr sulfides		replacing Crs gr Bi (patchy, <2% of interval)		N504834		30	32	2.0	0.002	<0.005	0.002			0.3		1280	100	>10000	0.4		TB13118919
30.90	31.45	FZ - fault or shear zone				3-5% disseminated sulphides		N504835	d	32	34	2.0	0.005	<0.005	0.002			0.7		4460	170	>10000	1.44		TB13118919
				within very Mag rich melano layer of 2f unit. Intense Chlor, Bi, Act alteration. Act forms psuedos of Ol.		fine-med gr 6-8% Po, tr-1% Cpy (8:1)		N504836		34	36	2.0	0.006	<0.005	0.002			0.5		2610	138	>10000	0.68		TB13118919
31.45	45.34	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504837		36	38	2.0	0.001	<0.005	0.001			<0.2		396	62	>10000	0.25		TB13118919
				Continuation of above 2f unit. See above for textural, mineralization, and alteration details.		31.45-45.34m fine-med gr 6-8% Po, tr-1% Cpy (8:1)		N504838		38	40	2.0	0.002	<0.005	0.002			0.2		856	110	8370	0.37		TB13118919
						INCLUDING:		N504839		40	42	2.0	0.008	0.008	0.008			0.9		3660	280	>10000	0.93		TB13118919
						Local blebs to 2-4% sulphides		N504840		40	42	2.0	0.005	0.01	0.007			0.9		3490	285	>10000	0.97		TB13118919
						38.77-45.34m same as above, plus local pods		N504841		42	44	2.0	0.004	0.005	0.005			0.5		2220	166	>10000	0.62		TB13118919
						of med gr 10% Po, 5% Cpy associated with Bi and Mag		N504842		44	46	2.0	0.001	<0.005	0.001			0.3		1050	92	>10000	0.27		TB13118919
						layers/Chlor veins 10% of this interval (2:1)		N504843		46	48	2.0	0.003	0.008	0.002			0.6		2790	149	>10000	0.86		TB13118919
45.34	48.14	2l - Med to coarse gr olivine gabbro to melatroctolite with MS intrusions				3-5% disseminated sulphides		N504844		48	50	2.0	0.003	<0.005	0.002			0.7		3270	130	8240	1.19		TB13118919
				Possible 3g? 2f with 3h intrusions (15% of rock, 5-15 cm wide)		med-crs gr 6-8% Po, 1% Cpy (6:1) in 2f		N504845		50	52	2.0	<0.001	<0.005	<0.001			0.2		998	45	6400	0.47		TB13118919
				Overall Med-crs gr, Mag-Cpx-Ol-Plag: 10-20% Ap (most concentrated at 3h intrusions)		Local blebs to 2-4% sulphides		N504846		52	54	2.0	<0.001	<0.005	0.001			<0.2		392	9	7380	0.29		TB13118919
				Upper contact marked by 5b (4cm thick), lower is sharp.		Crs gr 8% Po, 2-3% Cpy (4:1)associated with 3h intrusions, at		N504847		54	56	2.0	0.003	<0.005	0.001			<0.2		703	8	7660	0.76		TB13118919
				45.34-45.45m Pegm 5b, possibly mixing with 3h (both pegm, euhedral Cpx)		the contact. Most commonly intergrown with Bi and Mag		N504848		56	58	2.0	<0.001	<0.005	0.001			<0.2		226	5	8960	0.26		TB13118919
				Alteration:				N504849		58	60	2.0	<0.001	<0.005	<0.001			<0.2		225	2	9490	0.27		TB13118919
				Mod-intense Chlor alteration throughout, most intense at 3h intrusions (up to 4cm Chlor vein at intrusion)				N504850		60	62	2.0	0.001	<0.005	<0.001			<0.2		92	1	8870	0.26		TB13118919
								N504851		62	64	2.0	<0.001	<0.005	<0.001			<0.2		58	<1	8140	0.27		TB13118919
48.14	59.36	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504852	b	64	66	2.0	<0.001	<0.005	<0.001			<0.2		52	<1	8050	0.25		TB13118919
				Med gr leuco layers: Plag-Cpx-Ol-Mag		Med gr 48.14-55.28m 4% Po, 1% Cpy (4:1)		N504853		66	68	2.0	<0.001	<0.005	0.001			<0.2		249	3	8430	0.4		TB13118919
				48.14-51.76m Increase in leuco layers (25%, 5-40cm), other than this, 15%, <20cm wide		3-5% disseminated sulphides		N504854		68	70	2.0	<0.001	<0.005	<0.001			<0.2		192	2	8030	0.31		TB13118919
				Med gr melano layers: Cpx-Plag-Mag-Ol		Fine-med gr 55.26-55.96m 6% Po, 1% Cpy (6:1)		N504855					<0.001	<0.005	0.001			<0.2		3	1	40	0.01		TB13118919
				Alteration:		2-3% disseminated sulphides		N504856		70	72	2.0	0.003	<0.005	0.003			0.6		3730	91	7940	2.37		TB13118919
				Relatively unaltered, very weak Chlor. 55.26-59.36 increase in Chlor veins (5-10% of interval, <1cm)		Fine gr 55.96-59.36m 2-3% Po, 0-tr Cpy		N504857		72	74	2.0	0.004	<0.005	0.003			0.7		3420	93	7810	2.11		TB13118919
59.36	69.65	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N504858		74	76	2.0	<0.001	<0.005	0.005			<0.2		269	5	1830	0.36		TB13118919
				Weak layering, very close to homogenous. Plag-Cpx-Mag-Bi-Ol		Fine gr Tr Po		N504859		76	78	2.0	0.001	<0.005	0.004			<0.2		344	7	7860	0.45		TB13118919
				Gradational upper and lower contact.				N504860		78	80	2.0	0.003	0.005	0.004			0.4		2550	67	7960	1.59		TB13118919
				Alteration:				N504861		80	82	2.0	0.003	<0.005	0.003			0.7		3570	93	8060	2.15		TB13118919
				Weak Chlor and Bi alteration, <2% Chlor and Bi veins				N504862		82	84	2.0	0.004	0.005	0.002			0.2		1710	45	8570	1.45		TB13118919
69.65	73.95	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504863		84	86	2.0	<0.001	<0.005	0.001			<0.2		102	6	8230	0.22		TB13118919
				Weak layering, leuco layers <10%, <5cm wide. Med gr Cpx-Plag-Po-Mag-Bi		Fine-med gr 10% Po, 1% Cpy (10:1)		N504864		100	102	2.0	<0.001	<0.005	0.001			<0.2		97	1	9020	0.31		TB13118919
				Alteration:				N504865		102	104	2.0	0.001	<0.005	0.001			<0.2		94	2	9320	0.32		TB13118919
				Weak-moderate Chlor and Bi alteration, more intense associated with subparallel Chlor filled joints				N504866		104	106	2.0	<0.001	<0.005	<0.001			<0.2		75	1	7430	0.24		TB13118919



