APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 1 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

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(pg 1-70)

LYNNE PROJECT

GEOLOGIC AND GEOTECHNICAL DRILLING LOGS

Explanation of Terms and Abbreviations

Geotechnical Terms

Run - Footage of rock drilled during each successive drilling interval or "run." The parameters listed below are determined on the basis of each run.

% - Percentage of rock recovered in each run.

RQD - "Rock Quality Determination" - the length of core recovered in solid cylinders, each more than four inches long, expressed as a percentage of the length of the core run.

Rf - "Intact rock strength" - related to an empirical scale, this parameter approximates the unconfined compressive strength of a given rock. For example, "R1" corresponds to very weak rock, whereas "R5" denotes very strong rock.

Fracture frequency - The frequency of fractures or discontinuities in the core.

Jn - Number of joints or fracture sets.

Jrc - "Joint roughness coefficient" - describes the surface roughness of joints or fractures.

Ja - "Joint alteration" - identifies specific alteration minerals or other criteria associated with joints.

SpG - Specific Gravity.

Fol - The orientation of fractures, foliations, or other planar fabrics with respect to the core axis.

Geologic Terms

Code - A letter code identifying the rock type, used for a computerized data base. (Please ignore this acronym and refer to the Lithology.)

Lithology - Rock type. A list of rock names with specific meanings to the Lynne Project is given below:

Massive Sulfide - Any rock with base-metal sulfide minerals comprising more than 25-30% of the rock volume. The base-metal sulfide minerals logged at Lynne are galena, sphalerite, and chalcopyrite.

Tuffite - Any rock with base-metal sulfide minerals comprising more than 10%, but less than 25-30%, of the rock volume.

Tufa - A sedimentary rock composed largely of carbonate minerals, predominantly calcite.

Wacke - A rhyolitic volcanic to volcaniclastic rock with some evidence of having been reworked or resedimented.

Sulfides - The sulfide minerals are identified, and their abundance (volume percent) is estimated. The total amount of sulfide minerals is also estimated. Individual sulfide minerals are identified by the following abbreviations:

Sp - Sphalerite	**Py - Pyrite**
Cp - Chalcopyrite	**Po - Pyrrhotite**
Ga - Galena	**As - Arsenopyrite**

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	186.4	-47.7
200'	185.9	-48.3
300'	187.4	-48.5
400'	187.2	-48.5
500'	189.0	-48.2
642'	189.1	-47.0

PROJECT: LYNNE #1874
CONTRACTOR: Longyear Co.
LOGGED BY: T. Harding
DATE COLLARED:
REMARKS: Boxes 9, 13, & 17 still in Toronto, log checked against assays.
CORE SIZE: NQ & BQ

HOLE NO: LYN90-1 (WDNR #138)

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

BEARING: S186E INCLINATION: -52 T.D: 642'
COORDINATES: L10000 E, 10860 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-5-91
PAGE 1 OF 4

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 58.0			0.0 58.0 OVERBURDEN	
58.0 65.0	(not recovered)			
65.0 68.0	(NQ core)			
58.0 115.3		Rd	58.0 115.3 RHYOLITE DIKE	
115.3 135.5		Sk	115.3 135.5 SKARN	
134.5 135.5		Sks	134.5 135.5 Skarn, With Sulfides	115.3 135.5 Ep-Mt-Gt-Po-Di 134.5 135.5 5% Cp
135.5 197.2		MS	135.5 197.2 MASSIVE SULFIDE	135.5 197.2 50% Sp, 3% Cp, 2% Pb, 5% Po, Py
197.2 205.4		R	197.2 205.4 RHYOLITE	
205.4 263.4		MS	205.4 263.4 MASSIVE SULFIDE	
263.4 268.4		TS	263.4 268.4 TALC SEDIMENT	
263.4 266.0		TSs	263.5 266.0 Talc Sediment, With Sulfides	263.5 266.0 5% Sp, 2% Po, Py
268.4 318.0		SS	268.4 318.0 SANDSTONE	
272.0 288.0		gRd	272.0 288.0 Granophyric Rhyolite Dike	

ORIGINAL

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	186.4	-47.7
200'	185.9	-48.3
300'	187.4	-48.5
400'	187.2	-48.5
500'	189.0	-48.2
642'	189.1	-47.0

PROJECT: LYNNE #1874
CONTRACTOR: Longyear Co.
LOGGED BY: T. Harding
DATE COLLARED:
REMARKS: Boxes 9, 13, & 17 still in Toronto, log checked against assays.
CORE SIZE: NQ & BQ

HOLE NO: LYN90-1 (WDNR #138)

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

BEARING: S186E INCLINATION: -52 T.D: 642'
COORDINATES: L10000 E, 10860 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-5-91
PAGE 1 OF 4

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
318.0 642.0		QD	×× 318.0 642.0 QUARTZ DIORITE	
318.0 338.0		gQD	^^ 318.0 338.0 Granophyric Quartz Diorite	
			E.O.H. 642' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN30-1

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 58.0											** 0.0 58.0 OVERBURDEN								
									-20	Rd	** 58.0 115.3 RHYOLITE DIKE SWARM, beige to red granophyric and porphyritic rhyolite dikes with epidote-altered fractures @ 20 degrees to axis								
68.0																			
72.0																			
74.0																			
79.0																			
									-20F										
90.0																			
95.0																			
99.0									-20F										
102.0																			
108.0									-20F										
									-20F										
114.0																			
116.0									-20C	Sk	** 115.3 135.5 SKARN, Ep-Mt-Gt-Po-Di alteration	b				5		5
122.0												b				5		5
												b				5		5
												b				5		5
												b				5		5
												b				5		5

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

DRILL HOLE: LYN90-1

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
127.0												b					5		5
132.0												b					5		5
												b					5		5
										Sks	^^ 134.5 135.5 Skarn, with sulfides	b					5		5
136.0									-85C	MS	>< 135.5 197.2 MASSIVE SULFIDE	b					5		5
												b					5		5
												b		5			5		10
										MSca	^^ 135.5 141.0 Massive Sulfide, calcareous bedded, amber sphalerite	f	80	1	5	3	10		99
									-50B			f	80	1	5	3	10		99
									-60B		Note: @ 141.0-151.0 Box Missing	f	80	1	5	3	10		99
												f	80	1	5	3	10		99
												f	80	1	5	3	10		99
												f	80	1	5	3	10		99
												f	80	1	5	3	10		99
152.0										MSz	^^ 151.0 172.0 Massive Sulfide, stringery, possible talc but not soapy, epidote, iron sulfides with sphalerite and along fractures	e	40	1	3	5	8		57
												e	40	1	3	5	8		57
158.0												d	15	2		5	8		30
												d	15	2		5	8		30
162.0												d	15	2		5	8		30
												d	15	2		5	8		30
												c	6	3		5	8		22
												c	6	3		5	8		22
167.0												c	6	3		5	8		22
												c	6	3		5	8		22
172.0										MSp	^^ 172.0 197.2 Massive Sulfide	f	50	1	1	5	8		65
												f	50	1	1	5	8		65
												f	80	3	4	2	7		96
177.0												f	80	3	4	2	7		96
												f	80	3	4	2	7		96
											Note: @ 179.0-189.0 Box missing	f	80	3	4	2	7		96
												f	80	3	4				87
												f	80	3	4				87
												f	80	3	4				87
												f	80	3	4				87
192.0												f	80	3	4				87
												f	80	3	4				87
196.0												f	80	3	4				87
												f	80	3	4				87
									-70C	R	>< 197.2 205.4 RHYOLITE, grey matrix, with grey quartz eyes	f	80	3	4				87

ROCK QUALITY:

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

DRILL HOLE: LYN90-1

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
202.0																				
205.0										MS	>< 205.4 263.4 MASSIVE SULFIDE, massive, coarse-grained, maroon sphalerite		f	90	3	3	2	2	100
													f	90	3	3	2	2	100
212.0									-55B				f	90	3	3	2	2	100
													f	90	3	3	2	2	100
214.0									-55B				f	90	3	3	2	2	100
													f	90	3	3	2	2	100
											Note: @ 216.0-228.0 Box missing		f	90	3	3	2	2	100
													f	50	2	2	2	5	61
													f	50	2	2	2	5	61
													f	50	2	2	2	5	61
													f	50	2	2	2	5	61
													f	50	2	2	2	5	61
229.0										MSca	^^ 230.0 249.0 Massive Sulfide, calcareous		f	50	2	2	2	5	61
									-62B				e	50	2	2	1	2	57
232.0													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
239.0													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
241.0													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
													e	50	2	2	1	2	57
252.0										MSp	^^ 249.0 258.4 Massive Sulfide, with pyrrhotite		e	50	2	2	1	2	57
													f	50	2	2	10	20	84
									-65B				f	50	2	2	10	20	84
258.0									-40B	TS	^^ 258.4 263.5 Massive Sulfide, talcose		f	50	2	2	10	20	84
													f	50	2	2	10	20	84
262.0													d	35			1	1	37
										TS	>< 263.5 268.4 TALC SEDIMENT		d	35			1	1	37
													d	35			1	1	37
										TSs	^^ 263.5 266.0 Talc Sediment, with sulfides	b		5			1	1	7
												b		5			1	1	7
												a					1	1	2
												a					1	1	2
									-65B	SS	>< 268.4 318.0 SANDSTONE, black, massive,	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: LYN90-1

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
269.0											with plag-phyric and grainy intervals								
272.0									-20C	gRd	^^ 272.0 288.0 Granophyric Rhyolite Dike, dark grey brown, granophyric, lower contact broken								
278.0																			
281.0																			
288.0																			
292.0																			
297.0																			
302.0																			
306.0																			
312.0																			
318.0									-87C	QD	>< 318.0 642.0 QUARTZ DIORITE								
										gQD	^^ 318.0 338.0 Granophyric Quartz Diorite								
321.0																			
											E.O.H. 642' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	188.3	-55.8
200'	188.4	-56.0
300'	188.2	-56.5
400'	188.7	-56.8
559'	188.9	-57.2

PROJECT: LYNNE P.D. 1870
CONTRACTOR: Longyear Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED:
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN90-2 (WDNR #139)

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

BEARING: S183.6E INCLINATION: -55.4 T.D.: 559'
COORDINATES: L10000E, 11000N
ELEV: 1563.7' SEC: 15 TWP: 37N RANGE: 4E

DATE: 11-11-91
PAGE 1 OF ?

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 49.0			** 0.0 49.0 OVERBURDEN	
49.0 66.0		MSch	** 49.0 66.0 MASSIVE SULFIDE, Cherty	49.0 66.0 60% Sp, Po, Ga, Py
66.0 69.5		Chp	** 66.0 69.5 CHERT, With Pyrrhotite	
69.5 74.0		Sk	** 69.5 74.0 SKARN, Chert Protolith	69.5 74.0 Ep, Gt
74.0 99.7		gR	** 74.0 99.7 GRANIPHYRIC RHYOLITE	
99.7 102.6		D	** 99.7 102.6 DACITE	
102.6 141.0		MSchp	** 102.6 141.0 MASSIVE SULFIDE, Cherty, With Pyrrhotite	102.6 141.0 12% Sp, 3% Ga, 15% Po, Py
141.0 156.0		MSp	** 141.0 156.0 MASSIVE SULFIDE, With Pyrrhotite	141.0 156.0 12% Sp, 4% Ga, 12% Po, Py
156.0 158.0		D	** 156.0 158.0 DACITE	
158.0 207.2		MSch#	** 158.0 207.2 MASSIVE SULFIDE, Cherty, With Diopside	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	188.3	-55.8
200'	188.4	-56.0
300'	188.2	-56.5
400'	188.7	-56.8
559'	188.9	-57.2

PROJECT: LYNNE P.D. 1870
CONTRACTOR: Longyear Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED:
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN90-2 (WDNR #139)

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

BEARING: S183.6E INCLINATION: -55.4 T.D.: 559'
COORDINATES: L10000E, 11000N
ELEV: 1563.7' SEC: 15 TWP: 37N RANGE: 4E

DATE: 11-11-91
PAGE 1 OF 7

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
207.2 242.3		MSca	** 207.2 242.3 MASSIVE SULFIDE, Calcareous	
242.3 250.9		gR	** 242.3 250.9 GRANOPHYRIC RHYOLITE	
250.9 320.6		MSca	** 250.9 320.6 MASSIVE SULFIDE, Calcareous	250.9 320.6 60% Sp
320.6 376.5		CS	** 320.6 376.5 TUFA	320.6 376.5 4% Sp
376.5 380.0		MStp	** 376.5 380.0 MASSIVE SULFIDE, Talcose, With Pyrrhotite	376.5 380.0 20% Sp, 2% Ga, 12% Po, Py
380.0 399.0		TS	** 380.0 399.0 TALC SEDIMENT	
399.0 423.0		Xz,t	** 399.0 423.0 TUFFITE, Talcose, Stringery	399.0 423.0 25% Sp, 3% Cp, 1% Ga
423.0 435.0		MSp	** 423.0 435.0 MASSIVE SULFIDE, With Pyrrhotite	423.0 435.0 60% Sp, 20% Po, Py
435.0 559.0		QD	** 435.0 559.0 QUARTZ DIORITE	
			E.O.H. 559' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-2

