Assessment Report on Diamond Drilling EL25-06, -07, -08

Loveland Twp., Timmins, Ont. Porcupine Mining Division

NTS 42A/14

May 26th, 2003

2.25689



GEOSCIENCE ASSESSMENT OFFICE



42A12NE2044

2.25689

LOVELAND

DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project:

Enid Creek -Loveland Township

Date: November 10 to 20, 2000

Logged by: Robert Calhoun Drilling Co: Colbert Drilling

Claim Number: P. 1037161

SURVEYS: Acid Test

 Depth Setup:
 Depth 0.0m
 Azimuth 270°
 Dip -70°

 102.0m 200.0m
 -70°
 -70°

DDH: EL25-06

COLLAR LOCATION: L50200N/10325E

UTM COORDINATES

GRID COORDINATES

 Northing:
 5388814N
 50200N

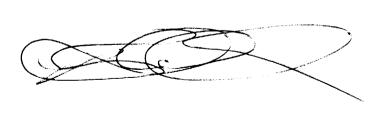
 Easting:
 0454445E
 10325E

 Elevation:
 0.0 meters

TD: 255.0 meters

DRILLING DATES

Started: November 10, 2000 Finished: November 20, 2000



DIAMOND DRILL SUMMARY LOG

Project: Enid Creek -Loveland Township Date: November 10, 2000 Logged By: R. F. Calhoun

DDH: EL25-06

GEOLOGIC SUMMARY

FROM	TO	DESCRIPTION	n	TERVAL	,			SIGNIFICA	NT ASSAY	AVERAGES		
(m)	(m)		From (m)	To (m)	Width (m)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
0.0	16.8	Overburden					l FF	,		''	1	
16.8	25.2	Gabbro			Ì		ļ	1	1	ŀ		ļ
25.2	41.45	Andesite								1		1
41.45	51.5	Gabbro			<u> </u>				1	İ		
51.5	71.6	Gabbro	}				Í			1		
71.6	75.3	Andesite			1					ļ		ļ
75.3	135.0	Gabbro			1		1	ĺ	1]	1	,
135.0	167.0	Gabbro	ļ					ĺ		İ		
167.0	173.0	Gabbro		İ							ļ	
173.0	1 7 5. 8	Gabbro						ļ			1	1
175.8	181.0	Gabbro		Ì				Ì		ĺ		
181.0	191.9	Gabbro		1								
191.9	206.7	Gabbro				•	ĺ	ŀ				_
206.7	214.5	Gabbro-sulfides	211.2	212.5	1.3	1070	2780	210	24	137	N/A	7
214.5	228.4	Porphyritic Andesite		i			,	-				1
228.4	255.0	Andesite	1					}		1		
j	255.0	End of Hole	}	1]	1	1	1

COMMENTS

Property: Enid Creek Loveland Township

Hole Number: EL25-06

Claim Number:

P. 1037161

Location: <u>L50200N/10325E</u>

Final Depth: 255.0 meters

Logged By:

Robert Calhoun

Azimuth: 270°

Dates Drilled: November 10 to 20, 2000

Drilled By:

Colbert Drilling

Dip: <u>-70°</u>

Dates Logged: November 11 to 21, 2000

								Assays	<u> </u>			_	
From	То	Description	Sample	From	То	Length	Cu	Ni	Co	Pt	Pd	Rh	Au
			#			(meter)	ppm	ppm	ppm	ppb	ppb	ppb	ppb
0.0	16.8	Overburden					<u> </u>						
16.8	25.2	Gabbro -medium grained, medium grey massive, featureless, looks more like a diorite, white feldspars. There are small quartz veins white, milky and laminae veins with some pink feldspars.											
25.2	41.45	Andesite -fine grained, medium grey to grey green siliceous, does not or is hard to scratch with a knife. Near the upper contact to 27.6m, there are large, possible amygdules, which are dark grey to grey green, hard siliceous. Within this section there are possible flow bands at 26.7-26.8m. The amygdule nature occurs over small sections below the main area. The unit is quite massive in nature with coarser gabbroic sections as at 33.9-35.4m. Below 35.4m there are laminae which are dark grey to blackish on fractures, possible chlorite.					-						
41.45	51.5	Gabbro -medium grained to locally coarse grained, medium grey to grey green, siliceous possible local chlorite. There are up to 1m sections of andesitic material with amygdules to vesicules as noted above, generally smaller in this section.											
51.5	71.6	Gabbro medium to coarse grained gabbro, medium grey green to green grey, grain size is much coarser than above. This section is massive with only minor fine to medium grained sections. There are small laminae to 1cm wide silica feldspar veinlets at generally low angles to core axis <25°.	1304	59.35	59.75	0.4	3610	119	73	<5	<5	NA	34

