APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 1 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT
6

(pg 351 - 420)

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
550.0				a	60													
	99	75	R3	a	10	3												
554.0				a	30						×R	^^ 554.0 560.0 Spherulitic Rhyolite Interbeds						
					50													
	99	60	R3	a	20	2												
				a	55													
559.0				a														
	99	85	R3	a	20	3												
				a	40													
				a	55													
				a														
569.0				a														
	99	70	R3	a	30	2												
573.0				a	60													
	99	50	R3	a	10	3												
574.5					30													
					60													
	99	75	R3	a	10	3					Rc	×× 576.0 626.0 RHYOLITE CRYSTAL TUFF, brownish matrix, abundent blue quartz eyes						
578.5				a	30													
					50													
	99	65	R3	a	10	3												
				a	30													
				b	70													
586.0				b														
	100	90	R4	a	30	2												
				c	60													
591.0				c														
	99	75	R4	b	10	3												
594.0				b	30													
					60													
	99	85	R4	c	20	2												
				c	45													
				b														
601.0				b														
	100	80	R4	b	20	2												
604.0				a	45													
	99	50	R4	a	10	2												
607.0				a	30													
	99	0	R4	b	10	2												
609.0					45													

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	70	R4	a	10	2												
612.5				a	30													
	99	80	R2	a	20	2												
				a	40													
617.0				a														
	100	50	R3	b	40	1												
618.5																		
	99	65	R3	c	20	2												
				b	40													
623.0																		
	99	50	R3	a	20	2												
626.0				a	45						CT*	** 626.0 655.0 CALCAREOUS TUFF,						
	100	85	R2	a	25	2						pervasive apple-green diopside and						
				b	40							carbonated pink carbonate in fractures						
				a								and along bedding						
634.0				a														
	100	100	R3	a	30	3												
				a	50													
				a	70													
				a														
644.0				a														
	100	85	R2	a	20	2												
				a	60													
650.0				a														
	100	85	R2	a	20	3												
				a	40													
				a	60						Rc	** 655.0 666.0 RHYOLITE CRYSTAL TUFF,						
658.5				a								blue quartz-eyes, brown matrix, medium-						
	100	50	R2	b	20	3						grained						
660.0					40													
					60													
	99	85	R2	b	20	2												
				a	50													
665.0				a														
	100	50	R2	a	20	2												
666.0					50						CT*	** 666.0 672.0 CALCAREOUS TUFF,						
	99	70	R2	b	30	2						diopside-altered						
				a	50													
				a							Rc	** 672.0 709.3 RHYOLITE CRYSTAL TUFF,						
674.6				a								blue quartz eyes, brown matrix, medium-						

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	99	70	R2	a	20	3						grained, patchy carbonate						
				a	40													
679.0				a	60													
	99	50	R2	a	20	2												
682.0				b	40													
	100	50	R2	b	10	2												
684.0					40													
	100	50	R2	b	20	2												
687.0				b	40													
	100	85	R2	b	40	2												
				a	60													
692.0				b														
	98	20	R2	a	20	2												
694.0					40													
	99	75	R2	b	20	2												
				c	50													
700.0				c														
	100	85	R2	b	50	1												
				a														
706.0				a														
	100	90	R2	a	10	3												
				a	40						CT	** 709.3 712.0 CALCAREOUS TUFF						
				a	60													
				a							Rc	** 712.0 726.0 RHYOLITE CRYSTAL TUFF, dark grey, fine to medium-grained, blue quartz eyes						
714.0																		
	100	95	R4	a	30	2												
				a	50													
				c														
722.0				a														
	100	95	R3	b	30	2												
				b	50						Rc*	** 726.0 763.0 RHYOLITE CRYSSTAL TUFF, calcareous, altered, bluish-grey, fine-grained matrix, apple-green diopside alteration						
				b														
				b														
732.0				a														
	100	100	R2	a	20	2												
				a	50						Rc	^^ 736.0 740.0 Rhyolite Crystal Tuff						
				a														
				a														
742.5				a														
	100	95	R2	a	10	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-31

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	30													
				a	60													
				a														
752.0				a														
	100	100	R2	a	20	3												
				a	40													
				a	65													
				a														
762.0				a														
	100	90	R3	a	10	3					D	** 763.0 774.5 DACITE, grey black, fine-grained						
				a	30													
				a	65													
				a														
771.5				b														
	100	100	R3	b	25	3					QD	** 774.5 808.0 QUARTZ DIORITE						
				a	40													
				a	60						gQD	^^ 774.5 795.0 Granophyric Quartz Diorite						
				b														
				b														
781.0																		
	100	100	R3	b	30	2												
				a	50													
				b														
				b														
791.5				a														
	100	100	R3	b	40	2												
				b	60													
798.0				a														
	100	100	R3	b	20	3												
				a	40													
				a	60													
				a														
808.0				b								E.O.H. 808' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.7	-47.1
250'	182.8	-47.6
550'	182.8	-48.3
750'	182.6	-49.3
959'	184.5	-49.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-24-90
REMARKS: WW-2
CORE SIZE: HQ/NQ

HOLE NO: LYN90-32 (WDNR #181)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-5-90

BEARING: S181.9E INCLINATION: -47.6 T.D: 959'
COORDINATES: L10600 E, 11485 N
ELEV: 1563.6' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 74.0			⋇⋇ 0.0 74.0 OVERBURDEN	
74.0 76.0	(not recovered)			
76.0 87.0	(HQ core)			
72.0 200.0		D	⋇⋇ 74.0 200.0 DACITE	
153.0 158.8		SL	^^ 153.0 158.8 Siltstone	
200.0 266.6		R	⋇⋇ 200.0 266.6 RHYOLITE	
266.6 287.7		D	⋇⋇ 266.6 287.7 DACITE	
287.7 324.0		R	⋇⋇ 287.7 324.0 RHYOLITE	
324.0 330.3		SL	⋇⋇ 324.0 330.3 SILTSTONE	
330.3 369.0		D	⋇⋇ 330.3 369.0 DACITE	
369.0 423.7		R	⋇⋇ 369.0 423.7 RHYOLITE	
423.7 446.5		D	⋇⋇ 423.7 446.5 DACITE	
446.5 464.0		Rcl	⋇⋇ 446.5 464.0 RHYOLITE CRYSTAL LAPILLI TUFF	
464.0 499.4		D	⋇⋇ 464.0 499.4 DACITE	
499.4 545.2		Rcl	⋇⋇ 499.4 545.2 RHYOLITE CRYSTAL LAPILLI TUFF	365.0 369.2 Stringer Magnetite
545.2 575.0		SL	⋇⋇ 545.2 575.0 SILTSTONE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.7	-47.1
250'	182.8	-47.6
550'	182.8	-48.3
750'	182.6	-49.3
959'	184.5	-49.9

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-24-90
REMARKS: WW-2
CORE SIZE: HQ/NQ

HOLE NO: LYN90-32 (WDNR #181)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-5-90

BEARING: S181.9E INCLINATION: -47.6 T.D: 959'
COORDINATES: L10600 E, 11485 N
ELEV: 1563.6' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
575.0 676.3		R	** 575.0 676.3 RHYOLITE	
676.3 694.0		SL	** 676.3 694.0 SILTSTONE	
694.0 745.2		Rc	** 694.0 745.2 RHYOLITE CRYSTAL TUFF	
745.2 761.0		TS	** 745.2 761.0 TALCOSE SEDIMENT	
761.0 827.0		Rt	** 761.0 827.0 RHYOLITE TUFF	
827.0 859.0		BP,ch	** 827.0 859.0 INTERBEDDED RHYOLITE TUFF, PYRRHOTITE, CHERT	
859.0 916.5		Wq	** 859.0 916.5 QUARTZ WACKE	
916.5 959.0		QD	** 916.5 959.0 QUARTZ DIORITE	
			E.O.H. 959' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
0.0 74.0											** 0.0 74.0 OVERBURDEN						
											^^ 0.0 20.0 Sand						
											^^ 20.0 65.0 Fine sand						
											^^ 65.0 74.0 Sand and gravel						
										D	** 74.0 200.0 DACITE, fine-grained, grey						
77.0																	
	100	100	R3	b	10	2											
82.0				b	40												
	100	100	R3	a	10	2											
				a	50												
87.0				a							Note: 87.0-120.0 Core broken						
	95		R3	a	crushed												
89.5																	
	99	75	R3	a	20	2											
93.0				a	40												
	100	85	R3	a	20	2											
				a	40												
				b													
101.5				b													
	98		R3	b	crushed												
103.0																	
	95		R3	b	crushed												
108.5				b													
	50	Broke	R3	b	20	2					Note: @ 110.0-115.0 Pink carbonate along fractures						
112.0				b	40												
	99	80	R3	a	10	2											
116.5				b	30												
	90	Broke	R3	a	10	2											
118.0					30												
	90	Broke	R2	a	10	2											
119.0					45												
	99	85	R3	b	10	2											
124.0				c	30												
				c													
	50	50	R3	c	30	1											
126.0																	
	100	95	R4	c	10	2											
				a	30												
				b													
134.0				c													
	100	85	R4	b	10	2											
				a	30												

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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														
141.0				b														
	99	50	R3	a	10	2						^^ 139.0 145.0 Fractured at 0 degrees to core axis, minor epidote on fractures						
145.5				a	40													
	100	85	R3	a	50	2												
148.5				a	75													
	100	85	R4	a	20	2												
				c	40													
				c														
156.0				c							SL	^^ 153.0 158.8 Siltstone						
	100	95	R4	c	20	2												
159.0				a	60													
	100	90	R4	b	30	2												
163.0				a	50													
	100	100	R4	a	25	2												
165.0					50													
	100	95	R4	a	10	3												
167.3					40													
					60													
	100	85	R4	a	10	3												
169.0					30													
					50							Note: @ 170.0-173.0 Carbonate-filled fractures @ 50-60 degrees to core axis, possible along bedding						
	100	85	R4	a	10	3												
				a	30													
				a	70													
177.5				a														
	100	100	R4	b	10	2												
				b	30													
				b														
				b														
186.5				b														
	100	100	R4	a	10	2												
				b	30													
				b														
				b														
196.0				b														
	100	100	R4	b	10	2					R	** 200.0 266.6 RHYOLITE						
				c	30													
201.3											W1	^^ 200.0 227.0 Lapilli Wacke, bleaching/alteration, epidote-bleached crystal tuff matrix, with lapilli sized angular grey chert or tuff fragments						
	100	95	R4	b	20	2												
				b	40													
207.3				b														
	100	100	R4	b	20	1												
210.0																		
	100	100	R4	b	20	2												
213.3				b	60													
	100	100	R4	b	20	2												
217.3				c	50													
	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: LYN90-32

