GM 50887

DIAMOND DRILL RECORD, NORTH ZONE, BELLECHASSE PROJECT

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PROJECT NORTH ZONE / BELLECHASSE PROJECT					
CLAIM P05958	TOWNSHIP ROLETTE/PANET	RANGE VII/I	LOT 34/34		
OCCURRENCE NORTH ZONE	GRID NZ 1987	COORD 16+75E / 1+00N			
LENGTH 334.7'	HORIZ.	VERT.	AZIMUTH 135°	CORE SIZE BQ	
ELEV. 1464'	LOGGED BY J.F. BURZYNSKI	DATE FEBRUARY 19, 1990			

INCLINATION TESTS

DEPTH	DIP	DEPTH	DIP	DEPTH	DIP
COLLAR	46°				
334.7'	44°				

HOLE NO. 90-06

DRILLED BY ST. LAMBERT

STARTED FEBRUARY 15, 1990

FINISHED FEBRUARY 17, 1990

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
54.5'	54.8'	0.3	0.3	100	9006-1	0.0' - 2.0' DRILL STEM
60.0'	61.8'	1.8'	1.8'	100	-2	0.0' - 9.8' CASING
74.0'	76.0'	2.0'	2.0'	100	-3	
76.0'	77.7'	1.7'	1.7'	100	-4	9.8' - 49.2' FRONTIERE FORMATION
86.4'	87.0'	0.6'	0.6'	100	-5	TURBIDITES: WACKES, SILTSTONES & MUDSTONES.
87.9'	90.3'	2.4'	2.4'	100	-6	LIGHT TO DARK GREY, TO GREY-GRN.
96.1'	98.4'	2.3'	2.3'	100	-7	DOMINANTLY MST WITH 7-8 TURBIDITE
98.4'	103.0'	4.6'	4.6'	100	-8	SEQUENCES (UP TO 1.5' WIDE); FIXING
112.0'	113.5'	1.5'	1.5'	100	-9	DOWNHOLE (SOUTHEAST). ONLY 5-6
115.7'	117.3'	1.6'	1.6'	100	-10	QTZ VEINLETS TH'OUT, ALL ≤1cm WIDE
120.6'	123.5'	2.9'	2.9'	100	-11	W NO VIS MINERALIZATION.
207.5	208.4'	0.9'	0.9'	100	-12	
208.4'	211.2'	2.8'	2.8	100	-13	22' S. @ 30° S. @ 45°
211.2'	215.2'	4.0'	4.0	100	-14	25' S. @ 40° S. @ 38°
215.2	216.6'	1.4'	1.4	100	-15	33' S. @ 60° S. @ 60°
216.6'	219.1'	2.5	2.5	100	-16	45' S. @ 50° S. @ 45°
219.1'	221.5'	2.4'	2.4	100	-17	
221.5'	225.0'	3.5'	3.5	100	-18	30.2' GOUGEY FAULT (1" WIDE)
226.3'	229.0'	2.7'	2.7	100	-19	
231.0'	233.8'	2.8'	2.8	100	-20	46.2'-46.5' 5mm QTZ VEINLET @ ~10°
252.2'	253.3'	1.1'	1.1	100	-21	
260.6'	265.3'	3.7'	3.7	100	-22	47.0'-47.7' DISTORTED/SHEARED QTZ-CARB
265.3'	269.3'	4.0'	4.0	100	-23	VEIN(S) @ ~50°. NO VIS MIN.
269.3'	273.3'	4.0'	4.0	100	-24	
273.3'	276.5'	3.2'	3.2'	100	-25	
276.5'	279.8'	3.3'	3.3	100	-26	- 49.2' FRONTIERE FM. / ETCHEMIN FM. CONTACT (?)
279.8'	282.6'	2.8'	2.8	100	-27	
291.0'	294.8'	3.8'	3.8	100	-28	
294.8'	297.6'	2.8'	2.8	100	-29	
297.6'	300.0'	2.4'	2.4	100	-30	

LITHOLOGY

STRUCTURE (SCALE 1" = 20')

MIN'ZN

ALTER.

SM5

HOLE NO. 90-06

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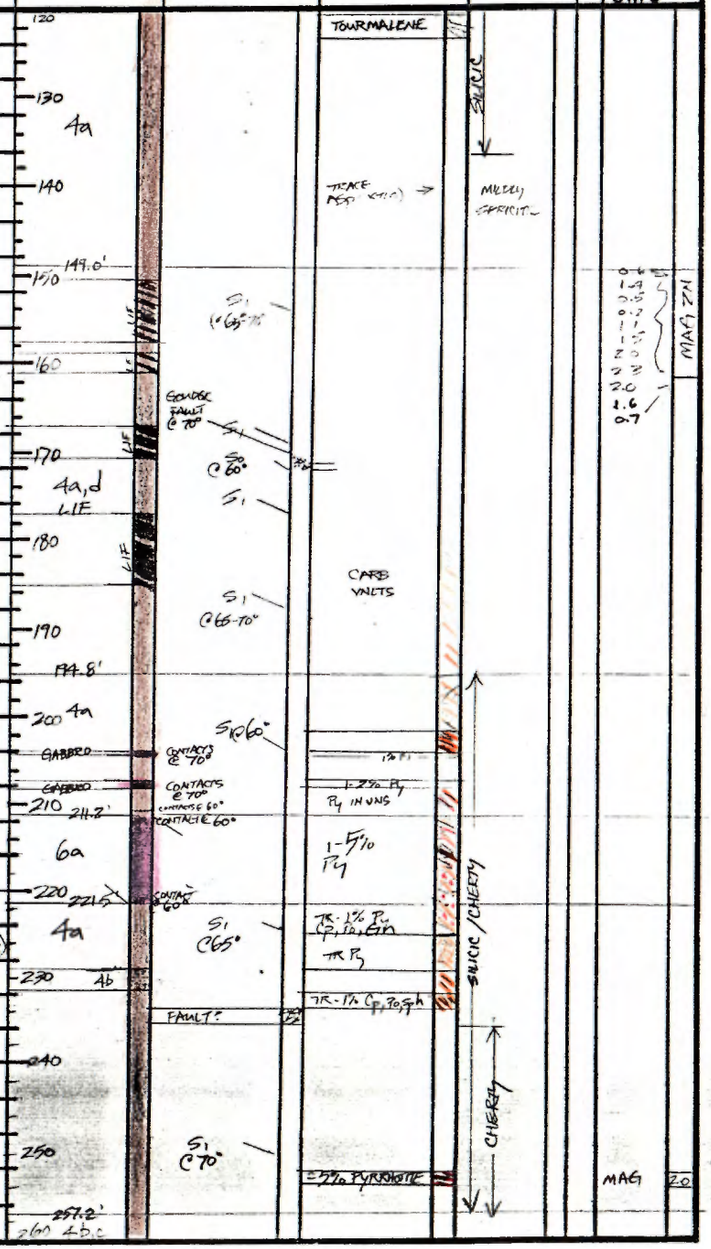
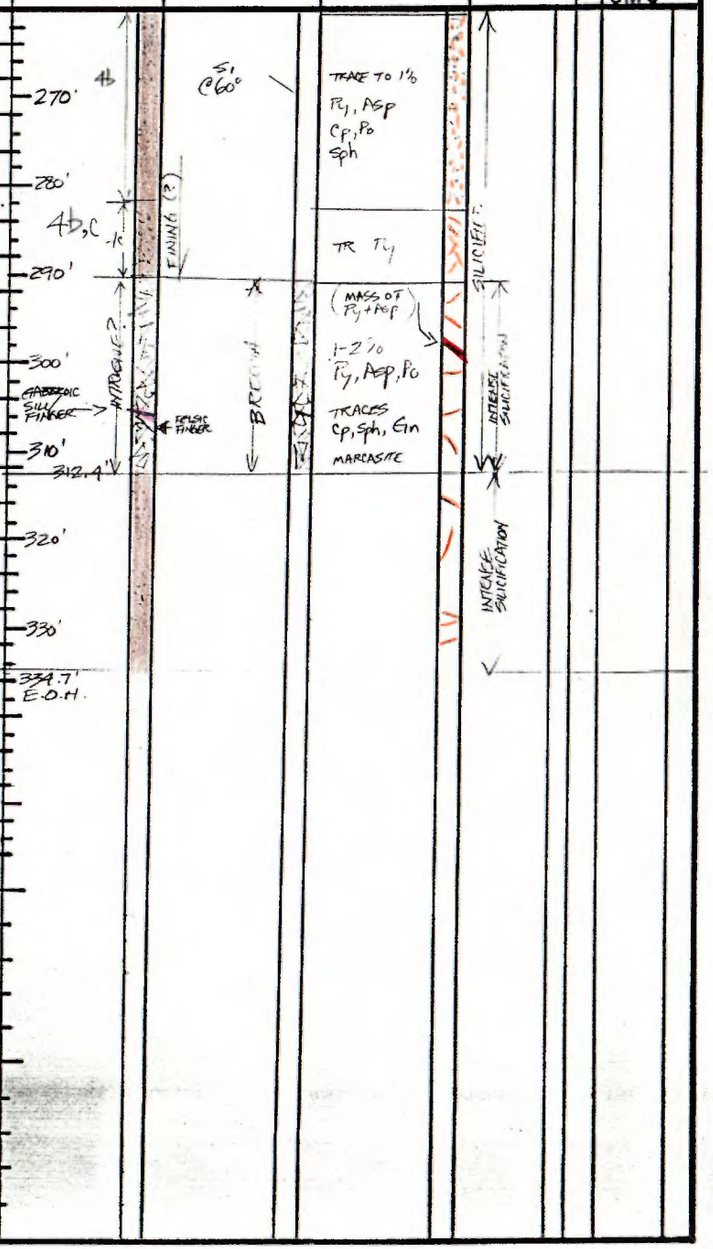
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
300.0'	303.5	3.5'	3.5	100	9006-31	49.2' - 77.7' ETCHEMIN FORMATION
303.5'	305.6	2.1'	2.1	100	-32	GY TO GY-GN MUDSTONES.
305.6'	307.8	2.2'	2.2	100	-33	LOCAL STRONG SHEARING @ 55°-40°
307.8'	312.4'	4.6'	4.6	100	-34	
						49.4' S.@ 60° S.@ 50°-55°
						53.0' S.@ 60° S.@ 60°
						69.0' S.@ 60° S.@ 60°-65°
						72.0 S.@ 45° S.@ 45°
						SECOND FAULT SET @ ~40°.
						SECTION ALSO CONTAINS 20-30 mm SCALE CARB +/- QTZ VEINLETS AT ODD ANGLES TO C.A.
						54.5'-54.8' QTZ+CARB+CHLOR VEINLET @ 70° W TR. PY CUBES & MOD. FEOX. (SHEARED @ 70°
						56.2'-56.4' SHEARED QTZ VEIN @ 30°.
						60.0'-61.8' 6" QTZ VEIN & QTZ STRINGERS. VEIN @ 60°-65° W 1-3% Py + ASP AS DISCRETE SUB TO EUHEDRAL XTALS GENERALLY 1-2 mm DIAM. STRINGERS HAVE <1% Py, (NO ASP NOTED IN SMALLER STRNGS)
						61.8'-74.0' 15-20 mm SCALE QTZ +/- CARB STRINGERS AT ODD ANGLES. NO VIS. SUL.
						74.0'-77.7' 20-25 QTZ STKWK VNLTS @ ALL ANGLES, DOMINANTLY @ ± 60°. STRONGLY SHEARED



HOLE NO. 90-06

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						FROM 75.5' - 77.7' GOOD MIN'ZN
						FROM 74.5' TO 76.0' AS 3-5% Py,
						MINOR ASP AND TRACES OF GALENA
						Py OCCURS AS BLEBS & DISCONTINUOUS
						AGGREGATE SEAMS UP TO 5MM THICK
						GENERALLY // TO CHEAR AT 50°-25°.
						ASP & Gn AS DISCRETE XTALS / BLEBS
						77.7' - 81.6' MIXED LEAM FROM FM. & DK GN MST
						MAGNETIC (SMS RANGES 0.2 TO 2.0)
						So @ 55°/S1 @ 50°
						81.6' - 87.4' DK GN / GN MUDSTONE (SILICIC)
						So // S1 @ 60°.
						82.6' 2MM 'BLEACHED' SEAM IN
						Py STRINGER @ 60°
						— 2 FRACT FILLING QTZ VEINLETS
						(<1CM THICK) @ 55° & ONE 4 INCH
						QCARB VN & STRINGERS FROM 86.4'-87.0'
						SHEARED @ 60°. NO VIS. SUL.
						87.4' - 103.0' SILTSTONE (SILICIC)
						GY TO LT GY. So @ 55°-60°
						S1 @ 50°-55°. SHEAR FABRIC @ 45°-55°
						87.9'-90.3' 7-8 QTZ VEINS RANGING
						1 TO 8 CM THICK, SHEARED @ 55°-60°
						5-8% CLINOZ WITH MAIN VEIN.
						VEINS HOST TRACE AMTS OF Py,
						ASP & Cp AS DISCRETE XTALS.
						90.3'-96.0' 6-7 ≤1cm THICK QTZ VNLS
						@ 45°-50°. NO VIS MIN



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FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						96.1'– 103.0' ≈ 60-70 % QTZ (STKWK) VEINS ≤ 1" THICK @ 40°-50°, SHEARED. X SERICITE/SERICITIZN OF HOST SLTST. VEINS & SLTST CONTAIN ≤1-2% LOCALLY ASP, Py & LOCAL FLECKS OF SPH & Gn. CLINOZ & CHLORITE CLOTS ASS'D W/ MOST VEINS.					
						(SILICIC) 103.0'-149.0' GY TO GY-GN MUDSTONE. So VERY FAINT TO NON-EVIDENT. (? ≈ 60°); S,C 50°-70°					
						103.0'-112.0' STRONG FRACTURING. CORE V. BRN UP, FAULT AT 103.1' (V. GOUGEY/CLAYEY) ORIENTATN?					
						112.0'-113.5' 20-30% QSTK VNLTS @ ODD ORIENTATIONS. AVG. THICKNESS OF VEINS ≈ 3-5mm (UP TO 2cm). TRACE Py.					
						115.7'-117.3' 5-6 QTZ VNLTS, 5mm TO 2cm THICK @ ODD ANGLES. NO VIS. SUL.					
						120.6'-123.5' 5-6 QTZ VNLTS & ONE 3" VEIN @ ODD ANGLES, AVG ≈ 60°. LG. VEIN HAS ≈ 1% BLACK TOURMALENE (<1mm LONG) XTALS					
						136.2'-149.0' LOWER/NEGLIGABLE SILICIFICATION. CORE V. BRN UP, MILDLY SERICITIC. TRACE ASP (XTALS) AT 140.4'					

HOLE NO. 90-06

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω⁻¹ SM5
						149.0' – 194.8' MIXED LIF & DARK GREEN MST (ALTERNATELY MAGNETIC & NON-MAG) WEAKLY TO NON-SILICIC. CORE HEAVILY FRACTURED, BROKEN UP (SHEARED: SLICKS ON MANY S, SURFACES)					
						RD-BROWN MST INTERVALS					
						150.3' – 157.5' (MIXED/SHEARED W GN MST)					
						158.8' – 161.0' GY MST W 20% LIF					
						167.2' – 170.6' LIF & GN MST (60-40)					
						176.9' – 185.0' LIF W ~10% GN MST					
						ALL OTH. INTERVALS ARE DK GN TO GN MST, LOCALLY SERICITIC (ie 165'-166')					
						S1 @ 65°-70° THROUGHOUT. So ERASED BY SHEARING. ONE SILTY/SANDY RED 4" THICK W So @ 60° (173'-173.4')					
						170.6'-172' FAULT ZONE. CRUSH-GOUGY CORE. STRONG SHEARING. FAULT @ 70° ('11 S.)					
						182.0'-192.0' 15-20 mm SCALE CARB VEINLETS IN S1 PLANE (70°).					
						194.8' – 257.2' MUDSTONE WITH MAFIC INTRUSIONS. MUDSTONE RANGES GY-GN TO DK GY BEDDING @ 60°; S1 @ 60°→65°→70° OVERALL V. SILICIC TO CHERTY.					
						194.8'-204.2' GN-GY SILICIC MST, 10-15 QTZ VNLTS @ 60°-70° (DEFMD)					
						(UP TO 1", AVG. 5mm) BETWEEN 201.7'-203.6'					

HOLE NO. 90-06

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω⁻¹ SM.5
						204.2'- 204.7' GABBROIC SILL (?) GN-Gy, V. FINE GR'D. ≃30% <1cm THICK QTZ VNLTS (DEF'MD) @ ≃70°. ? SHEARED & SILICIFIED? CONTACTS @ ≃70°. ≃1% Py AS ONE DISCONTINUOUS mm SCALE SEAM IN THE GAB.					
						206.4'- 207.0' 3-4 mm SCALE Py STRINGERS @ 70° (//S,)					
						207.5'- 208.4' GABBROIC SILL, A.A. ≃10% QTZ VNLTS UP TO 1cm THICK @ 60°-50° 1-2% Py AGGREGATES/BLEBS IN VNLTS.					
						208.4'- 211.2' DK Gy MST W 7 QTZ VEINS UP TO 3cm THICK (AVG. 1-2 cm) @ 50°→30°. LOCALLY 1-2% Py SEAMS IN THE VNLTS.					
						210.7' 8mm THICK MAFIC 'FINGER' W ≃ 3-5% Py AGGREGATES. CONTACTS SHARP @ 60°.					
						211.2'- 221.5' GABBROIC (SILL?) LIGHT GN, FINE TO MEDIUM FINE GRAINED. SHEAR FABRIC. OVERALL					
						GAB CONTACTS SHARP UPPER @ 60° LWR @ 50°					
						(QTZ+CARB+CHLOR) VEINS ± CLINOZ → ≃25% QTZ AS 8-9 DEF'M'D VEINS UP TO 1.4 FT (AVG 1-2") THICK. GAB MATRIX CONTAINS 1-3% (LOCALLY 3-5%) COARSE Py AGGREGATES/BLEBS &					
						215.2'- 216.6' 1.4 FT QTZ VEIN (+CLINOZ+CHLOR) @ 50°, SHEARED.					

HOLE NO. 90-06

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						DISCONTINUOUS SEAMS UP TO 5mm +/- IN DIAMETER.					
						221.5'-225.0' 10-15 SHEARED QTZ VNLTS +TRACE Cp Po & GN → AVG. ≤ 1cm THICK @ 50°-60°. TRACE TO 1% Py BLEBS IN VNLTS.					
						226.3'-229.0' ± 25 QTZ VNLTS AVG. 0.5mm THICK @ 50°-60°. TRACE Py IN VNLTS & HOST MST					
						229.0'-231.0' SILTY INTERVAL, So & FINING? (NOT DISCERNABLE), 2-3 ≤ 5mm THICK QTZ VNLTS @ 50°.					
						231.0'-233.8' 15-20 5mm +/- QTZ VNLTS @ 50°-60° IN SILICIC DK GY-GN MST. ≤ 1%-1% CHALCO +/- Po BLEBS & MASSES (3-5mm DIAM) AND FLECKS OF SPHALERITE IN LOCAL VNLTS & IN KNITTING FRACTURES.					
						233.8'-235.5' CORE V. BKN / FRACT'D (? FAULT?)					
						235.5'-252.2' DK GY TO GY/BLK V. CHERTY MST. ONLY 5-6 mm SCALE QSCARB VNLTS THROUGH THIS INTERVAL					
						252.2'-253.3' LT. GY V. CHERTY (?) MST WITH ± 5% Po CONTENT. Po AS MASSES UP TO 1CM THICK (MOST mm SCALE) FILLING FRACT'S @ 70°-85° Po MAGNETIC (UP TO 2.0)					

HOLE NO. 90-06

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Q-1 SM5
						257.2' - 312.4' SILTSTONE TO GREYWACKE (W MAFIC/FELSIC INTRUSIVES) DK GY TO DK GY-GN. FINE TO V. COARSE GRAINED, N.B: SILICIFICATION HAS DESTROYED ORIGINAL GRAINS BUT 'MACRO FABRIC' STILL EVIDENT. FINING APPEARS TO BE DOWNHOLE. NO PERVASIVE CLEAVAGE, BUT FRACTURES (RARE) TREND AT 60°-70°.					
						(AVG ≤5mm THICK) → ≈ 5-8% QSTK VNLTS UP TO 282.6' 25-30 VNLTS. VNLTS @ ALL ANGLES, LOCALLY BRKUP BY SHEARING & RESILICIFIED					
						LOCAL PATCHY DISSEM'S OF CLINOZ (ie. ASSOCIATED WITH SILICIFICATION).					
						260.5'-282.6' V. WEAK MINERALIZATION THROUGH THIS SECTION (SILICIFIED SLTST), TRACES TO LOCALLY ≈1% Py, Asp, Cp +/- Po AND SPH. MINZN OCCURS AS FLECKS & BLEBS IN MATRIX OF SIL. SLTST & WITHIN THE SMALL QSTK VNLTS. RARE Py BLEBS UP TO 5-8 mm DIAM & ONE 2mm FRACT. FILLING SEAM					
						282.6'-291.0' RESILICIFIED GWKE, V. COARSE GR'D. ORIGINAL QTZ VNLTS(?) LIKELY ALSO SHEARED INTO MATRIX. ONLY 5-8 mm SCALE QTZ VNLTS @ ODD ANGLES. SPARSE TRACES OF Py.					
						POSSIBLE? 291.0'-312.4' BRECCIATED INTRUSIVE(?) GY-CREAM COLORED, INTENSELY SILICIFIED BRECCIA; V FINE TO FINE GRAINED (? ORIGINAL TEXTURE DESTROYED?) POSSIBLE LEUCOCRATIC SILL? SUB mm SCALE					
						? POSS. STRONGLY SERICITIZED SED?					

