APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 3 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

23

(p. 421 - 490)

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.9	-66.8
100'	177.4	-65.4
200'	179.2	-65.5
300'	179.4	-65.6
400'	180.3	-65.4
500'	182.2	-64.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 5-25-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-125 (WDNR #262)

DATE: 9-12-91
PAGE 1 OF 8

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 5-29-91

BEARING: S180.9E INCLINATION: -66.8 T.D: 500'
COORDINATES: L9700E 11265N
ELEV: 1569.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 55.0			** 0.0 55.0 OVERBURDEN	
55.0 58.5	(not recovered)			
55.0 113.7		R	** 55.0 113.7 RHYOLITE	
113.7 143.5		D	** 113.7 143.5 DACITE	
143.5 165.0		R	** 143.5 165.0 RHYOLITE	
165.0 199.5		SL	** 165.0 199.5 SILTSTONE	
199.5 282.5		SS	** 199.5 282.5 SANDSTONE	
282.5 323.5		R	** 282.5 323.5 RHYOLITE	
323.5 334.0		BP	** 323.5 334.0 BEDDED PYRRHOTITE	323.5 334.0 3% Chalcopyrite
334.0 355.0		TS	** 334.0 355.0 TALCOSE SEDIMENT	334.0 355.0 1% Chalcopyrite
355.0 500.0		QD	** 355.0 500.0 QUARTZ DIORITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.9	-66.8
100'	177.4	-65.4
200'	179.2	-65.5
300'	179.4	-65.6
400'	180.3	-65.4
500'	182.2	-64.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 5-25-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-125 (WDNR #262)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 5-29-91

DATE: 9-12-91
PAGE 1 OF 8

BEARING: S180.9E INCLINATION: -66.8 T.D: 500'
COORDINATES: L9700E 11265N
ELEV: 1569.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
355.0 385.4		gQD	^^ 355.0 385.4 Granophyric Quartz Diorite	
			E.O.H. 500' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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
0.0 55.0											** 0.0 55.0 OVERBURDEN								
											^^ 0.0 20.0 Sand, gravel, and boulders								
											^^ 20.0 35.0 Sand and gravel								
											^^ 35.0 55.0 Sand, gravel, cobbles, and boulders								
											Note: Lost circulation								
										R	** 55.0 113.7 RHYOLITE								
										Rl	^^ 55.0 65.3 Rhyolite Lapilli Tuff, porphyritic rhyolite and rhyolite crystal lapilli clasts in a finer-grained matrix. Enlarged lower contact.								
										Rcl	^^ 65.3 133.7 Rhyolite Crystal Lapilli Tuff								
											Note: @ 94.0 96.0 Core broken, high angle (20 degrees) to core axis								

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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
											Note: @ 112.0 115.0 High angle calcite fractures								
									-10F -60C -10F	D	>< 113.7 143.5 DACITE, sandstone-like to 121.0 then moderately plag-phyric								
										R	>< 143.5 165.0 RHYOLITE								
									-40C -40B	Wf	^^ 143.5 155.0 Feldspathic Wacke, light green, plag-rich, beige (0.5") rhyolite clasts								
									-45C	Rcl	^^ 155.0 165.0 Rhyolite Crystal Lapilli Tuff								
									-60C -60B	SL	>< 165.0 199.5 SILTSTONE, heavily laminated, with pink and beige ashy or								

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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
									-60B		cherty interbeds, and scattered 2"- 4"								
									-60B		sandy beds, spherulitic beds top 10'								
									-60B										
									-40B										
									-45B										
									-50B										
									-50B										
									-55B										
									-60B										
									-30C										
										SS	** 199.5 282.5 SANDSTONE, medium grey, subtle clasts or grains								
										W1	^^ 233.0 249.0 Lapilli Wacke, greenish alteration, rounded clasts (0.5"), some clasts larger								

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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
										Wmp	^^ 249.0 257.5 Wacke with pyrrhotite and magnetite, green alteration, host rock is laminated with clasts but sulfides are stringery	b					8	8
												b					8		8
												b					8		8
												b					8		8
												b					8		8
											Note: @ 257.5 282.5 ~2% iron sulfides along fractures. No obvious carbonate	b					8	8
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
									-70C	Rc	^^ 282.5 323.5 Rhyolite Crystal Tuff, dark matrix, plagrphyric but with blue quartz eyes. Sheared 316.0 333.5	a				1	1		2
									-30S	FZ	^^ 282.5 290.0 Possible Fault Zone. Iron staining, sheared, core broken, granophyric quartz diorite veinlets @ 289.0-291.0 at high angle								
									-25S										

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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 -25S	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
323.0																				
	100	90	R3	a	30	2					BP	** 323.5 334.0 BEDDED PYRRHOTITE, Massive, not laminated, sulfides are matrix with 0.25"-1.0" clasts							
				b	50															
				b																
				c																
332.5																				
	100	100	R3	b	35	2					TS	** 334.0 355.0 TALCOSE SEDIMENT	e	3		40				43
335.5				b	60								e	3		40				43
	99	80	R2	b	30	2							e	3		40				43
				c	60								e	3		40				43
				b									b	1						1
				b									b	1						1
345.0				b									b	1						1
	99	90	R3	b	10	3							b	1						1
				b	40								b	1						1
				b	60								b	1						1
				c									b	1						1
355.0				b									b	1						1
	100	100	R3	b	10	3				-70C	QD	** 355.0 500.0 QUARTZ DIORITE	b	1						1
				b	30						gQD	^^ 355.0 385.4 Granophyric Quartz Diorite, grey								
				c	60															
				c																
				c																
364.0																				
										-30S										
										-30S										

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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
									-40C	gQD	^^ 401.4 404.4 Granophyric Quartz Diorite								
									-30S		^^ 404.4 463.0 Moderately sheared								
									-20S										
									-30S										
									-45S										
									-35S										
									-40S										
									-30C	Md	^^ 471.0 474.3 Mafic Dike, high angle, fine-grained								

ROCK QUALITY:

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

DRILL HOLE: LYN91-125

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
									-35C										
										gQD	^^ 489.0 493.0 Granophyric Quartz Diorite								
									-22C -30C	Md	^^ 493.0 496.8 Mafic Dike, high angle, fine-grained								
											E.O.H. 500' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	182.1	-63.0
100'	182.5	-63.5
200'	183.3	-63.5
301'	183.7	-63.8

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 5-28-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-126 (WDNR #220)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 5-29-91

BEARING: S182.1E INCLINATION: -63
COORDINATES: L9700 E, 10840 N
ELEV: 1564.5' SEC: 15 TWP: 37N

T.D: 301'
RANGE: 4E

DATE: 9-10-91
PAGE 1 OF 5

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 53.0			0.0 53.0 OVERBURDEN	
53.0 55.5	(not recovered)			
53.0 74.3		Sk	53.0 74.3 RHYOLITE, Skarn-Alteration	53.0 74.3 Ep-Gt-Mt-Po
74.3 88.0		BFM	74.3 88.0 BEDDED MAGNETITE-PYRRHOTITE	74.3 88.0 30% Po, Mt
88.0 104.5		CS	88.0 104.5 CALCAREOUS SEDIMENT	
104.5 110.0		X	104.5 110.0 TUFFITE	
104.5 107.0		Xca,p	104.5 107.0 Tuffite, Calcareous, With Pyrrhotite	104.5 107.0 15% Sp, 15% Po, Py
107.0 110.0		Xt	107.0 110.0 Tuffite, Talcose	107.0 110.0 25% Sp, 1% Ga
110.0 141.0		VCS	110.0 141.0 VOLCANICLASTIC SEDIMENTS	
141.0 181.0		ChTp	141.0 181.0 CHERTY TUFF, With Pyrite And Pyrrhotite	141.0 181.0 2% Cp
181.0 301.0		QD	181.0 301.0 QUARTZ DIORITE	
			E.O.H. 301' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-126

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
0.0 53.0											>< 0.0 53.0 OVERBURDEN								
											^^ 0.0 20.0 Fine sand								
											^^ 20.0 53.0 Sand, clay, and boulders								
55.0										Sk	>< 53.0 74.3 RHYOLITE, skarn alteration, Ep-Gt-Po-Mt, with diopside								
	98	90	R3	b	10	3													
				b	30														
				b	55														
				a															
65.0				a															
	100	95	R3	b	30	2													
				a	55														
				a															
				a						BPM	>< 74.3 88.0 BEDDED MAGNETITE-PYRRHOTITE	d			10	20		30
75.0				b								d			10	20		30
	100	95	R3	b	30	2						d			10	20		30
				b	55							d			10	20		30
				b								d			10	20		30
				b						BPM	^^ 84.0 88.0 Bedded Magnetite-Pyrrhotite, with rounded tufa clasts	d			10	20		30
85.0				a								d			10	20		30
	100	90	R3	b	30	2						d			10	20		30
				c	50					CS	>< 88.0 104.5 CALCAREOUS SEDIMENT,	d			10	20		30

