UTAH MINES LTD.

EXPLORATION DEPARTMENT

SUITE 1600, 1050 W. PENDER STREET • VANCOUVER, B.C., CANADA V6E 3S7

(604) 683-6921

February 8, 1982.

Mining Recorder & Claims Inspector
800 Hornby Street
Vancouver, B.C.

Dear Sir:

Re: Assessment Report - Poplar Groups

Please find attached two copies of "Appendix B - Assay Logs", which form an integral part of the above report.

In accordance with the Mineral Act Regulation C 1 (7), I respectfully request a five (5) year period of confidentiality for these appendices.

Please advise me if this cannot be granted.

Yours truly,

G.L. Holland
Geologist

GLH/pc

10298
part 2
of 2

COMPOSITE DRILL LOG

CORE SIZE : NQ wireline SCALE : 1:100 PROJECT : Poplar Lake HOLE No. : PC-69

CASING COLLAR ELEV.: 917.5m GROUND ELEV.: 917.3m DATE STARTED : october 30, 1981 PAGE No. 1 OF 23

COORDINATES : 6003.7 N. 1200.2 E. DATE FINISHED : November 2, 1981 REF. TO CLAIM CORNER :

INCLINATION : -090° AZIMUTH : TOTAL DEPTH : 337.11 m LOGGED BY : G. L. Holland

DEPTH (M)	ALTERATION: silica	sericite	clay	sec. bio.	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
0								0-0.31 stick-up										
								0.31 - 27.4 OVERBURDEN										
5																		
10																		
15																		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 2 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	SEC. BIO.	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS: % Cu	% Mo		Oz/Ton Ag	Au
15								OVERBURDEN													
20																					
25								27.4 m								27.4					882.1
30	st - v. str.	mod			v. str.	PY-CPY		27.4 - 30.6 - FELDSPAR PORPHYRY - grnish-grey color - strongly altered - silicification - ✱ strongly foted - strong s/w - phenos have been heavily altered and obliterated - plag → sericite. - strong PY veining - no oxidation				4%	0.30%	85001C		30	1.04	0.002			887.3

UTAH MINES LTD.

COMPOSITE DRILL LOG

CORE SIZE :	SCALE :	PROJECT : Poplar		HOLE No. : PC-69	
CASING COLLAR ELEV.:	GROUND ELEV.:	DATE STARTED :		PAGE No. 3 OF 23	
COORDINATES : N.	E.	DATE FINISHED :		REF. TO CLAIM CORNER :	
INCLINATION :	AZIMUTH :	TOTAL DEPTH :	m	LOGGED BY :	

ALTERATION: SILICA — SERICITE — CLAY — SEC. BIO.

FRACTURING: moderate

MINERALS: py-cpy

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

- 10cm gouge zone
- 30.6 m — gouge contact @ 50° to c.a.

BIOTITE - FELDSPAR PORPHYRY

- pale green to grey color
- strong porphyritic texture - crowded
- composition
  - 30-40% phenos
  - 25% plag → ser + clay
  - 5% bio → sericite
  - groundmass - silica ? sericite.
- 30cm gouge zone
- 1cm qtz vn/t.
- strongly altered
- relic bio phenos remain
- qtz s/w moderate
- fracturing - moderate
- phenos up to 1mm in size
- 1.5cm gouge zone

* Noted cpy decrease across contact @ 30.6m

- due to decrease in frting
- 1cm qtz-py vn/t
- color alternates from light to dark grey.
- 1cm carb vn/t

PHYLLIC ALT'N

- 1cm py vn/t.
- traces of red hematitic staining present in some plag phenos
- 1cm gyp vn/t
- 1.5cm py vn/t.

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo	ASSAYS Oz/Ton Ag	ASSAYS Oz/Ton Au
30			4	0.15 %	85002C		30	0.40	0.002		
				0.10 %	85003C		33	0.11	0.002		
			2-2½ %	0.10 %	85004C		36	0.10	0.002	0.04	<0.003
				0.15 %	85005C		39	0.10	0.002		875.5
				0.10 %	85006C		42	0.10	0.005		
45							45				

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 4 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA: v. str. → moderate to strong; SERICITE: moderate; CLAY: v. wk → weak; SEC. BIO.: v. str.

FRACTURING: moderate

MINERALS: py-cpy.

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY cont.

- str qtz s/w
- zones of strong qtz s/w mixed w/ zones of weak s/w
- 1cm gyp vnlt.
- 1cm qtz vnlt
- Numerous H/L py vnlts.
- str qtz s/w
- 2cm carb ± gyp vnlt
- numerous H/L gypsum vnlts ~12-15 per meter
- 0.6cm gyp vnlt
- Alt'n strong - phyllic phase
- phenos distinct
- 1cm carb-py vnlt
- 1cm py vnlt.
- ** cpy is v. fine grained and it would not be hard to underestimate ✓
- 3cm qtz vnlt
- 1.5cm qtz vnlt
- * H/L frts ; py vnlts show some displacement of the qtz vnlts
- 40cm silicious zone
- 1.5cm py-carb vnlt cuts 1.5cm qtz vnlt.

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
45							45				
				0.10 %	85007C			0.11	0.003		
48							48				
				0.10 %	85008C			0.18	0.003	0.01	<0.003
51							51				
			2-3%	0.10 %	85009C			0.16	0.003		
54							54				824.5
				0.15 %	85010C			0.17	0.002		
57							57				
				0.10 %	85011C			0.17	0.002		
60							60				

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 5 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BID. | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

DEPTH (M)	DESCRIPTIVE GEOLOGY	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
60	BIOTITE - FELDSPAR PORPHYRY cont.			60				
	1cm gouge zone							
	Minor hematite staining of fspars							
	15cm carb vnlt.	0.15%	85012C		0.16	0.002	0.02	<0.003
	0.5cm chl vnlt 63.0 - decrease in frts, py vnlts			63				
	Rock takes on a darker grey tone - more silica							
	0.5cm py vnlt	0.15%	85013C		0.14	0.002		
65	Phyllic alt'n - very strong							
	1cm carb vnlt			66				851.5
	2-3%	0.15%	85014C		0.14	0.002		
	1.2cm qtz vnlt.							
	str qtz s/w 69.0 - Increase in s/w and frtng			69				
70		0.10%	85015C		0.21	0.002	0.03	<0.003
	2cm qtz vnlt							
	1cm py vnlt							
	1cm qtz vnlt			72				
	1cm py vnlt							
	1.5cm qtz vnlt	0.10%	85016C		0.15	0.004		
	2cm gyp vnlt							
75				75				

very strong — mod to str. — weak

moderate — weak

weak to mod — moderate

mod

py - cpy - (MoS_2)

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 6 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA (strong), SERICITE (moderate), CLAY (weak), SEC. BIO.

FRACTURING: moderate

MINERALS: py - cpy - MoS2

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY

- 1.5cm qtz vnlt
- hematitic staining of altered feldspar phenos common.
- 0.8cm py vnlt
- 2cm qtz vnlt. - Qtz s/w moderately developed
- Numerous H/L gyp vnlts
- 0.6cm py vnlt
- Phyllic alt'n
- 1cm qtz vnlt

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
75							75				
				0.10%	85017C			0.16	0.005		839.5
							78				
				<0.10%	85018C			0.05	0.004		
							81				
				<0.10%	85019C			0.07	0.004	.002	<0.003
							84				
				<0.10%	85020C			0.10	0.003		
							87				
				0.10%	85021C			0.13	0.002		
90							90				828.5

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 7 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA — strong; SERICITE — moderate; CLAY — v. weak; SEC. BIO.

FRACTURING: moderate; MINERALS: PY - CPY; GEOLOGY: very weak

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY

90.4 - Qtz s/w decreases

- Gypsum vning ~ 15-20/meter.

10° contact — 94.3m — sharp contact @ 10° to C.A.

TRACHYTIC RHYODACITE BRECCIA DYKE (PMD)

- dark brown color w/ sections of bleached (pale green) rock.
- trachytic texture strong
- lathes not aligned or oriented
- contains several M/L carbonate units.
- plag lathes ⇒ sericite
- 2cm gouge zones
- fragments are rounded to subrounded - brn - poss argillite
- contains many calcite amygdules
- 2cm gouge zones

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo		oz/ton Ag	oz/ton Au
90			2%	0.10%	850222C		90	0.13	0.002		0.01	<.003
							93					
				0.20%	850223C			0.16	0.001			
94.3							94.3					
95												
100			< 0.5%	nil			Not Sampled					
105												

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 8 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | oz/ton Ag | oz/ton Au

DEPTH (M)

105

TRACHYTIC RHYODACITE BRECCIA DYKE

- 3cm gouge zone

- 2cm gouge zone 109.8m Gouge Contact @ 80° to C.A

BIOTITE - FELDSPAR PORPHYRY

- 1cm gouge zone
- 5cm gouge zone
- 1cm py-gyp vnlt.
- brownish grey colored
- crowded porphyritic texture
- comp
  - 30% phenos - 90% plag → sericite ± clay
  - 5% bio → sericite.
  - 70% g.m. - silica, sericite, rare bio
- Qtz s/w weakly developed
- gypsum vning moderate.
- Alot of pink hem staining on fpms
- numerous H/L py vnlts
- phenos completely altered but distinct.

110

- 2cm gouge zone w/ gypsum.

115

- 2cm qtz vnlt
- 1cm py vnlt

- Weak potassic phase

- 1cm qtz vnlt
- 1cm gyp vnlt.

120

Sample No.	% Sample Recovered	Sample Interval (M)	% Cu	% Mo	oz/ton Ag	oz/ton Au
		105 – 109.3	Not sampled			
85024C		109.3 – 111	0.04	0.006		808.2
85025C		111 – 114	0.11	0.003		803.5
85026C		114 – 117	0.11	0.005	0.04	<0.003
85027C		117 – 120	0.17	0.006		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 9 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

COMMENTS :

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY cont.

1cm gouge zone

123.6 - Qtz s/w picks up - moderate.

sulphides very fine grained - estimates probably low!

str. qtz s/w. wk potassic alt'n

1.3cm qtz vnlt.

s/w still increasing

1.5cm qtz vnlt.

1.2cm qtz-py vnlt

1.5cm qtz vnlt

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	SEC. BIO.	FRACTURING	MINERALS	GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS: % Cu	% Mo		Oz/Ton Ag	Oz/Ton Au
120	moderate	moderate to strong	weak (potely)	weak	moderate to strong	py - cpy. - (mass)					2-3%	0.10%	85028C		120	0.14	0.003			
															123					
125												0.15%	85029C			0.18	0.003			
															126					79/1.5
												0.15%	85030C			0.27	0.006			
130															129					
												0.10%	85031C			0.33	0.004		0.01	<0.003
															132					
135												0.15%	85032C			0.24	0.011			

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 10 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

DEPTH (M)

BIOTITE - FELDSPAR PORPHYRY cont

0.8cm py vnlt

-Qtz s/w moderate

1.5cm py-qtz vnlt

* Periodic zones of 0.30% Cu
Very small and not continuous
- corresponds to increase in s/w

1.2cm qtz vnlt

1cm qtz-carb vnlt

Numerous H/L py vnlts

3x1cm qtz vnlts.

Visual Cu increasing

1cm gouge zone

0.8cm py vnlt

DEPTH (M)	ALTERATION	FRACTURING	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
135	moderate	moderate to strong	2½ - 3 %	0.10%	85033C		135	0.21	0.004		779.5
138	moderate to strong	py - cpy - (MoS2)		0.15%	85034C		138	0.29	0.007		
141	weak			0.20%	85035C		141	0.32	0.003	0.01	<0.05
144				0.20%	85036C		144	0.36	0.003		
147				0.15%	85037C		147	0.19	0.002		767.5
150							150				

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 11 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

DEPTH (M)

150

BIOTITE - FELDSPAR PORPH. cont

SILICA: moderate — SERICITE: strong — CLAY: v. weak — SEC. BIO.: —

FRACTURING: mod - strong py-cpy

MINERALS: —

GEOLOGY:

- 2cm qtz py
- WK potassic alt'n
- 0.8cm py vnlt

155

- 2cm gouge zone
- 1cm qtz vnlt
- 1cm gouge zone — 158.0 Gouge contact @ 30° to C.A
- Q.F.B.P #2 DYKE
- 1cm gouge zone — 159.0 Gouge contact @ 25° to C.A
- BIOTITE - FELDSPAR PORPHYRY

160

- 1cm gouge zone
- 159-169 - Rock is very strongly altered - phenos obliterated
- 1cm qtz vnlt
- 2cm gouge zone — - Qtz s/w strong
- - cpy contained within micro frts & silicious patches
- 1cm qtz-carb vnlt
- 2cm qtz vnlt

165

SILICA: strong — very strong

FRACTURING: strong py-cpy

MINERALS: WK

DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
		2½ %	0.20 %	85038C		150–153	0.23	0.006		
			0.20 %	85039C		153–156	0.15	0.001	0.05	<0.003
		<0.5	0.15%	85040C		156–159	0.15	0.002		
			0.20 %	85041C		159–162	0.26	0.004		755.5
		2½ %	0.25%	85042C		162–165	0.21	0.003		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 12 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | oz/Ton Ag | oz/Ton Au

DEPTH (M)	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo	oz/Ton Ag	oz/Ton Au
165	BIOTITE - FELDSPAR PORPHYRY cont'd				165				
	1cm gyp vnlt.								
	1cm qtz vnlt - starting to see cpy in the py vnlts								
	Qtz s/w - strong		0.20%	85043C	168	0.25	0.003		
	169.0 - Phenos become quite distinct again								
170	1cm gouge zone								
	3cm gouge-bxx zone								
	1cm py ± cpy vnlt								
	Phyllic to v. weak potassic alt'n.	3%	0.20%	85044C	171	0.25	0.002	0.29	0.003
	2cm qtz vnlt. Qtz s/w mod to strong		0.25%	85045C	174	0.21	0.002		
	1cm gouge zone								3.5
175	1cm qtz vnlt		0.30%	85046C	177	0.28	0.001		
	0.7cm py-cpy vnlt.								
			0.20%	85047C	180	0.23	0.001		
180	1cm gouge zone								

ALTERATION: strong | v. strong | moderate to strong | moderate to strong | weak (phenos) | traces

FRACTURING: strong

MINERALS: py - 2cpy - (Mos)

UTAH MINES LTD — 85

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-64

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 13 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | | Oz/Ton Ag | Oz/Ton Au

180

BIOTITE - FELDSPAR PORPHYRY cont.