								Assa	ys .				
From	То	Description	Sample	From	То	Length	Cu	Ni	Co	Pt	Pd	Rh	Au
 		59.35-59.75m -fine gabbro with 10-15% sulfides of pyrrhotite and 1% chalcopyrite. 65.6-71.6m -quartz veining becomes more obvious in this section increasing down hole with some epidote, the lower section 68.0-71.6m becomes crushed, broken possible fault zone, gabbro becomes lighter in colour.	#			(meter)	ppm	ppm	ppm	ppb	ppb	ppb	ppb
71.6	75.3	Andesite -fine grained, medium green grey to grey green, there are abundant small quartz/quartz carbonate laminae veinlets to small veinlets <0.5cm. These veinlets form high angles 60-75° to core axis and <20° to core axis. The unit is massive and upper contact is crushed. Lower contact is at 25° to core axis.											
75.3	135.0	Gabbro medium to coarse grained, medium to dark green to green grey with white feldspars with diffuse edges. Unit is massive generally with only small fine grained zones <0.5m and generally <5cm. There are random quartz veins in most of unit with exceptions noted below. Sulfides are generally minor 101.7-106.5m -quartz veins milky white <1cm in width generally at low angles <20° to core axis, 1-2 per meter average. 106.5-111.1m -quartz rich section with milky white veins as above but the veining is more abundant, can be up to 20cm in width. This section could be described as silica flooded. The large vein at 109.3-109.6m has fragments of the gabbro floating in the quartz with a fine silicified section 20cm below the vein. Sulfides are nil to trace. 116.9-119.8m -andesite, fine grained to medium grained with feldspars <1mm in size and possible leucoxene. Contacts in gabbro upper especially are disrupted in appearance and lower is somewhat intermixed. Hematite on fractures. 119.8-135.0m -gabbro has minor random quartz veins, generally milky white. Lower angles to core <20° to sub parallel to core axis.	1305 1306 1307	107.7 108.8 114.5	108.8 109.9 115.8	1.1 1.1 1.3	154 524 953	98 71 311	15 13 23	<5 <5 17	<5 <5 24	NA NA NA	3 3 14
135.0	167.0	Gabbro -medium to coarse grained, medium grey in colour with local areas with pinkish colouration(granitic colour). Unit is massive with only minor quartz veinlets <0.5cm. there are short <0.5m sections that are finer grained ranging from light grey with quartz to pale green with epidote/carbonate alteration.											
167.0	173.0	Gabbro -medium to coarse grained to 168m, mainly medium grained to 173.0m, upper section has dark green matrix with abundant white feldspars and below 168m, the unit is dark green with less feldspars with less defined edges. The lower contact area 172.5-173.0m is fine grained, dark green, crushed at contact.											

Hole # EL25-06

								Assa	ys				
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Ni ppm	Co	Pt ppb	Pd ppb	Rh ppb	Au
173.0	175.8	Gabbro -coarse grained, light to medium green to whitish, mainly accumulate of feldspars in masses and dark mafic minerals in matrix. There are fine layers 5-10cm pale grey. There are minor pyrrhotite sulfides with minor chalcopyrite.											
175.8	181.0	Gabbro -medium grained, dark green grey similar to section from 167.0-173.0m. The feldspars are diffuse whitish green. This section contains pyrrhotite sulfides with minor chalcopyrite to <0.5%. Chalcopyrite more abundant towards lower contact.	1308 1309	178.2 180.0	180.0 181.0	1.8 1.0	555 407	343 323	37 38	5 5	12 10	NA NA	nil nil
181.0	191.9	Gabbro -coarse grained, colour is variable but is mainly greenish white feldspars in a dark mafic matrix with local grey siliceous "layers". This section contains pyrrhotite and chalcopyrite. The pyrrhotite is as fine disseminations, clots and locally as elongated blebs. The chalcopyrite although mainly in the pyrrhotite can also occur as disseminated grains. 181.0-182.2m -pyrrhotite 1-3% with chalcopyrite 0.5%. 182.2-183.7m -pyrrhotite 1-3%, chalcopyrite <0.5% 183.7-190.0m -pyrrhotite 2-5% overall with local <0.5m sections to 10% plus. Chalcopyrite is 0.5% to 1% overall with 1-2% in higher pyrrhotite zones. 190.0-191.0m -pyrrhotite 10-15%, chalcopyrite 1% 191.0-191.9m -pyrrhotite 1-3% with chalcopyrite <1%.	1310 1311 1312 1313 1314 1315 1316 1317	181.0 182.2 183.7 185.0 186.0 187.5 188.9 190.0	182.2 183.7 185.0 186.0 187.5 188.9 190.0 191.0	1.2 1.5 1.3 1.0 1.5 1.4 1.1	1490 627 552 912 596 1510 1750 1490	653 467 684 592 235 637 680 760	45 36 71 65 30 63 61 92	15 19 34 14 14 24 17 22	39 41 96 113 50 120 99 101	NA NA NA NA NA NA NA NA	12 7 2 12 nil 7 9
191.9	206.7	Gabbro -medium to coarse grained, dark green with greenish white feldspars, well developed, with small accumulate sections with feldspars to 1cm in length. This section has minor sulfides of pyrrhotite and nil to trace chalcopyrite. 205.2-206.7m -the lower section of this unit is finer grained, dark green grey, weak siliceous with fine disseminations of pyrrhotite, trace chalcopyrite. Lower contact broken.	1318 1319 1320 1321 1322	191.0 191.9 195.0 202.5 205.2	191.9 193.5 196.5 204.0 206.7	0.9 1.6 1.5 1.5	736 235 340 247 150 -	440 256 193 182 253	45 32 34 36 37	15 5 <5 <5 <5	113 26 <5 <5 <5	NA NA NA NA NA	9 7 9 14 nil
206.7	214.5	Gabbro- Sulfides -medium to coarse grained, with finer grained sections, generally dark green to dark green grey. The contact with the upper unit marked by a siliceous/feldspar white "vein" 20cm in width. A larger "vein" of similar material occurs at 207.25 to 208.25m, the remainder of the unit contains 30cm to 1m wide coarse feldspar overgrowths or accumulations. Locally with some epidote. 206.7-208.5m -medium grained dark green gabbro with whitish siliceous zones with 2-3% sulfides of pyrnhotite and chalcopyrite. The chalcopyrite is as disseminations with pyrnhotite and as grains in the siliceous sections. Chalcopyrite maybe up to 1%, 208.5-211.2m -medium grained, dark green with local accumulate feldspars in "layers". Pyrnhotite occurs as disseminations, clots and elongated clots. Chalcopyrite	1323 1324 1325 1326 1327 1328	206.7 208.5 209.7 211.2 212.5 213.5	208.5 209.7 211.2 212.5 213.5 214.5	1.8 1.2 1.5 1.3 1.0	334 2470 457 1070 970 1560	338 1130 560 2780 1360 347	35 98 65 210 182 45	5 12 9 24 17 14	12 51 17 137 79 65	NA NA NA NA NA NA	14 5 7 7 10 7