ROCK QUALITY:

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

DRILL HOLE: LYN91-126

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	I
				c								massive to well laminated, minor epidote								
				c								vuggy, with tourmaline and Mt								
				c						-30B										
										-30B	BPM	^^ 93.0 97.0 Bedded Pyrrhotite, Magnetite	c			5	10		15
95.0													c			5	10			15
	100	95	R3	a	10	2							c			5	10			15
				b	50					-50B			a			2				2
				c						-75B			a			2				2
				c							X	>< 104.5 110.0 TUFFITE	c	15			10	5		30
				c						-60B			c	15			10	5		30
105.0											Xca	^^ 104.5 107.0 Tuffite, calcareous, with	c	25		1	2	2		30
	100	100	R3	c	10	2						pyrite, well-bedded	c	25		1	2	2		30
107.5					50								c	25		1	2	2		30
	100	90	R3	c	10	3					Xt	^^ 107.0 110.0 Tuffite, talcose	c	25		1	2	2		30
				b	40								c	25		1	2	2		30
				a	60						SS	>< 110.0 141.0 SANDSTONE, medium grey,	c	25		1	2	2		30
				b								fine-grained, massive, occassional subtle								
115.0												feldspars, numerous calcite-filled								
												fractures, no sulfides								
										-35		^^ 131.0 134.0 Brecciated Zone, siltstone	b				2	8	10
												and chert clasts, in pyrrhotite matrix,	b				2	8	10
												clasts are rounded; some horizons are	b				2	8	10
												oxidized, gouge at base	b				2	8	10
										-45			b				2	8	10
											Wq	^^ 134.0 141.0 Quartz Wacke, reworked	a				1	1	2
										-30		crystal tuff; blue quartz with weathered	a				1	1	2
												matrix, plag crystals, laminated top.	a				1	1	2
												Scattered sulfides.	a				1	1	2
													a				1	1	2
											ChTp	>< 141.0 181.0 CHERTY TUFF, cherty	b		2		4	1	7
145.0												or silicified sediment, with laminated	b		2		4	1	7
	100	100	R3	c	5	2				-30B		intervals and Cp and Po, Py associated	b		2		4	1	7
												with cherty zones, high angle bedding	b		2		4	1	7

ROCK QUALITY:

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

DRILL HOLE: LYN91-126

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
				c	30								b		2		4	1		7
				c						-20B			b		2		4	1		7
				c									b		2		4	1		7
155.0				c									b		2		4	1		7
	100	100	R3	c	5	3							b		2		4	1		7
				c	20								b		2		4	1		7
				c	40								b		2		4	1		7
				b									b		2		4	1		7
165.0				b									b		2		4	1		7
	100	95	R3	b	5	3							b		2		4	1		7
				c	20								b		2		4	1		7
				c	50								b		2		4	1		7
				b									b		2		4	1		7
175.0				b									b		2		4	1		7
												Note: @ 176.0-177.0 Quartz Diorite Dike (?), possibly a xenolith or a fragment ?								
											QD	** 181.0 301.0 QUARTZ DIORITE								
											gQD	^^ 181.0 230.0 Granophyric Quartz Diorite								

ROCK QUALITY:

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

DRILL HOLE: LYN91-126

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
											Note: @ 295.0-300.0 Rock very broken due to core orientation device								
											E.O.H. 301' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.3	-64.0
100'	182.4	-64.1
200'	181.5	-64.4
300'	181.6	-64.5
400'	182.2	-64.7
560'	183.6	-63.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 5-29-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-127 (WDNR #263)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 5-31-91

BEARING: S179.3E INCLINATION: -64 T.D: 560'
COORDINATES: L9700E 1138SN
ELEV: 1565.6' SEC: 15 TWP: 37N RANGE: 4E

DATE: 9-11-91
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 52.0			** 0.0 52.0 OVERBURDEN	
52.0 57.5	(not recovered)			
52.0 98.0		D	** 52.0 98.0 DACITE (Basalt)	
98.0 130.0		R	** 98.0 130.0 RHYOLITE	
130.0 161.4		D	** 130.0 161.4 DACITE	
161.4 206.7		R	** 161.4 206.7 RHYOLITE	
206.7 242.0		SL	** 206.7 242.0 SILTSTONE	
242.0 282.3		R	** 242.0 282.3 RHYOLITE	
282.3 454.0		SS	** 282.3 454.0 SANDSTONE	
333.4 342.0		pR	^^ 333.4 342.0 Rhyolite Porphyry	
454.0 491.5		SS,Rc	** 454.0 491.5 INTERBEDDED SANDSTONE, RHYOLITE CRYSTAL TUFF	
491.5 499.0		D	** 491.5 499.0 DACITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.3	-64.0
100'	182.4	-64.1
200'	181.5	-64.4
300'	181.6	-64.5
400'	182.2	-64.7
560'	183.6	-63.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 5-29-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-127 (WDNR #263)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 5-31-91

BEARING: S179.3E INCLINATION: -64 T.D: 560'
COORDINATES: L9700E 11385N
ELEV: 1565.6' SEC: 15 TWP: 37N RANGE: 4E

DATE: 9-11-91
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
499.0 518.0		Rc	** 499.0 518.0 RHYOLITE CRYSTAL TUFF	
518.0 521.0		Xz,t	** 518.0 521.0 TUFFITE, Talcose, Stringery	@ 518.0 521.0 10% Sphalerite
521.0 560.0		sQD	** 521.0 560.0 QUARTZ DIORITE, Sheared	
521.5 537.0		pRd	^^ 521.5 537.0 Rhyolite Porphyry Dike	
			E.O.H. 560' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
0.0 52.0											** 0.0 52.0 OVERBURDEN								
											^^ 0.0 30.0 Sand								
											^^ 30.0 52.0 Sand, gravel, and boulders								
											Note: Lost circulation								
											** 52.0 98.0 DACITE, black, massive, plagphyric, (actually probably basalt), no sulfides along fractures								
									-20F										
									-10F										
									-15F										
									-10F										
									-60C	R	** 98.0 130.0 RHYOLITE								

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
										R1	^^ 98.0 112.0 Rhyolite Lapilli Tuff, dark grey matrix with dark porphyritic rhyolite fragments								
									-50B	Rt	^^ 112.0 115.5 Rhyolite Tuff, fine-grained, epidote-altered, scattered pyrite	a a a a				1 1 1 1			1 1 1 1
										R1	^^ 115.5 130.0 Rhyolite Lapilli Tuff, as above but larger fragments	a				1			1
									-5F		Note: @ 125.0 130.0 Core broken and slightly oxidized.								
									-0F -5F	D	** 130.0 161.4 DACITE, dark grey black, massive, subtley plag-phyric, slight greensh cast. Not as massive as 52.0 - 98.0								
									-60C -60C	R1	^^ 156.0 158.6 Rhyolite Lapilli Tuff, coarse-grained, embayed depositional contacts.								
									-60C	R	^^ 161.4 206.7 Rhyolite, predominantly Rhyolite Crystal Tuff, very crystal-rich, with sandier epidote-altered intervals								

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
									-80C	SL	>< 206.7 242.0 SILTSTONE, medium-grey, moderately laminated, with possible talc, 235.0 242.0. Flat upper contact, and irregular, embayed lower contact								
									-70B										
									-70B										
									-70B										
											Note: @ 225.0 242.0 ~ 2% iron sulfides on fractures associated with carbonate filling. No oxidation.	a			1	1		2
												a			1	1		2
									-57B			a			1	1		2
									-57B			a			1	1		2
												a			1	1		2
									-60B		Note: @ 235.0 242.0 Possible talc and altered rounded patches or clasts aligned with bedding	a			1	1		2
												a			1	1		2
									-60B			a			1	1		2
												a			1	1		2
									-60C	R	>< 242.0 282.3 RHYOLITE	a			1	1		2
										IR	^^ 242.0 247.0 Intrusive Rhyolite, with blue quartz eyes, but dark matrix, plag-phyric							

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
									-45C										
									-60B	SL,t	^^ 247.0 250.0 Siltstone, talcose								
									-70C										
										IR	^^ 250.0 282.3 Intrusive Rhyolite, dark matrix, plag-phyric to granophyric, dark matrix, pinkish cast along fractures.								
									-80C	SS,SL	** 282.3 454.0 SANDSTONE, SILTSTONE, predominantly grey, massive dacite or dacitic sandstone, with laminated intervals	a		1		1	1		3
												a		1		1	1		3
												a		1		1	1		3
											Note: @ 282.0 288.5 Possible talcose alteration, forest-green with ~3% sulfides.								
									-60B										

