842151

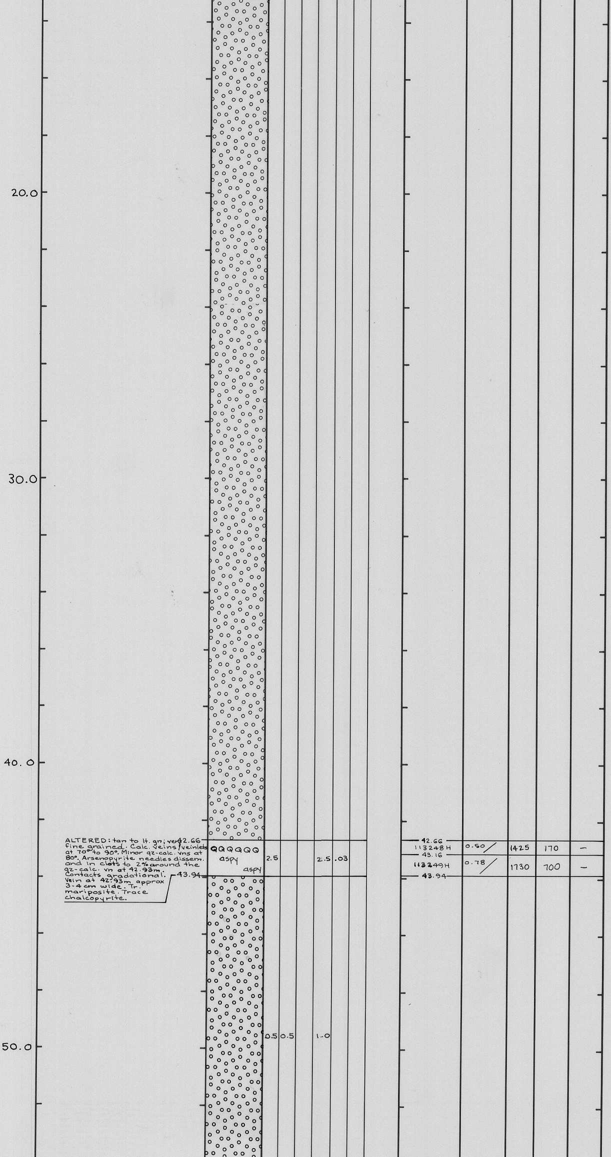
Sample Nos.: 113248 to 113259 H

CHEVRON CANADA RESOURCES

HOLE No. WS 84-003	**PROJECT** M577	**PROPERTY** WAYSIDE	**STARTED**: 84-07-02 **FINISHED**: 84-07-18
COORDINATES **N:** 5635252 N **E:** 511810 E	**AZ.**: vertical **EL.**: 697.0 m	**DIP-COLLAR:** -90.0° **ACID DIP TESTS:** NO TESTS TAKEN	**T.D.**: 447.75 m **LOGGED BY:** LDM

