DIAMOND DRILLING

AREA: McVICAR LAKE REPORT NO: 36

WORK PERFORMED FOR: BHP-Utah Mines Ltd.

RECORDED HOLDER: Same as above [xx]
: Other [ ]

Claim No.	Hole No.	Footage	Date	Note
846028	ML-35/	309'	Apr/88	(1)
	ML-36/	369'	Apr/88	(1)
	ML-37/	429'	Apr/88	(1)
	ML-39/	399'	Apr/88	(1)
846036	ML-44	699'	May/88	(1)
846033	ML-38/	509'	Apr/88	(1)
	ML-40/	489'	Apr/88	(1)
	ML-42/	629'	May/88	(1)
	ML-43/	649'	May/88	(1)
	ML-41	509'	Apr/88	(1)
	ML-45	479'	May/88	(1)

NOTES: (1) #W8803.193, filed in Jan/89

Hole No. ML 35 | Project: 1446 | Page No: 1 Of 6

Casing Collar Elev.: | Ground Elev.: | Date Started: 13/04/88 | Ref. to Claim Corner:-

Coordinates: NG 3+50S N. 2+50 E. | Date Finished: 14/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 309' | Logged By: K. Houle

ALTERATION: APPLE GREEN MICA | CARBONATE | SILICA

FRACTURING | MINERAL: QTZ | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

SECTION | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

0

OVERBURDEN 0' - 41.2'
CASING REMAINS

STEEL CASING

9'

19'

29'

39'

GABBRO 41.2' - 49.5'.
FINE TO MED GRAINED, LIGHT GREEN TO LIGHT GREY, MASSIVE TO VERY LIGHTLY FOLIATED, HIGH CARBONATE RXN WITH 20% CARB IN MATRIX, WISPY CARB FRACTURES ALSO PERVADE, WEAK SILICIFICATION, VERY FINELY DISSEMINATED Py, TR-1%.

TR-1% Py

100%

BQ

49'

SHARP

TONALITE 44.5' - 56.0'
FINE TO MED GRAINED LIGHT GREY WITH A SPECKLED SALT AND PEPPER APPEARANCE, SUBHEDRAL TO ANHEDRAL FELDSPAR WITH ANHEDRAL QTZ ... < 5% FINE GRAINED MAFICS. LOW CARB REACTION EXCEPT ON FRACTURE, FRACTURES SHOW PATCHY SILICIFICATION. TRACE Py, Po

TR Py, Po

100%

SHARP 1-3% Py Po ON CONTACT

TR-Py Po

59'

Hole No. ML 35 | Project: 1446 | Page No: 2 Of 6

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Inclination: -70° | Bearing: 230° | Total Depth: 309' | Logged By: K. HOULE

SECTION | ALTERATION (APPLE GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

60

GABBRO 56.0' - 103.5'

[illegible] / GREY, MASSIVE TO SLIGHTLY FOLIATED. SAME AS IN 41.2' - 49.5'

TR Py, Po

70

TONALITE / GRANITOID DYKE

FINE TO MED GRAINED, GREENISH GREY / GREEN, TO [illegible] BY SILICA FRACTURES 1-2 MM XENOLITHS OF GABBRO PRESENT, LOW TO NIL CARB RXN. UPPER CONTACT SHOWS SLIGHT ALTERATION ZONE. LOWER CONTACT SHARP

FE CARB PATCHES

PYKE IS HIGHLY SILICIFIED

80

FELSIC DYKE 2 CM

TONALITE / GRANITOID DYKE

[illegible] SHARP FRACTURES

90

TONALITE 96.0' - 99'

SAME AS 49.5' - 56.0'

100

TONALITE 103.5' - 143.2'

SAME AS 49.5' - 56.0' WEAK CARBONITIZATION TO STRONG ALONG CARB FRACTURES. TR - 1% Po Py EXCEPT ALONG A FEW FRACTURE PLANES 3-5% OCCASIONAL PATCHES OF PINKISH RED ALKALI FELD THROUGHOUT ZONE

110

TR Py Po

69'

100%

TR Py Po

79'

100%

TR Py Po

89'

100%

TR Py Po

99'

100%

TR Py Po

109'

100%

TR Po, Py

119'

100%

BQ

Hole No. ML 35 | Project: 1446 | Page No: 3 of 6

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SECTION | ALTERATION (APPLE GREEN MG, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

120

TONALITE 103.5' - 143.2'
CONT'D

TR Po-Py

129'

TR Cp-Py

95%

139'

TR-1% Py Po

100%

149'

TR-1% Py-Po

100%

159'

TR-1% Po-Py

100%

169'

TR-1% Po-Py

TR-1% Po FRACT

90%

179'

BQ

130

140

150

160

170

BRECCIATED GABBRO / GABBRO 143.2' - 158.3'

FINE GRAINED APHANITIC, DARK TO MED DARK GREEN MASSIVE TO SEMI-FOLIATED OR MASSIVE, FELSITIC [illegible] AT MARGINS AND RECEIVING ROCK [illegible] CONTACT, OCCASIONAL [illegible] OPHITIC TEXT. TRACE TO 1% Py Po WITH GREATER CONCENTRATIONS ALONG FRACTURES. BRECCIATED GABBRO IS SUPPORTED BY CARB MATRIX @ 20%

GABBRO 158.3' - 174.5'

MED GRAINED, LIGHT TO DARK GREEN GREY MASSIVE WITH SUBHEDRAL TO EUHEDRAL CRYSTALS OF PLAG. PLAG IS COMPLETELY OR PARTIALLY SURROUND BY PYROXENE IMPARTING AN OPHITIC TEXTURE. GABBRO COMPOSED OF ± 40% PLAG 1-3 MM. TR-1% Py-Po WITH BOTH Py Po LINING FRACTURES

DIP TEST 165' CORR 67.7°

PORPHYRITIC BASALT 174.5' - 179.0'

VERY FINE GRAINED APHANITIC, DARK GREY TO BLACK SUBHEDRAL TO EUHEDRAL PHENOCRYSTS OF PLAG 1-3 MM 1-2% HBOR INDICATES POSSIBLE SILICIFICATION, FINE CARB FILLED FRACTURES. TR-1% Po ALONG FRACTURES

Hole No. ML 35 | Project: 1446 | Page No: 4 Of 6

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ALTERATION: APPLE GREEN MICA | CARBONATE | SILICA | FRACTURING | MINERAL | GEOLOGY | SECTION

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

180

SILICIFIED ZONE.

SILICIFIED ZONE SHARP CONT

GABBRO 179.0' - 188.6'

MED GRAINED, LIGHT TO DARK GREY, HIGHLY FRACTURED WITH CHLORITIC ALTERATIONS ALONG FRACTURES, ZONES OF HIGH SILICIFICATION W/ DISCERNABLE SHARP CONTACTS, NUMEROUS SILICIFIED VEINS AND THROUGH SECTION, TR - 1% Po Py, Po Py COATING ON SOME FRACTURE PLANES

TR-1% Po-Py

189'

90%

190

PORPHYRITIC GABBRO 188.6' - 201.6'

FINE GRAINED APHANITIC, CHLORITIC GREEN TO MED GREY 1-2% FELDSPAR PORPHYRIES 2-4 MM IN SIZE. NUMEROUS SILICIFIED VEINS AND FINE FRACTURES. SOME SILICIFIED ZONES CONTAIN CHLORITIC YELLOWISH Po + TR Py FOUND ON CONTACTS BETWEEN SILICIFIED AND PORPHYRITIC ZONES. 1-2% Po, TR Py, NOTED SHARP CONTACTS BETWEEN SOME SIMILAR ROCKS.

1-2% Po TR Py

199'

100%

FELDSPAR PHENOCRYSTS 2-5 %

200

GABBRO 201'6 - 223.9'

CAVING 158.3' - 174.5' GREATER DEGREE OF SILICIFICATION [illegible] PORPHYRY SHARP CONTACTS 2-5° [illegible] CHLORITIC [illegible] TR-1% Po, TR Py

TR-1% Po TR Py

109'

100%

210

PORPHYRY [illegible] GREEN CHLORITIC [illegible]

TR-1% Po TR Py

119'

100%

220

PORPHYRY GABBRO

PORPHYRY .5 - 1.5 CM

TR-1% Po TR Py

BRECCIATED GABBRO 223.9' - 244.8'

FINE GRAINED, LIGHT GREY TO GREY GREEN, ANGULAR TO SUBANGULAR SHEARED GABBRO IN A 20% CARB MATRIX WITH RANDOM ORIENTATION. MULTIPLE CARB EVENTS WITH Y-CUTTING SiO_2 / CARB VEINS. CHLORITIC AND SERICITIC ALTERATION OF FRAGMENTS. TR-2% Py

TR-2% Py

129'

100%

230

INCREASE IN SHEARING INTENSITY

TR-2% Py

139'

100%

BQ

Hole No. ML 35 | Project: 1446 | Page No: 5 Of 6

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Inclination: -70° | Bearing: 230° | Total Depth: 309' | Logged By: K. HOULE

ALTERATION: APPLE GREEN MICA | CARBONATE | SILICA

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

240

BRECCIATED GABBRO 223.9' - 244.8' CONT'D

ALTERED ZONE BEGINS

SAME AS ABOVE EXCEPT MORE INTENSELY SHEARED, INCREASE IN SERICITE AND CHLORITE ALTERATION

INTERMEDIATE INTRUSIVE 244.8' - 257.7'

FINE GRAINED, BUFF MUDDY GREEN. HIGHLY FRACTURED WITH CARB. SEPARATE QTZ FILLED FRACTURES. TR-2% Py; DISSEMINATED WITH SMALL BLEB ALONG FRACTURE CONTACTS.

TR-3% Py — 249' — 100% — BQ — 1793, 1794

250

TR-2% Py — 259' — 100% — 1795, 1796, 1797

260

WIDE GRADATIONAL AREA WITH MARKED INCREASE IN QTZ

APPLE GREEN MICA

SHARP CONTACT

GREEN SERICITE CONTACT

CA' MEASURED 65°

INTERMEDIATE INTRUSIVE

APPLE GREEN MICA

QUARTZ 257.7' - 264.0'

MASSIVE QTZ WITH NARROW ZONES OF APPROX. 40% APPLE GREEN MICA, FINE X'LS OF Py AND SMALL BLEBS FOUND IN THESE AREAS. TR Py FOUND IN THE MASSIVE QTZ

TR Py — 269' — 100% — 1798, 1799, 1800

270

APPLE GREEN MICA 264.0 - 265.0'

[illegible] CARBONATE APPLE [illegible] PARTLY, FINELY DISSEMINATED Py AND SMALL Py BLEBS ALONG [illegible] ZONES. PRESENCE OF SERICITE SHEARING BETWEEN APPLE GREEN MICA LAYERS. FINE CARB PRESENT WITH LOW REACTION. Py 1-3%

TR-1% Py — 279' — 100% — 1801, 1802

SHEARED GABBRO 265.0' - 270.9'

FINE TO MED GRAINED, LIGHT GREEN TO GREEN/GREY. SOME ZONES APPEAR HYDROTHERMAL WITH STRETCHED QTZ. HIGHLY SHEARED, VERY LOW TO NO CARB. FEW SMALL ZONES OF INTERMEDIATE INTRUSIVE. GRADES INTO SHEARED PORPHYRY GABBRO. TR - 1% Py

280

SHEARED PORPHYRITIC GABBRO 270.9' - 281.9'

FINE-MED GRAINED, LIGHT GREEN TO GREY/GREEN. SHEARED, ZONES OF FELSIC? PORPHYRIES 5-20 MM. 2% ZONES OF APPLE GREEN MICA HIGHLY DEFORMED WITH 1-2% DISSEMINATED Py. OVERALL TR - 1% Py. GRADES INTO BRECCIATED GABBRO.

TR-1% Py Po — 289' — 100% — 1803

ALTERED ZONE ENDS

290

BRECCIATED GABBRO 281.9' - 289.0'

SAME AS 223.9' - 243.3'

GABBRO 289.0' - 309.0'

SAME AS 158.3' - 174.5'

TR-1% Py Po — 299'

Hole No. ML 35 | Project: 1446 | Page No: 6 Of 6

Casing Collar Elev.: | Ground Elev.: | Date Started: 13/04/88 | Ref. to Claim Corner:

Coordinates: NO 31505 ~~N.~~ 2450 E. | Date Finished: 14/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 309' | Logged By: K. Hoyle

SECTION	ALTERATION: APPLE GREEN MICA	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
300							GABBRO 289.0' - 309.0' CONT'D				100%	BQ			
							DIP TEST CORR < 63.5° END OF HOLE			309'					
310															
320															

Hole No. ML 36 | Project: 1446 | Page No: 1 of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 15/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+50S N. 3+00 E. | Date Finished: 16/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 369' | Logged By: K. HOULE

SECTION | ALTERATION (APPLE GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

0

OVERBURDEN 0 - 33.8'
CASING REMAINS

9' 19' 29' 39' 49' 59'

100% 100% 100% 100% 100% 100%

STEEL CASING

BQ

GABBRO 33.8' - 54.1'
MED GRAINED, LIGHT GREEN TO GREEN GREY, FEW AREAS WITH FELDSPAR PORPHYRIES (OCCASIONAL SILICA/CARB FILLED FRACTURES, OVERALL LOW CARB RXN. SOME SERICITE ALTERATION ALONG FRACTURE ZONES, TR Py.

TR-Py

TR-Py

TR Py

SHARP CONTACT

FINER GRAINED GABBRO.

SHARP CONTACT

GABBRO 54.1' - 59.8'
FINE TO MED GRAINED, LIGHT TO MED GREY. SHARP CONTACT OF FINER GRAINED GABBRO AT 57.5' WITH EVIDENCE OF WISPY SILICIFICATION AND INCLUDING AN ANGULAR AUTOLITH ? 2 CM. POOR CARB RXN EXCEPT ON MINUTE FILLED FRACTURES. TR Py.

Hole No. ML 36 | Project: 1446 | Page No: 2 of 7

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Inclination: -70° | Bearing: 230° | Total Depth: 369' | Logged By: K. Hoult

ALTERATION (APPLE GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

SECTION

DESCRIPTIVE GEOLOGY

60

GABBRO 59.3' - 77.0'
SAME AS 33.8' - 54.1'. MATRIX BECOMES FINER AT 73.5'. ALSO BECOMES LIGHTER GREY.

TR Py

69'

100%

70

MATRIX BECOMES FINER.

BECOMES PORPHYRY CUT BY CARB VEINS

TR-Py

79'

100%

80

BRECCIATED BASALT 77.0' - 89.0'
FINE GRAINED, MED GREEN/GREY, HIGHLY SHEARED ANGULAR TO SUBANGULAR BASALT FRAGMENTS SUPPORTED IN A 10-15% CARBONATE MATRIX. ZONES OF VOLCANIC TUFF 1-2 MM ANGULAR FRAGMENTS WELL FOLIATED AND SHOWING CHLORITIC ALTERATION TR - 1% FINELY DISSEMINATED Py

QTZ VEIN ~2"

TR-1% Py

182.3

100%

APPEAR TUFFACEOUS

GRADATIONAL CONTACT.

89'

90

PORPHYRITIC BASALT 89.0' - 91.0'
FINE GRAINED, DARK GREEN/BLACK, EUHEDRAL TO SUBHEDRAL PORPHYRITIC PLAG 2 MM. CUT BY FINE CARB FILLED FRACTURES. HAS SHARP CONTACT WITH HIGHLY SHEARED ZONE WITH ANGULAR FRAGMENTS 1-2 MM (TUFFACEOUS?) TR-1% Py

HIGHLY SHEARED NO LOWER CONTACT

TR-1% Py

TR-1% Py Po

100%

99'

GABBRO PORPHYRY 91.0' - 103.0'
LIGHT GREY - FINE TO MED GRAINED, 20-30% FELDSPAR PORPHYRIES IN A FINER MAFIC MATRIX, PORPHYRIES RUN 3-15 MM, FINE TO MED CARB AND CARB/SILICA FRACTURES. CONTAINS A FEW ZONES OF SLIGHTLY SHEARED ROCK LACKING FELDSPAR PORPHYRIES.
TR -1% Py Po

TR-1% Py Po

100%

100

SHARP

GABBRO 103.0' - 120.7'
FINE GRAINED DARK GREEN, MASSIVE TO SLIGHTLY SHEARED GABBRO WITH SMALL BRECCIATED AREAS. OCCASIONAL AREAS 2-10 CM WIDE OF PORPHYRITIC GABBRO WITH FELD. 2-12 MM. HAIRLINE CARB FRACTURES PERVADE WITH OCCASIONAL CARB/SILICA FRACTURES
TR-1% Py Po

TR-1% Py Po

109'

100%

110

BRECCIATED 109.6 - 111.3' 5-10% CARB.
PORPHYRITIC 117.4' - 118.4'

119'

BQ

Hole No. ML 36 | Project: 1446 | Page No: 3 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 15/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+50S N. 3+00 E. | Date Finished: 16/04/88 | Scale: 1" = 10'

Inclination: -70° Bearing: 230° | Total Depth: 369' | Logged By: K. HOULE

SECTION	ALTERATION: APPLE GREEN MICA	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
120							2' QTZ VEIN MARKS BOUNDARY								
							DIORITIC XENOLITH								
							GABBRO / PORPHYRITIC GABBRO 120.7' - 143.0'		TR-1% Py Po						
							SAME AS 103.0' - 120.7' WITH OCCASSIONAL ZONES GRADING INTO PORPHYRITIC GABBRO TR - 1% Py Po								
130							SHEARED AND SILICIFIED BRECCIATED			129'	100%	BQ			
							PORPHYRITIC		TR-1% Py Po						
140							PORPHYRITIC GRADATIONAL			139'	100%				
							GABBRO 143.0' - 151.7'		TR-1% Py						
							SAME AS 103'0 - 130.7'								
							HARD WEAK TO MED CARB RXN								
150							SHARP GRADATIONAL APPEARANCE			149'	100%				
							TONALITE 151.7' - 157.1'		Py Po						
							FINE TO MED GRAINED - LIGHT GREY TO BUFF BROWN, SUBHEDRAL TO ANHEDRAL FELDSPAR WITH AUBEDRAL QTZ WEAK SECONDARY SILICIFICATION. VERY FINELY DISSEMINATED TR - Py, Po								
							GABBRO 157.1' - 165.6'			159'	100%				
160							SAME AS 103'0 - 120.7' HAS ZONES OF MED CARB RXN WITH AREAS OF LOW RXN. CARB FILLED FRACTURES PERVADE TR - 1% Py		TR-1% Py						
							2" WHITE QTZ VEIN								
							TONALITE 165.6' - 172.2'			169'	100%				
							SIMILAR TO 151.7' - 157.1'. MORE BROWNISH IN COLOUR. ZONES OF SILICIFIED CARBONATE WITH LOW RXN.								
170							DIP TEST 169' CORR. < = 66.5°		TR-1% Py						
							GABBRO 172.2' - 176.3'			179'	100%				
							SAME AS 103.0 - 120.7'. MED CARB IMPRINT OVER ENTIRE SECTION. TR - 1% py								
							SHARP								
							PORPHYRITIC BASALT 176.2' - 181.0'								
							SAME AS 89.0' - 91.0'								

Hole No. ML 36 | Project: 1446 | Page No: 4 of 7

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ALTERATION: ABBLE GREEN MICA | CARBONATE | SILICA

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

SECTION

180

GABBRO 181.0' - 205.0'

FINE TO MED GRAINED, LT. GREY/GREEN SUBHEDRAL TO EUHEDRAL FELDSPAR PHENOCRYSTS MED GRAINED MAFIC MINERALS. 189.0' - 195.5' LOCALLY BLEACHED ROCK, CARB FRACTURES THROUGHOUT, OCCASIONALLY SLIGHTLY SHEARED. TR - 1% Py, Po

TR-1% Py, Po

189'

199'

100%

190

200

TR-1% Py, Po

209'

TONALITE DYKE 205.0' - 203.5'

TR - 1% Py Po

TR-1% Py

GABBRO 203.5' - 216.9'

SAME AS 231.0' - 205.0'

219'

100%

210

TONALITE 216.9' - 224.2'

SAME AS 151.7' TO 157.1'

TR - 1% Po Py

TR-1% Po Py

TR Po Py

239'

100%

220

TONALITE DYKE INTERSECTING AT > 80°

ANORTHOSITIC GABBRO PORPHYRY - 20% FELD.

TR Po Py

TR Py

TR-2% Po

239'

100%

230

GABBRO 224.2' - 227.1'

FINE GRAINED, DARK GREY/GREEN

GABBRO 227.1' - 233.9'

FINE TO MED GRAINED SPECKLED LT. GY TO BK

SMALL ZONE OF ANORTHOSITIC PORPHYRY GABBRO

TR Py

GRADATIONAL INTERMEDIATE INTRUSIVE DYKES 2-5 cm.

BQ

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ALTERATION (DARK GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

SECTION

DESCRIPTIVE GEOLOGY

240

GABBRO 227.1' - 233.9' CONT'D
- WITH FELDSPARS <90% LOW → MED CARB ALT IN LOWER SECTION. TR - Py

233.9 → 237.0' FINE GRAINED LOW → MIL CARB EVERY ON FRACTURES TR - 2% Po

250

GABBRO 237.0' - 270.0'
FINE GRAINED → APHANITIC, DARK GREEN TO BLACK, HIGHLY FRACTURED, MANY CUSP SHAPED AND FILLED BY CARBONATE, OCCASIONAL XENOLITHS OF MED GRAINED GABBRO TR-1% Py

260

270

GRADES SMALL SECTION

3-6% Py ON FOLIATION

BRECCIATED GABBRO 270.0' - 273.5'
FINE GRAINED, LIGHT GREY TO GREEN GREY TO BUFF, ANGULAR TO SUBANGULAR SHEARED GABBRO IN A FINE CARB MATRIX TR - 1% Py

ALTERED ZONE

SHEARED

QTZ VEIN SILICIFIED INTRUSIVE

SHEARED AND SLIGHTLY ARGILLATED INTERMEDIATE INTRUSIVE DYKE CONTAINS ROUNDED QTZ GRAINS.

INTERMEDIATE INTRUSIVE 273.5' - 282.5'
FINE GRAINED, BUFF BROWN TO BROWN, FINE 2-5% HIGHLY SHEARED ALTERED INTRUSIVE WITH HIGHLY SHEARED ALTERED MAFIC. CENTER IS LIGHTLY SHEARED TO MASSIVE BECOMING AGAIN HIGHLY SHEARED MED CARB RYN IN SHEARED AREAS TR - 2% Py

280

SHEARED GABBRO 282.5' - 299.7'
FINE GRAINED LIGHT GREEN/GREY TO DARK GREEN. HIGHLY SHEARED AND AT TIMES SLIGHTLY BRECCIATED. CONTAINS 5-15% CARB THROUGHOUT. OCCASSIONAL SMALL CARB / SILICA VEINS TR - 1% Py.

290

QTZ VEIN

TR-1% Py | 249' | 100% | BQ | 270.0'
TR-1% Py | 259' | 100% | 1804 | 273.5' | 3.5'
TR-1% Py | 269' | 100% | 1805 | 278.0' | 4.5'
TR-1% Py | 279' | 100% | 1806 | 282.5' | 4.5'
TR-2% Py | 289' | 100% | 1807 | 287.5' | 5.0'
TR-4% Py | 299' | 100% | 1808 | 292.5' | 5.0'
1809 | 299.7' | 7.2'

Hole No. ML 36 | Project: 1446 | Page No: 6 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 15/04/88 | Ref. to Claim Corner:

Coordinates: NG 3450S N. 3400 E. | Date Finished: 16/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 369' | Logged By: K. HOULE

SECTION | ALTERATION (APPLE GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

300

MASSIVE QTZ VEIN 299.7' - 301.5'
INCLUDES 5 MM SECTION OF SHEARED, MAFIC ± 3 CM
CONTAINING 2-4% PY. QTZ CONTAINS 1-3% PY

SHEARED GABBRO 301.5' - 312.7'
- FINE GRAINED DARK GREEN TO LIGHT GREY GREEN, SLIGHTLY SHEARED OVER SECTION
- LOW - MOD CARB, MODERATE SILICIFIED TO QTZ CONTACT, TR-1% PY

310

MASSIVE QTZ 313.7' - 326.9'
- CONTAINS ANGULAR TO ROUNDED SILICIFIED XENOLITHS OF INTERMEDIATE INTRUSIVE ALONG WITH ANGULAR TO SUBANGULAR FRAGMENTS OF APPLE GREEN MICA/SERICITE. ZONES OF WELL DEVELOPED EUHEDRAL QTZ X'LS IN A FINE GRANULAR QTZ MATRIX OCCUR
- OCCASIONALLY, MOD CARB RXN. APPLE GREEN MICA/SERICITE APPEARS SHEARED ALSO ALONG INTERVALS VERY RANDOMLY ORIENTED. TR-1% PY

320

SEMI MASSIVE QTZ/APPLE GREEN MICA 326.9' - 331.6'
50-60% SEMI MASSIVE QTZ WITH FINE TO MED SHEARED APPLE GREEN MICA/SERICITE. MICA/SERICITE SLIGHTLY BRECCIATED AT TIMES
- LITTLE TO NO CARB RXN, 2-5% PY

TONALITE-FELSIC INTRUSIVE 331.6' - 334.2'
- FINE TO MED GRAINED LT GREY, SILICIFIED SLIGHTLY FOLIATED, MINOR CARB, 3% PY

330

GABBRO 334.2' - 345.3'
- FINE GRAINED → APHANITIC DARK GREEN TO BUFF
- ALTERATION EFFECT OF OVERLYING INTRUSIVE GIVING APPEARANCE OF "INTERMEDIATE" INTRUSIVE GRADING FROM BUFF TO MOTTLED BUFF/GREEN, GREEN/BUFF TO GREEN, TR-1% PY

HIGHLY ALTERED ZONE

340

GRADATIONAL

ALTERED ZONE ENDS

BRECCIATED GABBRO 345.3' → 356.3'
SAME AS 270.0' - 272.9' CARB MATRIX ± 20%

350

GABBRO 356.3' - 369'
MED GRAINED - DARK GREEN - 30% ANHEDRAL → SUBHEDRAL FELDSPAR, CARB RXN ALONG

Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
1-3% PY			BQ	1810	309.6'	1.4'
TR-1% PY	309'	100%		1811	311.0'	2.1'
				1812	313.6'	3.6'
TR-1% PY				1813	313.1'	3.2'
TR-4% PY	319'	100%		1814	318.9'	5.8'
TR-4% PY				1815	321.9'	3.2'
2-5% PY	329'	100%		1816	324.7'	2.8'
3-5% PY				1817	331.6'	6.7'
TR-PY		100%		1818	334.2'	2.6'
TR-1% PY	334'			1819	335.5'	1.3'
				1820	341.0'	5.5'
TR-1% PY		100%		1821	345.4'	4.4'
	349'			1822	352.3'	6.9'
TR-1% PY		100%				
	359'					

Hole No. ML 36 | Project: 1446 | Page No: 7 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 15/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+50S N. 3+00 E. | Date Finished: 16/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 369' | Logged By: K. HOULE

SECTION	ALTERATION: APPL. GREENSTONE	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
360						+ + + + + +	GABBRO 356.2'-369'		0-1% Py		100%	BQ			
							- SMALL VEINS, TR-1% Py								
							DIP TEST 369' CORR < 67° — END OF HOLE 369'			369'					
370															

Hole No. ML 37 | Project: 1446 | Page No: 1 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+50S N. 3+50E E. | Date Finished: 18/04/88 | Scale: 1" = 10'

Inclination: -70° Bearing: 230° | Total Depth: 429' (130.7 M) | Logged By: R. G. BONNER

COMMENTS: To cut down dip extension of Altered Zone. Casing Remains

AVE CORE REC'Y/HOLE

SECTION	ALTERATION (Apple Green / Carbonate / Silicification)	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
0					0.0' - 57.0' OVERBURDEN				NQ CASING REMAINS			
57.0' - 69.0' TONALITE SEE OVER						Tr Py	57' - 59'	100	BQ			

Hole No. ML 37 | Project: 1446 | Page No: 2 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: 3+50S N. 3+50E E. | Date Finished: 18/04/88 | Scale: 1"=10'

Inclination: -70° | Bearing: 230° | Total Depth: 429' (130.7M) | Logged By: R.G.B.

