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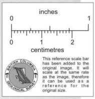

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CHEVRON STANDARD LIMITED-MINERALS STAFF
ROCK LOG

No MG 83-1

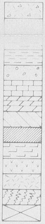
WELL CHEVRON MICROGOLD MG 83-1

LOCATION

WELL	CHEVRON MG 83-1		PROJECT M 522		
AREA	STUMP LAKE				
LOCATION	LATITUDE 50° 23' 25" APP.	LONGITUDE 120° 21' 42" APP.	UTM GRID	NORTHING	EASTING
ELEVATION	GROUND 3450' APP.	K.B./D.F. 3453' APP.	CONTROL LOG		
STATUS			CORE DIAMETER	INTERVAL(S)	
TOTAL DEPTH	409.65 m	1344 FT	NQ 1.875"		
OLDEST FM. PENETRATED	NICOLA GROUP				
SPUD DATE	APRIL 17/83	COMPLETION DATE MAY 2/83	SAMPLE QUALITY		

COMMENTS CAMERON McCUTCHEON DRILLING LTD	LOGGED BY	INTERVAL	DATE
WITH SUPERDRILL, TRACK MOUNTED	L. DEKKER/D. BROWN		
VERTICAL HOLE	PLOTTED BY	INTERVAL	DATE
	L. DEKKER/D. BROWN		

LITHOLOGIC KEY



- GLACIAL DRIFT
- SANDSTONE
- SILTSTONE
- SHALE & CLAYSTONE
- CONGLOMERATE
- LIMESTONE
- DOLOMITE
- ANHYDRITE
- GYPSUM
- SALT
- VOLCANIC
- IGNEOUS
- METAMORPHIC
- NO SAMPLES

FRAMEWORK TYPES

○	OOLITES, PISOLITES
	PELLETS
F	FOSSILIFEROUS
	ALGAE, ALGAL
	FORAMINIFERS
	PELECYPODS
	AMMONITES
	BELEMNITES
▽	BRACHIOPODS
	CORALS
☆	CRINOIDS

ACCESSORIES

—	ARGILLACEOUS
	CALCAREOUS
	DOLOMITIC
	LIMESTONE LAMINAE &/or NODULES
	DOLOMITE LAMINAE &/or NODULES
..	SILTY
K	KAOLINITIC
	PLANT REMAINS
○	NODULES
	CARBONACEOUS } MATERIAL BITUMINOUS
	ANHYDRITE LAMINAE &/or NODULES

ALTERATION

	FRACTURED
◇ ◇	BRECCIATED
L	LEACHED
Y	STYLOLITIC
R	RECRYSTALLIZED
	HALITE FILLED FRACTURES

POROSITY GRADES

T	TIGHT	nil
TR	TRACE	0-2%
F	FAIR	2-6%
M	MEDIUM	6-12%
G	GOOD	12-20%
E	EXCELLENT	>20%

SHOWS

■	MINERAL SHOW
●	OIL SHOW
◗	SLIGHT OR TRACE OIL SHOW
▲	ASPHALT OR TAR OCCURRENCE
S	SYLVITE
C	CARNALLITE

GRAIN AND CRYSTAL SIZE SCALE

VERY FINE GRAINED	~~<3 mm~~ 1/16 - 1/8 mm	
FINE GRAINED	1/8 mm	- 1/4 mm
MEDIUM GRAINED	1/4 mm	- 1/2 cm
COARSE GRAINED	1/2 cm	- 1.0 cm
VERY COARSE GRAINED	1.0 cm	2.0 cm
EXTREMELY COARSE GRAINED	1 cm	

FRAGMENTS, BLEBS, CLOTS ETC. SIZE SCALE

VERY MINUTE	<1 mm	
MINUTE	1 mm	- 5 mm
SMALL	5 mm	- 1 cm
MEDIUM	1 cm	- 1.5 cm
LARGE	1.5 cm	- 3.0 cm
VERY LARGE	>3.0 cm	

0m

SURFACE CASING SET TO 10'

CORE #1 10'-19'
3.05-5.79m

CORE #2 19'-29'
5.79-8.84m

10m CORE #3 29'-39'
8.84-11.89m

CORE #4 39'-49'
11.89-14.94m
13.82-13.95 SAMPLE 1/1TS
13.95-14.25 SAMPLE 2/2TS
CORE #5 49'-59'
14.25-14.37 SAMPLE 3/3TS
14.94-17.98m

CORE #6 59'-69'
17.98-21.03m

20m

CORE #7 69'-79'

CORE #8 79'-89'
24.08-27.13m

CORE #9 89'-99'
27.13'-30.18m

30m

CORE #10 99'-109'
30.18-33.22m
32.15-32.47 SAMPLE 4/4TS
32.47-32.87 SAMPLE 5/5TS
CORE #11 109'-119'
32.87-33.12 SAMPLE 6/6TS
33.22-36.27m

CORE #12 119'-129'
36.27-39.32m

40m CORE #13 129'-139'
39.32-42.37m

CORE #14 139'-149'
42.37-45.42m

CORE #15 149'-159'
45.42-48.46m

CORE #16 159'-169'
50m 48.46-51.51m

CORE #17 169'-179'
51.51-54.56m

CORE #18 54.56-57.61m
179'-189'

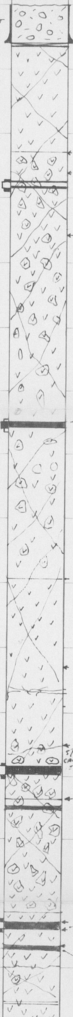
CORE #19 189'-199'
59.14-59.24 SAMPLE 7/7TS
57.61-60.66m
60m 59.24-59.84 SAMPLE 8/8TS
59.84-60.04 SAMPLE 9/9TS
CORE #20 199'-209'
60.66-63.70m

CORE #21 209'-219'
63.70-66.75m

CORE #22 219'-229'
66.75-69.80m

70m CORE #23 229'-239'
71.75-72.05 SAMPLE 10/10TS 69.80-72.85m
72.05-72.42 SAMPLE 11/11TS
72.42-72.67 SAMPLE 12/12TS
CORE #24 239'-249'
72.85-75.90m

CORE #25 249'-258'
75.90-78.64m
79.19-79.49 SAMPLE 13/13TS
79.44-79.99 SAMPLE 14/14TS
CORE #26 258'-268'



LOST 1'

GREENSTONE, M TO CRS XLN, GROUNDMASS OF ALTERED FELDSPAR XLS AND UP TO 20% DARK MAFIC MINERALS, ALTERED TO HEMATITE, POSSIBLY HORNBLENDE OR AUGITE FELDSPAR ALTERED TO ? KAOLINITE. ROCK HAS MOTTLED, PATCHY APPEARANCE AS COLOR CHANGES FROM MOSTLY LIGHT GREENISH/GREY TO BROWNISH/RED AS RESULT OF HEMATIZATION ; CALCITE VEINLETS MOSTLY FROM LESS THAN A MM TO SEVERAL MM'S THICK W/ PATCHES OF BROWNISH PYRITE VEINLETS MAKE UP LESS THAN 1% OF TOTAL ROCK ; < 1% PYRITE, FINE XLN DISSEMINATED IN GROUNDMASS.

11.50 LITHOLOGY BECOMES MORE FRAGMENTAL, AGGLOMERATIC ; FRAGMENTS UP TO SEVERAL CM'S, ANGULAR, IN GROUNDMASS OF SIMILAR COMPOSITION

13.12 2 CM THICK CALCITE/FLUORITE VEINLET (45°)

13.80-13.87
14.02-14.27 VEINLETS OF BANDED/GREY CALCEDONY & PURPLE FLUORITE W ≤ 5% BLEBS & XLS OF PYRITE & THIN BANDS OF HEMATITE AT 45° TO CORE AXIS, SME SMALL VUGS

GREENSTONE, M/CRS XLN, GROUNDMASS OF FELDSPAR XLS (.2-2 mm). W/ DK MINERALS 10%-30% (? HORNBLENDE; IN PLACES CLOTS & FRAGMENTS OF SEVERAL CM'S OF SIMILAR COMPOSITION

17.60-17.68 DISSEMINATIONS & BLEBS OF PYRITE)

GREENISH COLORS DUE TO CHLORITIZATION GRADING TO REDDISH HEMATIZED AREAS ACCESSORY PYRITE AS DISSEMINATIONS ; VEINLETS OF CALCEDONY/FLUORITE W/ PYRITE & POSSIBLY PYRRHOTITE, HEMATIZED & CHLORITIZED IN PART VEINS VARY IN ∅ FROM HAIRLINE UP TO 1 CM ; AT RANDOM ANGLES BUT CONJUGATE 45° SET PREDOMINATES.