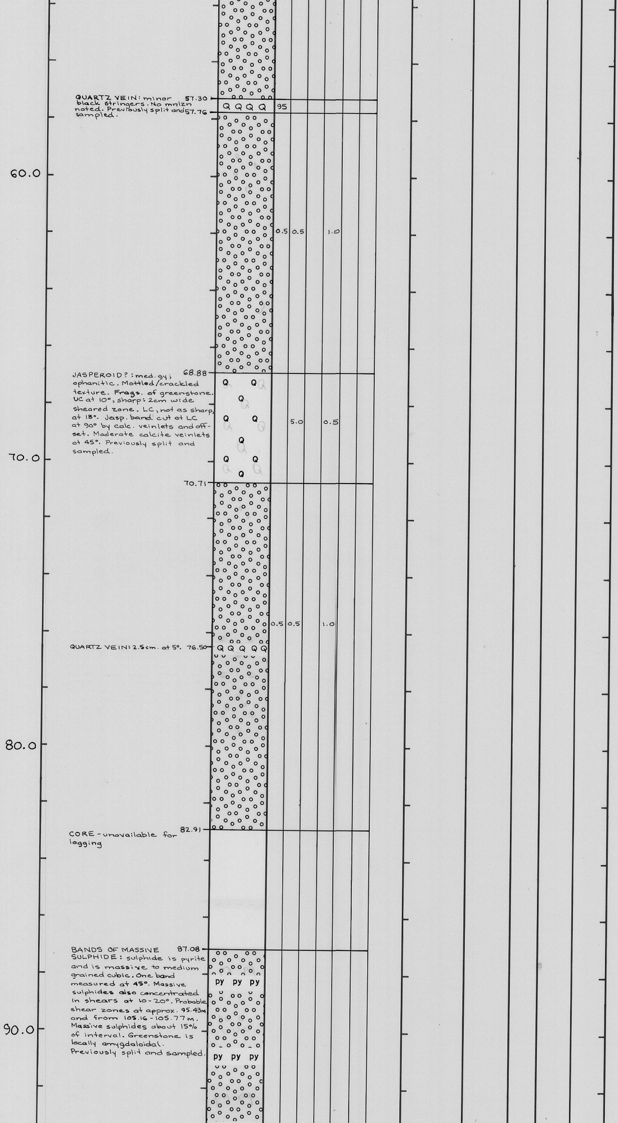
⋯	OVERBURDEN	∘ ∘ ∘ ∘ ∘	GREENSTONE	▲ ▲ ▲	BRECCIA	
b b b b b	BASALT	v v v v v	VOLC. FLOWS	⋇ ⋇ ⋇	STOCKWORK	
◇ ◇ ◇ ◇	DYKE	— — —	CHERT	Q Q Q Q Q	SILICIFIED	
x x x x x x x	GRANITE	^ ^ ^ ^ ^	DIORITE	D D D D D	DOLOMITIZED	
☰	ARGILLITE	s s s s s	SERPENTINITE	bx (d)	breccia (ted)	
▦	LIMESTONE	⩘⩘	FAULT	fgm (s)	fragment (s)	
▨	DOLOMITE	∼ ∼	GOUGE	mx	matrix	
				vn (lt) s	vein (let) s	
				str	stringer	
				fcts (a)	fractures (ing)	
				ss	slickenside	
				diss.	disseminated	
				xls	crystals	
				bl.	bleached	
				py	pyrite	
				cr	carbonaceous	

	REMARKS m		**% ALTERATION**						**% RECOVERY BETWEEN BLOCKS**	**SAMPLE INTERVAL**	**SAMPLE LENGTH % REC.**	**ICP As ppm**	**Geochem Au ppb**	**Assay Au oz/ton**
			SILICA	PYRITE	CLAY	CARBONATE	MARIPOSITE	CHLORITE						
0	OVERBURDEN: no core recovered.													
4.89	GREENSTONE: Medium to dark green. Fine to medium. Amygdaloidal with calcite infillings. Locally tuffaceous. Locally brecciated - some fragments up to 5cm. Rare patches of silica. Weak quartz veining. Weak to moderate calcite veins/veinlets. Trace hematite. Common shearing and veining trend at 0-10°. Pyrite disseminated to 0.5%. Chalcopyrite in patches to 0.25%.	∘ ∘ ∘ ∘ ∘												
10.0		∘ ∘ ∘ ∘ ∘												



ALTERED: tan to lt. gn; very fine grained. Calc. veins/veinlets at 70° to 90°. Minor qz-calc. vns at 80°. Arsenopyrite needles dissem. and in clots to 2% around the qz-calc. vn at 42.93m. Contacts gradational. Vein at 42.93m approx 3-4 cm wide. Tr. mariposite. Trace chalcopyrite.

