APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 2 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

15

(421 - 490)

ROCK QUALITY:

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

DRILL HOLE: LYN91-72

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											Note: @ 2072.0-2092.0 Lt. grey, bleached matrix								
										00	^^ 2107.5 2110.0 Quartz Diorite, coarse-grained, with numerous venoliths of fragments, black country rock								

ROCK QUALITY:

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

DRILL HOLE: LYN91-72

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											Note: @ 2114.0-2118.9 Quartz Diorite Dikelets								
										QD	** 2118.9 2229.0 QUARTZ DIORITE								
										gQD	^^ 2118.9 2121.0 Quartz Diorite, Granophyric								

ROCK QUALITY:

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

DRILL HOLE: LYN91-72

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											Note: @ 2189.0-2210.0 Shearing in quartz diorite @ 10 degrees to axis								
									-10F		Note: @ 2208.5 Fracture zone/fault								
											E.O.H. 2229' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
150'	180.9	-60.9
250'	181.1	-60.7
350'	181.7	-60.3
450'	182.6	-60.6
550'	184.0	-60.8
620'	184.7	-60.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-2-91
REMARKS: Log checked with assays
CORE SIZE: NQ

HOLE NO: LYN91-73 (WDNR #202)

DATE: 10-8-91
PAGE 1 OF 9

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-5-91

BEARING: S180.5E INCLINATION: -60.6 T.D: 620'
COORDINATES: L10300 E, 10830 N
ELEV: 1560.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 50.0			** 0.0 50.0 OVERBURDEN	
50.0 55.5	(not recovered)			
50.0 108.0		Sk	** 50.0 108.0 SKARN (Ep-Mt-Gt)	50.0 108.0 Ep-Mt-Gt Alteration
108.0 112.0		CSs	** 108.0 112.0 CALCAREOUS SEDIMENT, With sulfides	108.0 112.0 6% Sp, 2% Ga
112.0 124.3		Xca	** 112.0 124.3 TUFFITE, Calcareous	112.0 124.3 12% Sp, Ga
124.3 190.0		Xt	** 124.3 190.0 TUFFITE, Talcose, With Diopside	124.3 190.0 20% Sp, Ga
190.0 193.0		Wq	** 190.0 193.0 QUARTZ WACKE	
193.0 201.0		Ch	** 193.0 201.0 CHERT	
201.0 212.0		Xch	** 201.0 212.0 TUFFITE, Cherty	201.0 212.0 30% Sp, Ga
212.0 232.0		ChT	** 212.0 232.0 CHERTY TUFF	
212.0 217.0		Chs	^^ 212.0 217.0 Cherty Tuff, With Sulfides	212.0 217.0 5% Sp
228.0 232.0		TS	^^ 228.0 232.0 Talcose Sediment	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

ootage	Bearing	Inclination
150'	180.9	-60.9
250'	181.1	-60.7
350'	181.7	-60.3
450'	182.6	-60.6
550'	184.0	-60.8
620'	184.7	-60.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-2-91
REMARKS: Log checked with assays
CORE SIZE: NQ

HOLE NO: LYN91-73 (WDNR #202)

DATE: 10-8-91
PAGE 1 OF 9

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-5-91

BEARING: S180.5E INCLINATION: -60.6 T.D: 620'
COORDINATES: L10300 E, 10830 N
ELEV: 1560.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
232.0 335.6		Ch	** 232.0 335.6 CHERT	
265.0 270.0		Chs	^^ 265.0 270.0 Chert, With Sulfides	265.0 270.0 7% Sp
280.0 290.0		Chs	^^ 280.0 290.0 Chert, With Sulfides	280.0 290.0 6% Sp
310.0 315.0		Xch	^^ 310.0 315.0 Tuffite, Cherty	310.0 315.0 10% Sp
335.6 342.5		CS	** 335.6 342.5 CALCAREOUS SEDIMENT	
342.5 351.5		Xca	** 342.5 351.5 TUFFITE, Calcareous	342.5 351.5 10% Sp
351.5 360.5		Xch	** 351.5 360.5 TUFFITE, Cherty	351.0 360.5 10% Sp
360.5 379.0		CSs	** 360.5 379.0 CALCAREOUS SEDIMENT, With Sulfides	360.5 379.0 8% Sp
379.0 441.5		Wbp	** 379.0 441.5 WACKE, With Bedded Pyrrhotite	379.0 441.5 20% Po, Py, 15% Cp
441.5 620.0		QD	** 441.5 620.0 QUARTZ DIORITE	
441.5 453.7		gQD	^^ 441.5 453.7 Quartz Diorite, Granophyric	
453.7 458.5		Md	^^ 453.7 458.5 Mafic Dike	
			E.O.H. 620' (total depth)	

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
0.0 50.0												** 0.0 50.0 OVERBURDEN								
												^^ 0.0 40.0 Sand								
												^^ 40.0 50.0 Sand, gravel, and cobbles								
											Sk	** 50.0 108.0 EP-MT SKARN								
55.00																				
	99	95	R3	b	20	2														
58.00				b	40															
	100	100	R3	b	10	2														
				b	30							Note: @ 62.0-67.0 Garnet								
63.00				b																
	100	100	R3	c	40	1														
65.00																				
	100	100	R3	c	10	3														
				b	30															
70.00				b	50															
	100	100	R3	b	10	3														
				b	30															
75.00				b	50															
	100	100	R3	b	10	3														
				b	30															
				b	50							Note: @ 82.0-86.0 Garnet								
				c																
85.00				b																
	100	100	R3	b	5	3														
				b	30															
92.00				b	60															
	100	100	R3	b	10	3														
95.00				b	30															
					60															
	100	100	R3	b	5	3				-60B										
				b	30															
				b	60															