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	50													
				c														
				b														
226.8				b														
	100	100	R4	c	20	2												
					50													
228.0											Rcl	^^ 227.0 234.7 Rhyolite Crystal Lapilli Tuff, coarse-grained crystal tuff matrix with rounded to subangular clasts (0.5")						
	100	100	R3	d	30	1												
231.8				d														
	100	100	R3	c	10	2					Rc	^^ 234.7 240.2 Rhyolite Crystal Tuff						
				c	30													
				b														
240.0				b							Rcl	^^ 240.2 251.9 Rhyolite Crystal Lapilli Tuff						
	100	95	R3	b	15	2												
				c	30													
				d														
248.5				d								Note: Core Orientation @ 248.5-252.0						
	100	85	R3	c	15	1												
252.0				c							Rc	^^ 251.9 257.0 Rhyolite Crystal Tuff						
	100	95	R3	c	15	3												
				c	30													
				b	55					-90	Rcl	^^ 257.0 266.6 Rhyolite Crystal Lapilli Tuff						
				b														
262.0				a														
	100	90	R3	a	15	2												
264.0					30													
	100	90	R3	a	15	2					D	** 266.6 287.7 DACITE, Fine-grained, medium to dark grey, patchy epidote alteration @ 280.0-287.0						
268.5					30													
	100	100	R3	a	20	2												
270.0					40					-70								
	100	90	R3	a	20	2												
				a	40													
				a														
				a														
280.0				a														
	100	90	R3	a	30	1												
284.0				a														
	100	100	R3	a	10	2												
				a	30						R	** 287.7 324.0 RHYOLITE						
287.0																		
	99	90	R3	a	10	3					Rc,Rcl	^^ 287.7 306.6 Interbedded Rhyolite Crystal Tuff, Rhyolite Crystal Lapilli Tuff						
291.8				b	30					-55								
					50													
	100	100	R3	b	10	3												
				a	30													
297.3				a	50													
	100	100	R3	b	30	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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
302.0				b	50													
	99	85	R3	b	15	2												
306.7				a	30						Rch	^^ 306.6 324.0 Rhyolite Tuff, Cherty						
	99	85	R3	a	15	2												
				a	30													
311.0				a														
	100	95	R2	a	10	3												
314.5				a	25													
					40													
	100	85	R3	a	20	2												
				b	40													
				a						-50								
321.8				a														
	100	90	R3	a	20	2				-50	SL	** 324.0 330.3 SILTSTONE						
326.0				a	45													
	100	85	R4	a	20	2												
330.5				a	40						D	** 330.3 369.0 DACITE						
												^^ 330.3 336.0 Epidote Alteration						
	99	85	R4	b	20	2												
				b	40													
335.3				b														
	99	90	R4	b	10	2												
338.0				b	30													
	100	85	R4	b	10	2												
				b	30													
344.0				b														
	100	85	R3	a	20	2												
				a	50													
349.8				a														
	99	75	R3	a	30	2												
352.0					50													
	99	75	R4	a	10	3												
354.0					30													
					50													
	100	95	R3	a	10	3												
				a	25													
				a	50													
				a														
363.0				a														
	100	100	R3	a	30	2												
368.5				b	50													
	100	100	R3	a	10	2												
					30						R	** 369.0 423.7 RHYOLITE						
370.0											W1	^^ 369.0 386.2 Lapilli Wacke						
	100	100	R3	a	20	2												
				a	50													
				a														
377.0				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	100	R3	a	10	3												
380.3				a	30													
					50													
	100	100	R4	a	10	3												
381.5					30													
					50													
	100	100	R4	a	20	2												
				a	40						Rc	^^ 386.2 392.0 Rhyolite Crystal Tuff						
				a														
				a														
391.5				a							Rcl	^^ 392.0 399.5 Rhyolite Crystal Lapilli Tuff (breccia ?)						
	100	100	R4	b	20	2												
				c	40													
				b														
400.0				b							Wl	^^ 399.5 423.7 Lapilli Wacke						
	100	90	R3	a	15	3												
				a	30													
				a	50													
				a														
410.0				a														
	100	90	R3	a	15	2												
413.0				a	30													
	100	90	R3	a	15	3					Rl	^^ 415.0 419.5 Rhyolite Lapilli Tuff						
				a	30													
				b	50													
				b														
423.0				c							D	** 423.7 446.5 DACITE, grey black, fine-grained						
	100	90	R4	b	25	2												
				b	40													
429.0				b														
	100	100	R4	a	10	2												
430.5					30													
	100	95	R3	a	15	2												
				a	70													
				a														
437.0				a														
	100	85	R2	a	10	2												
440.0				b	60							Note: Plag-phyric Interval @ 440.2-446.5						
	100	80	R3	a	20	3												
443.0				a	40													
					75													
	99	85	R3	a	10	2					Rcl	** 446.5 464.0 RHYOLITE CRYSTAL LAPILLI TUFF, plag-phyric coarse-grained matrix with lapilli-rounded chert clasts, quartz eyes						
447.0				a	40													
	100	85	R3	a	20	2												
450.0				c	40													
	100	100	R3	c	30	1												
				c														
455.0				c														
	99	85	R3	a	20	2												
458.0				a	40							Note: 5' Core Loss @ 458.0-464.0						

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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
	5	crush	R3															
464.0											D	** 464.0 499.4 DACITE, fine-grained, dark-grey upper contact broken						
	100	95	R3	a	5	3												
				a	30													
				a	60													
				a														
474.0				a														
	100	95	R3	a	10	2												
				a	40													
				a														
482.5				a														
	100	100	R3	a	15	3												
486.0				a	40													
					70													
	100	95	R4	a	10	3												
				a	30													
				a	70													
493.0				b														
	100	100	R4	b	15	2												
494.6					40													
	100	100	R4	b	10	3												
				a	40													
499.5				a	65					-55C	Rcl	** 499.4 545.2 RHYOLITE CRYSTAL LAPILLI TUFF, coarse-grained greenish, grey matrix with white quartz/plag crystals and grey and white subangular lapilli. Contacts are roughly parallel to bedding, with no chill margin- but still possibly intrusive						
	100	85	R4	b	5	3												
502.0					20													
					40													
	100	95	R4	b	5	3												
505.0				a	40													
					70													
	99	85	R4	b	5	2												
507.3					40													
	100	85	R3	a	20	3												
				a	40													
				a	60													
				b														
517.4				b														
	100	100	R3	b	5	3												
				b	30													
				a	70													
				c														
527.5				b														
	100	90	R3	b	10	3												
				b	30													
				b	60													
535.0				b														
	100	95	R3	a	5	3												
				a	40													
				a	65													
542.0				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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
544.0	99	60	R3	b	5	3												
					40													
					65													
											SL	** 545.2 575.0 SILTSTONE						
547.0	99	85	R3	b	5	3				-70C	SL,*R	^^ 545.2 552.5 Interbedded Siltstone, Spherulitic Rhyolite, blue-green, fine-grained tuff, spherulitic interbeds						
				a	30													
					60													
552.0	95	45	R3	a	5	3							a				5	
				a	40													
					60						Rt,l,Ch	^^ 552.5 575.0 Siltstone, chert, blue-green, fine-grained tuff, grey chert, contorted bedding						
554.0	95	20	R3	a	10	3												
				a	40													
					60													
557.0	99	75	R2	a	10	3												
				a	40													
					60													
561.0	98	75	R2	a	10	3												
				a	40													
					60													
566.0	95	45	R2	a	20	2												
				a	60													
572.0	100	85	R2	a	20	3												
				a	40													
				a	60													
	99	85	R3	a	10	3												
				a	30													
				b	60						R	** 575.0 676.3 RHYOLITE						
				b														
580.5											W1	^^ 575.0 600.0 Lapilli Wacke, brown-grey medium-grained crystal matrix with blue quartz eyes, white plag laths and chert fragments, white/grey cherty interbeds possibly just large clasts						
	100	70	R3	a	10	3												
				a	40													
				b	60													
587.5				a														
	100	85	R3	a	15	3												
				a	40													
				a	65													
595.5				a														
	100	85	R3	a	10	3												
				a	40													
602.5				a	65						Rc	^^ 600.0 621.0 Rhyolite Crystal Tuff, brown-grey crystal-rich matrix, with blue quartz eyes and plag laths						
	97	85	R3	a	10	3												
				a	40													
				a	65													
609.0				a														
	98	90	R3	b	20	3												
614.0				b	40													
					60													

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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	85	R3	a	5	3												
				b	50													
				b	65													
621.0				a							D/Rc	^^ 621.0 654.5 Interbedded Dacite, Rhyolite Crystal Tuff, blue-green, fine-grained tuff, not laminated, with 6"-1.0' lapilli tuff interbeds. Lapilli tuff has brownish matrix, with blue quartz eyes, and white crystal fragments						
	100	95	R3	a	10	3												
626.0				a	30													
					65													
	100	100	R3	a	20	3												
				a	40													
				b	60													
634.0				b														
	100	100	R4	a	20	3												
				a	40													
				a	60													
641.0				a														
	100	100	R4	b	20	2												
643.0					55													
	100	100	R3	a	15	3												
				a	40													
				a	60							Note: 647.0-652.0 Bedding becomes contorted						
652.8				a														
	100	95	R3	a	10	3					R	^^ 654.5 664.0 Rhyolite Tuff, brownish rhyolite tuff matrix, with disseminated pyrite, hosting angular clasts of chert, spherulitic tuff. Clasts have wispy tails and inclusions	b			5	
				a	30								b			5		
				a	45								b			5		
				a									b			5		
662.0				a									b			5		
													b			5		
	98	80	R3	a	10	3					*R	^^ 664.0 676.3 Spherulitic Rhyolite, brownish, fine-grained rhyolite tuff, with beige spherulitic interbeds	b			5	
				a	30													
667.3				a	60													
	100	90	R3	a	10	3												
				a	30													
673.5				a	50													
	100	70	R2	a	10	3					SLp	** 676.3 694.0 SILTSTONE, with pyrite, pyrite (minor pyrrhotite) bedded to laminated, within lt. grey tuff. Note: chert beds (1") and grey-black, needle-like septachlorites(?) or chloritoids (?)	c		10	2	
677.2				a	30								c		10	2		
					60								c		10	2		
	100	100	R2	a	5	3							c		10	2		
678.7					30								c		10	2		
					50								c		10	2		
	99	70	R2	a	10	2							c		10	2		
				a	50								c		10	2		
				b									c		10	2		
				b									c		10	2		
688.0				b									c		10	2		
	99	80	R2	b	10	3							c		10	2		
				a	40								c		10	2		
694.0				b	70						Rc	** 694.0 745.2 RHYOLITE CRYSTAL TUFF	c		10	2		
	99	85	R3	b	20	3												
697.0				b	50													
					70													

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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	85	R3	b	10	3												
				b	40													
704.0				b	60													
	99	70	R3	a	30	2												
708.5				b	50													
	100	85	R2	b	30	2												
712.5				b	50													
	100	80	R3	c	30	2												
				c	50													
718.0				b														
	100	80	R3	b	10	3												
				a	30													
				b	50													
725.0				b														
	99	85	R3	a	30	2												
				a	50													
731.0				a														
	100	85	R3	c	5	3												
735.0				b	30													
					50													
	99	75	R3	a	5	3												
739.0				a	30													
					50													
	100	85	R3	a	5	3												
742.5				a	20													
					60													
	100	80	R3	a	25	2												
				a	40						TS	** 745.2 761.0 TALCOSE SEDIMENT, with pyrrhotite	b					
														e				10
														e				10
				a							BP	^^ 746.6 748.0 Bedded Pyrrhotite		e				10
				a									b					10
751.5				a									b					10
	100	85	R3	a	20	2					BP	^^ 753.6 760.0 Bedded Pyrrhotite	b					10
755.5				a	50									e				50
	100	80	R2	a	20	2								e				50
				a	40									e				50
762.0				a							Rt	** 761.0 827.0 RHYOLITE TUFF						
	100	70	R2	a	10	3												
764.0					40													
					70													
	99	50	R2	a	30	2												
767.8				a	50													
	100	95	R3	a	30	2												
772.0				a	50													
	100	95	R3	a	5	3												
				a	20													
778.0				a	60													
	99	85	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: LYN90-32

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	70													
				a														
787.5				a														
	99	50	R2	a	5	3												
791.3				a	30													
					70													
	99	75	R2	a	10	3												
				a	30													
797.5				a.	50						TS	^^ 797.0 812.0 Talcose Sediments, with pyrrhotite	a					4
	99	65	R2	a	5	3							a					4
				b	20								a					4
				b	40								a					4
				b									a					4
807.5				b									a					4
	100	85	R2	b	10	3							a					4
				a	30								a					4
				a	50								a					4
815.0				a														
	100	100	R3	a	20	3												
				a	40													
				a	70													
				a														
825.0				a														
	100	90	R3	a	10	3					BP,ch	** 827.0 859.0 INTERBEDDED RHYOLITE TUFF, PYRRHOTITE, CHERT	e					50
				a	30								e					50
				a	70								e					50
834.0				a									e					50
	100	100	R3	b	30	2							e					50
				b	50								e					50
				a														
				a														
844.0				a														
	100	100	R3	b	5	3												
				b	30													
				b	50													
				b														
854.0				b														
	100	100	R3	b	5	3												
				b	30													
				b	50						Wq	** 859.0 916.5 QUARTZ WACKE						
				b														
863.0				b														
	100	70	R3	a	20	2												
866.0				a	50													
	100	80	R3	a	30	2												
868.0					50													
	100	85	R3	a	10	3												
				a	30													
874.0				a	50													
	98	80	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: LYN90-32

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	30							Note: 878.0-883.0 Core broken						
880.6				a	60							Note: 880.0-916.5 Hornfelsed						
	99	40	R3	a	10	2												
883.0				a	40													
	99	85	R3	a	30	1												
884.5																		
	99	45	R3	a	40	2												
887.5				b	70													
	100	85	R3	b	25	2												
889.0					40													
	99	85	R3	b	15	2												
				a	40													
894.0				a														
	100	85	R3	a	5	3												
898.0				a	30													
					50													
	100	90	R3	a	30	2												
902.0				a	50													
	99	50	R3	a	30	2												
903.0					50													
	100	100	R3	a	10	3												
905.0					30													
					50													
	100	90	R3	a	10	3												
				a	30													
				a	50													
914.0				b														
	100	95	R3	b	30	2					QD	** 916.5 959.0 QUARTZ DIORITE						
				a	50													
				a														
921.7				b														
	100	100	R3	a	30	2												
				b	50													
				b														
				b														
932.0				b														
	100	100	R3	b	30	2												
				b	50													
938.0				b														
	100	100	R3	b	30	2												
941.0				b	50													
	100	100	R3	c	30	2												
				c	50													
				b														
				b														
951.0				c														
	100	100	R3	c	30	2												
				c	50													
				c														
959.0				c								E.O.H. 959' (total depth)						

