1974 DRILLING

QUINTANA

013322

Type I PJ to 643
then [illegible]
[illegible]

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No: R 74-1 Page No. 1 Length: 750' Lat. _____ Drill Type: LONGYEAR 44
District: CLINTON Bearing _____ Dept. _____ Hole Size: HQ - NQ
Commenced _____ Inclination: 90° (VERTICAL) Elev. _____ Contractor: CAN. LONGYEAR Logged by: W A HOWELL
Completed: MARCH 6, 1980 Approved by _____ Date _____

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Vein	Py/Cpy	EST % Cu
0	100				OVERBURDEN																
100	120	7501	10.6		TYPE I QUARTZ DIORITE PORPHYRY. SULPHIDES	F	2					1		1							
		7502	9.9		DISS. & ON FRACTURE FACES & MINOR STRINGERS.	D				3	3	?		?				2		4/1	.3
					ROCK COMMONLY CONTAINS 1-15 mm VUGS																
					(AVG SIZE 2-4 mm) MINOR MoS_2 ON FRACT																
					FACES, VERY OCCAISIONAL BORNITE ON FRACT.																
					FACES.																
120	177	7503	10.5		TYPE I Q.D. PORPHYRY. SULPHIDE MORE COMMON	F	1-2			1	1	1		2							
		7504	10		ON FRAC., MINOR DISS SULPHIDES MAGN.	D	3			3	2			1				1.0		10/1	.1
		7505	9		ON FRAC. & AS DISS. OCCAISIONAL VEINLET																
		7506	10		CONTROLLED SERICITE WITH PY & QTZ.																
		7507	10		MINERALIZED FRACTURES ARE "TIGHT"																
		7508	8																		
177	189	7509	10		TYPE I Q.D. PORPHYRY. PY ON FRAC. AND	F	1					2-3		?							
					DISS AS XTLS. VERY LITTLE Cu MINERALIZATION,	D	1				1-2	?(1)		1				1.0		20/1	.05
					ROCK IS BLEACHED																
189	191				GOUGE, MUCH SERICITE AND "BLACK MUD"						3	3									
					OCCAISIONAL PY. VISIBLE																
191	248	7510	10		TYPE I Q.D. PORPHYRY GREY COLOUR, PY,	F	2			1		2		3	.1						
		7511	10		CPY ON FRACTURES AND WEAKLY DISSEMINATED	D	?			2	2	1		2				2.0		20/1	.1
		7512	10		FELDSPARS GENERALLY MORE "CHALKEY".																
		7513	9.5		QTZ - CARB - GYPSUM - PY VEINING PARALLEL CORE																
		7514	10.5		NEAR 220'.																
		7515	11		AS CARB/GYPSUM CONTENT INCREASES																
					VUGS DECREASE IN SIZE AND FREQUENCY																

DIAMOND DRILL RECORD

Property: FISH LK.
Hole No.: 74-1 Page No.: 2/4 Length: 750 Lat.: Drill Type:
District: Bearing: Dept.: Hole Size:
Commenced: Inclination: Elev.: Contractor: Logged by: W. A. HOWELL
Completed: Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
248	262	7516	9		TYPE I Q.D. PORPHYRY, BLEACHED CREAM COLOUR														
		7517	10		FELDSPARS MED SOFT - "CHALKEY"	F	3				2-3								
					MAFICS INDISTINCT TO OBLITERATED	D	2				2-3	1(?)		(?)		1%		1/1	<.1
					HEMATITE AFTER MAGNETITE PRESENT														
					PY, CPY, MINOR Bn (BORNITE) ON FRACT.														
					QTZ VEINLETS WITH PY, CPY, HEMATITE.														
					OCCASIONAL PY VEIN TO 1 CM WIDE, W. MINOR TO														
					NIL Cu.														
262	267	7517	10		BROKEN CORE, ROCK SIMILAR TO 248 - 262	F	2			1	2	2		2-3					
					SLIKENSIDED FRACTURES WITH HEMATITE & "BLACK	D				2	2	2		1-2		1		1/1	<.1
					GOUGE" COMMON. GOUGE CONTAINS ABUNDANT														
					CARBONATE. PY VEINLETS TO 2 CM WIDE WITH														
					MINOR CPY														
267	347	7518	10		TYPE I Q.D. PORPHYRY LIGHT GREY TO	F	2			1	2	2		2-3					
		7519	10		CREAM COLOUR. FELDSPARS CHALKY WHITE TO	D				2	2	2		1-2		1		1/1	<.1
		7520	10		SOFT PALE GREEN (? SERICITE), MAFICS - CHLORITE														
		7521	10		TO BLEACHED CHL/Bi. PY & MINOR CPY DISS.														
		7522	10		MOST SULPHIDES ON "TIGHT" FRACT. OR QTZ,														
		7523	10		SERICITE, CARB. VEINLETS														
		7524	10		282 - 285 QTZ/CARB VEINING, INCREASE IN														
		7525	10		SERICITE. ALSO 317 - 319														
347	375	7526	10		TYPE I Q.D.P., GREY GREEN COLOUR	F	2			2	1	2		3					
		7527	10		FELDSPARS - MOD. HARD OPAQUE APPEARANCE	D				2	1			1-2		2		2/1	.1
		7528	10		MAFICS - CHL. CLOTS OFTEN CONTAINING MAGN.														
		7529	10		PY & CPY PREDOM. ON FRACT. SFC. ALSO														
		7530	10		DISS. LOCAL QTZ CARB VEINLETS WITH														
					SERICITE SELVAGES, ROCK IS GENERALLY														
					BLEACHED AROUND SUCH VEINLETS. CHL. SERICITE ON														
					OCCASIONAL FRACT. SURFACES. GROUND UP SULPHIDES														
					ON [illegible]														

DIAMOND DRILL RECORD

Property: FISH LK
Hole No.: 74-1 Page No.: 3/4
Length:
Lat.:
Drill Type:
District:
Bearing:
Dept.:
Hole Size:
Commenced:
Inclination:
Elev.:
Contractor:
Logged by: W.A. Howell
Completed:
Approved by:
Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Veln	Py/Cpy	Est % Cu
3.75	431	7531	10		TYPE I (?) Q.D.P. POSSIBLY TYPE II	F	2			2	2	2		2	1						
		7532	10		FELDSPAR AVG SIZE ~ 2 mm, CHALKEY WHITE TO	D					3	1(?)						1		10/1	.15
		7533	14		PALE GREEN TRANSLUCENT, MAFICS ARE RECRYST.																
		~~7534~~			CHL. IN v.f.g. CLOTS. SOME MINOR STOCKWORK																
					DEVELOPMENT. PY/CPY ON FRACT. ~ 3/1. SHEARS																
					AT 426' CONTAIN GROUND UP SULPHIDES AND																
					LENSES TO 2 mm OF PYRITE & CARBONATE.																
					GYPSUM ON SOME FRACTURE FACES.																
					—— "H" CORE ENDS AT 421' ——																
431	508	7534	10.2		TYPE I Q.D.P. FELDSPARS WHITE "CHALKEY",	F	3			1	2	2		1	1						
		7535	10.5		MAFICS BLEACHED RELICT TEXTURES ± APPARENT.	D	1				3							1		10/1	.1
		7536	15.3		HEMATITE ALT. FROM MAGN. QTZ SERICITE																
		7537	6.5		VEINLETS, SOME STOCKWORK FRACTURE DEVELOPMENT																
		7538	13.5																		
		7539	10																		
		7540	11																		
508	537	7541	8		TYPE I QDP GENERALLY GRADING FROM "FRACT.	F	2			2	1-2	1		1	1-2					10/1	
		7542	10.5		CONTROLLED SERICITE" ALT TO "INTRODUCED FRACT	D				2		1(?)						1			.1
		7543	10.5		CONTROLLED CHL." ALT. FELDSPARS MED SOFT,																
		~~7544~~			MAFICS ARE CHLORITE CLOTS. PY/CPY IN																
					STRINGERS AND VEINLETS ± QTZ, CARB, GYP.																
					PY, CPY, PRESENT IN MINOR AMTS AS DISSEMINATED																
					MINERAL. MAGNETITE PRESENT AS ACCESSORY																
					DISSEMINATIONS																
537	643	7544	10		SIMILAR TO 431 - 508 GROUND UP	F	3			1	2	2		1	1						
		7545	10		SULPHIDES ON SHEARED FACES. PY OCCURS BOTH	D	1				3							1		10/1	.1
		7546	10		DISS. & ON FRAC. SURFACES. CPY OCCURS MOSTLY																
		7547	10		ON FRACT. SFC. GYP. INCREASING WITH DEPTH FROM																
		7548	10		~ 430'																
		7549	10																		
		7550	10																		