SECTION | ALTERATION (Apple Green, Carbonate, Silicification) | FRACTURING | QTZ/MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

60
70
80
90
100
110

66' - GABBRO XENOLITH
SHARP
72.5' QTZ-CARB VEIN (3 cm)
74' SHEARING AT 45° TO CA
94' WEAK SILICIFICATION
SHARP
SHARP, QTZ VEIN (2cm), SILICIFICATION
107' FOLIATION AT 40° TO CA
111.2' QTZ VEIN (5cm)
SHARP
118.5' QTZ VEIN (3 cm)

DESCRIPTIVE GEOLOGY

57.0' - 69.0' TONALITE cont...

VERY FINE GRAINED TO FINE GRAINED, LIGHT GREENISH WHITE TO YELLOWISH, 45% FINE MAFIC GRAINS, ZONES OF SILICA FLOODING, WEAK CARBONATE ALONG FRACTURES, FEW XENOLITHS OF UNDERLYING GABBRO - WEAK PERVASIVE CARBONATE, SHARP INTRUSIVE CONTACTS, TRACE DISSEMINATED PYRITE - EUHEDRAL TO SUBHEDRAL, ALSO PYRITE ALONG FRACTURES

69.0' - 100.5' GABBRO

MEDIUM GRAINED, DARK GREEN TO WHITE SPECKLED, 40% PLAG, OPHITIC, POOR TO TO WEAKLY FOLIATED, ZONE OF MODERATE CARBONATE BRECCIATION - FRAGMENTS ARE WEAKLY TO INTENSELY SHEARED, NARROW QTZ-CARB VEIN WITHIN THIS ZONE, FEW NARROW ZONES OF WEAK PERVASIVE CARBONATE - OVERALL CARBONATE IS WEAK AND FRACTURE RELATED, PATCHY SILICIFICATION - DEUTERIC AND SECONDARY RELATED TO SHEARING, TRACE DISSEMINATED PYRITE-CRYSTALS AND BLEBS, OFTEN FRACTURE RELATED AS WELL

100.5' - 104.9' GABBRO

FINE GRAINED, DARK GREEN, CHLORITIC, WEAKLY FRACTURED WITH CARBONATE FILLED FRACTURES UP TO 5mm WIDE - WEAK PERVASIVE CARBONATE THROUGHOUT UNIT, WEAKLY FOLIATED TO MASSIVE, FRACTURES APPEAR RANDOM, TRACE PYRITE ALONG FRACTURE PLANES, APPROACHING BRECCIA IN ZONES

104.9' - 114.6' GABBRO

MEDIUM TO COARSE GRAINED, DARK GREEN TO WHITE, 50% SILICIFIED (DEUTERIC REPLACEMENT) EUHEDRAL TO SUBHEDRAL (2-5mm) PLAG, WEAK TO MODERATELY FOLIATED, ZONES OF INTENSE LATE SILICIFICATION, FEW WHISPS APPLE GREEN MICA ASSOCIATED WITH LATE SILICIFICATION, WEAK CARBONATE RELATED TO FRACTURING, MINOR QTZ VEIN, TRACE PYRITE - DISSEMINATED

114.6' - 123.6' BRECCIATED GABBRO

FINE GRAINED, DARK GREEN, INTENSELY FOLIATED, ROTATED FRAGMENTS WITH CARBONATE MATRIX (WHITE), FRAGMENT SUPPORTED, WEAKLY CHLORITIC AND SERICITIC, FRAGMENTS ARE VERY WEAKLY CARBONATED UNIT IS INTENSELY CARBONATED cont...

Tr Py

69' | 74' | 84' | 99' | 109' | 119'

100 | 100 | 100 | 100 | 100

BQ

119'

Hole No. ML 37 | Project: 1446 | Page No: 3 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: 3+50 S N. 3+50 E. | Date Finished: 18/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 429' (130.7m) | Logged By: R.G.B.

SECTION	ALTERATION: Lt. Green Mica	ALTERATION: Carbonate	ALTERATION: Silicification	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
120															
130															
140															
150															
160															
170															

120.7' PORPHYRITIC FELSIC INTRUSIVE

122.4' PORPHYRITIC FELSIC INTRUSIVE GRADATIONAL

129.3' QTZ VEIN (2cm) SILICA BANDS

SHARP

SHARP

148' WEAK FOLIATION 30° TO CA

SHARP

SHARP

168.2' QTZ VEIN (2cm)

169' DIP TEST 70°

172' SILICA VEIN (2.5cm)

DESCRIPTIVE GEOLOGY

114.6' - 123.6' BRECCIATED GABBRO cont...

TWO INTERVALS OF FINE GRAINED DARK GREY WEAKLY PORPHYRITIC FELSIC INTRUSIVE. SHARP CONTACTS, NOT BRECCIATED - WEAKLY FRACTURED, COMPETENCY CONTRAST, THESE NARROW UNITS CONTAIN UP TOO 3% DISSEMINATED PYRITE BLEBS, BRECCIATED UNIT HAS TRACE DISSEMINATED PYRITE

123.6' - 134.5' PORPHYRITIC GABBRO

FINE GRAINED, DARK GREEN, WITH UP TO 5% EUHEDRAL TO SUBHEDRAL (2-4mm) REPLACED PLAG PHENOCRYSTS, DEUTRIC SILICA REPLACEMENT AND SECONDARY CARBONATE REPLACEMENT IN NARROW ZONES, ZONES OF SILICA BANDING PARALLEL TO A WEAK FOLIATION, WEAK FRACTURING WITH CARBONATE COATINGS, TRACE DISSEMINATED PYRITE WITH RARE PYRRHOTITE

134.5' - 140.0' TONALITE

AS IN 57.0' - 69.0'; SOMEWHAT DARKER WITH 5-7% FINE MAFIC GRAINS, FEW SMALL GABBRO XENOLITHS, SHARP CONTACTS, MINOR FRACTURE RELATED CARBONATE, TRACE DISSEMINATED PYRITE, MINOR FRACTURE RELATED PYRRHOTITE WITH SUBORDINATE CHALCOPYRITE

140.0' - 156.2' GABBRO

AS IN 69.0' - 100.5'; WEAKLY FOLIATED, MINOR CHLORITIC FRACTURE COATINGS, TRACE PYRITE PYRRHOTITE

156.2' - 158.6' TONALITE

AS IN 134.5' - 140.0'

158.6' - 234.8' GABBRO

AS IN 69.0' - 100.5'; WEAKLY SILICIFIED, TRACE DISSEMINATED PYRITE. ZONES OF WEAK PERVASIVE CARBONATE

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
Tr Py	129'	100	BQ	119 - 123.6'	9.6'	18.2%
Tr Py Po	139'	100				
Tr Py Po Cp	149'	100				
Tr Py Po	159'	100				
Tr Py	169'	100				
Tr Py	179'	100				

Hole No. ML 37 | Project: 1446 | Page No: 4 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+50 S N. 3+50 E. | Date Finished: 18/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 429' (130.7 m) | Logged By: R. G. B.

SECTION	ALTERATION (Apple Green Mica, Carbonate, Silicification)	FRACTURING	QTZ MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

158.6' - 234.8' GABBRO ..... cont...

234.8' - 236.0' TONALITE

AS IN 134.5' - 190.0'

236.0' - 238.5' PORPHYRITIC FELDSPAR FELSIC INTRUSIVE

TWO NARROW ZONES OBSERVED AT 120.9' AND 122.9' APHANITIC DARK GREY TO BLACK UP TO 5% EUHEDRAL PLAG PHENOCRYSTS RANDOMLY ORIENTED PHENO'S APPEAR UNALTERED MATRIX EXTREMLY HARD CONTACTS SHARP WAS LOGGED IN ML 4X AS AN INTRUSIVE. CARBONATE ALONG FRACTURES NO VISIBLE SULPHIDE

238.5' - 241.6' TONALITE

AS IN 134.5' - 140.0' XENOLITH OF SHEARED GABBRO WITH WEAK PERVASIVE CARB.

SHARP

SHARP

SHARP

Hole No. ML 39 | Project: 1446 | Page No: 5 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+50S N. 3+50 E. | Date Finished: 18/04/88 | Scale: 1"=10'

Inclination: -70° | Bearing: 230° | Total Depth: 429' (130.7m) | Logged By: R.G.B.

SECTION	ALTERATION: Apple Green Mica	ALTERATION: Carbonate	ALTERATION: Silicification	FRACTURING	MINERAL: Qtz	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
240						241.8 GABBRO XENOLITH; SHARP; SHARP	238.5'-241.6' TONALITE ..... cont...					BQ			
							241.6'-242.7' PORPHYRITIC FELDSPAR FELSIC INTRUSIVE. AS IN 236.0'-238.5'				100				
						SHARP	242.7'-245.5' TONALITE. AS IN 134.5'-140.0'			249'					
250							245.5'-266.6' GABBRO. AS IN 69.0'-100.5'; ZONES OF FINER GRAINED GABBRO WITH WEAK PERVASIVE CARBONATE		Tr Py		100				
										259'					
260									Tr Py		100				
						SHARP	266.6'-269.2' TONALITE. AS IN 134.5'-140.0'			269'					
270						SHARP	269.2'-272.8' GABBRO. AS IN 100.5'-104.9'; PLAG REPLACED BY CARBONATE		Tr Py						
						SHARP	272.8'-281.0' TONALITE. AS IN 134.5'-140.0'; FEW GABBRO XENOLITHS, MINOR PATCHES YELLOWISH CARB.				100				
										279'					
280						280' GABBRO XENOLITH; SHARP	281.0'-282.2' GABBRO. AS IN 100.5'-104.9'; ZONES OF MEDIUM GRAIN, BECOMING SHEARED LATE IN SECTION				100				
						287' WEAKLY FOLIATED 45° TO CA; SHARP	282.2'-289.9' TONALITE. AS IN 134.5'-140.0'			289'					
290							289.9'-294.4' GABBRO. AS IN 104.9'-119.6'; WEAKLY BRECCIATED, WEAK CARB FOR UNIT				100				
						SHARP	294.4'-301.9' TONALITE. AS IN 272.8'-281.0'			299'					

Hole No. ML 37 | Project: 1446 | Page No: 6 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: 3+50 S N. 3+50 E. | Date Finished: 18/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 230° | Total Depth: 429' (130.7 m) | Logged By: RGB

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

294.4' - 301.9' TONALITE ..... cont...

301.9' - 308.5' GABBRO

AS IN 104.9' - 119.6'; WEAK FRACTURE RELATED CARBONATE

308.5' - 317.2' BRECCIATED GABBRO

FINE GRAINED, DARK BLUE GREEN TO GREEN, SUBROUNDED, CLAST SUPPORTED, MASSIVE TO WEAKLY FOLIATED - SHAPED FRAGMENTS WITH FINE WHITE CALCITE CEMENT, FRAGMENTS ARE RANDOMLY ORIENTED, CHLORITIC TO WEAKLY SERICITIC, FEW HINTS OF APPLE GREEN CARBONATE RESTRICTED TO CEMENT, INCREASING DEFORMATION WITH DEPTH, TRACE TO 2% DISSEMINATED PYRITE WITHIN FRAGMENTS, ONE NARROW BRECCIATED TONALITE DYKE AT 314.9'

317.2' - 328.0' BRECCIATED SHEARED GABBRO

AS ABOVE BUT FRAGMENTS ARE INTENSELY SHEARED OFTEN CRENULATED, FEW ZONES ARE MORE SHEARED THAN BRECCIATED SOME FRAGMENTS ARE STILL RECOGNIZABLE AS MEDIUM GRAINED GABBRO

ALTERED ZONE 328.0' - 381.8' (53.8')

328.0' - 343.0' SHEARED GABBRO

FINE GRAINED, GREY GREEN, INTENSELY SHEARED, WELL FOLIATED, NUMEROUS SMALL BOUDINS OF QTZ, FEW HINTS OF APPLE GREEN, MINOR CARBONATE ON FRACTURE AND SHEAR PLANES, CHLORITIC TO TO WEAKLY SERICITIC, 1-2% FINE DISSEMINATED PYRITE BLEBS ALONG SHEAR PLANES, SULPHIDE CONTENT GREATEST IN QTZ RICH ZONES FEW BRECCIATED ZONES

343.0' - 346.7' APPLE GREEN MICA SCHIST

FINE GRAINED, BRIGHT APPLE GREEN TO WHITE, INTENSELY SHEARED, WELL FOLIATED, SERICITE, FEW NARROW QTZ VEINS WITH TRACE DISSEMINATED PYRITE

346.7' - 348.4' QUARTZ

FINE WHITE BULL QUARTZ, 10% OF UNIT LITHIC FRAGMENTS, WHISPS OF APPLE GREEN, ONE INT. INTRUSIVE LITHON; FINE DISSEMINATED PYRITE

348.4' - 350.0' SHEARED GABBRO

AS IN 328.0' - 343.0'; WEAK PERVASIVE CARBONATE

350.0' - 362.2' INTERMEDIATE INTRUSIVE

FINE GRAINED, MASSIVE TO VERY WEAKLY FOLIATED, WEAK SERICITIC ALT., LIGHT YELLOW GREEN, WITH 1-2% DISSEMINATED PYRITE BLEBS MINOR WEAK CARBONATE ALONG FRACTURES

AT cont...

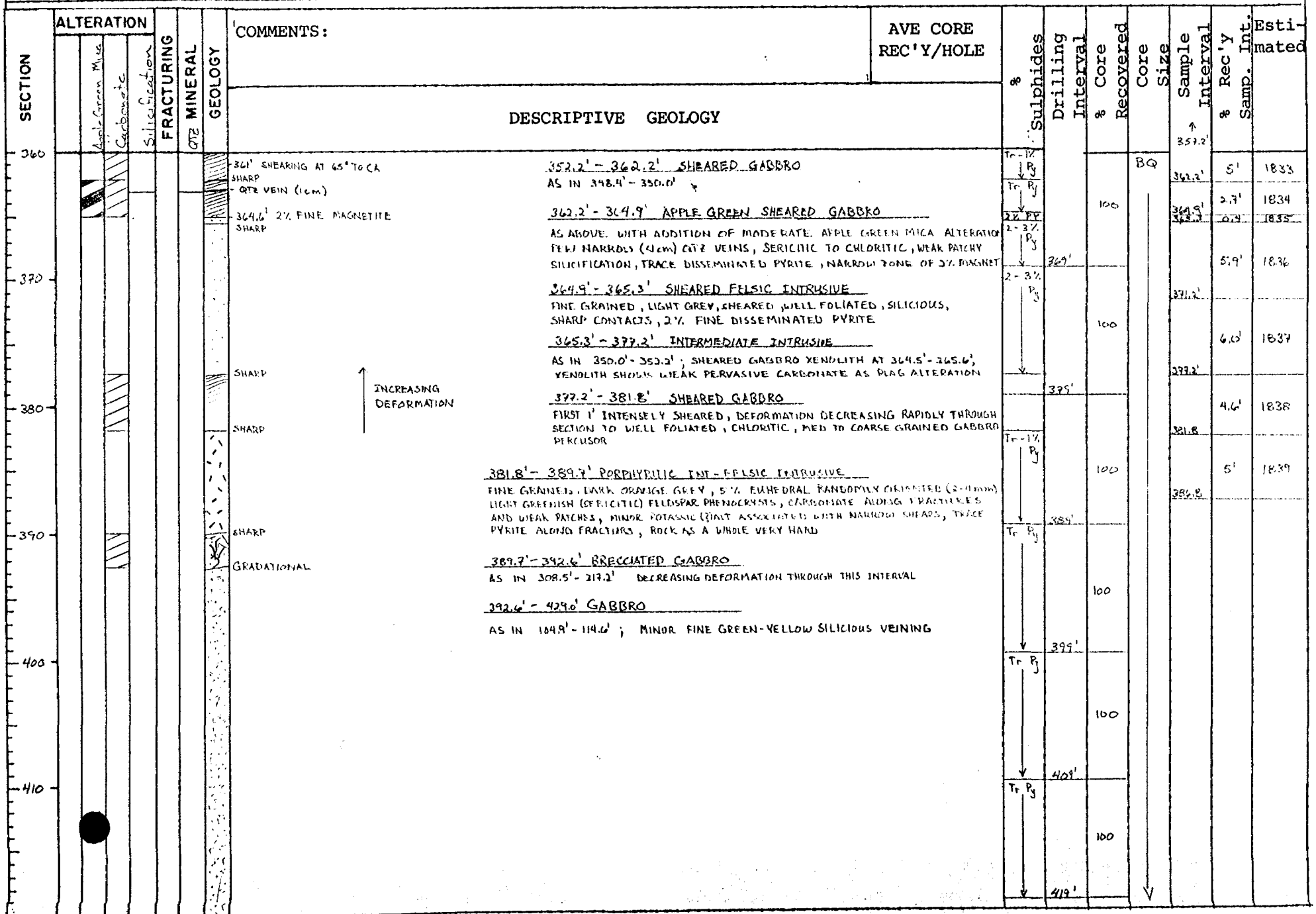
Section	Geology	Fracturing	Mineral	Alteration	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
300	SHARP				Tr Py		100	BQ			
310	SHARP; 314.9 TONALITE BR.; GRADATIONAL				Tr - 2% Py	309	100				
320	321' SHEARING AT 60° TO CA; GRADATIONAL; 329' DIP TEST - 68°				Tr - 2% Py	319	100		323'		
330	337' SHEARING AT 35° TO CA				Tr - 2% Py	329	100		328'	5'	1825
340	SHARP; SHARP; SHARP				1-2% Py	339	100		333'	5'	1826
350	SHARP; SHARP				Tr Py	349	95		338'	5'	1827
					1-2% Py				343'	5'	1828
					Tr Py				348.4'	6.4'	1829
					1-2% Py				350'	1.6'	1830
					Tr - 1% Py	359	100		352.2'	2.2'	1831
					Tr Py				353.2'	5'	1832

Hole No. ML 37 | Project: 1446 | Page No: 7 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: 3+50S N. 3+50 E. | Date Finished: 18/04/88 | Scale: 1"=10'

Inclination: -70° | Bearing: 230° | Total Depth: 429' (130.7m) | Logged By: RGB



Hole No. ML 37 | Project: 1446 | Page No: 8 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: 17/04/88 | Ref. to Claim Corner:

Coordinates: 3150S N. 3150 E. | Date Finished: 18/04/88 | Scale: 1"=10'

Inclination: −70° | Bearing: 230° | Total Depth: 429' (130.7 M) | Logged By: R.G.B.

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
420					392.6' - 429.0' GABBRO cont...		Tr Py		BQ				
					DIP TEST -68° END OF HOLE.			429'					
430													

Hole No. ML 38 | Project: 1446 | Page No: 1 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: NG 3+56 S N. 4+53 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240 | Total Depth: 509' | Logged By: K. Hoole

COMMENTS: SEE NOTE AT END OF LOG.*

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

OVERBURDEN 0.0' - 27.7'
(CASING REMAINS)

BASALT 27.7' - 49.0'
FINE GRAINED, DARK TO LIGHT GREY/GREEN, FELDSPAR PHYRIC, SUBHEDRAL TO EUHEDRAL (4th 2 1mm) (± 15-20%) PERVASIVE HAIRLINE AND MINOR SILICA FRACTURES AS OCCASIONAL CARB AND CARB/SILICA FRACTURES. TR-1% py FINELY DISSEMINATED AND AS FINE FRACTURE FILLED AGGREGATES.

SMALL INCREASE IN FG-CARB AND DISSEMINATED MAGNETITE
CARB INCREASE
SHARP CONTACT

PORPHYRITIC FELDSPAR, FELSIC INTRUSIVE 49.0' - 53.2'
FINE GRAINED TO APHANITIC, DARK GREY TO BLACK, HARD MATRIX, SILICIFIED BASALT XENOLITHS, ANHEDRAL TO SUBHEDRAL PORPHYRITIC FELDSPAR 2-5%. SHARP CONTACTS, MOD CARB RVN AND FRACTURES. TR-2% py DISSEMINATED.

SHARP

BASALT 53.2' - 57.1'
SAME AS 27.7' - 49.0'

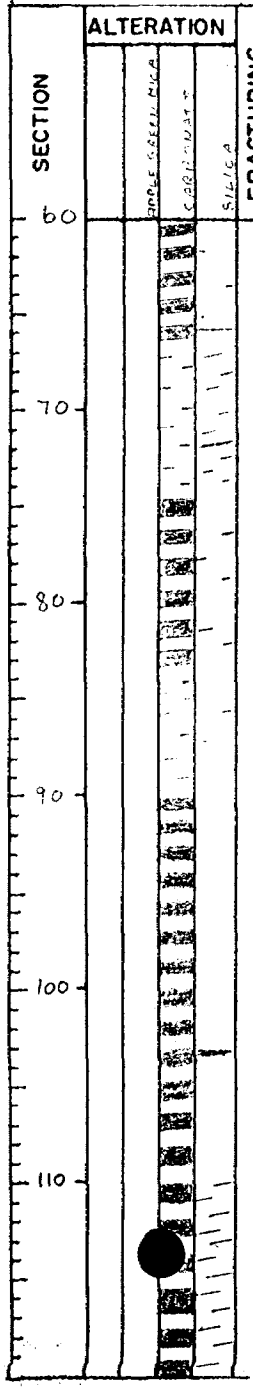
SHARP

FELSIC INTRUSIVE? 57.1' - 58.9'
SIMILAR TO 49.0' - 53.2' NON PORPHYRITIC, NO XENOLITHS

TR Py

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
TR-1% Py	9'		STEEL CASING			
	19'					
TR-1% Py	29'	100%	BQ			
	39'	100%				
TR-1% Py	49'	100%				
TR-1% Py	59'	100%				

Hole No. ML 38	Project: 1446	Page No: 2 of 9
Casing Collar Elev.: Ground Elev.:	Date Started: 19/04/88	Ref. to Claim Corner:
Coordinates: 3+56 S N. 4+53 E.	Date Finished: 21/04/88	Scale: 1" = 10'
Inclination: -70 Bearing: 240°	Total Depth: 509'	Logged By: K. Houle



COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BRECCIATED BASALT 58.9' - 66.8'

FINE GRAINED LIGHT TO MED GREEN/GREY SLIGHTLY FOLIATED FRAGMENTS OF BASALT IN 5 TO 20% CARB MATRIX. PROGRESSIVELY BECOMING MORE SHEARED TR-1% DISSEMINATED PY

QTZ VEIN 2" GRADATIONAL

HIGHLY SERICITIC QTZ VEIN 1" C.A. 50° GRADATIONAL

SHEARED BASALT 66.3' - 74.6'

FINE GRAINED, DARK GREEN/GREY, HIGHLY SHEARED WITH LAYERS OF SERICITE (1" - 3") SCHISTOSITY AVE CA 50° (ROC) TR-2% PY DISTINCT BASALT/SERICITE CONTACTS

BRECCIATED BASALT 74.6' - 83.3'

SAME AS 58.9' - 66.8'

GRADATIONAL

SHEARED BASALT 83.3' - 89.6'

SAME AS 66.3' - 74.6' TR-1% PY

FELSIC DYKE INTRUSIVE (GRANITE) 89.6' - 90.1'

FINE GRAINED, PALE GREY/GREEN TO BUFF, SCHISTOSITY 0° TO CA, 2" DYKE INTRUSIVE WITH BASALT SHARP CONTACTS. TR-1% PY

BRECCIATED BASALT 90.1' - 106.8'

SAME AS 58.9' - 66.8'

QTZ VEIN WITH HIGHLY SHEARED (FOLDED) CHERTIC BASALT FRAGMENTS.

APPEARS TUFFACEOUS, MAGNETIC GRN FRAGMENTS 2-4MM IN FINE MATRIX

MED GRAINED

GABBRO 106.8' - 136.8'

FINE MED GRAINED, MED GREY TO MED GREY/GREEN SLIGHTLY SHEARED OVER FIRST FOOT. MED CARB REACTION THROUGH OUT SILICIFIED THROUGH FINE HAIRLINE FRACTURES. CARB FRACTURES THROUGHOUT. TR-1% PY

114'0 - 136.8' MED GRAINED

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
TR-1% PY	69'	100%	BQ			
TR-2% PY						
TR-1% PY	79'	100%				
TR-1% PY	89'	100%				
TR-1% PY	99'	100%				
TR-1% PY	109'	100%				
TR-1% PY	119'	100%				

Hole No. ML 38 | Project: 1446 | Page No: 3 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3+56 S N. 4+53 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

SECTION	ALTERATION: APPLE GREEN MICA	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

GABBRO 106.8' - 136.8'
CONT'D

TR-1% Py

129'

100%

BQ

130

TR-1% Py

139'

100%

BRECCIATED GABBRO 136.8' - 142.9'

FINE TO MED GRAINED, LIGHT TO DARK GREEN GREY, SLIGHTLY FOLIATED FRAGMENTS GABBRO IN A 15-20% CARB MATRIX, ANGULAR TO SUBANGULAR CLASTS, CLAST SUPPORTED IN FINE MATRIX. GABBRO BECOMING SLIGHTLY CHLORITIC WITH A PERVASIVE FINE SERICITIC ALTERATION. TR-1% Py

GRADATIONAL

140

TR-1% Py

INTERMEDIATE [illegible] 142.9' - 145.2'

FINE GRAINED SEDIMENTARY DARK GREY MASSIVE [illegible] RELATIVELY SHARP DIRECTIONAL CONTACTS TO ABOVE, SOME FILLED FRACTURES [illegible] TR-5% Py

149'

100%

150

GABBRO 145.2' - 160.4'

COARSE GRAINED, MOTTLED DARK GREY/GREEN - WHITE 60% SUBHEDRAL TO ANHEDRAL FELDSPAR. MINOR CARB ON HAIRLINE FRACTURES, SMALL ZONES GRADING ANORTHOSITIC GABBRO PORPHYRY. TR-1% Py

TR-1% Py

159'

155.6 / 157.2

1846

1.5'

100%

160

PRECIPITOUS CONTACT 2 CM WIDE

SHARP

PORPHYRITIC GABBRO 160.4' - 181.3'

FINE GRAINED, MED GREY, MASSIVE, 1-5% EUHEDRAL TO SUBHEDRAL PLAG. 1-3 MM. LOW PERVASIVE CARBONATE RXN THROUGHOUT. OCCAISSIONAL CARB, SiO_2 AND CARB/SiO_2 VEINS. TR-1% DISSEMINATED FINE EUHEDRAL Py

TR-1% Py

169'

166.6 / 167.4

1841

.8'

100%

170

QTZ VEIN 6 CM

DIP TEST 169' CORR ∠ 66.5°

TR-1% Py

179'

100%

Hole No. ML 38 | Project: 1446 | Page No: 4 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3756 S N. 4453 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. Hoult

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

INTERMEDIATE INTRUSIVE 181.2' - 183.1'

ZONE OF FINE GRAINED [illegible] BRECCIATED [illegible] ZONE OF MED GRAINED SPECKLED DARK GREEN TO BLACK [illegible] SOME AN INTERMEDIATE HYBRIDIZATION [illegible] SHARP, PERVASIVE LOW CARB, TR Py EXCEPT IN FRACTURES

GABBRO 183.1' - 187.6'

FINE GRAINED, MED SPECKLED, SLIGHTLY BRECCIATED NEAR UPPER INTRUSIVE CONTACT, LOW PERVASIVE CARB PRESENCE OF Py ON FRACTURE PLANES [illegible] TR-1% Py DISSEMINATED.