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I
				b																
105.00				b						-40B										
	100	100	R3	a	5	3				-60B	CSs	** 108.0 112.0 CALCAREOUS SEDIMENT, with	b	6		2	1	1		10
				b	30							sulfides	b	6		2	1	1		10
				c	50								b	6		2	1	1		10
				c							Xca	** 112.0 124.3 TUFFITE, calcareous	c	10		2	1	1		14
				c									c	10		2	1	1		14
115.00													c	10		2	1	1		14
	100	100	R3	b	5	3							c	10		2	1	1		14
				c	30															
				b	50															
				c							Xt	** 124.3 190.0 TUFFITE, talcose,	c	10		2		2		14
125.00				c								with diopside	c	10		2		2		14
	100	100	R2	b	5	3							c	10		2		2		14
127.00					30								c	10		2		2		14
					60								c	10		2		2		14
	100	95	R2	c	30	1							c	10		2		2		14
				c									c	10		2		2		14
				c							TSs	^^ 134.0 149.0 Talc Sediment, with	b	5		2		2		9
135.00				c								sulfides	b	5		2		2		9
	100	100	R2	c	10	2							b	5		2		2		9
				c	30								b	5		2		2		9
				c									b	5		2		2		9
				c									b	5		2		2		9
145.00				c									b	5		2		2		9
	100	90	R2	c	5	2							b	5		2		2		9
				c	30								b	5		2		2		9
				b									c	18		2		5		25
				b									c	18		2		5		25
155.00				b									c	18		2		5		25
	100	90	R2	b	10	2							c	18		2		5		25
				b	30								c	18		2		5		25
				b									c	18		2		5		25
				b									c	18		2		5		25
165.00				b									c	18		2		5		25
	100	90	R2	b	5	3							c	18		2		5		25
				b	30								c	18		2		5		25
				b	60								c	18		2		5		25
				b								Note: @ 177.5-182.0 Stringery amber	c	18		2		5		25
175.00				b								sphalerite	c	18		2		5		25

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
	100	100	R2	b	30	2							c	18		2		5		25
				b	50							Note: @ 182.0-188.0 Stringery	c	18		2		5		25
				b								alteration-or diopside with sphalerite	c	18		2		5		25
				b						-60B		core in talcose matrix. Becomes more	c	18		2		5		25
185.00				b								bedded toward base	c	18		2		5		25
	100	95	R2	c	5	3				-60C			c	18		2		5		25
				c	30						Wq	** 190.0 193.0 QUARTZ WACKE, blue quartz								
				b	60							eyes but appears bedded, reworked								
				b																
											Ch	** 193.0 201.0 CHERT, black and white	c	2				3		5
195.00				a									c	2				3		5
	100	95	R3	b	10	3							c	2				3		5
				b	30								c	2				3		5
				b	50						Xch	** 201.0 212.0 CHERTY TUFFITE	c	2				3		5
				b									d	30		2				32
205.00				b									d	30		2				32
	100	100	R3	b	5	3							d	30		2				32
				c	30								d	30		2				32
				b	50						ChT	** 212.0 232.0 CHERTY TUFF	d	30		2				32
				a									d	30		2				32
				a							Chs	^^ 212.0 217.0 Cherty Tuff, with sulfides	b	5		2				7
215.00																				
	100	100	R2	a	10	3														
220.00				b	30															
					50															
	100	85	R3	a	10	3														
				a	30															
225.00				a	50															
	100	100	R3	a	10	3					TS	^^ 228.0 232.0 Talcose Sediment								
				a	30															
				a	50					-55C	Ch	** 232.0 335.6 CHERT	a					2		2
				a									a					2		2
235.00				a									a					2		2
	100	100	R3	a	10	3							a					2		2
				a	30								a					2		2
				a	50								a					2		2
				a									a					2		2
245.00				a									a					2		2
	100	100	R3	a	10	3							a					2		2

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
246.00					30								a					2		2
					50								a					2		2
	100	100	R3	b	10	2							a					2		2
				b	30								a					2		2
				b									a					2		2
				b									a					2		2
255.00				a									a					2		2
	100	100	R3	b	10	2							a					2		2
257.00					50								a					2		2
	100	90	R3	b	10	3							a					2		2
				a	50					-10F										
				b	70						Md	^^ 261.0 265.0 Mafic Dike, high angle								
				b								contacts, chilled margin								
				a																
265.00										-20C	Chs	^^ 265.0 270.0 Chert, with sulfides	c	7				4		11
	99	90	R3	a	10	3							c	7				4		11
				a	30								c	7				4		11
				a	70								b	2				4		6
				a									b	2				4		6
275.00				b									b	2				4		6
	100	95	R3	a	10	3							b	2				4		6
				a	30						Chs	^^ 280.0 290.0 Chert, with sulfides	b	2				4		6
				a	70								c	6				4		10
				a									c	6				4		10
285.00				a									c	6				6		12
	100	95	R3	a	10	3							c	6				6		12
				b	30								c	6				6		12
				a	70								b			1		4		5
				a									b			1		4		5
295.00				a									b			1		4		5
	99	90	R3	a	10	3							b			1		4		5
				a	30								b			1		4		5
				a	70								b			1		4		5
				a									b			1		4		5
305.00				b									b			1		4		5
	100	100	R3	b	40	2							b			1		4		5
				b	60						Xch	^^ 310.0 315.0 Tuffite, cherty	c	10		1		4		15
				a									c	10		1		4		15
				b									c	10		1		4		15
315.00				a									c	10		1		4		15

ROCK QUALITY:

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

LYN91-73

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
	99	95	R3	a	10	3														
				a	40															
				a	70															
				a																
325.00				b																
	99	95	R3	b	20	3														
				b	40															
				c	70															
				c																
335.00				b							CS	** 335.6 342.5 CALCAREOUS SEDIMENT								
	100	100	R2	a	40	2														
				c	60															
				c							Xca	** 342.6 351.5 TUFFITE, calcareous	c	10				2		12
				c									c	10				2		12
345.00				b									c	10				2		12
	100	90	R2	a	10	3							c	10				2		12
				a	40								c	10				2		12
350.00				b	60								c	10				2		12
	100	95	R2	b	10	3					Xch	** 351.5 360.5 TUFFITE, cherty	c	10				2		12
				a	40								c	10		2		2		14
355.00				a	60								c	10		2		2		14
	100	100	R2	a	15	3							c	10		2		2		14
				a	40						CS	** 360.5 379.0 CALCAREOUS SEDIMENT	c	10		2		2		14
				a	60								c	12		3				15
				b									c	12		3				15
365.00				a									c	12		3				15
	100	100	R2	a	10	3							c	8		3				11
				c	30								c	8		3				11
				c	60								c	8		3				11
372.00				b									c	8		3				11
	99	85	R2	b	10	2							c	8	1			5		14
375.00				c	40								c	8	1			5		14
	100	100	R3	c	10	2							c	8	1			5		14
				c	40						Wp	** 379.0 441.5 WACKE, with pyrrhotite,	c	8	1			5		14
				c								pyrite, and calcopyrite	d		15		5	15		35
				c									d		15		5	15		35
385.00				c									d		15		5	15		35
	100	100	R3	c	30	1							d		15		5	15		35
				c									d		15		5	15		35
				c									d		15		5	15		35

