APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 1 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

3

(pg 141 - 210)

ROCK QUALITY:

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

DRILL HOLE: LYN90-13

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					-75			b					5
				c									b					5
				c									b					5
433.00				c						-60			b					5
	100	85	R2	c	15	2				-62			b					5
				c	50								b					5
				b									b					5
				b									b					5
443.00				b									b					5
	100	90	R2	b	30	1				-60			b					5
				b									b					5
				b						-60			b			1		5
				b						-52			b			1		5
453.00				b									b			1		5
	100	100	R3	a	25	2				-58			b			1		5
				b	50								b			1		5
				c									b			1		5
				a									b			1		5
462.00				b						-63			b			1		5
	100	70	R3	b	40	2				-65			b			1		5
				b	60						Xca	><< 465.5 477.0 Tuffite	b			1		5
				a									c	20				10
				a									c	20				10
				a							MSp	^^ 468.2 472.7 Massive Sulfide	f	40				20
472.00										-55			f	40				20
													f	40				20
	100	90	R3	b	15	2							c	20				10
				a	30								c	20				10
				b									c	20				10
				a							Rts#	>>< 477.0 491.6 Rhyolite Crystal Tuff	c	3	2	1		10
				a									c	3	2	1		10
											Rts#	^^ 477.0 486.4 Ashy Tuff, with sulfides	c	3	2	1		10
482.00												and pale green (diopside-epidote)	c	3	2	1		10
	100	90	R4	a	30	2						alteration	c	3	2	1		10
				b	40								c	3	2	1		10
				a									c	3	2	1		10
				a									c	3	2	1		10
492.00				a						-45	QD	>>< 491.6 562.0 Quartz Diorite						

ROCK QUALITY:

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

DRILL HOLE: LYN90-13

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	^^ 491.6 495.4 Granophyre						
496.00	99	55	R3	a	20	2												
				b	40													
	100	100	R3	b	30	2												
502.00				b	50													
				c														
	100	100	R3	c	30	1												
				c								Note: @ 506.0-508.5 Sheared interval					
				c						-27								
				c														
511.00				c														
	100	85	R3	c	30	1												
515.00				c														
	100	100	R3	c	30	1						Note: @ 517.0-521.0 Sheared intervals						
				c														
				c								Note: @ 522.5-531.0 Sheared intervals						
523.00				c						-20								
	100	90	R3	c	15	2												
				b	30													
				b														
				c														
533.00				c														
	100	70	R3	c	3	2												
				c	20					-27		Note: @ 537.0-551.0 Sheared intervals, with high angle fractures to core axis						
539.00				c														
	100	80	R3	c	15	1												
				c														
				b														
				b														
548.00				b														
	80	0	R3	a	5	2												
551.00				a	20													
	100	100	R3	b	30	1												
552.00																		
	100	80	R3	b	20	1												
				b														
				c														
				c														
562.00				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-13

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
											E.O.H. 562' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	176.9	-56.2
100'	178.7	-56.2
250'	178.4	-56.7
400'	179.6	-56.3
550'	180.1	-55.4
661'	180.7	-54.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-9-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-14 (WDNR #155)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-16-90

BEARING: S180E INCLINATION: -55 T.D: 661'
COORDINATES: 9800 E, 11310 N
ELEV: 1566.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 55.0			** 0.0 55.0 OVERBURDEN	
55.0 60.0	(not recovered)			
55.0 214.5		Ml,Rc	** 55.0 214.5 BASALT, RHYOLITE CRYSTAL TUFFS & LAPILLI TUFFS	
60.0 68.0	(HQ core)			
214.5 243.0		IR	** 214.5 243.0 INTRUSIVE RHYOLITE(?), Pervasively Altered	
243.0 264.5		Ml	** 243.0 264.5 BASALT	
264.5 317.5		FZ/DS	** 264.5 317.5 FAULT ZONE/DIKE SWARM	
264.5 269.0			^^ 264.5 269.0 Basalt Sill?, Plag-phyric	
317.5 330.0		Md(?)	** 317.5 329.0 BASALT (Dike?)	
330.0 332.0		Rtp#	** 329.0 332.0 RHYOLITE SULFIDE TUFF	330.0 332.0 10% sulfide, 7% Po, 3% Sp
332.0 337.7		Xp/MS	** 332.0 337.7 BEDDED TO MASSIVE SULFIDE	332.0 352.5 45% sulfide, 25% Sp, 5% Ga, 15% Po
337.7 341.5		Xp/MS	** 337.7 341.5 TUFFITE, with Po	
341.5 352.2		Xp/MS	** 341.5 352.5 MASSIVE SULFIDE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	176.9	-56.2
100'	178.7	-56.2
250'	178.4	-56.7
400'	179.6	-56.3
550'	180.1	-55.4
661'	180.7	-54.6

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-9-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-14 (WDNR #155)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-16-90

BEARING: S180E INCLINATION: -55 T.D: 661'
COORDINATES: 9800 E, 11310 N
ELEV: 1566.5' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-22-90
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
352.5 358.0		Rt	** 352.5 358.0 RHYOLITE TUFF	
358.0 364.5		Xp,t	** 358.0 364.5 TUFFITE	
364.5 392.7		Rt,Rch	** 364.5 392.7 TUFF, Interbedded Chert	
391.0 392.7		QD	^^ 391.0 392.7 Quartz Diorite Dikes	
392.7 403.1		Rch,p	** 392.7 403.1 TUFF, Interbedded Chert, with Sulfides	392.7 403.1 6% sulfide, 4% Po, 2% Cp
397.5 403.1		QD	^^ 397.5 403.1 Quartz Diorite Dikes	
403.1 420.0		Xch,p	** 403.1 420.0 TUFFITE, Interbedded Chert	403.1 420.0 35% sulfide, 20% Po, 12% Cp, 3% Sp
420.0 426.0		Rch	** 420.0 426.0 CHERTY TUFF	
426.0 661.0		QD	** 426.0 661.0 QUARTZ DIORITE	
426.0 451.2		gQD	^^ 426.0 451.2 Granophyre	
478.0 485.0		Rt	^^ 478.0 485.0 Rhyolite Tuff	
533.1 536.5		Md	^^ 533.1 536.5 Basalt Dike	
			E.O.H. 661' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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						
											M1,Rc	** 55.0 214.5 Basalt; Rhyolite Crystal Tuffs & Lapilli Tuffs						
											Md	^^ 55.0 134.2 Basalt Grey-black, with epidote alteration associated with quartz-filled fractures from 20-40 degrees to core axis						
60.00										-22								
	100	90	R3	a	20	1				-20								
				a														
65.00				a														
	100	95	R3	a	20	1												
68.00				a						-40								
	100	90	R5	b	30	1												
				a														
73.00				b						-35								
	100	100	R4	a	5	2												
76.00				a	40													
	100	25	R3	b	5	2												
79.00				b	40													
	100	95	R3	b	20	2				-35								
83.00				a	40													
	100	70	R3	a	25	1												
				b						-25								
				a														
91.00				c														
	100	100	R4	c	20	2												
93.00					40													
	99	65	R4	c	20	1												
				b														
				c														
100.00				b														
	100	85	R3	a	10	2				-25								
				a	20													
				a														
				b														
111.00				b														
	100	70	R3	b	10	2												
				b	50					-20								
117.00				b						-50								

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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	b	55	2				-70								
119.00					30					-25								
	100	80	R3	b	20	2				-10								
123.00				a	50					-40		Note: Fracturing and alteration increase from ~122.0 to 134.2. Fractures @ 20-40 degrees to core axis are offset by fractures @ 70 degrees to core axis						
	99	20	R3	a	40	1												
128.00				a						-20								
	100	40	R3	a	10	2				-70								
131.00				a	40													
	100	100	R3	a	20	2												
134.00				a	40						pRd	^^ 134.2 146.0 Rhyolite Porphyry Dike Swarm						
	100	85	R3	a	10	2												
				b	30													
139.00				a														
	100	95	R3	b	5	2												
				b	30													
				a														
				b														
148.00				c								^^ 146.0 169.1 Basalt (?) dark grey, plag-phyric						
	100	90	R3	b	30	1												
				a														
153.00				b														
	100	80	R4	b	20	2												
				a	50													
				a														
162.00				a														
	100	100	R4	a	20	2												
166.00				a	40													
	100	95	R4	b	10	2												
				b	60					-70	Rt,l	^^ 169.1 173.4 Chert, Dark Grey, Laminated						
				a						-90								
173.00				b						-40								
	99	85	R3	a	20	3						^^ 173.4 203.0 Pillowed Basalt Fine-grained, dark-grey with sulfides along fractures and triple-points						
				b	30													
				b	40													
180.00				c														
	100	100	R3	b	30	2												
				a	60													
				b														
				b														
189.00				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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	85	R4	b	20	2												
192.00				a	40													
	100	100	R4	b	30	1												
				c														
				b														
				b														
202.00				c														
	100	90	R3	c	20	1				-80	R1	^^ 203.0 214.5 Lapilli Tuff, minor Chlorite-epidote alteration/bleaching						
206.00				b														
	100	90	R3	c	50	1												
				c						-60								
211.00				c														
	100	90	R3	c	20	1					IR	** 214.5 243.0 Intrusive Rhyolite, Pervasively altered						
				c														
217.00				c														
	100	60	R3	c	15	1												
220.00				c														
	100	10	R3	b	30	2												
223.00				b	50													
	99	0	R3	b	10	1												
226.00				b														
	100	90	R3	c	30	1												
				c														
232.00				c														
	100	75	R3	b	20	2												
236.00				b	50													
	99	80	R3	b	20	2												
				b	50													
241.00				b														
	100	70	R3	a	30	2					M1	** 243.0 264.5 Basalt, patchy epidote alteration						
				a	60													
				a														
249.00				a														
	100	50	R3	a	20	2												
251.00					60													
	100	90	R5	b	20	2												
				c	60													
				b														
				b														
261.00				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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	R4	a	40	2												
264.00				a	55						FZ/DS	** 264.5 317.5 Fault Zone/Dike Swarm						
	100	90	R3	a	30	2												
				b	55													
				a							Md	^^ 264.5 269.0 Basalt Dike, plag-phyric						
				a														
				a														
										-15	pRd	^^ 269.0 293.0 Rhyolite Porphyry Dike Swarm						
273.00																		
	100	90	R3	a	5	2												
				b	20							Note: Fault Breccia 277.0-279.0, 286.9-290.5						
279.00				b														
	100	40	R3	b	20	2												
				b	40													
285.00				a														
	100	70	R3	c	30	1												
289.00				c						-70								
	100	70	R3	b	45	1												
				b						-45								
295.00				a														
	100	90	R2	a	15	2												
296.00					45													
	100	95	R2	b	30	2												
				b	50					-55								
				b							pRd	^^ 301.0 312.0 Rhyolite Porphyry Dike Swarm						
303.00				b														
	100	95	R3	b	30	2												
				b	50													
				c														
311.00				a														
	99	70	R3	a	10	2				-60								
				a	30					-60								
318.00				a														
	100	100	R3	b	30	1					Md(?)	^^ 317.5 329.0 Basalt (?) Massive dike (?)						
				b														
323.00																		
	100	80	R2	b	30	1												
				b														
329.00				a							Rtp*	** 329.0 332.0 Rhyolite Sulfide Tuff	b	3				7