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 49.0												** 0.0 49.0 OVERBURDEN									
												^^ 0.0 20.0 Soft sand									
												^^ 20.0 38.0 Sand and gravel									
												^^ 38.0 49.0 Gravely clay and boulders									
											MSch	** 49.0 66.6 MASSIVE SULFIDE, cherty, bedded sphalerite with pyrrhotite, pyrite and cherty clasts 0.5-2.0"		d	25	7		3		35
55.0														d	25	7		3			35
	100	70	R3	b	10	2								d	25	7		3			35
59.0				b	40									d	25	7		3			35
	100	60	R3	b	10	2								d	25	7		3			35
61.0					40									d	25	7		3			35
	100	80	R3	c	10	2									f	70	15	5	10		100
63.0					55					-45B					f	70	15	5	10		100
	100	100	R3	c	10	2									f	70	15	5	10		100
68.0				c	40						Chp	** 66.6 69.5 CHERT, with pyrrotite			f	40	7	5	10		62
	100	100	R3	b	10	2									f	40	7	5	10		62
72.0				b	55						Sk	** 69.5 74.0 SKARN, chert with epidote and garnet, embayed upper contact	b						8		8
	100	100	R3	b	20	2															
					55																
73.0											gRd	** 74.0 99.7 GRANOPHYRIC RHYOLITE DIKE, with hi-angle fractures with epidote, pinkish grey, contacts broken									
	100	65	R3	b	15	3															
				b	35																
78.0				b	50					-15F											
	99	50	R3	b	15	3															
				b	35																
79.0				b	50																
	100	80	R3	b	15	2				-0F											
83.0				b	50																
	100	60	R3	b	10	2				-5F											
				b	50																
89.0				b																	

ROCK QUALITY:

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

DRILL HOLE: LYN90-2

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
	100	90	R3	b	10	3														
				a	30					-15F										
93.0					50															
	99	50	R3	a	10	3														
				a	30															
96.0					50					-5F										
	100	60	R3	a	10	3														
				a	30															
100.0					50						D	** 99.7 102.6 DACITE, black, plag laths, no obvious quartz								
	100	85	R3	b	10	2														
				b	30															
											MSch,p	** 102.6 141.0 MASSIVE SULFIDE, cherty, with pyrrhotite	c	5		1	5	10	21
													c	5		1	5	10	21
													c	5		1	5	10	21
103.0											Chps	^^ 102.6 105.3 Chert, with pyrrhotite, and sulfides	d	20		5	5	10	40
	100	100	R3	a	10	2							d	20		5	5	10	40
107.0				b	40								d	20		5	5	10	40
	100	100	R3	c	10	2							d	20		5	5	10	40
				c	40								d	20		5	5	10	40
113.0				b							Chps	^^ 111.0 120.0 Chert, with pyrrhotite and sulfides	c	3				7	10
	100	90	R3	b	15	2							c	3				7	10
				b	60								c	3				7	10
				b									a					3	3
122.0				b							Chp	^^ 121.0 123.8 Chert, with pyrrhotite, chert is grey to white translucent and fractured. Sulfides are disseminated and along fractures, not bedded except at base	a					3	3
	100	100	R3	b	15	1							a					3	3
				c	40								a					3	3
128.0				c									d	15		3	3	15	36
	100	100	R3	c	15	1							d	15		3	3	15	36
132.0				c								Note: @ 132.0-138.0 Native Silver	d	15		3	3	15	36
	100	100	R3	b	15	2							d	15		3	3	15	36
				b	30								d	15		3	3	15	36
138.0				b									d	15		3	3	15	36
	100	100	R3	b	15	2							d	15		3	3	15	36
142.0				b	50								d	15		3	3	15	36
	100	90	R3	b	10	2					MSp	** 141.0 156.0 MASSIVE SULFIDE, with pyrrhotite, bedded to contorted sphalerite and pyrrhotite, with translucent blebs and beds. Does not fizz, probably chalcedony or chert	d	15		3	3	15	36
				c	40								d	12		4		12	28
				c									d	12		4		12	28
				b									d	12		4		12	28
151.0				b									d	12		4		12	28
													d	12		4		12	28

ROCK QUALITY:

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

DRILL HOLE: LYN90-2

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
	100	100	R3	b	15	2								d	12		4		12		28
156.0				b	40						D	** 156.0 158.0 DACITE, fine-grained, dark green, flat lower contact		d	12		4		12		28
	100	95	R3	b	15	2															
				b	35																
										-75C	MSch#	** 158.0 207.2 MASSIVE SULFIDE, cherty, with diopside		f	60		6				66
														f	60		6				66
											Chc#	^^ 158.0 207.2 Chert, with diopside, grey chert and apple-green diopside matrix, with rounded cherty clasts. Diopside zones are fractured, with galena along fractures. Serpentine along fractures parallel to core axis. Iron sulfides <1%		f	60		6				66
														f	60		6				66
														f	60		6				66
														f	60		6				66
														f	60		6				66
														f	60		6				66
160.0														f	60		6				66
	100	90	R3	b	15	3					Chc#s	^^ 162.0 163.7 Chert, with diopside and sulfides	b		5		2				7
				b	30								b		5		2				7
				b	60								b		5		2				7
				a								^^ 166.0 170.0 Chert, with diopside	b		5		2				7
167.0													b		5		2				7
	100	80	R3	a	15	2							b		5		2				7
169.0					40								b		5		2				7
	100	100	R3	a	15	3							b		5		2				7
				b	40								b		5		2				7
174.0				b	60								b		5		2				7
	100	100	R3	b	40	2					Chc#	^^ 173.4 178.0 Chert, with diopside	b		5		2				7
177.0				b	60								b		5		2				7
	100	90	R3	b	20	3							b		5		2				7
				a	40								b		5		2				7
183.0				a	60									d	20		5				25
	100	90	R3	b	20	3								d	20		5				25
				a	40									d	20		5				25
186.0					60									d	20		5				25
	100	80	R3	a	10	2								d	20		5				25
190.0				a	35									d	20		5				25
	100	80	R3	b	10	2								d	20		5				25
193.0				b	35									d	20		5				25
	100	95	R3	c	5	2								d	20		5				25
				c	35									d	20		5				25
199.0				b						-4F		Note: @ 198.0-202.5 Fracture zone, @ high angles to core axis		d	20		5				25
	100	60	R3	b	5	2				-13F				d	20		5				25
														d	20		5				25

ROCK QUALITY:

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

DRILL HOLE: LYND-2

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

Run	%	RQD	RF	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
203.0				b	50								d	20		5				25
	100	100	R3	c	30	2							d	20		5				25
				c	60						MSca	** 207.2 242.3 MASSIVE SULFIDE,	d	20		5				25
209.0				c								calcareous, contorted to bedded, with	c	15		2	2			19
	100	95	R3	c	60	1						tufa, like intervals interbedded with	c	15		2	2			19
213.0				c								more clastic looking zones with cherty	c	15		2	2			19
	100	100	R3	c	30	2						and calcareous clasts. Sphalerite is	c	15		2	2			19
				b	60					-30B		slightly amber with 2-3% iron sulfide	c	15		2	2			19
219.0				b								cubes disseminated with it.	c	15		2	2			19
	100	100	R3	b	30	1							c	15		2	2			19
223.0				c									c	15		2	2			19
	100	100	R3	c	40	2				-45B	CSs	^^ 226.8 231.1 Tufa, with sulfides	c	15		2	2			19
				c	70								c	15		2	2			19
				c						-50B			c	15		2	2			19
				c									c	15		2	2			19
233.0				c									c	15		2	2			19
	100	100	R3	c	30	2							c	15		2	2			19
238.0				c	70								c	15		2	2			19
	100	100	R3	b	20	2							c	15		2	2			19
				b	45								c	15		2	2			19
243.0				b						-70C	gR	** 242.3 250.9 GRANOPHYRIC RHYOLITE,	c	15		2	2			19
	100	80	R3	b	5	3						lt. grey, granophyric with plag laths.	c	15		2	2			19
				b	20							Flat contacts; look chilled, could be a								
247.0					60							sill.								
	100	85	R3	b	15	2														
249.0					65					-60C	MS	** 250.9 320.6 MASSIVE SULFIDE,	f	60		2				62
	100	85	R3	b	15	3						predominantly just massive sulfide, with	f	60		2				62
				b	40							diopside and cherrt clasts or patches.	f	60		2				62
253.0					60							In places, vuggy weathering or sulfides.	f	60		2				62
	100	95	R3	b	10	2						Carbonate, chert, and tremolite increase	f	60		2				62
				c	30							toward base.	f	60		2				62
258.0				c									f	60		2				62
	100	100	R3	c	20	2							f	60		2				62
				c	60								f	60		2				62
263.0				c									f	60		2				62
	100	95	R3	c	15	2							f	60		2				62
				c	35								f	60		2				62
269.0				c									f	60		2				62
	100	95	R3	c	45	1							f	60		2				62
273.0				c									f	60		2				62

ROCK QUALITY:

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

DRILL HOLE: LYN90-2

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
	99	70	R3	c	45	1								f:	60		2				62
275.0														f:	60		2				62
	60	0	Crush	-	-	-								f:	60		2				62
277.0														f:	60		2				62
	99	60	Crush	-	-	-								f:	60		2				62
282.5												Note: @ 280.0-315.0 Calcareous patches		f:	60		2				62
	100	80	R3	c	40	1						and increasing patches of white bladed		f:	60		2				62
				c								mineral (tremolite)		f:	60		2				62
288.0				c										f:	60		2				62
	99	80	R3	b	30	2								f:	60		2				62
292.0				b	60									f:	60		2				62
	99	60	R3	crush	40	2								f:	60		2				62
296.0				b	60									f:	60		2				62
	100	95	R3	c	30	2								f:	60		2				62
				c	50									f:	60		2				62
				c										f:	60		2				62
303.0				c										f:	60		2				62
	100	100	R3	c	30	2								f:	60		2				62
				c	60									f:	60		2				62
				c										f:	60		2				62
312.0				c										f:	60		2				62
	100	75	R3	c	30	2								f:	60		2				62
				c	50									f:	60		2				62
				b										f:	60		2				62
				c										f:	60		2				62
320.0				c							CS	** 320.6 376.5 TUFA, bedded, with		f:	60		2				62
	100	80	R3	b	40	2						fluctuating angles, possible graphitic	c	:	4			5	3		12
				c	60							beds but does not smear. Possible	c	:	4			5	3		12
												tourmaline 8-10% disseminated iron	c	:	4			5	3		12
												sulfides. Vuggy weathering of sulfides.	c	:	4			5	3		12
													c	:	4			5	3		12
											CSs	^^ 320.6 334.1 Tufa, with sulfides	c	:	4			5	3		12
323.0													c	:	4			5	3		12
	100	90	R3	c	30	2							c	:	4			5	3		12
328.0				c	50								c	:	4			5	3		12
	100	100	R3	b	30	2				-308			c	:	4			5	3		12
				c	60								c	:	4			5	3		12
333.0				c						-158	Xca	^^ 334.1 342.5 Tuffite, calcareous	c	:	4			5	3		12
	100	100	R2	c	30	2							c	:	4			5	3		12

ROCK QUALITY:

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

DRILL HOLE: LYN90-2

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
336.0				c	65								c	4			5	3		12
	100	100	R2	c	30	2				-45B			c	4			5	3		12
				c	60					-75B			c	4			5	3		12
				c						-55B	CS	^^ 342.5 350.2 Tufa, bedded, with cherty clasts	c	4			5	3		12
343.0				c									c	4			5	3		12
	100	95	R2	c	30	2							c	4			5	3		12
347.0				c	60								c	4			5	3		12
	100	95	R3	c	45	2					CS	^^ 350.2 376.5 Calcareous Sediment, apple-green, massive, with pink and red patches (rhodocrosite or siderite) and scattered garnet. Diopside-rich.	a	4						4
353.0				a	65								a	4						4
				c									a	4						4
	100	100	R3	c	40	2							a	4						4
357.0				c	70								a	4						4
	100	100	R3	b	10	3							a	4						4
				c	40								a	4						4
363.0				b	70								a	4						4
	100	100	R3	b	10	3							a	4						4
				c	50								a	4						4
366.0					70								a	4						4
	100	80	R2	b	30	3							a	4						4
				b	50								a	4						4
369.0					70								a	4						4
	100	100	R3	a	30	3							a	4						4
				b	50								a	4						4
373.0					70								a	4						4
	100	100	R3	c	30	2					MS,pt	** 376.5 380.0 MASSIVE SULFIDE, talcose, with pyrrhotite	a	4						4
				c	70								a	4						4
				c									d	20		2	4	8		34
379.0											TS	** 380.0 399.0 TALC SEDIMENT, lt. grey, massive	d	20		2	4	8		34
	100	100	R2	c	30	2							d	20		2	4	8		34
383.0				c	70															
	100	100	R2	c	40	2														
				c	65															
389.0				c																
	100	100	R2	c	20	2														
392.0				c	60															
	100	100	R2	c	20	2														
				c	40															
398.0				c																
	100	100	R2	c	25	1					Xz,t	** 399.0 423.0 TUFFITE, talcose, stringery sphalerite and 2-5%	c	25	3	1	2	3		34
401.0													c	25	3	1	2	3		34

ROCK QUALITY:

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

DRILL HOLE: LYN30-2

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
	100	95	R2	c	25	2						disseminated iron sulfides	c	25	3	1	2	3		34
				c	40								c	25	3	1	2	3		34
				c									c	25	3	1	2	3		34
				c									c	25	3	1	2	3		34
411.0				c									c	25	3	1	2	3		34
	100	100	R2	c	20	2							c	25	3	1	2	3		34
				c	40								c	25	3	1	2	3		34
				c									c	25	3	1	2	3		34
				c									c	25	3	1	2	3		34
421.0				c									c	25	3	1	2	3		34
	100	100	R3	c	20	1							c	25	3	1	2	3		34
423.0										-40C	MSp	** 423.0 435.0 MASSIVE SULFIDE, with pyrrhotite, disseminated iron sulfides	c	25	3	1	2	3		34
	100	100	R3	c	5	2							f	60				10	10	80
428.0				c	20								f	60				10	10	80
	100	100	R3	b	5	2							f	60				10	10	80
429.0					20								f	60				10	10	80
	100	100	R3	c	5	2							f	60				10	10	80
				c	30								f	60				10	10	80
				c							QD		f	60				10	10	80
				b																
439.0				b																
	100	100	R3	b	5	2														
441.0					20															
	100	100	R3	c	25	1														
				c																
447.0				c																
	100	100	R3	c	20	1														
				c																
				c																
				c																
457.0				c																

ROCK QUALITY:

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

DRILL HOLE: LYN90-2

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. 559' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.1	-61.9
100'	180.4	-61.9
250'	176.8	-61.9
400'	178.5	-62.0
463'	180.3	-62.0

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: L. Kennedy, T. Harding, P. Jongewaard
DATE COLLARED: 6-21-90
REMARKS: NQ to test HLEM Max-Min anomaly
CORE SIZE: NQ/HQ

HOLE NO: LYN90-3 (WDNR #141)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-25-90

BEARING: S179.1E INCLINATION: -61.9 T.D: 463'
COORDINATES: L10200 E, 10824 N
ELEV: 1561.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 39.0			** 0.0 39.0 OVERBURDEN	
39.0 42.0	(not recovered)			
39.0 51.0		Rc	** 39.0 51.0 RHYOLITE CRYSTAL TUFF	
			GAMMA SULFIDE UNIT: @ 51.0-173.4	
51.0 173.4		Rl,s	** 51.0 173.4 RHYOLITE LAPILLI-SULFIDE TUFF	51.0 61.0 10% Sp
96.0 103.5		Rl	^^ 96.0 103.5 Rhyolite Lapilli Tuff	61.0 67.0 50% Sp, 3% Ga
120.5 159.5		ChR	^^ 120.5 159.5 Interbedded Tuff & Chert	67.0 96.0 25% Sp
159.5 173.4		Ch	^^ 159.5 173.4 Chert	96.0 97.0 10% Ga
				97.0 103.5 10% Sp, 3% Ga
173.4 190.0		gRs	** 173.4 190.0 GRANOPHYRIC RHYOLITE SILL	103.5 120.5 50% Sp, Ga
				150.0 157.0 5% Ga
			BETA SULFIDE UNIT: @ 190.0-324.0	
190.0 197.0		MS	** 190.0 197.0 MASSIVE SULFIDES	
		Xch	Note: @ 188.0-194.0 Tuffite, Chert	190.0 197.0 30% Sp, 10% Ga
197.0 324.0		Xca	** 197.0 324.0 TUFFITE, Calcareous with Scattered Massive Sulfide Beds	197.0 215.0 20% Sp, 2% Ga
			Note: @ 270.0-274.0 Chert	231.0 235.0 50% Sp, Ga
			Note: @ 295.0-299.0 Chert	235.0 257.0 5% Sp, Cp
				257.0 270.0 15% Sp
324.0 334.0		Sk	** 324.0 334.0 EPIDOTE-MAGNETITE-SPHALERITE CALC-SILICATE	324.0 334.0 10% Sp
				289.0 291.0 40% Sp, Ga

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.1	-61.9
100'	180.4	-61.9
250'	176.8	-61.9
400'	178.5	-62.0
463'	180.3	-62.0

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: L. Kennedy, T. Harding, P. Jongewaard
DATE COLLARED: 6-21-90
REMARKS: NQ to test HLEM Max-Min anomaly
CORE SIZE: NQ/HQ

HOLE NO: LYN90-3 (WDNR #141)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-25-90

BEARING: S179.1E INCLINATION: -61.9 T.D: 463'
COORDINATES: L10200 E, 10824 N
ELEV: 1561.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
			ALPHA SULFIDE UNIT: @ 334.0-405.0	
334.0 405.0		Xt	** 334.0 405.0 TUFFITE, Tuffaceous	299.0 324.0 30% Sp
356.0 359.0		Rc	^^ 356.0 359.0 Rhyolite Crystal Tuff	334.0 356.0 40% Sp, 10% Cp
395.0 405.0		Rtb,s	^^ 395.0 405.0 Sulfide Lapilli Tuff Breccia	359.0 395.0 30-40% Sp, 10% Cp
405.0 437.0		Rc	** 405.0 437.0 RHYOLITE CRYSTAL TUFF	399.5 423.0 Talc
437.0 463.0		QD	** 437.0 463.0 QUARTZ DIORITE	
437.0 442.8		gQD	^^ 437.0 442.8 Granophyre	
			E.O.H. 463' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-3

SULFIDES:

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
0.0 39.0												** 0.0 39.0 OVERBURDEN	a						
													a						
											Rc	** 39.0 51.0 RHYOLITE CRYSTAL TUFF,	a						
43.0												cherty tuff (Sp+Py~2%)	a						
	100	100	R3	c	45	2							a						
44.0					70								a		3-5			1	
	99	25	R3	a	40	1							a		1-2			1	
47.0				a									a		1-2			1	
	80	0	R3	a	20	2							a		1-2			1	
48.0					60								a		1-2			1	
	99	29	R3	a	30	2						GAMMA SULFIDE UNIT: @ 51.0-173.4	a		1-2			1	
				c	70						Rc	** 51.0 173.4 RHYOLITE CRYSTAL TUFF, &	a		1-2			1	
51.5										-50		massive and semi-massive sulfides		b	5-10	1	1	1	2-3
	100	72	R3	c	30	2								b	5-10	1	1	1	2-3
				c	50									b	5-10	1	1	1	2-3
				c										b	5-10	1	1	1	2-3
				c										b	5-10	1	1	1	2-3
61.0				c										b	5-10	1	1	1	2-3
	100	85	R3	c						-58				e	45		5		
				c										e	45		5		
				c										e	45		5		
				b										e	45		5		
				b									a		5-10				60
71.0													a		1-2	1	1		
	100	88	R3	b	35	2							a		5				5
				c	55									e	>80				
				c										c	20			2	3
				c										c	20			2	3
				c										c	20			2	3
81.0										-90				c	20			2	3
	98	45	R3	c	75	3								c	20			2	3
				c	20									c	20			2	3
				c	50									c	20			2	3
				b										c	20			2	3
														e	40			10	10
91.0				b										e	40			10	10
	100	98	R3	c	55	2								e	40			10	10
				c	35						R1	^^ 96.0 103.5 Rhyolite Lapilli Tuff,		e	40			10	10
												very fine-grained, Sp blotches in pro-		c	1	110-20		1	
				c								gressively fine-grained pale green alter-		c	10-20				1

ROCK QUALITY:

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

DRILL HOLE: LYN90-3

SULFIDES:

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
				d									c	10-20				
101.0				d								nated rhyolite lapilli tuff ~ 10-20% Ga,	c	10-20				
	100	50	R3	c	30	1						1% Cp, Sp from @ 96.5-97.5	c	10-20				
													f	30		30		
				c									f					50
				b									f					50
				b									f					50
111.0				c									f					50
	90	50	R3	a	70	2							e	40		5-10	5-10	
115.0				c	50								e	40		5-10	5-10	
	100	80	R3	c	75	2				-40			e	40		5-10	5-10	
				b	55					-85	ChR	** 120.5 159.5 INTERBEDDED TUFF & CHERT,	e	40		5-10	5-10	
				c						-90		brecciated fine-grained dark grey &	e	40		5-10	5-10	
				c								pale green cherty ash & chert. Local						
125.0				c								pervasive pale green Ep/Chlorite (?)	b	3	1	2-3		
	98	85	R3	d	30	2						alteration. Associate thin <1 mm high	b	3	1	2-3		
				d	85							angle gash veinlets with significant Ga	b	3	1	2-3		
				c								& Cp @ 125.0-129.0 & @ 138.0-140.0 &						
				b								especially @ 150.0-157.0.						
135.0				c						-75								
	100	80	R3	c	55	2				-82			b	5		1-2		
				c	70								b	5		1-2		
				c														
				c														
145.0				c														
	100	75	R3	b	70	2												
				c	25													
				c						-75			b		1	5-10		
				c									b		1	5-10		
155.0				c									b		1	5-10		
	100	90	R3	c	80	3							b		1	5-10		
				c	50					-80	Ch	** 159.5 173.4 CHERT, grey transluscent	b		1	5-10		
				c	25							chert, few tiny fracture-controlled						
				a								chlorite (?) blips...						
165.0				a														
	98	50	R2	a	45	2												
				a	55													
				a														
				a							gRs	** 173.4 190.0 GRANOPHYRIC RHYOLITE SILL,						

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

DRILL HOLE: LYN90-3

SULFIDES: % 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
175.0				a								dark grey, normal graded tuff,						
	95	25	R3	b	30	2						10-15% 1 mm feldspar phenos at base,						
176.5					50							tops down the hole ?						
	95	5	R3	b	55	2												
					75													
178.5																		
	80	40	R3	a	25	2												
					40													
180.5																		
	100	50	R3	c	45	1												
182.7													a			1-2		
	99	65	R3	c	45	1							a			1-2		
				c									a			1-2		
				b								Note: @ 188.0-197.0 Fault Zone ?						
				b														
											Xch	Note: @ 188.0-194.0 Tuffite, Chert,	d	40		10-20		
												stippled	d	40		10-20		
													d	40		10-20		
												BETA SULFIDE UNIT: @ 190.0-324.0	d	40		10-20		
													d	40		10-20		
												** 190.0 197.0 MASSIVE SULFIDES	d	40		10-20		
191.0													d	40		10-20		
	99	45	R3	b	15	2				-65			d	30	1	10		
195.0				b	35								d	30	1	10		
	100	70	R3	c	45	1				-80	Xca	** 197.0 324.0 TUFFITE, Calcareous,	d	20	5	10		
												@ 204.8-208.0 massive sulfide; >50% Sp,Ga,	e	30			30	
				b								Py,Po	e	30			30	
													c	10-15	1-2	1	5-10	1
				c									c	10-15	1-2	1	5-10	1
				b									c	10-15	1-2	1	5-10	1
205.0				b									c	10-15	1-2	1	5-10	1
	99	60	R3	c	45	1				-50			c	10-15	1-2	1	5-10	1
				c									e	25	5	1-2	20	5
				b						-40			e	25	5	1-2	20	5
				b									d					
				b									d					
													d	20		2-3	15	
													d	20		2-3	15	
215.0													d	20		2-3	15	
													c	5-10			5-10	

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

DRILL HOLE: LYN90-3

SULFIDES: % 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
	100	70	R3	c	45	1				-60			c	5-10			5-10	
				c									c	5-10			5-10	
				b									c	5-10			5-10	
				b									c	5-10			5-10	
225.0				b									c	5-10			5-10	
	99	40	R2	b	45	1							c	5-10			5-10	
230.0				b						-12			c	5-10			5-10	
	99	40	R2	c	35	2				-12		Note: @ 231.0-235.0 Massive Sulfides,	c	5-10			5-10	
				b	70							Sp>Ga>Py	e	40	1	1	10	
				b						-35			e	40	1	1	10	
													e	40	1	1	10	
													ab	3		1	2	
237.0													ab	3		1	2	
	100	40	R2	c	35	3				-40			ab	3		1	2	
				c	45								ab	3		1	2	
				c	70					0			ab	3		1	2	
				b						-45			ab	3		1	2	
247.0				b									ab	3		1	2	
	100	45	R2	c	45	1				-30			ab	3		1	2	
				c									ab	3		1	2	
				c						-55			ab	3		1	2	
				b									ab	3		1	2	
257.0				b									ab	3		1	2	
										-35			d	25	10	5	10	
	100	75	R3	c	45	1							d	10	1	3	4-5	
				c									d	10-15	1	3	4-5	
264.0				c						-40			d	10-15	1	3	4-5	
	99	40	R3	c	25	2				-55			d	10-15	1	3	4-5	
				c	70								d	10-15	1	3	4-5	
				b								Note: @ 270.0-274.0 Chert	d	10-15	1	3	4-5	
272.0				b														
	99	70	R2	b	45	2				-55			c	2-3		3-5	5	
				b	70								c	2-3		3-5	5	
				c									c	2-3		3-5	5	
				b														
281.0				a														
	80	25	R4	c	15	2				-70								
286.0				a	45								b		5	5		
	100	15	R4	a	45	2							b		5	5		
				a	60					-60			e	35	5		2-3	

ROCK QUALITY:

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

DRILL HOLE: LYN90-3

SULFIDES:

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
				b								e	35	5		2-3	
				b								e	35	5		2-3	
				b								a	3			2	
												a	3			2	
295.0											Note: @ 295.0-299.0 Chert	a	3			2	
	75	0	R4	a	35	2						d					
299.0				a	70							d					
	98	70	R3	c	20	3			-45			d					
				d	35							d					
				c	50							d					
				b					-40			d					
309.0				b								d					
	100	80	R3	c	40	2			-90			d					
				b	65				0			d					
315.0				b					-45			d					
	100	85	R3	b	45	2						d					
				c	70							d					
				c					-80			d					
				b						Sk	** 324.0 334.0 EPIDOTE MAGNETITE	d					
											SPHALERITE CALC-SILICATE	c	10-20			1-2	2-3
325.0				b								c	10-20			1-2	2-3
	95	0	R3	b	35	2			-75			c	10-20			1-2	2-3
				a	75							c	10-20			1-2	2-3
331.0				a							ALPHA SULFIDE UNIT: @ 334.0-405.0	c	10-20			1-2	2-3
	95	35	R3	b	35	2				Xt	** 334.0 405.0 TUFFITE, Tuffaceous	c	10-20			1-2	2-3
												e	50		30	20	
336.0				a	60							e	40	1	2-3	10-15	3-5
	98	35	R3	a	15	3						e	40	1	2-3	10-15	3-5
				a	30				-40			e	40	1	2-3	10-15	3-5
342.0				a	45							e	40	1	2-3	10-15	3-5
	99	85	R3	a	25	2						e	40	1	2-3	10-15	3-5
				a	65				-85			e	40	1	2-3	10-15	3-5
				b								e	40	1	2-3	10-15	3-5
				b								e	40	1	2-3	10-15	3-5
351.0				b								e	10	10-15		10	
	100	75	R3	a	45	2			-35			e	10	10-15		10	
				a	80					Rc	^^ 356.0 359.0 Rhyolite Crystal Tuff	e	10	10-15		10	
				a					-75			e	10	10-15		10	
359.0				a								e	10	10-15		10	
												ef	10-20	1-2	1	2-5	10-20

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-3

SULFIDES:

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
	100	95	R3	b		0							ef	10-20	1-2	1	2-5	10-20
				a									ef	10-20	1-2	1	2-5	10-20
				a									ef	5-10	10-20		5-10	3-5
				a									ef	5-10	10-20		5-10	3-5
369.0				a									ef		10		10	10
	100	95	R3	a	30	3				-50			ef		10		10	10
				a	40								ef				10	10
376.0				a	60								ef	40	10	2-3	1	
	100	95	R3	a	30	2							ef	40	10	2-3	1	
				a	55								ef	5	10		10	5
				b									ef	10	5	5	20	
				b									ef	10	10		10	10
385.0				b									ef	30	2		10	5
	100	80	R3	b	15	2							ef	30	2		10	5
				b	45								ef	30	2		10	5
				a									ef	30	2		10	5
				b									ef	30	2		10	5
395.0				b							Rtb,s	^^ 395.0 405.0 Sulfide Lapilli Tuff	ef	30	2		10	5
										-60		Breccia with sulfides	c	1-2	5		5	5
	100	80	R3	b	15	3							c	1-2	5		5	5
				c	45								c	1-2	5		5	5
				b	60					-90			c	1-2	5		5	5
				a						-40			c	1-2	5		5	5
405.0				a						-85	Rc	** 405.0 437.0 RHYOLITE CRYSTAL TUFF	c	1-2	5		5	5
	100	90	R3	c	20	2				-60								
				c	50													
				c														
				c														
415.0				c														
	100	35	R4	b	20	2												
				a	50													
421.0				b														
	100	90	R3	b	15	3												
				b	45													
				b	60													
				a														
431.0				b														
	90	55	R4	b	45	2												
				b	80													
				b							QD	** 437.0 463.0 QUARTZ DIORITE						

ROCK QUALITY:

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

DRILL HOLE: LYN90-3

SULFIDES:

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
											gQD	^^ 437.0 442.8 Granophyre						
139.0				a														
	98	60	R3	a	45	1												
143.0				a														
	100	90	R3	a	10	2												
				a	45													
				b														
				c														
153.0				c														
	100	100	R3	d	45	1												
				d														
				c														
				d														
163.0				d								E.O.H. 463' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	177.8	-50.5
100'	180.1	-49.6
150"	180.7	-49.8
250'	181.1	-49.7
319'	181.7	-49.8

PROJECT: LYNNE 1874

CONTRACTOR: Longyear
LOGGED BY: L.Kennedy/T. Harding
DATE COLLARED: 6-20-90
REMARKS: NQ to test HLEM Max-Min anomaly
CORE SIZE: HQ/NQ

HOLE NO: LYN90-4 (WDNR #140)

DATE: 10-20-90
PAGE 1 OF 5

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-23-90

BEARING: S180E INCLINATION: -52 T.D: 319'
COORDINATES: L9800 E, 10894 N
ELEV: 1579.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 70.0			** 0.0 70.0 OVERBURDEN	
70.0 74.0	(not recovered)			
74.0 133.4		Rc	** 70.0 133.4 RHYOLITE CRYSTAL TUFF	
104.0 108.5		Rt,p	^^ 104.0 108.5	
115.5 132.3		CT	^^ 115.5 132.3 CALCAREOUS TUFF	
			SULFIDE UNIT C: 133.4-180.8	
133.4 149.0		BP,sm	** 133.4 149.0 BEDDED PYRRHOTITE TUFF	
133.4 135.4		Ch	^^ 133.4 135.4 Cherty	
149.0 162.8		Rt,*	** 149.0 162.8 RHYOLITE TUFF, ALTERED	
149.0 154.0		Rt,s	^^ 149.0 154.0 Galena	
162.8 165.8		CT	** 162.8 165.8 CALCAREOUS TUFF	
165.8 170.2		Xt,st	** 165.8 170.2 TUFFITE	
170.2 180.8		CT/Rl	** 170.2 180.8 CALCAREOUS LAPILLI TUFF	
180.8 214.1		Rt	** 180.8 214.1 RHYOLITE TUFF	
180.8 186.0		Rt,t	^^ 180.8 186.0 Talcose	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	177.8	-50.5
100'	180.1	-49.6
150"	180.7	-49.8
250'	181.1	-49.7
319'	181.7	-49.8

PROJECT: LYNNE 1874

CONTRACTOR: Longyear
LOGGED BY: L.Kennedy/T. Harding
DATE COLLARED: 6-20-90
REMARKS: NQ to test HLEM Max-Min anomaly
CORE SIZE: HQ/NQ

HOLE NO: LYN90-4 (WONR #140)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-23-90

BEARING: S180E INCLINATION: -52 T.D: 319'
COORDINATES: L9800 E, 10894 N
ELEV: 1579.5' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-20-90
PAGE 1 OF 5

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
			SULFIDE UNIT B: 214.0-228.6	
214.1 224.5		Xz,t	** 214.1 224.5 TUFFITE	
224.5 228.6		Rt,ts	^^ 224.5 228.6 Talc	
228.6 250.7		Rc	** 228.6 250.7 RHYOLITE CRYSTAL TUFF	
248.5 250.7		Rt,t	^^ 248.5 250.7 Minor talc alteration	
			SULFIDE UNIT A: 250.7-261.7	
250.7 261.7		Rtp,ch	** 250.7 261.7 RHYOLITE TUFF	
261.7 288.4		Rt	** 261.7 288.4 RHYOLITE TUFF	
288.4 319.0		GP	** 288.4 319.0 GRANITE PORPHYRY	
288.4 294.0			^^ 288.4 294.0 Granophyre	
			E.O.H. 319' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-4

SULFIDES:

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

Run	%	RQD	Rf	ABCDE	Fol	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
0.0 70.0												** 0.0 70.0 Overburden						
0.0 15.0												^^ 0.0 15.0 Soft Sand						
15.0 30.0												^^ 15.0 30.0 Gravel & Boulders						
30,0 40.0												^^ 30.0 40.0 Gravel with green Clay						
40.0 70.0												^^ 40.0 70.0 Gravel & Boulders						
											Rc	** 70.0 133.4 Rhyolite Crystal Tuff, dark grey, normally graded tuff beds. 3-4mm quartz & feldspar @ base grade upward to fine-grained tuffs with plagioclase "phenocrysts"						
74.0																		
	100	50	R3	c														
77.0				a														
	80	30	R3	b	50	1												
				b														
83.0				a														
	100	30	R3	b	50					-45								
				b	30	2												
89.0				b									b			x		
	100	45	R3	b	70								b			x		
				b	30	2												
				b														
				b														
99.0				b														
	100	58	R3	a														
103.0				a							Rt,p	^^ 104.0 108.5 Rhyolite Tuff	c			5	15	
	100	63	R3	a	70	2							c			5	15	
				a	30					-60			c			5	15	
				a						-50								
				a														
113.0				b							CT	^^ 115.5 132.3 Calcareous Tuff carbonate and faint epidote "alteration" intense to pervasive						
	100	75	R3	a	80	1												
				b														
				a						-62								

ROCK QUALITY:

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

DRILL HOLE: LYN90-4

SULFIDES:

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

Run	%	RQD	Rf	ABCDE	Fol	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a														
123.0				a								124.0 127.0 Less Intense Alteration						
	100	73	R3	c	40	1												
				c						-40								
				c														
				d						-55								
133.0				d									a				10	
											BP,sm	** 133.4 149.0 Bedded Pyrrhotite Tuff	a				10	
	100	69	R3	b	20	1							a				10	
				b		0					Ch	^^ 133.4 135.4 Cherty	a				10	
				b										f			10	x
				bc										f			10	10
				c										f			10	10
143.0														f			10	10
	100	86	R3	bc	50	1				-50				f			10	10
				bc										f			10	10
				bc							Rt,#	** 149.0 162.8 Rhyolite Tuff, Altered		f			10	10
				bc										f		5		5
				bc						-85	Rt,s	^^ 149.0 154.0 Galena		f		5		5
										-55				f		5		5
153.0														f		5		5
	100	78	R3	c	50	1				-40			b			5	5	5
				c									b			2	5	5
				c						-45			b			2	5	5
				c							CT	** 162.8 165.8 Tuff, Altered & Tufa	b			2	5	5
163.0				c									b			2	5	5
	100	61	R3	c	45	1					Xt,st	** 165.8 170.2 Tuffite, Talcose Tuff		d	15-50		5	10
				c						-60		with Sphalerite & Talc		d	15-50		5	10
				b						-35				d	15-50		5	10
				c							CT/Rl	** 170.2 180.8 Calcareous Lapilli Tuff		d	15-50		5	10
				b						-70		and "tufa" sericite rinds to some	b					
173.0										-75		lapilli	b					
	100	77	R3	b	40	1				-70			b					
				c									b					
				b							Rt	** 180.8 214.1 Rhyolite Tuff	b					
				c								Fine-grained	b					
				c						-45			b					
											Rt,t	^^ 180.8 186.0 Talcose	b					
183.0																		
	98	40	R3	c	42	2				-45								

ROCK QUALITY:

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

DRILL HOLE: LYN90-4

SULFIDES:

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

Run	%	RQD	Rf	ABCDE	Fol	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a						-65								
				b														
				b														
193.0				c														
	99	50	R3	d		2												
196.0				a														
198.0	99	0	R3	a		3												
	100	75	R3	b	60	3												
201.0				b	20													
	100	75	R3	b	25	1												
205.0				b						-70								
	99	70	R3	d		2												
210.0				a														
	100	100	R3			1						SULFIDE UNIT B 214.0-228.6						
213.0											Xz,t	^^ 214.1 224.5 Tuffite, talcose with bedded to stringer sulfides	d	28	2			
	100	95	R3	b	30	2							f	60	1	10	25	
				b	80					-45			d	25			1	4
				c									d	30				3
				c						-60			d	28				2
223.0				c						-60	Rt,ts	^^ 224.5 228.6 Talc-rich						
	100	80	R2	b	80	2				-45								
				b	45						Rc	** 228.6 250.7 Rhyolite Crystal Tuff dark grey, graded bedding, subaqueous tuff						
				a														
				c														
233.0				d														
	100	98	R3	d	80	2												
				c	50													
				d														
				c														
243.0				c														
	100	98	R4	d	20	2												
				b	50						Rt,t	^^ 248.5 250.7 Minor Talc alteration						
				c														
				c								SULFIDE UNIT A: 250.7-261.7						
				d							Rtp,ch	^^ 250.7 261.7 Rhyolite Tuff with disseminated to minor, bedded Po & chert; 1-2% Cp	c		5			15
										-60								
253.0																		
	98	85	R3	c	40	3									2			
				b	80								c		2			5
258.0				a	20										2			

ROCK QUALITY:

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

DRILL HOLE: LYN90-4

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

	Run	%	RQD	Rf	ABCDE	Fol	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
260.0		95	0	R3	a	15	2									2			
						45													
		100	40	R5	b	50	1					Rt	** 261.7 288.4 Rhyolite Tuff						
263.0																			
		100	85	R3	b	45	2						261.7 270.7 Carbonate Veinlets						
					c	75													
					c								270.7 288.4 Hornfels						
					c								(plag-"phyric")						
273.0					c														
		100	85	R3	b	65	1												
277.0					b														
		100	90	R5	c	10	3												
					c	30													
					c	50													
					c														
285.0					c														
		100	100	R4	c	25	1					GP	** 288.4 319.0 Granite Porphyry						
289.0					c								^^ 288.4 294.0 Granophyre						
		100	95	R3	b	10	2												
293.0					a	35													
		100	95	R3	a	20	2												
					c	40													
					c														
					b														
301.0					c														
303.0		100	100	R3	d	40	1												
		100	100	R3	d	40	1												
307.0					d														
		90	100	R3	d	30	2												
					c	70													
313.0					c														
		100	80	R3	a	10	3												
					a	45													
319.0					b	60							E.O.H. 319' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-59.8
100'	179.4	-59.9
200'	179.9	-60.0
300'	179.7	-59.2
353'	180.1	-58.8

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/L. Kennedy
DATE COLLARED: 6-246-24-90
REMARKS: H of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-5 (WDNR #142)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-26-90

BEARING: S179.5E INCLINATION: -59.8 T.D: 353'
COORDINATES: L10400 E, 10515 N
ELEV: 1561.6' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-9-91
PAGE 1 OF 7