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-1 Page No.: 4
Length: Lat.: Drill Type:
District: Bearing: Dept.: Hole Size:
Commenced: Feb 27/78 Inclination: Elev.: Contractor: Logged by: W.A. Howell
Completed: Feb 4/78 Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
547	643	7552	10		CONT'D – FELDSPAR GRAIN SIZE	F															
		7553	10		DECREASES TO 643' ROCK LOOKS SIMILAR TO	D															
		7554	10		TYPE II ALTERATION AND MINERALIZATION																
		~~7555~~			HOLD CONSTANT.																
643	750	75			HORNFELS, ROCK IS INITIALLY BLEACHED.	F	2		(?) 1	2		2			3						
		7555	10		CONTACT IS DETERMINED ON THE BASIS OF	D			(?) 1	2								1.5		2/1	.1
		7556	10		± EUHEDRAL FELDSPARS IN GROSS APPEARANCE																
		7557	10		CONTACT IS GRADATIONAL OVER ~ 30' FROM																
		7558	5.5		DISTINCT ROCK TYPES ON EITHER SIDE.																
		7559	10		TIGHT FRACTURES COMMONLY CONTAIN																
		7560	5		PY/CPY ≈ 1/2 to 1/5. OCCASIONAL QTZ-GYPSUM																
		7561	10		VEINLETS ARE ACCOMPANIED BY CPY/PY																
		7562	7.5		MINERALIZATION WITH ACCESSORY BORNITE AND																
		7563	9		MINOR MoS_2. QTZ GYPSUM VEINLETS ARE																
		7564	10		COMMONLY BARREN OF SULPHIDES. MAGNETITE I																
		7565	10		HEMATITE IS PRESENT THROUGHOUT THE ROCK																
		7566	3		AS AN ACCESSORY MINERAL. OCCASIONAL																
		~~75~~			QTZ PYRITE VEINLETS UP TO 1.5 CM WIDE																
					HAVE SERICITE SELVAGES. GYPSUM VEINLETS																
					AND FRACTURE FILLINGS ARE COMMON																
					—— END OF HOLE ——																

HFR. 281
Type II PPy 321
HFR 512
Type ~~520~~ 686
Cu avg 0.1 < 0.2

DIAMOND DRILL RECORD

Property: Fish Lake
Hole No: 74-2 Page No: 1
Length: 686'
Lat.:
Drill Type: Longyear 44
District:
Bearing:
Dept.:
Hole Size: HQ
Commenced:
Inclination: 90°
Elev.:
Contractor: Canadian Longyear
Logged by: W A Howell
Completed:
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Vein	Py/Cpy		
							ALTERATION															
0	230'				OVERBURDEN																	
230'	281	7567	8.5		HORNFELS - DARK GREY GREEN TO TAN COLOUR.	F				3	1-2	1	0-1	2								
		7568	10		CHLORITE BLOTS COMMON, PY & MINOR CPY ON	D				2-3	1			2				75		10/1	<.1	
		7569	9.5		SOME FRACTURE FACES. ROCK IS VERY																	
		7570	9.3		FRACTURED AND BROKEN. CHLORITE IS INTERGROWN																	
		7571	9.8		ON FRACTURES. MANY SURFACES SLICKENSIDED,																	
		7572	8.0		OCCASIONAL EP. AND HEMATITE OBS. ON																	
					SHEAR FACES - SHEAR PLANES COMMONLY																	
					INTERSECT CORE AT SMALL ANGLES, IE 0°-15°																	
							1															
281	321	7573	10.4		TYPE II Q.D. PORPHYRY - GREY GREEN																	
		7574	11.1		TO DARK GREY COLOUR. CONTACT WITH	F	2			2	3			3								
		7575	10		HORNFELS IS OBS. AS VERY SHARP ALONG	D				2				3				1.2		20/1	.05	
		7576	10		A SHEAR PLANE. ROCK HAS A FEW																	
					LARGE (≥ 4mm) AND MANY SMALL PLAG.																	
					PHENOCRYSTS, USUALLY MED SOFT, WHITE "CHALKY"																	
					XTLS. MAFICS ARE CHLORITE AFTER																	
					HORNBLENDE. BOTH FRACTURE SURFACES AND																	
					ROCK MATRIX EFFERVESCES PROFUSELY WITH																	
					DIL. HCl																	
					MINOR PY AND VERY MINOR CPY ON																	
					FRACTURE FACES. ROCK ALMOST TOTALLY																	
					BARREN OF SULPHIDES. NO MAGN. OBS.																	
321	415	7577	10.5		HORNFELS - AS FOR 230-281	F				3	1-2	1	0-1	2								
		7578	10		OCC. FRACT. SFC. WITH PY/CPY 1/3 to 1/10	D				2-3	1			2				1%		10/1	.1	
		7579	11		MINOR QTZ CARB. VEINING WITH VERY																	
		7580	8		MINOR MoS_2 AND MINOR CPY & PY																	
		7581	6		SOME MAGNETITE ON NO. FRACT. SURFACES																	
		82	10.5																			
		83	10.5																			
		84	"																			

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 24-2 Page No.: 2
Length: 686 Lat.: Drill Type:
District: Bearing: Dept.: Hole Size:
Commenced: Inclination: 90° Elev.: Contractor: Logged by: W.A. HOWELL
Completed: Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss/ Vein	Py/ Cpy	
415	418.6	7586	3.5		TYPE II QDP. (?) SIMILAR TO 281-321. CONTACT IS NOT OBSERVED AND APPEARS TO BE LOST IN VERY BROKEN TO SHEARED CORE. CONTACT IS LIKELY FAULTED BOUNDED.														
418.5	430	7587	8		HORNFELS - GREY GREEN, SOMEWHAT MORE BLEACHED LOOKING THAN PREVIOUS HORNFELS (cf. 230-281 & 321-415) FRACT. HAVE INTROD. CHL. QTZ CARB. MINOR MAGN. CPY & PY. ROCK IS VERY BROKEN AND SHEARED. FRACTURES ARE OFTEN 'TIGHT' AND 'DRY' SOME FRACTURES CONTAIN CPY AND A VERY LITTLE PY & HEMATITE. SOME FRACTURE CONTROLLED SERICITE IS PRESENT AND VERY SMALL AMOUNTS OF BORNITE MAY ACCOMPANY CPY ON FRACT. FACES.	F D	2 1			2 2-3	1-2 1-2	0-1		1-2 1			.75		5/1	.15
430	440	7588	11.5		AS ABOVE WITH CPY INCREASING IN FREQUENCY ON FRACTURES. CPY & PY ALSO DISSEMINATED IN THE ROCK. ROCK MAY BE MORE SILICIC THAN PREVIOUSLY.	F D	2 2			2 2-3	1-2 1-2			1-2 1			.25		1/2	.25
440	505	7589	10.5		HORNFELS (?) LIGHT GREEN TO PALE GREY,														
		90	8		BLEACHED NO DISTINCT FELDSPARS SOME	F	3			1-2	1			2					
		91	10		FRACTURES AND QTZ CARB STRINGERS CONTAIN	D	2			2-3	1-2			2			.75		5/1	.15
		92	8		CPY. ROCK IS GENERALLY MORE SILICIC THAN														
		93	10		PREVIOUSLY (UP TO 430 or 440')														
		94	10.2																
		95	10																
505	510	7596	5.3		VERY BROKEN AND SHEARED SILICIC HORNFELS	F D	1-2 1-2			1 1	3 3	1 1		2 2			.25		5/.	< 1
	510																		