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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	80	R2	b	30	1										b	3				7
				b							Xp/MS	**	332.0	337.7	Bedded to Massive Sulfide	e	25		5		15
				c												e	25		5		15
				b												e	25		5		15
				b												e	25		5		15
											Xp/MS	**	337.7	341.5	Tuffite, with Po	e	25		5		15
339.00																c	10				10
	100	90	R2	b	15	2										c	10				10
				b	30						Xp/MS	**	341.5	352.5	Massive Sulfide	c	10				10
				c						-40						f	30		5		20
				a												f	30		5		20
				c												f	30		5		20
349.00										-45						f	30		5		20
	100	80	R2	a	30	2				-50						f	30		5		20
				b	50											f	30		5		20
				a							Rt	**	352.5	358.0	Rhyolite Tuff	f	30		5		20
356.00				b												f	30		5		20
	100	90	R2	c	30	1															
				c							Xp,t	**	358.0	364.5	Tuffite	c	15				5
				b						-40						c	15				5
363.00				a						-30						c	15				5
	99	60	R2	a	30	2					Rt,Rch	**	364.5	392.7	Tuff, Interbedded Chert	c	15				5
367.00				a	60																
	99	0	R3	a	10	2															
369.00					30																
	99	40	R3	a	10	2															
371.00					30																
	100	0	R3	a	10	2															
374.00				a	40																
	100	85	R3	a	30	2															
				a	50																
379.00				a																	
	99	0	R3	a	20	2															
381.00					60																
	99	0	R3	a	30	2															
382.00					60																
	100	0	R3	a	30	2															
384.00					60																
	100	70	R3	a	10	2															

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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
386.00					60													
	99	0	R3	b	45	1												
387.00																		
	100	70	R3	b	20	2												
				b	60													
				b							QD	391.7 392.7 Quartz Diorite Dike						
				b														
										-40	Rch,p	^^ 392.7 403.1 Tuff, Chert, with Sulfides						
393.00																		
	100	95	R3	b	30	2							b		2			5
				a	60						QD	396.8 397.6 Quartz Diorite Dike	b		2			5
				a						-60			b		2			5
400.00				b									b		2			5
	100	40	R3	b	10	2				-50	QD	401.0 401.2 Quartz Diorite Dike	b		2			5
402.00					60					-85			b		2			5
										-80			b		2			5
	100	100	R3	b	50	2				-85	Xch,p	^^ 403.1 420.0 Tuffite, With Interbedded Chert, Lapilli	b		2			5
				a	75								d	3	12			20
				b						-70			d	3	12			20
				a						-80		Note: Small-scale folds with axes	d	3	12			20
412.00				a						-85		@45-55 degrees to core axis, off set	d	3	12			20
	100	85	R3	a	50	1				-65		by fractures @ 35-40 degrees to axis	d	3	12			20
				a						-58			d	3	12			20
				a						-70			d	3	12			20
				b						-50	Rch	^^ 420.0 426.0 Cherty Tuff	d	3	12			20
422.00				b						-50								
	100	65	R3	a	15	2												
				a	50						QD	** 426.0 661.0 Quartz Diorite						
				a														
				a							gQD	^^ 426.0 451.2 Granophyre						
429.00												Note: Sheared contact @ 426.0						
	100	100	R3	a	30	2						Reddish alteration: 426.0-444.0						
431.00					60													
	100	95	R3	a	40	2												
433.00					60													
	99	20	R3	a	10	2												
437.00				a	60													
	100	90	R3	a	30	2												
441.00				a	60													

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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	55	R3	a	30	2												
445.00				a	60													
	100	75	R3	a	30	2												
				b	50													
451.00				a							QD	^^ 451.2 478.0 Quartz Diorite						
	100	85	R3	b	30	2												
				b	50													
				a														
458.00				b														
	100	35	R3	a	30	2												
461.00				b	50													
	100	98	R3	b	20	1												
463.00																		
	99	45	R3	b	10	2												
				b	40													
470.00				b														
	100	70	R3	c	10	2												
				c	60													
				c														
				c							Rt	^^ 478.0 485.0 Basalt Dike Contacts @ ~60 degrees to core axis						
480.00				a														
	100	100	R4	b	20	2												
				b	50													
485.00				a							QD	^^ 485.0 539.0 Quartz Diorite						
	100	90	R3	a	20	2												
				a	50													
				b														
493.00				b														
	100	100	R3	c	50	1												
				c														
				c														
				c														
503.00				c														
	100	90	R3	d	50	1						Note: Shear Zone 506.0-549.0 Reddish alteration 506.0-549.0						
				d														
509.00				c														
	100	90	R3	b	20	2												
513.00				a	50													
	100	80	R3	a	60	1												
				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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														
520.00				b														
	90	0	R3	b	40	2												
521.00					60													
	100	60	R3	b	40	2												
523.00					60													
	100	60	R3	b	40	1												
525.00																		
	100	60	R3	b	40	1												
526.00																		
	99	55	R3	b	40	2												
530.00				a	60													
	100	65	R3	a	20	2												
533.00				b	60					-30	Md	^^ 533.1 536.5 Basalt Dike						
	100	40	R3	a	10	2												
				a	40													
539.00				a														
	100	70	R3	b	10	3					gQD,s	^^ 539.0 564.0 Sheared Granophyre						
				b	30													
				b	50													
				b														
549.00				b														
	100	30	R3	a	20	1												
552.00				b														
	100	90	R3	b	40	2				-30								
				b	60													
				b														
				a														
562.00				a														
	100	95	R3	a	50	1					QD,s	^^ 564.0 637.0 Sheared to foliated Quartz Diorite						
				b														
				b														
				c														
572.00				b														
	100	100	R3	b	10	2				-35		Note: Medium to coarse-grained with apparent fabric oriented @30-35 degrees to core axis and chloritic veinlets with same orientation						
				b	40													
				a														
				a														
582.00				b														
	100	100	R3	b	50	1												

DRILL HOLE: LYN90-14

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														
				c														
				c														
592.00				c														
	100	90	R3	c	10	2												
				b	40													
				b														
599.00				c														
	100	90	R3	c	40	1												
				c						-35								
				b														
607.00				b														
	100	85	R3	a	10	2												
				b	40					-35								
613.00				b														
	100	100	R3	a	20	2				-30								
				b	50													
				a														
621.00				a														
	100	100	R3	b	20	2												
				b	50													
				b														
				c														
631.00				c														
	100	100	R3	c	30	2				-35								
				c	50													
				c							QD	^^ 637.0 661.0 Quartz Diorite Very coarse-grained						
				d														
641.00				d														
	100	100	R3	d	60	1												
				d														
				d														
				d														
651.00				d														
	100	100	R3	d	30	1												
				c						-35								
				d														
				d														
661.00				d														

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-14

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
											E.O.H. 661' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.0	-60.7
100'	183.1	-60.1
250'	178.6	-60.4
400'	178.9	-60.4
529'	180.3	-59.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-19-90
REMARKS: FF of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-15 (WDNR #157)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-23-90

BEARING: S180E INCLINATION: -60.7 T.D: 529'
COORDINATES: L9600 E, 11290 N
ELEV: 1584.7' 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 76.0	(not recovered)			
76.0 79.5	(HQ core)			
72.0 186.0		M1	** 72.0 160.8 BASALT	
128.9 160.8		pRd	^^ 128.9 160.8 Rhyolite Porphyry Dike Swarm	
186.0 259.5		Rc,Rl,Rt,l	** 160.8 259.5 RHYOLITE TUFFS, Crystal, Lapilli, and Laminated	
259.5 291.0		M1	** 259.5 291.0 BASALT	
291.0 311.0		Rc	** 291.0 311.0 RHYOLITE CRYSTAL TUFF	
311.0 320.5		Xt,cl,t	** 311.0 320.5 TUFFITE, with Chlorite, Talcose	311.0 320.5 20% sulfide, 15% Sp, 5% Po
320.5 335.3		M*,ca	** 320.5 335.3 ALTERED MAFIC, with Serpentenite	
335.3 357.0		Rt*	** 335.3 357.0 TUFF, Altered	
357.0 372.0		M1	** 357.0 372.0 BASALT, Plagrphyric	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.0	-60.7
100'	183.1	-60.1
250'	178.6	-60.4
400'	178.9	-60.4
529'	180.3	-59.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-19-90
REMARKS: FF of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-15 (WDNR #157)

DATE: 7-18-
PAGE 1 OF 8

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-23-90

BEARING: S180E INCLINATION: -60.7 T.D: 529'
COORDINATES: L9600 E, 11290 N
ELEV: 1584.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
372.0 377.5		R1	** 372.0 377.5 LAPILLI TUFF	
377.5 400.7		Xt,t	** 377.5 400.7 TUFFITE, Talcose	
377.5 380.0		Rz,t	^^ 377.5 380.0 Massive Talc	377.5 385.0 25% sulfide, 17% Sp, 8% Ga
385.0 393.1		ca	^^ 385.0 393.1 Calcareous	385.0 393.1 35% sulfide, 25% Sp, 5% Ga, 4% P.
400.7 404.0		Rt	** 400.7 404.0 TUFF	
404.0 418.0		M1	** 404.0 418.0 BASALT(?), Plag-phyric	
418.0 424.0		Rt*,t	** 418.0 424.0 TUFF, Talcose, Altered	
424.0 436.4		Rt	** 424.0 436.4 TUFF	
436.4 529.0		QD	** 436.4 529.0 QUARTZ DIORITE	
436.4 439.0		gQD	^^ 436.4 439.0 Granophyre	
466.4 473.5		M1	^^ 466.4 473.5 Basalt Dike	

E.O.H. 529' (total depth)

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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						
											M1	** 72.0 186.0 Basalt, dark grey to black fine-grained						
76.00																		
	99	10	R3	b	20	1												
79.50				b														
	99	25	R3	b	20	2												
84.00				c	50													
	100	80	R3	c	20	2												
87.00				c	70													
	100	50	R3	c	20	2												
89.00					60													
	100	60	R3	a	20	2												
93.00				b	50													
	100	85	R3	c	10	2												
				c	70													
				c														
				c														
103.00				b														
	100	100	R4	b	10	3												
				b	30							Note: Increasing Plag or Leucoxene crystals/ghosts from 110.0-128.9						
				b	70													
				b														
113.00				b														
	100	40	R3	a	10	2												
				b	70													
				b														
122.00				b														
	100	15	R3	b	10	2												
				b	70													
127.00				b							pRd	^^ 128.9 160.8 Rhyolite Porphyry Dike Swarm						
	99	50	R3	a	10	2												
129.00					40													
	100	70	R3	a	10	2												
132.00				a	50													
	100	75	R3	b	10	2												
136.00				c	50													
	99	40	R3	c	10	2												
139.00				c	50													

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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	10	2												
143.00				a	50													
	100	100	R3	b	10	2												
				b	50													
				b														
152.00				b														
	100	95	R3	b	10	2												
				a	50													
				a														
				a							Rc	** 160.8 186.5 Rhyolite Crystal Tuff						
				b														
163.00				b								Note: Alteration 160.8-171.0						
	100	65	R4	b	10	2						Epidote and kspar bleaching						
168.00				c	30													
	100	50	R3	a	10	2												
				a	40													
173.00				a														
	100	100	R3	a	10	2												
176.00				b	30													
	100	95	R4	a	20	2												
179.00				b	60													
	100	100	R3	b	40	2												
				c	60													
184.00				b														
	99	50	R3	b	25	1				-30	Rc,Rl,Ch	** 186.5 259.5 Interbedded Rhyolite						
				a								Crystal and Lapilli Tuffs and Laminated						
												Cherty Ash						
187.00											ChT,l	^^ 186.5 196.5 Laminated Cherty-ash Tuff						
	100	80	R3	a	25	1												
190.00				b						-44		Note: Bedding angle shallows from ~50						
	100	80	R3	a	30	1				-50		degrees to 25 degrees @ 196.0'						
193.00				b						-47								
	100	85	R3	b	20	2				-45								
				c	50						Rc	^^ 196.5 200.8 Fine-grained Crystal Tuff						
198.00				c						-25								
	100	100	R4	c	20	2					Rt,l*	^^ 200.8 210.0 Laminated ash with						
201.00				c	60					-50		epidote-kspar bleaching associated						
	100	100	R4	c	10	2				-55		with dikelets and fractures @ 20-30						

