APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 1 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

7

(PG 421 - 490)

ROCK QUALITY:

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

DRILL HOLE: LYN90-37

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														
				b														
464.00				c														
	100	100	R3	b	10	2												
				b	40													
				c														
				c							R1	** 470.0 479.0 RHYOLITE LAPILLI TUFF						
472.50				c														
	100	90	R3	b	10	2												
				a	75													
				b														
				b							Rt	** 479.0 573.5 RHYOLITE TUFF						
482.50				b														
	100	95	R3	c	10	3												
				b	30													
				b	50													
				a														
492.50				a							pRd	^^ 492.3 496.5 Rhyolite Porphyry Dike						
	100	100	R3	a	10	3												
495.60				a	30													
					65													
	100	85	R3	a	10	3												
				a	30													
501.60				a	60													
	100	100	R3	a	5	3												
				a	20													
				a	60						DS	^^ 507.0 528.6 Dike Swarm, Rhyolite Porphyry dikes with hornfelsed tuff as country rock						
509.00				a														
	100	100	R3	a	5	3												
510.00					20													
					60													
	100	100	R3	b	5	3												
				b	20													
				b	60													
				b														
520.00				b														
	100	100	R3	a	10	3												
				a	25													
				a	65													
				a							pMd	^^ 528.6 531.0 Mafic Dike, Plag-phyric						

DRILL HOLE: LWN90-37

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
529.60				a														
	100	100	R3	a	10	3												
533.50				a	25													
					65													
	100	100	R3	a	10	3												
				b	30													
				a	65													
				a							Rcl	^^ 541.5 546.0 Rhyolite Crystal Lapilli Tuff						
543.00				a														
	100	100	R3	b	15	2												
				a	60													
				a														
552.50				a														
	99	85	R3	a	10	3												
				a	30													
				a	60													
559.00				a														
	100	100	R3	a	20	2												
561.00					40													
	100	95	R3	a	20	2												
				b	45													
				b														
568.00				a							pMd	^^ 568.8 573.0 Mafic Dike, Plag-phyric						
	100	95	R3	b	20	2												
				b	70													
574.00				b							Rcl	** 573.5 606.6 RHYOLITE CRYSTAL LAPILLI TUFF, coarse-grained, dark grey matrix, white crystals						
	100	100	R3	b	20	2												
				b	70													
				c														
				c														
584.00				c														
	100	90	R3	c	20	2												
				c	70													
				c														
				c														
594.00				c														
	100	100	R3	b	30	2												
				c	70													
599.00				c														
	100	95	R3	c	50	1												

ROCK QUALITY:

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

DRILL HOLE: LYN90-37

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							R1,Ch	** 606.6 618.0 RHYOLITE LAPILLI TUFF, CHERTY, lapilli tuff, with brownish matrix and blackish and greyish cherty patches and interbeds						
				c														
				c														
				c														
609.00																		
	98	75	R2	c	10	3												
				b	30													
				a	60													
618.00				a						-40C	R1,Ch	** 618.0 653.0 INTERBEDDED LAPILLI TUFF, CHERT						
	100	85	R3	a	20	3					M1	^^ 620.3 626.4 Mafic Flow(?)						
				a	40													
				a	60													
				a						-50C								
627.00				a														
	100	85	R3	a	10	3												
631.00				a	30					-70B	M1	^^ 631.5 634.0 Mafic Flow(?)						
					60													
	100	85	R3	a	10	3												
				a	30													
638.00				b	60													
	100	90	R3	b	10	2				-50B		Note: Mafic flows have low-angle contacts (40-50 degrees), appears greenish "coarse-grained" and bedded in places						
642.00				a	60													
	100	95	R3	a	10	3												
				b	30													
648.50				a	50													
	100	95	R3	a	10	3												
				a	30													
				b	50						M1	** 653.0 669.0 MAFIC FLOW(?)						
				b														
658.00				a														
	100	100	R3	b	25	2												
661.00				b	60													
	99	85	R3	a	20	2												
				a	60													
				a														
				a						-65B	R1	** 669.0 677.2 LAPILLI TUFF						
671.00				a														
	100	95	R3	a	20	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-37

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													
				a							M1	** 677.2 683.7 MAFIC FLOW(?)						
679.00				a														
	99	90	R3	b	20	2												
681.00					40													
	99	90	R3	b	20	2				-78B	*P	** 683.7 704.0 SPHERULITIC RHYOLITE						
				a	40													
688.00				a														
	100	100	R3	a	20	2												
690.00				a	40													
	100	100	R3	a	30	2												
				a	50													
695.00				a														
	99	85	R3	a	10	2												
697.00					50													
	100	100	R3	a	10	2												
				a	40							Note: 702.0-704.0 No Spherulites,						
				a								Lapilli-rich base						
704.00																		
	99	85	R3	a	10	3					Rt	** 704.0 733.0 RHYOLITE TUFF	c					12
													c					12
											Rt,p	^^ 704.0 711.0 Rhyolite Tuff, With	c					12
				a	25							Pyrrhotite	c					12
				a	40					-80B			c					12
				a									c					12
714.00				a						-65B		Note: Tuff is greenish-grey, bedded to						
	100	95	R3	a	10	2						laminated, with soft-sediment slumps or	b					7
				a	50							folds (704.0-708.0), some offset	b					7
				a								(0.2-0.5") is noted along fractures	b					7
				a								@ ~5 degrees to core axis						
724.00				a						-80B								
	100	90	R3	a	10	2				-70B								
				a	50													
				a									b					7
731.00				b									b					7
	100	90	R2	c	10	3					Rt,t	** 733.0 742.0 RHYOLITE TUFF, Talcose	b					5
				b	30								b					5
				b	50								b					5
				a									b					5
741.00				b							Rl	** 742.0 748.5 RHYOLITE LAPILLI TUFF	b					5

POOR QUALITY:

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

DRILL HOLE: LYN90-37

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	60	R2	a	10	2												
746.00				a	40													
	98	50	R3	b	10	2												
748.00					40						Rch,p	** 748.5 761.4 RHYOLITE TUFF, Cherty,	b					8
	99	30	R3	a	10	2						with pyrrhotite	b					8
749.00					40								b					8
	99	25	R3	a	10	2							b					8
751.00					40								b					8
	100	100	R3	a	10	3							b					8
				a	40								b					8
				a	60								b					8
				a														
761.00				a							ChTp	** 761.4 779.0 CHERTY TUFF, With	c					10
												Pyrrhotite	c					10
													c					10
	100	100	R2	a	20	3							c					10
				a	40								c					10
				a	70								c					10
				a									c					10
771.00				a									c					10
	100	100	R3	a	20	2							c					10
				a	40								c					10
				a									c					10
779.00				a						-74B	Xzch	** 779.0 788.0 TUFFITE, Cherty,	c					10
										-65B		Stringery	c	12		2		15
													c	12		2		15
	100	90	R2	b	20	2							c	12		2		15
				a	40								c	12		2		15
				c									c	12		2		15
				c							BPt	** 788.0 792.0 BEDDED PYRRHOTITE,	c	12		2		15
789.00				c								Talcose	c					20
													c					20
	100	95	R2	c	20	2					BPch	** 792.0 797.0 BEDDED PYRRHOTITE, Cherty	c					20
				b	40								c					20
				a									c					20
				a									c					20
				a							Rt	** 797.0 817.6 RHYOLITE TUFF	c					20
799.00																		
	100	100	R3	a	10	3												
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-37

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
804.00				b	50													
	99	90	R3	b	10	3												
808.00				a	30													
					50													
	99	70	R3	a	10	3												
809.00					30													
					50													
	100	100	R3	a	10	3												
				a	30													
815.50				a	50													
	100	90	R3	a	15	2					Rt,p	** 817.6 831.8 RHYOLITE TUFF, With Pyrrhotite	c				10	
				b	30								c				10	
821.00				b									c				10	
	100	100	R3	b	10	2							c				10	
				b	30								c				10	
				b									c				10	
				b														
831.00				b							Rt,tp	** 831.8 856.0 RHYOLITE TUFF, Talcose, with pyrrhotite	b					8
	99	80	R2	a	20	2							b					8
				b	50								b					8
				a									b					8
839.00				a									b					8
	100	95	R2	a	10	3							b					8
				b	40								b					8
				b	60								b					8
				b									b					8
				b									b					8
													b					8
849.00													b					8
	100	100	R2	b	20	3							b					8
854.00				b	40								b					8
					60						Rchs,tp	** 856.0 870.5 RHYOLITE TUFF, Cherty and talcose, with pyrrhotite & sulfides	b					8
	100	100	R3	a	10	2							c	5				15
				a	30								c	5				15
				a									c	5				15
				a									c	5				15
864.00				a									c	5				15
	100	95	R2	a	10	2							c	5				15
				a	40								c	5				15
				a							Rt,t	** 870.5 878.5 RHYOLITE TUFF, Talcose	c	5				15

ROCK QUALITY:

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

DRILL HOLE: LYN90-37

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														
874.00				b														
	99	65	R2	b	20	2												
878.00				b	60						QD	** 878.5 944.0 QUARTZ DIORITE						
											gQD	^^ 878.5 944.0 Quartz Diorite, Granophyric						
	99	85	R3	b	20	2												
				b	50													
883.00				b														
	100	100	R3	b	30	2												
				c	70													
890.00				c														
	100	100	R3	a	20	3												
				b	40													
				b	70													
				b														
899.00				b														
	100	100	R3	b	10	2												
904.00				b	30													
	100	100	R3	b	10	2												
				b	30													
				b														
				b														
914.00				a														
	100	100	R3	a	10	2												
				b	30													
				b														
				a														
924.00				a														
	100	100	R3	a	10	2												
				a	30													
				a														
				a														
934.00				a														
	100	100	R3	a	10	2												
				a	30													
				a														
				a														
944.00				a								E.O.H. 944' (total depth)						

Noranda Exploration Inc.
Eastern Divison

DATE: 1-11-92
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HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.66	-61.56
200'	179.15	-61.47
300'	179.72	-61.58
401'	179.76	-61.58

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-14-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-38 (WDNR #184)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-16-90

BEARING: S180E INCLINATION: -61.7 T.D: 401'
COORDINATES: L9500 E, 11000 N
ELEV: 1564.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 45.0			** 0.0 45.0 OVERBURDEN	
45.0 49.0	(not recovered)			
49.0 59.0	(HQ core)			
45.0 79.5		Rc	** 45.0 79.5 RHYOLITE CRYSTAL TUFF	
79.5 90.0		Rl	** 79.5 90.0 RHYOLITE LAPILLI TUFF	
90.0 127.0		Rc	** 90.0 127.0 RHYOLITE CRYSTAL TUFF	
98.0 107.0		FZ	^^ 98.0 107.0 Fracture Zone	
127.0 178.5		Rl	** 127.0 178.5 RHYOLITE LAPILLI TUFF	
178.5 185.2		MS	** 178.5 185.2 MASSIVE SULFIDE	178.5 185.2 70% sulfide, 62% Sp, 7% Po, 1% Cp
185.2 190.5		Rts*	** 185.2 189.5 RHYOLITE TUFF, Altered, With Sulfides	185.2 189.5 8% sulfide, 5% Sp, 3% Po
189.5 193.0		MS	** 189.5 193.0 MASSIVE SULFIDE	189.5 193.0 50% sulfide, 44% Sp, 5% Po, 1% Cp
193.0 300.5		Rc	** 193.0 300.5 RHYOLITE CRYSTAL TUFF	
238.0 250.5		FZ7	^^ 238.0 250.5 Core Broken	
279.0 284.0		gQD	^^ 279.0 284.0 Granophyric Quartz Diorite	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.66	-61.56
200'	179.15	-61.47
300'	179.72	-61.58
401'	179.76	-61.58