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
									-50C	pR	^^ 333.4 342.0 Rhyolite Porphyry, pink porphyritic rhyolite with blue quartz eyes								
											Note @ 345.0 350.0 Possible talc, 345.5 - 360.0 ~ 1% iron sulfides on fractures	a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1
											Note: @ 369.0 371.0 Core bleached and broken.								
											Note: @ 377.0 454.0 1 - 2% iron sulfides on fractures.	a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
										Rc	^^ 421.0 422.0 Rhyolite Crystal Tuff, blue quartz eyes	a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
											Note: @ 435.0 454.0 Moderately plagphyric	a				1	1		2
										SS,Rc	** 454.0 491.5 INTERBEDDED SANDSTONE, RHYOLITE CRYSTAL TUFF	a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1
												a				1			1

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
										D	** 491.5 499.0 DACITE, massive, dark grey black								
										Rc	** 499.0 518.0 RHYOLITE CRYSTAL TUFF, dark matrix, blue quartz eyes.								
										SZ	^^ 508.5 513.0 Shear Zone, chloritic-carbonate gouge @ 508.5								
518.0	100	100	R3	b 30 c 50	2				-45C	Xz,t	** 518.0 521.0 TUFFITE, talcose, stringery with diopside	c c	10 10	2 2					12 12
521.0									-60C -30C	sQD	** 521.0 560.0 QUARTZ DIORITE, sheared, not granophyric	c c	10 10	2 2					12 12
										pRd	^^ 521.5 537.0 Rhyolite Porphyry Dike, dark matrix, blue quartz eyes, sheared toward lower contact								
									-20C										
									-30s										
									-30S										
									-35S										
									-35S										

ROCK QUALITY:

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

DRILL HOLE: LYN91-127

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
											E.O.H. 560' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	177.3	-59.7
100'	180.7	-58.8
200'	180.2	-58.5
270'	181.3	-58.2

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 5-29-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-128 (WDNR #281)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 5-31-91

BEARING: S177.3E INCLINATION: -59.7 T.D: 270'
COORDINATES: L10200 E, 10505 N
ELEV: 1565.3' SEC: 15 TWP: 37N RANGE: 4E

DATE: 9-10-91
PAGE 1 OF 5

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 55.0			0.0 55.0 OVERBURDEN	
55.0 59.5	(not recovered)			
55.0 147.0		R	55.0 147.0 RHYOLITE	
124.5 147.0		gRd	124.5 147.0 Rhyolite Dike, Granophyric	
147.0 158.0		VCS	147.0 158.0 INTERBEDDED RHYOLITE CRYSTAL TUFF AND SANDSTONE	
158.0 161.3		Chps	158.0 161.3 CHERT, Laminated, With Pyrrhotite, & Sulfides	158.0 161.3 5% Sp, Cp, Ga, 5% Po, Py
161.3 170.0		TSs	161.3 170.0 TALCOSE SEDIMENT, With Sulfides	161.3 170.0 5% Sp, Cp, Ga
170.0 270.0		gQD	170.0 270.0 QUARTZ DIORITE, Granophyric	

E.O.H. 270' (total depth)

ROCK QUALITY:

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

DRILL HOLE: LYN91-128

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	I
0.0 55.0												** 0.0 55.0 OVERBURDEN								
											R	** 55.00 147.0 RHYOLITE								
											Rf	^^ 55.0 84.0 Rhyolite Flow, lt. grey, fine-grained, almost glassy, possible pRd @ 76.0-82.0								
59.50																				
	99	70	R3	b	10	3						Note: @ 55.0-71.0 Core Broken, with slight iron staining								
				a	30															
65.00				b	70															
	98	50	R3	b	5	3														
				b	30															
68.00					70															
	98	50	R3	b	15	4														
				a	30															
					50															
71.00					70															
	100	85	R3	a	5	3														
				a	30															
75.00					60															
	99	85	R3	a	5	3														
				b	20															
				b	40															
				b																
85.00				a							Rc	^^ 84.0 89.0 Rhyolite Crystal Tuff, blue quartz eyes, lapilli-sized lithic clasts. Broken upper & lower contacts.								
	98	50	R3	b	10	3														
				b	20															
				a	60						gR	^^ 89.0 110.0 Granophyric Rhyolite, light to medium grey, faint crystals, glassy								
				a																
94.00				a																
	100	100	R3	a	5	3														
					30															
95.00					60															
	100	100	R3	a	5	4														
					20															
					40															
97.50					70															
	99	70	R3	a	5	3														
				a	25															
				a	60															

ROCK QUALITY:

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

DRILL HOLE: LYN91-128

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
105.00				a																
	99	70	R3	a	15	3														
				a	30					-30C	SS	^^ 110.0 117.0 Sandstone ?, dark grey, core broken, ~1% Py along fractures	a				1			1
				a	70								a				1			1
				a									a				1			1
115.00				b									a				1			1
	100	95	R3	a	5	3					gR	^^ 117.0 124.5 Granophyric Rhyolite, glassy, grey, with pinkish tint, faint crystals	a				1			1
				a	25															
				a	60															
				a																
				a						-30C	Rd	^^ 124.5 147.0 Rhyolite Dike, possible fault zone, high angle, with brecciated zones with epidote @ 139.0-139.5								
125.00																				
	98	50	R3	a	15	3														
				a	30															
				a	65															
132.50				a																
	100	80	R3	a	15	3														
				a	40															
135.00					65					-20F										
	100	90	R3	a	5	3														
				a	30					-25										
				a	65															
				a																
145.00				a																
	100	90	R2	a	20	3					VCS	** 147.0 158.0 INTERBEDDED RHYOLITE, SANDSTONE, rhyolite is grey, with faint crystals & iron staining, sandstone has dark grey matrix with carbonate clasts, possible talc	a				1			1
				b	40					-30			a				1			1
				a	60								a				1			1
				a									a				1			1
155.00				a									a				1			1
	99	85	R3	b	10	3				-50B			a				1			1
				a	30						Chps	** 158.0 161.3 CHERT-Po, bedded	a				1			1
				b	50															
				a							TSs	** 161.3 170.0 TALC SEDIMENT, diopside alteration, trace galena, bedded, fractured lower contact	b	3			1	4		8
				a									b	3			1	4		8
165.00										-35			b	3			1	4		8
	100	90	R3	a	10	3							b	3			1	4		8
				a	30								b	3			1	4		8
				a	50					-40B	FZ	^^ 169.0 170.0 Fracture Zone, serpentized	b	3			1	4		8
				a																
				a																

ROCK QUALITY:

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

DRILL HOLE: LYN91-128

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
										-30C	gQD	** 170.0 270.0 QUARTZ DIORITE, granophyric								
175.00																				
	100	100	R3	a	25	2						Note: @ 170.0-217.0 Quartz Diorite weakly granophyric and moderatly sheared								
				b	45															
				b																
				b																
185.00				b						-25										
	100	100	R3	b	10	3														
				c	30															
				b	50															
				b																
195.00				b																
	100	100	R3	b	10	3														
				b	25															
				b	50															
				b																
205.00				b						-35										
	100	100	R3	a	5	3														
				b	30															
				a	50															
				a																
215.00				b																
	100	100	R3	b	5	3														
					30															
217.50					50															
	100	100	R3	a	5	3						Note: @ 217.0-237.0 Orange iron staining ?								
				a	30															
				b	55															
225.00				a																
	100	100	R3	a	5	3														
				a	25															
				a	55															
				b																
235.00				b																
	100	100	R3	b	35	2														
239.00				c	50															
	100	100	R3	c	35	2						Note: @ 240.0-250.0 Moderately sheared								
				c	50															

ROCK QUALITY:

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

DRILL HOLE: LYN91-128

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
245.00				c																
	100	95	R3	b	10	3				-45										
				a	30															
				a	50															
				a																
255.00				b						-60										
	100	100	R3	b	5	4														
				b	20															
				c	40															
				b	65															
265.00				b																
	100	100	R3	b	30	2														
267.50					50															
	100	100	R3	b	15	3														
					30															
270.00					60							E.O.H. 270' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	3.2	-55.7
100'	359.9	-53.5
200'	1.8	-53.8
300'	2.5	-53.4
455'	4.0	-53.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff
DATE COLLARED: 5-31-91
REMARKS: Geotech hole
CORE SIZE: NQ

HOLE NO: LYN91-129 (WDNR #282)