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-2 Page No.: 3
Length: 686
Lat.:
Drill Type:
District:
Bearing:
Dept.:
Hole Size:
Commenced:
Inclination: 90°
Elev.:
Contractor:
Logged by: WA Howell
Completed:
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Py/Cpy	
512	538	7597	7.1		TYPE II Q.D.P. - SMALL (1-4 mm) PLAG	F	2			1	1	0-1		1					
		7598	9.9		PHENOCRYSTS. MED. SOFT 'CHALKEY WHITE'	D	2			2	2			2		.25		5/1	.05
		7599	9.5		PALE GREEN TO CREAM COLOURED MATRIX														
					WITH CHL. AFTER HORNBLENDE, TO														
					BLEACHED CHL. MAFICS. MINOR PY														
					ON FRACTURES AND OCCAISIONALLY DISSEMINATED														
					VERY MINOR TO TRACE CPY WITHIN														
					THE MATRIX, THE AMOUNT OF CARB.														
					BEARS A RELATION TO THE AMOUNT OF														
					CHLORITE PRESENT. CARB. IS LESS														
					COMMON ON FRACT.														
538	559	7600	10.5		SHEARED TYPE II WITH SMALL SECTIONS ~~LENGTHS~~ OF VERY BLEACHED	F	2			0-1	2-3			1	1	.25		5/1	.05
		7601	9.5		SILICIC HORNFELS PY & CPY ON FRACT. &	D	3			1	2			1					
					SHEARS WITHIN THE HORNFELS BUT														
					ABSENT FROM TYPE II EXCEPT FOR														
					TRACE AMOUNTS														
559	605	7602	10		TYPE II Q.D. PORPHYRY SILICIC ALT'N	F	2			1	1				2				
		7603	10		ROCK IS PALE GREEN TO VERY BLEACHED	D	3			2	1					.5		5/1	<.1
		7604	10		CREAM COLOUR. TIGHT, DRY FRACTURES														
		7605	10		COMMON. QTZ ± GYPSUM VEINLETS FAIRLY														
					COMMON AND OFTEN CARRY PY. HEMATITE														
					AFTER MAGN. IS PRESENT ON SOME														
					FRACTURE SURFACES.														
					BROKEN ROCK AND GOUGE 573 - 580														

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-2 Page No.: 4
District:
Commenced: Nov 6/74
Completed: Nov 11/74

Length: 686
Bearing:
Inclination: 90

Lat.:
Dept.:
Elev.:

Drill Type:
Hole Size:
Contractor:

Logged by: W.A. Howell
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Pv/Cpy		
605	686	7606	12		TYPE II Q.D.P. AS ABOVE WITH	F	2			1	1				2					
		7607	9.4		INCREASE IN SULPHATE (GYPSUM) AND	D	3			2	1					.5		5/1	(.)	
		7608	10.2		SLIGHT INCREASE IN OPY & PY CONTENT															
		7609A	10.9		ON FRACT. ROCK IS MORE VARIABLY															
		7609B	9.		ALTERED WITH MORE CHLORITE APPARENT															
		7610	10.5		IN THE MATRIX AND SOME VERY BLEACHED															
		7611	10		AN SILICIC SECTIONS. SILICIC SECTIONS															
		7612	9		HAVE ALMOST ALL FELDSPARS OBLITERATED															
		7613	5		A PINK HUE IN SOME SECTIONS IS															
					V.F.G HEMATITE IN THE MATRIX															
					END OF HOLE.															
					242' OF OLD HQ ROD ON TOP OF															
					GROUT PLUG LEFT IN HOLE.															
					32' OF H.W CASING & SHOE,															
					HAMMERED OFF AND ABANDONED IN															
					THE HOLE. W.A.H.															

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-3 Page No.: 1
District:
Commenced: MARCH 13 /74
Completed: MARCH 18 /74

Length: 500
Bearing:
Inclination:

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: NQ
Contractor: CAN. LONGYEAR

Logged by: W. A. Hamilton
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
0	201				OVERBURDEN - ARTESIAN WATER @ 46'														
201	374.6	7614	10		TYPE I Q.D.P. WHITE 'CHALKY' ANHEDRAL TO	F	2			1-2		1		2					
		7615	10		SUBHEDRAL FELDSPARS IN A GREY-GREEN FINE	D				2-3	1			1-2		1%		3/1	.07
		7616	9		GRAINED MATRIX. FELDSPARS MAY HAVE A SOFT														
		7617	11		PALE GREEN TRANSLUCENT APPEARANCE (? SERICITIZED)														
		7618	10		CHLORITE IS OBS. AS CLOTS WITHIN THE MATRIX														
		7619	9		AND AS AN INTRODUCED MINERAL ON FRACTURES.														
		7620	11		MAGNETITE IS DISSEMINATED AND ON FRACTURES														
		7621	10		PY IS WEAKLY DISSEMINATED CPY & PY ARE														
		7622	6.5		OBS. ON FRACT. SURFACES MAGN. MAY BE														
		7623	9.5		ALTERED TO HEMATITE ON FRACT. ~7' OF CORE														
		7624	8		GROUND BETWEEN 241'-253'														
		7625	9		GOUGE @ 304.5 AND 307-310, 287-293'-														
		7626	10		[illegible] A.M. DIKE. DIKE IS DARK GREEN,														
		7627	9		CHLORITE AFTER HBDE. 5% ANHEDRAL SOFT PALE														
		7628	10		GREEN FELDSPARS (1-4 mm) FRACTURES WITHIN														
		7629	8.6		THE DIKE HAVE QTZ CHL. PY MINOR SERICITE														
		7630	5.4		& CPY.														
		7631	10		OCC. SLIKENSIDED HAVE GROUND SULPHIDES AND														
		7632	12		HEMATITE COATING. ONE PIECE OF CORE @ 339'														
					HAS A FRAGMENT OF FINE GRAINED HORNFELS														
					OCC QTZ PY VEINLETS TO 3 mm														
374.6	431	7633	8		ROCK IS SIMILAR TO ABOVE EXCEPT MORE	F	2		0-1	1-2		1		1-2					
		7634	7		SILICIC WITH LESS CHLORITE. FRACTURING	D	2			2	1			1-2		1%		1/1	.1
		7635	10		MORE INTENSE (SLIGHT STOCKWORK DEVELOPMENT)														
		7636	7		QTZ PY VEINING CONTAINS MORE CPY AND														
		7637	12		OCCASIONALLY A LITTLE BORNITE.														
		7638	11																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-3 Page No.: 2
District: CLINTON
Commenced: MAR 13 / 74
Completed: MAR 18 / 74

Length: 500
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: H Q
Contractor: CAN LONGYEAR

Logged by: W. A. Howell
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Veln	Py/Cpy	Est % Cu
431	500	7639	13		ROCK IS STILL SIMILAR TO PREVIOUS, WITH	F	2			1-2		1						1%			.07
		7640	7		CHLORITE BLEACHED, AND INCREASE IN	D	2			1-2											
		7641	8.5		SILICA. STOCKWORK DEVELOPMENT CEASED.																
		7642	7.5		EXCEPT FOR OCCASIONAL FRACTURES CONTAINING																
		7643	6.5		PY & CPY, ROCK IS BARREN OF Cu MINERALIZATION																
		7644	10.5		OVER MUCH OF THE CORE GYPSUM VEINING																
		7645	10		UP TO 2.5 CM EVIDENT NEAR BOTTOM OF																
					HOLE 492 - 500 CHLORITE CONTENT																
					INCREASES, SLIGHT IMPROVEMENT OF Cu																
					MINERALIZATION ALSO																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: Q 74-4 1/4
Claim: CLINTON
Date: MAR 19 / MAR 23

