APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 1 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

5

(pg 281 - 350)

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	177.5	-57.1
100'	177.3	-56.2
250'	177.7	-56.8
400'	178.8	-57.1
550'	179.8	-57.0
801'	179.5	-56.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding/ L. Kennedy
DATE COLLARED: 10-3-90
REMARKS:
CORE SIZE: HQ\NQ Twin of LYN90-20

HOLE NO: LYN90-25 (WDNR #170)

DATE: 1-8-92
PAGE 1 OF 12

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

BEARING: S177.5E INCLINATION: -57.1 T.D: 811'
COORDINATES: L10200 E, 11395 N
ELEV: 1569.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
739.7 811.0		QD	>< 739.7 811.0 QUARTZ DIORITE	
739.7 744.0		gQD	^^ 739.7 744.0 Granophyric	
			E.O.H. 811' (total depth)	

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
0.0 72.0												** 0.0 72.0 OVERBURDEN						
												^^ 0.0 65.0 Sand						
												^^ 65.0 72.0 Sand, gravel, and boulders						
											W1	** 72.0 92.0 Lithic Wacke, grey-beige coarse-grained matrix, with angular reddish (chert ?) fragments (0.5-1.5")						
75.00																		
	100	100	R3	c	10	2												
79.00				b	50													
	100	90	R3	a	10	2												
81.50					50													
	100	90	R3	c	10	2												
				b	40							Note: @ 87.0-92.0 Decrease in fragments, and presence of white cherty interbeds, and pumaceous fragments.						
88.00				b														
	100	100	R3	b	10	2												
89.50					40													
	100	90	R3	a	20	2					pRd	** 92.0 94.2 Rhyolite Porphyry Dike, upper contact broken, lower contact 30 degrees and altered						
				a	40													
				b								Note: Patchy epidote alteration @ 92.0-115.0						
94.00										-30C	D	** 94.2 131.5 Dacite, fine-grained, black, patchy epidote alteration						
	100	80	R3	b	5	3												
				a	20													
				a	40					-5F		Note: High angle fractures (5 degrees) @ 100.0-115.0						
				a														
103.50				a														
	100	100	R3	b	20	3												
105.50					50													
					70													
	100	80	R3	b	30	2												
110.00				b	50													
	100	60	R3	b	10	2				-5F								
				b	65													
115.00				b														
	100	100	R3	c	20	2												
118.00				b	65													
	100	100	R4	b	20	2												
120.00					65													
	100	75	R4	a	20	2												
124.00				b	70													
	100	70	R3	a	10	3				-30F								
				a	20													
				a	70													
132.50				a							W1	** 131.5 160.0 Lithic Wacke, grey, medium-grained grey matrix, with grey (chert ?) and pinkish porphyritic fragments						
	100	85	R3	a	5	3												
				a	15													
				a	60													
				a														

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a								Note: Epidote and chlorite alteration						
				a								of fragments and reddish alteration @						
144.00												140.0-142.0, upper and lower contacts						
	100	100	R3	a	5	3						broken						
				a	20													
150.50				a	45													
	100	85	R3	a	10	3												
				a	30													
					50													
154.00																		
	100	95	R3	b	10	3						Note: @ 153.5-164.0 Fractures at 20						
				a	30							degrees to core axis offset by set at						
					50							70 degrees						
												Note: @ 153.5-166.0 Epidote alteration						
												in patches and along fractures						
157.00										-30								
	100	95	R3	a	5	3				-20F								
160.50				a	25					-70F		** 160.0 177.0 Dacite						
					60													
	100	75	R2	a	20	2				-25F		Note: @ 162.0-163.5 Highly broken core						
164.00				b	40													
	100	85	R3	a	10	2												
168.00				a	60													
	100	95	R3	a	10	2												
170.00					30													
	100	85	R3	b	10	2												
174.00				b	40													
	100	100	R3	a	20	2												
176.00					40													
	80	0	R3	a	20	2				-50B								
177.00					40					-50B	W	** 177.0 220.0 Wacke, with laminated	a				2	
	100	90	R3	a	10	2						siltstone intervals, quartz lithic wacke	a				2	
				a	30								a				2	
182.00											R1%	^^ 182.5 190.5 Rhyolite Lapilli Tuff,	a				2	
	100	85	R3	a	10	3						bleached pale-green (epidote ?),	a				2	
185.00				a	30							bleaching of matrix						
					65													
	100	75	R3	a	10	3				-15F		Note: @ 188.0-191.0 Core fractured @						
189.50				a	30							high angles to axis (15 degrees)						
					80													
	100	70	R3	a	10	3												
191.00					30													
					80													
	100	90	R4	a	10	2												
194.00				a	50													
	100	85	R4	a	10	2												
				a	50													
200.00				a														
	100	100	R3	a	10	2												
202.00					50													
	100	75	R3	a	10	2												
				a	60													
				a														
				a														

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
212.00				a														
	100	85	R3	a	20	2												
215.50				a	70													
	100	90	R4	a	10	3					SL	^^ 217.0 220.0 Siltstone						
				a	30													
				a	70					-30F	pD	** 220.0 251.0 Porphyritic Dacite, black						
222.50										-30F		tiny fractures @ 30 degrees to core axis,						
	100	100	R3	a	15	3						epidote-altered beds @ 70 degrees to						
				a	30							core axis						
				a	50													
				a														
232.00				a						-70B								
	100	85	R3	a	15	3												
				a	30					-70B								
				a	50					-70B								
240.00				a														
	100	85	R3	a	5	3												
				b	30													
246.00				b	50													
	100	85	R3	b	10	3												
				a	20													
				a	50						W1	** 251.0 258.5 Lithic Wacke,						
				b								altered, green-grey altered lapilli						
254.00												in a crystal-rich black matrix						
	100	85	R3	c	30	2												
											Rch,1	** 258.5 273.5 Siltstone, laminated, with						
				a	60							pyrite						
				a														
				a								^^ 262.8 273.5 Altered Carbonate						
263.00				b														
	100	90	R3	b	10	2												
				b	40													
				c						-90B								
				c														
272.50				a						-80C								
	100	90	R3	a	5	2					R	** 273.5 524.5 Rhyolite						
				a	30													
				a							IR	^^ 273.5 326.0 Intrusive Rhyolite						
												Tuff, dark grey black matrix						
277.50																		
	100	85	R3	a	10	3												
				a	30													
284.00				a	50													
	100	85	R3	a	10	3												
285.50					30													
					50													
	100	100	R3	a	10	3												
288.00					40							Note: @ 288.0 293.0 Scattered Pyrrhotite,	a					2
					60							disseminated and in fractures	a					2
	100	90	R3	a	10	3							a					2
291.00				a	30								a					2
					60							Note: @ 293.0 303.0 Rhyolite Porphyry	a					2
	100	90	R3	b	10	3						Dike, granophyric, bleached grey						

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

LYN90-25

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	30													
				a	60													
299.00				a														
	100	70	R3	a	5	3												
				a	20													
				a	60													
308.00				a														
	100	85	R3	a	5	3												
311.50				a	20							Note: @ 312.0 322.0 Scattered Rhyolite Porphyry dikes						
					50													
	100	85	R3	a	5	3												
				b	20													
317.50				a	40													
	100	100	R3	a	10	2												
				a	60													
324.00				a														
	100	90	R3	a	10	2					pD	^^ 326.0 338.0 Porphyritic Dacite, or Rhyolite, hornfelsed						
				a	40													
				a														
				a														
333.00				a														
	100	85	R3	a	5	3												
				a	20						FZ	^^ 338.0 358.5 Fault Zone, silicification, red alteration						
				a	60													
				a														
342.50				a														
	99	50	R2	a	15	2				-30F		Note: @ 343.5-345.0 Chloritic carbonate sheared interval						
				a	40													
				a														
350.00				a														
	100	75	R3	a	10	3												
354.00				a	30													
					60													
	100	80	R3	a	10	2												
358.00				a	30						Rc	^^ 358.5 396.5 Rhyolite Crystal Tuff, medium-grained, lt. grey matrix, patchy alteration, plag crystals						
	100	85	R3	a	10	3												
				a	30													
364.00				a	50													
	100	90	R3	a	10	3						Note @ 366.5-379.5 Scattered granophyric rhyolite porphyry patches with scattered sulfides						
				a	30													
				a	50													
369.50																		
	100	95	R3	a	10	3												
				a	30													
				a	50													
				a														
379.50				a														
	100	80	R3	a	10	2												
				a	50					-10F		Note: @ 383.5-385.0 Carbonate sheared fracture						
				a														
				a														
389.50				b														
	100	90	R3	a	20	2												

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
392.00				b	55													
	100	80	R3	a	15	2												
				a	55						Rt,#p	^^ 396.5 398.0 Rhyolite Tuff, Altered, with pyrrhotite, fine-grained, greenish alteration	a					5
				a														
				a														
400.00											Rlb	^^ 398.0 419.0 Rhyolite Lapilli Breccia, rhyolite crystal lapilli-rich matrix, lt. grey, with angular bluish (chert ?) fragments and whitish (granitic) fragments and blue quartz eyes						
	100	100	R3	a	15	2												
402.00					50													
	100	100	R3	b	10	2												
				a	55													
				b														
409.00				a														
	100	90	R3	b	20	2												
				a	50													
				b														
417.00				c						-80C								
	100	100	R3	a	20	2					Rc	^^ 419.0 422.7 Rhyolite Crystal Tuff, dark grey, medium-grained	a					3
													a					3
				a	65								a					3
424.00				b							Rc	^^ 422.7 439.0 Rhyolite Crystal Tuff	a					3
	100	90	R4	b	20	2							a					3
				b	70													
				c														
				c														
434.00				c														
	100	90	R2	b	20	3						Note: 435.0-439.0 Scattered Sp & Po	b	3				5
				b	50								b	3				5
				a	70					-40C	pDd	^^ 439.0 441.4 Plag-phyric Dacite Dike	b	3				5
										-30C			b	3				5
441.50				a														
	100	50	R2	a	15	2					Rl,Ch	^^ 441.4 501.6 Interbedded Rhyolite Lapilli Tuff & Chert, with spherulitic interbeds and scattered pyrrhotite	a					5
				a	30					-50B			a					5
				a									a					5
450.50				a						-50B								
	100	100	R3	a	15	2												
				a	30								a					3
456.00				a									a					3
	99	80	R3	a	15	2							a					3
458.00					30								a					3
	100	85	R3	a	5	3							a					3
				a	20					-50B			a					3
463.50				a	50								a					3
	100	50	R2	a	5	3							a					3
				a	20													
469.00				a	50							Note: @ 468.0-469.0 7% pyrrhotite	b					7
	98	30	R3	a	5	3												
472.50				a	20													
					50													
	99	20	R3	a	5	3												
				a	20													
478.00				a	50													

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	90	R2	a	10	2												
482.00				a	40													
	100	80	R3	a	10	2												
486.00				b	30													
	100	50	R3	a	10	2												
489.00				a	40													
	100	75	R2	a	20	2												
				b	50													
494.50				a														
	100	70	R2	a	10	2												
				a	50													
				a														
501.00				a							R1#	^^ 501.6 515.0 Rhyolite Lapilli Tuff, altered with scattered pyrrhotite, apple-green patchy alteration, (diopside?)						
	100	100	R3	a	20	3												
				a	40													
				a	60													
				a														
511.50				a														
	100	75	R3	a	20	2												
513.00					60													
	100	90	R2	a	20	2					R1	^^ 515.0 524.5 Rhyolite Lapilli Tuff						
				a	60													
				b														
				b														
523.00				b							Xt#z	** 524.5 540.5 Tuffite, Talcose, Altered, stringery sulfides, lt. grey, patchy green alteration (diopside)	c	12	5		5
	100	85	R3	b	20	2							c	12	5		5
				b	60								c	12	5		5
				a									c	12	5		5
531.00				b									c	12	5		5
	100	90	R3	b	10	2							c	12	5		5
				c	50								c	12	5		5
				c									c	12	5		5
				c									c	12	5		5
				c							Rch#,p	** 540.5 572.7 Rhyolite Tuff, Cherty, altered, with scattered pyrrhotite	c	12	5		5
													b				7
													b				7
541.00											Rch#,p	^^ 540.5 545.0 Rhyolite Tuff, Cherty, altered, with pyrrhotite	b				7
	100	50	R2	b	20	2							b				7
543.50					40								b				7
	100	85	R3	c	10	2							b				7
545.00					40								b				7
	100	70	R4	c	20	2							b				7
				a	40												
550.00				b													
	100	70	R2	a	20	2											
554.00				a	50												
	100	85	R2	b	10	2											
				b	50												
559.00				b													
	99	30	R3	a	30	2											
				a	50												
				a							Rch#,p	^^ 563.0 572.7 Rhyolite Tuff, Cherty, altered, with pyrrhotite	b				7
567.00				a						-60B			b				7
	100	85	R3	a	20	2							b				7
													b				7