Noting that a silicious envelope is developing around the frts & units.

→ 0.5cm py unit

→ 1cm qtz unit

Gypsum vning weak

Qtz s/w mod developed

185

→ 1.5cm qtz unit @ MoS_2

→ 3cm qtz-carb unit

Upper phyllic to wk potassic alt'n phase

190

→ 1cm gouge zone

→ 1cm qtz unit

→ 2cm gouge zone

→ 1.5cm qtz vnlt

195

Sample Interval (M)	Sample No.	% Estimated Cu	% Sulphides	% Core Recovered	Drilling Interval	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
180 – 183	85048C	0.30%	2½%			0.22	0.002	0.08	<0.003
183 – 186	85049C	0.25%				0.23	0.001		73/1.5
186 – 189	85050C	0.35%				0.27	0.002		
189 – 192	85051C	0.35%				0.25	0.003	0.05	<0.003
192 – 195	85052C	0.30%				0.22	0.002		

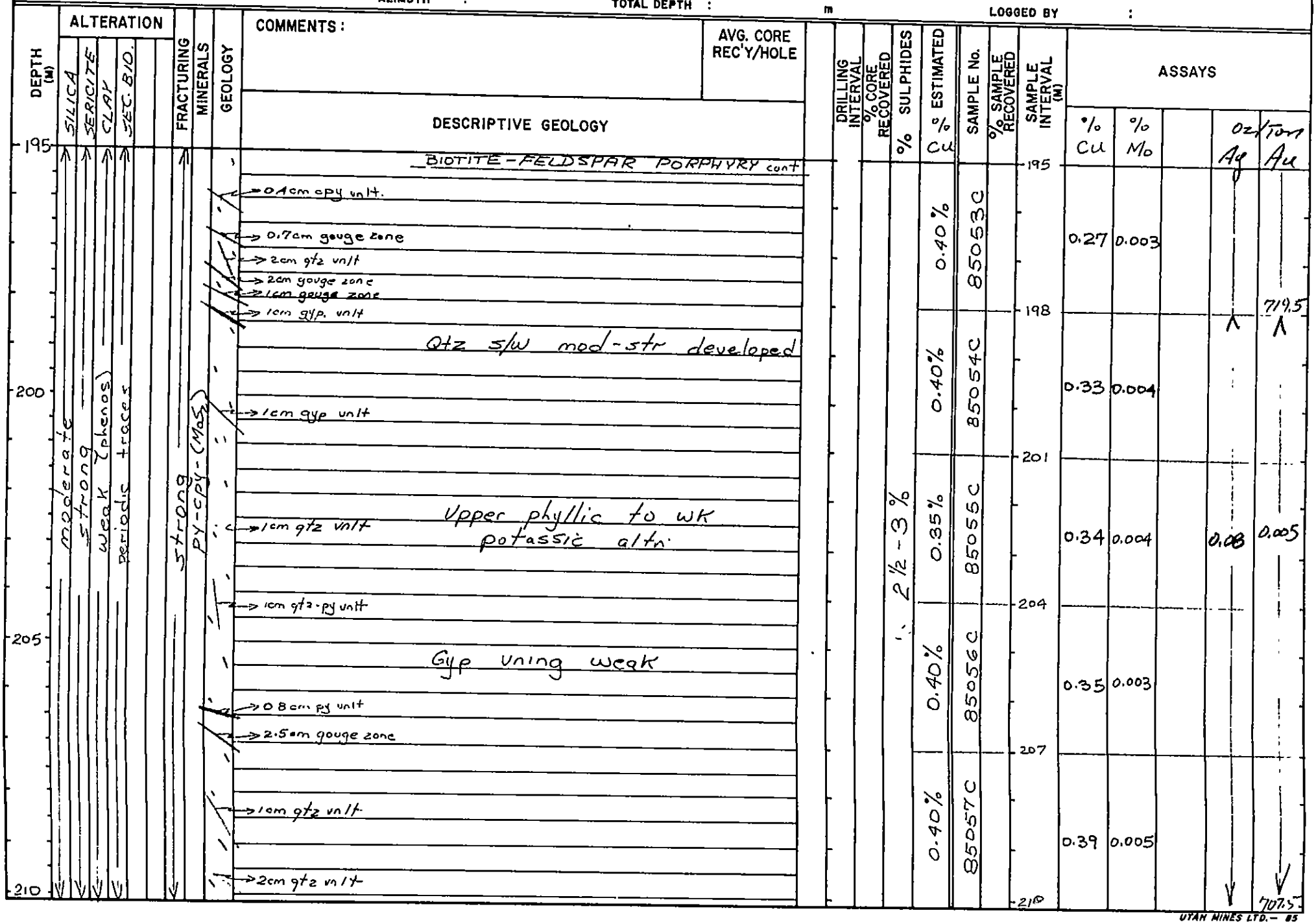
COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV : | GROUND ELEV. : | DATE STARTED : | PAGE No. 14 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :



COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 15 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA — moderate to strong; SERICITE — v strong; CLAY — strong; SEC. BIO. — weak (phenos)

FRACTURING: strong

MINERALS: Py-cpy-(Mo Sz)

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE-FELDSPAR PORPHYRY cont.

- 2cm qtz vnlt
- 1cm qtz vnlt — Qtz s/w mod-str.
- 1cm qtz vnlt
- Upper phyllic alt'n.
- 1cm py-qtz vnlt — -cpy contained in micro siliceous vnlts ; sil. patches
- 1cm py vnlt
- 1cm qtz vnlt
- 1.5cm qtz vnlt
- 1cm gouge zone cut 1cm qtz vnlt

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo	oz/Ton Ag	oz/Ton Au
210							210				
				0.50%	850580			0.40	0.004		
							213				
				0.50%	850590			0.39	0.006	0.11	0.003
215			3-3½%								
				0.50%	850600		216	0.36	0.006		
							219				
				0.40%	850610			0.48	0.002		
220							222				695.5
				0.40%	850620			0.32	0.002		
225							225				

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 16 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

225 — BIOTITE ± FELDSPAR PORPHYRY cont.

1cm qtz-py-cpy vnlt. — 225.6m vein contact @ 5° to C.A.

ARGILLITE

1.5cm qtz vnlt

- contains many BFP sections as we are following the contact for awhile.

1.3cm carb vnlt w/ sph ± gal.

1cm py-cpy-grp-carb vnlt

- tan to grey color
- very strong to intense frting
- intense alt'n - sericitization
  - silicification
- sulphides contained in frts ± sil-ser zones.
- qtz s/w v. strong

intense s/w

1cm qtz vnlt.

1cm qtz vnlt

0.8cm py vnlt.

- cpy v. fine grained

1cm qtz vnlt.

235

1cm qtz vnlt

BFP

1cm qtz vnlt.

240

Depth (M)	% Sulphides	% Estimated Cu	Sample No.	Sample Interval (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
225	3	0.45%	850638	225	0.18	0.004		
228		0.40%	850648	228	0.34	0.009	1.01	0.004
231	1 3½-4%	0.40%	850658	231	0.39	0.002		
234		0.40%	850668	234	0.29	0.004		
237		0.45%	850678	237	0.27	0.004		
240				240				

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COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-64

CASING COLLAR ELEV : | GROUND ELEV. : | DATE STARTED : | PAGE No. 17 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Az/Tan Ag | Az/Tan Au

DEPTH (M)	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo	Az/Tan Ag	Az/Tan Au
240	ARGILLITE cont.				240				
	1cm qtz vnlt.								
	1cm qtz vnlt								
	1cm qtz vnlt — Qtz s/w strongly developed		0.35%	85068C		0.34	0.003	0.01	<0.003
					243				
245	2cm qtz vnlt — Alt'n - wk potassic		0.35%	85069C		0.25	0.003		
		3¼ - 4%			246			X	671.5
			0.35%	85070C		0.29	0.002		
	0.5cm py vnlt				249				
250	1cm py-carb vnlt.		0.30%	85071C		0.30	0.002	0.07	<0.003
	series of qtz ± py vnlts				252				
			0.30%	85072C		0.28	0.002		
	3cm gauge zone w/ qtz.								
255	1cm qtz vnlt				255				

ALTERATION: strong; very strong; mod

FRACTURING: very strong to intense

MINERALS: py-cpy

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69
CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 18 OF 23
COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :
INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO.
FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

DEPTH (M)

255

ARGILLITE cont.

→ BFP

Qtz s/w very strong

→ 1cm qtz vnlt.

→ 1cm gouge zone.

260.6m

→ Dyke Bxx. w/ Sil.

260.6-268.3 - Fault zone w/ small sections of dyke QFP-1

→ QPP. Dyke.

260.6-268.5 - *BIOTITE - FELDSPAR PORPHYRY -very strong alteration - phenos are mostly obliterated

→ 2cm qtz vnlt.

→ 2cm gouge zone

→ 6cm gouge zone.

→ PMD

265.3-265.7 - PMD - Q.F.P.-1 ~ 80% to C.A.

Qtz s/w very strong

→ 1.5cm qtz vnlt

268.5m sharp contact @ 80° to C.A.

PMD - Q.F.P. #2

-light green to dk brn color, qtz phenos

-weakly frted

270

Depth (M)	Alteration	Fracturing	Minerals	Geology	Drilling Interval	% Core Recovered	% Sulphides	% Estimated Cu	Sample No.	% Sample Recovered	Sample Interval (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
255	strong Silica, very strong Sericite, weak Clay, Sec. Bio.	v. str. to intense	Py-Cpy-gal				3½-4%	0.25%	85073C		255	0.43	0.003		659.5
260								0.25%	85074C		268	0.44	0.002		
								0.20%	85075C		201	0.34	0.002	0.15	<0.003
265								0.40%	85076C		264	0.33	<0.001		
								0.20%	85077C		267	0.21	<0.001		
270		weak v. strong					<0.5%				270				647.5

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar Lake | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 19 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO.

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

270 PMD - Quartz-Feldspar Porphyry cont

2cm gouge 271.4m Gouge contact @ 70° to C.A.

1cm qtz vnlt BIOTITE - FELDSPAR PORPHYRY

- contains periodic patches of altered argillite
- strongly altered - potassic phase - phenos often obscured
- qtz s/w strongly developed.
- 1st appearance of good sec. bio. (in quantity and persistence)
- pale green to dk brn color
- pheno size appears to be a bit smaller than before.
- comp - 40% phenos - 35% plag → ser
  - 5% bio → ser
  → 2° bio
  - 60% gm - sec. bio, silica, sericite

1.5cm gouge zone

1cm qtz vnlt

Argillite

1cm qtz vnlt

1cm gouge ∅ qtz

2cm gouge zone

1cm py vnlt

275.3 - 276.2 m - Argillite - contains a lot of faults

3cm gouge zone

1cm qtz vnlt.

1cm vuggy qtz vnlt

1cm qtz vnlt.

1.5cm qtz vnlt

285

Depth	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au	Sample No.	Sample Interval (M)	% Sulphides	% Est. Cu
270–273	0.22	0.001			85078C	270–273	<0.5%	0.20%
273–276	0.38	0.003	0.07	<0.003	85079C	273–276	3-3½%	0.40%
276–279	0.29	0.003			85080C	276–279		0.40%
279–282	0.43	<0.001			85081C	279–282		0.40%
282–285	0.50	<0.001		635.5	85082C	282–285		0.40%

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV : | GROUND ELEV. : | DATE STARTED : | PAGE No. 20 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. B/O | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

285

- 1cm gouge zone — BIOTITE - FELDSPAR PORPHYRY.
- 1.5cm qtz vnlt.
- 1cm qtz-py vnlt
- Gouge contact
- Andesite — 287-287.8 - Andesite Dyke
- sharp contact @ 45°

288

- 2cm qtz vnlt — 289-290 - sections of argillite present
- 1cm qtz vnlt

290

- 1cm qtz vnlt
- 1.3cm gouge zone. — Qtz s/w strong
- 1.5cm qtz vnlt

291

- 1cm gouge zone — 293 - 298.2 - Periodic sections
- Argillite. — of argillite contained within
- 1cm qtz-py vnlt.

294

- Argillite.

295

- Argillite

297

- 1cm qtz vnlt
- Argillite.
- 1.3cm gouge zone

300

SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
850833C		285–288	0.36	<0.001		
850834C		288–291	0.36	<0.001	0.08	<0.003
850835C		291–294	0.64	<0.001		623.5
850836C		294–297	0.43	<0.001		
850837C		297–300	0.52	0.001		

ALTERATION: moderate to strong SILICA; moderate SERICITE; weak (phenos) CLAY; weak to moderate SEC. B/O

FRACTURING: strong PY-cPy

% SULPHIDES: 3 - 3½ %

% ESTIMATED Cu: 0.30% | 0.30% | 0.35% | 0.35% | 0.40%

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 21 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO.

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | Oz/Ton Ag | Oz/Ton Au

DEPTH (M)	DESCRIPTIVE GEOLOGY	SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
300	1cm qtz vnlt. BIOTITE - FELDSPAR PORPHYRY cont				300				
	Argillite.								
	1.3cm gouge zone * Arc very near the arg -								
	1cm carbonate vnlt BFP contact.								
	1.4cm qtz vnlt								
	- Qtz s/w strong								
	25cm gouge zone				303				
305									
	Alt'n strong - potassic								
		3 - 3 1/2 %			306				
	1.0cm qtz vnlt								
	1cm qtz vnlt				309				
310	310 - 312 / - Argillite								
	Argillite -tan to dk brn color depending								
	on the sec. bio. content.								
					312				
	Argillite								
	Argillite.								
315					315				

ALTERATION: moderate | moderate to strong | moderate

FRACTURING: strong to very strong

MINERALS: PY - CPY

SAMPLE No.	% ESTIMATED Cu	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
85088C	0.40%	0.44	0.001	0.08	<0.003
85089C	0.40%	0.61	<0.001		
85090C	0.40%	0.64	0.002		
85091C	0.40%	0.49	0.001	0.12	<0.003
85092C	0.40%	0.24	0.002		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 22 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO

FRACTURING: strong

MINERALS: py-cpy

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY cont.