Hole # EL25-06

								Assa	ys				
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Ni ppm	Co	Pt ppb	Pd ppb	Rh ppb	Au
		occurs as grains with the pyrrhotite and fine disseminations. There is one large clot of chalcopyrite at 208.55, 3cm long and 1cm wide with pyrrhotite. Total sulfides are 5-10% with chalcopyrite 1% to possible 2%. 211.2-212.5m -dark green gabbro with feldspar accumulate section 211.9-212.6m. This section has pyrrhotite as clots, disseminations and discontinuous replacement/fracture veins. The chalcopyrite occurs as disseminations with pyrrhotite, disseminated grains and two small laminae veinlets were noted. The total sulfide in this section is 15-20% with chalcopyrite probably 2%. There are epidote patches in the feldspar section. 212.5-214.5m -this section is fine grained, dark green with variable sulfides mainly as clots but there is a 10cm section at 213.05-213.15m of veined pyrrhotite. There is minor chalcopyrite with the pyrrhotite and one larger clot of chalcopyrite 1.5cm in diameter at 214.45m with a smaller clot.											
214.5	228.4	Porphyritic Andesite -fine grained, medium grey weakly siliceous andesite. The feldspar phenocrysts are abundant, making up to 30% of the unit to 216.0m, decreasing down section with 1m sections nearly absent of phenocrysts. The unit is massive in nature with only minor quartz veining and multiple fractures at low angles up to 70° to core axis. These fractures cause local crushing.											
228.4	255.0	Andesite -fine grained, medium grey to grey green with local bleaching. The unit is similar to above with the fracturing but may have a slight layering texture. There are small feldspar porphyritic sections and unit becomes greener down hole. There are two silica rich bands or layers and small quartz veins.											
	255.0	End of Hole Acid Tests 102.0m -70° 200.0m -70°											

DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project: Enid Creek -Loveland Township

Date: November 22 to 26, 2000

Logged by: Robert Calhoun Drilling Co: Colbert Drilling

Claim Number: P. 1037161

SURVEYS: Acid Test

 Depth Setup:
 Depth 0.0m
 Azimuth 213°
 Dip -60°

 108.0m
 -55°

COLLAR LOCATION: L50185N/10150E

UTM COORDINATES GRID COORDINATES

 Northing:
 5388802N
 50185N

 Easting:
 454268E
 10150E

 Elevation:
 0.0 meters

DDH: EL25-07

TD: 150.0 meters

DRILLING DATES

Started: November 22, 2000 Finished: November 26, 2000



42A12NE2044 2.25689

LOVELAND

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DIAMOND DRILL SUMMARY LOG

Project: Enid Creek -Loveland Township Date: November 22, 2000 Logged By: R. F. Calhoun

DDH: EL25-07

GEOLOGIC SUMMARY

FROM TO	DESCRIPTION	<u>I</u>	TERVAL	 			SIGNIFICA	NT ASSAY	AVERAGES		
(m) (m		From (m)	To (m)	Width (m)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
0.0 3. 3.0 70 70.8 73 73.6 78 78.6 85 85.9 92 4 101 101.2 108 109.4 110 110.7 133 133.2 146 146.2 150	8 Gabbro 6 Andesite 6 Gabbro 9 Gabbro 4 Gabbro 2 Gabbro 9 Gabbro 0 Gabbro 1 Gabbro 1 Gabbro 2 Gabbro 2 Gabbro 2 Gabbro 3 Gabbro 4 Gabbro 5 Gabbro 7 Massive Sulfides/Gabbro Andesite 6 Gabbro 7 Andesite	108.9 109.4	109.4 110.7	0.5	14700 6600	1780 13700	140 690	30 220	260 1240	NA NA	160 30

COMMENTS

Claim Number: <u>P. 1037161</u>

Signature:

Property: Enid Creek -Loyeland Township Hole Number: El25-07

Location: 50185N/10150E Final Depth: 150,0 meters Logged By: Robert Calhoun

Azimuth: 213° Dates Drilled: November 22 to 26, 2000 Drilled By: Colbert Drilling