42.66 113248H 43.16	0.50 /	1425	170	–
113249H 43.94	0.78 /	1730	700	–



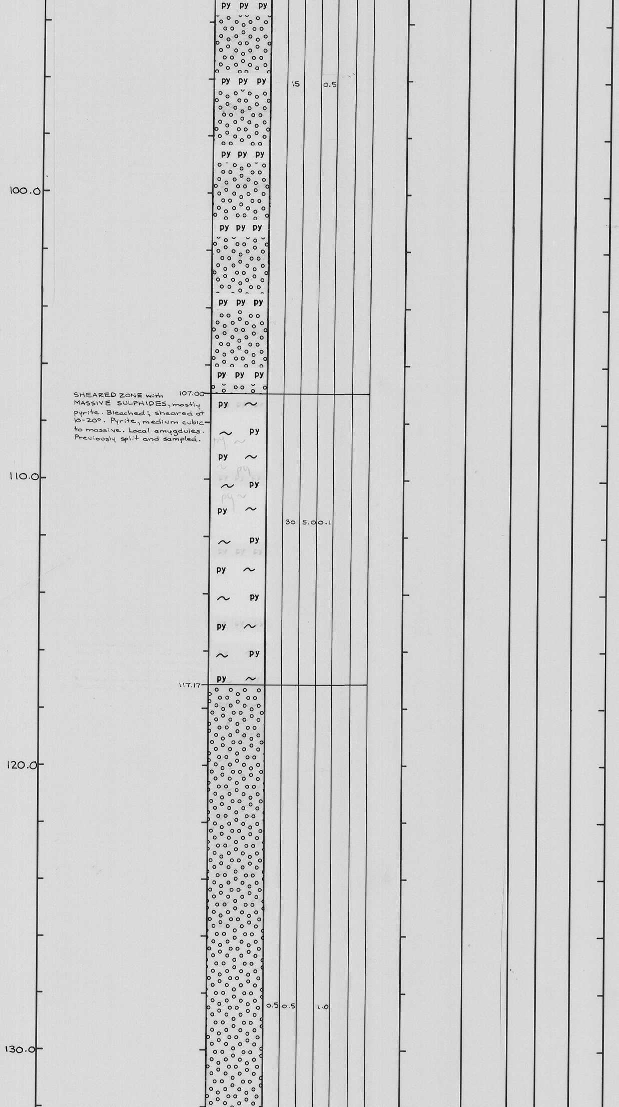
QUARTZ VEIN: minor black stringers. No mnlzn noted. Previously split and sampled. 57.30 57.76

JASPEROID?: med. gy; aphanitic. Mottled/crackled texture. Frags. of greenstone. UC at 10°, sharp: 2cm wide sheared zone. LC, not as sharp, at 18°. Jasp. band cut at LC at 90° by calc. veinlets and offset. Moderate calcite veinlets at 45°. Previously split and sampled. 68.88 70.71

QUARTZ VEIN: 2.5cm. at 5°. 76.50

CORE - unavailable for logging 82.91

BANDS OF MASSIVE SULPHIDE: sulphide is pyrite and is massive to medium grained cubic. One band measured at 45°. Massive sulphides also concentrated in shears at 10-20°. Probable shear zones at approx. 95.43m and from 105.16 - 105.77 m. Massive sulphides about 15% of interval. Greenstone is locally amygdaloidal. Previously split and sampled. 87.08

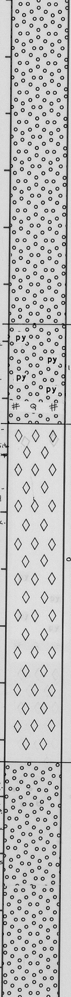


SHEARED ZONE with MASSIVE SULPHIDES, mostly pyrite. Bleached; sheared at 10-20°. Pyrite, medium cubic to massive. Local amygdules. Previously split and sampled.

140.0

150.0

160.0



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143.41

MASSIVE SULPHIDE BAND: banding at 25-30°. Sulphides predominantly fine to medium cubic pyrite with minor chalcopyrite. Sulphides 30-40%. Local shearing. Local qz-calc. stockwork at approx. 146.20m. Minor limonite on veins. 1.5 cm calcite vein at UC at 33°. Interval previously split and sampled.