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-14-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-38 (WDNR #184)

DATE: 1-11-92
PAGE 1 OF 7

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-16-90

BEARING: S180E INCLINATION: -61.7 T.D: 401'
COORDINATES: L9500 E, 11000 N
ELEV: 1564.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
300.5 309.5		Rt,tp	⌘ 300.5 309.5 RHYOLITE TUFF, Talcose, With Pyrrhotite	300.5 309.5 20% Po, 1% Cp
307.5 309.5		BP	^^ 307.5 309.5 Bedded Pyrrhotite	307.5 309.5 30% Po
309.5 337.5		Rc	⌘ 309.5 337.5 RHYOLITE CRYSTAL TUFF (Hornfelsed)	
337.5 401.0		gQD	⌘ 337.5 401.0 QUARTZ DIORITE, Granophyric	
			E.O.H. 401' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-38

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 45.0												** 0.0 45.0 OVERBURDEN						
												^^ 0.0 15.0 Sand						
												^^ 15.0 35.0 Sand and gravel						
												^^ 35.0 45.0 Sand, gravel, and cobbles						
											Rc	** 45.0 79.5 RHYOLITE CRYSTAL TUFF, dark grey, fine-grained						
49.00																		
	98	80	R3	a	10	3												
				a	40													
				a	60													
				a														
59.00				a														
	100	100	R3	a	10	3												
63.00				a	30													
					60													
	100	95	R3	a	20	2												
				a	40													
69.50				a														
	100	90	R3	a	20	2												
72.50				a	40													
	100	90	R3	a	20	2												
74.50					40													
	100	90	R3	a	20	2												
				a	40													
80.50				b							Rl	** 79.5 90.0 RHYOLITE LAPILLI TUFF, medium to light grey, white crystals and clasts < 0.25"						
	100	100	R3	b	20	2												
84.00				a	35													
	100	75	R3	a	5	2												
				a	50													
90.50				a							Rc	** 90.0 127.0 RHYOLITE CRYSTAL TUFF						
	100	100	R3	a	5	3					pRd	^^ 90.0 92.0 Rhyolite Porphyry Dike, dark grey, fine-grained						

ROCK QUALITY:

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

DRILL HOLE: LYN90-38

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
93.50				a	20													
					60													
	100	100	R3	a	20	2												
				a	60						FZ	^^ 98.0 107.0 Fracture Zone						
				a														
				b														
104.00				a														
	100	95	R3	a	20	2												
				a	60							Note: @ 107.0-127.0 Core jointed/						
				a								fractured, quartz vein fillings						
				a														
114.00				a														
	100	100	R3	a	25	2												
				a	60													
				a														
122.00				a														
	100	100	R3	a	25	2												
124.00					50													
	99	85	R2	a	10	3												
				a	30						R1	** 127.0 178.5 RHYOLITE LAPILLI TUFF,						
				b	70							greenish grey, apparent bedding medium-						
				a								grained, crystal-rich						
				b														
				a														
				b														
				b														
				b														
144.00				b														
	100	95	R2	b	20	3												
				b	30													
				b	70													
				a														
154.00				a														
	100	100	R2	b	10	3												
				a	35													
				a	70													
				a														
164.00				a														
	100	100	R3	a	10	3												
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-38

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
169.00				a	70														
	100	100	R3	b	10	2													
172.00				b	30														
	100	100	R3	b	20	2													
				c	40														
177.00				c							MS	** 178.5 185.2 MASSIVE SULFIDE		f	60	2		1	7
	99	85	R2	b	10	2				-50B				f	60	2		1	7
				b	30									f	60	2		1	7
184.00				c										f	60	2		1	7
	99	75	R2	b	10	3					Rts*	** 185.2 189.5 RHYOLITE TUFF, altered,		f	60	2		1	7
				b	40							with sulfides, talc-po	b		5			1	2
				a	60								b		5			1	2
				a							MS	** 189.5 193.0 MASSIVE SULFIDE	b		5			1	2
				a															
193.00											Rt	** 193.2 300.5 RHYOLITE TUFF, medium							
	100	90	R3	a	10	3						grey, fine-grained							
				a	40														
				a	60														
202.00				a															
	100	90	R3	a	20	3													
				a	50														
207.00				a	70														
	100	100	R3	a	20	2													
				a	40														
214.00				a															
	100	95	R3	a	20	2													
				b	40														
				a															
				a															
223.00				a															
	100	85	R3	a	20	2													
				a	60														
230.60				a															
	60	0	R3	a	20	2													
232.00					60														
	60	50	R3	a	20	2													
233.00					60														
	99	50	R3	a	5	3													
				a	20							Note: @ 238.0-250.5 Core Broken							
239.00				a	60														

ROCK QUALITY:

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

DRILL HOLE: LYN90-38

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
	20	crush	R3	a	5													
244.00				a	20													
				a	60													
	50	crush	R3	a														
245.50				a														
	50	50	R3	a	10	3												
246.50					30													
					60													
	50		R3															
247.00																		
	50	50	R3	a	10	3												
249.00					40													
					60													
	50	40	R3	a	10	3												
250.00					40													
					60													
	50	0	R3	a	10	3												
250.50					40													
					60													
	100	100	R3	a	10	3												
254.50				a	40													
					60													
	99	70	R3	a	10	3												
				a	30													
260.00				a	50													
	100	85	R3	a	20	3												
263.50				a	40													
					60													
	100	90	R3	a	10	3												
				a	40							Note: @ 268.0-271.0 Cherty/ashy						
270.00				a	60							interbeds, fractured						
	100	100	R3	a	20	3												
				a	40													
276.50				a	60													
	100	100	R3	a	20	3												
				a	40						gQD	^^ 279.0 284.0 Granophyric Quartz						
				a	60							Diorite						
283.50				a														
	100	100	R3	a	10	3												
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-38

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	65													
				a														
293.00				a														
	99	80	R3	a	20	2												
				a	40													
				a						-65	Rt,tp	** 300.5 309.5 RHYOLITE TUFF, talcose, with pyrrhotite	b		2			8
				a									b		2			8
303.50				b									b		2			8
	100	95	R2	a	30	2							b		2			8
				b	60						BP	~~ 307.5 309.5 Bedded Pyrrhotite, talc-po	b		2			8
				c									c					12
309.50											Rc	** 309.5 337.5 RHYOLITE CRYSTAL TUFF, medium grey, hornfelsed	c					12
	100	100	R3	b	10	3												
				b	30													
				a	60													
				a														
319.50				a														
	100	100	R3	a	15	3												
324.00				b	40													
					60													
	100	100	R3	b	10	3												
				a	40													
				a	60													
				a														
334.00				a														
	100	100	R3	a	10	3												
				a	30						gQD	** 337.5 401.0 QUARTZ DIORITE, Granophyric						
				a	50													
341.00				a														
	100	100	R3	b	20	3												
				b	40													
				c	60													
				c														
351.00				b														
	100	100	R3	b	5	3												
				b	30													
				b	60													
				b														
361.00				a														
	100	100	R3	a	20	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-38

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	40													
				a	60													
				a														
371.00				a														
	100	100	R3	b	5	3												
				c	30													
				c	60													
380.00				c														
	100	100	R3	c	10	3												
384.00				b	30													
					60													
	100	100	R3	a	10	3												
				a	30													
389.50				a	70													
	100	95	R3	a	10	3												
				a	40													
				a	60													
397.50				a														
	100	100	R3	a	5	3												
401.00				a	20													
					60							E.O.H. 401' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.40	-62.26
300'	180.15	-65.42
500'	181.64	-65.57
700'	183.57	-65.70
1014'	183.51	-64.88

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-19-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-39 (WDNR #180)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-3-90

BEARING: S179.2E INCLINATION: -65.9 T.D: 1014'
COORDINATES: L10600 E, 11490 N
ELEV: 1563.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 62.0			** 0.0 62.0 OVERBURDEN	
62.0 64.0	(not recovered)			
64.0 69.0	(HQ core)			
62.0 116.0		Rt	** 62.0 116.0 DACITE	
116.0 134.5		SL	** 116.0 134.5 SILTSTONE	
134.5 183.0		W	** 134.5 183.0 WACKE	
141.0 170.0		W1	^^ 141.0 170.0 Lapilli Wacke	
175.5 183.0		SL	^^ 175.5 183.0 Siltstone	
183.0 215.0		D	** 183.0 215.0 DACITE	
210.5 213.5		FZ	^^ 210.5 213.5 Fracture Zone	
215.0 251.0		R	** 215.0 251.0 RHYOLITE	
251.0 286.6		D	** 251.0 286.6 DACITE	
286.6 324.0		R	** 286.6 324.0 RHYOLITE	
324.0 375.0		M1	** 324.0 375.0 MAFIC FLOW (?)	
375.0 661.0		R	** 375.5 661.0 RHYOLITE	
402.2 493.6		Rt	^^ 402.2 493.6 RHYOLITE TUFF	
493.6 530.0		Rcl	^^ 493.6 547.0 Rhyolite Crystal Lapilli Tuff	
547.7 567.0		Rt#	^^ 547.7 567.0 Rhyolite Tuff, Altered	
567.0 587.0		Rcl	^^ 567.0 587.0 Rhyolite Crystal Lapilli Tuff	
587.0 610.0		Rt#	^^ 587.0 610.0 Rhyolite Tuff, Altered	
610.0 620.4		Rcl	^^ 610.0 620.4 Rhyolite Crystal Lapilli Tuff	
620.4 629.0		SL	^^ 620.4 629.0 Siltstone	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.40	-62.26
300'	180.15	-65.42
500'	181.64	-65.57
700'	183.57	-65.70
1014'	183.51	-64.88

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-19-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-39 (WDNR #180)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-3-90

BEARING: S179.2E INCLINATION: -65.9 T.D: 1014'
COORDINATES: L10600 E, 11490 N
ELEV: 1563.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
629.0 639.0		ChT	^^ 629.0 639.0 Charty Tuff, Altered	
639.0 661.0		Rc	^^ 639.0 661.0 Rhyolite Crystal Tuff	
661.0 714.5		SL	** 661.0 714.5 SILTSTONE	
661.0 667.3		SL,p	^^ 661.0 667.3 Siltstone, With Pyrrhotite	
667.3 714.5		SL	^^ 667.3 714.5 Siltstone	
714.5 745.0		BPch,1	** 714.5 745.0 BEDDED PYRRHOTITE, With Chert	
745.0 785.0		D	** 745.0 785.0 DACITE	
785.0 804.0		pD	** 785.0 804.0 DACITE, Plag-phyric	
804.0 817.0		R1	** 804.0 817.0 RHYOLITE LAPILLI TUFF	
817.0 828.5		SLp	** 817.0 828.5 SILTSTONE, With Pyrrhotite	
822.0 828.5		BP	^^ 822.0 828.5 Bedded Pyrrhotite	
828.5 988.0		R	** 828.5 988.0 RHYOLITE	
828.5 840.0		*R	^^ 828.5 840.0 Spherulitic Rhyolite	
840.0 866.0		W1	^^ 840.0 866.0 Lapilli Wacke	
866.0 903.0		Rc	^^ 866.0 903.0 Rhyolite Crystal Tuff	
903.0 913.0		*R	^^ 903.0 913.0 Spherulitic Rhyolite	
913.0 988.0		R1	^^ 913.0 930.0 Rhyolite Lapilli Tuff	
930.0 988.0		Rt	^^ 930.0 988.0 Rhyolite Tuff	
988.0 1014.0		gQD	** 988.0 1014.0 QUARTZ DIORITE, Granophyric	
			E.O.H. 1014' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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 62.00											** 0.0 62.0 OVERBURDEN						
											^^ 0.0 20.0 Sand						
											^^ 20.0 50.0 Fine sand						
											^^ 50.0 60.0 Sand, gravel, and boulders						
											^^ 60.0 62.0 Sand and gravel						
										D	** 62.0 116.0 DACITE, dark grey, fine-grained						
67.00																	
	100	95	R4	b	20	2											
69.00					65												
	99	90	R4	a	20	2											
				a	65												
74.00				b													
	98	50	R4	b	10	2											
				b	50												
79.00				b													
	100	100	R4	b	20	2											
				a	40												
84.00				a													
	99	90	R3	a	15	2											
88.00				a	40												
	99	85	R3	b	15	2											
90.00					60												
	100	85	R3	a	15	3											
				b	30												
				b	60												
				b													
100.00				a													
	100	100	R3	b	15	3											
				a	30												
				c	50												
108.00				b													
	100	90	R3	a	5	3											
				b	20												
114.00				b	60												
	100	100	R4	a	20	3				SL	** 116.0 134.5 SILTSTONE						
				a	50												
120.00				a	70												
	100	100	R4	a	30	2											
124.00				a	60												
	100	95	R4	a	10	3											
				b	20												
				a	40												
132.50				b													

