APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 3 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

24

OCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												a				1			1		×											
												a				1			1		×											
									-10	VCS,t	⋇⋇ 871.8 872.6 VOLCANICLASTIC SEDIMENT,	a				1			1		×										
									-20		talcose volcaniclastic @ 10-20 degrees	<=.25% Py																			
											to core axis	<=.25% Py																			
												<=.25% Py																				
										R	⋇⋇ 872.6 881.6 RHYOLITE	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-20	VCS/GW	⋇⋇ 881.8 894.0 VOLCANICLASTIC SEDIMENT/	<=.25% Py																			
									-90		GRAYWACKE, greenish-gray, calcite	<=.25% Py																			
											veinlets, possibly graded and convoluted	<=.25% Py																			
											beds: beds @ 20 to 90 degrees to core	<=.25% Py																			
											axis.	<=.25% Py																			
												<=.25% Py																				
										R	⋇⋇ 894.0 1110.8 RHYOLITE, dark-gray to	<=.25% Py																			
											black, locally porphyritic with blue	<=.25% Py																			
											quartz and white plag phenocrysts in	<=.25% Py																			
											an aphanitic groundmass	<=.25% Py																			
												<=.25% Py																				
												a				1			1													
									-20C	Bd	^^ 1062.0 1063.2 Basaltic Dike, contacts	a				1			1													
											@ 20 degrees to core axis	a				1			1													
												a				1			1													
												<=.25% Py																				
										Td	^^ 1097.2 1109.6 Tonalite Dike	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
										gR	^^ 1104.6 1110.8 Granophyric Rhyolite	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										T	⋇⋇ 1110.8 1186.0 TONALITE, lt. pink	<=.25% Py																				

ROCK QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
											to gray, medium to fine-grained, 20-30%	<=.25% Py																				
											blue quartz, to clear quartz. 50-70%	<=.25% Py																				
											white plag, <=10% hornblende	<=.25% Py																				
												<=.25% Py																				
										Bd	~~ 1119.5 1120.0 Basaltic Dikes	<=.25% Py																				
												<=.25% Py																				
										Bd	~~ 1121.0 1121.4 Basaltic Dike	<=.25% Py																				
												<=.25% Py																				
										QDd	~~ 1144.4 1147.0 Quartz Diorite Dike	<=.25% Py																				
												<=.25% Py																				
										QDd	~~ 1163.2 1165.5 Quartz Diorite Dike	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1169.0 1170.2 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1171.6 1172.2 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1174.2 1174.8 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										R	>< 1186.0 1226.0 RHYOLITE	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1196.6 1198.0 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1199.4 1200.4 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1203.6 1205.0 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1206.0 1207.0 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
									-30	Bd	~~ 1208.0 1211.0 Basaltic Dike @	<=.25% Py																				
											30 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Td	~~ 1219.6 1223.0 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				

X QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10
C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
										T	>< 1226.0 1287.0 TONALITE, (Hornblende), pink to gray, 25% quartz, 65% feldspar, <=10% hornblende	<=.25% Py																			
									-15	VCS/Rt	^^ 1261.5 1263.0 Volcaniclastic Sediment/ Rhyolite Tuff	<=.25% Py																			
										R	>< 1287.0 1291.2 RHYOLITE	<=.25% Py																			
										pR	^^ 1287.0 1289.0 Rhyolite Porphyry	<=.25% Py																			
										T	>< 1291.2 1372.0 TONALITE, Hornblende, lt. gray to pink with numerous epidote and chlorite-rich zenoliths-tuff ?	<=.25% Py																			
									-40	FZ	^^ 1294.6 1295.4 Fault Zone @ 40 degrees to core axis	<=.25% Py																			
									-30	R	>< 1372.0 1399.2 RHYOLITE, TO HORNBLENDE TONALITE, contact zone/fault, contact from tonalite to rhyolite, fault @ 30 degrees to core axis	<=.25% Py																			
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
										R	>< 1399.2 1512.5 RHYOLITE, dark gray to black, aphanitic groundmass with blue quartz and white plag phenocrysts	<=.25% Py																			
												<=.25% Py												x	x							

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
									-45	FZ/SZ	^^ 1427.5 1431.0 Fault/Shear Zone,	<=.25% Py												x	x							
											@ 45 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x	x							
												<=.25% Py												x	x							
									-45	Rt	^^ 1451.0 1454.3 Rhyolite Tuff, foliation	<=.25% Py												x	x							
									-10		@ 45 degrees to core axis, faulted,	<=.25% Py												x	x							
									-30		fault fractures 10 to 30 degrees to	<=.25% Py																				
											core axis	<=.25% Py																				
												<=.25% Py																				
										pR	^^ 1460.5 1485.0 Rhyolite Porphyry	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x	x							x
									-10	FZ/SZ	^^ 1497.8 1502.5 Fault/Shear Zone,	<=.25% Py												x	x							x

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
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ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
									-50		epidote, calcite, FeO veinlets at	<=.25% Py												x	x						x
											10 to 50 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										T	** 1512.5 2069.2 TONALITE, Hornblende,	<=.25% Py																				
											dark gray to black, medium to fine-	<=.25% Py																				
											grained, 20-30% quartz, 30-50% subhedral	<=.25% Py																				
											plag and 10-20% hornblende	<=.25% Py																				
												<=.25% Py																				
									-20	FZ	^^ 1520.5 1520.8 Fault Zone, calcite	<=.25% Py																				
											fractures @ 20 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
									-20	qev	^^ 1556.5 Quartz-epidote veins at	<=.25% Py												x							
									-40		20 to 40 degrees to core axis	<=.25% Py												x							
												<=.25% Py												x								
									-20	qev	^^ 1560.0 Quartz-epidote veins at	<=.25% Py												x							
									-40		20 to 40 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x								
												<=.25% Py												x								
									-20	qev	^^ 1584.0 Quartz, epidote veins @	<=.25% Py												x							
									-90		20 to 90 degrees to core axis	<=.25% Py												x							
												<=.25% Py																				
												<=.25% Py																				
										gd	^^ 1591.0 1595.6 Granitic Dike	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py																				
												<=.25% Py																				
										qv	^^ 1720.0 1720.5 Quartz Vein	<=.25% Py												x	x							
												<=.25% Py												x	x							
									-10	SZ/FZ	^^ 1722.5 1751.0 Shear/Fault Zone, with	<=.25% Py												x	x							
									-45		abundant epidote, quartz veins @ 10 to	<=.25% Py												x	x							
											45 degrees to core axis	<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
										VCS/Rt	^^ 1733.0 1741.0 Volcaniclastic Sediment/	<=.25% Py												x	x							
											Rhyolite Tuff, dark green, chloritic to	<=.25% Py												x	x							
											cherty, fragmental	<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
										FZ	^^ 1744.5 1745.5 Fault Zone, core broken	<=.25% Py												x	x							
												<=.25% Py												x	x							
										qv	^^ 1747.1 1748.5 Quartz Vein	<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py													x							
												<=.25% Py													x							
										gd	^^ 1761.2 1771.0 Granitic Dike, lt. pink,	<=.25% Py																				
											medium to fine-grained, 40-50% quartz and	<=.25% Py																				
											plag	<=.25% Py																				
												<=.25% Py																				
									-45	SZ/FZ	^^ 1876.0 1876.8 Shear/Fault Zone, epidote	<=.25% Py												x							
											veins @ 45 degrees to core axis	<=.25% Py												x							
												<=.25% Py												x								
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				

X QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x								x
									-45	ev	^^ 1905.6 1906.8 Epidote and FeO veins	<=.25% Py												x							x
											at 45 degrees to core axis.	<=.25% Py													x							x
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-10	FZ/SZ	^^ 1933.5 1935.0 Fault/Shear Zone, core	<=.25% Py												x	x	x					
											broken. Fractures at 10 degrees to core	<=.25% Py												x	x	x					
											axis, with epidote and calcite.	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-10	FZ	^^ 1952.5 1954.5 Fault Zone, fractures at	<=.25% Py												x	x	x					
											10 degrees to core axis, epidote	<=.25% Py												x	x	x					
												<=.25% Py																				
									-45	SZ	^^ 2023.5 Shear Zone, with calcite &	<=.25% Py												x	x						
											epidote veinlets at 45 degrees to core	<=.25% Py												x	x						
											axis	<=.25% Py																				
												<=.25% Py																				
										SZ	^^ 2030.5 Shear Zone, same as above	<=.25% Py																				
												<=.25% Py												x	x						