NOTE :
GREENSTONE MOST LIKELY OF ANDESITIC COMPOSITION

32.47-32.94 SUB-HORIZONTAL BANDED VEIN OF L/DK GREY CALCEDONY W/ 2 AND 6 CM THICK BANDS OF WHITE CALCITE, SOME SMALL CAVITIES, SME DISSEMINATED PYRITE

GREENSTONE, GRADUALLY GRADING FROM CRS TO MED. XLN AND FRAGMENTAL TO LESS AGGLOMERATIC (FROM 80% TO 50% FRAGMENTS), FINER XLN & GREENER, MORE CHLORITIZED GROUNDMASS. FRACTURES FILLED W/ MOSTLY CALCITE HAIRLINE, TO (MOST COMMON) SEVERAL MM'S, OCCASIONALLY UP TO 1 CM. AT 45° BUT ALSO AT RANDOM ; FRACTURES < 1% OF TOTAL ROCK
BRECCIATION UNCOMMON

44.77 GREENSTONE, MOSTLY FINE XLN, CHLORITIZED, MOSTLY GREEN, GRADING IN PART TO M. XLN, SOME PURPLISH/RED PATCHES, OCCASIONALLY DISSEMINATED FINE XLN PYRITE ; RARE FINE XLN HEMATITE ; THIN (MM THICK) FISSURES & VEINLETS OF WHITE CALCITE W/ VARYING PROPORTIONS OF RED HEMATITE TRANSLUCENT, L. GREENISH/PURPLISH FLUORITE AND ACCESSORY QUARTZ ; VNS OFTEN CHLORITIZED, SOMETIMES EPIDOTIZED ; GENERAL ORIENTATION 60° TO 70° ; SME CONTAIN DISSEMINATED PYRITE, FINE XLS.

51.56-51.80m EPIDOTIZED, BRECCIATED VEINLET

53.36-53.50 MORE INTENSE VEINING (70°) AND SLIGHT BRECCIATION W/ UP TO 5% DISSEMINATED PYRITE

FROM 53.50-54.56 MORE PURPLISH/GREEN M/CRS XLN GREENSTONE

54.56-56.41 GREENSTONE AS AT 44.77m

56.41 GRADING TO LIGHTER GREYISH/GREEN TO PURPLISH M TO CRS XLN W/ UP TO 20% DK MINERALS ; UP TO 5% DISSEMINATED PYRITE/PYRRHOTITE IN GROUNDMASS TRACE OF HEMATITE XLS, OCCASIONALLY CHALCO PYRITE AS PATCHES & XLS I.E AT 57.00m

57.72-.75 CALCITE/HEM. VEINLET AT 20°

AT 58.54 AND 58.60 1 & 2 CM THICK FLUORITE VEINLET (20°) W/ DISS. PYRITE

GRADUALLY MORE AGGLOMERATIC W/ LARGE CM SIZED ANGULAR FRAGMENTS (REDDISH) IN GROUNDMASS OF SIMILAR COMPOSITION

58.60-59.40 INTENSE VEINING (20°) W/ GREY CALCEDONY VEINS RIMMED W/ HEMATITE, SME MINOR BRECCIATION, MM'S THICK ZONE OF WHITE KAOLINITE AT 58.76m

UP TO 5% DISSEMINATED PYRRHOTITE / PYRITE
ALSO MM THICK CALCITE VEINLETS THROUGHOUT

61.82-61.92m INTENSE CALCEDONY/HEMATITE VEINING

62.45-62.65 1½ CM THICK QUARTZ/HEMATITE VN AT 80° DIP.

68.93-69.10 EPIDOTE VEINLETS (MM'S THICK) AT 20°.
X CUTTING THIN CALCITE VEINLETS AT 70°

70.97-71.12 V.F XLN, SL SILICIFIED GREENSTONE W/ < 3% DISS. PYRITE XLS

71.60-72.25 BANDED CALCEDONY, GREY, LIGHT TO MEDIUM, BANDED W/ VNS (BANDS) FROM MM'S TO 2 CM THICK ; VNS TAKE UP 20% OF TOTAL ROCK SME BX IN HOST AND VEINS ; FROM SUB HORIZONTAL TO 45° ; DISS. F. TO M. XLN PYRITE UP TO 5% IN HOST ROCK & VEINS.

73.42-73.72 ZONE W/ CALCEDONY & BANDED RED HEMATITE, A.A., FROM SUB HORIZONTAL TO 70°

75.00m 6 CM THICK ZONE OF BRECCIATION FILLED W/ WHITE CALCITE/L. GN FLUORITE SOME CHALCO ; 60° DIP

77.60-77.78m ZONE W/ SERIES OF MM SIZED UP TO 1.5 CM QUARTZ/HEMATITE VEINLETS (70°)

80m 78.64 - 81.69m
79.99 - 80.14 SAMPLE 15/15TS
80.41 - 80.66 SAMPLE 16/16TS
CORE #27 268' - 269'
80.66-81.06 SAMPLE 17/17TS 81.69 - 81.99m
81.06-81.31 SAMPLE 18/18TS
CORE #28 269' - 279'
81.99 - 85.04m

CORE #29 279' - 289'
85.04 - 88.09m
87.09-87.34 SAMPLE 19/19TS
87.34 - 88.56 SAMPLE 20/20TS
88.56 - 88.81 SAMPLE 21/21TS
CORE #30 289' - 299'
90m

88.09 - 91.14m

CORE #31 299' - 309'
91.14 - 94.18m

CORE #32 309' - 319'
94.18 - 97.23m

CORE #33 319' - 329'
100.18 - 100.88 97.23 - 100.28m
SAMPLE 22/22TS
100m 100.88 - 101.78 SAMPLE 23/23TS

CORE #34 329' - 339'
SAMPLE #24
101.78 - 102.03m 100.28 - 103.33m

CORE #35 339' - 349'
103.33 - 106.38m

CORE #36 349' - 359'
106.38 - 109.42m

CORE #37 359' - 369'
110m 109.42 - 112.47m

CORE #38 369' - 379'
112.47 - 115.52m

CORE #39 379' - 389'
115.52 - 118.57m

CORE #40 389' - 399'
120m
118.57 - 121.62m

CORE #41 399' - 409'
121.62 - 124.67m

CORE #42 409' - 419'
124.67 - 127.71m

CORE #43 419' - 429'
130m 127.71 - 130.76m

CORE #44 429' - 439'
130.76 - 133.81m

CORE #45 439' - 449'
133.81 - 136.86m

CORE #46 449' - 459'
136.86 - 139.60m

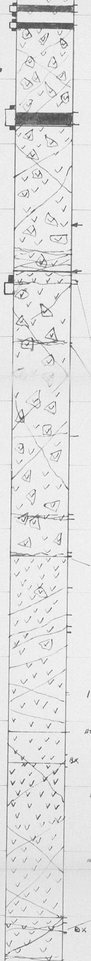
140m CORE #47 459' - 468'
139.60 - 142.65m

CORE #48 468 - 478.5'
142.65 - 145.85m

CORE #49 478.5' - 489'
145.85 - 149.05 m

150m CORE #50 489' - 499'
149.05 - 152.10m

CORE #51 499' - 509'
152.10 - 155.14m



79.16 - 79.74 AND 80.02 - 80.71 ZONES OF BANDED QUARTZ/CALCEDONY, GREY & WHITE, GREENISH/WHITE FLUORITE POSSIBLY ? ZEOLITES, SME COLLOIDAL TEXTURES, BANDING SUB HORIZONTAL SME BRECCIATION, HEMATIZED IN PART, DISS. PYRITE UP TO 5%

GRADING TO AGGLOMERATIC, FRAGMENTAL W/ FRAGMENTS VARYING FROM REDDISH/BROWN TO GREYISH/GREEN IN CRS XLN MATRIX OF SIMILAR COMPOSITION; SME FINE XLN DARKER FRAGMENTS; HAIRLINE FRACTURES FILLED W/ CALCITE 70° TO SUB VERTICAL BUT ALSO AT LESSER ANGLES.