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	100	R4	a	20	3					W	** 134.5 183.0 WACKE						
				a	40													
137.50				a	60													
	100	100	R4	a	20	3												
				a	40						W1	^^ 141.0 170.0 Lapilli Wacke,						
144.00				b	60							medium grey, medium-grained, lt.						
	99	90	R4	c	20	3						crystals and fragments less than 0.1"						
				c	40													
				c	60													
151.00				c														
	99	85	R3	c	10	2												
				c	30													
				c														
160.00				c														
	100	100	R4	c	15	2												
164.00				c	30													
	100	100	R4	c	15	2												
				c	30													
				c														
				c														
173.00				c														
	100	95	R4	c	15	1					SL	^^ 175.5 183.0 Siltstone, with cherty						
				c								interbeds and occasional laminations						
179.50				c														
	100	100	R4	c	30	1												
				c							D	** 183.0 215.0 DACITE						
				c														
				c														
189.50				c														
	100	100	R4	c	30	1												
				c														
				c														
				c														
200.00				c														
	100	100	R4	c	10	3												
204.00				c	30													
					65													
	100	85	R3	c	10	3												
				c	40													
				b	70						FZ	^^ 210.5 213.5 Fracture Zone, fracture						
				a								with epidote alteration and fault						
				a								breccia @ 10 degrees to core axis						
213.00																		
	100	90	R3	a	10	3					R	** 215.0 251.0 RHYOLITE						
				b	40													
				a	70													
				a							W1	^^ 215.0 228.8 Lapilli Wacke,						
				a								coarse-grained, almost conglomertic,						
												with blue quartz eyes and quartz and						

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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
223.00												rhyolite						
	100	90	R3	a	10	3												
				a	30													
				b	60						R1b	^^ 228.8 251.0 Rhyolite Lapilli Breccia,						
230.50				a								lt. grey (bleached) with angular						
	100	100	R3	c	30	2						lithic fragments (0.5'->1.0"), and						
234.00				b	60							rounded quartz eyes						
	100	100	R3	c	30	2												
				c	70													
				b														
				b														
244.00				b														
	98	65	R3	b	10	3												
				a	40													
249.00				a	70													
	100	90	R3	a	10	3												
250.50					40													
					70						D	** 251.0 286.6 DACITE, dark grey,						
	100	100	R3	a	10	3						fine-grained						
				a	30													
				a	50													
				a														
260.00				a														
	100	100	R3	a	20	1												
262.00																		
	100	100	R3	a	20	1												
				a														
				a														
				a														
272.00				a														
	100	100	R3	a	10	3												
				a	30													
				b	50													
				b														
282.00				b														
	100	100	R3	b	20	2												
				a	60						R	** 286.6 324.0 RHYOLITE						
				a														
											Rch	^^ 286.6 306.0 Rhyolite Tuff, cherty,						
287.00												lt. grey cherty, laminated beds						
	100	90	R3	a	20	2												
				b	40													
				a														
				b														
297.00				a														
	99	90	R3	b	20	3												
				a	40													
				a	60													
304.00				a														
	99	90	R3	a	20	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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
307.00				c	40													
					60													
	100	95	R4	b	10	2												
				b	30													
				c														
				c														
317.00				c														
	100	100	R4	c	20	1					Rc	^^ 318.0 324.0 Rhyolite Crystal Tuff, medium-grained						
				d														
				d							M1	** 324.0 375.5 MAFIC FLOW (?), fine-grained, greenish, heavy						
				c														
327.00				c														
	100	100	R3	b	20	2												
				b	50													
				b														
334.00				c														
	100	100	R3	b	10	3												
				c	30													
				c	60													
				c														
344.00				b														
	100	100	R4	c	10	2												
				c	50													
				c														
				c														
354.00				c														
	100	100	R4	c	5	3												
				b	30													
				c	60													
				c														
364.00				c														
	100	100	R4	c	10	2												
				c	55													
				c														
372.00				b														
	100	95	R4	c	20	2												
				c	55						R	** 375.5 661.0 RHYOLITE						
				b														
				a							pR	^^ 375.5 402.2 Rhyolite Porphyry, crystal-rich, heavy, coarsens downward. From 375.0-384.0-appears to be interbedded fine-grained and crystal rich. Weird splotchy alteration @ 478.0-482.0. @ 395.0-402.2 epidote-altered, fine-grained, with quartz eyes						
				b														
382.00																		
	100	100	R3	b	15	2												
				b	30													
387.00				b														
	100	100	R3	b	20	2												
				b	40													
				a														
394.00				a														
	100	100	R4	b	20	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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	70													
				b														
				b							Rt	^^ 402.2 493.6 Rhyolite Tuff, medium grey, fine-grained, granophyric. apparently hornfelsed from 402.2-444.0 by numerous rhyolite porphyry dikelets. Epidote bleaching/Fe-staining along fractures						
403.00				a														
	100	100	R3	a	10	3												
				a	30													
				b	50													
412.00				b														
	100	100	R3	a	10	3												
416.50				a	30													
					70													
	100	100	R3	b	10	3												
				a	30													
424.00				a	70													
	100	100	R3	a	10	3												
				a	30													
				a	60													
431.00				a														
	99	85	R3	a	10	3												
433.00					30													
					50													
	100	90	R3	a	10	3												
				a	30													
440.00				a	60													
	99	85	R3	a	10	3					pRd/FZ	Note: @ 439.0-442.0 Rhyolite Porphyry Dike, possible fracture zone						
				a	30													
				a	70						Wf	Note: @ 444.0-451.0 Feldspathic Wacke, medium-grained						
				a														
447.00																		
	100	100	R3	a	10	3												
				b	30													
				b	70							Note: @ 451.0-493.6 Rhyolite Tuff is hornfelsed, epidote-altered along fractures						
454.00				a														
	100	95	R3	a	10	3												
				a	30													
				a	60													
				a														
464.00				a														
	100	95	R3	a	10	3					pRd	Note: @ 463.0-467.0 Rhyolite Porphyry Dike						
				b	30													
				a	60													
472.00				a														
	100	100	R3	b	30	2												
				b	70													
				b														
480.00				b														
	100	95	R3	a	10	3												
				a	30													
				a	60													
487.00				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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	R3	a	10	2												
				a	30													
494.00				a							Rcl	^^ 493.6 547.0 Rhyolite Crystal Lapilli Tuff						
	100	100	R3	b	10	2												
				b	30													
499.00				c														
	100	100	R3	c	20	2												
				c	60													
				c														
				c														
509.00				b														
	100	85	R3	b	20	2												
				c	60													
				a														
				b														
519.00				b														
	100	95	R3	c	30	2												
				c	60													
				b														
				a														
528.00				b														
	100	95	R3	c	20	2												
				c	70													
				c														
				c														
538.50				c														
	100	95	R3	c	10	3												
				c	30													
				c	60													
				c														
548.50				b														
	100	95	R3	b	10	3					Rt#	^^ 547.7 567.0 Rhyolite Tuff, altered, medium grey, fine-grained						
				a	35													
				a	65													
				b							Rcl	Note: @ 556.0-563.0 Rhyolite Crystal Lapilli Tuff						
558.50				a														
	100	95	R3	b	10	3												
				a	35													
				a	60													
				a														
				a							Rcl	^^ 567.0 587.0 Rhyolite Crystal Lapilli Tuff						
569.00				a														
	100	90	R3	a	10	3												
				a	30							Note: 569.0-575.0 Core Fractured @ 10 degrees to core axis						
				a	60													
577.00				a														
	99	80	R3	a	10	3						Note: 577.0-589.0 Core Fractured/Broken						
				a	30													
584.00				a	60													
	98	70	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: LYN90-39

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
587.00				a	30						Rt#	^^ 587.0 610.0 Rhyolite Tuff, altered						
					60													
	98	60	R3	a	10	3												
589.00					30													
					60													
	98	85	R2	a	5	3												
				a	20													
				a	40													
595.50				b														
	98	80	R2	a	5	3												
				a	20						pRd/FZ	Note: @ 600.0-606.0 Rhyolite Porphyry Dike, possible fracture zone						
				a	40													
604.00				a														
	100	85	R3	a	5	3												
				b	20													
				c	60						Rcl	^^ 610.0 620.4 Rhyolite Crystal Lapilli Tuff						
				b														
614.00				c														
	100	95	R3	c	10	2												
				c	50													
				c							SL	^^ 620.4 629.0 Siltstone, altered	a					5
				b									a					5
624.00				a									a					5
	100	100	R3	a	20	2							a					5
				b	75								a					5
				a							ChT	^^ 629.0 639.0 Cherty Tuff, bedded white to lt. grey chert, with epidote along some beds	a					5
				a														
634.00				a														
	98	85	R3	a	10	3												
				a	30							Note: 638.0-640.0 Core broken						
				a	70													
640.00																		
	100	90	R3	a	10	3					Rc	** 639.0 661.0 RHYOLITE CRYSTAL TUFF						
				a	30													
645.00				a	70													
	100	100	R3	a	10	2												
648.00				a	40													
	99	85	R3	a	10	2												
651.00				b	50							Note: 649.0-659.0 Core broken/fractured						
	99	70	R3	b	10	2												
655.00				a	50													
	99	70	R3	a	10	2												
658.00				a	50													
	95	50	R3	a	10	2												
				a	50						SL	** 661.0 714.5 SILTSTONE						
662.00																		
	100	95	R3	a	10	2					SLp	^^ 661.0 667.3 Siltstone, with pyrrhotite	b					7
				a	50								b					7
668.60				a							SL	^^ 667.3 714.5 Siltst...	b					7

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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	95	R3	a	10	3						grey, no lithics or crystals, bleached, bedded						
				a	40													
				a	70													
675.00				a														
	100	85	R3	a	20	3												
678.00				a	40													
					65													
	100	85	R3	a	20	3												
				a	40													
				a	65													
686.00				a														
	99	70	R3	a	20	3												
688.60				a	40													
					65													
	99	85	R3	a	10	3												
				a	40													
				a	65													
696.00				a														
	99	85	R3	a	10	3												
698.00				a	30													
					65													
	98	70	R3	a	20	3												
701.60				a	40													
					60													
	99	85	R3	a	15	3												
704.00				a	40													
					80													
	100	80	R3	a	10	3												
				a	25													
710.00				a	70													
	100	90	R3	a	5	3												
				a	20						BPch,1	** 714.5 745.0 BEDDED PYRRHOTITE, with chert, alternating beds of massive pyrrhotite and greyish chert, or cherty tuff. Beds are 0.25"-0.50" thick, locally contorted with fluctuating bedding angles at 65-90 degrees	d					
				a	70								d					
				b									d					
720.00				c									d					
	100	100	R3	c	15	2							d					
				c	45								d					
				c									d					
				c									d					
730.00				c									d					
	100	100	R3	c	15	2							d					
				c	45								d					
				c									d					
				b									d					
740.00				b									d					
	100	95	R3	b	10	3							d					
				a	35								d					
				a	70						D	** 745.0 785.0 DACITE	d					
747.00				a									d					
	100	95	R3	a	10	3												