Local Grid: BOL
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.: 4883

Drill Type: LONGYEAR 44
Hole Size: HQ - NQ
Contractor: CAN. LONGYEAR

Logged by: W A HOWELL
Approved by: _____ Date: _____

From	To	Sample No.	Length	% Rcv.	Description		Q	KF	Bi	Chl.	Cl.	Ser	Ep.	Cb	Su.	% Sulph	Diss./Vein	Py/Cpy	Est % Cu
							ALTERATION												
0	60				OVERBURDEN														
60	~94	7646	10.5		HORNFELS - DARK GREY GREEN RK.	F				1				2					
		7647	10		FELDSPARS INDISTINCT AND FINE GRAINED.	D			(?)	2	1-2			0-1		1%		~3/1	.03
		7648	10		QTZ OBSERVED AS A MINOR CONSTITUENT WHERE														
					PRESENT. MAFIC ~~AR~~ IS CHLORITE, POSSIBLY SOME														
					RELICT BI WITH OCCASIONAL CHLORITE CLOTS.														
					ROCK IS WELL FRACTURED AND BROKEN, WITH														
					PYRITE ON FRACTURE FACES. SOME INTRODUCED														
					FRACTURE CHLORITE. FRACTURES ARE OFTEN														
					SLIKENSIDED														
~94	259	7649	10		TYPE II Q.D.P. - FELDSPARS SMALL	F	1-2					0-1		1					
		7650	11		(.5 - 2 mm) SUBHEDRAL MED. HARD WHITE.	D				2	3			0-1		1%		~3/1	.03
		7651	10.5		QTZ - MINOR CONSTITUENT. MAFIC - CHLORITE														
		7652	10		IN INDISTINCT CLOTS, FROM 110 - 131 ROCK														
		7653	9		IS MORE ARGILLIC, CHLORITE IS BLEACHED														
		7654	8.5		THIS ZONE APPEARS TO BE ZONED AROUND														
		7655	8.5		A VERY BROKEN SECTION @ 116-121.														
		7656	10		FRACTURES COMMONLY CONTAIN PY, OCC.														
		7657	10		QTZ-PY VEINLETS OF "ROTTEN PYRITE" IE														
		7658	6		VERY LOOSE & GRANULAR. DETAILED INSPECTION														
		7659	11		OF THESE VEINLETS SHOWS SOME MINOR														
		7660	13.4		CHALCOCITE (?) COATING OF PYRITE GRAINS														
		7661	7.6		CPY IS OBSERVED VERY RARELY AS VERY														
		7662	11.5		FINE DISSEMINATED GRAINS IN THE ROCK MATRIX.														
		7663	11.5		SLIKENSIDED SURFACES ARE COMMON.														
		7664	9		(SOME OF THE FINE GRAINED TYPE II MAY														
		7665	8.5		BE AN ADVANCED GRADE OF HORNFELS.														
					- EST. GRADE OF Cu IS VERY SUBJECTIVE)														
					BROKEN CORE @ 203 - 205														
					225														
					GOUGE, PYRITE - QTZ - SERICITE VEINLETS AT														

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: Q 74-4 Page No.: 2/6
District: CLINTON
Commenced: MAR 19
Completed: MAR 23

Length: 800'
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: LONG 44
Hole Size: HQ - NQ
Contractor: CAN. LONGYEAR

Logged by: W.A. HOWELL
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Vein	Pv/Cpy	Est % Cu
259	302	7666	10.5		TYPE I (?) PORPHYRITIC NATURE OF ROCK																
		7667	10		IS MORE DISTINCT. BROKEN ROCK @ 260' MAY	F	1-2			2		1		1-2							
		7668	7.5		REPRESENT A SHEAR CONTACT WITH TYPE I	D				2	1							1.5%		~40/1	.03
		7669	8.5		PORPHYRY. CLOTS OF CHLORITE OCC. CONTAIN																
		7670	10		MINOR CPY. MINOR CPY & PY DISS. & ON FRAC.																
					PLAG PHENOCRYSTS ARE SMALL FOR TYPE I																
					(.5 to 2 mm) OCC QTZ. CARB. VEINLETS CARRY																
					MINOR CPY. QTZ IS MINOR CONSTITUENT OF																
					ROCK																
302	350	7671	13		ROCK HAS A MORE HORNFELS APPEARANCE	F	1-2			1		0-1		1-2							
		7672	11		STYLE OF MINERALIZATION HAS NOT CHANGED	D				2	1							1.5%		~40/1	.03
		7673	8																		
		7674	8																		
		7675	10																		
350	364	7676	9		SIMILAR TO 94 - 259, FELDSPARS SUB TO	F	1			1		0-1		1				1.5%			
		7677	8.5		ANHEDRAL, CHLORITE PRESENT AS CLOTS, MINOR DISS CPY	D				2	1-2							1.5%		30/1	.06
364	446	7678	12		TYPE I Q.D.P. - QUARTZ IS UBIQUITOUS THROUGHOUT																
		7679	10.5		THE MATRIX RATHER THAN DISCRETE "EYES". FELDSPARS	F	2				2-3	2-3		1							
		7680	10		SOFT, PEARLY LUSTRE (SERICITIZED?) CHLORITE IS	D	2			0-1	2	2		1-2				1.5%		20/1	.2
		7681	10		VERY BLEACHED CARB NOT OBVIOUS BUT IS																
		7682	10		SIGNIFICANTLY PRESENT, QTZ, SERICITE, PY ±																
		7683	10		SPECULAR HEMATITE VEINING TO 1.5 cm, PRESENT.																
		7684	5		MoS_2 ABUNDANT ON SOME SLIKENSIDES. CPY																
		7685	9.5		VARIABLY PRESENT ON FRACTURES AND AS																
					DISSEMINATIONS																
446	485	7686	9.5		AS ABOVE BUT Cu MINERALIZATION	F	2				2-3	2-3		1							
		7687	9.5		DIMINISHES, TOTAL SULPHIDES ALSO DIMINISH.	D	2			0-1		2		1-2				1%		10/1	.15
		7688	6.5																		
		7689	[illegible]																		

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: Q74-4 Page No.: 3
District: CLINTON
Commenced: MAR 19
Completed: MAR 23

Length: 801
Bearing:
Inclination:

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: HQ - NQ
Contractor: CAN LONGYEAR

Logged by: W.A. HOWELL
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Vein	Py/Cpy		
485	495	7691	8.5		TYPE I Q.D.P. SIMILAR TO 446 - 485 WITH																	
					ALTERATION LESS INTENSE - CHLORITE IS	F	1			1		1										
					UNBLEACHED AND VERY GREEN, Cu CONTENT IS	D				2		1						1%		10/1	.03	
					LOW Py ON FRACTURES & AS DISSEMINATIONS																	
495	523	7692	8		TYPE II Q.D.P. (?) EUHEDRAL FELDSPARS ALTERED																	
		7693	10		TO QTZ - SERICITE OCC DISS. Py - MAGN. STRINGERS	F	2			.	2	2		1								
		7694	10.5		ROCK MATRIX IS BLEACHED WHITE TO PALE GREY	D	2				2	2		1				.5%		—		
					BROWN CHLORITE ALSO BLEACHED.																	
523	530	7695	10.3		TYPE I (?) Q.D.P. SIMILAR TO 364 - 446	F	2				2-3	2-3		1								
					CONTACTS NOT OBS.	D	2			0-1	2	2		1-2				1.5%			.2	
530	576	7696	9.4		TYPE II QDP - GREY, MED HARD																	
		7697	10.1		SUB GLASSY EUHEDRAL FELDSPARS Py DISS	F	2				1	1										
		7698	9.9		& ON FRACTURE FACES. SOME Py - CARB	D	1			1	1	1						1%		—		
		7699	4.5		VEINING. ONLY TRACE CPY OBS ON FRACT &																	
					DISS. SLIKENSIDED SURFACES CONTAIN																	
					GROUND SULPHIDES AND A VERY LITTLE (?)																	
					MoS_2																	
576	602	7700	11		TYPE I Q.D.P. SIMILAR TO 364 - 446,	F	2-3					2		0-1								
		7701	8		SHEARED & MYLONITIZED CONTACT WITH PRECEEDING	D	1-2			0-1	2	0-1		0-1				2			.2	
		7702	7		TYPE II. CPY VEINLETS TO 1 CM WIDE																	
					APPARENT ON SOME SHEAR PLANES, OTHERS HAVE																	
					VUGGY QTZ FILLINGS OR QTZ/Py FILLINGS																	
					SOME HEMATITE STAIN ON FRACTURE SURFACES																	
					MOSTLY Py ON FRACT SURFACES BUT OCC																	
					FRACTURES CONTAIN REL GOOD CPY/Py.																	
					END OF "H" CORE																	
					"N" CORE CONTINUES ON P. 4																	