Dip: <u>-60°</u> Dates Logged: <u>November 23 to 27, 2000</u>

								Assays	3				
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
0.0	3.0	Overburden											
3.0	70.8	Gabbro -medium to coarse grained, medium to dark grey green with colour variable due to feldspar content including accumulations, numerous leucocratic sections. Upper part of the unit has multiple silica feldspar rich "veins" ranging from white to medium grey. These "veins" can be patches discontinuous or as veins sub parallel to core axis. 6.9-6.95m -semi massive pyrrhotite with silica vein. 7.1-7.6m -silica vein 2cm wide sub parallel to core axis with chalcopyrite <1% as clots to 0.5cm. 9.5-23.9m -"layering" due to feldspar accumulates 80° to core axis. Massive pyrrhotite veinlet at 11.77-11.80m(3cm), minor chalcopyrite. Minor sulfides in finer grained grey sections around 21.0m. Finer sections form various angles to core axis.	1329	6.8 20.7	7.6	0.8	2310 232	734 133	80	<5 <5	15	NA NA	34
		23.9-24.5m -fine grained, grey green with 10% pyrrhotite and <0.5% chalcopyrite. Laver is at 75° to core axis.	1331	23.9	24.5	0.6	1820	580	138	<5	7	NA	14
		24.5-35.5m -layering due to feldspar accumulates and finer layers at contorted angles and 45° to core axis(i.e. 28.9-29.3m). There are sulfides locally over <0.5m as at 31.1-31.5m mainly pyrrhotite, with minor chalcopyrite. 35.5-37.9m -fine grained, grey green, leucoxene. 37.9-43.6m -medium to coarse gabbro 43.6-45.3m -fine grained, light to medium grey, siliceous, probable andesite. There is minor hematite in some fractures. Upper contact at 20° to core axis. Lower is 40° to core axis 45.3-61.2m -mixed zone, mainly medium to coarse grey green gabbro with several <0.5m finer grained to fine grained grey green bands or layers. 61.2-67.7m -gabbroic section with quartz veining 5% as narrow 2-5cm veins 60° and	1332	28.1	28.9	0.8	708	263	51	<5	10	NA	24

								Assa	ys				
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
		sub parallel to core axis. There is some bleaching associated with the veins. 67.7-70.8m -gabbro, medium to fine grained, grey green to bleached green grey. There are patches of bleaches gabbro and mainly one quartz/carbonate vein that is sub parallel to core axis 68.5-69.4m. Above the quartz vein from 68.0-68.5m there is abundant green carbonate, possible fuchsite in the bleached section. The carbonate is bright emerald green. The green carbonate continues randomly along the quartz/carbonate vein noted above. This section is quite altered.	1333	68.4	69.5	1.1	15	43	11	<5	3	NA	2
70.8	73.6	Andesite -fine grained, light to medium yellow green to grey, bleached with sections of whitish bleaching as patches. There appears to be continued green carbonate in this section and local leucoxene.											
73.6	78.6	Gabbro -this section begins to 75 and ends 77.7-78.6m with a medium to fine grained dark green gabbro especially the lower section and has a coarse grained feldspar rich accumulate 75 to 77.7m. The feldspars are white. There are also white quartz nodules with some of the feldspars											
78.6	85,9	Gabbro -fine to medium grained, medium grey green to green grey, although the unit appears to be fine andesite, it is medium grained with the grains and ground mass essentially the same making the coarser grains hard to see. Within the unit there are significant sulfides as noted below. 78.6-80.0m -gabbro 1-2% sulfides 80.0-82.8m -10% pyrrhotite with <0.5% chalcopyrite 82.8-84.0m -gabbro 1-2% sulfides 84.0-84.7m -10% pyrrhotite with local blebs of chalcopyrite. 84.7-85.9m -gabbro 1-2% sulfides quartz vein sub parallel to core axis 1 cm wide.	1334 1335 1336 1337 1338 1339	78.6 80.0 81.4 82.8 84.0 84.7	80.0 81.4 82.8 84.0 84.7 85.9	1.4 1.4 1.4 1.2 0.7 1.2	84 1860 2280 661 1650 81	156 1130 1080 594 1790 203	27 92 97 73 227 37	<5 <5 <5 <5 <5 <5	<5 62 67 27 26 <5	NA NA NA NA NA NA	nil 12 22 3 5 nil
85.9	92.4	Gabbro -medium to coarse grained, medium to dark green grey to whitish leucocratic in areas of feldspar accumulates. There is one vein of quartz with feldspars at 88.1-88.3m. Sulfides of pyrrhotite/pyrite occur randomly as noted below. 85.9-88.1m -5-10% pyrrhotite with pyrite nodules and <0.5% chalcopyrite 88.1-92.4m -pyrrhotite with pyrite 2% to local 5% in coarse gabbro with feldspars.	1340 1341 1342 1343 1344	85.9 87.0 88.1 90.0 91.4	87.0 88.1 90.0 91.4 92.4	1.1 1.1 1.9 1.4 1.0	627 940 112 461 1070	1270 999 125 224 364	91 96 25 39 44	<5 <5 <5 <5 <5	72 86 5 34 62	NA NA NA NA NA	9 10 nil 15 9
92.4	101.2	Gabbro -medium to coarse grained gabbro, medium green to dark green. There are layers which are finer grained. Dark green. The unit has an overall "layered" appearance. There are significant sulfides and there are appreciable amounts of pyrite as clots small	1345 1346 1347 1348	92.4 94.0 95.4 96.5	94.0 95.4 96.5 98.6	1.6 1.4 1.1 1.6	1780 605 2360 2760	991 250 1400 1230	85 39 86 98	33 5 31 45	207 36 281 300	NA NA NA	24 10 17 39