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

ROCK QUALITY:

DRILL HOLE: LYN90-39

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													
754.00				a	70													
	99	85	R3	a	10	3												
756.00					35													
					70													
	100	90	R3	a	10	3												
				a	40													
762.00				a	70													
	100	95	R3	a	10	3												
				a	45													
				a	60													
770.00				a														
	98	85	R3	a	10	3												
				a	30													
				a	50													
				b														
780.00				a														
	95	crush	R3	a	10	3						Note: 780.0-806.0 Core fractured/broken						
781.00					30													
					60													
	95	crush	R3	a	10	3												
782.50					30													
					60													
	99	85	R3	a	10	3												
784.00					30													
					60													
	99	85	R3	a	10	2												
785.00					50						pD							
	98	50	R3	a	10	2						** 785.0 804.0 DACITE, plag-phyric, dark grey dense, doesn't look like rhyolite crystal lapilli tuff						
787.50				a	50													
	100	95	R3	b	15	3												
790.50				b	30													
					65													
	100	95	R3	c	15	2												
793.50				c	30													
	100	95	R3	c	10	2												
796.00				c	30													
	98	85	R3	a	20	2												
798.00					60													
	98	85	R3	a	20	2												
800.00					60													
	98	80	R3	a	10	3												
802.50					30													
					60													
	99	85	R3	a	20	3					R1	** 804.0 817.0 RHYOLITE LAPILLI TUFF, brownish-greenish matrix with rounded unaltered patches						
				a	50													
807.50				a	70													
	100	90	R4	b	20	2												
				a	40													
814.00				c								Note: 814.0-819.0 Core broken						

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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
	99	75	R2	c	20	2												
				b	50						SLp	** 817.0 828.5 SILTSTONE, with pyrrhotite	c					5
819.50				a									c					5
	100	100	R3	a	15	2							c					5
				a	30						BP	^^ 822.0 828.5 Bedded Pyrrhotite	c					5
				a									c					5
				b							R	** 828.5 988.0 RHYOLITE	d					25
													d					25
											*R	^^ 828.5 840.0 Spherulitic Rhyolite	a					4
829.50													a					4
	99	90	R3	a	30	2							a					4
832.00				a	50								a					4
	99	65	R2	a	20	2							a					4
835.50				a	50								a					4
	100	70	R2	a	20	2							a					4
839.00				a	50								a					4
	98	80	R2	a	10	2							a					4
840.50					50						Wl	^^ 840.0 866.0 Lapilli Wacke	a					4
	98	70	R2	a	25	2							a					4
844.00				a	50													
	99	60	R3	a	25	2												
848.00				a	50													
	100	100	R3	b	15	2												
				a	40													
854.00				a														
	100	90	R3	a	10	3												
				a	30													
				a	60													
862.00				a														
	100	85	R3	a	15	3												
865.00				a	30						Rc	^^ 866.0 903.0 Rhyolite Crystal Tuff, granophyric matrix						
					60													
	98	crush	R3	a	10	2												
867.00				a	70													
	100	85	R3	a	20	3												
870.00				a	50													
					70													
	100	100	R3	a	20	2												
873.00				a	70													
	100	100	R3	a	20	2												
876.00				b	60													
	99	90	R3	b	10	3												
878.00					30													
					60													
	99	75	R3	a	10	3												
882.00				a	30													
					60							Note: 882.0-903.0 Core fractured/broken						
	99	50	R3	a	10	3												
883.00					30													
					60													

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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	50	R3	a	20	3												
885.00					40													
					70													
	95	crush	R3	a	20	3												
887.00				a	40													
					70													
	90	crush	R3	a	20	3												
888.00					40													
					70													
	98	85	R3	a	20	2												
892.00				a	40							Note: Core mislatch						
	10	crushed																
896.00																		
	98	80	R3	a	20	3												
897.50					40													
					70													
	99	50	R3	a	20	3												
899.00					40													
					70													
	98	40	R3	a	10	3												
902.00				a	40													
					70						*R	^^ 903.0 913.0 Spherulitic Rhyolite						
	95	crush	R3	a	10	3												
903.00					40													
					70													
	100	85	R3	b	10	3												
				b	40													
				b	70													
				a														
912.00				b														
	99	90	R3	c	20	3					R1	^^ 913.0 930.0 Rhyolite Lapilli Tuff						
				b	40													
				a	70													
917.00																		
	90	crush	R3	a														
918.50																		
	95	crush	R3	a	10	3												
922.00				a	40													
					60													
	100	85	R3	b	1	2												
				a	30													
927.00				a														
	100	80	R3	b	10	3												
				a	40													
932.00				a	70						QD	^^ 931.8 932.2 Quartz Diorite						
	99	70	R3	a	10	3					QD	^^ 934.2 935.6 Quartz Diorite						
				a	40													

ROCK QUALITY:

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

DRILL HOLE: LYN90-39

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	75	R3	b	20	3												
				b	45													
				b	70													
				a							QD	^^ 947.0 972.0 Quartz Diorite						
949.00				a														
	100	90	R3	a	20	2												
				a	45													
				a														
958.00				a														
	99	75	R3	a	20	2												
				a	45													
				a														
966.50				a								Note: 966.0-990.0 Core fractured/broken						
	99	75	R3	a	20	2												
970.00				a	45													
	98	50	R3	a	20	2												
				a	45													
				a														
977.00				a														
	98	70	R3	a	20	2												
980.00				b	45													
	99	70	R3	b	10	2												
				a	40													
				a														
988.00				a							gQD	xx 988.0 1014.0 QUARTZ DIORITE, Granophyric						
	99	crush	R3	a	30	2												
990.00					60													
	100	95	R3	a	10	2												
				a	40													
				a														
997.00				a														
	100	100	R3	a	10	2												
				a	40													
1004.00				a														
	100	100	R3	a	10	2												
				a	40													
				a														
				a														
1014.00				a								E.O.H. 1014' (total depth)						

Noranda Exploration Inc.
Eastern Divison

DATE: 7-18-91
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HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.0	-60.0
250'	179.0	-60.5
400'	179.0	-60.9
650'	180.0	-60.5
791'	180.8	-60.3

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-27-90
REMARKS: "VV" of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-40 (WDNR #174)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-4-90

BEARING: S179.2E INCLINATION: -60.0 T.D: 794'
COORDINATES: L10000 E, 11480 N
ELEV: 1559.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 58.0			0.0 58.0 OVERBURDEN	
58.0 64.0	(not recovered)			
64.0 69.0	(HQ core)			
58.0 225.0		R	58.0 225.0 RHYOLITE	
225.0 270.0		SL,l	225.0 270.0 SILTSTONE, Laminated	
270.0 439.0		R	270.0 439.0 RHYOLITE	
439.0 507.6		SS/SL	439.0 507.6 SANDSTONE/SILTSTONE	
507.6 538.0		Rl	507.6 538.0 RHYOLITE LAPILLI TUFF	
528.0 532.0		pMd	528.0 532.0 Plag-phyric Mafic Dike	
538.0 549.0		Rts	538.0 549.0 RHYOLITE TUFF, With Sulfides	
543.0 547.3		pMd	543.0 547.3 Plag-phyric, Mafic Dike	
549.0 560.0		Xz,t	549.0 560.0 TUFFITE, Stringery, Talcose	549.0 560.0 20% Sp, 5% Ga
560.0 567.0		CT,t	560.0 567.0 CALCAREOUS TUFF, Talcose	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.0	-60.0
250'	179.0	-60.5
400'	179.0	-60.9
650'	180.0	-60.5
791'	180.8	-60.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-27-90
REMARKS: "VV" of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-40 (WDNR #174)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-4-90

BEARING: S179.2E INCLINATION: -60.0 T.D: 794'
COORDINATES: L10000 E, 11480 N
ELEV: 1559.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
567.0 576.0		Xz,t	** 567.0 576.0 TUFFITE, Stringery, Talcose	
576.0 584.7		CT,t	** 576.0 584.7 CALCAREOUS TUFF, Talcose, With Sulfides	
584.7 597.0		Rt,s	** 584.7 597.0 RHYOLITE TUFF, With Sulfides	584.7 597.0 10% Sp, 2% Ga
597.0 605.3		Xz,t	** 597.0 605.3 TUFFITE, Talcose, Stringery	
605.3 613.6		MS	** 605.3 613.6 MASSIVE SULFIDE	605.5 613.6 30% Sp, 5% Ga
613.6 617.6		Rts,t	** 613.6 617.6 RHYOLITE TUFF, With Sulfide, Talcose	613.6 617.6 3% Cp, 2% Sp
617.6 621.0		Xz,p	** 617.6 621.0 TUFFITE, Stringery, Talcose	617.6 621.0 10% Sp, 1% Cp
621.0 625.3		Rts,t	** 621.0 625.3 RHYOLITE TUFF, Talcose, With Sulfides	621.0 625.3 4% Sp, 2% Ga
625.3 668.0		CT	** 625.3 668.0 CALCAREOUS TUFF	
668.0 672.7		CTs	** 668.0 672.7 CALCAREOUS TUFF, With Sulfides	668.0 672.7 7% Sp, 1% Ga

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.0	-60.0
250'	179.0	-60.5
400'	179.0	-60.9
650'	180.0	-60.5
791'	180.8	-60.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-27-90
REMARKS: 'VV' of drill proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-40 (WDNR #174)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-4-90

BEARING: S179.2E INCLINATION: -60.0 T.D: 794'
COORDINATES: L10000 E, 11480 N
ELEV: 1559.5' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
672.7 692.0		Xca	><< 672.7 692.0 TUFFITE, Calcareous	672.7 692.0 15% Sp
692.0 698.5		Rt#	><< 692.0 698.5 RHYOLITE TUFF, Altered	
698.5 713.5		CT	><< 698.5 713.5 CALCAREOUS TUFF	
713.5 719.0		Xca	><< 713.5 719.0 TUFFITE, Calcareous	713.5 719.0 12% Sp, 3% Ga
719.0 740.3		Xz,t	><< 719.0 740.3 TUFFITE, Stringery, Talcose	719.0 740.3 20% Sp
740.3 794.0		QD	><< 740.3 794.0 QUARTZ DIORITE	
740.3 759.0		gQD	^^ 740.3 759.0 Quartz Diorite, Granophyric	
			E.O.H. 794' (total depth)	

DRILL HOLE: LYN90-40

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 58.0												⋇⋇ 0.0 58.0 OVERBURDEN						
												^^ 0.0 40.0 Sand						
												^^ 40.0 50.0 Sand and gravel						
												^^ 50.0 58.0 Sand, gravel, and boulders						
											R	⋇⋇ 58.0 225.0 RHYOLITE						
								TAH relogged to 525'			pRb	^^ 58.0 143.0 Rhyolite Breccia, Porphyritic. Greenish-grey fine to medium-grained matrix, with red granophyric angular to subangular clasts, clasts range in size from 0.5-2.0"						
64.00																		
	100	100	R3	b	30	2												
67.00				b	50													
	100	100	R3	a	20	2												
69.00					50													
	100	100	R3	a	10	3												
				a	30													
74.00				a	50													
	100	90	R3	a	10	2												
				a	35													
80.50				a														
	100	95	R3	a	10	2												
84.00				a	35													
	100	100	R3	b	10	2												
				b	35													
90.00				b														
	99	80	R3	a	10	2												
				a	35													
96.00				a														
	100	100	R3	a	10	2												
100.00				b	50													
	Sand																	
101.00																		
	99	85	R3	a	10	2												
104.00				a	60													