Argillite

- 13cm qtz vnlt.
- 10cm gouge zone
- 22cm gouge zone

* Contains sections of Argillite within.

- contacts very sharp and irregular.

- 0.5cm py vnlt.

Qtz s/w strong

- 1cm py vnlt
- 2x1cm qtz vnlts
- 1cm py-cpy vnlt

Alt'n strong - potassic

- 28cm gouge zone
- 1cm qtz vnlt

826.8 - 329.5 - Rock is very blocky due to the sec. bio.

- Qtz masses
- 1.5cm qtz vnlt

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo	Oz/Ton Ag	Cu
315							315				
				0.35%	85093C			0.46	0.001		
318							318				592.5
				0.30%	85094C			0.24	0.005		
321							321				
			3-3½	0.35%	85095C			0.26	0.003	0.11	0.009
324							324				
				0.40%	85096C			0.61	0.001		
327							327				
				0.45%	85097C			0.79	0.001		587.7
330							330				

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-69

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 23 OF 23

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: silica — strong; sericite — moderate to strong; clay; sec. bio — mod to strong

FRACTURING — strong to very strong

MINERALS — Pr-cpy-(Mag)

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL

% CORE RECOVERED

% SULPHIDES

% ESTIMATED Cu

SAMPLE No.

% SAMPLE RECOVERED

SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | | Oz/Ton Ag | Oz/Ton Au

330 — BIOTITE - FELDSPAR PORPHYRY cont.

1.2cm py vnlt.

- Qtz s/w very strong

1.6cm qtz vnlt strong potassic alt'n.

335 — 2cm gouge zone.

1cm qtz vnlt.

337.11m End of Hole

DEPTH (M)	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au
330			330				
	85098C			0.82	0.001	0.07	0.005
333			333				
	85099C			0.65	0.001		
336			336				
	85100C			0.63	0.001		580.32
337.11			337.11				

0.45% Cu | 3-3½% Sulphides

0.45% Cu | 0.40% Cu

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COMPOSITE DRILL LOG

CORE SIZE : NQ wireline
SCALE : 1:100
PROJECT : Poplar Lake
HOLE No. : PC-70
CASING COLLAR ELEV.: 903.9m
GROUND ELEV.: 903.7m
DATE STARTED : Nov. 2, 1981
PAGE No. 1 OF 21
COORDINATES : 5905.2 N. 12001.8 E.
DATE FINISHED : Nov. 5, 1981
REF. TO CLAIM CORNER :
INCLINATION : -70°
AZIMUTH : 090°
TOTAL DEPTH : 306.7 m
LOGGED BY : G.L. Holland

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
0					0. - 0.31 Stick-Up									
5					0.31 - 20.73m Overburden									
10														
15														

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 2 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | LIMONITE

FRACTURING | MINERALS | GEOLOGY

COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

15

Overburden

20

20.73 m

BIOTITE - FELDSPAR PORPHYRY

- greenish-grey color
- very strongly altered - often phenos are completely obliterated.
- crowded porphyry - phenos range up to 1mm in size
- comp - 40% phenos - 97% plag → ser → clay
  - 3% bio → ser
  - 60% gm - silica + sericite
- bio phenos relicts are found only in short sections - mostly destroyed.

large gauge zone

25

20.73 - 61.60 - Rock is very badly broken up.

gauge zone.

Gauge zone - Qtz s/w weak

- very badly frted

Gauge zone

30

strong to v. strong | strong | weak (phenos) | very weak. | strong

very strong (CPS) = 1 in PM

9 - 4 %

Drilling Interval	% Core Recovered	% Sulphides	% Est. Cu	Sample No.	% Sample Recovered	Sample Interval (M)	% Cu	% Mo
						20.73		
			< 0.10 %	85101C		24	0.05	0.007
			< 0.10 %	85102C		27	0.04	0.005
			< 0.10 %	85103C		30	0.03	0.002

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar Lake | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 3 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE-FELDSPAR PORPHYRY cont

- 2cm gouge zone
- Gouge zone
- Alt'n very strong - phyllic.
- Gouge zone.
- 0.7cm py vnlt.
- 2cm qtz vnlt * Rock very badly fractured
- Gouge zone

strong / strong / weak (pheno's) | very strong | py - (cpy)

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo

DEPTH (M)	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
30				30		
		<0.10%	85104C		0.02	0.003
				33		
35		<0.10%	85105C		<0.01	0.003
	3-3½%			36		
		<0.10%	85106C		0.03	0.001
				39		
40		<0.10%	85107C		0.02	0.003
				42		
		<0.10%	85108C		0.02	0.002
45				45		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar Lake | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 4 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. Bio. | FRACTURING | MINERALS | GEOLOGY

COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
45	BIOTITE - FELDSPAR PORPHYRY cont				45		
	2cm gouge zone						
	0.6cm py unit.						
			< 0.10%	85109C		0.01	0.003
	Rock very shattered				48		
	1cm gouge zone						
50	1cm gouge zone		< 0.10%	85110C		0.01	0.002
	0.8cm qtz-py unit Qtz s/w weak.				51		
	Gouge zone	3-3½ %	< 0.10%	85111C		< 0.01	0.003
					54		
55	Gouge zone		< 0.10%	85112C		0.01	0.004
					57		
			< 0.10%	85113C		0.02	0.003
60					60		

ALTERATION: strong SILICA; strong SERICITE; weak (phenos) CLAY; SEC. Bio.

FRACTURING: very strong

MINERALS: py - (cpy) - (hem)

UTAH MINES LTD — 85

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 5 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

60

BIOTITE-FELDSPAR PORPHYRY cont

61.6 - End of shatter zone

1cm gouge zone

10cm py unit

63.1m sharp-irregular contact.

TRACHYTIC RHYODACITE BRECCIA.

- trachytic texture is very strong on the edges of the dyke, disappears in the core.
- At edges - dark brn color
  - weak porphyritic texture
- In core - no trachytic texture
  - porphyritic texture.
  - 10-15% - plag - 8%
    qtz - 6%
    bio - 1%
  - breccia frags more prominant
  - light grey color - minor hem staining.

65.8 - End of trach text

20cm gouge zone

- Qtz phenos increase in size & content towards the middle.
- Periodic lathes found in the core - same dyke.

15cm carb. unit.

1.5 cm gouge zone

A lot of bleaching around gouge zones

1cm carb unit

1cm gouge zone

* Breccia texture very weak - could be a

70

75

DEPTH (M)	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
60	3-3½%	<0.10%	85114C		60	0.01	0.004
63.1					63.1		
	<0.5%	nil			Not sampled		

UTAH MINES LTD - 85

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 6 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	SILICA	SERICITE	CLAY	SEC BIO	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
75		weak			weak				<0.5	nil	—	76.7	Not sampled	
								76.7m sharp contact @ 85° to C.A						
								1cm gouge zone						
								BIOTITE-FELDSPAR PORPH.						
								-light grey color		<0.10%	85115C	78	0.01	0.002
								-very strong alteration - phenos mostly destroyed.						
								-no relic bio,s noted, rock type based on texture.						
								-strong silicious salvages devel. around frts						
80								- Qtz s/w weak						
								-numerous py vnlts.						
								1cm gouge zone		<0.10%	85116C	81	0.01	0.002
								0.5cm py vnlt						
								-no gypsum	3-3½%					
								1cm py vnlt		0.15%	85117C	84	0.01	0.002
	strong	strong	very weak		strong	py-cpy		Alt'n strong - phyllic phase.						
85								0.9cm py vnlt		<0.10%	85118C	87	0.02	0.002
								1.3cm py vnlt						
										<0.10%	85119C	90	0.02	0.003
90								0.6cm py vnlt						

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 7 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY

- py vnlts
- 1.5 cm py vnlts.
- 0.7cm gyp vnlt
- 2 x 1.5cm py vnlts
- Qtz s/w weakly developed
- 1.2cm py vnlt
- Alt'n very strong - phyllic
- 0.5cm py vnlt.
- Argillite
- 1cm gyp. vnlt.
- 0.8cm carb. vnlt.
- 0.5cm gouge zone.

Alteration: strong silica, strong sericite, weak (phenos) clay, sec. bio

Fracturing: strong py-cpy

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	Cu % ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
90							90		
				<0.10%	85120C			<0.01	0.002
							93		
				<0.10%	85121C			0.03	0.003
95							96		
			3-5%	<0.10%	85122C			0.02	0.003
							99		
100				<0.10%	85123C			<0.01	<0.001
							102		
				<0.10%	85124C			<0.01	<0.001
105							105		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV : | GROUND ELEV. : | DATE STARTED : | PAGE No. 8 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

105

BIOTITE - FELDSPAR PORPHRY cont.

1cm gouge zone.

0.8cm py vnlt.

- Qtz s/w weakly developed

1cm py vnlt.

Alt'n strong - phyllic phase.

2cm py vnlt

1cm carb. vnlt

3cm qtz vnlt

2x1.5cm py vnlts

2cm carb. vnlt

strong strong weak (phenos) 3

strong py - (cpy)

3 %

SAMPLE INTERVAL (M)	SAMPLE No.	% ESTIMATED Cu	% Cu	% Mo
105 – 108	85125C	<0.10%	0.02	<0.001
108 – 111	85126C	<0.10%	0.01	0.002
111 – 114	85127C	<0.10%	0.02	0.002
114 – 117	85128C	<0.10%	0.03	0.005
117 – 120	85129C	<0.10%	0.05	0.005

COMPOSITE DRILL LOG

CORE SIZE :
CASING COLLAR ELEV.:
COORDINATES : N. E.
INCLINATION :
SCALE :
GROUND ELEV.:
AZIMUTH :
PROJECT : Poplar
DATE STARTED :
DATE FINISHED :
TOTAL DEPTH : m
HOLE No. : PC-70
PAGE No. 9 OF 21
REF. TO CLAIM CORNER :
LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BID.
FRACTURING
MINERALS
GEOLOGY
COMMENTS:
AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DEPTH (M) | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | ASSAYS % Mo

120 — BIOTITE - FELDSPAR PORPHYRY cont

→ 0.8cm py vnlt.

Qtz s/w weakly developed

123

125 — Numerous H/L py vnlts.

→ 15cm gyp vnlt.

→ 0.7cm py vnlt

126

Alt'n strong - phyllic
- phenos mostly destroyed

4-5%

129

130

132

→ 1.3cm py vnlt.

135

SAMPLE INTERVAL (M)	% Cu	% Mo	SAMPLE No.	% ESTIMATED Cu	% SULPHIDES	% CORE RECOVERED	DRILLING INTERVAL
120							
	0.04	0.003	85130C	<0.10%			
123							
	0.02	0.003	85131C	<0.10%			
126							
	0.05	0.002	85132C	<0.10%	4-5%		
129							
	0.06	0.002	85133C	<0.10%			
132							
	0.05	0.002	85134C	<0.10%			
135							

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 10 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

135

→0.8cm py vnlt. BIOTITE - FELDSPAR PORPHYRY cont.

→1cm py vnlt

Alt'n strong - phyllic.

Qtz s/w weak

140

→3cm carb. vnlt

→2cm gyp. vnlt.

145

146.1m Gouge contact @ 30° to C.A

TRACHYTIC F. RHYODACITE

- bleached, fspar laths → sericite
- minor qtz ± fspar phenos

148.3m sharp contact @ 80° to C.A

wk breccia

→3cm qtz vnlt.

BIOTITE - FELDSPAR PORPHYRY

as above

150

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
135	strong silica, strong sericite, weak clay (phenos)	strong	py ± cpy	BIOTITE - FELDSPAR PORPHYRY cont.	5%	< 0.10%	85135C		135	0.04	0.002
138						< 0.10%	85136C		138	0.05	0.003
141						< 0.10%	85137C		141	0.02	0.002
144						< 0.10%	85138C		144	0.03	0.002
147	strong silica, weak sericite, weak clay	weak	py (cpy)	TRACHYTIC F. RHYODACITE	< 0.5%	< 0.10%	85139C		147	0.03	0.002
150	strong silica, strong sericite, weak clay	strong	py (cpy)	BIOTITE - FELDSPAR PORPHYRY	5%				150		

UTAH MINES LTD — 85

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar Lake | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 11 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

150

BIOTITE - FELDSPAR PORPHYRY

→ 2x1cm qtz vnlts.

→ 0.5cm gouge zone.

→ 0.3 cm cpy-py vnlt.

1535 - starting to get small patches of argillite in the B.F.P.

→ 2cm gouge zone

155

Discription -
- grey color
- very strongly altered
- phenos are rare, many ghosts still present
- very strong silicification + sericitization
- Qtz s/w weak

→ 1cm gouge zone

→ Vuggy qtz vnlt

→ 2cm py vnlt w gyp

* cpy contained in several units.
- probably if s/w was greater this would have alot more cpy
- cpy very fine

160

→ 1cm gouge zone

Alt'n very strong - phyllic

→ 1cm gouge zone

165

DEPTH (M)	SILICA	SERICITE	CLAY	SEC BIO	FRACTURING	MINERALS	GEOLOGY	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
150	very strong	strong	very weak		strong	py > (cpy)	BIOTITE - FELDSPAR PORPHYRY			3 - 4 %	< 0.10 %	85140C		150	0.04	0.002
153											< 0.10 %	85141C		153	0.06	0.002
156											< 0.10 %	85142C		156	0.08	0.019
159											< 0.10 %	85143C		159	0.06	0.003
162											0.15 %	85144C		162	0.11	0.003
165														165		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 12 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
165	BIOTITE-FELDSPAR PORPHYRY cont.				165		
	1.3cm gyp vnlt						
	1cm gouge zone		0.10%	85145C		0.03	0.002
	1cm qtz-py vnlt.						
	1cm gouge zone		0.10%	85146C	168	0.08	0.004
	Alt'n very strong - phyllic.						
170	0.9cm py-qtz vnlt	3-4%	0.10%	85147C	171	0.07	<0.001
	2cm gouge zone						
	Qtz s/w weakly devel.						
	1cm qtz-carb vnlt						
	Argillite						
	1cm qtz vnlt		0.10%	85148C	174	0.09	0.002
175	1cm gouge zone						
	1cm gouge zone				177		
	2cm qtz vnlt.		0.10%	85149C		0.06	0.003
	1cm qtz vnlt						
180					180		

very strong | strong | very weak | strong py-cpy

UTAH MINES LTD — 65

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 13 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

180 m

180.3m Gouge contact @ 47° to CA

PMD - Q.F.P. #2

→BPP @ 10° to C.A

- pale green color
- 5% phenos in a silicious matrix
- 1% qtz
- 1% plag
- frting - weak.