GEOLOGY						Mineraliz	Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Mat Rock	Min Rock	Comments	Mineraliz	Comments		NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
				(~5% of rock unit, 1cm thick)				N504867		106	108	2.0	<0.001	<0.005	<0.001			<0.2		99	<1	9100	0.33		TB13118919
73.95	76.86	2g - Gabbroic anorthosite				Semi massive to massive sulphides		N504868		108	110	2.0	0.001	<0.005	0.001			<0.2		136	2	>10000	0.43		TB13118919
				with 5% 3h intrusions.		local blebs in 3h intrusions (5% total of this unit)		N504869		110	112	2.0	<0.001	<0.005	<0.001			<0.2		72	1	8770	0.25		TB13118919
				Sharp upper and lower contact.		20% Po, 5% Cpy (4:1) Intergrown with 2ndary Mag. and Bi, or		N504870	mpg2				0.079	0.318	0.739			1.2		2900	292	1740	1.18		TB13118919
				3h intrusions: 2-5cm, patchy and irregular. Sulphides commonly semi-massive in these pods. Mag		forming pseudos of Cpx		N504871		112	114	2.0	<0.001	<0.005	0.001			<0.2		65	1	7280	0.22		TB13118919
				forms pseudos of cpx (common, sometime 90% Mag in pods with sulphides intergrown in Mag)				N504872		114	116	2.0	0.001	<0.005	<0.001			<0.2		73	2	7850	0.23		TB13118919
				Alteration:				N504873		116	118	2.0	<0.001	<0.005	0.001			<0.2		290	<1	8430	0.25		TB13118919
				Strong Chlor, Bi, Pink alteration within and adjacent o 3h intrusions, moderate Chlor alteration				N504874		118	120	2.0	<0.001	<0.005	0.001			<0.2		300	1	7990	0.24		TB13118919
				throughout				N504875		120	122	2.0	0.001	<0.005	0.004			<0.2		209	5	5230	0.15		TB13118919
76.86	77.30	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504876		122	124	2.0	0.006	0.015	0.013			<0.2		112	10	650	<0.01		TB13118919
				10% euhedral Py and very intense to complete Chlor and Talc alteration at upper contact (10cm		10% Po, Tr Cpy		N504877		165	167	2.0	<0.001	<0.005	<0.001			<0.2		263	2	8590	0.18		TB13118919
				zone)				N504878		167	169	2.0	<0.001	<0.005	0.001			0.2		650	2	9160	0.33		TB13118919
				Melano layers: Med gr Cpx-Plag-Mag-Po-Bi-Ol				N504879		169	171	2.0	<0.001	<0.005	0.001			0.2		425	2	8920	0.21		TB13118919
				Leucolayers: <5%, <15cm Meg-crs gr Plag-Cpx-Mag				N504880		171	173	2.0	<0.001	<0.005	0.001			0.2		432	1	>10000	0.22		TB13118919
77.30	77.45	FZ - fault or shear zone						N504881		173	175	2.0	0.001	<0.005	0.002			<0.2		373	2	>10000	0.22		TB13118919
				FZ of above 2f unit. Associated with Very intense Chlor, Talc, and Bi alteration and possible 3h				N504882		175	177	2.0	<0.001	<0.005	0.001			<0.2		273	2	>10000	0.21		TB13118919
				stringers (Very crs gr, Cpx-Plag-Mag)				N504883		177	179	2.0	0.001	<0.005	<0.001			<0.2		253	3	9940	0.19		TB13118919
77.45	79.10	2f - Medium to coarse grained		oxide augite melatroctolite				N504884		179	181	2.0	0.007	<0.005	0.001			<0.2		298	2	>10000	0.31		TB13118919
				Continuation of above unit.				N504885	d	179	181	2.0	0.002	<0.005	<0.001			<0.2		347	2	>10000	0.34		TB13118919
				Melano layers: Med gr Cpx-Plag-Mag-Po-Bi-Ol				N504886		181	183	2.0	<0.001	<0.005	0.001			<0.2		368	3	>10000	0.43		TB13118919
				Leucolayers: <5%, <15cm Meg-crs gr Plag-Cpx-Mag				N504887		183	185	2.0	<0.001	<0.005	0.001			<0.2		497	3	>10000	0.56		TB13118919
79.10	79.36	FZ - fault or shear zone						N504888		185	187	2.0	0.002	0.005	<0.001			0.2		671	4	>10000	0.53		TB13118919
				FZ of above 2f unit. Associated with Very intense Chlor, Talc, and Ser alteration (KaoI??)				N504889		187	189	2.0	0.001	<0.005	<0.001			0.3		585	4	>10000	0.31		TB13118919
79.36	83.37	2f - Medium to coarse grained		oxide augite melatroctolite				N504890		189	191	2.0	0.001	<0.005	0.001			0.2		719	4	>10000	0.69		TB13118919
				Continuation of above unit.				N504891		191	193	2.0	0.004	<0.005	0.001			0.4		1000	5	>10000	0.45		TB13118919
				Melano layers: Med gr Cpx-Plag-Mag-Po-Bi-Ol				N504892		193	195	2.0	0.001	0.006	0.001			0.6		1345	8	>10000	0.4		TB13118919
				Leucolayers: <5%, <15cm Meg-crs gr Plag-Cpx-Mag				N504893		195	197	2.0	0.001	<0.005	0.001			<0.2		683	7	>10000	0.38		TB13118919
83.37	107.02	2b - Coarse grained olivine gabbro with modal layering				2-3% disseminated sulphides		N504894		197	199	2.0	<0.001	<0.005	0.002			<0.2		1035	18	>10000	0.38		TB13118919
				Leuco layers: Med gr Plag-Cpx-Ol (1:1 Cpx:Ol)-Bi		Fine gr 83.37-83.92m 1-2% Po, Tr Cpy		N504895		199	201	2.0	0.004	0.011	0.012			0.2		551	101	>10000	0.15		TB13118919
				Melano layers have an increase in Cpx, 10% of unit, 5-20cm thick		Trace to 0.5% disseminated sulphides		N504896		201	203	2.0	0.005	0.032	0.037			<0.2		302	202	2340	0.06		TB13118919
				Gradational upper and lower contact.		Fine gr 83.92-102.44m 0-Tr Po		N504897		203	205	2.0	0.004	0.062	0.077			<0.2		107	301	1000	<0.01		TB13118919
				Alteration:		0.5% to 1% disseminated sulphides		N504898		205	207	2.0	0.004	0.049	0.048			<0.2		137	270	1020	0.01		TB13118919
				Weak-moderate Chlor, Bi, Act and mostly associated with Chlor veins (5% of unit, 1-3cm thick)		Fine gr 102.44-107.02m 1-2% Po		N504899		207	209	2.0	0.004	0.044	0.045			<0.2		191	166	2820	0.03		TB13118919
								N504900	b				<0.001	<0.005	<0.001			<0.2		<1	<1	30	<0.01		TB13118919
107.02	109.74	2f - Medium to coarse grained		oxide augite melatroctolite		3-5% disseminated sulphides		N504901		209	211	2.0	0.003	0.021	0.039			<0.2		154	85	2020	0.04		TB13118919
				Fine-med gr Cpx-Mag-Ol-Plag		Fine gr 3-4% Po, Tr Cpy		N504902		211	213	2.0	0.005	0.048	0.068			<0.2		93	105	1370	0.01		TB13118919
				Leuco layer <5%, 1-3cm thick				N504903		213	215	2.0	0.01	0.162	0.334			<0.2		149	90	2430	0.02		TB13118919
				Alteration:				N504904		215	217	2.0	0.01	0.186	0.33			<0.2		252	106	8860	0.14		TB13118919
				Strong to intense Chlor alteration associated with Chlor veins (some with slickensides, 1-2cm thick,				N504905		217	219	2.0	0.006	0.145	0.21			<0.2		317	93	>10000	0.07		TB13118919
				25% of unit total)				N504906		219	221	2.0	0.015	0.288	0.622			<0.2		237	75	3540	0.04		TB13118919
109.74	121.26	2b - Coarse grained olivine gabbro with modal layering				0.5% to 1% disseminated sulphides		N504907		221	223	2.0	0.021	0.402	1.1			<0.2		171	72	2780	0.03		TB13118919
				Med gr Plag-Ol-Cpx-Mag-Bi		Fine gr 109.74-116.15m 0-1% Po		N504908		223	225	2.0	0.06	0.431	1.39			<0.2		387	81	5970	0.05		TB13118919
				Alteration:		2-3% disseminated sulphides		N504909		225	227	2.0	0.359	0.487	1.02			1.1		1600	129	4020	0.23		TB13118919
				Weak Bi and Chlor alteration throughout		Fine gr 116.15-121.26m 2% Po		N504910		227	229	2.0	0.427	0.465	1.195			1		2340	136	6300	0.33		TB13118919
121.26	125.50	1a - Footwall rheomorphic intrusive breccia						N504911		229	231	2.0	0.216	0.215	0.542			0.7		1620	180	7250	0.2		TB13118919
				Fine gr, silicified, 10-15% Fine gr xenos (5-25 mm)				N504912		231	233	2.0	0.186	0.111	0.143			0.7		1725	103	3710	0.21		TB13118919
				Sharp upper and lower contact.				N504913		233	235	2.0	0.258	0.031	0.041			1.5		2770	102	5730	0.31		TB13118919
125.50	167.40	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N504914	mpg1	235	237	2.0	0.048	0.012	0.02			0.7		1710	78	8550	0.2		TB13118919
				Med gr Plag-Ol-Cpx-Mag-Bi Melano layers 10% (Cpx-Plag-Ol-Mag)		Fine gr 125.5-128.8m Tr Po		N504915					0.247	0.91	3.41			3.1		6820	374	1320	1.04		TB13118919
				Alteration:		0.5% to 1% disseminated sulphides		N504916		237	239	2.0	0.043	0.029	0.06			0.5		1480	87	10000	0.17		TB13118919
				Weak to moderate Chlor alteration. Strong Chlor and Bi alteration associated with Chlor veins (8%		Fine gr 128.8-167.4m 1-2% Po, Tr-1% Cpy (2:1		N504917		239	241	2.0	0.052	0.089	0.144			0.5		1245	84	7000	0.15		TB13118919
				of unit, dispersed somewhat continuously throughout), 0.5-2cm thick.				N504918		241	243	2.0	0.017	0.019	0.03			0.2		606	58	1910	0.06		TB13118919
167.40	168.20	2f - Medium to coarse grained		oxide augite melatroctolite		2-3% disseminated sulphides		N504919		243	245	2.0	0.013	0.007	0.009			0.4		714	53	820	0.06		TB13118919
				Mag gr Ol-Mag-Cpx-Plag-Bi		167.4-175.89m Fine gr 2% Po, Tr Cpy		N504920		245	247	2.0	0.095	0.067	0.076			0.9		2140	111	>10000	0.21		TB13118919
				Alteration:				N504921		247	249	2.0	0.065	0.061	0.082			1.1		2630	128	>10000	0.28		TB13118919
				Moderate to strong Chlor alteration mostly associated with Chlor veins (10% or unit) and FZ				N504922		249	251	2.0	0.075	0.076	0.098			1.2		3110	156	>10000	0.36		TB13118919
168.20	168.86	FZ - fault or shear zone						N504923		251	253	2.0	0.003	0.009	0.011			0.2		478	47	1270	0.07		TB13118919
				FZ of 2l. Intense to complete Chlor alteration.				N504924		253	255	2.0	0.001	0.007	0.008			<0.2		197	46	140	0.08		TB13118919
168.86	175.89	2f - Medium to coarse grained		oxide augite melatroctolite				K008551		86	95	9.0											0.29	0.04	TB13118918



[illegible]

NTS:

UTM

(Nad27)

Elevation (m):

Dip at Collar:

Azimuth:

Total Depth:

Core Size:

Remarks:

42 D / 16

Northing

5408836

Easting

548073.2

375.7

-69.56

32.87

336

NQ

Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:

Lease/Claim:

Property:

Zone:

Date start:

Date finish:

Contractor:

Logged by:

Assistant:

FD-13-34

1240554

Coldwell Complex

Four Dams South

15-Jun-13

24-Jun-13

Chibougamau Diamond Drilling

Julien Meric

Yonggang Feng, Renata Smoke and Rachel Epstein

DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-69.56	32.87

complete downhole survey in Four Dams masterlist

GEOLOGY				Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu		Ni	P	S	C	Job
From	To	Maj Rock	Min Rock		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	4.90	OB - Overburden					N504925	d	4.9	7	2.1	0.004	<0.005	0.001			0.2		962	80	>10000	0.41		TB13121162
							N504926		7	9	2.0	0.002	<0.005	<0.001			<0.2		286	45	9550	0.15		TB13121162
4.90	47.16	2f - Medium to coarse grained			oxide augite melatroctolite	2-3% disseminated sulphides	N504927		9	11	2.0	0.004	<0.005	0.004			<0.2		537	106	>10000	0.26		TB13121162
					10-30% plag rich layers, med to fine ol, cpl, mag, plag, Biotite and chlorite as secondary minerals	4.9-6.55, Overall, 2% Po, trace Cpy. Fine grained to med	N504928		11	13	2.0	0.005	<0.005	0.006			0.3		1210	129	>10000	0.39		TB13121162
					Chlorite content increases close to the fractures.	Trace to 0.5% disseminated sulphides	N504929		13	15	2.0	0.007	<0.005	0.005			0.6		2860	143	>10000	0.87		TB13121162
			5b - Augite syenite			6.55-13.32 very fine grained	N504930		13	15	2.0	0.006	<0.005	0.005			0.6		2560	138	>10000	0.78		TB13121162
					from 7.9-12m <5% of dykes and blebs of syenite between 1 to 5cm wide. Crs gr cpx, plag. Seems	2-3% disseminated sulphides	N504931		15	17	2.0	0.005	<0.005	0.006			<0.2		850	150	>10000	0.38		TB13121162
					really altered, with stong chlorite alteration.	13.32-20.36 med to fine grained variation Cpy content 8:1	N504932		17	19	2.0	0.008	<0.005	0.006			0.7		2680	222	>10000	1.04		TB13121162
					2b - Coarse grained olivine gabbro with modal layering	to 4:1. Cpy seems to increase in plag rich layers.	N504933		19	21	2.0	0.006	<0.005	0.004			0.5		2500	191	>10000	0.94		TB13121162
					21.64-25.4 between 40-65% plag rich layers, with gradual contacts with 2f.	Trace to 0.5% disseminated sulphides	N504934		21	23	2.0	0.002	<0.005	0.001			<0.2		375	65	>10000	0.15		TB13121162
						20.36-26.90 trace with few blebs	N504935		23	25	2.0	0.003	<0.005	0.001			<0.2		575	84	>10000	0.18		TB13121162
						2-3% disseminated sulphides	N504936		25	27	2.0	0.003	<0.005	0.001			<0.2		1085	122	>10000	0.31		TB13121162
						26.90-33.13 med to fine gr, blebs at the beginning then	N504937		27	29	2.0	0.006	<0.005	0.002			0.6		2790	180	>10000	0.92		TB13121162
						continuous, mostly po, trace Cpy	N504938		29	31	2.0	0.008	<0.005	0.003			0.7		3250	184	>10000	1.31		TB13121162
						3-5% disseminated sulphides	N504939		31	33	2.0	0.008	0.005	0.003			0.5		2910	182	>10000	0.91		TB13121162
						33.13-37.10 med to fin gr, but size increase. Po 5:1 Cpy	N504940		33	35	2.0	0.008	<0.005	0.003			0.7		3270	164	>10000	1.27		TB13121162
						0.5% to 1% disseminated sulphides	N504941		35	37	2.0	0.009	0.006	0.007			0.8		2870	106	>10000	0.82		TB13121162
						37.10-47.16 fine gr occurs in blebs	N504942		37	39	2.0	0.003	<0.005	0.004			<0.2		654	99	>10000	0.3		TB13121162
47.16	60.10	2i - Med to coarse gr olivine gabbro to melatroctolite with MS intrusions			3-5% disseminated sulphides		N504943	b	39	41	2.0	0.002	<0.005	0.004			<0.2		542	108	>10000	0.26		TB13121162
					20-30% of marathion intrusions in a 2f unit, with sharp contacts between both. Marathon units are	47.16-60.10 fine to crs gr in 2f unit really continuous the	N504944		41	43	2.0	0.004	<0.005	0.005			0.2		846	113	>10000	0.37		TB13121162
					richer in Cpy than 2f unit. Presence of few magnetite layers in 2f >50% mag.	sulfide content vary and could reach 8% with 6:1 Po:Cpy.	N504945				2.0	0.001	<0.005	<0.001			<0.2		11	2	170	<0.01		TB13121162
						In 3i and 3h unit 4-6% med to crs grained sulfide, the ratio vary	N504946		43	45	2.0	0.005	<0.005	0.002			0.2		1225	101	9640	0.38		TB13121162
					3i - Apatitic olivine clinopyroxenite	from 2:1 to 1:1 po:Cpy.	N504947		45	47	2.0	0.005	<0.005	0.002			0.6		2450	134	8340	0.99		TB13121162
					med to crs grained cpx, ol, plag, mag. <5% apatite. interstitial mag and plag, also lathlike plag.		N504948		47	49	2.0	0.006	<0.005	0.001			0.9		3620	162	9650	1.32		TB13121162
					58.03-58.64 ; 58.86-59 ; 59.18-59.4		N504949		49	51	2.0	0.006	<0.005	0.003			0.8		3360	155	8950	1.5		TB13121162
							N504950		51	53	2.0	0.004	0.007	0.002			0.4		2090	119	9380	1.11		TB13121162
					3h - Apatitic clinopyroxenite		N504951		53	55	2.0	0.004	0.007	0.002			0.3		1305	118	>10000	0.72		TB13121162
					Blebs or dykes with crs grained cpx, plag (labradorite), biotite. Strong chlorite alteration replacing		N504952		55	57	2.0	0.008	0.005	0.004			0.8		3150	262	>10000	0.89		TB13121162
					cpx and pink alteration ( K feldspar ?) but no apatite.This unit could also be a syenite (5b) ?		N504953		57	59	2.0	0.005	<0.005	0.002			0.7		3060	192	>10000	1.03		TB13121162
					47.16-47.44 ; 48.27-48.48 ; 49.58-49.60 ; 49.76-50.39 ; 54.12-54.25		N504954		59	61	2.0	0.007	<0.005	0.002			0.9		3960	204	>10000	1.37		TB13121162
							N504955		61	63	2.0	0.005	<0.005	0.003			0.9		4150	169	7500	1.68		TB13121162
60.10	66.00	2f - Medium to coarse grained			oxide augite melatroctolite	3-5% disseminated sulphides	N504956	mpa2	63	65	2.0	0.002	<0.005	0.001			0.5		2100	80	7460	1.02		TB13121162
					see 2f description above	60.10-64.79 fine to med gr po, cpy po:cpy 6:1	N504957		65	67	2.0	<0.001	<0.005	0.001			<0.2		212	11	7480	0.14		TB13121162
						Trace to 0.5% disseminated sulphides	N504958		110	112	2.0	<0.001	<0.005	<0.001			<0.2		113	1	>10000	0.29		TB13121162
						64.79-66.0 trace mostly po	N504959		112	114	2.0	0.001	<0.005	<0.001			0.2		1335	31	9010	1.15		TB13121162
66.00	87.58	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides	N504960				2.0	0.064	0.3	0.827			1.2		2760	273	1710	1.12		TB13121162
					plag content variation, between 40 to 70% plag rich layers. Really stong chlorite alateration	trace mostly po	N504961		114	116	2.0	0.004	<0.005	0.002			0.4		2480	60	9460	1.84		TB13121162
					(green color of the rock) and trace of carbonate alteration close to the fracturesand carbonate infill.		N504962		116	118	2.0	0.001	<0.005	<0.001			<0.2		287	7	8770	0.46		TB13121162
							N504963		118	120	2.0	0.001	<0.005	<0.001			<0.2		64	1	5410	0.23		TB13121162
87.58	89.80	FZ - fault or shear zone				Trace to 0.5% disseminated sulphides	N505157		232	234	2.0	0.001	<0.005	<0.001			<0.2		524	3	>10000	0.24		TB13121162
						trace mostly po	N505158		234	236	2.0	0.003	<0.005	<0.001			<0.2		616	4	>10000	0.44		TB13121162
							N505159		236	238	2.0	0.001	<0.005	<0.001			<0.2		582	6	>10000	0.61		TB13121162
89.80	118.90	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides	N505160		238	240	2.0	0.001	<0.005	<0.001			<0.2		666	4	>10000	0.53		TB13121162
					plag content variation, between 40 to 70% plag rich layers. Really stong chlorite alateration	89.80-112.64 trace mostly po	N505161		240	242	2.0	0.001	<0.005	<0.001			<0.2		832	5	>10000	0.38		TB13121162
					(green color of the rock) and trace of carbonate alteration close to the fracturesand carbonate infill.	3-5% disseminated sulphides	N505162		242	244	2.0	0.001	<0.005	<0.001			<0.2		683	5	>10000	0.36		TB13121162
					strong fracturation. The mafic content increase after 110m and you have 40-50% plag rich layers	112.64-116.36 med to fine gr homogenous and continuous.	N505163		244	246	2.0	<0.001	<0.005	<0.001			<0.2		834	5	>10000	0.48		TB13121162
					(close to 2f unit).	Mostly in mafic part and mostly Po, trace Cpy	N505164		246	248	2.0	0.002	<0.005	<0.001			<0.2		587	6	>10000	0.43		TB13121162

GEOLOGY						Mineraliz	Mineralization	SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Mat Rock	Min Rock	Comments	Mineraliz	Comments		NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
								N505165			248	250	2.0	0.001	<0.005	0.001		<0.2		524	5	>10000	0.24		TB13121162
118.90	122.00	5a - Quartz syenite				Trace to 0.5% disseminated sulphides		N505166			250	252	2.0	0.001	<0.005	<0.001		<0.2		619	7	>10000	0.21		TB13121162
				crs gr k feldspar (strong orange color), and interstitial quartz, and chlorite infill in fractures.		118.9-122 Pyrite in chlorite joints within the syenite.		N505167			252	254	2.0	0.001	<0.005	<0.001		<0.2		602	10	>10000	0.26		TB13121162
				You also have pyrite in the chlorite joints.				N505168			254	256	2.0	<0.001	<0.005	<0.001		<0.2		651	10	>10000	0.24		TB13121162
								N505169			256	258	2.0	<0.001	<0.005	<0.001		<0.2		579	14	>10000	0.28		TB13121162
122.00	124.75	FZ - fault or shear zone				Trace to 0.5% disseminated sulphides		N505170	b					<0.001	<0.005	<0.001		<0.2		23	1	610	0.04		TB13121162
				Chlorite coated slickenslide, filled with chlorite and carbonate. Highly fractured and presence of gouge.		fine gr trace to 0.5 mostly po. Few trace of Cpy.		N505171			258	260	2.0	<0.001	<0.005	<0.001		<0.2		779	18	>10000	0.26		TB13121162
								N505172			260	262	2.0	<0.001	<0.005	<0.001		0.2		983	24	>10000	0.32		TB13121162
								N505173			262	264	2.0	0.001	<0.005	0.001		0.2		850	23	>10000	0.31		TB13121162
124.75	126.00	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N505174			264	266	2.0	0.002	<0.005	0.001		0.6		2310	50	>10000	0.47		TB13121162
				same description as the 2b above, but strong carbonate alteration and carbonate infill in fractures.		fine gr trace to 0.5 mostly po. Few trace of Cpy.		N505175			266	268	2.0	0.002	<0.005	0.002		0.3		1380	50	>10000	0.28		TB13121162
								N505176			268	270	2.0	0.007	0.005	0.009		<0.2		999	84	>10000	0.17		TB13121162
126.00	127.00	FZ - fault or shear zone				Trace to 0.5% disseminated sulphides		N505177			270	272	2.0	0.06	0.031	0.066		0.5		1745	150	>10000	0.21		TB13121162
				Chlorite coated slickenslide, filled with chlorite and carbonate. Highly fractured		fine gr trace to 0.5 mostly po. Few trace of Cpy.		N505178			272	274	2.0	0.928	0.191	0.556		3		5620	207	8040	0.55		TB13121162
								N505179			274	276	2.0	0.314	0.32	0.387		3.1		6440	256	>10000	0.62		TB13121162
127.00	146.57	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N505180			276	278	2.0	0.146	0.064	0.162		2.6		4820	183	7210	0.55		TB13121162
				med to crs gr plag, cpx, ol and mag, between 50 to 60% plag rich layers. Really stong chlorite		fine gr trace to 0.5 mostly po. Few trace of Cpy.		N505181			278	280	2.0	0.028	0.02	0.017		0.4		967	65	8500	0.19		TB13121162
				alteration (green color of the rock) and trace of carbonate alteration close to the fractures and carbonate infill. Strong fracturation. And also pink alteration (<10%)				N505182			280	282	2.0	0.019	0.014	0.018		0.3		857	70	>10000	0.27		TB13121162
								N505183			282	284	2.0	0.01	<0.005	0.006		0.2		555	51	6240	0.17		TB13121162
								N505184			284	286	2.0	0.014	<0.005	0.002		0.3		640	63	7900	0.14		TB13121162
				136.24-136.44 leucopod, sharp contact above and fracture filled with chlorite below.				N505185	mpg1					0.219	0.974	3.35		3.4		7200	404	1400	1.14		TB13121162
				mostly plag but pink alteration (albite alteration ?), chlorite alteration (green color of the feldspar).				N505186			286	288	2.0	0.041	0.021	0.027		0.5		1110	79	1960	0.19		TB13121162
								N505187			288	290	2.0	0.05	0.008	0.008		0.4		1160	83	3210	0.18		TB13121162
146.57	147.16	FZ - fault or shear zone				Trace to 0.5% disseminated sulphides		N505188			290	292	2.0	0.246	0.177	0.284		1.8		3990	194	3270	0.44		TB13121162
				Chlorite coated slickenslide, fractures filled with chlorite and carbonate.		fine gr trace to 0.5 mostly po. Few trace of Cpy.		N505189			292	294	2.0	0.233	0.205	0.357		2		4250	195	9730	0.54		TB13121162
								N505190			294	296	2.0	0.071	0.046	0.075		1.1		2690	218	9290	0.44		TB13121162
147.16	200.49	2b - Coarse grained olivine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N505191			296	298	2.0	0.023	0.007	0.017		0.5		1240	78	>10000	0.32		TB13121162
				146.16- 170 med to crs gr plag, cpx, ol and mag, between 50 to 60% plag rich layers. Less altered		147.16-151.03 fine gr trace to 0.5 mostly po. Few trace of Cpy.		N505192			298	300	2.0	0.009	0.008	0.01		0.2		612	70	6500	0.11		TB13121162
				and fractured than th 2b from 127-146.57.		0.5% to 1% disseminated sulphides		N505193			300	302	2.0	0.033	0.049	0.079		0.6		1550	210	5980	0.3		TB13121162
				170-200.49 homogenous 2b <10% mafic rich layers.		151.03-164.33 variation between 0.5-1, fine gr mostly po, trace		N505194			302	304	2.0	0.099	0.044	0.053		1.2		3010	168	>10000	0.41		TB13121162
						of Cpy. Presence of feww patches wich could reach 1 -2%.		N505195			304	306	2.0	0.142	0.051	0.072		1.2		3020	147	8320	0.38		TB13121162
				165-165.04 carbonate vein, with a green halo of alteration (mostly chlorite transformation)		Trace to 0.5% disseminated sulphides		N505196			306	308	2.0	0.057	0.013	0.019		0.2		788	86	5230	0.11		TB13121162
						164.33-200.49 fine gr, trace to 0.5 mostly po presence of Cpy		N505197			308	310	2.0	0.054	0.014	0.016		0.5		1080	81	5300	0.14		TB13121162
								N505198			310	312	2.0	0.055	0.028	0.037		0.6		1650	110	>10000	0.22		TB13121162
								N505199			312	314	2.0	0.028	0.023	0.019		0.6		1500	110	>10000	0.2		TB13121162
								N505200	d		312	314	2.0	0.031	0.021	0.023		0.6		1460	119	>10000	0.2		TB13121162
200.49	271.57	2f - Medium to coarse grained oxide augite melatroctolite				Trace to 0.5% disseminated sulphides		N505201			314	316	2.0	0.019	0.008	0.008		0.3		1080	123	4960	0.15		TB13121162
				200.49-233.7 med gr ol, cpx, mag and palg. But 30-50%plag rich layers not evenly distributed.		200.49-206.63 increase close to 0.5 but higher in mafic parts.		N505202			316	318	2.0	0.085	0.053	0.048		1.3		3170	196	>10000	0.44		TB13121162
				gradual contact with 2b above.		0.5% to 1% disseminated sulphides		N505203			318	320	2.0	0.047	0.022	0.024		1.1		2620	220	>10000	0.34		TB13121162
				233.7-241.21 mag content increase from 15-20 to 30% presence of magnetite layers		206.63-211.12 in mafic parts.fine gr mostly po, presence of Cpy.		N505204			320	322	2.0	0.062	0.038	0.053		1.5		3570	210	>10000	0.49		TB13121162
				(>50% magnetite) around 1-3 cm wide. Presence of apatite and content increase.		Trace to 0.5% disseminated sulphides		N505205			322	324	2.0	0.054	0.046	0.049		1.4		3100	180	>10000	0.4		TB13121162
				241.21- 247.44 Grain size increasing, med to crs gr cpx, med.		211.12-234 in mafic parts.fine gr mostly po, presence of Cpy.		N505206			324	326	2.0	0.073	0.053	0.07		2.2		5280	305	>10000	0.64		TB13121162
						Local blebs to 1-2% sulphides		N505207			326	328	2.0	0.032	0.027	0.03		1.5		3670	217	>10000	0.46		TB13121162
				247.44-263.4 plag rich 2f, sharp contact above (with mafic 2f), with med to crs gr Plag, ol, mag,		234-247.44 disseminated, 1 to 2% med to fine. 6:1, po Cpy.		N505208			328	330	2.0	0.084	0.052	0.057		2.3		6260	317	>10000	0.61		TB13121162
				cpx. Plag content vary between 20-50% and is not evenly distributed. Around 20-30 % of the plag		Presence of few blebs and patches.		N505209			330	332	2.0	0.06	0.032	0.041		1.7		4380	248	>10000	0.81		TB13121162
				are altered, albitisation or sericitisation? This alteration altered first the border the reach the centre,		237.08-237.35 po vein 3mm wide, po seems to replace chlorite		N505210			332	334	2.0	0.041	0.018	0.022		1.3		3180	150	>10000	0.47		TB13121162
				the part altered is whiter.		Trace to 0.5% disseminated sulphides		N505211			334	336	2.0	0.026	<0.005	0.017		0.9		2110	88	8000	0.36		TB13121162
				Then from 263.4 to 271.57 the plag content and the grain size decrease gradually		247.44-263.4 mostly 0.5 with 4:1 po:Cpy. Presence of few		K008559			67	76	9.0										0.25	0.02	TB13118918
				until med to fine ol30-40%, mag 20-30%, cpx10-20%, plag10-20% and 5-10%apatite.		blebs and patches richer.		K008560			76	85	9.0										0.28	0.02	TB13118918
				Presence of few blebs (<5%) with very crs plag and cpx wich could be pegmatitic 3d, but the contacts are diffuse.		Local blebs to 1-2% sulphides		K008561			85	94	9.0										0.22	0.1	TB13118918
						263.4-271.57 disseminated, 1 to 2% med to fine. 4:1, po Cpy.		K008562			94	103	9.0										0.3	0.02	TB13118918
						Presence of few blebs and patches. Sulfides in mafic part.		K008563			103	110	7.0										0.32	0.06	TB13118918
271.57	297.04	3h - Apatitic clinopyroxenite				3-5% disseminated sulphides		K008564			120	126	6.0										0.1	0.6	TB13118918
				Heterogenous unit with roughly 50% of 3h, 30% 3i, 10% 3d and 10% 2a xenoliths.		271.57-277.92 fine to crs gr with heterogenous gr size repartion		K008636			126	135	9.0										0.25	1.43	TB13118918
				Chlorite and biotite alteration, and sometime blebs (<5%) of chlorite alteration with 30% of the minerals transformed in chlorite.294.2-294.9 really strong chlorite alteration with strong		You could have aggregates. Ratio vary from 1:1 to 1:3 po:Cpy.		K008637			135	144	9.0										0.23	0.02	TB13118918
				fracturation.		Crs gr sometime surrounding biotite and seems to replace		K008638			144	153	9.0										0.25	0.03	TB13118918
						it and also replacing chlorite.		K008639			153	162	9.0										0.21	0.08	TB13118918
				3h is med to crs gr cpx, mag,ol, plag with grain size variation,You also have around 5% of apatite.		Trace of bornite, med gr generally associated with crs gr.		K008640			162	171	9.0										0.15	0.03	TB13118918
				Biotite and chlorite as secondary minerals.		In the fine grain gabbro (2a bodies) you have just trace mostly in		K008641			171	180	9.0										0.18	0.02	TB13118918