1.0 30 1.0

146.91

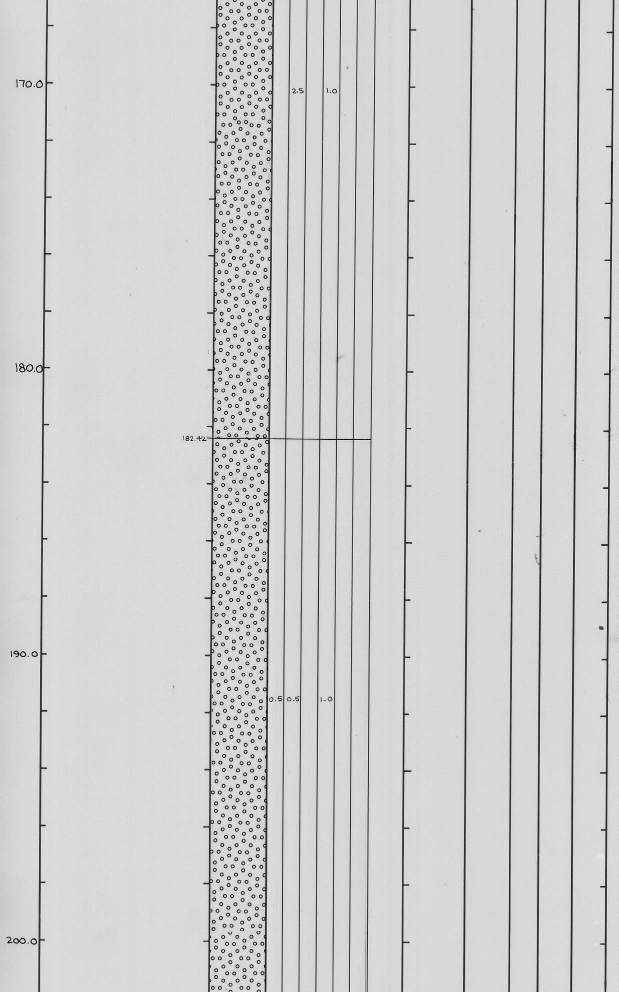
FELSITE DYKE: white, fine-grained, equigranular. 2% dissem. limonite spots. Limonite also as fracture coatings. Sharp UC at 30°, LC is broken. Spots of pyrite and fine sulphide (pyrite), to 1.5%. Very fine sericite disseminated throughout to 3%. Fractures commonly at 50° and 15°. Minor quartz veins. Minor calcite veining. Very fine limonite stockwork. Previously split and sampled from 155.45-158.80m.

0.1 2.5 0.5

158.80

FRACTURED ZONES: dk. gn. Moderately well to extremely well-fractured, some shearing. Locally amygdaloidal. Calcite stringers and veinlets common. A common fracture trend at 5-10°. Section from 166.12-167.64m only moderately fractured. Narrow clay gouge (1-2cm) at approx. 116.46m. Disseminated pyrite 2-3%. Pyrite rarely as thin bands with chalcopyrite stringers.

Previously split and sampled from 162.92-165.05m and 176.02-182.42m.



203.45

MINERALIZED ZONE: tan to dk gn. Fine grained. Clots and bands of pyrite and chalcopyrite in weakly altered and moderate local shearing from 203.45 to 209.40m, sulphides 10%. From 209.40 - 210.31m: chalcopyrite to 5% and sphalerite 5-10%, pyrite 10-15% medium to coarse cubic. From 211.23 - 212.75m: zone is sheared and has medium and coarse cubic pyrite to 20%, chalcopyrite 2-3%, sphalerite 1%. From 213.21 - 213.51m: sheared with 15% pyrite, 3-5% sphalerite and silica bands (jasperoid?).

Previously split and sampled.

1.0 10 0.5

GREENSTONE:

- separated from first primary interval for convenience. Medium to dark green. Fine-grained. Calcite-filled amygdules common. Locally brecciated. Shear at 217.02m. Sheared and fractured (gouge?) at 218.54 - 219.46m. Shear at: 256.03m - 7cm, at 25-30°, clay gouge to 20%, pyrite patches to 20%.