→1cm gouge zone

185 m

Gouge contact 186.6m Gouge contact @ 80° to CA

→1cm qtz-py vnlt

→1cm qtz vnlt

BIOTITE - FELDSPAR PORPHYRY

- very strongly altered
- strong silicification ? sericitization
- phenos are rare
- fracturing strong
- qtz s/w weak
- alt'n - phyllic phase
- numerous H/L py vnlts.

→1cm qtz vnlt

→2cm gyp vnlt

190 m

→1.2cm qtz vnlt

→1cm gouge zone

→1cm gouge zone

→1cm gouge zone

195 m

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
180							180		
								N.S.	sampled
186			<0.5%	nil			186		
				<0.10%	85150C			0.07	0.003
189							189		
			3 1/2 %	<0.10%	85151C			0.08	0.003
192							192		
				<0.10%	85152C			0.10	0.002
195							195		

ALTERATION: strong strong

FRACTURING: weak

MINERALS: strong py-cpy

UTAH MINES LTD — 85

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 14 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO.

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

195

BIOTITE - FELDSPAR PORPHYRY cont.

→ 0.6cm py vnlt.

Qtz s/w weak.

strong (SILICA) | strong (SERICITE) | very weak (phenos) (CLAY) | strong (SEC. BIO.)

strong FRACTURING | PY - Copy. | weak

5% | <0.10% | 85153C | 195 | 0.04 | 0.004

198.5m sharp contact @ 20° to C.A.

Quartz - Feldspar - Biotite Porphyry Dyke (PMD)

- olive green, silicious, aphanite matrix
- 15% phenos - up to 5mm in size.
- 7% qtz
- 7% plag → sericite
- 1% bio → chlorite.
- frting weak

200

→ 2cm gouge zone

<0.05% | nil | 198.5

205

→ 1cm gouge zone

→ 1cm gouge zone

206.0m Gouge contact @ 30° to C.A.

SILICIFIED ARGILLITE

→ 2cm gouge zone

- tan to grey color
- very strung frting

very strong | moderate | wk

very strong FRACTURING | PY - Copy | wk

2% | <0.10% | 85154C | 206.0 | 0.01 | 0.004

208.8 - 209.3 - B.F.P

209.3m sharp contact @ 20° to C.A.

Q.B.F.P. Dyke cont

209.3

210

Not Sampled

COMPOSITE DRILL LOG

CORE SIZE :
CASING COLLAR ELEV.:
COORDINATES : N. E.
INCLINATION : AZIMUTH :
SCALE :
GROUND ELEV.:
PROJECT : Poplar
DATE STARTED :
DATE FINISHED :
TOTAL DEPTH : m
HOLE No. : PC-70
PAGE No. 15 OF 21
REF. TO CLAIM CORNER :
LOGGED BY :

ALTERATION | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

DEPTH (M)

DESCRIPTIVE GEOLOGY

210

Quartz-Feldspar-Biotite Porphyry

PMD - QFBP

2x3cm gouge zones

22cm gouge zone

2cm gouge zone

10cm gouge zone

215

4cm gouge zone

220

225

sericite

very weak

weak

% SULPHIDES: < 0.5%

% ESTIMATED Cu: nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE :
CASING COLLAR ELEV.:
COORDINATES : N. E.
INCLINATION :
SCALE :
GROUND ELEV.:
AZIMUTH :
PROJECT : Poplar.
DATE STARTED :
DATE FINISHED :
TOTAL DEPTH : m
HOLE No. : PC-70
PAGE No. 16 OF 21
REF. TO CLAIM CORNER :
LOGGED BY :

ALTERATION | FRACTURING | MINERALS | GEOLOGY | COMMENTS : | AVG. CORE REC'Y/HOLE | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

DEPTH (M)

DESCRIPTIVE GEOLOGY

225

PMD - Q.F.B.P. Dyke.

sericite

very weak

weak

230

1cm gouge zone

<0.5%

nil

No Sampled

235

>1cm gouge zone

240

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 17 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: silica, sericite, clay, sec. bio

FRACTURING: very weak → moderate → weak

MINERALS: weak → moderate → moderate

GEOLOGY: py-cpy

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

PMD - Q.B.F.P Dyke.

1cm gouge zone

1cm gouge zone

251.1m Gouge contact @ 80° to c.A

BIOTITE - FELDSPAR PORPHYRY
- lgt grey color
- crowded porphyritic texture
- alt'n moderate
- comp - 40% phenos - 35% plag → clay
- 5% bio.
matrix - silica : sericite
- qtz s/w weak.

2cm gouge zone.

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
240									
			< 0.5%	nil				Not Sampled	
245									
250							251.1		
			3-4%	0.10%	85155C			0.04	<0.001
255							254		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 18 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: silica, sericite, clay | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo.

255

BIOTITE-FELDSPAR PORPHYRY

259.9m sharp contact

SILICIFIED ARGILLITE

→ 1cm qtz vnlt.

- tan color
- v. strong frtng
- alot of py in frts.
- Qtz s/w weakly devel.

strong — moderate — very weak

very strong — weak

py - (cpy)

SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo.
85156C	257	0.07	0.005
85157C	260	0.07	0.005
85158C	261.7	0.08	0.003

260

261.7m Brxx contact @ 80° to CA

→ 4cm gouge zone Qtz - Fsp - Bio Porph Dyke

same as before

2% | < 0.10% | < 0.5% | nil

265

→ 1cm gouge zone

→ 2cm gouge zone

Not Sampled

270

UTAH MINES LTD — 85

COMPOSITE DRILL LOG

CORE SIZE :
SCALE :
PROJECT : Poplar
HOLE No. : PC-70
CASING COLLAR ELEV. :
GROUND ELEV. :
DATE STARTED :

COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

COMMENTS :

AVG. CORE REC'Y/HOLE

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	SEC BIO	FRACTURING	MINERALS	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
270–270.7		wk			wk		→1cm gouge zone. PMD – Q.F.B.P. Dyke.				270.7	Not sampled	
270.7–272.6	strong	strong			strong		270.7m sharp contact @ 30° to C A; →1cm py vnlt; →5cm gouge zone; BIOTITE-FELDSPAR PORPH; 272.6m irregular contact.	2½-3%	<0.10%	85159C	270.7–273	0.08	0.007
272.6–279.0	strong	moderate			very strong	py-(cpy)-(moS₂)	Argillite; - tan color; - strong silicification; →2cm gouge zone.; S/W weak; →1cm gouge zone; 279.0m Gouge contact @ 70° to C.A	2½-3%	<0.10%	85160C	273–276	0.06	0.007
									<0.10%	85161C	276–279	0.11	0.011
279.0–285		weak			weak		PMD - Q.F.B.P. Dyke; →3cm gouge zone.	<0.5%	nil			Not sampled	

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar. | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 20 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: Sericite

DEPTH (M) | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

285

PMD - Q.F.B.P. Dyke.

2cm gouge zone

weak

290

1cm gouge

290.7m Gouge contact @ 40° to C.A.

PMD - Trachytic-Feldspar-Biotite Rhyodacite Dyke.

- dk brn color
- trachytic texture comes and goes
- <5% qtz & fspar phenos.
- frting weak

2cm gouge zone

295

weak.

Vuggy carbonate veins

300

<0.5%

nil

Not Sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-70

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 21 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: sericite	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
300		weak			PMD – T.F.B.R. Dyke.				<0.5%	nil			Not sampled	
					→ carb unlts									
305					→ carb unlts.									
					306.7 End of Hole									

COMPOSITE DRILL LOG

CORE SIZE : NQ wireline	SCALE : 1:100	PROJECT : Poplar		HOLE No. : PC-71	
CASING COLLAR ELEV.: 923.7m	GROUND ELEV.: 923.5m	DATE STARTED : Nov 5, 1981		PAGE No. 1 OF 15	
COORDINATES : 6296.6 N. 12398.8 E.		DATE FINISHED : Nov 7, 1981		REF. TO CLAIM CORNER :	
INCLINATION : -090°	AZIMUTH : —	TOTAL DEPTH : 218.24 m		LOGGED BY : G. L. Holland	

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	SEC. BIO.	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
0								0 - 0.32 STICK-UP										
								0.32 - 9.14m - OVERBURDEN										
5																		
								9.14 m								9.14		
10	mod to strong	strong	weak		strong	Py-cpy		BIOTITE-FELDSPAR PORPHYRY - greenish grey color - alt'n strong - phenos often destroyed. - strong fr'ting - mod to strong silicification in envelopes. - Qtz s/w moderately developed. - crowded porphyry - 30-35% phenos - 30% plag → ser → clay ≤5% bio → ser → 1.5 cm gouge zone → 2cm gouge zone. → 0.6cm Py vnit					3%	0.10%	85162C			0.09	0.003
													0.10%	85163C		12	0.12	0.004
15																15		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 2 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | ASSAYS % Mo

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
15	strong silica, strong sericite, weak (pleas) clay, mod sec. bio.	strong	py - cpy - (Mo S2)	→ 3cm gouge zone BIOTITE - FELDSPAR PORPHYRY cont					15		
				→ 0.7cm qtz vnlt.			< 0.10%	851646		0.11	0.004
				- Numerous H/L py vnlts.					18		
				→ 1cm py vnlt			< 0.10%	851656		0.13	0.010
20				→ 1cm gouge zone Qtz s/w moderately developed.							
				* Siliceous envelopes up to 1cm wide are present around frts	3%				21		
				→ 2cm gouge zone			0.10%	851666		0.13	0.005
				→ 1.5cm py-qtz vnlt Minor hemetite staining of fspars.					24		
				Alt'n strong - phyllic phase.			0.10%	851676		0.11	0.004
25				→ 2cm gouge zone					27		
				→ 1.5cm qtz vnlt			0.15%	851686		0.14	0.012
				28.6 - presence of sec. bio - increase in cpy.							
30									30		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 3 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BID. | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
30	BIOTITE - FELDSPAR PORPHYRY cont			30		
	2cm gouge zone					
	1.3cm py qtz vn lt	0.15%	85169C		0.17	0.005
	Numerous H/L py vn lts					
	33.3 - 36.0 Rock badly broken up			33		
	Alt'n moderate - potassic phase	0.20%	85170C		0.16	0.005
35	Qtz s/w moderate					
	6cm brecc zone			36		
	1cm carb-py vn lt	0.15%	85171C		0.16	0.004
	37 - 44.9 - Qtz s/w strong					
	1cm py vn lt			39		
	1cm py vn lt.					
	1.2cm qtz vn lt.	0.25%	85172C		0.15	0.008
40	2x1cm gouge zone.					
	1cm qtz vn lt			42		
	1cm py-qtz vn lt					
	2cm qtz vn lt	0.15%	85173C		0.18	0.004
	1.5cm qtz vn lt					
	2cm qtz vn lt					
45	44.90 Breccia contact			45		

ALTERATION: moderate | moderate | weak (plenos) | moderate

FRACTURING: moderate to strong

MINERALS: Py - Cpy

% SULPHIDES: 2½ - 3½ %

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-1

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 4 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DESCRIPTIVE GEOLOGY

45

TRACHYTIC FELDSPAR (BIOTITE) RHYODACITE DYKE

1.3cm carb vnlt

- light green to dk brn color
- bleaching at contacts and around frts.
- strong trachytic texture. - no visible alignment
- 15% phenos - 13% plag
  1% bio
  1% qtz
- plag phenos weakly altered sser
- fracturing weak
- phenos range up to 1cm in size in some places.

3cm gouge zone

50

* Belieue contact is somewhat around 30 to 50° to c.A

55

contact @ 30°

56.0 - 56.7 - B.F.P.

BFP

contact @ 30° to c A

maze of carb vnlts

Periodic Bxx frags found within the unit - frags up to 20cm in size

60

very weak (phenos)

weak

< 0.10%

nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE :
SCALE :
PROJECT : Poplar
HOLE No. : PC-71
CASING COLLAR ELEV.:
GROUND ELEV.:
DATE STARTED :
PAGE No. 5 OF 15
COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

DEPTH (M)	ALTERATION: SILICA	ALTERATION: SERICITE	ALTERATION: CLAY	ALTERATION: SEC. BIO.	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
60								→ frag-unknown. T.F.B.R. Dyke cont.										
								Minor hemetitic staining of the plag phenos										
65		weak (phenos)			weak			→ 3cm gouge zone.				< 0.10%	nil					
								→ B.F.P frag										
70																		
75																		

N/S Sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-11

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 6 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

75

T.F.B.R. Dyke cont.

80

→ B.F.P frag

83.7m — sharp contact @ 15° to C.A

83.7 - 91.1m - Bio - Fsp. Porphyry and Argillite Inter Phase
- mostly argillite w/ small sections of B.F.P.
- Qtz s/w weakly developed.

85

→ 1cm qtz vnlt.

→ 2cm py-carb vnlt

→ 1.5cm qtz vnlt

→ 2x 0.5cm gouge zones

90

ALTERATION: SILICA weak; SERICITE weak; CLAY moderate strong

FRACTURING: weak; Strong

MINERALS: Py-cpy

DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
		< 0.1%	nil			83.7		
		2%	0.10%	85174C		87	0.18	0.009
			0.10%	85175C		90	0.19	0.004

NOT Sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 7 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

DESCRIPTIVE GEOLOGY

90

mod SILICA, str SERICITE, weak CLAY

str FRACTURING

PY-cpy MINERALS

Argillite

Bxx zone

Brxx contact.

91.1m

PMD - Q.F.P. #1

1cm gouge zone

- olive green aphanitic matrix
- 7% qtz phenos
- 4% plag phenos
- alot of vugs where probably plag phenos used to be.
- frting weak except in fault zones
- traces of altered bio phenos.