CK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
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ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
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												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x	x							
									-45	SZ	^^ 2061.0 2062.5 Shear Zones, with epidote	<=.25% Py												x	x							
											and calcite veinlets at 45 degrees to	<=.25% Py												x	x							
											core axis	<=.25% Py																				
												<=.25% Py													x							
										Bd	>>< 2069.2 2083.6 BASALTIC DIKE, dark	<=.25% Py													x							
											green, aphanitic with felty plag ground-	<=.25% Py													x							
											mass; weakly magnetic, <=.5 mm calcite	<=.25% Py													x							
											veinlets at random orientations	<=.25% Py													x							
												<=.25% Py													x							
												<=.25% Py												x	x							
												<=.25% Py												x	x							
										T	>>< 2083.6 2359.0 HORNBLENDE TONALITE, lt.	<=.25% Py												x	x							
											gray to dark gray, with numerous	<=.25% Py												x	x							
											zenoliths of dacite to andesite	<=.25% Py												x	x							
												<=.25% Py												x	x							
									-40	FZ/SZ	^^ 2083.0 2083.6 Fault/Shear Zone, @	<=.25% Py												x	x							
											40 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
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CK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x	x							x
												<=.25% Py												x	x							x
									-30	FZ/SZ	~~ 2123.0 2123.6 Fault/shear zone at	<=.25% Py											x	x							x
											30 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x								x
									-20	FZ/SZ	~~ 2133.5 2135.5 Fault/shear zone, at	<=.25% Py											x								x
											20 degrees to core axis	<=.25% Py											x								x
												<=.25% Py																				
										R	~~ 2162.0 2165.6 Rhyodacite Zenoliths	<=.25% Py																				
												<=.25% Py																				
									-45	Gd	~~ 2175.0 2177.0 Granitic Dike: lt.	<=.25% Py											x								
											pink to gray, with epidote veinlets	<=.25% Py											x								
											@ 45 degrees to core axis	<=.25% Py											x								
												<=.25% Py											x								
									-45	FZ/SZ	~~ 2184.0 2185.0 Fault/shear zone, with	<=.25% Py											x								
											epidote veins @ 45 degrees to core axis	<=.25% Py											x								
												<=.25% Py											x								
										R	~~ 2184.5 2187.9 Rhyodacite Zenoliths	<=.25% Py											x								
												<=.25% Py											x								
												<=.25% Py																				
												<=.25% Py																				
										R	~~ 2192.0 2194.0 Rhyodacite Zenoliths	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										R	~~ 2197.0 2198.0 Rhyodacite Zenoliths	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py								x				x					x			
												<=.25% Py								x				x					x			
									-11		~~ 2207.0 2208.6 Quartz-Actinolite,	<=.25% Py								x				x					x			

ICK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10
C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
											Biotite veins @ 11 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
									-10		^^ 2258.0 2264.0 Epidote, Actinolite,	<=.25% Py									×			×					×		
											Biotite veinlets <=10 degrees to core	<=.25% Py									×			×					×		
											axis	<=.25% Py									×			×					×		
												<=.25% Py									×			×					×		
											^^ 2264.0 2270.0 Pervasive epidote along	<=.25% Py									×			×					×		
											randomly oriented fractures	<=.25% Py												×							
												<=.25% Py												×							
												<=.25% Py												×							
									-10		^^ 2272.5 2278.0 Epidote, Actinolite,	<=.25% Py												×							
											Biotite veinlets <=10 degrees to core	<=.25% Py												×							
											axis	<=.25% Py																			
												<=.25% Py												×	×						×
										R	^^ 2314.0 2316.0 Rhyodacite Dike	<=.25% Py												×	×						×
												<=.25% Py																			
									-25	FZ	Note: @ 2315.0 2315.5 Fault Zone, pink	<=.25% Py																			
											calcite, epidote veins with FeO @ 25	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
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												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
									-25	T	^^ 2359.0 2382.3 TONALITE, pink to gray,	<=.25% Py																			
											medium to fine-grained, 30-40% quartz,	<=.25% Py																			
											50-70% plag, <5% mafics	<=.25% Py																			

ROCK QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Ch	^^ 2371.0 2372.0 Chert interval, with	<=.25% Py												x							
											epidote veinlets	<=.25% Py												x								
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										G	>< 2382.3 2389.6 GRANOPHYRE, pinkish-red	<=.25% Py																				
											with fine-grained quartz and plag inter-	<=.25% Py																				
											grown	<=.25% Py																				
												<=.25% Py																				
									-45	FZ	^^ 2386.0 2387.0 Fault Zone, core	<=.25% Py												x							
											broken, epidote veinlets @ 45 degrees	<=.25% Py												x							
											to core axis	<=.25% Py												x							
												<=.25% Py												x							
									-65	VCS	>< 2389.6 2393.8 VOLCANICLASTIC SEDIMENT,	<=.25% Py												x							
											Graywacke, dark green with massive and	<=.25% Py																				
											graded beds 1" to 3" thick. Bedding	<=.25% Py																				
											@ 65 degrees to core axis.	<=.25% Py																				
												<=.25% Py																				
										R	>< 2393.8 2413.2 RHYODACITE	<=.25% Py																				
												<=.25% Py																				
											Note: @ 2396.0, 2399.0, 2399.8, 2400.6-	<=.25% Py																				
											2403.3, & 2407.3-2409.0 Hornblende	<=.25% Py																				
											Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
									-25	Gd	^^ 2396.6 2397.9 Granophyric Dike, with	<=.25% Py												x		x						
									-60		calcite and epidote veinlets from 25 to	<=.25% Py												x		x						
											60 degrees to core axis	<=.25% Py												x		x						
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py								x				x								
										CZ	^^ 2410.6 2412.6 Contact Zone, with under-	<=.25% Py								x				x								
											lying tonalite, 30% epidote throughout	<=.25% Py								x				x								
												<=.25% Py																				
										T	>< 2413.2 2582.4 HORNBLENDE TONALITE, same	<=.25% Py																				
											as above	<=.25% Py																				
												<=.25% Py																				

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
										FZ	^^ 2460.4 2461.5 Fault Zone, core broken, chlorite along fractures	<=.25% Py																			
									-40	ev	^^ 2480.0 Epidote Veins @ 40 degrees to core axis	<=.25% Py												x							
									-35	SZ	^^ 2506.0 Shear Zone with smokey quartz-epidote veinlets @ 35 degrees to core axis	<=.25% Py																			
										SZ	^^ 2508.0 Same as above	<=.25% Py																			
										SZ	^^ 2523.0 Same as above	<=.25% Py																			
										gT	^^ 2534.0 2535.0 Granophyric Hornblende Tonalite Zenolith	<=.25% Py																			
										gT	^^ 2545.0 2546.0 Granophyric Hornblende Tonalite Zenolith	<=.25% Py																			
										gT	^^ 2551.0 Granophyric Hornblende Tonalite Zenolith	<=.25% Py																			
											^^ 2567.0 2569.0 Granophyric Hornblende Tonalite Zenolith	<=.25% Py																			
											^^ 2569.0 Andesite Zenolith	<=.25% Py																			
											^^ 2574.1 2574.9 Andesite Zenolith	<=.25% Py																			
											^^ 2580.2 2582.5 Andesite Zenolith	<=.25% Py																			
										T	^^ 2582.0 2617.0 TONALITE: lt. pink to gray, same as @ 2359.0-2382.3	<=.25% Py																			
									-40	FZ	^^ 2594.2 2595.0 Fault Zone, core broken, fractured @ 40 degrees to core axis	<=.25% Py																			

ICK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10
C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												<=.25% Py																				
												<=.25% Py												x								
												<=.25% Py												x								
										qev	^^ 2607.5 2609.5 Quartz Vein, smokey-pink	<=.25% Py												x								
											with randomly oriented epidote veinlets	<=.25% Py																				
											throughout	<=.25% Py																				
												<=.25% Py																				
										T	^^ 2610.0 2612.5 Hornblende Tonalite	<=.25% Py																				
											Zenolith	<=.25% Py																				
												<=.25% Py																				
										qev	^^ 2613.5 2614.5 Same as @ 2607.5-2609.5	<=.25% Py																				
												<=.25% Py																				
										T	^^ 2617.0 2808.0 HORNBLENDE TONALITE,	<=.25% Py																				
											same as above	<=.25% Py																				
												<=.25% Py																				
									-40	ev	^^ 2649.8 2650.0 Quartz-epidote veins	<=.25% Py												x								
											@ 40 degrees to core axis	<=.25% Py												x								
									-45			<=.25% Py																				
											Note: @ 2677.0 2677.5 Granophyric Veinlets	<=.25% Py																				
											at random angles to core axis	<=.25% Py																				
												<=.25% Py																				
											Note: @ 2676.0-2679.0 Fault/shear	<=.25% Py																				
											contact zone-hornblende tonalite to	<=.25% Py																				
											granophyric tonalite dike	<=.25% Py																				
												<=.25% Py																				
									-35		Note: @ 2677.3-2688.5 Granophyric tonalite	<=.25% Py																				
											dike @ 35 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
									-20		Note: @ 2687.5 Epidote veins at 20 degrees	<=.25% Py												x								
											to core axis	<=.25% Py																				
												<=.25% Py																				
											^^ 2709.0 2712.0 Alteration Zone, with	<=.25% Py								x				x					x			
											actinolite, epidote, quartz, and biotite	<=.25% Py								x				x					x			
												<=.25% Py																				
									-30	ev	^^ 2722.0 Epidote veins @ 30 degrees	<=.25% Py																				
											to core axis	<=.25% Py																				
												<=.25% Py																				
											^^ 2765.0 2771.5 Alteration Zone, dark	<=.25% Py								x				x					x			
											green aphanitic groundmass with epidote,	<=.25% Py								x				x					x			
											actinolite, biotite ?, randomly oriented	<=.25% Py								x				x					x			