DATE: 12-1291
PAGE 1 OF 7

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED:6-2-91

BEARING: S3.2E INCLINATION: -55.7 T.D: 455'
COORDINATES: L10000 E, 10880 N
ELEV: 1566.2' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 60.0			** 0.0 60.0 OVERBURDEN	
60.0 63.5	(not recovered)			
63.5 86.1		D	** 60.0 86.1 DACITE	
86.1 90.4		Xch	** 86.1 90.4 TUFFITE, Cherty	
90.4 94.6		Tschp	** 90.4 94.6 TALC SEDIMENT AND CHERT	
94.6 103.9		D	** 94.6 103.9 DACITE	
103.9 152.8		Xch	** 103.9 152.8 TUFFITE, Cherty	
152.8 169.2		pBd	** 152.8 169.2 BASALTIC DIKE	
169.2 186.0		Ch,Di	** 169.02 186.0 CHERT, With Epidote and Diopside	
186.0 197.0		MS	** 186.0 197.0 MASSIVE SULFIDE	
197.0 212.5		Xch	** 197.0 212.5 TUFFITE, Cherty	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	3.2	-55.7
100'	359.9	-53.5
200'	1.8	-53.8
300'	2.5	-53.4
455'	4.0	-53.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff
DATE COLLARED: 5-31-91
REMARKS: Geotech hole
CORE SIZE: NQ

HOLE NO: LYN91-129 (WDNR #282)

DATE: 12-1291
PAGE 1 OF 7

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED:6-2-91

BEARING: S3.2E INCLINATION: -55.7 T.D: 455'
COORDINATES: L10000 E, 10880 N
ELEV: 1566.2' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
212.5 324.0		D	** 212.5 324.0 DACITE	
324.0 342.3		Pcl	** 324.0 342.3 RHYOLITE CRYSTAL LAPILLI TUFF	
342.3 364.0		gR	** 342.3 364.0 GRANOPHYRIC RHYOLITE	
364.0 369.5		Xca	** 364.0 369.5 TUFFITE, Calcareous	
369.5 381.1		MP	** 369.5 381.1 MASSIVE PYRITE	
381.1 388.0		Xchp	** 381.1 388.0 TUFFITE, Chert, With Pyrrhotite and Pyrite	
388.0 419.3		R	** 388.0 419.3 RHYOLITE	
419.3 426.8		MS,t	** 419.3 426.8 MASSIVE SULFIDE, Talcose	
426.8 438.5		Xz,t	** 426.8 438.5 TUFFITE, Talcose, With Sulfides	

Noranda Exploration Inc.
Eastern Division

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	3.2	-55.7
100'	359.9	-53.5
200'	1.8	-53.8
300'	2.5	-53.4
455'	4.0	-53.5

PROJECT: LYNNE P.D. 1376
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff
DATE COLLARED: 5-31-91
REMARKS: Geotech hole
CORE SIZE: NQ

HOLE NO: LYNN1-129 (WDNR #282)

DATE: 12-1291
PAGE 1 OF 7

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-2-91

BEARING: S3.2E INCLINATION: -55.7 T.D: 455'
COORDINATES: L10000 E, 10880 N
ELEV: 1566.2' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
438.5 455.0		Ch.Di	** 438.5 455.0 CHERT, With Diopside	
			E.O.H. 455' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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	I
0 60.0												** 0.0 60.0 OVERBURDEN									
											D	** 60.0 86.1 DACITE, black, fine-grained									
63.5																					
	98	85	R3	a	20	3															
				a	40																
68.0					55																
	90	85	R3	a	20	3					Rd	^^ 70.0 82.5 Rhyolite Dike (?), tan to black, highly fractured, granophyric to plag-phyric (internal veinlets @ 45-55 degrees)									
				a	40																
73.7				a	60																
	99	85	R3	b	40	2				-40											
				a	55					-50											
79.0				b																	
	99	95	R3	b	30	2															
83.0				b	55																
	99 crush																				
83.5																					
	99	85	R3	b	35	2				-35C	Xch	** 86.1 90.4 TUFFITE, cherty		F	60		4				64
				c	60									F	60		4				64
				c							MS	^^ 86.1 87.5 Massive Sulfide		F	60		4				64
				b										F	60		4				64
										-65C		^^ 87.5 88.5 Andesite Dike (?)		F	60		4				64
														F	60		4				64
										-44	MSch	^^ 88.0 91.0 Massive Sulfide, cherty		F	60		4				64
														F	60		4				64
90.5										-15	TSchp	** 90.4 94.6 TALC SEDIMENT AND CHERT, interbedded, irregular oblique contact	]		3		2	1	3	9
	100	100	R3	a	10	3				-0-10(?)				b	3		2	1	3		9
				a	30									b	3		2	1	3		9
93.5					60						Dd	** 94.6 103.9 DACITE (?) DIKE, trace disseminated Py, Po		b	3		2	1	3		9
	100	95	R3	b	10	2															
95.0					55																
	100	95	R3	b	10	3															
					40																
97.0					60																
	99	60	R3	c	10	2															
98.0					50																
	100	100	R3	b	25	2															
99.0					50																
	100	100	R3	b	20	3															

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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
				b	40						Xch	** 103.9 152.8 TUFFITE, cherty, weakly bedded	b	7	1	1				9
				b	60								b	7	1	1				9
													b	7	1	1				9
105.0											Chs	^^ 103.0 115.0 Chert, to cherty tuffite	b	7	1	1				9
	100	100	R3	c	20	2							b	7	1	1				9
					50								b	7	1	1				9
107.5													b	7	1	1				9
	100	100	R3	c	50	2							b	7	1	1				9
				c	70								b	7	1	1				9
				c									c	7	5	1		2		15
115.0				b									c	7	5	1		2		15
	100	100	R3	c	40	1							d	35		3	1			39
117.0										-15B			d	35		3	1			39
	100	100	R3	c	30	2							e	35		3	1	7		46
				c	55								e	35		3	1	7		46
				b									d	35		3	1			39
125.5				b						-35B		Note: @ 125.3-127.5 Sp Ms beds	f	80		3	1			84
	100	100	R3	c	10	3				-70			d	35		3	1			39
				b	30								d	35		3	1			39
				a	55					-70			d	35		3	1			39
				b									d	35		3	1			39
135.0				b									d	35		3	1			39
	100	100	R3	b	35	2							d	30		3		4		37
				b	60								d	30		3		4		37
				b									d	30		3		4		37
143.5				b									d	30		3		4		37
	100	100	R3	c	40	2							f	60	1	3		4		68
145.0					60								f	60	1	3		4		68
	100	90	R3	c	20	2					Ch	^^ 148.0 152.8 Chert, minor epidote alteration	f	60	1	3		4		68
				a	60								e	35	1	3		4		43
				a																
				a						-60C	p8d	** 152.8 169.2 BASALTIC DIKE, plag-phyric, with chilled contacts								
153.0				a																
	100	100	R3	a	20	2				-55C										
155.0					60															
	100	100	R3	a	20	2						Note: @ 152.8 and 171.5 Clay gouge and epidote at contacts								
				a	60															
162.0				a																
	100	100	R4	b	20	2														

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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
165.0				a	40															
	100	100	R4	a	15	2														
167.5				a	60															
	100	90	R4	a	10	3				-65C	Ch,Di	** 169.2 186.0 CHERT, with epidote and diopside								
				a	30					-15F										
173.0				a	55															
	100	95	R3	a	20	3														
				a	40															
				b	60															
				c							Sk	^^ 182.3 186.0 Skarn	a				3	1		4
183.0				c									a				3	1		4
	100	100	R3	c	30	2							a				3	1		4
185.0					55						MSch	** 186.0 197.0 MASSIVE SULFIDE, cherty, some "ash"	a				3	1		4
	100	95	R3	c	10	3							a				3	1		4
				c	30								a				3	1		4
				c	50						Sk	^^ 186.8 187.4 Skarn, with garnet and epidote	d	35	1	1	1			38
				c									d	35	1	1	1			38
				c									d	35	1	1	1			38
											xR	^^ 189.5 191.0 Spherulitic Rhyolite (Relict)	d	35	1	1	1			38
													d	35	1	1	1			38
195.0													d	35	1	1	1			38
	100	100	R3	c	30	2					Xch	** 197.0 212.5 TUFFITE, cherty	d	35	1	1	1			38
				b	55								c	10	1		1	1		13
				b							Rsk	^^ 202.1 209.3 Rhyolite, skarn, chert, diopside ("barren")	c	10	1		1	1		13
				b									c	10	1		1	1		13
205.0				b									c	10	1		1	1		13
	100	95	R3	b	10	3				-20B			c	10	1		1	1		13
				b	45								c	10	1		1	1		13
				a	60					-50C	D	** 212.5 324.0 DACITE, black, fine-grained (volcaniclastic ?) to plag-phyric, (andesite), clay gouge at contact	c	10	1		1	1		13
				a									c	10	1		1	1		13
215.0				a																
	99	90	R4	a	45	2														
217.0					60															
	100	90	R4	a	10	3														
				a	45					-65C	Ch	@ 221.9 223.1 Chert with chlorite, Sp, Ep	a	2						2
				a	60								a	2						2
224.0											gRd	@ 223.1 232.0 Granophyric Rhyolite Dike, tan to green aphanitic								
	98	70	R2	b	45	2														
				a	60															