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.2	-51.6
300'	179.6	-51.9
500'	181.0	-52.3
700'	181.9	-52.8
832'	182.2	-53.1

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-3-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-41 (WDNR #187)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-10-90

BEARING: S178.2E INCLINATION: -51.9 T.D: 832'
COORDINATES: L10200 E, 11366 N
ELEV: 1565.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-11-92
PAGE 1 OF 12

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 73.0			** 0.0 73.0 OVERBURDEN	
73.0 76.0	(not recovered)			
76.0 78.0	(HQ core)			
73.0 94.0		SW	** 73.0 94.0 LITHIC WACKE	
94.0 122.7		D	** 94.0 122.7 DACITE	
122.7 141.5		SW	** 122.7 141.5 LITHIC WACKE	
141.5 228.0		SL	** 141.5 228.0 SILTSTONE, Laminated	
143.3 149.5		Rt,l	^^ 143.3 149.5 Rhyolite Tuff, Laminated	
228.0 266.7		D	** 228.0 266.7 DACITE	
266.7 271.0		WCh	** 266.7 271.0 CHERT/WACKE	
271.0 273.4		SSCh	** 271.0 273.4 CHERTY SANDSTONE	
273.4 407.0		Rcl	** 273.4 407.0 RHYOITE CRYSTAL LAPILLI TUFF	
285.0 311.0		pD	^^ 285.0 311.0 Porphyritic Dacite	
311.0 317.0		Rcl	^^ 311.0 317.0 Rhyolite Crystal Lapilli Tuff	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.2	-51.6
300'	179.6	-51.9
500'	181.0	-52.3
700'	181.9	-52.8
832'	182.2	-53.1

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-3-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-41 (WDNR #187)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-10-90

BEARING: S178.2E INCLINATION: -51.9 T.D: 832'
COORDINATES: L10200 E, 11366 N
ELEV: 1565.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-11-92
PAGE 1 OF 12

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
317.0 331.3		glR	^^ 317.0 331.3 Granophyric Intrusive Rhyolite	
331.3 339.0		pD	^^ 331.3 339.0 Porphyritic Dacite Flow	
339.0 346.0		glR	^^ 339.0 346.0 Granophyric Intrusive Rhyolite	
346.0 351.5		pD	^^ 346.0 351.5 Porphyritic Dacite	
351.5 364.0		Rcl	^^ 351.5 364.0 Rhyolite Crystal Lapilli Tuff	
407.0 413.0		Rt	** 407.0 413.0 RHYOLITE TUFF	
413.0 441.0		Rcl	** 413.0 441.0 RHYOLITE CRYSTAL LAPILLI TUFF	
418.0 425.0		pMd	^^ 418.0 425.0 Plag-phyric Mafic Dikes	
425.0 429.0		gR	^^ 425.0 429.0 Granophyric, Altered	
441.0 463.5		ChT	** 441.0 463.5 CHERTY TUFF	
463.5 495.0		ChCx	** 463.5 495.0 CHERTY TUFF, Diopside-altered	
495.0 515.8		Rl	** 495.0 515.8 RHYOLITE LAPILLI TUFF	
515.8 534.0		Chc*,CT	** 515.8 534.0 INTERBEDDED CALCAREOUS TUFF, Diopside Cherty Tuff	
534.0 637.7		CT	** 534.0 637.7 CALCAREOUS TUFF	
555.0 556.5		Xzca	^^ 555.0 556.5 Tuffite, Stringery, Calcareous	555.0 556.5 10% Sp
564.0 565.5		Xca	^^ 564.0 565.5 Tuffite, Calcareous	564.0 565.5 15% Sp

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.2	-51.6
300'	179.6	-51.9
500'	181.0	-52.3
700'	181.9	-52.8
832'	182.2	-53.1

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-3-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-41 (WDNR #187)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-10-90

BEARING: S178.2E INCLINATION: -51.9 T.D: 832'
COORDINATES: L10200 E, 11366 N
ELEV: 1565.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
637.7 649.0		Xz,t	** 637.7 649.0 TUFFITE, Talcose, Stringery	637.7 649.0 12% Sp
649.0 662.0		MS,t	** 649.0 662.0 MASSIVE SUFIDE, Talcose	649.0 662.0 45% Sp, 4% Ga
662.0 676.0		Xz,t	** 662.0 676.0 TUFFITE, Stringery, Talcose	662.0 676.0 15% Sp
676.0 687.0		Rt,t	** 676.0 687.0 RHYOLITE TUFF, Talcose	
687.0 692.5		Xz,t	** 687.0 692.5 TUFFITE, Stringery, Talcose	687.0 692.5 10% Sp, 1% Cp
689.7 691.0		QD	^^ 689.7 691.0 Quartz Diorite	
692.5 695.0		BPs	** 692.5 695.0 BEDDED PYRRHOTITE, With Sulfides	692.5 695.0 4% Sp, 1% Cp
695.0 711.0		Rt	** 695.0 711.0 RHYOLITE TUFF	
711.0 725.0		Rt,t	** 711.0 725.0 RHYOLITE TUFF, Talcose	
725.0 735.0		Xz,t	** 725.0 735.0 TUFFITE, Stringery, Talcose	725.0 735.0 20% Sp, 2% Cp
735.0 738.0		Rt	** 735.0 738.0 RHYOLITE TUFF (Hornfelsed)	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.2	-51.6
300'	179.6	-51.9
500'	181.0	-52.3
700'	181.9	-52.8
832'	182.2	-53.1

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-3-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-41 (WDNR #187)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-10-90

BEARING: S178.2E INCLINATION: -51.9 T.D: 832'
COORDINATES: L10200 E, 11366 N
ELEV: 1565.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
738.0 832.0		QD	** 738.0 832.0 QUARTZ DIORITE	
			E.O.H. 832' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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 73.0												** 0.0 73.0 OVERBURDEN						
												^^ 0.0 50.0 Fine sand						
												^^ 50.0 65.0 Silty sand						
												^^ 65.0 73.0 Sand, gravel, and boulders						
76.00											SW	** 73.0 94.0 LITHIC WACKE, lt. grey, granophyric matrix with angular reddish and black fragments						
	100	100	R3	c	25	1												
78.00																		
	100	90	R3	a	10	2												
				b	50													
				b														
				a														
				a														
90.00				b														
	99	95	R3	b	20	2												
				b	50						D	** 94.0 122.7 DACITE, dark grey, fine-grained, with patchy epidote alteration						
95.00				b														
	100	95	R3	b	10	2												
				b	30													
				b														
103.00				c														
	100	100	R3	c	20	3												
				b	35													
109.00				c	70													
	100	100	R3	c	70	1												
113.00				c														
	100	100	R3	c	30	1												
117.00				b														
	100	100	R3	c	20	2												
121.00				b	60						SW	** 122.7 141.5 LITHIC WACKE, grey to lt. grey matrix, with smaller, more angular fragments than above						
	100	100	R3	b	10	2												
123.00					40													
	100	95	R3	a	15	2												
				b	60													

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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				b														
	100	100	R3	b	10	3												
				b	30													
133.00				a	70													
	100	100	R3	a	5	3												
137.00				a	30													
					60													
	100	100	R3	a	5	3					SL	** 141.5 228.0 SILTSTONE, laminated						
				a	40													
143.00				a	60						Rt,l	^^ 143.3 149.5 Rhyolite Tuff, laminated						
	100	100	R3	a	10	2												
147.00				a	40													
	100	100	R3	a	10	2												
149.00					40					-50B		Note: @ 150.0-154.0 Crystal-rich base						
	100	100	R3	a	10	2												
153.00				b	30													
	100	95	R3	b	10	2												
				a	30													
160.00				a								Note: @ 159.0-177.0 Occasional						
	100	100	R3	b	10	2						laminations and lapilli-rich intervals						
163.00				a	30													
	100	95	R3	a	10	2												
				a	30					-60B		Note: @ 167.0-169.0 Lithic Wacke						
				a														
				a														
173.00				a														
	100	95	R3	a	20	1												
177.00				a														
	100	100	R3	a	10	2												
182.50				a	50													
	100	95	R3	b	10	3												
				b	30													
188.00				a	60													
	100	90	R3	a	5	3												
				a	30													
				a	60													
				a								Note: @ 196.0-205.0 Fracturing parallel						
198.00				a								to core axis						
	100	95	R3	a	5	3												
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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													
				a														
207.00				a														
	100	95	R3	a	5	3												
				a	20													
				a	50													
				a														
217.00				a														
	100	100	R3	a	10	2												
221.00				b	40													
	100	95	R3	c	5	3						Note: @ 225.0-230.0 Broken core						
				a	20													
				b	40						D	** 228.0 266.7 DACITE						
229.00				b														
	100	100	R3	a	5	2												
233.00				a	20													
	100	100	R3	a	5	3												
				a	20													
				a	40													
				b														
243.00				a														
	100	100	R3	a	20	3												
248.00				a	40													
					60													
	100	100	R3	a	10	3												
				a	40													
				a	60													
				a														
257.00				a														
	100	90	R3	a	10	3												
				a	30							Note: Core sheared/altered @ 266.7-269.0						
				a	50													
				a							WCh	** 266.7 271.0 CHERT/WACKE						
267.00				a														
	100	100	R3	a	10	3												
				a	30						SSCh	** 271.0 273.4 CHERTY SANDSTONE						
				a	50													
273.00											Rcl	** 273.4 407.0 RHYOLITE CRYSTAL LAPILLI TUFF						
	100	100	R3	a	10	3												
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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							Note: @ 275.0-280.0 Carbonate alteration						
				a														
283.00				b														
	100	100	R3	a	5	3					pD	^^ 285.0 311.0 Porphyritic Dacite,						
				a	20							bleached toward base by carb veinlets						
				a	50													
				a														
293.00				a														
	100	100	R3	a	5	3												
				a	20													
				a	70													
				a														
303.00				a														
	100	100	R3	a	10	3												
				a	40													
				a	70													
				a							Rcl	^^ 311.0 317.0 Rhyolite Crystal Lapilli						
313.00				a								Tuff						
	100	100	R3	a	10	3												
				a	40						gIR	^^ 317.0 331.3 Granophyric Intrusive						
				a	70							Rhyolite, greenish						
				a														
323.00				a														
	100	100	R3	a	10	3												
				a	30													
329.00				a	55					-40C								
	100	100	R3	a	10	4					pD	^^ 331.3 339.0 Porphyritic Dacite Flow						
333.00				a	30													
					50													
					70													
	100	100	R3	a	5	4												
337.00				a	20													
					50						gIR	^^ 339.0 346.0 Granophyric Intrusive						
					70							Rhyolite						
	100	100	R3	a	5	4												
				a	20													
343.00				a	40													
					60					-75C	pD	^^ 346.0 351.5 Porphyritic Dacite						
	100	100	R3	a	5	4												
				a	20													