87.50 - 88.49 ZONE OF SUB HORIZONTAL BANDED CALCEDONY & FLUORITE, SME BX, SME BLEBS OF CHALCOPYRITE; BANDS MAKE UP 40% OF TOTAL ROCK

GREENSTONE, AGGLOMERATIC, W/ SME V. LARGE CM'S SIZED FRAGMENTS MM THICK VEINLETS OF WHITE CALCITE AT ANGLES OF 30°-45° (MOSTLY) TO CORE AXIS.

96.13 2CM THICK VEINLET (10°) WHITE CALCITE, RIMMED W/ RED, DENDRITIC HEMATITE AND GREENISH FLUORITE IN CENTRE.

98.23 - 98.35 BAND OF CRACKLE BRECCIA W/ CALCITE FILLED VEINLETS & ANGULAR CALCITE FRAGMENTS IN LIGHT GREEN PORPHYRITIC MATRIX

98.80 - 100.18 ZONE CHARACTERIZED BY SLIGHT INCREASE IN VEINING VNS ARE MM'S THICK & FILLED W/ CALCITE AT 20°-40°; ONE DOMINANT DIRECTION BUT CONJUGATE DIRECTION AS WELL.

99.84 4CM THICK WHITE QUARTZ VN W/ PURPLISH/GREENISH MM THICK FLUORITE RIM FOLLOWED BY FOUR 3-4 MM THICK BANDED VEINLETS FILLED W/ CALCEDONY; PYRITE XLS (5%), F TO M. XLN & BLEBS OF 1½ CM Ø IN GANGUE.

100.50 - 101.80 GREENSTONE, L. GREY, SOFT, BLEACHED, ALTERED, POSSIBLY KAOLINITE ALTERATION, SME BANDED CALCEDONY/FLUORITE VNS, L GREY TO OFF-WHITE (30°-40°); ACCESSORY PYRITE

105.50 - 105.64 CRACKLE BRECCIA (5% OF ROCK VOLUME); SL. CALCAREOUS HOST

AGGLOMERATE, CRS XLN MATRIX AND FRAGMENTS (UP TO 10 CM Ø), MOSTLY ANGULAR TO SUB ANGULAR, MOSTLY FROM MM'S TO CM'S IN SIZE; COLORS VARY FROM BROWN/PURPLISH/RED TO LIGHT GREEN; SOMEWHAT CALCAREOUS INDICATING SOME CALCITE ALTERATION

112.76 2CM THICK CRS XLN CALCITE VEIN AT 70°

VEINLETS FILLED W/ CALCITE, YELLOWISH/WHITE TO WHITE, CRS XLN, ≈ 60°, MOSTLY HAIRLINE TO MM'S BUT UP TO 2CM THICK. CONJUGATE SET W/ ONE SET MORE PROMINENT; SME VEINING IRREGULAR, SUB PARALLEL CORE AXIS AND NOT FOLLOWING FRACTURE PLANES

115.22 - 118.87 FEWER VEINLETS & VEINING LESS INTENSE.

118.87 - 119.10 FIVE MM THICK CALCITE VEINLETS (50°) W/ CONJUGATE SET OF LESS PRONOUNCED, UP TO 1CM OF ? TENSION GASHES FILLED W/ CRS XLN CALCITE

121.84 - 122.02 ZONE CONSISTING OF 50% CALCITE VEINLETS AT 20°, SLIGHT BRECCIATION

CHANGE TO GREENSTONE, ANDESITIC, CRS XLN, L. GREENISH/GREY BUT MOSTLY RED, HEMATIZED, CHLORITIZED, FELDSPARS, KAOLINIZED, CHLORITIZED, UP TO 80% DARK MAFIC MINERALS (? AUGITE, HORNBLENDE), HEMATIZED.; FEW LARGER FRAGMENTS BANDED VEINLETS OF CALCITE/CALCEDONY/(? FLUORITE)/HEMATITE AT 124.67 (6cm) AT 126.95 (3cm) AND 127.8 (3cm); ALL AT 70°/80°; AT 128.36 - 129.56 SUB VERTICAL CALCITE VEINLET STRADDLING CORE (1-2CM WIDE).

132.80 - 133.00 SEVERAL MM'S THICK CALCITE VEINLETS, SUB-VERTICAL AND A FEW BANDED CALCITE/HEMATITE VEINLETS (70°-80°)

AT 135.80 COLOR CHANGE FROM MOSTLY RED → LIGHT GREENISH/GREY; CRYSTALLINITY CHANGING GRADUALLY FROM CRS TO FINE & MEDIUM; ACCESSORY DISSEMINATED PYRITE (<5%); SUB VERTICAL CALCITE VEINLETS, SL. BRECCIATION AT 137.70 - 138.40 RARE CALCEDONY BANDS (1CM THICK

138.40 - 150.35 MOSTLY CRS XLN L. GREENISH/GREY, IN PART GRADING TO REDDISH, LITHOLOGY AS ABOVE; VEINLETS FILLED W/ BANDED CALCITE/HEMATITE AT 70°-80°. BUT ALSO AT LESSER ANGLES (20°) MOSTLY SUB MM TO MM WIDTH, BUT UP TO A FEW CM'S OCCASIONALLY SME RARE CALCEDONY-FILLED VEINLETS.

AT 150.10 BANDED WH. CALCITE VN (7CM THICK, 60°) W/ SME MM THICK HEMATITE VEINLETS.

BEYOND 150.10 L. GREENISH/GREY, SLIGHTLY BLEACHED GREENSTONE W/ INCREASING NUMBER OF MM THICK CALCITE/HEMATITE VEINLETS

AT 150.44 - 151.28 m; DISSEMINATED PYRITE/CHALCOPYRITE (<5%) IN HOST ROCK. THIS ZONE IS MORE INTENSELY VEINED (30%) AND CRACKLE BRECCIATED; HOST MORE ALTERED AS RESULT; CHLORITIZED, L. GREENISH/GREY, FINE TO PARTLY GRADING TO COARSE XLN, W/ DISS. FINE XLS OF PYRITE. WHITE CALCITE VEINLETS & PATCHES AT 40°/50° CONJUGATE SET; ALSO SUBHORIZONTAL AND SUBVERTICAL. ZONES