299.4

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FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						ALTERED PSEUDO-XTALLINE GROUNDMASS (? XTALS = ALTERED FELDSPARS?); BX MATRIX IS CHLORITE (CHLORITIZED). GENERAL ABSENCE OF VEINING (ie 5-10 QTZ mm SCALE VNLTS THROUGHOUT SECTION). SECTION IS					
						(1-2% Py, Asp, Po.) WELL MINERALIZED WITH PYRITE, ASP, Po, WITH TRACES OF Cp, Sph & GALENA. MARCASITE occurs locally ON FRACTURE SURFACES.					
						MINERALIZATION (ASIDE FROM MARCASITE) OCCURS DOMINANTLY IN THE CHLORITIC Bx MATRIX AS AGGREGATE BLEBS, FLECKS; DISCRETE XTALS & XTAL GROUPINGS.					
						298.0' - 298.2' LARGE FRACT. FILLING MASS OF Py + ASP (70% - 30%)					
						305.8' - 306.0' SMALL MAFIC PHANEROIC SILL W SHARP CONTACTS @ 70°-75°.					
						306.0' - 307.0' SMOKEY/Gy INTENSELY SILICIFIED (? ALTERED QTZ VN?) DK GN, CHLORITIC 1% Py IN MATRIX, + TRACE ASP Po + Cp					
						307' 1 cm FELSIC DIKE @ 10° TO C.A COARSE XTALLINE, CREAMY COLOUR. TRACE Py, Po IN MATRIX					
						310.5' - 311.6' INTENSE FRACTURING (UNHEALED) @ 25°-30°					
						LIGHT BLUE mm SCALE XTALS OCCUR ON LOCAL FRACT SURFACES. SIMILAR TO THOSE SEEN IN 8710A, THEY ARE LIKELY ANATASE XTALS (SEE L.L. PET. REPORT, July 23/87 p. 103)					

HOLE NO. 90-06

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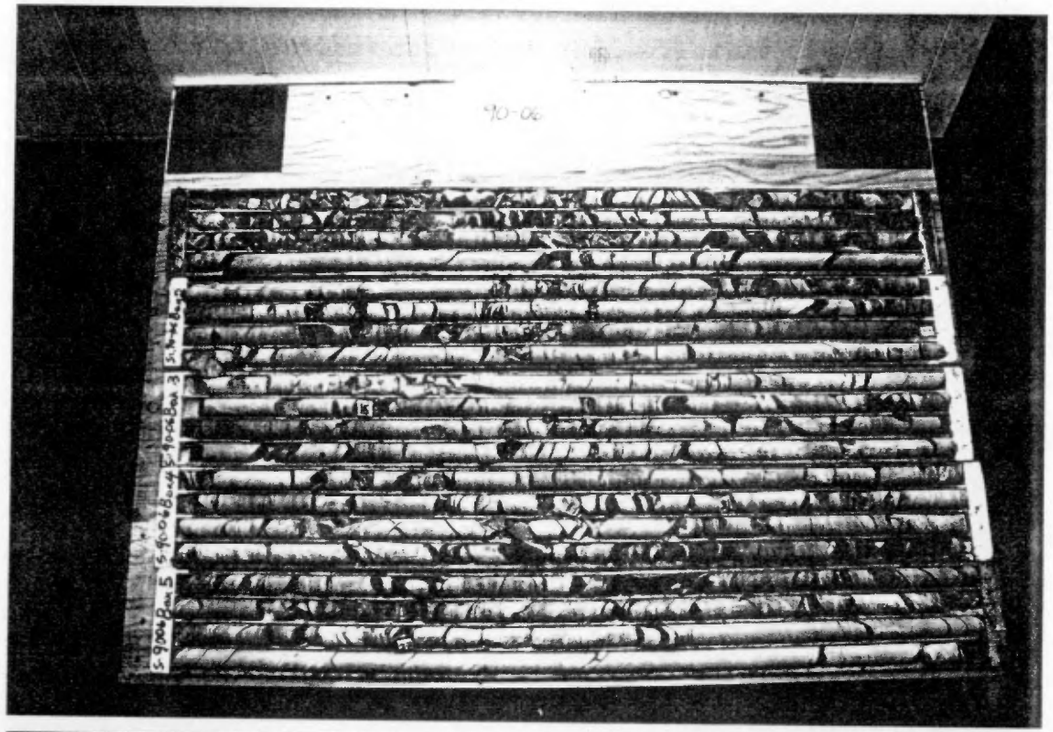
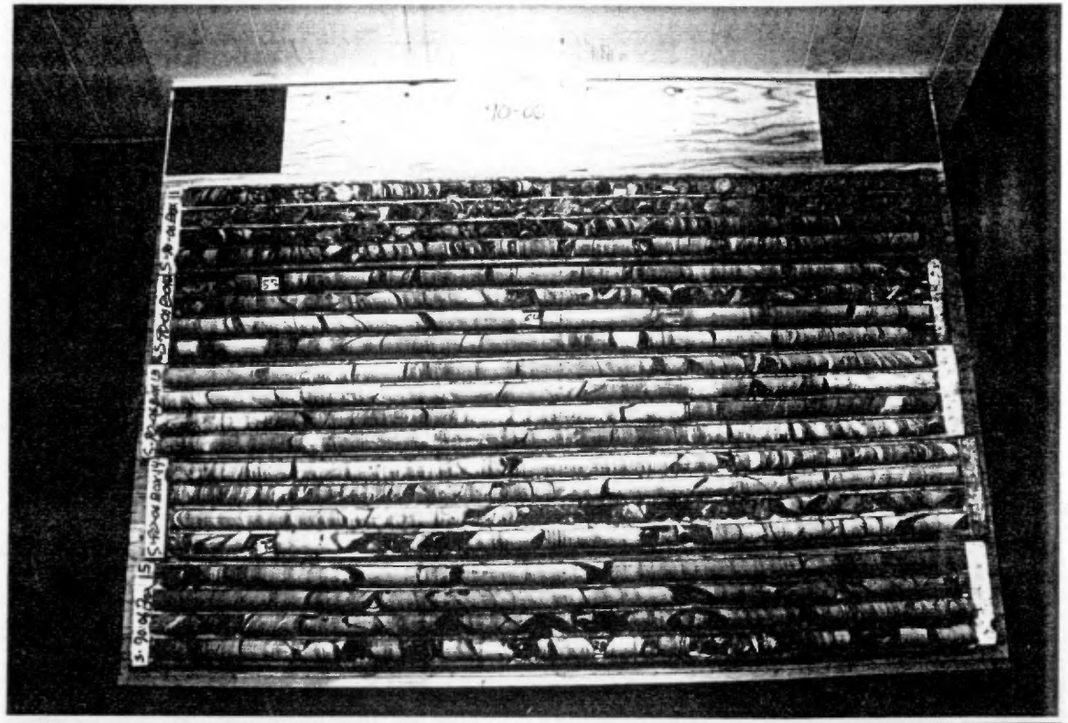
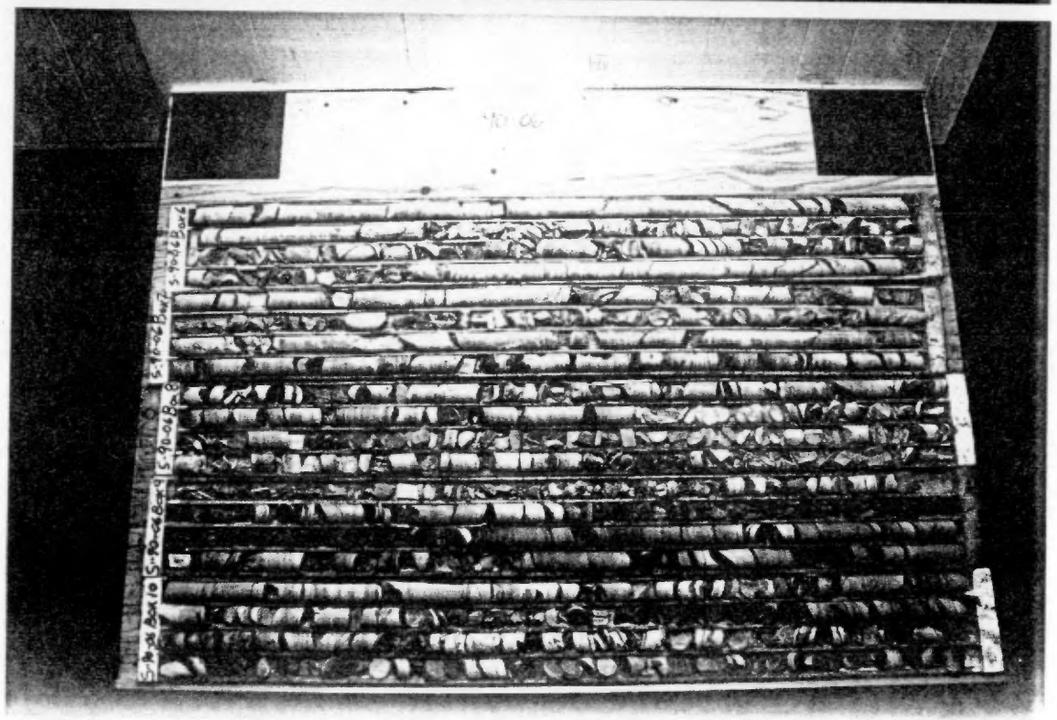
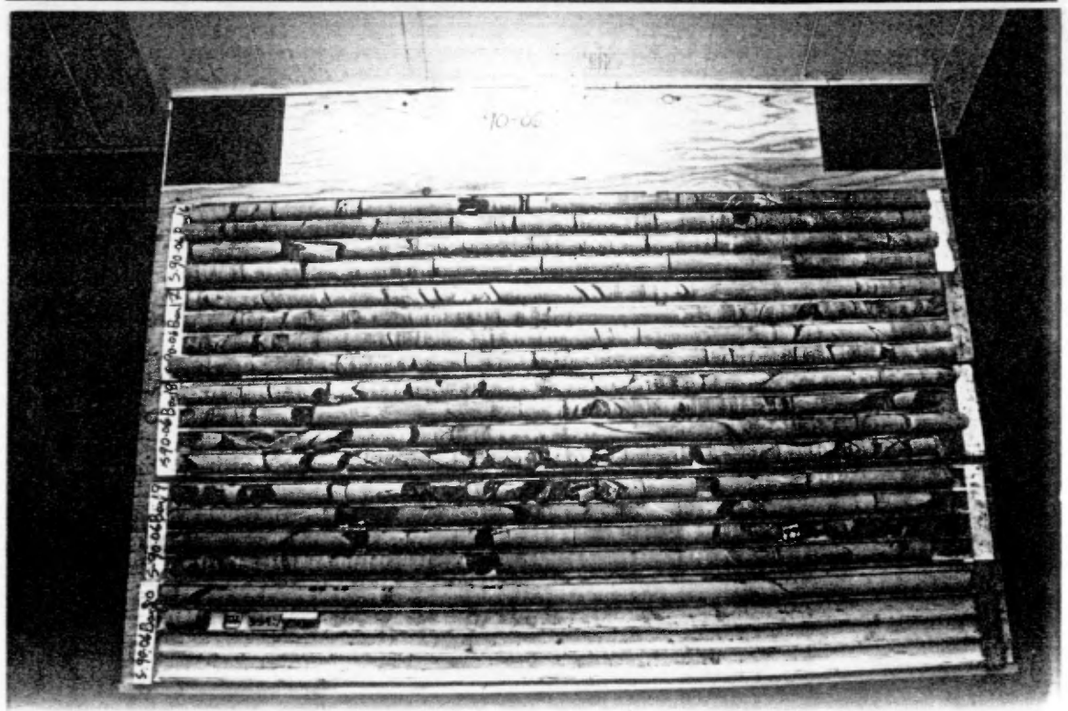
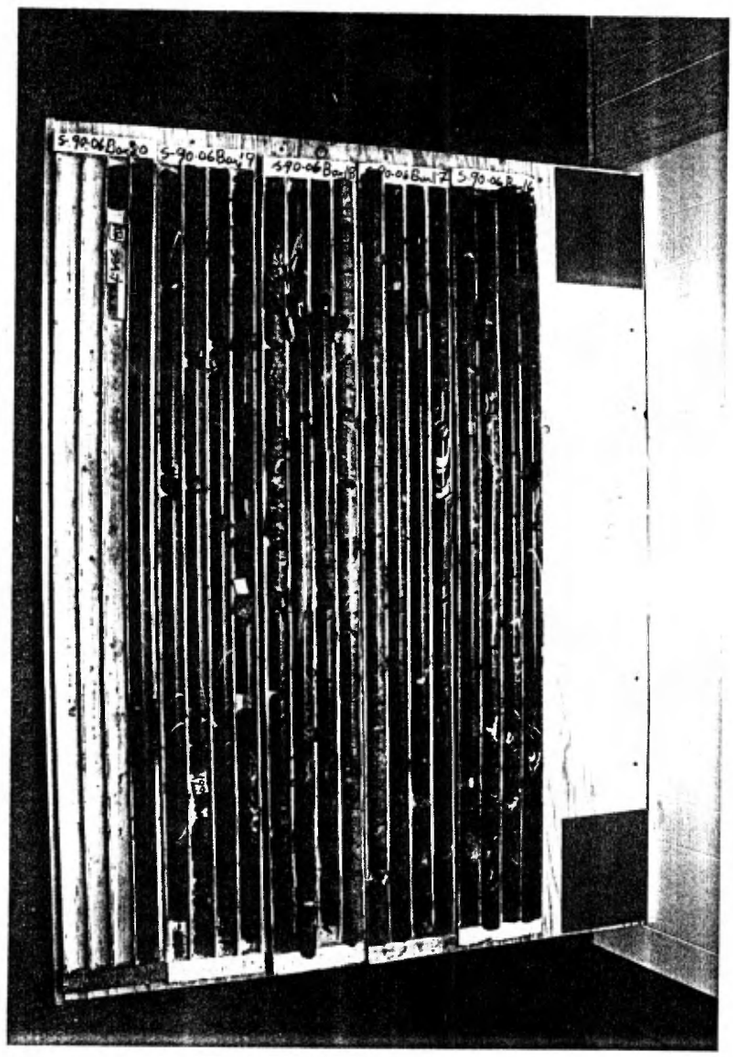
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	QTZ SM 5
						312.4' - 334.7' MUDSTONES, SILTSTONES & GWKES INTENSELY SILICIFIED, ORIGINAL GRAINS IN COARSER UNITS REMELTED/SILICIFIED BUT AS PREVIOUS, MACRO TEXTURE STILL EVIDENT. FINING DOWNHOLE. ~5% MM SCALE QTZ VNLTS & NO CONSISTENT ORIENTATION; NO VISIBLE MINERALIZATION.					
						334.7' END OF HOLE.					







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S-90-06 Box 16

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CHIMITEC LTEE

CERTIFICAT
D'ANALYSE

DATE DE L'IMPRESSION: 2-MAR-90
RAPPORT: C90-50102.4 PROJET: AUCUN PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au GTM	Au GTM
D2 S9006-01		<0.07	<0.07
D2 S9006-02		0.68	0.76
D2 S9006-03		2.14	2.75
D2 S9006-04		0.15	0.32
D2 S9006-05		<0.07	<0.07
D2 S9006-06		1.10	1.37
D2 S9006-07		0.08	0.13
D2 S9006-08		0.17	0.16
D2 S9006-09		0.14	0.08
D2 S9006-10		<0.07	<0.07
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D2 S9006-26		0.07	0.07
D2 S9006-27		0.10	<0.07
D2 S9006-28		1.33	0.81
D2 S9006-29		0.28	0.07
D2 S9006-30		1.10	1.15
D2 S9006-31		<0.07	<0.07
D2 S9006-32		<0.07	<0.07
D2 S9006-33		0.33	0.31
D2 S9006-34		<0.07	<0.07

Richard Deschambault

Work Order : R-0065
KHS

DDH 9006

Sample Number	Sample Wt. g	Conc. Wt. g	Bead Wt. mg	Conc. g/t Au	Fines Wt. g	Fines g/t Au	Float g/t Au	Head Sample no float	Head Sample w/float	Sites +10	Sites +20	Sites -20+60	Sites -60+100
North Zone													
9006-01	45	9.71	1.61	165.83	13	0.40		36.10	1.053	*	*	*	*
9006-02	476	29.32	0.15	4.95	93	2.39		2.55	0.074	*	*	*	*
9006-03	753	23.29	2.68	115.08	159	18.16		21.16	0.617	*	*	2	10
9006-04	376	22.35	0.01	0.54	79	0.74		0.73	0.021	*	*	*	*
9006-05	0	0.00	0.00		0	0.00				*	*	*	*
9006-06	587	23.08	0.06	2.43	147	0.99		1.05	0.031	*	*	*	*
9006-07	633	20.95	0.01	0.57	172	0.15		0.16	0.005	*	*	*	*
9006-08	1472	25.74	0.33	12.82	432	0.53		0.74	0.022	*	*	*	1
9006-09	371	15.84	0.00	< 0.07	107	0.08		0.08	0.002	*	*	*	*
9006-10	446	17.78	0.00	< 0.07	95	0.08		0.08	0.002	*	*	*	*
9006-26	1217	30.03	0.01	0.33	298	0.04		0.05	0.001	*	*	*	*
9006-27	793	17.69	0.17	9.89	156	1.43		1.62	0.047	*	*	*	1
9006-28	1410	21.81	0.25	11.46	267	1.75		1.90	0.055	*	*	*	*
9006-29	953	24.75	0.00	0.08	212	0.77		0.75	0.022	*	*	*	*
9006-30	986	23.92	0.32	13.38	223	2.05		2.32	0.068	*	*	*	*
9006-31	1548	20.14	0.04	1.79	321	0.07		0.09	0.003	*	*	*	*
9006-32	553	21.45	0.00	< 0.07	100	< 0.07		0.07	0.002	*	*	*	*
9006-33	657	19.54	0.03	1.59	120	0.44		0.47	0.014	*	*	*	*
9006-34	1297	26.55	0.00	< 0.07	297	0.19		0.19	0.006	*	*	*	*

PROJECT NORTH ZONE / BELLECHASSE PROJECT						INCLINATION TESTS						HOLE NO. 90-07	
CLAIM P05959	TOWNSHIP ROLETTE/PANET		RANGE VII/I	LOT 35/35		DEPTH	DIP	DEPTH	DIP	DEPTH	DIP		
OCCURRENCE NORTH ZONE	GRID NZ 1987		COORD 3+40E/0+70N			COLLAR	46½°					DRILLED BY ST. LAMBERT	
LENGTH 433.1'	HORIZ.	VERT.	AZIMUTH 135°	CORE SIZE BQ		433.1'	43°					STARTED FEBRUARY 17, 1990	
ELEV. 1466'	LOGGED BY Luc Daigle		DATE Feb 25, 1989									FINISHED FEBRUARY 20 1990	

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
192.5'	194.7'	2.2'	2.2	100	9007-1	0.0' - 3.0' DRILL STEM
196.6'	198.6'	2'	2	100	9007-2	0.0' - 13.1' CASING.
198.6'	200.6'	2'	2	100	9007-3	
200.6'	202.6'	2'	2	100	9007-4	13.1' - 433.1 Etchemin Formation / FRONTIERE FM.
202.6'	204.6'	2'	2	100	9007-5	
204.6'	207.1	2.5'	2.5'	100	9007-6	The hole is comprised of fining downhole
207.1'	209.1'	2'	2'	100	9007-7	turbidite sequences. Also thick units
271.0'	272.0'	1'	1'	100	9007-8	of green, grey, and red mudstone are
286.9'	291.9	5'	5'	100	9007-9	common. Mineralization is observed as
291.9'	292.9	1'	1'	100	9007-10	sulphidic mudstones and greywackes, and
292.9'	294.25	1.35'	1.35'	100	9007-11	in quartz/carb stock work systems.
294.25'	295.6	1.35'	1.35'	100	9007-12	Pyrite predominates in the sediments
309.3	310.3	1'	1'	100	9007-13	while arsenopyrite dominates in
310.3	310.55	2.5"	2.5"	100	9007-14	quartz veins and silicified zones.
310.55	315.0	4.45'	4.45'	100	9007-15	
315.0	320.0	5'	5'	100	9007-16	13.1'-71.4 L. Light grey, coarse grained,
320.0	324.8	4.8'	4.8'	100	9007-17	FRONTIERE FM. massive and fining downhole greywacke.
324.8	330.6	5.8'	5.8'	100	9007-18	White clasts (felsic?) up to 3mm in diameter
330.6	336.0	5.4'	5.4'	100	9007-19	and flattened lithic fragments
336.0	341.0	5'	5'	100	9007-20	dominant the coarse clastic component.
341.0	346.0	5'	5'	100	9007-21	A sulphidic, weathered carb concretion about
393.3	398.3	5'	5'	100	9007-22	(quartz carb conc at 64.9) 1" thick occurs at 67', from 67' to
405.2	410.2	5'	5'	100	9007-23	59' the greywacke is sulphidic with
410.2	415.2	5'	5'	100	9007-24	seams and blebs of fine grained py. <2%
415.2	420.2	5'	5'	100	9007-25	S1 ≈ 45° So ≈ 70°
420.2	425.2	5'	5'	100	9007-26	
425.2	430.2	5'	5'	100	9007-27	FRONTIERE FM. 71.4-90.1 Light grey greywacke and mudstone,
430.2	433.1	2.9'	2.9'	100	9007-28	interbedding, fining down hole sequences
						of greywacke to thin mudstones. 13
						sequences form this unit.