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	40					-70C								
				a	70						Rcl	^^ 351.5 364.0 Rhyolite Crystal Lapilli Tuff						
353.00				a														
	100	100	R3	a	10	3												
				a	40													
				a	70													
				a														
363.00				a														
	100	100	R3	a	10	3												
				c	30													
369.00				b	60													
	100	100	R3	b	20	3												
				a	40													
				a	60													
				a														
379.00				a														
	100	100	R3	a	20	2												
				b	40													
				c														
387.00				c														
	100	95	R3	c	20	2												
				c	40													
393.00				a														
	100	100	R3	a	20	2												
394.00					40													
	100	100	R3	b	20	2												
				c	40													
				c														
				c														
403.00				c														
	100	100	R3	c	10	2												
				c	30						Rt*	** 407.0 413.0 RHYOLITE TUFF, altered						
				b														
				a														
413.00				b							Rcl	** 413.0 441.0 RHYOLITE CRYSTAL LAPILLI TUFF, brownish matrix						
	100	100	R3	b	5	2												
				b	30													
				c						-30C	pMd	^^ 418.0 425.0 Plag-phyric Mafic Dike						
				c														
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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 -30C	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
423.00																		
	100	100	R3	a	20	2					gR	^^ 425.0 429.0 Granophyric, altered						
426.00				a	70													
	100	100	R3	a	15	3												
				a	30													
				b	50													
433.00				c														
	100	95	R3	a	20	2												
				a	50													
440.00				a														
	100	100	R3	a	10	2					ChT	** 441.0 463.5 CHERTY TUFF						
442.00					30													
	100	95	R3	a	10	2												
446.00				a	30													
	99	85	R3	a	10	2												
450.00				a	30													
	100	100	R3	a	20	2												
453.00				a	60													
	100	90	R3	a	30	2												
458.00				a	60													
	99	90	R3	a	10	3												
460.00					40													
					60													
	100	100	R3	a	5	3												
461.00					30													
					50													
											ChC*	** 463.5 495.0 CHERTY TUFF, diopside-altered	c	7	2			
	100	100	R2	a	10	3												
				b	30													
				b	50													
				a														
471.00				b														
	100	100	R3	a	10	2												
				a	50													
				c														
				c														
481.00				c														
	100	100	R3	c	10	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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
483.00					40													
	100	100	R3	b	25	2												
				b	50													
				b														
				b														
493.00				c														
	100	95	R3	a	10	3												
496.00				a	40						R1	** 495.0 515.8 RHYOLITE LAPILLI TUFF						
					60													
	100	70	R3	a	10	2												
				a	40													
501.00				a														
	100	100	R3	b	30	2												
				a	50													
507.00				a														
	100	100	R3	b	20	2												
				b	70													
				c														
				b							CHC*,CT	** 515.8 534.0 INTERBEDDED DIOPSIDE-ALTERED CHERTY TUFF AND CALCAREOUS TUFF						
517.00				a														
	100	100	R2	c	20	2												
				a	50													
				a														
525.00				b														
	100	100	R2	b	20	2												
				c	40													
				c														
533.00				b							CT	** 534.0 637.7 CALCAREOUS TUFF						
	100	100	R2	b	10	3												
				b	30													
				b	60													
				b														
543.00				b														
	100	100	R2	b	30	2												
				b	50													
				b														
551.00				b														
	100	100	R2	b	30	2												
				c	50						Xzca	^^ 555.0 556.5 Tuffite, stringery, calcareous	c	10				
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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														
560.00				b														
	100	90	R2	b	30	2												
				b	60						Xca	^^ 564.0 565.5 Tuffite, calcareous	c	15				
				b														
				a														
570.00				a														
	100	100	R2	a	40	2												
				b	60													
				a														
577.00				c														
	100	100	R2	c	50	1												
				c														
				c														
				c														
587.00				c														
	100	100	R2	c	30	2												
				c	50													
				c														
				c														
597.00				c														
	100	100	R2	c	30	2												
				c	50													
				c														
				c														
607.00				c														
	100	100	R2	c	20	2												
				c	50													
				a														
				b														
617.50				b														
	100	100	R2	c	10	2												
				c	50													
				b														
				c														
628.00				c														
	100	100	R2	c	20	2												
				c	50													
				a														
				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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
638.00				a							Xz,t	** 637.7 649.0 TUFFITE, talcose, stringery	c	12	1			
	99	90	R2	b	30	2							c	12	1			
				b	50								c	12	1			
				b									c	12	1			
				a									c	12	1			
647.00				a									c	12	1			
	100	100	R2	c	50	1							c	12	1			
649.00											MS	** 649.0 662.0 MASSIVE SULFIDE	c	12	1			
	100	100	R2	c	30	2							e	45		4		
				c	50								e	45		4		
				c									e	45		4		
				b									e	45		4		
659.00				c									e	45		4		
	100	100	R2	c	40	1					Xz,t	** 662.0 676.0 TUFFITE, stringery, talcose	e	45		4		
				c									c	12				
				c									c	12				
				c									c	12				
669.00				c									c	12				
	100	100	R2	c	40	1							c	12				
674.00				c									c	12				
	100	100	R2	c	20	2					Rt,t	** 676.0 687.0 RHYOLITE TUFF, talcose	c	12				
				c	50								c	12				
				c														
682.00				c														
	100	95	R2	c	50	1												
				c							Xz,t	** 687.0 692.5 TUFFITE, stringery, talcose	c	10	1			3
				c									c	10	1			3
				b									c	10	1			3
				b									c	10	1			3
691.00											BPs	** 692.5 695.0 BEDDED PYRRHOTITE, with sulfides	c	10	1			3
	100	100	R2	b	50	1							c	4	1			10
				b									c	4	1			10
				b									c	4	1			10
				c							Rt	** 695.0 711.0 RHYOLITE TUFF	c	4	1			10
				c														
701.00																		
	100	100	R3	c	10	2												
				c	40													
				b														
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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
711.00				a							Rt,t	** 711.0 725.0 RHYOLITE TUFF, talcose						
	100	100	R2	c	10	2												
				a	30													
				a														
719.00				a														
	100	100	R2	a	20	2												
				b	60													
				c							Xz,t	** 725.0 735.0 TUFFITE, stringery, talcose	c	20	2			
				c									c	20	2			
729.00				c									c	20	2			
	100	100	R2	c	10	2							c	20	2			
				c	40								c	20	2			
				c							Rt	** 735.0 738.0 RHYOLITE TUFF, hornfelsed	c	20	2			
				a														
				b														
739.00											QD	** 738.0 832.0 QUARTZ DIORITE						
	100	100	R3	b	15	1												
				b														
				a														
				a														
749.00				b														
	100	100	R3	b	15	1												
753.00				b														
	100	100	R3	b	20	1												
				a														
				b														
				b														
763.00				b														
	100	100	R3	b														
				b														
				b														
				b														
773.00				b														
	100	100	R3	b	20	2												
				c	40													
				c														
				a														
783.00				a														
	100	100	R3	c	10	1												
787.00				c														

ROCK QUALITY:

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

DRILL HOLE: LYN90-41

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	100	R3	c	20	1												
				c														
793.00				c														
	100	100	R3	c	20	1												
				c														
				c														
				c														
803.00				c														
	100	100	R3	a	20	2												
				a	50													
				c														
				c														
813.00				c														
	100	100	R3	c	20	2												
				c	40													
				c														
				c														
823.00				a														
	100	100	R3	a	10	2												
				a	30													
				a														
832.00				a								E.O.H. 832' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.69	-68.64
300'	177.19	-68.80
500'	178.24	-69.17
800'	180.33	-68.94
1002'	184.85	-68.87

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-4-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-42 (WDNR #186)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-13-90

BEARING: S177.8E INCLINATION: -68.3 T.D: 1002'
COORDINATES: L10400 E, 11500 N
ELEV: 1565.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-30-91
PAGE 1 OF 15

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 60.0			><< 0.0 60.0 OVERBURDEN	
60.0 64.0	(not recovered)			
64.0 80.0	(HQ core)			
80.0 235.0		Rc,Rt	><< 60.0 235.0 RHYOLITE CRYSTAL TUFF	
174.0 226.0		Wq/SL	^^ 174.0 226.0 Interbedded Quartz Wacke, Siltstone, Altered	
235.0 314.0		Rlc	><< 235.0 314.0 RHYOLITE LAPILLI CRYSTAL TUFF	
314.0 371.5		Rt	><< 314.0 371.5 RHYOLITE TUFF	
317.5 324.0		pRd	^^ 317.5 324.0 Rhyolite Porphyry Dike	
371.5 393.0		SL	><< 371.5 393.0 SILTSTONE	
393.0 454.0		Wq	><< 393.0 454.0 QUARTZ WACKE	
401.5 407.5		pRd	^^ 401.5 407.5 Rhyolite Porphyry Dike	
413.0 439.0		pRd	^^ 413.0 439.0 Rhyolite Porphyry Dike Swarm	
454.0 503.3		Rlc	><< 454.0 503.3 RHYOLITE LAPILLI CRYSTAL TUFF	
503.3 524.0		Rlc	><< 503.3 524.0 RHYOLITE LAPILLI CRYSTAL TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.69	-68.64
300'	177.19	-68.80
500'	178.24	-69.17
800'	180.33	-68.94
1002'	184.85	-68.87

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-4-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-42 (WDNR #186)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-13-90

BEARING: S177.8E INCLINATION: -68.3 T.D: 1002'
COORDINATES: L10400 E, 11500 N
ELEV: 1565.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-30-91
PAGE 1 OF 15

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
524.0 556.0		Rt	>< 524.0 556.0 RHYOLITE TUFF	
526.0 549.0		FZ/pRd	^^ 526.0 549.0 Rhyolite Porphyry Dike Swarm/Fracture Zone	
556.0 580.0		Rlc	>< 556.0 580.0 RHYOLITE LAPILLI CRYSTAL TUFF	
580.0 633.5		Rt	>< 580.0 633.5 RHYOLITE TUFF	
588.0 595.0		Rcl	^^ 588.0 595.0 Rhyolite Crystal Lapilli Tuff	
633.5 647.8		Rc	>< 633.5 647.8 RHYOLITE CRYSTAL TUFF	
639.4 643.0		SL,p	^^ 639.4 643.0 Siltstone, With Pyrrhotite	639.4 643.0 5% Po
647.8 652.5		ChT*	>< 647.8 652.5 CHERTY TUFF, Altered	
652.5 658.5		SL,lmp	>< 652.5 658.5 SILTSTONE, Laminated, With Pyrrhotite & Magnetite	
658.5 664.7		SL,p	>< 658.5 664.7 SILTSTONE, With Pyrrhotite	
664.7 680.0		SL,>R	>< 664.7 680.0 SILTSTONE/SPHERULITIC RHYOLITE	
680.0 686.7		Rt	>< 680.0 686.7 RHYOLITE TUFF	
686.7 691.0		TS,p	>< 686.7 691.0 TALCOSE SEDIMENT, With Pyrrhotite	686.7 691.0 5% Po, Mt

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.69	-68.64
300'	177.19	-68.80
500'	178.24	-69.17
800'	180.33	-68.94
1002'	184.85	-68.87

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-4-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-42 (WDNR #186)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-13-90

BEARING: S177.8E INCLINATION: -68.3 T.D: 1002'
COORDINATES: L10400 E, 11500 N
ELEV: 1565.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-30-91
PAGE 1 OF 15

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
691.0 694.5		TS,p	⋇⋇ 691.0 694.5 TALCOSE SEDIMENT, With Pyrrhotite And Sulfides	691.0 694.5 5% Sp, 5% Po
694.5 705.0		TS,p	⋇⋇ 694.5 705.0 TALCOSE SEDIMENT, With Pyrrhotite	
705.0 711.0		TS,p	⋇⋇ 705.0 711.0 TALCOSE SEDIMENT, With Pyrrhotite	
711.0 715.5		BP	⋇⋇ 711.0 715.5 BEDDED (MASSIVE) PYRRHOTITE	711.0 715.5 60% Po
715.5 728.0		Rt	⋇⋇ 715.5 728.0 RHYOLITE TUFF	
728.0 733.0		Xp*	⋇⋇ 728.0 733.0 TUFFITE, Altered, With Pyrrhotite	728.0 733.0 12% Sp, 2% Ga
733.0 744.0		BPch,l	⋇⋇ 733.0 744.0 BEDDED PYRRHOTITE, With Chert, Laminated	
744.0 827.0		Rt	⋇⋇ 744.0 827.0 RHYOLITE TUFF	
744.0 759.6		Rt*	^^ 744.0 759.6 Spotted Alteration	
827.0 842.0		⋇R	⋇⋇ 827.0 842.0 SPHERULITIC RHYOLITE	
842.0 948.5		Rtch	⋇⋇ 842.0 948.5 RHYOLITE TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.69	-68.64
300'	177.19	-68.80
500'	178.24	-69.17
800'	180.33	-68.94
1002'	184.85	-68.87