1cm gouge zone

95

10cm gouge zone
≈ Bxx frags

Bxx zone ≈
PMD ; BFP frags

100

100.6 - 101.7 - Fault zone

101.7m

1cm gouge

P.MD. - T.F.B.R. Dyke

as before (page 6)

this dyke is post above dyke

105

weak to intense

weak

weak

DEPTH (M)	% SULPHIDES	% ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
90	2	0.10	85176		90	0.16	0.003
91.1					91.1		

< 0.10 %

nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 8 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, chlorite | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

DEPTH (M)

105

T.F.B.R. Dyke cont

105.5m

Q.B.F.P. #2 or #1 Dyke.

- no trachytic texture
- 15% phenos - 10% plag
  - 4% qtz
  - 1% bio.
- bio phenos small and chloritically altered

1cm gouge zone

110

weak

weak

112.8 - 120.6 - Breccia - containing frags of - Q.F.P. #1
- Q.B.F.P. #1

115

strong

120

<0.10%

nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 9 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

DEPTH (M)

120

Fault contact

120.7m

Q.F.P. #1

3cm gouge zone -as before

5cm gouge zone

5cm gouge zone.

125

50cm brxx zone

2cm gouge zone

weak

130

30cm brxx zone.

134-134.8 -Brxx Zone

135

< 0.10%

nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE :	SCALE :	PROJECT : Poplar	HOLE No. : PC-71
CASING COLLAR ELEV :	GROUND ELEV. :	DATE STARTED :	PAGE No. 10 OF 15
COORDINATES : N. E.		DATE FINISHED :	REF. TO CLAIM CORNER :
INCLINATION :	AZIMUTH :	TOTAL DEPTH : m	LOGGED BY :

DEPTH (M)	ALTERATION: SILICA / SERICITE / CLAY	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
135		weak (135–150)			Q.F.P. #1 Dyke.				<0.10%	nil				Not Sampled
				Δ Δ	Bxx									
					1cm gauge zone									
140					In bxx zone - Frags are Q.F.P #1									
				Δ Δ	1m bxx zone									
145														
150														

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV : | GROUND ELEV. : | DATE STARTED : | PAGE No. 11 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
150							Q.F.P. #1 Dyke									
						Bxx										
155						1.3m Fault zone										
				weak							< 0.01%	nil				No x Sampled
160																
							7 1cm gouge zone									
165																

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-11

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 12 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
165							Q.F.P. #1 Dyke. cont.									
							→ 1cm gouge									
							→ 1cm gouge.									
170							→ 1.5cm gouge				< 0.10%	nil				Not Sampled
				weak.			→ 10cm brx									
175							→ 1cm gouge									
							→ 15cm gouge									
							→ 1cm gouge									
180																

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 13 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	FRACTURING	MINERALS	GEOLOGY	COMMENTS: DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
180							Q.F.P. #1 Dyke cont									
							10cm gouge									
							10cm gouge.									
							15cm gouge									
185							1cm gouge zone				< 0.10%	nil.				Not sampled
							30cm gouge zone									
190							2cm gouge zone									
							Δ Δ wk bxx									
							Δ Δ wk bxx									
195				weak.												

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-71

CASING COLLAR ELEV : | GROUND ELEV. : | DATE STARTED : | PAGE No. 14 OF 15

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
195					Q.F.P. #1 Dyke cont.									
				A	weakly bxx'd.									
200		weak			1cm gouge zone.				<0.10%	nil				
					1cm gouge zone									
					204.5 - 206.3 m - Bxx zone									
205														
210														

NOT sampled

COMPOSITE DRILL LOG

CORE SIZE :	SCALE :	PROJECT : Poplar		HOLE No. : PC-71	
CASING COLLAR ELEV. :	GROUND ELEV. :	DATE STARTED :		PAGE No. 15 OF 15	
COORDINATES : N. E.		DATE FINISHED :		REF. TO CLAIM CORNER :	
INCLINATION :	AZIMUTH :	TOTAL DEPTH : m		LOGGED BY :	

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
210		weak			Q.F.P. #1 dyke cont				<0.10%	nil				Not Sampled
				Δ Δ	212.6 - E.O.H - Brxx with Q.F.P #1 & QB.F.P #2 frags									
215				Δ Δ										
					218.24m E.O.H									
220														

COMPOSITE DRILL LOG

CORE SIZE : NQ wireline SCALE : 1:100 PROJECT : Poplar HOLE No. : PC-72

CASING COLLAR ELEV.: 923.8m GROUND ELEV.: 923.6m DATE STARTED : Nov. 7, 1981 PAGE No. 1 OF 21

COORDINATES : 6295.8 N. 12399.2 E. DATE FINISHED : Nov. 11, 1981 REF. TO CLAIM CORNER :

INCLINATION : -60° AZIMUTH : 090° TOTAL DEPTH : 309.6 m LOGGED BY : G.L. Holland

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO | limonite

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | | oz/T Ag | Au

0

0 - 0.31 STICK-UP

0.31 - 9.14 OVERBURDEN

9.14m

9.14 - 22.8 BIOTITE - FELDSPAR PORPH.

- alt'n strong - most sections phenos completely destroyed
- greenish - grey color.
- a lot of H/L py unit
- strong sil. salvages around frts + veins
- Qtz s/w mod.
- 15cm gouge comp - 40% phenos - 37% plag → ser = clay ~3% bio → ser.
- 10cm gouge matrix - sil + ser.

mod to strong | strong | weak | weak | strong py-cpy.

2½ - 3%

SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo	oz/T Ag	Au
85177C	10 - 12	0.13	0.002	0.05	0.003
85178C	12 - 15	0.10	0.003		

915.9

COMPOSITE DRILL LOG

CORE SIZE :
SCALE :
PROJECT : Poplar
HOLE No. : PC-72
CASING COLLAR ELEV.:
GROUND ELEV.:
DATE STARTED :
PAGE No. 2 OF 21
COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | CHLORITE
FRACTURING
MINERALS
GEOLOGY
COMMENTS:
AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DEPTH (M) | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

15
- 2x 3cm gouge BIOTITE - FELDSPAR PORPHYRY
- 2cm qtz vn/lt
- Qtz s/w moderate
- 1cm py vn/lt
- 1cm qtz vn/lt
- 19-21 - Alot of hemetite staining
- 5cm gouge zone
- 1cm gouge zone Alt'n strong - phyllic phase
- 10cm gouge.
- 22.8m — sharp contact @ 45° to c.A
- 1cm carb vn/lt
- TRACHYTIC FELDSPAR - BIOTITE RHYODACITE DYKE (T.F.B.R.)
  - color varies from reddish brn to cream
  - cream reflect bleaching
  - friting weak
  - trachytic texture mod to str. - no alignment
  - porphyritic texture - 15% phenos - 13% plag - 2% bio.
  - bio phenos weakly altered (chlorite) to fresh.
  - minor diss hem or magnetite.
  - minor bxx frags present.
30

Depth	Alteration	Fracturing	Minerals	Geology	Drilling Interval	% Core Recovered	% Sulphides	% Estimated Cu	Sample No.	% Sample Recovered	Sample Interval (M)	% Cu	% Mo
15	strong silica, strong sericite, v. weak clay, sec bio., chlorite	strong	Pyepy				3%	0.15%	85179C		15–18	0.10	0.005
20								0.15%	85180C		18–21	0.12	0.008
								0.15%	85181C		21–22.8	0.12	0.002
25	weak. weak weak	weak	hem				<0.1%	nil			22.8–	Not sampled	
30													

924.1

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 3 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: sericite — weak; chlorite — weak

FRACTURING: weak

MINERALS: hem.

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

30

T.E.B.R. Dyke cont.

→ 2cm gouge

32.5 - 33.9 - Brxx - containing Q.F.P. #1 bxx and B.F.P frags. in a gouge matrix

→ 1cm gouge

→ 1cm carb vnlt

35

Periodic frags present - up to 15cm in size

40

→ 1cm carbvnlt

→ F.P. frag

45

< 0.10%

nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 4 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: sericite, chlorite | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

45

T.F.B.R. Dyke cont

sericite: weak → | chlorite: weak → | FRACTURING: weak → | MINERALS: hem | GEOLOGY: 20cm gouge

47.35m Gouge contact @ 80° to c.A

Quartz-Feldspar Porphyry #1

Bxx.

47.3 - 49.2 - bxx - ω QFP #1 frags

50

- olive green color aphanitic matrix
- 20% phenos - 10% qtz
- 10% plag
- plag phenos often plucked out
- fring generally weak.

1cm gouge zone

Bxx zone ~20cm

7cm gouge zone

55

1cm gouge

1cm gouge

7cm bxx zone.

60

FRACTURING: weak.

% SULPHIDES: <0.10%

% ESTIMATED Cu: nil

Not Sampled

COMPOSITE DRILL LOG

CORE SIZE :
SCALE : "
PROJECT : Poplar
HOLE No. : PC-72
CASING COLLAR ELEV.:
GROUND ELEV.:
DATE STARTED :
PAGE No. 5 OF 21
COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

DEPTH (M)	ALTERATION: sericite	ALTERATION: chlorite	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
60						Q.F.P. #1 Dyke									
65			weak			2m Fault zone				<0.00%	nil			Not Sampled	
70						2cm gouge zone									
						wk brxx zone									
75															

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 6 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: sericite	ALTERATION: chlorite	FRACTURING	MINERALS	GEOLOGY	COMMENTS: DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
75						Q.F.P. #1 Dyke									
						→ 2cm gouge									
80			weak			→ 20cm gouge zone				< 0.10%	nil				
85						→ 1cm gouge zone									
						→ 1cm gouge zone									
90															

No X sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 7 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION | FRACTURING | MINERALS | GEOLOGY | COMMENTS : | AVG. CORE REC'Y/HOLE

DEPTH (M) | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

90

Q.F.P. #1 DYKE cont

95

1cm gouge zone

97.8 - 98.8 - Fault zone

1m Fault zone

100

10cm gouge zone

104.5 - 105.4 - Fault zone

90cm Fault zone

105

sericite

chlorite

weak

< 0.10%

nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 8 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION (sericite)	FRACTURING	MINERALS	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS
105					Fault zone — Q.F.P. #1 DYKE cont									
					20cm gouge zone									
					30cm gouge zone									
110		weak			30cm gouge zone				0.10%	nil				Not Sampled
					10cm gouge zone									
115					Bxx zone									
120														

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 9 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION | FRACTURING | MINERALS | GEOLOGY | COMMENTS : | AVG. CORE REC'Y/HOLE

DEPTH (M) | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

120

1cm gouge Q.F.P. #1 Dyke cont

5cm gouge zone

-There is no distinct contact

123.0 - Breccia Zone

-contains fragments of

B.F.P, Q.F.P #1, Q.B.F.P #1

-at the upper contact 90% of

the frags are Q.F.P #1 w

minor B.F.P ; Q.B.F.P #1

125

1cm gouge -strongly cemented silicious

matrix

1cm gouge

1cm gouge

130

131 - fragments are 50% Q.F.P #1

50% B.Q.F.P #1 & minor

B.F.P

2cm gouge

135

FRACTURING: weak

% SULPHIDES: <0.10%

% ESTIMATED Cu: nil

Not sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 10 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION | FRACTURING | MINERALS | GEOLOGY | COMMENTS : | AVG. CORE REC'Y/HOLE | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS

DEPTH (M)

DESCRIPTIVE GEOLOGY

135

BRECCIA cont

136 - fragments - 70% QBFP #1
↓ - 30% Q.F.P

→ 2cm gouge zone

140

140.0 - fragments - 50% Q.F.P. #1
↓ - 50% Q.B.F.P #1

144.0 - fragments - 95% Q.F.P #1
↓ 5% QBFP #1

→ 1cm gouge zone

145

145.0 - Q.F.P. #1 Dyke
- occasional small B.F.P ; QBFP #1 frags present.

→ 1cm gouge zone

147.0 - Weakly brecciated - mostly just rotation of the Q.F.B.P. frags

→ 2cm gouge zone

150

FRACTURING: weak

< 0.1.0 %

nil

No Sample

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 11 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC B/D

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo | | oz/Ton Ag | oz/Ton Au

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo	oz/Ton Ag	oz/Ton Au
150					Q.F.BP.#1 Pyke cont								
					→ 15cm gouge zone.								
					→ 5cm gouge zone								
		weak				< 0.10%	nil		not sampled				
155					→ 1cm gouge zone								
					→ 1cm gouge 156.3m Gouge contact @ 45° to c.A				156.3				78834
					→ 1cm qtz vnlt. BIOTITE - FELDSPAR PORPHYRY								
					→ 20cm gouge zone -alt'n very strong - rare								
					→ 1cm qtz vnlt phenos noted								
					- pale green color.								
					- qtz stw. strong - large vnlts		0.15%	85182C		0.34	0.003		
					→ 2x1cm qtz vnlts - minor hematitic staining				159				
	very strong	very strong											
160					→ 1cm gouge zone.								
		very strong	py - cpy		-alt'n - wk potassic to upper	2 1/2%	0.20%	85183C		0.29	0.002	0.08	<0.003
					→ 10cm qtz vnlt. phyllic phase.								
					162.0 - Alt'n not as strong				162				
	very strong				as before - more phenos present								
					→ 1cm qtz vnlt		0.25%	85184C		0.21	0.001		
165									165				78834

UTAH MINES LTD — 85

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 12 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo, Oz/Ton Ag, Oz/Ton Au

DEPTH (M)

BIOTITE - FELDSPAR PORPHYRY cont

165.5 - 169 - Rock takes on a black color due to the sec bio

- 165: strong silica, strong sericite, moderate clay, strong sec. bio; strong fracturing; strong py - cpy
- 0.7cm qtz vnlt
- 1cm qtz vnlt
- 1.3cm qtz-py vnlt
- Qtz s/w moderately developed
- 1cm gyp vnlt
- 170
- 1cm py-cpy vnlt.
- Alt'n mod to str. - phyllic phase
- 1cm qtz vnlt
- 175
- 2cm gouge zone
- 1.3cm qtz vnlt.
- 1cm qtz vnlt
- 0.8cm py vnlt
- 180