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: CR 74-4 Page No.: 4
Length: 801
Lat.:
Drill Type: LONGYEAR 44
District:
Bearing:
Dept.:
Hole Size: HQ - NQ
Commenced:
Inclination:
Elev.:
Contractor: CAN. LONGYEAR
Logged by: W.A. HOWELL
Completed:
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.	NQ CORE		Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
602	690	7703	9		TYPE II (?) Q.D.P. MOD HARD SUB GLASSY														
		7704	10		PLAG PHENOCRYSTS (.5 to 2 mm LONG) MAFIC IS	F	1			2	1	1		1	1-2				
		7705	10		CHLORITE VARIABLY BLEACHED, FELDSPARS IN	D				2	1	0-1		0-1		2%			.1
		7706	10		MORE BLEACHED SECTIONS BECOMING SOFTER														
		7707	10		AND TRENDING TO QTZ SERICITE. FRACTURES														
		7708	9		ARE DOMINANTLY PY COATED WITH OCC														
		7709	10.2		FRACTURES HAVING SOME CPY. OCC QTZ														
		7710	5.3		VEINING TO .5 CM. AND OCC VUGGY CARB.														
		7711	10.3		VEINING. CORE IS VERY BROKEN, WITH														
		7712	10.2		GOUGE @ 660' OCC PY VEINING TO .5 CM														
					I MINOR CPY. MINOR HEMATITE STAINING ON														
					FRACT. SURFACES														
690	801	7713	10.2		HORNFELS - DARK GREY GREEN COLOUR,	F	1-2			2		1			2-3				
		7714	10.2		INTRUSIVE CONTACT OBS. MARKED INCREASE	D	1		(?)	2						3%		tr/1	.25
		7715	10.3		IN CPY CONTENT. FELDSPARS IN THE HORNFELS														
		7716	10.3		MATRIX ARE HARD & GLASSY. CHLORITE														
		7717	10		(± ? 2° Bi) IS PRESENT AS CLOTS AND														
		7718	10		DISSEMINATED GRAINS. FRACTURES														
		7719	10		COMMONLY CONTAIN PY WITH SOME CPY														
		7720	10		CPY IS ALSO OBS. AS OCC DISS GRAINS.														
		7721	10		QTZ SERICITE GYPSUM CHLORITE VEINS ± PY, CPY														
		7722	10		ARE ALSO OBS. GYPSUM VEINLETS														
		7723	9		PRESENT. A SINGLE 5 CM WIDE VEIN														
					OF "HONEY" SPHALERITE, GYPSUM, HEMATITE														
					PYRITE AND CPY OCCURS @ 767'														
					END OF HOLE														

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-5 Page No.: 1
District: CLINTON
Commenced:
Completed: MAR 28

Length: 535
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: H Q
Contractor: CAN LONGYEAR

Logged by: W P Howell
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
0	60				OVERBURDEN																
60	83	7724	9.5		TYPE I Q.D.P. WEATHERED & BROKEN. GROUND	F	2				2	1									
		7725	12		UP & WEATHERED SULPHIDES ON FRACTURE SURFACES	D	2					2						1%			.3
					AND IN VEINLETS, QTZ/SERICITE ALT. ON																
					FRACTURES. POSSIBLE MINOR CHALCOCITE COATING																
					CPY GRAINS ON OCCAISIONAL FRACTURES AND																
					IN DISSEMINATIONS.																
83	145	7726	8.5		HORNFELS - FRACTURED & BROKEN, DARK GREEN	F				2	1	2									
		7727	7.5		COLOUR, CHLORITE ABUNDANT IN MATRIX.	D	2			3	1							1%			.15
		7728	8		FRACTURES OFTEN ~~have~~ QTZ-SERICITE-CHLORITE																
		7729	10		COATED. PY, CPY MINOR BN ON FRACT. SFC.																
		7730	8		GOUGE, SOME GROUND CORE @ 98'																
		7731	8.5		GOUGE @ 121-124', CORE VERY BROKEN 142-145																
		7732	10																		
145	147.5				GOUGE LOST IN DRILLING																
147.5	236	7733	9		TYPE I Q.D.P. VERY SOFT & INCOMPETENT CORE	F	1			1	3	3		2							
		7734	10		DUE TO EXTREME SERICITIZATION. FELDSPARS	D	2				2	3		2				1%			.1
		7735	11.3		ARE OFTEN COMPLETELY SERICITIZED. PY VEINS																
		7736	11.2		ARE EVIDENT WITH MINOR CPY. PY & CPY																
		7737	8.5		IS DISSEMINATED. "BLACK MUD" SEAMS ARE																
		7738	9		THOUGHT TO BE SHEARS WITH GRAPHITE AND																
		7739	9.5		SULPHIDES. PY, CARB. MINOR CPY IS OBS AS																
		7740	10		FRACTURE FILLINGS & VEINLETS. PY-CARB																
		7741	9.5		VEINLETS INCREASE AROUND 230' TO ~5% OF																
		7742	10.5		ROCK.																
236	270	7743	8.5		HORNFELS - FRACTURED. PY/CPY RATIOS ON	F	1			1	2	2			3						
		7744	10.5		OCC. FRACT FACES IS ~ 1/4. PLAG IS GLASSY	D	2			3	1-2	0-1			2			1%			.2
		7745	10.5		- UNALTERED. ABUNDANT GYPSUM ON FRACTURES																
					AND IN VEINLETS FROM ~250' ONWARDS.																
					FRACTURES ARE COMMONLY SLICKENSIDED.																
					SERICITE CLAY ALT FROM ~270'																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-5 Page No.: 2
Length: 535
Lat.:
Drill Type: LONGYEAR 44
District:
Bearing:
Dept.:
Hole Size: HQ
Commenced:
Inclination: 90°
Elev.:
Contractor: CAN LONGYEAR
Logged by: W A HOWELL
Completed:
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
270	386	7746	11		HORNFELS - HIGHLY FRACTURED ROCK WITH TIGHT														
		7747	10.5		HAIRLINE FRACTURES. ROCK IS GREY GREEN, VERY	F	1			1-2	2	1		1-2	3				
		7748	10		FINE GRAINED. FELDSPARS ARE INDISTINCT.	D	1			1	1-2			2		1%		÷	.2
		7749	10.5		DARK SPOTS ARE CHLORITE RICH.														
		7750	10		ABUNDANT GYPSUM VEINLETS ± CPY, PY														
		7751	10		STRINGERS COMMON. CLAY ALTERATION SEEMS														
		7752	10		TO INCREASE WITH DEPTH. CHLORITE ALSO														
		7753	10		BECOMES MORE DISTINCT. CPY IS OBSERVED														
		7754	10		AS v.f.g. DISSEMINATIONS AND ON FRACTURE														
		7755	10		SURFACES. SLIKENSIDED SURFACES ARE COMMON														
		7756	12.5		AND OFTEN CONTAIN GROUND UP SULPHIDES ±														
					MINOR MoS₂.														
386	406	7757	10.3		HORNFELS - CREAMY COLOUR - COLOUR CHANGE	F	2-3												
		7758	8.2		IS GRADUAL, AT ~ 386 CLAY ALTERATION	D	2			1-2	0-1	1				.75			.15
					DECREASES AND SILICA CONTENT INCREASES.														
					FRACTURES BECOME SILICIFIED AND BLEACHED.														
					QTZ STRINGERS ARE EVIDENT. HAIRLINE FRACTURES														
					CLUSTERED AT ~ 402' CONTAIN HEMATITE.														
					CPY IS DISS. AND IS OFTEN ASSOCIATED WITH														
					CHLORITIC / SERICITIC SPOTS.														
					GYPSUM NOT EVIDENT.														
					GOUGE @ 405-406 - BLACK MUD														
406	454	7759	9		TYPE I Q.D.P. FELDSPARS SUBHEDRAL.	F	2												
		7760	10		MED. SOFT TO VERY SOFT PALE GREEN	D	1	(?)		1-2	1	1-2				1%			.15
		7761	10		(SERICITIZED?) A PINKISH HUE TO THE ROCK MATRIX														
		7762	10		MAY BE K-SPAR BLEEDING OR VERY														
		7763	10		FINELY DIVIDED HEMATITE. THE LATTER														
					EXPLANATION IS FAVOURED. EXTREMELY FINE														
					GRAINED DISS PY & CPY, PY VEINLETS														
					& STRINGERS PRESENT. UP TO PY VEIN TO 1.5 CM														
					CORE BECOMES VERY FRACTURED WITH														
					RETICULATE NETWORK TOWARDS 454														