ROCK QUALITY:

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

DRILL HOLE: LYN90-32

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	30							Note: 878.0-883.0 Core broken						
880.6				a	60							Note: 880.0-916.5 Hornfelsed						
	99	40	R3	a	10	2												
883.0				a	40													
	99	85	R3	a	30	1												
884.5																		
	99	45	R3	a	40	2												
887.5				b	70													
	100	85	R3	b	25	2												
889.0					40													
	99	85	R3	b	15	2												
				a	40													
894.0				a														
	100	85	R3	a	5	3												
898.0				a	30													
					50													
	100	90	R3	a	30	2												
902.0				a	50													
	99	50	R3	a	30	2												
903.0					50													
	100	100	R3	a	10	3												
905.0					30													
					50													
	100	90	R3	a	10	3												
				a	30													
				a	50													
914.0				b														
	100	95	R3	b	30	2					QD	** 916.5 959.0 QUARTZ DIORITE						
				a	50													
				a														
921.7				b														
	100	100	R3	a	30	2												
				b	50													
				b														
				b														
932.0				b														
	100	100	R3	b	30	2												
				b	50													
938.0				b														
	100	100	R3	b	30	2												
941.0				b	50													
	100	100	R3	c	30	2												
				c	50													
				b														
				b														
951.0				c														
	100	100	R3	c	30	2												
				c	50													
				c														
959.0				c								E.O.H. 959' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.2	-58.1
200'	177.3	-58.4
300'	176.6	-58.2
375'	177.0	-58.5
583'	177.0	-58.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-31-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-33 (WDNR #179)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-6-90

BEARING: S178.2E INCLINATION: -58.8 T.D: 583'
COORDINATES: L10300 E, 10725 N
ELEV: 1560.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 55.0			>< 0.0 55.0 OVERBURDEN	
55.0 60.0	(not recovered)			
60.0 69.0	(HQ core)			
55.0 72.5		Wq	>< 55.0 72.5 QUARTZ WACKE	
72.5 136.0		Sk	>< 72.5 136.0 CALCSILICATE ALTERED TUFF	72.5 136.0 Gt, Ep
136.0 154.0		MSp	>< 136.0 154.0 MASSIVE SULFIDE, With Pyrrhotite	136.0 154.0 60 % sulfide, 45% Sp, 5% Ga, 10%
136.0 141.0		X	^^ 136.0 141.0 Tuffite	
150.8 154.0		X	^^ 150.8 154.0 Tuffite	
154.0 167.0		CSz	>< 154.0 167.0 CALCAREOUS SEDIMENT, Stringery	154.0 167.0 5% sulfide, 5% Po
167.0 217.0		Xca	>< 167.0 217.0 TUFFITE, Calcareous	167.0 217.0 20% sullfide, 12% Sp
217.0 233.5		gR	>< 217.0 233.5 GRANOPHYRIC RHYOLITE	
177.0 187.0		CS	^^ 177.0 187.0 Calcareous Sediment	
227.0 233.0		pRd	^^ 227.0 233.0 Rhyolite Porphyry Dike	
233.5 253.5		Xlzp	>< 233.5 253.5 CALCAREOUS SEDIMENT, Stringery, Lapilli-rich	233.5 253.5 15% sulfide, 5% Sp, 7% Po, 1% Cp

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.2	-58.1
200'	177.3	-58.4
300'	176.6	-58.2
375'	177.0	-58.5
583'	177.0	-58.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-31-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-33 (WDNR #179)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-6-90

BEARING: S178.2E INCLINATION: -58.8 T.D: 583'
COORDINATES: L10300 E, 10725 N
ELEV: 1560.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-11-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
253.5 270.7		Xzca	253.5 270.7 TUFFITE, Stringery, Calcareous	253.5 270.7 20% sulfide, 15% Sp, 3% Ga, 2% Po
270.7 284.0		CS	270.7 284.0 CALCAREOUS SEDIMENT	
284.0 292.4		Xz,tp	284.0 292.4 TUFFITE, Talcose, Stringery, With Pyrrhotite	284.0 292.4 10% Sp
292.4 297.4		CS*	292.4 297.4 CALCAREOUS SEDIMENT, Altered	
297.4 301.0		MS	297.4 301.0 MASSIVE SULFIDE	297.4 301.0 50% sulfide, 40% Sp
301.0 304.0		Xca*	301.0 304.0 TUFFITE, Calcareous, Altered	301.0 304.0 15% sulfides, 12% Sp
304.0 327.0		CS*,t	304.0 327.0 CALCAREOUS SEDIMENT, Altered, Talcose, With Sulfides	
327.0 367.5		Rt*	327.0 367.5 CALCAREOUS SEDIMENT, Altered, (Serpentinized)	
367.5 372.0		TS	367.5 372.0 TALC SEDIMENT	
372.0 382.0		Xz,t	372.0 382.0 TUFFITE, Talcose, Stringery	372.0 382.0 20% Sp, 1% Cp
378.8 381.5		QD	378.8 381.5 Quartz Diorite	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.2	-58.1
200'	177.3	-58.4
300'	176.6	-58.2
375'	177.0	-58.5
583'	177.0	-58.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 10-31-90
REMARKS:
CORE SIZE: HQ/NQ

HOLE NO: LYN90-33 (WDNR #179)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-6-90

BEARING: S178.2E INCLINATION: -58.8 T.D: 583'
COORDINATES: L10300 E, 10725 N
ELEV: 1560.8' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-11-92
PAGE 1 OF 9

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
382.0 389.0		MS	⋇⋇ 382.0 389.0 MASSIVE SULFIDE	382.0 389.0 70% Sp, 3% Cp
389.0 394.4		Rts	⋇⋇ 389.0 394.4 RHYOLITE TUFF, With Sulfides	389.0 394.4 5% Sp
394.4 398.8		Xz,t	⋇⋇ 394.4 398.8 TUFFITE, Talcose, Stringery	394.4 398.8 25% Sp, 1% Cp
398.8 403.5		MS	⋇⋇ 398.8 403.5 MASSIVE SULFIDE	398.8 403.5 40% Sp
403.5 425.0		Wq	⋇⋇ 403.5 425.0 QUARTZ WACKE	
425.0 484.5		VCS	⋇⋇ 425.0 484.5 VOLCANICLASTIC SEDIMENT	
484.5 489.7		TSs	⋇⋇ 484.5 489.7 TALCOSE SEDIMENT, With Sulfides	
489.7 499.5		VCS	⋇⋇ 489.7 499.5 VOLCANICLASTIC SEDIMENT	
499.5 583.0		gQD	⋇⋇ 499.5 583.0 QUARTZ DIORITE, Granophyric	
553.0 571.5		Rc	^^ 553.0 571.5 Rhyolite Crystal Tuff	

E.O.H. 583' (total depth)

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
0.0 55.0												** 0.0 55.0 OVERBURDEN						
											Wq	** 55.0 72.5 QUARTZ WACKE, brownish matrix with bluish and whitish rounded fragments						
60.00																		
	99	85	R3	c	10	1		No blocks @ 60.0-84.0										
				c														
66.00				c								Note: @ 69.0-72.5 Brownish alteration						
	99	75	R3	c	15	2												
				b	30						Sk	** 72.5 136.0 CALCSILICATE ALTERED TUFF, fine-grained, greenish (epidote) with garnet abundent @ 96.0-126.0						
				b														
73.00				b														
	100	90	R3	b	15	2												
				b	30													
				b														
				b														
84.00				b														
	100	95	R3	b	15	2												
87.50				b	30													
	99	90	R3	b	15	2												
91.00				b	40													
	100	100	R3	b	15	2												
94.00				b	30							Note: Cave in						
	99	60	R3	a	15	2						Note: No visible magnetite, core not magnetic						
97.00				a	30													
	99	60	R3	b	15	2												
99.00					30													
	95	20	R3	a	15	3												
101.00					30													
					60													
	100	100	R3	a	20	2												
104.00				b	50													
	100	85	R3	b	15	3												
				a	30													
				b	50													
112.00				b														
	100	90	R3	b	5	3												
				b	30													
				a	50													
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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
122.00				a								Note: @ 126.5-127.2 Massive Sulfide						
	100	95	R3	b	15	2												
				b	40								a	4				
				b									a	4				
				b									a	4				
				b									a	4				
132.00				a									a	4				
	100	95	R3	b	10	3						Note: @ 134.5-135.2 Massive Sulfide	a	4				
				a	30								a	4				
				b	60					-53C	MSp	** 136.0 154.0 MASSIVE SULFIDE, with pyrrhotite	a	4				
				b									d	20	2		10	
				b									d	20	2		10	
											X	^^ 136.0 141.0 Tuffite	d	20	2		10	
													d	20	2		10	
142.00													f	70	2		10	
	95	75	R3	b	60	1							f	70	5		10	
145.00				b									f	70	5		10	
	100	90	R3	a	10	2							f	70	5		10	
				c	40						X	^^ 150.8 154.0 Tuffite	f	70	5		10	
				c									f	70	5		10	
154.00				c							CS	** 154.0 167.0 CALCAREOUS SEDIMENT, stringery, bedding is predominantly wavey and contorted, at high angle (10-20 degrees) to core axis	f	70	5		10	
	100	80	R3	c	30	2							b	5			5	
158.50				b	50								b	5			5	
	100	100	R3	c	30	1							b	5			5	
				c									b	5			5	
164.00				c									b	5			5	
	100	95	R3	b	10	2							b	5			5	
				b	30						X	** 167.0 217.0 TUFFITE	b	5			5	
				a									b	5			5	
172.50				b									c	10			5	
	100	100	R3	a	10	2							c	10			5	
				b	30								c	10			5	
				b							CS	^^ 177.0 187.0 Calc Sediment	c	10			5	
				a									c	10			5	
182.50				a									c	20			5	
	100	100	R3	b	10	3							c	20			5	
				a	30								c	20			5	
				a	55								c	20			5	
				a									c	20			5	
													c	12			5	

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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
192.50				a									c	12				5
	100	100	R3	a	10	2							c	12				5
				c	30								c	12				5
				c									c	12				5
				b									c	12				5
202.00				b									c	12				5
	100	95	R3	a	10	3							c	12				5
				a	40								c	12				5
				b	70								c	12				5
				b									c	12				5
212.00				b									c	12				5
	100	85	R3	b	10	3							c	12				5
				b	40								c	12				5
				a	70					-65C	gR	** 217.0 233.5 GRANOPHYRIC RHYOLITE , with alteration along high-angle fractures. Faintly plag-phyric with dark matrix.	c	12				5
220.00				a									c	12				5
	99	60	R3	a	10	3												
221.00					40													
					70													
	100	85	R3	a	10	3												
225.00				a	25													
				a	70													
	99	80	R3	a	5	3				-10F	pRd	^^ 227.0 233.0 Rhyolite Porphyry Dike						
				a	20													
232.00				a	40													
	100	95	R3	a	5	3					CSz,ca	** 233.5 253.5 CALCAREOUS SEDIMENT, stringery, lapilli-rich, calcareous	c	18	1			5
234.00					20								c	18	1			5
					40								c	18	1			5
	100	100	R3	b	10	2							c	18	1			5
235.50					30								c	18	1			5
	100	90	R3	a	20	2							c	18	1			5
				b	40								c	18	1			5
242.00				a									c	18	1			5
	100	90	R3	a	20	3							c	18	1			5
				a	40								c	18	1			5
				a	70								c	18	1			5
250.00				b									c	18	1			5
	100	95	R2	b	15	3							c	10		3		4
				b	30						Xzca	** 253.5 270.7 TUFFITE, stringery, calcareous	c	10		3		4
				b	60								c	10		3		4
				a									c	10		3		4
													c	10		3		4

ORIGINAL

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
259.00				a									c	10		3		4
	100	95	R3	a	15	3							c	10		3		4
				b	30								c	10		3		4
				a	65								c	10		3		4
266.00				a									c	12		3		4
	100	95	R3	a	30	2							c	12		3		4
				b	65						CS	** 270.7 284.0 CALCAREOUS SEDIMENT	b	5				
				a									b	5				
273.00				b									b	5				5
	100	85	R3	a	30	2							b	5				5
				b	50								b	5				5
				b									b	5				5
				c									b	5				5
282.50				c									b	5				5
	99	70	R3	b	10	2					Xz,tp	** 284.0 292.4 TUFFITE, stringery,	c	12				5
				b	30							talcose, with pyrrhotite	c	12				5
287.00													c	12				5
	98	60	R3	b	20	2							c	12				5
290.00				a	40								c	12				5
													c	12				5
	99	85	R3	b	30	1					CSs,t	** 292.4 297.4 CALCAREOUS SEDIMENT,	c	12				5
293.00				c								talcose, with sulfides, apple-green,	b	7				
												not bedded, with stringery-patchy	b	7				
	99	85	R2	c	10	3						sphalerite	b	7				
				b	30								b	7				
				a	50						MSp	** 297.4 301.0 MASSIVE SULFIDE	b	7				
				a									e	40			3	7
				b							Xca	** 301.0 304.0 TUFFITE, calcareous,	e	40			3	7
303.00												apple-green (diopside?) patches, with	c	12				3
	100	85	R2	c	20	2						sphalerite infilling	b	5	2			3
				c	50								b	5	2			3
				b							CS,t	** 304.0 327.0 CALCAREOUS SEDIMENT,	b	5	2			3
												talcose, green (diopside), with sulfides	b	5	2			3
308.00													b	5	2			
	99	90	R2	b	10	3							b	5	2			
312.00				b	30								b	5	2			
					50								b	5	2			
	100	100	R2	c	20	2							b	5	2			
				b	50								b	5	2			
				b									b	5	2			