**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM (Nad27)	Northing	5408833
	Easting	548126.9
Elevation (m):	375.3	
Dip at Collar:	-44.02	
Azimuth:	31.34	
Total Depth:	84	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:            FD-13-35

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	16-Jun-13
Date finish:	16-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Yonggang Feng
Assistant:	

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-44.02	31.34

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job	
From	To	Maj Rock	Min Rock	Comments					FROM	TO															
0.00	4.30	OB - Overburden					N504964	d	10	12	2.0	0.003	<0.005	0.003			<0.2		671	102	9750	0.17			TB13121160
							N504965		12	14	2.0	0.004	<0.005	0.005			0.2		942	137	>10000	0.2			TB13121160
4.30	23.19	2f - Medium to coarse grained		oxide augite melastroctolite	Trace to 0.5% disseminated sulphides		N504966		14	16	2.0	0.004	<0.005	0.005			0.2		889	151	>10000	0.21			TB13121160
				The rock is composed of med to coarse grained anhedral to subhedral Pl, Ol, Cpx and Mag, 55% Pl	4.3-23.19m. Overall, 0.5% Po, trace Cpy. Difficult to estimate		N504967		16	18	2.0	0.006	<0.005	0.009			0.3		1140	187	>10000	0.26			TB13121160
				,20% Ol, 20% Mag and 5% Cpx. The rock shows Pl-rich layers with 5-10 cm width. The fractures are	Po: Cpy.		N504968		18	20	2.0	0.005	<0.005	0.008			<0.2		882	160	>10000	0.2			TB13121160
				high weathered in the rock. Cpx and Ol is partially replaced by Chl.			N504969		20	22	2.0	0.003	<0.005	0.003			<0.2		666	118	9980	0.16			TB13121160
				2b - Coarse grained olivine gabbro with modal layering			N504970		22	24	2.0	0.003	<0.005	0.005			0.2		844	105	9390	0.2			TB13121160
				9.46-10.09m. Gradational with 2f. Pl-rich rock is composed of 65% Pl, 15% Cpx, 10%Ol and 10%			N504971		34	36	2.0	0.006	<0.005	0.001			<0.2		383	41	3900	0.08			TB13121160
				Mag, Cpx and Ol are commonly replaced by Chl and Bt.			N504972		36	38	2.0	0.001	<0.005	0.001			<0.2		620	71	8040	0.14			TB13121160
				10.83-11.43m. Same as the 2b from 9.46 to10.09m.			N504973		38	40	2.0	<0.001	<0.005	<0.001			<0.2		189	18	6270	0.1			TB13121160
							N504974		40	42	2.0	0.001	<0.005	0.001			<0.2		223	24	6390	0.1			TB13121160
				5b - Augite syenite			N504975		40	42	2.0	0.001	<0.005	0.001			<0.2		242	23	6310	0.1			TB13121160
				19.76-20.1m. Syenite dike cross-cuts 2f. The rock is dominated by coarse grained to megacrystic			K008565		4.3	10	5.7											0.21	0.05		TB13118918
				Kfs with minor interstitial Cpx. Kfs 85%, Cpx 15%.			K008566		24	34	10.0											0.09	0.65		TB13118918
				The rock shows strong alteration. Kfs is green and likely replaced by Chl and epidote (?).			K008567		42	51	9.0											0.13	0.03		TB13118918
				Cpx is completely replaced by Chl that has been further replaced by carbonate			K008568		51	60	9.0											0.27	0.02		TB13118918
							K008569		60	69	9.0											0.24	0.02		TB13118918
23.19	26.26	5b - Augite syenite			Trace to 0.5% disseminated sulphides		K008570		69	78	9.0											0.19	0.03		TB13118918
				Sharp contact with 2f.		23.19-26.26m. No visible sulfides.	K008571		78	84	6.0											0.16	0.04		TB13118918
				23.19-24.7m. Pink rock is composed of coarse grained subhedral Kfs and med grained																					
				Cpx. Cpx is interstitial to Kfs and partially replaced by Chl. Equigranular texture.																					
				24.7-26.26m. The rock gradually becomes dark and the grain size increases. The rock is dominated																					
				by megacrystic Kfs and quartz with minor Cpx. Quartz is likely secondary and interstitial to Kfs.																					
				Kfs is dark green and possibly pseudomorphed by Chl or epidote (?). Cpx is completely replaced by																					
				Chl. Carbonates are present as secondary minerals, replacing Kfs and Cpx as well.																					
26.26	28.25	2f - Medium to coarse grained		oxide augite melastroctolite	0.5% to 1% disseminated sulphides																				
				Sharp contact with the above syenite. Same as the previous 2f unit but has 3-5% fine grained		26.26-28.25m. Overall, 1% Po, <0.5% Cpy (Po:Cpy=3:1). Po																			
				disseminated Ap.		is rimmed by Cpy.																			
				27.1-27.16m. Leucopods in this 2f unit.																					
28.25	36.62	5a - Quartz syenite			Trace to 0.5% disseminated sulphides																				
				Sharp contact with 2f. The dark rock is composed of coarse grained to megacrystic Kfs and Qtz		28.25-36.62m. Trace sulfides. Almost invisible.																			
				with minor mafic minerals (Cpx?). Kfs is subhedral to euhedral and almost completely replaced by																					
				Chl or epidote. Qtz may be secondary and is interstitial to Kfs. Some Qtz crystals show zoning.																					
				Original mafic minerals (Cpx?) are completely altered to Chl. Pink Kfs is still present as a relic phase.																					
				The rock is cross-cut by carbonate stringers. Carbonates as secondary minerals are also interstitial																					
				to Kfs and replacing mafic minerals.																					
36.62	40.17	2f - Medium to coarse grained		oxide augite melastroctolite	0.5% to 1% disseminated sulphides																				
				Sharp contact with the above syenite. Similar to the previous 2f unit in this drillhole.		36.62-37m. 1% Po, <0.5% Cpy (Po:Cpy=5:1).																			
				The rock is composed of med to coarse grained anhedral to subhedral Pl, Ol, Cpx and Mag, 55% Pl																					
				,20% Ol, 20% Mag and 5% Cpx.																					
				37.4-40.17m. The rock is relatively rich in Pl and mafic minerals are present in dark patches. The	Trace to 0.5% disseminated sulphides																				
				appearance is similar to that of anorthosite. Gradational into this interval from the interval of 36.62-		37-40.17m. Trace Po and Cpy.																			
				37.4m.																					
40.17	43.20	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides																				