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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
												degrees to axis						
				c	50					-48								
				c						-50								
				b						-50	Rt,l	^^ 210.0 229.5 Laminated Ashy Tuff with						
211.00				b						-50		scattered 1" thick crystal tuff beds						
	100	90	R3	b	10	2				-48								
				b	60					-50								
217.00				c						-45								
	100	95	R3	c	10	2				-50								
				b	40					-50								
223.00				c						-48								
	100	95	R3	c	10	2				-50		Note: 224.4-225.1 Either medium-grained						
				c	50					-60		crystal tuff or plag-phyric basalt sill						
229.00				a									a					3
	100	95	R3	a	20	1					R1	^^ 229.5 240.8 Lapilli Tuff	a					3
													a					3
				c								Note: Epidote or diopside alteration	a					3
				c								229.5-234.0 with scattered sulfides						
				c														
239.00				c							Rc	^^ 240.8 247.1 Crystal Tuff with						
	100	90	R3	c	10	1				-40		cherty-ashy interbeds						
				b						-50								
244.00				b						-50								
	100	90	R3	b	10	2												
				c	35						R1,#	^^ 247.1 259.5 Lapilli Tuff, Altered						
				d														
252.00				d														
	100	70	R3	c	20	2												
				b	40													
				b														
				b														
261.50				c							M1	** 259.5 291.0 Basalt, appears pillowed						
	99	40	R3	b	10	2						with alteration and sulfides along						
				c	20							fractures and triple points						
				a														
270.00				a														
	100	90	R3	a	20	1												
273.00				a														
	100	90	R3	a	10	2												
				c	50													
				a														
				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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
283.00				b														
	100	100	R3	a	10	2												
				a	30													
				a							Rc	** 291.0 311.0 Crystal Tuff						
				a														
293.00				a						-30		Note: Fault Zone/Dike Swarm 293.5-311.0						
	100	100	R3	a	10	2												
				a	40													
				c														
				c														
303.00				c														
	99	85	R3	a	10	2												
				a	40													
				a														
311.00				a							Xt,cl	** 311.0 320.5 Tuffite, numerous vein-	c	15	1			4
	99	90	R2	a	10	2						lets/fractures @ 10-30 degrees to core	c	15	1			4
				a	40							axis, chlorite alteration	c	15	1			4
				a									c	15	1			4
				a							M*,ca	** 320.5 335.3 Intensely Altered Mafic	c	15	1			4
321.00				a								rock, with serpentenite	c	15	1			4
	100	100	R2	a	10	2												
325.00				b	30													
	99	0	R2	b	20	2												
328.00				b	40													
	99	0	R2	b	10	2												
331.00				b	40													
	99	0	R2	b	10	2												
333.00					40													
	99	50	R2	b	40	1												
335.00											Rt*	** 335.3 357.0 Tuff, Altered Tuff with						
	100	100	R2	c	10	2						carbonate-serpentenite alteration						
				c	60													
				c														
343.00				b														
	99	50	R2	b	10	2												
				b	30													
				a														
				a														
353.00				c														
	100	95	R2	c	20	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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	40					-25	M1	** 357.0 372.0 Basalt Sill, Plag-phyric						
				b	60													
				a														
363.00				a														
	100	85	R3	a	10	3												
				a	40													
				a	60													
				a						-45	R1	** 372.0 377.5 Lapilli Tuff						
373.00				a														
	100	55	R3	a	30	3												
				a	50					-70	Xt,t	** 377.5 400.7 Tuffite, Talcose	c	17		8		
				a	70								c	17		8		
				c								Note: Massive Talc 377.5-380.0	c	17		8		
383.00				c									c	17		8		
	100	55	R3	c	40	1							c	17		8		
				b						-30	ca	^^ 385.0 393.1 Calcareous	d	25	1	5	1	4
				c									d	25	1	5	1	4
				c									d	25	1	5	1	4
				c									d	25	1	5	1	4
393.00													d	25	1	5	1	4
	100	75	R2	c	10	2							c	8		10		2
				c	30								c	8		10		2
				c									c	8		10		2
402.00				c							Rt	** 400.7 404.0 Rhyolite Tuff	c	8		10		2
	100	35	R3	b	30	2					M1	** 404.0 418.0 Basalt(?) Plag-phyric	c	8		10		2
				b	50													
407.00				a														
	100	30	R3	a	30	2												
				a	55													
413.00				b														
	100	0	R3	a	30	2												
415.00					55													
	99	40	R3	a	10	3												
				a	40						Rt	** 418.0 436.4 Rhyolite Tuff						
				a	60													
											Rt,t#	^^ 418.0 424.0 Talcose, Altered						
420.00																		
	100	50	R3	a	40	2												
				b	60													

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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														
				a														
429.00				a														
	100	90	R3	a	30	2												
433.00				b	50													
	100	20	R3	a	20	2												
434.00					60													
	100	50	R3	b	20	2					QD	** 436.4 529.0 Quartz Diorite						
				b	60													
											gQD	^^ 436.4 439.0 Granophyre						
438.00																		
	100	65	R3	c	20	2												
440.00					40													
	100	100	R3	c	45	1												
				c														
				c														
				c														
450.00				c														
	100	100	R3	c	15	2												
				c	50													
				c														
458.00				c														
	100	85	R3	c	15	2												
461.00				c	50													
	100	85	R3	c	10	2												
				c	50						M1	^^ 466.4 473.5 Basalt Dike						
467.00				b														
	100	80	R4	a	10	2												
				a	40													
473.00				a														
	100	90	R3	a	5	2												
				b	50													
				b														
				c														
483.00				c														
	100	90	R3	c	15	2												
				c	40													
				c														
				c														
493.00				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-15

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	45	1												
				c														
				c														
				c														
503.00				c														
	100	60	R3	b	20	2												
				b	45													
				b														
511.00				b														
	100	90	R3	b														
				c	45	2												
				c	75													
				c														
521.00				c														
	100	100	R3	c	40	1												
				c														
				c														
529.00				c								E.O.H. 529' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-58.1
100'	179.2	-57.8
250'	179.6	-58.0
400'	179.5	-58.3
553'	179.7	-57.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-16 (WDNR #153)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-30-90

BEARING: S179.5E INCLINATION: -58.1 T.D: 553'
COORDINATES: L10000 E, 11260 N
ELEV: 1561.0' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-10-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 50.0			** 0.0 50.0 OVERBURDEN	
50.0 54.0	(not recovered)			
54.0 59.0	(HQ core)			
50.0 84.2		Rd?,pRd	** 50.0 84.2 RHYOLITE DIKE(?)	
50.0 67.6		pR	^^ 50.0 67.6 Rhyolite Porphyry	
50.0 73.0		Wl	^^ 50.0 73.0 Lapilli Wacke	
73.0 84.2		IR	^^ 73.0 84.2 Intrusive Rhyolite	
84.2 124.0		gR	** 84.2 124.0 GRANOPHYRIC RHYOLITE	69.0 83.2 Epidote alteration, bleaching along high-angle fractures
124.0 142.5		Rd	** 124.0 142.5 CHERTY TUFF, Granophyric	
142.5 146.0		Wlf	** 142.5 146.0 LAPILLI WACKE, Feldspathic	
146.0 154.0		gR	** 146.0 154.0 GRANOPHYRIC RHYOLITE	
154.0 160.5		Wl*	** 154.0 160.5 LAPILLI WACKE, Altered, With Epidote	
160.5 168.0		gR	** 160.5 168.0 GRANOPHYRIC RHYOLITE	
168.0 201.5		Rcl	** 168.0 201.5 RHYOLITE CRYSTAL LAPILLI TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-58.1
100'	179.2	-57.8
250'	179.6	-58.0
400'	179.5	-58.3
553'	179.7	-57.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-16 (WDNR #153)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-30-90

BEARING: S179.5E INCLINATION: -58.1 T.D: 553'
COORDINATES: L10000 E, 11260 N
ELEV: 1561.0' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-10-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
201.5 240.0		SS,D	** 201.5 240.0 SANDSTONE, DACITE	
240.0 267.8		Rc	** 240.0 267.8 RHYOLITE CRYSTAL TUFF	
267.8 289.2		IR	** 267.8 289.2 INTRUSIVE RHYOLITE	
289.2 315.0		D,SS	** 289.2 315.0 DACITE, SANDSTONE, Dacitic	
295.0 315.0		pMd	^^ 295.0 310.0 Plag-phyric Basalt	
			SULFIDE UNIT C: 315.0-324.3	
315.0 324.3		MSca	** 315.0 324.3 MASSIVE SULFIDE, Calcareous	
324.3 340.5		ChT/SS	** 324.3 340.5 CHERTY TUFF OR SANDSTONE	
340.5 343.8		BP	** 340.5 343.8 BEDDED PYRRHOTITE, with Sp	340.5 343.8 40% sulfide, 10% Sp, 30% Po
343.8 360.5		ChT/SS	** 343.8 360.5 CHERTY TUFF OR SANDSTONE	
			SULFIDE UNIT B: 360.5-399.8	
360.5 365.8		MSp,ca	** 360.5 365.8 MASSIVE SULFIDE, Calcareous, with Pyrrhotite	360.5 365.8 40% sulfide, 30% Sp, 10% Po

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-58.1
100'	179.2	-57.8
250'	179.6	-58.0
400'	179.5	-58.3
553'	179.7	-57.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-16 (WDNR #153)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-30-90

BEARING: S179.5E INCLINATION: -58.1 T.D: 553'
COORDINATES: L10000 E, 11260 N
ELEV: 1561.0' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-10-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
365.8 368.5		BP	>< 365.8 368.5 BEDDED PYRRHOTITE, with Sp	365.8 368.5 40% sulfide, 40% Po, 5% Py
368.5 373.8		MSch	>< 368.5 373.8 MASSIVE SULFIDE, Cherty	368.5 373.8 60% sulfide, 25% Sp, 10% Ga, 10% P
373.8 395.5		Xch	>< 373.8 395.5 TUFFITE, Cherty	373.8 395.5 40% sulfide, 15% Sp, 5% Ga, 10% P
379.1 394.5		FZ/DZ	^^ 379.1 394.5 Fault Zone/Dike Swarm	
395.5 399.8		Ch	>< 395.5 399.8 CHERT	
399.8 452.5		Rc/Rl	>< 399.8 452.5 RHYOLITE CRYSTAL TUFF/Lapilli Tuff	
400.0 401.4		M1	^^ 400.0 401.4 Basalt, Plag-phyric	
410.0 411.0		Xz	^^ 410.0 411.0 Tuffite	410.0 411.0 50% sulfide, 40% Sp, 5% Po, 3% Ga.
421.5 422.0		MS	^^ 421.5 422.0 Massive Sulfide	421.5 422.0 20% sulfide, 10% Sp, 10% Po
428.4 431.6		MS	^^ 428.4 431.6 Massive Sulfide	428.4 431.6 80% sulfide, 70% Sp, 10% Po
			SULFIDE UNIT A: 452.5-482.5	
452.5 482.5		MSt	>< 452.5 482.5 MASSIVE SULFIDE, Talcose	452.5 482.5 50% sulfide, 40% Sp, 10% Po
465.0 472.0		Xt,z	>< 465.0 472.0 TUFFITE, Talcose, stringery	
472.0 482.5		MSt,z	>< 472.0 482.5 MASSIVE SULFIDE, Talcose, stringery	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-58.1
100'	179.2	-57.8
250'	179.6	-58.0
400'	179.5	-58.3
553'	179.7	-57.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-16 (WDNR #153)