SAMPLE #25
155.39 - 155.64
SAMPLE #26
155.64 - 156.39
SAMPLE # 27
156.39 - 156.64
CORE #52 509' - 519'
155.14 - 158.19m

160m
CORE #53 519' - 529'
158.19 - 161.24m

CORE #54 529' - 539'
161.24 - 164.29m

CORE #55 539' - 549'
164.29 - 167.37m

170m
CORE #56 549' - 559'
167.37 - 170.38m

CORE #57 559' - 569'
170.38 - 173.43m

CORE #58 569' - 579'
173.43 - 176.48m

CORE #59 579' - 589'
176.48 - 179.53m

180m
CORE #60 589' - 599'
179.53 - 182.58m

CORE #61 599' - 609'
182.58 - 185.62m

CORE #62 609' - 619'
185.62 - 188.67m

190m
CORE #63 619' - 629'
188.67 - 191.72m

CORE #64 629' - 639'
191.72 - 194.77m

SAMPLE #28, 29, 30
196.45 - 196.70
196.70 - 198.40
198.40 - 198.80
CORE #65 639' - 649'
194.77 - 197.82m

200m
CORE #66 649' - 658'
197.82 - 200.56m

CORE #67 658' - 668.5'
200.56 - 203.76m

CORE #68 668.5' - 678.5'
203.76 - 206.81m

CORE #69 678.5' - 688.5'
206.81 - 209.85m

210m
CORE #70 688.5' - 698.5'
209.85 - 212.90m

CORE #71 698.5' - 708.5'
212.90 - 215.95m

CORE #72 708.5' - 718.5'
215.95 - 219.00m

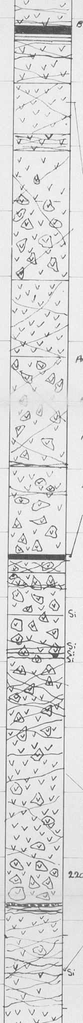
CORE #73 718.5' - 729'
219.00 - 222.20m

220m
CORE #74 729' - 739'
222.20 - 225.25m

CORE #75 739' - 749'
225.25 - 228.30m

SAMPLES #31, 32, 33
228.30 - 228.70
228.70 - 229.45
229.45 - 229.85
230m
CORE # 76 749' - 759'
228.30 - 231.34m

CORE #77 759' - 769'
231.34 - 234.39m



OF HEAVY CALCITIZATION & INCIPIENT MICROBRECCIATION AT 153.64 - 153.94, 154.38 - 154.68 (CALCITE VN AT 80°) AND 155.42 - 155.51 (CRACKLE BRECCIA W/ 70% CALCITE), SME BRIGHT GREEN CHLORITE XLS.

155.60 - 156.30 ZONE W/ BANDED CALCEDONY (WHITE TO L.GN); FLUORITE & CHLORITE IN THIN LAMINAE PRIMARILY AT TOP, SME REMNANT PATCHES OF NOW SILICIFIED PORPHYRITIC ANDESITE., SOME ACCESSORY DISSEMINATED PYRITE, SME AGATIC TEXTURES (CAVITY FILLING). DIPS FROM 20° TO SUBVERTICAL

156.35 - 157.25 SEVERAL LAMINATED & BANDED CALCEDONIC BANDS MM'S TO 1CM THICK, 30° TO 50°

157.50 - 158.40 CALCITE VEINLETS UP TO 30% OF TOTAL ROCK, 40° TO 50° BUT ALSO IRREGULAR, SUB-HORIZONTAL; SME MM THICK HEMATITE VEINLETS; GANGUE THOROUGLY CHLORITIZED & SLIGHTLY CARBONITIZED.

158.96 - 159.16 SEVERAL CALCITE/HEMATITE/CHLORITE VEINLETS AT 60° W/ HAIRLINE VEINLETS X CUTTING AT 20°

159.40 - 160.10 SLIGHTLY LIGHTER FINE XLN BLEACHED CHLORITIZED ZONE W/ SEVERAL CONJUGATE MM'S THICK CALCITE/CHLORITE VEINLETS.

160.10 - 164.09 MOSTLY L. GREENISH/GREY CHLORITIZED GREENSTONE OF ANDESITIC COMPOSITION, FINE TO MEDIUM XLN, X CUTTING HAIRLINE CALCITE VEINLETS (<2%) AT ANGLES OF 45° ± & 10°, SOME SUBVERTICAL THICKEST UP TO 6 mm; ACCESSORY HEMATITE & PYRITE IN GROUNDMASS GRADING TO (AT 167.40 - 167.72 SERIES OF MM THICK CALCITE VEINLETS W 45° DIP)

164.09 - 165.10 INTENSELY ALTERED & CHLORITIZED MEDIUM TO CRS XLN GREENISH TO PINKISH GREENSTONE W/ UP TO 20% MM THICK CHLORITE VEINLETS.

165.10 - 165.25 ZONE OF INTENSE VEINING (45°) OF BANDED CALCITE/HEMATITE/CHLORITE W/ SME DISS. ACCESSORY PYRITE / ? PYRRHOTITE.

INTRODUCTION OF AGGLOMERATE FRAGMENTS AT 168 ≈ GRADING TO AGGLOMERATE AT 169.40 m, FRAGMENTS UP TO SEVERAL CM'S IN ∅ COLORS VARY FROM REDDISH TO GREENISH W/ FRAGMENTALS MORE REDDISH.

AT 172.31 - 172.33 & 172.43 - 172.46 TWO WIDER CHLORITIC/CALCITE VEINLETS AT 20° W/ SME MICROBRECCIATION AND ACCESSORY PYRITE/CHALCOPYRITE

AT 174.43 - 174.93 SOFT CHLORITIZED & CALCITIZED ZONE AT 70°/80°

AT 175.38 m LITHOLOGY CHANGE TO FINE/M. XLN CHLORITIZED ANDESITE, A.A. W/ CONJUGATE SET OF CALCITE VEINLETS (20° - 70°); S. RARE VEINLETS W/ EPIDOTE

AT 177.35 3 cm THICK CALCITE VEIN W/ SME BRECCIATED ANGULAR GNSTONE FGMTS (45°)

AT 181.50 m GRADING TO V CRS FRAGMENTAL AGGLOMERATE BECOMING A MIXTURE OF BLOTCHY/MOTTLED FRAGMENTS AT 183.18 m; CALCITE/CHLORITE VEINLETS INCREASE SLIGHTLY IN FRAGMENTAL ZONE AND WIDEN TO A FEW MM'S

AT 189.97 m GRADING TO MOSTLY V CRS TO CRS XLN GREENSTONE, CHLORITIZED W/ A FEW LARGER FRAGMENTS, TR. OF DISS. PYRITE/PYRRHOTITE.

ZONES OF MORE INTENSE CALCITE/CHLORITE VEINING (ACC. FLUORITE). AT 189.62 - 189.92 m AND 191.42 - 192.20 m W/ SME DISS. PYRITE/PYRRHOTITE

AT 191.32 m GRADING FROM V CRS XLN GREYISH/GREEN GREENSTONE TO FRAGMENTAL AGGLOMERATE W/ MORE REDDISH TONES

AT 196.70 - 197.35 m ZONE OF INTENSE SILIFICATION W/ L GREENISH GREY BANDED AND LAMINATED CALCEDONY, UP TO 50% AS BANDS AND PATCHES, SUBHORIZONTAL; IN THIS ZONE FRAGMENTS & AREAS OF CHLORITIZED GREENSTONE; AS BLEBS & PATCHES AND DISSEMINATED PYRITE, FINE TO CRS XLN; SOME SMALL CAVITIES, SME BRECCIATION & CHLORITIZATION

THIS SILICIFIED ZONE GIVES WAY TO ZONE OF INTENSE CALCITIZATION & CALCITE VEINING & CHLORITIZATION, SOMEWHAT BRECCIATED, UP TO 40% CALCITE; AT 197.35 - 198.32; ALSO CALCITE ZONE AT 198.78 - 199.22

AGGLOMERATE, V. CRS FRAGMENTAL, VARICOLORED, BLOTCHY REDDISH BUT MOSTLY GREENISH TONES, IN PART GRADING TO V CRS CHLORITIZED GREENSTONE

AT 201.41 m 1 CM THICK VEINLET OF WH. CALCEDONY RIMMED W/ MM THICK CHLORITE/CALCITE SME BRECCIATION; SEVERAL THIN CALCEDONY VEINLETS (AT 45° AND STEEPER) (AT 60°) FROM 201.41 - 203.76 m; ALSO CALCITE VEINLETS.

COLORS MOSTLY GREENISH/GREY W/ BLOTCHY RED SPOTS & FRAGMENTS.

203.76 - 204.46 m. SUBVERTICAL IRREGULAR FEW MM THICK HEMATITE/CALCEDONY VEINLET ASSOCIATED W/ PYRITE XLS.

204.33 - 204.43 m ≈ 1 cm THICK BANDED GREY CALCEDONY VEINLET (60°) W/ SME HEMATITE & UP TO 8% PYRITE, M TO CRS XLN, RIMMING VEIN WALL AND AS SMALL PATCHES AND AS XLS IN GANGUE. 204.53 - 204.64 6 CM THICK GREY/GREENISH WHITE BAND OF CALCEDONY W/ CAVITIES CONTAINING SECONDARY QUARTZ XL OVERGROWTH, IN TURN OVERGROWN BY SME CALCITE XLS; ACCESSORY DISSEM. PYRITE IN GANGUE

FROM 203.76 - 211.10 MORE INTENSE VEINING AT 30° TO 40° AS WELL AS RANDOM. SME BRECCIATION IN MOSTLY CRS XLN GREENSTONE GRADING TO AGGLOMERATE IN PART.