**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408832
(Nad27)	Easting	548125.9
Elevation (m):	374.5	
Dip at Collar:	-84.45	
Azimuth:	16.55	
Total Depth:	111	
Core Size:	NQ	

Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-36

Lease/Claim: 1240554  
Property: Coldwell Complex  
Zone: Four Dams South  
Date start: 16-Jun-13  
Date finish: 17-Jun-13  
Contractor: Chibougamau Diamond Drilling  
Logged by: Julien Meric  
Assistant: Rachel Epstein and Renata Smoke

## DIAMOND DRILL CORE LOG

Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.45	16.55

complete downhole survey in Four Dams masterlis

GEOLOGY						Mineralization		SAMPLE		INTERVAL			WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments	Mineraliz		Comments	NO.	QC	FROM	TO			ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	2.42	OB - Overburden						N504976		9	11	2.0		0.005	<0.005	0.003			0.2		1020	141	>10000	0.25		TB13118917
								N504977		11	13	2.0		0.004	<0.005	0.002			0.2		800	109	>10000	0.19		TB13118917
2.42	41.84	2f - Medium to coarse grained		oxide augite melatroctolite			Trace to 0.5% disseminated sulphides	N504978		13	15	2.0		0.004	<0.005	0.005			0.3		949	114	>10000	0.22		TB13118917
				2f with high content in plag rich layers, (50/50), but we still see layering but you are at the border to			2.42-11 just trace very fine	N504979		15	17	2.0		0.005	<0.005	0.006			0.3		978	145	>10000	0.22		TB13118917
				call that unit 2b.			0.5% to 1% disseminated sulphides	N504980		17	19	2.0		0.005	<0.005	0.005			0.2		859	141	>10000	0.19		TB13118917
				In plag rich parts, you have med to crs gr plag, cpx, ol, mag and in mafic rich parts you have med to			11-32.07 fine + few blebs	N504981		19	21	2.0		0.006	<0.005	0.009			0.2		1080	185	>10000	0.23		TB13118917
				crs gr ol, cpx, plag, mag. You can have all the the content variation between both.			2-3% disseminated sulphides	N504982		21	23	2.0		0.005	<0.005	0.007			0.2		905	170	>10000	0.19		TB13118917
				Biotite and chlorite as secondary minerals. Few fracture with chlorite infill.			32.07-37.83 med to fine gr, mostly in more mafic parts.	N504983		23	25	2.0		0.005	<0.005	0.009			0.2		899	157	>10000	0.19		TB13118917
				26-41.34 more fractured zone, mostly chlorite infill and also carbonate. Chlorite alteration is stronger			6:1 po:cpy	N504984		25	27	2.0		0.004	<0.005	0.006			0.2		797	139	>10000	0.17		TB13118917
				close to the fractures.			Trace to 0.5% disseminated sulphides	N504985		27	29	2.0		0.006	<0.005	0.009			0.2		1120	170	>10000	0.23		TB13118917
				30.92-37.10 leucopod, probably a rich plag 2e richer in cpy			37.83-41.84Trace, more rich in mafic part (0.5) very fine gr	N504986		29	31	2.0		0.006	<0.005	0.007			0.3		1305	193	>10000	0.26		TB13118917
				2b - Coarse grained olivine gabbro with modal layering				N504987		31	33	2.0		0.008	0.013	0.005			0.4		1785	202	>10000	0.37		TB13118917
				See description above. med to crs gr plag, cpx, ol, mag.				N504988		33	35	2.0		0.008	0.017	0.012			0.8		2480	299	8010	0.49		TB13118917
				5b - Augite syenite				N504989		35	37	2.0		0.005	0.008	0.008			0.5		2150	239	8630	0.38		TB13118917
				18.66-19.15 crs gr feldsK, labradorite, biotite and cpx?. Low to med chlorite alteration.				N504990	b					0.002	<0.005	0.001			<0.2		36	4	170	<0.01		TB13118917
				2e - Medium to coarse grained olivine gabbro				N504991		37	39	2.0		0.002	<0.005	0.001			0.2		910	101	8820	0.16		TB13118917
				40.41-41.84 unit really rich in plag, without alignment (looks like anorthosite) continue into FZ.				N504992		39	41	2.0		0.002	<0.005	0.001			<0.2		704	56	8100	0.14		TB13118917
41.84	53.48	FZ - fault or shear zone					Trace to 0.5% disseminated sulphides	N504993		41	43	2.0		0.001	<0.005	<0.001			<0.2		220	7	4170	0.07		TB13118917
				2 lithologies begins with 2e and continue with quartz syenite. All the interval is highly altered ,			Trace, more rich in mafic part (0.5) very fine gr	K008572		2.42	9	6.6												0.2	0.03	TB13118918
				strong chlorite alteration in 2e part. Carbonate alteration and carbonate veins in both lithologies				K008573		43	52	9.0												0.09	0.51	TB13118918
				Some parts are not highly fractured but presence of gouge at 41.9-42 and 50.57-50.77.				K008574		52	61	9.0												0.27	0.25	TB13118918
				2e - Medium to coarse grained olivine gabbro				K008575		61	70	9.0												0.27	0.02	TB13118918
				41.84-46.17 begins before the FZ, but more altered in the FZ, pink alteration and maybe carbonate				K008576		70	79	9.0												0.28	0.05	TB13118918
				alteration presence of carbonate veins and fractures. The part closer to syenite seem completely				K008577		79	88	9.0												0.26	0.06	TB13118918
				transformed in chlorite				K008578		88	97	9.0												0.14	0.05	TB13118918
				5a - Quartz syenite			no sulfide in syenite	K008579		97	106	9.0												0.45	0.06	TB13118918
				sharp contact with 2e. Crs gr feldsK and quartz, its difficult to see texture because really altered,				K008580		106	111	5.0												0.41	0.09	TB13118918
				strong orange color. Presence of carbonate and probably chlorite veins.																						
				49.10-49.93 and 51-51.15 rock completely altered transformed in chlorite possibly 6a lamprophyre or																						
				a 2e part in the syenite dyke.																						
53.48	78.28	2b - Coarse grained olivine gabbro with modal layering					Trace to 0.5% disseminated sulphides																			
				50-70% plag rich layers. Med to crs gr plag, cpx, ol, mag. Biotite and chlorite as secondary minerals.			Trace, more rich in mafic part (0.5) very fine gr																			
				plag alignment. <5% sericite alteration.																						
				55.12-57.55 more fractured zone, mostly chlorite infill and also carbonate																						
78.28	78.42	FZ - fault or shear zone																								
				rubble and chlorite coated slickensides																						
78.42	84.27	2b - Coarse grained olivine gabbro with modal layering					Trace to 0.5% disseminated sulphides																			
				50-70% plag rich layers. Med to crs gr plag, cpx, ol, mag. Biotite and chlorite as secondary minerals.			Trace, more rich in mafic part (0.5) very fine gr																			
				plag alignment. <5% sericite alteration.																						
				87.94-84.27 no plag alignment and grain size variation it could be 2e.																						
84.27	94.06	1a - Footwall rheomorphic intrusive breccia					no sulfide in footwall lithology																			
				fine gr, silicified, few xenolith (around 10%). sharp contact above and below.																						



**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

<b>NTS:</b>	<b>42 D / 16</b>	
<b>UTM</b>	<b>Northing</b>	<b>5408790</b>
<b>(Nad27)</b>	<b>Easting</b>	<b>548162.3</b>
<b>Elevation (m):</b>	<b>375.8</b>	
<b>Dip at Collar:</b>	<b>-44.6</b>	
<b>Azimuth:</b>	<b>31.43</b>	
<b>Total Depth:</b>	<b>78</b>	
<b>Core Size:</b>	<b>NQ</b>	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-37

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	17-Jun-13
Date finish:	18-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Julien Meric
Assistant:	Rachel Epstein

# DIAMOND DRILL CORE LOG

## Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-44.6	31.43

complete downhole survey in Four Dams masterlist

[illegible]

**STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG**

NTS:	42 D / 16	
UTM	Northing	5408790
(Nad27)	Easting	548161.3
Elevation (m):	380.3	
Dip at Collar:	-84.76	
Azimuth:	16	
Total Depth:	105	
Core Size:	NQ	

**Remarks:** Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH: FD-13-38

Lease/Claim:	1240554
Property:	Coldwell Complex
Zone:	Four Dams South
Date start:	18-Jun-13
Date finish:	18-Jun-13
Contractor:	Chibougamau Diamond Drilling
Logged by:	Renata Smoke
Assistant:	Yonggang Feng, Julien Meric