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				c									d		15		5	15		35
395.00				c									d		15		5	15		35
	100	100	R3	c	10	2							d		15		5	15		35
				c	30								d		15		5	15		35
				c									d		15		5	15		35
				c									d		15		5	15		35
405.00				c									d		15		5	15		35
	100	100	R3	c	10	2							d		15		5	15		35
				b	30								d		15		5	15		35
				c									d		15		5	15		35
				c									d		15		5	15		35
415.00				c									d		15		5	15		35
	100	100	R3	c	10	2							d		15		5	15		35
				c	40							Note: @ 419.0-440.5 >20% Po, Py, bedded	d		15		5	15		35
				c								to massive	d		15		5	15		35
				c									d		15		5	15		35
425.00				c									d		15		5	15		35
	100	100	R2	c	10	2							d		15		5	15		35
				c	40								d		15		5	15		35
				c									d		15		5	15		35
				c									d		15		5	15		35
435.00				c									d		15		5	15		35
	100	100	R2	c	10	3							d		15		5	15		35
				c	40								d		15		5	15		35
				c	70					-70C	QD	** 441.5 620.0 QUARTZ DIORITE	d		15		5	15		35
				a																
				a							gQD	^^ 441.5 453.7 Granophyric, pink								
445.00																				
	100	100	R3	a	10	3														
				a	30															
				a	70															
				a						-30C	Md	^^ 453.7 458.5 Mafic Dike ?								
455.00				a																
	100	100	R3	a	10	2				-80C	QD	^^ 458.5 488.0 Quartz Diorite								
				a	30															
				a																
				b																
465.00				b																
	100	100	R3	b	10	2														

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				c	30															
				c																
				c																
475.00				c																
	100	100	R3	c	10	2														
				c	30															
				c																
				c																
485.00				c																
										-25C	Md	^^ 488.0 504.0 Mafic Dike, @ high angle to core axis, with granophyric quartz diorite. Clast of mafic dike in granophyre @ 491.0							
										-20C										
										-5C										
										-0C										
										-7	gQD	^^ 504.0 505.5 Granophyric								
											QD	^^ 505.5 527.0 Quartz Diorite, coarse-grained								
											gQD	^^ 527.0 538.3 Granophyric, sheared @ 527.0-528.0 ~ 30 degrees								
											gQd	^^ 538.3 546.0 Coarse-grained								
										-25C	gQd	^^ 546.0 549.0 Granophyric								

ROCK QUALITY:

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

LYN91-73

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										gQd	~~ 549.0 620.0 Coarse-grained								

ROCK QUALITY:

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

LYN91-73

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											E.O.H. 620' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.3	-63.7
300'	180.6	-63.8
500'	182.0	-63.9
700'	183.5	-64.1
780'	184.4	-63.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-2-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-74 (WDNR #230)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-6-91

BEARING: S179.6E INCLINATION: -65.4 T.D: 780'
COORDINATES: L10500 E, 11175 N
ELEV: 1559.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 51.0			>< 0.0 51.0 OVERBURDEN	
51.0 58.5	(not recovered)			
51.0 93.0		Rt	>< 51.0 93.0 RHYOLITE TUFF	
93.0 132.0		D	>< 93.0 132.0 DACITE	
132.0 174.8		R	>< 132.0 174.8 RHYOLITE	
174.8 222.5		D	>< 174.8 222.5 DACITE	
222.5 404.5		R	>< 222.5 404.5 RHYOLITE	
404.5 414.0		SLch	>< 404.5 414.0 SILTSTONE, Cherty	
414.0 426.0		BPM	>< 414.0 426.0 BEDDED PYRRHOTITE/MAGNETITE	414.0 426.0 30-40% Po, Py, Mt
420.0 423.0		BPMs	^^ 420.0 423.0 Bedded Pyrrhotite, Magnetite, With Sulfides	420.0 423.0 5% Sp
426.0 432.0		SL	>< 426.0 432.0 SILTSTONE	
432.0 535.0		R	>< 432.0 535.0 RHYOLITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.3	-63.7
300'	180.6	-63.8
500'	182.0	-63.9
700'	183.5	-64.1
780'	184.4	-63.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-2-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-74 (WDNR #230)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-6-91

BEARING: S179.6E INCLINATION: -65.4 T.D: 780'
COORDINATES: L10500 E, 11175 N
ELEV: 1559.7' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-10-91
PAGE 1 OF 12

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
535.0 565.0		SL,xR	xx 535.0 565.0 INTERBEDDED SILTSTONE AND SPHERULITIC RHYOLITE	
565.0 592.5		pR	xx 565.0 592.5 RHYOLITE PORPHYRY	
592.5 596.7		Chp	xx 592.5 596.7 CHERT, With Pyrrhotite	592.5 596.7 15% Po, Py
596.7 609.0		SL,t	xx 596.7 609.0 SILTSTONE, Talcose	
609.0 626.0		TS	xx 609.0 626.0 TALC SEDIMENT	
626.0 692.7		D	xx 626.0 692.7 DACITE	
692.7 704.0		SSt	xx 692.7 704.0 SANDSTONE, Talcose	
704.0 708.8		Chp	xx 704.0 708.8 CHERT, With Pyrrhotite	704.0 708.8 50% Po, Py
708.8 717.0		SS	xx 708.8 717.0 SANDSTONE	
717.0 731.0		pR	xx 717.0 731.0 RHYOLITE PORPHYRY	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.3	-63.7
300'	180.6	-63.8
500'	182.0	-63.9
700'	183.5	-64.1
780'	184.4	-63.9

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-2-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-74 (WDNR #230)