AT 212.05 m 6 cm THICK (40°) CALCITE VEIN W/ BRECCIATION.

MOSTLY FINE XLN CHLORITIZED & RED, HEMATIZED ANDESITE GRADING IN PART TO M. XLN W/ SOME FRAGMENTS & CALCITE/CHLORITE/HEMATITE VEINLETS (AT 20° TO 50°) MOSTLY MM'S THICK BUT UP TO SEVERAL (2) CM'S

AT 214.54 APP. GRADING TO GREEN M.XLN (IN PART PINKISH GREEN) TO OCCASIONALLY FINE XLN & CRS FRAGMENTAL AGGLOMERATIC; IN PART ACCESSORY F. XLN PYRITE FRACTURE FILL W/ CALCITE/CHLORITE, SOMETIMES HEMATITE AS X CUTTING SETS AT 40° TO 68 BUT ALSO SHALLOWER & STEEPER DIPS

220.20m LITHOLOGY GRADING TO CRS FRAGMENTAL, AGGLOMERATIC, MOSTLY GREEN, W/ ANGULAR TO SUBROUNDED FRAGMENTS MOSTLY FROM MM TO CM SIZE.

223.60 - 224.34 m GREEN CHLORITE VEINING (60° TO SUBVERTICAL) GIVING WAY TO CHLORITE/CARBONATE VEINING FROM 224.34 - 224.65 W/ SME GREY CALCEDONY AS WELL.

224.65 - 226.28 m CHLORITIZED, M XLN, GREENSTONE W/ SME MM THICK CALCITE VEINS

226.28 - 230.90 m ZONE OF INTENSE VEINING W/ BRECCIATION IN PLACES (70° TO SUBVERTICAL) VEINS IRREGULAR, VEINS MOSTLY FILLED W/ WHITE CALCITE AS VEIN FILLING AND AS PATCHES (UP TO 30% OF ROCK VOLUME; CHLORITE VEINS & SME L TO M GREY CALCEDONY VEINS UP TO 1CM THICK FROM 228.90 - 229.45; SME MIXED IN HEMATITE VEINING FROM 229.45 - 231.90; SME ACCESSORY FINE XLN PYRITE

231.90 - 234.15 m GREENSTONE A.A. MOSTLY M. XLN GRADING IN PART F XLN W/ MODERATE NUMBER OF CALCITE VEINLETS (TWO OF 2CM THICK AT 70°, SME LINED W/ RED HEMATITE.

CORE #78 769'-779'
234.39 - 237.44 m

CORE #79 779'-789'
237.44 - 240.49 m

240m

CORE #80 789'-799'
240.49 - 243.54 m

CORE #81 799'-809'
243.54 - 246.58 m

CORE #82 809'-819'
246.58 - 249.63 m

250m

CORE #83 819'-829'
249.63 - 252.68 m

CORE #84 829'-839'
252.68 - 255.73 m

CORE #85 839'-849'
255.73 - 258.78 m

260m

CORE #86 849'-859'
258.78 - 261.82 m

CORE #87 859'-869'
261.82 - 264.87 m

SAMPLES #
34,35,36
266.70-266.87
266.87-267.42
267.42-268.32

CORE #88 869'-879'
264.87 - 267.92 m

CORE #89 879-889'
267.92 - 270.97 m

270m

SAMPLE #37
271.22-271.77

CORE #90 889'-899'
270.97 - 274.02 m

SAMPLES #
38,39
275.46-276.56
276.56-277.71

CORE #91 899'-909'
274.02 - 277.06 m

CORE #92 909'-919'
277.06 - 280.11 m

SAMPLE #40
277.71-278.06

280m

CORE #93 919'-929'
280.11 - 283.16 m

SAMPLES
#41,42,43
283.66-283.93
283.93-284.26
284.26-284.51

CORE #94 929'-939'
283.16 - 286.21 m

SAMPLE #40
286.00-286.10

CORE #95 939'-949'
286.21 - 289.26 m

290m

CORE #96 949'-959'
289.26 - 292.30 m

SAMPLE #45
291.77-291.90
AND
292.13-292.30

CORE #97 959'-969'
292.30 - 295.35 m

SAMPLE #46
294.80-295.15

CORE #98 969'-979'
295.35 - 298.40 m

CORE #99 979'-989'
298.40 - 301.45 m

300m

SAMPLE #47
302.20-302.55

CORE #100 989'-999'
301.45 - 304.50 m

CORE #101 999'-1009'
304.50 - 307.54 m

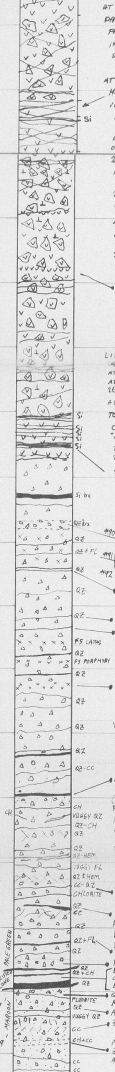
SAMPLES #
48,49,50
308.59-309.21
309.21-309.69
309.69-310.22

CORE #102 1009'-1019'
307.54 - 310.59 m

310m

CORE #103 1019'-1029'
310.59 - 313.64 m

CORE #104 1029'-1039'
313.64 - 316.69 m



AT 234.15 m AGGLOMERATE, MOTTLED GREEN GRADING TO RED; FGMTS M TO CRS.; IN PART INTENSELY VEINED W/ CRACKLE BX CALCITE VNS; ALSO VNS OF CHLORITE & HEMATITE FROM 40° TO SUB-VERTICAL, IRREGULAR; FROM FEW MM'S UP TO 1 OR 2 CM'S.
INTENSE VEINING OF LAMINATIONS OF CALCITE/HEMATITE AT 240.00 - 240.29 m SUB VERTICAL TO 60°.; VNS MAKE UP 20% TO 30% OF TOTAL ROCK.

AT 240.82 m ZONE OF INTENSE VEINING & BRECCIATION (70° TO SUB VERTICAL), THOROUGHLY HEMATIZED, PARTICULARLY FROM 241.04 - 242.24 m WHICH IS RED.
VEINING EXTENDS TO 244.84 MOST VEINS CRACKLE BRECCIATED & FILLED W/ CALCITE AS PATCHES, WISPS, STRINGERS (ALMOST "ZEBRA-LIKE TEXTURE).; HEMATIZATION & CHLORITIZATION INTENSE; SOME FLOWAGE / SME DISS. ACCESSORY PYRITE; IN SME VNS ALTERATION TO SOFT GREY CLAY (? CHLORITE); TOTAL VNS FROM 20% TO 60%; SME FGMTS OF GANGUE PRESERVED AMIDST THE VEINS / 5MM THICK SUB VERTICAL CALCEDONY VEINLET AT 242.40 m. GRADING M/CRS XLN GREENSTONE GRADING TO CRS AGGLOMERATIC AT 245.18 m; MOSTLY PATCHY, MOTTLED GREENISH & REDDISH TONES.
AT 245.35 - 246.00 m ZONE OF CALCITE CRACKLE BRECCIA W/ UP TO 20% CALCITE.
247.03 - 247.28 m CALCITE/HEMATITE/CALCEDONY VEINLET (70°) IRREGULAR
AGGLOMERATE IS CALCAREOUS THROUGHOUT, CALCITE VEINLETS THROUGHOUT, S. GREEN ? RHYOLITE FRAGMENTS & CRS (1-3 mm) XLN FELDSPAR PORPHYRY (FLOW BANDED).
248.39 - 248.62 CRACKLE BRECCIA W/ CALCITE/HEMATITE/CALCEDONY (50°).
249.17 - 249.63 MORE CHLORITIZED, LIGHT GREEN F XLN ZONE (50°) W/ CALCITE/HEMATITE/SME CALCEDONY VEINLETS; W/ DISS. (3%) PYRITE XLS, SME SMALL VUGS
250.01 - 250.16 BANDED LAMINATED ZONE OF CALCITE/HEMATITE (60°) W SME ACCESSORY CALCEDONY
250.57 - 251.95 SEVERAL ZONES OF BANDED/LAMINATED CALCITE/HEMATITE/CHLORITE (50°-70°) (CM'S THICK) VNS MAKE UP 50% OF ROCK VOLUME), CALCITE VNS GETTING THICKER, I.P. CRACKLE BRECCIATED, SME ACC. CALCEDONY VEINLETS. (GREY).
253.76 - 254.26 V. CRS XLN PORPHYRY (CHLORITIZED / CARBONITIZED) XLS 1-3 mm.
AT 254.99 - 255.27 (14cm 60°), 255.32 - 255.46 (7 cm 60°) & 255.67 - 255.81 (9cm 50°) CALCITE/HEMATITE VNS W. ACC. CALCEDONY VEINLETS & CHLORITE VEINS.
CONJUGATE SET 256.42 - 256.55 2cm CALCITE VN (30°) W/ OPPOSING HEMATITE/CALCITE VN AT 40°
257.74 - 258.18 7cm THICK VEINLET A.A. AT 80°.
259.92 - 260.28 SERIES OF LAMINATED VEINLETS (7cm, 80°). A.A., CALCITE CRACKLE BX, THIN CALCITE VEINLETS X CUT CALCEDONY.