ROCK QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	F
											quartz-epidote veinlets, granitic zenoliths throughout	<=.25% Py								x				x					x			
												<=.25% Py																				
									-10	FZ/SZ	^^ 2790.5 2792.5 Fault/Shear Zone, chlorite	<=.25% Py										x		x	x		x					x
											calcite, magnetite, quartz, epidote,	<=.25% Py										x		x	x		x					x
											FeO along fractures at 10 degrees to core	<=.25% Py																				
											axis, slickenslides	<=.25% Py																				
												<=.25% Py																				
									-45C		** 2802.0 2829.2 ANDESITE PORPHYRY: dark	<=.25% Py																			
											green aphanitic groundmass, with <=3 mm	<=.25% Py																				
											diameter subhedral plag phenos, 45 degree	<=.25% Py																				
											contacts with hornblende tonalite	<=.25% Py																				
												<=.25% Py																				
									-15	FZ/SZ	^^ 2810.0 2810.5 Fault/Shear Zone at	<=.25% Py																			x
											15 degrees to core axis, pervasive FeO	<=.25% Py																				
												<=.25% Py																				
										T	** 2829.2 2959.0 HORNBLENDE TONALITE	<=.25% Py																			
												<=.25% Py																				
									-15	FZ/SZ	^^ 2835.0 2836.0 Fault/Shear Zone with	<=.25% Py												x							
											epidote fractures at 15 degrees to core	<=.25% Py																				
											axis	<=.25% Py																				
												<=.25% Py																				
									-25	FZ/SZ	^^ 2842.5 2843.0 Fault/Shear Zone, with	<=.25% Py													x						
											chlorite, calcite veinlets at 25 degrees	<=.25% Py																				
											to core axis	<=.25% Py																				
												<=.25% Py																				
									-35	FZ/SZ	^^ 2857.9 2859.0 Fault/Shear Zone, with	<=.25% Py												x	x						
											chlorite, epidote, FeO veins at 35 degrees	<=.25% Py												x	x						
											to core axis	<=.25% Py																				
												<=.25% Py																				
									-90	FZ/SZ	^^ 2863.0 2868.5 Fault/Shear Zone, with	<=.25% Py												x	x						x
											epidote, calcite veinlets at 90 degrees	<=.25% Py												x	x						x
											to core axis, pervasive FeO	<=.25% Py												x	x						x
												<=.25% Py																				
									-20	FZ/SZ	^^ 2898.0 2900.5 Fault/Shear Zone, with	<=.25% Py												x	x						x
											epidote, calcite, chlorite veinlets with	<=.25% Py												x	x						x
											pervasive FeO staining at 20 degrees	<=.25% Py																				
											to core axis	<=.25% Py																				
												<=.25% Py																				
									-20	FZ/SZ	^^ 2913.5 2915.0 Fault/Shear Zone, with	<=.25% Py												x	x						x

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	F
											calcite, epidote veinlets at 20 degrees to	<=.25% Py												x	x						
											core axis, FeO staining	<=.25% Py																				
												<=.25% Py																				
									-30	gTd	^^ 2938.0 2941.0 Granophyric Tonalite Dike,	<=.25% Py																			
									-40		moderate foliation 30-40 degrees to core	<=.25% Py																			
											axis, contacts at 45 degrees to core	<=.25% Py																			
											axis	<=.25% Py																			
												<=.25% Py																			
									-20	FZ/SZ	^^ 2939.5 2940.0 Fault/Shear zone, with	<=.25% Py												x							
									-15		epidote, FeO veins at 15 degrees to core	<=.25% Py												x							
											axis	<=.25% Py																			
												<=.25% Py																			
									-10	FZ/SZ	^^ 2956.5 2957.0 Fault/Shear Zone, with	<=.25% Py												x	x						
									-15		chlorite, epidote, calcite veins and	<=.25% Py												x	x						
									-45		fractures at 10-15 degrees to core axis,	<=.25% Py												x	x						
											slickenslides show movements at 45 degrees	<=.25% Py																			
											to core axis	<=.25% Py																			
											E.O.H. 2959' (total depth)																				

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
21'	180	-66.0
500'	180	-66.0
1000'	180	-66.0
1500'	180	-65.0
2000'	180	-63.0

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Suszek
DATE COLLARED: 10-23-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-134 (WDNR #287)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 11-6-91

BEARING: S180E INCLINATION: -66 T.D: 2309'
COORDINATES: L11000 E, 14020 N
ELEV: 1568' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 21.0			><< 0.0 21.0 OVERBURDEN	
21.0 96.5		R	><< 21.0 96.5 RHYOLITE	
64.0 66.8		R#	^^ 64.0 66.8 Altered Tuff, With Tremolite ?	
66.8 67.8		Rcl	^^ 66.8 67.8 Lapilli Crystal tuff	
96.5 161.5		RD	><< 96.5 161.5 RHYODACITE	
150.0 151.0		Rc	^^ 150.0 151.0 Crystal Tuff	
161.5 291.2		R	><< 161.5 291.2 RHYOLITE	
198.0 202.0			^^ 198.0 202.0 Tremolite Alteration ?	
260.0 263.0		Md	^^ 260.0 263.0 Mafic (Basaltic) Dike	
263.0 285.6		VCS	^^ 263.0 285.6 Volcaniclastic (Crystal Lapilli Tuff)	
291.2 324.5		RD	><< 291.2 324.5 RHYODACITE	
324.5 367.0		HT	><< 324.5 367.0 HORNBLENDE TONALITE	
367.0 384.5		RD	><< 367.0 384.5 RHYODACITE	
384.5 478.0		HT	><< 384.5 478.0 HORNBLENDE TONALITE	

Noranda Exploration Inc.
Eastern Divison

DATE: 12-2-91
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HOLE SURVEY DATA

Footage	Bearing	Inclination
21'	180	-66.0
500'	180	-66.0
1000'	180	-66.0
1500'	180	-65.0
2000'	180	-63.0

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Suszek
DATE COLLARED: 10-23-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-134 (WDNR #287)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 11-6-91

BEARING: S180E INCLINATION: -66 T.D: 2309'
COORDINATES: L11000 E, 14020 N
ELEV: 1568' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
478.0 506.0		RD	⋇ 478.0 506.0 RHYODACITE-DACITE ?	
506.0 534.5		HT	⋇ 506.0 534.5 HORNBLENDE TONALITE	
534.5 567.0		R	⋇ 534.5 567.0 RHYOLITE	
540.8 542.0		pR	~~ 540.8 542.0 Rhyolite Porphyry	
567.0 572.0		D	⋇ 567.0 572.0 DACITE	
572.0 612.5		R	⋇ 572.0 612.5 RHYOLITE	
578.8 579.0		Rc	~~ 578.8 579.0 Crystal Tuff ?	
579.5 580.0		Rc	~~ 579.5 580.0 Crystal Tuff ?	
612.5 613.5		Rcl	~~ 612.5 613.5 Crystal Lapilli Tuff	
613.5 662.2		D	⋇ 613.5 662.2 DACITE	
647.0 662.2			~~ 647.0 662.2 Abundant Epidote, Calcite, FeO Veinlets	
662.2 791.0		HT	⋇ 662.2 791.0 HORNBLENDE TONALITE	
765.0 767.9		Md	~~ 765.0 767.9 Mafic (Basaltic) Dike	
791.0 834.0		R	⋇ 791.0 834.0 RHYOLITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
21'	180	-66.0
500'	180	-66.0
1000'	180	-66.0
1500'	180	-65.0
2000'	180	-63.0

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Suszek
DATE COLLARED: 10-23-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-134 (WDNR #287)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 11-6-91