FELSIC INTRUSIVE 187.6' - 187.7'

SAME AS 49.0' - 53.2' EXCEPT < 1% PHENOCRYSTS.

GABBRO 187.6' - 254.0'

SAME AS 106.2' - 130.8' MED GRAINED LOW CARB ETC.

192.7' - 193.3' [illegible] OBVIOUS CONTACTS @ 30°

200.1' - 200.8' BRECCIATED GABBRO [illegible]

60% BOTRYOIDAL CA @ 30°

HEMATITIZED GABBRO

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
TR-1% Py	189'	100%	BQ			
TR-1% Py	199'	100%				
TR-1% Py	209'	100%				
TR-1% Py	219'	100%				
TR-1% Py	229'	100%				
TR-1% Py	239'					

Hole No. ML 38 | Project: 1446 | Page No: 5 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3+56 S N. 4+53 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

ALTERATION: APPLE GREEN MICA | CARBONATE | SILICA

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

SECTION

240

GABBRO 187.6' - 254.0' CONT'D

INTERMEDIATE INTRUSIVE 254.0' - 255.5'
SAME AS 181.3' - 183.1'

TONALITE 255.5' - 256.2'
FINE TO MED GRAINED, LIGHT SPECKLED GREY/WHITE, <15% FINE MAFICS, SUBORDINAL TO EQUIGRANULAR QUARTZ, FELDSPAR, NO CARB REACTION, PATCHY SILICIFICATION, [illegible] TR-1% Py, NO FRACTURE FEATURES

[illegible] GABBRO 256.2' - 258.0'
FINE GRAINED [illegible]
[illegible] LOW PERVASIVE CARB REACTION, TR PERVASIVE SILICIFICATION, MED SPACED VEINS AND FRACTURES, TR-1% Py

270.0' - 283.2' PROGRESSIVELY MORE INTENSELY FRACTURED AND PATCHY WEAK FINE SILICIFICATION

PORPHYRITIC FELDSPAR, FELSIC INTRUSIVE 283.2' - 287.6
SAME AS 49.0 - 53.2' NO XENOLITHS, LOW PERVASIVE CARB, TR-2% Py

SHARP

GABBRO 287.6 - 296.2'
COARSE GRAINED BECOMING PROGRESSIVELY FINER, GREEN/GREY TO BLUE GREY, MASSIVE BECOMING SLIGHTLY FOLIATED AND BRECCIATED, LOW TO MOD CARB RXN ALONG FRACTURES VEINS, TR-1% Py

INTERMEDIATE INTRUSIVE 5CM, SLIGHTLY SHEARED/BRECCIATED

BRECCIATED GABBRO 296.2' - 304.5'
(OVER)

GRADATIONAL

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
TR-1% Py	249	100%	BQ			
TR-1% Py	259	100%				
TR-1% Py	279	100%				
TR-1% Py	289	100%		1842	293.6 - 294.4	.8'
TR-1% Py	299					

Hole No. ML 38 | Project: 1446 | Page No: 6 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3456 S N. 4753 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

SECTION | ALTERATION | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

BRECCIATED GABBRO 290.2' - 304.5'

SAME AS 136.3' - 142.9'

INTERMEDIATE TO FELSIC INTRUSIVE 304.5' - 314.4'

FINE TO MED GRAINED, GREY ...

... BRECCIATED GABBRO ...

304.5' - 314.4' ...

... CALCITE

TONALITE 314.4' - 318.6'

SAME AS 255.5' - 256.2' WITH LARGE ALTERED ...

GABBRO 318.6' - 371'

... 319' ...

... TR-1% PY

1CM QTZ VEIN WITH CHLORITE ALTERATION ALONG CONTACT

1CM QTZ VEIN

LG > 10CM CARB VEIN SYS

TR-2% PY

TR-1% PY

TR-1% PY

TR-1% PY

309'

319'

329'

339'

349'

359'

100%

100%

100%

100%

BQ

Hole No. ML 38 | Project: 1446 | Page No: 7 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3+56 S N. 4+53 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
360					GABBRO 318.6' - 371.8' CONT'D		TR-1% Py	0		FQ			
								369'	100%				
370				SHEAR	PORPHYRITIC GABBRO 371.8' - 383.6' SAME AS 256.2' - 268.2'		TR-1% Py						
								379'	100%				
380				SHEAR	TONALITE DYKE 383.6' - 385.8' SAME AS 255.5' - 256.2' WITH MED GRAINED MAGNETITE GABBRO 385.8' - 395.4'		TR-1% Py						
								389'	100%				
390				SILICIFICATION	MED GRAINED, LIGHT GREEN, SOFT, CHLORITIC ALTERATION MASSIVE BECOMING SLIGHTLY FOLIATED, SLIGHTLY FOLIATED, BRECCIATED, SILICIFICATION, DECREASE IN CORE RECOVERY FELDSPAR PHENOCRYSTS, SUBHEDRAL, ONLY GRADUALLY DIMINISHES IN CONCENTRATIONS 30-70%, TR-1% Py		TR-1% Py						
					BRECCIATED GABBRO 395.4' - 399.6' SAME AS 136.8' - 142.9'			399'			1843	398.5	3.0'
400				GRADATIONAL	ALTERED ZONE "A" 399.6' - 411.5		TR-2% Py					401.5	
					SHEARED GABBRO 399.6' - 411.5' FINE GRAINED DARK TO LIGHT GREEN - WHITE, HIGHLY SHEARED, SOFT, EASILY BROKEN INTO LAYERS, HIGHLY SERICITIC, RARE CARB BLEB, TR-2% Py FOUND AS DISSEMINATIES OR AGGREGATES BETWEEN LAYERS				100%		1844		5.0'
												406.5	
				CA 70°				409'			1845		5.0'
410				5 CM QTZ VEIN	*SHEARED GABBRO IS NOT IN TYPICAL "ALTERED ZONE" PACKAGE AND THIS SEEMS TO INDICATE THAT WE MAY HAVE REACHED THE FRINGE OF THIS ZONE.		TR-1% Py					411.5	
					ALTERED ZONE ENDS				100%		1846		5.0'
					BRECCIATED GABBRO 411.5' - 418.5 SAME AS 136.8' - 142.9'							416.5	
					GABBRO 418.5 - 421.5 MED GRAINED, LIGHT GREEN, SOFT, CHLORITIC ALTERATION IRREGULAR CARB PATCHES 2-5% Py		2-5% Py	419'					

Hole No. ML 38 | Project: 1446 | Page No: 8 Of 9

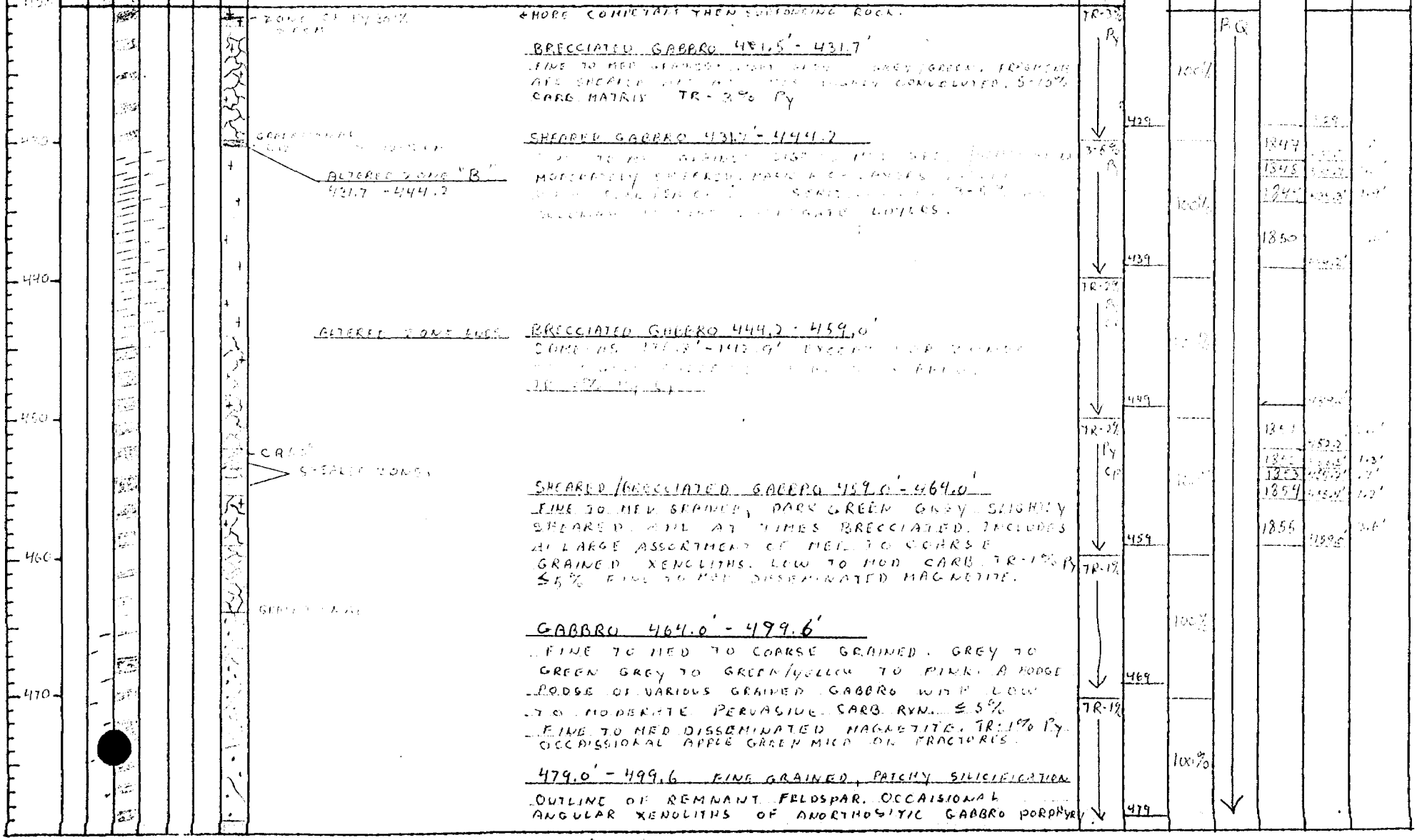
Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3+56 S N. 4+53 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K HOULE

SECTION | ALTERATION | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

DESCRIPTIVE GEOLOGY



CHORE CONGLOMERATE THEN SURROUNDING ROCK.

BRECCIATED GABBRO 431.5' - 431.7'

FINE TO MED GRAINED GREY GREEN / GREY GREEN, FRAGMENTS ARE SHEARED AND AT TIMES BRECCIATED, 5-10% CARB MATRIX TR-3% Py

SHEARED GABBRO 431.7' - 444.2

MODERATELY SHEARED, MAFIC AGGREGATES ... SHEARED TO FINE GRAINED LOWER.

BRECCIATED GABBRO 444.2 - 459.0'

COMPOSITION 443.3' - 443.9' EXCEPT FOR SHEARED ... TR-3% Py, 2+

SHEARED/BRECCIATED GABBRO 459.0' - 469.0'

FINE TO MED GRAINED, DARK GREEN GREY SLIGHTLY SHEARED, MOD AT TIMES BRECCIATED. INCLUDES AT LARGE ASSORTMENT OF MED TO COARSE GRAINED XENOLITHS. LOW TO MOD CARB. TR-1% Py ≤5% FINE TO MED DISSEMINATED MAGNETITE.

GABBRO 469.0' - 499.6'

FINE TO MED TO COARSE GRAINED, GREY TO GREEN GREY TO GREEN/YELLOW TO PINK. A MODGE PODGE OF VARIOUS GRAINED GABBRO WITH LOW TO MODERATE PERVASIVE CARB. RXN. ≤5% FINE TO MED DISSEMINATED MAGNETITE. TR-1% Py OCCASSIONAL APPLE GREEN MICA ON FRACTURES.

479.0' - 499.6 FINE GRAINED, PATCHY SILICIFICATION

OUTLINE OF REMNANT FELDSPAR. OCCAISIONAL ANGULAR XENOLITHS OF ANORTHOSITIC GABBRO PORPHYRY

Hole No. ML 38 | Project: 1446 | Page No: 9 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 19/04/88 | Ref. to Claim Corner:

Coordinates: 3456 S N. 4453 E. | Date Finished: 21/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

GABBRO 464.0' - 499.6'
CONT'D

ANORTHOSITIC GABBRO PORPHYRY 499.6' - 509.0'
COARSE GRAINED, MOTTLED WHITE GREEN, 5% MAFIC PHENOCRYSTS IN FINER MATRIX

END HOLE 509'

* THE TWO ZONES OF SHEARED GABBRO; ONE AT 399.6'-411.5'(A), THE OTHER AT 431.7'-444.2' (B) ARE NOT THE TYPICAL ALTERED ZONE DEVELOPEMENT. THE FIRST ZONE IS HIGHLY SERICITIZED AND SHEARED, WHEREAS THE SECOND ZONE IS ONLY MODERATELY SHEARED WITH LOW TO MODERATE SERICITIZATION. THESE TWO UNITS SEEM TO INDICATE THAT WE HAVE REACHED A BIFURCATING FRINGE OF THE MUCH LARGER ALTERED ZONE DEVELOPMENT AS SEEN IN PREVIOUS HOLES.

Hole No. ML 39 | Project: 1446 | Page No: 1 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corner:

Coordinates: NG 3198S / N. 3151 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K HOULE

SECTION	ALTERATION (APPLE GREEN MICA / CHLORITE / SERICITE)	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
0					OVERBURDEN 0.0' - 50.0' (CASING REMAINS). STEEL CASING NG								
10													
20													
30													
40													
50				RUBBLY	GABBRO 50.0' - 59.8' MED. GRAINED, LIGHT GREEN/GREY TO GREY, MASSIVE, HIGHLY FRACTURED WI CHLORITIC AND SERICITIC ALTERATION. REPLACEMENT OF FELDSPARS BY CARB OVERPRINT. LOW PERVASIVE CARB. RXN. FELDSPAR IS SUBHEDRAL TO ANHEDRAL. 1-4MM K'LS TR-1% PY		TR-1% Py	59'	95%	BQ			

Hole No. ML 39 | Project: 1446 | Page No: 2 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corner:

Coordinates: 3+98 S N. 3+51 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K HOULT

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BRECCIATED GABBRO 59.8' - 73.8'

FINE TO MED GRAINED, LIGHT TO MED GREEN/GREY BLUE/GREY, MASSIVE TO WEAKLY FOLIATED + BRECCIATED WITH 5-15% CLOSELY SPACED MATRIX, LOW CHLORITIC AND SERICITIC ALTERATION TR-1% PY

GABBRO 73.8' - 77.0'

SAME AS 50.0' - 59.8'

TONALITE 77.0' - 93.6

FINE TO MED GRAINED, LIGHT GREY/BLUE GREY, MASSIVE SUB-TO ANHEDRAL QTZ/FELD WITH ± 5% FINE MAFICS OCCASIONAL DYKES OF INTERMEDIATE COMP. W/ CARB RYN EXCEPT FOR SHARP CHLORITIC ALTERATION

BASALT 93.6' - 106.6'

FINE GRAINED, DARK TO LIGHT GREY/GREEN, FELDSPAR PHYRIC, SUBHEDRAL TO EUHEDRAL LATH & INTERGRANULAR TO CARB RYN AND PATCHY, WET LOOKING SILICIFICATION, SOME HIGHLY FRACTURED AREAS WITH CHLORITIC ALTERATION TR-1% DISSEMINATED PY.

TONALITE 106.6' - 119.3'

SAME AS 77.0' - 93.6' WT CARB REPLACING FELDSPAR → 119.0' TR-1% PY

QTZ VEIN BOUNDED BY CHLORITIC GABBRO ~3% PY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
60	TR-1% PY	69'	95%	BQ			
70	TR-1% PY	79'	100%				
80	TR-1% PY	94'					
90			100%				
100	TR-1% PY	109	100%				
110	TR-1% PY	119'	100%				

Hole No. ML 39 | Project: 1446 | Page No: 3 of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corner:

Coordinates: 3+98 S N. 3+51 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K. HOULE

SECTION | ALTERATION (ABRAS. ASSEM. MICA, CHLORITE, SERICITE) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

DESCRIPTIVE GEOLOGY

120

GABBRO 119.3' - 125.0'

FINE GRAINED, MED GREY/GREEN, MASSIVE, CARB SERICITE FRACTURES, 1-2% Py, LOW PERVASIVE CARB ALT'N.

121.9' - 125.0' MED - COARSE GRAINED SAME AS ABOVE EXCEPT NO SERICITE ALT'N, TR Py

SHARP

TONALITE 125.0' - 127.3'

MED GRAINED, GREY, SUBSIDIARY [illegible] <5% FINE MEDIUM CARB RXN ON HAIRLINE FRACTURES ONLY. TR-1% Py, Po

SHARP

130

GABBRO 127.3' - 136.9'

MED GRAINED, MED GREEN/GREY, 1% BLEB/LENSOIDAL [illegible] 2% SUBHEDRAL 5% SUBHEDRAL MASSIVE, BRECCIATED, ALTERATION: LOW PERVASIVE CARB RXN. HAIRLINE FRACTURES COMMON. TR-1% Py, Po

SHARP

140

TONALITE 136.9' - 143.8'

SAME AS 77.0' - 93.6' TR-1% Py, Po, Cp

BRECCIATED GABBRO 143.2' - 145.2'

SAME AS 71.8' - 73.5'

GABBRO 145.2' - 200.3'

SAME AS 127.3' - 136.9'

150

160

[illegible] FELDSPAR PORPHYRY

SMALL SHEARZONE WITH SERICITE AND CHLORITIC ALTERATION

DIP TEST 169'
CORR 67°

170

TONALITE DYKE

TR-1% Py

129'

TR-1% Py, Po, Cp

130'

100%

TR-1% Py, Po

159'

100%

TR-1% Py, Po

169'

100%

TR-1% Py, Po

179'

BQ

Hole No. ML 39 | Project: 1446 | Page No: 4 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corners:

Coordinates: 3+98 S N. 3+51 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K. HOULE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
180					GABBRO 145.2' - 200.3' CONT'D					BQ			
				SHARP	155.0' - 194.6' FINE GRAINED, MASSIVE VERY HARD, ... SILICA CARBON THROUGH ROCK ... SILICA IS BEING REMOVED ... VEINS. LOW CARB RYB EXCEPT ... HAIRLINE FRACTURES		TR-1% Py Po	139'	100%				
190				SHARP			TR-1% Py Po	199'	100%				
				SHARP	PORPHYRITIC FELDSPAR - FELSIC INTRUSIVE 200.2' - 205.1' FINE GRAINED TO APHANITIC, DARK GREY TO BLACK, HARD MATRIX ... FELDSPAR PHENOCRYSTS		TR-1% Py	209'	100%				
210				SHARP	GABBRO 205.1' - 206.5' SAME AS 127.3 - 136.9'		TR-1% Py Po	219'	100%				
					TONALITE 206.5 - 209.5 SAME AS 77.0 - 93.6' WITH XENOLITHS OF SURROUNDING GABBRO								
220				ATA	SLIGHTLY BRECCIATED GABBRO ... CALC MATRIX								
					GABBRO 209.5' - 269.8' SAME AS 127.3 - 136.9' TR-1% Py Po		TR-1% Py Po	229'	100%				
					- ZONE MASSIVE PO 2-5% OVER 2CM.								
					HIGHLY CONTORTED ZONE OF GABBRO REFRACTED BRECCIATION IN A PEGMATOIDAL SILICA VEIN								
230							TR-1% Py Po	239'	100%				
					ZONE OF SILICIFIED FELDSPAR 23CM.								

Hole No. ML 39 | Project: 1446 | Page No: 5 of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corner:

Coordinates: 3+98 S N. 3+51 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K. HOULE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

240

139.8' - 149.3' FINE GRAINED MED BLUE/GREY GABBRO HAS APPEARANCE OF BEING SHATTERED, ANGULAR GABBRO FRAGMENTS IN A DARKER MATRIX, CONSIST OF MED LIKE SILICIFICATION IN SOME AREAS VERY HARD Py 2-3% LIMONITE GOE ALTERATION.

250

254.7 - 256.4' SAME AS 139.8' - 149.3'

260

270

INCREASE IN SHEARING

BRECCIATED / SHEARED 268.8'-283.3'
MED TO FINE GRAINED, DARK GREY GREEN, SHEARED FABRIC WORK BECOMES MORE PRONOUNCED AND FRAGMENTS MORE SHEARED. CLASTS SUPPORTED IN A 10-30% CARB MATRIX. TR-1% Py Py

280

GRADATIONAL

CA 50°

SHEARED GABBRO 283.3' - 292.7'
FINE GRAINED, DARK GREY TO GREY GREEN, MODERATELY SHEARED AND AT TIMES SLIGHTLY BRECCIATED, LOW PERVASIVE CARB, LOW CHLORITIC AND SERICITIC ALTERATION. 2-3% FINELY DISSEMINATED Py

290

GRADATIONAL

BRECCIATED / SHEARED GABBRO 292.7'-301.3'
FINE GRAINED, DARK GREY TO GREY GREEN, SHEARED GABBRO FRAGMENTS IN A 20% CARB MATRIX. FEW ZONES LACKING BRECCIATION BUT HIGHLY SHEARED INCREASE IN DEGREE OF SERICITIZATION AND CHLORITIC ALTERATION 2-3% Py.

2-3% Py

TR-2% Py

TR-1% Py

2-3% Py

2-3% Py

240' 259' 269' 279' 289' 299'

100% 100% 100% 100% 100%

BQ

1856 5.5'

2960

Hole No. ML 39 | Project: 1446 | Page No: 6 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corner:

Coordinates: 3+98S / N. 3+51 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K. Houle

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

ALTERED ZONE 301.5'-334.1'

SHEARED GABBRO 301.5' - 334.1'

FINE GRAINED, MEDIUM GREY TO LIGHT GREY/GREEN HIGHLY SHEARED, HIGH DEGREE OF SERICITIC ALTERATION ESPECIALLY ALONG SHEAR PLANES OCCASIONAL SMALL CARB/QUARTZ VEINS 1% - 2% PY DISSEMINATED AND SMALL BLEBS

ALTERED ZONE ENDS

BRECCIATED GABBRO 334.1' - 342.7'

FINE GRAINED, LIGHT GREEN/GREY TO BLUE/GREY, SLIGHTLY SHEARED GABBRO IN A 15-20% CARB MATRIX. ANGULAR TO SUBANGULAR CLASTS SUPPORTED. OCCASIONAL CARB/SILICA FRACTURES. TR - 1% PY

ANORTHOSITIC GABBRO PORPHYRY 342.7 - 359.8'

MED -> COARSE GRAINED, WHITE TO GREENISH WHITE, EUHEDRAL TO SUBHEDRAL FELDSPAR X'LS > 70% < 1 - < 5% FINE GRAINED MAFICS. OCCASIONAL SMALL SHEAR ZONES. PERVASIVE APPLE GREEN MICA ALTERATION ON FRACTURE PLANES AND BETWEEN LARGE FELDSPAR GRAINS, CARB RXN ONLY ON SMALL HAIRLING FRACTURES. TR - 1% PY

Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.
10-5% Py	300'	95%	BQ	1857 2.5'	301.5' / 304.0'
10-5% Py				1858 5.0'	309.0'
				1859 5.0'	314.0'
	319'	100%		1860 5.0'	
7R-1% Py				1861 5.0'	324.0'
	329'	100%		1862 5.0'	
7E-1% Py				1863 5.0'	
	334'	100%		1864 5.0'	339.0'
1E-1% Py					
	349'	100%		1865 5.0'	354.0'
TR-1% Py					
	359'				359.0'

Hole No. ML 39 | Project: 1446 | Page No: 7 Of 7

Casing Collar Elev.: | Ground Elev.: | Date Started: 21/04/88 | Ref. to Claim Corner:

Coordinates: 3498 S .N. 3451 E. | Date Finished: 22/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 399' | Logged By: K. HOULE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
360					INTERMEDIATE INTRUSIVE 359.3' - 365.3'					BQ			
					FINE GRAINED, DARK GREY - DARK GREEN GABBRO WITH MASSIVE CORE TO SECTION WITH STRONG CHILLED LOWER CONTACT. SOME PLAG PHENOCRYSTS.		1P-1% Py	369'	100%				
370					GABBRO 365.3' - 399.0'								
					FINE TO MED GRAINED, LIGHT GREEN GREY TO DARK GREY, MASSIVE WITH SOME CHILLED MARGINS. GRADUAL DECREASE IN GRAIN SIZE TOWARDS BOTTOM OF HOLE.		1P-1% Py	379'	100%				
380							1P-1% Py	389'	100%				
390							1P-1% Py	399'	100%				
					DIP TEST 394' CORR 69°								
400					END OF HOLE 399.0'								

Hole No. ML 40 | Project: 1446 McVICAR L. | Page No: 1 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: 5/100 S. N. 4125 E. | Date Finished: APRIL 25/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 489' | Logged By: I AA

SECTION	ALTERATION (Argillic, Chlorite, Silica)	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
0					OVERBURDEN 0.0' - 20.2' (CASING REMAINS)					NQ			
10													
20				TONALITE?	GABBRO 20.2 - 36.2 MEDIUM GRAINED, LIGHT GREEN-GREY, MASSIVE TO WEAKLY FOLIATED, MODERATELY FRACTURED, FRESH TO SLIGHTLY CHLORITE - CARBONATE ALTERATION, OCCASIONAL 1-2 mm QUARTZ FILLED FRACTURES		TR-minor Py, Po		100%	BQ			
30				BRECCIATION				31'					
				SHARP, 45°	TONALITE 36.2' - 42.2' FINE GRAINED, MEDIUM GREEN-GRAY, MASSIVE. 3-5 mm QUARTZ VEIN @ UPPER AND LOWER CONTACTS WITH GABBRO, VERY DISTORTED AND ALTERED AT UPPER CONTACT.		TR-1% Py, Po		99%				
40				SHARP, 45°	GABBRO 40.2' - 44' SIMILAR TO 20.2 - 36.2 BUT MORE SERICITE, CHLORITE ALTERATION		TR-minor Py, Po	39'					
					SILICIFIED GABBRO? 44.0 - 49.0 PALE YELLOW COLOUR - MAY BE FELSIC INTRUSIVE WITH HALO OF SILICIFICATION, GABBRO REMNANTS IN FIRST 3', THEN DISAPPEAR. FINE GRAINED. MODERATE - INTENSE CARB.		TR-minor Py, Po		100%				
50				TONALITE CONTACT 44° CA	GABBRO 49.0 - 55.1 SAME AS 40.2' - 44'		TR-1% Py, Po	49'					
					TONALITE 55.1' - 66.3' SAME AS 36.2 - 40.2 BUT HAS ZONE OF MOD - INTENSE FRACTURING/BRECCIATION AT CONTACTS, AGAIN W/ Q2-CARB VEIN DEVELOPMENT. LOWER CONTACT GRADATIONAL TO SILICIF. GABBRO.		TR-1% Py, Po	59'	100%				

Hole No. ML 40 | Project: | Page No: 2 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: IAA

SECTION | ALTERATION (CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

SILICIFIED GABBRO 66.3' - 76.8'

FIRST 3' MED. YELLOW-GREEN, THEN LIGHT GREYISH WHITE. YELLOW COLOUR DUE TO HIGH TO MOD. CARB ALTN. FINE GRAINED, MASSIVE, WITH 20-30% MEDIUM GABBRO. LOWER CONTACT SHARP, 60° CA. VERY HARD. SCATTERED HEALED FRACTURES

GABBRO 76.8 - 96.1

SIMILAR TO 20.2 - 36.2', FINE TO MEDIUM GRAINED, MASSIVE. PATCHY WEAK SILICIFICATION, MODERATE CARB ALTERATION. LOCALLY INTENSE.