LITHOLOGY AGGLOMERATE, A.A. V CRS FRAGMENTAL W/ ZONES OF VEINING & BRECCIATION CHARACTERIZED BY CALCITE/HEMATITE/CHLORITE & SOME AMORPHOUS GREY/WHITE SILICA (CALCEDONY)
AT 261.78 - 262.10, 262.71 - 262.68; A FEW THIN ZONES (1-2cm) FROM 262.68 - 264.87.
AT 264.09 - 264.88 3cm THICK VEIN, A.A. AT 70°.
265.75 - 265.91 m 8cm THICK VEIN, A.A., W. UP TO 10% CALCEDONY
AGGLOMERATIC TEXTURE PERSISTS TO 265.75 m, BELOW 265.91 LITHOLOGY CHANGES TO MORE ALTERED, CHLORITIZED ZONE W/ LESS RECOGNIZABLE TEXTURES & FRAGMENTS, COLOR BRIGHTER L. GREEN AS OPPOSED TO L. GREYISH/GREEN; SME BX, SUBVERTICAL, "MOTTLED" PATCH OF HEMATITE/CALCEDONY AT 266.03 - 266.23 ±; SIMILAR VEINLETS AT 266.49 - 266.55 (40°, 4cm) & 266.65 - 266.70 (40°, 3cm); FAIR AMOUNT OF F XLN PYRITE (≤5%)
266.91 - 267.04 CHLORITIZED/BX ZONE W HEMATITE & SILICA, X CUTTING VEINLETS OF SAME W/ UP TO 5% PYRITE XLS UP TO MM'S & AS PATCHES
267.27 - 26.77 ZONE OF INTENSE SILIFICATION, BX, CHLORITIZED, HEMATIZED, W/ SM. VUGS (CAVITIES) IRREGULARLY BANDED W/ UP TO 5% ACC. PYRITE AS F TO M XLN & AS PATCHES (SMALL), MOTTLED L. GNISH/RED, DIPPING AT 50°, GRADING AT 267.77 TO CALCITE RICH HEMATITE/CHLORITE ZONE W/ MINOR QUARTZ
AT 267.92 LITHOLOGY BECOMES HIGHLY CHLORITIZED M. (TO CRS) XLN GREENSTONE W/ IRREGULAR MM'S THICK CRACKLE VEINLETS OF CALCITE (30° TO SUB VERTICAL) INCREASING TO 40% OF ROCK AT 268.77

#90 BLEACHED MAROON AND GREEN, HEM. STRINGERS ≤ 1MM THICK (5-10%), QZ VEINS ≤ 1CM THICK (5%) EXTENSIVE CLAY-CARB. ALTERATION, BRECCIATED QZ AT 271.17 - 271.77 m, MORE MASSIVE THAN CORE #89

#91 BRECCIATED ANDESITIC INTRUSIVE, MASSIVE ZONES UP TO 40 CM LONG, HEM. FRACTURES, PURPLE AND COLOURLESS FLUORITE-QZ VEINS, CHALCEDONY VEINS, UP TO 15% PY, QZ VEIN AT 275.27 - 275.32 m

#92 MAROON-GREY VOLCANICLASTIC, PORPHYRITIC FRAGS., LAMINATED GREY CHALCEDONY VEINS WITH SHALLOW DIPS (< 35°), BLEACHED MATRIX (PARTIALLY SILICIFIED), PYRITIC BOUNDARIES OF QZ VEINS, QZ VEINS AT 277.61 - 277.86 m WITH PYRITIC VOL. BX BETWEEN VEINS, HEM. STRINGERS CUT BY QZ VEINS

VOLCANICLASTIC, MGR, ANGULAR FRAGS, MAROON AND GREEN FRAGS, BRECCIATED QZ VEIN AND LAMINATED CHALCEDONY VEIN AT 281.11 - 281.21 m, SHALLOW DIP (< 30°), 2CM CHALCEDONY VEIN AT 282.31 m WITH BLEACHED CONTACT EXTENDING 4CM IN HOST ROCK, BELOW 282.81 m DOMINANTLY FS LATHS IN MAROON MATRIX (GROUNDMASS)

BLEACHED MAROON VOLCANICLASTIC, ZONES OF FS PORPHYRY (FLOWS OR FRAGS.), 5% CHALCEDONY VEINS < 3 CM WIDE, PY ASSOCIATED WITH QZ VEINS, MINOR CC VEINING, VOL. BRECCIA, QZ VEINS AT 284.16 - 284.20 m AND 285.85 - 285.90 m

TOP 60 CM FGR, MAROON, INTRUSIVE TEXTURE (DYKE OR FRAG?), REMAINDER IS GREYISH VOLCANICLASTIC, SAUSSURITIZED FS LATHS IN FRAGS. AND MATRIX, < 5% QZ VEINS, SIMILAR TO CORE #94.

VOLCANICLASTIC, MGR, ANGULAR FRAGS, 10% QZ VEINS, SHALLOW DIP (< 35°), GREYISH, ABUNDANT FS LATHS IN MATRIX, VERY FINE DISSEM. PY, UP TO 3%, < 2% WHITE CC VEINING CUT QZ VEINS, 17CM THICK, GREY CHALCEDONY VEIN AT 292.13 - 292.30 m AND 5CM THICK VEIN AT 291.85 m.

VOLCANICLASTIC LIKE CORE #96, 15% QZ-CC VEINING, 35 CM WIDE SILICIFIED ZONE WITH 2% PY AT 294.80 - 295.15, STEEPLY DIPPING (> 60°), PARTIALLY STAINED BY HEM., MGR, GREYISH VOLCANICLASTIC, TOP 70 CM IS COARSER, BOTTOM 20cm (AFTER SILICIFIED ZONE) IS PALE GREENISH AND PARTIALLY SILICIFIED.

PALE GREENISH GREY VOL. BRECCIA, MAROON AND GREEN FRAGS., FS LATHS WITH FLOW TEXTURE — COMMON CLASTS, FS LATH MATRIX, VARIABLE CH ALTERATION, CH VEINS UP TO 1CM THICK, SOME VUGGY QZ, STEEP AND SHALLOW DIPS, 1-2% DISSEM. PY, SEVERAL GENERATIONS OF QZ (5-10%).

GREY - PALE GREEN VOL. BRECCIA, CH ALTERED ZONES WITH QZ-CH VEINING, HEM. STRINGERS (< 3%) CUT BY SOME QZ VEINS, ALL VEINS ARE LOCALLY DISPLACED, DIP STEEPLY (> 60°), 15-20% VEINING, 1-2% PY, PURPLE FLUORITE AT 300.10 m, 15 cm ZONE OF INTENSE FRACTURING FILLED WITH QZ AT 301.35 - 301.40 m.