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 56.0			><< 0.0 56.0 OVERBURDEN	
56.0 61.0	(not recovered)			
56.0 196.0		R	><< 56.0 196.0 RHYOLITE	
196.0 215.0		SS	><< 196.0 215.0 SANDSTONE	
			SULFIDE UNIT B: 215.0-243.0 CHERT, CHERT-SULFIDE	
215.0 221.0		Xch,p	><< 215.0 221.0 TUFFITE	215.0 221.0 2% Sp 216.0 221.0 23% Sp
221.0 246.0		Chp	><< 221.0 246.0 CHERTY, With Pyrrhotite	
246.0 263.0		Rch	><< 246.0 263.0 RHYOLITE TUFF, Cherty	
263.0 280.0		TS	><< 263.0 280.0 TALC SEDIMENT	265.0 275.0 5% Py, 5% Po-Asp
280.0 290.0		>R	><< 280.0 290.0 SPHERULITIC RHYOLITE, Sheared	
290.0 353.0		gQD	><< 290.0 353.0 QUARTZ DIORITE	
290.0 338.0			^^ 290.0 338.0 Foliated to Sheared	
326.0 340.5		Bd	^^ 326.5 340.5 Basalt Dike	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-59.8
100'	179.4	-59.9
200'	179.9	-60.0
300'	179.7	-59.2
353'	180.1	-58.8

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/L. Kennedy
DATE COLLARED: 6-246-24-90
REMARKS: H of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-5 (WDNR #142)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-26-90

BEARING: S179.5E INCLINATION: -59.8 T.D: 353'
COORDINATES: L10400 E, 10515 N
ELEV: 1561.6' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
			E.O.H. 353' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-5

SULFIDES: % 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
0.0 56.0												** 0.0 56.0 OVERBURDEN							
												^^ 0.0 30.0 Fine sand							
												^^ 30.0 40.0 Sand							
												^^ 40.0 56.0 Sand, gravel, with boulders							
											Rc	** 56.0 76.5 Rhyolite Crystal Tuff, medium to coarse-grained, dark grey with plagioclase crystals and blue quartz eyes							
61.0																			
	90	25	R4	a	45	2													
				b	60														
				b								Note: Fracture set 55-70 degrees from core axis, second set 0-25 degrees from core axis							
69.0				c															
	100	90	R4	d	50	1													
73.0				d															
	99	50	R3	b	45	2					pR	** 76.5 94.5 Rhyolite Porphyry, beige orange, fine-grained matrix, with white plag phenocrysts							
77.0				a	80														
	100	50	R3	a	45	2													
78.0					60														
	95	50	R3	a	45	2													
79.0					60														
	95	0	R3	a	30	2													
					70														
81.0																			
	95	50	R3	a	15	2													
83.0					45														
	100	90	R3	b	15	2													
				a	45														
89.0				a															
	100	95	R3	a	15	2													
90.0					45														

ROCK QUALITY:

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

DRILL HOLE: LYN90-5

SULFIDES: % 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
		99	0	R3	a	15	2													
91.0						45														
		100	40	R3	a	30	2													
94.0					a	55						IR	** 94.5 177.0 Intrusive Rhyolite,							
		99	0	R3	a	45	2						predominantly beige orange, granophyric							
95.0						65														
		99	10	R3	a	10	3													
					a	45														
100.0					a	90														
		100	45	R3	a	10	3													
103.0					a	45														
						90														
		100	65	R3	b	15	2													
					a	30														
					a															
111.0					b															
		100	95	R3	b	15	2													
113.0						45														
		70	40	R3	a	15	2													
					b	45														
					a															
120.0					a															
		100	80	R3	a	5	3				-65									
123.0					a	45														
						60														
		100	50	R3	a	15	3													
125.0						45														
						60														
		100	65	R3	a	45	1													
129.0					b															
		75	30	R3	b	45	2													
133.0					b	80														
		100	30	R3	b	15	2													
136.0					c	45					-55									
		100	75	R3	a	45	2													
					a	60														
					a															
143.0					a															
		100	50	R4	a	20	3													
					a	45														

ROCK QUALITY:

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

DRILL HOLE: LYN90-5

SULFIDES: % 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
				a	60														
				a															
153.0				a															
	98	60	R3	a	10	3													
				a	30														
				a	45														
				a															
163.0				b															
	98	0	R3	b	10	2				-80									
165.0					30														
	98	40	R3	a	20	3													
				b	50														
170.0				b	80														
	99	55	R3	b	20	2													
173.0				b	60														
	100	70	R3	b	25	3													
176.0				b	40						Rcl	^^ 177.6 196.0 Rhyolite Crystal Lapilli Tuff, medium to coarse-grained, normally graded, unaltered							
					75														
	100	45	R3	b	40	2													
180.0				c	75														
	100	95	R3	c	40	1													
183.0				d															
	99	50	R2	c	10	2													
				b	40														
189.0				c															
	99	35	R2	b	45	1													
192.0				c															
	70	50	R3	c	20	2													
				c	50						SS	^^ 196.0 215.0 Sandstone, grey, fine-grained with 0.1mm chert interbeds							
				a															
				a															
201.0				a															
	100	80	R4	a	10	2													
				a	50							Note: @ 205.0 212.0 Reddish alteration along fractures, 50 degrees to core axis, 1-3 degrees to core axis							
				a															
210.0				a															
	99	0	R4	a	15	2						^^ 212.0 215.2 Epidote-talc alteration	a					2	
213.0				a	45					-50			a					2	
	99	40	R3	a	25	2							a					2	

ROCK QUALITY:

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

DRILL HOLE: LYN90-5

SULFIDES: % 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
				a	50						Xch,p	^^ 215.0 221.0 Bedded Sulfide (45%)	e	30		2	5	30	
218.0				a								Po>Sp>Py>Ga, cherty	c	20		2		10	
	100	80	R3	a	40	2							c	20		2		10	
				a	80							Note: @ 216.0 217.9 Massive Bedded Sulfide	c	20		2		10	
													c	15		2		10	
													c	2				10	
222.5										-85B	Chp	>< 221.0 246.0 CHERT, with pyrrhotite, bedded to stringery Po & Py in cherty matrix	c	2		1		10	
	100	60	R3	b	5	2				-90B			c	2		1		10	
				a	40								c	2				10	
227.0				a									c					10	
	99	0	R3	a	10	2							c					10	
229.0					40								c					10	
	99	20	R3	a	10	2				-50			c					10	
233.0				a	40								c					10	
	99	30	R3	a	20	2							c					10	
				a	40								c					10	
				a									c					10	
				a								Note: @ 246.0 1" pink carbonate vein 20 degrees to core axis	c					10	
				a									c					10	
243.0													c					10	
	99	35	R3	a	10	3				-20	Rch	>< 246.0 263.0 Rhyolite Tuff, cherty, silicified tuff with high angle veinlets and fractures-looks shattered	b					7	
				a	30								b					7	
				a	45								b					7	
251.0				a															
	99	40	R3	a	30	2													
253.0					40														
	99	30	R3	a	5	3						Note: Sphalerite and Carbonate veinlets @ 260.0-266.0							
				a	20														
				a	40														
				a															
263.0				a							TS	>< 263.0 280.0 Talc Sediment, with 3% Po, Py	b						
	99	15	R3	a	20	2							b						
266.0				a	40								b	1		2	1	3	3-5
	90	10	R3	a	25	2						Note: Arsenopyrite	b	2		2	1	3	3-5
				a	50								b	2		2	1	3	3-5
				a							sQDd	^^ 270.0 272.2 Quartz Diorite Dike, sheared	b	2		2	1	3	3-5
				a									b	2			1	3	3-5
273.0													b	1			1	3	3-5
	99	40	R3	a	10	2							b	1			2	5	3-5
				a	40														

ROCK QUALITY:

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

DRILL HOLE: LYN90-5

SULFIDES: % 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
				a															
				a							⁎R	⁎⁎ 282.7 290.0 Spherulitic Rhyolite, sheared							
				b															
												Note: High-angle fracture set 0-20 degrees from core axis							
										-30									
283.0																			
	100	40	R3	b	20	3				-40									
				a	40														
				b	70						gQD	⁎⁎ 290.0 353.0 Quartz Diorite, granophyric							
										-35									
				b								^^ 290.0 326.5 Foliated to Sheared, with patchy epidote bleaching, and blueish quartz, foliated							
293.0				b						-20									
	100	80	R3	a	20	2				-35									
				b	60														
				a															
				a															
303.0				a															
	100	75	R3	b	30	2				-30									
				a	70														
				a															
				a						-30									
313.0				a						-35									
	100	75	R3	b	30	2				-18									
				a	70					-20									
				a															
				a															
323.0				b															
	100	85	R3	b	40	2				-40C	Bd	^^ 326.5 340.5 Basalt Dike							
				a	60					-27C									
				b															
				b															
333.0				b															
	100	40	R3	a	40	2													
				a	80														
338.0				a															
	100	100	R3	a	40	2													
				a	70														

ROCK QUALITY:

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

DRILL HOLE: LYN90-5

SULFIDES: % 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
343.0					a															
		100	100	R3	a	30	2													
					b	70														
					b															
					b															
353.0					b								E.O.H. 353' (total depth)							

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
93'	182	-55.25
293'	200	-55.50
493'	184	-55.50

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/L. Kennedy
DATE COLLARED: 6-25-90
REMARKS: C of drill proposal

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-28-90

HOLE NO: LYN90-6 (WDNR #143)
BEARING: S180E INCLINATION: -54 T.D: 493'
COORDINATES: L9800 E, 11075 N
ELEV: 1571.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF 8

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 72.0		**	0.0 72.0 OVERBURDEN	
72.0 74.0	(not recovered)			
72.0 171.1		**	72.0 171.1 RHYOLITE TUFF	
125.0 154.5		^^	125.0 154.5 Epidote-Chlorite Bleaching/Alteration Along High Angle Fractures	
171.0 197.8		**	171.0 197.8 CHERT-SULFIDE TUFF	171.0 197.8 30% Sulfide; Sp>Py>Ga
182.7 195.0		^^	182.7 195.0 Rhyolite Porphyry	
197.8 271.0		**	197.8 271.0 GAMMA SULFIDE UNIT	
197.8 222.0		^^	197.8 222.0 Po-Ep Calcsilicate	197.8 222.0 45% Po
222.0 241.8		^^	222.0 241.8 Bedded Sulfide-Magnetite	222.0 241.8 95% Sulfide; 40% Sp, Mt, Py
241.8 271.0		^^	241.8 271.0 Calcareous Bedded Sulfide	241.8 271.0 40-50% Sulfide; 16% Sp, Py, Po
271.0 277.5		**	271.0 277.5 RHYOLITE CRYSTAL TUFF	
277.5 323.5		**	277.5 323.5 BETA SULFIDE UNIT	
277.5 289.5		^^	277.5 289.5 Calcareous Sulfide Tuff	277.5 323.5 30-50% Sulfide; Ga>Sp, Py, Cp
289.5 323.5		^^	289.5 323.5 Cherty Sulfide Tuff	279.0 282.5 90% Sulfide
323.5 365.7		**	323.5 365.7 RHYOLITE CRYSTAL TUFF	
365.7 413.5		**	365.7 413.5 ALPHA SULFIDE UNIT	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
93'	182	-55.25
293'	200	-55.50
493'	184	-55.50

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/L. Kennedy
DATE COLLARED: 6-25-90
REMARKS: C of drill proposal

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 6-28-90

HOLE NO: LYN90-6 (WDNR #143)
BEARING: S180E INCLINATION: -54 T.D: 493'
COORDINATES: L9800 E, 11075 N
ELEV: 1571.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF 8

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
365.7 375.0		^^	365.7 375.0 Calcareous Sulfide Tuff	
375.0 413.5		^^	375.0 413.5 Massive Sulfide	375.0 413.5 60-75% Sulfide; Sp, Po, Cp, Py
413.5 442.0		**	413.5 442.0 RHYOLITE CRYSTAL TUFF	
442.0 493.0		**	442.0 493.0 GRANITE PORPHYRY	
			E.O.H. 493' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: % 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
0.0 72.0												⋇ 0.0 72.0 OVERBURDEN						
												^^ 0.0 15.0 Brown sand						
												^^ 15.0 30.0 Gravel						
												^^ 30.0 50.0 Gravel & boulders						
												Note: @ 30.0-45.0 Lost 1000 gallons of slurry						
												^^ 50.0 72.0 Coarse gravel						
74.0												⋇ 72.0 171.1 RHYOLITE TUFF						
	100	70	R4	a	5	2												
				a	40													
				a														
				a														
83.0				a														
	100	70	R4	a	15	3				-35		86.0 115.0 Several brecciated fractures or veinlets, 0-25' to core axis, cemented with quartz/chert						
				a	40													
				a	60													
				a														
93.0				a														
	100	85	R3	a	20	2				-25								
				a	40													
				a														
				a								101.0 115.0 Bleaching associated with fractures						
103.0				a														
	100	30	R3	a	20	3				-3 -5								