BEARING: S180E INCLINATION: -66 T.D: 2309'
COORDINATES: L11000 E, 14020 N
ELEV: 1568' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
792.5 795.0		Rcl	^^ 792.5 795.0 Crystal Lapilli Tuff	
797.5 798.0			^^ 797.5 798.0 Biotite-Pyrite Vein ~ Parallel To Core Axis	
843.6 1001.0		HT	><< 843.6 1001.0 HORNBLENDE TONALITE	
874.0 876.0		VCS	^^ 874.0 876.0 Volcaniclastic (Possibly Tuff ?), Zenolith ?	
978.5 979.5			^^ 978.5 979.5 Serpentine-Chlorite (Talc ?) Vein, ~ 2 cm Wide	
992.0 995.0		Rcl	^^ 992.0 995.0 Crystal Lapilli Tuff, Zenolith ?	
1001.0 1017.5		pR	><< 1001.0 1017.5 RHYOLITE (PORPHYRY)	
1010.0 1013.0		Rcl	^^ 1010.0 1013.0 Crystal Lapilli Tuffs, With Interbedded Volcaniclastics (Possibly Graywacke)	
1015.5 1017.5		Rcl	^^ 1015.5 1017.5 Crystal Lapilli Tuffs, With Interbedded Volcaniclastics (Possibly Graywacke)	
1017.5 1773.8		HT	><< 1017.5 1773.8 HORNBLENDE TONALITE	
1095.5 1105.0		VCS ?	^^ 1095.5 1105.0 Tuff, Very Siliceous (VCS ?)	
1235.0 1247.8			^^ 1235.0 1247.8 Andesite Porphyry	
1377.5 1506.0		FZ/SZ	^^ 1377.5 1506.0 Fault/Shear Zone	
1773.8 1807.8		g	><< 1773.8 1807.8 GRANOPHYRE	
1807.8 2309.0		HT	><< 1807.8 2309.0 HORNBLENDE TONALITE	
1953.0 1966.8		Md	^^ 1953.0 1966.8 Mafic (Basaltic) Dike	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
21'	180	-66.0
500'	180	-66.0
1000'	180	-66.0
1500'	180	-65.0
2000'	180	-63.0

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Suszek
DATE COLLARED: 10-23-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-134 (WDNR #287)

DATE: 12-2-91
PAGE 1 OF 18

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 11-6-91

BEARING: S180E INCLINATION: -66 T.D: 2309'
COORDINATES: L11000 E, 14020 N
ELEV: 1568' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
			E.O.H. 2309' (total depth)	

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To
21.0											>< 0.0 21.0 OVERBURDEN	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
										R	>< 21.0 96.5 RHYOLITE, dark gray to	<=.25% Py											x				x			
											black aphantic to fine-grained ground-	<=.25% Py											x				x			
											mass, blue quartz & subhedral white	<=.25% Py																			
											plag phenos	<=.25% Py																			
												<=.25% Py																			
									-45C	Td	^^ 22.0 Tonalite Dike, with 45 degree	<=.25% Py																			
											contacts	<=.25% Py																			
												<=.25% Py																			
										Td	^^ 25.9 Tonalite Dike	<=.25% Py																			
												<=.25% Py																			
									-10	FZ/SZ	^^ 27.0 28.0 Fault/Shear Zone, @ 10	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											x		x						
										FZ/SZ	^^ 41.3 48.0 Fault/Shear Zone, associated	<=.25% Py											x		x						
											with tonalite dike, core broken	<=.25% Py											x		x						
												<=.25% Py																			
										Td	^^ 48.6 49.6 Tonalite Dike	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											x	x							
												<=.25% Py											x	x							
											^^ 55.9 56.0 Alteration Zone, with	<=.25% Py											x	x							
											tremolite (ash tuff)	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
											^^ 64.0 66.8 Alteration Zone, with	<=.25% Py																			
											tremolite (ash tuff)	<=.25% Py																			
												<=.25% Py																			
										Rcl	^^ 66.8 67.8 Lapilli Crystal Tuff,	<=.25% Py																			
											(Rhyolite)	<=.25% Py											x		x						
												<=.25% Py											x		x						
												<=.25% Py											x		x						
												<=.25% Py											x		x						
									-10	Gd	^^ 76.5 79.5 Gr[illegible] Dike, at	<=.25% Py											x		x						

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
									-70		10 & 70 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											×		×							
									-35	Td	^^ 88.0 88.6 Tonalitic Dike, 35 degrees	<=.25% Py											×		×							
											to core axis	<=.25% Py																				
												<=.25% Py																				
									-90	SZ	^^ 90.0 91.5 Shear, parallel to core axis	<=.25% Py																			
												<=.25% Py																				
									-60	Gd	^^ 92.0 96.5 Granophyre Dike, contacts	<=.25% Py																			
											~ 60 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
										RD	>>< 96.5 161.5 RHYODACITE	<=.25% Py																				
												<=.25% Py																				
										Td	^^ 97.0 101.0 Hornblende Tonalite Dike	<=.25% Py																				
												<=.25% Py											×		×							×
										Td	^^ 101.0 102.0 Tonalite Dike, 50 degrees	<=.25% Py											×		×							×
											to core axis	<=.25% Py											×		×							×
												<=.25% Py											×		×							×
									-15	FZ/SZ	^^ 106.0 108.6 Fault/Shear zone ~ 15	<=.25% Py																			
											degrees to core axis	<=.25% Py																				
												<=.25% Py																				
											Note: Numereous epidote-rich fractures	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py											×									×
									-10	FZ/SZ	^^ 118.0 119.0 Fault/Shear Zone ~ 10	<=.25% Py											×									×
											degrees to core axis	<=.25% Py																				
												<=.25% Py																				
										Gd	^^ 119.0 120.0 Granophyre Dike	<=.25% Py																				
												<=.25% Py																				
										FZ/SZ	^^ 124.0 125.0 Fault/Shear Zone ~ <=10	<=.25% Py																				
											degrees to core axis	<=.25% Py																				
												<=.25% Py											×						×			×
												<=.25% Py											×						×			×
												<=.25% Py																	×			×
												<=.25% Py																	×			×
												<=.25% Py																	×			×
												<=.25% Py																				
									-40	FZ/SZ	^^ 140.0 141.0 Fault/Shear Zone, 40	<=.25% Py											×				×					×

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
											degrees to core axis	<=.25% Py											×				×					×
												<=.25% Py											×				×					×
												<=.25% Py																				
												<=.25% Py																				
									-30	Rc	^^ 150.0 151.0 Crystal Tuff, siliceous,	<=.25% Py																				
											dark grey-green, contact @ 30 degrees to	<=.25% Py											×									×
											core axis, broken plag crystals ? on	<=.25% Py											×									×
											rhyolitic dike	<=.25% Py											×									×
												<=.25% Py																				
												<=.25% Py											×		×				×			×
										R	^^ 161.5 260.0 RHYOLITE TO RHYODACITE,	<=.25% Py											×		×				×			×
											dark gray to black, generally fine-	<=.25% Py											×		×				×			×
											grained, with blue quartz and white plag	<=.25% Py											×		×				×			×
											phenos, randomly distributed throughout,	<=.25% Py											×		×				×			×
											numerous 1" to 1' thick randomly oriented	<=.25% Py											×		×				×			×
											granophyric to tonalitic dikes, fault	<=.25% Py											×		×				×			×
											brecciated ?, fragmental	<=.25% Py											×		×				×			×
												<=.25% Py											×		×				×			×
										FZ/SZ	^^ 161.5 165.5 Fault/Shear Zone, core	<=.25% Py											×		×				×			×
											broken	<=.25% Py											×		×				×			×
												<=.25% Py																				
												<=.25% Py											×									×
												<=.25% Py											×									×
												<=.25% Py											×		×		×					×
												<=.25% Py											×		×		×					×
									-15	FZ/SZ	^^ 175.5 177.0 Fault/Shear Zone @ 15	<=.25% Py											×		×		×					×
											degrees to core axis	<=.25% Py											×		×		×					×
												<=.25% Py											×		×							
									-35	FZ/SZ	^^ 182.0 182.5 Fault/Shear Zone, @ 35	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												×								
												<=.25% Py												×								
												<=.25% Py												×								
											^^ 198.0 202.0 Tremolite needles ?	<=.25% Py												×								
												<=.25% Py												×								
												<=.25% Py												×								
										Gd	^^ 203.0 203.5 Granophyre Dike	<=.25% Py																			