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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	5	2			
322.00				b									b	5	2			
	100	100	R2	b	10	3							b	5	2			
				c	50								b	5	2			
				a	70						CS	** 327.0 367.5 CALCAREOUS SEDIMENT,	b	5	2			
				a								altered, not bedded, patchy serpentine						
331.00				a								alteration, olive green						
	100	90	R2	a	15	2												
				a	60						Rt*,s	^^ 335.0 339.0 Rhyolite Tuff, altered,	b	7				
337.00				a								with sulfides	b	7				
	100	95	R3	a	10	3							b	7				
				a	30													
344.00				a	60													
	99	85	R3	a	10	3												
				a	25													
				a	60													
352.00				b								^^ 351.0 358.0 Fracture Zone, core						
	95		R3	a	10	3						sheared/broken @ 30-35 degrees to core						
				a	25							axis						
				a	60													
359.00				a														
	100	85	R3	a	10	3												
				a	30													
				a	60													
368.00				a							TS	** 367.5 372.0 TALC SEDIMENT	c	20	1		4	
	99	85	R3	a	10	3							c	20	1		4	
372.50				a	30						Xz,t	** 372.0 382.0 TUFFITE, talcose,	c	20	1		4	
					60							stringery	c	20	1		4	
	99	90	R2	b	20	2							c	20	1		4	
				c	40								c	20	1		4	
377.50				b							QD	^^ 378.8 381.5 Quartz Diorite	c	20	1		4	
	100	85	R2	a	10	3												
				a	40						MS	** 382.0 389.0 MASSIVE SULFIDE	c					
384.00				a	60								f	60	3	1	2	
	100	85	R2	c	20	2							f	60	3	1	2	
				c	40								f	60	3	1	2	
390.00				b							Rts	** 389.0 394.4 RHYOLITE TUFF, with	f	60	3	1	2	
	100	80	R3	b	20	2						sulfides	b	5	1			
				c	40								b	5	1			
				c							Xz,t	** 394.4 398.8 TUFFITE, talcose,	b	5	1			

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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								stringery	c	15	1			
													c	15	1			
398.00											MS	** 398.8 403.5 MASSIVE SULFIDE	c	15	1			
	100	100	R2	c	20	2							e	40	1	2		
				c	35								e	40	1	2		
				c							Wq	** 403.5 425.0 QUARTZ WACKE, reworked	e	40	1	2		
				c								crystal tuff (VCS)						
408.00				b														
	100	85	R2	b	10	3												
				a	30													
				a	60					-85C	QD	^^ 414.5 415.5 Quartz Diorite Dike,						
				b						-70C		pinkish white, granophyric, flat						
418.50				b								contacts						
	100	100	R3	c	10	3												
				c	40													
				c	70													
				a							VCS	** 425.0 484.5 VOLCANICLASTIC SEDIMENT,						
428.00				a								predominantly sandstone to 458.0, then						
	100	100	R3	a	10	3						plag-phyric dacite to 484.5. Dark grey						
				a	30							to black, no visible quartz.						
				a	70													
				a														
438.00				a														
	100	100	R3	a	20	3												
				a	40													
				a	70													
445.00				a														
	100	100	R3	a	10	3												
				a	25													
				a	70													
454.00				a								Note: @ 460.0-470.0 Crystal tuff is						
	100	95	R3	a	10	3						medium to light grey, fine-grained and						
				a	25							locally hornfelsed by granophyric						
				a	70							quartz diorite veinlets						
461.00				a														
	100	100	R3	a	10	3												
466.50				a	40													
					60													
	100	100	R3	a	10	3												
				a	40													

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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														
				a														
477.00				a														
	100	100	R3	a	20	3												
				a	40													
				a	60						TS	** 484.5 489.7 TALCOSE SEDIMENT, with magnetite, pyrrhotite & sphalerite	c	2				10
				b									c	2				10
487.00				c									c	2				10
	100	100	R2	c	20	2					VCS	** 489.7 499.5 VOLCANICLASTIC SEDIMENT, subtle lamination, rare quartz, medium grey, fine-grained, hornfelsed	c	2				10
				b	40													
				b														
				a														
496.00				a														
	100	95	R3	a	20	2												
				a	40						QD	** 499.5 583.0 QUARTZ DIORITE						
				a														
504.00											gQD	^^ 499.5 553.0 Granophyric Quartz Diorite, reddish alteration @ 499.5-507.0, 514.0 and @ 517.0-524.0, sheared to foliated ~ 30-40 degrees to core axis						
	100	100	R3	a	20	2												
				a	40													
507.00											sQD	^^ 507.0 513.0 Quartz Diorite, sheared						
	100	100	R3	a	10	3												
				a	25													
				a	40													
				a														
517.00				a														
	100	95	R3	b	20	2												
				a	40													
				b														
				b														
527.00				a														
	100	100	R3	b	10	2												
				a	30													
				a														
				b														
538.00				c														
	100	95	R3	c	20	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-33

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	50						sQD	^^ 542.0 553.0 Quartz Diorite, sheared						
				a						-15								
				a														
548.00				a														
	98	75	R2	a	5	3												
				a	20					-15		Note: @ 551.0 Fault gouge, chlorite in fracture						
				a	40													
553.00											Rc	^^ 553.0 571.5 Rhyolite Crystal Tuff, sheared, hornfelsed						
	99	75	R2	b	10	3												
				b	30					-20C		Note: @ 557.0 571.5 Mafic Dike, @ 20 degres to core axis						
				a	60													
561.00				a														
	100	100	R3	a	10	2												
				a	55													
				a														
				a														
571.00				a														
	100	100	R3	a	10	2				-20C	gQD	^^ 571.5 583.0 Granophyric Quartz Diorite						
573.00					60													
	99	85	R3	a	10	3												
574.50					30													
					50													
	100	100	R3	a	15	3												
				a	30													
				a	60													
				a														
583.00				a								E.O.H. 583' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.0	-66.8
300'	178.1	-67.2
450'	178.7	-67.4
600'	180.2	-67.1
750'	181.7	-66.6
926'	181.7	-66.5

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-5-90
REMARKS: "A6" of Drill Proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-34 (WDNR #176)

DATE: 5-30-91
PAGE 1 OF 14

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-14-90

BEARING: S178.9E INCLINATION: -66.7 T.D: 926'
COORDINATES: L10200 E, 11515 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

0.0 60.0		⋙ 0.0 60.0 OVERBURDEN
60.0 67.0	(not recovered)	
67.0 80.0	(HQ core)	
60.0 110.0	Rc	⋙ 60.0 110.0 RHYOLITE CRYSTAL TUFF
78.0 86.5	pRd	^^ 78.0 86.5 Rhyolite Porphyry Dike
110.0 119.0	pRb	⋙ 110.0 119.0 RHYOLITE BRECCIA, Porphyritic
119.0 239.0	Rt,Rc	⋙ 119.0 239.0 RHYOLITE TUFF, RHYOLITE CRYSTAL TUFF
239.0 281.0	Rcl	⋙ 239.0 281.0 RHYOLITE CRYSTAL LAPILLI TUFF
250.5 272.3	pMd	^^ 250.5 272.3 Plag-phyric Basalt
281.0 355.7	pRd	⋙ 281.0 310.0 RHYOLITE PORPHYRY DIKE
310.0 330.0	Rlb	⋙ 310.0 330.0 RHYOLITE LAPILLI BRECCIA
330.0 358.0	IR	⋙ 330.0 358.0 INTRUSIVE RHYOLITE
355.7 408.0	Rlb	⋙ 358.0 408.0 RHYOLITE CRYSTAL LAPILLI TUFF

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.0	-66.8
300'	178.1	-67.2
450'	178.7	-67.4
600'	180.2	-67.1
750'	181.7	-66.6
926'	181.7	-66.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-5-90
REMARKS: "A6" of Drill Proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-34 (WDNR #176)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-14-90

BEARING: S178.9E INCLINATION: -66.7 T.D: 926'
COORDINATES: L10200 E, 11515 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 14

DRILL HOLE SUMMARY

408.0 482.5
425.5 433.0
450.6 459.0
464.0 471.0

482.5 596.5
490.0 494.0
522.3 547.0

596.5 650.0

650.0 654.5

654.5 661.0

661.0 668.0

668.0 680.3

680.3 705.2
684.4 701.0

Rch ⋙ 408.0 482.5 RHYOLITE TUFF, Cherty
pRd ^^ 425.5 433.0 Rhyolite Porphyry Dike
pRd ^^ 450.6 459.0 Rhyolite Porphyry Dike
pRd ^^ 464.0 471.0 Rhyolite Porphyry Dike

Rcl ⋙ 482.5 596.5 RHYOLITE CRYSTAL LAPILLI TUFF
pRd ^^ 490.0 494.0 Rhyolite Porphyry Dike
pRd ^^ 522.3 547.0 Rhyolite Porphyry Dike Swarm

Rl,Rch ⋙ 596.5 650.0 RHYOLITE LAPILLI TUFF, CHERTY TUFF

Rt,p ⋙ 650.0 654.5 RHYOLITE TUFF, With Pyrrhotite

Xz,tp ⋙ 654.5 661.0 TUFFITE, Stringery, Talcose, With Pyrrhotite

BP,t ⋙ 661.0 668.0 INTERBEDDED PYRRHOTITE, Talc

Rc ⋙ 668.0 680.3 RHYOLITE CRYSTAL TUFF

BP ⋙ 680.3 705.2 BEDDED PYRRHOTITE
Xbp,t ^^ 684.5 701.0 TUFFITE, Talcose, With Bedded Pyrrhotite

684.5 701.0 5% Sp

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.0	-66.8
300'	178.1	-67.2
450'	178.7	-67.4
600'	180.2	-67.1
750'	181.7	-66.6
926'	181.7	-66.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-5-90
REMARKS: "A6" of Drill Proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-34 (WDNR #176)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-14-90

BEARING: S178.9E INCLINATION: -66.7 T.D: 926'
COORDINATES: L10200 E, 11515 N
ELEV: 1567' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-30-91
PAGE 1 OF 14

DRILL HOLE SUMMARY

705.2 718.0 — pMd — >>< 705.2 718.0 MAFIC DIKE OR FLOW, Plag-Phyric-Reversely Graded

718.0 718.3 — BPs — >>< 718.0 718.3 BEDDED PYRRHOTITE

718.3 776.0 — Rt — >>< 718.3 776.0 RHYOLITE TUFF

735.0 742.0 — QD — ^^ 735.0 742.0 Quartz Diorite

776.0 926.0 — QD — >>< 776.0 926.0 QUARTZ DIORITE

776.0 783.0 — gQD — ^^ 776.0 783.0 Granophyric Quartz Diorite

E.O.H. 926' (total depth)

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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						
											Rc	** 60.0 110.0 RHYOLITE CRYSTAL TUFF, green grey, fine-grained						
												Note: Core Broken @ 60.0-81.0						
67.00																		
	90	0	R3	a	20	2												
69.00					40													
	90	10	R3	a	20	2												
71.00					40													
	90	20	R3	a	20	2												
76.00					40													
	95	50	R3	a	10	2				-20C	pRd	^^ 78.0 86.5 Rhyolite Porphyry Dike, Porphyritic. Dark grey black matrix-quartz and plag phenocrysts. Lower contact broken						
80.00				a	30													
	99	85	R3	a	20	2												
				b	40													
86.00				b														
	98	80	R2	b	20	2												
				b	40													
				b														
				b														
96.00				b														
	98	75	R3	b	20	2												
100.00				b	40													
	99	85	R3	b	30	2												
				b	50													
106.00				b														
	100	95	R3	a	20	2												
				a	50						pRb	** 110.0 119.0 RHYOLITE BRECCIA, Porphyritic. Green-grey crystal tuff matrix, with rhyolite porphyry clasts-up to 2" in diameter						
				a														
113.00				b														
	98	70	R3	a	20	1												
				b														
118.50				b														
	100	100	R3	c	20	1				-70B	Rt	** 119.0 129.0 RHYOLITE TUFF, Fine-grained						
122.00				b														
	100	90	R4	b	10	2												
				c	25							Note: Weird black patchy alteration in beds from 119.0-125.0						
128.00				c														