LITHOLOGY: Numerous ≈3mm white (feldspar) clasts and flattened lithics; 3a,b,c tu; 3d; LIF 4d

STRUCTURE: S1≈45°; So≈70°; S1≈45°; So≈70°; S1≈45-65°; So≈65°; S1≈60°; So≈65°

MIN'ZN: ≈<2% Py as seams, veins, dessiminations; Py cubes at base of greywacke

ALTER.

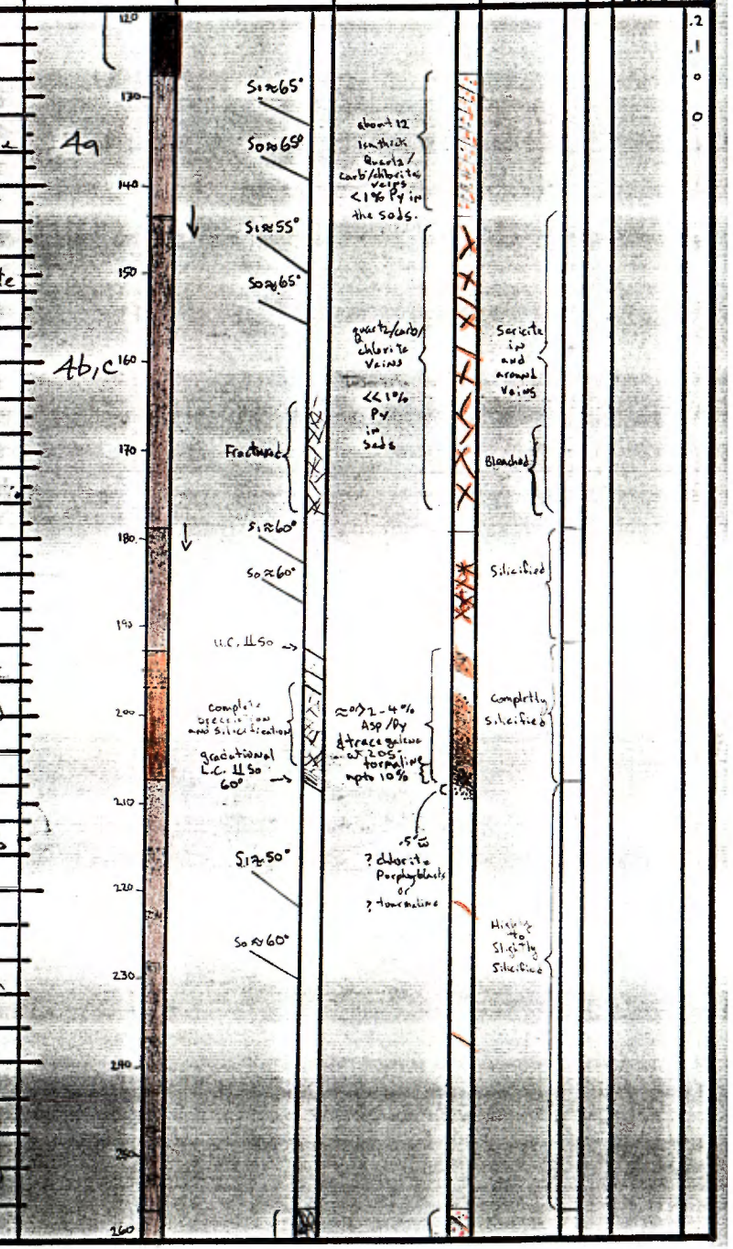
Ω-1 SM5

HOLE NO. 90-07

PAGE 2 of 6

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						$S_1 \approx 45°$, $S_0 \approx 70°$
						90.1 - 95.6 Light green mudstone, this in the fine down hole end of the last greywacke in the previous unit. The contacts are gradational. The greywacke base to this unit is sulphidic with 0 1mm Py cubes (.5cm) and dessiminations. A ½" quartz/carb/chlorite vein occurs at 93.6'.
						FRONTIERE FM. $S_1 \approx 45$-$65°$ $S_0 \approx 65°$
						S_1 refracts to Sub ⊥ to S_0
						FRONTIERE/ETCHEMIN CONTACT
						95.6 - 127.5 (Lean Iron Formation) Red mudstone with some green intercalations. Both upper and lower contacts are gradational. The rock is highly fissile, parting along the cleavage planes easily. The cleavage is kinked in some places. The unit is NON MAGNETIC to weakly magnetic (SM-5, 0.1-0.2)
						(LIF) $S_1 \approx$ ⊥60° ∪ $S_0 \approx$? 60-65°
						127.5 - 143.4 Light green to grey mudstone. Highly fissile, contains about 12 Quartz/carb/chlorite veins ≈ and < 1cm thick. The unit is slightly sulphidic < 1% Py. Also the unit progressively become green downhole. The QV. are ⊥ to S_1 which is sub ⊥ to $S_0 \approx 65°$
						143.4 - 179' Light grey silty greywacke thinly to thickly laminated. The unit is cut by numerous quartz/carb/chlorite veins cutting the core ⊥ to ⊥ to S_1 and $S_0 \approx 55$-$65°$

LITHOLOGY | STRUCTURE | MIN'ZN | ALTER. | Ω-4 SM5



HOLE NO. 90-07

PAGE 3 of 6

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						Sericite alteration occurs around veins and also in areas without veins. The unit fines down hole, the lower half of the unit is fractured and bleached. Sulphides occur only sparsely, usually as py in or around quartz veins <<1%.
						179.0-
						179.0-192.5 Light grey-green silty greywacke. This sequence fines down hole and is cut by quartz/carb/chlorite stockwork in the middle. Silicification and quartz veining cut the core ∥ to ⊥ to $S_1 \approx S_0 \approx 60°$
						No sulphides present
						Asp Py
						192.5-207.1 Quartz stock work and completely silicified rock, with an interval of silty greywacke from 194.7 to 196.6. The stockwork here is highly mineralized 2-4% Asp & Py. The veins have highly variable dip and size, carb, chlorite and possible sericite are common. Tourmaline occurs near the lower contact @ 2065-207.1
						QV. from 206-207.1
						Zone of tourmaline & Asp/Py
						60°CA
						207.1-256.2 Light grey-green greywacke, siltstone, and mudstone form several intercalated fining down hole sequences, from thickly bedded to thinly laminated. The unit is slightly silicified and contains a couple thin QV. $S_0 \approx 60$ $S_1 \approx 53°$ the upper .5 foot is silicified and appears to contain chlorite porphyroblasts or tourmaline.
						intervals laminated Q.V.
						front parallels the Larger stockwork
						tourmaline
						256.2-273 Fault gouge. Grey green mudstone polished, slickened and brecciated. The rock is chloritic, py: trc <1% and is cut by numerous thin ≈ 1mm to thick ≈ 1.5" Quartz/carb veins containing <1% Asp. The gouge planes and fractures
						Vein grades into country rock over .5 feet.

LITHOLOGY

260 270 280 290 300 310 320 330 340 350 360 370 380 390 400

LIFT

STRUCTURE

Fault gouge
$S_1 \approx 60°$
$S_0 \approx 65°$
$S_1 \& S_0 \approx 65°$
$S_1 \approx 50°$
$S_0 \approx 60$
$S_1 \approx 53°$
Fracture & gouge
$S_1 \& S_0 \approx 55°$
Kinks ⊥ to S_0 & S_1
$S_1 \approx 61°$
$S_0 \approx 67°$

MIN'ZN

chloritic & <1% Asp
Traces of galena & Py
Thin veinlets ∥ to S_1 & S_0
85% quartz/carb/chlorite ☐ 1-3% Asp/Py Trace Tourmaline & trace galena/sph.
Quartz/carb chlorite veins ☐ Trace Py & Sph. & galena & Po/cp
Numerous thin Quartz/carb veins ☐ trace Py Gn/Cp/sph/Po and minor chlorite
<1-15% Py in seams and blebs ∥ to So

ALTER.

Slightly silicified
Silicification around veins

SM 5

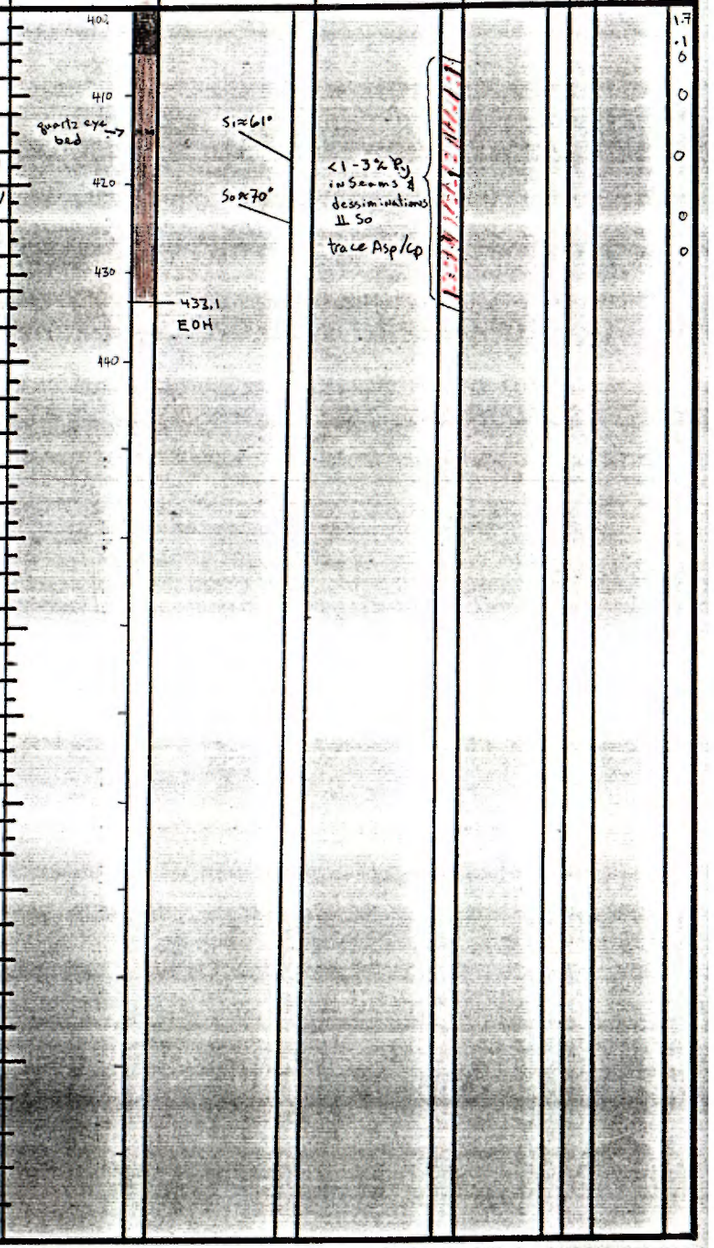
0 0 0 0 0 .1 .7 1.4 .4 .5 .1 1.3 .5 .8 2.3

HOLE NO. 90-07

PAGE 4 of 6

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						are highly variable in orientation, in places ⊥ to TCA.
					LIF	273 – 277.4 Light grey – brown to pale green mudstone fining down hole. Lower contact bedding & So ≈65°, S1 ≈60° TCA. One Quartz/carb/chlorite vein 1.5" thick cut the unit sub ⊥ to So≈S1. (LIF)
						277.4-291.9 Light grey silty grey wacke, fines down hole. Thin gouges occur at 282.8' & 278.4' and a 2" thick quartz/carb vein ⊥ to So & S1 ≈ 65°
						291.9–295.6 Quartz vein & stockwork with silty grey wacke inclusions and intervals. The unit is about 85% quartz. The vein contain carb & chlorite. 1-3% Py, Asp and trace tormaline?. The main body of the vein is sub ⊥ to So & S1
						295.6 - 297.6 Light grey to grey silty mudstone to mudstone fining down hole sequence. With minor quartz/carb vein ⊥ to ⊥ to So & S1 ≈ 50-60. The unit is slightly silicified.
						297.6-324.8 Light grey greywacke. This unit is part of a fining down hole sequence. The lower half of the unit from 306.7 to 324.8 is cut by quartz stockwork veins <1mm to 3" in thickness, with highly variable orientation. A thick fracture and gouge interval occurs from 321.3-324.8.

LITHOLOGY | STRUCTURE | MIN'ZN | ALTER. | Ω-1 SM5



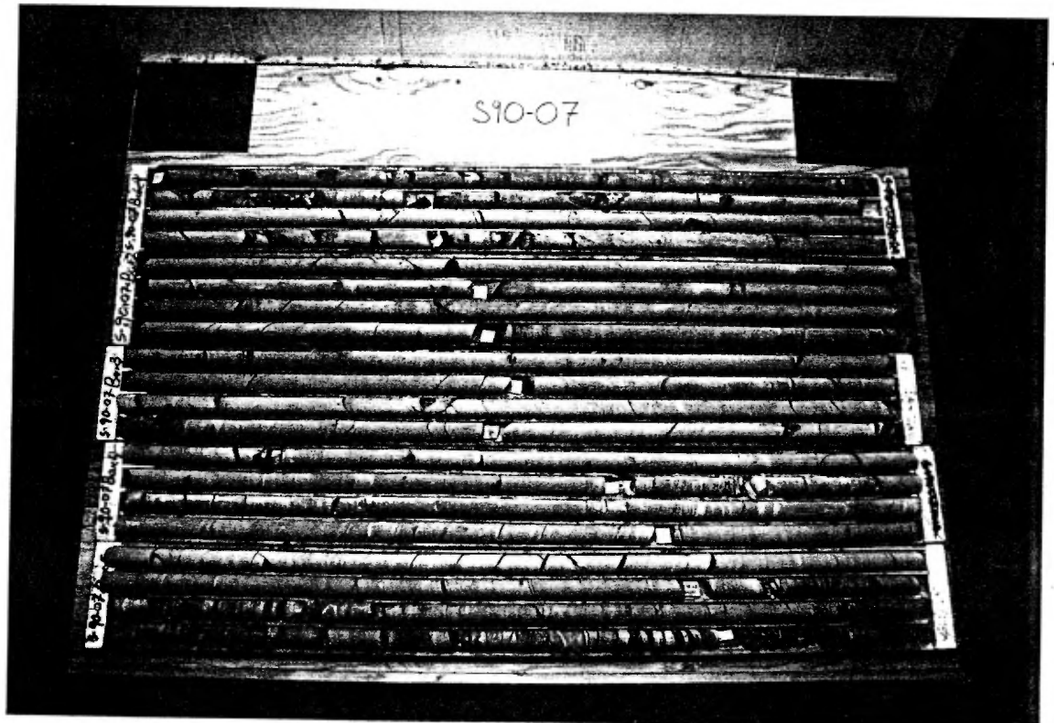
HOLE NO. 90-07

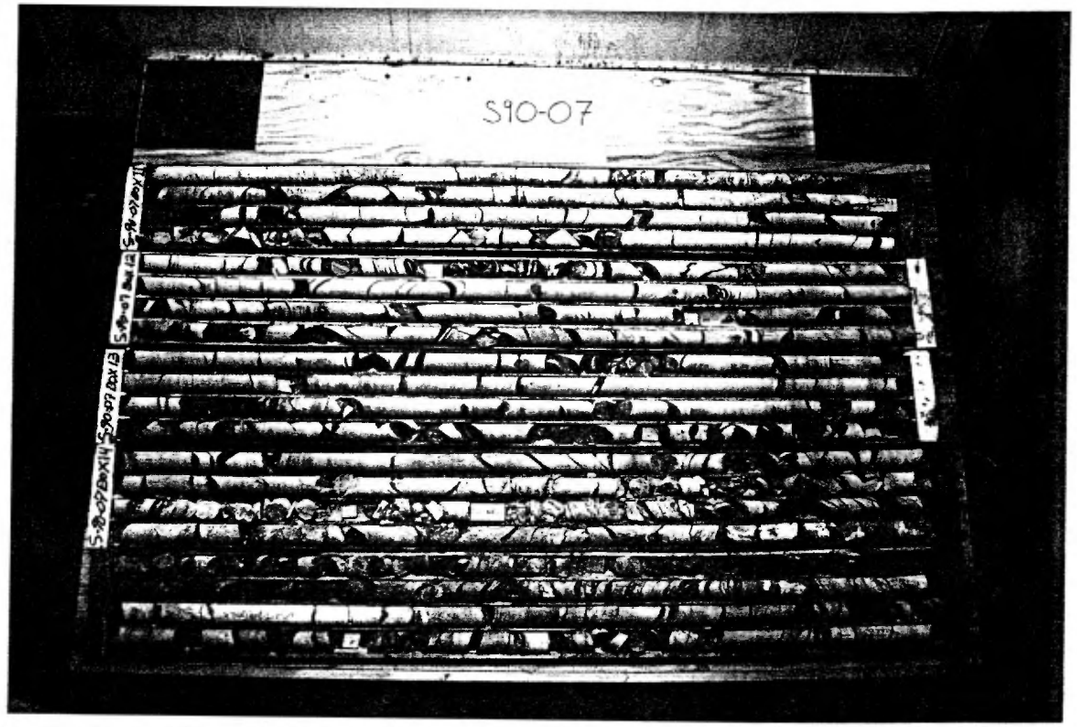
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω⁻¹ SM5
						Within that interval quartz veins present are highly fractured, they carry py which is also fractured. One vein at 310.1 to 310.3 has sights of sphalerite. $S_1 \approx 52°$, S_0? (Also noted Sph/cp/Gn/Po during splitting of the core)					
						324.8-369.4 Light grey to grey-green silty mudstone to mudstone with very thin (.5") intercalations of greywacke. The unit fines downhole and is cut by numerous veins at various orientations, some contain <1% Py. The veins are Quartz/carb and minor chlorite. The unit is slightly silicified around the veins. $S_1 \approx 55$, $S_0 \approx 55$ TCA. The bedding and cleavage is kinked about 90° to their orientation. The mudstone is thinly to thickly laminated. (Gradational contacts)					
					(Lif) SM-5 from 0.0 to 2.3	369.4-405.2' Magnetic Red and green Mudstone. This unit varies from red mudstone to greenish mudstone, it is thinly to thickly laminated and contains a sulphidic unit @ 393.3 - 398.3 up to 15% Py in places, generally <1%. (Gradational contacts) $S_1 \approx 61°$ $S_0 \approx 67°$					
					Sulphide Zone	405.2'-433.1 Light grey to pale green mudstone, some very thin beds of silty greywacke occur (≈5-10 cm) which fire down hole rapidly. One coarse grained greywacke bed occurs at 413.45 to 413.75'. This thin unit contains glassy quartz "eyes" and is almost quartzite. The entire unit contains Py seams and dessiminations sub 1% to 5%					

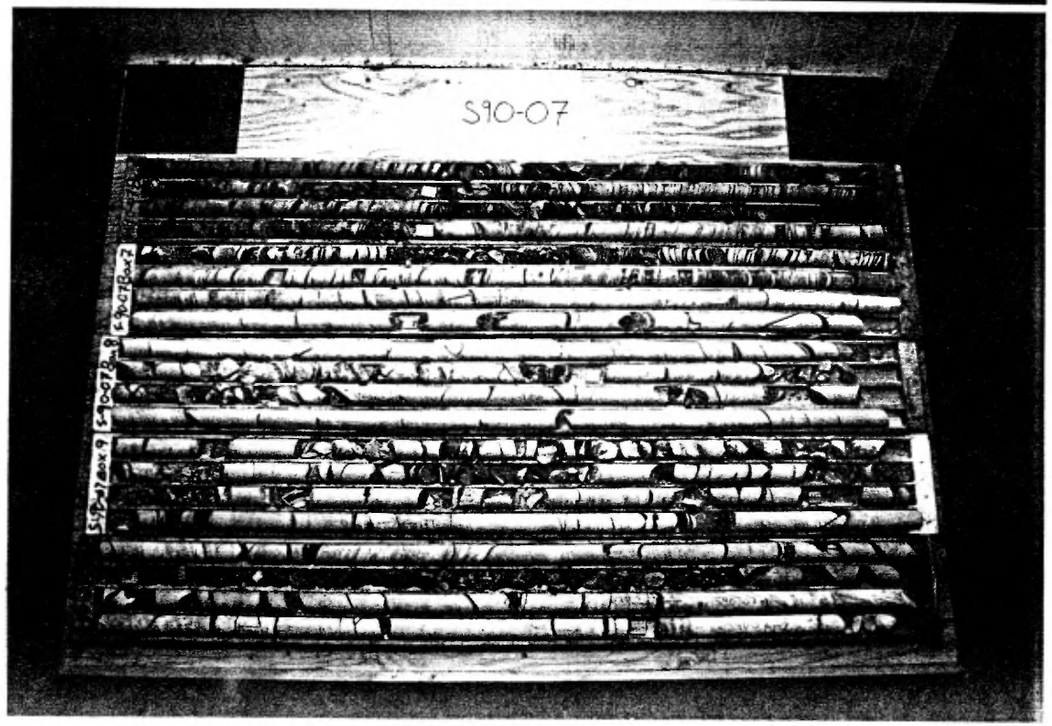
HOLE NO. 90-07

PAGE 6 of 6

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	SMS
						AND S_1. Some seams are .5 cm thick and commonly are folded with S_0.					
						$S_1 \approx 61°$, $S_0 \approx 70°$ TCA					
						Sulphide content <1% to 3%					
						(Also noted Asplco during splitting of core.)					
						433.1 END OF HOLE.					