Sample No.	% Sample Recovered	Sample Interval (M)	% Cu	% Mo	Oz/Ton Ag	Oz/Ton Au	% Cu Estimated	% Sulphides
		165						
85185C		165 - 168	0.20	<0.001			0.20%	2½ - 3%
85186C		168 - 171	0.20	<0.001			0.20%	
85187C		171 - 174	0.16	0.001	0.02	<0.003	0.20%	
85188C		174 - 177	0.21	0.001			0.15%	
85189C		177 - 180	0.13	<0.001			0.20%	

7.2.9

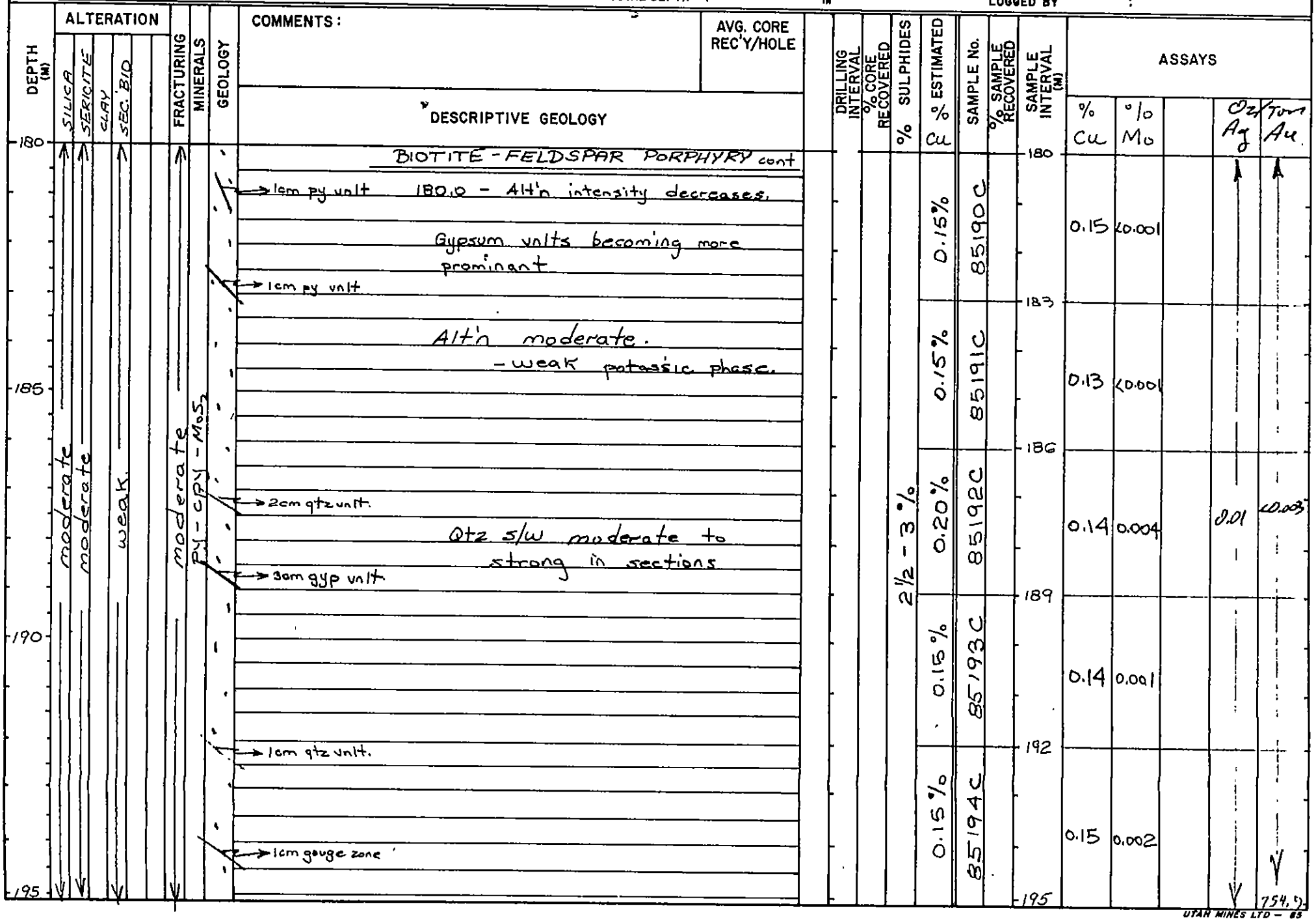
COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 13 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :



UTAH MINES LTD — 65

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 14 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	SILICA	SERICITE	CLAY	SEC BIO	FRACTURING	MINERALS	% ESTIMATED	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
195	1cm qtz vnlt — BIOTITE - FELDSPAR PORPHYRY cont	mod to strong	moderate	weak.	weak	moderate to strong	Py - cpy - MoS2	0.15%	85195C	195	0.15	0.002
	1.5cm qtz vnlt.									198		
	2cm qtz vnlt.											
	1cm gouge zone — Qtz s/w moderately devel.							0.10%	85196C		0.15	0.004
200	1cm carb vnlt.									201		
	Alt'n mod - potassic							0.10%	85197C		0.10	0.002
	1cm gouge zone.									204		
	204 - Alt'n strong - potassic							0.10%	85198C		0.08	0.004
205	1cm qtz-py vnlt									207		
	1.5 cm py-cpy vnlt											
	Numerous H/L py vnlts.							0.15%	85199C		0.10	0.008
	0.9cm qtz vnlt											
	3cm gouge zone											
	1cm qtz vnlt											
210										210		

2½ - 3 %

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 15 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)	SILICA	SERICITE	CLAY	SEC. BIO.	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
210	str			mod				BIOTITE - FELDSPAR PORPHYRY cont			210		
								1cm qtz vnlt					
								1cm qtz vnlt					
								- Qtz S/W weak to moderate	0.10%	852000		0.09	0.004
								0.7cm carb vnlt			213		
								- Numerous H/L py vnlts					
215								1cm gouge zone					
								2cm carb vnlt					
								2cm gouge zone Alt'n mod - potassic phase.	0.10%	852010		0.08	0.004
								1.5cm py vnlt.			216		
									0.10%	852020		0.08	0.006
											219		
220													
									0.10%	852030		0.11	0.004
											222		
								1cm carb vnlt:					
									0.10%	852040		0.05	0.007
225											225		

moderate | moderate | weak | weak | moderate | py - cpy - (MoS2) | 2½ - 3%

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 16 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)

225

BIOTITE-FELDSPAR PORPHYRY cont

moderate | moderate | weak | weak | moderate | PY-cPy

3cm gouge zone

0.5cm py vnlt

irregular contact

228.2m

1cm gouge zone

ARGILLITE

1cm gouge zone

- tan color
- mod silicification around frts and vnlts.
- frting strong

230

moderate to weak | strong | PY-(cPy)

5cm gouge zone

- Alt'n moderate - phyllic phase.

235

4cm gouge

1cm gouge

wk brxx contact @ 80°+/- CA

238.3m

weak

2x1cm gyp vnlts.

TRACHYTIC FELDSPAR BIO Rhyodacite Dyke.

240

DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
		3%	0.10%	85205C		225	0.06	0.003
						228		
			<0.10%	85206C			0.03	0.002
						231		
		1/2 %	<0.10%	85207C			0.02	0.002
						234		
			<0.10%	85208C			0.03	0.002
			<0.10%	85209C		237	0.01	0.001
		<0.10%	nil			238.3	Not sampled	

COMPOSITE DRILL LOG

CORE SIZE :
SCALE :
PROJECT : Poplar
HOLE No. : PC-72
CASING COLLAR ELEV. :
GROUND ELEV. :
DATE STARTED :
PAGE No. 17 OF 21
COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

COMMENTS :

AVG. CORE REC'Y/HOLE

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	SEC BIO	FRACTURING	MINERALS	DESCRIPTIVE GEOLOGY	% SULPHIDES	% Cu ESTIMATED	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
240–246.6		weak			weak		T.F.B.R. Dyke cont. -green to brown color - strong trachytic texture -unaligned - 15% phenos - 13% plag ⇒ ser 2% bio ⇒ ser →15cm gouge. 246.6m Gouge contact	<0.10%	nil		246.6	Not sampled	
246.6–250.5	strong	strong			intense	PY-(FP)	MIXTURE OF ARGILLITE AND FELDSPAR PORPHYRY →3cm gouge zone. →10cm gouge zone →10cm gouge zone →20cm gouge zone 250.5m Gouge contact	2%	<0.10%	85210C		0.02	0.002
250.5–252.9		wk			weak		→1cm gouge zone T.F.B.R. Dyke →1cm gouge zone 252.9m Gouge contact @ 65°	<0.10%	nil		252.9	Not sampled	
252.9–255	str	str.			str.	PY-CPY	BIOTITE-FELDSPAR PORPHYRY. →1cm carb. vnlt →1.5cm qtz vnlt	2½%	0.10%	85211C	255	0.17	0.003

Column headings also printed: DRILLING INTERVAL, % CORE RECOVERED, % SAMPLE RECOVERED, GEOLOGY, ASSAYS (blank).

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 18 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

255

BIOTITE - FELDSPAR PORPHYRY cont

- 3cm gouge zone
- 1cm qtz vn/t
- 1.5cm qtz vn/t
- 1cm qtz-py vn/t

Qtz s/w moderate

- 1.5cm carb vn/t
- 18cm gouge zone
- 1cm qtz vn/t
- 1cm gouge zone.
- 2cm qtz vn/t

Alt'n strong - phyllic

- 0.5m Fault zone
- 2cm carb vn/t
- 1cm qtz vn/t

264 - Major Fault zone
- probably movement (alteration)
- rock turns from greenish to black across fault

Alt'n strong - potassic

Qtz s/w weak

Sample No.	Sample Interval (m)	% Cu	% Mo
85212C	255–258	0.18	0.002
85213C	258–261	0.14	0.002
85214C	261–264	0.17	0.005
85215C	264–267	0.12	0.002
85216C	267–270	0.13	0.001

% Cu: 0.10% | 0.10% | 0.10% | 0.10% | 0.10%

% SULPHIDES: 2-4%

ALTERATION: strong (SILICA) | strong (SERICITE) | weak to moderate (CLAY) | moderate (SEC. BIO)

FRACTURING: strong py>cpy

MINERALS

GEOLOGY

210

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 19 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO

DEPTH (M) | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

270

BIOTITE - FELDSPAR PORPHYRY cont

- 2cm qtz vnlt.
- 1.5cm carb vnlt
- 1cm carb vnlt

* strong envelopes around frts - sil ser

mod

275

- Qtz s/w starting to pick-up weak to moderate.

strong

strong PY-CPY

- 2cm qtz vnlt

Alt'n strong - potassic

2½ - 3 %

- 1cm carb vnlt
- 1cm carb vnlt

280

Depth (M)	% Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
270	0.10 %	852170		270	0.13	0.002
273	0.15 %	852180		273	0.13	0.002
276	0.15 %	852190		276	0.15	0.003
279	0.15 %	852200		279	0.09	0.005
282	0.15 %	852210		282	0.11	0.002
285				285		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-72

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 20 OF 21

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % Cu ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

BIOTITE-FELDSPAR PORPHYRY cont.

- 285
- 1cm qtz vn/t w py ± cpy.
- 1.6cm qtz vn/t
- 1cm gouge w carb.
- * Sil ± ser envelopes well developed along frts
- 290
- carb vn/t cuts qtz vn/t.
- 1cm qtz vn/t.
- Alt'n strong - potassic
- 1cm qtz vn/t
- 1cm qtz vn/t.
- Qtz s/w weak to moderate
- 295
- 5cm carb vn/t w qtz.
- 300

Alteration: strong; moderate to strong; strong; moderate; strong

Fracturing: strong

Minerals: py-cpy

% Sulphides: 2½ - 3%

Sample No.	Sample Interval (M)	% Cu Estimated	% Cu	% Mo
85222C	285	0.20%	0.13	0.015
85223C	288	0.15%	0.10	0.002
85224C	291	0.10%	0.10	0.004
85225C	294	0.10%	0.09	0.002
85226C	297	0.10%	0.08	0.002
	300			

COMPOSITE DRILL LOG

CORE SIZE :
SCALE :
PROJECT : Poplar
HOLE No. : PC-72
CASING COLLAR ELEV.:
GROUND ELEV.:
DATE STARTED :
PAGE No. 21 OF 21
COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

BIOTITE - FELDSPAR PORPHYRY

1cm qtz vn/lt.

1cm qtz-carb vn/lt

Alt'n strong - potassic.

2x1.7cm gouge zones ⊙ carbonate

Qtz s/w weak to mod

1cm qtz-carb vn/lt

309.6 E.O.H.

DEPTH (M)	ALTERATION: SILICA	SERICITE	CLAY	SEC. BIO	FRACTURING	MINERALS	GEOLOGY	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
300	strong	mod-str	strong	strong	strong	Py-cpy				2½-3%	0.15 %	85227C		300	0.09	0.002
303											0.60%	85228C		303	0.07	0.002
306	strong	strong	moderate	strong							0.15%	85229C		306	0.08	0.008
309.6	mod-str.													309.6		
310																

COMPOSITE DRILL LOG

CORE SIZE : NQ wireline | SCALE : 1:100 | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: 922.7m | GROUND ELEV.: 922.7m | DATE STARTED : November 11, 1981 | PAGE No. 1 OF 22

COORDINATES : 5996.5 N. 12,498.7 E. | DATE FINISHED : November 14, 1981 | REF. TO CLAIM CORNER :

INCLINATION : -090° | AZIMUTH : — | TOTAL DEPTH : 327.97 m | LOGGED BY : G. L. Holland

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M)

ASSAYS: % Cu | % Mo

0

0-0.31 stick-up

0.31 - 9.14 OVERBURDEN

5

9.14m

MIXED SECTIONS OF ARGILLITE AND BIOTITE-FELDSPAR PORPH.