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 12-4-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-42 (WDNR #186)

DATE: 12-30-91
PAGE 1 OF 15

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 12-13-90

BEARING: S177.8E INCLINATION: -68.3 T.D: 1002'
COORDINATES: L10400 E, 11500 N
ELEV: 1565.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
907.0 915.0		FZ	^^ 907.0 915.0 Fracture Zone	@ 907.0 915.0, @ 926.0-931.0, @ 942.0-944.0, Sheared Chloritic, carbonate intervals
926.0 931.0		SZ	^^ 926.0 931.0 Shear Zone	
942.0 944.0		SZ	^^ 942.0 944.0 Shear Zone	
948.5 1002		gQD	** 948.5 1002.0 QUARTZ DIORITE, Granophyric	
			E.O.H. 1002' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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 60.0												** 0.0 60.0 OVERBURDEN						
												~~ 0.0 40.0 Fine sand						
												~~ 40.0 50.0 Silty sand						
												~~ 50.0 60.0 Sand, gravel, and cobbles						
											Rt	** 60.0 235.0 RHYOLITE TUFFS						
											D	~~ 60.0 87.0 Dacite, medium to light grey, fine-grained, some epidote bleaching						
64.00																		
	99	95	R3	c	10	1												
66.80																		
	100	100	R3	b	10	2												
68.00					30													
	100	100	R3	b	10	2												
70.00					30													
	100	100	R3	b	10	2												
74.00				c	30													
	100	100	R3	c	10	2												
78.00				c	40													
	100	100	R3	c	10	2												
80.00					40													
	100	100	R3	c	10	2												
				b	30							Note: @ 83.0-87.0 Occasional laminations						
85.00				c														
	100	100	R3	c	10	2					Wq	~~ 87.0 94.5 Quartz Wacke, greenish grey matrix						
				a	30													
				c														
				c							Rt	~~ 94.5 174.0 Rhyolite Tuff, dark grey, fine-grained						
95.00				a														
	100	100	R4	a	10	2												
				b	70													
				a														
				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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
105.00				a														
	100	100	R4	b	20	2												
107.00					70													
	100	100	R3	b	10	2												
110.00				b	30													
	100	100	R3	a	10	2												
				b	30													
115.00				b														
	100	95	R3	b	10	2												
118.00				b	30													
	100	95	R4	a	10	2												
122.00				b	30													
	100	95	R4	b	10	2												
126.00				b	40													
	100	95	R3	a	10	2												
				b	30													
				c														
134.00				a														
	100	95	R4	b	10	3												
				b	30													
140.00				a	60													
	100	100	R4	c	10	2												
				c	30													
145.00				c														
	100	100	R4	b	20	2												
				b	40													
				c								Note: @ 150.0-160.0 Broken core						
152.00				c														
	80	80	R3	b	10	2						Note: 1' Core loss, mislatch						
				b	30													
158.00				b														
	100	100	R3	b	10	2												
160.00					30													
	100	90	R3	b	10	2												
				b	30													
166.00				c								Note: @ 165.0-173.0 Broken core						
	100	90	R3	b	10	2												
169.50				b	30													
	99	90	R3	b	10	3												
172.00					30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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						Wq/SL	^^ 174.0 226.0 Interbedded Quartz Wacke/						
	100	95	R3	b	10	3						Siltstone, greenish-grey epidote						
				c	30							bleaching, also fracturing parallel to						
				a	50							core axis @ 180.0-190.0						
179.50				b														
	100	90	R3	c	10	1												
				c														
185.00				c														
	100	90	R2	c	10	2												
				b	30													
				b														
194.50				b														
	100	100	R3	a	10	2												
				b	30													
				a														
				b														
204.00				c														
	99	90	R3	b	20	2												
				c	40													
				a								Note: @ 210.0-214.0 Possible fracture						
				a								zone-red alteration along fractures						
215.00				b								and gouge at 212.0						
	100	90	R3	b	10	2												
				b	30													
221.00				a														
	100	100	R3	b	10	2												
				a	30							Note: @ 226.0-235.0 Altered intervals						
				a								and breccia (?) intervals, transitional						
				b								to underlying unit						
231.00				a														
	100	100	R3	b	10	2												
				a	30													
236.00				a							R1c	** 235.0 314.0 RHYOLITE LAPILLI CRYSTAL						
	99	95	R3	a	10	2						TUFF, greenish-grey, crystal and lapilli-						
238.00					30							rich matrix, with rounded to sub-						
	100	95	R3	a	10	2						angular fragments						
241.00				b	40													
	100	100	R3	c	10	2						Note: @ 235.0-239.0 Almost conglomeritic,						
243.00					30							with rounded pink fragments						
	100	90	R3	c	10	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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													
249.00				c														
	100	100	R3	c	40	1												
250.00																		
	100	100	R3	c	10	1												
				c														
255.00				c														
	100	100	R3	c	50	1												
				c														
				c														
				c														
265.00				c														
	100	100	R3	c	10	2												
				c	30													
				c														
				c														
275.00				a														
	100	100	R3	b	10	2												
				b	30													
280.50				b							pRd	^^ 280.2 286.8 Rhyolite Porphyry Dike						
	100	100	R3	a	10	2												
283.00				a	30													
	100	100	R3	a	10	2												
287.00				a	30													
	100	95	R3	c	10	2												
				b	40													
292.00				b														
	100	100	R3	b	10	1												
295.00				a														
	100	100	R3	c	10	1												
				c														
301.50				b							pRd	^^ 301.0 309.5 Rhyolite Porphyry Dike						
	100	100	R3	c	10	2												
304.50				b	30													
	100	100	R3	c	20	1												
				b														
				a														
				c														
				b							Rt	** 314.0 371.5 RHYOLITE TUFF						
315.00				b														

DRILL HOLE: LYN90-42

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	a	20	1												
				b							pRd	^^ 317.5 324.0 Rhyolite Porphyry Dike Swarm, rhyolite tuff is dark grey to black, fine-grained, with occasional cherty or clast-rich interbeds						
				b														
322.00				b														
	100	95	R3	a	20	2												
				a	40													
327.50				a														
	100	100	R3	b	20	2												
331.00				b	40													
	100	100	R3	a	20	2												
				a	40													
				a														
				a														
341.00				a														
	100	100	R3	a	20	2												
				a	40													
				a														
349.00				b														
	100	95	R3	c	20	2												
				c	40													
355.00				b														
	100	100	R3	b	20	2												
				b	50													
				a														
				a														
364.50				b														
	99	90	R3	b	20	2												
367.00					50													
	100	100	R3	a	20	2												
371.00				a	50						SL	** 371.5 393.0 SILTSTONE, interbedded dark tuff and pinkish grey cherty or ashy beds						
	99	85	R3	a	20	2												
				a	50													
				a														
379.00				a														
	99	85	R3	b	10	2												
				a	30													
				a														
387.00				a														
	99	25	R3	a	5	3												
390.50				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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
					70													
	100	90	R4	a	10	2					Wq	** 393.0 454.0 Quartz Wacke, medium-						
				b	30							grey, fine-grained, hornfelsed						
				b														
				c														
400.50				c														
	100	100	R3	b	20	1					pRd	^^ 401.5 407.5 Rhyolite Porphyry Dike						
				b														
405.00				b														
	100	95	R3	a	10	2												
410.00				a	30													
	99	85	R3	a	20	2												
413.50				a	70						pRd	^^ 413.0 439.0 Rhyolite Porphyry Dike						
	99	65	R3	a	10	3						Swarm/fracture zone						
				a	20													
419.00				a	75													
	100	75	R3	a	10	3												
422.00				a	30													
					70													
	100	95	R3	a	5	3												
				a	30													
				a	50													
429.00				a														
	100	100	R3	a	10	3												
				a	30													
				a	60													
				a														
439.00				a														
	100	100	R3	a	10	3												
				a	30													
445.00				a	60													
	100	100	R3	a	10	3												
448.00				a	30													
					50													
	100	100	R3	a	20	2												
450.50					40													
	100	95	R3	a	20	2												
				a	50						Rlc	** 454.0 503.3 RHYOLITE LAPILLI CRYSTAL						
				c								TUFF, crystal-rich, lt. grey matrix,						
				c								with lapilli-sized fragments						

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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
460.00				c														
	100	90	R3	c	10	2												
				c	40													
				c														
				c														
470.00				c														
	100	100	R3	b	20	2												
473.50				b	70													
	100	100	R3	c	30	1												
				c														
				c														
481.00				c														
	100	100	R3	c	10	1												
484.00				c														
	100	95	R3	c	20	2												
				c	40													
				c														
492.00				c														
	100	100	R3	b	20	2												
				b	40													
				c														
				c														
502.00				a														
	100	100	R3	a	20	2					R1c	>< 503.3 524.0 RHYOLITE LAPILLI CRYSTAL TUFF, medium grey, coarse-grained, coarsens downward, looks almost like rhyolite crystal lapilli @ 517.0						
505.00				a	60													
	100	100	R3	b	10	2												
				a	40													
510.50				a														
	100	100	R3	a	20	2												
				b	50													
				c														
				c														
520.00				c														
	99	90	R3	c	20	2												
											Rt	>< 524.0 556.0 RHYOLITE TUFF, medium pinkish grey, fine-grained, hornfelsed						
				b	70													
525.00				a							FZ	^^ 526.0 549.0 Fracture Zone, fracturing/ shattering @ 10 degrees to core axis with rhyolite porphyry dikelets, quartz						
	99	90	R3	a	10	3												
528.00				a	25													

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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
					70							veinlets, and chloritic shears						
	99	50	R3	a	10	3												
531.00				a	25													
					70													
	99	crush	R3	a	10	3												
532.00					25													
					70													
	100	95	R3	a	10	3												
				a	25													
				a	70													
				a														
542.00				a														
	100	95	R3	a	10	3												
				a	40													
				a	70													
549.00				a														
	100	85	R3	a	10	2												
552.00				a	60													
	100	95	R3	a	10	3												
				a	30						Rlc	** 556.0 580.0 RHYOLITE LAPILLI CRYSTAL						
				b	60							TUFF, lt. grey, crystal-rich matrix						
560.00				b								with subangular lapilli-sized fragments						
	100	100	R3	b	10	3												
				b	30													
566.00				b	80													
	100	100	R3	b	10	2												
				b	50													
571.00				a														
	100	100	R3	b	10	1												
				c														
				c														
				c							Rt	** 580.0 633.5 RHYOLITE TUFF, medium						
581.00				c								to dark grey, fine-grained						
	100	100	R3	b	10	2												
				a	40													
				b							Rcl	^^ 588.0 595.0 Rhyolite Crystal Lapilli						
				a								Tuff						
591.00				a														
	100	95	R3	b	15	2												
				b	40													