S10-07


S10-07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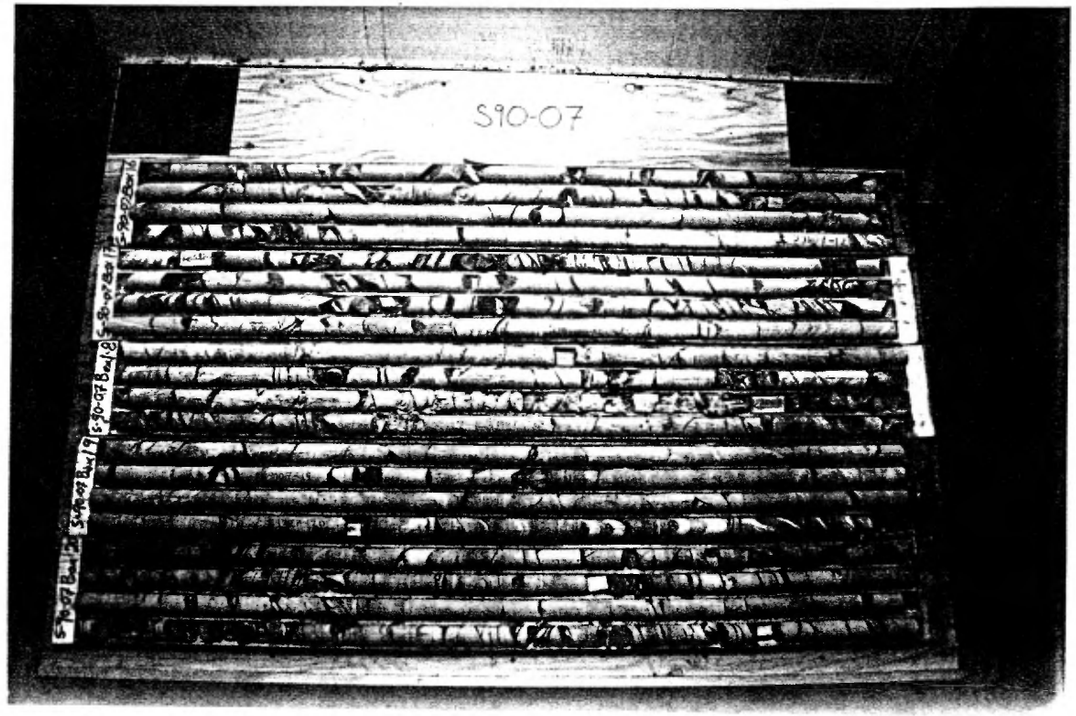
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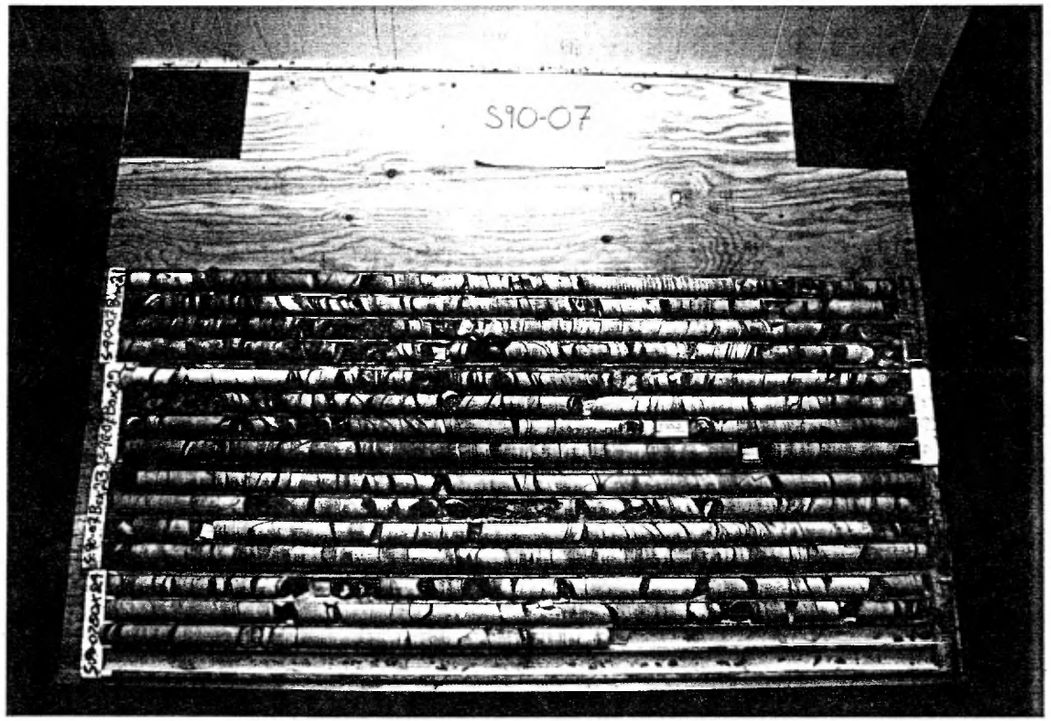
S90-07

LTEE
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CHIMITEC LTEE

RAPPORT D'ANALYSE E
GÉOCHIMIQUE E

RAPPORT: C90-50154.0

DATE DE L'IMPRESSION: 23-MAR-90
PROJET: AUCUN PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au PPB	Au PPB	Au PPB
D2 9007-01		<5		
D2 9007-02		997		
D2 9007-03	0.032 oz/t	1072	622	
D2 9007-04		46		
D2 9007-05		165	221	88
D2 9007-06		940		
D2 9007-07		24		
D2 9007-08		818	1046	
D2 9007-09		<5		
D2 9007-10		<5		
D2 9007-11		271		
D2 9007-12		319		
D2 9007-13		<5		
D2 9007-14		7		
D2 9007-15		<5		
D2 9007-16		181		
D2 9007-17		215		
D2 9007-18		57		
D2 9007-19		85		
D2 9007-20		35		
D2 9007-21		8		
D2 9007-22		15		
D2 9007-23		<5		
D2 9007-24		<5		
D2 9007-25		<5		
D2 9007-26		32		
D2 9007-27		<5		
D2 9007-28		10		

Work Order : R-0065
KMS

DDH 9007

Sample Number	Wt. g	Conc. Wt. g	Bead Wt. mg	Conc. g/t Au	Fines Wt. g	Fines g/t Au	Float g/t Au	Head Sample no float	Head Sample w/float	Sites +10	Sites +20	Sites -20+60	Sites -60+100
North Zone													
9007-01	746	19.71	0.00	0.10	245	< 0.07		0.07	0.002	*	*	*	*
9007-02	553	18.79	0.15	7.98	131	1.11		1.34	0.039	*	*	*	*
9007-03	655	19.47	0.12	6.31	126	1.06		1.22	0.036	*	*	*	*
9007-04	586	26.63	0.00	0.05	112	0.35		0.34	0.010	*	*	*	*
9007-05	746	19.16	0.02	1.28	172	0.46		0.48	0.014	*	*	*	*
9007-06	694	17.55	0.25	13.99	141	1.37		1.69	0.049	*	*	*	*
9007-07	656	23.35	0.05	2.26	173	0.19		0.26	0.008	*	*	*	*
9007-08	2165	24.23	0.15	6.22	676	2.35		2.39	0.070	*	*	*	*
9007-09	1947	28.34	0.05	1.59	590	0.07		0.09	0.003	*	*	*	*
9007-10	219	13.97	0.00	<0.07	64	0.67		0.63	0.018	*	*	*	*
9007-11	343	33.54	0.03	0.88	76	0.47		0.51	0.015	*	*	*	*
9007-12	388	19.24	0.04	2.15	88	0.77		0.84	0.024	*	*	*	*
9007-13	216	17.34	0.00	<0.07	60	< 0.07		0.07	0.002	*	*	*	*
9007-14	53	9.31	0.00	<0.07	15	0.23		0.20	0.006	*	*	*	*
9007-15	2081	16.99	0.00	0.17	610	< 0.07		0.07	0.002	*	*	*	*
9007-16	2116	19.40	0.04	2.31	547	0.57		0.59	0.017	*	*	*	*
9007-17	1339	24.65	0.03	1.02	410	0.20		0.22	0.006	*	*	*	*
9007-18	2383	18.74	0.20	10.71	658	0.31		0.39	0.011	*	*	*	*
9007-19	1978	19.62	0.05	2.57	418	0.49		0.51	0.015	*	*	*	*
9007-20	1761	28.28	0.12	4.08	344	0.55		0.61	0.018	*	*	*	1
9007-21	2459	23.00	0.00	<0.07	690	< 0.07		0.07	0.002	*	*	*	*
9007-22	2036	21.00	0.00	<0.07	602	< 0.07		0.07	0.002	*	*	*	*
9007-23	2312	21.63	0.00	0.11	651	< 0.07		0.07	0.002	*	*	*	*
9007-24	2145	15.98	0.00	< 0.07	618	< 0.07		0.07	0.002	*	*	*	*
9007-25	1910	18.04	0.00	< 0.07	495	< 0.07		0.07	0.002	*	*	*	*
9007-26	2034	29.99	0.00	0.16	536	< 0.07		0.07	0.002	*	*	*	*
9007-27	1863	23.00	0.00	< 0.07	492	< 0.07		0.07	0.002	*	*	*	*
9007-28	989	24.68	0.00	< 0.07	234	< 0.07		0.07	0.002	*	*	*	*

PROJECT BELLECHASSE													
CLAIM P05958	TOWNSHIP ROUETTE / PANET			RANGE VII / I	LOT 34/34								
OCCURRENCE NORTH ZONE		GRID NZ 1987		COORD 12+75E / 1+25N									
LENGTH 383.9'	HORIZ.		VERT.	AZIMUTH 135°		CORE SIZE BQ							
ELEV. 1459'	LOGGED BY Luc Daigle			DATE Feb. 26, 1990									

INCLINATION TESTS					
DEPTH	DIP	DEPTH	DIP	DEPTH	DIP
COLLAR	50°				
3839'	48°				

HOLE NO. 90-08

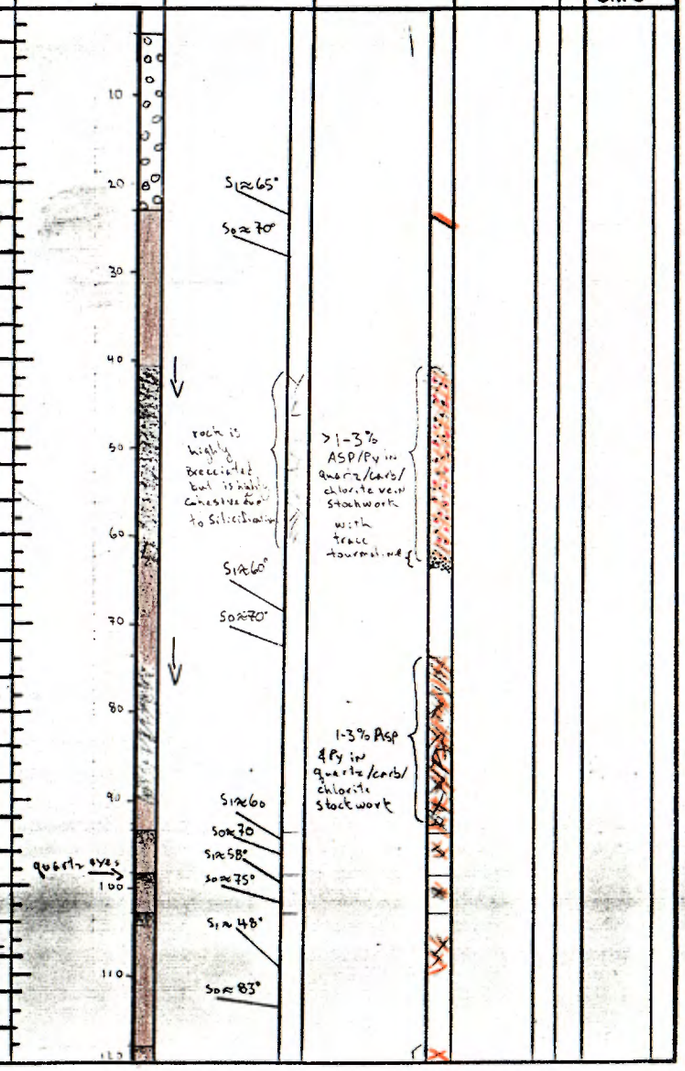
DRILLED BY ST. LAMBERT

STARTED FEBRUARY 20, 1990

FINISHED FEBRUARY 22, 1990

FOOTAGE FROM	FOOTAGE TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
40.6'	42.6'	2'	2'	100	9008-1	0.0' - 3.0' DRILL STEM
42.6'	44.6'	2'	2'	100	9008-2	0.0' - 23.0' CASING
44.6'	46.6'	2'	2'	100	9008-3	
46.6'	48.6'	2'	2'	100	9008-4	23.0' - 383.9 Etchemin Formation (4a,b,c,d)
48.6'	50.6'	2'	2'	100	9008-5	
50.6'	52.6'	2'	2'	100	9008-6	The core consists of meta greywacke, siltstone
52.6'	54.6'	2'	2'	100	9008-7	mudstone and "Lean Iron Formation". The sediments
54.6'	56.6'	2'	2'	100	9008-8	are thickly bedded to thinly laminated and occur
56.6'	58.6'	2'	2'	100	9008-9	as incomplete "Bouma" turbitic sequences. In places
58.6'	63.1'	4.5'	4.5'	100	9008-10	the mudstone is sulphidic with dessiminated and
75.0'	80.0'	5'	5'	100	9008-11	bedded seams of Py. The rock is also cut in places by
80.0'	85.0'	5'	5'	100	9008-12	zones of Asp/Py mineralized quartz stockwork and
85.0'	90.0'	5'	5'	100	9008-13	silicification. Bedding fines down hole indicating
90.0'	93.1'	3.1'	3.1'	100	9008-14	a synycline occurs to the south of the hole and
122.1'	125.7'	3.6'	3.6'	100	9008-15	an anticline to the North. The beds are overturned
125.7'	130.4'	4.7'	4.7'	100	9008-16	towards the south.
130.4'	134.2'	3.8'	3.8'	100	9008-17	
265.0'	270.0'	5'	5'	100	9008-18	23.0'-40.6' Light grey silty mudstone. The core
~~270.0'~~	~~275.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-19~~	is broken and is only about 40%
~~275.0'~~	~~280.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-20~~	recovered. a 3" Quartz/carb/chlorite vein at ≈25'
~~280.0'~~	~~285.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-21~~	So ≈ 70°, S1 ≈ 65°
~~285.0'~~	~~290.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-22~~	
~~290.0'~~	~~295.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-23~~	SEE RELOG 40.6'-93.1' Light grey to pale green greywacke
~~295.0'~~	~~300.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-24~~	fining downhole to siltstone to
300.0'	305.0'	5'	5'	100	9008-25	mudstone. So ≈ 70°, S1 ≈ 60° The
305.0'	310.0'	5'	5'	100	9008-26	unit is cut by a quartz/carb/chlorite
~~310.0'~~	~~315.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-27~~	stockwork bearing 1-3% Asp/Py. Silicifi-
315.0'	320.0'	5'	5'	100	9008-28	cation of the surrounding rock varies from
~~340.0'~~	~~345.0'~~	~~5'~~	~~5'~~	~~100~~	~~9008-29~~	slight to complete. Veins occur at highly
~~345.0'~~	350.0'	5'	5'	100	9008-30	variable orientations and occur su

LITHOLOGY | STRUCTURE | MIN'ZN | ALTER. | Ω-1 SM5



HOLE NO. 90-08

PAGE 2 of 4

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
350.0'	355.0	5'	5	100	9008-31	SEE RE-LOG

frequent as to brecciate the host rock completely. The stockwork "zones" occur at 40.8 to 63.1 with possible tormaline at 62.7 - 63.1, and stockwork at 73.4 - 92.8'.

93.1 - 98.5 Light grey greywacke, fines downhole to Light grey - grey mudstone.
So ≈ 70°, S1 ≈ 60° TCA
Minor quartz stockwork. Sub ∥ to S1 & So

rod and slicken ⊥ to drag folding?

98.5 - 102.8 Same as above (1-2 mm quartz eyes at base)
So ≈ 75°, S1 ≈ 58° TCA

102.8 - 118.2 Same as above
@ ≈ 112' So ≈ 83°, S1 ≈ 48° TCA

Laminated unit

118.2 - 134.2 Same as above
Minor Quartz/Carb/chlorite stockwork with traces of Po, Py, cpy & tormaline from 122.1 - 125.7 & 130.4 - 133.7. The veins are sub ∥ to ⊥ to So & S1. So ≈ 60, S1 ≈ 55 TCA The intervening mudstone contains <1% - 2% Py. as dessiminations.

(LIF) 134.2 - 141.0 Red Mudstone with green mudstone intervals. (Lean Iron Formation). Slightly magnetic 2.2 - .1 on the SM-5 So ≈ 47, S1 ≈ 42° TCA. The unit is thinly to thickly laminated.

141.0 - 149.6 Light grey to pale green mudstone. This completes a fining downhole sequence. One 2mm thick Py seam is present at 149.3.

LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω SM5
	S1≈55 So≈60	Minor Quartz/carb/chlorite w/ no Stockwork & trace Po, Py, cpy & ? formaline 1-2 % Py dessim		
	S1≈42° So≈47°			
	S1≈36 So≈45°			
	So≈45°	Minor Quartz/carb chlorite veins ≈<1cm thick		
	S1≈36-45°			
	Fault gouge			
LIF	S1≈54°			Mag
	So≈55-65°			

HOLE NO. 90-08

PAGE 3 of 4

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						Several thin Quartz/carb/chlorite veins <.5cm thick occur sub ∥ to ⊥ to So & S1. So ≈ 45°, S1 ≈ 36° TCA
						149.6-222.8 Light grey to pale green greywacke fining downhole to mudstone. Minor quartz veining in the first 12' of the unit, quartz/carb/chlorite in thin ≤ 1cm thick veins. So ≈ 45°, S1 ≈ 36-45° TCA Fault gouge @ 186.5 - 187.0
						(LIF) 222.8-259.5 Red and Green intercalating Mudstone. This unit is magnetic (Lean Iron Formation). Contains a few thin (1-3cm) silty laminations and quartz/carb/chlorite veins ∥ to So & S1. So ≈ 55-65, S1 ≈ 54 TCA. The magnetic zone extends 6-7 feet into the underlying unit, and about 1.5' feet into the overlying unit
						259.5-329.4 Pale green-grey to grey Mudstone. Py seams and dessiminations occur sparsely throughout the unit. <1% but up to 5-10% in some sections. The lower half of the unit is slightly silicified and contains several carbonate unit up to 10cm thick which show "skarn" alteration. So ≈ 70°, S1 60° ≈ TCA.
						329.4-383.9 Light grey greywacke to silty greywacke. The unit has a sharpe erosional base and fines gradually downhole. So ≈ 70, S1 ≈ 58° TCA. The unit is commonly cut by quartz/carb veins which contain trace Py and tourmaline?