DATE: 10-10-91
PAGE 1 OF 12

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-6-91

BEARING: S179.6E INCLINATION: -65.4 T.D: 780'
COORDINATES: L10500 E, 11175 N
ELEV: 1559.7' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
731.0 780.0		gQD	>< 731.0 780.0 QUARTZ DIORITE, Granophyric	
			E.O.H. 780' (total depth)	

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

LYN91-74

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
.0 51.0											** 0.0 51.0 OVERBURDEN								
											^^ 0.0 4.0 Muskeg								
											^^ 4.0 35.0 Sand								
											^^ 35.0 45.0 Sand and gravel								
											^^ 45.0 51.0 Gravel, loose, with cobbles								
										Rt	** 51.0 93.0 RHYOLITE TUFF, fine-grained, dark feldspathic interbeds, contorted bedding, feldspar/quartz clasts at base								
										D	** 93.0 132.0 DACITE, fine-grained, dark grey to black, massive								

ROCK QUALITY:

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

LYN91-74

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
									-50C	R	** 132.0 174.8 RHYOLITE								
									-30C	pR	^^ 132.0 135.0 Porphyritic Rhyolite, dark matrix, blue quartz eyes								
										gR	^^ 135.0 171.3 Granophyric Rhyolite, salmon-colored								
										Rc	^^ 171.3 174.9 Rhyolite Crystal Tuff, feldspar-rich, with blue quartz eyes								
										D	** 174.9 222.5 DACITE								

ROCK QUALITY:

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

LYN91-74

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										pRd	^^ 188.0 193.0 Rhyolite Porphyry Dike, dark matrix, blue quartz eyes, lower contact high angle @ (30 degree), upper contact spun.								
										D	^^ 193.0 199.5 Dacitic Flow, olivine-plag rich, possible amygdaloidal texture								
										D,SS	^^ 199.5 222.5 Dacite, Sandstone, dark grey to black, massive, fine to medium-grained								
										R	** 222.5 404.5 RHYOLITE								
										Rt	^^ 222.5 252.0 Rhyolite Tuff, medium gray, granophyric at base with pinkish alteration, fining upward.								

ROCK QUALITY:

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

LYN91-74

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
									-40C	D	^^ 252.0 262.0 Dacite, dark grey, massive, possible triple point fractures								
										Rc	^^ 262.0 296.4 Rhyolite Crystal Tuff, granophyric with plag crystals at top, coarsening with depth. Epidote altered top (6"), patchy sulfides to 267.0	a a a a				2 2 2 2			2 2 2 2
									-40C	SS	^^ 296.4 300.0 Sandstone, medium to dark grey, patchy alteration. Scattered (2%) Fe-sulfides	a a a a				1 1 1 1	1 1 1 1		2 2 2 2
										Rc	^^ 300.0 348.0 Rhyolite Crystal Tuff, medium to lt. grey, plag-rich, blue quartz eyes	a				1	1		2
									-25F		Note: @ 324.0-329.0 Fault Zone, carb-chlorite gouge, some brecciation								

ROCK QUALITY:

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

LYN91-74

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
									-40C	Md	^^ 348.0 350.0 Mafic Dike, lower contact broken, grey black, massive, subtley plag-phyric								
										Rc	^^ 350.0 353.0 Rhyolite Crystal Tuff, lt. grey, fine to medium-grained								
										Rcl	^^ 353.0 400.0 Rhyolite Crystal Lapilli Tuff, dark, grey black matrix, with dark lithics and quartz-plag porphyroblasts								

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

LYN91-74

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											Rc	^^ 400.0 404.5 Rhyolite Crystal Tuff								
										-60B	SLch	** 404.5 414.0 SILTSTONE, cherty, laminated, with cherty intervals and crystal-rich beds								
415.00											BPM,t	** 414.0 426.0 BEDDED PYRRHOTITE/ MAGNETITE, 30-40%, Fe-sulfides and Mt in soft sediment. Possible talc.	d			10	10	15	35
	100	100	R3	b	5	3							d			10	10	15	35
				b	30								d			10	10	15	35
				b	60								d			10	10	15	35
				b							BPMs	^^ 420.0 423.0 Bedded Pyrrhotite, Magnetite, with sulfides	d	5		10	10	15	40
				b									d	5		10	10	15	40
													d	5		10	10	15	40
425.00											SL	** 426.0 432.0 SILTSTONE	d			10	10	15	35
	100	95	R2	b	5	3														
				b	30															
				b	50						R	** 432.0 535.0 RHYOLITE								
				b																
				b							Rc	^^ 432.0 454.0 Rhyolite Crystal Tuff, squiggly bedding, with ashy layers, and sericite altered intervals								
435.00										-50B										
											Rc	^^ 454.0 482.0 Rhyolite Crystal Tuff, medium to dark grey, minor sericite								

ROCK QUALITY:

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

LYN91-74

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										Rc*	^^ 482.0 487.0 Rhyolite Crystal, altered, lt. grey, fine-grained, bleached alteration								
										Rc	^^ 487.0 535.0 Rhyolite Crystal Tuff								
									-20F		Note: @ 502.5-513.0 Fault Zone, Ep-chlorite carb alteration with brecciation								
										SL,>R	** 535.0 565.0 INTERBEDDED SILTSTONE, AND SPHERULITIC RHYOLITE								
										SL	^^ 535.0 543.0 Siltstone								

ROCK QUALITY:

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

LYN91-74

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										-35B	xR	^^ 543.0 551.8 Spherulitic Rhyolite								
545.00																				
	100	85	R3	b	25	3				-80B										
				a	45															
				b	60						SSp	^^ 551.8 565.0 Sandstone, with pyrrhotite	b				2	5		7
				a									b				2	5		7
555.00				a									b				2	5		7
	99	85	R2	a	20	3							a				2	1		3
				a	50								a				2	1		3
				a	70								a				2	1		3
				a									a				2	1		3
565.00				a						-35C	pR	** 565.0 592.5 RHYOLITE PORPHYRY, porphyritic at base, granophyric at top, lt. grey matrix, plag-rich, lower contact flat.	a				2	1		3
	100	95	R3	a	30	3														
				a	55															
				b	70															
				a																
575.00				a																
	100	100	R3	a	10	4														
				a	25															
				a	40															
				a	55															
585.00				a																
	100	95	R2	b	20	2														
				c	50															
				c						-85B	Chp	** 592.5 596.7 CHERT, with pyrrhotite	c				5	10		15
				b						-45B			c				5	10		15
595.00				b							SLp,t	** 596.7 609.0 SILTSTONE, finely laminated, talcose, scattered pyrrhotite, pyrite	c				5	10		15
				b	50								a				2	3		5
				c									a				2	3		5
				c									a				2	3		5
605.00				c									a				2	3		5
	100	100	R2	c	20	2							a				2	3		5
				c	50						TS	** 609.0 626.0 TALC SEDIMENT	a				1	2		3
				b									a				1	2		3
				c									a				1	2		3
615.00				c									a				1	2		3
	100	100	R2	c	20	2					SLp	^^ 618.0 621.0 Siltstone, with pyrrhotite	a				1	2		3
				c	50								a				1	2		3
				c									b				5	10		15
				c									a				1	2		3
				c									a				1	2		3