DATE: 1-10-92
PAGE 1 OF 9

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 8-30-90

BEARING: S179.5E INCLINATION: -58.1 T.D: 553'
COORDINATES: L10000 E, 11260 N
ELEV: 1561.0' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
482.5 553.0		QD	** 482.5 553.0 QUARTZ DIORITE	
482.5 483.2		gQD	^^ 482.5 483.2 Granophyre	
517.0 525.0		gQD,f	^^ 517.0 525.0 Fractured Interval	
537.0 540.0		gQD,s	^^ 537.0 540.0 Sheared Interval	
			E.O.H. 553' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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 50.0											** 0.0 50.0 OVERBURDEN						
											~~ 0.0 20.0 Sand						
											~~ 20.0 40.0 Sand, gravel, and cobbles						
											~~ 40.0 50.0 Sand, gravel, and boulders						
										Rd?,pRd	** 50.0 84.2 Rhyolite Porphyry Dike Swarm						
54.00										WI	~~ 50.0 73.0 Lapilli Wacke						
	99	0	R3	a	10	1											
59.00				a													
	99	30	R3	a													
62.00				b	10	2											
	100	100	R3	b	30	1											
64.00				b	30												
	100	70	R3	b	30	2											
69.00				b	60												
	100	100	R3	b													
73.00				b	30	2											
	100	85	R3	b	60				-50C	IR	~~ 73.0 84.2 Intrusive Rhyolite						
				a	10	2											
81.00				b	30												
	100	80	R4	b	60												
				b													
				b	20	2				gR	** 84.2 124.0 Rhyolite, granophyric, unaltered, almost plag-phyric						
89.00				b	60												
				a													
				a													
93.00	100	90	R4	a	5	2											
				b	20												
	100	90	R4	a	20	2											
				b	60												

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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														
				a														
102.00				a														
	100	100	R3	a	20	2												
103.00					60													
	100	80	R3	a	10	3												
				a	30													
				a	50													
111.00				a														
	100	95	R3	a	10	3												
				a	20													
				a	50						Rd	** 118.5 201.5 Rhyolite Porphyry Dike Swarm						
				a														
												^^ 118.5 135.6 Highly fractured interval upper/lower contacts of 30 degrees						
119.00																		
	100	95	R4	a	20	3												
121.00					40													
					60													
	100	90	R4	a	20	2												
123.00					40						ChT	^^ 124.0 142.5 Cherty Tuff, granophyric, no subtle crystals						
	95	25	R4	a	10	2												
				a	35													
				a														
130.00				b														
	99	50	R4	b	10	2												
134.00				a	70													
	99	50	R3	a	20	2												
136.00					40					-40								
	95	70	R3	a	5	3												
				a	20													
				a	40						Wlf	^^ 142.5 146.0 Lapilli Wacke, feldspathic						
143.00				a														
	99	0	R3	b	5	2												
144.00					30													
	100	90	R3	b	5	3					gR	^^ 146.0 154.0 Granophyric Rhyolite						
				b	20													
				a	60													
152.00				b														
	100	80	R3	b	5	2					Wl*	^^ 154.6 160.5 Lapilli Wacke, altered,						

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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	30							epidote						
				b														
				b														
162.00				b							gR	~~ 160.5 168.0 Granophyric Rhyolite						
	100	90	R3	b	5	3												
				b	20													
				b	50					-45	Rcl	~~ 168.0 201.5 Rhyolite Crystal Lapilli Tuff						
170.00				b														
	100	90	R3	b	10	2												
				b	20													
				b														
177.00				b														
	100	95	R3	c	30	1												
				b														
183.00				b														
	100	95	R3	b	15	2												
				b	30													
				a														
				b														
192.50				c														
	100	95	R3	c	20	2												
				a	50													
				a														
				a														
202.00				a						-40	SS,D	~~ 201.5 240.0 Siltstone, Dacite						
	100	95	R4	a	10	2												
				a	30													
				a														
				a								Note: @ 209.0 216.0 Plag-phyric interval						
211.00				a														
	100	100	R3	a	10	2												
				a	50													
				a														
				a								Note: @ 220.0 227.0 Plag-phyric interval						
221.00				a														
	100	100	R3	a	10	2												
				a	40													
				a								Note: @ 210.0-227.0 Silica-filled fractures with sulfides ~ 0-20 degrees to core axis and ~ 70-90 degrees to						
230.00				a														
	99	35	R2	b	20	1												

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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
233.00				b								core axis, @ 227.0-240.0 subtle laminations						
	100	95	R2	a	30	2												
				a	80													
				b														
240.00				b							Rc	** 240.0 267.8 Rhyolite Crystal Tuff with silicified zones (altered dikes?)						
	100	0	R2	b	10	2												
241.00					30													
	99	0	R3	b	10	2						Note: @ 240.0-253.0 Highly fractured interval						
243.00					60													
	99	40	R3	b	10	2												
				a	40													
				a														
250.00				a														
	99	30	R3	a	10	2												
253.00				b	50													
	100	50	R3	a	10	2												
				b	50							^^ 257.0 267.8 Silicified Crystal Tuff, with blue quartz eyes						
259.00				c														
	100	70	R3	c	15	2												
				c	40													
				c														
				c														
268.00				a						-25	gIR	** 267.8 289.2 Intrusive Rhyolite or Quartz Diorite, granophyric						
	100	100	R3	a	15	2												
270.00					40													
	100	100	R3	a	20	2												
273.00				a	40													
	100	100	R3	b	15	2												
277.00				b	40													
	100	100	R3	b	20	2												
				c	40													
283.00				b														
	100	100	R3	b	5	2												
				b	40													
288.00				b														
	100	90	R3	b	30	2				-70	D,SS	** 289.2 315.0 Dacite, Sandstone, dacitic plag-phyric						
				b	60													
				b														
				a							Rc*	^^ 289.2 291.3 Altered Tuff						
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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
298.00											pMd	^^ 295.0 310.0 Plag-phyric Basalt						
	100	100	R3	a	20	2												
				a	40													
303.00				a														
	100	90	R3	a	10	2												
				a	30													
				a														
				a														
313.00				b														
	100	100	R3	c	20	2				-32	MSca	SULFIDE UNIT C: 315.0-323.4 ** 315.0 324.3 Massive Sulfide, calcareous	f	60	1	2	5
				c	60					-35			f	60	1	2	5
				c									f	60	1	2	5
				c									f	60	1	2	5
323.00				d						-75	ChT/SS	** 324.3 340.5 Cherty Tuff or Sandstone	f	60	1	2	5
	100	90	R3	c	10	2							f	60	1	2	5
				b	20								f	60	1	2	5
				b														
				b														
333.00				b														
	100	100	R3	b	5	2												
				a	30													
				a						-20	BP	** 340.5 343.8 Bedded Pyrrhotite with sphalerite	e	2		5	45
341.00				a						-43			e	2		5	45
	100	60	R3	c	10	3				-70	ChT/SS	** 343.8 360.5 Cherty Tuff or Sandstone	e	2		5	45
				a	20								e	2		5	45
				a	40													
349.00				a														
	100	75	R3	a	10	3												
				a	40													
355.00				a	75													
	90	25	R3	a	5	2												
356.00					30													
	100	100	R3	a	10	2												
				a	30					-70	MSp,ca	SULFIDE UNIT B: 360.5-399.8 ** 360.5 365.8 Massive Sulfide, calcareous, with pyrrhotite	e	30			10
				a									e	30			10
363.00				b						-20			e	30			10
	100	100	R3	c	60	1					BP	** 365.8 368.5 Bedded Pyrrhotite	e	30			10

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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						-35			e				5	40
				c						-55	MSch	** 368.5 373.8 Massive Sulfide, cherty	e				5	40
369.00																		
	100	100	R3	c	40	1							f	25		8	5	10
				d									f	25		8	5	10
				d							Xch	** 373.8 395.5 Tuffite, cherty	f	25		8	5	10
				d									e	15		5	5	10
													e	15		5	5	10
379.00																		
				d						-35	FZ/DZ	^^ 379.1 394.5 Fault Zone/Dike Swarm,	e	15		5	5	10
	100	100	R4	c	30	2					pMd	@ 379.1 385.0 Plagrphyric Basalt Dike	e	15		5	5	10
				b	70							~ 20 degrees to core axis	e	15		5	5	10
				b									e	15		5	5	10
				b									e	15		5	5	10
				b									e	15		5	5	10
389.00																		
	100	90	R3	a	10	2							e	15		5	5	10
				b	50								e	15		5	5	10
				b							Ch	** 395.5 399.8 Chert, grey black,	e	15		5	5	10
				a								translucent with alteration patches						
				a														
399.00											Rc/Rl	** 399.8 452.5 Rhyolite Crystal Tuff						
	100	95	R2	a	30	2					pM1	^^ 400.0 401.4 Basalt Sill, Plagrphyric						
				a	60													
				c														
				a														
409.00				b														
	100	45	R3	c	10	2					Xz	^^ 410.0 411.0 Tuffite, with stringer	d	15	2			10
				c	40							sphalerite, pyrrhotite and chalcopyrite						
				b														
417.00				a														
	99	30	R2	a	10	2						Note: 418.0-427.0 highly fractured						
				a	30						MS	^^ 421.5 422.0 Massive Sulfide	f	40			2	8
423.00				a														
	100	10	R2	b	10	2												
				b	40													
428.00				b							MS	^^ 428.4 431.6 Massive Sulfide						
	100	90	R3	c	30	2							f	60	2			10
				c	60								f	60	2			10
				c									f	60	2			10

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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
435.00				b														
	100	45	R3	b	15	2												
439.00				b	40													
	100	90	R3	b	25	2												
				a	50													
				a														
				a														
449.00				a														
	100	90	R3	b	20	2						SULFIDE UNIT A: 452.5-482.5						
452.00				b	40						MSt	** 452.5 465.0 Massive Sulfide, talcose	e	40	1	2	5	
	100	60	R3	a	40	2							e	40	1	2	5	
				b	70								e	40	1	2	5	
				a									e	40	1	2	5	
459.00				b									e	40	1	2	5	
	99	80	R3	c	50	1							e	40	1	2	5	
463.00				c									e	40	1	2	5	
	100	90	R3	c	20	1					Xt,z	** 465.0 472.0 Tuffite, talcose, stringery	e	40	1	2	5	
				c									e	25	1	2	5	
				c									d	25	1	2	5	
				d							MSt,z	** 472.0 482.5 Massive Sulfide, talcose, stringery	d	25	1	2	5	
473.00				c									e	40	1	2	5	
	100	100	R4	d	40	1							e	40	1	2	5	
				d									e	40	1	2	5	
				d									e	40	1	2	5	
				d							QD	** 482.5 533.0 Quartz Diorite	e	40	1	2	5	
				c									e	40	1	2	5	
											gQD	^^ 482.5 483.2 Granophyre	e	40	1	2	5	
483.00																		
	100	100	R3	c	30	1												
				c														
490.00				c														
	100	75	R3	c	30	2												
				c	80													
				c														
				b														
499.00				c														
	100	100	R3	c	30	2												
503.00				c	70													
	100	45	R3	c	10	2												
508.00				c	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-16

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	85	R3	c	30	1												
				c														
				c														
515.00				c														
	100	90	R3	c	20	2					gQD,f	^^ 517.0 525.0 Fractured interval						
				b	40													
521.00				c														
	99	0	R3	b	40	2												
523.00					60													
	99	0	R3	b	40	2												
525.00					60													
	100	95	R3	c	50	2												
				c	70													
				c														
				b														
533.00				c														
	100	90	R3	c	30	2												
				c	50													
538.00				b							gQD,s	^^ 537.0 540.0 Sheared interval						
	99	0	R3	a	30	2												
539.50					60													
	100	85	R3	b	50	1												
541.00																		
	100	95	R3	b	20	2												
545.00				b	50													
	100	90	R3	b	30	2												
				c	50													
				b														
552.00				c								E.O.H. 553' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.7	-45.0
100'	184.0	-42.8
250'	184.0	-43.0
400'	183.5	-43.5
550'	181.7	-43.8
605'	181.4	-43.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-30-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-17 (WDNR #160)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-10-90