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	TotalX	Sp	Cp	Ga	Py	Po
	100	85	R4	c	20	2					Rc	** 129.0 204.0 RHYOLITE CRYSTAL TUFF, lt. grey medium-grained, grading from crystal-poor to crystal rich, almost plag-phyric @ 159.0-167.0, then repeating						
				c	40													
				c														
135.00				c														
	100	100	R4	c	10	1												
				c														
				c														
				c														
145.00				c							Rc,Rt	^^ 146.0 148.5 Interbedded Rhyolite Crystal Tuff, Rhyolite Tuff						
	100	95	R4	b	10	2												
				b	30													
150.50				a														
	100	100	R4	a	10	2												
154.00				a	40													
	100	90	R4	a	20	2												
				a	45													
159.00				a														
	100	85	R4	b	20	2												
				c	50													
165.00				b														
	100	85	R4	a	10	2												
				b	30													
				b														
				a														
174.00				a								Note: 172.0-174.0 Fracture @ 20 degrees to axis with epidote and pink carbonate						
	99	85	R4	b	10	2												
				b	30													
179.50				b														
	100	100	R4	b	30	1					Rt,p	^^ 180.0 185.8 Rhyolite Tuff, With Pyrrhotite	a					5
				c									a					5
186.00				c						-20			a					5
	99	75	R4	c	10	1				-17		Note 187.0-192.0 Core Oxidized/Fractured @ 10-20 degrees to core axis						
190.00				c						-17								
	99	85	R4	b	10	3												
				b	30													
				c	60													
				d														
200.00				b														
	100	100	R4	c	10	3												

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	30						Rt	** 204.0 211.0 RHYOLITE TUFF, Fine-grained, blue-grey						
				c	50													
				b														
210.50				a														
	99	85	R3	a	20	2					Rc	** 211.0 239.0 RHYOLITE CRYSTAL TUFF, fine to medium-grained patchy epidote alteration, cherty interbeds						
				a	60													
				a														
219.00				a														
	100	100	R3	a	20	2												
				a	60													
				a														
226.00				b														
	100	90	R3	b	10	3												
				a	30													
				a	60													
233.00				a														
	100	90	R3	a	20	2												
				c	60													
				b							Rc	** 239.0 281.0 RHYOLITE CRYSTAL TO LAPILLI TUFF, greyish, bleached, fine-grained matrix, with rounded darker grey crystals?, possible hornfels texture between two dikes						
				b														
243.00				b														
	100	100	R3	a	10	3												
				a	30													
				a	60													
				a						-15C	pMd	^^ 250.5 272.3 Plag-phyric Mafic Dike, fractured @ 10-20 degrees to core axis, appears to have chilled, crystal-poor margins						
253.00				a														
	100	100	R3	a	10	3												
				a	30													
				a	55													
				a														
263.00				a														
	100	85	R3	a	10	3				-7F								
				a	30					-10F								
				a	65													
				a														
273.00				a														
	100	95	R3	a	10	3				-12C								
				a	30													

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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														
283.00				a						-22C	pRd	** 281.0 310.0 RHYOLITE PORPHYRY DIKE, grey, granophyric, crystals are small						
	99	80	R3	a	10	3												
286.00				a	30													
					65													
	99	80	R3	a	10	2												
290.00				a	60							Note: Core broken @ 288.0-309.0						
	98	60	R3	a	10	2												
292.00					30													
	50		R3	a	10	2												
293.00					30													
	95	60	R3	a	10	2												
295.00					30													
	98	50	R3	a	5	2												
298.00				a	30													
	100	100	R3	a	5	2												
299.00					30													
	100	85	R3	a	5	2												
303.00				a	30													
	100	70	R3	b	10	2												
				a	70													
309.50				a														
	100	90	R3	a	10	2					R1b	** 310.0 330.0 RHYOLITE LAPILLI BRECCIA, brown-grey, crystal to lapilli tuff matrix, with angular clasts						
				a	65													
315.00				a														
	100	100	R3	b	10	3												
				a	25													
				b	45													
				b														
				a														
				a														
				b							IR	** 330.0 358.0 INTRUSIVE RHYOLITE, pinkish-grey, granophyric, flat upper contact, gradational (bedded) lower contact						
				b														
333.50				a														
	100	100	R4	a	10	2												
337.50				a	30													
	100	100	R4	b	10	2												
				b	30													
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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
346.00				a														
	100	100	R4	a	20	2												
				a	50													
				b														
				a														
356.00				b														
	98	70	R4	a	5	3					Rcl	** 358.0 408.0 RHYOLITE CRYSTAL LAPILLI TUFF, greyish white coarse-grained crystal martix with lapilli sized clasts						
				a	20													
361.50				b	50													
	100	100	R4	a	5													
365.50				a	20	3												
					55													
	100	100	R3	a	5	3												
				b	20													
				c	60													
				c														
375.50				b														
	100	100	R3	b	10	3												
				c	30													
				c	50													
				c														
386.00				c														
	100	100	R3	c	10	3												
				c	40													
				c	60													
394.00				b														
	100	100	R3	b	10	2												
				c	70													
				b														
401.00				a														
	100	100	R3	a	10	2												
406.00				a	40													
	100	100	R3	a	10	2					Rlch	** 408.0 437.0 RHYOLITE LAPILLI TUFF, Chert, lt. grey, cherty fragments and interbeds						
				a	35													
				a														
				a														
415.00				a														
	100	75	R3	a	10	2												
				a	40													
421.00				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	100	R3	a	20	2												
				b	50													
426.00				a						-20C	pRd	^^ 425.0 433.0 Rhyolite Porphyry Dike, green grey, granophyric margins, porphyritic middle						
	100	95	R3	a	10	2												
				a	40													
				a														
				a														
436.00				a														
	100	90	R3	a	10	3					Rt,Ch	×× 437.0 782.5 RHYOLITE TUFF, Cherty, dark grey, fine-grained						
				a	30													
442.00				a	60													
	99	85	R3	a	5	3												
446.00				a	20													
					40													
	99	85	R3	a	5	3												
450.50				a	20					-5F	pRd	^^ 450.5 459.0 Rhyolite Porphyry Dike, green grey, granophyric, with chlorite alteration and Fe-staining						
					50													
	100	100	R3	a	10	3												
				a	30													
				a	70													
				b						-20F								
460.00				b														
	100	95	R3	a	10	3												
				a	30					-15F	pRd	^^ 464.0 471.0 Rhyolite Porphyry Dike, red, grey, granophyric, with fault breccia in fractures						
				a	60													
467.50				a														
	99	70	R3	a	10	3												
				a	40													
				a	60													
475.00				a														
	99	60	R3	a	20	3												
				a	40													
				a	60						Rcl	×× 482.5 522.5 RHYOLITE CRYSTAL LAPILLI TUFF						
483.50				a														
	100	85	R3	b	15	3												
				c	40													
				b	60						pRd	^^ 490.0 494.4 Rhyolite Porphyry Dike, greenish, pink, granophyric, caused chilled, hornfelsed margins						
491.00				a														
	100	95	R3	a	10	3												
				a	40													

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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	70													
				b														
500.00				a														
	100	100	R3	a	50	2												
				a	70					-20C	pMd	^^ 504.3 510.7 Plag-phyric Mafic Dike, chilled margins						
507.50				a														
				a														
	100	100	R3	a	50	2												
511.50				b	70					-20C								
	100	100	R3	a	20	3												
516.00				a	50													
					70													
	100	95	R3	b	20	3												
				a	50													
521.00				a	70													
	100	100	R3	a	20	3					pRd	** 522.3 547.0 RHYOLITE PORPHYRY DIKE SWARM, Granophyric. Dike material more abundent, with hornfelsed crystal tuff as host rock						
				a	40													
528.50				a	75													
	100	100	R4	a	20	3												
				a	30													
534.00				a	70													
	100	100	R4	a	15	3												
				b	30													
				b	65													
				a														
543.00				a														
	100	100	R3	a	15	3												
				b	30													
				a	65													
551.00				a														
	100	100	R3	a	10	3												
				b	30													
556.00				b	70													
	100	85	R3	a	15	3												
				b	30													
				a	70													
				b														
566.00				a														
	100	95	R3	a	10	3												
				b	20													

Note: Rhyolite Crystal Lapilli Tuff

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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							becomes more breccia-like towards bottom of interval						
				b														
575.00				a														
	100	95	R3	a	20	2												
				a	70													
				a														
				b														
584.00				a														
	100	100	R3	b	20	3												
				b	50													
				b	70													
				a														
594.00				a														
	100	95	R3	a	10	3					Rlch	** 596.5 615.7 RHYOLITE LAPILLI TUFF, CHERTY						
				a	30													
				a	70													
				b														
604.00				b														
	100	95	R3	b	10	3												
				a	30													
				b	60													
				b														
				b														
616.00				a														
	100	95	R3	a	10	3					Rch,*R	** 615.7 650.4 INTERBEDDED RHYOLITE TUFF, CHERTY, & SPHERULITIC RHYOLITE						
				a	30													
				a	60													
623.00				a									a					4
	99	85	R3	a	10	3					Rt,l	^^ 625.4 626.0 Rhyolite Tuff, Laminated, with magnetite	a					4
				b	30								a					4
				b	60													
631.00				a														
	100	85	R2	b	15	2					Rt*,t	^^ 634.0 637.0 Rhyolite Tuff, Altered, talcose						
				b	30													
				b														
				b							*R	^^ 637.0 643.0 Spherulitic Rhyolite						
639.00																		
	100	85	R2	b	15	2												
				b	30													
646.00				b														

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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

Run	%	RQD	RF	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
	100	85	R2	b	15	2												
				b	55													
652.60				b							Rt,p	** 650.4 654.5 RHYOLITE TUFF, With Pyrrhotite	b					7
													b					7
656.00	100	100	R2	b	30	1					Xz,tp	** 654.5 661.0 TUFFITE, Stringery, talcose, with pyrrhotite	b					7
				b									b					7
	99	75	R2	a	30	2							b					7
				a	50								c	12		2		6
				a									c	12		2		6
				b									c	12		2		6
													c	12		2		6
663.00											BPt	** 661.0 668.0 INTERBEDDED PYRRHOTITE, Talc	c	12		2		6
	100	95	R2	a	15	3							c	12		2		6
				b	30								c	2				12
				c	50								c	2				12
				b									c	2				12
671.00											Rc	** 668.0 680.3 RHYOLITE CRYSTAL TUFF	c	2				12
	100	90	R3	b	15	3							c	2				12
				a	30													
676.00				b	50													
	100	100	R2	a	10	3												
				a	30													
				b	50						BP	** 680.3 705.2 BEDDED PYRRHOTITE						
				b									c	3		1		10
685.00				c							Xp,t	** 684.4 701.0 TUFFITE, BEDDED PYRRHOTITE, talcose	c	3		1		10
	100	100	R2	c	10	2							c	3		1		10
				c	30								c	8	1	2		10
				c									c	8	1	2		10
693.00				c									c	8	1	2		10
	90	45	R2	b	10	2							c	8	1	2		10
696.00				b	30								c	8	1	2		10
	100	95	R2	b	10	3							c	8	1	2		10
				c	30						Xz,tp	** 697.5 705.3 TUFFITE, Talcose, stringery, with pyrrhotite	c	8	1	2		10
				b	50								c	8	1	2		10
704.00				c									c	8	1	2		10
	100	90	R4	c	35	2				-82c	Rc?	** 705.2 718.0 PLAG-PHYRIC FLOW	c	2		1		10
				c	50								c	2		1		10
				b									c	2		1		10

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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
714.00				a														
				c														
	100	90	R4	b	35	2												
				a	50					-70c	BP	** 718.0 718.3 BEDDED PYRRHOTITE	c					30
				a														
720.00											Rc	** 718.3 776.0 RHYOLITE CRYSTAL TUFF, grey, coarse-grained	c					30
	100	85	R3	a	10	3							c					30
				b	30													
726.00				b	50													
	100	85	R3	a	10	3												
				a	30													
				a	65													
				a														
736.00				a							Rc	^^ 734.5 742.0 Rhyolite Crystal Tuff, coarse-grained						
	98	85	R3	a	10	3												
737.50					30													
					65													
	100	90	R3	a	10	3												
				a	30													
				a	65													
746.00				a														
	100	100	R3	a	10	3												
				a	30													
751.00				a	60													
	100	100	R3	a	15	3												
756.00				a	30													
					60													
	100	90	R3	a	15	3												
				a	30													
761.50				a	60													
	99	85	R3	a	30	2												
				a	65													
				a														
				c														
771.50				c														
	99	90	R3	c	30	2												
				c	50													
				c							OD	** 776.0 926.0 QUARTZ DIORITE						
				b														
											gOD	^^ 776.0 783.0 Granophyric Quartz						