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-5 Page No.: 3
District: CLINTON
Commenced:
Completed: 28

Length: 535
Bearing:
Inclination:

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: HQ
Contractor: CANADIAN LONGYEAR

Logged by: W. A. Howell
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	Est. Au Cu.
454	517				POST MINERAL DIKE - CREAMY WHITE APLITE. VERY MINOR DISS PY. CORE NOT SPLIT FOR ASSAY. SOME SHEARING EVIDENCED BY SLIKENSIDES IN THE DIKE.																
517	535	7765	18		SHEARED AND BROKEN TYPE 1 Q.D.P.	F	2														
		7766	8.5		SIMILAR TO 406 - 454	D	1	(?)		1-2	1	1-2						1%			.15
					END OF HOLE																
					70' USED HQ ROD LEFT HANGING ~~IN HOLE~~ FROM SURFACE, IN HOLE.																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-6 Page No.: 1
District: CLINTON
Commenced:
Completed: APR. 2

Length: 801
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.: 4807

Drill Type: LONGYEAR 44
Hole Size: HQ - NQ
Contractor: CANADIAN LONGYEAR

Logged by: W.A. HOWELL
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss/Vein	Py/Cpy	EST % Cu
					OVERBURDEN TO 121 FEET														
121	141	7767	10		Q.D.P. TYPE I, FELDSPARS INDISTINCT, SOFT.	F						3							
		7768	12.5		(SERICITIZED?) CHLORITE IS BLEACHED, PY & CPY	D					2	3		0-1		1%			.25
					ON FRACTURES AND STRINGERS, ALSO DISSEMINATED,														
					SOME HEMATITE STAINING ON FRACTURES														
141	252	7769	7.5		BRECCIATED HORNFELS, VERY BLEACHED	F	1-2			1-2	1	2-3		2					
		7770	10.5		CREAM COLOURED FRAGMENTS IN A BLEACHED	D				1	2	2				1%			.15
		7771	9.5		CHLORITE/WHITE MICA RICH GROUNDMASS, FRAGMENT														
		7772	8.5		BOUNDARIES NOT ALWAYS DISTINCT. ABUNDANT														
		7773	8.0		FRACTURING, VERY FINE INDISTINCT FRACTURES														
		7774	8.5		HAVE QTZ CARB ALTERATION, MINOR DISSEMINATED														
		7775	12.6		HEMATITE ALSO PRESENT. QTZ SERICITE ±														
		7776	9.4		CHLORITE ± MAGNETITE VEINING OFTEN HAS														
		7777	9.6		CPY MINERALIZATION.														
		7778	10																
		7779	10																
		7780	10																
252	286	7781	8.5		AS ABOVE WITH LESS BLEACHING - MORE GREEN	F	1-2			2	1	2-3		2					
		7782	10.5		COLOURATION DUE TO INCREASE IN CHLORITE.	D				2-3	1	1-2				1%			.2
		7783	10		CHLORITE ALSO MORE COMMON WITH CPY ON SOME														
					FRACTURE SURFACES. USE SLICKENSIDES MAKE														
					GROUND UP SULPHIDES (PY & MoS_2 ?)														
286	326	7784	10.5		Q.D.P. TYPE I FELDSPARS INDISTINCT TO	F	3					2		2					
		7785	10.5		SUBHEDRAL, ROCK IS BLEACHED, CREAMY GREY	D	3				1					.5			.2
		7786	9.5		COLOUR. NO LARGE QUARTZ 'EYES' BUT QUARTZ														
					IS FAIRLY UBIQUITOUS THROUGHOUT THE ROCK.														
					TOWARDS 326' ROCK GRADES TO A GREY														
					SILICIC HORNFELS 3 OR 4 'TIGHT' HAIRLINE														
					FRACTURES ARE INDIS. AND COMMON. PRO. HQ														

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-6 Page No.: 2
District: CLINTON
Commenced:
Completed:

Length: 801
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: HQ - NQ
Contractor: CANADIAN LONGYEAR

Logged by: W.A. HOWELL
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	% Cu
286	326				CONT'D - FRACTURES COMMONLY CARRY HEMATITE, PY, AND MINOR CPY, WITH QTZ & SERICITE. OCC. QTZ CARB VEINLETS ± PY ACCOMPANY SLIKENSIDED SURFACES																	
326	333	7788	10.5		HORNFELS - BLEACHED, SILICIC, WELL FRACTURED, HEMATITE ON FRACTURES, CHLORITE CLOTS BLEACHED TO WHITE MICA.	F D.	3 3				1 1			1				.75			.25
333	342	~~7789~~			HORNFELS, BRECCIA. IN A PERVASIVE QTZ SERICITE ALTERED QUARTZ DIORITE MATRIX REMANENT CHLORITE CLOTS VARIABLY ALTERED TO WHITE MICA. FRACTURES ~~PRE~~ CONTAIN QUARTZ ± CARB ± SERICITE AND ± MINOR CPY	F D	3 3			1-2	2 2	3 3		1				.5			<.1
342	362	7789 7790	10 10		HORNFELS - DARK GREY TO GREEN COLOUR FRACTURES & VEINLETS CONTAIN QTZ CARB ± MINOR CPY & PY	F D	2			2-3	1 1	1		2				.75			.2
362	418.5	7791 7792 7793 7794 7795 7796	10 10 10 10 10 8.5		BRECCIATED HORNFELS GREEN-GREY COLOUR SIMILAR TO 333-342 BUT WITH LESS SERICITE AND NOTICEABLY MORE CPY ASSOC. WITH FRAGMENTS AND FRACTURES. A SMALL INTRUSIVE DIKE OF TYPE I Q.D.P. IS OBS AT 372-373 AND ENCLOSES HORNFELS FRAGMENTS IN ADJACENT ROCK WHICH IS MORE SILICIFIED & BLEACHED. FRACTURING IS LESS INTENSE THAN 333-342. GYPSUM BECOMING COMMON IN FRACTURES AND AS VEINLETS.	F D	2-3 2			1-2 2		1						.75			.2

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-6 Page No.: 3
District: CLINTON
Commenced:
Completed:

Length: 801
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: HQ - NQ
Contractor:

Logged by: W. A. Newbie
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Vein	Py/Cpy	Est % Cu
418.5	452.5	7797	10		QUARTZ FELDSPAR PORPHYRY - LOCALLY SOME	F	2			2					2-3						
		7798	10.5		TYPE I. FELDSPARS ARE HARD OPAQUE.	D.	3			2-3		0-1		1				.75			.15
		7799	11		MAFIC IS CHLORITE WITH VERY OCCASIONAL																
					RELICT HORNBLENDE. QTZ IS PERVASIVE																
					THROUGHOUT THE MATRIX AND ONLY OCCASIONAL																
					AS PHENOCRYSTS OR 'EYES'. THE ENTIRE																
					SECTION MAY BE A MORE SILICIC VARIANT																
					OF TYPE I Q.D.P. ROCK IS GREY IN																
					COLOUR. FRACTURES ARE VARIABLE FROM																
					'TIGHT HAIRLINE' TO GYPSUM FILLED																
					STRINGERS AND VEINLETS. CONTACT WITH																
					PRECEEDING BRECCIATED HORNFELS IS																
					OBSERVED ALONG A GYPSUM FILLED																
					FRACTURE @ 418.5'. PY AND CPY WITH																
					MINOR BORNITE IS OBSERVED AS "SALT																
					& PEPPER" TEXTURE ON SOME FRACTURE FACES.																
					SILICIC ALTERATION OR INTRODUCED QTZ																
					ACCOMPANIES MINERALIZED FRACTURES.																
					CPY & PY ARE ALSO OBSERVED WEAKLY																
					DISSEMINATED THROUGH THE ROCK.																
452.5	456	7800	10		HORNFELS - CONTACT AREA IS BROKEN	F	2-3				2	1-2			2-3						
					& BRECCIATED. GYPSUM AND QUARTZ VEINING	D.	2			3				1-2				1%			.2
					MORE COMMON. FRACTURES ~~MAY BE~~ OCC. ARE SLICKENSIDED																
					PY & CPY OCC. ACCOMPANY VEINING.																
456	577.5	7801	10		HORNFELS - GREEN COLOUR, OCCASIONALLY	F	2														
		7802	10		BUFF WITH DARKER SPOTS. ROCK IS	D	2-3			3	1			0-1	2-3			1%			.25
		7803	9.5		LARGELY E.g. "FELTED" CHLORITE AND																
		7804	10.5		QTZ. CPY AND PY ARE OBSERVED AS																
		7805	10		MINOR DISSEMINATIONS AND OCCASIONAL CLOTS.																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-6 Page No.: 4
Length: 801
Lat.:
Drill Type: LONGYEAR 44
District:
Bearing:
Dept.:
Hole Size: HQ - NQ
Commenced:
Inclination: 90°
Elev.:
Contractor: CANADIAN LONGYEAR
Logged by: W. A. Howell
Completed:
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/Vein	Py/Cpy	% Cu
456	597.5	7806	10		CONT'D. - CPY IS MORE COMMON THAN																
		7807	10		PY ON OCCASIONAL HAIRLINE FRACTURES.																
		7808	10		MAGNETITE IS COMMON, GIVING THE ROCK																
		7809	10		A NOTICEABLE MAGNETIC CHARACTER, LOCALLY																
		7810	10		MAGNETITE HAS ALTERED TO HEMATITE																
		7811	10		ALONG FRACTURES OR OCCASIONAL SHEARS.																
		7812	5		MAGNETITE IS GENERALLY LESS COMMON BELOW																
		7813	5		520'																
		7815	10		HQ CORE ENDS AT 572'																
597.5	607	7816	10		TYPE I Q.D.P. DIKE, FELDSPARS ARE WHITE, MED	F	3								1						
					HARD INTERSTITIAL QUARTZ THROUGHOUT THE MATRIX.	D	2-3			2-3	1-2			0-1	1			1%			25
					CHLORITE GENERALLY IN BLOTS AND OCC AFTER																
					HBDE. MINOR DISS. MAGNETITE. FRACTURES HAVE																
					QUARTZ FILLING OR ALTERATION. MANY ARE																
					'TIGHT'. PY & CPY MAY ACCOMPANY FRACTURES																
607	683	7817	10		HORNFELS SIMILAR TO 456 - 597.5	F	2														
		7818	10		ROCK IS BROKEN & SHEARED @ 659 - 665	D	2-3			3	1			0-1	2-3			1%			.25
		7819	10																		
		7820	10																		
		7821	10																		
		7822	8																		
		7823	7.6																		
		7824	10.4																		
683	693.5	7825	10		POST MINERAL DIKE - SMALL SUB-HEDRAL	F															
					PLAGIOCLASE XTLS, CHLORITIZED RANDOMLY ALIGNED	D.															
					HBDE, BLADED XTLS. VERY MINOR DISS. PY																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-6 Page No.: 5
District:
Commenced:
Completed:

Length: 801
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: LONGYEAR 44
Hole Size: HQ - NQ
Contractor: CANADIAN LONGYEAR
Logged by: W A. Howell
Approved by:
Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	EST % Cu	
693.5	788	7826	10		HORNFELS - SIMILAR TO 456-597.5	F	2															
		7827	10		AND 607 - 683	D	2-3			3	1			0-1	2-3			.1%			.25	
		7828	10																			
788	801	7829	10		TYPE I Q.D.P. (?) GREY COLOUR	F	1-2															
		7830	10		FELDSPARS COMMONLY SMALL MED HARD WHITE.	D				2-3	1				1-2			.5			.1	
		7831	4		MINOR CPY & PY DISS AND ALONG QTZ																	
		7832	10		FILLED FRACTURES AND VEINLETS. HORNFELS																	
		7833	10		MAY BE SHOWING UP AGAIN AT 880-801																	
		7834	10																			
		7835	10																			
		7836	10																			
		7837	4																			

DIAMOND DRILL RECORD

Property: Fish Lake
Hole No.: Q-74-7 Page No.: 1/3
District: Clinton
Commenced:
Completed:

Length: 707'
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.: 4841'

Drill Type: 44
Hole Size: HQ-NQ
Contractor: Canadian Longyear

Logged by: W.A. Howell
Approved by: C.S. Ney Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
					Overburden to 30'																
30	97	7838	10.5		Spotted Hornfels. Quartz is present as a pervasive	F	3				1	0-1		2							
		7839	9.5		interstitial mineral rather than as quartz phenocrysts	D	3			3	1-2			1				1%			3
		7840	10		Rock is broken and weathered to 50.5'. Minor																
		7841	10		malachite on rusty fractures. Minor Qt.-carbonate																
		7842	10		veining accompanied by py-cpy and specular																
		7843	7		hematite is evident.																
		7844	10		Cpy is disseminated and on fractures. Spots and																
					clots of chlorite ranging in size from 2 - 20 mm.																
					Rock is locally bleached to a buff colour but generally																
					is a grey green colour in gross appearance. Type I																
					ppy appears locally																
97	167	7845	10		Hornfels - more bleached than previously increase	F	3			1				2				1%			.3
		7846	10		in clay alt. and decrease in chlorite, otherwise	D				1	2-3			0							
		7847	10		similar.																
		7848	10																		
167	215	7849	10		Hornfels - darker in colour shearing evident	F	2-3				1			2							
		7850	10		Grey to tan colour variable qtz. carb. veinlet	D				1-2	2			0				1%			.2
		7851	10		to 3 cm with cpy & py, occasional open space																
		7852	10		filling along shears may contain qtz.carb. with																
		7853	10		py & cpy also. Locally the hornfels may be quite																
		7854	10.5		bleached to a buff or tan colour.																
		7855	12																		
215	331	7856	10		Hornfels - more chlorite than before, similar to	F	3							2-3							
		7857	10		30 - 97	D	3			2	1			2				1%			.25
		7858	10.5																		
		7859	10																		
		7860	10																		
		7861	12																		
		7862	10																		

DIAMOND DRILL RECORD

Property FISH LAKE
Hole No. Q-74-7 Page No. 2/3 Length _____ Lat. _____ Drill Type _____
District _____ Bearing _____ Dept. _____ Hole Size _____
Commenced _____ Inclination _____ Elev. _____ Contractor _____ Logged by _____
Completed _____ Approved by _____ Date _____

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy		
		7865	10		Continued																	
		7866	10		Occasional pink carbonite veining up to 5 cm																	
	331	7867	10		wide has 5 mm black sphalerite border, cpy & py																	
		7868	10		occur in veinlets and stringers up to 1.5 cm wide and																	
		7269	10		occasionally on hairline fractures. Cpy & py are a																	
		7270	10		also very weakly disseminated.																	
		7271	10																			
		7272	10																			
		7273	10																			
		7274	10																			
		7275	10																			
		7276	10																			
		7277	9																			
		7278	9.5																			
		7279	14.5																			
		7280	13.5																			
		7282	8.5																			
	487	7283	10																			
487	569	7284	10		Quartz feldspar porphyry - feldspars med. hard	F	3							1-2	1-2							
		7285	10		white to chalky, quartz phenocrysts of 4 mm	D	3			2	1-2							1%			.25	
		7286	10		diameter present. Chlorite variably present - less																	
		7287	10		evident in bleached portion. Cpy and Py on hairline																	
		7288	10		fractures to veinlets and stringers up to 1 cm wide																	
		7289	5		Gypsum in stringers evident from approximately 525'																	
		7290	9		minor vuggy terminated quartz etles on zone faces.																	
		7291	10		Carbonate variably present with quartz in occasional																	
		7292	6		veinlets.																	
569	645	7293	10		Hornfels buff tan to dark green, chlorite common	F	2-3															
		7294	10		in darker variety, selinite veinlets and quartz	D	2			2-3	2			2-3				1.5%			.3	
		7295	10		stringers evident often with accompanying Cpy & Py.																	