BEARING: S180.7E INCLINATION: -45 T.D: 605'
COORDINATES: L9400 E, 11501 N
ELEV: 1568.2' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-9-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 76.0			⋇ 0.0 76.0 OVERBURDEN	
76.0 82.0	(not recovered)			
82.0 88.0	(HQ core)			
76.0 110.0		Rb	⋇ 76.0 110.0 RHYOLITE TUFF BRECCIA	
110.0 127.5		Rt	⋇ 110.0 127.5 RHYOLITE TUFF	
110.0 113.1			~~ 110.0 113.1 Crystal-rich Flow	
127.5 155.3		IR	⋇ 127.5 155.3 INTRUSIVE RHYOLITE	
149.3 155.3		R17	~~ 149.3 155.3 Rhyolite Tuff, Lapilli	
155.3 173.6		Rt,Rc	⋇ 155.3 173.6 RHYOLITE TUFF, CRYSTAL TUFF	
173.6 182.5		pRd	⋇ 173.6 182.5 RHYOLITE PORPHYRY DIKE	
182.5 251.7		Rc	⋇ 182.5 251.7 RHYOLITE CRYSTAL TUFF	
251.7 311.7		D	⋇ 251.7 311.7 DACITE	
291.1 311.7		D	~~ 291.1 311.7 DACITE, Altered	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.7	-45.0
100'	184.0	-42.8
250'	184.0	-43.0
400'	183.5	-43.5
550'	181.7	-43.8
605'	181.4	-43.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-30-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-17 (WDNR #160)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-10-90

BEARING: S180.7E INCLINATION: -45 T.D: 605'
COORDINATES: L9400 E, 11501 N
ELEV: 1568.2' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-9-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
311.7 321.7		SL	** 311.7 321.7 SILTSTONE	
321.7 326.0		Rc	** 321.7 326.0 RHYOLITE CRYSTAL TUFF	
324.8 325.6		SL	^^ 324.8 325.6 Siltstone	
326.0 330.2		Rl	** 326.0 330.2 RHYOLITE LAPILLI TUFF	
330.2 404.5		SL	** 330.2 404.5 SILTSTONE	
378.4 380.0		ChT	^^ 378.4 380.0 Laminated, Altered Tuff (Chert?)	
394.3 396.0		ChT	^^ 394.3 396.0 Laminated, Altered Tuff (Chert?)	
404.5 411.5		SSp	** 404.5 411.5 SANDSTONE, With Pyrrhotite	
411.5 508.4		Rt	** 411.5 508.4 RHYOLITE TUFF	
442.7 452.8		Rc	^^ 442.7 452.8 Rhyolite Crystal Tuff	
457.8 460.7		pMd	^^ 457.8 460.7 Plag-phyric Dike	
463.0 466.4		pRd	^^ 463.0 466.4 Rhyolite Porphyry Dike	
508.4 510.3		MSt	** 508.4 510.3 MASSIVE SULFIDE, Tuffaceous	508.4 510.3 40% sulfide, 40% Sp
510.3 522.2		Xz,p	** 510.3 522.2 TUFFITE, Stringery, with Pyrrhotite	510.3 522.2 30% sulfide, 12% Sp, 15% Po, 3% Ga

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	180.7	-45.0
100'	184.0	-42.8
250'	184.0	-43.0
400'	183.5	-43.5
550'	181.7	-43.8
605'	181.4	-43.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 8-30-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-17 (WDNR #160)

DATE: 1-9-92
PAGE 1 OF 9

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-10-90

BEARING: S180.7E INCLINATION: -45 T.D: 605'
COORDINATES: L9400 E, 11501 N
ELEV: 1568.2' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
522.2 526.2		Rt*	** 522.2 526.2 RHYOLITE TUFF, Altered	
522.2 523.0			^^ 522.2 523.0 Sheared Chloritic-Talcose Interval	
525.5 526.2			^^ 525.5 526.2 Fault Breccia, Talcose	
526.2 605.0		QD	** 526.2 605.0 QUARTZ DIORITE	
526.2 585.5		gQD	^^ 526.2 585.5 Granophyric Quartz Diorite	
556.4 563.0		Md	^^ 556.4 563.0 Basalt Dike	
588.1 591.4		Md	^^ 588.1 591.4 Basalt Dike	
			E.O.H. 605' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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 76.0											** 0.0 76.0 OVERBURDEN						
											^^ 0.0 15.0 Sand and gravel "fill"						
											^^ 15.0 20.0 Sand						
											^^ 20.0 60.0 Sand, gravel, and cobbles						
											^^ 60.0 76.0 Sand, gravel, and boulders						
										Rb	** 76.0 110.0 Rhyolite Tuff Breccia, felsic fragmental unit with medium-grained matrix and (0.5-1.0") fragments						
82.00																	
	100	50	R3	b	10	2											
				b	50												
				c													
88.00				c													
	99	40	R3	b	20	1											
90.00																	
	60	0	R3	b	20	1											
92.00																	
	100	100	R4	c	25	1											
				c													
				d													
				d													
101.50				c													
	99	50	R3	c	45	1											
105.00				b													
	80	0	R3	b	10	2											
107.00					30												
	100	50	R3	b	10	2											
109.00					40				-30	Rt	** 110.0 127.5 Rhyolite Tuff						

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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
112.00	99	60	R3	b b	30	1				-30		^^ 110.0 113.1 Crystal-rich flow, dark grey, fine to medium-grained						
113.00	99	0	R3	b	20	1												
115.00	100	20	R3	b	30	1												
120.00	100	75	R3	b b b	5 30	2												
122.00	100	40	R4	b	5 30	2												
126.00	100	100	R5	c b	40	1												
128.00	100	50	R4	b	30	1												
131.00	99	80	R3	b b	20	1				-30	IR	>< 127.5 155.3 Intrusive Rhyolite, (possible fault zone)						
132.00	99	0	R3	b	40	1												
134.00	100	60	R3	b	40	1												
140.00	100	90	R3	c c b	20	1												
144.00	100	90	R3	b c	30	1												
147.00	99	25	R3	b a	20 40	2												
153.00	100	90	R3	c c c	30 60	2					R1?	^^ 149.5 155.3 Fault Breccia or Lapilli Tuff, fragments caught in porphyry matrix						
154.00	50	0	R3	c	30	1												
155.00	100	50	R3	c	50	1												
156.00	100	100	R3	b	30	1				-30	Rt,Rc	>< 155.3 173.6 Rhyolite Tuff, Rhyolite Crystal Tuff						
159.00	100	90	R3	b a	10 30	2						Note: @ 158.2-160.1 Lt. grey, altered crystal tuff						
	100	85	R4	a	10	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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
162.00				b	30					-25		Note: @ 162.7 173.6 White/grey, quartz-rich crystal tuff						
	100	100	R3	b	30	2												
				b	60													
				c														
170.00				b														
	100	90	R3	b	10	2												
				b	30					-20	pRd	** 173.6 182.5 Rhyolite Porphyry Dike, Granophyric, reddish to salmon pink alteration, high-angle contacts						
				c														
177.00				c														
	100	100	R3	c	5	2												
				c	20													
182.00				b						-22	Rc	** 182.5 251.7 Rhyolite Crystal Tuff						
	100	98	R4	b	10	2						Note: @ 182.5-187.5 Patchy epidote alteration, medium-grained crystal tuff						
				b	35													
				c								Note: @ 187.5-193.5 Medium-grained, unaltered						
				c														
191.00				b														
	100	10	R3	a	30	2												
193.00					50					-70		Note: @ 193.5-206.2 Fine to medium-grained, patchy alteration, coarsens downward						
	100	100	R3	c	40	1												
194.00																		
	100	85	R3	b	25	2												
				a	40													
				c														
				b														
203.00				b														
	100	90	R3	b	20	2				-50		Note: @ 206.2-228.8 Graded, lt. grey, becoming lighter-grey, more altered at base						
				b	40													
209.00				c														
	100	100	R3	c	20	1												
210.00																		
	100	90	R3	c	35	1				-50								
				c						-50								
				c														
217.00				c														
	100	90	R3	c	40	2												
				b	60													
				c														

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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
226.00				c														
	100	80	R3	c	20	2				-50		Note: @ 228.8-230.1 Fine-grained, dark grey interval						
				c	50													
				b														
				b								Note: @ 230.1-239.4 Medium-grained, with light grey bleaching and epidote interval						
233.00																		
	100	100	R3	c	20	2												
236.00				b	40													
	100	100	R3	c	20	2												
				c	40							Note: @ 239.4-251.7 Fine-grained, epidote bleaching						
				c														
243.00				c														
	100	100	R3	c	10	2												
247.00				a	50													
	100	90	R3	b	20	2												
251.00				b	50					-70	D	** 251.7 311.7 Dacite, fine-grained, black						
	100	10	R3	b	20	2												
				b	50													
256.00				b														
	100	85	R3	b	10	2												
258.00					50													
	100	70	R3	b	5	3												
				a	20													
264.00				a	40													
	90	0	R3	a	5	3												
265.00					20					-50								
					40													
	100	90	R3	a	20	3												
				b	40													
				b	70													
273.00				a														
	100	50	R3	b	30	2												
277.00				b	70													
	100	100	R4	c	35	2												
281.00				c	60													
	100	90	R3	c	20	2												
				c	60													
286.00				b														
	99	85	R3	a	10	2												
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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							D	^^ 291.1 311.7 Dacite, altered, fine to medium-grained, patchy lt. green alteration						
293.00				b														
	100	100	R3	b	10	2				-35								
295.00					30													
	100	100	R3	b	10	2												
298.00				a	30						Rb	^^ 298.2 299.5 Rhyolite Tuff Breccia						
	100	100	R3	a	10	2												
301.00				c	30													
	100	90	R3	c	40	1												
305.00				c						-50								
	99	90	R3	c	40	1												
				a														
				a							SL	** 311.7 321.7 Siltstone, very fine-grained, with greyish "ashy" bleaching						
				c														
315.00				a														
	100	80	R3	a	40	1												
319.00				a						-55								
	100	85	R3	a	20	2					Rc	** 321.7 326.0 Rhyolite Crystal Tuff, medium-grained						
				c	40													
				c														
325.00										-40	SL	^^ 324.8 325.6 Siltstone, fine-grained						
	100	90	R3	c	50	1					R1	** 326.0 330.2 Rhyolite Lapilli Tuff						
328.00				c														
	100	85	R3	a	30	2				-30	SL	** 330.2 404.5 Siltstone, fine-grained, dark-grey to black						
				a	45													
334.00				a														
	80	0	R3	a	20	2												
335.00					60					-40								
	100	75	R4	a	10	2												
				a	40					-40								
				a														
				a								Note: @ 343.0-345.0 Scattered crystal-rich interbeds						
				a														
345.00												Note: @ 346.5-347.5 Coarse-grained crystal bed with blue quartz eyes						
	100	80	R3	a	30	2												
				a	60													
				a								Note: @ 347.5-364.0 Lt. Grey bleaching						