TONALITE 96.1 - 98.4

SAME AS 36.2 - 40.2

ANORTHOSITIC GABBRO 98.4 - 108.5

MOTTLED GREEN AND WHITE, MEDIUM GRAINED, MASSIVE. 30-40% ANORTHOSITE LOCALLY 60-70%. WEAKLY CARB. SHARP CONTACTS WITH UPPER AND LOWER UNITS

PORPHYRITIC FELSIC INTRUSIVE 108.5 - 109.5

SEE BELOW (116.8 - 128.5')

GABBRO 109.5 - 116.8

SAME AS 20.2 - 36.2

Drilling Interval	% Core Recovered
69'	99%
79'	100%
89'	98%
99'	99%
109'	98%
119'	100%

Hole No. ML 40 | Project: | Page No: 3 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: IAA

ALTERATION | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE

SECTION | DESCRIPTIVE GEOLOGY | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

120

FELDSPAR PORPHYRITIC FELSIC INTRUSIVE 116.8'- 128.5'

VERY FINE GRAINED MATRIX WITH 10-15% 2-4 mm EUHEDRAL TO SUBHEDRAL FELDSPAR PHENOCRYSTS. DARK GREY-GREEN, MASSIVE. WEAK, PERVASIVE CARB ALT'N. MINOR 2% PY AS SCATTERED BLEBS, DISCONTINUOUS STRINGERS. 122-124.7 BRECCIATED GABBRO - SEE BELOW. THIS PORPHYRY SAME AS SEEN NEAR HI-GRADE QUARTZ VEIN OF TRENCH AREA 2.

BRECCIATED GABBRO 128.5'- 136.7'

MEDIUM GRAY-GREEN UNIT. BRECCIATED BY 5-15 mm CARB-QZ VEINS. MANY OF FRAGMENTS APPEAR STRONGLY SHEARED TO MYLONITIC. SCATTERED, IRREGULAR 5-20 cm BLEBS QZ. AVG. 1-2% PY BUT SCATTERED VERY FINE GRAINED ZONES HAVE 4-6% VFG PY.

SHARP CA= 70°

SHARP CA= 60°

TONALITE 136.7'- 189.2'

MEDIUM GRAY, MASSIVE, FINE GRAINED UNIT. THIS UNIT HAS A DISTINCTIVE SALT AND PEPPER TEXTURE NOT SEEN IN THE PREVIOUS TONALITES (THEY MAY BE BASALT). THIS UNIT IS WEAKLY TO MODERATELY CARBONATIZED AND HAS PATCHY YELLOW-GREEN SERICITIC ALT'N. QZ-CARB STRINGERS ARE COMMON RANGING FROM 1 TO 5 mm.

GRADATIONAL

BASALT

151'-158'1" IS A BASALTIC INTERVAL - A MASSIVE FINE GRAINED MEDIUM GREEN UNIT. THE LOWER CONTACT IS GRADATIONAL AND IS MARKED BY ABUNDANT RED (HEMATITIC?) STAINING. THIS UNIT IS COARSELY BRECCIATED BY 1-3 mm QZ-CARB STRINGERS.

GRADATIONAL

166-169' - GABBROIC

DIP TEST CORRECTED 65°

MINOR TO 2%

TR-1% Py, Po

TR-1% Py, Po

TR-1% Py, Po

TR-1% Py, Po

TR-1% Py, Po

129'

139'

149'

159'

169'

179'

100%

100%

100%

100%

100%

Hole No. MC 40 | Project: | Page No: 4 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: IAA

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

180

TONALITE 136.7' - 189.2'

SHARP - CA: 50°

190

BASALT 189.2' - 195.3'

AS DESCRIBED PREVIOUSLY, HAS SCATTERED GABBROIC AND TONALITIC INCLUSIONS. 2-3% FINELY DISSEMINATED PY

FELDSPAR PORPHYRITIC INTRUSIVE

TONALITE 195.3' - 212.5'

SAME AS 136.7 - 189.2' BUT HAS 10-15% GABBRO + BASALT AUTOLITHS.

200

GABBRO

FAULT

210

SHARP CA: 75°

GABBRO 212.5 - 233.6'

SHARP CA: 52°

TONALITE

SHARP

MEDIUM GREEN-GRAY, MASSIVE, VARIABLY TEXTURED GABBRO. VARIES FROM VERY FINE GRAINED TO QUITE COARSE. SCATTERED TONALITIC AREAS, IN COARSE-GRAINED ZONES FELSIFIC COMPONENT UP TO 40% OF THE ROCK. MODERATE TO STRONG CARBONATE ALTERATION THROUGHOUT THIS UNIT.

220

COARSE GABBRO

COARSE GABBRO

TONALITE

230

GRADATIONAL

COARSE GRAINED GABBRO 233.6 - 240'

MEDIUM TO DARK GREEN, MASSIVE, COARSE GRAINED UNIT. AV. GRAIN SIZE IS 3 mm IN A RANGE OF 5 TO 10 mm. THE ROCK IS 20-30% COARSE

GRADATIONAL

Hole No. ML 40 | Project: | Page No: 5 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: TAA

SECTION	ALTERATION (CARBONATE, SILICA)	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

DESCRIPTIVE GEOLOGY

240

GRADATIONAL

COARSE GRAINED GABBRO 237.6 - 240.0'

FELDSPARS, 30-40% COARSE CLOTS OF MAFIC MINERALS, PROBABLY AMPHIBOLES, AND 50-60% FINE GRAINED MAFIC MINERAL. CALCITE VEINLETS UP TO 3 mm WIDE ARE PRESENT AS PATCHY WEAK CARB ALTN.

250

GABBRO 240.0 - 255.8'

MEDIUM GREEN, FINE TO MEDIUM GRAINED, MASSIVE GABBRO. FELDSPAR INITIALLY COMPRISES 10-15% OF THE UNIT, INCREASING TO 50-60% BY THE MIDDLE, THEN DECREASING TO 15-20% BY THE END. CARBONATE ALTN PATCHY AND WEAK. SCATTERED FINE QZ-CARB STRINGER HEALING FRACTURES

SHARP, IRREGULAR

FELDSPAR PORPHYRITIC FELSIC INTRUSIVE 255.8 - 261.4'

SAME AS 116.8 - 128.5' HAS 1-2 mm CHILLED MARGIN @ LOWER CONTACT.

260

SHARP, CA=63°

GABBRO 261.4 - 271.4'

MEDIUM GRAY-GREEN, GENERALLY FINE GRAINED MASSIVE GBBR. TONALITE INCLUSIONS PRESENT, INCREASE TOWARDS THE FELSIC CONTACT. SCATTERED 1-5 mm QV, OFTEN ALONG CARB. ACTIN. SCATTERED TONALITE INCL.

270

GRADATIONAL

SHEARED, BRECCIATED GABBRO(?) 271.4 - 279'

COARSELY BRECCIATED BY 3-10 mm CB-QZ VNG. CARB CONFINED TO VEINS. VERY FINE GRAINED UNIT. MEDIUM BLUE GREEN TO LIGHT GREY. 2-3% PY, LOCALLY 4-6%. 2-3% MINOR TO LOCALLY QV. SHEARING VARIES FROM INTENSE TO APPARENTLY ABSENT. SHEARED AREAS RICH IN CHLORITE.

280

GRADATIONAL

GABBRO 279' - 329.2'

FINE TO MEDIUM GRAINED, MEDIUM GRAY-GREEN, MASSIVE UNIT. FELDSPAR COMPRISES UP TO 40 OF THE ROCK LOCALLY. OCCASIONAL PODS TO 3 cm. SCATTERED NARROW FINE GRAINED ZONES THROUGH THE UNIT. WEAK, PATCHY CARB ALTN. 1-2% FELDSPAR VEINLETS THROUGHOUT.

290

% Sulphides: TR-1% Py, Po; TR - MINOR Py, Po; TR - MINOR Py, Po; 2-3% Py; TR - MINOR Py, Po

Drilling Interval: 247, 259, 279, 289

% Core Recovered: 100%, 100%, 100%, 100%

Hole No. ML 40 | Project: | Page No: 6 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: I A A

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

300

GABBRO 279' - 329.2'

309' SHARP CA= 50°
FELDSPAR PORPHYRITIC FELSIC INTRUSIVE
315.5' SHARP CA= 45°

310

320

SHARP CA= 30°

330

GRADATIONAL

2-3% VEINLETS

340

GRADATIONAL

SHEARING INCR. CA= 56°

350

GRADATIONAL

CA= 61°

2cm qV

DIP BEFORE CORRECTED 65°

SHARP BUT ROCK RUBBLY, BROKEN

PORPHYRITIC GABBRO 329.2 - 334

MEDIUM TO DARK GREEN, FINE GRAINED, MASSIVE UNIT WITH 5% 1-3 mm FELDSPAR PHENOS. 10-15% 0.1-4 mm QZ-CB AND FS STRINGERS @ 65° TO CA. CALC CONFINED TO STRINGERS

GABBRO 334.0 - 343.1

MASSIVE, MEDIUM GREY-GREEN, VARIABLY TEXTURED GABBRO. RANGES FROM VERY FINE GRAINED TO MEDIUM GRAINED TO LOCALLY PORPHYRITIC. FINE GRAINED ZONES WEAKLY BRECCIATED BY QZ-CB STRINGERS.

BRECCIATED, SHEARED GABBRO 343.1 - 352.6

IRREGULAR CARB STRINGERS BRECCIATE A MODERATELY TO INTENSELY SHEARED GABBRO - LOCAL "LINE" CHLORITE SCHIST. 343.3 - 344.3 HAS 30-40% MASSIVE Po W/LESSER Py. SLIGHT INCREASE IN SERICITE TOWARDS LOWER CONTACT.

ALTERED ZONE 352.6 - 416.6

CONTACT GRADATIONAL - TAKEN WHERE FOLIATION BECOMES INTENSE AND SERICITE BEGINS TO INCREASE.

352.6 - 359.1 SHEARED GABBRO

Tr-minor fs, Po

Tr-minor Py, Po

Tr-1% Py, Po

30-40% Po, Py

5-7% Po, Py

3-4% Po, Py

3-5% Po, Py

279' 309' 319' 329' 339' 349' 359'

100% 100% 100% 99% 100% 95%

343.3 344.3 348.3 352.6 354.6 356.6 359.1

100 100 100 100 100 95

1866 1867 1868 1869 1870 1871

18-72

Hole No. ML40 | Project: | Page No: 7 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: IAA

ALTERATION (GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL (Qz) | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

ALTERED ZONE 352.6 - 416.6 (CONT'D)

352.6 - 359.1 SHEARED GABBRO

INTENSELY SHEARED GABBRO - CHLORITIC SCHIST, HAS SCATT. WISPS APPLE GREEN 2-3% Py, Po (MAINLY AS 1-3 mm STRINGERS LOCALLY BRECCIATED. CARB CONFINED TO Qz-CB STRINGERS & CUT Qz V @ 356.4'.

359.1 - 362.1 QUARTZ

MASSIVE BULL QV w/10% LITHIC FRAGS. INCL 1-3% WISPS YELLOW TO PALE GREEN MICA. MINOR Py, Po IN QZ, 5-10% IN LITHIC FRAGS. THIS ZONE VERY PROBABLY AT/NEAR FOOT OF CORE LOSS.

362.1 - 382 SHEARED GABBRO

STRONGLY SHEARED GABBRO - LESS INTENSE THAN 352.6 - 359.1. 80% Qz FROM 365.2 - 366.2'. APPROX 1' OF CORE LOST BETWEEN 362.1 AND 365.2. 2-5% LT GRN MICA TO BOUDINS. CARB MAINLY IN FINE STRINGERS. 366.2 - 367.2 HAS 7-10% Py, Po. 369.2 - 371.8 - 5-8% Py, Po, 10-15% Qz BOUDINS/VEINS.

371.8 - 375.4 HAS 5-8% Po, Py, 2-5% Qz BOUDINS/VEINS. 377.4 - 379? HAS 5-8% Py, Po, 10-12% Qz BOUDINS/VEINS. 378.2 - 38. INCLUDES 2' OF INTRUSIVE - SEE BELOW.

382 - 388.2' INTERMEDIATE INTRUSIVE

MASSIVE, FINE GRAINED, MEDIUM GRAY-GREEN TO YELLOW-GREEN [illegible] WEAK SERICITE, 2-5% Py, Po, 1-2% CARBONATE AS FINE STRINGERS CUTS

388.2 - 388.2 FOLIATED INTRUSIVE

FOLIATED, DARK GRN INTERMEDIATE TO MINOR INTRUSIVE FEATURELESS UNIT WITH 1-2% Py. WEAK PERVASIVE CARBONATIZATION.

388.2 - 416.8' SHEARED GABBRO

SAME AS 362.1 - 382 BUT HAS MORE QUARTZ BOUDINS/VEINS AND MORE GREEN MICA.

388.2 - 390.2 - AS 362.1 - 382

390.2 - 392.1 - 75% Qz, 25% LITHIC FRAGS, Qz BOUDINS BRECCIATED BY LATER STRINGERS MODERATE PATCHY CARB., 5-7% Py, Po MINOR WISPS APPLE GREEN.

392.1 - 395.4' - SHEARED GABBRO w/ 5-8% APPLE GREEN, SERICITE, MOD-INT PATCHY CARB ALT'N. TR-1% Py, Po

395.4 - 396.8 - AS 390.2 - 392.1

396.8 - 399.7 - AS 392.1 - 395.4, 1-2% Py, Po, 8-10% APPLE GREEN, 5% Qz

399.7 - 401.8 - SHEARED GABBRO w/ 20-25% APPLE GREEN

401.8 - 402.8 - AS 392.1 - 395.4

402.8 - 403.8 - AS 390.2 - 392.1, MORE APPLE GREEN, LESS LITHIC FRAGS

403.8 - 405.6 - AS 392.1 - 395.4

405.6 - 408 - AS 392.1 - 395.4

408 - 410.5 - SHEARED GABBRO AS 362.1 - 382.

410.5 - 415.2 - SHEARED GABBRO

415.2 - 416.6 - 90% Qz VEIN WITH 10% LITHIC FRAGS, 3-4% Py, Po

TONALITE 416.6 - 474.3

FINE GRAINED, MASSIVE, GREY-GREEN TO YELLOW GREEN UNIT. SIMILAR TO PREVIOUS TONALITES. FIRST 4-5' SOMEWHAT ALTERED - CARB, SERICITE

% Sulphides	Drilling Interval	% Core Recovered	Sample Interval	% Rec'y Samp. Int.	Estimated
2-4% Py, Po			362.1	70	1372
2-3% Py, Po		80%	365.2	70	1873
2-3% Py, Po	369		366.2	95	1874
5-8% Py, Po			367.2	100	1877
5-8% Py, Po		97%	371.8	100	1877
5-8% Py, Po			375.4	100	1878
5-8% Py, Po	379		379.3	100	1879
2-4% Py, Po			382	60	1881
2-3% Py		99%	388.2	100	1882
TR-2% Py, Po	389		390.2	20	1883
1-2% Py, Po			392.1	100	1884
TR-1% Py, Po		99%	395.4	100	1885
5-7% Po, Py			396.8	100	1886
1-2% Py, Po	399		399.7	100	1887
TR-1% Py, Po			401.8	100	1888
TR-1% Py, Po			402.8	100	1889
5-7% TR-1% Py, Po		95%	403.8	100	1890
			405.6	100	1891
2-3% Py Po			408	100	892
1-3% Py, Po	409		410.5	100	1893
TR-1% Po, Py		99%	415.2	100	1894
3-4% TR-1% Py, Po	419		416.6	100	1895
			420	100	1896

Hole No. ML 40 | Project: | Page No: 8 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: JAA

SECTION	ALTERATION: CHLORITE/MICA	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

420

TONALITE 416.6 - 474.3

ALTERNATING MEDIUM GREY-GREEN AND YELLOW GREEN, OCCASIONAL COARSER ZONES. MODERATE, PERVASIVE CARBONATE ALT'N.

TR-1% Py, Po

BQ

429

430

439

440

449

450

459

460

469

470

SHARP CA = 35°

PORPHYRITIC, ANORTHOSITIC GABBRO 474.3 - 489

MASSIVE, COARSE GRAINED, GREEN-WHITE UNIT. MAGNETITE-RICH AS 0.1 - 1.5 mm CLOTS AND CRYSTALS INTERSTITIAL TO THE FELDSPAR GRAINS. FELDSPARS RANGE FROM 2-7 mm. WEAK, PERVASIVE CARB ALT'N

TR-1% Py, Po

479

Hole No. MC40 | Project: | Page No: 9 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: | Scale:

Inclination: | Bearing: | Total Depth: | Logged By: IAA

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

Hole No. ML 41 | Project: 1446 | Page No: 1 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: NG 4+00 S N. 4+75 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

SECTION	ALTERATION (CARBONATE)	ALTERATION (SILICA)	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
0						OVERBURDEN 0.0' - 41.8' (CASING REMAINS)					STEEL CASING			
10														
20														
30														
40						BRECCIATED BASALT 41.8' - 44.3' FINE TO MEDIUM GRAINED, MED GREEN GREY, CLAST SUPPORTED BASALT IN 10-15% CARB MATRIX, SLIGHTLY FOLIATED, CLASTS SUBANGULAR TO SUBROUNDED. TR-1% FINELY DISSEMINATED Py		TR-1% Py	49'	100%	BQ			
50						PORPHYRITIC BASALT 44.3' - 47.7' FINE TO MED. GRAINED, LIGHT GREEN GREY. ANHEDRAL TO SUBHEDRAL FELDSPAR GRAINS IN A FINER MATRIX. 10-15% FELDSPARS, RANGING GENERALLY FROM 2-5 MM. TR-1% FINELY DISSEMINATED Py.		TR-1% Py		100%				
						BRECCIATED BASALT 47.7' - 53.2' SAME AS 41.8' - 44.3'. MORE HIGHLY FOLIATED, SHOWS CHLORITIC ALTERATION. TR-1% Py			59'					

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE AUG 09 1988 RECEIVED

RECEIVED JUL 25 1988 PATRICIA MINING DIVISION

Hole No. ML 41 | Project: 1446 | Page No: 2 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 400 S N. 4+75 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

COMMENTS:

AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

PORPHYRITIC BASALT, 53.2' - 59.7'
SAME AS 44.3' - 47.7'

BASALT 59.7' - 61.2'
FINE GRAINED, DARK GREY GREEN, MASSIVE BUT AT TIMES VERY SLIGHTLY FOLIATED. CONTACT SHARP IRREGULAR, CARB FILLED FRACTURES FELDSPAR APHYRIC TR-1% PY

GABBRO 61.2' - 73.6'
MED GRAINED, LIGHT TO MED GREEN/GREY, MASSIVE TO WEAKLY FOLIATED, MILD CHLORITIC ALTERATION, SMALL TO LARGE CARB FILLED FRACTURES, MOST GRAIN BOUNDARIES ARE DIFFUSE, TR-1% PY FINELY DISSEMINATED

SILICIFIED GABBRO 73.6' - 90.6'
MED GRAINED, LIGHT GREY MASSIVE WITH [illegible]

GABBRO 90.6' - 95.9'
MEDIUM GRAINED, MED GREY GREEN, MASSIVE, HARD, SLIGHTLY SILICIFIED, FINE CROSS CUTTING QTZ VEIN, LOW CARB EXCEPT ON HAIRLING FRACTURES TR-1% PY

SILICIFIED GABBRO 95.9' - 100.8'
FINE TO MED GRAINED, LIGHT GREY, MASSIVE VERY HARD, WEAK TO MODERATELY SILICIFIED, VARIABLE TEXTURE AT TIMES "GHOST" GABBROIC, NETWORK OF SILICA FRACTURING TR-1% FINELY DISSEMINATED PY

FELSIC INTRUSIVE 100.8' - 106.6'
FINE GRAINED - APHANITIC, DARK GREY/BLACK, SHARP CONTACTS HARD, TR-1% PO, PY, INCLUDES SECTION OF SILICIFIED GABBRO, CARB FILLED FRACTURES.

SILICIFIED GABBRO 106.6' - 139.8
LINED MED, LIGHT GREY SAME AS 95.9' - 100.8'
WITH WEAK TO INTENSING SILICIFICATION TR-1% PY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
60	TR-1% PY	59'	100%	BQ			
70	TR-1% PY	79'	100%				
80	TR-1% PY	99'	100%				
90	TR-1% PY	109'	100%				
100	TR-1% PY PO	119'	100%				
110	TR-1% PY PO		100%				

Hole No. ML 41 | Project: 1446 | Page No: 3 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 4+00 S N: 4175 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240° | Total Depth: 509' | Logged By: K. Houle

ALTERATION | CARBONATE | SILICA | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | SECTION | DESCRIPTIVE GEOLOGY | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

SILICIFIED GABBRO 106.6' - 130.8'
CONT'D

PERPHYRITIC FELDSPAR PORPHYRITE 130.8' - 134.8'

BRECCIATED/SHEARED GABBRO 134.8' - 144.7'

FINE-GRAINED, LIGHT GREEN TO MED GREY SILICIFIED

GABBRO 144.7' - 240.5'

LOW SILICIFICATION

SILICIFIED

DIP TEST CORE @ 69°
169'

INTENSE SILICIFICATION
PORPHYRITIC GABBRO

CARB/SILICA VEINING

TR-1% Py

TR-1% Py

TR-2% Py

TR-1% Py

TR-1% Py

139'

149'

159'

169'

179'

100%

100%

100%

100%

BQ

Hole No. ML 41 | Project: 1446 | Page No: 4 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 4+00 S N. 4+75 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K HOULE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

DESCRIPTIVE GEOLOGY

GABBRO 141.7' - 240.5'

135.0' - 240.5'

216' - 216.2'

235.0' - 240.5' FELDSPAR BEING REPLACED BY CARB, - LOW TO MED PERVASIVE CARB.

Hole No. ML 4/1		Project: 1446	Page No: 5 Of 9
Casing Collar Elev.:	Ground Elev.:	Date Started: 25/04/88	Ref. to Claim Corner:
Coordinates: 4+00 S N. 4+75 E.		Date Finished: 27/04/88	Scale: 1"=10'
Inclination: -70°	Bearing: 240°	Total Depth: 509'	Logged By: K. Hoole

SECTION | ALTERATION | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

240

INTERMEDIATE INTRUSIVE/TONALITE [illegible] - 250.2'

FINE TO MEDIUM GRAINED, [illegible] GREY [illegible]

[illegible]

250

TONALITE/DIORITE [illegible] - 255.0'?

FINE TO MED GRAINED, LIGHT GREY TO WHITE/GREY [illegible] USUALLY COINCIDING WITH INCREASED FRACTURING. TONALITE CONTAINS [illegible] FINE MAFICS. SOME [illegible] FRACTURING. [illegible]

260

TONALITE 2??.0' - 272.2'

[illegible] GREY, [illegible]

270

BRECCIATED GABBRO 272.2' - 277.3'

FINE GRAINED [illegible] CARB MATRIX, BRECCIA IS [illegible] MODERATE DEGREE OF [illegible]ZATION TR-1% py

280

GABBRO 277.3' - 287.1'

FINE TO MED GRAINED, MED TO DARK GREY/GREEN. 10-25% SUBHEDRAL TO ANHEDRAL [illegible]. [illegible] AND RXN LOW EXCEPT ON HAIRLINE FRACTURES TR-1% FINELY DISSEMINATED PY.

SHARP

TONALITE 287.1' - 292.1'

290

SHARP

FINE TO MED GRAINED, LIGHT TO MED GREY, "SALT + PEPPER" APPEARANCE, < 5% FINE MAFICS, CONTACT SHARP ANHEDRAL TO SUBHEDRAL X'L STRUCTURES, SOME SILIF. VEINING AND SMALL CARB HAIRLINE FRACTURES. Py TR-1% AND AS FRACTURE COATINGS.