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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
780.00												Diorite						
	100	100	R3	b	10	2												
				c	30													
786.00				c														
	100	100	R3	d	20	2												
				d	60													
				d														
				d														
796.00				d														
	100	100	R3	d	20	2												
				d	40													
				d														
				d														
805.00				d														
	100	100	R3	d	15	2												
				d	40													
				d														
				b														
815.00				c														
	100	100	R3	b	10	3												
				c	30													
				b	60													
				a														
826.00				b														
	100	100	R3	c	10	2												
				b	30													
				c														
				c														
836.00				c														
	100	100	R3	c	30	1												
				c														
				c														
				c														
846.00				a														
	100	100	R3	a	30	1												
				b														
				c														
				d														
				d														

ROCK QUALITY:

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

DRILL HOLE: LYN90-34

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				d														
861.00				d														
				d														
	100	100	R3	d		0												
866.00				d														
	100	100	R3	c	10	2												
				c	30													
				c														
				c														
876.00				c														
	100	100	R3	d	30	2												
				d	60													
				d														
				d														
886.00				c														
	100	95	R3	c	30	2												
				c	60													
				c														
896.00				c														
	100	95	R3	c	10	2												
				a	60													
				b														
906.00				b														
	100	100	R3	c	20	2												
				c	40													
914.00				c														
	100	100	R3	c	20	2												
				c	40													
				c														
924.00				c														
	100	100	R3	c	20	2												
926.00					40													

E.O.H. 926' (total depth)

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.2	-62.3
200'	179.3	-62.0
300'	178.6	-62.1
416'	177.9	-61.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-6-90
REMARKS: "A2" of Drill Proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-35 (WDNR #178)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-9-90

BEARING: S178.9E INCLINATION: -59.6 T.D: 416'
COORDINATES: L10300 E, 10610 N
ELEV: 1562.4' SEC: 15 TWP: 37N RANGE: 4E

DATE: 12-31-91
PAGE 1 OF

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 59.0			0.0 59.0 OVERBURDEN	
59.0 64.0	(not recovered)			
64.0 69.0	(HQ core)			
59.0 130.0		Rc/W	59.0 130.0 RHYOLITE CRYSTAL TUFF (WACKE)	
66.0 77.5		pRd	66.0 77.5 Rhyolite Porphyry Dike	
90.0 95.0		pRd	90.0 95.0 Rhyolite Porphyry Dike	
110.0 124.2		pRd	110.0 124.2 Rhyolite Porphyry Dike	
130.0 209.0		CS	130.0 209.0 CALCAREOUS SEDIMENT	
135.0 147.0		Xzca	135.0 147.0 Tuffite, Stringery, Calcareous, With Diopside	135.0 140.0 12% Sp, 5% Po, Py
158.0 186.0		CTs	158.0 186.0 Calcareous Tuff, With Sulfides	158.0 186.5 7% Sp, 5% Py, Po
186.0 200.0		ChC#	186.0 200.0 Diopside Altered Cherty Tuff	
200.2 206.5		BPM	200.2 206.5 Bedded Magnetite, Pyrrhotite	
206.5 209.0		ChC#	206.5 209.0 Diopside Altered Cherty Tuff	
209.0 224.0		SL#	209.0 224.0 SILTSTONE, Altered	
224.0 231.0		Sk	224.0 231.0 CALCSILICATE-ALTERED TUFF	224.0 231.0 Gt, Ep
231.0 260.0		Xch#	231.0 260.0 TUFFITE, Cherty, Altered Diopside	231.0 240.5 12% Sp
260.0 262.0		MS	260.0 262.0 MASSIVE SULFIDE	260.0 262.0 60% Sp
262.0 298.5		ChTs	262.0 298.5 CHERTY TUFF, With Sulfides	262.0 298.5 5% Sp
277.5 279.5		MS	277.5 279.5 Massive Sulfide	277.5 279.5 60% Sp
293.5 295.7		MS	293.5 295.7 Massive Sulfide	293.5 295.7 80% Sp
298.5 416.0		QD	298.5 416.0 QUARTZ DIORITE	
376.0 378.0		Rt?	376.0 378.0 Rhyolite Tuff ?	
387.5 394.5		FZ	387.5 394.5 Fracture Zone	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.2	-62.3
200'	179.3	-62.0
300'	178.6	-62.1
416'	177.9	-61.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-6-90
REMARKS: "A2" of Drill Proposal
CORE SIZE: HQ/NQ

HOLE NO: LYN90-35 (WDNR #178)

DATE: 12-31-91
PAGE 1 OF

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-9-90

BEARING: S178.9E INCLINATION: -59.6 T.D: 416'
COORDINATES: L10300 E, 10610 N
ELEV: 1562.4' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
			E.O.H. 416' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-35

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 59.0												** 0.0 59.0 OVERBURDEN						
												^^ 0.0 40.0 Sand						
												^^ 40.0 59.0 Sand, gravel, and boulders						
											Rc/W	** 59.0 130.0 RHYOLITE CRYSTAL TUFF/ WACKE, dark grey, hornfelsed						
64.00																		
	95	50	R3	c	10	3					pRd	^^ 66.0 77.5 Rhyolite Porphyry Dike, pinkish green, granophyric						
				b	30													
69.00				a	70													
	99	80	R3	a	10	3												
72.00				a	30													
					60													
	100	95	R3	a	30	2												
74.00					60													
	90	75	R3	a	10	3				-10F								
				a	40													
79.00				a	60					-20F								
	99	85	R3	a	10	2												
82.00				a	40													
	100	90	R3	a	20	2												
84.00					60													
	99	85	R3	a	10	2												
				a	40													
				a														
91.00				a							pRd	^^ 90.0 95.0 Rhyolite Porphyry Dike, pinkish green, granophyric						
	99	85	R3	a	10	2												
				a	40													
				a								Note: @ 98.0-103.0 Core broken						
99.00				a														
	99	85	R3	a	20	2												
101.00					40													
	99	70	R4	a	20	2												
103.50					45													
	100	90	R4	a	10	2												
				a	40													
				b														
112.00				a							pRd	^^ 110.0 124.2 Rhyolite Porphyry Dike Swarm						
	100	90	R3	a	20	3												
				a	40													

ROCK QUALITY:

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

DRILL HOLE: LYN90-35

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	Sp6	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a	60													
121.00				a														
				a														
	99	85	R4	a	20	3												
124.50				a	40													
					60													
	99	80	R2	b	40	1												
126.00												Note: @ 128.0-130.0 Core crumbled						
	98	75	R2	a	10	3				-40B	CS	** 130.0 209.0 CALCAREOUS SEDIMENT, grey						
				a	30					-85B		tuff, with green diopside interbeds						
131.00				b	60					-65B								
	99	85	R3	b	20	3				-65B								
				a	40					-60B	Xzca	^^ 135.0 147.0 Tuffite, stringery,						
				a	60							calcareous, with diopside	c	12				5
138.00				b									c	12				5
	100	90	R2	b	10	2							c	12				5
				b	40								c	12				5
				c														
146.00				b														
	100	100	R2	c	10	2							c	10				5
				c	40						CS	^^ 147.0 158.0 Calcareous Sediment,	c	10				5
152.00				b								contorted bedding	c	10				5
	100	100	R2	b	15	2							a				3	1
				c	30								a				3	1
				c									a				3	1
				c							CTsp	^^ 158.0 186.0 Calcareous Tuff, with	a				3	1
161.50				c								sulfides, contorted bedding	a				3	1
	100	100	R2	c	15	2							b		7		3	2
				c	40								b		7		3	2
				c									b		7		3	2
				c									b				4	2
171.50				c									b				4	2
	100	90	R2	c	10	2							b				4	2
				c	40								b				4	2
				c									b				4	2
				c														
181.50				c														
	100	100	R2	c	25	2												
				c	40													
188.00				a							Chc#	^^ 186.0 200.0 Diopside Altered Cherty						
	100	85	R3	a	25	2						Tuff						
192.00				a	45													
	100	100	R3	a	25	2												
194.00					45													
	100	95	R3	a	15	2												
				b	30													
200.00				a														
	100	95	R3	b	10	2					BPM	^^ 200.2 206.5 Bedded Magnetite,						
204.00				b	50							Pyrrhotite						
	100	100	R3	b	30	2					ChC#	^^ 206.5 209.0 Diopside Altered Cherty						

ROCK QUALITY:

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

DRILL HOLE: LYN90-35

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
208.00				a	50							Tuff						
	99	85	R3	a	20	3												
				a	50													
				a	80						SL#	** 209.0 224.0 SILTSTONE, altered						
215.00				a														
	100	85	R2	a	30	3												
				a	50													
222.00				a	80													
	100	85	R4	b	10	3					Sk	** 224.0 231.0 CALCSILICATE-ALTERED TUFF						
				c	30													
				b	70													
230.00				a														
	100	100	R4	a	10	3					Xch#	** 231.0 260.0 TUFFITE, cherty, diopside-altered	c	10				2
231.00					30								c	10				2
					50								c	10				2
	100	80	R3	a	10	3							c	10				2
				a	30								c	10				2
				a	50								c	10				2
				a									c	10				2
241.00				a									c	10				3
	100	75	R3	a	20	2							c	10				3
				a	40								c	10				3
247.00				a									c	10				3
	98	50	R3	a	10	3						Note: @ 247.5-250.5 Core crumbled/ sheared	c	10				3
				a	40								c	10				3
254.00				a	60								c	10				3
	100	95	R3	a	20	2							c	10				3
				a	45							Note: 4" Quartz Diorite Dikelet	c	10				3
260.00				a									c	10				3
	100	100	R3	a	10	2					MS	** 260.0 262.0 MASSIVE SULFIDE	d	60				5
				a	40								d	60				5
				b							ChTs	** 262.0 298.5 CHERTY TUFF, with sulfides	d	60				5
				b									b	6				4
270.00				b									b	6				4
	100	100	R3	a	10	2							b	6				4
				a	30								b	6				4
276.00				a									b	6				4
	100	100	R3	a	10	2					MS	^^ 277.5 279.0 Massive Sulfide	b	6				4
				a	30								f	60				
282.00				a									b	6				2
	100	90	R3	a	30	2							b	6				2
				b	50								b	6				2
288.50				a									b	6				2
	99	75	R3	b	10	3							b	6				2
				b	30								b	6				2
294.00				b	50								b	6				2
	100	80	R3	b	20	2					MS	^^ 293.5 295.7 Massive Sulfide	b	6				2
				a	50					-40C	QD	** 298.5 416.0 QUARTZ DIORITE	f	60				
				a									f	60				
											QDs	^^ 298.5 317.0 Quartz Diorite, sheared						

ROCK QUALITY:

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

DRILL HOLE: LYN90-35

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 @ 40 degrees to core axis	Total%	Sp	Cp	Ga	Py	Po
299.50																		
	100	85	R3	a	30	2												
304.50				a	55													
	100	100	R3	a	20	2												
				b	50													
				a														
				a														
314.00				a						-40C								
	100	100	R3	a	20	2												
				a	60							^^ 317.0 376.0 Moderately sheared, granophyric						
				a														
324.00				a														
				b														
	100	100	R3	b	20	2												
				a	65					-38F								
				b														
				b														
334.00				b														
	100	100	R3	a	15	2												
				b	30													
				c														
				b														
344.00				a														
	100	100	R3	a	15	2												
346.00					40													
	100	95	R3	a	10	3												
				b	25													
				b	70													
354.00				a														
	100	100	R3	b	20	3												
				a	40													
				a	80													
				a														
364.00				a														
	100	100	R3	a	10	2												
				b	80													
				b														
				b														
374.00				b														
	99	85	R3	b	20	2				-10-15	Rt?	^^ 376.0 378.0 Rhyolite Tuff, foliated, high angle contacts 10-15 degrees to core axis, lower contact broken, same as in LYN90-33						
				a	55													
379.00				b														
	100	95	R2	a	10	2												
				a	60													
				a														
				b						-10	FZ	^^ 387.5 394.5 Fault Zone, fault breccia/gouge, chloritic alteration @ high angle 10 degrees to core axis, contains mafic dike						
389.00				a														
	100	85	R2	a	10	2												
				a	50													
				a														

ROCK QUALITY:

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

DRILL HOLE: LYN90-35

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														
399.00				a						-10F		~~ 400.0 416.0 Red iron staining, big						
	100	85	R3	a	10	2						quartz eyes, elongated ~ parallel to						
				b	60							axis, sheared						
				b														
				b														
408.00				c														
	100	85	R3	b	20													
				a		2												
				a	50													
416.00				a								E.O.H. 416' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.6	-65.1
200'	181.5	-65.1
300'	183.8	-65.0
400'	181.6	-64.6
518'	183.4	-64.2