LITHOLOGY

STRUCTURE: carb. zone.? | S1 ≈ 60° | So ≈ 70° | S1 ≈ 58° | So ≈ 70°

MIN'ZN: Slightly silicified By <1% Avg. but up to 5-10% in places. in seams and as dessiminations ∥ So | Numerous Thin Quartz/Carb Vein ≈ < 1cm with trace Py and ? Tourmaline

ALTER.: Skarn Alter of carb

383.9' EOH

Ω-1 SM5

HOLE NO. 90-08

PAGE 4 of 4

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω⁻¹ SM5
						The veins are generally .5-1cm thick and occur at highly variable orientations and are commonly rotated by progressive simple shear during ductile-brittle deformation of the host rock.					
					383.9'	E.O.H.					

RELOG

HOLE NO. 9008

PAGE 1 of 5

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
270.0'	272.8'	2.8	2.8	100	9008-19	221.6'-277.4 MIXED LEAN IRON FM. AND
272.8'	275.0'	2.2	2.2	100	-20	PALE TO DARK GREEN MUDSTONE,
275.0'	275.3'	0.3	0.3	100	-21	VARIABLY MAGNETIC FROM 221.6'
275.3'	277.4'	2.1	2.1	100	-22	TO 266.0'.
288.2'	289.5'	1.3	1.3	100	-23	
289.5'	290.6'	1.1	1.1	100	-24	LIF IS ALL MUDSTONE, RANGING FROM
290.6'	292.4'	1.8	1.8	100	-25	MAUVE TO RED-BROWN. IT IS
295.5'	295.8'	0.3	0.3	100	-26	FINELY LAMINATED WITH AND/OR
295.8'	297.1'	1.3	1.3	100	-27	SHEARED (BLENDED?) WITH THE PALE
315.0'	317.0'	2.0	2.0	100	-28	TO DK. GN MUDSTONE AND RARE
329.9'	332.7'	2.8	2.8	100	-29	SILTY LAMINATIONS (GENERALLY <0.5cm
332.7'	335.2'	2.5	2.5	100	-30	THICK). LOCALLY, UNIT HAS MODERATE
338.1'	341.3'	3.2	3.2	100	-31	TO NEGLIGABLE SILICIFICATION.
343.5'	345.0'	1.5	1.5	100	-32	
345.0'	346.8'	1.8	1.8	100	-33	LOCAL SMALL SCALE FOLDING/KINKING
346.8'	347.9'	1.1	1.1	100	-34	SMALL FOLDS (ie 225.0'-227.0'), SPARSE QTZ+/-
347.9'	352.6'	4.7	4.7	100	-35	AXES @ 60° CARB VNLTS <0.5cm THICK IN S_1 PLANES
352.6'	354.4'	1.8	1.8	100	-36	
354.9'	355.4	0.5	0.5	100	-37	FREQUENT GOUGEY 'CRUSH ZONES'
358.0'	361.9'	3.9	3.9	100	-38	ALONG S_1 PLANES.
373.4	376.1	2.7	2.7	100	-39	
376.9	378.3	1.4	1.4	100	-40	MAIN LIF (RED-BR. 4d) SECTIONS:
379.3	380.5	1.2	1.2	100	-41	222.8'-224.8' 40% LIF 60% GN MST
						226.6'-228.1' 30% " 70% "
						235.1'-237.6' 40% " 60% "
						240.7'-244.7' 50% " 50% "
						246.6'-251.9' 20% " 80% 4a,b
						251.9'-258.0' 80% " 20% 4a

	S_0	S_1
225'	60°	60°
237'	60°	60°
248'	50°	50°
254'	60°	60°
272'	80°-60°	60°

LITHOLOGY: 220, 221.6', LIF, LIF, 230, LIF, 240, 4a,d, LIF, 250, LIF, LIF, 260, 270, 277.4', 280, 4a, 290, 300, 310, 4a HORNFELSIC?, 4a, 4a HORNFELSIC?

STRUCTURE: S_0 S_1 @60°; S_0 S_1 @60°; S_0 S_1 @70°; S_0 S_1 @60°; S_1 @60°; S_0 S_1 @60-80°; S_0/S_1 @70°; CONTACT @ 77°

MIN'ZN: PYRITIC SEAMS; 1% Py; TRACE Py; 1% Py; 5% Po (Py)

ALTER.: 'SKARN' CARB 80S; 'SKARN' CARB BDS; STRONG SILICIFICATION

QTZ SM5: MAG ZONE; MAG

0.1 0.2 1.6 23 0.2 2.6 0.0 0.2 8.0 0.2 0.9 5.5 1.3 29 0.2 2.9 0.1 1.8 0.7

HOLE NO. 9008

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						264.0'-272.0' 8-10 PALE OLIVE TO GY-WHITE SILICIFIED INTERVALS ≤ 1-3cm THICK (? SKARN ALTERATION OF CARB BEDS?)
						272.8'-275.0' 8-10 AGGREGATE PYRITE SEAMS (w @ CARB MATRIX) AVG. 2-4mm THICK @ 60°-70°.
						275.0'-275.3' QTZ VEIN @ 50°-70°. 1-2% Py on VN BOUNDARIES & WITH CHLORITIC INCLSNS IN VEIN.
						277.4'-329.5' MUDSTONE GN-GY TO LIGHT GY TO DK GY (MOVING DOWNHOLE); ALL STRONGLY SILICIFIED, LOCALLY CHERTY. TOTAL ABSENCE OF ANY VEINING w EXCEPTION 295.5'-295.8': 2-3 SHEARED QTZ VN'S 2-5cm THICK w TRACE Py, VNLTS TREND @ 60° (INS.)
						277.4'-285.0' 5 BEIGE TO OLIVE 'SKARN ALTERED' CARB? BEDS UP TO 2" THICK (CONTACTS (?) @ 70°.
						288.2'-289.5' ≤ 1% DISSEM'D Py IN GN/GY MST.
						289.5'-290.6' 2-3% Py DISSEM'D & AS SEAMS UP TO 5mm THICK @ 65°
						290.6'-292.4' GY MST (NO VIS. SUL).

LITHOLOGY: 4a; 4a,b,c (tn); 3839 END OF HOLE

STRUCTURE: SLC 60°; GOUDGY FAULT @ 70°; FINING (?); Sc/Si @ 50-60°

MIN'ZN: GALENA Py →; SPHALERITE Py →; TRACE - 1% TOURMALINE

ALTER.: STRONG SILICIFICATION

Ω SM 5

HOLE NO. 9008

PAGE 3 of 5

FOOTAGE FROM	TO	FT.	FT.REC.	% REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω SM5
						295.8'-297.1' ≤ 1% Py DISSEM'D & TWO MM SCALE SEAMS @ 70° IN LT. GY MST.					
						309.0'-320.0' DK GY/BLACK CHERTY MST. ? HORNFELS ? (99% 5% Po+Py) → * SAMPLE SPLIT. BEDDING @ 314.9' @ 85°?					
						315.0'-317.0' PALE GN/OLIVE MST (? POSS. V.V. FINE GR'D MAFIC INTRUSIVE ?) WITH ≤ 5% PYRRHOTITE CONTENT AS DISSEMINATIONS & MASSIVE SEAMS UP TO 2cm THICK. MAGNETIC (0.2 TO 1.8). UPHOLE CONTACT SHARP @ 75°					
						320.0'-329.5' DK GY SILICIFIED MST. 328.4'-328.5' GOUGEY 'CRUSH' ZONE (FAULT) @ 70°.					
						S_0 S_1 278' ? 60° 291' 70° 70° 305' 50°? 60° 320' ? FRACTS @ 30° (?) 326' 60°? 40°					
						329.5'-383.9' SILTSTONE/SANDSTONE/GREYWACKE TURBIDITIC UNITS. LT-DK GY. SILICIFIED. APPEAR TO FINE UPHOLE. 10%-20% QSTK VEINING OVERALL, @ ALL ANGLES, PREDOMINANTLY @ 40°-60°. UNITS GENERALLY < 1cm (AVG 0.5cm) THICK, RARELY UP TO 1" THICK. LOCAL UNITS CONTAIN 10-20% CLINOZ + CHLORITIC FLECKS/INCLUSIONS. TRACE SULPHIDES NOTED IN VNS, AND LOCALLY MARCASITE COATS S_1 FRACTS.					
						S_0/S_1 GEN. 11 @ 50°-60°.					

HOLE NO. 9008

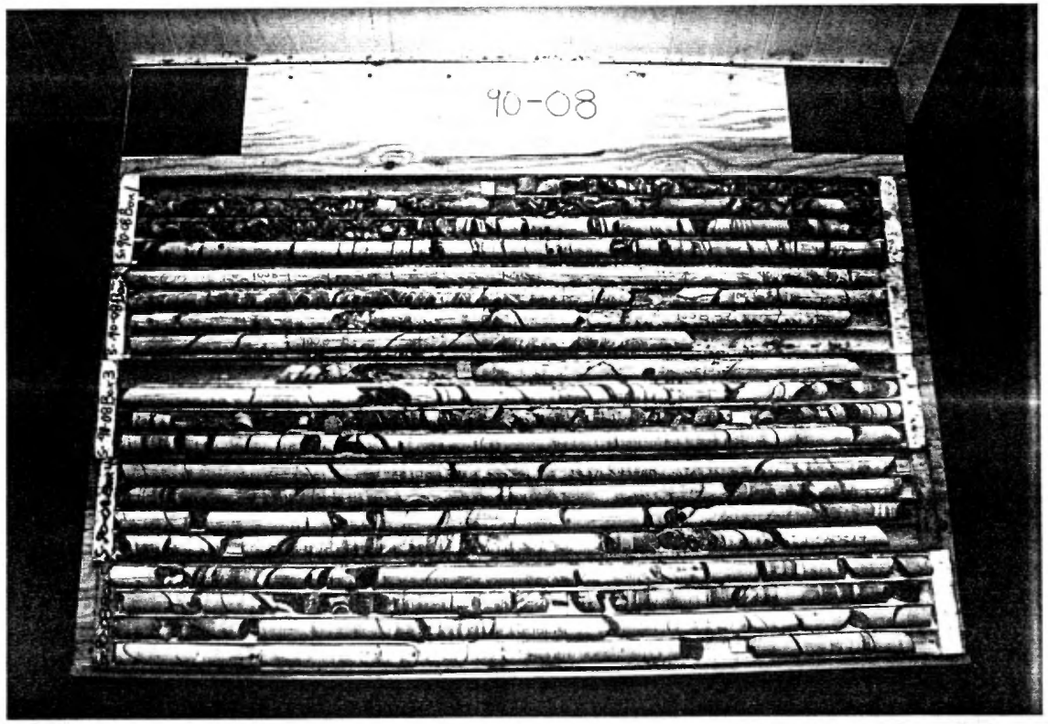
PAGE 4 of 5

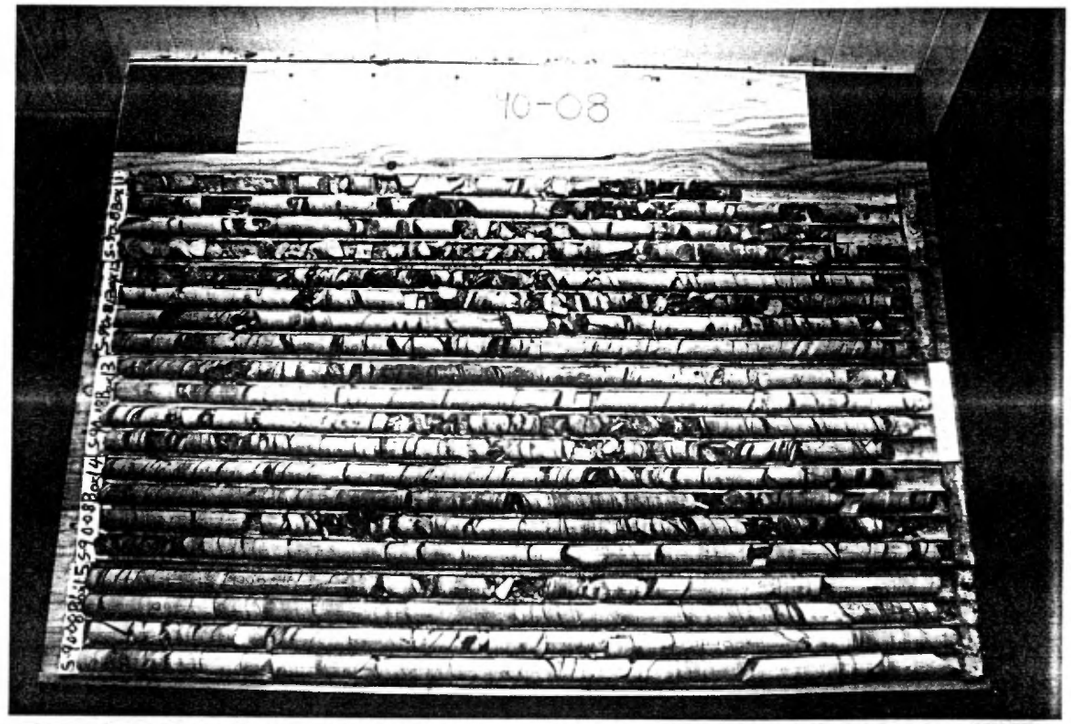
FOOTAGE FROM	TO	FT.	FT.REC.	% REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM.5
						329.5'-332.7' 20% QSTK VNING.					
						332.7'-335.2' 20% QSTK VNING.					
						335.2'-338.1' PATCHY CLINOZ ALTERATION THROUGHOUT HOST WACKE. ≤1% QVNLTS.					
						338.1'-341.3 10% QSTK VNING.					
						341.3'-343.5' 2-3% QSTK					
						343.5'-345.0' ≤60% VEIN MATERIAL. (*NOT SAME AS SURROUNDING QSTK.) HOST SLTST/SS IS BRECCIATED & INCLUDED IN 8"-12" VEIN AS SUBANGULAR FRAGMENTS. QTZ VEIN ALSO CONTAINS 5-10% CLINOZ" & ≤1% <<1/mm LONG/DIAM TOURMALENE (?) LATHS/XTALS. *THIS INTERVAL HAS SIMILARITIES TO THE INTERVAL FROM HOLE 9006.					
						LOOK UP ⇨ & ADD					
						345.0'-346.8' 5% QSTK w CLINO + <1% TOURM.					
						346.8'-347.9' 10% QSTK w 5% CLINO + ≤1% TOURM.					
						347.9'-352.6' 10-15% QSTK w ≤5% CLINO & <1% TOURMALENE (MICROXTALS) ONE SITE OF GALENA & TRACES OF Py.					
						352.6' 354.4' ≤25% QSTK w ≤5% CLINOZ AND 1% TOURMALENE (MICROXTALS).					

HOLE NO. 9008

PAGE 5 of 5

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	SM.S
						354.9'-355.4' 20% QSTK W 3-5% CLINO & TRACE TOURMALINE (?)					
						358.0'-361.9' ≈10% QSTK W 5% CLINO & TRACE TOURM (?)					
						373.4'-376.1' 5-10% QSTK W 1-2% CLINO V. SPARSE TOURM (?)					
						376.9'-378.3' 10-15% QSTK W 3-5% CLINO TRACE TOURM (?)					
						379.3'-380.5' A.A. WITH TRACE FLECKS OF SPHALERITE & PYRITE.					
						383.9' END OF HOLE.					