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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														
				a						-30								
355.00																		
	100	90	R3	a	25	2						Note: @ 357.0-375.0 Scattered sulfides						
				a	60					-30		in veinlets and on fracture faces						
362.00				a						-70								
	100	60	R3	a	25	2												
				a	40													
				a														
				a														
372.00				a														
	100	40	R3	b	40	1												
374.00																		
	100	30	R3	a	10	2												
378.00				b	40					-55	ChT	~~ 378.4 380.0 Laminated Ashy (Chert?)						
	100	90	R3	a	15	3				-55		Tuff, laminae are (0.1-1.0") and white,						
				a	30					-40		peach, and greenish-grey						
				a	50													
				a						-40		Note: @ 382.0-382.3 Quartz-epidote						
385.00												vein bed						
	100	90	R3	b	20	2				-30								
				a	50													
				a														
392.00				b														
	100	80	R3	a	20	2				-35	ChT	~~ 394.3 396.0 Laminated, Ashy (chert?)						
395.00				b	50							Tuff						
	100	80	R3	b	20	2												
				a	40					-30		Note: @ 397.0 30 degree beds offset by						
399.00												70 degree fracture						
	100	0	R3	a	20	2												
401.00					40													
	100	80	R3	a	40	2					SSp	>>< 404.5 411.5 Sandstone, bleached,						
405.00				a	60							altered, with pyrrhotite, possible	a					x
	100	100	R3	b	30	2						calcsilicate alteration	a					x
406.00					50								a					x
	100	95	R3	b	30	2							a					x
				c	50													
412.00				c														
	100	70	R3	c	20	2					Rt	>>< 411.5 508.4 Rhyolite Tuff, black,						
				b	40							fine-grained, with small (0.1") altered						
												patches (altering pyroxene/amphibole?),						

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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								most likely dacite from geochem.						
				b														
421.00				b														
	100	30	R3	a	20	2												
424.00				b	50													
	100	90	R3	b	10	2												
				b	50													
				b														
431.00				b														
	100	50	R3	b	2	3												
				a	10													
				a	40													
439.00				a														
	100	100	R3	a	10	2					Rc	^^ 442.7 452.8 Rhyolite Crystal Tuff,						
				b	40					-50		bedded coarse-grained, greyish-white						
				c								with (0.1"-0.5") crystal fragments						
				c						-50								
448.00				c														
	100	100	R3	c	40	1												
451.00				c						-48								
	100	100	R3	c	40	1												
453.00																		
	100	60	R3	a	10	2												
455.00					40					-55		Note: @ 455.5-456.1 Sheared, chloritic						
												interval with minor sulfides						
	100	90	R3	a	10	3				-30	pMd	^^ 457.8 460.7 Plag-Phyric Dike (?)						
				a	40													
				a	60													
				a						-60	pRd	^^ 463.0 466.4 Rhyolite Porphyry Dike,						
465.00				a						-60		with sheared upper/lower contacts						
	100	98	R3	a	10	3												
469.00				a	20													
					40													
	100	75	R3	a	10	3												
				a	40													
				a	60													
				a														
477.00				a														
	100	95	R3	a	20	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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	50													
				a														
485.00				a														
	100	100	R3	a	20	2												
				a	40													
				a														
493.00				a														
	100	50	R3	a	10	2												
495.00					40													
	100	100	R3	a	10	2												
				b	30													
				b														
				b														
505.00				b														
	100	80	R3	b	20	2												
				b	40						MSt	** 508.4 510.3 Massive Sulfide,	e	40				2
				c								tuffaceous	e	40				2
				c						-40			e	40				2
				a							Xz,p	** 510.3 522.2 Tuffite, stringery, with	e	40				2
										-60		pyrrhotite	d	12			3	15
514.00													d	12			3	15
	100	95	R3	c	40	1						Note: Weird flourescent green mineral	d	12			3	15
				c						-60		(epidote?) @ 512.0-521.0	d	12			3	15
519.00				b						-60			d	12			3	15
	100	90	R3	b	40	2				-85	Rt*	** 522.2 526.2 Rhyolite Tuff, altered	d	12			3	15
				b	70													
				a								^^ 522.2 523.0 Sheared chloritic/talcose						
				a								interval						
				a														
												^^ 525.5 526.2 Fault Breccia(?), talcose						
											QD	** 526.2 605.0 Quartz Diorite						
											gQD	^^ 526.2 585.5 Granophyre						
529.00																		
	100	80	R3	a	20	2												
				a	50													
				a														
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-17

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
539.00				a														
	100	95	R3	b	10	2												
				a	40													
				b														
				b														
548.00				a														
	100	100	R3	a	40	1												
				c														
				c														
555.00				c						-55	Md	^^ 556.4 563.0 Basalt Dike, fine-grained						
	100	95	R5	c	10	2												
				a	25													
				b						-60								
				a														
565.00				c														
	100	80	R3	c	20	2												
				c	40													
				c														
				a														
574.00				a														
	100	95	R3	a	20	2												
				b	60													
579.00				c														
	100	95	R3	c	10	2												
582.00				b	40													
	100	100	R3	a	10	2												
585.00				b	40													
	100	100	R3	c	50	1												
587.00											Md	^^ 588.4 591.4 Basalt Dike, with sheared lower contact						
	100	100	R3	a	10	2												
				b	30													
				b														
595.00				a														
	100	100	R3	a	10	2												
597.00					50													
	100	90	R3	b	10	2												
				b	40													
				a														
605.00				a								E.O.H. 605' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.0	-56.9
100'	178.9	-55.6
250'	177.7	-55.9
400'	178.2	-56.0
550'	179.0	-55.1
666.5'	180.0	-54.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 9-4-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-18 (WDNR #162)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-13-90

BEARING: S179E INCLINATION: -56.9 T.D: 666.5'
COORDINATES: L10000 E, 11380 N
ELEV: 1563.1' SEC: 15 TWP: 37N RANGE: 4E

DATE: 11-22-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 67.0			** 0.0 67.0 OVERBURDEN	
67.0 73.0	(not recovered)			
73.0 81.0	(HQ core)			
67.0 209.8		R	** 67.0 209.8 RHYOLITE	
209.8 257.0		SS/SL	** 209.8 257.0 SANDSTONE/SILTSTONE	
257.0 325.0		R	** 257.0 325.0 RHYOLITE	
325.0 353.0		D	** 325.0 353.0 DACITE	
353.0 356.2		MSch#	** 353.0 356.2 MASSIVE SULFIDE, Cherty	
356.2 364.2		Rcp	** 356.2 364.2 RHYOLITE CRYSTAL TUFF, With Pyrrhotite	
361.0 364.4		Ch	^^ 361.0 364.4 Cherty	
364.4 370.6		MSt	** 364.4 370.6 MASSIVE SULFIDE, Tuffaceous	
370.6 374.0		Xz,p	** 370.6 374.0 TUFFITE, Stringery, With Pyrrhotite	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.0	-56.9
100'	178.9	-55.6
250'	177.7	-55.9
400'	178.2	-56.0
550'	179.0	-55.1
666.5'	180.0	-54.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 9-4-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-18 (WDNR #162)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-13-90

BEARING: S179E INCLINATION: -56.9 T.D: 666.5'
COORDINATES: L10000 E, 11380 N
ELEV: 1563.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
374.0 377.5		Rch,p	><< 374.0 377.5 RHYOLITE, Cherty, With Pyrrhotite	
377.5 382.2		MSz	><< 377.5 382.2 MASSIVE SULFIDE, Stringery	
382.2 397.0		Rt*	><< 382.2 397.0 RHYOLITE TUFF, Altered, Cherty	
386.5 396.0		gRd	^^ 386.5 396.0 Rhyolite Granophyric Dike Swarm	
397.0 416.0		Rt	><< 397.0 416.0 RHYOLITE TUFF	
416.0 478.6		Cht	><< 416.0 478.6 CHERT	
451.0 478.6		X	^^ Tuffaceous With Cherty Zones	
478.6 490.0		Ch*C	><< 478.6 790.0 CHERTY TUFF	
490.0 524.5		Cht	><< 490.0 524.5 CHERT	
524.5 527.9		ChT/CS	><< 524.5 527.9 INTERBEDDED CHERTY TUFF, TUFA	
527.9 531.5		MSca	><< 527.9 531.5 MASSIVE SULFIDE, Calcareous	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.0	-56.9
100'	178.9	-55.6
250'	177.7	-55.9
400'	178.2	-56.0
550'	179.0	-55.1
666.5'	180.0	-54.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 9-4-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-18 (WDNR #162)

DATE: 11-22-91
PAGE 1 OF 10

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-13-90

BEARING: S179E INCLINATION: -56.9 T.D: 666.5'
COORDINATES: L10000 E, 11380 N
ELEV: 1563.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
531.5 562.7		Rch	** 531.5 562.7 RHYOLITE, Cherty	
562.7 570.0		Rz,p	** 562.7 570.5 RHYOLITE TUFF, With Sulfides	
570.0 598.0		SS,D	** 570.5 598.0 SANDSTONE/DACITE	
598.0 666.5		QD*	** 598.0 666.5 QUARTZ DIORITE	
605.0 608.0		Bd	^^ 605.0 608.0 Basalt Dike	
608.0 617.2		gQD	^^ 608.0 617.2 Granophyre	
613.0 613.5		Bd	^^ 613.0 613.5 Basalt Dike	

E.O.H. 666.5' (total depth)

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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 67.0												** 0.0 67.0 OVERBURDEN						
												^^ 0.0 61.0 Sand						
												Note: @ 55.0-62.0 Lost circulation						
												^^ 61.0 67.0 Boulders						
											R	** 67.0 209.8 RHYOLITE						
											R1	^^ 67.0 103.5 Rhyolite Lapilli Tuff						
73.00																		
	99	0	R3	a	20	3												
77.00				a	40													
					60													
	90	0		a														
78.00																		
	99	50	R3	a	10	2												
79.00					40													
	100	100	R3	b	10	3												
81.00					30													
					50													
	10	0																
82.00																		
	75	50	R3	b	10	2												
84.00					30													
	100	100	R3	c	10	2												
88.00				a	25													
	100	80	R3	a	25	2												
92.00				b	40													
	100	50	R3	a	5	2												
95.00				b	20							Note: @ 94.7-103.5 Very fractured						
	98	25	R3	a	5	2												
99.00				a	20													
	98	0		a														
				a														
104.00				a							Rt	^^ 103.5 156.0 Rhyolite Tuffs, patchy						

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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	35	R3	b	20	1						epidote alteration and bleaching/kspar alteration/iron staining along fractures						
107.00				b														
	40	0		a														
111.00				a														
	98	0		a								Note: @ 103.5-123.5 Highly fractured						
113.00																		
	10	0		a														
				a														
120.00				a														
	98	0		a														
122.00																		
	98	0		a														
123.00																		
	99	50	R3	a	10	2												
				a	30													
129.00				a														
	99	0	R3	a	5	2												
134.00				a	40													
	100	80	R3	a	5	3												
				a	20													
				a	40													
142.00				a														
	100	40	R3	b	5	2												
				a	30													
147.00				a														
	100	90	R3	a	20	2												
151.00				a	40													
	100	85	R4	a	20	2												
153.00					40													
											IR	^^ 156.0 177.5 Intrusive Rhyolite						
	99	60	R4	b	30	2												
157.00				a	60							Note: @ 156.5 162.3 Fractured, Fe-staining at high angle (10-20 degrees) to core axis						
	99	10	R3	a	5	2												
161.50				a	20													
	90	90	R3	a	20	2												
				b	60													
167.00				b														
	100	75	R3	b	10	1						Note: @ 168.5 177.5 Grey brown, granophyric						
171.00				c														