10

strong | strong | strong | py-cpy-hem

→ 1.3cm qtz vnlt 9.1 - 13.3 - B.F.P

→ 1cm qtz vnlt

→ 0.8cm py vnlt

13.3 - 14.5 - Argillite

→ 1cm gouge 14.5 - 15.7 - B.F.P

→ 1cm gouge

15

Sample No.	Sample Interval (M)	% Sulphides	% Estimated Cu	% Cu	% Mo
852230C	9.14 - 12	3-5%	<0.10%	0.06	0.002
852231C	12 - 15	<0.10%	<0.10%	0.10	0.003

COMPOSITE DRILL LOG

CORE SIZE :
SCALE :
PROJECT : Poplar
HOLE No. : PC-73
CASING COLLAR ELEV.:
GROUND ELEV.:
DATE STARTED :
PAGE No. 2 OF 22
COORDINATES : N. E.
DATE FINISHED :
REF. TO CLAIM CORNER :
INCLINATION :
AZIMUTH :
TOTAL DEPTH : m
LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO.
FRACTURING
MINERALS
GEOLOGY
COMMENTS:
AVG. CORE REC'Y/HOLE
DESCRIPTIVE GEOLOGY
DEPTH (M)
DRILLING INTERVAL
% CORE RECOVERED
% SULPHIDES
% ESTIMATED Cu
SAMPLE No.
% SAMPLE RECOVERED
SAMPLE INTERVAL (M)
ASSAYS: % Cu, % Mo

SILICA: moderate - strong
SERICITE: moderate to strong
CLAY:
SEC. BIO.: str. / mod / weak
FRACTURING: strong to v. strong
MINERALS: py - cpy
GEOLOGY: mod py - cpy - lam

B.F.P - Argillite Interphase
15.7m

Argillite

- tan color
- strong to very strong fnting
- strong sil.; ser. envelopes on fnts
- Qtz s/w weak
- minor H/L py veins.

0.8cm py vein
1cm gouge
1cm gouge
0.8cm qtz vein
0.8cm carb vein
2cm gouge zone
1cm gouge zone
0.8cm carb vein
10cm Gouge zone.

27.6m Gouge contact

BIOTITE - FELDSPAR PORPHYRY

- greenish-grey color
- crowded porphyritic texture.
- Qtz s/w weak

0.8cm carb vein

DEPTH (M)	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
15							15		
				<0.10%	85232C			0.05	0.003
18							18		
				<0.10%	85233C			0.09	0.003
21			2½ - 3%				21		
				<0.10%	85234C			0.09	0.002
24							24		
				<0.10%	85235C			0.07	0.003
27							27		
			3%	0.10%	85236C			0.07	0.002
30							30		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 3 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

30

BIOTITE- FELDSPAR PORPHYRY cont

- composition
- 15% phenos - 40% plag → ser → clay
- 5% bio → ser.
- matrix - silica + sericite
- bio phenos are relics
- alt'n: moderate but complete
- groundmass completely altered
- phenos completely altered but distinct

SILICA: strong | SERICITE: moderate | CLAY: weak | SEC. BIO:

FRACTURING: moderate | MINERALS: PY - (cpy) | GEOLOGY:

→ 0.8cm carb. vnlt

→ 2cm carb vnlt

% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo
3%	<0.10%	85237C		30	0.06	0.001
				33		

35

35.1m sharp irregular contact.

- fring weak to moderate
- Qtz s/w weak

% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo
	<0.10%	85238C			0.06	0.001

Argillite.

2m Fault zone

SILICA: strong | SERICITE: moderate | CLAY: moderate | SEC. BIO:

FRACTURING: strong | MINERALS: PY - (cpy) | GEOLOGY:

% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo
2½-3%	<0.10%	85239C		36	0.08	0.002
				39		

sharp contact @ 30° to C.A.

39.2m

BIOTITE-FELDSPAR PORPHYRY

40

→ 1cm carb. vnlt

as before

SILICA: strong | SERICITE: moderate | CLAY: weak | SEC. BIO:

FRACTURING: moderate | MINERALS: PY - (cpy) | GEOLOGY:

→ 2x1cm carb vnlts

% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo
3%	<0.10%	85240C			0.01	<0.001
				42		

42.3m irregular contact

→ 2cm gouge zone.

ARGILLITE

SILICA: moderate | SERICITE: moderate | CLAY: weak | SEC. BIO:

FRACTURING: strong | MINERALS: PY - (cpy) | GEOLOGY:

as before

% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo
2½ %	<0.10%	85241C			0.09	0.001
				45		

→ 3cm gouge zone

45

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 4 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
45	moderate →	strong →	py-(cpy)	2cm gouge zone	ARGILLITE cont.				45		
				1cm gouge zone							
				1.5cm py-hem vn H							
				2.5cm py-hem vnlt		2%	<0.10%	85242C		0.02	0.002
				1cm py-hem vnlt							
				1cm gouge zone.							
				1cm gouge zone.	48.0 - 49.1 - P.M.D - Q.F.B.P. #1	<0.10%			48		
				3cm gouge zone	49.1m BIOTITE - FELDSPAR PORPH						
				2cm gouge zone							
50	strong → moderate → weak	wk → moderate	py-(cpy)	1cm py vnlt.	as before.	2½-3%	<0.10%	85243C		0.04	0.002
					Qtz s/w weak.						
					Phyllic alt'n.			85244C	51	0.06	0.001
				10cm gouge zone							
					Gouge contact @ 20° to C.A						
					54.2m Q.F.B.P. #1 Dyke				54.2		
55		weak		Carb. vnlts		<0.10%	nil			Not sampled	
				1cm carb vnlt.	Gouge contact @ 20° to C.A						
					57.7m				57.8		
	strong → mod → weak	mod. → weak	py-(cpy)	2cm gouge zone	BIOTITE-FELDSPAR PORPHYRY	3%	<0.10%	85245C		0.05	<0.001
					as before						
60				0.8cm qtz vnlt							

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 5 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SER. BID.

DEPTH (M) | FRACTURING | MINERALS | GEOLOGY | COMMENTS : | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % Cu ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

60

BIOTITE-FELDSPAR PORPHYRY cont.

→ 1cm carb vnlt

→ 1cm qtz vnlt.

→ 2cm qtz-py vnlt

* minor H/L hematite vnlts

→ 1cm qtz vnlt.

→ 1cm qtz vnlt — Qtz s/w weak.

65

Alt'n strong - phyllic.

→ 2cm py vnlt

→ 1cm gouge zone

→ 2cm qtz-py vnlt

→ 2cm qtz-py-vnH

71.1m — irregular contact

Argillite

- tan color
- strong frting - envelopes ground frts.

74.4m — irregular contact

B.F.P. cont

75

DEPTH (M)	FRACTURING	MINERALS	GEOLOGY	% SULPHIDES	% Cu ESTIMATED	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
60	moderate	py-hem-carb		2½-3%	<0.10%	85246C		60–63	0.05	0.002
63					<0.10%	85247C		63–66	0.06	0.002
66					<0.10%	85248C		66–69	0.06	0.001
69					<0.10%	85249C		69–72	0.10	0.002
72	strong	py-carb		1½%	<0.10%	85250C		72–75	0.10	0.002
75										

ALTERATION: strong (SILICA) | moderate to strong (SERICITE) | weak (CLAY) | mod (SER. BID.) | mod

UTAH MINES LTD — 84

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 6 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

BIOTITE - FELDSPAR PORPH. cont.

- 1cm gouge zone
- 2cm gouge zone

Qtz s/w beginning to increase

- 2cm qtz-py vnlt

178.5 - some zones of very strong sericitic ± siliceous alt'n. - masks phenos

- 0.6 cm qtz vnlt.
- 1cm hem-qtz vnlt

Alt'n strong - phyllic

- 1cm qtz vnlt.

* Alot of H/L hemetite vnlts. - up to 1% diss. hem

Qtz s/w moderate

- 1cm qtz vnlt.
- 2cm qtz vnlt
- 1cm gyp vnlt.

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo
75	strong silica, mod-str sericite, weak clay, sec. bio	strong	Py-hem-(cpy)	2½-3%	<0.10%	85251C		75	0.06	0.002
								78		
80					<0.10%	85252C			0.09	0.002
								81		
					<0.10%	85253C			0.05	0.003
								84		
85					<0.10%	85254C			0.03	0.003
								87		
					0-10%	85255C			0.05	0.001
90								90		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 7 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	ASSAYS % Cu	% Mo
90	strong silica, strong sericite	strong to v strong	py-hem-(cpy)	→ 1cm hem-qtz vnlt	BIOTITE - FELDSPAR PORPH cont.	2½ - 3%	0.10%	85256C	90	0.03	<0.001
				→ 1cm qtz vnlt	Qtz s/w moderate.						
				→ 0.2cm py vnlt							
				→ 1cm gyp vnlt.	Alt'n strong - phyllic						
95				→ 1cm gyp vnlt			0.10%	85257C	93	0.04	0.001
				→ 1cm carb vnlt							
				→ 1cm gouge zone							
				→ 1cm gouge zone							
				→ 2cm gouge zone							
				→ 10cm gouge zone	98.5m Gouge contact @ 35° to c.A		<0.10%	85258C	96	0.03	0.002
					ARGILLITE						
				→ 1cm gouge.	- greenish color						
100	mod to strong, strong	strong to v strong	py-hem-(cpy)	→ 0.8cm py. vnlt	- f-t-ing strong to v strong	3 - 4%	<0.10%	85259C	99	0.05	0.002
				→ 1cm gouge zone	- Alt'n strong - phyllic.						
					- Qtz s/w weak						
				→ 1cm gouge zone			<0.10%	85260C	102	0.05	0.003
				→ 1cm py vnlt							
105				→ 2cm qtz vnlt					105		

COMPOSITE DRILL LOG

CORE SIZE :
CASING COLLAR ELEV.:
COORDINATES : N. E.
INCLINATION : AZIMUTH :
SCALE :
GROUND ELEV.:
PROJECT : Poplar
DATE STARTED :
DATE FINISHED :
TOTAL DEPTH : m
HOLE No. : PC-73
PAGE No. 8 OF 22
REF. TO CLAIM CORNER :
LOGGED BY :

ALTERATION: SILICA — mod-str. → moderate; SERICITE — strong → moderate to strong; weak

FRACTURING: strong → intense → strong

MINERALS: PY - hem ± cpy

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

105 — 2cm qtz vnlt. ARGILLITE cont.

106 - 108.1 - Fault zone

Fault zone

108.1m

2cm qtz vnlt BIOTITE - FELDSPAR PORPHYRY

1.5cm carb vnlt - pale green - white color

1cm qtz vnlt - crowded porphyry

110 - comp - 60% phenos - 45% plag ⇒ ser ⇒ clay, 5% bio ⇒ ser

matrix - sil ⇒ ser

1cm qtz vnlt

6cm carb vnlt

Salvages developed around fractures.

4cm qtz-hem vnlt.

1cm qtz vnlt.

115

1cm py-qtz vnlt

0.5cm hem vnlt

1cm carb vnlt

3cm qtz vnlt ± py.

120

DRILLING INTERVAL

% CORE RECOVERED

% SULPHIDES: 3-4% (105–108); 2½ % (108–120)

% ESTIMATED Cu: <0.10% (105–108); <0.10% (108–111); <0.10% (111–114); <0.10% (114–117); <0.10% (117–120)

SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
852G1C		105	0.08	0.003
852G2C		108	0.06	0.004
852G3C		111	0.06	0.001
852G4C		114	0.09	0.001
852G5C		117	0.13	0.002
		120		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 9 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA — moderate; SERICITE — moderate to strong; CLAY — weak; SEC. BIO.

FRACTURING: strong

MINERALS: Py-hem-(Epy)

GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
120	→ 0.7cm carb BIOTITE-FELDSPAR PORPHYRY cont.	2½-3%	0.10%	852666	120	0.13	<0.001
	→ 1cm qtz-hem vnlt						
	Strong salvages developed around frts - up to 1cm						
	→ 0.7cm carb vnlt.				123		
	Numerous hem vnlts.		0.15%	852667		0.09	0.001
125	→ 2x2cm py vnlts Qtz s/w weak to moderate.						
	→ 1.8cm qtz vnlt ⊙ hem.				126		
			0.10%	852668		0.13	<0.001
	→ 1cm carb vnlt.						
	Alt'n moderate - phyllic.						
	→ 1.3 cm carb vnlt				129		
			<0.10%	852669		0.10	<0.001
	→ 0.7cm qtz vnlt						
130					132		
			0.10%	852670		0.11	<0.001
135					135		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 10 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BID.

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
135	1cm hem vnlt. BIOTITE - FELDSPAR PORPH. cont 1.5cm qtz-py vnlt.			135		
	Qtz s/w weak to moderate	0.10%	85271C		0.13	<0.001
				138		
	20cm gouge zone 2cm qtz vnlt.	0.10%	85272C		0.13	<0.001
140				141		
	4cm gouge zone 0.7cm carb. vnlt.	0.10%	85273C		0.12	<0.001
	2cm qtz vnlt Alt'n moderate - phyllic 1cm gyp vnlt			144		
145		0.15%	85274C		0.10	<0.001
	1cm qtz vnlt 0.7cm py vnlt.			147		
	20 cm qtz vnlt. 10 cm gouge zone 4 cm gouge zone	0.15%	85275C		0.11	<0.001
150				150		

moderate to strong PY-hem-(CPY)

moderate to strong

weak

strong

2½-3%

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COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 11 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC. BIO., CHLORITE | FRACTURING | MINERALS | GEOLOGY

COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

DEPTH (M)

150

1cm gougezone BIOTITE-FELDSPAR PORPHYRY cont

1cm qtz vnlt

Qtz s/w weak

1cm gougezone.

Alt'n mod - phyllic

155

156.0m sharp contact @ 30° to c.A

TRACHYTIC FELDSPAR BIOTITE PORPHYRY DYKE

- pale green color.
- strong trachytic texture
- 20% phenos - 15% plag → ser.
  5% bio → chl.
- minor frags present
- minor hematite staining of fspars.