# DIAMOND DRILL CORE LOG

### Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-84.76	16

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization	SAMPLE NO.	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments					FROM	TO														
0.00	1.94	OB - Overburden					N505002	mpg1	27	29	2.0	0.003	<0.005	0.004			<0.2		420	78	>10000	0.12		TB13121161
							N505003		29	31	2.0	0.003	<0.005	0.006			<0.2		485	92	>10000	0.15		TB13121161
1.94	44.83	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides		N505004		31	33	2.0	0.003	<0.005	0.007			<0.2		623	112	>10000	0.18		TB13121161
				1.94-27.9m Plag-Ol-Cpx-Mag (approx equal proportions of Ol, Mag in melano layers)	1.96-29.8m Tr-1% Po concentrated in melano layers		N505005					0.246	0.926	3.34			3		6660	355	1340	1.05		TB13121161
				27.9-44.8m Plag-Cpx-Mag-Ol (greater proportion of Cpx in melano layers)	2-3% disseminated sulphides		N505006		33	35	2.0	0.004	<0.005	0.005			<0.2		698	110	>10000	0.19		TB13121161
				1.96-29.8m 10% melano layers (5-10 cm wide), 29.8-44.8m 30% melano layers (5-20 cm wide)	1-2% Po, 0-Tr Cpy concentrated in melano layers		N505007		35	37	2.0	0.003	<0.005	0.002			<0.2		613	98	>10000	0.16		TB13121161
				Weak Chlor and moderate Ser (cloudy white) alteration throughout.			N505008		37	39	2.0	0.001	<0.005	<0.001			<0.2		378	68	9390	0.11		TB13121161
44.83	55.60	2f - Medium to coarse grained oxide augite melatroctolite			3-5% disseminated sulphides		N505009		39	41	2.0	0.001	<0.005	0.001			<0.2		428	68	9520	0.12		TB13121161
				44.83-50m Approx equal proportions of Mag, Ol, Cpx. 50-55.6m Ol content is higher than Cpx;	3-4% Po, <1% Cpy (6:1-8:1)		N505010		41	43	2.0	0.005	<0.005	0.001			<0.2		510	90	>10000	0.14		TB13121161
				Mag-Ol-Cpx-Plag	3-5% disseminated sulphides		N505011		43	45	2.0	0.002	<0.005	<0.001			<0.2		460	86	>10000	0.13		TB13121161
					Rare patches of Crs gr 4% Po, 3% Cpy (4:3, <1% of rock)		N505012	45	47	2.0	0.003	<0.005	0.002			0.2		1100	172	>10000	0.26		TB13121161	
				Somewhat gradational upper, and sharp lower contact.	associated with Bi and Chlor veins (<5% of unit, <1 cm) and patchy Bi rich zones		N505013	47	49	2.0	0.009	0.017	0.01			0.7		2730	295	>10000	0.57		TB13121161	
					patchy Bi rich zones		N505014	49	51	2.0	0.007	0.009	0.007			1.1		4360	262	7000	0.75		TB13121161	
					3-5% disseminated sulphides		N505015	51	53	2.0	0.006	0.008	0.007			0.9		3610	198	>10000	0.68		TB13121161	
					55.35-55.6m 3% Po, 1-2% Cpy associated with contact of 2g		N505016	53	55	2.0	0.002	<0.005	0.001			<0.2		896	82	>10000	0.18		TB13121161	
					and an increase in Bi content		N505017	55	57	2.0	0.003	<0.005	0.001			0.2		1130	51	7940	0.26		TB13121161	
55.60	69.27	2b - Coarse grained olivine gabbro with modal layering			0.5% to 1% disseminated sulphides		N505018	d	57	59	2.0	0.001	<0.005	0.001			<0.2		359	16	6180	0.1		TB13121161
				55.6-60.85m Patchy zone of very Plag rich and mag rich areas, associated with intense Chlor alteration.	55.6-60.85m Tr-1% Cpy, Tr Po in patchy zone		N505019		59	61	2.0	<0.001	<0.005	<0.001			<0.2		265	11	6260	0.1		TB13121161
					Local blebs to 2-4% sulphides		N505020		59	61	2.0	0.001	<0.005	<0.001			<0.2		218	9	5850	0.1		TB13121161
				60.85-61.66m 5b Pegm syenite stringer (intense pink alteration, composed largely of Feld, Bi, Cpx)	Crs gr 6% Cpy, 2%Po		N505021		61	63	2.0	0.002	<0.005	<0.001			<0.2		954	18	6820	0.17		TB13121161
					Within Pegm syenite intrusion forming psuedos of Bi and Cpx		N505022		63	65	2.0	<0.001	<0.005	<0.001			<0.2		321	6	8430	0.14		TB13121161
				Sharp upper, diffuse lower contact. Lower contact marked by Pegm 5b or 3c stringer (difficult to determine due to degree of pink Chlor, and Ep alteration) and V Crs Mag rich zone (2-3 cm wide)	Trace to 0.5% disseminated sulphides		N505023		65	67	2.0	<0.001	<0.005	<0.001			<0.2		216	<1	8890	0.24		TB13121161
					Tr Po in melano layers		N505024		67	69	2.0	0.001	<0.005	0.001			<0.2		297	<1	8210	0.17		TB13121161
							N505025		69	71	2.0	0.001	<0.005	0.001			<0.2		123	<1	4760	0.09		TB13121161
69.27	87.14	2g - Gabbroic anorthosite			Trace to 0.5% disseminated sulphides		N505026		71	73	2.0	<0.001	<0.005	0.001			<0.2		7	1	980	<0.01		TB13121161
				Patchy texture, intense Ser, Chlor and moderate Pink alteration.	3% Po, 1% Cpy in rare (<1% of unit) 3g stringers		N505027		73	75	2.0	0.001	<0.005	0.006			<0.2		20	1	1830	0.03		TB13121161
				<5% MS intrusions <8cm thick, <5% of rock unit.	Local blebs to 2-4% sulphides		N505028	75	77	2.0	<0.001	<0.005	0.004			<0.2		13	2	880	0.02		TB13121161	
				Sharp lower contact.	Rare blebs of Po within complete Chlor alteration patch		N505029	77	79	2.0	0.001	<0.005	0.005			<0.2		13	2	1310	0.01		TB13121161	
					2-3% disseminated sulphides		N505030	79	81	2.0	0.001	<0.005	0.002			<0.2		15	1	1500	0.04		TB13121161	
					69.45-69.55m 3% Med gr Po associated with Mag rich layer		N505031	81	83	2.0	0.001	0.026	0.004			<0.2		69	4	4970	0.17		TB13121161	
				3h - Apatitic clinopyroxenite	3-5% disseminated sulphides		N505032	83	85	2.0	0.001	0.008	0.002			<0.2		63	8	4660	0.15		TB13121161	
				80.9-81.72m, 83.9-84.5m Possible 3h. Sharp to diffuse and irregular contacts. Cpx-Mag-Plag-Ap, mod-intense Chlor alteration	3% Po, Tr Cpy in possible 3h unit (see intervals to right)		N505033	85	87	2.0	0.001	<0.005	0.006			<0.2		19	4	1890	0.03		TB13121161	
							N505034	87	89	2.0	<0.001	<0.005	0.001			<0.2		74	5	8590	0.22		TB13121161	
87.14	105.00	2b - Coarse grained olivine gabbro with modal layering			Trace to 0.5% disseminated sulphides		N505035	b	<0.001	<0.005	<0.001	<0.2			2	1	50	<0.01						TB13121161
				15% Melano layers, 5-20cm wide. Plag-Cpx-Ol-Mag	Tr-1% Po in melano Ol-Mag rich layers		N505036		89	91	2.0	0.001	<0.005	<0.001			<0.2		54	1	6820	0.18		TB13121161
				Upper contact marked by an 18cm 2f type layer with Ol-Mag-Cpx-Plag (greater proportion of Ol than the rest of the unit.	2-3% disseminated sulphides		N505037		91	93	2.0	0.001	<0.005	<0.001			<0.2		162	<1	7720	0.24		TB13121161
				95.7-102m Increase in Chlor veins (10% of interval, <1 cm thick	1-2% Po in 2f layers		N505038		93	95	2.0	<0.001	<0.005	<0.001			<0.2		111	<1	8580	0.23		TB13121161
				Weak to moderate Chlor alteration throughout			N505039		95	97	2.0	0.001	<0.005	<0.001			<0.2		84	<1	7410	0.21		TB13121161
							K008588		1.94	11	9.1											0.07	0.04	TB13118918
				2f - Medium to coarse grained oxide augite melatroctolite			K008589		11	20	9.0											0.13	0.03	TB13118918
				Ol-Mag-Cpx-Plag-Ap: 87.14-87.32m, 91.80-93.40m,			K008590		20	27	7.0											0.17	0.04	TB13118918
105.00		EOH - End of Hole					K008591		97	105	8.0											0.24	0.03	TB13118918

NTS:  
UTM  
(Nad27)  
Elevation (m):  
Dip at Collar:  
Azimuth:  
Total Depth:  
Core Size:  
Remarks:

42 D / 16  
Northing  
5409269  
Easting  
547729.1  
378.8  
-69.05  
30.88  
201  
NQ  
Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

DDH:  
Lease/Claim:  
Property:  
Zone:  
Date start:  
Date finish:  
Contractor:  
Logged by:  
Assistant:

FD-13-39  
1240552  
Coldwell Complex  
Four Dams South  
18-Jun-13  
19-Jun-13  
Chibougamau Diamond Drilling  
Yongang Feng  
Julien Meric, Renata Smoke, Rachel Epstein

DIAMOND DRILL CORE LOG		
Reflex EZ Shot- Diamond Drillhole Survey		
Depth	Dip	Azimuth
Casing	-69.05	30.88
complete downhole survey in Four Dams masterlist		