GABBRO 292.1' - 388.0'

SAME AS 277.3' - 287.1'

2 CM QTZ VEIN

% Sulphides	Drilling Interval	% Core Recovered	Core Size
TR-1% Py	249'		BQ
[illegible]	259'	100%	
TR-1%	269'		
TR-1% Py	279'	100%	
TR-1% Py	289'	100%	
TR-1% Py	299'	100%	

Hole No. ML 41 | Project: 1446 | Page No: 6 of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 4+00 S ~~N.~~ 4+75 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. HOULE

ALTERATION (APPLE GREEN MICA, CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

SECTION

DESCRIPTIVE GEOLOGY

GABBRO 292.1' - 388.0'

CONT'D. MORE FREQUENT SIGNS OF SILICIFICATION

300

310

320

330

340

350

2cm QTZ VEIN

INTENSE SILICIFICATION

SHEAR ZONE @ 68°

APPLE GREEN MICA ON FRACTURE PLANE

TR-1% Py

209

319

329

339

349

359

100%

BQ

Hole No. ML 41 | Project: 1446 | Page No: 7 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 4400 S N. 4475 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240° | Total Depth: 509' | Logged By: K. Hoole

SECTION	ALTERATION (Apple Green Mica / Carbonate / Silicified)	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

DESCRIPTIVE GEOLOGY

GABBRO 292.1' - 388.0'

COLOUR

SHEARED ZONE

379.5 - 374.2 SHEARED ZONE WITH FOLIATED GABBRO AND MAFIC FOLIATION, 5% ZONE

BRECCIATED GABBRO 388.0' - 412.2'

MED TO FINE GRAINED, LIGHT GREEN GREY TO BROWN BEIGE, WELL FOLIATED TO SLIGHTLY FOLIATED, CLASTS SUPPORTED IN A FINE CARB MATRIX (10-20%), BECOMING MORE SHEARED DOWNHOLE. TR-3% PY AS FINE GRAINED DISSEMINATED AND FINE TO MED AGGREGATES.

ICE QTZ

BROKEN CORE RUBBLY

SHEARING INCREASE

GRADATIONAL RUBBLY

CA 55°

ALTERED ZONE 412.2' - 466.1'

SHEARED GABBRO 412.2' - 419.7'

FINE TO MED GRAINED, MEDIUM GREEN GREY, WELL SHEARED AND FOLIATED, MILDLY SERICITIZED AND CHLORITIZED. 414.0' - 415.3' MASSIVE QTZ VEIN, WT. APPLE GREEN MICA ALONG SHEARED SECTION. 2-5% PY BLEBS IRREGULAR. VERY LITTLE TO NO CARB RXN.

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.
TR-1% Py	369'	120%	BQ		
TR-1% Py	379'	100%			
TR-1% Py	389'	100%			
TR-3% Py	399'	100%			
TR-3% Py	409'	95%			407.0'
2-5% Py	419'	100%		1897 5.2'	412.2'
				1898 1.8'	414.0'
				1899 1.3'	415.3'
				1900 4.4'	419.7'

Hole No. ML 41 | Project: 1446 | Page No: 8 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 4+00 S -N: 4+75 E. | Date Finished: 27/04/88 | Scale: 1"=10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. Houle

SECTION | ALTERATION (APPLE GREEN MICA, CARBONATE, [illegible]) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

420

QUARTZ SERICITE SCHIST 419.7' - [illegible]

[illegible]

430

MASSIVE QUARTZ 425.7' - 427.8

[illegible] 10% [illegible]

QUARTZ SERICITE SCHIST 427.8' - 434.9'

SAME AS 419.7' - 425.7' [illegible]

[illegible] 438.7'

BRECCIATED/[illegible] GABBRO 434.9 - 438.7

[illegible]

440

QUARTZ SERICITE SCHIST [illegible]

[illegible]

450

INTERMEDIATE INTRUSIVE 450.1 - 463.1

FINE GRAINED, LIGHT TAN [illegible] MASSIVE [illegible] WEAK QTZ VEINING [illegible] APPROACHING LOWER CONTACT [illegible] FRACTURES, APPARENT [illegible] CARB [illegible] FRACTURES TR-1% PY

460

SHEARED GABBRO 463.1' - 466.1'

SAME AS 412.2' - 419.7'

ALTERED ZONE END 466.1'

GABBRO 466.1' - 482.2'

FINE GRAINED, DARK GREEN, MASSIVE AND SLIGHTLY BRECCIATED AT TIMES WITH ANGULAR FRAGMENTS > 5% CARB. TR-1% PY

470

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
[illegible] Py	429'	100%	BQ	1901 3.0'; 1902 3.0'; 1903 2.1'; 1904 3.2'	422.7; [illegible]	
4-6% Py; TR-1% Py	439'	100%		1905 2.9'; 1906; 1907 3.8'	434.9; 438.7	
4-6% Py	449'	100%		1908 5.3'; 1909 6.1'	[illegible]	
[illegible]	459'	100%		1910; 1911 3.9'	451.1; 455.0	
TR-1% Py	469'	100%				
TR-1% Py	479'	100%				

Hole No. ML 41 | Project: 1446 | Page No: 9 Of 9

Casing Collar Elev.: | Ground Elev.: | Date Started: 25/04/88 | Ref. to Claim Corner:

Coordinates: 4+00 S N. 4+75 E. | Date Finished: 27/04/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 509' | Logged By: K. Hoult

ALTERATION | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

SECTION

DESCRIPTIVE GEOLOGY

480

TONALITE 483.2' - 484.6'

490

GABBRO 484.6' - 502.5'

- SAME AS 416.1' 419.7'
- SMALL INTRUSIVE TRACHES OR VEINS

500

TONALITE 502.5' - 509'

SAME AS

510

509'

BQ

Hole No. ML 42 | Project: 1446 | Page No: 1 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/05/88 | Ref. to Claim Corner:

Coordinates: NG 5+01 S N. 6+63 E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240 | Total Depth: 629' | Logged By: K. Hoole

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

AVE CORE REC'Y/HOLE

OVERBURDEN 0.0' - 20.0'

CASING RETURNS

GABBRO 20.0' - 36.1'

45.6'

36.1' - 45.6'

TR-1%

INTERMEDIATE INTRUSIVE 45.6' - 47.6'

FINE GRAINED MED BROWN/GREY ... CONTACTS ... SHARP BUT ARE SLIGHTLY ... WITH ... LOWER CONTACTS ... SLIGHTLY ... BOUDINAGE ... NO APPARENT ...

BASALT 47.6' - 49.0'

SAME AS 36.1' - 45.6'

BRECCIATED BASALT 49.0' - 55.0'

FINE GRAINED, LIGHT GREEN, SLIGHTLY FOLIATED ...

BRECCIATED 5-10% CARB MAINLY TR-1% PY

10%

75%

100%

BG

Hole No. ML 92 | Project: LMC | Page No: 2 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/05/88 | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 629' | Logged By: K. Moulds

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

60

BASALT 60.2' - 75.2'

70

75.2 - 82.5' [illegible]

80

82.5' - 90.1'

90

FINE GRAINED, MED GREEN ARGILLITE [illegible]

95%

100

GABBRO 100.4' - [illegible]

MED TO FINE GRAINED, MED GREY TO DARK GREY, [illegible] SUBHEDRAL TO SUBHEDRAL, X-CUT BY NUMEROUS CALCITE/CARB VEINS, [illegible], LIGHT CARB ALONG FRACTURE PLANES, TR-1% FINE Py AND Po

AMPHIBOLE + SAND

104.5 - 105.6' ANORTHOSITIC GABBRO PORPHYRY

95% FELDSPAR WT < 5% MAFIC CONSTITUENTS

110

111.1' - 114.9' FINER GRAINED WT. MORE SILICIFIED MELTING, SLIGHTLY SHEARED, WITH CARB FILLED FRACTURES

TR-1% Py Po

TR-1%

Py Po

100%

119'

129'

139'

149'

Hole No. RL 4/2 | Project: 1446 | Page No: 3 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/05/88 | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: 07/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 210° | Total Depth: 629' | Logged By: K. Hoole

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
120					GABBRO 120.5 - 161.6								
130													
140													
150													
160					161.6 - 174.2								
170					DIP TEST 160° CORE < 60°				100%				
					8cm QTZ VEIN								
					8cm QTZ VEIN								

Hole No. ML 4/2 | Project: 1446 | Page No: 4 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/04/88 | Ref. to Claim Corner:

Coordinates: 801 S N. 6+63 E. | Date Finished: 04/05/88 | Scale: 1"=10'

Inclination: -70 | Bearing: 240° | Total Depth: 629' | Logged By: K. Hoult

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
180													
200													
220													
230													

Hole No. ML 42 | Project: 1446 | Page No: 5 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/04/88 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 329' | Logged By: K. Heale

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
250							TR Py	240'		BQ			
260							TR Py	259'					
270							TR Py	279'					
280							TR Py	289'					
290							TR Py	299'	100%				

Hole No. ML 42 | Project: 1446 | Page No: 6 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: [illegible] | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: [illegible] | Scale: 1" = 10'

Inclination: -70° Bearing: 240° | Total Depth: 329' | Logged By: K. Hoole

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

GABBRO 261.6' - 344.1'

331.2 - 332.5' FELSITIC [illegible]

DIP TEST 334'
CORE ∠ = 66.5°

ALTERED GABBRO 344.1'
SAME AS 261.6' - 261.6'

GABBRO 353.1' - 365.7'
SAME AS 261.6 - 344.1'

BQ

100%

Hole No. ML 42 | Project: 1496 | Page No: 7 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 09/04/88 | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: 09/05/88 | Scale: 1" = 40'

Inclination: -70 | Bearing: 240° | Total Depth: 609' | Logged By:

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated

GABBRO 212.7' - 363.2'

MEDIUM GRAINED GABBRO 363.2' - 378.1'

SAME AS 212.7' - 363.2'

SHEAR

GABBRO 378.1' - 435.2'

FINE GRAINED TO MEDIUM GRAINED

GABBRO 435.2' - 498.2'

SAME.

GRAN

TONALITE 498.2' - 508.7'

FINE GRAINED

SHEAR

GABBRO 508.7' - 545.2'

MED GRAINED, LEUCOCRATIC LIGHT GREY/GREEN 50-60% FELDSPAR. SLIGHTLY CHLORITIC, SOME SECTIONS BECOMING OR BEING ANORTHOSITIC. MINOR CARB ON FRACTURES. TR-1% Po Py

36°

319

349

409

419

100%

Hole No. ML 42 | Project: 1446 | Page No: 3 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/05/88 | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70° Bearing: 240° | Total Depth: 629' | Logged By: K. Hoodless

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
420					GABBRO 408.7 - 445.4				100%	BQ			
440					BRECCIATED GABBRO 445.4' - [illegible]								
460					SHEARED GABBRO 474.0' - 474.8' FINE GRAINED, LIGHT TO MED BLUE/GREY GREEN SLIGHTLY SHEARED, MODERATELY SERICITIZED, ELONGATED QTZ BLEBS ≤ 2 MM. 1-3% PY.				100%				
480													

Hole No. ML 42 | Project: 1446 | Page No: 9 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 03/05/88 | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 629' | Logged By: K. Hoult

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
480										BQ			
490								482'					
500					FELSIC INTRUSIVE 494.3' - 516.3'			509'					
510					GABBRO 518' - 545.4'			519'					
520								529'					
530								539'					

Hole No. ML 42 | Project: 1446 | Page No: 10 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/05/88 | Ref. to Claim Corner:

Coordinates: 5401 S N. 6463 E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240 | Total Depth: 629' | Logged By: K. Hoole

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated

DESCRIPTIVE GEOLOGY

GABBRO 516.8' - 545.4'
CONT'D

TONALITE 545.4' - 549.0'

GABBRO 549.0' - 629.0'
FINE GRAINED, MED TO DARK GREEN, SLIGHT
CHLORITIC ALTERATION ALONG MINOR CALCITE FILLED FRACTURES, TR-1% Py

TR-Py

549'

TR-1% Py

559'

TR-1% Py

579'

TR-1% Py

589'

TR-1% Py

599'

BQ

100%

100%

100%

100%

Hole No. ML 4/2 | Project: 1446 | Page No: 11 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: 02/05/88 | Ref. to Claim Corner:

Coordinates: 5+01 S N. 6+63 E. | Date Finished: 04/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 629' | Logged By: K. HOOLE

SECTION	ALTERATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
600					GABBRO 549.0' - 629.0' cont'd								
610													
620													
630					629' END OF HOLE 629'								

Hole No. ML - 43 | Project: McVICAR L. 1446 | Page No: 1 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: NG 5+00 S ~~N.~~ 7+25 E. | Date Finished: MAY 6, 1988 | Scale: 1" : 10'

Inclination: -70 | Bearing: 270 | Total Depth: 649' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

SECTION | ALTERATION (CHLORITIZATION, CARBONATIZATION, SILICIFICATION) | FRACTURING | MINERAL | GEOLOGY | DESCRIPTIVE GEOLOGY | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated SAMPLE #

0 - 4' OVERBURDEN (CASING REMAINS)

CASING

4' - 41.1' MAFIC VOLCANIC (BASALT)
FINE GRAINED, MEDIUM TO DARK GREEN MASSIVE WITH NO FLOW TEXTURES NOTED, MODERATELY FRACTURED WITH HAIR-LINE TO 3mm RANDOMLY ORIENTED FRACTURES WHICH FOR THE MOST PART ARE WEAKLY CHLORITIC N'L CALCAREOUS, UNIT IS MODERATELY SILICIOUS AND CONTAINS OCCASSIONAL PATCHY CLORITIZATION, NIL TO TRACE PYRITE

13.2'-14.6' - MODERATELY TO HIGHLY CLORITIZED WITH SMALL MM SCALE RANDOMLY ORIENTATED STRINGERS OF PYRITE + OR - CALCITE (WEATHERED OUT)

- RARELY A VERY WEAK FOLIATION CAN BE NOTED, PYRITE INCREASES AFTER 14.6' TO TRACE OCCURRING AS DISSEMINATED VERY FINE GRAINS

24.2-25.1 - HIGHLY TO INTENSLY SILICIFIED TURNING TO HIGHLY CALCAREOUS AT 25.1'

38' 3-6mm BOUDIN QZ-CARB VEIN SUB-PARALLEL TO C.A.

41.1' SHART CONTACT @ 45° TO C.A.

44.4' SHART CONTACT @ 35° TO C.A.

41.1'- 44.4' IRON STONE

- THIN mm SCALE BEDS OF MAGNETITE WHERE DISTINGUISHABLE, UNIT IS VERY CHLORITIC WITH CHLORITE BANDS AND FRACTURE FILLINGS MAKING UP 15-20% OF UNIT
- UNIT IS HIGHLY MAGNETIC DUE TO VERY FINE GRAINED MAGNETITE
- UNIT CONTAINS 2-4% VERY FINE GRAINED WISPY (CONFORMABLE TO MT BANDS) Po WITH TRACE CP
- UNIT BECOMES BRECCIATED WITH A CHLORITIC MATRIX AT LOWER CONTACT

44.4'- 69.7' MAFIC VOLCANIC (BASALT)

- UNIT IS MUCH THE SAME AS 4'-41.1' EXCEPT FRACTURING IS NOT QUITE AS INTENSE AND CARBONATE FRACTURE FILLINGS INCREASE TO 4) MM OCCASSIONALLY
- UNIT OCCASSIONALLY BECOMES FELDSPAR PHYRIC MAKING UP 5-5% OF ROCK

Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
NIL TO TRACE PY	9	100	BQ			
3 PY		100				
TRACE PY	19					
TRACE PY		100				
	29					
		100				
TRACE PY	39			41.1		
2-4% Po/Cp		100		44.4	100	1926
TRACE	49					
		100				
	59	100				

Hole No. ML-113 | Project: McVICAR L. 1446 | Page No: 2 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

ALTERATION: CHLORITIZATION | CARBONATIZATION | SILICIFICATION

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated SAMPLE #

62' EDGE OF GRANITIC VEIN

62.7' - 2" WEAKLY MAGNETIC IRON STONE @ ≈ 35° TO C.A. IRREGULAR CONTACT

44.4'-69.7' MAFIC VOLCANIC (CONTINUED)
- SILICIFICATION IS VARIABLE FROM WEAK TO MODERATE

IRREGULAR CONTACT

69.7'-77' ALTERED BASALT
- UNIT IS DARK GREEN AND VERY FINE GRAINED
- HIGHLY CHLORITIZED WITH SHEARING PARALLEL TO SUBPARALLEL TO C.A.
- MODERATELY FRACTURED WITH QUARTZ-CARBONATE FLOODING
- NIL TO TRACE PYRITE, CONTACTS ARE IRREGULAR

IRREGULAR CONTACT

77'-112' MAFIC VOLCANIC (BASALT)
- MUCH THE SAME AS 4'-41.1'
- FINE GRAINED, MEDIUM TO DARK GREEN, MASSIVE
- MODERATELY FRACTURED WITH TWO SETS OF FRACTURES AT RANDOM ORIENTATIONS. ONE SET OF FRACTURES IS CHLORITIZED, THESE ARE CROSS-CUT BY QUARTZ-CARBONATE FILLED FRACTURES, BOTH SETS ARE MM SCALE
- NON-SILICIFIED, WEAKLY CHLORITIZED IN FORM OF FRACTURE FILLING GENERALLY

93'-109' - UNIT BECOMES DARKER GREEN, AS WELL AS BECOMING WEAKLY SILICIFIED AND CARBONATIZATION DECREASES

99' DARK PATCH OF SILICIFICATION

% Sulphides: TRACE; NIL TO TRACE PY; NIL TO TRACE

Drilling Interval: 69, 79, 89, 99, 109, 119

% Core Recovered: 100, 100, 100, 100, 100, 100

Core Size: BQ

SECTION: 60, 70, 80, 90, 100, 110, 120

Hole No. ML-43 | Project: McVICAR L. 1446 | Page No: 3 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

119.2'-126' WEAKLY SHEARED BASALT

- UNIT IS MEDIUM TO DARK GREEN, VERY FINE GRAINED, WEAKLY SHEARED @ 40° TO C.A. AND LOCALLY BRECCIATED
- MINOR QUARTZ-CARBONATE FRACTURING IN CONJUNCTION WITH BRECCIATION
- WEAKLY CHLORITIZED PARALLEL TO SHEARING
- RED (HEMATITE?) COATING ON SOME FRACTURE SURFACES
- NIL TO TRACE PYRITE

126'-129.4' SHEARED BASALT

- BUFF GREY GREEN WITH A PRONOUNCED SHEARING @ 35-40° TO C.A.
- UPPER CONTACT IS GRADATIONAL WHILE LOWER CONTACT IS SHARP
- WEAK TO NIL FRACTURING AND TRACE VERY FINE GRAINED DISSEMINATED PYRITE
- 127.6'-128.2' HIGHLY SILICIFIED SECTION, BUFF IN COLOUR
- VERY WEAKLY SERICITIZED

129.4-130.3' FELSIC TO INTERMEDIATE INTRUSIVE

- DARK GREY-GREEN, FINE TO VERY FINE GRAINED
- SHARP, IRREGULAR UPPER AND LOWER CONTACTS
- BASICALLY FRESH IN APPEARANCE, 2-3% FELDSPAR PHENOCRYSTS UP TO 2 mm IN DIAMETER, VERY WEAK CARBONATE FILLED FRACTURES CONTAINING TRACE PY, CP

130.3'-132.1' SHEARED FELSIC INTRUSIVE

- BUFF GREY-GREEN IN COLOUR, FINE GRAINED
- ORIGINAL TEXTURES AND STRUCTURES MOSTLY OBSCURED
- SHEARING IS NIL TO MODERATE @ ≈ 50° TO C.A.
- WEAKLY SERICITIZED, TRACE PY AS FRACTURE COATING
- SHARP CONTACTS

132.1'-133.8' BRECCIATED BASALT

- MEDIUM GREEN IN COLOUR, FINE GRAINED
- MODERATELY FRACTURED WITH QUARTZ-CARBONATE FLOODING GIVING UNIT A BRECCIATED APPEARANCE
- TRACE VERY FINE GRAINED PYRITE ASSOCIATED WITH QUARTZ-CARBONATE STRINGERS
- SHARP UPPER AND LOWER CONTACTS

133.8-136.2' ALTERED FELSIC INTRUSIVE

- BUFF GREEN IN COLOUR, VERY SILICIOUS
- WEAKLY SHEARED @ ≈ 50° TO C.A., WEAKLY TO MODERATELY SERICITIZED, MINOR BRIGHT GREEN MICA, TRACE PYRITE
- ORIGINAL TEXTURE OBSCURE
- SHARP CONTACTS

136.2'-169.5' BRECCIATED BASALT/GABBRO

- MEDIUM GREEN IN COLOUR, FINE GRAINED WITH A WEAK FOLIATION LOCALLY, INDIVIDUAL BRECCIA BLOCKS ARE OCCASIONALLY SOMEWHAT ROTATED AS CAN BE NOTED BY MISALIGNED FOLIATION
- FRAGMENTS OF BASALT/GABBRO ARE SUPPORTED IN A

25' WEAK SHEARING @ 40° TO C.A.

SHARP
SHARP
SHEARING @ 50° TO C.A.
SHARP
SHARP
SHARP

44.4' 1½" SILICIOUS ZONE

169' ACID TEST CORRECTED ∠ = 66°
169.5'

132.2 - 133.1 ANORTHOSITE

Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
NIL TO TRACE PY			BQ			
		100		126		
TRACE PY					100	1927
	129			129.4		
TRACE PY, CP				130.3		
TRACE PY					100	1928
TRACE PY				132.1		
					100	1929
TRACE PY		100		133.8		
					100	1930
				136.2		
TRACE PY	139				100	1931
				141		
				143		
1% PY		100			100	1932
				147		
	149			149		
TRACE PY					100	1933
		100		154		
					100	1934
1-2% PY				157		
					100	1935
TRACE PY	159			159.9		
					100	1936
1-2% PY				161.9		
TRACE PY		100			100	1937
				167		
	169					
	179	100				

Hole No. ML-43 | Project: McVicar L. 1446 | Page No: 4 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1":10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

136.2'-169.5' BRECCIATED BASALT/GABBRO (CONTINUED)
- MATRIX OF QUARTZ-CARBONATE, MINOR ANKERITE ASSOCIATED WITH CARBONATE
- VERY WEAKLY SERICITIZED, TRACE TO 2% (LOCALLY) PYRITE OCCURRING AS FINE TO VERY FINE GRAINED DISSEMINATED CLUSTERS OF GRAINS
- UPPER CONTACT IS SHARP WHILE LOWER CONTACT IS GRADATIONAL INTO BASALT/GABBRO

159.9-161.9 - QUARTZ VEIN, MASSIVE, GREY IN COLOUR WITH GREEN TINGE DUE TO TRACE PRESENCE OF BRIGHT GREEN MICA AND MINOR SERICITE
- CONTAINS 1-2% PYRITE AS CLOTS AND WISPS OF MASSIVE TO SEMI-MASSIVE FINE GRAINED PYRITE CONCENTRATED NEAR FRACTURES AND MARGINS
- SHARP IRREGULAR CONTACTS

169.5'-189.3' GABBRO/BASALT
- UNIT IS GENERALLY DARK GREEN-GREY FINE TO MEDIUM GRAINED
- OFTEN SECTIONS OF WHITE ANORTHOSITIC GABBRO OCCUR (POSSIBLY AS CRYSTAL SEGREGATION) IN CONTACT WITH FINER GRAINED GABBRO (COULD BE XENOLITHS)
- WEAKLY TO MODERATELY SILICIFIED AND MODERATELY FRACTURED WITH RANDOMLY ORIENTATED HAIRLINE QZ.-CARBONATE FILLED FRACTURES, NIL TO TRACE PY
- LOWER CONTACT IS RELATIVELY SHARP OVER 6cm

172.2'-173.1' - ANORTHOSITIC SECTION WITH 90% PLAG., TRACE APPLE GREEN MICA + POSS. TRACE TOURMALINE

189.3 - 209.3 SILICIFIED GABBRO
- BUFF GREEN-GREY, 30% MAFIC MINERALS ON AVERAGE,
- COARSE GRAINED AND MASSIVE
- SILICA IS MOSTLY IN FORM OF REPLACEMENT OF FELDSPAR (MODERATE TO HIGHLY SILICIFIED)
- SILICIFICATION IS OFTEN PATCHY
- WEAK HAIR-LINE RANDOMLY ORIENTATED FRACTURES, NIL TO TRACE PYRITE

209.3 - 211.4 FOLIATED GABBRO?
- VERY FINE GRAINED AS COMPARED TO OTHER GABBRO
- WEAK FOLIATION @ ≈ 70° TO C.A. (IRREGULAR)
- SHARP CONTACTS, NIL TO TRACE PY

211.4'-356.3' GABBRO
- DARK TO MEDIUM GREEN, MASSIVE, COARSE GRAINED, OCCASSIONALLY PLAGIOCLASE APPEARS PORPHYRITIC
- GENERALLY 40-45% MAFIC MINERALS
- VERY SPECKLED AND EQUIGRANULAR IN APPEARANCE
- VERY WEAK PERVASIVE CARBONITIZATION
- VERY WEAKLY FRACTURED WITH RANDOMLY ORIENTATED HAIRLINE QUARTZ-CARBONATE FILLED FRACTURES
- VERY WEAKLY MAGNETIC, TRACE VERY FINE GRAINED DISSEMINATED PYRITE

Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
NIL TO TRACE PY		100	BQ			
NIL TO TRACE PY	189	100				
NIL TO TRACE PY	199	100				
TRACE PY	209	100				
	219	100				
	229	100				
	239					

Hole No. ML-43 | Project: McVICAR I. 1446 | Page No: 5 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY, 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: | Logged By: B. HILL

SECTION	ALTERATION: SERICITIZATION	ALTERATION: CHLORITIZATION	ALTERATION: CARBONITIZATION	ALTERATION: SILICIFICATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
240								AVE CORE REC'Y/HOLE 100%							
								211.4'-356.3' GABBRO (continued)	TRACE PY		100	BQ			
								219.8'-222.6' - FINE GRAINED SECTION, DARK GREEN, SHARP CONTACTS, OCCASSIONAL SMALL ZONE OF COARSE GRAINED PLAGIOCLASE CRYSTALS - UNIT IS POSSIBLY A LATE INJECTION OF GABBRO							
250										249	100				
260										259	100				
270										269	100				
								276.6'-277.7' - GABBRO BECOMES FOLIATED (WEAKLY SHEARED?), FINE GRAINED WITH TRACE AMOUNTS OF SERICITE - SHARP CONTACTS, ORIGINAL TEXTURES STILL VISABLE - FOLIATION @ 40° TO C.A., WEAKLY CARBONITIZED & SILICIFIED							
280										279	100				
290										289	100				
300										299	100				

Hole No. ML-43 | Project: MEVICAR L 1446 | Page No: 6 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 270° | Total Depth: 649' | Logged By: B. HILL