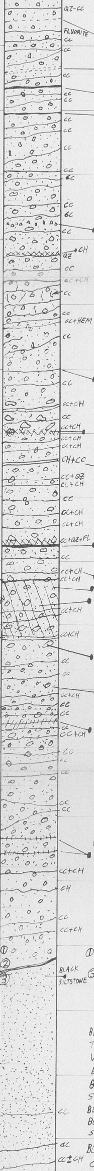
PALE GREEN VOL. BRECCIA, CH ALTERED, CC-QZ VEINING, < 1CM THICK, STEEP DIPS (50°-75°), CC > QZ, 2CM THICK CC-QZ VEIN AT 301.95 m, CRACKLE BX ZONE AT 302.45 m, 1CM THICK CC-QZ VEIN AT 303.45 m, 0-2% DISSEM. PY, GREEN CHALCEDONY VEIN (< 2CM THICK) AT 303.80 m.

PALE GREEN VOL. BRECCIA, 5-8% CHALCEDONY VEINING, TRACE PURPLE FLUORITE VERY FINE DISSEM. PY (2%), SOME GREEN CHALCEDONY AT 305.50 m, MAROON ZONE WITH SAUSSURITIZED FS LATHS 10 CM WIDE ABOVE 2.5 CM THICK QZ-FLUORITE VEIN AT 306.44 m - 306.59 m; SPOTTY CONCENTRATIONS OF PY < 3MM LONG.

PALE GREEN VOL. BRECCIA, FROM 307.54 - 308.54 m, 2% DISSEM. PY, PY ALSO ALONG CHALCEDONY VEINLETS
BLEACHED PALE GREEN ZONE 160 CM WIDE, SILICIFIED VOL. BX + QZ VEINS; GREEN, GREY, WHITE CHALCEDONY VEINS, CHALCEDONY-QZ VEINS AT 308.99 - 309.05 m AND 309.16 - 309.54 m, 1% DISSEM. PY, LAMINATED CHALCEDONY LOCALLY BRECCIATED, SHARP CONTACT WITH VOL. BX
GRADATIONAL CHANGE TO UNSILICIFIED MAROON VOL. BRECCIA, PURPLE FLUORITE VEIN AT 310.25 m, 5% CC VEINLETS

MAROON WACKE, DOMINANTLY ANGULAR FRAGS, SOME SUBROUNDED CLASTS, QZ VEIN AT 311.62 - 311.65 m, VUGGY QZ VEIN AT 311.94 m, STEEPLY (> 60°) CC VEINS BETWEEN 312.90 - 313.20 m, 5-10% CC VEINING

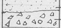
MAROON WACKE, CH ALTERED ZONE AT 313.84 - 314.15 m; 25% CC VEINING BETWEEN 313.95 - 314.35 m, 5% VEINING ELSEWHERE, ANGULAR AND SUBROUNDED FRAGS., COARSE ANGULAR VOL. MATRIX, CC STRINGERS AT ALL ORIENTATIONS