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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	40	1												
173.00																		
	100	100	R3	c	20	1												
177.00				c							pR	^^ 177.5 187.5 Rhyolite Porphyry Sill						
	100	100	R3	c	10	3												
				c	30													
183.00				b	50													
	100	100	R3	b	10	3												
				b	20													
188.00				b	30						IR	^^ 187.5 209.8 Intrusive Rhyolite, altered, scattered rhyolite porphyry dikes						
	100	100	R3	b	15	3												
189.00					30													
					50													
	100	90	R3	c	5	3												
				c	20													
				b	50							^^ 195.3 203.0 Reddish Fe-alteration						
				b														
199.00				a														
	100	90	R3	a	20	3												
				b	40													
				b	60													
206.00				b														
	100	100	R3	b	10	1												
210.00				b														
	100	50	R3	b	5	1					SS,SL	** 209.8 257.0 Sandstone, Siltstone, fine-grained, dark grey to black, hard, occasionally laminated						
213.00				b														
	99	40	R4	b	15	1												
215.00																		
	99	85	R4	a	5	2												
217.50					30													
	100	100	R4	b	20	1												
221.50				c														
	100	100	R4	b	10	2												
225.00				c	30													
	100	90	R4	c	10	2												
				c	30													
231.50				b														
	100	90	R4	b	10	2												
236.00				b	30													
	99	85	R4	b	30	1												

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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														
242.50				c														
	100	90	R4	b	10	2												
244.00					30													
	100	100	R4	b	10	2												
				c	30													
249.50				c														
	100	90	R4	c	30	1												
252.00																		
	100	80	R4	c	10	2												
256.00				b	30													
	100	100	R4	c	10	2												
					30						R	** 257.0 325.0 RHYOLITE						
257.50											Wql	^^ 257.0 306.5 Quartz Lapilli Wacke, altered, medium grey						
	100	100	R4	b	10	1						Note: @ 257.0 263.4 Green epidote alteration						
				c														
263.00				c														
	100	80	R4	b	30	1												
				c														
				c														
				c														
272.00				b														
	100	90	R4	b	10	2				-35		Note: @ 273.4 276.4 Rhyolite Porphyry, granophyric, red alteration						
				b	30													
				b						-10		Note: @ 276.4 306.5 Green epidote alteration, scattered pyrite						
				b														
				b														
282.00												Note: Fractures at high-angle (~10 degrees) to core axis from 281.0-306.5						
	100	70	R3	b	5	2												
				b	30													
				b														
289.00				b														
	100	90	R3	b	5	2						Note: @ 292.5 306.5 Scattered rhyolite porphyry dikes						
				a	50													
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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															
99.50				b															
	100	100	R4	a	5	2													
				b	30														
				b						-7	IR	^^ 306.5 325.0 Intrusive Rhyolite , lt. pink, granophyric							
107.00				b															
	100	100	R4	b	20	1													
111.00				b															
	100	100	R4	b	5	2													
113.00					50														
	100	90	R4	c	10	2													
				a	40														
119.00				a															
	100	95	R4	b	10	2													
				a	40														
124.00				a															
	100	75	R3	a	10	2													
126.00					30						D	** 325.0 353.0 Dacite, plag-phyric black, with plag crystals							
	100	40	R3	a	10	2													
129.50				a	40														
	100	100	R3	b	30	2						Note: @ 326.5 329.0 Fractured zone							
131.50					60														
	100	100	R4	b	20	2													
				b	40														
137.00				a						-40		^^ 338.4 339.1 Sheared interval							
	100	90	R4	a	10	2													
				a	30														
				a															
144.00				b															
	100	100	R4	b	30	2													
146.00					50														
	100	90	R3	b	10	3													
				a	30														
				c	50														
154.00				a						-70	MSch#	** 353.0 356.2 Massive Sulfide, cherty with green diopside alteration		f	40	10	4	4	
														f	40	10	4	4	
														f	40	10	4	4	
	100	90	R3	c	10	2					Rcp	** 356.2 364.2 Rhyolite Crystal Tuff (?) with bedded pyrrhotite		f	40	10	4	4	
				c	40					-60			b					7	
				a						-60			b					7	

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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						-60		^^ 361.0 364.4 Cherty, greenish		b					7
				c								alteration		b					7
														b					7
364.00											MSt	** 364.4 370.6 Massive Sulfide,		b					7
										-70		tuffaceous		e	40			5	5
	100	100	R3	c	30	1				-60				e	40			5	5
				d										e	40			5	5
				d						-30	Xz,p	** 370.6 374.0 Tuffite, stringery, with		e	40			5	5
				b						-30		pyrrhotite		c	13	1		1	5
				c										c	13	1		1	5
374.00										-70	Rch,p	** 374.0 377.5 Rhyolite, cherty with		c	13	1		1	5
	100	100	R3	c	30	1						pyrrhotite		c	13	1		1	5
				c						-55				c	13	1		1	5
				c						-50	MS	** 377.5 382.2 Massive Sulfide,		d	30				5
				c						-50		stringery		d	30				5
				c						-30				d	30				5
										-50	Rt*	** 382.2 397.0 Rhyolite Tuff, altered,		d	30				5
383.00										-50		cherty							
										-60									
	100	95	R3	a	10	2					gRd	^^ 386.5 396.0 Rhyolite Granophyric							
387.00				b	30							Dike Swarm, fracturing and alteration							
	99	0	R3	a	10	2						@ <10 degrees to core axis							
390.00				a	30														
	100	95	R3	a	10	2													
				a	40														
395.00				a															
	100	100	R3	a	5	2					Rt	** 397.0 416.0 Rhyolite Tuff							
399.50				a	45							(silicified) lt. grey bleaching,							
	100	100	R3	a	20	2						scattered pyrrhotite and pyrite							
				a	60					-80									
406.00				a															
	100	100	R3	a	20	2													
				a	40														
				b															
				b															
414.00				a															
	100	90	R3	a	10	2					Ch	** 416.0 478.6 Chert, black, with							
418.50				a	60							greenish alteration and tuffaceous							
	100	90	R3	a	5	2						zones, and scattered sulfides							
				a	20					-30									

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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						-30								
				b						-50								
428.50				a						-40								
	100	100	R3	a	10	3												
432.00				a	40													
					60					-40								
	100	85	R3	a	20	2				-30								
				a	40													
				a														
				a														
441.00				a														
	100	95	R3	a	10	2												
444.50				a	40													
	100	100	R4	a	10	2												
				a	25													
450.00				a														
	100	100	R3	a	20	2				-25		^^ 451.0 478.6 More tuffaceous with cherty zones, patchy green alteration, and scattered sulfides						
453.00				a	50													
	100	90	R3	a	20	2				-50								
				a	60													
				a						-30								
				a						-30		Note: 462.0-465.0 Scattered 0.5"-1.0" beds, @30-35 degrees to core axis, white matrix with green, angular chert fragments						
464.00				a						-30								
	100	95	R3	a	5	2				-35								
				a	30													
470.00				b						-30								
	100	100	R3	b	15	2												
				a	40					-40								
				a						-50								
				b							Ch#C	** 478.6 490.0 Cherty Tuff, bleached, altered, with scattered sulfides, contorted bedding						
				b														
481.50				b														
	100	100	R3	c	20	2												
483.00					50													
	100	90	R3	c	20	2												
				c	40													
				c							Cht	** 490.0 524.5 Chert, Cherty Tuff, black and greenish, with greenish and yellow patchy alteration, with Po & Sp increasing towards the base						
				b														
493.00				b														
	100	100	R3	a	60	1												

ROCK QUALITY:

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

DRILL HOLE: LYM90-18

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
494.00																		
	100	85	R3	a	5	3												
				a	30													
				a	50													
502.00				a														
	100	70	R3	a	30	2												
				a	60													
508.00				a														
	100	50	R3	a	40	1												
510.00																		
	100	80	R3	b	5	3												
				b	20													
				a	40													
518.00				a														
	100	85	R3	a	40	2												
				a	70													
524.00				a							ChT/CS	** 524.5 527.9 Interbedded Cherty Tuff, Tufa, laminated						
	100	90	R3	a	40	2												
				a	70													
				b							MSca	** 527.9 531.5 Massive Sulfide, Calcareous	d	22		8		
				a									d	22		8		
				a									d	22		8		
											Rch	** 531.5 562.7 Rhyolite, cherty, with scattered sulfides	d	22		8		
534.00																		
	100	50	R3	a	45	2												
				a	70													
539.00				a														
	99	0	R3	a	40	1												
541.00																		
	100	90	R4	a	30	1												
				a														
				a														
550.00				a														
	100	70	R3	a	30	2												
				a	50													
				a														
				b														
559.00				c														
	100	90	R2	b	30	2												

ORIGINAL

ROCK QUALITY:

FRACTURE FREQ.
A:0-3,B:3-10
C:10-30,D:30-1000
E:>100 cm.

DRILL HOLE: LYN90-18

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

Run	%	RQD	Rf	ABCDE		Jrn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
561.00					50						Rz,p	** 562.7 570.5 Rhyolite Tuff, with	b		2			4
	99	60	R2	c	30	22						Sulfides	b		2			4
				b	50								b		2			4
566.00				a									b		2			4
	100	95	R3	b	10	22							b		2			4
				a	30								b		2			4
				a							SS,D	** 570.5 598.0 Sandstone, Dacite , with	b		2			4
572.00				b								disseminated Po, and scattered chert	b		2			4
	100	95	R3	b	30	22						interbeds						
				a	70													
				a														
579.00				b														
	100	50	R3	a	30	22												
581.00					60													
	100	100	R3	a	45	11												
584.00				a														
	100	85	R3	a	2	33												
				a	20													
				a	50													
				a														
593.50				a														
	100	100	R3	a	30	11												
				a							QD#	** 598.0 666.5 Quartz Diorite						
				b														
601.00				c														
	100	90	R4	a	10	22												
				b	45													
				a						-50	Md	^^ 605.0 608.0 Basalt Dike						
				a														
608.00										-55	gQD	^^ 608.0 617.2 Granophyre						
	100	100	R3	c	10	2												
				c	40													
				c						-50	Md	^^ 613.0 613.5 Basalt Dike						
				c						-50								
618.50				c														
	100	100	R3	c	10	2												
				c	40													
				c														
				c														
				c														

ROCK QUALITY:

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

DRILL HOLE: LYN90-18

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
629.00				c														
	100	100	R3	c	45	1												
				c														
				c														
				c														
639.00				c														
	100	100	R3	c	45	1												
				c														
				c														
				c														
649.50				c														
	100	100	R3	c	40	1												
				c														
				c														
				c														
660.00				c														
	100	100	R3	c	40	1												
				c														
666.50				c								E.O.H. 666.5' (total depth)						

Noranda Exploration Inc.
Eastern Divison

DATE: 1-10-92
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HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	178.8	-57.4
100'	180.7	-57.2
250'	181.1	-57.6
400'	181.2	-58.2
550'	181.9	-58.5
651'	182.0	-58.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy/ D. Stevens
DATE COLLARED: 9-10-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-19 (WDNR #161)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-14-90