SECTION	ALTERATION: SERICITIZATION	ALTERATION: CHLORITIZATION	ALTERATION: CARBONITIZATION	ALTERATION: SILICIFICATION	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE 100%	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
300								DESCRIPTIVE GEOLOGY		TRACE PY			BQ			
310								211.4'-356.3' GABBRO (CONTINUED)			309	100				
320											319	100				
330								329' ACID TEST CORRECTED ∠ = 67°			329	100				
340								QZ VEIN			339	100				
350								332.3'-332.5' - QUARTZ VEIN @ ≃ 55° TO C.A. - BARREN WITH CARBONITIZED AND VERY WEAKLY SERICITIZED MARGINS			349	100				
360								350.1'-350.5' - SILICIFIED CARBONATE VEINING CAUSING MINOR SILICIFICATION OF HOST ROCK AS WELL AS A DECREASE IN GRAIN SIZE			359	100				
								356.3', 357.5'								
								356.3'-357.5' PORPHYRITIC FELSIC INTRUSIVE · DARK GREY IN COLOUR, VERY SILICIOUS, 85% Q VARTZ · 3-4% PLAGIOCLASE PHENOCRYSTS UP TO 3mm EVENLY		TRACE PY						

Hole No. ML-43 | Project: McVICAR L... | Page No: 7 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

SECTION	ALTERATION: SERICITIZATION	ALTERATION: CHLORITIZATION	ALTERATION: CARBONITIZATION	ALTERATION: SILICIFICATION	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
360			-	/	~		X	FOLIATION @ ≃60° TO C.A.	TRACE PY			BQ			
			-	▬			+ +	356.3'-357.5' PORPHORITIC FELSIC INTRUSIVE (CONTINUED) DISPERSED THROUGH UNIT, SEMI-CONCHOIDAL FRACTURE - TRACE TO 0.5% VERY FINE GRAINED DISSEMINATED PYRITE - VERY WEAKLY HAIRLINE FRACTURED, SHARP UPPER AND LOWER CONTACTS @ 110° & 60° RESPECTIVELY	TRACE PY						
							X	357.5'-363' GABBRO - MUCH THE SAME AS 211.4'-356.3', CONTAINS SLIGHTLY FINER GRAINED SECTIONS, MODERATE DEGREE OF QUARTZ-CARB FRACTURES - UNIT BECOMES MODERATELY SILICIFIED AND WEAKLY FOLIATED NEAR LOWER CONTACT.	TRACE PY		100				
370				▬	~		X			369					
							X	363-364.8 PORPHORITIC FELSIC INTRUSIVE - AS 356.3'-357.5', GRADATIONAL UPPER CONTACT AS WALL ROCK HAS BEEN SILICIFIED WHILE LOWER CONTACT IS SHARP @ ≃ 85° TO C.A.			100				
							X	364.8'-390.6' GABBRO - MUCH AS 211.4'-356.3' - GRAIN SIZE VARIES FROM COARSE TO FINE GRAINED BUT IS GENERALLY MEDIUM - DARK GREEN IN COLOUR 371.8-372.6' - SILICIFIED ZONE WITH MAFIC CRYSTALS GROWING UP TO 5mm IN SIZE							
380				▬			X			379					
							X				100				
							Y								
390					X		-X								
					~		+ +	390.6'-393.4' INTERMEDIATE INTRUSIVE (?) - DARK GREEN, FINE GRAINED WITH PARTIALLY ASSIMILATED GABBRO AT UPPER CONTACT WHILE LOWER CONTACT IS SHARP @ ≃ 50° TO C.A. - WEAKLY FRACTURED WITH HAIRLINE QUARTZ-CARBONATE FRACTURES, TRACE PYRITE, UN-ALTERED (COULD BE BASALT LENS)	TRACE PY	389					
							X		TRACE PY PO		100				
							X	393.4'- 401' GABBRO - AS 211.4-356.3' - SLIGHTLY FELDSPAR PHYRIC, COARSE TO MEDIUM GRAINED DARK GREEN IN COLOUR							
400				▬			X			399					
							+ +	401' - 403.7' TONALITE - BUFF GREY IN COLOUR, FINE GRAINED, VERY SILICEOUS - SPECKLED APPEARANCE CAUSED BY DISSEMINATED MAFIC MINERALS - SHARP UPPER & LOWER CONTACTS @ ≃ 45° TO C.A., SOME ASSIMILATION OF WALL ROCK IS NOTED AT MARGINS, TRACE PY	TRACE PY						
							Y		TRACE TO 1% Po Py		100				
							Y	WEAK FOLIATION @ 115° TO C.A.		409					
410							Y	403.7'- 462.5' GABBRO/BASALT - MEDIUM GREEN IN COLOUR, GENERALLY FINE GRAINED BUT GRAIN SIZE IS VARIABLE - OCCASSIONAL SECTIONS HAVE MEDIUM TO COARSE GRAIN SIZE, THESE FEATURES COULD POSSIBLY BE PARTIALLY ASSIMILATED XENOLITHS OF PRE-EXISTING ROCK AS THEY HAVE SEMI-SHARP IRREGULAR CONTACTS - UNIT HAS WEAK TO MODERATE FERROUS CARBONITIZATION, WEAK TO MODERATE HAIR-LINE TO 5 mm QUARTZ-CARBONATE FRACTURE FILLINGS, MINOR SERICITIZATION ON SOME FEATURES			100				
							Y								
420							Y			419					

Hole No. ML-43 | Project: McVICAR L. 14416 | Page No: 8 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION

SECTION | FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated Sample #

420

403.9' - 462.5' GABBRO/BASALT (CONTINUED)
- TRACE TO 1% Po, Py OCCURRING AS FINE GRAINED DISSEMINATED GRAINS & CLUSTERS OF GRAINS WITH RARE 1-2mm SEAMS
- OCCASSIONALLY UNIT BECOMES FELDSPAR PHYRIC
405.3' - 408' - FINE GRAINED FELDSPAR PHYRIC SECTION WITH 3-4% 1-2mm FELDSPAR PHENOCRYSTS

TRACE TO 1% Po Py

BQ

430 — 429

100

100

440 — 439

100

450 — 449

100

460 — 459

462.5' - 490' WEAKLY SHEARED/BRECIATED GABBRO
- MEDIUM TO DARK GREY-GREEN IN COLOUR, GENERALLY FINE GRAINED WITH A WEAK SHEARING DEVELOPED AS WELL AS MINOR BRECCIATION DUE TO HIGH DEGREE OF QUARTZ-CARBONATE FRACTURE FLOODING
- RELIC GABBROIC TEXTURES CAN BE NOTED OCCASSIONALLY
- SOME SECTIONS BECOME MODERATELY SILICIFIED TURNING ROCK DARK GREY-BLACK
- 1% PYRITE/PYRRHOTITE AS DISSEMINATED FINE GRAINED CLUSTERS AND WISPS
- UPPER CONTACT HAS ANGLE CALCITE 1.5cm QZ VEIN, LOWER CONTACT IS GRADATIONAL

1% Py Po

100

469

470 — 469

100

480 — 479

479' 4" QZ VEIN WITH TRACE GREEN MICA, 2% IN IRREGULAR CONTACTS

Hole No. ML-43 | Project: McVicar L. 1446 | Page No: 9 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION

FRACTURING | MINERAL | GEOLOGY

% Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated Sample #

462.5'-490' WEAKLY SHEARED/BRECCIATED GABBRO (CONTINUED)

1% Py Po

SHEARING @ 50° TO C.A.

490'

490'-511' BRECCIATED GABBRO

- DARK GREY-GREEN WITH NUMEROUS QUARTZ-CARBONATE PATCHES BRECCIATING GABBRO
- GABBRO IS MODERATELY TO HIGHLY SHEARED & SOMEWHAT CRENULATED DURING BRECCIATION
- SOME GABBROIC TEXTURES ARE PRESERVED
- 1% PYRITE (UP TO 2% LOCALLY) OCCURRING AS FINE GRAINED DISSEMINATED CLUSTERS AND OCCASSIONAL WISP

1% Py (2% LOCALLY)

4199' ACID TEST CORRECTED ∠ = 67.5°

511'-533.4' SHEARED GABBRO

- INTENSLY SHEARED @ ≈ 50° TO C.A.
- MEDIUM TO DARK GREEN WITH A STRIPED APPEARANCE DUE TO HIGH DEGREE OF QUARTZ-CARBONATE FLOODING PARALLEL TO SHEARING
- MINOR SERICITIZATION PARALLEL TO SHEARING - USUALLY ASSOCIATED WITH QUARTZ
- 1-2% PYRITE OCCURRING AS FINE GRAINED DISSEMINATED GRAINS OCCASSIONALLY CONCENTRATED IN QUARTZ-CARBONATE

511'

522'-2" ZONE OF MYLONITED ROCK, MEDIUM GREEN, MINERY & BREAKS INTO SMALL CHIPS.

1-2% Py

SHEARING @ ∠ 50° TO C.A.

522' MYLONITE 2"

533.4', 50-55° TO 534.3' C.A.

533.4'-534.3' FELSIC INTRUSIVE

- BUFF GREY BROWN, FINE GRAINED, OCCASSIONAL MM SCALE FELDSPAR PHENOCRYST, VERY SILICIOUS - 80% QZ, VERY WEAKLY SERICITIZED, TRACE PY
- UPPER CONTACT IS SHARP, LOWER CONTACT HAS 1½" QZ VEIN WITH PORPHYRITIC FELDSPHIR ON MARGIN PARALLEL TO CONTACT

TRA Py

2-4% Py

538.5 BUFF GREY QZ VEIN 1½" WIDE

Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
499	100	1938
504	100	1939
509	100	1940
514	100	1941
519	100	1942
524		
529		
533.4		

Hole No. ML-43 | Project: McVICAR L 1446 | Page No: 10 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1" : 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

534.3'-545.7' SHEARED GABBRO
- MUCH THE SAME AS 511-533.4'
- PRONOUNCED SHEARING @ ≈ 55° TO C.A., STRIPED APPEARANCE DUE TO QUARTZ-CARBONATE FLOODING PARALLEL TO SHEARING, 2-4% PYRITE AS FINE DISSEMINATED GRAINS

545.7-547.8' QUARTZ-SERICITE SCHIST
- VERY SILICIOUS (RANGING FROM 60-85%)
- MODERATELY SERICITED IN DIRECTION OF SHEARING, TRACE BRIGHT GREEN MICA, 5-7% FINE GRAINED DISS-PYRITE, WEAKLY CARBONITIZED
547.9'-546.3 - QUARTZ-SERICITE VEIN, MASSIVE QUARTZ WITH DISSEMINATED SERICITE

547.8'-556.5 WEAKLY SHEARED GABBRO
- A LESS SHEARED VERSION OF 511'-533.4', WEAK SHEARING @ ≈ 75° TO C.A.
- 1-2% PYRITE DISSEMINATED THROUGH UNIT

556.5'-557.9' QUARTZ-SERICITE SCHIST
- MUCH AS 545.7'-547.8'
- CONTAINS 20% FRAGMENTS OF GABBRO (FOLIATED/SHEARED)
- TRACE TO 1% BRIGHT GREEN MICA, 3-4% PYRITE AS DISSEMINATED GRAINS + BLEBS

557.9'-618' GABBRO/BASALT
- ALTERED AT UPPER CONTACT WITH QUARTZ-CARBONATE FLOODING ± MINOR BRECCIATION, ALTERATION SUBSTANTIALLY DECREASES DOWN HOLE
- REMAINDER OF UNIT IS BASICALLY FINE GRAINED, FELDSPAR PHYRIC, DARK GREEN IN COLOUR, TRACE TO 1% PYRITE AS FINE DISSEMINATED GRAINS
- GRAIN SIZE CAN BE VARIABLE
- MODERATELY HARD, WEAK HAIR-LINE FRACTURING AT RANDOM ORIENTATIONS
567.9'-559.3 - WEAK TO MODERATE SHEARING, QUARTZ-CARBONATE FLOODING, 2-4% PYRITE
559.3'-559.6' - SERICITIZED QUARTZ VEIN, 1% PYRITE, SHARP CONTACTS @ 60° TO C.A.
560.1-560.6' - AS 559.3-559.6'
564.9'-565.5' - AS 559.3-559.6'
565.5-566.5' - QUARTZ VEIN WITH SILICIFIED WALL ROCK, QZ IS MEDIUM GREY WITH 2% PY, WHILE WALL ROCK HAS 5% PY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
540	2-4% PY			BQ	543.3		
	5% PY		100		545.7	100	1943
	5-7% PY				547.8	100	1944
550	1-2% PY	549			551.6		
			100			100	1945
					556.5		
	3-4% PY					100	1946
560	TRACE TO 1% PY	559			557.9	100	1947
			100		559.3		
					564.9	100	1948
	2-5% PY				566.5		
	TRACE PY						
570		569					
			100				
580		579					
			100				
590		589					
			100				
600		599	100				

548.3 - SILICIOUS SOMEWHAT BRECCIATED, MINOR SERICITE, 5% DISS PY

546.7'

547.8'

SHEARING @ 55° TO C.A.

556.5'

Hole No. ML-43 | Project: McVICAR L 1446 | Page No: 11 Of 11

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 4, 1988 | Ref. to Claim Corner:

Coordinates: N. E. | Date Finished: MAY 6, 1988 | Scale: 1" : 10'

Inclination: -70° | Bearing: 240° | Total Depth: 649' | Logged By: B. HILL

SECTION	ALTERATION: SERICITIZATION	ALTERATION: CHLORITIZATION	ALTERATION: CARBONITIZATION	ALTERATION: SILICIFICATION	FRACTURING	MINERAL	GEOLOGY
600							
610							
620							
630							
640							
649							

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

567.9 - 618' GABBRO/BASALT (CONTINUED)

618-629.3' FELSIC INTRUSIVE
- DARK GREY-BLACK IN COLOUR, VERY HARD AND SILICIOUS
- APHANITIC WITH OCCASSIONAL 1 mm FELDSPAR PHENOCRYST
- TRACE TO 1% VERY FINE GRAINED PYRITE, WEAKLY HAIRLINE FRACTURED, SHARP CONTACTS @ ∠ 70° TO C.A.

629.3'-649' SILICIFIED GABBRO/BASALT
MEDIUM TO DARK GREEN, GRAIN SIZE VARIES WITH DEGREE OF SILICIFICATION, GENERALLY FINE GRAINED, TRACE FINE GRAINED DISSEMINATED PYRITE, WEAK TO NIL FRACTURING
- MODERATELY TO HIGHLY SILICIFIED

649' ACID TEST CORRECTED ∠ = 62.5°

649' END OF HOLE

% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
TRACE PY			BQ			
		100				
	609					
		100				
TRACE TO 1% PY	619					
		100				
TRACE PY	629					
		100				
	639					
		100				
	649					

Hole No. ML 44 | Project: 1446 | Page No: 1 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S N. 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

SECTION | ALTERATION (CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

DESCRIPTIVE GEOLOGY

0

RUBBLY

MAFIC VOLCANIC (BASALT) 0.0' - 35.9'

FINE GRAINED TO APHANITIC, MED TO DARK GREEN ... CLASSIFIED AS ... SILICA KNOTTING ... FELSIC ... 1% APHYRIC ... 5MM, MINOR CARB ... FRACTURES. ORANGE IRON STAINING ... FRACTURE SURFACES. TR-1% DISS ... Py Po

10

20

30

SILICIFIED ... 3CM

40

3CM SILICIFIED

FELSIC INTRUSIVE 35.9' - 39.0'

FINE TO FINE GRAINED, BLACK ... VERY HARD, MINOR ... FAIRLINE FRACTURES ... CONTACT ... TR Py

MAFIC ... FELSIC (BASALT) 39.0' - 44.9'

... 39.0' - 44.9'

39.0' - ... GRADATIONAL ... SILICIFICATION ... SURFACE ... TR Py

50

59'

RECEIVED
JUL 25 1988
PATRICIA MINING DIVISION

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE

AUG 04 1988

RECEIVED

Hole No. ML 44 | Project: 1446 | Page No: 2 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5400 S ~~N~~ 7475 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

SECTION	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
60					SHARP CONTACT	IRON FORMATION 61.9' - [illegible] FINE [illegible] DARK GREEN TO BLACK FINE TO MEDIUM [illegible] LAYERS MARGINAL [illegible] SILICA [illegible] MASSIVE LAYERS [illegible]		T-2% Py TR-1% Py		100%	BQ			
70								TR-1% Py	69'					
80					3CM CARB/QTZ [illegible] WT MAFIC VOLC. INCLUSIONS	MAFIC VOLCANIC (BASALT) 63.8' - 102.7' SAM: AS 00' - 35.9'		TR-1% Py	79'	100%				
90								TR-1% Py	89'	100%				
100					QTZ VEIN (ANCHED) W/ VERGENT [illegible]			TR-1% Py	99'	100%				
110					QTZ/CARB [illegible]			TR-1% Py	109'	100%				
								TR-1% Py	119'	100%				

Hole No. ML 4/4 | Project: 1446 | Page No: 3 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S N. 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70 | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

SECTION	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
120						MAFIC [illegible] (GABBRO) 63.5' - 182.7'		TR-1% P, TR P	129'	100%	BQ			
130						129' ± INCREASED [illegible]		TR-1% P, TR-P	139'	100%				
140								TR-1% P, TR PO	149'	100%				
150								TR-1% P	159'	100%				
160						QTZ CARB VEIN ≤ 3CM		TR-1% P	169'	100%				
170						169' DID TEST CORE ∠ 67°		TR-1% P, TR-P	179'	100%				

Hole No. ML 44	Project: 1446	Page No: 4 Of 12	
Casing Collar Elev.:	Ground Elev.:	Date Started: 07/05/88	Ref. to Claim Corner:
Coordinates: 5+00 S N. 7+75 E.		Date Finished: 09/05/88	Scale: 1" = 10'
Inclination: -70°	Bearing: 240°	Total Depth: 669'	Logged By: K. HOULE

SECTION | ALTERATION (CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

DESCRIPTIVE GEOLOGY

180

GRADATIONAL

BRECCIATED BASALT 182.7' - 187.4'

FINE GRAINED LIGHT GREY TO GREEN SPECKLED ANGULAR TO SUBANGULAR BASALT IN A 15% CARB. MATRIX. MODERATE GREEN ALTERATION. TR-1% PO, TR - Po

190

QTZ 3 CM

FELSIC INTRUSIVE 187.4' - 188.5'

QTZ / SERICITE VEIN

SHEARED CONTACT 188.4' - 188.5'

CARB MATRIX TR-1% PO, 2-3% PO TR Cp

BRECCIATED GABBRO 188.5' - 253.0'

FINE GRAINED, LIGHT TO MED GREEN / GREY GABBRO CLASTS IN STRONGLY SHEARED, 15% CARB MATRIX

HIGHLY SHEARED ZONE WI IRON STAINING ON FRACTURE SURFACES

SMALL 1% QTZ CARB VEINS COMMON. SOME CLASTS SILICIFIED, WEAK TO MOD REMNANT PO, TR-1% PO, 1-2% PO TR

2 cm QTZ FRACTURE SUBPARALLEL TO C.A.

200

210

220

4 CM QTZ CARB VEIN

227.6' - 231.7' HIGHLY SHEARED AREA. TR-1% GRAIN SIZE REDUCED, MORE CHLORITE, LESS PO

230

SHEARED ZONE WI 1-3 CM QTZ VEINS

7R-1% Py 189'

7R-3% Py 7R-1% 199'

7R-2% Py 7R-1 209'

7R-1% Py 219'

7R-2% Py 229'

7R-1% Py 239'

100%

BQ

Hole No. ML 44 | Project: 1446 | Page No: 5 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S ~~N.~~ 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

ALTERATION | CARBONATE | SILICA | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Esti-mated

SECTION

DESCRIPTIVE GEOLOGY

240

BRECCIATED GABBRO 188.5' - 253.0'
CONT'D

250

LOSS OF BRECCIATION BUT MODERATE PERVASIVE CARB REMAINS

GABBRO 253.0' - 301.1'

FINE TO MED GRAINED, LIGHT TO MED GREEN/GREY SUBEQUIGRANULAR SUBHEDRAL PLAGIOCLASE AND [illegible] CRYSTALS

SLIGHTLY BRECCIATED

TR-1% FINELY DISSEMINATED Py

260

268.0' ± GRAIN SIZE IS FOR PREDOMINATELY MEDIUM

270

SLIGHTLY BRECCIATED

5 CM FELSIC INTRUSIVE DYKE

280

290

PRESENCE OF CC CARB REPLACEMENT OF PLAGIOCLASE

QTZ VEIN WITH CHLORITIC

TR-1% Py | 249 | 100% | BQ

TR-1% Py | 259 | 100%

TR-1% Py | 269 | 100%

TR-1% Py | 279 | 100%

TR-1% Py | 284 | 100%

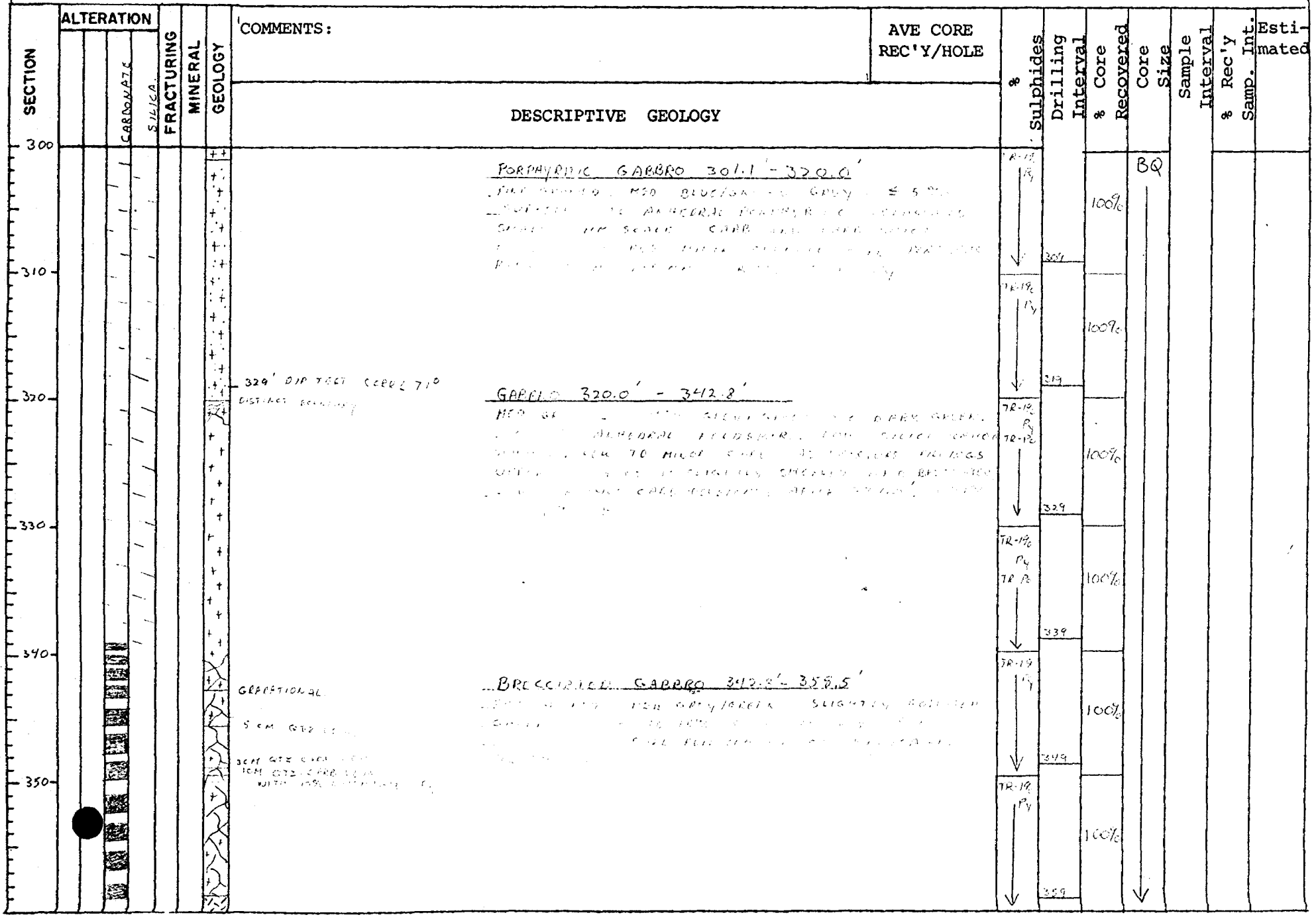
TR-1% Py | 299 | 100%

Hole No. ML 44 | Project: 1416 | Page No: 6 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S ~~N~~. 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE



Hole No. ML 44 | Project: 1446 | Page No: 7 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S N. 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

SECTION	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
360					GABBRO PEGMATITE	FELDSPAR PORPHYRITIC FELSIC MINE DIKE 358.5' - 361.0'		TR-1% Py						
370					ANORTHOSITIC GABBRO PORPHYRY FELSIC DIKE	SHEARED 361.0' - 392.7'		TR-1% Py	369'	100%	BQ			
380						MED TO FINE GRAINED, MED TO DARK GRN/GREEN GRAY, MODERATELY TO WELL FOLIATED TO MASSIVE, 5-10% MEDIUM TO COARSE HAIRLINE FRACTURES		TR-1% Py	379'	100%				
390					SLIGHTLY FOLIATED LOW PERVASIVE CHL.	BRECCIATED GABBRO 392.7' - 401.7'		TR-1% Py	389'	100%				
400					GRADATIONAL	FINE GRAINED, MED GREEN GRAY, SLIGHTLY TO MOD. FOLIATED, SUBANGULAR CLASTS OF GABBRO 5-10% CHL.		TR-1% Py Po	399'	100%				
410						GABBRO 401.7' - 463.9'		TR-1% Py Po	409'	100%				
						FINE GRAINED, MED GREEN/GREY GRAY, SLIGHTLY TO MOD. FOLIATED, 5-10% CHLORITE, FEW SHEAR ZONES, TR-1% Py, TR Po		TR-1% Py Po	419'					

Hole No. ML 44 | Project: 1446 | Page No: 8 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S N. 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

SECTION | ALTERATION (CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

420

GABBRO 401.7' - 462.9'
CONT'D

430

434.4' - 435.8' MED TO COARSE GRAINED, SOME [illegible]
[illegible] 2-3% Pc 1-2% Py

435.8' - 437.4' FINER GRAINED, INCREASE [illegible]
[illegible] TR Py

440

FINER GRAINED
SLIGHTLY MORE
SILICIFIED

[illegible] SLIGHTLY [illegible]

450

SLIGHTLY
BRECCIATED

460

GRADATIONAL

PORPHYRITIC GABBRO 462.9' - 477.8'
FINE GRAINED MED GREEN GREY 1-2%
[illegible] 10 Py

470

BRECCIATION GABBRO 477.8' - 512.2'
(over)

2-3% Pc
TR-1% Py
429'

TR-1% Pc
TR Py
429'

TR-1% Pc
1% Py
449'

TR-1% Pc
1% Py
459'

TR-1% Pc
469'

TR-1% Pc
479'

100%
100%
100%
100%
100%
100%

BQ

Hole No. ML 44 | Project: 1446 | Page No: 9 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S N. 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240' | Total Depth: 669' | Logged By: K. HOULE

SECTION	ALTERATION (CARBONATE / SILICA)	FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Esti-mated
480					DESCRIPTIVE GEOLOGY								
490					BRECCIATED GABBRO 484.1' - 510.9'		TR-1% Py	484	100%	BQ		491.1	
500					DIP TEST 499' CORE ∠ 67.5°		TR-1% Py	499	100%		1949	493.6	2.5'
510					GABBRO 510.9' - 525.1'		TR Py	509	100%		1950	507.4 508.2	.8'
520					3-5 CM QTZ VEIN		TR-1% Py	519	100%				
530					SHARP SHARP 6CM TONALITE DYKE 5CM QTZ VEIN		TR-1% Py	529	100%				
					GABBRO 529.7' - 542.2		TR-1% Py	539	100%				

Hole No. ML 44 | Project: 1446 | Page No: 10 Of 12

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/88 | Ref. to Claim Corner:

Coordinates: 5+00 S ~~N.~~ 7+75 E. | Date Finished: 09/05/88 | Scale: 1" = 10'

Inclination: -70° | Bearing: 240° | Total Depth: 669' | Logged By: K. HOULE

SECTION	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
540						BRECCIATED GABBRO 542.2 - 553.0'					BQ		542.2	
						DISTINCT						1951	545.0	3.8'
									549'	100%		1952	548.0	3.0'
550						GRADATIONAL						1953	552.0	4.0'
										100%		1954	557.0	5.0'
									559'				562.0	
560												1955	564.0	6.0'
										100%		1956	569.0	5.0'
									569'					
570						QTZ SHEAR						1957	573.0	11.0'
						CA 75°				100%		1958	576.9'	3.9'
									579'			1959	580.0	3.1
580						392.7 - 421.9'						1960	584.1	3.1
										100%				
									589'					
590						GRADED 621.1 - 649.6								
										100%				
									591'			L96	593.0 599.0	1.0'

Hole No. ML 44 | Project: 1446 | Page No: 11 Of 12.