90-08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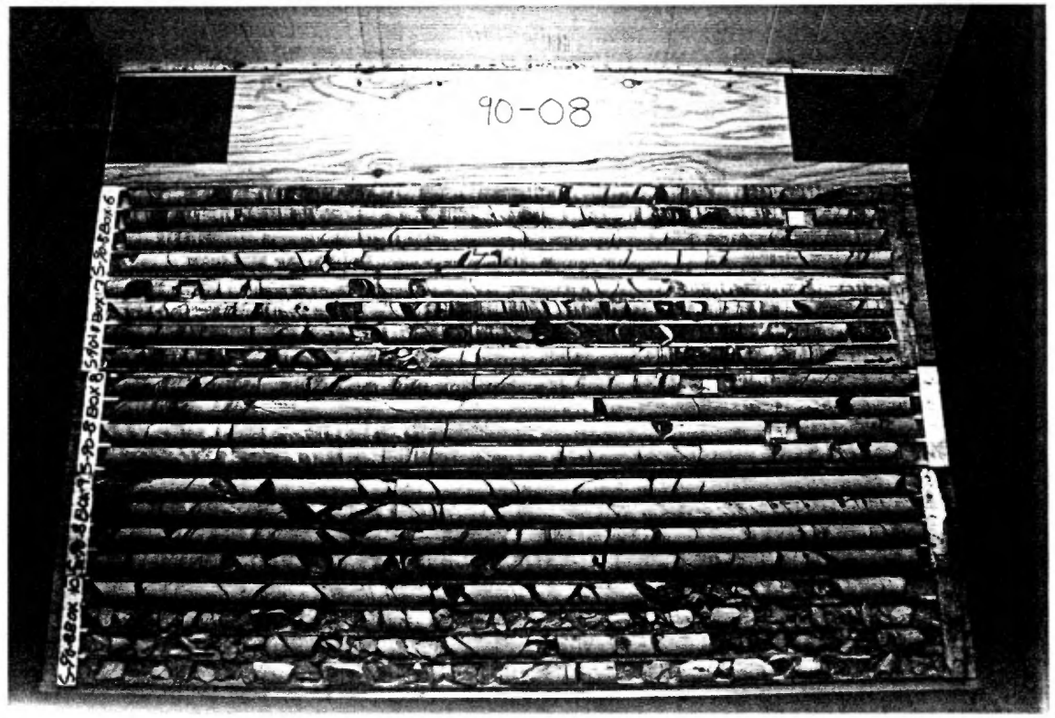
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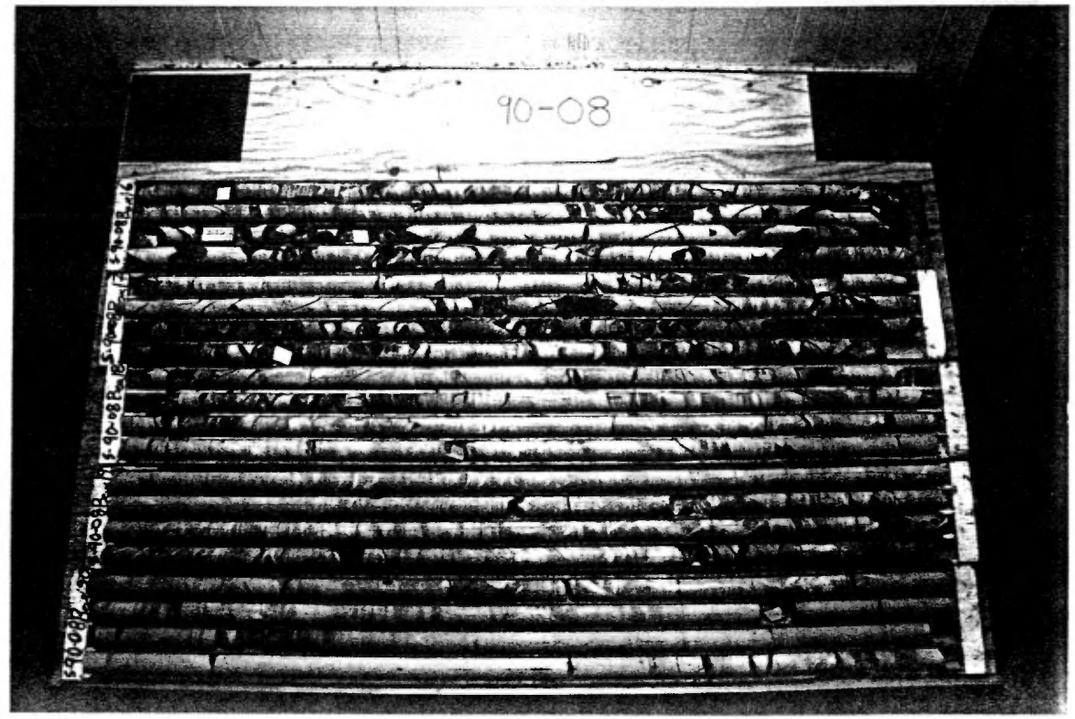
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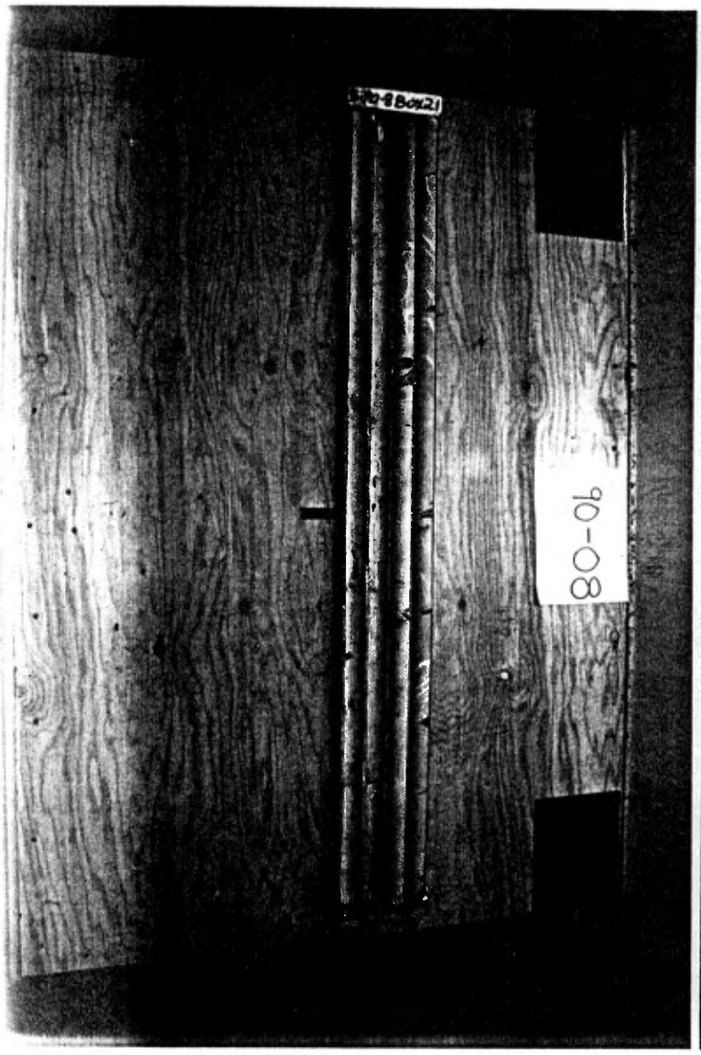
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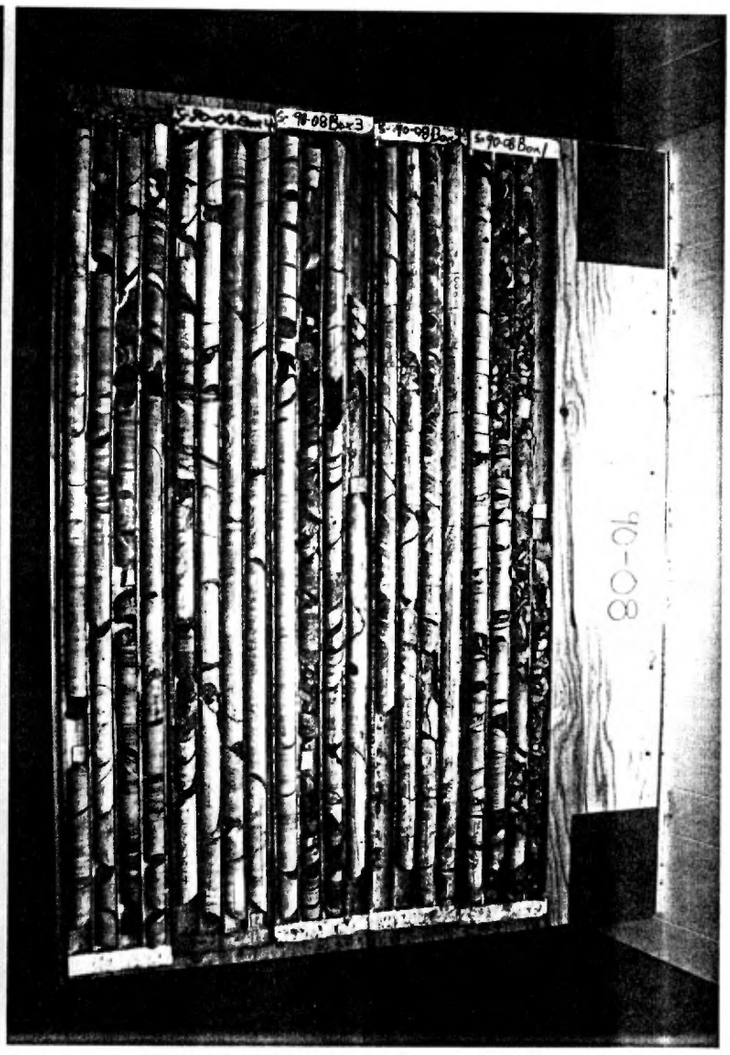
90-08

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Rue Nérée Tremblay
-Foy, Québec G1N 4H7
(418) 683-1777
FAX: (418) 683-7791

CHIMITEC LTEE

RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 23-MAR-90

RAPPORT: C90-50155.0

PROJET: AUCUN

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS Au PPB		NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS Au PPB
D2 9008-01	158		D2 9008-41	<5
D2 9008-02	102			
D2 9008-03	563			
D2 9008-04	34			
D2 9008-05	1186	0.035 oz/T		
D2 9008-06	344			
D2 9008-07	113			
D2 9008-08	254			
D2 9008-09	14			
D2 9008-10	5			
D2 9008-11	7			
D2 9008-12	127			
D2 9008-13	8			
D2 9008-14	10			
D2 9008-15	<5			
D2 9008-16	<5			
D2 9008-17	162			
D2 9008-18	<5			
D2 9008-19	<5			
D2 9008-20	<5			
D2 9008-21	<5			
D2 9008-22	<5			
D2 9008-23	<5			
D2 9008-24	<5			
D2 9008-25	<5			
D2 9008-26	<5			
D2 9008-27	<5			
D2 9008-28	<5			
D2 9008-29	6			
D2 9008-30	<5			
D2 9008-31	<5			
D2 9008-32	<5			
D2 9008-33	<5			
D2 9008-34	<5			
D2 9008-35	<5			
D2 9008-36	6			
D2 9008-37	29			
D2 9008-38	<5			
D2 9008-39	6			
D2 9008-40	<5			

Work Order : R-0065
KMS

DDH 9008

Sample Number	Wt. g	Conc. Wt. g	Bead Wt. mg	Conc. g/t Au	Fines Wt. g	Fines g/t Au	Float g/t Au	Head Sample no float	Head Sample w/float	Sites +10	Sites +20	Sites -20+60	Sites -60+100
NORTH ZONE													
9008-01	1444	24.52	0.03	1.22	410	< 0.07		0.09	0.003	*	*	*	1
9008-02	1350	25.15	0.03	1.04	310	0.88		0.88	0.026	*	*	*	*
9008-03	1410	22.48	0.15	6.72	345	0.90		0.99	0.029	*	*	*	*
9008-04	1416	18.28	0.03	1.40	371	0.18		0.20	0.006	*	*	*	*
9008-05	1090	25.86	0.31	12.01	337	2.12		2.35	0.069	*	*	*	*
9008-06	1488	22.03	0.10	4.43	435	0.10		0.16	0.005	*	*	*	*
9008-07	1296	22.34	0.02	0.77	351	0.10		0.11	0.003	*	*	*	*
9008-08	1490	23.48	0.07	2.92	438	0.26		0.30	0.009	*	*	*	*
9008-09	1142	18.13	0.01	0.39	295	< 0.07		0.08	0.002	*	*	*	*
9008-10	3281	22.63	0.00	< 0.07	996	< 0.07		0.07	0.002	*	*	*	*
9008-11	3722	20.48	0.04	1.76	935	0.09		0.10	0.003	*	*	*	*
9008-12	4032	21.98	0.06	2.60	1008	0.21		0.22	0.006	*	*	*	*
9008-13	3354	15.10	0.01	0.45	991	< 0.07		0.07	0.002	*	*	*	*
9008-14	2354	23.60	0.01	0.38	775	< 0.07		0.07	0.002	*	*	*	*
9008-15	2573	24.79	0.00	< 0.07	636	< 0.07		0.07	0.002	*	*	*	*
9008-16	4163	19.71	0.00	< 0.07	941	< 0.07		0.07	0.002	*	*	*	*
9008-17	2310	21.27	0.07	3.13	674	0.48		0.50	0.015	*	*	*	*
9008-18	4081	19.79	0.00	< 0.07	1659	< 0.07		0.07	0.002	*	*	*	*
9008-19	2063	23.41	0.00	< 0.07	581	< 0.07		0.07	0.002	*	*	*	*
9008-20	1713	16.64	0.00	< 0.07	475	< 0.07		0.07	0.002	*	*	*	*

PROJECT	BELLECHASSE PROJECT												
CLAIM	PO5957	TOWNSHIP	ROLETTE / PANET	RANGE	VII / I	LOT	33/33						
OCCURRENCE	NORTH ZONE	GRID	NZ 1987	COORD	21+00E / 1+80N								
LENGTH	561.0'	HORIZ.	VERT.	AZIMUTH	135°	CORE SIZE	BQ						
ELEV.	1443'	LOGGED BY	J.F. BURZYNSKI	DATE	FEBRUARY 27, 1990								

INCLINATION TESTS					
DEPTH	DIP	DEPTH	DIP	DEPTH	DIP
COLLAR	45°				
374.0	40°				
561.0	37°				

HOLE NO. 90-09

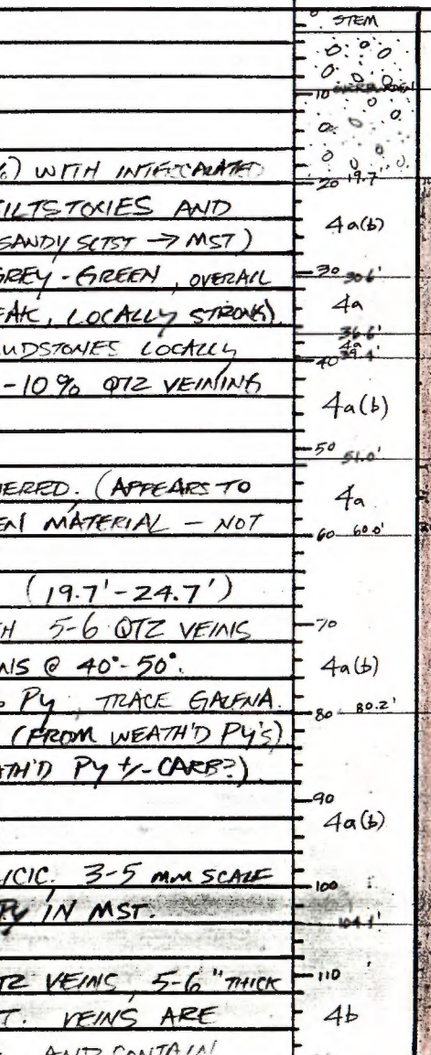
DRILLED BY ST. LAMBERT

STARTED FEBRUARY 22, 1990

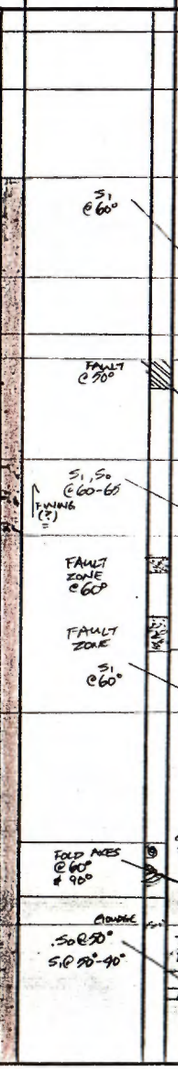
FINISHED FEBRUARY 25, 1990

FOOTAGE FROM	TO	FT.	FT. REC.	%REC	SAMPLE NO.	DESCRIPTION
19.7'	24.7	5.0'	4.5'	90	9009-1	0.0' - 3.0' DRILL STEM
36.6'	39.4'	2.8'	2.5	89	-2	0.0' - 9.8' CASING
51.0'	51.5'	0.5	0.3	60	-3	
65.5'	66.3'	0.8	0.8	100	-4	9.8' - 104.1' FITCHEM IN FORMATION
73.0'	75.0'	2.0'	1.8'	90	-5	DOMINANTLY MST (80%) WITH INTERCALATED
75.0'	77.5'	2.5'	1.7'	68	-6	SILTSTONES, SANDY SILTSTONES AND
77.5'	80.2'	2.7'	2.6'	96	-7	SEVERAL TURBIDITIC (SANDY SCIST → MST)
100.2'	101.7'	1.5'	1.3'	87	-8	UNITS. GREY TO GREY-GREEN, OVERALL
104.1'	109.0'	4.9	4.9'	100	-9	SILICIC (GENERALLY WEAK, LOCALLY STRONG),
109.0'	111.6'	2.6'	2.6'	100	-10	WEAKLY CHLORITIC, MUDSTONES LOCALLY
111.6'	112.3'	0.7'	0.7'	100	-11	MOD. CHLORITIZED. 8-10% QTZ VEINING
121.5'	124.1'	2.6'	2.4'	92	-12	OVERALL.
138.5'	140.1'	1.6'	1.6'	100	-13	
257.6'	258.3'	0.6'	0.6'	100	-14	9.8' - 19.7' ≈ 2.5ft CORE RECOVERED. (APPEARS TO
262.3'	263.4'	1.1'	1.1'	100	-15	BE MAINLY OVERBURDEN MATERIAL - NOT
275.3'	279.9'	4.6'	4.6'	100	-16	BEDROCK)
285.5'	288.4'	2.9'	2.9'	100	-17	(19.7' - 24.7')
300.2	300.5'	0.3'	0.3'	100	-18	19.7' - 30.6' SILTY MUDSTONE WITH 5-6 QTZ VEINS
322.0'	323.8'	1.8'	1.8'	100	-19	UP TO 6" THICK. VEINS @ 40°-50°.
329.1'	329.7	0.6'	0.6'	100	-20	VEINS CONTAIN TR-1% Py. TRACE GALENA.
330.1'	332.1	2.0	1.5	75	-21	HEAVY FeOx STAINING (FROM WEATH'D Py's)
347.6'	348.8'	1.2'	1.2'	100	-22	VEINS 'VUGGY' (WEATH'D Py +/- CARB?)
400.0'	402.0'	2.0'	2.0'	100	-23	S.I.@ 60°
404.3'	407.0'	2.7'	2.7'	100	-24	
447.5'	449.6	2.1'	2.1'	100	-25	30.6' - 36.6' GY-GN MST. V. SILICIC. 3-5 mm SCALE
450.5'	453.1'	2.6'	2.6'	100	-26	QTZ STR'S. TRACE Py IN MST.
459.7'	462.6'	2.9'	2.9'	100	-27	
532.6'	535.1'	2.5'	2.5'	100	-28	36.6' - 39.4' 2-3(?) SHEARED QTZ VEINS, 5-6" THICK
						@ ≈ 50° IN HOST MST. VEINS ARE
						SHATTERED VUGGY AND CONTAIN

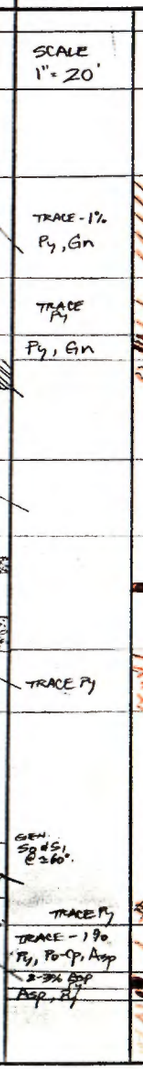
LITHOLOGY



STRUCTURE



MIN'ZN



ALTER.

SM 5

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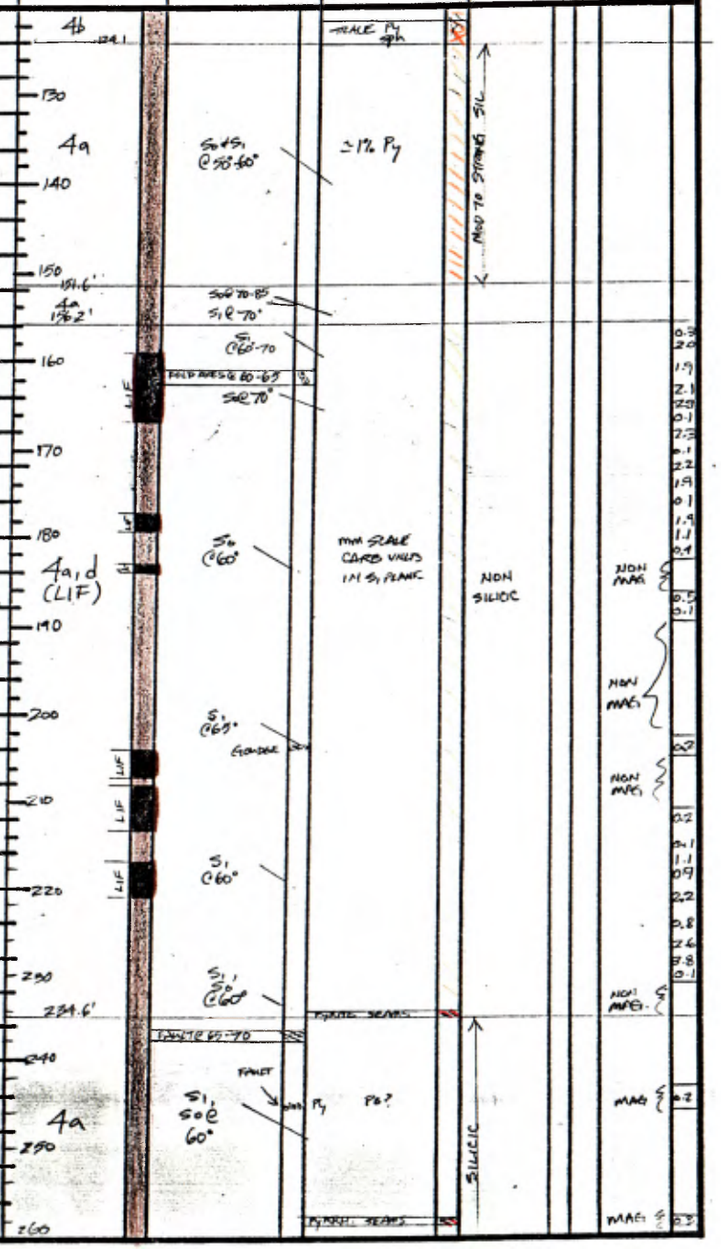
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						≃1% Py BLEBS (UP TO 3-4mm DIAM) AND TRACE FLECKS OF GALENA. MOD TO HEAVY FEOX STAINING IN VEIN FRACTS.
						39.4'-51.0' SILTY MST; HIGHLY FRACTURED, BLKY UP CORE. 39.4'-43.0' FAULT ZONE RUBBLY CORE W/ ≥ ONE INCH GOUGE INTERVALS, FAULT @ 90°. 3-5% mm SCALE QTZ STRINGERS THROUGH SECTION.
						51.0'-60.0' MST WITH THREE 5"-6" TURBIDITIC INTERVALS (SS → SLST → MST) FINING DIRECTION NOT CERTAIN, APPEARS TO BE UPHOLE. So @ 60°-65°; S1 @ 60°-65°
						61.4'-63.7' FAULT ZONE. MST STRONGLY FRACTURED, @ 60°, GOUGEY.
						65.5'-66.3' SHEARED QTZ VN(S?), GOUGEY INTERVAL IN MID-VEIN 1" THICK W/ STRONG FEOX.
						68.9'-73.0' RUBBLY MST - FAULT ZN? ≃ 1ft CORE RECOVERED.
						73.0'-80.2' SILTY MST, SILICIC WITH 5-8% mm SCALE QTZ STRINGERS & ONE 6" VEIN. STRINGERS @ ALL ANGLES. STRONG FRACTURING, MINOR GOUGE ON SOME FRACT PLANES. MOD TO STRONG FEOX IN VEINS & ON FRACTS, TRACE Py IN VEINS. S1 @ 60. So ?
						2nd FRACT SET @ 0° TO 10° (SUB // TO C.A.)