160

165

ALTERATION: moderate SILICA, strong SERICITE, weak CLAY, weak SEC. BIO., weak CHLORITE

FRACTURING: strong Py-chem-ccpy, weak

MINERALS

GEOLOGY

DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
		2½-3%	0.20%	85276C		150		
							0.13	<0.001
						153		
			0.15%	85277C			0.11	<0.001
		<0.10%	nil			156		

No x sampled

COMPOSITE DRILL LOG

CORE SIZE :
CASING COLLAR ELEV.:
COORDINATES : N. E.
INCLINATION :
SCALE :
GROUND ELEV.:
AZIMUTH :
PROJECT : Poplar
DATE STARTED :
DATE FINISHED :
TOTAL DEPTH : m
HOLE No. : PC-73
PAGE No. 12 OF 22
REF. TO CLAIM CORNER :
LOGGED BY :

ALTERATION | FRACTURING | MINERALS | GEOLOGY | COMMENTS : | AVG. CORE REC'Y/HOLE | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (m) | ASSAYS

DEPTH (m)

DESCRIPTIVE GEOLOGY

165

1cm gauge P.M.D. T.F.B.R. Dyke cont.

1cm gouge zone

170

175

1cm gouge zone

180

sericite: weak (plag phenos)

chlorite: weak (bio phenos)

FRACTURING: weak

% SULPHIDES: <0.10%

% ESTIMATED: nil

ASSAYS: Not Sampled

COMPOSITE DRILL LOG

CORE SIZE :
CASING COLLAR ELEV.:
COORDINATES : N. E.
INCLINATION :
SCALE :
GROUND ELEV.:
AZIMUTH :
PROJECT : Poplar
DATE STARTED :
DATE FINISHED :
TOTAL DEPTH : m
HOLE No. : PC-73
PAGE No. 13 OF 22
REF. TO CLAIM CORNER :
LOGGED BY :

ALTERATION: sericite — weak; chlorite — weak
FRACTURING — weak
MINERALS
GEOLOGY
COMMENTS:
AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DEPTH (M)

180 — P.M.D. - T.F.B.R. Dyke cont.

≥1cm gouge zone.

185 — ≥10cm gouge zone.

Bxx zone.

≥1cm qtz vn/lt

190 — ≥1cm gouge zone.

195

DRILLING INTERVAL
% CORE RECOVERED
% SULPHIDES — <0.10%
% ESTIMATED Cu — nil
SAMPLE No.
% SAMPLE RECOVERED
SAMPLE INTERVAL (M)
ASSAYS: % Cu — not sampled; % Mo — not sampled

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 14 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC BIO., CHLORITE | FRACTURING | MINERALS | GEOLOGY

COMMENTS:

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

PMD - T.F.B.R. Dyke cont

195

10cm gouge zone

50cm gouge - bxx zone

TF.BR has alot of very similar characteristics as the Q.F.B.P. - probably is a variation

1cm gouge zone

1m gouge zone

bxx-gouge zone

199.0 Q.F.B.P #1

200

10m gouge zone

2cm gouge zone

<0.10%

nil

WEAK

WEAK

WEAK

Not sampled

205

10cm gouge zone.

10cm gouge zone

40cm bxx zone

210

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV. : | GROUND ELEV. : | DATE STARTED : | PAGE No. 15 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO | CHLORITE

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
210	weak (phenos)	weak			PMD - ~~F.F.B.R.~~ Dyke cont. Q.F.B.P. #1						
					→ 1cm gouge zone.						
215	weak (phenos)	weak			→ 1cm gouge zone.	<0.10%	nil		N/X Sampled		
220	moderate / moderate / weak	moderate	py-cpy-hem		221.5m sharp contact @ 30° to CA BIOTITE-FELDSPAR PORPH. → 1cm qtz vnlt → 1.5 cm qtz vnlt → 1cm gyp. vnlt - crowded porphyry - comp - 50% phenos - 45% plag → ser - 5% bio → ser ± sec. bio - matrix - sil ± ser. - qtz s/w moderately developed - minor H/L hem vnlts. - alt'n mod - potassic	2½%	0.30%	25278C	221.5 – 225	0.17	<0.001
225											

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 16 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC. BIO. | CHLORITE

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu | % Mo

DEPTH (M)	ALTERATION	FRACTURING	MINERALS	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
225	moderate	moderate	cpy-hem-py		2x1.5cm qtz vnlt. BIOTITE - FELDSPAR PORPHYRY cont				225		
					Bxx						
					225.8 - 226.3 - Bxx zone. w Q.F.P #1						
					1cm gouge zone. and B.F.P frags in a green s/l matrix		0.25%	25279C		0.17	<0.001
					1cm gyp vnlt.						
									228		
230	weak to moderate	moderate	cpy-hem-py	Bxx zone	229 - 230.1 - Bxx zone - as above.	2-2½	0.25%	25280C		0.26	0.002
					1cm gouge zone						
					100cm qtz vnlt w cpy : hem						
					Qtz s/w moderate.						
					3x2cm qtz vnlt						
									231		
					232.9m contact @ 70° to C.A.		0.10%	25281C		0.16	<0.001
					PMD - T.B.F.P Dyke						
					-strong trachytic texture						
					-purple grn color						
					-15% phenos -12% plag -3% bio	<0.10%					
235	weak	weak	cpy-hem-py		235.2m bxx contact @ 40° to CA.				234		
					1cm gouge BIOTITE - FELDSPAR PORPHYRY		0.10%	25282C		0.14	<0.001
					as before.						
						1½-2%			237		
	mod to strong	mod to strong	hem-cpy-py		1cm qtz vnlt. Qtz s/w moderate.		0.25%	25283C		0.22	<0.001
240					10cm bxx zone.				240		

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 17 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO | CHLORITE | Sec Kspar | FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

240

BIOTITE - FELDSPAR PORPHYRY cont.

1.5cm qtz vnlt

1cm qtz-hem vnlt. Numerous H/L hem vnlts

-up to 2% hem in rock.

0.8cm qtz-hem vnlt

2cm hem-qtz vnlt

Qtz s/w moderate

1cm gouge zone

Alth strong - inner potassic

245

1cm cpy vnlt & qtz ± hem

1cm gouge zone

1cm gouge zone

1cm qtz vnlt.

10cm gouge zone

1cm qtz vnlt

1cm gouge zone.

250

251.1 - 251.8 Brxx zone

Bxx zone

251.8 - 252.3 - T.F.B.R Dyke.

Dyke @ 45° to c.a

255

254.8m

SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	% Cu	% Mo	% ESTIMATED Cu	% SULPHIDES	% CORE RECOVERED	DRILLING INTERVAL
		240						
85284C			0.23	<0.001	0.30%			
		243						
85285C			0.26	<0.001	0.30%	2½ - 3%		
		246						
85286C			0.20	0.002	0.30%			
		249						
85287C			0.17	0.002	0.25%			
		252						
85288C			0.13	0.001	0.35%			
		254.8						

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 18 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC BIO, SEC KSPAR | FRACTURING | MINERALS | GEOLOGY

COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

255

PMD - T.F.B.R. DyKe

-dk brn color

1cm gouge zone

- strong trachytic texture.

- 15% phenos - 13% plag

2% bio

259 - 261.6m - Fault zone.

at 45° to C.A

260

Fault zone

FRACTURING: weak → intense → weak

265

1cm gouge zone

Gouge contact.

10cm gouge 267.8m

BIOTITE-FELDSPAR PORPHYRY

as before

270

ALTERATION: mod → strong → weak

FRACTURING: strong

MINERALS: hem-py-(cpy)

% SULPHIDES: < 0.10% | 2%

% ESTIMATED Cu: nil | 0.10%

SAMPLE No.: 85289C

SAMPLE INTERVAL (M): 267.8

Not sampled

ASSAYS: % Cu 0.14 | % Mo <0.001

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 19 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC BIO, SEC KSPAR | FRACTURING | MINERALS | GEOLOGY

COMMENTS: | AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
270	BIOTITE-FELDSPAR PORPHYRY cont			270		
	1cm qtz vnlt					
	1cm qtz vnlt					
	1cm gouge zone.	0.10%	85290C		0.14	0.002
	27310 - 275.54 - Core ground			273		
	Core lost - core springs failed and could not retrieve core.	0.30%	85291C		0.21	0.002
275	- Up to 2% hem present					
	2cm qtz vnlt			276		
	10cm bxx zone					
	Alt'n strong - inner potassic	0.35%	85292C		0.24	0.002
	4cm qtz vnlt					
	8cm qtz-hem vnlt					
	1cm py vnlt					
	1cm gyp vnlt					
	1cm qtz vnlt			279		
	1cm qtz vnlt					
280	Qtz s/w moderate.	0.35%	85293C		0.15	0.003
	6cm qtz vnlt					
	0.8cm qtz vnlt					
				282		
	1cm py-qtz vnlt.	0.35%	85294C		0.15	0.001
285				285		

DRILLING INTERVAL | % CORE RECOVERED: 2½-3%

FRACTURING: strong

MINERALS: hem-cpy-py

GEOLOGY: strong silica, weak sericite, weak to moderate clay, weak to moderate sec bio, strong sec kspar

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 20 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA, SERICITE, CLAY, SEC BIO, SEC. KSPAR | FRACTURING | MINERALS | GEOLOGY | COMMENTS: | AVG. CORE REC'Y/HOLE | DESCRIPTIVE GEOLOGY | DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | ESTIMATED | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS: % Cu, % Mo

285

→ 1cm qtz-hem vnlt BIOTITE - FELDSPAR PORPHYRY cont

→ 2cm qtz vnlt

→ 1.2cm qtz vnlt Qtz s/w moderately devel

→ 0.5cm py vnlt.

→ 1cm qtz vnlt

Alt'n strong - inner potassic

→ 18cm bxx zone.

→ 1cm qtz vnlt

290

→ Bxx. 290.8 - 291.1 - Breccia

→ 1cm qtz vnlt

→ 1cm gouge zone.

→ 1cm gouge zone. 293.6m Gouge contact @ 36° to c.A

Quartz - Feldspar Porphyry #1

295

- olive green color
- 15% phenos - 8% qtz
- 7% plag + ser.
- aphanitic matrix

→ 10 cm gouge zone.

300

→ 10cm gouge zone.

Depth (M)	Alteration	Fracturing	Minerals	Geology	Drilling Interval	% Core Recovered	% Sulphides	Estimated	Sample No.	% Sample Recovered	Sample Interval (M)	% Cu	% Mo
285	strong silica, weak sericite, weak (phenos)	strong	hem-cpy-py	BIOTITE - FELDSPAR PORPHYRY cont			2½-3%	0.30%	85295C		285	0.18	0.002
288	weak to moderate clay, moderate sec. kspar			Alt'n strong - inner potassic				0.35%	85296C		288	0.15	0.003
291				Breccia 290.8 - 291.1				0.30%	85297C		291	0.17	0.001
293.6		weak.		Quartz - Feldspar Porphyry #1			<0.10%	nil			293.6	Not sampled	

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COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 21 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

DEPTH (M)	ALTERATION: SILICA	ALTERATION: SERICITE	ALTERATION: CLAY	ALTERATION: SEC BIO	ALTERATION: SEC KSPAR	FRACTURING	MINERALS	GEOLOGY	COMMENTS: DESCRIPTIVE GEOLOGY	AVG. CORE REC'Y/HOLE	DRILLING INTERVAL	% CORE RECOVERED	% SULPHIDES	% ESTIMATED Cu	SAMPLE No.	% SAMPLE RECOVERED	SAMPLE INTERVAL (M)	ASSAYS % Cu	ASSAYS % Mo
300		weak				weak			P.M.D. - Q.F.P. #1 Dyke										
									3cm gouge zone										
													<0.10%	nil				Not sampled	
									304.7m sharp contact @ 70° to C.A										
305	strong		moderate		moderate				BIOTITE-FELDSPAR PORPHYRY								304.7		
									QFLP frags										
		weak							- crowded porphyry										
									1cm qtz vnlt										
									- 50% phenos - 42% plag > ser										
									8% bio > sec. bio > ser.										
									- matrix - silica + sec Kspar.										
									Alt'n strong - inner potassic					0.25%	85298C			0.15	0.001
									1cm qtz vnlt										
310						strong	hem-py-cpy		1.5cm qtz vnlt				2-2½%				308		
									310.6 - Alt'n decrease					0.30%	85299C			0.22	<0.001
									1cm qtz vnlt								311		
									Bxx. Alt'n mod - potassic										
									311.7-312 - Bxx - Q.F.P #1, B.F.P. &					0.30%	85300C			0.21	0.001
									QBFP frags										
									1cm gouge										
									314.1 - Alt'n strong - inner potassic.								314		
315	str	wk	mod	mod					2cm qtz-py vnlt.										

COMPOSITE DRILL LOG

CORE SIZE : | SCALE : | PROJECT : Poplar | HOLE No. : PC-73

CASING COLLAR ELEV.: | GROUND ELEV.: | DATE STARTED : | PAGE No. 22 OF 22

COORDINATES : N. E. | DATE FINISHED : | REF. TO CLAIM CORNER :

INCLINATION : | AZIMUTH : | TOTAL DEPTH : m | LOGGED BY :

ALTERATION: SILICA | SERICITE | CLAY | SEC BIO | SEC KSPAR

FRACTURING | MINERALS | GEOLOGY

COMMENTS :

AVG. CORE REC'Y/HOLE

DESCRIPTIVE GEOLOGY

DRILLING INTERVAL | % CORE RECOVERED | % SULPHIDES | % ESTIMATED Cu | SAMPLE No. | % SAMPLE RECOVERED | SAMPLE INTERVAL (M) | ASSAYS % Cu | % Mo

DEPTH (M)	DESCRIPTIVE GEOLOGY	% ESTIMATED Cu	SAMPLE No.	SAMPLE INTERVAL (M)	% Cu	% Mo
315	BIOTITE - FELDSPAR PORPHYRY cont			315		
		0.40%	85301C		0.21	<0.001
	→1.5cm qtz-py vnlt Alt'n very strong - inner potassic			317		
	→2cm qtz vnlt Qtz s/w strong.	0.35%	85302C		0.20	<0.001
320	→2cm qtz vnlt			320		
	→1cm qtz vnlt.	0.30%	85303C		0.23	0.004
	→1cm qtz vnlt					
	→2cm qtz vnlt			323		
	→1cm gyp vnlt.	0.40%	85304C		0.25	0.003
325	→2cm qtz-hem vnlt			326		
	→1cm py vnlt.	0.35%	85305C		0.23	<0.001
	→1cm qtz 327.97m End of Hole.					
330						

2-2½%

very strong / weak — strong hem-cpy-py

moderate / strong / weak — moderate

mod / mod