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	50						Rt,tsp	** 572.7 576.0 Rhyolite Tuff, Talcose, with sulfides & pyrrhotite	b					7
573.00				b														
	100	85	R2	b	30	1							c	8		2		7
				c						-70B	BP	** 576.0 578.5 Bedded Pyrrhotite	c	8		2		7
				c									c	8		2		7
				c									d					30
				c							Xtz	** 578.0 582.0 Tuffite, Talcose, stringery	d					30
													d					30
													c	10		2		5
											Rt#,t	** 582.0 594.8 Rhyolite Lapilli Tuff, talcose, altered, patchy green (diopside) alteration	c	10		2		5
583.00													c	10		2		5
	100	90	R2	c	30	2												
				c	50													
				c														
				c														
593.00				c														
	100	95	R2	d	20	1					Xtz	** 594.8 604.2 Tuffite, Lapilli-rich, altered, talcose, patchy green (diopside) alteration	c	10				3
				d									c	10				3
				d									c	10				3
				d									c	10				3
603.00				d									c	10				3
	100	90	R3	c	10	2					Xch,z	** 604.2 609.0 Tuffite, Cherty, stringery	c	10				3
				c	50								d	25		5		5
609.00				c									d	25		5		5
	100	65	R3	b	10	2				-55C -70B	Xlz,t	** 609.0 627.0 Tuffite, Lapilli-rich, stringery, patchy diopside alteration, talcose	d	25		5		5
				b	60								c	10		2		
615.00				b									c	10		2		
	100	90	R3	b	15	2							c	10		2		
				a	60								c	10		2		
				a									c	10		2		
				b									c	10		2		
624.00				b									c	10		2		
	100	90	R3	b	10	2				-75B			c	10		2		
				a	50								c	10		2		
				c							Rt,tz	** 627.0 634.5 Rhyolite Tuff, Talcose, with stringery sulfides	b	8				
				c									b	8				
634.00				c									b	8				
	99	70	R3	a	40	1					Xcaz	** 634.5 643.7 Tuffite, Calcareous, predominantly bedded, with amber sphalerite	b	8				
636.00													c	15		5		
	100	95	R3	b	30	2							c	15		5		
				c	50							Note: Core Orientation @ 634.0-636.0	c	15		5		
				b									c	15		5		
				b						-75B			c	15		5		
644.00				b						-70B	CT	** 643.7 679.0 Calcareous Tuff	c	15		5		
	100	100	R2	b	10	3						Note: 645.0-680.0 Contorted Bedding	c	15		5		
				c	30													
				b	60						Xca	^^ 649.5 650.5 Tuffite, Calcareous	c	12				
				b														
654.00				b														
	99	80	R2	a	40	2												
				a	60													
				b						-40B								
				a								Note: 662.0-664.0 Tufa						
664.00				a														

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	65	R2	b	10	3												
				b	40													
669.50				a	60													
	100	85	R3	a	10	2					Xca#	^^ 671.0 674.0 Tuffite, Calcareous, diopside alteration	d	25				2
				a	40								d	25				2
674.00													d	25				2
	100	95	R2	a	20	2					CTs	^^ 674.0 679.0 Calcareous Tuff, with sulfides	d	25				2
677.00				a	60								b	5	3			
	100	85	R2	a	20	2							b	5	3			
681.00				a	60						Xlcaz	** 679.0 697.5 Tuffite, Lapilli-rich, Calcareous, stringery	b	5	3			
	100	70	R2	a	20	2							c					
683.00				a	60								c					
	100	95	R2	a	10	2							c					
				a	30								c					
				c									c					
				c									c					
693.00				b									c					
	100	85	R3	b	10	2							c					
				b	30								c					
698.00				b									c					
	100	80	R3	a	20	2					MS	** 697.5 701.0 Massive Sulfide	c					
				a	70								e	50	8			
703.00				b							Xlz	** 701.0 731.0 Tuffite, Lapilli-rich, stringery	e	50	8			
	100	80	R3	a	10	2							c	15				
				a	45								c	15				
				a									c	15				
711.00				b									c	15				
	100	95	R3	c	20	2							c	15				
				c	40								c	15				
				b									c	15				
				b									c	15				
721.00				b									c	15				
	100	100	R3	b	20	2							c	15				
				b	40								c	15				
726.00				b									c	15				
	100	100	R3	b	20	1							c	15				
729.00				c									c	15				
	99	70	R3	c	5	3					Rt	** 731.0 739.7 Rhyolite Tuff	c	15				
				a	30								c	15				
				a	70						MS	^^ 733.5 734.0 Massive Sulfide						
				a														
737.00																		
	100	80	R3	a	5	3												
740.00				b	30						MS	^^ 739.2 739.7 Massive Sulfide						
					70													
											QD	** 739.7 811.0 Quartz Diorite						
	100	80	R3	b	5	2					gQD	^^ 739.7 744.0 Granophyric Quartz Diorite						
				c	30													
				b														
				b														
				c														
749.00																		

ROCK QUALITY:

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

LYN90-25

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	100	R3	c	30	1												
				c														
				c														
757.00				c														
	100	100	R3	d	20	1												
				d														
764.00				d														
	100	100	R3	d	20	1												
				c														
				c														
				c														
774.50				c														
	100	100	R3	c	20	1												
				c														
780.00				c														
	100	100	R3	d	20	1												
				d														
				d														
				d														
789.00				d														
	100	100	R3	c	20	1												
791.00																		
	100	100	R3	c	20	1												
				c														
				c														
				c														
801.50				d														
	100	100	R3	c	20	1												
				c														
				c														
				c														
811.00				c								E.O.H. 811' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	178.7	-58.2
100'	177.4	-58.6
250'	177.5	-57.9
386'	176.9	-57.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-8-90
REMARKS:
CORE SIZE: HQ, NQ

HOLE NO: LYN90-26 (WDNR #147)

DATE: 1-7-92
PAGE 1 OF 6

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

BEARING: S178.7E INCLINATION: -58.2 T.D: 386'
COORDINATES: L9400 E, 10960 N
ELEV: 1562.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 41.0			0.0 41.0 OVERBURDEN	
41.0 45.0	(not recovered)			
45.0 60.0	(HQ core)			
41.0 95.8		Rc	41.0 95.8 RHYOLITE CRYSTAL TUFF	41.0 95.8 Fractured with minor Po, 1% Cp
80.8 95.8		Rt,ch	80.8 95.8 Rhyolite Tuff, Charty	80.8 95.8 Fractured with minor Po, 1% Cp
95.8 146.5		Rc	95.8 146.5 RHYOLITE CRYSTAL TUFF	95.8 146.5 Minor pyrrhotite, <1%
95.8 114.0		Rcl	95.8 114.0 Rhyolite Crystal Lapilli Tuff	
146.5 166.0		D	146.5 166.0 DACITE	
166.0 190.3		SL	166.0 190.3 SILTSTONE	
190.3 209.5		Xz,t	190.3 209.5 TUFFITE, Rhyolite Tuff with Stringery Sulfides, Talcose Note: @ 197.5 198.0 Talcose Note: @ 206.8 209.0 Massive Sulfide, Talcose	190.3 209.5 10% Sp, .5% Cp, 7% Po
209.5 222.5		Rz,t	209.5 222.5 RHYOLITE TUFF, Talcose, With Stringer Sulfides	209.5 222.5 3% Sp, 5% Po, 1% Cp
209.5 218.4		Rz,tp	209.5 218.4 Rhyolite Tuff, Talcose, With Stringer Sulfides	
218.4 222.5		Rtp,l	218.4 222.5 Rhyolite tuff, Talcose With Pyrrhotite Laminae	
222.5 304.0		Rc	222.5 304.0 DACITE	
261.8 267.6		QD	261.8 267.6 Quartz Diorite	
286.5 291.5		gQD	286.5 291.5 Quartz Diorite Dike	
297.6 298.6		gQD	Note: @ 297.6 298.6 Quartz Diorite Dike	
300.0 300.3		gQD	Note: @ 300.0 300.3 Quartz Diorite Dike	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	178.7	-58.2
100'	177.4	-58.6
250'	177.5	-57.9
386'	176.9	-57.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-8-90
REMARKS:
CORE SIZE: HQ, NQ

HOLE NO: LYN90-26 (WDNR #147)

DATE: 1-7-92
PAGE 1 OF 6

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

BEARING: S178.7E INCLINATION: -58.2 T.D: 386'
COORDINATES: L9400 E, 10960 N
ELEV: 1562.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
304.0 386.0		sQD	⋇⋇ 304.0 386.0 QUARTZ DIORITE, Sheared to Foliated	
333.0 338.0		Rc#	^^ 333.0 338.0 Rhyolite Crystal Tuff, Altered	
348.0 349.5		Rc	^^ 348.0 349.5 Rhyolite Crystal Tuff	
354.0 359.5		Rc#	^^ 354.0 359.5 Rhyolite Crystal Tuff, Altered	
			E.O.H. 386' (total depth)	

ROCK QUALITY:

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

LYN90-26

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	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
0.0 41.0											** 0.0 41.0 OVERBURDEN						
											^^ 0.0 20.0 Sand						
											^^ 20.0 41.0 Sand, gravel, and boulders						
										Rc	** 41.0 95.8 Rhyolite Crystal Tuff, laced with fractures, generally 20-25 degrees from core axis						
45.00																	
				Mud													
47.00																	
	100	95	R3	a	10	2											
50.00				a	30												
	100	90	R3	a	10	2											
54.00				a	30												
	100	100	R3	a	10	3											
58.00				a	30												
					50												
	100	100	R3	a	10	3											
60.00					30												
					50												
	100	85	R3	a	20	2											
				a	50												
				a													
				a													
70.00				a													
	100	90	R3	a	10	2											
				a	50												
				a						Rc,#	^^ 75.8 76.8 Rhyolite Crystal Tuff, altered						
				a													
				a													
80.00										Rt,ch	^^ 80.8 95.8 Rhyolite Tuff, Cherty						
	100	100	R3	a	10	3											
				a	30												
				a	50												
				a													
90.20				a													
	98	85	R3	a	10	3											
				a	30												
96.00				a	50												
	100	50	R3	a	10	3				Rc	** 95.8 146.5 Rhyolite Crystal Tuff						
					30					Rlc	^^ 95.8 114.0 Rhyolite Crystal Lapilli Tuff						
					50												
97.00																	
	100	95	R3	a	10	2											

ROCK QUALITY:

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

LYN90-26

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
99.00				a	30													
	100	80	R3	a	10	2												
103.00				a	30													
	100	85	R3	b	15	2												
				c	30													
108.00				c														
	100	75	R3	b	10	2												
111.60				b	40													
	98	70	R3	a	5	3					SL	^^ 114.0 144.0 Siltstone, with rhyolite crystal lapilli interbeds						
				a	30													
118.50				a	50													
	100	50	R3	a	10	3												
120.50					30													
					50													
	100	75	R3	a	10	2												
124.50				a	30													
	100	50	R3	a	20	2												
126.00					40													
	100	85	R3	a	10	2												
129.60				a	30													
	100	90	R3	a	10	2												
134.00				a	40													
	40	25	R3	a	10	2												
				a	40													
				a														
141.50				a														
	100	50	R3	b	30	2												
144.00				b	50						Rcl	^^ 144.0 146.5 Rhyolite Crystal Lapilli Tuff						
	100	90	R3	b	20	3												
				a	50													
					70						D	>< 146.5 166.0 Dacite, porphyritic, 2-3% disseminated pyrrhotite, flow texture, feldspar being replaced with pyrrhotite	a					2
148.00													a					2
	100	80	R3	a	10	2							a					2
				a	50								a					2
151.60					70								a					2
	100	100	R3	a	20	3							a					2
				a	40								a					2
157.60				a	60								a					2
	100	85	R3	a	10	3							a					2
162.60				a	30								a					2
					60								a					2
	100	85	R3	a	10	3							a					
				a	40						SL	>< 166.0 190.3 Siltstone, laminated, with dacitic debris	a					
168.60				a	60								a					
	99	80	R3	b	10	3							a					
				a	25								a					
				a	45								a					
175.00				a									a					
	100	80	R3	a	10	3							a					
				b	20								a					
				a	40								a					
183.00				b									a					
	100	85	R3	a	10	3							a					
				a	20								a					

ROCK QUALITY:

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

LYN90-26

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
188.60					40													
	100	70	R2	a	20	3					Xz,t	** 190.3 209.5 Tuffite, talcose, stringery to bedded sulfides	a					
				a	40								a					5
				a	60								a					5
				b									a					5
				b									c	15				5
	100	75	R2	b	20	2							c	15				5
				b	40								b	2				5
				c									b	2				5
206.70				c									b	2				5
	99	70	R2	c	10	2							b	2				5
				c	30						Rz,t	** 209.0 222.5 Rhyolite Tuff, Talcose, with stringer sulfides	d	20				8
				c									d	20				8
				c									d	20				8
				c							Rz,tp	^^ 209.0 218.4 Rhyolite Tuff, Talcose, with stringer sulfides Note: Possible fault zone @212.0-220.0		3	1			5
														3	1			5
215.30														3	1			5
	98	40	R2	b	10	2								3	1			5
219.30				a	30						Rtp,l	^^ 218.4 222.5 Rhyolite Tuff, Talcose, with pyrrhotite laminae		3	1			5
	99	65	R2	a	10	3							a	3	.3			5
				a	30								a		.3			5
226.00				a	60								a		.3			5
	100	40	R3	a	10	3					D	** 222.5 304.0 Dacite	a		.3			5
229.00				a	25								a		.3			5
					50													
	100	85	R3	a	10	3												
				a	30													
				a	50													
238.50				a								^^ 236.8 237.0 Minor Chalcopyrite in narrow shear zone			1			
	100	95	R3	a	10	3												
				a	30													
				a	50													
246.00				a														
	100	85	R2	a	10	3												
				a	40													
				a	60													
				a														
256.00				b								^^ 253.0 254.2 Stringery Pyrrhotite, Chalcopyrite and Sphalerite along narrow shear zone	b	1	.5			7
	100	60	R2	b	20	2												
				a	40													
262.00				a														
	100	95	R3	a	10	3			-60		QD	^^ 261.8 267.6 Quartz Diorite						
				a	30													
				a	50													
				a														
272.00				a														
	100	100	R3	a	10	3												
				a	30													
				a	50													
				a														
282.00				a														
	99	85	R3	b	10	3												

ROCK QUALITY:

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

LYN90-26

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
284.50					30													
					50													
	100	95	R3	a	10	2					gQDd	^^ 286.5 291.5 Quartz Diorite Dike, Granophyric						
				a	30													
				a														
				a														
294.00				a														
	100	95	R3	a	15	2												
				a	40						gQD	297.6 298.6 Quartz Diorite Dike, Granophyric						
				b														
				b														
											gQD	300.0 300.3 Quartz Diorite Dike, Granophyric						
304.00				b														
	100	100	R3	a	20	2					sQD	** 304.0 386.0 Quartz Diorite, Sheared to foliated						
				a	50													
				a														
				a														
314.00				a														
	100	95	R3	a	10	2												
				a	60													
				a														
				a														
324.00				a														
	100	100	R3	a	10	2												
				a	50													
				a														
				a														
334.00				a														
	100	90	R3	a	15	3						^^ 333.0 338.0 Rhyolite Crystal Tuff, altered						
				a	40													
				a	55													
				a														
344.00				a														
	100	90	R3	a	10	2						^^ 343.0 349.5 Rhyolite Crystal Tuff, (irregular contact with Quartz Diorite dike)						
348.00				b	60													
	100	95	R3	b	20	2												
				a	60													
				a														
				a						-30		^^ 354.0 359.5 Rhyolite Crystal Tuff, altered						
358.00				a														
	100	95	R3	b	20	2				-45								
				b	60													
				a														
				b														
368.00				b														
	100	100	R3	b	20	2												
371.50				b	50													
	100	100	R3	b	20	2												
374.00				a	40													
	100	100	R3	a	10	2												
376.50					40													
	100	100	R3	a	10	3												

ORIGINAL

ROCK QUALITY:

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

LYN90-26

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	25													
				a	50													
				a														
386.00				a								E.O.H. 386' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.6	-50.8
250'	178.6	-51.0
400'	179.9	-51.3
550'	180.4	-51.5
694'	180.9	-51.5

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

HOLE NO: LYN90-27 (WDNR #171)

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

BEARING: S180.8E INCLINATION: -52.6 T.D: 694'
COORDINATES: L10850 E, 10830 N
ELEV: 1563.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 57.0			0.0 57.0 OVERBURDEN	
57.0 61.0	(not recovered)			
61.0 67.5	(HQ core)			
57.0 64.5		Rc	57.0 64.5 RHYOLITE CRYSTAL TUFF	
64.5 72.0		pRd	64.5 72.0 RHYOLITE BRECCIA, Porphyritic	
72.0 148.0		Rcl	72.0 148.0 RHYOLITE CRYSTAL LAPILLI TUFF (?)	
77.0 81.5		Rc	77.0 81.5 Rhyolite Crystal Tuff	
89.4 96.5		Rc	89.4 96.5 Rhyolite Crystal Tuff	
134.5 138.6		Rc	134.5 138.6 Rhyolite Crystal Tuff	
148.0 166.5		Rc	148.0 166.5 RHYOLITE CRYSTAL TUFF	
166.5 187.6		Rcl	166.5 187.6 RHYOLITE CRYSTAL LAPILLI TUFF	
187.6 192.5		Rch	187.6 192.5 RHYOLITE TUFF, Cherty	
192.5 233.0		Rcl	192.5 233.0 RHYOLITE CRYSTAL LAPILLI TUFF	
233.0 236.0		Rt	233.0 236.0 RHYOLITE TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.6	-50.8
250'	178.6	-51.0
400'	179.9	-51.3
550'	180.4	-51.5
694'	180.9	-51.5

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

HOLE NO: LYN90-27 (WDNR #171)

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

BEARING: S180.8E INCLINATION: -52.6 T.D: 694'
COORDINATES: L10850 E, 10830 N
ELEV: 1563.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
236.0 241.5		M1	** 236.0 241.5 BASALT(?)	
241.5 246.0		Rt	** 241.5 246.0 RHYOLITE TUFF	
246.0 252.0		Rt,*R,ch	** 246.0 252.0 RHYOLITE TUFF, with Chert & Spherulitic Interbeds	
252.0 262.0		Rt,la	** 252.0 262.0 RHYOLITE TUFF, Laminated, with Magnetite	
262.0 283.0		*R,ch	** 262.0 283.0 INTERBEDDED SPHERULITIC RHYOLITE/CHERTY INTERBEDS	
283.0 289.1		Rt*	** 283.0 289.1 RHYOLITE TUFF, Altered	
289.1 328.8 322.5 328.8		*R,la Rt,la	** 289.1 328.5 RHYOLITE TUFF, SPHERULITIC, Laminated, With Magnetite ^^ 320.0 328.5 Rhyolite Tuff, Laminated, with Magnetite	
328.8 383.5		pRd	** 328.5 383.5 FELSIC DIKE SWARM	
383.5 391.0 384.0 385.0 389.0 391.0		Rt,la RIt Rt,lap	** 383.5 391.0 RHYOLITE TUFF, Laminated With Magnetite ^^ 384.0 385.0 Rhyolite Lapilli Tuff ^^ 389.0 391.0 Rhyolite Tuff, Laminated, With Magnetite & Pyrrhotite	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.6	-50.8
250'	178.6	-51.0
400'	179.9	-51.3
550'	180.4	-51.5
694'	180.9	-51.5

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

HOLE NO: LYN90-27 (WDNR #171)

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

BEARING: S180.0E INCLINATION: -52.6 T.D: 694'
COORDINATES: L10850 E, 10930 N
ELEV: 1563.5' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
391.0 393.0		BP	** 391.0 393.0 BEDDED PYRRHOTITE	
393.0 409.0		Rt,mp	** 393.0 409.0 RHYOLITE TUFF, Occasionally Laminated, With Pyrrhotite and Magnetite	
409.0 424.2		Rt,tp	** 409.0 424.2 RHYOLITE TUFF, Talcose, With Pyrrhotite	
424.2 449.0		Rl,tp	** 424.2 449.0 RHYOLITE LAPILLI TUFF, Talcose, With Pyrrhotite	
449.0 466.0		Rt,t	** 449.0 466.0 RHYOLITE TUFF, Talcose	
466.0 474.0		Rl	** 466.0 474.0 RHYOLITE LAPILLI TUFF	
474.0 486.4		Rc	** 474.0 486.4 RHYOLITE CRYSTAL TUFF	
486.4 490.8		BPp	** 486.4 490.8 BEDDED PYRRHOTITE, With Pyrite	
490.8 525.0		Rt	** 490.8 525.0 RHYOLITE TUFF	
525.0 530.0		Rl,tp#	** 525.0 530.0 RHYOLITE LAPILLI TUFF, Altered, Talcose, (With Pyrrhotite)	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.6	-50.8
250'	178.6	-51.0
400'	179.9	-51.3
550'	180.4	-51.5
694'	180.9	-51.5

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

HOLE NO: LYN90-27 (WDNR #171)

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

BEARING: S180.8E INCLINATION: -52.6 T.D: 694'
COORDINATES: L10850 E, 10830 N
ELEV: 1563.5' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
530.0 539.5		R1,t	** 530.0 539.5 RHYOLITE LAPILLI TUFF, Talcose	
539.5 572.0		Rc	** 539.5 572.0 RHYOLITE CRYSTAL TUFF	
572.0 580.0		pRd	** 572.0 580.0 FELSIC DIKE SWARM	
572.0 572.5			^^ 572.0 572.5 Chalcopyrite & Pyrrhotite Along Dike Margin	
580.0 619.0		Rt	** 580.0 619.0 RHYOLITE TUFF, With Scattered Felsic Dikes	
619.0 625.2		R1,Rt	** 619.0 625.2 INTERBEDDED LAPILLI & FINE-GRAINED TUFF	
625.2 627.7		Rt	** 625.2 627.7 RHYOLITE TUFF	
627.7 634.0		Rc	** 627.7 634.0 RHYOLITE CRYSTAL TUFF	
634.0 635.7		Rt	** 634.0 635.7 RHYOLITE TUFF	
635.7 644.7		R1,t#	** 635.7 644.7 RHYOLITE LAPILLI TUFF, Talcose, Altered	
		R1s,t#	^^ 638.0 642.5 Rhyolite Lapilli Tuff, Talcose, Altered, with Sulfides	638.0 642.5 10% sulfides, 5% Sp, 5% Po

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.6	-50.8
250'	178.6	-51.0
400'	179.9	-51.3
550'	180.4	-51.5
694'	180.9	-51.5

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

HOLE NO: LYN90-27 (WDNR #171)

DATE: 5-30-91
PAGE 1 OF 10

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

BEARING: S180.0E INCLINATION: -52.6 T.D: 694'
COORDINATES: L10850 E, 10830 N
ELEV: 1563.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
644.7 694.0		OD	xx 644.7 694.0 QUARTZ DIORITE	
644.7 691.5		gOD	^^ 644.7 691.5 Granophyric Quartz Diorite	
			E.O.H. 694'. (total depth)	