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Un	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x								x
												<=.25% Py												x								x
												<=.25% Py												x								x
									-20	FZ/SZ	^^ 227.0 229.5 Fault/Shear Zone @ 20	<=.25% Py												x							x
											degrees to core axis	<=.25% Py												x	x							x
												<=.25% Py												x	x							x
												<=.25% Py												x	x							x
									-25	FZ/SZ	^^ 236.0 243.0 Fault/Shear Zone @ 25	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
											^^ 240.0 241.0 Core broken	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x									
												<=.25% Py											x									
									-15	Bd	** 260.0 263.0 BASALTIC DIKE, dark green-	<=.25% Py											x									
											black, aphantic, weakly magnetic,	<=.25% Py											x									
											contacts 15 degrees to core axis	<=.25% Py											x									
												<=.25% Py											x									
									-30	VCS	** 263.0 285.6 VOLCANICLASTIC SEDIMENT,	<=.25% Py											x									
											fault/sheared lapilli crystal tuff,	<=.25% Py																				
											lt. green-gray with pervasive epidote	<=.25% Py																				
											and FeO, shearing and bedding @ 30	<=.25% Py											x			x						x
											degrees to core axis. Randomly oriented	<=.25% Py											x			x						x
											epidote-calcite veinlets throughout.	<=.25% Py											x			x						x
												<=.25% Py											x			x						x
												<=.25% Py											x			x						x

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										R	** 285.6 291.2 RHYOLITE, reddish-gray,	<=.25% Py																				
											porphyritic with <=1 cm diameter blue	<=.25% Py																				
											quart and subhedral plagioclase crystals	<=.25% Py																				
												<=.25% Py																				
										RD	** 291.2 324.5 RHYODACITE, dark-gray,	<=.25% Py																				
											numerous rhyolitic to rhyodacitic	<=.25% Py																				
											zenoliths and dikes	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										T	** 324.5 367.0 HORNBLENDE TONALITE (QUARTZ	<=.25% Py																				
											DIORITE), dark-grey, fine-grained, with	<=.25% Py																				
											numerous rhyolitic to rhyodacitic	<=.25% Py																				
											zenoliths and dikes	<=.25% Py																				
												<=.25% Py																				
									-15	SZ	^^ 324.0 325.0 Shear @ 15 degrees to	<=.25% Py																				
											core axis	<=.25% Py																				
												<=.25% Py																				
										FZ/SZ	^^ 364.0 365.0 Fault/Shear Zone, core	<=.25% Py																				
											broken	<=.25% Py																				
												<=.25% Py																				
									-30	FZ/SZ	^^ 365.5 368.0 Fault/Shear Zone, @ 30	<=.25% Py																				
											degrees to core axis	<=.25% Py																				
												<=.25% Py																				
										RD	** 367.0 384.5 RHYODACITE, dark gray,	<=.25% Py																				
											fine-grained groundmass of plag-	<=.25% Py																				
											hornblende quartz with quartz plag	<=.25% Py																				

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
											phenocrysts	<=.25% Py																				
												<=.25% Py																				
										gT	** 384.5 461.0 GRANOPHYRIC HORNBLENDE	<=.25% Py																				
											TONALITE (QUARTZ DIORITE), possible	<=.25% Py																				
											hornfels volcanic, abundant rhyolitic	<=.25% Py																				
											zenoliths and dikes	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Gd	^^ 397.0 398.0 Granophyric Dike	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-20	FZ/SZ	^^ 408.0 409.0 Fault/Shear Zone @ 20	<=.25% Py											x					x			x
											degrees to core axis	<=.25% Py											x					x			x
												<=.25% Py											x					x			x
												<=.25% Py																x			
												<=.25% Py																x			
												<=.25% Py																x			
												<=.25% Py																x			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
										Gd	^^ 431.0 432.5 Granophyre Dike	<=.25% Py											x					x			x
												<=.25% Py											x					x			x
												<=.25% Py											x					x			x
									-10	FZ/SZ	^^ 438.6 439.0 Fault/Shear Zone @ 10	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
										Rd	^^ 456.0 461.0 Rhyodacite Dike	<=.25% Py											x		x						x
												<=.25% Py											x		x						x

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
									-15	FZ/SZ	^^ 458.5 459.5 Fault/Shear Zone, 15	<=.25% Py											×		×						×
											degrees to core axis, pink unknown mineral	<=.25% Py											×		×						×
												<=.25% Py											×		×						×
											** 461.0 465.5 ANDESITIC TO RHYODACITIC	<=.25% Py																			
											PORPHYRY, contacts not well defined	<=.25% Py																			
												<=.25% Py																			
										HT	** 465.5 478.0 HORNBLENDE TONALITE, medium	<=.25% Py																		
											to course-grained	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											×		×						×
												<=.25% Py											×		×						×
									-15	FZ/SZ	^^ 475.0 477.0 Fault/Shear Zone, @ 15	<=.25% Py											×		×						×
											degrees to core axis	<=.25% Py																			
												<=.25% Py																			
										Gd	^^ 477.0 478.0 Granophyre Dike	<=.25% Py																		
												<=.25% Py																			
											** 478.0 484.5 RHYODACITE PROPHYRY, dark-	<=.25% Py																			
											gray with plag and hornblende phenos	<=.25% Py																			
												<=.25% Py																			
										D	** 484.5 506.0 DACITE, green-gray, fine-	<=.25% Py																		
											grained, siliceous groundmass with	<=.25% Py																			
											numerous tonalitic dikes	<=.25% Py																			
												<=.25% Py																			
										Rd	^^ 491.5 492.5 Rhyolite Dike	<=.25% Py																		
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											×								×
									-20C	FZ/SZ	^^ 500.0 505.5 Fault/Shear Contact Zone,	<=.25% Py											×								×
											20 degrees to core axis, slickenslides	<=.25% Py											×		×						×
											along fractures	<=.25% Py											×		×						×
												<=.25% Py											×		×						×
										HT	** 506.0 534.5 HORNBLENDE TONALITE	<=.25% Py																		
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
									-30	FZ/SZ	^^ 519.0 Fault/Shear Zone @ 30 degrees	<=.25% Py																		
											to core axis	<=.25% Py																		

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Un	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										R	** 534.5 567.0 RHYOLITE TO RHYODACITE	<=.25% Py																				
												<=.25% Py																				
										Td	^^ 536.8 540.8 Tonalite Dike	<=.25% Py																				
												<=.25% Py																				
										p	^^ 540.8 542.0 Porphyritic	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-50	FZ/SZ	^^ 547.5 551.0 Fault/Shear Zone @ 50	<=.25% Py											x		x						
											degrees to core axis, randomly oriented	<=.25% Py											x		x						
											veinlets of epidote, calcite and quartz	<=.25% Py											x		x						
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Dd	** 567.0 572.0 DACITE DIKE, black with plag	<=.25% Py																				
											phenos	<=.25% Py																				
												<=.25% Py																				
										R	** 572.0 612.5 RHYOLITE, dark-gray to	<=.25% Py																				
											black, with <=3 mm in diameter, phenos	<=.25% Py																				
											of blue quartz and subhedral white plag	<=.25% Py																				
												<=.25% Py																				
									-20	FZ	^^ 576.9 577.5 Fault Zone, 20 degrees to	<=.25% Py																				
											core axis	<=.25% Py																				
												<=.25% Py																				
										Rc	^^ 578.8 579.5 Crystal Tuff	<=.25% Py																				
												<=.25% Py																				
									-40	Rcl	** 612.5 613.5 RHYOLITE CRYSTAL LAPILLI	<=.25% Py																				
											TUFF, dark-green, chloritic, bedding 40	<=.25% Py																				
											degrees to core axis	<=.25% Py																				
												<=.25% Py																				
										D	** 613.5 662.2 DACITE, black fine-grained,	<=.25% Py																				

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

n	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
											groundmass of quartz-plag mafic ?	<=.25% Py																				
												<=.25% Py																				
										p	^^ 613.5 615.0 Porphyritic, with phenos	<=.25% Py																				
											increasing upward	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-20	FZ	^^ 625.0 627.0 Fault, core broken ~ 20	<=.25% Py											x					x			
											degrees to core axis	<=.25% Py											x					x			
												<=.25% Py											x					x			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x					x			
												<=.25% Py											x					x			
												<=.25% Py											x					x			
									-10	FZ/SZ	^^ 642.8 645.0 Fault/Shear Zone, @ 10	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
											^^ 647.0 657.0 Randomly oriented epidote,	<=.25% Py											x		x						x
											calcite veinlets stained with FeO	<=.25% Py											x		x						x
												<=.25% Py											x		x						x
												<=.25% Py																				
												<=.25% Py																				
									-20	FZ/SZ	^^ 657.0 662.2 Fault/Shear Zone, ~ 20	<=.25% Py																			
											degrees to core axis, abundant Ep-Ca-FeO	<=.25% Py																			
											veinlets, brecciated, fault contact zone	<=.25% Py																			
											with underlying tonalite	<=.25% Py																			
												<=.25% Py																				
										HT	** 662.2 754.0 HORNBLENDE TONALITE,	<=.25% Py																			
											dark-gray to black, coarse to fine-	<=.25% Py																			
											grained plag-blue quartz and hornblende;	<=.25% Py																			
											epidote common along fractures and with	<=.25% Py											x								
											zenoliths	<=.25% Py											x								
												<=.25% Py											x								
									-35	Gd	^^ 678.0 679.0 Granophyre Dike ~ 35	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				