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	2.86	OB - Overburden						N505040	mpg2	8	10	2.0	<0.001	<0.005	<0.001			<0.2		235	3	9810	0.3		TB13123278
								N505041		10	12	2.0	<0.001	<0.005	<0.001			<0.2		189	<1	8420	0.34		TB13123278
2.86	11.43	2b - Coarse grained olivine gabbro with modal layering		Trace to 0.5% disseminated sulphides				N505042		12	14	2.0	<0.001	<0.005	<0.001			<0.2		218	2	8920	0.48		TB13123278
				The rock is composed of med grained anhedral Pl, Ol and Mag and med grained subhedral Cpx.		2.86-11.43m. <0.5% sulfides. Sulfides are dominated by Po.		N505043		14	16	2.0	0.001	<0.005	0.001			<0.2		182	<1	>10000	0.41		TB13123278
				50% Pl, 15%Cpx, 10% Ol and 20-25% Mag. Mag is commonly interstitial to Cpx and Ol. The rock is pinkish possibly due to Kfs alteration.		Po:Cpy=2:1.		N505044		16	18	2.0	<0.001	<0.005	<0.001			<0.2		188	1	9730	0.37		TB13123278
								N505045		18	20	2.0	<0.001	<0.005	0.001			<0.2		184	<1	>10000	0.39		TB13123278
				5b - Augite syenite				N505046		20	22	2.0	<0.001	<0.005	<0.001			<0.2		268	<1	>10000	0.59		TB13123278
				6.45-6.47m. Thin syenite dike cross-cuts 2b. The rock is dominated by coarse grained Kfs (70%) and interstitial Cpx (30%).				N505047		22	24	2.0	<0.001	<0.005	<0.001			<0.2		465	<1	>10000	0.86		TB13123278
								N505048		24	26	2.0	<0.001	<0.005	<0.001			<0.2		242	2	>10000	0.47		TB13123278
								N505049		26	28	2.0	0.009	<0.005	0.001			<0.2		230	<1	9080	0.41		TB13123278
11.43	30.65	3h - Apatitic clinopyroxenite		2-3% disseminated sulphides				N505050					0.066	0.232	0.898			1.2		2930	285	1770	1.2		TB13123278
				Abruptly into this unit though the boundary is not distictly sharp. Dark rock is dominated by		11.43-30.65m. Overall, 2% Po, 0.5% Cpy (Po:Cpy=4:1).		N505051		28	30	2.0	<0.001	<0.005	<0.001			<0.2		157	<1	6910	0.24		TB13123278
				coarse grained subhedral to euhedral Cpx, med grained subhedral Ol and med grained anhedral		3-5% disseminated sulphides		N505052		30	32	2.0	<0.001	<0.005	<0.001			<0.2		190	<1	8470	0.31		TB13123278
				Pl and Mag. Pl and Mag are interstitial to Cpx and Ol. Bt and Chl are secondary, commonly		18-20m. 3% Po, 0.5%Cpy (Po:Cpy=6:1).		N505053		32	34	2.0	0.001	<0.005	<0.001			<0.2		183	<1	7470	0.25		TB13123278
				replacing Cpx and Ol. 70% Cpx, 15% Ol, 5% Pl, 5-8% Mag and 2-5% fine grained disseminated Ap.		Local blebs to 2-4% sulphides		N505054		34	36	2.0	0.002	<0.005	<0.001			<0.2		772	<1	>10000	0.77		TB13123278
				5b - Augite syenite		21.9-22m. Po+Cpy aggregate on 10 cm scale. 3% Po, 1% Cpy		N505055		36	38	2.0	<0.001	<0.005	<0.001			<0.2		191	1	9950	0.23		TB13123278
				21.13-21.33m and 29.37-30.11m. Syenite dikes cross-cut 3h.		(Po:Cpy=3:1). Po is rimmed by Cpy.		N505056		38	40	2.0	<0.001	<0.005	<0.001			<0.2		440	<1	>10000	0.49		TB13123278
								N505057		40	42	2.0	<0.001	<0.005	<0.001			<0.2		484	3	>10000	0.7		TB13123278
								N505058		42	44	2.0	<0.001	<0.005	<0.001			<0.2		222	1	8850	0.36		TB13123278
30.65	38.25	2b - Coarse grained olivine gabbro with modal layering		Trace to 0.5% disseminated sulphides				N505059	d	44	46	2.0	<0.001	<0.005	<0.001			<0.2		158	<1	7840	0.21		TB13123278
				Abruptly into this unit. The contact between this unit and the above 3h is likely defined by a Mag-		30.65-33.78m. Sulfides are dominated by Po. 0.5% Po, trace		N505060		46	48	2.0	<0.001	<0.005	<0.001			<0.2		224	<1	8760	0.31		TB13123278
				rich layer. This unit is similar to the previous 2b unit but shows stronger Kfs alteration. Secondary		Cpy.		N505061		48	50	2.0	<0.001	<0.005	<0.001			<0.2		293	<1	9890	0.28		TB13123278
				Chl and Bt replace Cpx and Ol.		2-3% disseminated sulphides		N505062		74	76	2.0	<0.001	<0.005	<0.001			<0.2		294	1	>10000	0.21		TB13123278
				2f - Medium to coarse grained oxide augite melatroctolite		33.78-35m. Sulfide veins cross-cut the rock at 40-45 degrees		N505063		76	78	2.0	<0.001	<0.005	<0.001			<0.2		545	1	>10000	0.29		TB13123278
				33.78-34.71m. The dark is dominated by med grained subhedral Ol (60%) and med grained		to the core axis. The veins are dominated by Po and Cpy (Po:		N505064		78	80	2.0	0.001	<0.005	<0.001			<0.2		936	4	9620	0.42		TB13123278
				anhedral Mag (40%). Mag is interstitial to Ol.		Cpy=5:1). Po is med grained subhedral while Cpy is interstitial		N505065		78	80	2.0	<0.001	<0.005	<0.001			<0.2		1010	3	>10000	0.44		TB13123278
				5b - Augite syenite		to Po. The overall Po and Cpy contents of this interval are		N505066		80	82	2.0	<0.001	<0.005	0.001			0.6		2740	7	>10000	0.85		TB13123278
				29.36-30.6m. Syenite cross-cuts 2b. The rock is composed of coarse grain Kfs and Cpx. Kfs and		2% Po, <0.5% Cpy.		N505067		82	84	2.0	0.002	<0.005	0.001			0.4		2110	4	>10000	0.68		TB13123278
				Cpx are almost completely altered. Kfs is likely replaced by epidote. Cpx is replaced by Chl.				N505068		84	86	2.0	<0.001	<0.005	<0.001			<0.2		535	3	>10000	0.29		TB13123278
				32.6-32.9m. 5 cm wide syenite dike cross-cuts 3h at an angel of 15 degree to the core axis.				N505069		86	88	2.0	<0.001	<0.005	<0.001			<0.2		451	2	>10000	0.25		TB13123278
				33.81-33.9m. Syenite dike cross-cuts 2f.		Trace to 0.5% disseminated sulphides		N505070		88	90	2.0	<0.001	<0.005	<0.001			<0.2		502	3	>10000	0.33		TB13123278
				3h - Apatitic clinopyroxenite		35-38.25m. Trace sulfides.		N505071		131	133	2.0	<0.001	<0.005	0.002			<0.2		730	23	>10000	0.19		TB13123278
				32.4-32.9m.Possibly 3h.The unit is dominated by Cpx but shows pink color likely due to Kfs				N505072		133	135	2.0	<0.001	<0.005	<0.001			<0.2		595	17	>10000	0.27		TB13123278
				alteration.				N505073		135	137	2.0	<0.001	<0.005	<0.001			<0.2		82	2	1650	0.1		TB13123278
				34.7-35.43m.Abruptly into this unit from the above 2f. The contact between this unit and 2f is				N505074		137	139	2.0	<0.001	<0.005	<0.001			<0.2		169	7	4130	0.17		TB13123278
				defined by a Mag layer. Same as the previous 3h unit. Secodary carbonates are interstitial to Cpx.				N505075		139	141	2.0	<0.001	<0.005	0.003			<0.2		269	15	4920	0.29		TB13123278
				37.61-38.25m. Same as previous.				N505076		166	168	2.0	0.002	<0.005	<0.001			<0.2		163	40	80	0.05		TB13123278
								N505077	b	168	170	2.0	0.002	<0.005	<0.001			<0.2		299	49	400	0.21		TB13123278
38.25	39.00	FZ - fault or shear zone						N505078		170	172	2.0	0.001	<0.005	<0.001			<0.2		359	27	2950	0.31		TB13123278
				The broken rock is 3h. The rock shows strong Chl alteration. Chl commonly replaces Cpx.				N505079		172	174	2.0	0.002	<0.005	0.001			<0.2		409	80	3680	0.49		TB13123278
								N505080					<0.001	<0.005	<0.001			<0.2		3	11	30	<0.01		TB13123278
39.00	41.96	3h - Apatitic clinopyroxenite						N505081		174	176	2.0	0.001	<0.005	<0.001			<0.2		275	49	190	0.2		TB13123278
				Same as the above 3h unit but has stronger Chl alteration. Ap content increases to 5-7%.		Trace to 0.5% disseminated sulphides		N505082		176	178	2.0	0.002	<0.005	0.001			<0.2		422	89	3800	0.21		TB13123278
				Composed of coarse grained subhedral to euhedral Cpx, med grained subhedral Ol and med		39-41.96m. Sulfides in trace amounts.		N505083		178	180	2.0	0.008	<0.005	<0.001			<0.2		161	56	240	0.09		TB13123278
				grained anhedral Pl and Mag.				K008592		2.86	8	5.1											0.27	<0.01	TB13118918
41.96	76.44	2b - Coarse grained olivine gabbro with modal layering		Trace to 0.5% disseminated sulphides				K008593		50	59	9.0											0.2	0.01	TB13118918
				Abruptly into this unit from the above 3h. Same as the previous 2b unit but has 5-50cm wide 3h and		41.96-76.44m. Overall sulfide content is <0.5%.		K008594		59	68	9.0											0.22	0.01	TB13118918







STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG																																																																	
NTS:	42 D / 16																																																																
UTM	Northing	5409255																																																															
(Nad27)	Easting	547789.4																																																															
Elevation (m):	380.7																																																																
Dip at Collar:	-50.23																																																																
Azimuth:	29.1																																																																
Total Depth:	144																																																																
Core Size:	NQ																																																																
Remarks:	Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario																																																																
DDH: FD-13-40																																																																	
Lease/Claim: 1240552																																																																	
Property: Coldwell Complex																																																																	
Zone: Four Dams South																																																																	
Date start: 19-Jun-13																																																																	
Date finish: 20-Jun-13																																																																	
Contractor: Chibougamau Diamond Drilling																																																																	
Logged by: Julien Meric																																																																	
Assistant: Yongang Feng																																																																	
DIAMOND DRILL CORE LOG																																																																	
Reflex EZ Shot- Diamond Drillhole Survey																																																																	
		Depth	Dip	Azimuth																																																													
		Casing	-50.23	29.1																																																													
complete downhole survey in Four Dams masterlist																																																																	
GEOLOGY						Mineralization					SAMPLE		INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job																																					
From	To	Maj Rock	Min Rock	Comments	Mineraliz	Comments					NO.	QC	FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#																																					
0.00	2.21	OB - Overburden									N505084		3	5	2.0	0.001	<0.005	<0.001				0.2		399	<1	7650	0.31	TB13123320																																					
											N505085		5	7	2.0	0.001	<0.005	<0.001				0.2		425	<1	6590	0.3	TB13123320																																					
2.21	26.56	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides						N505086		7	9	2.0	0.001	<0.005	<0.001				0.2		373	<1	7320	0.27	TB13123320																																					
				Around 10% plag rich layers. Med gr ol, mag, cpx, plag. Plg content could vary <5-10%.		4.07-14.71 fine gr, mostly po, trace of cpy					N505087		9	11	2.0	0.001	<0.005	<0.001				0.2		393	<1	7490	0.27	TB13123320																																					
					2-3% disseminated sulphides						N505088		11	13	2.0	0.001	<0.005	<0.001				<0.2		221	<1	7360	0.19	TB13123320																																					
			2b - Coarse grained olivine gabbro with modal layering			14.71-19.14 fine gr, 6:1 po:cpy.					N505089		13	15	2.0	0.001	<0.005	<0.001				<0.2		288	<1	7550	0.24	TB13123320																																					
				10.49-14.71 and 19.78-24.04 Med to crs gr Plag, cpx, ol and mag,50-70% plag rich layers.Plag alignment not obvious. Gradauk contact with 2f at the above and below.	3-5% disseminated sulphides						N505090		15	17	2.0	<0.001	<0.005	<0.001				0.2		510	<1	7820	0.33	TB13123320																																					
						19.14-20.04 med to fine gr, 6:1 po:cpy.					N505091		17	19	2.0	0.001	<0.005	<0.001				0.3		639	<1	8520	0.35	TB13123320																																					
					0.5% to 1% disseminated sulphides						N505092		19	21	2.0	0.008	<0.005	<0.001				0.7		2070	1	9460	0.88	TB13123320																																					
						20.04-24.05 fine gr, 6:1 po:cpy.					N505093		21	23	2.0	<0.001	<0.005	<0.001				<0.2		238	<1	7990	0.19	TB13123320																																					
					3-5% disseminated sulphides						N505094		23	25	2.0	0.001	<0.005	<0.001				0.2		567	<1	8730	0.34	TB13123320																																					
						24.05-26.56 med to fine gr, 6:1 po:cpy					N505095					0.261	0.893	3.47				3.1		7060	395	1350	1.11	TB13123320																																					
26.56	43.04	2b - Coarse grained olivine gabbro with modal layering			3-5% disseminated sulphides						N505096		25	27	2.0	0.001	<0.005	<0.001				0.8		2230	3	9190	0.93	TB13123320																																					
				Med to crs gr Plag, cpx, ol and mag,60-80 % plag rich layers.		26.56-26.7 med to fine gr, po:cpy 2:1					N505097		27	29	2.0	0.002	<0.005	<0.001				0.2		508	<1	6240	0.23	TB13123320																																					
					0.5% to 1% disseminated sulphides						N505098		29	31	2.0	0.001	<0.005	<0.001				<0.2		153	<1	6000	0.15	TB13123320																																					
						26.7-43.04 with bleb around 1%. Fine gr, 3:1 Po:cpy					N505099		31	33	2.0	<0.001	<0.005	<0.001				<0.2		150	<1	6110	0.17	TB13123320																																					
											N505100		33	35	2.0	0.001	<0.005	<0.001				<0.2		135	<1	5570	0.16	TB13123320																																					
43.04	69.44	2f - Medium to coarse grained oxide augite melatroctolite			0.5% to 1% disseminated sulphides						N505101		35	37	2.0	0.002	<0.005	<0.001				<0.2		201	<1	7810	0.19	TB13123320																																					
				Med gr ol, mag, cpx, plag.		43.04-44.76 with bleb around 1%. Fine gr, 3:1 Po:cpy					N505102		37	39	2.0	0.001	<0.005	<0.001				<0.2		213	<1	8550	0.12	TB13123320																																					
				43.04-45.17 plag rich layer decrease gradually 20-40% plag rich layers.	3-5% disseminated sulphides						N505103		39	41	2.0	0.002	<0.005	<0.001				<0.2		200	<1	8650	0.1	TB13123320																																					
				47.2-69.44 Med to crs gr cpx plag, mag and ol. Plag content vry between 20-50% and is not evenly distributed, it looks like pods of plag. Mag is around 20%.		44.76-47.2 med to fine gr, 6:1 po:cpy,but cpy ratio increase					N505104		41	43	2.0	0.001	<0.005	<0.001				<0.2		202	<1	7820	0.09	TB13123320																																					
						in the 2b part 1:2 po:cpy from 44.76-45.17.					N505105		43	45	2.0	0.001	<0.005	<0.001				<0.2		373	<1	9740	0.24	TB13123320																																					
				Few times the cpx texture looks ophitic with crs gr plag, could be blebs of 3d, not sure.	0.5% to 1% disseminated sulphides						N505106		45	47	2.0	0.003	<0.005	<0.001				1		3280	7	>10000	1.32	TB13123320																																					
						47.2-69.44 fine gr 4:1 po:cpy. Presence of few patches and blebs that could reach more than 1%.					N505107		47	49	2.0	0.001	<0.005	<0.001				0.2		497	<1	>10000	0.26	TB13123320																																					
			3h - Apatite clinopyroxenite								N505108		49	51	2																																																		