210.0

213.51

217.79

MASS. SULPH. ZONE: mass. and fine-med. cubic py. 70-80%. Sphal. bands to 5% at 30-40°, Chalco stringers and diss. to 3%. Minor calc. stringers. Previously split and sampled.

70 0.1

218.24

219.46

DISSEM. SULPH. ZONE: dark green greenstone. Local amygdules. Pyrite and chalcopyrite locally disseminated to 10% and 2%, respectively. Some barren sections. Zones of chlorite/serpentine alteration in shears at 227.99, 230.73 and from 232.56 - 233.48m. Disseminated sulphides throughout from 219.46 - 226.77m. Shearing at 5-20°. Massive sulphide from 234.23 - 234.96m, mostly massive pyrite. Rare silica patches. Local stockwork at 241.10m.

Previously split and sampled.

220.0

230.0

0.1 5.0 0.5

240.0

MINERALIZED ZONE: 248.41

Green to tan. Bleached. Sheared. Patches of intense alteration. Well-fractured to crumbly. Weak calcite veining possibly at 45°. Coarse cubic pyrite 15-30%. Amygdules common and occasionally with pyrite - calcite infilling. Chalcopyrite concentrated locally to 5% (254.60m). Sulphide band possibly at 20°.

Previously split and sampled.

250.0

254.66

Shear zone: 7cm wide at 25-30°, clay gouge to 20%, pyrite patches to 20%. 256.03

260.0

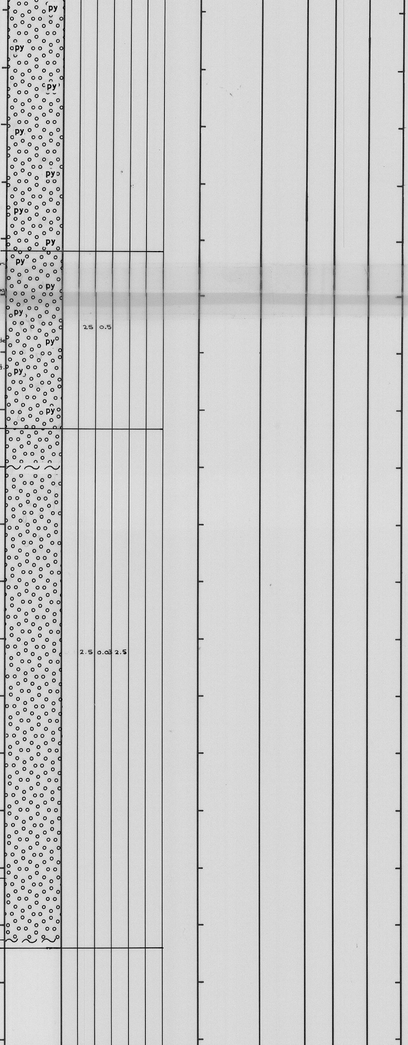
270.0

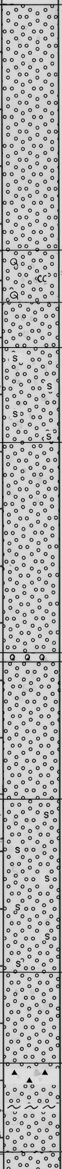
1-2cm. CALCITE VEIN at 15°. 270.36

SHEARED at 15°. 272.50

MISSING 272.80

core unavailable for logging.





276.30			2.5	0.03	2.5		
284.95	VEIN: QUARTZAND CALCITE, approx. 2-7cm wide at 0-10°.	2.5	1.0		2.5		
286.75			2.5	0.03	2.5		
288.34	ZONE OF SHEARING: dark green. Fine-grained. Shear at 288.72m at 10°. 95% core missing from 289.56 - 291.50m, much crumbled chlorite/serpentine left behind. Pyrite in clay gouge and disseminated to 2%. Calcite as veins and fracture coatings.		2.0	1.0	1.0		20
291.69			2.5	0.03	2.5		
299.01	VEIN: CARBONATE-QUARTZ, Stockwork of veining. Possibly at 50°. Minor cubic pyrite? Previously split and sampled.						
299.31			2.5	0.03	2.5		
306.15	HIGHLY FRACTURED: dark green. Fine to medium grained. Crackle texture to intensely fractured. Locally serpentinized. Some fractures measured at 10-20°. Much of core is shattered.						10
312.24			2.5	0.03	2.5		
315.37	SHEARED and BRECCIATED: med. to dark green. Sheared and quartz veined at 25-30°. Qz vn'g is dark gray and mottled, sub-rounded greenstone fragments in qz vng. 5% fragments, 1-20mm. White quartz-calcite veins 2-10mm at 60°. Medium to coarse cubic pyrite associated with the gray qz veining. Pyrite to 5%.	20	5.0		1.0		2.5
318.48	CALCITE VEINS at 10-30°						