DRILL HOLE: LYN90-27

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
0.0 57.0												** 0.0 57.0 OVERBURDEN						
											Rc	** 57.0 64.5 RHYOLITE CRYSTAL TUFF, Fine-grained						
61.00																		
	100	65	R3	b	30	2												
				a	50						pRb	** 64.5 72.0 RHYOLITE BRECCIA, PORPHYRITIC. Dark grey, fine-grained crystal tuff matrix, with pinkish grey porphyritic fragments						
				a														
68.00				b														
	100	52	R3	b	20	2												
				c	40													
				c							Rcl	** 72.0 148.0 RHYOLITE CRYSTAL LAPILLI TUFF, Lt. grey, coarse-grained matrix with blue quartz eyes, with angular, to subangular fragments (0.1"-0.5")						
				b														
				b														
				b							Rc	^^ 77.0 81.5 Rhyolite Crystal Tuff, dark grey, fine-grained, with plag crystals						
82.00																		
				c														
	100	90	R3	c	20	2												
				c	40													
				b							Rc	^^ 89.0 96.5 Rhyolite Crystal Tuff, dark grey, fine-grained, with plag crystals						
				b														
				b														
94.00				c														
	100	100	R3	b	20	2												
96.00					50													
	100	85	R3	b	10	2												
				b	30													
102.50				b														
	100	95	R3	c	30	1												
				c														
107.00																		
	100	100	R3	c	10	2												
109.00					40													
	100	100	R3	c	10	2												
110.00					40													
	100	80	R3	b	20	2												
114.00				b	40													
	100	75	R3	b	20	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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	TotalX	Sp	Cp	Ga	Py	Po
118.50				b	40													
	100	85	R3	b	10	2												
122.00				b	30													
	100	95	R3	b	10	2												
				c	40													
				c														
				c														
132.00				c														
	100	100	R3	c	20	2					Rc	^^ 134.5 138.6 Rhyolite Crystal Tuff, dark grey, fine-grained, with plag crystals, patchy epidote alteration					
135.00				b	40													
	100	85	R3	a	20	2												
137.00					50													
	100	65	R3	a	30	2						Note: 136.0-148.0 Scattered Granophyric Rhyolite Porphyry Dikes						
141.00				a	50													
	100	100	R3	b	20	2												
142.50					50													
	99	80	R3	b	20	2												
				a	50													
148.00				a														
	100	95	R3	a	10	2					Rc	** 148.0 166.5 RHYOLITE CRYSTAL TUFF, fine-grained, silicified/hornfelsed						
150.50					40													
	90	80	R3	a	20	2												
154.00				a	50													
	100	75	R3	a	10	2												
155.50					60													
	100	100	R3	a	10	3												
158.00				a	40													
					55							Note: 158.0-166.5 Pinkish Alteration						
	99	85	R3	a	10	3												
162.00				a	50													
					70													
	100	85	R3	a	10	3												
				a	30						Rcl	** 166.5 187.6 RHYOLITE CRYSTAL LAPILLI TUFF, coarse-grained matrix, lapilli-sized angular and subangular fragments, blue quartz eyes, patchy Fe-staining, possible rhyolite porphyry dikelets						
168.00				a	60													
	100	90	R3	a	10	2												
				a	45													
173.00				a														
	100	95	R3	a	10	2												
175.00					40													
	100	95	R3	a	10	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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													
				a	45													
184.00				a														
	100	100	R3	a	10	3												
186.00					30													
					50						Rch	** 187.6 192.5 RHYOLITE TUFF, Cherty						
	100	80	R3	a	10	3												
190.00					40													
					70						Rcl	** 192.5 233.0 RHYOLITE CRYSTAL LAPILLI TUFF, medium to coarse-grained matrix with blue quartz eyes & scattered lapilli						
	99	40	R3	a	10	2												
193.00				a	40													
	100	100	R3	a	20	2												
195.00					40													
	100	85	R3	a	20	2												
199.50				a	40													
	80	80	R3	a	10	3												
204.00				a	30													
					40													
	100	75	R3	a	5	3												
206.00					20													
					70													
	99	40	R3	a	10	2												
209.50				a	40					-50B								
	100	80	R3	b	10	2												
213.50				a	45													
	100	85	R3	a	10	2												
220.00				a	45													
				b						-57B								
	100	85	R3	b	20	1												
224.00				c														
	100	90	R3	c	20	1												
227.00				c														
	100	85	R3	c	30	1												
230.50				c														
	100	85	R4	b	10	2												
				b	30						Rt	** 233.0 236.0 RHYOLITE TUFF, Fine-grained						
				a														
				a														
238.00										-30C		** 236.0 241.5 BASALT?						

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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	R4	a	10	2												
241.00				a	30					-60C	Rt#	** 241.5 246.0 RHYOLITE TUFF, Fine-grained, fractured, altered						
	100	100	R4	a	10	3												
244.00				a	25													
					50						*R,ch	** 246.0 252.0 RHYOLITE TUFF, with chert and spherulitic interbeds						
	100	75	R4	a	10	3												
				a	20					-50B								
				a	50													
251.00				a						-50B	Rt,lm	** 252.0 262.0 RHYOLITE TUFF, Laminated, with magnetite						
	100	100	R4	a	10	3												
252.50					40													
					60													
	100	70	R4	b	10	2												
256.00				b	40													
	100	85	R4	c	30	1				-35B								
259.00				c						-35B								
	100	75	R4	b	10	2				-35B								
260.00					50					-50B								
	100	70	R4	b	30	1					*R,chT	** 262.0 283.0 INTERBEDDED SPHERULITIC RHYOLITE and cherty tuff						
263.00				b														
	100	50	R4.	b	10	2												
264.50					50					-60B								
	99	70	R3	a	20	2												
267.00				a	40													
	90	0	R3	a	20	2												
269.00					40													
	99	50	R3	a	10													
271.00					40													
	99	50	R3	a	20	2												
274.50				a	40													
	100	85	R3	a	20	2												
279.50				a	40													
	99	75	R3	a	10	2												
283.50				a	50						Rt#	** 283.0 289.1 RHYOLITE TUFF, Fine-grained, altered						
	99	75	R2	a	10	3												
289.00				a	40						*R,lm	** 289.1 328.5 RHYOLITIC TUFF, SPHERULITIC, fine-grained, laminated, with magnetite, greenish-bleached, with						
					60													
	100	90	R3	a	10	3				-42B								

DRILL HOLE: LYN90-27

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
294.00				a	30					-35B		pinkinsh-white spherulite beds, spherulites decrease toward base, magnetite increases toward base						
				b	50													
	100	70	R4	b	10	2				-35B								
296.00					40					-40B		Note: Garnets in spherulite beds(?)						
	100	85	R4	b	10	2												
300.00				a	40													
	100	50	R4	a	30	2				-43B								
304.00				a	50													
	100	85	R4	a	25	2												
305.00					50													
										-40B								
	100	85	R4	b	20	2				-40B		Note: 307.5-311.5 No Spherulitic beds, scattered Po and Py						
310.00				a	40													
				a														
	100	100	R4	b	20	2												
311.50					40					-40B								
	100	90	R4	b	20	2				-36B								
				b	50					-30B								
318.00				b														
												Note: 318.0-323.0 Soft-sediment slump features						
	100	90	R4	b	10	2				-30B	Rt,lm	^^ 320.0 328.5 Rhyolite Tuff, Fine-grained, laminated, with magnetite						
322.00				b	30													
	100	95	R4	b	10	2				-45B								
				b	40					-45B								
				b						-35C	pRd	** 328.5 383.5 FELSIC DIKE SWARM, chilled margins, granophyric chlorite alteration and Fe-staining along fractures, with upper/lower contact parallel with bedding						
330.00				b														
	100	70	R4	b	10	3												
331.00					20													
					40													
	100	75	R4	b	10	2												
335.00				b	50													
	100	90	R3	b	10	2												
338.00				b	70													
	100	95	R3	b	20	2												
344.00				b	80													
				a														
	100	85	R3	a	25	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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
347.00				a	60													
	100	100	R3	a	20	2												
351.60				a	45													
	100	100	R3	a														
				a														
357.00				b														
	100	90	R3	b	30	2												
361.00				b	60													
	100	100	R3	b	20	2												
365.60				a	40													
	100	90	R3	a	10	2												
				b	40													
				b														
374.00				b														
	100	100	R3	a	15	2												
376.60					30													
	99	70	R3	a	30	2												
379.60				a	60													
	95	40	R3	a	20	2												
382.00		.		a	40													
										-40B	Rt,lm	** 383.5 391.0 RHYOLITE TUFF, Laminated, with magnetite						
	100	85	R4	a	10	3					R1	^^ 384.0 385.0 Rhyolite Lapilli Tuff						
386.00				b	30					-35B								
					50													
	100	90	R4	b	20	2				-33B								
				b	50					-35B	Rt,lmp	^^ 389.0 391.0 Rhyolite Tuff, Laminated with Magnetite & Pyrrhotite	b					7
				b									b					7
391.00													b					7
										-30B	BP	** 391.0 393.0 BEDDED PYRRHOTITE	b					7
	100	100	R4	b	10	2								e				50
393.50					40					-40B	Rt,mp	** 393.0 409.0 RHYOLITE TUFF, Fine-grained, with magnetite and pyrrhotite, with scattered laminae (not as laminated as above but still laminated) pyrrhotite higher at top, decreases, then increases from 408.0 to contact, 1" bed of pyrrhotite at base		e				50
	100	100	R4	b	40	1							b					5
				c									b					5
399.50				c									b					5
	100	85	R4	b	20	2												
402.00					40													
	100	90	R4	a	45	1												

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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
405.00				b														
	100	85	R4	b	30	2				-45								
				c	60					-40B	Rt,tp	** 409.0 424.2 RHYOLITE TUFF, Talcose, with pyrrhotite, fine-grained, occasionally laminated, pyrrhotite disseminated and as laminae						
				b														
414.00				b														
	99	75	R2	b	10	2				-60B			b					10
				b	50								b					10
				b						-53B			b					10
				a									b					10
424.00				a									b					10
	100	85	R2	b	30	2					Rl,tp	** 424.2 449.0 RHYOLITE LAPILLI TUFF, talcose, with pyrrhotite, medium grey, scattered tiny blue quartz eyes, and pyrrhotite	a					5
				c	60								a					5
				c									a					5
434.00				c									a					5
	100	75	R2	c						-60B			a					5
				b	10	2							a					5
				b	50								a					5
				c									a					5
				c									a					5
444.00				c									a					5
	100	85	R2	c						-70B			a					5
				c	20	2							a					5
				c	60								a					5
				c							Rt,t	** 449.0 466.0 RHYOLITE TUFF, Talcose, fine-grained, medium grey	a					5
				c														
453.00				c														
	100	100	R2	b	20	2												
454.00					60													
	100	85	R2	c	20	1												
				c														
				c														
464.00				c														
	100	75	R2	b	50	1												
467.00				b							Rl	** 466.0 474.0 RHYOLITE LAPILLI TUFF, medium grey, fine-grained						
	100	85	R3	a	10	2												
470.00				a	60													
	99	85	R4	a	30	2												
473.00				a	50													
	100	80	R4	a	30	2					Rc	** 474.0 486.4 RHYOLITE CRYSTAL TUFF, medium grey, fine-grained						
				a	60													

DRILL HOLE: LYN90-27

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	TotalX	Sp	Cp	Ga	Py	Po
479.00				a														
	99	50	R4	a	10	2												
481.00					50													
	100	85	R4	c	30	2												
				c	50													
486.00				c														
	100	90	R2	b	15	2					BPp	** 486.4 490.8 BEDDED PYRRHOTITE, With pyrite, sulfides increase towards base	c				5	15
				b	60								c				5	15
				a									c				5	15
				a							Rt	** 490.8 525.0 RHYOLITE TUFF, Black, fine-grained	c				5	15
494.00													c				5	15
	100	85	R4	c	10	2												
495.00					60													
	100	85	R4	b	10	2												
				b	45													
500.00				a														
	99	75	R4	a	20	2												
				a	70													
				a														
507.00				a														
	100	85	R4	b	20	2												
508.00					50													
	100	100	R4	a	20	2												
511.00				a	40													
	100	75	R4	a	10	2												
				b	50													
517.00				a														
	100	85	R4	a	20	2												
				a	60													
524.00				a														
	100	95	R2	a	20	2					Rl,tp	** 525.0 530.0 RHYOLITE LAPILLI TUFF, Talcose, with pyrrhotite	b					8
				b	40								b					8
				c									b					8
				c							Rl,t#	** 530.0 539.5 RHYOLITE LAPILLI TUFF, Talcose, altered	b					8
				c														
533.00																		
	100	95	R2	c	20	3												
				c	45													
				c	60													
				b							Rc,f	** 539.5 572.0 RHYOLITE CRYSTAL TUFF,						

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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
542.00				a								medium grey, fine to medium-grained, core highly fractured and broken @ 556.0-569.0						
	100	100	R3	a	10	3												
544.00					45													
					60													
	100	80	R3	a	20	3												
547.00				a	40													
					60													
	100	100	R2	a	20	3												
550.00				a	40													
					60													
	100	85	R2	a	20	3												
				a	40													
556.00				a	60													
	99	75	R3	a	5	3												
558.00					40													
					60													
	50	0	R3	a	5	3												
559.00					40													
					60													
	99	50	R3	a	20	3												
563.00				a	40													
					60													
	90	50	R3	a	20	3												
565.00					40													
					60													
	90	75	R2	a	20	3												
569.00				b	40													
					60													
	100	85	R3	a	20	3												
571.00					40						pRd	** 572.0 580.0 FELSIC DIKE SWARM	b		1			5
					60								b		1			5
	100	100	R3	a	20	2						^^ 572.0 572.5 Chalcopyrite & Pyrrhotite along dike margin	b		1			5
574.00				a	35													
	100	100	R3	a	20	2												
577.50				a	30													
	100	100	R3	a	5	3					Rt	** 580.0 619.0 RHYOLITE TUFF, with scattered felsic dikes, alteration and dike emplacement along high-angle fractures						
				a	20													
584.00				a	50													
	100	85	R3	a	5	2												
588.50				a	20													

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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

Run	% 100	RQD 100	Rf R4	ABCDE		Jn 3	Jrc	Ja	SpG	Fol	CODE	Lithology	TotalX	Sp	Cp	Ga	Py	Po
				a	5													
				a	20													
				b	50													
				a														
598.50				a														
	99	25	R4	a	5	3												
601.00				a	20													
					40													
	100	50	R4	a	5	3												
602.00					20													
					40													
	98	60	R4	a	5	3												
606.00				a	20													
					50													
	99	75	R3	a	10	2												
610.00				a	30													
	99	80	R4	a	5	2												
612.60				a	15													
	98	75	R3	a	10	3												
				a	30													
617.00				a	50													
	99	75	R3	a	10	3												
620.00				a	30						R1,Rt	** 619.0 625.2 INTERBEDDED LAPILLI & FINE-GRAINED TUFF						
					50													
	99	85	R2	b	10	2												
623.00				c	30							Note: Weird discolored patches						
	99	60	R3	a	10	2												
626.00				b	30						Rt	** 625.2 627.7 RHYOLITE TUFF						
												Note: Dark ovoid patches, possible oriented (vesicles?)						
	100	100	R3	b	30	2					Rc	** 627.7 634.0 RHYOLITE CRYSTAL TUFF						
				a	60													
				a														
634.00				a							Rt	** 634.0 635.7 RHYOLITE TUFF,						
												Note: Dark ovoids						
	100	90	R2	c	45	1					R1,t#	** 635.7 644.7 RHYOLITE LAPILLI TUFF,						