DIAMOND DRILL RECORD

Property: Fish Lake
Hole No.: Q-74-7 Page No.: 3/3
Length: Lat.: Drill Type:
District: Bearing: Dept.: Hole Size:
Commenced: Inclination: Elev.: Contractor: Logged by:
Completed: Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcv.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/ Veln	Py/ Cpy	Est. % Cu
569	645	7297	10		Continued.																
		7298	10																		
		7299	10																		
		7300	10																		
645	682	7301	10		Qtz. feldspar porphyry similar to 487 - 569	F	2-3			1	1										
		7302	10		Py & Cpy on hairline fractures and with small	D	3			2	2				2			1%			.2
		7303	10		1 - 2 mm quartz stringers. Gypsum stringers																
		7304	10		also evident.																
					Py and Cpy also disseminated. Chlorite may be																
					locally bleached.																
682	747	7305	10		Hornfels - generally bleached to a buff or tan	F	2			1-2	1			2	3			.75			.5
		7306	10		color, some minor 2nd Bi evident 715 to 725'	D	2		1		1										
		7307	10		commonly contain hematite after magnetite. Qtz.																
		7308	10		veining and stringers may have chlorite. Cpy &																
		7309	10		Py accompanying some shearing has accompanied																
		7310	10		some of the qtz. stingers. Gypsum stringers are																
					common.																
747	780	7311	10		Type I(?) Q.D.P. Quartz eyes as phenocryst	F	1-2				2			2	2-3						
		7312	10		are lacking. Rock is very bleached, feldspars	D	1				2-3							.75			.15
		7313	10		soft and indistinct. Cpy & Py is commonly in																
			10		fairly tight fractures, rarely disseminated minor																
			10		hornfels locally.																
780	797	7314	10		Type I(?) Q.D.P. similar to above but noticeably	F	1-2				2			2	2-3						
		7315	10		less Cpy., Py is more common. Rock appear to be	D	1				2-3							.75			-.1
					gradational between hornfels and porphyry.																
					END OF HOLE.																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-8 Page No.: 1
District: Clinton
Commenced:
Completed:

Length: 402
Bearing:
Inclination: 90°

Lat.:
Dept.:
Elev.:

Drill Type: L-44
Hole Size: NQ
Contractor: Can. Longyear

Logged by: W.A. Howell
Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy	Est % Cu
					Overburden at 41 feet																
41	80	7316	9.5		Type I Q.D.P. - weathered and broken, Py &	F	2				2			2				.75			.2
		7317	8.5		CPY on rusty & weathered fracture surfaces	D	1-2				2-3										
		7318	12		Grains of Cpy in the weathered surface commonly																
		7319	14		contains coatings of covellite/chalcocite, fractures																
					commonly contain qtz. & carbonate and minor																
					malachite, rock is bleached, feldspars small,																
					(up to 2 mm) soft white.																
80	109	7320	10		Hornfels grey green to buff colour occassional	F	1-2			1	2			2				.75			.15
		7321	12		fine fracture contains Cpy & Py. Py is also	D	1-2			2-3	2										
					weakly disseminated, carbonate stringers common.																
109	197	7322	9		Type I Q.D.P(?) fine-grained average feldspar	F	1-2							1-2				.75			.15
		7323	10.5		size .5 - 2 mm. Feldspars chalky white chlorite	D				1-2	2										
		7324	9.5		partially bleached Cpy, Py & hematite variably																
		7325	8.5		present on fine fractures and occassionally as																
		7326	10.5		disseminations, minor qtz. stringers have chlorite																
		7327	10		and Cpy. Thes section may be in fact an advanced																
		7328	12		grade of hornfels. Locally the fine porphyritic																
		7329	10		texture dissappears and the rock looks like hornfels.																
		7330	10																		
197	217.5	7331	10		Hornfels - grey "crackled texture" v.f.g. dissem.	F															
		7332	10		Cpy & Py fracture also contain Cpy & Py, minor	D															
					vuggy qtz. carbonate veining present. Other than																
					"crackle" fractures are not particularly common.																

DIAMOND DRILL RECORD

Property: FISH LAKE
Hole No.: 74-8 Page No.: 2
Length: Lat.: Drill Type:
District: Bearing: Dept.: Hole Size:
Commenced: Inclination: Elev.: Contractor: Logged by:
Completed: Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss/ Vein	Pv/ Cpy		Est. % Cu
217.5	402	7333	10		Type I Q.P.D.(?) very similar to 109 - 197	F	1-2			1	1-2			1-2				1%				.25
		7334	10		pyrite is diss. on fractures and as occassionally	D				2	2-3											
		7335	10		prominent veinlets up to 1 cm wide. Cpy is also																	
		7336	10		variable - present on tight fractures in small																	
		7337	9		stringers and as disseminations, it was not detected																	
		7338	15		with the pyrite in the prominent veins.																	
		7339	10		Chlorite is occassionally introduced on the fractures																	
		7340	12		usually with quartz as previously mentioned, this																	
		7341	12		section also may in fact be an advanced grade of																	
		7342	8		hornfels rather than Type I Q.P.D.																	
		7343	10																			
		7344	10																			
		7345	10																			
		7346	10.5																			
		7347	9																			
		7348	11.5																			
		7349	10																			
		7350	8		END OF HOLE																	

DIAMOND DRILL RECORD

Property: Fish
Hole No.: 74-9 Page No.: 1/1
District: Clinton
Commenced: May 3, 1974
Completed: May 8, 1974
Length: 407
Bearing:
Inclination: -90
Lat.:
Dept.:
Elev.: 4910
Drill Type: Longyear 44
Hole Size: NQ
Contractor: Longyear
Logged by: M. Wolfhard
Approved by:
Date: May 8/74

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.			Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.	% Sulph.	Diss./Vein	Py/Cpy
0	60				Casing - overburden													
60	122	7351			QFP, py, cpy, diss., Clay? alt. of													
		7352			feldspar, clost of sericite throughout	F	1										9/1	8/1
		7353				D						2-3						
		7354																
		7355																
122	190	7356			Q D, type IIa. White clay?													
		7357				F	1					1-2					1/1	4/1
		7358			Alt. of all feldspar. No	D						1						
		7359			mafics left. py, cpy, diss. and													
		7360			frac.													
		7361																
		7362																
190	223	7363			Hornfels or type IIa. Dark green	F	1			1							1/1	2/1
		7364			abundant clots of chlorite.	D				3								
		7365			Feldspar soft.													
		7366																
223	407	7367			Q D, type IIa. 122-190	F	1					1-2					1/2	4/1
		7368				D						tr						
		7369																
		7370																
		7371																
		7372																
		7373																
		7374																
		7375																
		7376																
		7377																
		7378																

DIAMOND DRILL RECORD

Property: Fish

Hole No.: 74-9 Page No.: 2 Length: 407 Lat.: Drill Type: Longyear 44

District: Clinton Bearing: Dept.: Hole Size: NQ

Commenced: May 3, 1974 Inclination: -90 Elev.: 4910 Contractor: Longyear Logged by:

Completed: Approved by: Date:

FOOTAGE From	FOOTAGE To	SAMPLE No.	Length	% Rcy.		ALTERATION Q	KF	Bi	Chl.	Cl.	Ser.	Ep.	Cb.	Sul.			% Sulph.	Diss./Vein	Py/Cpy		
		7380																			
		7381																			
		7382																			
		7383																			
		7384																			
		7385																			
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