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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
				a						-53	FZ	^^ 227.5 237.0 Shear/fault zone								
230.0																				
	100	95	R3	a	50	2					R1	^^ 230.0 242.5 Rhyolite Lapilli Tuff, black, weakly sheared								
				a	70															
				a																
				a																
240.0				b																
	100	100	R3	a	10	2						@ 239.5-253.0 (Weak) Talc								
242.5					55															
	100	90	R3	b	30	2														
				a	60															
				a																
				b																
252.5				b																
	98	85	R3	c	15	3														
				b	40															
257.5				a	60															
	100	95	R3	a	15	3				-35										
				a	30															
				a	55															
265.0				a																
	100	90	R3	a	20	2														
269.5				b	40															
	100	95	R3	b	30	2														
				a	60															
				a																
				a																
279.5				a						-20										
	100	95	R2	a	20	2														
				c	50							Note: @ 283.0-324.0 Lithic clasts, some crystal tuff at base of VCS unit								
				c																
287.0				c																
	100	85	R3	c	35	2														
291.0				c	50															
	100	95	R3	b	25	2														
				b	55															
				a						-47										
				b																
301.0				b																

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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
	98	70	R3	b	25	2														
				c	55															
				c																
309.0				c																
	98	50	R2	b	10	2														
314.0				b	60															
	70	50	R2	b	20	2														
				b	50															
				b																
324.0				c							R1c	** 324.0 342.3 RHYOLITE CRYSTAL LAPILLI								
	100	100	R3	c	20	2						TUFF, grades upward into VCS								
325.0					50															
	100	100	R3	c	20	2														
				c	60															
332.0				c																
	100	90	R3	b	20	2														
335.0				b	60															
	100	100	R3	c	20	2														
337.5					50															
	100	100	R3	b	15	2														
340.0					30															
	100	100	R3	b	15	2				-36C	gR	** 342.3 364.0 RHYOLITE, Granophyric	a				2			2
				a	55								a				2			2
345.0				a									a				2			2
	100	100	R3	a	40	2							a				1			1
349.0				b	60								a				1			1
	100	100	R3	a	40	2				-40			a				1			1
				a	60								a				1			1
355.0				a									a				1			1
	100	100	R3	a	40	2							a				2			2
357.5				a	60								a				2			2
	100	90	R3	a	40	2							a				2			2
				a	55								a				2			2
364.0				a									a				2			2
	100	100	R3	c	55	1				-32	Xca	** 364.0 369.5 TUFFITE, calcareous, bedded		e	5		40			45
366.0														e	5		40			45
	100	100	R3	c	40	2								e	5		40			45
				c	60					-30				e	5		40			45
				c							MP	** 369.5 381.1 MASSIVE PYRITE		e	5		40			45
				c										d			40			40
				c							MPca,s	^^ 369.5 375.5 Massive Pyrite, calcareous,		d			40			40

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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
												with sulfides	d				40			40
374.5										-30			d				40			40
	99	90	R3	c	30	2					MP,t	^^ 375.5 381.1 Massive Pyrite, talcose	d				40			40
				c	50								d	5			30			35
				c									d	5			30			35
				c									d	5			30			35
384.0				c							Xchp	** 381.1 388.0 TUFFITE, Chert, with pyrrhotite and pyrite	c	5			10	5		20
	99	90	R3	c	35	2							c	5			10	5		20
				c	50					-30C	R	** 388.0 419.3 RHYOLITE, dark grey, numerous fractures, ~ 1% disseminated pyrite	c	5			10	5		20
				a									c	5			10	5		20
				b									a				1			1
394.0				b									a				1			1
	100	100	R3	a	30	3				-50			a				1			1
				a	45								a				1			1
				a	60								a				1			1
401.5				b									a				1			1
	100	100	R3	b	30	2							a				1			1
404.5				b	50								a				1			1
	100	100	R3	b	20	2							a				1			1
407.0				b	40								a				1			1
	100	100	R3	b	25	2							a				1			1
410.0					40								a				1			1
	100	90	R3	a	25	3							a				1			1
				b	40								a				1			1
415.0				a	60								a				1			1
	100	90	R3	b	10	2							a				1			1
419.0				a	45					-40C	MS,t	** 419.3 426.8 MASSIVE SULFIDE, talcose	a				1			1
	100	100	R2	c	10	2							a				1			1
				d	30								e	48		1				49
425.0				d						-40	Xz,t	** 426.8 438.5 TUFFITE, talcose, with stringer sulfides	e	48		1				49
	100	100	R2	d	10	2							e	48		1				49
428.0				d	30								c	20		1				22
	100	95	R2	c	10	3							c	20		1				22
				c	30								c	20		1				22
				c	50								c	20		1				22
435.0				c									c	20		1				22
	100	100	R2	c	10	2							c	20		1				22
437.0					50					-30	Uh,Di	** 438.5 450.0 CHERT, diopsidic, high angle bedding (?) or foliations	c	20		1				22
	100	100	R2	c	10	2							c	20		1				22
													c	20		1				22

ROCK QUALITY:

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

DRILL HOLE: LYN91-129

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
				a	40																
442.5				a						-30											
	100	100	R3	a	10	2				-25											
444.5					35					-30											
	100	100	R3	b	20	2															
447.0					40					-30											
	100	100	R3	b	25	2				-45											
				a	45																
				a						-35											
455.0				a									E.O.H. 455' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.3	-53.1
100'	180.2	-51.8
200'	180.6	-51.8
250'	180.2	-51.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff
DATE COLLARED: 6-2-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-130 (WDNR #283)

DATE: 9-9-91
PAGE 1 OF 4

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED:6-3-91

BEARING: S180.3E INCLINATION: -53.1 T.D: 250'
COORDINATES: L9800 E, 10766N
ELEV: 1567.4' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 71.0			** 0.0 71.0 OVERBURDEN	
71.0 102.0		Rc	** 71.0 102.0 RHYOLITE CRYSTAL TUFF	
89.0 92.0		Sk	^^ 89.0 92.0 Chloritic Sediment	
92.0 102.0		BM	^^ 92.0 102.0 Massive Magnetite	
102.0 140.0		Rt	** 102.0 140.0 RHYOLITE TUFF	
121.0 127.0		SZ	^^ 121.0 127.0 Shear Zone	
127.0 135.2		BP	^^ 127.0 135.2 Bedded Pyrrhotite	
135.2 140.0		Rb	^^ 135.2 140.0 Rhyolite Breccia	
140.0 153.3		D	** 140.0 153.3 DACITE	
153.0 250.0		gQD	** 153.3 250.0 GRANOPHYRIC QUARTZ DIORITE	
			E.O.H. 250' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-130

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
0 71.0												** 0.0 71.0 OVERBURDEN								
											Rc	** 71.0 102.0 RHYOLITE CRYSTAL TUFF, minor lapilli sized fragments ?, epidote along fractures							
												Note: @ 83.0-87.5 Minor interbedded feldspar crystal rich zones								
											Sk	^^ 89.0 92.0 Chloritic Sediment or Skarn alteration (epidote)								
91.5										-45B	BM	^^ 92.0 102.0 Massive Magnetite with pyrrhotite, ~ 95% magnetite	a					5		5
	100	100	R3	c	30	2							a					5		5
95.0				b	50								a					5		5
	100	100	R3	c	10	2							a					5		5
99.0				c	30								a					5		5
	100	95	R3	c	10	2				-75B	Rt	** 102.0 140.0 RHYOLITE TUFF OR SANDSTONE, black, fine-grained, massive, moderate amount of very small quartz filled fractures	a					5		5
				b	30															
105.0				b																
116.0																				
	100	90	R3	a	10	3														
				a	50															
				b	70						SZ	^^ 121.0 127.0 Shear Zone ?, fine-grained, black to green rock, sheared or foliated, serpentinized								
				b						-60B										
125.0				b						-55B										
	99	50	R2	a	30	2														
127.5					60					-60C	BP	^^ 127.0 135.2 Bedded to Massive Pyrrhotite, minor brecciation or clasts	e		1			45		46
	100	100	R3	b	40	2							e		1			45		46
				c	60								e		1			45		46
				c									e		1			45		46
135.0				c						-35F	Rb	^^ 135.2 140.0 Rhyolite Breccia (?), or a Rhyolite Dike with xenoliths, grey to black, aphanitic, numerous fractures	e		1			45		46
	100	100	R3	b	10	3				-30V			e		1			45		46
				c	30															