BEARING: S178.8E INCLINATION: -57.4 T.D: 651'
COORDINATES: L9400 E, 11505 N
ELEV: 1568.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 68.0			** 0.0 68.0 OVERBURDEN	
68.0 71.0	(not recovered)			
71.0 77.0	(HQ core)			
77.0 217.0		Rt	** 68.0 217.0 RHYOLITE TUFF	
68.0 100.0		Rb	^^ 68.0 100.0 Rhyolite Tuff Breccia	
100.0 112.3		Rt	^^ 100.0 112.3 Rhyolite Tuff	
112.3 147.0		IR	^^ 112.3 147.0 Intrusive Rhyolite	118.0 128.0 Iron-stained fractures @ 5-45 degrees
147.0 155.5		Rt	^^ 147.0 155.5 Rhyolite Tuff	
155.5 163.2		pRd	^^ 155.5 163.2 Rhyolite Porphyry Dike	
163.2 188.9		Rt*	^^ 163.2 188.9 Rhyolite Tuff	
188.9 217.1		Rc,Rl	^^ 188.9 217.1 Rhyolite Crystal Lapilli Tuff	190.0 208.0 Epidote staining, alteration
190.0 205.3		Rc*	Note: @ 190.0-205.3 Rhyolite Crystal Tuff, With Lapilli, Altered	
217.1 280.0		D	** 217.1 280.0 DACITE	
228.5 229.5		Rc	^^ 228.5 229.5 Rhyolite Crystal Tuff	
275.2 275.7		Rc	^^ 275.2 275.7 Rhyolite Crystal Tuff	
280.0 507.0		R	** 280.0 507.0 RHYOLITE	
280.0 315.0		ChT,l	^^ 280.0 315.0 Cherty Tuff, Laminated	
315.0 326.5		W	^^ 315.0 326.5 Wacke	
326.5 354.8		SL	^^ 326.5 354.8 Siltstone	
354.8 360.0		W	^^ 354.8 360.0 Wacke	
360.0 439.2		Rt	^^ 360.0 439.2 Rhyolite Tuff	
375.2 409.7		Rc	Note: @ 375.2-409.7 Rhyolite Crystal Tuff	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	178.8	-57.4
100'	180.7	-57.2
250'	181.1	-57.6
400'	181.2	-58.2
550'	181.9	-58.5
651'	182.0	-58.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy/ D. Stevens
DATE COLLARED: 9-10-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-19 (WDNR #161)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-14-90

BEARING: S178.8E INCLINATION: -57.4 T.D: 651'
COORDINATES: L9400 E, 11505 N
ELEV: 1568.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
377.3 388.7		Rc*	Note: @ 377.3-388.7 Epidote Bleaching, Pink Alteration Along Fractu	
409.7 439.2		Rl*	Note: @ 409.7-439.2 Granophyric Rhyolite	
415.0 432.2		pRd	Note: @ 415.0-432.2 Rhyolite Porphyry Dike Swarm	
439.2 507.0		Rl	^^ 439.2 507.0 Rhyolite Crystal Tuff	
462.6 465.0		Rb	^^ 462.6 465.0 Rhyolite Lapilli Tuff Breccia	462.6 465.0 5% Sp, Cp
465.0 469.0		Rl*	^^ 465.0 469.0 Rhyolite Lapilli Tuff, Bleached	
469.0 470.9		Rt	^^ 469.0 470.9 Rhyolite Tuff	
470.9 471.7		Rb	^^ 470.9 471.7 Rhyolite Lapilli Tuff Breccia	470.9 471.7 5% Sp, Cp
471.7 476.4		Rl*	^^ 471.7 476.4 Rhyolite Lapilli Tuff, Bleached	
476.4 507.5		Rl	^^ 476.4 507.5 Rhyolite Lapilli Tuff	
478.5 480.0		pRd	^^ 478.5 480.0 Rhyolite Porphyry Dike	
507.5 541.5		Rt	** 507.5 541.5 RHYOLITE TUFF	
510.0 514.2		Rc	^^ 510.0 514.2 Rhyolite Crystal Tuff	
534.0 535.5		Rt*,p	^^ 534.0 535.5 Rhyolite Tuff, Altered with Pyrrhotite	
541.5 550.5		Rc	** 541.5 550.5 RHYOLITE CRYSTAL TUFF	
550.5 555.0		Rca*	** 550.5 577.2 RHYOLITE TUFF, Calcareous, with Diopside Alteration	550.5 555.0 3% Sp, Cp
577.2 584.7		Xcaz	** 577.2 584.7 TUFFITE, Calcareous with Stringer Sulfides	577.2 584.7 15% Sp, Cp
584.7 597.0		Rtz,t	** 584.7 597.0 RHYOLITE TUFF, Talcose with Stringer Sulfides	584.7 597.0 >5% Sp, Cp, Ga

Noranda Exploration Inc.
Eastern Divison

DATE: 1-10-92
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HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	178.8	-57.4
100'	180.7	-57.2
250'	181.1	-57.6
400'	181.2	-58.2
550'	181.9	-58.5
651'	182.0	-58.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy/ D. Stevens
DATE COLLARED: 9-10-90
REMARKS:
CORE SIZE: NQ/HQ

HOLE NO: LYN90-19 (WDNR #161)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 9-14-90

BEARING: S178.8E INCLINATION: -57.4 T.D: 651'
COORDINATES: L9400 E, 11505 N
ELEV: 1568.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
597.0 600.0		Rt,t*	** 597.0 600.0 RHYOLITE TUFF, Talcose, Altered	
600.0 651.0		QD	** 600.0 651.0 QUARTZ DIORITE	
600.0 607.5		gQD	^^ 600.0 607.5 Granophyre	
			E.O.H. 651' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-19

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 68.0												** 0.0 68.0 OVERBURDEN						
												^^ 0.0 10.0 Fill						
												^^ 10.0 20.0 Sand and gravel						
												^^ 20.0 40.0 Sand and large loose gravel						
												^^ 40.0 60.0 Coarse sand						
												^^ 60.0 68.0 Sand, gravel, and boulders						
											Rt	** 68.0 217.0 Rhyolite Tuff						
											Rb	^^ 68.0 100.0 Rhyolite Tuff Breccia, Porphyritic, contains cherty lithic fragments ranging from 0.2"-3.0", minor FeOx, pervasive and on fracture surfaces						
71.00																		
	100	100	R3	b	20	1												
74.00				a														
	99	50	R3	a	20	1												
76.00												Note: Extremely broken with minor epidote alteration						
	99	0	R3	a	20	2												
78.00					50													
	99	0	R3	b	30	2												
79.00					50													
	99	20	R3	b	30	2				-60								
82.00				b	60													
	99	20	R3	a	30	1												
84.00										-55								
	100	100	R3	c	10	1												
				c														
89.00				c						-30								
	99	50	R3	c	10	1												
90.00										-40								
	100	100	R3	c	10	1												
94.00				c														
	100	100	R3	c	10	1												
95.00																		

ROCK QUALITY:

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

DRILL HOLE: LYN90-19

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	85	R3	c	10	1												
				c														
				c						-35	Rt	^^ 100.0 112.3 Rhyolite Tuff, fine to						
102.00				d						-35		medium-grained						
	100	95	R4	d	30	1												
				d														
				d														
				d														
112.50				c						-60	IR	^^ 112.3 147.0 Intrusive Rhyolite						
	100	90	R4	c	10	2												
				c	30													
				c								Note: High angle fractures from 5-25						
120.00				c								degrees from core axis @ 119.0-128.5 with						
	99	85	R4	c	10	2						FeOx penetrating ~.1"						
				c	40													
124.00												Note: @ 123.0-136.0 Bleached						
	99	85	R4	b	20	1												
				c														
				b														
131.00				c														
	100	100	R4	b	15	2												
133.00					40													
	100	100	R4	c	10	1				-45								
135.00																		
	100	95	R4	b	20	1												
				b														
141.00				b														
	100	85	R4	b	20	1												
				c														
146.00				b														
	95	95	R4	c	20	2					Rt	^^ 147.0 155.5 Rhyolite Tuff						
150.00				c	50					-40								
	100	100	R3	c	30	1					Rtp	Note: @ 152.5 154.0 Rhyolite Tuff, with						
				c								disseminated pyrrhotite and minor						
				c								chalcopyrite, weakly chlorotized						
										-65	Rt*	Note: @ 154.0 155.5 Rhyolite Tuff,						
												altered with stringer pyrrhotite						

ROCK QUALITY:

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

DRILL HOLE: LYN90-19

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
156.00										-65	pRd	^^ 155.5 163.2 Rhyolite Porphyry Dike						
	100	95	R3	c	20	1				-60		Swarm, pervasive FeOx stain, fractures						
				b								10-15 degrees to core axis						
161.00				b														
	100	95	R3	a	10	2												
163.00					30					-45	Rt	^^ 163.2 188.9 Rhyolite Tuff, bleached						
	100	90	R4	b	30	1						and chlorotic along fractures						
				b						-55		penetrating from 0.1" to 0.5"						
170.00				b														
	100	90	R5	a	10	2				-50								
				a	30													
176.00				b														
	100	100	R4	b	30	1												
178.00																		
	100	100	R4	c	30	2												
				b	70													
183.00				b														
	100	75	R4	b	20	2												
187.00				b	70													
	100	100	R4	a	10	3					Rl	^^ 188.9 217.1 Rhyolite Crystal Lapilli						
					20							Tuff						
					70													
189.00										-70	Rl*	Note: @ 190.0 205.3 Rhyolite Crystal						
												Lapilli Tuff, altered, bleached epidote						
	100	95	R3	c	15	2						stained						
				b	30					-90								
				c						-60								
197.00				c														
	100	95	R3	c	25	2												
				c	50													
				c														
				c														
207.00				c														
	100	95	R4	c	30	2												
				c	60													
213.00				c														
	100	90	R5	c	5	2				-60								
				c	30						D	** 217.1 280.0 Dacite						
				a														
				a						-60								

ROCK QUALITY:

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

DRILL HOLE: LYN90-19

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
223.00				a														
	100	85	R3	a	30	2												
				b	50						Rc	^^ 228.8 229.5 Rhyolite Crystal Tuff						
				a														
231.00				a														
	100	90	R3	a	10	2												
				b	50					-60								
				b														
				b														
241.00				c														
	99	50	R3	a	30	2												
				b	50							Note: Silicified high angle vein 25						
				a								degrees to core axis @ 244.0-245.0						
248.00				a														
	100	50	R5	b	10	2												
250.00					60													
	100	75	R5	b	30	2												
253.00				b	60													
	100	75	R3	a	30	2												
				a	60							Note: Sheared FeOx stained, moderatly						
258.00				a								altered zone @ 255.0-255.5						
	100	100	R3	a	40	2				-54		Note: Epidote altered fractures, mine						
				a	60							pyrite phenocrysts and along fractures						
				a						-60		@ 255.0-280.0						
265.00				b														
	100	75	R3	b	30	2												
269.00				b	50													
	100	90	R4	b	30	2												
271.00					50					-45								
	100	80	R4	b	10	2												
				a	30					-70	Rc	^^ 275.2 275.7 Rhyolite Crystal Tuff						
277.00				a														
	100	100	R4	b	30	1				-40	R	** 280.0 507.0 Rhyolite						
				b														
											ChT,l	^^ 280.0 315.0 Cherty Tuff, laminated						
281.00																		
	100	85	R3	b	30	2												
285.00				b	50													
	100	85	R3	a	10	2				-50								
				b	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-19

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
291.00				a						-42								
	100	90	R4	c	20	2												
				b	30													
297.00				c						-52								
	100	95	R4	c	30	1				-50								
				b														
303.00				b														
	100	100	R4	a	30	1												
				a														
308.00				b						-40								
	100	100	R3	b	2	3												
				a	30													
313.00				a	70													
	100	90	R3	b	20	2					W	~~ 315.0 326.5 Wacke						
				b	40													
				a														
321.00				b														
	99	90	R3	b	30	2				-60								
				c	50													
326.00				b							SL	~~ 326.5 354.8 Siltstone, fine-grained						
	100	100	R3	a	30	2												
328.00					50													
	100	95	R3	a	20	2												
				a	50													
333.00				a						-40								
	100	100	R4	a	20	2												
336.00				a	40													
	100	50	R4	a	20	2												
339.00				a	40													
	100	80	R3	a	20	2												
				a	50													
				a														
346.00				b														
	100	100	R4	c	20	1												
348.00																		
	100	90	R3	c	10	2												
				b	40					-55								
353.00				c							W	~~ 354.8 360.0 Wacke						
	100	100	R3	c	20	1												
356.00				b						-70								