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: % 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
					a	40													
109.0					a	70													
		100	90	R3	b	45	1				-5		111.5 113.5 Blue quartz and feldspar globs						
					c														
					c														
117.0					b														
		100	85	R3	b	20	2												
119.0						45													
		100	80	R3	b	20	2						^^ 125.5 147.0 Bleached Alteration associated with zoned veinlets @ 0-20 degrees to core axis						
					a	40													
					b									b				2	5
					c								^^ 125.0 154.5 Epidote-chlorite	b				2	5
					b								Chlorite bleaching/alteration along	b				2	5
129.0													high angle fractures	b				2	5
		100	80	R4	a	30	2												
					b	70													
					a														
					b								Note: @ 135.0 171.1 Fine Lapilli						
139.0					a								5-10% coarse crystal tuff, 138.0 147.0						
		90	0	R4	b	15	1						(Fr2) fracture zone with joints and fractures @ 0-10 degrees to core axis						
					b														
143.5																			
		99	15	R3	b	15	1												
148.0					c														
		100	85	R3	c	15	2							c				12	
152.0					b	45													
		100	75	R3	b	15	2												
					c	45													
					d														
159.0					d														
		99	50	R4	d	70	1												
162.0					b														
		99	0	R3	c	20	1												
164.0																			
		100	75	R4	c	40	1												
167.5					c														
		99	0	R3	b	15	2												
169.5						40													
		99	50	R3	b	30	2				-55		>>< 171.0 197.8 CHERT-SULFIDE TUFF,	d	20		5	5	
					a	70							interbedded chert and lapilli	d	20		5	5	

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: % 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
					b								tuff, epidote-carbonate alteration with		d	20		5	5	
					c								sulfides		d	20		5	5	
179.0					b										d	20		5	5	
		100	90	R3	c	15	2				-65		^^ 182.7 195.0 Rhyolite Porphyry		d	20		5	5	
					b	45					-55				d	20		5	5	
184.0					b										d	20		5	5	
		100	90	R3	c	30	1													
					b															
189.0					b															
		100	90	R3	b	10	3				-20									
					a	30					-14		193.3 195.0 Kspar alteration?							
					a	45							195.0 197.8 Chlorite-Epidote alteration							
196.0					a								><< 197.8 271.0 GAMMA SULFIDE UNIT							
		100	40	R3	a	15	2				-14									
					b	40					-20									20
200.0													^^ 197.8 222.0 Po-Ep Calc-Silicate		c					20
													Epidote altered tuff to cherty tuff		c					20
		100	70	R3	c	15	2						with 45% pyrrhotite		b					10
					a	40									b					10
					b										b					10
					a										b					10
					c								208.0 222.0 80% Pyrrhotite as cement			f				80
210.0													for chert and lithic fragments			f			80	
		100	85	R3	c	40	1									f			80	
214.0					b											f			80	
		100	75	R3	c	20	2									f			80	
					b	45										f			80	
					b											f			80	
					b								^^ 222.0 241.8 Bedded Sulfide-			f			80	
223.5					b								Magnetite, 95% sulfide-Sp>>Mt>Py			f	90		5	
		99	45	R3	b	15	2									f	90		5	
					b	45										f	90		5	
					b											f	90		5	
					b											f	90		5	
233.0					b											f	90		5	
		100	30	R3	a	50	1									f	90		5	
					b											f	90		5	
					c											f	90		5	
					b								Note: 237.0 241.8 Bedded magnetite with		c			5	5	
					b								90% Mt, 10% Po, Py		c			5	5	

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: % 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
														c					5	5
														c					5	5
241.0													^^ 241.8 271.0 Calcareous Bedded	c					5	5
		100	70	R3	b	45	1						Sulfide, contorted bedding, chert		e	30		5	15	5
					c								clasts and rhyolite lapilli toward base		e	30		5	15	5
					c								of interval, Sp>Py>>Po; 50% sulfides at		e	30		5	15	5
					c								top of interval		e	30		5	15	5
251.0					c										e	30		5	15	5
		100	75	R3	b	45	2								e	30		5	15	5
					b	80									e	30		5	15	5
					c									c		7	1	1	5	1
					b									c		7	1	1	5	1
					c									c		7	1	1	5	1
261.0													Sp>Py>>Po; 15% sulfides Cp	c		7	1	1	5	1
		100	60	R3	b	45	1							c		7	1	1	5	1
					c									c		7	1	1	5	1
					b									c		7	1	1	5	1
					b									c		7	1	1	5	1
271.0					b								** 271.0 277.5 Rhyolite Crystal	c		7	1	1	5	1
		99	10	R3	a	10	3						Tuff							
273.0						45														
						70														
		100	75	R3	b	10	2													
276.0					c	40														
		100	75	R3	a	40	1						** 277.5 323.5 Beta Sulfide		f			60		10
					b								Unit, 30-50% sulfide: Ga>>Sp, Py, Cp		f			60		10
					b										f			60		10
					b								^^ 277.5 289.5 Calcareous		f			60		10
													Sulfide Tuff	b						
283.0														b						
		100	95	R3	c	45	2							b						
					d	70								b						
					d								^^ 289.5 323.5 Cherty Sulfide	b						
					a								Tuff	b						
293.0					b									b						
															d	20	10	5		5
		100	100	R3	d	45	2								d		10	20		10
					b	70									d		10	20		10
298.0					a										d		10	20		10

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: % 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
	100	100	R3	b	15	2								d		10	20		10
				b	40									d		10	20		10
303.0				b										d		10	20		10
	100	50	R3	b	20	2								d		10	20		10
306.5				a	40									d		10	20		10
	100	90	R3	b	30	2								f			20		60
				a	60									f			20		60
				b										f			20		60
				b										f			20		60
														f			20		60
315.0														d	5	5	20		10
	99	40	R3	b	30	2								d	5	5	20		10
				c	45									d	5	5	20		10
				c										d	5	5	20		10
				a										d	5	5	20		10
324.5				a										d	5	5	20		10
	99	20	R3	a	15	3						** 323.5 365.7 Rhyolite Crystal Tuff		d	5	5	20		10
326.0					45														
					80							Note: Ep-Carb altered interbeds							
	99	30	R4	a	30	2						@ 326.5-327.0, 333.0 -334.0,							
329.0				a	70							335.0-338.0, 339.0- 340.0,							
	100	55	R3	a	20	2						354.2-355.0							
331.0					60														
	100	70	R3	b	45	2													
				c	80														
				b															
339.0				b															
	99	25	R3	c	45	2													
343.0				a	80														
	99	25	R3	b	55	2													
345.5					80														
	99	20	R3	c	45	2													
350.0				b	70														
	99	10	R3	a	45	2													
352.5					70														
	99	10	R3	b	45	1													
354.0																			
	99	20	R3	a	40	2													
357.5				a	60														

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: 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
		99	10	R3	a	30	2												
361.0					a	50													
		99	10	R3	a	30	3												
					a	45							** 365.7 413.5 Alpha Sulfide						
					a	60							Unit	c	10		15		
					c									c	10		15		
368.0													^^ 365.7 375.0 Calcareous	c	10		15		
		100	50	R3	c	60	1						Sulfide Tuff, 25% sulfide; Ga>Sp	c	10		15		
					c									c	10		15		
					c									c	10		15		
					c									c	10		15		
					c								^^ 375.0 413.5 Massive Sulfide	f	40	10		5	10
377.0													60-75% Sulfides; Sp>Po>>Py, Cp at top	f	40	10		5	10
		100	55	R3	d	45	1						Po>Cp>>Sp, Py toward base	f	40	10		5	10
					c									f	40	10		5	10
					c									f	40	10		5	10
					c									e	5	15		5	30
					b									e	5	15		5	30
387.0														e	5	15		5	30
		100	90	R3	b	45	1							e	5	15		5	30
					c									e	5	15		5	30
					d									e	5	15		5	30
					d									e	5	15		5	30
397.0					d									e	5	15		5	30
		100	90	R3	d	30	1							e	5	15		5	30
					d									e	5	15		5	30
					d									e	5	15		5	30
					c									e	5	15		5	30
407.0					d									e	5	15		5	30
		100	90	R4	c	45	1							e	5	15		5	30
					d									e	5	15		5	30
					d								** 413.5 442.0 Rhyolite Crystal	e	5	15		5	30
					d								Tuff, hornfelsed dark grey, hard						
417.0					d														
		100	70	R4	d	30	2												
					d	50													
					d														
					c														
427.0					b														
		100	80	R3	b	10	2												

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-6

SULFIDES: % 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
431.0					c	30													
		100	70	R3	d	30	2												
					c	70													
					b														
438.0					b														
		99	0	R3	a	30	2												
439.0						45													
		100	75	R3	a	10	3						** 442.0 493.0 Granite Porphyry						
					c	45													
					b	75													
					a														
449.0					a														
		99	50	R3	a	20	1												
451.0																			
		99	40	R3	b	40	1												
454.0					c														
		99	50	R3	b	20	2												
455.5						40													
		95	40	R3	a	20	2												
459.0					a	40													
		100	30	R3	b	5	2												
					a	60													
464.5					a														
		100	85	R3	b	45	2												
					a	70													
					b														
					b														
473.0																			
		100	90	R3	b	30	2												
					b	45													
					a														
					a														
483.0					a														
		100	100	R3	a	10	3												
					a	30													
					b	70													
					c														
493.0					a								E.O.H. 493' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
80'	213	-55.25
200'	172	-55.00
400'	174	-55.25
583'	183	-55.00

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy/ P. Jongewaard
DATE COLLARED: 6-27-90
REMARKS: A of drill proposal

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 7-1-90

HOLE NO: LYN90-7
BEARING: S180E INCLINATION: -56 T.D: 583'
COORDINATES: L10000 E, 11140 N
ELEV: 1560.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 58.0			** 0.0 58.0 Overburden	
0.0 20.0			^^ 0.0 20.0 Soft Sand	
20.0 40.0			^^ 20.0 40.0 Soft, Dark Brown Silt	
40.0 53.0			^^ 40.0 53.0 Sand, Gravel with boulders	
53.0 58.0	(not recovered)			
58.0 169.0		RTcl	** 53.0 169.0 Granophyric Intrusive Rhyolite	86.0 103.7 intense bleaching/silicification 125.0 166.0 intense bleaching/silicification 204.0 221.0 high angle carbonate-talc veinlets
169.0 176.0		SL	** 169.0 176.0 Siltstone	
176.0 183.5		Dd	** 176.0 183.5 Dacite Dike, Plag-Phyric	
183.5 211.0		FZ	** 183.5 211.0 Fault Zone, Carb-Chlorite Fractures, Brecciated, Hi-angle	
211.0 249.0		SS	** 211.0 249.0 Sandstone, Massive, Tiny Blue Quartz Eyes	
249.3 314.0		GAMMA	** 249.3 314.0 Unit C	
249.3 265.0		ChST	^^ 249.3 265.0 Chert-Sulfide Tuff	249.0 256.1 Calc-Silicate (Sp,Po)
265.0 279.0		CSb	^^ 265.0 279.0 Calcareous Bedded Sulfide	249.0 265.0 50% Sp, 20% Py, 1% Ga, 5% Po 265.0 279.0 25% Sp, 5% Py 1% Ga, Fine-grained Epid
279.0 290.5		ChST	^^ 279.0 290.5 Chert-Sulfide Tuff	279.0 290.5 10% Sp, 2% Py
290.5 312.9		CSbx	^^ 290.5 312.9 Calcareous Sulfide Tuff Breccia Ga rich calc matrix surrounding large siliceous fragments	290.5 312.9 15% Sp, 5% Py, 2% Ga(?)

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
80'	213	-55.25
200'	172	-55.00
400'	174	-55.25
583'	183	-55.00

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy/ P. Jongewaard
DATE COLLARED: 6-27-90
REMARKS: A of drill proposal

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 7-1-90

HOLE NO: LYN90-7
BEARING: S180E INCLINATION: -56 T.D: 583'
COORDINATES: L10000 E, 11140 N
ELEV: 1560.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
314.0 321.3		RTc	** 314.0 321.3 Rhyolite Crystal Tuff	314.0 321.3 Talc in fractures
321.3 457.0		BETA	** 321.3 457.0 Unit B	
321.3 343.2		RStx	^^ 321.3 343.2 Rhyolite Tuff Breccia with very fine grained semi-massive sphalerite	321.3 333.0 5% Sp, 10% Py 333.0 343.2 40% Sp, 10% Py
343.2 350.0		RT,t	^^ 343.2 350.0 Talc (massive)	346.0 350.0 1-2% Ga
350.0 362.0		ChS	^^ 350.0 362.0 Cherty Sulfide Tuff	350.0 362.0 25% Sp, 1-2% Ga, 5-10% Py
362.0 369.5		RStx	362.0 369.5 Tuff Breccia	362.0 369.5 Talc alteration along fracture
369.5 443.2		MSs	369.5 443.2 Siliceous Massive Sulfide	369.5 443.2 40% Sp, 10% Py, 1% Ga
443.2 457.0		RSt	^^ 443.2 457.0 Rhyolite Sulfide Tuff (Pseudobreccia) with sulfide rich matrix	443.2 457.0 5% Sp, 5% Py
457.0 489.0		ALPHA	** 457.0 489.0 Unit A	
457.0 465.0		CSl	^^ 457.0 465.0 Calcareous Laminated Sulfide	457.0 465.0 40% Sp, 10% Py
465.0 472.0		Skeg	^^ 465.0 472.0 Ep-Gt Calc-Silicate	465.0 472.0 Epidote-Calcite-Garnet zone
472.0 489.0		MS	^^ 472.0 489.0 Massive Sulfides Po,Py,Cp rich	472.0 489.0 30% Sp, 10% Cp, 20% Py, 10% Po
489.0 583.0		GP	** 489.0 583.0 Granite Porphyry	
			E.O.H. 583' (total depth)	