ROCK QUALITY:

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

DRILL HOLE: LYN90-27

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	TotalX	Sp	Cp	Ga	Py	Po
				c							talcose, altered						
				c													
				c						R1,t*	^^ 638.0 642.5 Rhyolite Lapilli Tuff,	b	5				5
				c							talcose, altered, with Sp and Po	b	5				5
643.00												b	5				5
	100	50	R3	a 10	2							b	5				5
644.00				30						QD	** 644.7 694.0 QUARTZ DIORITE						
	100	100	R3	a 10	2					gQD	^^ 644.7 691.5 Granophyre						
648.50				c 30													
	100	100	R3	c 30	2												
				c 60													
				c													
				b													
658.50				c													
	100	100	R3	c 10	2												
				b 40													
				a													
				b													
668.00				c													
	100	85	R3	c 10	3												
				b 30													
				a 60													
				a													
678.00				a													
	100	100	R3	a 10	2												
				b 30													
				b													
685.00				b													
	100	100	R3	b 10	3												
				c 30													
				b 70													
694.00				c							E.O.H. 694' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
0'	179.5	-49.5
100'	178.6	-47.8
250'	178.8	-48.3
331'	179.1	-47.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-11-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-28 (WDNR #169)

DATE: 12-9-91
PAGE 1 OF 5

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

BEARING: S179.5E INCLINATION: -49.5 T.D: 331'
COORDINATES: L10000 E, 10625 N
ELEV: 1586.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 96.0			><< 0.0 96.0 OVERBURDEN	
96.0 145.0		R	><< 96.0 145.0 RHYOLITE	
96.0 107.5		pRd	^^ 96.0 107.5 Porphyritic Rhyolite Dike	
107.5 145.0		gR	^^ 107.5 145.0 Granophyric Rhyolite	
145.0 149.5		SLch	><< 145.0 149.5 SILTSTONE, Cherty	
149.5 163.6		BM	><< 149.5 163.6 BEDDED MAGNETITE	
163.6 168.0		Chp	><< 163.6 168.0 CHERT, With Pyrrhotite	
168.0 182.0		TS	><< 168.0 182.0 TALC SEDIMENT	
177.0 182.0		SL,t	^^ 177.8 182.0 Siltstone, Talcose	
182.0 290.0		SS	><< 182.0 290.0 SANDSTONE/DACITE	
290.0 331.0		QD	><< 290.0 331.0 QUARTZ DIORITE	
			E.O.H. 331' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-28

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 96.0												>< 0.0 96.0 OVERBURDEN						
												^^ 0.0 96.0 Boulder and gravel						
												Note: @ 80.0-90.0 Lost circulation						
											R	>< 96.0 145.0 RHYOLITE						
96.00											pRd	^^ 96.0 107.5 Porphyritic Rhyolite Dike, light green epidote alteration						
	99	50	R3	a	10	2												
97.00					60													
	100	95	R3	b	40	2												
				b	60													
102.00				b														
	99	60	R3	a	10	3												
104.60				a	30													
					50													
	100	50	R3	a	10	3												
106.00					40													
					70													
	100	70	R3	a	10	3												
108.00					40					-45C	gR	^^ 107.5 145.0 Granophyric Rhyolite, fine-grained, dark grey, regularly spaced fracctures @ 50 degrees to core axis, with Ep-Chlorite alteration. Pink colored porphyritic to granophyric rhyolite patches with epidote alteration.						
					70													
	40	0	R3	a	10	3												
110.00					50													
					75													
	50	50	R3	a	10	3												
111.00					50													
					70													
	99	0	R3	a	20	2												
114.00				a	60					-60								
	99	70	R3	a	30	2												
117.30				a	60													
	100	80	R3	a	30	2												
119.50					50													
	100	95	R3	a	30	2												
121.00					50													
	95	85	R3	a	25	2				-35								
126.00				a	60													
	95	85	R3	a	30	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-28

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
128.00					55													
	98	85	R3	a	30	2												
129.00					60													
	100	90	R3	a	20	2												
133.00				a	55													
	100	100	R3	b	30	2												
134.00					70													
	100	70	R3	b	30	2												
137.50				a	50													
	98	75	R3	a	10	3												
141.50				a	30													
					50													
	98	0	R3	a	10	3				-40								
145.00				a	30					-75	SLch	** 145.0 149.5 SILTSTONE, laminated, cherty						5
					50											1		5
	70	40	R2	a	20	2							c			1		10
148.00				a	40								c			1		10
	95	25	R2	a	20	2							c			1		10
150.00					40					-45	BM	** 149.5 163.6 BEDDED MAGNETITE, with calcareous (tufa) interbeds like @ 150.0-152.0, & 155.5	c			1		10
	99	50	R2	a	20	2							c			1		10
				a	40					-38B								
				a														
157.00				a														
	100	85	R4	a	20	2												
161.50				b	40													
	100	85	R3	c	20	2					Chp	** 163.6 168.0 CHERT, with pyrrhotite, laminated (hi-angle), with bedded iron sulfides and sphalerite contorted	b					10
				c	60								b					10
				b									b					10
				b									b					10
167.00													b					10
	99	60	R3	b	30	2						** 168.0 182.0 TALC SEDIMENT, minor Py, Po	a				1	2
171.00				b	50								a				1	2
	80	70	R3	b	20	2							a				1	2
				b	50					-40			a				1	2
177.00				a									a				1	2
	100	70	R3	a	10	2					SL,t	^^ 177.8 182.0 Siltstone, fine-grained, laminated, calcite in fractures, minor chlorite, (weak talc), 2% bedded iron sulfides	a				1	2
				a	30								a				1	1
				b									a				1	1
				b									a				1	1
													a				1	1

ROCK QUALITY:

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

DRILL HOLE: LYN90-28

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
184.00											SS	** 182.0 290.0 SANDSTONE, DACITE, Fine-grained, calcite on fractures, massive, grey-black	a					
	100	100	R3	a	10	4												
				a	30													
				a	50													
				a	70													
194.00				a														
	100	85	R3	a	10	2				-80								
				a	60					-80	gQD	~~ 197.5 199.8 Quartz Diorite Dike, Granophyric						
				a														
				a														
202.00												Note: @ 199.8 290.0 Rhyolite Tuff, fractured with calcite & minor pyrite in fractures						
	99	75	R3	a	10	3												
				a	30													
				a	75													
210.00				a														
	99	75	R3	a	10	3												
				a	30													
215.00				a	70													
	99	80	R3	a	10	3												
218.00				a	30													
					70													
	99	80	R3	a	20	3												
				a	40													
				a	70													
228.00				a														
				a														
	98	50	R3	a	10	3												
232.00				a	40													
					60					-65	gQD	~~ 232.1 234.0 Quartz Diorite Dike, Granophyric						
	99	65	R3	a	20	3				-60								
				a	40						SS	~~ 234.0 262.2 Sandstone, silicified or hornfelsed by dikes on either side						
				a	65													
238.00																		
	98	70	R3	a	20	2												
				a	40													
				a														
				a														
247.00				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-28

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
	90	0	R3	a	20	2												1
249.00					50													1
	99	85	R3	a	20	2												1
253.00				a	40													1
	98	85	R3	a	20	2												1
				a	40													1
260.00				a														1
	90	0	R3	a	20	2												1
262.00					40					-65	gQD	^^ 262.2 267.5 Quartz Diorite Dike, Granophyric						1
	99	85	R3	a	20	2				-50								1
265.00				a	40													1
	100	50	R3	a	25	2												1
267.50					40													1
	100	85	R3	a	20	3												1
271.50				a	30													1
					50													1
	100	85	R3	a	20	3												1
				a	40													1
				a	60													1
280.50				a														1
	99	70	R3	a	10	3												1
				a	25							Note: @ 281.0-282.0 Weakly talcose						
285.00				a	45					-60C								
	100	90	R3	a	10	3						^^ 285.3 290.0 Plag-phyric Dacite, oxidized top						
				a	30													
				b	50						QD	>< 290.0 331.0 QUARTZ DIORITE						
				a						-50								
293.00										-55	QD,s*	^^ 290.0 328.0 Quartz Diorite, Sheared, with minor FeOx stain						
				a														
	100	70	R3	a	10	3												
				a	40													
				a	60													
301.00				a														
	100	85	R2	a	15	3												
				a	40					-40	QD,s*	^^ 306.0 308.5 Quartz Diorite, Sheared, Strongly altered						
				a	60													
310.00				a														
	99	50	R3	a	15	3												
312.00					40													

ROCK QUALITY:

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

DRILL HOLE: LYN90-28

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
					60													
	100	80	R3	a	10	3												
				a	30													
				a	50													
319.50				a														
	99	70	R3	a	10	2												
323.00				a	40													
	99	85	R3	a	10	3												
				a	40													
				a	60													
331.00				c								E.O.H. 331' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.5	-55.6
300'	180.7	-55.8
500'	181.1	-56.5
703'	181.4	-55.2

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: D. Stevens
DATE COLLARED: 10-16-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-29 (WDNR #164)

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

BEARING: S183.7E INCLINATION: -55.6 T.D: 703'
COORDINATES: L9200 E, 11615 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 10

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 98.2		Rc	** 76.0 98.2 RHYOLITE TUFF/CRYSTAL TUFF	
76.0 92.8		Rc	^^ 76.0 92.8 Rhyolite Crystal Tuff	
92.8 98.2		Rt	^^ 92.8 98.2 Rhyolite Tuff, Fine-grained	
98.2 127.0		pRd	** 98.2 127.0 PORPHYRITIC RHYOLITE DIKE SWARM	
127.0 140.8		Rt	** 127.0 140.8 RHYOLITE TUFF	
140.8 170.5		Rc	** 140.8 170.5 RHYOLITE CRYSTAL TUFF	
161.0 170.5			^^ 161.0 170.5 Epidote & Carbonate Altered	
170.5 179.0		Rt#	** 170.5 179.0 RHYOLITE TUFF, Sheared	
176.0 179.0		Rl#	^^ 176.0 179.0 Rhyolite Lapilli Tuff	
179.0 268.5		Rt	** 179.0 268.5 RHYOLITE TUFF, Fine-grained	
205.0 216.0		Rt,Rc	^^ 205.0 216.0 Rhyolite Tuff/Crystal Tuff Interbeds	
216.0 239.0			^^ 216.0 239.0 Laminated	
251.0 255.5		pIR	^^ 251.0 255.5 Porphyritic Intrusive Rhyolite (Sill?)	
255.5 262.5		Rt,Rc	^^ 255.5 262.5 Rhyolite Tuff/Crystal Tuff Interbeds	
262.5 263.5		pIR	^^ 262.5 263.5 Porphyritic Rhyolite Sill	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.5	-55.6
300'	180.7	-55.8
500'	181.1	-56.5
703'	181.4	-55.2

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: D. Stevens
DATE COLLARED: 10-16-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-29 (WDNR #164)

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

BEARING: S183.7E INCLINATION: -55.6 T.D: 703'
COORDINATES: L9200 E, 11615 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
268.5 274.0		Rc	** 268.5 274.0 RHYOLITE CRYSTAL TUFF	
274.0 279.0		Ch	** 274.0 297.0 CHERT AND CHERTY TUFF	
297.5 319.3		Rt,Chl	** 297.5 319.3 RHYOLITE TUFF, Fine-grained	
319.3 328.0		Rc	** 319.3 328.0 RHYOLITE CRYSTAL TUFF	
328.0 334.3		Rt	** 328.0 334.3 RHYOLITE TUFF, Fine-grained	
334.3 341.8		Ch	** 334.3 341.8 CHERTY AND CHERTY TUFF	
341.8 348.0		Rl,ch	** 341.8 348.0 RHYOLITE LAPILLI TUFF	
348.0 377.8		pIR	** 348.0 377.8 PORPHYRITIC INTRUSIVE RHYOLITE, Sill(?)	
377.8 380.5		Rc	** 377.8 380.5 RHYOLITE CRYSTAL TUFF	
380.5 385.0		Rl	** 380.5 385.0 RHYOLITE LAPILLI TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.5	-55.6
300'	180.7	-55.8
500'	181.1	-56.5
703'	181.4	-55.2