ALTERATION

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

n	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
									-60	Gd	^^ 689.8 693.6 Granophyre Dike, lt. pink, blue quartz and plag ~ 60 degrees to core axis	<=.25% Py																						
												<=.25% Py																				
												<=.25% Py																				
									-50	FZ/SZ	Note: @ 691.0 Fault/Shear Zone ~ 50 degrees to core axis	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
										gHT	^^ 693.6 707.5 Granophyric Hornblende Tonalite, with coarse-grained dikes	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x								x	
												<=.25% Py											x x								x x	
												<=.25% Py											x								x	
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										gHT	^^ 721.5 741.5 Granophyric Hornblende Tonalite, with medium to coarse-grained dikes, and Ep-rich zenoliths and fractures	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x									
												<=.25% Py											x x									
												<=.25% Py											x									
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										Bd	** 754.0 760.5 BASALTIC DIKE, black, fine-grained groundmass of plag & mafic ?	<=.25% Py																			
												<=.25% Py																				

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
										FZ	^^ 754.0 755.0 Fault, core broken	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
										HT	** 760.5 765.0 HORNBLENDE TONALITE,	<=.25% Py											×		×	×					×
											medium to coarse-grained	<=.25% Py											×		×	×					×
												<=.25% Py											×		×	×					×
									-15	FZ/SZ	^^ 764.0 765.0 Fault/Shear Zone ~ 15	<=.25% Py											×		×	×					×
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
									-15	Bd	** 765.0 767.9 BASALTIC DIKE, ~ 15	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
										FZ	^^ 765.0 765.5 Fault Zone, core broken	<=.25% Py																				
												<=.25% Py																				
										HT	** 767.9 791.0 HORNBLENDE TONALITE	<=.25% Py																				
												<=.25% Py																				
										RD	** 791.0 792.5 RHYODACITE, becomes more	<=.25% Py																				
											dacitic upward toward 791.0'	<=.25% Py																			
												<=.25% Py																				
									-45	Rcl	** 792.5 795.0 CRYSTAL LAPILLI TUFF, ~ 45	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
										*R	^^ 793.0 795.0 Spherulitic Rhyolite	<=.25% Py																				
												<=.25% Py																				
										R	** 795.0 843.6 RHYOLITE	<=.25% Py																				
												<=.25% Py																				
											^^ 797.5 798.0 Biotite-Pyrite vein ~	<=.25% Py																			
											parallel to core axis	<=.25% Py																			
												<=.25% Py																				
										p	^^ 799.0 834.0 Porphyritic with <= 3 mm	<=.25% Py																				
											blue quartz and white plag phenos	<=.25% Py																			
												<=.25% Py																				
									-20	FZ/SZ	^^ 801.0 Fault/Shear Zone ~ 20 degrees to	<=.25% Py																			
											core axis	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				

QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
											~~ 818.5 820.5 Randomly oriented calcite veinlets	<=.25% Py													×							
												<=.25% Py													×							
												<=.25% Py													×							
									-5	FZ/SZ	~~ 822.0 825.0 Fault/Shear Zone ~ 5 degrees to core axis, slickenslides	<=.25% Py											×	×		×				×
												<=.25% Py												×	×		×				×
												<=.25% Py												×	×		×				×
												<=.25% Py												×	×		×				×
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
										gR	~~ 836.0 843.6 Granophyric Rhyolite, chilled contact zone with underlying tonalite	<=.25% Py																		
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
										FZ	~~ 838.0 840.0 Fault Zone, core broken	<=.25% Py																			
												<=.25% Py																			
										HT	~~ 843.6 874.0 HORNBLENDE TONALITE	<=.25% Py																			
												<=.25% Py																			
										Gd	~~ 862.5 864.5 Granophyre Dike, pink	<=.25% Py																			
												<=.25% Py																			
									-45	FZ/SZ	~~ 865.0 Fault/Shear Zone ~ 45 degrees to core axis	<=.25% Py																		
												<=.25% Py																			
												<=.25% Py																			
									-45	FZ/SZ	~~ 864.5 Fault/Shear Zone ~ 45 degrees to core axis	<=.25% Py																		
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											×		×							
									-25C	Rt	~~ 874.0 876.0 TUFF, grayish green, fine-	<=.25% Py											×		×							
									-15V		grained and altered due to contact with	<=.25% Py											×		×							
											tonalite, with pervasive Ep-Quartz and	<=.25% Py											×		×							
											quartz veins @ 15 degrees to core axis	<=.25% Py											×		×							
												<=.25% Py											×		×							
										HT	~~ 876.0 992.0 HORNBLENDE TONALITE,	<=.25% Py											×		×							
											(Quartz Diorite); lt. gray, medium to	<=.25% Py																			
											fine-grained, hornblende tonalite occurs	<=.25% Py																			
											as dike & sills with rapid changes in	<=.25% Py																			
											texture-possibly due to chilling along	<=.25% Py																			
											margins. Gray-black zenoliths (perhaps	<=.25% Py																			

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

n	%	RQD	RF	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
											veinlet volcanics).	<=.25% Py																				
									-45F			<=.25% Py											x		x							
												<=.25% Py											x		x							
									-30		^^ 903.0 904.5 Network of quartz-epidote	<=.25% Py											x		x							
									-45V		veinlets	<=.25% Py																				
												<=.25% Py																				
											Note: Local leucocratic, medium to	<=.25% Py																				
											coarse-grained tonalite dikes throughout	<=.25% Py																				
												<=.25% Py											x		x							
									-30F	FZ/SZ	^^ 972.0 Fault/Shear Zone; Ep-Calcite	<=.25% Py											x		x							
											veinlets, slickenslides	<=.25% Py											x		x							
												<=.25% Py																				
									-15	FZ/SZ	^^ 978.5 979.5 Fault/Shear Zone, talc-	<=.25% Py																				
											serpentine vein (~ 2 cm wide) @ 15 degrees	<=.25% Py																				
											to core axis	<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x		x							x
												<=.25% Py											x		x							x
									-40F	Rcl	** 992.0 995.0 LAPILLI-CRYSTAL TUFF	<=.25% Py											x		x							x
												<=.25% Py																				
									-45		^^ 993.0 994.0 Well foliated, possibly	<=.25% Py																				
											sheared @ 45 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
										gHT	** 995.0 1001.0 GRANOPHYRIC HORNBLENDE	<=.25% Py																				
											TONALITE, (Quartz Diorite), abundant Ep-	<=.25% Py																				
											rich zenoliths and veinlets	<=.25% Py																				
												<=.25% Py																				
										R	** 1001.0 1010.0 RHYOLITE, reddish-gray,	<=.25% Py																				
											porphyritic with blue quartz and white	<=.25% Py																			x	
											plag phenocrysts	<=.25% Py																			x	
												<=.25% Py																			x	
										FZ	** 1010.0 1013.0 CRYSTAL LAPILLI TUFF,	<=.25% Py																			x	
									-25F		dark-green with plag crystals and Ep rich	<=.25% Py																			x	
											fragments, could be gray wacke	<=.25% Py																			x	
												<=.25% Py																			x	
										FZ	^^ 1010.0 1012.0 Fault Zone, core broken	<=.25% Py											x		x						x	
												<=.25% Py											x		x	x					x	
												<=.25% Py											x		x	x					x	
											^^ 1015.5 1017.5 Same as above, @ 1010.0-	<=.25% Py											x		x	x					x	

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
											1013.0	<=.25% Py											×		×	×						×
												<=.25% Py											×		×	×						×
										HT	** 1017.5 1095.5 HORNBLENDE TONALITE	<=.25% Py											×		×	×						×
									-25F			<=.25% Py											×		×	×						×
												<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-25C			<=.25% Py																				
												<=.25% Py																				
									-30F			<=.25% Py																				
												<=.25% Py											×									×
												<=.25% Py											×									×
												<=.25% Py											×									×
									-50F			<=.25% Py											×		×							×
												<=.25% Py											×		×							×
										FZ/SZ	^^ 1046.0 Fault/Shear Zone @ 50 degrees	<=.25% Py																				
									-25F			<=.25% Py																				
										FZ/SZ	^^ 1049.0 Fault/Shear Zone, brecciation ~	<=.25% Py																				
											25 degrees	<=.25% Py											×									×
												<=.25% Py											×									×
												<=.25% Py											×									×
												<=.25% Py											×									×
												<=.25% Py											×									×
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				

QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10
C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
										Rcl	><< 1095.5 1105.0 ASH LAPILLI TUFF, dark-	<=.25% Py																				
											green, silciceous, possibly gray wacke,	<=.25% Py																				
											possibly altered rhyodacite grading upward	<=.25% Py																				
											to dacite-dacitic tuff ?	<=.25% Py																				
												<=.25% Py																				
									-40	s	^^ 1099.6 1105.0 Sheared with strong	<=.25% Py																				
											to medium foliation, pervasive chlorite,	<=.25% Py																				
											Ep-calcite veining ~ 40 degrees to core axi	<=.25% Py																				
									-40F			<=.25% Py																				
												<=.25% Py																				
										HT	><< 1105.0 1231.0 HORNBLENDE TONALITE,	<=.25% Py																				
											with abundant plag-rich tonalitic dikes,	<=.25% Py																				
											& veins: zenolith-rich with sizes ranging	<=.25% Py																				
											from 1 cm to <=2'	<=.25% Py																				
												<=.25% Py																				
											^^ 1118.0 1119.5 Plag-rich coarse-grained	<=.25% Py																				
											dike	<=.25% Py																				
												<=.25% Py																				
									-30	Gd	^^ 1148.0 1151.5 Pink Granophyric Dike,	<=.25% Py																				
											~ 30 degrees to core axis	<=.25% Py																				
												<=.25% Py																				
											^^ 1165.0 1167.0 Plagoclase-rich coarse-	<=.25% Py																				
											grained dike	<=.25% Py																				
												<=.25% Py																				
											Note: @ 1165.0-1178.0 Zenolith-rich	<=.25% Py																				
											zenoliths of finer-grained quartz diorite,	<=.25% Py																				
											possibly altered volcanics	<=.25% Py																				
												<=.25% Py											x		x							
												<=.25% Py											x		x							
												<=.25% Py											x		x							
												<=.25% Py											x		x							
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-45	S2	^^ 1196.0 1201.0 Shearing, moderate	<=.25% Py											x		x							x
											foliation ~ 45 degrees to core axis	<=.25% Py											x		x							x

% QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10
C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py											x		x							x
												<=.25% Py											x		x							x
												<=.25% Py											x		x							x
									-45		^^ 1206.0 1206.5 Plagioclaste-rich coarse-	<=.25% Py																				x
											grained dike ~ 45 degrees to core axis	<=.25% Py																				x
												<=.25% Py																				x
									-25F	FZ/SZ	^^ 1210.0 Fault/Shear Zone @ 25 degrees	<=.25% Py																			
											to core axis	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											x		x							x
												<=.25% Py											x		x							x
									-30Fol	Md	** 1231.0 1235.3 MAFIC DIKE, (diabase),	<=.25% Py											x		x							x
											fine-grained with plag laths and aphanitic	<=.25% Py											x		x							x
											mafic groundmass	<=.25% Py											x		x							x
												<=.25% Py											x		x							x
									-20F	FZ/SZ	^^ 1234.0 1235.0 Fault/Shear Zone,	<=.25% Py											x		x							x
											brecciated	<=.25% Py											x		x							x
												<=.25% Py											x		x							x
											** 1235.3 1247.8 ANDESITE PORPHYRY, gray-	<=.25% Py											x		x							x
											green siliceous grundmass with pyroxene ?,	<=.25% Py																			
											amphibole ? & plag crystals	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											x		x				x			x
									-15	Md	** 1247.8 1252.0 Same as dike @ 1231.0-	<=.25% Py											x		x				x			x
											1235.3, contacts ~ 15 degrees to core axis	<=.25% Py											x		x				x			x
												<=.25% Py											x		x				x			x
									-10	FZ	^^ 1248.0 1249.5 Fault Zone, ~ 10 degrees	<=.25% Py											x		x				x			x
											to core axis	<=.25% Py											x		x				x			x
												<=.25% Py											x		x				x			x
										HT	** 1252.0 1377.5 HORNBLENDE TONALITE,	<=.25% Py																x			
											(quartz diorite), granophyric with	<=.25% Py																			
											occassional coarse-grained plagioclase-	<=.25% Py																			
											quartz rich tonalitic and rhyolitic dikes	<=.25% Py																			

OCK QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To
											(whisps) & zenoliths	<=.25% Py																			
												<=.25% Py																			
											Note: @ 1252.0-1377.5 Where coarse-grained	<=.25% Py																			
											tonalite occurs as dikes & whisps, the	<=.25% Py																			
											hornblende tonalite (quartz diorite) is	<=.25% Py																			
											granophyric	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py											×		×			×			
												<=.25% Py											×		×			×			
												<=.25% Py											×		×			×			
									-25F	FZ/SZ	^^ 1287.0 1288.0 Fault/Shear Zone	<=.25% Py											×		×			×			
												<=.25% Py											×								
												<=.25% Py											×								
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
											^^ 1335.0 1342.0 Plag-quartz rich horizons,	<=.25% Py																			
											(porphyritic) <= 2" thick in fine-grained	<=.25% Py																			
											hornblende tonalite. These appear as	<=.25% Py																			
											rhyolitic dikes and whisps (apophysis)	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
									-20F	FZ	^^ 1352.0 1357.5 Fracture zone with	<=.25% Py													×					
											pervasive FeO and calcite veinlets	<=.25% Py													×					
												<=.25% Py													×						
												<=.25% Py													×						
												<=.25% Py													×						
												<=.25% Py																			
												<=.25% Py											×		×						
												<=.25% Py											×		×						
												<=.25% Py											×		×						
												<=.25% Py											×		×						
												<=.25% Py											×		×						

K QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py											×									
												<=.25% Py											×									
											** 1377.5 1411.8 FAULT BRECCIATED TONALITE,	<=.25% Py											×									
											pervasive FeO with FeO-calcite filled	<=.25% Py											×									×
											fractures at random angles to core axis	<=.25% Py																				×
												<=.25% Py																				×
											^^ 1384.5 1385.0 Fault Breccia	<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				×
											^^ 1393.2 1394.0 Fault Breccia	<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				×
											^^ 1399.0 1400.0 Fault Breccia, with Ep-	<=.25% Py																				×
											calcite rich fragments	<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				×
												<=.25% Py																				×
											^^ 1409.0 1411.8 Fault Breccia, Ep-calcite	<=.25% Py											×		×		×		×			×
											rich fragments	<=.25% Py											×		×		×		×			×
												<=.25% Py											×		×		×		×			
									<=-10	sT	** 1411.8 1506.0 SHEARED TONALITE, major	<=.25% Py											×		×		×		×			
									<=-10		fault/shear zone, sheared, intensely	<=.25% Py											×		×		×		×			
									<=-10		sheared with shear bands generally	<=.25% Py											×		×		×		×			
									<=-10		parallel to core axis. Chlorite-sericite	<=.25% Py											×		×		×		×			
									<=-10		along shear planes, randomly oriented	<=.25% Py											×		×		×		×			
									<=-10		white to pink calcite veins and veinlets.	<=.25% Py											×		×		×		×			
									<=-10		Quartz budons <= 1 cm thick, & <= 5 cm	<=.25% Py											×		×		×		×			
									<=-10		long and parallel to shearing, <=10	<=.25% Py											×		×		×		×			
									<=-10		degrees to core axis.	<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10		^^ 1417.0 1424.0 Fault gouge, breccia	<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			
									<=-10			<=.25% Py											×		×		×		×			

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Jn	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10		^^ 1445.0 1446.0 Quartz-plag rich restages	<=.25% Py											x		x		x		x			
									<=-10		of tonalite	<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10		Note: @ 1472.5 Chevron folds, circled in	<=.25% Py											x		x		x		x			
									<=-10		black	<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py				x	x						x		x		x		x			
									<=-10			<=.25% Py				x	x						x		x		x		x			
									<=-10			<=.25% Py				x	x						x		x		x		x			
									<=-10		^^ 1485.0 1486.0 Whisps & lenses of Ep,	<=.25% Py				x	x						x		x		x		x			
									<=-10		Ca, quartz and serpentine	<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10		^^ 1497.0 1506.0 Foliation is moderate with	<=.25% Py											x		x		x		x			
									<=-10		decrease in shear intensity	<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10			<=.25% Py											x		x		x		x			
									<=-10	HT	** 1506.0 1738.0 HORNBLENDE TONALITE,	<=.25% Py											x		x						
											moderate to weak foliation, medium-	<=.25% Py											x		x						
											grained to granophyric with numerous	<=.25% Py											x		x						
											randomly oriented quartz-calcite veins and	<=.25% Py											x		x						