NTS: 42 D / 16  
UTM Northing 5409252  
(Nad27) Easting 547786.9  
Elevation (m): 380.7  
Dip at Collar: -79.64  
Azimuth: 21.4  
Total Depth: 246  
Core Size: NQ  
Remarks: Core stored in Stillwater Canada Inc. warehouse, Marathon, Ontario

STILLWATER CANADA INC. - DIAMOND DRILL CORE LOG

DDH: FD-13-41  
Lease/Claim: 1240552  
Property: Coldwell Complex  
Zone: Four Dams South  
Date start: 20-Jun-13  
Date finish: 22-Jun-13  
Contractor: Chibougamau Diamond Drilling  
Logged by: Yonggang Feng  
Assistant: Julien Meric

DIAMOND DRILL CORE LOG  
Reflex EZ Shot- Diamond Drillhole Survey

Depth	Dip	Azimuth
Casing	-79.64	21.4

complete downhole survey in Four Dams masterlist

GEOLOGY					Mineraliz	Mineralization		SAMPLE	QC	INTERVAL		WIDTH	Au	Pt	Pd	Rh	TPGM	Ag	Cu	Cu	Ni	P	S	C	Job
From	To	Maj Rock	Min Rock	Comments		Comments		NO.		FROM	TO		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	#
0.00	2.30	OB - Overburden						N505128	mpg2	28	30	2.0	0.001	<0.005	<0.001			<0.2		191	2	6750	0.14		TB13123321
								N505129		30	32	2.0	<0.001	0.005	<0.001					1835	5	8820	0.91		TB13123321
2.30	14.33	2f - Medium to coarse grained		oxide augite melatroctolite		Trace to 0.5% disseminated sulphides		N505130		32	34	2.0	0.001	<0.005	<0.001			<0.2		829	1	6710	0.43		TB13123321
				Overall dark rock is composed of med grained subhedral Ol, anhedral Mag and Pl with lesser Cpx.		2.3-4.5m. Overall, sulfides in trace amounts.		N505131		34	36	2.0	0.001	<0.005	<0.001			<0.2		162	<1	6130	0.16		TB13123321
				50% Ol, 40% Mag, 5% Pl, 3% Cpx and 2% other minerals. Mag is intersittila to Ol. Rock exhibits 5-		Trace to 0.5% disseminated sulphides		N505132		36	38	2.0	0.001	<0.005	<0.001			<0.2		142	1	6020	0.16		TB13123321
				30 cm Pl-rich layers (Pl reaches 50% in these layers). These layers are gradational with the		4.5-14.33m. Roughly 0.5% Po, invisible Cpy.		N505133		38	40	2.0	<0.001	<0.005	<0.001			<0.2		190	<1	6600	0.18		TB13123321
				predominant Ol-Mag-rich part.				N505134		40	42	2.0	<0.001	<0.005	<0.001			<0.2		146	<1	5690	0.16		TB13123321
				2b - Coarse grained olvine gabbro with modal layering				N505135		42	44	2.0	0.001	<0.005	<0.001			0.2		1450	5	8360	0.7		TB13123321
				2.3-4.5m. Gradational with 2f. The rock is composed of coarse grained anhedral Pl and Cpx and				N505136		44	46	2.0	0.002	<0.005	<0.001			0.5		2530	7	9080	1.1		TB13123321
				med grained subhedral Ol and fine grained anhedral Mag. 55% Pl, 30% Cpx, 10% Ol and 5% Mag.				N505137		46	48	2.0	0.001	<0.005	<0.001			<0.2		514	<1	6810	0.24		TB13123321
				Pl is partially sericitized. Cpx and Ol are slightly altered to Chl. Slightly layered. Layering is defined				N505138		48	50	2.0	<0.001	<0.005	<0.001			<0.2		213	<1	8250	0.18		TB13123321
				by variation in Ol and Mag contents.				N505139		50	52	2.0	<0.001	<0.005	<0.001			<0.2		175	<1	7760	0.2		TB13123321
				13.55-14m. Same as 2b of 2.3-4.5m. Gradational contact with 2f.				N505140					0.061	0.25	0.861			1.2		2780	286	1700	1.17		TB13123321
								N505141		52	54	2.0	<0.001	<0.005	<0.001			<0.2		168	<1	6980	0.19		TB13123321
14.33	17.89	2b - Coarse grained olvine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N505142		54	56	2.0	<0.001	<0.005	<0.001			<0.2		151	<1	6590	0.17		TB13123321
				Same as 2b of 2.3-4.5m but has more Pl. 55% Pl, 25% Cpx, 10%Ol and 5%Mag. Bt occurs as a		14.33-17.89m. Trace sulfides.		N505143		56	58	2.0	0.001	<0.005	<0.001			<0.2		399	1	>10000	0.26		TB13123321
				secondary mineral, replacing Cpx and Ol. Gradational into this unit from the above 2f.				N505144		58	60	2.0	0.002	<0.005	0.001			0.6		2880	8	9230	1.12		TB13123321
								N505145		60	62	2.0	0.001	<0.005	<0.001			0.5		2370	4	8730	0.88		TB13123321
17.89	21.80	2f - Medium to coarse grained		oxide augite melatroctolite				N505146		62	64	2.0	<0.001	<0.005	<0.001			0.7		3140	8	9500	1.22		TB13123321
				Gradational into this unit. Overall, same as the previous 2f. The rock shows Pl alignments on 2-10	0.5% to 1% disseminated sulphides			N505147		64	66	2.0	0.001	<0.005	<0.001			0.4		1755	5	8320	0.54		TB13123321
				cm scale. Pl alignments are roughly 70-80 degrees to the core axis.		17.89-21.80m. 0.5-1% Po, trace Cpy. Hard to estimate Po:Cpy.		N505148		66	68	2.0	0.001	<0.005	<0.001			0.3		1675	8	>10000	0.79		TB13123321
				2b - Coarse grained olvine gabbro with modal layering				N505149		68	70	2.0	0.001	<0.005	<0.001			0.6		1865	6	9880	0.56		TB13123321
				20.52-20.94m. Gradational with 2f. Composed of coarse grained anhedral Pl and Cpx and				N505150		70	72	2.0	0.001	<0.005	<0.001			0.7		2120	5	>10000	0.73		TB13123321
				med grained subhedral Ol and fine grained anhedral Mag. 55% Pl, 30% Cpx, 10% Ol and 5% Mag.				N505151		72	74	2.0	<0.001	<0.005	<0.001			0.4		1620	4	>10000	0.49		TB13123321
								N505152		235	237	2.0	0.002	<0.005	0.001			<0.2		204	55	430	0.29		TB13123321
21.80	42.80	2b - Coarse grained olvine gabbro with modal layering				Trace to 0.5% disseminated sulphides		N505153		237	239	2.0	0.005	0.009	0.003			0.2		443	106	2090	0.32		TB13123321
				Gradational contact with the above 2f. Same as previous 2b but Pl in this unit is more altered.		21.8-42.8m. Overall, trace sulfides.		N505154	d	239	241	2.0	0.001	<0.005	0.001			<0.2		187	56	3370	0.27		TB13123321
				32.31-39m. The rock is relatively pinkish and may have relatively strong Kfs alteration. Also, Cpx		Trace to 0.5% disseminated sulphides		N505155		239	241	2.0	0.003	<0.005	<0.001			<0.2		184	49	3320	0.22		TB13123321
				and Ol in this interval are more altered and partially to completely replaced by Chl.		21.80-30.74m. Trace Po and Cpy.		N505156		241	243	2.0	0.003	<0.005	<0.001			<0.2		202	49	520	0.13		TB13123321
				2f - Medium to coarse grained oxide augite melatroctolite		3-5% disseminated sulphides		K008614		2.3	11	8.7										0.22	<0.01		TB13118918
				30-31.8m. Gradational into this unit from 2b. Relatively rich in Pl (20% on average).		30.74-31.8m. Po is predominant and reaches 3-4%, Cpy in		K008615		11	20	9.0										0.23	0.01		TB13118918
				Same as 2f of 17.89-21.80m.		trace amounts. Po:Cpy>=10:1.		K008616		20	28	8.0										0.22	0.01		TB13118918
				3b - Coarse grained, ophitic gabbro (>5mm)		2-3% disseminated sulphides		K008617		74	83	9.0										0.18	0.01		TB13118918
				27.85-28.75m. Sharp contact with 2b. The rock is composed of coarse grained Pl and Cpx. The		31.8-32.31m. 1.5%Po, 0.5%Cpy (Po:Cpy=3:1). Cpy rims Po.		K008618		83	92	9.0										0.37	0.01		TB13118918
				rock shows typical ophitic texture. The rock is pinkish possibly due to Kfs alteration. Cpx is partially		Trace to 0.5% disseminated sulphides		K008619		92	101	9.0										0.24	<0.01		TB13118918
				to completely replaced by Chl. Close to the contact between 2b and 3b, Ol and Mag in 2b become		32.31-42.8m. Sulfides in trace amounts.		K008620		101	110	9.0										0.24	0.01		TB13118918
				relatively coarse grained.				K008621		110	119	9.0										0.17	0.01		TB13118918
								K008622		119	128	9.0										0.12	0.04		TB13118918
42.80	45.70	2f - Medium to coarse grained		oxide augite melatroctolite		2-3% disseminated sulphides		K008623		128	137	9.0										0.07	0.03		TB13118918
				Gradational into this unit. Overall dark rock is composed of med grained subhedral Ol, anhedral		42.8-45.7m. Overall, 2% Po, hard to see Cpy.		K008624		137	146	9.0										0.02	0.04		TB13118918
				Mag and Pl with lesser Cpx.50% Ol, 40% Mag, 5% Pl, 3% Cpx and 2% other minerals. Mag is		2-3% disseminated sulphides		K008625		146	155	9.0										0.02	0.02		TB13118918
				intersittila to Ol. Rock exhibits 5-30 cm Pl-rich layers (Pl reaches 50% in these layers).		42.8-44.3m. 2-3%Po, no visible Cpy.		K008626		155	164	9.0										0.03	0.01		TB13118918
						0.5% to 1% disseminated sulphides		K008627		164	173	9.0										0.05	0.01		TB13118918
						44.3-45.63m. 0.5-1% Po, no visible Cpy.		K008628		173	182	9.0										0.03	0.02		TB13118918
						3-5% disseminated sulphides		K008629		182	191	9.0										0.03	0.01		TB13118918
						45.63-45.7m. 5-6% Po, no visible Cpy.		K008630		191	200	9.0										0.06	0.03		TB13118918
								K008631		200	209	9.0										0.02	0.16		TB13118918