ROCK QUALITY:

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

DRILL HOLE: LYN91-130

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
				c	50															
				b							D	** 140.0 153.3 DACITE, black, plag-phyric								
				b																
144.5																				
										-10F										
										-45C	gQD	** 153.3 250.0 GRANOPHYRIC QUARTZ DIORITE, numerous fractures with no preferred orientation (0-90 degrees)							
										-35										

ROCK QUALITY:

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

DRILL HOLE: LYN91-130

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
											E.O.H. 250' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	178.8	-58.6
100'	178.2	-58.0
200'	178.1	-58.2
250'	178.8	-58.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff
DATE COLLARED: 6-4-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-131 (WDNR #284)

DATE: 9-9-91
PAGE 1 OF 4

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-5-91

BEARING: S178.8E INCLINATION: -58.6 T.D: 250'
COORDINATES: L9600 E,. 10860 N
ELEV: 1564' SEC: 15 TWP: 37N RANGE: 4

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 50.0			** 0.0 50.0 OVERBURDEN	
50.0 76.0		D	** 50.0 76.0 DACITE	
76.0 114.5		Rc	** 76.0 114.5 RHYOLITE CRYSTAL TUFF	
107.0 114.5		Rl	^^ 107.0 114.5 Rhyolite Lapilli Tuff	
114.5 140.0		Sk	** 114.5 140.0 SKARN	
120.0 126.0		Rc	^^ 120.0 126.0 Rhyolite Crystal Tuff	
129.0 131.5		Rc	^^ 129.0 131.5 Rhyolite Crystal Tuff	
140.0 189.0		D	** 140.0 189.0 DACITE	
160.4 189.0		Rch	^^ 160.4 189.0 Rhyolite Tuff	
189.0 250.0		gQD	** 189.0 250.0 GRANOPHYRIC QUARTZ DIORITE	
			E.O.H. 250' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-131

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
0.0 50.0											** 0.0 50.0 OVERBURDEN								
										D	** 50.0 76.0 DACITE, plag-phyric	a				1			1
									-20F										
											Note: @ 76.0 Sharp contact								
									-45C	Rc	** 76.0 114.5 RHYOLITE CRYSTAL TUFF, feldspar rich, with abundant small blue quartz phenocrysts. Minor lapilli fragments.								
									-45										
									-45F	Rl	^^ 107.0 114.5 Rhyolite Lapilli Tuff, pale green to black, minor flow banding or bedding								
115.0	100	100	R3	a 10 b 40 c 60	3				-80B	Sk	** 114.5 140.0 SKARN, pale green diopside alteration, minor garnet development, trace epidote along fractures								

ROCK QUALITY:

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

DRILL HOLE: LYN91-131

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
				c							Rc	^^ 120.0 126.0 Rhyolite Crystal Tuff, minor lapilli fragments								
				b																
125.0													a					2		
	100	100	R3	b	5	3							a					2		
				c	50								a					2		
130.5				c	60								a					2		
	1000	90	R3	b	5	3				-80	Rc	^^ 129.0 131.5 Rhyolite Crystal Tuff	a					2		
				b	25							Note: @ 131.5-140.0 Strong diopside alteration, moderate to weak talc, weakly bedded to contorted								
135.0				b	65															
	100	100	R3	b	10	2														
				b	40					-60										
139.5										-80	D	** 140.0 189.0 DACITE, plag-phyric, black, possibly a minor amount of grey-white carbonate in matrix								
										-60										
162.5											Rch	^^ 160.4 189.0 Rhyolite Tuff or Sandstone, black, fine-grained, occasional cherty zones. ~ 1% disseminated to stringery chalcopyrite.	a		1					1
	99	85	R3	b	20	2							a		1					1
166.0				b	50								a		1					1
	100	100	R3	b	20	2							a		1					1
167.0					50								a		1					1
	100	100	R3	b	20	2							a		1					1
				c	50								a		1					1
				b									a		1					1
175.0				a									a		1					1
	100	100	R3	b	20	2							a		1					1
176.0					50								a		1					1
													a		1					1
													a		1					1
													a		1					1
													a		1					1
												Note: @ 189.0 250.0 Numerous fractures @ 0-10 degrees to axis	a		1					1
													a		1					1

ROCK QUALITY:

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

DRILL HOLE: LYN91-131

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
									-30C	gQD	** 189.0 250.0 GRANOPHYRIC QUARTZ DIORITE, dark matrix	a		1					1
											E.O.H. 250' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
115'		-60.0
315'		-61.0
425'		-61.0
515'		-61.0
625'		-61.0
697'		-61.0

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding/T. Suszek
DATE COLLARED: 6-4-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-132 (WDNR #285)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-8-91

BEARING: S180E INCLINATION: -60 T.D: 733'
COORDINATES: L12800 E, 11050 N
ELEV: 1561.5' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-5-91
PAGE 1 OF 11

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 43.5			0.0 43.5 OVERBURDEN	
43.5 136.5		Rc	43.5 136.5 RHYOLITE CRYSTAL TUFF	
135.5 143.3		gQd	136.5 143.3 QUARTZ DIORITE, GRANOPHYRIC	
143.3 158.0		VCS	143.3 158.0 VOLCANICLASTIC SEDIME	
158.0 172.0		Rcl	158.0 172.0 RHYOLITE CRYSTAL TUFF	
172.0 175.5		TS	172.0 175.5 TALC SEDIMENT	
175.5 597.0		R	175.5 597.0 RHYOLITE	
597.0 621.0		QDs	597.0 621.0 QUARTZ DIORITE SILLS	
621.0 660.5		R	621.0 660.5 RHYOLITE & RHYOLITE CRYSTAL OR LAPILLI TUFF	
660.5 676.0		QD	660.5 676.0 QUARTZ DIORITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
115'		-60.0
315'		-61.0
425'		-61.0
515'		-61.0
625'		-61.0
697'		-61.0

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding/T. Suszek
DATE COLLARED: 6-4-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-132 (WDNR #285)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-8-91

BEARING: S180E INCLINATION: -60
COORDINATES: L12800 E, 11050 N
ELEV: 1561.5' SEC: 15 TWP: 37N

T.D: 733'
RANGE: 4E

DATE: 12-5-91

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
676.0 733.0		pR	676.0 733.0 PORPHYRITIC RHYOLITE TO RHYOLITE CRYSTAL TUFF	
			E.O.H. 733' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
0.0 43.5											** 0.0 43.5 OVERBURDEN								
										R	** 43.5 136.5 RHYOLITE CRYSTAL TUFF								
											Note: @ 60.0-90.0 Rock very broken								
											Note: @ 117.0-125.0 Blue quartz eyes								

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

DRILL HOLE: LYN91-132

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
									-5F		(0.25"), high angle veinlets with carbonate and fractures								
									-20V										
									-10F	Rt,t	^^ 126.0 128.0 Rhyolite, talc altered, grey-black, high angle, like maybe a clast, contains grey angular fragments, very fine-grained pyrite in talc patches	a				2		2
									-40V										
										Rc	^^ 128.0 136.5 Rhyolite Crystal Tuff								
										gQD	>< 136.5 143.3 QUARTZ DIORITE, Granophyric								
									-50C	VCSm	>< 143.3 158.0 VOLCANICLASTIC SEDIMENT, black, medium to coarse-grained, magnetic (magnetite ?)								
									-35C										
									-45C		Note: @ 152.2 158.5 Same as above, ~ 4% magnetite								
									-30										
									-30C		Note: @ 158.0-158.5 Soft, green talc or serpentine along fractures or fault zone, minor brecciation and gouge								
										Rcl	>< 158.0 172.0 RHYOLITE CRYSTAL LAPILLI TUFF, or Granophyric Quartz Diorite								
										TS	>< 172.0 175.5 TALC SEDIMENT, abundant angular clasts, weak to moderate talc alteration, scattered very fine-grained pyrite, reddish-brown alteration; probably sericite. Not calcareous.	a a				1 1		1 1