ROCK QUALITY:

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

LYN91-74

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
625.00				c							D	** 626.0 692.7 DACITE, fine-grained,	a				1	2		3
	100	100	R3	b	10	3						dark grey calcite as fracture filling								
				b	30															
				b	60															
633.00				b																
690.00																				
	100	100	R3	b	10	3					SS	** 692.7 704.0 SANDSTONE, talcose	a				1	1		2
				b	30							alteration @ 692.7-697.0, minor	a				1	1		2
				b	50							pyrrhotite and pyrite	a				1	1		2
				b									a				1	1		2
700.00				b									a				1	1		2
	100	100	R3	b	5	3							a				1	1		2
				c	20					-45B	Chp	** 704.0 708.8 CHERT, with pyrrhotite	e				10	40		50

ROCK QUALITY:

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

LYN91-74

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				b	50								e				10	40		50
				c						-50C	SS	** 708.8 717.0 SANDSTONE, cherty interbeds	e				10	40		50
710.00				b																
	100	100	R3	b	30	2														
711.00					50															
	100	90	R3	b	30	2														
714.00				b	50															
	98	80	R3	c	10	2														
				b	40						pR	** 717.0 731.0 RHYOLITE PORPHYRY, very dark, fine-grained matrix, large blue quartz eyes, sheared broken upper contact, high angle fractures								
719.00				b																
										-30C	QD	** 731.0 780.0 QUARTZ DIORITE, Granophyric								
												Note: Contact between granophyric, quartz diorite, deformed, sheared, with elongated blue quartz eyes, sheared to 740.0, sheared again @ 763.0-766.0 @ 45 degrees. Fracture @ 765.3 @ 35 degrees.								
										-85		Note: @ 763.2-765.3 Shear zone								
												E.O.H. 780' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.6	-59.5
200'	184.4	-59.3
300'	184.8	-58.9
400'	185.6	-58.8
520'	185.8	-58.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-5-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-75 (WDNR #Z33)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-7-91

BEARING: S180.6E INCLINATION: -60.1 T.D: 520'
COORDINATES: L10600 E 10625 N
ELEV: 1560.1' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-10-91

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 55.0			><< 0.0 55.0 OVERBURDEN	
55.0 58.5	(not recovered)			
55.0 98.0		R	><< 55.0 98.0 RHYOLITE	
98.0 105.0		SL	><< 98.0 105.0 SILTSTONE	
105.0 125.5		CH	><< 105.0 125.5 CHERT	
110.4 116.2		MSca	^^ 110.4 116.2 Massive Sulfide, Calcareous	110.4 116.2 30% Sp, 5% Py
125.5 220.5		R	><< 125.5 220.5 RHYOLITE	
206.0 208.2		VCS	^^ 206.0 208.2 Volcaniclastic Sediment	
220.5 245.0		SLp	><< 220.5 245.0 SILTSTONE, With Pyrrhotite	220.5 245.0 7% Po, Py
245.0 253.0		Chp	><< 245.0 253.0 CHERT, With Pyrrhotite	245.0 253.0 15% Po, Py
253.0 273.0		TSp	><< 253.0 273.0 TALC, With Pyrrhotite	253.0 273.0 15% Po, Py
273.0 283.0		SLch	><< 273.0 283.0 SILTSTONE, Cherty	
283.0 310.7		Chp	><< 283.0 310.7 CHERT, With Pyrrhotite	283.0 310.7 10-15% Po, Py

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.6	-59.5
200'	184.4	-59.3
300'	184.8	-58.9
400'	185.6	-58.8
520'	185.8	-58.7

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-5-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-75 (WDNR #233)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-7-91

BEARING: S180.6E INCLINATION: -60.1 T.D: 520'
COORDINATES: L10600 E 10625 N
ELEV: 1560.1' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-10-91
PAGE 1 OF 8

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
310.7 357.5		Wq	310.7 357.5 QUARTZ WACKE	
357.5 368.3		TSp	357.5 368.3 TALC, With Pyrrhotite	357.5 368.3 25% Po, Py
368.3 412.4		D	368.3 412.4 DACITE	
412.4 419.7		BPM	412.4 419.7 BEDDED PYRRHOTITE & MAGNETITE	
419.7 424.8		gQD	419.7 424.8 QUARTZ DIORITE, Granophyric	
424.8 433.3		BP	424.8 433.3 BEDDED PYRHOTITE	
433.3 449.0		gQD	433.3 449.0 QUARTZ DIORITE, Granophyric	
449.0 452.0		TSp	449.0 452.0 TALC, With Pyrhotite	
452.0 520.0		gQD	452.0 520.0 QUARTZ DIORITE, Granophyric	
476.4 485.8		Md	476.4 485.8 Mafic Dike	

E.O.H. 520' (total depth)

ROCK QUALITY:

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

LYN91-75

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I
0.0 55.0											** 0.0 55.0 OVERBURDEN								
											^^ 0.0 3.0 Muskeg								
											^^ 3.0 38.0 Fine sand								
											^^ 38.0 55.0 Sand, gravel, and cobbles								
										R	** 55.0 98.0 RHYOLITE								
										R1*	^^ 78.6 81.0 Epidote Alteration, bleaching								
99.60									-85C	SL	** 98.0 105.0 SILTSTONE, fine-grained, laminated								
	100	75	R3	a	30	2			-60B										
				a	50														
105.00				b					-60B	CH	** 105.0 125.5 CHERT, massive, white-grey								