Casing Collar Elev.: | Ground Elev.: | Date Started: 07/05/82 | Ref. to Claim Corner:

Coordinates: 5+00 S N. 7+75 E. | Date Finished: 09/05/82 | Scale: 1" : 10'

Inclination: -70 | Bearing: 240° | Total Depth: 669' | Logged By: K. Houle

SECTION | ALTERATION (CARBONATE, SILICA) | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated

DESCRIPTIVE GEOLOGY

600

GABBRO 584.1' - 649.6'

610

BASAL CONTACT

QTZ

620

630

640

650

SHARP

FELDSPAR

SAME

SHARP

BRECCIATED GABBRO 652.0' - 659.6'

SAME

609'

619'

629'

639'

649'

658'

100%

BQ

Hole No. ML 44	Project: 1446	Page No: 12 Of 12	
Casing Collar Elev.: Ground Elev.:	Date Started: 07/05/88	Ref. to Claim Corner:	
Coordinates: 5100 S N. 7+75 E.	Date Finished: 09/05/88	Scale: 1" = 10'	
Inclination: -70° Bearing: 240°	Total Depth: 669'	Logged By: K. HOULE	

SECTION	ALTERATION: CARBONATE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y/HOLE	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated
660						[illegible]		TR-1% Py			BQ			
						- [illegible] SILICIFIED & BRECCIATED				100%				
						DIP TEST 664' CORE < 63°								
670						[illegible] DRESSICATED GABBRO 662.2' - 669.6' [illegible] END OF HOLE 669			669'					

Hole No. ML-45 | Project: McVicar L. 14416 | Page No: 1 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9, 1988 | Ref. to Claim Corner:

Coordinates: NG 4+49S N. 4+79 E. | Date Finished: MAY 11, 1988 | Scale: 1"-10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION | FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
0	TRACE Py			BQ			
		9	90%				
10			100				
		19					
20							
	TRACE Py		100				
		29					
30	TRACE Py		100				
	1-2% Py	39					
40			100				
		49					
50			100				
	TRACE Py						
60		59	100				

0'-4' OVERBURDEN (CASING REMAINS)

4-22.4' GABBRO
- MEDIUM GREEN IN COLOUR, MEDIUM GRAINED, 35% MAFIC MINERALS (PYROXENE) 55% PLAGIOCLASE
- WEAKLY FRACTURED WITH HAIR-LINE RANDOMLY ORIENTATED QUARTZ-CARBONATE FRACTURES, TRACE PYRITE
- 4-9' - WEAKLY TO MODERATELY WEATHERED FROM SURFACE

SHARP 22.4'

22.4'-29' MAFIC VOLCANIC (BASALT)
- MEDIUM TO DARK GREEN, FINE GRAINED, MODERATELY FRACTURED WITH 1-5 MM QUARTZ-CARBONATE FRACTURE FILLINGS
- TRACE PYRITE, SMALL ZONE OF SERICITIZATION/SHEARING OVER 3" IN CENTRE OF UNIT @ ≈ 65° TO C.A.
- THIS UNIT IS LIKELY A XENOLITH TRAPPED IN THE GABBRO INTRUSIVE

29' SHARP

29'-36.2' GABBRO
- MUCH AS 4'-22'
- 1½" ANGULAR XENOLITHS OF MAFIC VOLCANIC NOTED AT LOWER CONTACT (60° TO C.A.)

34.9 1" IRREGULAR QTZ VEIN

36.2'-55.2' MAFIC VOLCANIC (BASALT)
- AS 22.4'-29'
- 1-2% PYRITE OCCURING AS FINE TO MEDIUM GRAINED DISSEMINATED ANHEDRAL TO SUBHEDRAL CUBES
- UNIT IS FELDSPAR PHYRIC IN SOME PLACES
- THIS UNIT IS BELIEVED TO BE AN XENOLITH CONTAINED WITH IN THE GABBRO (SMALLER XENO'S NOTED IN GABBRO, FRACTURING OF UNIT IS INTERUPTED AT CONTACT WITH GABBRO)
- LOWER CONTACT IS SHARP @ 70° TO C.A.

55.2

55.2'-74' GABBRO
- AS 4'-22.4'
- TRACE PYRITE
- SLIGHT INCREASE IN SILICIFICATION NEAR LOWER CONTACT

Hole No. ML-45 | Project: McVICAR L 1446 | Page No: 2 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9, 1988 | Ref. to Claim Corner:

Coordinates: 4+49S ~~N.~~ 4+79 E. | Date Finished: MAY 11, 1988 | Scale: 1":10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION | FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated Sample Wt.
60	TRACE Py		100	BQ			
70		69					
74' SHARP @ 35° TO C.A.	TRACE Py Po		100				
75' SHARP	TRACE Py CP	79					
80			100				
85							
85.8 MAFIC VOLCANIC		89					
90			100				
100		99					
103.3	TRACE Py Po		100				
107	TRACE Py Po	109					
110	2-5 % CP		100				
120	TRACE Py Po	119	100				

55.2' - 74' GABBRO (continued)

74' - 75.9' FELSIC INTRUSIVE
- APHANITIC WITH 2-3% 1-2 MM FELDSPAR PHENOCRYSTS THROUGHOUT
- MEDIUM TO DARK GREY, VERY SILICEOUS
- 1" QUARTZ VEIN PARALLEL TO CONTACTS RUNNING THROUGH CENTRE OF UNIT
- UPPER AND LOWER CONTACTS ARE SHARP @ 35° TO C.A.
- TRACE Py Po

75.9' - 103.3' GABBRO
- AS 4-22.4'
- MEDIUM GREEN, MEDIUM GRAINED, MASSIVE
- WEAKLY FRACTURED WITH HAIR-LINE FRACTURES AND FINE 1 CM QUARTZ-CARBONATE FRACTURES
- TRACE PYRITE, TRACE CP AS FINE VEINLET
- 85 - 85.8' - MAFIC VOLCANIC (BASALT) AS 36.2' - 55.2', UPPER AND LOWER CONTACTS SHARP @ 60° & 50° RESPECTIVELY POSSIBLY XENOLITH ?

103.3' - 107' MAFIC VOLCANIC (BASALT)
- AS 36.2' - 55.2'
- XENOLITH WITHIN GABBRO (SHARP IRREGULAR CONTACTS & TERMINATED FRACTURES WITHIN BASALT AT CONTACT)
- BASALT IS MODERATELY FRACTURED WITH HAIR-LINE, QUARTZ CARBONATE FILLED FRACTURES
- ONE 1 CM IRREGULAR QUARTZ VEIN NOTED WITH TRACE Po

107 - 121.5' GABBRO
- AS 4'-22.4'
- SILICIFICATION INCREASES TOWARD 121.5' DUE TO FELSIC INTRUSIVE
- 114.8 - 115.5' - 5-7% Po WITH <1% CP AS WISPS AND SEMI-MASSIVE CLOTS

Hole No. ML-45 | Project: McVICAR L. | Page No: 3 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9, 1988 | Ref. to Claim Corner:

Coordinates: 4+49 S ~~N.~~ 4+79 E. | Date Finished: MAY 11, 1988 | Scale: 1" : 10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

121.5' - 127.4' FELSIC INTRUSIVE
- DARK GREY, BLACK - APHANITIC WITH 3-5% 1-2mm FELDSPAR PHENOCRYSTS SHARP CONTACTS (ANGLES NOT DETECTABLE BECAUSE OF BROKEN CORE) MASSIVE
- UP TO 4% DISSEMINATED FINE GRAINED PYRITE CLUSTERS
- WEAK TO NIL FRACTURING

127.4' - 134' BRECCIATED GABBRO/BASALT
- MEDIUM TO DARK GREEN IN COLOUR, GRAIN SIZE IS VARIABLE FROM APHANITIC TO MEDIUM
- HIGHLY SILICIFIED/CALCAREOUS CAUSING BRECCIATION
- MINOR ZONES OF MAFIC VOLCANIC WHICH MIGHT HAVE BEEN XENOLITHS
- BRECCIATED UNIT CAUSED BY FELSIC INTRUSIVE 121.5-127.4'
- WEAKLY SERICITIZED IN PLACES, 1% PY AS WISPS AND FINE DISSEMINATED GRAINS
- LOWER CONTACT GRADATIONAL

134' - 165.4' ALTERED GABBRO
- UNIT IS WEAKLY TO MODERATELY SILICIFIED, MODERATELY TO HIGHLY FRACTURED (QUARTZ-CARBONATE FILLED)
- CONTAINS XENOLITHS OF BASALT, UNIT APPEARS MIXED
- ALTERATION IS EXTREMELY VARIABLE THROUGH UNIT

134 - 134.5 - ALTERED GABBRO
134.5 - 135.4 - BRECCIATED BASALT
135.4 - 136.1 - ALTERED GABBRO
136.1 - 136.6 - MAFIC VOLCANIC
136.6 - 137.2 - ALTERED GABBRO
137.2 - 137.7 - MAFIC VOLCANIC
137.7 - 138.7 - GABBRO
138.7 - 142 - MAFIC VOLCANIC/BRECCIA
142 - 147 - ALTERED GABBRO
146 - 147 - FELSIC INTRUSIVE ? 5% PY
147 - 152 - ALTERED GABBRO
152 - 165.4 - GABBRO (SILICIFICATION INCREASES TOWARD 165.4)

165.4' - 202.3' INTENSLY SILICIFIED GABBRO
- MEDIUM BLUE-GREEN-GREY IN COLOUR, APHANITIC FOR THE MOST PART
- OCCASSIONALLY RELICT GABBROIC TEXTURE CAN BE NOTED BUT OFTEN NOT PRESERVED
- EXTREMLY SILICIFIED, OCCASSIONALLY TAKES ON A BANDED APPEARANCE (POSSIBLY RELICT FOLIATION/SHEARING)
- 70-90% SILICA
- TRACE VERY FINE GRAINED PYRITE (1% LOCALLY)
- APPEARS INTRUSIVE IN PLACES
- VERY WEAKLY FRACTURED WITH HAIR-LINE FRACTURES
- TRACE SERICITE

169' ACID TEST CORRECTED ∠ = 66.5°

179 "BANDING" @ 50° TO C.A.

Sample Interval	% Rec'y Samp. Int.	Estimated Sample #
127.4	100	1964
133.4		
146	100	1965
151.7		
169	100	1966
174		
179	100	1967

Hole No. ML-45 | Project: McVICAR L 1446 | Page No: 4 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9, 1988 | Ref. to Claim Corner:

Coordinates: 4+49 S -N. 4+79 E. | Date Finished: MAY 11, 1988 | Scale: 1" : 10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
180	TRACE TO 1% Py			BQ			
			100		184	100	1967
190		189					
			100		194		
						100	1968
200		199			199		
	TRACE TO 1% Py, Po		100				
210		209					
			100				
220		219					
			100		224.7		
	NIL TO TRACE Py					100	1969
230		229			229.7		
			100		234		
						100	1970
240		239	100		239		

165.4'-202.3' INTENSLY SILICIFIED GABBRO (CONTINUED)

202.3' 202.3'-224.7' SILICIFIED GABBRO
- FINE TO MEDIUM GRAINED (VARIABLE THROUGH UNIT)
- MEDIUM GREY-GREEN IN COLOUR
- MODERATELY TO HIGHLY SILICIFIED
- GABBROIC TEXTURE EVIDENT
- WEAKLY TO MODERATELY FRACTURED - HAIR-LINE TO 5 mm Qtz-CARBONATE FRACTURES
- WEAK FOLIATION @ ± 40-45° TO C.A.
- TRACE Py Po AS DISSEMINATED FINE GRAINS AND WISPY STRINGERS 1% LOCALLY

205.8-207.1 - INTENSLY SILICIFIED AS 165.4'-202.3'

WEAK FOLIATION @ 40-45° TO C.A.

224.7 -239' INTENSLY SILICIFIED GABBRO
- AS 165.4-202.3'
- TAKES ON PRONOUNCED BLUEISH TINGE, AS WELL AS PRONOUNCED BANDING @ 45° TO C.A.
- IN BANDED SECTIONS SILICA APPEARS VERY MUCH AS CHERT
- OCCASSIONAL MAFIC CLOTS
- RARELY GABBROIC TEXTURES ARE VISABLE
- GRADATIONAL CONTACTS

239

Hole No. ML-45 | Project: McVICAR L. | Page No: 5 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9, 1988 | Ref. to Claim Corner:

Coordinates: 4+49 S N. 4+79 E. | Date Finished: MAY 11, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100%

DESCRIPTIVE GEOLOGY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
240	TRACE TO 1% Py			BQ			
			100				
249							
			100				
259							
			100				
269							
			100				
279							
			100				
289							
			100				
300		300	100				

239 - 275.5 SILICIFIED GABBRO
- MEDIUM GRAINED WITH OCCASSIONAL FINE GRAINED SECTION
- MEDIUM TO DARK GREEN
- MODERATELY TO HIGHLY SILICIFIED
- MUCH AS 202.3 - 224.7 EXCEPT GRAN SIZE ON AVERAGE IS LARGER
- TRACE TO 1% PYRITE AS FINE DISSEMINATED GRAINS
- FINE GRAINED SECTIONS OCCUR WITH "CLOTS" OF COARSER GRAINED MATERIAL
- WEAK TO MODERATE QUARTZ - CARBONATE FRACTURING
260' - 275.5' - FINE GRAINED WITH NUMEROUS MEDIUM GRAINED "CLOTS"

259 - 259.6 SILICIFIED W/ 3" QUARTZ VEIN IRREGULAR

275.5 SHARP

275.5' - 284.2' FELSIC INTRUSIVE
- AS 121.5' - 127.4' EXCEPT ONLY TRACE VERY FINE GRAINED PYRITE
- SHARP IRREGULAR CONTACTS

284.2' SHARP

284.2 - 342.7' GABBRO
- MEDIUM TO DARK GREEN IN COLOUR
- MEDIUM GRAINED GENERALLY WITH FINE GRAINED SECTIONS CONTAINING "CLOTS" OF MEDIUM GRAINED GABBRO AS 239-275.5
- MODERATELY SILICIFIED
- WEAK TO MODERATE HAIR-LINE TO 5mm QUARTZ - CARBONATE FILLED FRACTURES
- TRACE Py
- 299.6' - 315.4 - FINE GRAINED WITH MEDIUM GRAINED "CLOTS"
- GENERALLY MASSIVE
- SILICIFICATION INCREASES TOWARD LOWER CONTACT

TRACE Py

TRACE Py

Hole No. ML-45 | Project: McVICAR L. 1446 | Page No: 6 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 09, 1988 | Ref. to Claim Corner:

Coordinates: 4+49 S ~~N.~~ 4+79 E. | Date Finished: MAY 11, 1988 | Scale: 1" : 10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

ALTERATION (SERICITIZATION, CHLORITIZATION, CARBONITIZATION, SILICIFICATION) | FRACTURING | MINERAL (GREEN MICA) | GEOLOGY | COMMENTS: | AVE CORE REC'Y/HOLE 100% | % Sulphides | Drilling Interval | % Core Recovered | Core Size | Sample Interval | % Rec'y Samp. Int. | Estimated SAMPLE #

DESCRIPTIVE GEOLOGY

284.2-342.7' GABBRO (CONTINUED)

329' ACID TEST
CORRECTED ∠ = 68.5°

342.7' GRADATIONAL

342.7'-349.5 HIGHLY SILICIFIED GABBRO
- BUFF GREEN IN COLOUR, FINE TO MEDIUM GRAINED, HIGHLY SILICIFIED
- TRACE PYRITE
- MODERATELY FRACTURED WITH QUARTZ-CARBONATE HAIR-LINE FRACTURES
- GABBROIC TEXTURES ARE VISABLE FOR THE MOST PART

349.5 GRADATIONAL

349.5-355' BRECCIATED GABBRO
MEDIUM GREEN IN COLOUR, HIGHLY SHEARED MAFIC ROCK IS BRECCIATED IN A QUARTZ-CARBONATE MATRIX, SOME ROTATION OF CLASTS CAN BE NOTED
- TRACE TO 1% PYRITE USUALLY ASSOCIATED WITH QUARTZ-CARBONATE

355 GRADATIONAL

ALTERED ZONE
355'-432.3'

355'-372.7' INTENSLY SHEARED ROCK (GABBRO?)
- (CONTINUED ON NEXT PAGE)

358.5 2" QZ VEIN

Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
TRACE Py	300		BQ			
		100				
	309					
		100				
	319					
		100				
	329					
		100				
	339					
TRACE Py		100				
	349			349.5		
TRACE TO 1% Py		100		355	100	1971
2-3% Py						
	359	100		359.5	100	1972

Hole No. ML-45 | Project: McVICAR L. 1446 | Page No: 7 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9, 1988 | Ref. to Claim Corner:

Coordinates: 4+49 S ~~N.~~ 4+79E E. | Date Finished: MAY 11, 1988 | Scale: 1": 10'

Inclination: -70° | Bearing: 240° | Total Depth: 479 | Logged By: B. HILL

ALTERATION: SERICITIZATION | CHLORITIZATION | CARBONITIZATION | SILICIFICATION | FRACTURING | MINERAL: GREEN MICA | GEOLOGY

COMMENTS:

AVE CORE REC'Y/HOLE 100 %

DESCRIPTIVE GEOLOGY

SECTION	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
360	2-3% Py			BQ	362	100	1973
					363.8	100	1974
			100			100	1975
					367.4		
390		369				100	1976
					371.4		
	1% Py		100				
380					379	100	1977
			100		384		
390		387					
	2-3% Py		100		391.8	100	1978
					393.7	100	1979
400		399			397	100	1980
	4-6% Py				400.7		
			100		405.7	100	1981
410		409				100	1982
			100		410.7		
					415.7	100	1983
420		419	100			100	1984

362.8 - 5% semi-massive Py

SHEARING @ 75° TO C.A.

355 - 372.7' INTENSLY SHEARED ROCK (GABBRO?) CONTINUED

- LIGHT TO MEDIUM GREEN, TAKES ON STRIPPED APPEARANCE DUE TO QUARTZ-CARBONATE PARALLEL TO SHEARING
- WEAKLY TO MODERATELY SERICITIZED, OCCASSIONAL 1-2 MM BAND OF APPLE GREEN MICA
- NUMEROUS QUARTZ BOUDING UP TO 6CM BUT GENERALLY < 2CM
- PYRITE CONTENT IS VARIABLE BUT 2-3% ON AVERAGE AS FINE TO MEDIUM DISSEMINATED GRAINS AND WISPS

359.5 - 362 - MODERATELY SERICITIZED TRACE APPLE GREEN MICA

363.8 - 367.5 - MODERATELY SILICIOUS WITH TRACE APPLE GREEN MICA

372.7

FOLIATION @ 70° TO C.A.

372.7' - 391.8' SHEARED/FOLIATED GABBRO

- MEDIUM TO DARK GREEN IN COLOUR, FINE GRAINED MODERATELY TO WELL FOLIATED AND VERY WEAKLY SHEARED
- GRADATIONAL CONTACTS
- 1% FINE GRAINED DISSEMINATED PYRITE
- MINOR QUARTZ-CARBONATE PARALLEL TO FOLIATION

GRADATIONAL 391.8

SHEARING @ 65° TO C.A.

391.8' - 400.7 INTENSLY SHEARED ROCK (GABBRO?)

- AS 355 - 372.7'
- GRADATIONAL UPPER CONTACT, LOWER CONTACT IS SHARP @ 70° TO C.A.

393.7' - 397 - 2-3% APPLE GREEN MICA, 2-3% PYRITE

400.7 SHARP

400.7 - 426.5' ALTERED FELSIC INTRUSIVE

- TAN GREEN - BROWN IN COLOUR, GENERALLY APHANITIC, WEAK SHEARING (FOLIATION?) IS PRESENT THROUGH OUT UNIT @ ≈ 55° TO C.A.
- WEAKLY SERICITIZED, VERY SILICIOUS, 4-6% PYRITE AS FINE TO MEDIUM GRAINED STRINGERS BUT MORE OFTEN DISSEMINATED
- WEAKLY FRACTURED WITH QUARTZ-CARBONATE FLOODING - MINOR QUARTZ BOUDIN

420.3 - 420.9 - QUARTZ VEIN WITH INCLUSIONS OF FELSIC INTRUSIVE

FOLIATION/SHEARING? @ 65° TO C.A.

WEAKLY WEATHERED BY GROUND WATER

Hole No. ML-45 | Project: McVICAR L. 1446 | Page No: 8 Of 8

Casing Collar Elev.: | Ground Elev.: | Date Started: MAY 9 1988 | Ref. to Claim Corner:

Coordinates: 4+49 S ~~N.~~ 4+79 E E. | Date Finished: MAY 11, 1988 | Scale: 1":10'

Inclination: -70° | Bearing: 240° | Total Depth: 479' | Logged By: B. HILL

COMMENTS:

AVE CORE REC'Y/HOLE 100%

SECTION	ALTERATION: SERICITIZATION	ALTERATION: CHLORITIZATION	ALTERATION: CARBONITIZATION	ALTERATION: SILICIFICATION	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY	% Sulphides	Drilling Interval	% Core Recovered	Core Size	Sample Interval	% Rec'y Samp. Int.	Estimated SAMPLE #
420								92 VEIN	4-6% Py			BQ	420.7	100	1984
								400.7'-426.5' ALTERED FELSIC INTRUSIVE (CONTINUED)						100	1985
								426.5 SHARP	TRACE Py		100		426.5		
								426.5'-432.3' BRECCIATED/SHEARED GABBRO - MUCH AS 349.5-355 EXCEPT INTENSITY IS SLIGHTLY LOWER - UPPER CONTACT IS SHARP, LOWER CONTACT IS GRADATIONAL		429				100	1986
430													431		
								432.3'	TRACE Py		100				
								432.3'-439.4' GABBRO - MEDIUM TO DARK GREEN - MEDIUM GRAINED, MINOR CM SCALE QUARTZ-CARBONATE VEINING, 30% MAFICS (PYROXENE) 50% PLAGIOCLASE - TRACE FINE GRAINED DISSEMINATED PYRITE - LOWER CONTACT IS SOMEWHAT GRADATIONAL		439					
440								439.4 GRADATIONAL	TRACE Pyrite		100		441	100	1987
								439.4'-447.4' BRECCIATED GABBRO - WEAKLY BRECCIATED 15-20% QUARTZ-CARBONATE MATRIX - SOME CLASTS ARE RECOGNIZABLE AS GABBRO WHILE IN OTHERS ORIGINAL TEXTURES ARE OBSCURED - TRACE FINE GRAINED DISSEMINATED PYRITE 445.4'-446.4' - ALTERED FELSIC INTRUSIVE MUCH AS 400.7' TO 426.5, ONLY TRACE TO 1% PYRITE, SHARP CONTACTS					444		
								447.4' SHARP	NIL TO TRACE Py	449					
450								447.4'-460.5' ANORTHOSITE PORPHYRY - LARGE 1cm PLAGIOCLASE PHENOCRYSTS, ROUNDED PHENOCRYSTS GIVES UNIT A POP-CORN TEXTURE, UP TO 85% PHENOCRYSTS - WEAKLY SILICIFIED, NIL TO TRACE PYRITE; VERY WEAKLY FRACTURED			100				
460								460.5' SHARP	TRACE Py	459					
								460.5'-473.7' TONALITE - FINE TO MEDIUM GRAINED, MEDIUM GREY GREEN, HAS "SALT & PEPPER" APPEARANCE - GENERALLY MASSIVE GRANULAR - VERY WEAKLY SERICITIZED IN PLACES, TRACE PYRITE - WEAK TO NIL FRACTURING 469.3-470.1 - XENOLITH OF ANORTHOSITE PORPHYRY			100				
470								473.7'-478' ANORTHOSITE PORPHYRY - AS 447.4-460.5'		469					
								473.7' SHARP IRREGULAR	NIL TO TRACE Py		100				
								478'-479' GABBRO - DARK GREEN, FINE GRAINED, WEAKLY SILICIFIED - TRACE PYRITE - WEAKLY FRACTURED WITH HAIR-LINE QUARTZ-CARBONATE FILLED FRACTURES, SHARP CONTACT							
479								479' END OF HOLE		479					
								479' ACID TEST CORRECTED ∠ = 68.5°							

Ministry of Northern Development and Mines

Ontario

Report of Work

DOCUMENT No. W8803-193

52011SW0023 36 MCVICAR LAKE

900

Mining Lands Branch

Name and Postal Address of Recorded Holder	Prospector's Licence No.
BHP-UTAH MINES LTD. SUITE 900, 25 ADELAIDE ST. EAST TORONTO, ONTARIO M5C 1Y2	T. 793

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: ~~5439~~ 4900

for Performance of the following work. (Check one only)

- [ ] Manual Work
- [ ] Shaft Sinking Drifting or other Lateral Work.
- [ ] Compressed Air, other Power driven or mechanical equip.
- [ ] Power Stripping
- [X] Diamond or other Core drilling
- [ ] Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.
KRL	846064 et al see appended list	

Mining Claim Prefix	Mining Claim Number	Work Days Cr.