CALCITE VEINS at 10-30°, 319.40
6-7veins / 15cm, 2-10mm wide.

320.0

2.5 0.03 2.5

330.0

332.80
CRACKLED ZONE with QZ VEINS/STOCKWORK: medium green. Cubic pyrite associated with quartz. Pyrite to 1%. Locally disseminated pyrite to 3%. Amygdules locally. From 336.50 - 337.11m: Intense fracturing, chlorite/serpentine alteration. Most of core in this interval is missing.

Previously split and sampled.

2.5 2.5 2.5

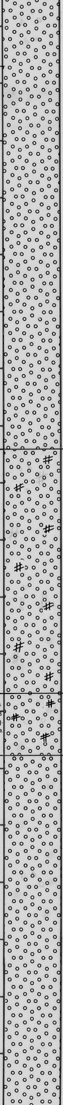
340.0

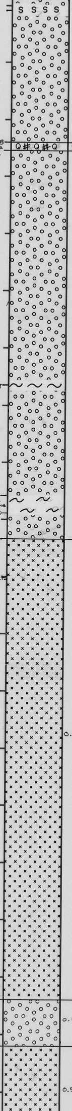
341.38
QUARTZ VEINING/STOCKWK with SULPHIDE: green to gray. Fine grained. Crackled locally. Qz is gy and mottled. 15% pyrite, 0.5% chalcopy. 0.1% sphalerite. Possible fracture orientation at 10°. Rare light green alteration - epidote? Previously split and sampled. 343.56

30 10 1.0

350.0

2.5 .03 2.5





SERPENTINE "CHIPS"

360.0

QZ VEIN/STWK: tan alter'n. Veining possibly at 70°. Tr. mariposite around vn. Arsenopy. needles to 1% around vn. Py diss. to 2%.

360.78 – 361.11 | 10 | 2.5 | 7.5 | 0.01

360.78 – 361.11 | 113250H | 0.33/ | 50 | 10 | —

2.5 | .03 | 2.5

369.27 SHEARING at 30°, carbonaceous with minor calcite stringers.

370.0

373.14 – 373.75 SHEAR: extremely carbonaceous at 373.14m at 10° with carbonate vns. Weak to moderate tan alteration from shear to 373.75m.

374.66

GRANITE ?:

Medium green to gray. Medium grained, equigranular. Moderate crackle texture by quartz veinlets and black stringers. Probably a diorite / granite mix with large xenoliths of greenstone. Local brecciated zones (380.75m). UC possibly at 55-60°. 3-4 cm quartz vein.

380.0

0.5

390.0

390.74 – 392.42 GREENSTONE: medium green. Fine grained. 15% granite intrusions at about 45°. Crackle texture in granite with black stringers.