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-12-90
REMARKS: "A10"
CORE SIZE: HQ/NQ

HOLE NO: LYN90-36 (WDNR #183)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-14-90

BEARING: S181.6E INCLINATION: -65.0 T.D: 518'
COORDINATES: L9500 E, 11080 N
ELEV: 1563.0' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-11-92
PAGE 1 OF 8

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 40.0			><< 0.0 40.0 OVERBURDEN	
40.0 44.0	(not recovered)			
44.0 49.0	(HQ core)			
40.0 280.6		Rc	><< 40.0 280.6 RHYOLITE CRYSTAL TUFF	
113.0 122.0		pRd	~~ 113.0 122.0 Rhyolite Porphyry Dike	
128.5 139.0		pRlb	~~ 128.5 139.0 Rhyolite Lapilli Breccia, Porphyritic	
		FZ	Note: @ 137.0-145.0, 149.0-159.0 Fault Zone	
208.0 211.0		FZ	~~ 208.0 211.0 Fracture Zone	
227.0 231.0		FZ	~~ 227.0 231.0 Fracture Zone	
280.6 284.0		BPs	><< 280.6 284.0 BEDDED PYRRHOTITE WITH SPHALERITE	
284.0 305.0		Rcl	><< 284.0 305.0 RHYOLITE CRYSTAL LAPILLI TUFF	
296.4 300.0		Rch	~~ 296.4 300.0 Rhyolite Tuff, Cherty	
305.0 319.0		Rch	><< 305.0 319.0 RHYOLITE TUFF, Cherty	
319.0 324.0		Rl	><< 319.0 324.0 RHYOLITE LAPILLI TUFF	
324.0 327.0		MS	><< 324.0 327.0 MASSIVE SULFIDE	
327.0 329.0		Rca#	><< 327.0 329.0 RHYOLITE TUFF, Calcareous, Altered	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.6	-65.1
200'	181.5	-65.1
300'	183.8	-65.0
400'	181.6	-64.6
518'	183.4	-64.2

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Longyear
LOGGED BY: T. Harding
DATE COLLARED: 11-12-90
REMARKS: "A10"
CORE SIZE: HQ/NQ

HOLE NO: LYN90-36 (WDNR #183)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-14-90

BEARING: S181.6E INCLINATION: -65.0 T.D: 518'
COORDINATES: L9500 E, 11080 N
ELEV: 1563.0' SEC: 15 TWP: 37N RANGE: 4E

DATE: 1-11-92
PAGE 1 OF 8

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
329.0 371.0		Rz,tp	** 329.0 371.0 RHYOLITE TUFF, Talcose, With Pyrrhotite	
371.0 410.0		sgQD	** 371.0 410.0 QUARTZ DIORITE, Granophyric, Sheared	
410.0 416.0		Rt,t	** 410.0 416.0 RHYOLITE TUFF, Talcose	
416.0 446.5		Rt,p	** 416.0 446.5 RHYOLITE TUFF, With Pyrrhotite	
446.5 518.0		gQD	** 446.5 518.0 QUARTZ DIORITE, Granophyric	
			E.O.H. 518' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN90-36

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 40.0											** 0.0 40.0 OVERBURDEN						
											^^ 0.0 20.0 Sand and boulders						
											^^ 20.0 40.0 Sand, gravel, and boulders						
										Rc	** 40.0 280.6 RHYOLITE CRYSTAL TUFF, medium-grey, fine-to medium grained						
44.0																	
	100	95	R3	a	10	3					Note: @ 44.0-75.0 Core jointed/shattered with quartz in filling, rock is silicified, almost "cherty"						
				a	30												
49.0				a	60												
	100	80	R3	a	10	3											
				a	30												
				a	60												
58.5				a													
	100	100	R3	a	10	3											
				a	30												
64.0				a	60												
	100	90	R3	a	10	2											
				a	35												
69.5				a													
	98	85	R3	a	10	2											
				a	35												
75.0				a													
	100	100	R3	a	10	2											
				a	35												
				a													
84.0				a													
	100	90	R3	a	10	3											
				a	30												
				a	60						Note: @ 88.0-128.0 Core jointed/shattered, bleached, lt. grey, possible rhyolite						

ROCK QUALITY:

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

DRILL HOLE: LYN90-36

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								porphyry dikelets. Crystal tuff host						
93.0				a								rock is spotted, (hornfelsed), silicified,						
	100	90	R3	a	5	2						and darker						
				a	30													
99.5				b														
	100	90	R3	b	5	3												
102.5				a	15													
					30													
	100	80	R3	a	5	3												
				a	20													
106.0					75													
	100	85	R3	a	20	2												
110.0				a	60													
	100	100	R3	a	5	3												
114.0				a	20						pRd	^^ 113.0 122.0 Rhyolite Porphyry Dike						
					65													
	100	100	R3	a	5	3												
118.5				a	20													
					65													
	100	70	R3	a	10	3												
121.5				a	30													
					60													
	100	100	R3	a	20	2												
124.0				a	65													
	100	95	R3	a	10	3												
				a	30						pRlb	^^ 128.5 139.0 Rhyolite Lapilli Breccia,						
				a	60							Porphyritic. Greenish grey, lapilli						
132.0				b						-44		tuff matrix, with angular cherty clasts,						
	100	95	R3	b	10	2						coarsens downward.						
				b	30													
				a														
				b						-30	FZ	^^ 139.0 163.0 Fault Zone, core is						
				b								bleached, shattered with joints, oblique/						
				b						-4		parallel to core, calcite fractures						
				a						-35-45B								
				a						-65B		Note: @ 137.0-145.0, 149.0-159.0 Fault/						
149.0				a						-18-25		Shear zone, quartz filled fractures and						
	100	100	R3	a	10	2						fault breccia. Fractures are nearly						
152.0				a	30							parallel to core axis and jagged.						
	100	95	R3	b	10	2												

ROCK QUALITY:

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

DRILL HOLE: LYN90-36

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

Run	%	RQD	Rf	ABCDE b	60	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
				a														
				a														
				a														
162.0				a														
	100	100	R3	a	10	2												
				a	55													
				a														
170.5				a														
	100	95	R3	a	15	2						Note: @ 169.0 VCS ?						
174.0				a	55													
	100	100	R3	a	10	3												
				a	30													
180.5				a	55													
	100	100	R3	a	10	3												
				a	30													
185.5				a	65													
	100	100	R3	a	15	2												
				a	50													
				a														
194.0				a														
	100	100	R3	a	10	3												
				a	30													
				a	50													
				a														
204.0				a														
	100	75	R3	a	10	3						Note: @ 206.5 VCS/Dacite						
				a	30						FZ	^^ 208.0 211.0 Fracture Zone, jagged fractures, nearly parallel to core axis, quartz-carbonate in filling						
				a	50													
				a														
214.0				a														
	100	100	R3	a	10	3						Note: 211.0-227.0 Crystal Tuff is heavily jointed and silicified ("cherty")						
				a	30													
				a	50													
				a														
224.0				a														
	99	85	R3	a	5	3												
				a	20						FZ	^^ 227.0 231.0 Fracture Zone						
				a	50													
232.0				a								Note: 231.0-280.6 Crystal tuff is						

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

ROCK QUALITY:

DRILL HOLE: LYN90-36

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	3												
				a	50					-50	Rch	** 305.0 319.0 RHYOLITE TUFF, Cherty						
				b	70													
				b														
311.0				a														
	99	85	R3	a	30	2												
				a	50													
				a														
320.6				b						-27B	R1	** 319.0 324.0 RHYOLITE LAPILLI TUFF						
	100	90	R3	b	30	2												
				b	50					-33	MS	** 324.0 327.0 MASSIVE SULFIDE, lapilli-	e	40				
				b								rich	e	40				
				a									e	40				
328.0											Rca*	** 327.0 329.0 RHYOLITE TUFF, calcareous,						
												altered,						
	100	100	R3	a	30	3				-55	Rz,tp	** 329.0 371.0 RHYOLITE TUFF, talcose,	c					15
				a	50							with pyrrhotite, pyrrhotite is pre-	c					15
				b	70							dominantly stringery	c					15
				a									c					15
338.0				b									c					15
	100	90	R2	a	20	3							c					15
				b	50								c					15
344.0				a	70								c					15
	100	95	R2	b	30	2							c					15
				b	50								c					15
				c									c					15
				c									c					15
353.0				c									c					15
	99	90	R2	c	30	2							c					15
				c	50								c					15
358.6				b									b					10
	100	100	R2	c	30	2							b					10
				c	50								b					10
364.0				c									c					15
	100	85	R2	c	20	2							c					15
				b	50								b					10
				b									b					10
				a							sgQD	** 371.0 410.0 QUARTZ DIORITE, sheared,	b					10
373.5				b								granophyric, reddish alteration						

ROCK QUALITY:

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

DRILL HOLE: LYN90-36

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	70	R3	a	30	2												
375.0					60													
	99	85	R3	a	10	2												
378.5				a	60	2												
	100	90	R3	a	50	1												
				a						-47								
384.0				a														
	100	90	R3	a	20	2												
				a	70													
				a														
				a														
393.0				a														
	100	85	R3	a	15	2												
				a	30													
				a														
				a														
404.0				a						-58		Note: Sheared						
	100	90	R2	b	30	2												
				a	50													
				a							Rt,t	** 410.0 416.0 RHYOLITE TUFF, talcose						
				a														
414.0				a														
	100	100	R2	a	30	1					Rt,p	** 416.0 446.5 RHYOLITE TUFF, with	c					15
				b								pyrrhotite, bedded to stringery	c					15
				b									c					15
421.0				b									c					15
	100	95	R2	c	10	2				-4			c					15
				c	30								c					15
				c									c					15
429.0				a									c					15
	100	85	R2	a	10	2							c					15
				a	30								c					15
				a									c					15
				b									c					15
438.5				b									c					15
	100	65	R2	b	10	2							c					15
				a	25								c					15
				a									c					15
446.0				a							gQD	** 446.5 518.0 QUARTZ DIORITE,	c					15
	100	95	R3	a	10	2						granophyric						

ROCK QUALITY:

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

DRILL HOLE: LYN90-36

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													
452.0				a														
	100	90	R3	a	20	2												
				a	50													
				a								Note: @ 458.0-462.0 Fracture Zone,						
459.0				a								parallel to core axis						
	100	80	R3	a	20	2												
463.0				b	50													
	100	100	R3	b	20	2												
				c	50													
				c								Note: Quartz Diorite, sheared to						
				c								foliated between fracture zones						
473.0				c														
	100	100	R3	c	20	2												
				b	40													
				a														
				c														
483.0				c														
	100	85	R3	c	10	2						Note: @ 485.0-488.0 Fracture Zone						
				b	30													
488.0				a														
	100	90	R3	b	10	2												
				a	35													
				c								Note: @ 494.0-496.0 Fracture Zone						
				a														
498.0				a														
	100	95	R3	a	10	2												
				a	30													
				a														
				a								Note: @ 505.0-509.0 Fracture Zone						
508.0				a														
	100	100	R3	a	10	2												
				a	40													
				a														
				a														
518.0				a								E.O.H. 518' (total depth)						

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.3	-69.6
250'	176.6	-70.0
400'	177.4	-70.1
600'	178.3	-70.4
800'	181.1	-70.6
944'	181.2	-70.7

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

HOLE NO: LYN90-37 (WDNR #175)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-27-90

BEARING: S180.2E INCLINATION: -70.1 T.D: 944'
COORDINATES: L10200 E, 11625 N
ELEV: 1559' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 59.0			** 0.0 59.0 OVERBURDEN	
59.0 64.0	(not recovered)			
59.0 259.0		SS/D	** 59.0 259.0 SANDSTONE/DACITE	
259.0 269.2		Wch	** 259.0 269.2 WACKE, Cherty	
269.2 272.0		BP	** 269.2 272.0 BEDDED PYRRHOTITE	269.2 272.0 20% Po
272.0 428.5		Rlb	** 272.0 428.5 RHYOLITE CRYSTAL LAPILLI TUFF	
290.0 296.0			^^ 290.0 296.0 Fracture Zone	
308.0 336.0		IR	^^ 308.0 336.0 Intrusive Rhyolite	
378.0 397.0		IR	^^ 378.0 397.0 Intrusive Rhyolite	
402.7 410.0		IR	^^ 402.7 410.0 Intrusive Rhyolite	
410.0 413.0		pRd	^^ 410.0 413.0 Rhyolite Porphyry Dike	
413.0 428.5		Rlbp	^^ 413.0 428.5 Rhyolite Lapilli Breccia, Porphyritic	
428.5 434.5		Rl	** 428.5 434.5 RHYOLITE LAPILLI TUFF	
429.3 432.0		pRd	^^ 429.3 432.0 Rhyolite Porphyry Dike	
434.5 441.0		Rt*	** 434.5 441.0 RHYOLITE TUFF, Altered	
441.0 470.0		Rcl	** 441.0 470.0 RHYOLITE CRYSTAL LAPILLI TUFF	