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a														
				a														
601.00				a														
	100	95	R3	a	20	3												
				a	40													
				a	70													
				a														
611.00				a														
	99	85	R3	a	5	2						Note: @ 610.0-619.0 Fracturing with chlorite and carbonate at 10-15 degrees to core axis						
				a	40													
618.50				a														
	100	95	R3	a	10	2												
				a	40													
				a														
625.00				a														
	100	95	R3	a	10	2						Note: @ 625.0-627.0 Tiny carbonate beds with chlorite						
629.50				a	40													
	99	85	R3	b	10	2												
632.00				a	30													
	100	75	R3	a	10	2					Rc	** 633.5 647.8 RHYOLITE CRYSTAL TUFF, brownish-grey matrix, with blue quartz eyes						
				a	50													
				b														
				b														
639.00																		
	100	100	R3	b	10	2					SL,p	^^ 639.4 643.0 Siltstone, with pyrrhotite	a					5
				b	30								a					5
645.00				b									a					5
	100	95	R2	b	10	3					ChT#	** 647.8 652.5 CHERTY TUFF, altered						
				a	30													
				a	60						SL,Imp	** 652.5 658.5 SILTSTONE, laminated, with magnetite and pyrrhotite	a					3
				a									a					3
655.00				b									a					3
	100	95	R2	b	10	2					SL,p	** 658.5 664.7 SILTSTONE, with pyrrhotite	b					8
				a	30								b					8
				a									b					8
				a							SL,*R	** 664.7 680.0 PREDOMINANTLY SPHERULITIC RHYOLITE, SILTSTONE, with cherty & tuff interbeds	b					8
665.00				a														
	90	crush	R2	a	10	3												
				a	50													
669.00				a	70							Note: @ 665.0-676.0 Core broken						

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

DRILL HOLE: LYN90-42

ROCK QUALITY:

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	crush	R2	a	10	3												
670.00					50													
					70													
	90	crush	R2	a	10	3												
673.50				a	30													
					60													
	90	crush	R2	a	0	0												
676.50				a														
	95	crush	R2		0	0												
678.50																		
	99	80	R2	b	10	3					Rt	** 680.0 686.7 RHYOLITE TUFF, medium						
				b	30							grey, fine-grained, spherulitic interbeds						
683.00				b	60													
	99	80	R2	c	10	2					TS,p	** 686.7 691.0 TALCOSE SEDIMENT, with	b					5
				c	30							pyrrhotite	b					5
689.00				c									b					5
	100	85	R2	b	20	2					TSs,p	** 691.0 694.5 TALCOSE SEDIMENT, with	b					5
												pyrrhotite and sulfides	c	8			5	5
													c	8			5	5
				b	40						TS,p	** 694.5 705.0 TALCOSE SEDIMENT, with	c	8			5	5
695.00				a								pyrrhotite, brownish matrix, blue-quartz	c				2	8
	100	95	R2	c	20	2						eyes, patchy and disseminated pyrrhotite	c				2	8
				b	40								c				2	8
				c									c				2	8
702.50				c									c				2	8
	100	100	R2	c	40	1							c				2	8
				c							TS,p	** 705.0 711.0 TALCOSE SEDIMENT, with	c				2	8
				c								pyrrhotite & magnetite	b					8
				c									b					8
				c							BP	** 711.0 715.5 BEDDED TO MASSIVE	b					8
713.00				c								PYRRHOTITE, with pyrite	f				20	60
													f				20	60
	100	95	R3	c	20	2					Rt	** 715.5 728.0 RHYOLITE TUFF, medium-	f				20	60
				a	50							grained, hornfelsed, lt. grey, shot						
719.00				a								through with fractures @ 70 degrees,						
	100	95	R3	a	20	2						possible flow?						
722.00				a	50													
	100	85	R3	a	20	2												
				a	50													
				b							Xp*	** 728.0 733.0 TUFFITE, bedded, with	e	25		2	5	15

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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
730.00				b								pyrrhotite, with diopside-altered, and quartz-rich beds	e	25		2	5	15
													e	25		2	5	15
	100	100	R2	c	20	2							e	25		2	5	15
				c	40								e	25		2	5	15
				c							BPch,l	>< 733.0 744.0 BEDDED PYRRHOTITE, with chert, laminated, with talcose intervals @ 736.0-738.0	e	25		2	5	15
				b									c					20
740.50				b									c					20
	100	80	R3	c	5	2							c					20
				c	40								c					20
				c							Rt	>< 744.0 827.0 RHYOLITE TUFF, fine-grained medium to light grey	c					20
				c														
				b								^^ 744.0 759.6 "Dalmatianite" alteration						
749.00																		
	100	85	R3	a	5	2												
753.00				a	40													
	100	50	R3	a	20	2												
755.00					50													
	100	50	R3	a	20	2												
				a	60													
760.00				b								Note: @ 760.0-787.0 Scattered pyrrhotite and pyrite veinlets, and along fractures, rock looks almost cherty						
	100	100	R2	a	20	2												
				a	40													
				a														
768.00				b														
	100	90	R3	a	10	3												
772.00				a	30													
					70													
	100	100	R3	b	10	3												
				a	40													
				a	60													
				a														
781.00				a														
	100	100	R3	a	20	3												
				a	40													
				a	60													
				a														
791.00				a								Note: @ 791.0-793.0 Fracturing @ 10-15						

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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	90	R3	a	20	2						degrees to axis						
796.00				a	60													
	100	100	R3	a	10	3												
				a	40													
				a	60													
				a														
805.00				a														
	100	95	R3	a	10	3												
				a	40													
				a	60													
814.00				a														
	100	100	R3	a	10	3												
				a	30													
				a	60													
821.00				a														
	100	100	R3	a	10	3												
				a	30													
				a	70						>R	>< 827.0 842.0 SPHERULITIC RHYOLITE						
				b														
831.50				b														
	100	70	R3	a	20	2												
835.00				a	60													
	100	95	R3	b	20	2												
				a	60													
841.00				a							Rt	>< 842.0 948.5 RHYOLITE TUFF, medium grey, fine-grained						
												^^ 842.0 884.0 Possible Flows 7, core broken, appears "cherty" or silicified						
	99	60	R3	a	10	3												
				a	30													
				a	60													
850.00				a														
	100	95	R3	a	10	3												
				a	40													
				a	70													
857.00				a														
	100	100	R3	a	20	3												
				a	40													
863.50				a	60													
	99	85	R3	a	20	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	40													
				a	60													
				a														
				a														
875.00				a														
	99	50	R3	a	10	2												
879.00				a	30													
	99	50	R3	a	10	2												
882.00				a	30													
	99	50	R3	a	10	2												
883.50					30													
	100	85	R3	a	10	2												
886.00				a	30													
	100	85	R3	a	10	2												
890.00				a	30													
	100	85	R3	a	10	2												
893.00				a	30													
	100	85	R3	a	15	3												
				a	30													
899.00				a	60													
	100	100	R3	a	10	3												
901.00					30													
					60													
	100	100	R3	a	10	3												
902.00					30													
					60													
	100	95	R3	a	10	3												
				a	30													
908.00				a	60						FZ	^^ 907.0 915.0 Fracture Zone, carbonate-chloritic fractures @ 20 degrees to axis, with broken core						
	100	85	R2	a	10	3												
				a	30													
914.50				a	60													
	100	90	R3	a	10	3												
				a	30													
919.00				a	60													
	100	95	R2	a	20	2												
				a	40													
				a							SZ	^^ 926.0 931.0 Shear Zone, chloritic						
				a														
929.00				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	100	R3	b	20	1												
930.00																		
	100	100	R3	b	20	2												
				b	60													
935.00				b														
	100	100	R2	b	10	2												
				c	30													
				a							SZ	^^ 942.0 944.0 Shear Zone, quartz-carbonate						
				a														
945.00				a														
	99	90	R2	a	10	3					gQD	** 948.5 1002.0 QUARTZ DIORITE, Granophyric						
950.00				a	30													
					60													
	100	100	R3	b	10	2												
				b	30													
				c														
				c														
959.00				c														
	100	100	R3	c	15	1												
				c														
964.00				b														
	100	100	R3	b	20	1												
				b														
				c														
				c														
973.00				c														
	100	100	R3	c	20	1												
				c														
				c														
				c														
983.50				c														
	100	100	R3	c	20	1												
				c														
				b														
				b														
993.00				c														
	100	100	R3	c	20	2												
				c	40													
				b														
				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-42

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

Run	%	RQD	Rf	ABCDE c	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
:002.00 ;										;	E.O.H. 1002' (total depth)	;	;				;

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.37	-41.05
300'	182.14	-41.10
500'	185.21	-40.24
650'	185.34	-39.48
757'	186.05	-39.36

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding

DATE COLLARED: 12-10-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-43 (WDNR #188)

DATE: 1-11-9.
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CO./STATE: Oneida, WI
BEARING: S181E
INCLINATION: -40.9 T.D: 757'

SCALE: 1"=10'
DATE COMPLETED: 12-14-90
COORDINATES: L10200 E, 11363 N
ELEV: 1566.0' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 85.0			>< 0.0 85.0 OVERBURDEN	
85.0 89.0	(not recovered)			
89.0 96.0	(HQ core)			
85.0 130.0		D	>< 85.0 130.0 DACITE	
130.0 151.0		SW	>< 130.0 151.0 SWAMP WACKE	
151.0 204.0		SL	>< 151.0 220.0 SILTSTONE	
174.0 181.5		W	^^ 174.0 181.5 Wacke	
204.0 220.0		D	>< 204.0 220.0 DACITE	
200.0 241.5		SR	>< 220.0 241.5 SWAMP RHYOLITE	
226.0 231.0		FZ	^^ 226.0 231.0 Fracture Zone	
241.5 247.0		Rt*	>< 241.5 247.0 RHYOLITE TUFF, Altered	
247.0 259.5		fW	>< 247.0 259.5 FELDSPATHIC WACKE	
259.5 336.0		LW	>< 259.5 336.0 LYNNE WACKE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.37	-41.05
300'	182.14	-41.10
500'	185.21	-40.24
650'	185.34	-39.48
757'	186.05	-39.36

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding

DATE COLLARED: 12-10-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-43 (WDNR #188)

CO./STATE: Oneida, WI

SCALE: 1"=10'
DATE COMPLETED: 12-14-90

BEARING: S181E INCLINATION: -40.9 T.D: 757'

COORDINATES: L10200 E, 11363 N
ELEV: 1566.0' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
336.0 436.0		Rcl	** 336.0 436.0 RHYOLITE CRYSTAL LAPILLI TUFF	
356.0 359.0		pMd	^^ 356.0 359.0 Plag-phyric Mafic Dike	
370.0 396.0		IR	^^ 370.0 396.0 Intrusive Rhyolite	
403.0 414.0		Rc	^^ 403.0 414.0 Rhyolite Crystal Tuff	
436.0 492.0		Rl,ch	** 436.0 492.0 RHYOLITE LAPILLI TUFF, Cherty	
492.0 549.5		Rt	** 492.0 549.5 RHYOLITE TUFF	
549.5 556.8		MSch*	** 549.5 556.8 MASSIVE SULFIDE, With Diopside	549.5 556.8 60% Sp, 5% Ga, 1% Cp
556.8 564.5		ChC*,p	** 556.8 564.5 DIOPSIDE-ALTERED CHERT, With Pyrrhotite	556.8 564.5 2% Cp, 20 % Po
564.5 573.0		MSch*	** 564.5 573.0 MASSIVE SULFIDE (Cherty, With Diopside)	564.5 573.0 30% Sp, 4% Ga
573.0 600.0		Chc*	** 573.0 600.0 DIOPSIDE-ALTERED CHERT	
587.0 589.5		Xch*	^^ 587.0 589.5 Tuffite, Cherty, Altered (Diopside)	587.0 589.5 15% Sp, 2% Ga
592.5 594.0		Xch*	^^ 592.5 594.0 Tuffite, Cherty, Altered (Diopside)	592.5 594.0 18% Sp
600.0 608.7		Xch*	** 600.0 608.7 TUFFITE, Cherty, Altered, (Diopside)	600.0 608.7 20% Sp
608.7 616.4		Rlca,s	** 608.7 616.4 CALCAREOUS LAPILLI TUFF, With Sulfides	608.7 616.4 5% Sp