То	Description	Comple		1							T	
		Sample	From	То	Length	Cu	Ni	Co	Pt	Pd	Rh	Au
		#			(meter)	ppm	ppm	ppm	ppb	ppb	ppb	ppb
	discontinuous laminae. The predominant sulfide is pyrrhotite but this is the highest	1349	98.6	100.0	1.4	152	256	37	<5	15	NA	3
	percentage of pyrite seen to date. Chalcopyrite is as exsolutions from the pyrrhotite and	1350	100.0	101.2	1.2	1880	1230	96	58	223	NA.	36
	as individual disseminated grains. There are small fracture fillings of sphalerite around	52505	101.2	103.2	2.0	290	501	55	22 14	82	NA NA	5
												3
	(sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m.	52508	106.0	107.4	1.4	283	512 556	55	21	27	NA NA	nil
108.9	Gabbro				ļ			}				
	-medium to coarse grained, dark green, possible chlorite altered with minor sulfides of pyrrhotite, pyrite and trace chalcopyrite. There is a slight increase in sulfides from 107.4-108.9m.	52501	107.4	108.9	1.5	716	735	77	5	41	NA	7
100 4	Cabbre			ļ					ł		}	
109.4	-as above except there are large clots of chalcopyrite with pyrrhotite. Chalcopyrite 1-2% overall but concentrated in the upper 10cm (108.9-109.0m).	52502	108.9	109.4	0.5	14700	1780	140	30	260	NA	160
110.7	Massive Sulfides/Gabbro				ÌÌ	j				ĺ		
	-this section is 60% massive pyrrhotite bands in gabbro as above chalcopyrite is 2-3% as large clots, blobs in the pyrrhotite. The upper section of the unit is nearly massive pyrrhotite 109.4-109.9m with 3-4% chalcopyrite.	52503	109.4	110.7	1.3	6600	13700	690	220	1240	NA NA	30
133.2	Andesite			İ								
	-fine grained, medium to dark (down hole) green. There are random carbonate/quartz veins. The unit is locally bleached and may in part be siliceous (120-125.5m). There are minor sulfides of mainly chalcopyrite near the upper contact. The andesite is massive with only a few layering features locally.	52504	110.7	112.4	1.7	1500	206	26	49	324	NA NA	10
1462	Gahhm (nymyenite)		i	İ								
140.2	-medium grained, dark green massive with pyroxene as matrix and as coarser grains. The unit has numerous fractures at 40°, 60°, 80° to core axis. There may be local leucoxene as at 142.3-143.0m.											
150.0	Andesite And											
1500												
100.0	Elia ol Loie	') '	1	}		·		}	1	1
-	Acid Test				į	ļ			Ì	1		ĺ
İ	108m -55°				i !					Ì		1
1 1:	09.4 10.7 33.2 46.2	Gabbro -medium to coarse grained, dark green, possible chlorite altered with minor sulfides of pyrrhotite, pyrite and trace chalcopyrite. There is a slight increase in sulfides from 107.4-108.9m. Gabbro -as above except there are large clots of chalcopyrite with pyrrhotite. Chalcopyrite 1-2% overall but concentrated in the upper 10cm (108.9-109.0m). Massive Sulfides/Gabbro -this section is 60% massive pyrrhotite bands in gabbro as above chalcopyrite is 2-3% as large clots, blobs in the pyrrhotite. The upper section of the unit is nearly massive pyrrhotite 109.4-109.9m with 3-4% chalcopyrite. Andesite -fine grained, medium to dark (down hole) green. There are random carbonate/quartz veins. The unit is locally bleached and may in part be siliceous (120-125.5m). There are minor sulfides of mainly chalcopyrite near the upper contact. The andesite is massive with only a few layering features locally. Gabbro (pyroxenite) -medium grained, dark green massive with pyroxene as matrix and as coarser grains. The unit has numerous fractures at 40°, 60°, 80° to core axis. There may be local leucoxene as at 142.3-143.0m. Andesite -fine grained, medium green to green grey, massive with only minor quartz veining to laminae in fractures. End of Hole Acid Test	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. Gabbromedium to coarse grained, dark green, possible chlorite altered with minor sulfides of pyrrhotite, pyrite and trace chalcopyrite. There is a slight increase in sulfides from 107.4-108.9m. Gabbroas above except there are large clots of chalcopyrite with pyrrhotite. Chalcopyrite 1-2% overall but concentrated in the upper 10cm (108.9-109.0m). Massive Sulfides/Gabbrothis section is 60% massive pyrrhotite bands in gabbro as above chalcopyrite is 2-3% as large clots, blobs in the pyrrhotite. The upper section of the unit is nearly massive pyrrhotite 109.4-109.9m with 3-4% chalcopyrite. Andesitefine grained, medium to dark (down hole) green. There are random carbonate/quartz veins. The unit is locally bleached and may in part be siliceous (120-125.5m). There are minor sulfides of mainly chalcopyrite near the upper contact. The andesite is massive with only a few layering features locally. Gabbro (pyroxenite)medium grained, dark green massive with pyroxene as matrix and as coarser grains. The unit has numerous fractures at 40°, 60°, 80° to core axis. There may be local leucoxene as at 142.3-143.0m. Andesitefine grained, medium green to green grey, massive with only minor quartz veining to laminae in fractures. End of Hole Acid Test	15% over short sections. Chalcopyrite is 5.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. 105.0 Sabbro	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. Gabbro	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. Gabbro	15% over short sections. Chalcopyrite is < 0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. Gabbro	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. Gabbro	15% ever short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core. (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. 52508 105.0 107.4 1.4 283 556 55 108.9 Gabbro	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m.	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. 52508 106.0 107.4 1.4 283 556 55 21 27 27 108.9 Gabbro	15% over short sections. Chalcopyrite is <0.5 to 1% locally. There was lost core, (sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. 52508 105.0 106.0 107.4 1.4 283 556 55 21 27 NA NA Sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. 52508 106.0 107.4 1.4 283 556 55 21 27 NA NA Sample # 1348) open spaces between 96.0m and 99.0m approximately 0.5m. 52508 107.4 108.9 1.5 716 735 77 5 41 NA NA pyritorite, pyrite and trace chalcopyrite. There is a slight increase in sulfides from 107.4-108.9m. 52501 107.4 108.9 1.5 716 735 77 5 41 NA NA pyritorite, pyrite and trace chalcopyrite with pyrrhotite. Chalcopyrite 1-2% overall but concentrated in the upper 10cm (108.9-109.0m). 10.7 Massive Sulfides/Gabbro 4-bits section is 60% massive pyrrhotite bands in gabbro as above chalcopyrite is 2-3% as large clots, blobs in the pyrrhotite. The upper section of the unit is nearly massive pyrrhotite 109.4-109.9m with 3-4% chalcopyrite - 109.4-109.9

DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project: Date:

Enid Creek -Loveland Township November 27 to December 2, 2000

Logged by: Drilling Co:

Robert Calhoun Colbert Drilling

Claim Number: P. 1037161

SURVEYS: Acid Test

Setup:

Depth 0.0m

Azimuth 270°

Dip

<u>-70°</u>

DDH: EL25-08

COLLAR LOCATION: L50150N/10250E

UTM_COORDINATES

GRID COORDINATES

50150N

10250E

Northing: Easting:

5388763N

454376E

Elevation: 0.0 meters

TD: 186.0 meters

DRILLING DATES

Started: November 27, 2000 Finished: December 2, 2000



42A12NE2044 2.25689

LOVELAND

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DIAMOND DRILL SUMMARY LOG

DDH: EL25-08

Project: Enid Creek -Loveland Township Date: November 27, 2000 Logged By: R. F. Calhoun

GEOLOGIC SUMMARY

FROM	TO	DESCRIPTION	<u> </u>	TERVAL				SIGNIFICA	NT ASSAY	AVERAGES	·	··
(m)	(m)		From (m)	To (m)	Width (m)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
0.0	1.7	Overburden		1						•		
1.7	17.0	Gabbro		{	{		ļ	1	{		į į	
17.0	30.3	Gabbro		ľ	1		i]	ŀ			
30.3	81.2	Gabbro	.	ł			ļ	1	1	<u> </u>		
81.2	85.8	Andesite/Gabbro		1]		i	j		1		
85.8	123.0	Gabbro		1			1	ŀ	1	1		
123.0	130.8	Gabbro		ł	i					1		
130.8	138.6	Gabbro	134.6	136.0	1.4	2980	1380	105	34	192	n/a	48
138.6	149.0	Gabbro	145.2	146.5	1.3	2620	2060	136	43	230	n/a	27
149.0	157.4	Gabbro		i	1				1			
157.4	186.0	Andesite		ì	1			1	\	1	<u>'</u>	
1	186.0	End of Hole	ì		l		İ		ļ	-		
]				1					ļ	1		
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- 1				j								

COMMENTS

Property: Enid Creek -Loveland Township

Hole Number: EL25-08

Claim Number: P.1037161

Location: L50150N/10250E

Final Depth: 186.0 meters

Logged By:

Robert Calhoun

Colbert Drilling

Azimuth: 270°

Dates Drilled: November 27 to December 2, 2000

Drilled By:

Dip: <u>-70°</u>

Dates Logged: November 28 to December 3, 2000

Signature:

								Assays	3				
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
0.0	1.7	Overburden			<u> </u>								
1.7	17.0	Gabbro -medium to coarse grained, medium to dark grey gabbro with white feldspars. This section is mixed with the gabbro interlayered with fine grained, spotted possibly fine grained gabbro or andesite with dark grey quartz spots or phenocrysts. There is a section of feldspar enrichment 11.9-13.1m. The unit is locally broken to crushed below 14.5m.											
17.0	30.3	Gabbro -medium to coarse grained, medium to locally dark green with coarse white feldspars and locally pink feldspars, random in occurrence but in crude layers. The unit locally appears bleached. 23.0-25.2m -fine grained, medium to dark grey. This section has minor pyrite as disseminations and fracture laminae. There is minor pyrrhotite near lower contact associated with a quartz vein.					_						
30.3	81.2	Gabbro -coarse grained, medium to dark grey green with white feldspars and pale green saussauritized feldspars with diffuse edges. The unit is massive with only minor small fine grained "veins" of probable chlorite-possibly mixed with carbonate. There are minor quartz veins. Down hole the feldspars become more distinct and locally the colour becomes weakly paler over 1-2m. 65.9-68.0m -fine grained, medium to dark green grey. The unit is leucoxenitic and has minor disseminated pyrite. There is a mixing of the unit with the gabbro near the contact and there is pyrrhotite over 10-20cm at the contact. 77.4-78.0m -slightly layered appearance to the unit with several clots to blebs of	52509	77.4	78.0	0.6	484	190	24	22	31		15