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: D. Stevens
DATE COLLARED: 10-16-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-29 (WDNR #164)

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

BEARING: S183.7E INCLINATION: -55.6 T.D: 703'
COORDINATES: L9200 E, 11615 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
385.0 390.0		Rt	** 385.0 390.0 RHYOLITE TUFF, Fine-grained	
390.0 397.5		Rl,ca	** 390.0 397.5 RHYOLITE LAPILLI TUFF, Carbonate Altered	
397.5 404.2		pRd	** 397.5 404.2 PORPHYRITIC RHYOLITE FLOW	
404.2 433.0		Rt	** 404.2 433.0 RHYOLITE TUFF, Fine-grained	404.2 433.0 Minor Cp, Ga, Po on high angle fractu @ 420.0'
433.0 445.0		Rc	** 433.0 445.0 RHYOLITE CRYSTAL TUFF	
445.0 555.5		Rl	** 445.0 555.5 RHYOLITE LAPILLI TUFF	
482.6 484.2		Rc	^^ 482.6 484.2 Rhyolite Crystal Tuff	
543.0 546.0		Rc	^^ 543.0 546.0 Rhyolite Crystal Tuff	
555.5 563.5		Rt	** 555.5 563.5 RHYOLITE TUFF, Fine-grained	
563.5 567.0		Rc#	** 563.5 567.0 RHYOLITE CRYSTAL TUFF	
567.0 573.2		Rt,p	** 567.0 573.2 RHYOLITE TUFF, Fine-grained	
573.2 579.5		Sk,l	** 573.2 579.5 CALC-SILICATE ALTERED TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.5	-55.6
300'	180.7	-55.8
500'	181.1	-56.5
703'	181.4	-55.2

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: D. Stevens
DATE COLLARED: 10-16-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-29 (WDNR #164)

DATE: 5-30-91
PAGE 1 OF 10

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

BEARING: S183.7E INCLINATION: -55.6 T.D: 703'
COORDINATES: L9200 E, 11615 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
579.5 598.0		Rc	** 579.5 598.0 RHYOLITE CRYSTAL TUFF, Hornfelsed	
590.0 592.5		Rt,lca	^^ 590.0 592.5 Rhyolite Tuff, Fine-grained, Laminated	
598.0 602.0		Rl,lca	** 598.0 602.0 RHYOLITE LAPILLI TUFF, Laminated, Calcareous	
602.0 703.0		OO	** 602.0 703.0 QUARTZ DIORITE, Sheared	
604.2 606.2		OO,sp	^^ 604.2 606.2 Quartz Diorite, Sheared Breccia Zone	
606.2 624.0		gOO	^^ 606.2 624.0 Quartz Diorite, Granophyric	
624.0 703.0		OOs	^^ 624.0 703.0 Quartz Diorite, Sheared	
			E.O.H. 703' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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						
										Rt,Rc	>>< 76.0 98.2 RHYOLITE TUFF/CRYSTAL TUFF						
										Rc	^^ 76.0 92.8 Rhyolite Crystal Tuff						
82.00																	
	100	80	R3	a	20	3											
				a	40												
			R4	a	60												
				a					-30								
				a						Rt	^^ 92.8 98.2 Rhyolite Tuff, Fine-grained						
				a													
			R3	a						pRd	>>< 98.2 127.0 PORPHYRITIC RHYOLITE DIKE SWARM						
				a													
103.00				a													
	100	90	R4	a	20	2											
				a	50												
				c													
				b													
114.00				a													
	100	60	R3	b	10	3											
118.00				b	30												
					50												
	100	85	R3	b	30	1											
119.00																	
	100	85	R3	a	10	2											
121.00					25												
	100	85	R3	a	20	2											
124.50				b	50												
	99	80	R4	a	10	3			-45								
				a	20												
130.50				a	40					Rt	>>< 127.0 140.8 RHYOLITE TUFF, Fine-grained, fractured with epidote alteration and minor pyrite on fractures						
	100	100	R4	a	20	2											
				a	35												
				a													
				a													

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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
140.50				a						-40	Rc	** 140.8 170.5 RHYOLITE CRYSTAL TUFF						
	100	85	R4	b	10	2												
				c	35													
				c														
147.00				b														
	100	100	R4	a	20	2												
149.00					35													
	100	85	R4	c	20	2												
153.00				b	40													
	100	75	R4	a	10	2												
155.00					20													
	100	85	R4	b	30	1												
159.00				c														
	99	85	R3	c	20	2						^^ 161.0 170.5 Epidote Altered, carbonate altered, calcite on fractures						
				a	40													
164.00				a														
	100	95	R3	a	10	3				-35								
				b	20													
169.00				a	40													
	99	65	R3	a	15	2					Rt#	** 170.5 179.0 RHYOLITE TUFF, Sheared, epidote altered, calcite in fractures						
				a	30													
175.00				a														
	100	85	R4	b	30	2					Rl#	^^ 176.0 179.0 Rhyolite Lapilli Tuff, epidote altered						
				b	50													
				b														
181.00											Rt	** 179.0 268.5 RHYOLITE TUFF, Fine-grained, fractured with minor calcite						
	100	95	R5	b	20	2												
185.00				b	40													
	100	100	R5	a	20	2												
188.00				b	30													
	100	90	R4	a	10	2												
191.00				a	40													
	100	90	R4	b	20	2												
				b	40													
				b														
199.00				b														
	100	100	R4	b	20	2												
202.00				a	40													
	100	80	R4	b	20	1												
				b							Rt,Rc	^^ 205.0 216.0 Rhyolite Tuff, with						

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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
207.00				c								Crystal tuff interbeds, minor pyrrhotite on fractures						
	100	95	R4	c	20	2												
				b	60													
213.00				a														
	100	95	R3	a	20	2												
216.00				a	40													
	99	85	R3	a	10	2				-40		^^ 216.0 251.0 Laminated						
				a	40													
223.00				a														
				a														
	100	85	R3	a	20	2												
227.00				a	50													
	100	80	R3	a	10	3				-70								
231.00				a	40					-65								
					70													
	100	80	R4	a	20	2												
				a	40													
				a														
241.00				a														
				b														
	100	85	R3	b	20	2				-80								
246.00				a	40													
				a														
	100	95	R3	a	10	3				-75								
				a	30													
253.00				a	50													
				a							pIR	^^ 251.0 255.5 Porphyritic Intrusive Rhyolite (sill?), fractured with calcite						
	100	100	R3	a	10	2												
257.00				a	40						Rt,Rc	^^ 255.5 262.5 Rhyolite Tuff, with Crystal Tuff interbeds						
	100	100	R4	a	10	3												
				a	25													
263.00				a	60					-65	pRd	^^ 262.5 263.5 Porphyritic Rhyolite Sill						
	100	85	R3	a	15	2												
267.00				a	40													
	100	100	R4	a	15	3					Rc	** 268.5 274.0 RHYOLITE CRYSTAL TUFF						
				a	30					-50								
				a	60					-40	Ch	** 274.0 297.0 CHERT, and Cherty Tuff, with occasional clasts of fine-grained						
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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
277.00				a								tuff						
	100	100	R3	a	15	2												
281.00				a	60													
	99	90	R3	a	10	3				-65								
				a	40													
				a	60													
				a														
				a														
293.00				a														
	100	85	R3	a	10	3					Rt,Chl	** 297.5 319.3 RHYOLITE TUFF, Fine-grained with cherty, laminated inter-beds						
				a	30													
				a	50													
				a														
303.00				a														
	100	85	R4	a	10	2				-60								
				b	30													
				a														
312.60				a														
	100	95	R3	a	10	3												
				a	20													
				a	40													
				a														
				a							Rc	** 319.3 328.0 RHYOLITE CRYSTAL TUFF, with splotchy epidote alteration along fractures						
323.00				a														
	100	95	R3	a	10	3												
328.00				a	30													
					50						Rt	** 328.0 334.3 RHYOLITE TUFF, Fine-grained, fractured with calcite						
	100	90	R4	a	5	4												
				a	20													
333.00				b	40						Rtch	** 334.3 341.8 CHERT, and Cherty Tuff, laminated and brecciated						
					70													
	100	85	R4	a	10	2												
337.00				a	40					-30								
	100	90	R5	a	10	3												
				a	40						Rl,ch	** 341.8 348.0 RHYOLITE LAPILLI TUFF, with chert fragments, epidote altered						
				a	70													
				b														
347.00				a							pIR	** 348.0 377.8 PORPHYRITIC INTRUSIVE RHYOLITE SILL(?)						
	100	80	R4	a	10	2				-40								
350.00				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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	TotalX	Sp	Cp	Ga	Py	Po
	100	75	R4	a	5	3												
				a	20													
				a	60													
				a														
				a														
				a														
363.00				a														
	100	90	R3	a	10	2												
				a	20													
				a														
372.00				a														
	100	80	R3	b	20	2												
376.00				a	40													
	100	95	R3	a	20	2					Rc	** 377.8 380.5 RHYOLITE CRYSTAL TUFF						
				a	45													
				a						-60	Rl	** 380.5 385.0 RHYOLITE LAPILLI TUFF						
				a														
				a														
386.00				a							Rt	** 385.0 390.0 RHYOLITE TUFF, Fine-grained with cherty interbeds						
	100	100	R3	a	20	2												
				a	50													
				a						-60	Rl,ca	** 390.0 397.5 RHYOLITE LAPILLI TUFF, carbonate altered						
				a						-75								
393.00																		
	100	100	R3	b	10	2												
				b	30													
398.00				a							pRv	** 397.0 404.2 PORPHYRITIC RHYOLITE FLOW(?)						
	100	75	R3	a	10	2												
400.00					30					-60								
	100	80	R3	a	20	3												
				a	35					-65	Rt	** 404.2 433.2 RHYOLITE TUFF, Fine-grained, fractured with calcite and minor pyrite						
				a	50													
				a														
409.50				a														
	100	100	R3	a	10	3												
				a	30													
				a	60													
				a														
419.50				a														
	100	90	R3	a	10	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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													
				a	60													
				b														
430.00				a														
	100	85	R3	a	10	3												
				a	30						Rc	** 433.0 445.0 RHYOLITE CRYSTAL TUFF						
				a	50													
				a														
				a														
				a														
443.00				a														
	100	85	R3	a	10	3					R1	** 445.0 555.5 RHYOLITE LAPILLI TUFF, calcite in fractures						
				b	30													
				c	50													
				c														
453.00				b														
	100	100	R3	c	10	3												
				a	30													
				b	50													
				b														
463.00				b														
	100	90	R3	a	5	3												
				a	40													
				a	60													
				a														
473.00				a														
	100	100	R3	a	10	3												
477.00				a	40													
					60							Core Orientation						
	100	95	R3	a	10	2												
				a	30						Rc	^^ 482.6 484.2 RHYOLITE CRYSTAL TUFF, epidote, chlorite altered						
				a														
485.00				b														
	100	100	R3	a	10	2												
486.00					30													
	100	100	R3	a	10	2												
				a	30													
				a														
				a														
496.00				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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	TotalZ	Sp	Cp	Ga	Py	Po
	100	90	R3	b	10	2												
				b	30													
502.00				a														
	100	85	R3	a	30	2												
503.00					50													
	100	85	R3	a	10	2												
505.00					40													
	100	85	R3	a	10	3												
				a	25													
				a	40													
513.00				a														
	100	90	R3	a	10	2					Rcl	^^ 516.0 534.0 Rhyolite Crystal Lapilli Tuff, weakly bleached, fine-grained						
				a	40													
				a														
				b														
523.00				b														
	100	100	R3	b	10	3												
				a	30													
				a	70													
				a														
533.00				a														
	100	100	R3	a	10	3												
				a	30													
539.00				a	60													
	100	100	R3	a	20	2												
				a	60													
546.00				a							Rc	^^ 543.0 546.0 Rhyolite Crystal Tuff						
	100	100	R3	a	20	2												
547.50					60													
	100	90	R3	b	10	3												
				b	30													
				a	60													
				a														
				a							Rt	** 555.5 563.5 RHYOLITE TUFF, Fine-grained, minor epidote, minor pyrrhotite	a					
560.50				a									a					
	100	100	R3	a	10	3							a					
				a	30						Rc,#	** 563.5 567.0 RHYOLITE CRYSTAL TUFF, epidote altered on fractures, minor pyrrhotite	a					
				a	60								a					
				a									a					
				b									a				5	