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

DRILL HOLE: LYN90-7

SULFIDES: % 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
0.0 58.0											** 0.0 58.0 OVERBURDEN						
											~~ 0.0 20.0 Sand, soft						
											~~ 20.0 40.0 Silt, soft, dark brown						
											~~ 40.0 53.0 Sand, Gravel with boulders						
										gIR	** 58.0 169.0 Granophyric Intrusive Rhyolite						
58.0																	
	100	100	R3	b	5	2											
60.0				70													
	99	50	R3	c	5	2											
63.0				b	30												
	100	85	R3	c	40	1											
				c													
				b													
				b													
73.0				b													
	100	80	R3	c	20	2											
				b	40												
79.0				b													
	100	30	R3	b	30	2											
83.0				b	45												
	99	20	R3	b	20	2											
87.0				b	40												
	100	90	R3	c	30	1											
90.0				c													
	100	85	R3	c	5	2											
93.0				c	45												
	100	90	R3	c	30	1											
97.0				b													
	100	95	R3	a	20	2											
102.0				a	45												

ROCK QUALITY:

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

DRILL HOLE: LYN90-7

SULFIDES:

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
104.0	100	100	R3	a	20	2												
					45													
	100	90	R3	a	40	2												
				b	80													
				b														
				a														
113.0				a														
	100	60	R3	a	30	2												
				b	80													
119.0				b														
	100	95	R3	b	20	2												
123.0				b	40													
	99	60	R3	a	20	2												
				a	50													
129.0				a														
	100	80	R3	a	20	2												
133.0				a	70													
	100	90	R3	a	5	2												
				a	25													
				a														
141.0				a														
	100	80	R3	a	15	2												
				a	40													
				b														
149.0				b														
	100	80	R3	b	15	2												
153.0				a	40													
	100	40	R3	a	15	1												
156.0				a														
	100	80	R3	b	20	2												
				a	40													
				b														
163.0				a														
	100	100	R3	b	5	2												
167.0				b	40													
169.0	100	55	R3	b	30	1					SL	** 169.0 176.0 Siltstone						
	100	50	R3	c	40	1												
173.0				b														
	100	95	R4	b	40	1					Dd	** 176.0 183.5 Dacite Dike, plag-phyric						
				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-7

SULFIDES:

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
				b						-20								
				b														
183.0				a							FZ	** 183.5 211.0 Fault Zone						
	100	95	R4	a	30	2												
				b	70													
				a														
										-30								
										-25								
				a						-33								
193.0				b														
	100	50	R3	c	20	2				-25								
				b	40													
				b							FZx	^^ 200.5 211.5 Fault Breccia						
				c														
203.0				b														
	100	90	R3	b	15	1												
				a						-50								
				b														
				b						-20	SS	** 211.0 249.0 Sandstone, massive, tiny						
213.0				a								blue quartz eyes						
	100	70	R3	a	20	2				-30	FZ	^^ 211.5 215.5 Fault zone						
				a	60													
				a									a		x		x	x
				a														
223.0				a														
	100	100	R3	b	30	2											x	
				b	70													
				c														
				c														
233.0				c														
	100	95	R4	c	10	3												
				b	30													
				a	70													
240.0				a														
	100	70	R4	a	20	2												
243.0				a	50													
	100	60	R4	a	5	3												
				a	20								ef	30	1		20	

ROCK QUALITY:

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

DRILL HOLE: LYN90-7

SULFIDES:

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
				a	60					-10	GAMMA	>< 249.3 314.0 Unit C	ef	40	1		20	
													ef	50	1		10	
				a						-20	ChST	^^ 249.3 265.0 Chert-Sulfide	ef	50	1		10	
253.0				b								Tuff	ef	50	1	20	10	
	100	70	R3	c	20	1							ef	50	1		10	
				c									ef	20	1	5	10	
259.0				c														
	100	90	R3	d	20	1							e	50		1	30	
				d									e	30	10	1-2		
				b							CSb	^^ 265.0 279.0 Calcareous	e	30	1	1-2	10	
				c								Bedded Sulfide	e	30	1	1-2	10	
269.0				c						-50			e	30	1	1-2	10	
	90	20	R3	c	45	1							e	30	1	1-2	10	
													c	5	1	1-2	5	
273.0				a									c	5	1	1-2	5	
	99	30	R3	b	45	1							c	5	1	1-2	5	
				b									c	5	1	1-2	5	
278.5				b									c	50	1	10	5	
	100	45	R3	c	20	2					ChST	^^ 279.0 290.5 Chert-Sulfide	c	3	1	1	2	
				b	45							Tuff	c	10-15	1	1	2	
283.0				b									c	10-15	1	1	2	
	100	80	R3	a	30	1							c	0	0	0	0	
287.0				c									c	5	1	1	5	
	100	75	R3	b	30	1							c	5	1	1	5	
				a							CSbx	^^ 290.5 312.9 Calcareous	c	5	1	1	5	
292.0				b								Sulfide Tuff Breccia Ga rich	c	5	1	1	5	
	99	45	R3	b	30	2						calc matrix surrounding large	c	5	1	1	5	
294.5					45							siliceous fragments	c	5	1	1	5	
	100	65	R3	c	10	2							c	5	1	1	5	
													c	5	1	1	5	
				b	45								d	30		5	5-10	
				b									d	20		1	5-10	
				b									d	20		1	5-10	
303.0	99	45	R3	a	20	2							d	40		5	5-10	
					45								bc	10		1	5	
305.0													bc	10		1	5	
	99	55	R3	a	20	2							bc	10		1	5	
				a	45								cd	5	3	8-10	5	
				b									cd	5	3	8-10	5	
313.0				c							RTc	>< 314.0 321.3 Rhyolite	cd	5	3	8-10	5	

ROCK QUALITY:

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

DRILL HOLE: LYN90-7

SULFIDES:

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
	100	60	R3	b	10	2						Crystal Tuffs	a	0	0	0	0	
				a	35								a	0	0	0	0	
				b									a	0	0	0	0	
				a							BETA	>< 321.3 457.0 Unit B	a	0	0	0	0	
323.0				c									c	<5	1		5-10	
	99	70	R3	b	30	2					RStx	^^ 321.3 343.2 Rhyolite Tuff	c	<5	1		5-10	
				a	50							Breccia with very fine	c	<5	1	5	5-10	
				b								grained semi-massive	c	<5	1		5-10	
				d								sphalerite	c	<5	1		5-10	
333.0				d									c	<5	1		5-10	
													e	30			10	
	100	60	R3	c	20	1							c	5				
				c									c	5				
				c									e	50			20	
341.0				b									e	50		10	20	
	95	20	R3	b	20	1							e	50			20	
343.0											RT,t	^^ 343.2 350.0 Talc (massive)	e	50			20	
	99	10	R2	b	25	1							a	0		3	1	
				b									a	0			1	
				a									a	0		2	1	
													a	0			1	
											ChS	^^ 350.0 362.0 Cherty Sulfide	d	70		3	10	
351.0				b								Tuff	d	25			5-10	
	99	0	R2	a	25	1							d	25			5-10	
353.0													d	25			5-10	
	99	50	R3	a	25	2							d	25		5	5-10	
				b	45								d	25			5-10	
				a									d	25			5-10	
				a							RStx	362.0 369.5 Tuff Breccia	d	20			5-10	
363.0				b														
	100	65	R3	a	30	2												
				a	55													
				a							MSs	369.5 443.2 Siliceous Massive						
				b								Sulfide	e	40-50			5-10	
373.0				c									e	40-50			5-10	
	100	80	R3	c	45	1							e	40-50	3-5		5-10	
				b									e	40-50			5-10	
378.0				c									e	40-50			5-10	
	100	95	R3	d	45	1							e	40-50			5-10	
				d									e	40-50			5-10	

DRILL HOLE: LYN90-7

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

SULFIDES: % 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
					c									e	40-50			5-10	
					b									e	40-50			5-10	
388.0					b									e	40-50			5-10	
		99	40	R3	c	60	1							e	40-50			5-10	
					c									e	40-50			5-10	
					a									e	40-50			5-10	
396.0					b									e	40-50			5-10	
		100	65	R3	c	45	1							e	40-50			5-10	
					b									e	30-40	1		5-10	
					b									e	30-40	1	3-5	5-10	
403.0					c									e	30-40	1	1	5-10	
		100	85	R3	c	20	1							e	30-40	1	1	5-10	
					b									e	30-40	1	1	5-10	
					c									e	30-40	1	1	5-10	
														e	5	1-2		30	5
411.0					c									e	5	1-2		30	5
		100	85	R3	c	45	2							e	30-40	1		10-20	
					c	80								e	30-40	5		10-20	
					c									e	30-40	10		10-20	
					c									e	30-40	5-10		10-20	
421.0					c									e	30-40			10-20	
		100	80	R3	c	35	2							e	30-40			10-20	
					b	65								e	30-40			10-20	
					a									e	30-40			10-20	
					c									e	30-40			10-20	
															30-40			10-20	
430.0					c									e	1-2			1	
		100	40	R3	b	30	2							e	1-2			20	5
433.0					c	45								e	1-2	10		20	5
		100	70	R3	b	30	2							e	1-2	10		20	5
					b	50								e	1-2			20	5
					c									e	1-2			20	5
					b									e	50		1-2	20	5
443.0					a							RSt	^^ 443.2 457.0 Rhyolite	e	50		1-2	20	5
		100	50	R3	a	15	2						Sulfide Tuff (pseudobreccia)	e		5			
					a	50							with sulfide rich matrix	e	50	5	1-2	10	10
														b	5	5		60	20
					a									b	5	5		5	
					a									b	5	5		5	
453.0					a									b	5	5		5	

DRILL HOLE: LYN90-7

ROCK QUALITY:

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

SULFIDES: % 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
		100	100	R3	a	5	2							b	5	5		5	
					b	30						ALPHA	>< 457.0 489.0 Unit A	b	5	5		5	
														f	40			10	10
					d							CSI	^^ 457.0 465.0 Calcareous	f	40			10	10
					d								laminated, Sulfide	f	40			10	10
463.0					d									f	40			10	10
		100	100	R3	d	30	1					Skeg	^^ 465.0 472.0 Ep-Gt	f	40			10	10
													Calc-Silicate	a	3		1		
					d									a	3		1		
					d									a	3		1		
					d							MS	^^ 472.0 489.0 Massive Sulfide	a	3		1		
473.0					c								Po,Py,Cp rich	f	40		10		
		100	90	R3	b	45	1							f	40		1		
					a									f	40		1		
					d									f	30	2-3	1	40	10-20
					d									f	30	2-3	1	40	10-20
483.0					c									f	30	2-3	1	40	10-20
		100	95	R3	c	45	1							f	30	20	1	40	10-20
					b									f	30	5	1	40	10-20
489.0					c							GP	>< 489.0 583.0 Granite Porphyry	f	30	5	1	40	10-20
		100	100	R3	c	10	2												
493.0					d	30													
		100	100	R3	d	50	1												
					c														
					c														
					d														
503.0					d														
		100	100	R3	c	20	2												
					c	75													
					c														
					c														
513.0					b														
		100	100	R3	a	30	2												
					c	80													
519.0					d														
		100	100	R3	d	40	1												
					d														
					d														
					d														
529.0					d														

ROCK QUALITY:

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

DRILL HOLE: LYN90-7

SULFIDES: % 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
		100	100	R3	b	25	1												
					a														
					b														
					b														
539.0					a														
		100	100	R3	a	30	1												
542.0					a														
		100	95	R3	a	30	1												
					c														
					c														
					d														
					d														
553.0																			
		100	100	R3	d	30	2												
					c	60													
					d														
					c														
563.0					d														
		100	100	R3	d	25	1												
					c														
					d														
					d														
573.0					d														
583.0													E.O.H. 583'(total depth)						

Noranda Explora..... Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.6	-58.9
100'	182.1	-59.7
200'	182.6	-59.6
300'	183.1	-59.6
400'	183.3	-59.4
433'	183.5	-59.5

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 6-29-90
REMARKS: E of drill proposal HQ/NQ
CORE SIZE: HQ/NQ

HOLE NO: LYN90-8 (WDNR #145)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 7-10-90

BEARING: S180E INCLINATION: -58 T.D: 433'
COORDINATES: L9600 E, 11073 N
ELEV: 1571' SEC 15 TWP: 37N RANGE 4E

DATE: 10-20-90
PAGE 1 OF 7

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 55.0			** 0.0 55.0 OVERBURDEN	
0.0 18.0			^^ 0.0 18.0 Sand	
18.0 20.0			^^ 18.0 20.0 Boulders	
20.0 40.0			^^ 20.0 40.0 Gravel & Boulders	
40.0 55.0			^^ 40.0 55.0 Sand & Gravel	
61.0 66.0	(not recovered)			
55.0 207.9		Rc	** 55.0 207.9 RHYOLITE CRYSTAL TUFF	
120.9 135.0		pRd	^^ 120.9 135.0 Rhyolite Porphyry Dike	121.0 135.0 Bleached alteration 157.0 163.0 associated with fractures 160.0 164.0 @ 10-20 degrees to core axis
207.9 218.7		Skep	** 207.9 218.7 EP-PO CALC-SILICATE	207.9 218.7 20% sulfide; Po, Sp>>Py with Mt
218.7 225.0		MSp	SULFIDE UNIT C: 218.7 286.5 ** 218.7 225.0 MASSIVE SULFIDE	218.7 225 90% sulfide; Sp>>Py, Po (est. ~24% Zn)
225.0 239.0		Xca,MSp	** 225.0 239.0 TUFFITE (Calcareous) And MASSIVE SULFIDE	225.0 265.0 25-30% sulfide; Sp, Py>>Po, Cp (est. ~5% tourmaline(?) at 235-236
239.0 255.0		CT	** 239.0 255.0 TUFA, Calcareous Tuff	
245.0 250.0		CTs	^^ 245.0 250.0 Sulfides	
255.0 265.0		MSca	** 255.0 265.0 MASSIVE SULFIDE	