LITHOLOGY | STRUCTURE | MIN'ZN | ALTER. | Ω-1 SM5



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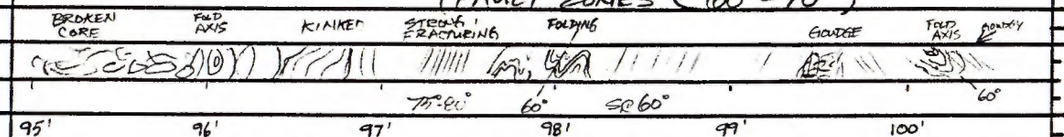
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						80.2'-104.1' GY-GN TO GN-GY MST (SILTY MST). S$_0$ @ 60° (?) S.P 60°
						WEAKLY SILICIC, CHLORITIC.
						ONLY 1-2 mm SCALE QTZ STRINGERS
						IN INTERVAL. STRONG S, CLEV. CORE
						RUBBLY. GOUGE @ 84', 94.5', 99.5'.
						(FAULT ZONES @ (60°-70°)



						FOLDING IS APPARENT IN SMALL SCALE
						BEDDING DEFORMATION: ONE FOLD AXIS @ 90°
						& TWO AT 60° OBSERVED. INTENSE
						FRACTURING & LOCAL FAULTING ASSOCIATED
						WITH FOLDING (SEE DIAGRAM ABOVE).
						100.2'-101.7' MST, STRONGLY SHEARED
						@ 70° WITH 20-25% SHEARED
						QSTK VEINING & TRACE Py.
						V. GOUGEY.
						104.1' GOUGEY, FAULTED CONTACT
104.1'	124.1'					SILTSTONE
						LIGHT GREY, FINE GRAINED.
						S$_0$ @ 50°(?) S.P @ 50°-40°.
						20% QSTOCKWORK VEINING OVERALL;
						VNS TREND @ ALL ANGLES, DOMINANTLY
						@ 40°-50°.
						104.1'-109.0' 10-20% QSTK VNLTS ≤ 1cm
						THICK; TRACE TO 1% Py,
						Po+Cp. ASP & LOCAL
						CHLORITE CLOTS IN VNLTS.

LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω SM5
4a		Po SEAM		MAG & qz
270		Po SEAM		
275.3'				
280		TRACE Py, Po (Asp?)		
		TRACE Py, Py & Asp		
290	FINING?			
CONTACTS @ 45°				
300 4a,b,c (Hw)		Py SEAMS	STRONGLY SIL.	
310				
320				
		Py SEAMS		
329.1' 6A	CONTACT @ 45°	TRACE Py		
330				
340				
350		TR. Asp		
360 4a,b	S.P @ 50°-60°	RARE ASP, Po, Py	W. STRONG SILICIFICATION	
370				
380				
390				
398.0' 400 6a	CONTACT @ 30°			

HOLE NO. 90-09

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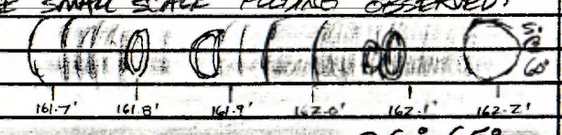
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION
						109.0'-111.6' SLTST w ≃ 60% QTZ VNING. ONE LG. VEIN ≃ 1 FT THICK. VEIN & VNLTS SHEARED @ 40°-60° ("RIBBON VNS"). STRONG ASP MINERALIZATION: DISSEM'D & COARSE ASP CUBES/CLUSTERS UP TO 5mm DIAM & SEAMS (UP TO 3CM LONG IN FRACTS) OVERALL 2-3% ASP. ALSO TRACE Py (DISSEM'D). ASP XTALS CROSS VEIN-SFD BOUNDARIES: POST VEIN EMPLACEMENT (? = CONTEMP. WITH SHEARING & SILICIFICATION?!).
						111.6'-112.3' 8-10 QTZ STRINGERS + ONE 3" QTZ + TOURMALENE + CHLORITE VEIN. ≃ 1% COARSE & DISSEM'D (XTALS IN VNS & HOST SLTST.) -> ASP + Py; MARCASITE ON S, FRACTS
						TOURMALENE OCCURS AS V POORLY FORMED (SUB)XTAL MASSES — 'DISSEM'D' APPEARANCE.
						117.5'-124.1' 10-15 QTZ VNLTS AVG < 1CM THICK @ ALL ANGLES.
						121.5'-124.1' 4" QTZ VN + 5-8 STRINGERS TRACE Py (DISSEM'D) & ONE FLECK OF SPHALERITE.
						124.1'-151.6' GREEN-GY TO GY MUDSTONE. MOD. TO STRONG SILICIFICATION. So & S1 @ 50°-60°. 20-25 ≤ 1CM THICK QTZ VNLTS // TO S1 (MOST SHEARED; SOME DISASSOCIATED).

(OVER)

LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
410	← MS1			
	STRONGLY SHEARED @ 70°-90°			
420				
		TRACE TO 2% PYRITE		
430			CHLORITIC	
6a				
440				
		2% Py		
450		1-2% Py		
460				
464.1'	CONTACT @ 50°	1-2% Py		
470				
480				
500				
4a				
510	S1 @ 50°-60° (So'11) ≃		V. SILICIC	
520				
530	FRACT @ 55° ENVELOPE			
540				
545.0				
4a, d 550 (LIF)				MAF

HOLE NO. 90-09

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω^{-1} SM5
						138.5'-140.1' SEVERAL (8-10?) QTZ VNLTS STRONGLY SHEARED UP INTERCAL'TO WITH MST FRAGMENTS (IN TURN, SERICITIC?) ≤ 1% Py OVERALL AS V. LOCAL MASSES/XTALS, ONE Py AGGREGATE MASS 1cm×5mm, LONG DIRECTION ⊥ TO S_1.	fa, d (LIF) fa 140.1'-161.0' END OF HOLE	S_1/S_0 @ 65-70° S_1/S_0 @ 65-70°		3.1m	Mag $\begin{cases} 0.2 \\ 0.2 \\ 0.9 \\ 0.2 \end{cases}$
						151.6'-156.6' GREEN MUDSTONE S_0 @ 70°-85°, S_1 @ 70°.					
						156.6'-234.6' MIXED GREEN AND RED MUDSTONE (LIF) LARGELY MAGNETIC. ALL V FINE GR'D WITH RARE SILTY INTERVALS 3mm TO 1" THICK. UNIT IS UNUSUALLY THICK (COMPARED TO OTHER NEARBY DDH INTER-SECTIONS) AND IS LIKELY SHOWING THICKENING DUE TO FOLDING (& POSS. FAULTING?) BEDDING IS LARGELY DESTROYED OR ALTERED BY SHEARING/ MOVEMENT ALONG S_1 PLANES (ie APPARENT BANDING/ALTERNATING "LAMINAE" OF LIF & GN MST NOT TRUE BEDDING IN MOST INSTANCES).					
						UNIT IS ONLY WEAKLY TO NON SILICIS					
						MAG UP TO 3.8.					
						SOME SMALL SCALE FOLDING OBSERVED:  SMALL SCALE FOLD AXES @ 60°-65° TO CORE AXIS. THE FOLD 'RINGS' ARE FINE SILTY LAMINAE & CARBONATE VEINLETS;					
						SILTY LAMINAE @ 161.4 TRENDS 70° (S_0)					

HOLE NO. 90-09

PAGE 6 of 10

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	QTZ SMS
						MAIN RED LIF SECTIONS:					
						158.7' - 166.2' S.@ 60°-70°					
						177.2' - 179.4' S.@ 70°					
						182.6' - 189.0' S.@ 60° S.@60°					
						204.0' - 206.6' S.@ 65°					
						208.0' - 213.0' S.@ 60°					
						216.5' - 221.0' S@ 60°					
						203.2' 1" GOUGEY FAULT@?					
						WHOLE INTERVAL CONTAINS 40-50 ± MM SCALE CARB VNLTS, BOUDINAGED & SHEARED OUT, IN S, PLANE.					
						MANY S, FRACT SURFACES 'GREASY' / TALCY (PERVASIVE' SHEARING THROUGH INTERVAL).					
						234.0' - 234.6' 2 MM SCALE PYRITIC 'STEAMS' (LARGEST UP TO 5MM THICK); DISSEMD PY, XTALLINE. S.@ 60°. S.@ 60°, S.@60°					
						234.6' - 275.3' LT TO DK GY SILICIC MUDSTONE S.@ S, FAIRLY CONSISTENT TH'OUT @ 60°. NO VEINING. MARCASITE+/- CARB ON LOCAL S, FRACT SURFACES.					
						236.5' - 238.0' FAULT ZONE: CORE BADLY BROKEN; GOUGE 237.2' - 237.4' IN FRACTS @ 65°-70°.					

HOLE NO. 90-09

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						243.0' - 244.5' MAG 0.1 - 0.2 (PYRRHOTITE DISSEM'D?)					
						244.8' - 244.9' FAULT/CRUSH ZONE: GOUGEY BX, ORIENTATION @ 60° (?-60°?) MARCASITE ON S, @60°; Py IN FAULT GOUGE (1-2% DAMSCALE XTALS).					
						257.6' - 258.3' 2-3 PYRRHOTITE SEAMS UP TO 3mm THICK @ 65° MAGNETIC (0.2).					
						260.9' ONE 1-2mm THICK Po SEAM (DISCONTINUOUS).					
						262.3' - 263.4' 5-6 ≤1mm TO 3mm THICK Po SEAMS @ 65°. SECTION MAGNETIC (0.3).					
						275.3' - 329.1' GREYWACKE, SLTST, MST (TURBIDITIC) GY TO GY-GN, STRONGLY SILICIFIED. ORIGINAL GRAINS/CLASTS RE MELTED? SILICIFIED. GROSS TEXTURES APPEAR TO FINE DOWNHOLE. 5-8% SUB CM SCALE QSTK VNLTS FROM 275.3' TO 297.0'. TRACE Py.					
						275.3' - 279.9' 5-8% QSTK VNING AA. TRACE Py, Po (Asp?)					
						285.5' - 288.4' ≈ 10% QSTK VNING. TRACE Py, Po, Asp.					

HOLE NO. 90-09

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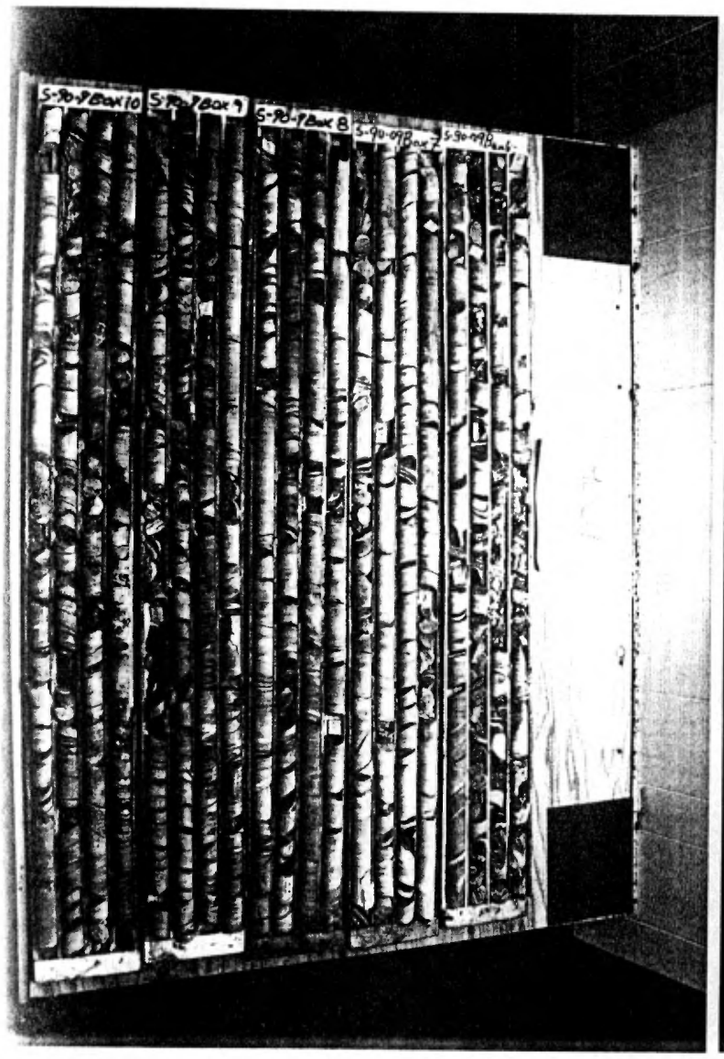
FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						300.2'-300.5' LT.GN GABBROIC SILL ('FINGER' SILL) W SHARP CONTACTS @ 45°. V.F. GRAINED, 1-2% Po+Py DISSEM'D THROUGHOUT.					
						322.0'-323.8' 2-3 PYRITIC SEAMS UP TO 5MM THICK; TREND @ 20°-30°, ARE DISCONTINUOUS.					
						329.1'-329.7' GABBROIC ('FINGER') SILL. LT.GN, V.F.GR'D. UPPER CONTACT SHARP @ 40°, LWR CONTACT BROKEN. 4 TO 5 MM SCALE Py SEAMS @ 50°.					
						329.7'-330.1' SLTST SILICIC, GY.					
						330.1'-332.1' GABBROIC (FINGER') SILL A.A., V.BRN WP. UPHOLE CONTACT @ 45°, DOWNHOLE? TRACE Py					
						332.1'-398.0' MUDSTONE / SLTST DOMINANTLY MST (80-90%). GY-DK GY, V.STRONG SILICIFICATION. 5% QSTK VEINING THROUGHOUT, VNS UP TO 2" THICK, GENERALLY <1cm TO <1cm THICK, V.RARE ASP XTALS & TRACE Py +/- Po IN VEINLETS S.@ 50°-60°, S.@?					
						MST-SLTST TO 362.5; ALL MST 362.5'-398.0'					
						347.6'-348.8' 1" QVN & STRINGERS TRACE ASP.					

HOLE NO. 90-09

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						398.0' - 464.1' GABBRO					
						GREEN - DK GR, V. CHLORITIC.					
						RANGES FROM V. FINE TO FINE-MEDIUM					
						GRAINED (COARSEST XTALS ≈ 1-2mm DIAM).					
						OVERALL CONTAINS TRACE TO 2% PYRITE					
						AS DISCRETE XTALS, BLEBS, MASSES &					
						DISCONTINUOUS SEAMS UP TO 3-5mm					
						DIAMETER.					
						2-3% QTZ+CARB +/- CHLOR +/- CLINOZOISITE +/- (RARE/TRACE)					
						EPIDOTE VEINING, GENERALLY SUB CM IN					
						SCALE, UP TO 2" THICK.					
						SULPHIDES (Py) GABBRO IS VERY SOFT, BROKEN UP &					
						IN HOST GAB & NOT SEEN GOUGY UP TO ≈430', WITH A V. STRONG					
						IN VEINS. SHEAR FABRIC @ 70°-90° TO C.A.					
						Ω-CARB VNLTS IN THIS INTERVAL ALSO					
						SHEARED APART/DISMEMBERED.					
						398.0' CONTACT @ 30° (SHEARED).					
						399.0' - 402.0' SHATTERED & RESILICIFIED MST					
						SHEAR FABRIC/FRACT'S @ 50°					
						5 to 8% STRNK VNING CONTACT @ 399.0' BROKEN, BUT					
						NO VIS. SUL. CORE IS ½ MST ½ GABBRO FROM					
						399.0' - 400.0' (CONTACT @ 0°-10°).					
						400.0' - 402.0' SHEARED/SILICIFIED					
						MST. CONTACT AT					
						404.3'-407.0' STRONGLY SHEARED 402.0' = ? (BROKEN).					
						w ≈ 1% Py.					
						412.0' - 412.2' QTZ+CARB+CHLOR+EP+CLINOZ. VNLT					
						@ 50°. NO VIS. SUL.					
						447.5' - 449.6' ≈ 2% PYRITE CONTENT.					
						450.5' - 453.1' 1-2% PYRITE & ONE 1-2" THICK					
						QTZ+CLINOZ. VNLT.					