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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
570.50											Rt,p	** 567.0 573.2 RHYOLITE TUFF, Fine-grained, epidote altered	a					5
	100	80	R3	b	10	3							a					5
				a	30								a					5
				a	70						Sk,l	** 573.2 579.5 CALC-SILICATE ALTERED TUFF, minor talc, garnets, fine-grained laminated	a					5
				a									a					
				a									a					
580.00											Rc	** 579.5 598.0 RHYOLITE CRYSTAL TUFF, Hornfelsed	a					
	100	100	R3	a	10	3												
				a	30													
				a	70													
				a														
590.00				a							Rt,lca	^^ 590.0 592.5 Rhyolite Tuff, Fine-grained, laminated, calcareous, minor pyrrhotite						
	99	85	R3	a	10	3												
				a	30													
				a	70													
				a							Rl,lca	** 598.0 602.0 RHYOLITE LAPILLI, Laminated, calcareous, minor Po, Sp (sheared)						
600.00				a														
	99	75	R3	a	30	2												
					50													
602.00											QD	** 602.0 703.0 QUARTZ DIORITE, Sheared, (601-604 mylonitic texture), foliated						
	100	90	R2	b	30	1												
				a							QD,sp	^^ 604.2 606.2 Quartz Diorite, Sheared breccia zone, strong epidote, 5% pyrite					5	
				b													5	
				b													5	
				b							gQD	^^ 606.2 624.0 Quartz Diorite, Granophyric, sheared at 40 degrees to core axis						
612.50																		
	100	100	R3	b	10	2												
				b	30													
				a														
				a														
621.00				a														
	100	100	R3	a	30	2					QDs	^^ 624.0 703.0 Quartz Diorite, Sheared						
				a	60													
				b														
				b														
631.00				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-29

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	b	10	3												
				b	30													
				b	50													
639.00				b														
	100	100	R3	b	30	2						^^ 642.0 644.0 Sheared @ 40 degrees						
				b	60													
				b														
				c														
649.00				b														
	100	100	R3	b	30	2												
				b	60													
				b														
				b								658.0 660.0 Diopside veinlets(?)						
659.00				b														
	100	100	R3	b	30	1												
				c														
				b														
				b														
669.00				b														
	100	100	R3	a	20	2												
				b	40													
				b								^^ 675.0 679.0 Sheared @ 40 degrees						
				b														
679.00				b														
	100	100	R3	b	10	2												
				b	30							^^ 684.0 686.0 Sheared @ 40 degrees						
				b														
				b														
689.00				b														
	100	100	R3	b	10	2												
690.00					30													
	100	100	R3	b	20	2												
				b	40													
				b														
				b														
699.50				b														
	100	100	R3	c	40	1												
703.00				c								E.O.H. 703' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	184.1	-51.2
200'	184.1	-51.1
354'	184.2	-51.2

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-19-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-30 (WDNR #149)

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

BEARING: S179.1E INCLINATION: -52.1 T.D: 354'
COORDINATES: L10850 E, 10400 N
ELEV: 1565' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 5

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 74.0			** 0.0 74.0 OVERBURDEN	
74.0 79.0	(not recovered)			
79.0 87.6	(HQ core)			
74.0 106.8		R1	** 74.0 106.8 RHYOLITE LAPILLI TUFF	
106.8 127.3		R1*	** 106.8 127.3 RHYOLITE LAPILLI TUFF, Altered	
127.3 132.5		BP,Ch	** 127.3 132.5 INTERBEDDED PYRITE, CHERT	
132.5 147.6		R1	** 132.5 147.6 RHYOLITE LAPILLI TUFF	
147.6 198.0		Rt	** 147.6 198.0 RHYOLITE TUFF, Cherty	
198.0 214.9		Rt,lm	** 198.0 214.9 RHYOLITE TUFF, Laminated, With Magnetite	
214.9 221.5		Rt,t	** 214.9 221.5 RHYOLITE TUFF, Talcose	
221.5 239.0		Rt,tp	** 221.5 239.0 RHYOLITE TUFF, Talcose, With Pyrrhotite	
239.0 242.5		Rt,t*	** 239.0 242.5 RHYOLITE TUFF, Talcose, Altered	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	184.1	-51.2
200'	184.1	-51.1
354'	184.2	-51.2

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-19-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-30 (WDNR #149)

DATE: 5-30-91
PAGE 1 OF 5

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

BEARING: S179.1E INCLINATION: -52.1 T.D: 354'
COORDINATES: L10850 E, 10400 N
ELEV: 1565' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
242.5 306.2		Rc	** 242.5 306.2 RHYOLITE CRYSTAL TUFF	
272.0 295.0		pRd	^^ 272.0 295.0 Rhyolite Porphyry Dike Swarm	
295.0 306.2		Rc	^^ 295.0 306.2 Rhyolite Crystal Tuff, Hornfelsed	
306.2 354.0		QD	** 306.2 354.0 QUARTZ DIORITE	
306.2 333.0		gQD	^^ 306.2 333.0 Granophyric Quartz Diorite	
			E.O.H. 354' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-30

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 74.0												** 0.0 74.0 OVERBURDEN						
											R1	** 74.0 106.8 RHYOLITE LAPILLI TUFF, medium grey, medium-grained, abundent blue quartz eyes						
78.50																		
	100	85	R3	b	10	2												
				b	30													
83.50				b						-25C	pRd	^^ 84.4 87.6 Rhyolite Porphyry Dike, red (Fe) alteration-granophyric, core broken. High angle upper contact, lower contact ground						
	95	75	R3	a	15	2												
85.50					60													
	95	75	R3	a	20	2												
87.50					60													
	10		R3	a	20	2												
89.30					60													
	100	100	R3	c	10	2						Note: Core loss ~2 ft.						
				c	40							Note: Scattered pyrite @ 94.0-95.0	a				2	
				b														
97.30				a														
	99	85	R3	a	10	2												
101.00				b	40													
	100	80	R3	b	5	2												
				c	15													
				b						-65C	R1*	** 106.8 127.3 RHYOLITE LAPILLI TUFF, altered, medium grey, medium-grained pervasive green (epidote-diopside?), alteration along beds and of lapilli						
				a														
110.00				a														
	98	90	R3	a	10	2												
111.30					25													
	100	95	R3	a	15	2												
115.70				b	30													
	99	85	R3	b	10	3												
120.00				a	40					-55B		Note: 119.5-122.0 Core oxidized, weathered						
					60													
	90	80	R3	a	10	3												
				b	40					-54B								
125.00				b	60					-60B								
	99	90	R3	b	10	2				-45B								
127.20					40					-45B	BP,Ch	** 127.3 132.5 INTERBEDDED PYRITE, CHERT, bedding irregular to contorted	c				12	2
	100	85	R3	a	5	2							c				12	2
													c				12	2
				a	30					-35C	R1	** 132.5 147.6 RHYOLITE LAPILLI TUFF,	c				12	2

DRILL HOLE: LYN90-30

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
				a								lt. grey/beige, lapilli-sized						
				c								fragments, including blue quartz eyes						
137.30				c						-70B		and pumice shards, bedded, 3" chert bed						
	100	100	R4	a	10	3				-65B		with chlorite alteration @ base						
				b	30													
144.00				b	50													
	100	100	R4	b	25	2				-70B								
				a	40					-70B	Rch	** 147.6 198.0 RHYOLITE TUFF, Cherty,						
				a								medium to dark grey, with chert inter-						
151.00				a								beds and cherty matrix, scattered						
	98	75	R3	a	10	2						pyrite						
155.00				a	40													
	99	65	R3	a	10	2						Note: 155.0-167.0 Reddish alteration						
159.50				a	30							along fractures of heavily broken core-						
	99	50	R3	a	15	2						possible fracture zone dike swarm						
162.00				a	25													
	99	50	R3	a	10	3												
165.00				a	30													
					50													
	98	0	R3	a	10	3												
167.00		.			30													
					50													
	98	25	R3	a	15	2												
170.50				a	25													
	98	50	R3	b	10	2												
174.00				b	30													
	99	65	R3	b	10	2						Note: 175.0-180.0 Scattered sulfides						
176.00					30													
	99	75	R3	a	10	3												
				a	30													
181.00				a	60													
	100	95	R3	a	10	3												
183.50				a	30													
					60													
	100	85	R3	a	10	3												
				a	30													
				a	60													
192.50				a								Note: 192.0-198.0 Chert clasts,						
	99	80	R3	a	10	3						192.3-194.0 1"-3" beds with brown matrix						
				a	40							milky white crystals or spherulites						

ROCK QUALITY:

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

DRILL HOLE: LYN90-30

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	60													
197.00											Rt,lm	** 198.0 214.9 RHYOLITE TUFF, Laminated,						
	99	85	R4	a	15	2				-28B		with magnetite, fine-grained, black to						
202.00				a	30					-25B		green beds, bedding angle fluctuates,						
	100	95	R4	b	20	2				-35B		upper contact broken						
205.00				b	40					-22B								
	100	80	R4	b	10	2												
207.00					25													
	100	75	R3	b	10	2												
210.00					40													
	100	85	R3	b	10	2						^^ 210.0 214.9 Rhyolite Tuff, Altered						
				a	50							occasionally laminated, with patchy						
				a								green alteration						
										-60C	Rt,t	** 214.9 221.5 RHYOLITE TUFF, Talcose,	a			1	2
215.00												medium to dark grey, fine to medium-	a			1	2
	100	85	R2	a	10	2						grained, with scattered pyrrhotite,	a			1	2
217.60					40							pyrite	a			1	2
	100	85	R2	b	10	2							a			1	2
				b	50						Rt,tp	** 221.5 239.0 RHYOLITE TUFF, Talcose,	a			1	2
223.00				b								with pyrrhotite	c			1	9
	99	85	R2	b	40	2							c			1	9
				c	60								c			1	9
				c									c			1	9
232.00				c									c			1	9
	99	50	R2	a	20	3							c			1	9
235.00				a	40								c			1	9
					65								c			1	9
	99	75	R2	b	50	2							c			1	9
239.50				b	70						Rt,t#	** 239.0 242.5 RHYOLITE TUFF, Talcose,	c			1	9
	100	85	R2	b	20	2						altered, patchy green (diopside)	a				2
				b	40							alteration, scattered pyrrhotite	a				2
				a									a				2
				a							Rc	** 242.5 306.2 RHYOLITE CRYSTAL TUFF	a				2
				a									a				2
249.00																		
	100	95	R3	a	30	2												
				a	70													
				a														
				a														

ORIGINAL

DRILL HOLE: LYN90-30

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
259.00				a														
	100	85	R3	a	40	2												
260.60					70													
	100	85	R3	a	20	3												
264.00				a	40													
					70													
	100	85	R3	a	30	3												
267.70				a	45													
					65													
	100	95	R3	a	10	3												
				a	40						pRd	^^ 272.0 295.0 Rhyolite Porphyry Dike	a					2
				a	65							Swarm, granophyric, epidote-felsic	a					2
				a								alteration with hornfelsed tuff host	a					2
278.00				a									a					2
	99	75	R2	a	40	2				-50F								
280.60					60					-50S								
	100	95	R2	a	10	3												
				a	30													
				a	50													
288.80				a														
	100	90	R3	a	20	3												
291.00				a	40													
					60													
	100	95	R4	a	20	3												
				a	40						Rc	^^ 295.0 306.2 Rhyolite Crystal Tuff,						
298.00				a	55							hornfelsed						
	100	90	R4	a	10	3												
				a	40													
				a	60													
				a							OD	** 306.2 354.0 QUARTZ DIORITE						
				a														
307.80				a	10	3					gOD	^^ 306.2 333.0 Granophyric Quartz						
	100	100	R3	a	30							Diorite						
311.50					50													
	100	95	R3	a	30	2												
				b	50													
				b														
				b														
321.50				b														

DRILL HOLE: LYN90-30

ROCK QUALITY:

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

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	95	R3	b	30	2												
				b	60													
				c														
329.40				c														
	100	100	R3	c	20	2												
334.00				b	60													
	100	100	R3	c	40	2												
				c	60													
				c														
				c														
344.00				c														
	100	100	R3	c	15	2												
				c	60													
				c														
				c														
354.00				b								E.O.H. 354' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.4	-45.4
300'	179.2	-46.0
500'	181.0	-46.2
700'	181.9	-46.6
808'	182.9	-46.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-31 (WDNR #177)

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

BEARING: S179.4E INCLINATION: -46.9 T.D: 808'
COORDINATES: L10400 E, 11395 N
ELEV: 1567.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 11-21-91
PAGE 1 OF 12

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 77.0			><< 0.0 77.0 OVERBURDEN	
77.0 81.6	(not recovered)			
81.6 90.0	(HQ core)			
77.0 108.0		Rv	><< 77.0 108.0 RHYOLITE FLOW	
108.0 120.0		W	><< 108.0 120.0 WACKE	
120.0 153.0		SL,m	><< 120.0 153.0 SILTSTONE, With Magnetite	
153.0 185.3		SL/W	><< 153.0 185.3 SILTSTONE/WACKE	
185.3 269.5		D	><< 185.3 269.5 DACITE	
260.5 314.0		SL/W	><< 269.5 314.0 INTERBEDDED SILTSTONE/WACKE	
292.0 300.0		pRd	^^ 292.0 300.0 Rhyolite Porphyry Dike	
314.0 388.0		Rlc	><< 314.0 388.0 RHYOLITE LAPILLI CRYSTAL TUFF	
388.0 414.2		gR	><< 388.0 414.2 RHYOLITE, Granophyric	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.4	-45.4
300'	179.2	-46.0
500'	181.0	-46.2
700'	181.9	-46.6
808'	182.9	-46.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-31 (WDNR #177)