Noranda Exploration Inc.
Eastern Divison

DATE: 7-18-
PAGE 1 OF 1

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.3	-69.6
250'	176.6	-70.0
400'	177.4	-70.1
600'	178.3	-70.4
800'	181.1	-70.6
944'	181.2	-70.7

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

HOLE NO: LYN90-37 (WDNR #175)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-27-90

BEARING: S180.2E INCLINATION: -70.1 T.D: 944
COORDINATES: L10200 E, 11625 N
ELEV: 1559' SEC: 15 TWP: 37N RANGE: 4

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
470.0 479.0		R1	** 470.0 479.0 RHYOLITE LAPILLI TUFF	
479.0 573.5		Rt	** 479.0 573.5 RHYOLITE TUFF	
492.3 496.5		pRd	^^ 492.3 496.5 Rhyolite Porphyry Dike	
507.0 528.6		DS	^^ 507.0 528.6 Dike Swarm	
528.6 531.0		pMd	^^ 528.6 531.0 Mafic Dike	
541.5 546.0		Rcl	^^ 541.5 546.0 Rhyolite Crystal Lapilli Tuff	
568.8 573.0		pMd	^^ 568.8 573.0 Mafic Dike	
573.5 606.6		Rcl	** 573.5 606.6 RHYOLITE CRYSTAL LAPILLI TUFF	
606.6 618.0		R1,Ch	** 606.6 618.0 RHYOLITE LAPILLI TUFF, Cherty	
618.0 653.0		P1,Ch	** 618.0 653.0 INTERBEDDED LAPILLI TUFF, CHERT	
620.3 626.4		M1	^^ 620.3 626.4 Mafic Flow(?)	
631.5 634.0		M1	^^ 631.5 634.0 Mafic Flow(?)	
653.0 669.0		M1	** 653.0 669.0 MAFIC FLOW(?)	
669.0 677.2		R1	** 669.0 677.2 RHYOLITE LAPILLI TUFF	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.3	-69.6
250'	176.6	-70.0
400'	177.4	-70.1
600'	178.3	-70.4
800'	181.1	-70.6
944'	181.2	-70.7

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

HOLE NO: LYN90-37 (WONP #175)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-27-90

BEARING: S180.2E INCLINATION: -70.1 T.D: 944
COORDINATES: L10200 E, 11625 N
ELEV: 1559' SEC: 15 TWP: 37N RANGE: 4

DATE: 7-19-
PAGE 1 OF 1

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
677.2 683.7		M1	** 677.2 683.7 MAFIC FLOW(?)	
683.7 704.0		xR	** 683.7 704.0 SPHERULITIC RHYOLITE	
704.0 733.0		Rt	** 704.0 733.0 RHYOLITE TUFF	
704.0 711.0		Rt,p	^^ 704.0 711.0 Rhyolite Tuff, With Pyrrhotite	
733.0 742.0		Rt,t	** 733.0 742.0 RHYOLITE TUFF, Talcose	
742.0 748.5		Rl	** 742.0 748.5 RHYOLITE LAPILLI TUFF	
748.5 761.4		Rch,p	** 748.5 761.4 RHYOLITE TUFF, Cherty, With Pyrrhotite	
761.4 779.0		ChTp	** 761.4 779.0 CHERTY TUFF, With Pyrrhotite	
779.0 788.0		Xzch	** 779.0 788.0 TUFFITE, Cherty, Stringary	
788.0 792.0		BPt	** 788.0 792.0 BEDDED PYRRHOTITE, Talcose	
792.0 797.0		BPch	** 792.0 797.0 BEDDED PYRRHOTITE, Cherty	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	176.3	-69.6
250'	176.6	-70.0
400'	177.4	-70.1
600'	178.3	-70.4
800'	181.1	-70.6
944'	181.2	-70.7

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

HOLE NO: LYN90-37 (WDNP #175)

DATE: 7-
PAGE 1 (

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 11-27-90

BEARING: S180.2E INCLINATION: -70.1 T.D:
COORDINATES: L10200 E, 11625 N
ELEV: 1559' SEC: 15 TWP: 37N RANGE

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
797.0 817.6		Rt	** 797.0 817.6 RHYOLITE TUFF	
817.6 831.8		Rt,p	** 817.6 831.8 RHYOLITE TUFF, With Pyrrhotite	
831.8 856.0		Rt,tp	** 831.8 856.0 RHYOLITE TUFF, Talcose, With Pyrrhotite	
856.0 870.5		Rchs,tp	** 856.0 870.5 RHYOLITE TUFF, Cherty, Talcose, With Pyrrhotite & Sulfides	
870.5 878.5		Rt,t	** 870.5 878.5 RHYOLITE TUFF, Talcose	
878.5 944.0		QD	** 878.5 944.0 QUARTZ DIORITE	
878.5 944.0		gQD	~~ 878.5 944.0 Quartz Diorite, Granophyric	
			E.O.H. 944' (total depth)	

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
0.0 59.0												** 0.0 59.0 OVERBURDEN						
												^^ 0.0 40.0 Sand						
												^^ 40.0 45.0 Silt, sticky						
												^^ 45.0 59.0 Sand, gravel, and cobbles						
												Note: @ 55.0-57.0 Lost circulation						
											SS/D	** 59.0 259.0 SANDSTONE/DACITE, medium to dark grey, fine-grained, coarsens to medium-grained @ 116.0						
											SS/D	^^ 59.0 111.0 Sandstone or Dacite						
64.00																		
	100	100	R3	c	20	2												
				c	40													
69.00				c														
	100	100	R3	c	10	2												
73.00				c	30													
	100	100	R3	c	10	2												
				c	30													
78.00				c														
	100	90	R3	b	10	2												
80.00					60													
	100	100	R3	c	15	2												
84.00				b	50													
	100	85	R3	b	30	2												
				c	50													
89.50				a														
	99	85	R3	b	15	2												
				c	30													
				c														
				c														
99.50				c														

RQD QUALITY:

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

DRILL HOLE: L'N90-37

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
	100	95	R3	c	20	2												
				c	50													
				c														
				c														
110.00				c														
	100	100	R3	c	20	2					Wf	^^ 111.0 134.0 Feldspathic Wacke						
112.00					50													
	100	95	R3	c	40	1												
				c								Note: @ 116.0-133.7 Coarse-grained						
				c														
120.00				c														
	99	85	R3	c	10	3												
				c	50													
				a	80													
128.50				a														
	99	85	R3	c	20	2						Note: @ 133.7-144.5 Fine-grained rhyolite tuff						
				c	60													
134.00				c														
	100	80	R3	c	20	2					D	^^ 134.0 151.0 Dacite ?						
				c	60													
139.50				c														
	100	90	R3	c	20	2												
144.00				c	60													
	100	90	R3	c	30	2						Note: @ 144.5-167.0 Medium to coarse-grained						
				c	60													
149.00				c														
	99	90	R4	c	10	2												
				b	60						Wf	^^ 151.0 167.0 Feldspathic Wacke						
154.00				c														
	100	90	R3	c	15	2												
				c	55													
				b														
161.00				a														
	100	100	R4	b	10	2												
164.00				b	60					-80C								
	100	100	R4	b	10	3												
				a	40					-57B	SL	^^ 167.0 186.0 Siltstone, laminated						
				a	60													
				a														
172.00				a														

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
	95	85	R4	a	10	2												
174.00					50													
	100	85	R3	a	10	2				-75B								
179.00				a	50													
	99	80	R3	b	10	2												
182.00				a	50													
	100	85	R3	a	10	2												
				a	60						SS	^^ 186.0 194.5 Sandstone, fine-grained, dark grey						
				a														
				b														
191.00				b														
	100	90	R3	b	10	3					SS	^^ 194.5 233.5 Sandstone, laminated, dark greenish grey with bleached areas and pink cherty interbeds						
				a	30													
				a	50													
				a														
				b														
												Note: @ 197.0 199.0 Fe-Staining and fracturing						
202.00																		
	100	95	R4	c	20	2				-60B		Note: 204.0-213.0 Fine-grained, occasionally laminated						
				c	50													
				b														
				a														
212.00				a														
	100	100	R5	a	20	2												
214.00					50					-55B								
	100	100	R5	a	10	2												
				a	60					-88B								
				a														
				a														
224.00				a														
	100	100	R4	b	10	3												
				b	30													
				a	60													
				a														
234.00				a							Wf	^^ 233.5 272.0 Feldspathic Wacke, ashy matrix with feldspathic intervals and lynne rhyolite clasts, with other fragments and chert interbeds						
	100	100	R4	a	10	3												
				b	30													
				b	50													

POOR QUALITY:

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

DRILL HOLE: LWN90-37

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

Pyn	%	PQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po
242.50				b														
	100	90	R4	a	10	3												
				a	30													
				c	60													
				c														
252.50				c														
	100	90	R4	b	10	1												
				b														
				c														
				c						-70B	WCh	** 259.0 269.2 WACKE, cherty						
262.50				c						-80B								
	100	100	R3	c	20	2												
				c	70													
				c														
				b							BP	** 269.2 272.0 BEDDED PYRRHOTITE	c					20
				b														
272.00											Rcl	** 272.0 428.5 RHYOLITE CRSTAL LAPILLI TUFF, lt. grey, with coarse-grained crystal matrix with white quartz and plag crystals and rounded to subangular dark clasts						
	100	100	R3	c	10	2												
				c	30													
				c														
				c														
				c														
284.00				c														
	99	85	R3	c	20	2												
				c	50													
				c							FZ	^^ 290.0 296.0 Fracture Zone, 10 degrees to core axis, with Fe-staining						
292.00				b														
	99	80	R3	a	15	2												
				a	60													
				a														
				a														
301.00				a														
	100	100	R3	a	5	3												
302.60					20													
					40													
	100	90	R3	b	20	2						Note: Some brownish alteration of matrix and of halos around clasts						
				c	40													
				c						-70C	IR	^^ 308.0 336.0 INTRUSIVE RHYOLITE, greyish pink granophyric matrix with smaller white euhedral crystals						
				b														
312.00				b														

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
	100	100	R3	a	15	2												
315.00				b	40													
	100	100	R3	c	15	2												
318.00				a	40													
	100	90	R3	a	15	2												
322.50				b	70													
	99	50	R3	b	20	1												
324.00																		
	100	90	R3	b	10	3												
				b	30													
				a	70													
				a														
333.50				b														
	100	100	R3	c	10	2				-65C								
				c	30													
339.00				c														
	100	100	R3	c	5	2												
				b	20													
345.50				a														
	100	100	R3	b	15	1												
				c														
352.00				c														
	100	90	R3	b	15	1												
				c														
				c														
359.00				b														
	100	100	R3	a	20	2												
362.50				b	70													
	100	100	R3	b	10	2												
				c	30													
				c														
				c														
372.50				c														
	100	100	R3	b	10	2												
374.00					70													
	100	100	R3	b	2	3												
				b	15					-64C	IR	^^ 378.0 397.0 Intrusive Rhyolite, pinkish grey, granophyric with epidote staining						
				c	65													
				c														
384.00				c														

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
	100	100	R3	b	10	3												
				a	30													
389.00				b	50													
	100	100	R3	b	5	3												
				b	30													
				c	60													
				c						-70C								
399.00				c														
	100	100	R3	a	5	3					IR	^^ 402.7 410.0 Intrusive Rhyolite, greyish-pink, granophyric						
				a	20													
				a	40													
				a														
409.00				a						-30C	pRd	^^ 410.0 413.0 Rhyolite Porphyry Dike						
	100	100	R3	a	10	3												
				b	30													
414.00				c	50						RIb,p	^^ 413.0 428.5 Rhyolite Lapilli Breccia, Porphyritic						
	100	100	R3	c	5	2												
				c	20													
				c														
				c														
424.00				c														
	100	100	R3	c	5	2												
				c	20					-40C	RI	** 428.5 434.5 RHYOLITE LAPILLI TUFF						
				c														
				c							pRd	^^ 429.3 432.0 Rhyolite Porphyry Dike						
				c						-40C								
434.00											Rt*	** 434.5 441.0 RHYOLITE TUFF, Altered, dark grey, fine-grained with epidote						
	100	95	R3	b	10	3												
				b	30													
439.00				b	60													
	100	100	R3	b	20	2				-70C	Rcl	** 441.0 470.0 RHYOLITE CRYSTAL LAPILLI TUFF						
				b	65													
				b														
447.00				b														
	100	100	R3	b	15	3												
				c	30													
				a	60													
454.00				a														
	100	100	R3	a	10	2												
				b	30													