								Assa	ys				
From	То	Description	Sample	From	То	Length	Cu	Ni	Со	Pt	Pd	Rh	Au
		chalcopyrite. There are minor garnets developed near a quartz vein in the lower contact area.	#			(meter)	ppm	ppm	ppm	ppb	ppb	ppb	ppo
81.2	85.8	Andesite/Gabbro -this section is dominated by a fine to medium grained andesitic unit, dark green to green interlayered with 10-20cm gabbro sections, medium to coarse grained. The andesite sections maybe fine gabbro.											
85.8	123.0	Gabbro -medium to coarse grained, medium grey green with local whitish grey sections in increase feldspar and silica. The unit is quite consistent, massive with a few minor quartz veins. There is only minor fracturing at mainly 60° to core axis averaging one fracture per 2 meters. There is one quartz vein at 120.9-121.1m with 3-5% pyrite.											
123.0	130.8	Gabbro -medium to coarse grained, medium grey green as above but in this section the gabbro is also dark green, medium grained, has local quartz veining with some sulfides of pyrite and has medium to coarse grained feldspar accumulates. The unit generally appears more altered than the above gabbro. The lower contact is crushed, broken with quartz veining. There was about 30cm of core lost in the contact area.	52510	129.0	130.8	1.8	41	186	28	7	5		3
130.8	138.6	Gabbro -medium to coarse grained, medium grey green with feldspar accumulates and local quartz. The unit displays a crude layering due to the feldspars which occur as clusters with no discernible orientations. There are dark green "veins" of chlorite. The unit is mineralized with pyrrhotite, pyrite and chalcopyrite as clots disseminations. There are rough layers with increased sulfides but the unit is fairly uniformly mineralized. The sulfide content is <0.5% to very local 1%. There are sections of crushing and there are some fractures sub parallel to core axis.	52511 52512 52513 52514 52515 52516	130.8 132.0 133.5 134.6 136.0 137.5	132.0 133.5 134.6 136.0 137.5 138.6	1.2 1.5 1.1 1.4 1.5	2890 996 1810 2980 728 852	1550 716 1030 1380 772 841	113 61 73 105 71 69	24 27 26 34 14 38	74 69 125 192 144 194		27 19 17 48 5
138.6	149.0	Gabbro -medium to coarse grained feldspar rich, medium grey green as above. Feldspars occur as cumulate "layer" to evenly distributed. There is local alteration possible chlorite where the sulfides occur and there is one large siliceous "layer" pale grey 139.3-139.9m forming contacts upper at 10°, lower crushed and broken as is core below the section. 143.8-146.5m -pyrite, pyrrhotite sulfides with disseminated grains of chalcopyrite. Total sulfide 1-3% as fine disseminations and small clots.	52517 52518	143.8 145.2	145.2 146.5	1.4 1.3	1320 2620	581 2060	49 136	15 43	72 230		12 27
149.0	157.4	Gabbro medium grained, dark green grey, feldspars are not distinct except in small layers, there is an increase in quartz/carbonate veins, small <1cm. The lower contact zone	52519	156,4	157.4	1.0	1150	1240	84	15	130		17

Hole # EL25-08

			Assays										
From	To	Description	Sample #	From	То	Length (meter)	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	Rh ppb	Au ppb
		156.3-157.4m is fine grained maybe chilled margin with minor to 3% sulfides of mainly pyrite with minor sphalerite. The contact is a 30cm quartz vein 157.1-157.4m, white to dark grey with 3% pyrite, sphalerite. Contact crushed.						• •					
157.4	186.0	Andesite -fine grained, medium grey to grey green, massive except for infrequent altered "veins", light grey to pinkish. There are minor quartz veins <0.5cm. There is possible flow layering around 171m and there are arrygduloidal sections from 183.0-185.0m with arrygdules to 1cm. There may also be flow banding at 176.4 to 178.0m.											
	186.0	End of Hole											
-	(



Work Report Summary

Transaction No:

W0360.00883

Status: APPROVED

Recording Date:

2003-MAY-26

Work Done from: 2000-NOV-10

Approval Date:

2003-MAY-27

to: 2000-DEC-02

Client(s):

130679

FALCONBRIDGE LIMITED

Survey Type(s):

PDRILL

W	Work Report Details:													
Claim#		Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve					
Ρ	1037149	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Ρ	1037154	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Р	1037155	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Р	1037160	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Ρ	1037161	\$13,824	\$13,824	\$400	\$400	\$4,000	4,000	\$9,424	\$9,424	2004-MAY-26				
Ρ	1037162	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Ρ	1037163	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Р	1037164	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Р	1037165	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Р	1037168	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
Ρ	1037169	\$0	\$0	\$400	\$400	\$0	0	\$0	\$0	2004-MAY-26				
		\$13,824	\$13,824	\$4,400	\$4,400	\$4,000	\$4,000	\$9,424	\$9,424	•				

External Credits:

\$0

Reserve:

\$9,424

Reserve of Work Report#: W0360.00883

\$9,424

Total Remaining

Status of claim is based on information currently on record.



42A12NE2044 2.25689

LOVELANI

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Date: 2003-MAY-28

FALCONBRIDGE LIMITED

TORONTO, ONTARIO

800-207 QUEEN'S QUAY WEST

CANADA



GEOSCIENCE ASSESSMENT OFFICE 933 RAMSEY LAKE ROAD, 6th FLOOR SUDBURY, ONTARIO P3E 6B5

Tel: (888) 415-9845 Fax:(877) 670-1555

Submission Number: 2.25689 Transaction Number(s): W0360.00883

Dear Sir or Madam

M5J 1A7

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Sheila Lessard

Acting Senior Manager, Mining Lands Section

Cc: Resident Geologist

Falconbridge Limited

(Claim Holder)

Dean Rogers (Agent)