Noranda Explora. . , Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.6	-58.9
100'	182.1	-59.7
200'	182.6	-59.6
300'	183.1	-59.6
400'	183.3	-59.4
433'	183.5	-59.5

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 6-29-90
REMARKS: E of drill proposal HQ/NQ
CORE SIZE: HQ/NQ

HOLE NO: LYN90-8 (WDNR #145)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 7-10-90

BEARING: S180E INCLINATION: -58 T.D: 433'
COORDINATES: L9600 E, 11073 N
ELEV: 1571' SEC 15 TWP: 37N RANGE 4E

DATE: 10-20-90
PAGE 1 OF 7

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
265.0 284.5		MSp	** 265.0 284.5 MASSIVE SULFIDE	265.0 284.0 55% Sp in massive, bedded sulfide (est.
284.5 297.0		Rt	** 284.5 297.0 RHYOLITE TUFF	
297.0 303.0		Rzt,s	SULFIDE UNIT B: 297.0 358.0 ** 297.0 303.0 TALCOSE TUFF, with Stringer Sulfide	297.0 358.0 ~15% total sulfide; 10% Po, 4% Py, <2% Cp
303.0 358.0		Rzt,p	** 303.0 358.0 Talcose Tuff, with Pyrrhotite	
358.0 372.4		Rt	** 358.0 372.4 TUFF (Sulfide Laminae)	
372.4 433.0		OD	** 372.4 433.0 GRANITE PORPHYRY	
			E.O.H. 433.0' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
0.0 55.0												** 0.0 55.0 Overburden						
0.0 18.0												^^ 0.0 18.0 Sand						
18.0 20.0												^^ 18.0 20.0 Boulders						
20.0 40.0												^^ 20.0 40.0 Gravel & Boulders						
40.0 55.0												^^ 40.0 55.0 Sand & Gravel						
											Rc	** 55.0 207.9 Rhyolite Crystal Tuff, series of dark grey, normally graded crystal tuffs						
61.0	100	80	R3	a	5	3												
				a	30							Note: reddish alteration associated with fractures 10-20 degrees to core axis 64.0 71.6						
66.0				a	45													
	99	20	R3	a	5	3												
68.0					30													
					45													
	100	20	R3	a	5	3												
72.0				a	30													
					45													
	100	80	R3	a	20	2												
				a	45													
77.0				a														
	100	80	R3	a	15	2												
81.0				a	40													
	100	40	R3	a	10	2												
84.0				b	30													
	100	50	R3	a	20	2												
86.0					50													
	100	60	R3	a	5	2												
				b	30													
91.0				a														
	100	75	R3	a	20	2												
				a	40													
96.0				a														
	100	55	R3	a	15	2												
100.0				b	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
	100	35	R3	b	15	3												
103.0				b	30													
					50													
	100	90	R3	b	30	1												
105.0																		
	100	80	R3	b	20	2												
				a	30													
111.0				a														
	99	0	R3	a	20	2												
113.0					45													
	99	10	R3	a	20	2												
115.0					45													
	99	0	R3	a	20	2												
116.0					45													
	95	0	R3	a	20	2												
118.0					50	2												
	99	60	R3	a	5						pRd	^^ 120.9 135.0 Rhyolite Porphyry Coarse-grained lt. grey reddish alteration						
				a	20													
123.0				a														
	99	25	R3	a	5	2												
125.0					40													
	99	25	R3	a	20	2												
129.0				b	40													
	99	0	R3	a	20	2												
131.0					40													
	95	0	R3	a	20	2												
133.0					40													
	100	65	R3	a	10	2				-70		135.0 146.0 Interbedded/laminated Chert-tuff						
				c	70													
				b														
140.0				a														
	99	35	R3	a	3	2				-70								
				a	60													
146.0				a						-55		146.0 157.5 Crystal Tuff Medium grained, alteration along fractures from 140.0 156.0 @ 10-20 degrees to core axis, high angle fracture 10-15 degrees to core axis @ 150.0-156.0 156.8 157.5, 159.0 165.7 Interbedded						
	100	50	R3	a	3	3												
150.0				a	10													
					60													
	99	65	R3	a	15	2												
				a	50													
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
					a								Crystal Tuff/Chert						
159.0					b														
		99	15	R3	b	10	2												
					a	60													
164.0					a						-85								
		100	50	R3	b	10	2												
166.0						60													
		100	90	R3	a	10	3						166.4 181.8 Crystal Tuff						
					a	50							Dark grey, fine-grained, with plag						
					a	80							crystals						
					a														
175.0					a														
		100	75	R3	a	10	3												
					a	50													
181.0					a	80													
		100	80	R3	a	10	2												
					b	40													
					c														
190.0					c														
		90	70	R3	b	10	3												
					a	40													
195.0					a	70													
		99	0	R3	a	10	3						Note: High angle fracture @ 5 degrees						
198.0					a	40							from core axis						
						70													
		99	65	R3	b	10	2						200.6 200.9 Coarse-grained crystal						
202.0					a	40							Tuff interbed						
		100	30	R3	a	20	2												
205.0					b	60							202.3 207.9 Medium-grained crystal Tuff						
		100	70	R3	b	10	1												
208.0					b														
		100	20	R3	b	10	1					Skep	** 207.9 218.7 Ep-Po CalSilicate	cd	15				15
211.0					b									cd	15				15
		100	80	R3	b	10	2							cd	15				15
					c	40								cd	15				15
					c								SULFIDE UNIT C: 218.7-286.5	cd	15				15
					c							MSp	** 218.7 225.0 Bedded, Massive Sulfide	cd	15				15
219.0					c								60-80% Sp, Po, Py, Mt	cd	15				15
		100	50	R3	c	10	1				-65			cd	15				15
223.0					c						-90			f	70				20
														f	70				20

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
		100	30	R2	c	20	2				-90			f	70				20
					c	40								d	30				20
					b							Xca,p	** 225.0 231.5 Calcareous Tuffite,	d	30				20
					a								Bedded Sulfide, Sp>Py, Po	d	30				20
													toward top, then Py>Sp	d	30				20
											-60			d	30				20
231.0											-80	MSp	** 231.5 234.0 Massive Sp, Sp, Po @ top	d	30				20
													Py toward base	d	30				20
		99	40	R2	b	20	2					Xca,p	** 234.0 239.0 Calcareous Tuffite,	d	30				20
					b	45							Bedded sulfide, Sp>Py, Po toward top,	d	30				20
					b								then Py>Sp	c	3		1	5	3
					a									c	2		1	5	3
239.0												CT	** 239.0 255.0 Tufa, Calcareous Tuff	c	1		1	5	3
		99	0	R2	a	45	2							c	1		1	5	3
					a	70								c	3		1	5	3
					a							CT,s	^^ 245.0 250.0 Tufa, with Sulfides	c	4	1	1	5	3
247.0					a									c	4	1	1	5	3
		80	0	R2	a									c	4	1	1	5	3
248.0														c	4	1	1	5	3
		100	95	R2	c	50	1				-45			c	4	1	1	5	3
														d	4	1	1		
					c									d					
253.0					c									d					
		100	90	R2	c	15	2					MSca	** 255.0 265.0 Massive Sulfide,	d					
					c	50							Calcareous	d	25				
258.0					b								258.5 260.2 Massive Sp	d	25				
														f	60				
		100	90	R2	a	10	2							c	2		3	2	10
					b	40					-35			c	2		3	2	10
263.0					b									c	10		3	2	10
		100	75	R2	b	50	1				-25	MSp	** 265.0 284.5 Massive Sulfide	c	10		3	2	10
					c									f	60	5	5	5	10
					c									f	60	5	5	5	10
					c									f	60	5	5	5	10
273.0					b									f	60	5	5	5	10
		99	40	R3	b	45	2				-50			f	60	5	5	5	10
					c	70								f	60	5	5	5	10
					b									e	40			5	5
280.0					a						-70			e	40			5	5

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
	100	100	R3	c	10	2				-60			e	40			5	5
283.0				b	35								e	40			5	5
										-60			e	40			5	5
													e	40			5	5
	99	50	R3	b	15	2					Rt	** 284.5 297.0 Rhyolite Tuff	e	40			5	5
				b	60						Rt*	^^ 284.5 286.5 Altered Tuff						
				a														
291.0				a														
	100	30	R3	a	15	2												
294.0				a	30													
	100	35	R2	a	15	2						SULFIDE UNIT B: 297.0 358.0						
				a	30						Rzt,s	** 297.0 303.0 Talcose Tuff with	c	5				15
299.0				b								Stringer sulfides	c	5				15
	100	60	R2	c	15	1							c	5				15
303.0				b									c	5				15
	99	80	R2	a	20	1						305.0 318.0 Very Talcose Tuff	c	5				15
				c								with minor sulfides						
				c								316.0 318.0 High angle fracture @ 8-12						
				b								degrees to core axis						
313.0				b														
	99	45	R2	b	15	1												
				b							Rzt,p	** 303.0 358.0 Talcose Tuff with	c					15
319.0				b								Pyrrhotite	c					15
	100	50	R2	b	30	2							c					15
323.0				c	50								c					15
	99	70	R2	b	20	2							c					15
				c	50								c					15
				b									c					15
331.0				a									c					15
	100	90	R2	b	20	2				-60			c					15
				c	40								c					15
				b									c					15
340.0				b									c					15
	100	55	R2	b	20	2				-70			c					15
				b	60								c					15
345.0				a									c					15
	100	25	R2	a	45	1							c					15
349.0				b						-70			c					15
	100	75	R2	b	20	2				-42			c					15
353.0				b	40								c					4

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
	100	70	R2	c	45	2				-56			c					4
				b	60						Rt	** 358.0 372.4 Tuff (Minimum Sulfide Laminae)	c					4
				b														
				a														
363.0				a														
	99	15	R3	a	30	2												
				a	50													
368.0				b														
	99	30	R3	a	20	2												
370.0					50													
	99	65	R3	a	20	2					QD	** 372.4 433.0 Granite Porphyry						
				a	60													
373.0												Note: High angle fracture 10-25 degrees to core axis @ 373.0-378.0						
	99	30	R3	a	20	2												
376.0				b	60													
	100	0	R3	b	100	2												
378.0					70													
	100	100	R3	c	10	3												
				c	30													
383.0				c	75													
	100	90	R3	b	5	2												
385.0					45													
	100	98	R3	c	20	2												
				b	40													
				a														
393.0				a														
	100	100	R3	a	10	2												
				a	50													
				a														
				a														
403.0				a														
	100	85	R3	a	5	2												
				a	55													
409.0				a														
	100	100	R3	a	25	1												
413.0				b														
	100	100	R3	b	10	2												
				b	30													
				b														
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-8

SULFIDES: % 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
423.0					a														
		100	100	R3	b	5	2												
					c	40													
					a														
					a														
433.0					a														
													E.O.H. 433' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	177.2	-63.1
100'	177.2	-62.7
250'	176.6	-63.0
400'	176.2	-63.5
515'	175.6	-63.3

PROJECT: LYNNE 1874
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 7-12-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-9 (WDNR #146)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 7-18-90

BEARING: S180E INCLINATION: -63 T.D: 515'
COORDINATES: L10200 E, 10925 N
ELEV: 1564' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-20-90
PAGE 1 OF 8

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 50.0			** 0.0 50.0 OVERBURDEN	
0.0 20.0			^^ 0.0 20.0 Fine Sand	
20.0 41.0			^^ 20.0 41.0 Sand, Gravel & Boulders	
50.0 54.5	(not recovered)			
54.5 60.0	(HQ core)			
50.0 105.0		Rc	** 50.0 105.0 RHYOLITE CRYSTAL TUFF	
73.7 83.6		Rt#	^^ 73.7 83.6 Altered Tuff	
			SULFIDE UNIT C, 105.0-256.0	
105.0 133.0		X	** 105.0 133.0 TUFFITE	
105.0 123.0		Xsk,p	^^ 105.0 123.0 Po CalcSilicate Tuffite	105.0 120.0 ~35% Sulfide, 10-15% Py, 8% Ga, 10-15% Sp, with 15% Ep
123.0 133.0		Xch	^^ 123.0 133.0 Cherty Tuffite	123.0 142.5 ~20% Sulfide, 5% Sp, 5% Ga, 10% Py,Po,Cp
133.0 142.8		Rch,S	** 133.0 142.8 RHYOLITE TUFF (Cherty)	
142.8 199.4		MS	** 142.8 199.4 MASSIVE SULFIDE	
142.8 184.0		MSch	^^ 142.8 184.0 Cherty Massive Sulfide	142.5 148.0 ~80% Sulfide, 70% Sp, 8-10% Py,Ga
184.0 199.4		MSca	^^ 184.0 199.4 Calcareous Massive Sulfide	148.0 186.5 ~50% Sulfide, 35% Sp, 15% Ga,Po
				193.0 193.5 Calcareous fault gorge
199.4 256.0		Xch	** 199.4 256.0 TUFFITE-Cherty	
209.7 227.8		pMd	^^ 209.7 227.8 Porphyritic Basalt Dike	
			SULFIDE UNIT B, 256.0-409.4	
256.0 289.6		Rch,s	** 256.0 289.6 RHYOLITE TUFF with Chert, Sulfide	
266.9 282.7		Md	^^ 266.9 282.7 Basalt Dike	