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
										R	** 175.5 597.0 RHYOLITE								
									-40										
									-50										
											Note: @ 183.0-500.0 Occasional fine-grained zones with sharp irregular contacts. Possibly pillow basalts (?) or large accidental blocks.								
											Note: @ 187.0 Pyrite along fractures								
									-15F										
											Note: @ 211.0-212.5 Fault Zone								
									-30										
									-15										
									-60C										

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
									-30F										
											Note: @ 322.0 Rhyolite becoming finer-								

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
											grained (less porphyritic)								
									-30										
									-40										
									-30F										
											Note: @ 390.5-391.0 Fault Zone								
											Note: @ 400.0-414.0 Good example of the accidental clasts or fragments								

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
											(xenoliths ?)								
									-20										
											Note: @ 455' Fault Zone								
											Note: @ 460.0 Fine to very fine-grained zones (sandstone ?) with occassional porphyritic or coarser-grained zones								
									-30										

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
									-20										
									-35										
									-30										

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
										pR	^^ 565.0 597.0 Porphyritic Rhyolite, black matrix with blue quartz eyes								
									-20										
									-30										
									-60										
									-25										
									-30C	QDs	>< 597.0 621.0 QUARTZ DIORITE SILLS								
									-40C										
									-30C										
									-50										
										Rcl	>< 621.0 660.5 RHYOLITE & RHYOLITE CRYSTAL AND OR LAPILLI TUFF								
									-40F										
									-50										

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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
									-25F										
									-25C										
									-25C		^^ 653.0 660.5 Fine-grained Tuff								
									-90C										
										QD	>< 660.5 676.0 QUARTZ DIORITE								
										Rc	>< 676.0 733.0 PORPHYRITIC RHYOLITE TO RHYOLITE CRYSTAL TUFF, black matrix with abundant blue quartz eyes.								
										Rcl	^^ 692.5 697.0 Rhyolite Crystal Lapilli Tuff								
											Note: @ 694.0-697.0 Moderate brecciation with calcite along fractures								
									-50										
											Note: @ 705.0-733.0 Locally intruded by quartz diorite dikes and sills								
									-25	FZ	^^ 711.0 725.0 Fault Zone, brecciation randomly-orientated calcite-quartz veinlets, @ 25 degrees to core axis								

ROCK QUALITY:

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

DRILL HOLE: LYN91-132

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	TotalX	Sp	Cp	Ga	Py	Po	As	T
											^^ 730.0 733.0 Hole bottoms out in quartz diorite								
											E.O.H. 733' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
50'	180	-68.0
500'	180	-68.0
1000'	180	-68.0
1500'	180	-66.0
2000'	180	-65.0
2500'	180	-63.0
2959'	180	-60.0

PROJECT: LYNNE STRAT, #1892
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. J. Suszek
DATE COLLARED: 5-24-91
REMARKS: EOH @ 2959' In Hornblende Tonolite
CORE SIZE: NQ

HOLE NO: LYN91-133 (WDNR #286)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 10-21-91

BEARING: S180E INCLINATION: -68 T.D: 2959'
COORDINATES: L12800E, 12890N
ELEV: 1579' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 48.0			** 0.0 48.0 OVERBURDEN	
48.0 212.0		R	** 48.0 212.0 RHYOLITE	
49.0 52.5		D	^^ 49.0 52.5 Dacite, (Quartz Diorite ?)	
		pR	Note: @ 52.5; 65.0; 67.0; 70.0; & 91.0 Rhyolite Porphyry	
100.0 102.0		Rt	^^ 100.0 102.0 Rhyolite Tuff	
102.0 179.5		pR	^^ 102.0 179.5 Rhyolite Porphyry	
179.5 187.3		R1	^^ 179.5 187.3 Rhyolite Lapilli Tuff	
187.3 210.0		R	^^ 187.3 210.0 Rhyolite	
210.0 212.0		R1	^^ 210.0 212.0 Rhyolite Lapilli Tuff	
212.0 300.6		R	** 212.0 300.6 RHYODACITE	
300.6 355.5		R	** 300.6 355.5 RHYOLITE	
355.5 369.5		R	** 355.5 369.5 RHYODACITE	
369.5 408.3		D	** 369.5 408.3 DACITE	
375.0 389.6		R	^^ 375.0 389.6 Rhyodacite	
408.3 594.5		R	** 408.3 594.0 RHYOLITE	
590.5 594.5		R1	^^ 590.5 594.5 Rhyolite Lapilli Tuff	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

ootage	Bearing	Inclination
50'	180	-68.0
500'	180	-68.0
000'	180	-68.0
500'	180	-66.0
000'	180	-65.0
500'	180	-63.0
959'	180	-60.0

PROJECT: LYNNE STRAT, #1892
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. J. Suszek
DATE COLLARED: 5-24-91
REMARKS: EOH @ 2959' In Hornblende Tonolite
CORE SIZE: NQ

HOLE NO: LYN91-133 (WDNR #286)

DATE: 12-2-91
PAGE 1 OF 27

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 10-21-91

BEARING: S180E INCLINATION: -68 T.D: 2959'
COORDINATES: L12800E, 12890N
ELEV: 1579' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
94.5 871.8		R	594.5 871.8 RHYOLITE	
54.0 871.8		pR	854.0 871.8 Rhyolite Porphyry	
71.8 872.6		VCS	871.8 872.6 BEDDED VOLCANICLASTIC Note: Talcose Horizon	
72.6 881.8		R	872.6 881.8 RHYOLITE	
31.8 894.0		GW	881.8 894.0 GRAYWACKE	
94.0 1097.2		Rf	894.0 1097.2 ANDESITIC TO RHYOLITIC FLOWS	
097.2 1104.6		G	1097.2 1104.6 GRANITE	
104.6 1110.8		R	1104.6 1110.8 RHYOLITE	
110.8 1132.5		GDD	1110.8 1132.5 GRANODIORITE (Granite ?)	
32.5 1135.5		QD	1132.5 1135.5 QUARTZ DIORITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

ootage	Bearing	Inclination
50'	180	-68.0
500'	180	-68.0
000'	180	-68.0
500'	180	-66.0
000'	180	-65.0
500'	180	-63.0
959'	180	-60.0

PROJECT: LYNNE STRAT, #1892
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. J. Suszek
DATE COLLARED: 5-24-91
REMARKS: EOH @ 2959' In Hornblende Tonolite
CORE SIZE: NQ

HOLE NO: LYN91-133 (WDNR #286)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 10-21-91

BEARING: S180E INCLINATION: -68 T.D: 2959'
COORDINATES: L12800E, 12890N
ELEV: 1579' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-2-91
PAGE 1 OF 27

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
135.5 1186.0		GQD	⋇⋇ 1135.5 1186.0 GRANODIORITE (Granite ?)	
186.0 1226.0		R	⋇⋇ 1186.0 1226.0 RHYOLITE	
226.0 1287.0		G	⋇⋇ 1226.0 1287.0 GRANITE	
287.0 1291.2		R	⋇⋇ 1287.0 1291.2 RHYOLITE	
287.0 1289.0		pR	^^ 1287.0 1289.0 Rhyolite Porphyry	
291.2 1295.4		G	⋇⋇ 1291.2 1295.4 GRANITE	
295.4 1372.0		QD	⋇⋇ 1295.4 1372.0 QUARTZ DIORITE	
372.0 1512.5		R	⋇⋇ 1372.0 1512.5 RHYOLITE	
451.2 1454.3		Rt	^^ 1451.2 1454.3 Rhyolite Tuff, Fault Zone	
454.3 1467.0		FZ	^^ 1454.3 1467.0 Fault Zone	
502.5 1512.5		R	^^ 1502.5 1512.5 Rhyolite, Quartz Diorite Contact Zone	
512.5 2069.2		HT	⋇⋇ 1512.5 2069.2 HORNBLENDE TONALITE	
		FZ/SZ	Note: @ 1722.5-1751.0 Fault/Shear Zone	
733.0 1741.0		VCS	^^ 1733.0 1741.0 Volcaniclastic Sediment: Graywacke ?, Tuff ?	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

otage	Bearing	Inclination
50'	180	-68.0
00'	180	-68.0
00'	180	-68.0
00'	180	-66.0
00'	180	-65.0
00'	180	-63.0
59'	180	-60.0

PROJECT: LYNNE STRAT, #1892
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. J. Suszek
DATE COLLARED: 5-24-91
REMARKS: EOH @ 2959' In Hornblende Tonolite
CORE SIZE: NQ

HOLE NO: LYN91-133 (WDNR #286)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 10-21-91

BEARING: S180E INCLINATION: -68 T.D: 2959'
COORDINATES: L12800E, 12890N
ELEV: 1579' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-2-91
PAGE 1 OF 27