HOLE NO. 90-09

FOOTAGE FROM	TO	FT.	FT.REC.	%REC	SAMPLE NO.	DESCRIPTION	LITHOLOGY	STRUCTURE	MIN'ZN	ALTER.	Ω-1 SM5
						459.7'-462.6' ≤ 1-2% PYRITE.					
						464.1' LOWER CONTACT SHARP & DISTINCT @ 50°. 3mm THICK QTZ VNLT SEPERATES GRAY FROM ADJACENT SED.					
						464.1'-545.0' MUDSTONE LT. TO DK GY, VERY SILICIC. STRONG FRACTURING. RESILICIFIED. REFRACTURED S, AVG. 50°-60° S. GENERALLY NON-VISIBLE, ≤ 50°-60°.					
						532.6'-535.1' 15-20 QSTK VNLTS < 1cm THICK (UP TO 1" THICK); AVG TREND @ 30°. NO VIS. SWL					
						533.7' 1" FAULT GOUGE FRACTS @ 55°					
						545.0'-557.8' MIXED GN MUDSTONE & RD-BR LIF MAGNETIC (0.0 -to 2.4) SHEARED & RE-SILICIFIED. S.C 65°-70° S,C 70°.					
						557.8'-561.0' MIXED GY & GN MST. So & S, @ 65°-70°. SILICIFIED.					
						561.0' END OF HOLE.					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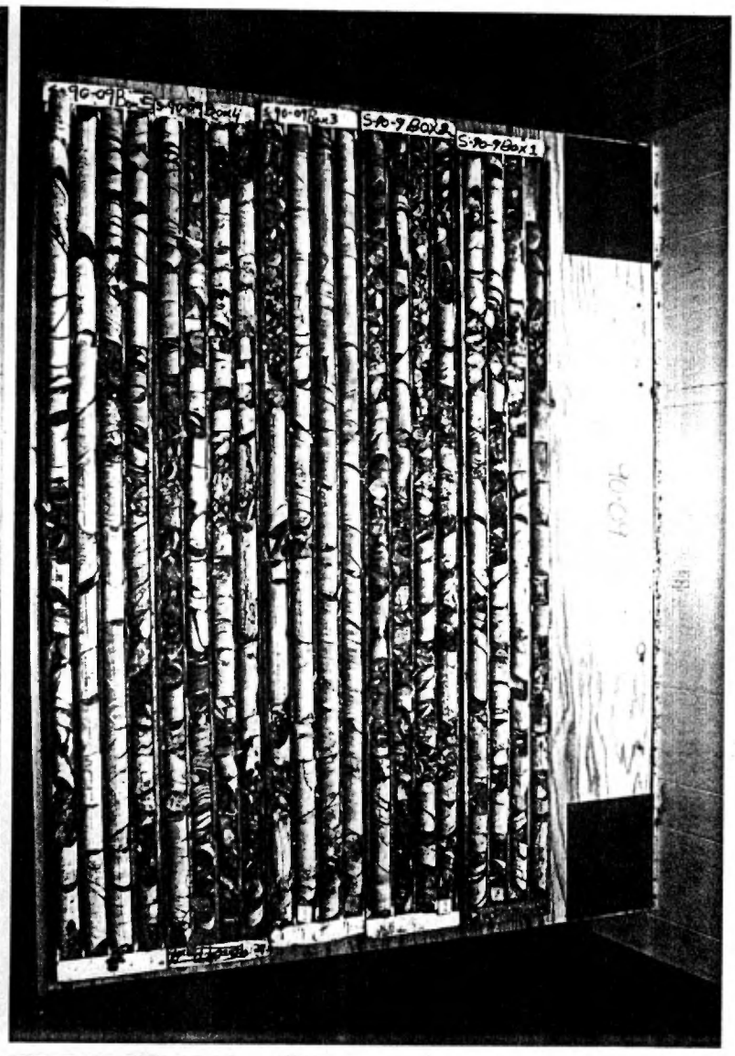
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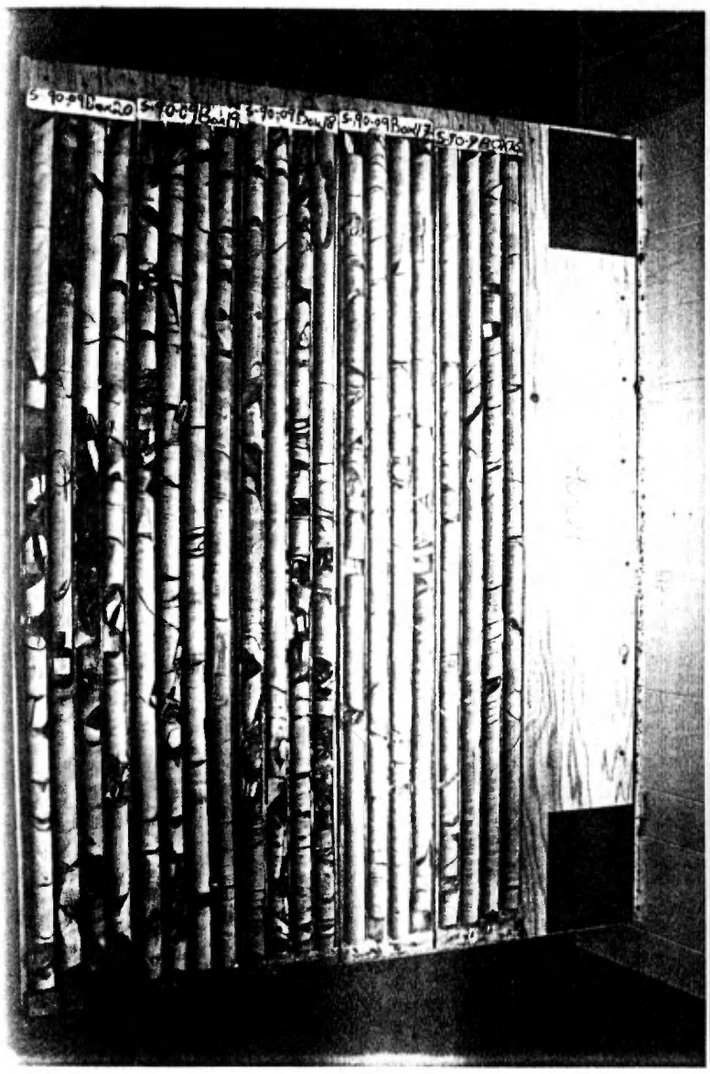
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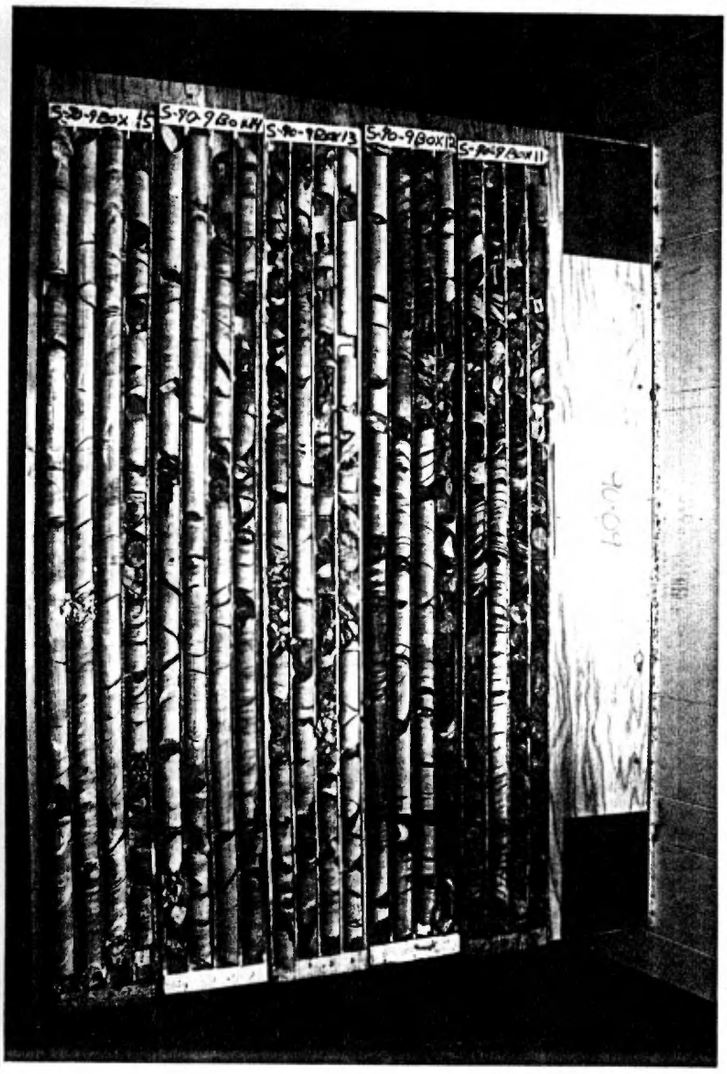
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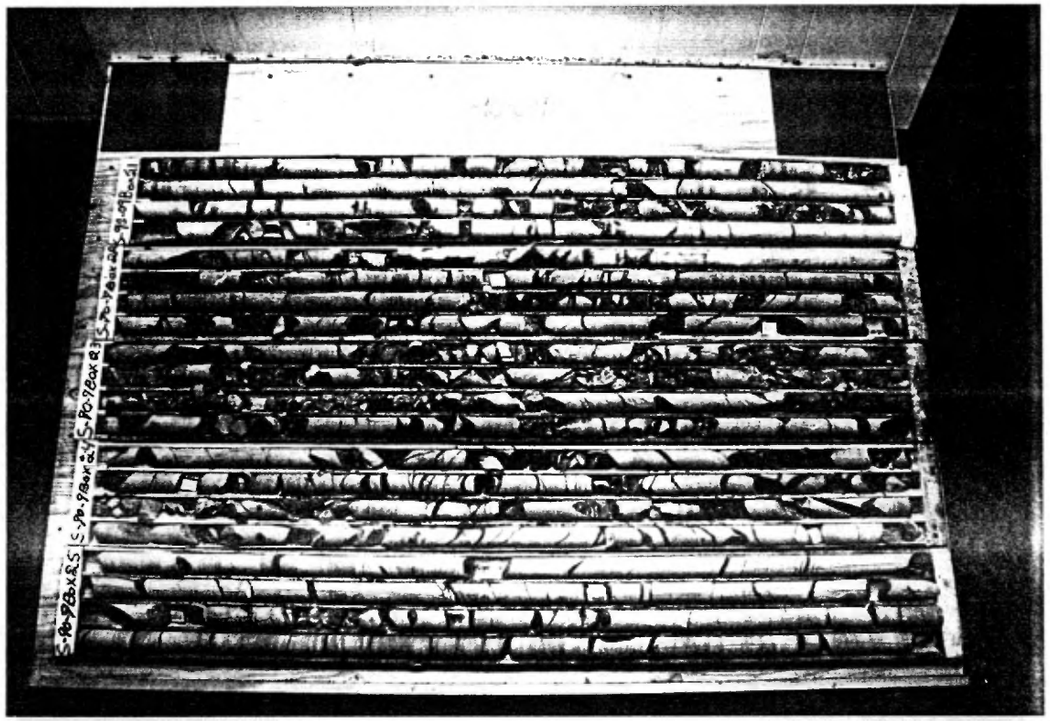

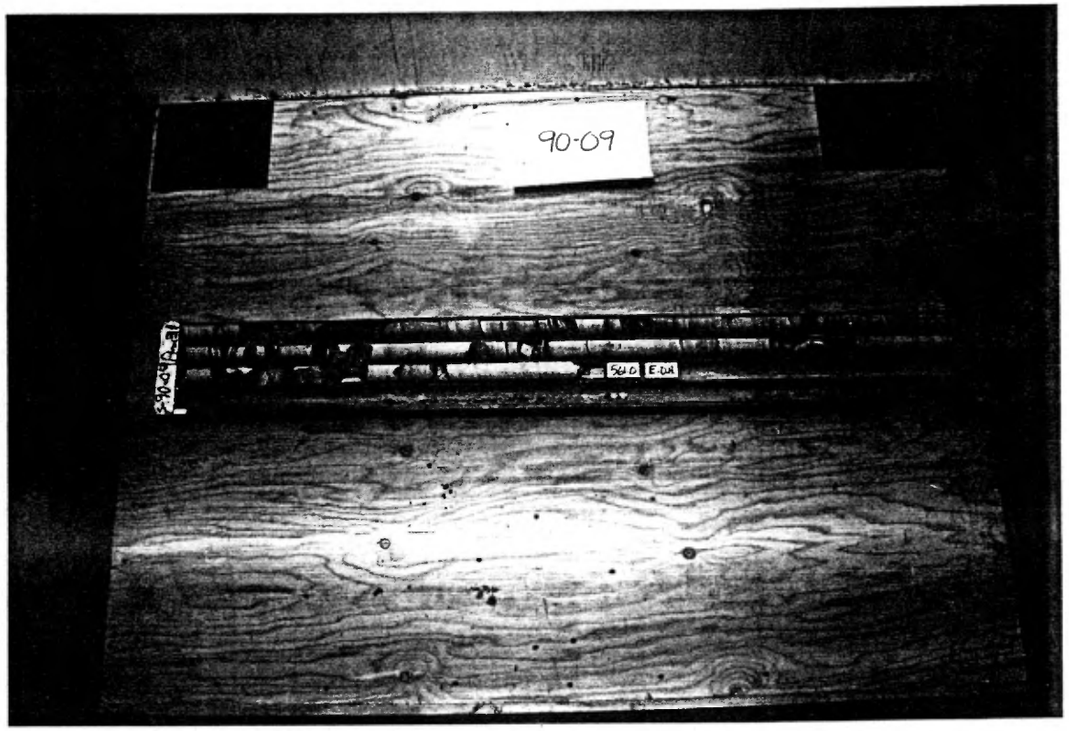
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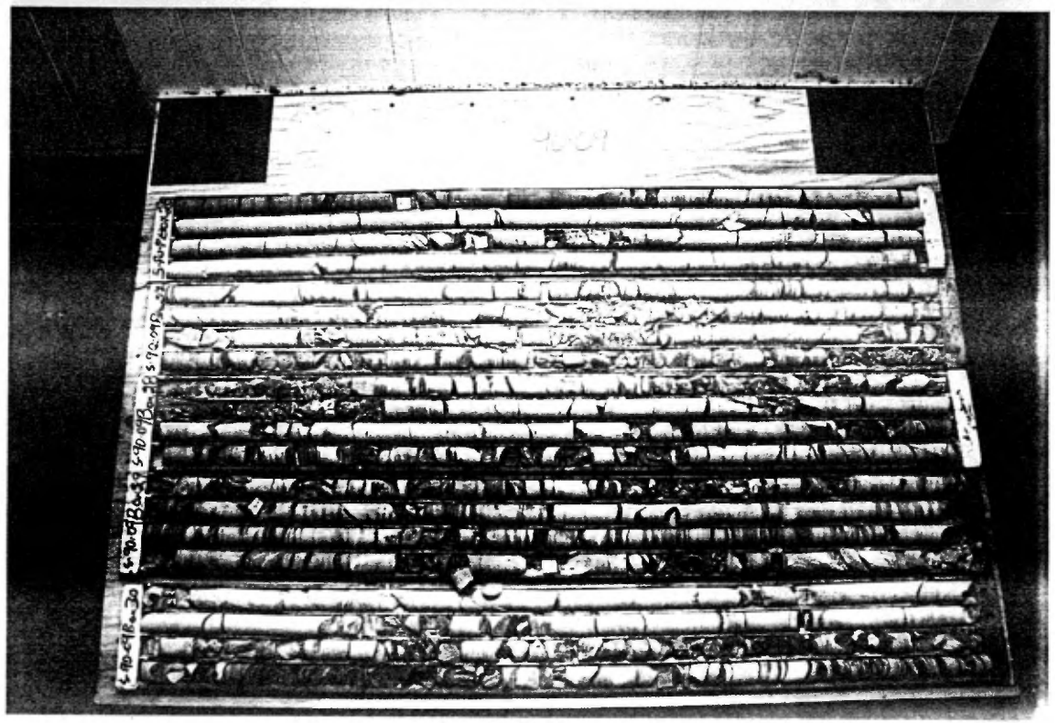

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CHIMITEC LTEE

RAPPORT D'ANALYSE
GÉOCHIMIQUE

DATE DE L'IMPRESSION: 23-MAR-90

RAPPORT: C90-50156.0

PROJET: AUCUN

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au PPB	
D2 9009-01		23	
D2 9009-02		232	
D2 9009-03		<5	
D2 9009-04		10	
D2 9009-05		126	
D2 9009-06		16	
D2 9009-07		60	
D2 9009-08		11	
D2 9009-09		176	
D2 9009-10		1139	0.032 oz/T
D2 9009-11		235	
D2 9009-12		9	
D2 9009-13		18	
D2 9009-14		<5	
D2 9009-15		<5	
D2 9009-16		<5	
D2 9009-17		10	
D2 9009-18		<5	
D2 9009-19		6	
D2 9009-20		21	
D2 9009-21		<5	
D2 9009-22		<5	
D2 9009-23		<5	
D2 9009-24		<5	
D2 9009-25		<5	
D2 9009-26		<5	
D2 9009-27		<5	
D2 9009-28		<5	

Work Order : R-0065

KMS

DDH 9009

Sample Number	Wt. g	Conc. Wt. g	Bead Wt. mg	Conc. g/t Au	Fines Wt. g	Fines g/t Au	Float g/t Au	Head Sample no float	Head Sample w/float	Sites +10	Sites +20	Sites -20+60	Sites -60+100
NORTH ZONE													
9009-01	3048	25.62	0.04	1.65	949	0.43		0.44	0.013	*	*	*	*
9009-02	1309	17.92	0.01	0.83	384	0.21		0.22	0.006	*	*	*	*
9009-03	126	22.83	0.00	< 0.07	26	0.07		0.07	0.002	*	*	*	*
9009-04	365	16.21	0.00	< 0.07	80	< 0.07		0.07	0.002	*	*	*	*
9009-05	1213	25.58	0.00	< 0.07	275	0.25		0.25	0.007	*	*	*	*
9009-06	314	20.41	0.00	< 0.07	69	0.16		0.15	0.004	*	*	*	*
9009-07	1549	31.25	0.00	0.11	428	0.12		0.12	0.003	*	*	*	*
9009-08	1242	22.13	0.00	< 0.07	334	< 0.07		0.07	0.002	*	*	*	*
9009-09	3558	25.92	0.10	3.79	1076	0.27		0.30	0.009	*	*	*	2
9009-10	1750	25.39	0.51	19.97	571	2.09		2.35	0.069	*	*	*	2
9009-11	374	25.15	0.05	2.01	92	0.98		1.05	0.031	*	*	*	*
9009-12	1444	27.13	0.00	< 0.07	402	< 0.07		0.07	0.002	*	*	*	*
9009-13	1036	25.81	0.00	0.10	321	0.12		0.12	0.003	*	*	*	*
9009-14	398	27.97	0.00	< 0.07	75	< 0.07		0.07	0.002	*	*	*	*
9009-15	633	30.93	0.00	< 0.07	145	< 0.07		0.07	0.002	*	*	*	*

LEGEND

LITHOLOGY - STRATIGRAPHY

6 MAFIC IGNEOUS COMPLEX
Intrusives (M. Ordovician)
6a Gabbro
6ab Basaltic
6ap Porphyritic
6b Diorite
6bq Quartz-Bearing

5 BEAUCEVILLE FORMATION
U.MAGOG Group (M. Ordovician)
5a Mudstone
5b Siltstone/Sandstone
5c Greywacke
5e Conglomerate

4 ETCHEMIN FORMATION
M.MAGOG Group (M. Ordovician)
4a Mudstone
4b Siltstone/Sandstone
4c Greywacke
4d Ferruginous Mudstone
(Lean Iron Formation, Red Beds)
4e Conglomerate

3 FRONTIERE FORMATION
L.MAGOG Group (M. Ordovician)
3a Mudstone
3b Siltstone/Sandstone
3c Greywacke
3e Conglomerate

2 SAINT-DANIEL FORMATION
Melange/Olistostrome (Cambrian - M. Ordovician)
2a Mudstone
2b Siltstone/Sandstone
2c Greywacke
2d Ferruginous Mudstone
(Lean Iron Formation, Red Beds)
2e Sedimentary Melange/Olistostrome
(Interbedded Mudstone, Siltstone, Greywacke)
2ep Pebbly
2eb Blocky
2f Ultramafic Volcanics
(Precambrian-Cambrian)
2fs Serpentinite

1 CALDWELL FORMATION
(Cambrian)
1a Mudstone
1b Siltstone
1c Sandstone
(Precambrian - Cambrian)
1d Mafic Volcanics
1e Ultramafic Volcanics
1es Serpentinite

1M BENNETT FORMATION
Metamorphosed Caldwell Rosaire and Armagh Formations
1ma Mudstone
1mb Siltstone
1mc Sandstone (Quartzite-Schistose Quartizite)

LEGEND

ABBREVIATIONS

LITHOLOGY

tu	Turbiditic
tf	Tuffaceous (volcanogenic sediments)

MINERALIZATION

VG	Visible Gold
ASP	Arsenopyrite
Cp	Chalcopyrite
Gn	Galena
Mag	Magnetite
Py	Pyrite
Po	Pyrrhotite
Sph	Sphalerite
Li	Limonite
He	Hematite
Mn	Manganese
Sul	Sulphides
Zo	Zoisite
Ep	Epidote
Cn	Carbon
Cl	Chlorite
Cb	Carbonate (Probable Mg-Fe)
Cc	Calcite
Cr	Rhodocrosite
F	Feldspar

VEINING

V	Vein
Stgrs	Stringers
Stk	Stockwork
VS	Vein system
Q	Quartz
QCb	Quartz carbonate
QF	Quartz feldspar
QCbF	Quartz carbonate feldspar
Bx	Breccia

ALTERATION

Ser	Sericitic
Chl	Chloritic
Sil	Silicious

Sil_1	weak to moderate
Sil_2	strong
Sil_3	hornfelsic or cherty

Grp	Graphitic
Carb	Carbonatized

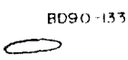
Cal	calcareous

METAMORPHISM

Sch	Schistose
Gn	Gneissic

LEGEND

GEOLOGICAL SYMBOLS

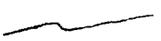


Outcrop/Station and Sample Number

Boulder (erratic) Transported

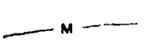
Float (locally derived)

Lithological Contacts

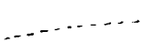


Observed, Defined

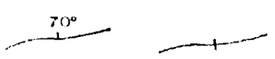
Approximate, Inferred



Inferred by Geophysics (M=Magnetics, EM=Electromagnetics)



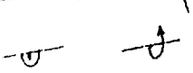
Assumed, Concealed or Interpreted



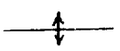
Contact Showing Inclined Dip; Vertical

Bedding

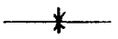
Bedding Plane: Inclined, Vertical, Horizontal



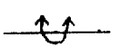
Bedding Plane with Younging Direction: Inclined; Overturned



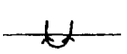
Anticline and Axial Trace



Syncline and Axial Trace

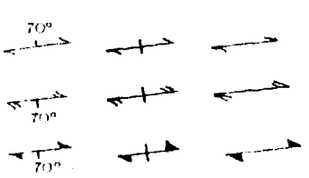


Overturned Anticline and Axial Trace



Overturned Syncline and Axial Trace

Cleavage and Foliation



S_1 Cleavage: Inclined; Vertical; Undetermined Dip

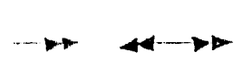
S_2 Cleavage: Inclined; Vertical; Undetermined Dip

S_3 Cleavage: Inclined; Vertical; Undetermined Dip

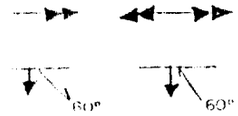
Lineations

Mineral Elongation; Quartz Elongation

Bedding-Cleavage Intersection Plunging; Horizontal



Crenulation S_1/S_2 Intersection Plunging; Horizontal



Slickenside (Shown on Fault Plane) Normal; Reverse

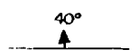
Mineral Striations (i.e. Rolled Vein with Grooved Surface)

Quartz Vein Intersection with S_1

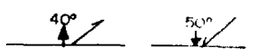
Faults (blue)

Fault Trace (Observed)

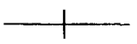
Approximate Fault Trace (Inferred)



Dip Direction/Angle - Normal Fault

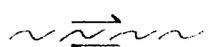


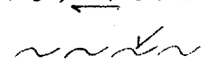
Dip Direction with Relative Slip - Reverse Fault


Vertical Fault


Low Angle Thrust (45° or less), Barbs on Hanging-Wall

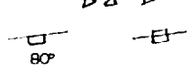
Shear


Strike-Slip Shear


Oblique Shear

Fault Zone or Shear Zone Showing Dip


Breccia



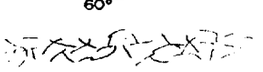
Joints: Inclined; Vertical

Mineralization

Orange = Quartz
Red = Sulfide

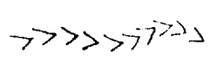
Quartz Vein: Inclined; Vertical

Folded Quartz Vein with Axial Trend and Plunge


Quartz Stockwork

Glacial Features

Striation with Determined Ice Direction Sense; Undetermined


Esker

Surface Openings

Prospect Trenches, Pits, or Open Cuts with Depth Indicated

Narrow Trench


Sand or Gravel Pit

Mine or Quarry