Assessment File Library

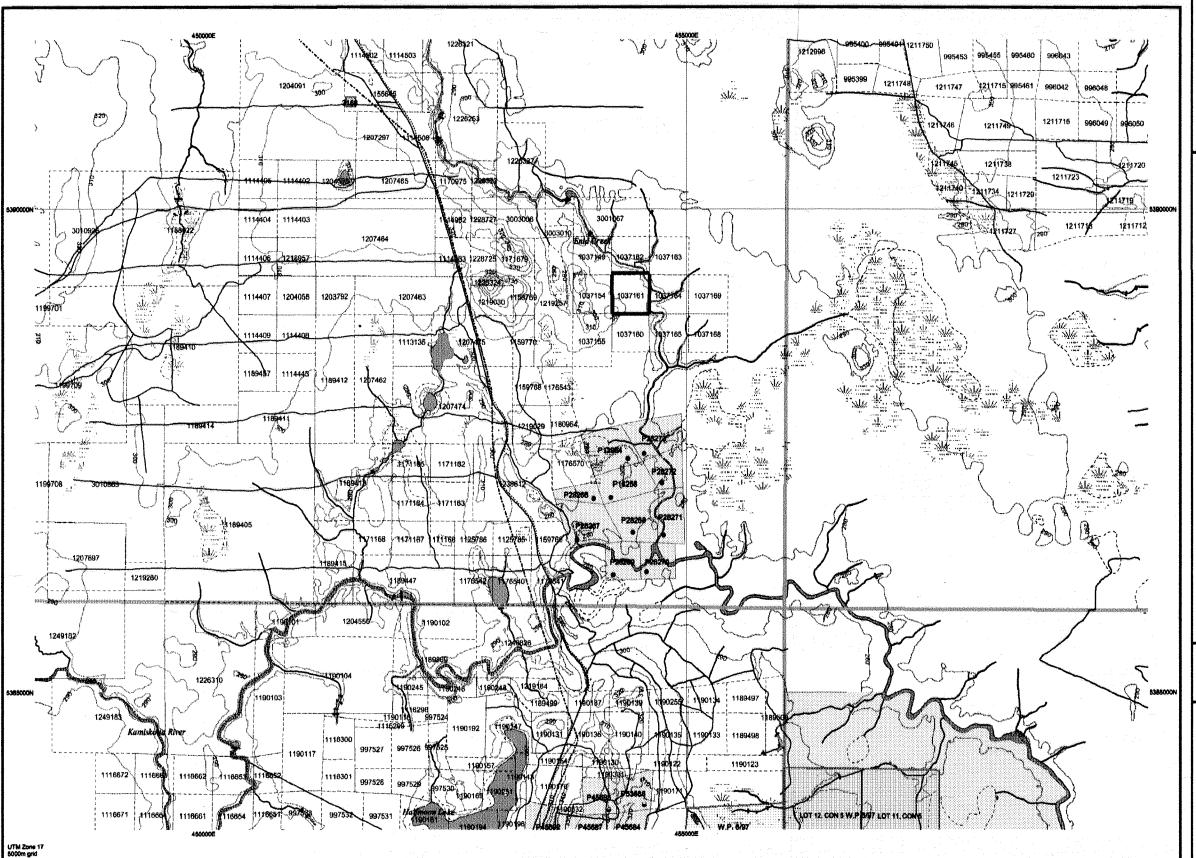
Falconbridge Limited (Assessment Office)



42A12NE2044 2.25689

LOVELAND

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Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Minies for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

Contact Information:

Provincial Mining Recorders' Office

Willet Green Miller Centre 933 Ramsey Leke Road
Sudbury ON P3E 685

Home Page: www.mndm.gov.on.ca/MNDM/MINES/LANDS/mlemnpge.htm

Toil Free Map Datum: NAD 83
Tel: 1 (888) 415-9845 ext 57#bjedion: UTM (6 degree)
Fax: 1 (877) 670-1444 Topographic Data Source: Land Information Ontario
Mining Land Tenura Source: Provincial Mining Recorders' Office

This map may not show unregistered land tenure and interests in land including certain patents, leases, easements, right of ways, flooding rights, licences, or other forms of disposition of rights and interest from the Crown. Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be litustrated.

ONTARIO CANADA Mining Land Tenure
Mining Land Tenure
Mining Map

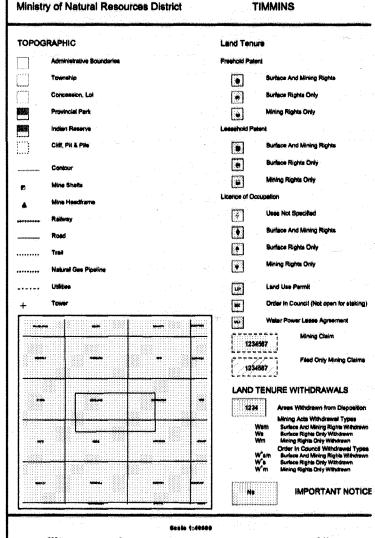
Date / Time of Issue: Wed May 28 09:56:54 EDT 2003

TOWNSHIP / AREA LOVELAND PLAN M-0293

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division
Land Titles/Registry Division
Ministry of Natural Resources District

Porcupine COCHRANE



LAND TENURE WITHDRAWAL DESCRIPTIONS

3137 Wsm Jan 1, 2001 FLOODING RIGHTS RESERVED TO ONTARIO HYDRO, LO 7065
3168 Wsm Jen 1, 2001 400 FEET SURFACE RIGHTS RESERVATION ALONG THE SHORE
3297 Wsm Jen 1, 2001 PROPOSED SURFACE RIGHTS DISPOSITION UNDER P.L.A. NOTI
FO Wsm Oct 11, 2001 Filed Only 1238499
W-P-61/00 Wsm Dec 7, 2000 Sec.35 W-P-61/00 07/12/2000 M&S 195150
W.P. 6/67 Wsm Apr 28, 1997 MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 3
W.P. 6/67 Wsm Apr 28, 1997 MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 3

2.25689 PDRILL