Mining Claim Prefix	Mining Claim Number	Work Days Cr.

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE

AUG 09 1988

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All the work was performed on Mining Claim(s): McVicar Lake G 2121, Stoughton Lake G 2228

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

Diamond Drilling Contractor: Langley Drilling
49 Jayfield Road
Brampton, Ontario L6S 3G3

Equipment Used: JKS 300

Work Period: April 13 - May 11, 1988

* 4710 days allocated to KRL - 846064 et al (see appended list)
~~729~~ 190 days to be * held in reserve

DDH NO.	CLAIM NO.	T.D. (FEET)
ML.35	846028	309
ML.36	846028	369
ML.37	846028	429
ML.38	846033	509
ML.39	846028	~~399~~ 160
ML.40	846033	489
ML.41	846033	509
ML.42	846033	629
ML.43	846033	649
ML.44	846036/846033	669
ML.45	846033	~~479~~ 179
	TOTAL	~~5439~~ 4960 feet

Recorded

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Date of Report	Recorded Holder or Agent (Signature)
JULY 21, 1988	Rodney N. Thomas

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying	Date Certified	Certified by (Signature)
RODNEY N. THOMAS C/o BHP-UTAH MINES LTD. SUITE 900, 25 ADELAIDE ST. EAST TORONTO, ONTARIO M5C 1Y2	JULY 21, 1988	Rodney N. Thomas

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	*Name and address of Ontario land surveyor.*	Nil	Nil

768 (85/12)

REPORT OF WORK CLAIMLIST - JULY 21, 1988

MDIV	CLAIM	RECDATE	PREVWKFILED	WKDUEDATE	AMTWKDUE	TALLY	WKFILED THIS REPORT
KRL	846064	851010	80	881010	20	1	20
KRL	846065	851010	80	881010	20	1	20
KRL	903106	860714	20	880714	40	1	40
KRL	903107	860714	20	880714	40	1	40
KRL	903108	860714	20	880714	40	1	40
KRL	903157	860714	20	880714	40	1	40
KRL	903158	860714	20	880714	40	1	40
KRL	903159	860714	20	880714	40	1	40
KRL	903160	860714	20	880714	40	1	40
KRL	903201	860714	20	880714	40	1	40
KRL	903202	860714	20	880714	40	1	40
KRL	903203	860714	20	880714	40	1	40
KRL	903204	860714	20	880714	40	1	40
KRL	903205	860714	20	880714	40	1	40
KRL	903206	860714	20	880714	40	1	40
KRL	903207	860714	20	880714	40	1	40
KRL	903208	860714	20	880714	40	1	40
KRL	903209	860714	20	880714	40	1	40
KRL	903210	860714	20	880714	40	1	40
KRL	903211	860714	20	880714	40	1	40
KRL	903212	860714	20	880714	40	1	40
KRL	903213	860714	20	880714	40	1	40
KRL	903214	860714	20	880714	40	1	40
KRL	903215	860714	20	880714	40	1	40
KRL	903216	860714	20	880714	40	1	40
KRL	903217	860714	20	880714	40	1	40
KRL	903218	860714	20	880714	40	1	40
KRL	903219	860714	20	880714	40	1	40
KRL	903220	860714	20	880714	40	1	40
KRL	903221	860714	20	880714	40	1	40
KRL	903222	860714	20	880714	40	1	40
KRL	903223	860714	20	880714	40	1	40
KRL	903224	860714	20	880714	40	1	40
KRL	903225	860714	20	880714	40	1	40
KRL	903226	860714	20	880714	40	1	40
KRL	903227	860714	20	880714	40	1	40
KRL	903228	860714	20	880714	40	1	40
KRL	903232	860714	20	880714	40	1	40
KRL	903233	860714	20	880714	40	1	40
KRL	903234	860714	20	880714	40	1	40
KRL	903235	860714	20	880714	40	1	40
KRL	903236	860714	20	880714	40	1	40
KRL	903237	860714	20	880714	40	1	40
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KRL	903239	860714	20	880714	40	1	40
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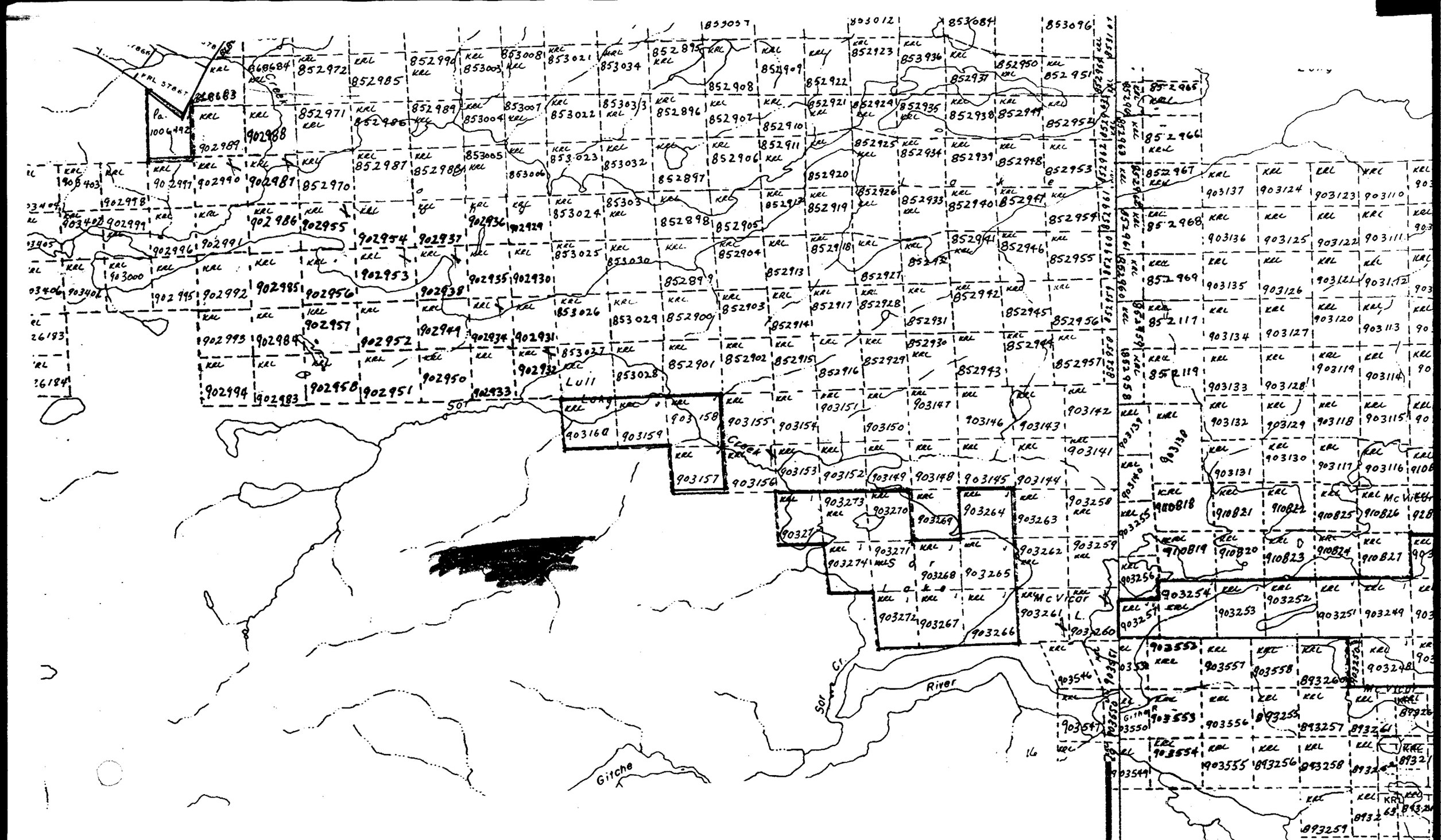
KRL	903241	860714	20	880714	40	1	40
KRL	903242	860714	20	880714	40	1	40
KRL	903243	860714	20	880714	40	1	40
KRL	903244	860714	20	880714	40	1	40
KRL	903245	860714	20	880714	40	1	40
KRL	903246	860714	20	880714	40	1	40
KRL	903247	860714	20	880714	40	1	40
KRL	903248	860714	20	880714	40	1	40
KRL	903249	860714	20	880714	40	1	40
KRL	903250	860714	20	880714	40	1	40
KRL	903251	860714	20	880714	40	1	40

REPORT OF WORK CLAIMLIST - JULY 21, 1988

MDIV	CLAIM	RECDATE	PREVWKFILED	WKDUEDATE	AMTWKDUE	TALLY	WKFILED THIS REPORT
KRL	903252	860714	20	880714	40	1	40
KRL	903253	860714	20	880714	40	1	40
KRL	903254	860714	20	880714	40	1	40
KRL	903257	860714	20	880714	40	1	40
KRL	903264	860714	50	880714	10	1	10
KRL	903265	860714	20	880714	40	1	40
KRL	903266	860714	20	880714	40	1	40
KRL	903267	860714	20	880714	40	1	40
KRL	903268	860714	20	880714	40	1	40
KRL	903270	860714	20	880714	40	1	40
KRL	903271	860714	20	880714	40	1	40
KRL	903272	860714	20	880714	40	1	40
KRL	903273	860714	20	880714	40	1	40
KRL	903274	860714	20	880714	40	1	40
KRL	903275	860714	20	880714	40	1	40
KRL	911381	860822	20	880822	40	1	40
KRL	911384	860822	20	880822	40	1	40
PA	1006251	870720	0	880720	20	1	20
PA	1006252	870720	0	880720	20	1	20
PA	914865	870805	0	880805	20	1	20
PA	914866	870805	0	880805	20	1	20
PA	914867	870805	0	880805	20	1	20
PA	914868	870805	0	880805	20	1	20
PA	914869	870805	0	880805	20	1	20
PA	914870	870805	0	880805	20	1	20
PA	914871	870805	0	880805	20	1	20
PA	914872	870805	0	880805	20	1	20
PA	914873	870805	0	880805	20	1	20
PA	914874	870805	0	880805	20	1	20
PA	914875	870805	0	880805	20	1	20
PA	914876	870805	0	880805	20	1	20
PA	914877	870805	0	880805	20	1	20
PA	914878	870805	0	880805	20	1	20
PA	914879	870805	0	880805	20	1	20
PA	914978	870805	0	880805	20	1	20
PA	914979	870805	0	880805	20	1	20
PA	914980	870805	0	880805	20	1	20
PA	914981	870805	0	880805	20	1	20
PA	914982	870805	0	880805	20	1	20
PA	914983	870805	0	880805	20	1	20
PA	914984	870805	0	880805	20	1	20
PA	914985	870805	0	880805	20	1	20
PA	914986	870805	0	880805	20	1	20
PA	914987	870805	0	880805	20	1	20
PA	914988	870805	0	880805	20	1	20
PA	914989	870805	0	880805	20	1	20
PA	914990	870805	0	880805	20	1	20
PA	914991	870805	0	880805	20	1	20
PA	914992	870805	0	880805	20	1	20
PA	914993	870805	0	880805	20	1	20
PA	1006492	871007	0	881007	20	1	20
PA	985755	871021	0	881021	20	1	20
PA	985756	871021	0	881021	20	1	20
PA	985757	871021	0	881021	20	1	20
PA	985758	871021	0	881021	20	1	20
PA	985759	871021	0	881021	20	1	20
PA	985760	871021	0	881021	20	1	20

REPORT OF WORK CLAIMLIST - JULY 21, 1988

MDIV	CLAIM	RECDATE	PREVWKFILED	WKDUEDATE	AMTWKDUE	TALLY	WKFILED THIS REPORT
PA	985761	871021	0	881021	20	1	20
PA	985762	871021	0	881021	20	1	20
PA	985763	871021	0	881021	20	1	20
PA	985764	871021	0	881021	20	1	20
PA	985765	871021	0	881021	20	1	20
PA	985766	871021	0	881021	20	1	20
PA	985767	871021	0	881021	20	1	20
PA	985768	871021	0	881021	20	1	20
PA	985769	871021	0	881021	20	1	20
PA	985770	871021	0	881021	20	1	20
PA	985771	871021	0	881021	20	1	20
PA	985772	871021	0	881021	20	1	20
PA	985773	871021	0	881021	20	1	20
PA	985774	871021	0	881021	20	1	20
PA	985775	871021	0	881021	20	1	20
PA	985776	871021	0	881021	20	1	20
PA	985777	871021	0	881021	20	1	20
PA	985778	871021	0	881021	20	1	20
PA	985779	871021	0	881021	20	1	20
PA	985780	871021	0	881021	20	1	20
PA	1006956	871021	0	881021	20	1	20
PA	1006957	871021	0	881021	20	1	20
PA	1006958	871021	0	881021	20	1	20
PA	1006959	871021	0	881021	20	1	20
PA	1006960	871021	0	881021	20	1	20
PA	1006961	871021	0	881021	20	1	20
PA	1006962	871021	0	881021	20	1	20
PA	1006963	871021	0	881021	20	1	20
PA	1006964	871021	0	881021	20	1	20
PA	1006965	871021	0	881021	20	1	20
PA	1006966	871021	0	881021	20	1	20
PA	1006967	871021	0	881021	20	1	20
PA	1006968	871021	0	881021	20	1	20
PA	1006969	871021	0	881021	20	1	20
PA	1006970	871021	0	881021	20	1	20
PA	1006971	871021	0	881021	20	1	20
PA	1006972	871021	0	881021	20	1	20
PA	1006973	871021	0	881021	20	1	20
PA	1006974	871021	0	881021	20	1	20
PA	1006975	871021	0	881021	20	1	20
PA	1006976	871021	0	881021	20	1	20
PA	1006977	871021	0	881021	20	1	20
PA	1006978	871021	0	881021	20	1	20
PA	1006979	871021	0	881021	20	1	20
PA	1006980	871021	0	881021	20	1	20
PA	1006981	871021	0	881021	20	1	20
PA	1006982	871021	0	881021	20	1	20
PA	1006983	871021	0	881021	20	1	20
PA	1006984	871021	0	881021	20	1	20
PA	1006985	871021	0	881021	20	1	20
PA	1006986	871021	0	881021	20	1	20
				TOTAL	4710	165	4710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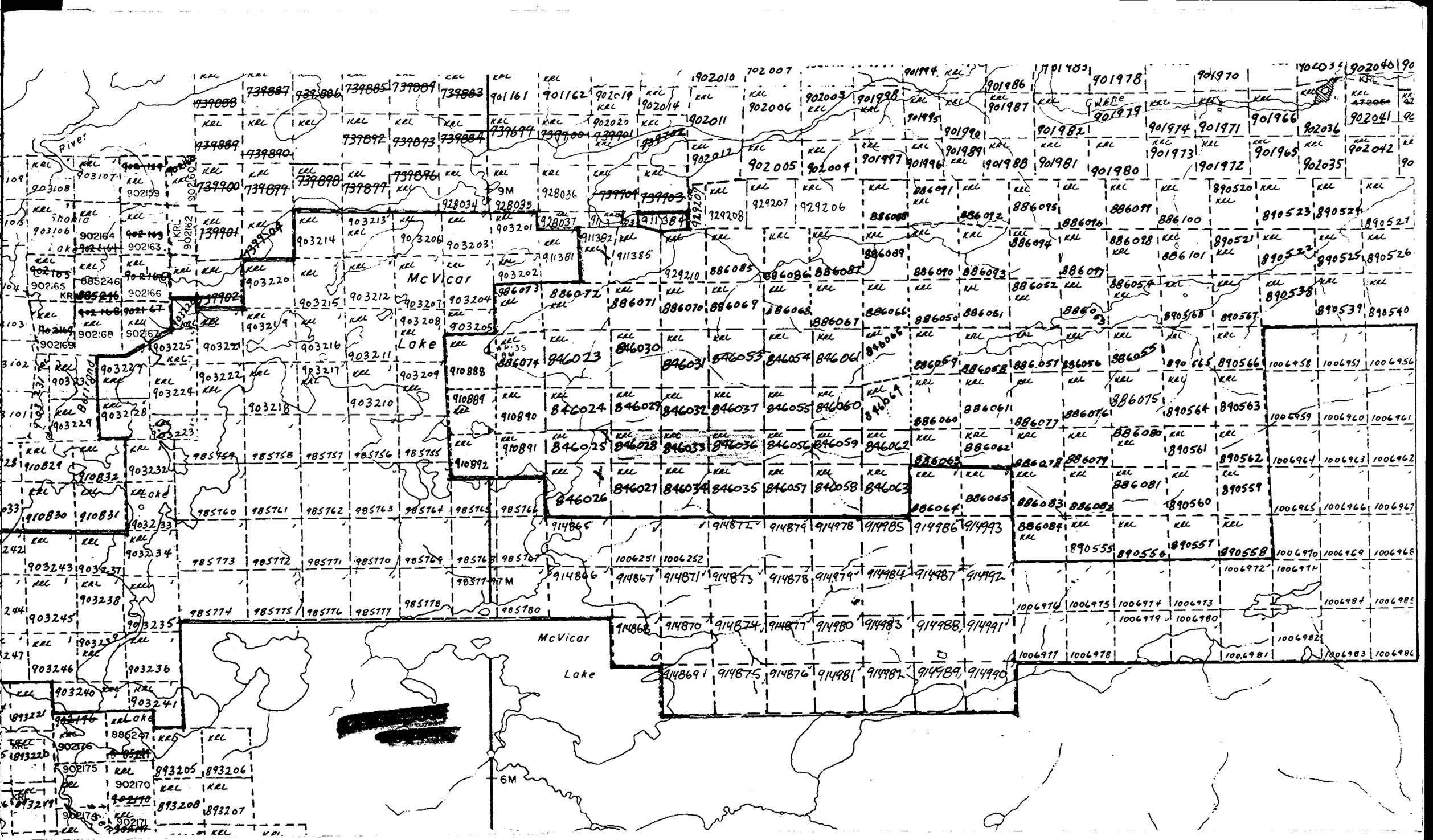
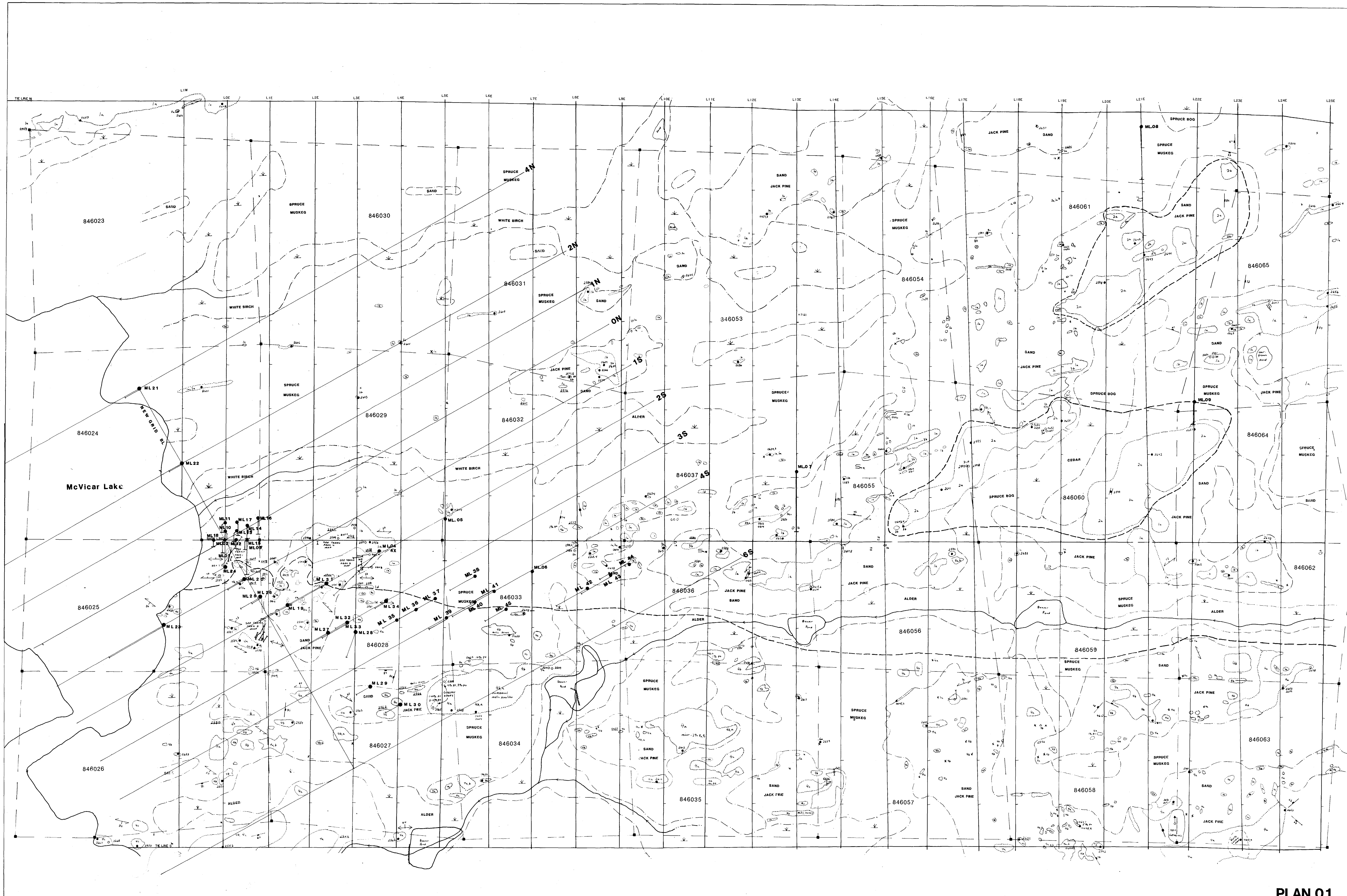
Creek
Sor Cr.
River
Gitche
McVICOR


McVicar
Lake
McVicar
Lake
6M
9M
WP 35
8M



PLAN 01

LEGEND

PRECAMBRIAN

PROTEROZOIC

LATE MAFIC INTRUSIVE ROCKS

6
- 6a Porphyritic mafic dike
- 6b Altered mafic intrusive

INTRUSIVE CONTACT

ARCHEAN

FELSIC INTRUSIVE ROCKS

5
- 5a Felsic dike

INTRUSIVE CONTACT

MAFIC INTRUSIVE ROCKS

4
- 4a Gabbro
- 4b Anorthositic gabbro
- 4c Anorthosite

INTRUSIVE CONTACT

CHEMICAL SEDIMENTS

3
- 3a Massive magnetite ironstone
- 3b Banded magnetite ironstone
- 3c Cherty magnetite ironstone
- 3d Hematite ironstone

INTERMEDIATE METAVOLCANICS

2
- 2a Silicified lava

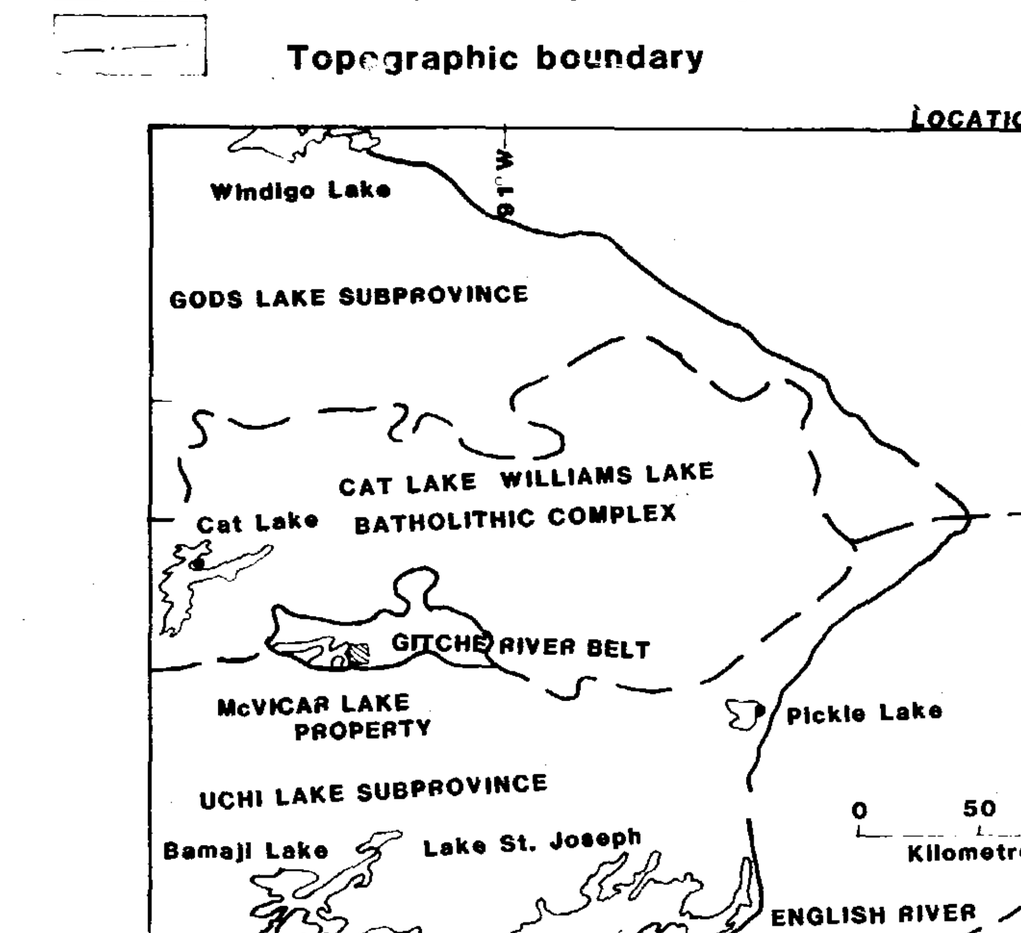
MAFIC METAVOLCANICS

1
- 1a Massive and foliated lava
- 1b Coarse-grained volcanic or mafic intrusive rocks
- 1c Amphibolite
- 1d Chlorite, chlorite-carbonate schist

SYMBOLS

- Geological boundary
- Outcrop
- Trench
- Claim line, post
- Drill hole (Kenlew Mines Ltd., 1959)
- Shearing (inclined)
- Foliation (inclined)
- Bedding (inclined)
- Drag fold with plunge
- Joint (inclined, vertical)
- Rock sample location— whole rock and trace element analysis
- Rock sample location—trace element analysis
- Outcrop description only
- Topographic boundary
- Trail
- Swamp
- Beaver dam

LOCATION MAP



UTAH MINES LIMITED
EXPLORATION DEPARTMENT
TORONTO ONTARIO CANADA

McVICAR LAKE PROPERTY

GEOLOGY

RECEIVED JUL 25 1988 PATRICIA MINING DIVISION

DATE	DRAWN	CHECKED	REVISED	N.T.S.	FILE	MAP
21/10/85	IAA			52011		OF

SCALE 0 100 200 300 METRES

McVicar Lk. DDR #36

52011SW0023 36 MCVICAR LAKE

200