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
69.2 2083.6		Bd	** 2069.2 2083.6 BASALTIC DIKE	
83.6 2359.0		T	** 2083.6 2359.0 HORNBLENDE TONALITE	
07.0 2208.6			^^ 2207.0 2208.6 Quartz, Epidote, Actinolite Veins & Alteration	
58.0 2264.0			^^ 2258.0 2264.0 Same As Above	
72.5 2278.0			^^ 2272.5 2278.0 Same As Above	
59.0 2382.3		T	** 2359.0 2382.3 TONALITE	
71.0 2372.0		Ch	^^ 2371.0 2372.0 Chert	
82.3 2389.6		G	** 2382.3 2389.6 GRANOPHYRE	
89.6 2393.8		GW	** 2389.6 2393.8 GRAYWACKE	
93.8 2413.2		R	** 2393.8 2413.2 RHYODACITE	
13.2 2582.4		T	** 2413.2 2582.4 HORNBLENDE TONALITE	
82.0 2617.0		T	** 2582.0 2617.0 TONALITE, Pink	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

ootage	Bearing	Inclination
50'	180	-68.0
500'	180	-68.0
000'	180	-68.0
500'	180	-66.0
000'	180	-65.0
500'	180	-63.0
959'	180	-60.0

PROJECT: LYNNE STRAT, #1892
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. J. Suszek
DATE COLLARED: 5-24-91
REMARKS: EOH @ 2959' In Hornblende Tonolite
CORE SIZE: NQ

HOLE NO: LYN91-133 (WDNR #286)

CO./STATE: Oneida, WI
SCALE: 1"=20'
DATE COMPLETED: 10-21-91

BEARING: S180E INCLINATION: -68 T.D: 2959'
COORDINATES: L12800E, 1289ON
ELEV: 1579' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-2-91
PAGE 1 OF 27

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
617.0 2808.0		T	⋇⋇ 2617.0 2808.0 HORNBLENDE TONALITE	
709.0 2712.0			^^ 2709.0 2712.0 Alteration Zone With Actinolite, Epidote, Quartz and Biotite ?	
765.0 2771.5			^^ 2765.0 2771.5 Alteration Zone With Actinolite, Epidote, Quartz and Biotite ?	
808.0 2829.5			⋇⋇ 2808.0 2829.5 ANDESITE PORPHYRY	
829.2 2959.0		T	⋇⋇ 2829.2 2959.0 HORNBLENDE TONALITE	
863.0 2868.5		FZ/SZ	^^ 2863.0 2868.5 Fault/Shear Zone	
			E.O.H. 2959' (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	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To
0 48.0											><< 0.0 48.0 OVERBURDEN	<=.25% Py																			
												<=.25% Py																			
												<=.25% Py																			
										R	><< 48.0 100.0 RHYOLITE, grayish-black,	<=.25% Py																			
											fine-grained groundmass with <=3 mm	<=.25% Py																			
											diameter quartz and plag phenocrysts	<=.25% Py																			
												<=.25% Py																			
										Qd	^^ 49.0 52.5 Quartz Diorite Dike	<=.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																			
												a				2			2												
												a				2			2												
												a				2			2												
												a				2			2												
								-30		VCS/R	><< 100.0 102.0 VOLCANICLASTIC SEDIMENT/	a				2			2												
											TUFF, grayish-green, chloritic fragments	<=.25% Py																			
												<=.25% Py																			
										pR	><< 102.0 179.5 RHYOLITE PORPHYRY	<=.25% Py												x	x					
												<=.25% Py												x	x					
												<=.25% Py																			
												<=.25% Py												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

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	x							
												<=.25% Py																				
												<=.25% Py												x	x							
												<=.25% Py												x	x							
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												a			<1				<1													
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1													
												a			<1				<1													
												a			<1				<1													
												a			<1				<1													
												a			<1				<1													
												a			<1				<1													
												a			<1				<1													
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
										R1	** 179.5 187.3 RHYOLITE LAPILLI TUFF	a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
												a			<1				<1					x	x							
										pR	** 187.3 210.0 RHYOLITE PORPHYRY, lt.	a			<1				<1					x	x							
											gray to black with <=3 mm diameter	a			<1				<1													

% 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
											blue quartz and white plag phenocrysts	a				<1			<1													
												a				<1			<1													
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1													
												a				<1			<1													
												a				<1			<1													
												a				<1			<1													
										R1	><< 210.0 212.0 RHYOLITE LAPILLI TUFF	a				<1			<1													
												a				<1			<1													
										R	><< 212.0 300.6 RHYODACITE, gray-black,	a				<1			<1													
											fine-grained groundmass with blue quartz	a				<1			<1													
											and white plag phenocrysts	a				<1			<1													
												a				<1			<1													
										R	><< 300.6 355.5 RHYOLITE, dark gray to	a				<1			<1					x	x							
											black, medium to fine-grained groundmass	a				<1			<1					x	x							
											with blue quartz and white plag	a				<1			<1					x	x							
											phenocrysts	a				<1			<1													
												a				<1			<1													
										Rt	^^ 324.0 325.0 Rhyolite Tuff, green-gray,	a				<1			<1													
											fine-grained, chloritic matrix	a				<1			<1													
												a				<1			<1													
										R	><< 355.5 408.3 RHYODACITE	a				<1			<1													
												a				<1			<1													
										D	^^ 369.5 375.0 Dacite	a				<1			<1													
												a				<1			<1													
										R	><< 408.3 417.0 RHYOLITE	a				<1			<1													
												a				<1			<1													
										pR	^^ 408.3 408.6 Rhyolite Porphyry	a				<1			<1													
												a				<1			<1													
										pR	^^ 411.0 415.0 Rhyolite Porphyry	a				<1			<1													
												a				<1			<1													
										pR	^^ 415.5 417.0 Rhyolite Porphyry	a				<1			<1													
												a				<1			<1													
										R	><< 417.0 502.0 RHYODACITE	a				<1			<1													
												a				<1			<1													
										QDd	^^ 421.0 Quartz Diorite Dike	a				<1			<1													
												a				<1			<1													
												a				<1			<1													

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	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
										pRd	~~ 427.3 428.6 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 432.0 433.0 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
												a				<1			<1													
										pRd	~~ 437.0 437.6 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 445.0 445.6 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 446.8 447.0 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 449.0 449.6 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										QDd	~~ 451.0 452.1 Quartz Diorite Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 452.1 453.0 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 455.2 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 465.5 467.5 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 477.0 478.3 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 484.8 485.6 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										pRd	~~ 491.6 492.6 Rhyolite Porphyry Dike	a				<1			<1													
												a				<1			<1													
										Rf	~~ 502.0 590.5 ANDESITIC TO RHYOLITIC FLOWS	a				<1			<1													
												a				<1			<1													
												a				<1			<1													
									-10	FZ	~~ 516.0 518.0 Fault Zone, calcite and epidote fractures at 10 to 20 degrees to core axis	a				<1			<1													
									-20			a				<1			<1													
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					x	x							x
												a				<1			<1					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	T	Ac	Ta	Mt	Gt	Ep	Ca	Di	Se	Br	Bi	Am	To	Fe
												a				<1			<1					x	x							x
												a				<1			<1													
												a				<1			<1													
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
									-25	FZ/SZ	^^ 555.0 Fault/Shear Zone, with epidote	<=.25% Py												x	x						
											and calcareous veinlets @ 25 degrees	<=.25% Py												x	x						
											to core axis	<=.25% Py												x	x						
												<=.25% Py												x	x						
												<=.25% Py												x	x						
									-45	VCS/Rl	>< 590.5 594.5 VOLCANICLASTIC SEDIMENT/	<=.25% Py																			
											RHYOLITE LAPILLI TUFF, bedding is 45	<=.25% Py																			
											degrees to core axis	<=.25% Py																			
												<=.25% Py																				
										R	>< 594.5 871.8 RHYOLITE	<=.25% Py																			
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py																				
												<=.25% Py												x	x							x
										Td	^^ 665.5 667.0 Tonalite Dike	<=.25% Py												x	x						x
												<=.25% Py												x	x							x
												<=.25% Py																				
									-40	FZ	^^ 672.0 673.0 Fault Zone, fractures @	<=.25% Py												x							
									-60		40-60 degrees to core axis	<=.25% Py												x							
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py												x								
												<=.25% Py																				
												<=.25% Py												x	x							x
												<=.25% Py												x	x							x
									-15	SZ	^^ 755.8 756.5 Shear Zone at 15 degrees	<=.25% Py												x	x						x
											to core axis	<=.25% Py																			
												<=.25% Py																				
										pR	^^ 854.0 871.8 Rhyolite Porphyry	<=.25% Py																			