320 m		CORE # 105 1039′-1049′ 316·69 - 319·74 m	MAROON VOLCANIC WACKE, POLYMICTIC - GREY, GREEN, MAROON AND BROWN VOL. CLASTS, 5% CARB. VEINLETS, 2% COLOURLESS CHALCEDONY AND FLUORITE, TRACE PY, SHALLOW (< 20°) DIP TO BEDDING, 3cm WIDE BLEACHED ZONE ADJACENT TO CHALCEDONY-PY VEINLET AT 318·34, QZ-CC VEIN AT 317·05m (4 cm WIDE)
		CORE # 106 1049′-1059′ 319·74 - 322·78 m	MAROON VOLCANIC WACKE, 5% IRREGULAR CARB. VEINING; BLEACHED ZONE BETWEEN 322·29 TO 322·68 m, MORE CHLORITIC, 2-QZ VEINS (1cm AND 2 cm WIDE) IN CENTER OF BLEACHED ZONE, PARTIAL SILICIFICATION ADJACENT TO VEINS
		CORE # 107 1059′-1069′ 322·78 - 325·83 m	MAROON VOLCANIC WACKE, CARB. (CC) IN MATRIX AND VEINLETS (10%), MGR, GRANITIC DYKE (?) AT 323·54 - 323·58 m, TENSIONAL FRACTURES FILLED WITH CARB., VEINLETS < 5MM THICK, AV. < 1MM THICK, MAROON INTRUSIVE TEXTURE AT 325·53 TO 325·60 m (DYKE OR CLAST ?)
		CORE # 108 1069′-1079′ 325·83 - 328·88 m	MAROON VOLCANIC WACKE, MGR, SHALLOW DIPPING CARB. VEINLETS (5%), BEDDING < 25°
330 m		CORE # 109 1079′-1089′ 328·88 - 331·93 m	MAROON VOLCANIC WACKE, PEBBLE-SIZE CLASTS, POLYMICTIC, 5-10% CC VEINING, DIPS < 50°, LARGER CC VEINS CONTAIN BRECCIATED WALL ROCK FRAGS., 5cm THICK VEIN AT 329·88 - 329·93 m, VERTICAL TENSION FRACTURES (// TO CORE AXIS) FILLED WITH CC, < 1MM THICK.
	SAMPLE #51 333·97-334·17	CORE # 110 1089′-1099′ 331·93 - 334·98 m	PEBBLY, MAROON, VOL. WACKE, CC VEIN AT 332·33 - 332·35 m (2 cm THICK), "CRACKLE BRECCIA" 20 cm THICK AT 333·93 - 334·13 m, CC MATRIX, MINOR CH.
		CORE # 111 1099′-1109′ 334·98 - 338·02 m	MAROON, VOL. PEBBLY WACKE, POLYMICTIC, < 5% CC VEINING, SHALLOW (< 35°) DIPS, 2 cm THICK QZ VEIN AT 336·48 cm, MGR, SUBROUNDED CLASTS UP TO 8 cm LONG, BEDDING DIPS < 25°.
340 m		CORE # 112 1109′-1119′ 338·02 - 341·07 m	MAROON VOL. WACKE, CC IN MATRIX AND IN VEINLETS, 15% CC VEINLETS, RIGHT-LATERAL DISPACEMENT ACROSS CC VEINLETS, 30-60° DIP ON VEINS, CC+CH VEIN ~ 5 MM THICK AT 338·22 m, MORE CC VEINS THAN PREVIOUS CORE.
		CORE # 113 1119′-1129′ 341·07 m - 344·12 m	MAROON VOL. WACKE, SIMILAR TO CORE # 112, LESS CC VEINING (5-10%), VEINLETS < 1MM THICK, CC-HEM. FRACTURES AT 341·92 m, STEEPLY DIPPING (~60°), 7MM THICK CC VEIN AT 341·57 M.
		CORE # 114 1129′-1139′ 344·12 - 347·17 m	MAROON VOL. WACKE, PEBBLE-SIZE CLASTS, SIMILAR TO PREVIOUS CORE, CC+CH + HEM. VEIN AT 345·12 - 345·16 M, SOME CLASTS HAVE WEATHERED RIMS, 5% CC VEINLETS, VARIABLE ORIENTATIONS.
350 m		CORE # 115 1139′-1149′ 347·17 - 350·22 m	MAROON VOL. WACKE, MGR MATRIX SUPPORTING SUBROUNDED CLASTS UP TO 4cm LONG, 5-10% CC VEINLETS, CC+CH VEINLETS AT 347·99, 349·02, AND 350·07M, CC+CH INCREASES TO ~35% FROM 350·07 - 350·22 m.
		CORE # 116 1149′-1159′ 350·22 - 353·26 m	MAROON VOL. WACKE, MICROFAULTS TRUNCATE CLASTS AT VARIABLE ORIENTATIONS, ZONES OF PARTIAL BRECCIATION, CH CONTENT OF CC VEINS INCREASES, RESULTS IN GREENISH COLOUR, CC+CH VEINS AT 352·47 m (3·5cm) AND 352·57 (2·5cm), PARTIAL BX AT 351·47 - 351·55m
		CORE # 117 1159′-1169′ 353·26 - 356·31 m	MAROON VOL. WACKE, CC+QZ VEIN (1·5cm THICK) AT 353·54, CC+CH VEIN (1cm THICK) AT 354·06m, CC VEIN (1cm THICK) AT 354·58 m AND 355·48 m, 5-10% VEINING, VARIABLE DIPS, LEFT-LATERAL MOVEMENT ACROSS VEINS, CLASTS < 7cm LONG.
	SAMPLES #52,53,54 357·82-358·32 358·33-358·57	CORE # 118 1169′-1179′ 356·31 - 359·36 m	MAROON VOL. WACKE. 5-10% CC VEINING, MGR MATRIX, SHALLOW DIPPING CC+CH VEINS (< 1cm THICK) AT 356·40, 356·76, 357·21 AND 357·51 m, 5cm THICK VEIN OF CC+ QZ + GREEN FLUORITE AT 378·81 - 378·86 m, WACKE BLEACHED FOR 25cm ABOVE VEIN (MORE CC+ CH + PY) 1-2% PY, RX UNALTERED BELOW VEIN.
360 m	358·57-358·62	CORE # 119 1179′-1189′ 359·36 - 362·41 m	MAROON WACKE, CC VEINS (0·8cm THICK) AT 359·41 AND 359·66 m, 5% CC VEINING, BLEACHED ZONE 7cm WIDE AT 360·95 m WITH CC+CH VEINLETS, AT 361·50 m CC+CH VEIN ~ 3cm THICK, BELOW VEIN MATRIX COMPLETELY REPLACED BY CC+CH FOR 10cm (361·53 - 361·63 m), BELOW 361·50m WACKE IS GREENISH, 25% CC+CH
		CORE # 120 1189′-1199′ 362·41 - 365·46 m	GREEN CHLORITE ALTERED "MAROON WACKE", MATRIX + CLASTS CH ALTERED, 8% CC VEINING, 3-5% CH VEINLETS, COARSE PEBBLY SECTION AT 365·00 - 365·46 m.
		CORE # 121 1199′-1209′ 365·46 - 368·50 m	GREEN CH ALTERATION CONTINUES FROM CORE # 120 TO 365·96 m, 5-10% CC VEINING, BELOW 365·96 m UNALTERED MAROON WACKE WITH RARE CH, FOSSILIFEROUS LST CLAST AT 366·80 m, FOLDED PHYLLITE CLAST, CC+CH VEINS AT 366·00 m (1·5 cm THICK) AND 366·20 m (2cm THICK).
370 m		CORE # 122 1209′-1219′ 368·50 - 371·55 m	MAROON WACKE, 5-10% CC VEINING, MODERATE DIPS (30°-65°), FOSSILIFEROUS LST CLAST AT 369·40 m, MGR, MATRIX CC PRIMARY (OR REPLACEMENT ?), CLASTS AV. < 2cm LONG, RARE CH IN CC VEINLETS.
	SAMPLE #55 373·15-373·35	CORE # 123 1219′-1229′ 371·55 - 374·60 m	MAROON WACKE, 10% CC VEINING, 2cm CC VEIN AT 373·25 m WITH BLEACHED PALE GREEN ZONE EXTENDING 5cm ON BOTH SIDES, 1cm CC+ CH VEIN AT 374·10 m.
		CORE # 124 1229′-1239′ 374·60 - 377·65 m	MAROON WACKE, 5% CC+CH VEINING, GENERALLY STEEP (> 60°) DIPS, TRUNCATED CC VEINS AT 375·00 m, 375·20 m, 376·35 m AND 377·15 m.
380 m		CORE # 125 1239′-1249′ 377·65 - 380·70 m	MAROON WACKE, 5% CC VEINLETS, MGR MATRIX, CLASTS < 2cm LONG, SHALLOW TO VERTICAL DIPPING VEINLETS, TRACE CH, LST CLAST AT 380·20 m.
	SAMPLE #56 382·60-382·80	CORE # 126 1249′-1259′ 380·70 - 383·74 m	MAROON WACKE, CC+CH VEINS AT 380·70 m (1cm THICK), 381·05 (1·5cm THICK), BLEACHED CC+CH ZONE AT 381·78 - 381·90 m (12cm) AND 282·60 - 282·80 m (20cm), "CRACKLE - BRECCIA" IN BLEACHED ZONE; < 5% CC VEINING.
		CORE # 127 1259′-1269′ 383·74 - 386·79 m	MAROON VOL. WACKE, < 5% CC VEINING, 1cm CC+CH VEIN AT 384·16 m, CH+ HEM. SHEAR SURFACES, MOST CLASTS < 2cm LONG, CH VEINLETS AT 386·15, 386·25 AND 386·65 m.
390 m		CORE # 128 1269′-1279′ 386·79 - 389·84 m	MAROON VOL. WACKE, CLASTS < 3 cm LONG, < 3% CC VEINING, 5% CH VEINLETS, SLIGHTLY BLEACHED BELOW 387·20, 2% COLOURLESS & PURPLE FLUORITE IN VEINLETS, TRACE PY.
	SAMPLES #57,58,59 390·34-391·34 391·34-392·34 392·34-392·89	CORE # 129 1279′-1289′ 389·84 - 392·89 m	① SLIGHTLY BLEACHED VOL. WACKE TO 390·84 m; ② BELOW 390·84 TO 391·35 m EXTENSIVELY BLEACHED (PARTALLY SILICIFIED & CHLORITIZED) WACKE, BRECCIATED 10% CH VEINLETS, 2% DISSEM. PY, AND ③ DARK GREEN TO BLACK, WELL FOLIATED, BEDDING // TO SHEARING, FGR ARGILLITE - SILTSTONE BRECCIATED ZONES FILLED WITH QZ + CH + PY ± CHALCO, 3-5% PY, GRADED BEDDING.
		CORE # 130 1289′-1299′ 392·89 - 395·94 m	BLACK ARGILLITE / SILTSTONE, APHANITIC PARTS ARE BLACK, FGR SILTY LAYERS ARE LIGHT GREY, "NORMAL" GRADED BEDDING, FINING UPWARDS, DIPS ~55°, < 1% FLUORITE, UP TO 8% PY, 8-10% QZ VEINING.
	SAMPLE #60 396·44-397·04	CORE # 131 1299′-1309′ 395·94 - 398·98 m	BLACK ARGILLITE, BRECCIATED FROM 396·44 TO 397·04 m AND 398·75 TO 398·98 m, SILTSTONE AT 397·98 TO 398·15 m, 15-20% CC VEINING, 0-3% DISSEM. PY.
400 m		CORE # 132 1309′-1319′ 398·98 - 402·03 m	BLACK ARGILLITE / GREY SILTSTONE, FIRST 67 CM TO 399·65 m BRECCIATED ARGILLITE, CC+CH BETWEEN FRAGS., SILICEOUS SILTSTONE AT 400·30 - 400·80 m, PYRITIC ZONES & DISSEM., UP TO 5%.
		CORE # 133 1319′-1329′ 402·03 - 405·08 m	BLACK ARGILLITE / GREY SILTSTONE LAYERS, 5% CC VEINING, MODERATE DIPS, BEDDING DIPS AT ~55°, QZ VEINLETS < 2%, PY PATCHES 2-3%, SOME CH IN VEINLETS.
		CORE # 134 1229′-1239′ 405·08 - 408·13 m	BLACK ARGILLITE / SILTSTONE, 5% CC VEINLETS, 2% QZ VEINLETS, CH IN SOME VEINLETS, MODERATE TO STEEP DIPS.

CORE #135 1239-1244'
408.13 - 409.65 m

410m



END OF HOLE

① BLACK ARGILLITE/SILTONE TO 408.70m, 5% CC VEINLETS

② BELOW 408.70 m GREENISH CRYSTAL-LITHIC TUFF, FS CRYSTALS, POLYMICTIC ROCK FRAGS, CH ALTERED FRAGS & MATRIX, PROBABLE ARGILLITE - TUFF BEDDING (? CONTACT IS STEEPLY DIPPING (~65°), 5% CC VEINING, CLASTS < 3 CM LONG.

420m

430m

440m

450m

457.2m/1500'

460m

470m

480m

490m