0.1 | 0.1

0.5

From (m)	Description	Lithology column						
396.25	GREENSTONE: medium green. Fine-grained. 15% granite intrusions. Crackle texture of black stringers in granite.					0.5		
398.22	MIXED ZONE: granite and tan-green altered bands (gnst?). Tan intervals very hard and fine-grained. Tan has been brecciated by intrusive. Intense crackling by black stringers. Tan bands at 60-80°. Pyrite dissem. and as stringers to 1%. Previously split and sampled from 398.23 - 398.67m.							
401.05	QZ VNG/STWK in granite: lt gy to bn. Coarse qz stwk with lim. Tan altern common - ankerite? Chl. partings at 10-20°. Tr. mariparound qz. vn at 401.90m. Mod. shearing. Small ladder veining (tensional). 3-5cm. qz-ank. vn. at 401.05m at 15°. Py diss. and stringers 1-2%.	# QQQQQQ #	20	2.5		5.0	.03	2.5
402.43			0.5					
402.95	DIORITE: Medium green. Fine to medium grained. Locally porphyritic. Granite mix and bands to 10%. Xenoliths of greenstone. Minor calcite veins. Rare quartz veins. Sheared zone at 434.87m at 30°, much chlorite/serpentine alteration, approx. 15cm. Shearing at 436.75 - 25cm and at 436.45 - 10cm.							
410.38	GREENSTONE: med. gn; fine grained. 5% intrusive injections (granite?). Minor calcite ± quartz stringers.		0.1			0.5		
412.10	QUARTZ VEINING ZONE: At 412.10: shearing at 20°, 1cm. qz vein at 60°. 412.10 - 413.00: tan-green alteration zone; ankerite crackled. Qz vn at 413.00, UC at 30°, LC at 15-20°. Altered from 413.40 - 413.90m. Qz vn UC at 40°, LC broken. At 415.60m: contact between qz vn and altered diorite? is clay gouge + limonitic. Arsenopyrite dissemin. thru'out altered sections (intrusive, poss. gran?) to 2-3%. Py. diss. 2-3%. Previously split and sampled from 413.00 - 416.49m.	Q~Q~Q aspy QQQQQ aspy QQQ QQ QQQ ~Q~Q~ aspy aspy	30	2.5	1.0	5.0		
416.59	VEINING ZONE: med-dk gn. Fine to med. grain. Mod. calc. vng with local fine stwk. Minor to mod. qz vng: White and dk gy. Calc. vns at 40-50°. Sheared zone with calc. vng at 25° at 418.80m. Local bxn.	QQQQ	1.0	1.0		5.0		5.0
417.40								
430.30	DYKE, HORNBLENDE PPY: dk. gn. Fine-grained with 3-5% phenocrysts 1-6mm, chlorite alter'd phenos. UC sharp at 45°, LC sharp at 45°. Locally crackled. 1% intrusive bands - xenoliths? Minor calcite veinlets.					1.0		2.5

400.0

410.0

420.0

430.0

398.80					
113251H	1.40/	<5	10	–	
400.20					
113252H	0.85/	590	285	–	
401.05					
113253H	1.06/	5	25	–	
402.11					
113254H	0.32/	10	5	–	
402.43					
412.10					
113255H	0.90/	60	10	–	
413.00					
113256H	0.40/	20	40	–	
413.40					
113257H	0.50/	1275	165	–	
413.90					
113258H	1.69/	2060	570	–	
415.59					
113259H	1.00/	30	20	–	
416.59					

432.31

DYKE, HORNBLENDE PPY 433.54
dk. gn. Fine grained with 5% phenos 1-5mm, commonly chl. altered. UC at 45°, LC broken. Chilled contacts. 434.19

1.0 5.0

SHEARED: at 30°, much chl/serp. approx. 15cm.

SHEARED: 25 cm.
SHEARED: 10 cm.

FAULT ZONE: Carbonaceous to 2%. Fine calcite stockwork. Foliated at 20-30°. Chlorite laminae. Local brecciation. Dark gray quartz veining at 25°. Minor fault at 10°. Clay gouge - 5mm - at 441.48m. Fault at 442.67m at 8° with fine calcite veining. 438.72

440.0

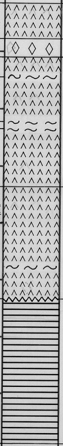
442.67

ARGILLITE: FAULT ZONE

extremely fractured to shattered calcareous argillite. Clay gouge - 4 cm - at 442.82m. Moderate to intense calcite veining at 25-35°. Carbonaceous. Chlorite/serpentine alteration in patches, (fragments). Much of interval is shattered.

5.0 5.0

447.75

END OF HOLE