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

BEARING: S179.4E INCLINATION: -46.9 T.D: 808'
COORDINATES: L10400 E, 11395 N
ELEV: 1567.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
414.2 432.0		Rlc	><< 414.2 432.0 RHYOLITE LAPILLI CRYSTAL TUFF	
432.0 472.7		Rt	><< 432.0 472.7 RHYOLITE TUFF	
472.7 523.0		Rlc	><< 472.7 523.0 RHYOLITE LAPILLI CRYSTAL TUFF	
523.0 534.2		Ch	><< 523.0 534.2 CHERT	
534.2 539.7		MS*	><< 534.2 539.7 MASSIVE SULFIDE, Altered	534.2 539.7 40% Sp, 5% Ga, 5% Po
539.7 576.0		Rc,Ch	><< 539.7 576.0 INTERBEDDED RHYOLITE CRYSTAL TUFF, CHERT	
554.0 560.0		>R	^^ 554.0 560.0 Spherulitic Rhyolite Interbeds	
576.0 626.0		Rc	><< 576.0 626.0 RHYOLITE CRYSTAL TUFF	
626.0 655.0		CT*	><< 626.0 655.0 CALCAREOUS TUFF, Altered	
655.0 666.0		Rl	><< 655.0 666.0 RHYOLITE LAPILLI TUFF	
666.0 672.0		CT*	><< 666.0 672.0 CALCAREOUS TUFF, Altered	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.4	-45.4
300'	179.2	-46.0
500'	181.0	-46.2
700'	181.9	-46.6
808'	182.9	-46.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-23-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-31 (WDNR #177)

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

BEARING: S179.4E INCLINATION: -46.9 T.D: 808'
COORDINATES: L10400 E, 11395 N
ELEV: 1567.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 11-21-91
PAGE 1 OF 12

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
672.0 709.3		Rc	>< 672.0 709.3 RHYOLITE CRYSTAL TUFF	
709.3 712.0		CT	>< 709.3 712.0 CALCAREOUS TUFF	
712.0 726.0		Rc	>< 712.0 726.0 RHYOLITE CRYSTAL TUFF	
726.0 763.0		Rc*	>< 726.0 763.0 RHYOLITE CRYSTAL TUFF, Calcareous, Altered	
736.0 740.0		Rc	^^ 736.0 740.0 Rhyolite Crystal Tuff	
763.0 774.5		D	>< 763.0 774.5 DACITE	
774.5 808.0		QD	>< 774.5 808.0 QUARTZ DIORITE	
774.5 795.0		gQD	^^ 774.5 795.0 Granophyric Quartz Diorite	
			E.O.H. 808' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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 77.0											><< 0.0 77.0 OVERBURDEN						
											~~ 0.0 50.0 Sand						
											~~ 50.0 55.0 Silt						
											~~ 55.0 79.0 Sand, gravel, and cobbles						
										Rv	><< 77.0 108.0 RHYOLITE FLOW, breccia, lt. greenish grey, medium to coarse-grained lapilli tuff matrix, with breccia sized clasts @ 77.0-90.0						
81.6	98	85	R3	b	20	2											
				a	40												
				b													
90.0				b							Note: 90.0-96.0 ~4' core lost						
	10	0	R4	crushed													
96.0																	
	99	75	R4	a	10	2											
				b	50												
				b													
104.0				c													
	100	90	R4	c	20	2											
				c	60					W	><< 108.0 120.0 WACKE, grey, fine to medium-grained, patchy green (epidote) alteration, coarsens downward, plag-phyric, crystal-rich bed @ base						
				c													
				c													
				c													
115.0				c													
	100	75	R4	b	10	2											
118.0				a	40												
	100	85	R4	b	20	2			-60C	SL,m	><< 120.0 153.0 SILTSTONE, laminated,						

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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							alternating lt./dark grey, fine-grained, with magnetite						
				a						-50B								
				a														
128.0				a						-55B		Note: Changing bedding angle to core axis, increases with depth						
	100	90	R5	a	10	2												
130.0					30													
	99	85	R5	a	20	2				-65B								
133.5				a	50													
	100	100	R5	b	5	3												
				a	20													
				a	50					-70B								
				a														
142.0				a						-80B								
	100	100	R5	c	50	1												
146.5				c														
	99	90	R5	a	50	1				-85B								
				a														
152.0				b														
	100	90	R3	b	20	1				-58B	Rt,l	** 153.0 185.3 SILTSTONE/WACKE, alternating beds of laminated, fine-grained siltstone, (no magnetite) and fine-grained wacke						
155.0				b														
	100	100	R3	b	15	2												
158.0				a	35													
	100	70	R4	a	10	2												
160.0					35													
	99	50	R4	a	10	2												
161.0					40													
	99	50	R4	a	10	2				-60B								
163.0					30													
	100	85	R4	a	25	2												
				a	40													
				b														
171.5				b						-36B								
	100	90	R4	a	20	2												
				a	35													
				a						-75B								
				a														
182.0				a														
	100	90	R4	a	20	2												
186.0				b	35						D	** 185.3 269.5 DACITE, Fine-grained, medium grey to dark grey, more VCS						
	100	95	R4	b	20	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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	35							at base						
				b	60													
194.0				b								Note: 193.5-203.5 Plag-phyric interval, contacts are gradational						
	100	100	R4	a	20	2												
				b	35													
199.0				a														
	100	90	R4	a	30	2												
203.5				a	50													
	99	70	R3	a	20	2												
				a	35													
209.0				a								Note: 209.0-219.0 Weird orange discoloration/alteration of matrix, with greyish spots 0.5" in diameter, 205.0-219.0 core broken-possible fracture zone						
	98	65	R2	a	20	2												
212.5				a	40													
	99	75	R3	a	20	2												
				a	40													
				b														
219.0				b														
	100	100	R3	b	10	2												
				c	30													
				b														
				b														
229.0				a														
	100	100	R3	b	20	2												
				b	40													
				c							pRd	Note: 236.5-237.5 Rhyolite Porphyry Dike						
				c														
239.0				a														
	100	85	R3	a	40	2												
				a	60													
246.0				a														
	100	95	R3	a	30	2												
				a	60													
				b														
				a							pRd	Note: 254.0-261.0 Rhyolite Porphyry Dike, possible fracture zone						
256.0				a														
	99	90	R3	a	10	2												
260.0				a	50													
	100	100	R3	b	20	2												
				c	50													
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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														
270.0				a						-80C	SL/W	** 269.5 314.0 INTERBEDDED SILTSTONE,						
	100	95	R3	a	5	3						WACKE, medium grey, occasionally						
274.0				a	20							laminated, fine-grained siltstone						
					40							with quartz wacke interbeds (6"-1')						
	100	100	R4	a	10	2												
				a	30													
				b						-65B								
				a														
284.0				a														
	100	80	R4	a	20	2				-60B								
				a	40													
				a														
292.0				a						-55B	pRd	^^ 292.0 300.0 Scattered Rhyolite						
	100	95	R3	a	20	2						Porphyry Dikes						
				a	50													
				a														
				a														
302.0				a														
	100	85	R3	a	20	2												
				a	40							Note: 305.5 Possible fault gouge						
				a														
				a														
312.0				a														
	100	60	R3	a	10	3				-45c	R1c	** 314.0 388.0 RHYOLITE LAPILLI CRYSTAL						
				a	30							TUFF, lt. greenish grey, with patchy						
				a	50							pink and green (epidote) bleaching						
320.0				a								alteration, contains subangular						
	99	60	R3	a	20	2						lapilli-sized fragments & rounded blue						
				a	35							quartz eyes, could be intrusive, looks						
				a								like unit @ top LYN90-23, called same						
327.0				a								name						
	100	85	R4	a	20	2												
331.0				a	40													
	100	100	R4	a	15	2												
				c	30													
				c														
				b														
341.0				b														
	100	100	R4	a	10	2												

DRILL HOLE: LYN90-31

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
				a	35													
				b														
348.5				b														
	100	100	R4	c	20	2												
				b	40													
				b														
355.5				b														
	100	100	R4	b	20	2												
				a	40													
				b														
364.0				b														
	100	100	R4	b	25	2												
				a	40													
				a														
				a								Note: Fine-grain (sheared?) interval						
374.0				a								@ 372.5-373.0						
	100	95	R4	a	5	3												
				b	30													
				a	50													
				b								Note: Decrease in grain size toward						
384.0				a								margin						
	100	80	R3	a	10	3												
				a	30					-40C	gR	>< 388.0 414.2 RHYOLITE, granophyric,						
390.0				a	50							fine-grained, hornfelsed, beige-grey,						
	100	85	R3	a	10	2						highly jointed and fractured @						
393.0				a	30							388.0-400.0						
	99	75	R3	a	10	3												
395.5				a	30													
					50													
	100	65	R3	a	20	2												
398.0				a	40													
	100	80	R3	a	10	2						Note: Possible Rhyolite Porphyry						
				a	50							Dikelets @ 400.0-412.0						
				a														
406.5				a														
	100	100	R3	a	10	2												
408.0					30													
	100	90	R3	a	10	3												
				a	40													
				a	60						RIc	>< 414.2 432.0 RHYOLITE LAPILLI CRYSTAL						

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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								TUFF, beige-grey, coarse-grained at						
417.0				a								top, granophyric to medium-grained						
	100	95	R3	a	10	2						toward base. Possible intrusive						
				a	40							related to above-possible hornfelsed						
				b								at base						
				b														
427.0				b														
	100	100	R3	a	10	2												
428.0					40													
	100	90	R4	a	10	3												
				a	30					-40C	Rt	** 432.0 472.7 RHYOLITE TUFF, Dark-						
				a	60							grey, fine-grained, probably hornfelsed						
436.0				a								by numerous rhyolite porphyry diklets						
	100	90	R4	a	20	2						@ 434.0-435.0, @ 441.5-442.0, with						
438.0					40							spotty epidote alteration, and alter-						
	100	90	R3	a	10	3						ation along fractures						
				a	30													
444.0				a	60							Note: 438.5-440.5 beige bedded chert,						
	100	85	R3	a	10	3						with 2" breccia zone overlying it						
				a	30													
450.0				a	50													
	100	95	R3	a	10	3												
				a	40													
				a	60													
458.0				a														
	100	95	R3	a	10	2					Rlc	^^ 459.6 462.0 Rhyolite Lapilli Crystal						
				a	40							Tuff						
464.0				a														
	100	100	R3	a	10	3												
468.0				a	30													
					50													
	100	85	R3	a	10	3												
471.5				a	30						Rlc	** 472.7 523.0 RHYOLITE LAPILLI CRYSTAL						
					60							TUFF, lt. grey, medium-grained crystal						
	100	100	R3	a	10	3						tuff matrix, size and frequency of						
473.0					30							subangular lapilli increase toward base						
					50													
	100	100	R3	b	10	3												
				c	40													
				b	60													

DRILL HOLE: LYN90-31

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
				a															
482.0				a															
	100	95	R3	a	20	2													
				a	35														
				a															
490.0				b															
	100	95	R3	b	20	2													
				a	50														
				b															
				a															
499.5				a															
	100	90	R3	b	30	2													
				a	50														
506.0				b															
	100	90	R3	a	30	2													
				c	50														
				b															
514.0				b															
	100	85	R3	a	30	2													
				a	50														
				a															
521.0				a															
	99	75	R3	a	10	3													
				a	30						Ch	** 523.0 534.2 CHERT, Black Chert,	a					1	2
526.0				a	50							bedded, jointed	a					1	2
	100	75	R3	a	10	3													
530.5				a	30														
					50														
	99	80	R3	a	10	3													
533.5				a	30						MS#,p	** 534.2 539.7 MASSIVE SULFIDE,		e	40	5		5	
					50							Stringery, altered with pyrrhotite,		e	40	5		5	
	100	85	R3	a	40	2						amber sphalerite, diopside alteration		e	40	5		5	
				c	60							toward base		e	40	5		5	
				b										e	40	5		5	
				a							Rc,Ch	** 539.7 576.0 INTERBEDDED RHYOLITE		e	40	5		5	
				a								CRYSTAL TUFF/CHERT, blue-quartz eye							
543.5												crystal tuff with episodic grey chert							
	98	35	R3	a	30	2						beds							
546.5				a	50														
	99	75	R3	a	30	2													