CK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fr
											veinlets	<=.25% Py											×		×							
												<=.25% Py											×		×							
											Note: The core between 1506.0-1679.0 is	<=.25% Py											×		×							
											not as well foliated as the core from	<=.25% Py											×		×							
											1411.8-1506.0. However, the foliation is	<=.25% Py											×		×							
											still weak to moderate with numerous	<=.25% Py											×		×							
											calcite-quartz epidote veins throughout.	<=.25% Py											×		×							
											These rocks appear to be assiciated with	<=.25% Py											×		×							
											the intense shearing and deformation from	<=.25% Py											×		×							
											1411.8-1506.0. The protolith for all these	<=.25% Py											×		×							
											deformed rocks appears to be tonolite with	<=.25% Py											×		×							
											blue quartz & plagioclase phenocrysts &	<=.25% Py											×		×							
											amphibolite needles (possibly hornblende).	<=.25% Py											×		×							
												<=.25% Py											×		×							
									-25		~~ 1536.5 1537.5 Moderate foliation @ 25	<=.25% Py											×		×							
											degrees to core axis	<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
										sT	~~ 1680.0 Sheared/Faulted Tonalite	<=.25% Py																			
												<=.25% Py																			
									-30F	FZ	~~ 1718.0 1719.0 Fault, core broken	<=.25% Py																			

K QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%		Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
										FZ	^^ 1729.5 1734.0 Fault, core broken	<=.25%	Py																				
												<=.25%	Py																				
									-20C	Md	^^ 1738.0 1743.0 Mafic Dike, dark green,	<=.25%	Py																				
											abundant calcite veinlets generally at	<=.25%	Py																				
											low angles to core axis	<=.25%	Py																				
												<=.25%	Py											x		x							
												<=.25%	Py											x		x							
												<=.25%	Py											x		x							
												<=.25%	Py											x		x							
												<=.25%	Py																				
												<=.25%	Py																				
												<=.25%	Py																				
												<=.25%	Py																				
									-15C	Md	^^ 1758.6 1759.0 Mafic Dike, dark green,	<=.25%	Py																				
											abundant calcite veinlets generally at	<=.25%	Py											x		x				x			
											low angles to core axis	<=.25%	Py											x		x				x			
												<=.25%	Py											x		x				x			
										Md	^^ 1759.4 1773.8 Mafic Dike, dark green,	<=.25%	Py											x		x				x			
											abundant calcite veinlets generally at	<=.25%	Py											x		x				x			
											low angles to core axis	<=.25%	Py											x		x				x			
												<=.25%	Py											x		x				x			
									-15F	FZ/SZ	^^ 1766.5 1767.0 Fault/Shear Zone,	<=.25%	Py											x		x				x			
											pervasive chlorite-epodite-calcite along	<=.25%	Py											x		x				x			
											fractures, slickenslides	<=.25%	Py																				
												<=.25%	Py											x		x							
										Gd	>>< 1773.8 1802.6 GRANOPHYRIC DIKE,	<=.25%	Py											x		x							
											generally leucratic, pink pervasive	<=.25%	Py											x		x							
											epidote, hornblende-rich tonalite zenoliths	<=.25%	Py											x		x							
												<=.25%	Py											x		x							
										Md	^^ 1802.6 1802.8 Mafic Dike, dark green,	<=.25%	Py																				
											abundant calcite veinlets generally at	<=.25%	Py																				
											low angles to core axis	<=.25%	Py																				
												<=.25%	Py																				
										Md	^^ 1805.0 1807.8 Mafic Dike, dark green,	<=.25%	Py																				
											abundant calcite veinlets generally at	<=.25%	Py																				
											low angles to core axis	<=.25%	Py																				
												<=.25%	Py																				
										HT	>>< 1807.8 1953.0 HORNBLENDE TONALITE,	<=.25%	Py											x									
											variable from melanocratic amphibole-rich,	<=.25%	Py											x									

ICK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

A:1-5,B:5-10
% C:10-25,D:25-40
E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	F
											fine-grained to granophyric, to coarse-	<=.25% Py											×									
											grained mesocratic to leucocratic plag-	<=.25% Py											×									
											quartz rich.	<=.25% Py											×									
												<=.25% Py											×									
									-30	Gd	^^ 1807.8 1809.0 Granophyre Dike,	<=.25% Py											×									
											leucocratic, pervasive epidote and calcite	<=.25% Py											×									
											veinlets at random orientation to core axis	<=.25% Py											×									
											lower contact @ 30 degrees to core axis	<=.25% Py											×									
												<=.25% Py											×									
												<=.25% Py											×									
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
									-25F	FZ/SZ	^^ 1831.0 1832.0 Fault/Shear Zone,	<=.25% Py											×		×							
											slickenslides	<=.25% Py											×		×							
												<=.25% Py											×		×							
											Note: Amphibolite-rich tonalite is fine-	<=.25% Py											×		×							
											grained where in contact with coarse-	<=.25% Py											×		×							
											grained mesocratic tonalite dikes-perhaps a	<=.25% Py											×		×							
											chill margin affect. Contacts along coarse-	<=.25% Py											×		×							
											grained tonalite dikes are irregular, and	<=.25% Py											×		×							
											commonly appear as whisps with <= 2"	<=.25% Py											×		×							
											inclusions of granophyric hornblende	<=.25% Py											×		×							
											tonalite.	<=.25% Py											×		×							
												<=.25% Py											×		×							
									-20F	FZ/SZ	^^ 1912.5 1919.5 Fault/Shear Zone, abundant	<=.25% Py											×		×		×					
											epidote-rich veins at 20 degrees to core	<=.25% Py											×		×		×					
											axis with serpentine, slickenslides	<=.25% Py											×		×		×					
												<=.25% Py											×		×		×					
												<=.25% Py											×		×		×					
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							
												<=.25% Py											×		×							

QUALITY: FRACTURE FREQ. A:0-3,B:3-10 C:10-30,D:30-100 E:>100 cm.

SULFIDES: (T) A:1-5,B:5-10 % C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Un	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	Fe
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-45C	Bd	** 1953.0 1966.8 BASALTIC DIKE, greenish-	<=.25% Py																			
											black randomly oriented calcite veinlets,	<=.25% Py																			
											4" wide gray-green chill margins. <= 1%	<=.25% Py																			
											pyrite in dike.	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
									-20-40	HT	** 1966.8 2309.0 HORNBLENDE TONALITE,	<=.25% Py																			
											variable texture from coarse-grained to	<=.25% Py																			
											granophyric with numerous fine-grained,	<=.25% Py																			
											gray zenoliths, locally is weak to moderate	<=.25% Py																			
											foliation @ 20-40 degrees to core axis	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x		x		x	x				
												<=.25% Py											x		x		x	x				
												<=.25% Py											x		x		x	x				
									-35F	FZ/SZ	^^ 1986.0 1987.0 Fault/Shear Zone @ 35	<=.25% Py											x		x		x	x				
											degrees to core axis	<=.25% Py											x		x		x	x				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py											x		x		x					x
										FZ/SZ	^^ 2005.0 2006.0 Fault/Shear Zone	<=.25% Py											x		x		x					x
												<=.25% Py											x		x		x					x
									-45F	FZ/SZ	^^ 2009.0 2010.0 Fault/Shear Zone	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T)

% A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%		Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To
									-40F	FZ/SZ	~~ 2018.5 2019.6 Fault/Shear, core broken	<=.25%	Py																			
												<=.25%	Py																			
									-30F	FZ/SZ	~~ 2022.0 2023.6 Fault/Shear Zone	<=.25%	Py																			
												<=.25%	Py																			
										FZ/SZ	~~ 2068.0 2068.8 Fault/Shear Zone	<=.25%	Py																			
												<=.25%	Py																			
											~~ 2128.0 2129.0 Quartz-epidote rich	<=.25%	Py											x				x		x	
											vein, brecciated country rock	<=.25%	Py											x				x		x	
												<=.25%	Py											x				x		x	
										FZ	~~ 2134.0 2136.0 Fault, core broken	<=.25%	Py											x				x		x	
												<=.25%	Py											x				x		x	
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x							
												<=.25%	Py											x				x		x	
												<=.25%	Py											x				x		x	
												<=.25%	Py											x				x		x	
										FZ/SZ	~~ 2165.6 2167.0 Fault/Shear Zone	<=.25%	Py											x				x		x	
																								x							
																								x							
																								x							
																								x							
																								x							
																								x							
																								x							

CK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-100
E:>100 cm.

SULFIDES: (T) % A:1-5,B:5-10 C:10-25,D:25-40 E:40-60,F:>60

ALTERATION

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T	Ta	Mt	Gt	Ep	Tr	Ca	Di	Se	Br	Cl	Am	To	F
											E.O.H. 2309' In Hornblende Tonalite (total depth)																					