ROCK QUALITY:

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

LYN91-75

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
	100	95	R3	a	5	3														
				a	30															
107.00					50															
	100	100	R3	a	5	2														
108.00					30															
	100	100	R3	a	5	3				-70B	MSca	** 110.4 116.2 MASSIVE SULFIDE, amber,	f	30			5			35
				b	30							bedded, faintly calcareous, talcose for	f	30			5			35
115.00				c	50					-60B		2-3" @ base	f	30			5			35
	100	85	R3	b	5	3							f	30		3	5			38
				a	30															
				a	50															
				a																
125.00				a							R	** 125.5 220.5 RHYOLITE								
										-70B	Rc	^^ 125.5 136.0 Rhyolite Crystal Tuff,								
												bedded, blue quartz eyes								
											IR	^^ 137.0 165.0 Intrusive Rhyolite Sills ,								
												red feldspathic alteration around								
												fractures, clasts at base								
											Rc	^^ 165.0 206.0 Rhyolite Crystal Tuff,								
												bedded blue quartz eyes, sericite								
												alteration, patchy alteration								
											gR	Note: @ 176.0 185.7 Granophyric Rhyolite								

ROCK QUALITY:

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

LYN91-75

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											VCS	** 206.0 208.2 VOLCANICLASTIC SEDIMENT								
											pR	** 208.2 220.5 PORPHYRITIC RHYOLITE								
215.00	85	crush																		
216.00																				
	99	80	R3	a	5	3														
				a	30						SLp	** 220.0 245.0 SILTSTONE, laminated, with	b				2	5		7
				a	50							pyrrhotite & magnetite, and plagphyric	b				2	5		7
223.50				b								zone @ 229.0-230.5	b				2	5		7
	100	90	R2	a	5	3							b				2	5		7
				b	30								b				2	5		7
				b	60					-50C			b				2	5		7
				c							pR	^^ 231.5 239.5 Porphyric Rhyolite	b				2	5		7
233.50				b																
	100	100	R3	a	10	3														
				a	30															
				a	60					-50C										
				a																
243.50				a						-45B			b				8	8		16
	100	100	R3	a	10	3							b				8	8		16
				a	30					-30B	Chp	** 245.0 253.0 CHERT, with pyrrhotite,	b				8	8		16
249.00				b	60							high angle bedding	b				8	8		16
	99	95	R2	a	10	2				-30B			b				8	8		16
				a	30								b				8	8		16
255.00				b							TSp	** 253.0 273.0 TALC, with pyrrhotite,	b				8	8		16
												talcose sediment, with spherulitic	b				8	8		16

ROCK QUALITY:

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

LYN91-75

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
	100	90	R2	b	50	2						interval	b				8	8		16
256.50				b	30								b				8	8		16
	99	90	R2	b	5	2							b				8	8		16
				c	30								b				8	8		16
				c									b				8	8		16
265.00				c									b				8	8		16
	100	100	R2	c	10	2				-65B			b				8	8		16
				b	30								b				8	8		16
				c									b				8	8		16
				b						-60B	SLch	** 273.0 283.0 SILTSTONE, cherty, with spherulitic or altered beds	b				8	8		16
275.00				c																
	100	100	R2	b	20	2														
				b	60															
				b																
				b							Chp	** 283.0 310.7 CHERT, with pyrrhotite, grey chert, with bedded pyrrhotite, bedding angles fairly inconsistant. Sulfides increase with depth, less bedded @ 306.0-310.7.	c				2	8		10
285.00				b									c				2	8		10
	100	100	R2	b	20	3							c				2	8		10
				a	40								c				4	10		14
				c	60								c				4	10		14
				c						-64B			c				4	10		14
295.00				b						-40B			c				4	10		14
	100	100	R3	a	20	3							c				4	10		14
					40								c				4	10		14
297.00					60								c				4	10		14
	100	95	R3	a	20	2				-48B			c				4	10		14
300.00				a	50					-20B			c				4	10		14
	100	100	R2	a	20	2				-38B			c				4	10		14
				a	40								c				4	10		14
305.00				a									b					5		5
	99	80	R2	b	20	2							b					5		5
				b	40								b					5		5
311.00				b							Wqp	** 310.7 357.5 SANDSTONE, no obvious quartz, grainy looking, subtle bedding, medium grey								
	99	85	R3	c	20	2														
				c	40															
				c																
319.00				c																
	98	75	R3	b	20	2														
				a	40															
324.00				b																
	99	80	R3	b	20	2														

ROCK QUALITY:

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

LYN91-75

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				b	40															
				b																
332.00				b																
	99	85	R3	b	20	2														
				c	60															
				c																
340.00				c																
	99	85	R3	c	20	2														
				c	60															
347.00				b																
	100	90	R3	b	20	2														
				b	50															
				b																
				b																
356.00				b																
	100	100	R2	b	20	2					TSp	><< 357.5 368.3 TALC, with pyrrhotite	c	5		12	15			32
				b	50								c	5		12	15			32
				c									c	5		12	15			32
				c									c	5		12	15			32
				c									c	5		12	15			32
366.00													c	5		12	15			32
	100	100	R3	a	20	2					D	><< 368.3 412.6 DACITE, dark grey,	c	5		12	15			32
				a	60							calcite-filled shatter veinlets, pyrite	c	5		12	15			32
				a								along high angle (10 degree) fractures								
				a																
376.00				a																
	100	95	R3	b	5	2														
				b	30															
				b																
				b																
387.00				b																
	100	100	R3	a	5	3														
				a	30															
				a	60															
				a									a				1			1
396.00				a																
	100	100	R3	a	5	3														
				a	30															
				a	60															
				a																

ORIGINAL

ROCK QUALITY:

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

LYN91-75

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
406.00				a																
	99	95	R2	a	5	2														
				a	30															
				b						-55C	BPM	** 412.6 419.7 BEDDED TO MASSIVE PYRRHOTITE & MAGNETITE	f				10	50	60
				c									f				10	50	60
416.00				c									f				10	50	60
	100	100	R3	c	10	3				-40C	gQD	** 419.7 424.8 QUARTZ DIOIRTE, Granophyric	f				10	50	60
				b	25															
				b	50															
				b						-55C	BPM	** 424.8 433.3 BEDDED PYRRHOTITE, thinly bedded, fractured, cherty intervals	e				5	40	45
425.00				b						-75B			e				5	40	45
	100	100	R3	b	10	2							e				5	40	45
				c	40								e				5	40	45
				c									e				5	40	45
				b							gQD	** 433.3 449.0 QUARTZ DIORITE, Granophyric contacts broken, but appears like they were flat. Lower ~70 degrees.							
435.00				a																
	100	95	R3	a	10	2														
				a	40															
				a																
				a																
445.00				a																
	98	90	R2	a	10	3														
				b	30					-70C	TSp	** 449.0 452.0 TALC WITH PYRRHOTITE	c				5	20	25
				a	50					-70B			c				5	20	25
452.00				a							gQD	** 452.0 520.0 QUARTZ DIORITE, Granophyric	c				5	20	25
	100	95	R3	a	10	3														
					30															
452.50					50															
	100	100	R3	a	10	3														
					30															
453.50					50															

ROCK QUALITY:

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

LYN91-75

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
									-20C	Md	^^ 476.4 485.8 Basalt Dike, slight magnetite component, calcite fractures								
									-20C										
											E.O.H. 520' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.2	-59.5
200'	181.4	-59.5
300'	181.9	-59.6
400'	182.7	-59.5
500'	183.0	-59.5
650'	184.0	-59.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: A. Zielinski/T. Harding
DATE COLLARED: 2-5-91
REMARKS: Log checked against assays.
CORE SIZE: NQ

HOLE NO: LYN91-76 (WDNR #203)

DATE: 10-8-91
PAGE 1 OF 10

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-8-91

BEARING: S179.9E INCLINATION: -61.6 T.D: 650'
COORDINATES: L10300 E 10940 N
ELEV: 1559.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 39.0			0.0 39.0 OVERBURDEN	
39.0 45.0	(not recovered)			
39.0 138.0		R	39.0 138.0 RHYOLITE	
138.0 187.4		D	138.0 187.4 DACITE	
187.4 203.0		X	187.4 203.0 TUFFITE	187.4 203.0 25% Sp, Ga
203.0 231.0		ChC*	203.0 231.0 CHERT, With Diopside	
208.0 211.6		ChC*s	208.0 211.6 Chert, With Diopside And Sulfides	208.0 211.6 7% Sp, Ga
226.7 231.0		ChC*s	226.7 231.0 Chert, With Diopside and Sulfides	226.7 231.0 7% Sp, Ga
231.0 238.0		CSs	231.0 238.0 CALCAREOUS SEDIMENT, With Sulfides	231.0 238.0 7% Sp, Ga
238.0 248.0		ChC*s	238.0 248.0 CHERT, With Diopside And Sulfides	238.0 248.0 7% Sp, Ga
248.0 273.0		Xch	248.0 273.0 TUFFITE, Cherty	248.0 273.0 12% Sp, Ga
273.0 294.0		ChC*	273.0 294.0 CHERT, With Diopside	
273.0 282.0		ChC*s	273.0 282.0 Chert, With Diopside And Sulfides	273.0 282.0 8% Sp, Ga

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.2	-59.5
200'	181.4	-59.5
300'	181.9	-59.6
400'	182.7	-59.5
500'	183.0	-59.5
650'	184.0	-59.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: A. Zielinski/T. Harding
DATE COLLARED: 2-5-91
REMARKS: Log checked against assays.
CORE SIZE: NQ

HOLE NO: LYN91-76 (WDNR #203)

DATE: 10-8-91
PAGE 1 OF 10

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-8-91

BEARING: S179.9E INCLINATION: -61.6 T.D: 650'
COORDINATES: L10300 E 10940 N
ELEV: 1559.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
290.0 294.0		CHC*s	^^ 290.0 294.0 Chert, With Diopside And Sulfides	290.0 294.0 6% Sp, Ga
294.0 339.7		Xca	>< 294.0 339.7 TUFFITE, Calcareous	294.0 339.7 30% Sp, Ga
339.7 345.6		R	>< 339.7 345.6 RHYOLITE	
345.6 375.0		Xca	>< 345.6 375.0 TUFFITE, Calcareous	345.6 375.0 30% Sp, Ga
375.0 407.0		TSs	>< 375.0 407.0 TALC SEDIMENTS, With Sulfides	375.0 407.0 8% Sp, Cp, Ga
407.0 427.0		MSca	>< 407.0 427.0 MASSIVE SULFIDE, Calcareous	407.0 427.0 35% Sp, Ga
427.0 480.0		TSs	>< 427.0 480.0 TALC SEDIMENT, With Sulfides	427.0 480.0 8% Sp, Cp, Ga
465.0 475.0		X,t	^^ 465.0 475.0 Tuffite, Talcose	465.0 475.0 25% Sp, Cp, Ga
480.0 505.2		Xcp	>< 480.0 505.2 TUFFITE, Chalcopyrite-rich	480.0 505.2 15% Cp, 15% Po, Py
505.2 579.6		SS,SL	>< 505.2 579.6 SANDSTONE, SILTSTONES	
579.6 650.0		QD	>< 579.6 650.0 QUARTZ DIORITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.2	-59.5
200'	181.4	-59.5
300'	181.9	-59.6
400'	182.7	-59.5
500'	183.0	-59.5
650'	184.0	-59.3

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: A. Zielinski/T. Harding
DATE COLLARED: 2-5-91
REMARKS: Log checked against assays.
CORE SIZE: NQ

HOLE NO: LYN91-76 (WDNR #203)

DATE: 10-8-91
PAGE 1 OF 10

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-8-91

BEARING: S179.9E INCLINATION: -61.6 T.D: 650'
COORDINATES: L10300 E 10940 N
ELEV: 1559.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
			E.O.H. 650' (total depth)	

ROCK QUALITY:

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
0.0 39.0											>< 0.0 39.0 OVERBURDEN								
											~~ 0.0 30.0 Sand								
											~~ 30.0 39.0 Sand, gravel, and cobbles								
										R	>< 39.0 138.0 RHYOLITE								
										IR	~~ 39.0 78.2 Intrusive Rhyolite, fine-grained, poorly developed feldspar laths rip up clasts at base								
											Note: @ 45.0-50.3 Fault Zone, no core recovered								
50.00																			
	98	100	R3	b	10	2													
				b	35														
55.00				a															
	100	90	R3	a	5	3													
				a	30														
				a	50														
				a															
65.00				a															
	100	90	R3	a	5	3													
				a	30														
71.00				b	65														
	100	100	R3	a	5	3													
				b	30														
75.00					60														
	99	85	R3	b	20	2				WI	~~ 78.2 138.0 Debris Flow, lapilli wacke, chert, rhtyolite clasts, blue quartz eyes, ashy interbeds, clusters of feldspar grains, feldspar filled fractures at base								
				b	40														
				b															
83.00				b															
	100	90	R3	b	15	2													
85.00					40														
	99	70	R3	a	10	2													
88.00				a	40														
	98	50	R3	b	5	2													

ROCK QUALITY:

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				b	40															
93.00				c																
	100	85	R3	c	5	2														
95.00					40															
	99	80	R3	c	15	3														
				c	30															
				c	60															
103.00				c																
	100	100	R3	c	10	3														
					30															
105.00					60															
	100	95	R3	c	10	3														
				c	30															
				c	50															
				b																
115.00				b																
	100	90	R3	b	10	3														
				b	30															
				b	50															
				b																
125.00				b																
	99	75	R3	b	5	3														
				c	30															
				c	50															
				c																
135.00				b																
	100	95	R3	b	5	4					D#	** 138.0 187.4 Dacite, altered, dark green, calcite filled fractures								
				a	30															
				a	50															
				a	70															
145.00				a																
	100	95	R3	a	5	4														
				a	25															
				a	50															
				a	70						SS#	^^ 154.0 187.4 Sandstone, altered diopside alteration, calcite filled fractures								
155.00				a																
	100	100	R3	a	5	3														
				a	25															
				a	70															
				a																

ROCK QUALITY:

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I
165.00				a																
	100	95	R3	a	5	3					SSCh	Note: @ 168.4 172.0 Chert Rich Zone								
				a	20															
				a	60															
				a																
175.00				a																
	100	100	R3	a	15	3														
				a	30															
				a	80															
				a																
185.00				a																
	100	95	R3	a	20	3					X	** 187.4 203.0 TUFFITE, amber sphalerite	d	25		5	5			35
				a	50							at base	d	25		5	5			35
				a	80								d	25		5	5			35
				a									d	25		5	5			35
195.00				a									d	25		5	5			35
	100	100	R3	a	5	4							d	25		5	5			35
				a	20								d	25		5	5			35
				a	50								d	25		5	5			35
				c	70						ChC*	** 203.0 231.0 CHERT, with diopside	d	25		5	5			35
				c									d	25		5	5			35
											ChC*s	^^ 203.0 211.6 Chert, with diopside and	b	5		2	2			9
205.00												sulfides	b	5		2	2			9
	99	95	R3	b	5	3							b	5		2	2			9
				b	30								b	5		2	2			9
				b	70								b	5		2	2			9
				b																
215.00				b																
	100	100	R3	a	10	2														
				a	30															
				a																
				a																
225.00				a							ChC*s	^^ 226.7 231.0 Chert, with diopside and	b	5		2	2			9
	100	100	R2	a	2	2						sulfides	b	5		2	2			9
				a	30															
				a							CSs	** 231.0 238.0 CALCAREOUS SEDIMENT,	b	5		2	2			9
				c								with sulfide	b	5		2	2			9
				c									b	5		2	2			9
235.00													b	5		2	2			9
	100	100	R2	c	5	3					ChTs	** 238.0 248.0 CHERT, with diopside and	b	5		2	2			9

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				c	20							sulfides	b	5		2	2			9
				a	50								b	5		2	2			9
				a									b	5		2	2			9
245.00				a									b	5		2	2			9
	100	95	R3	a	5	3					Xch	>< 248.0 273.0 TUFFITE, cherty	b	5		2	2			9
				a	20								c	10		2	2			14
				a	50						Rd	^^ 251.4 258.0 RHYOLITE DIKE, red, black,	c	10		2	2			14
				a						-10C		high angle upper contact (10 degrees)								
255.00				a								lower contact broken, irregular								
	100	100	R3	a	10	3														
				a	30								c	12		2	6			20
				a	50								c	12		2	6			20
				b									c	12		2	6			20
265.00				b									c	12		2	6			20
	100	100	R3	b	10	3							c	12		2	6			20
				b	30								c	12		2	6			20
				a	50								c	12		2	6			20
				a							ChC*	>< 273.0 294.0 CHERT-DIOPSIDE	c	12		2	6			20
				a									c	8			6			14
											ChC*s	^^ 273.0 282.0 Chert, with diopside	c	8			6			14
275.00												and sulfides	c	8			6			14
	100	100	R3	a	10	3							c	8			6			14
				b	30								c	8			6			14
				b	50								c	8			6			14
				b									b	2		1	6			9
285.00				b									b	2		1	6			9
	100	95	R3	b	10	3							b	2		1	6			9
				b	30						ChC*s	^^ 290.0 294.0 Chert, with diopside and	c	5		1	6			12
				b	50							sulfides	c	5		1	6			12
				a									d	25		4	9	5		?
				a							Xca	>< 294.0 339.7 TUFFITE, calcareous blebs,	d	25		4	9	5		?
295.00												disseminated pyrrhotite and pyrite	d	25		4	9	5		?
	100	100	R3	a	10	3							d	25		4	9	5		?
				b	30								d	25		4	9	5		?
				c	50								d	25		4	9	5		?
				b									d	25		4	9	5		?
305.00				b									d	25		4	9	5		?
	100	95	R3	b	10	2							d	25		4	9	5		?
				b	50						IR	^^ 309.4 313.8 Intrusive Rhyolite, fine-	a	1						1
				a								grained, medium grey, sulfides in	a	1						1

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				a								fractures								
				a																
													d	25		4	5	5		39
315.00													d	25		4	5	5		39
	100	100	R3	b	50	1							d	25		4	5	5		39
				c									d	25		4	5	5		39
				b									d	25		4	5	5		39
				b									d	25		4	5	5		39
325.00				c									d	25		4	5	5		39
	100	100	R3	c	10	3							d	25		4	5	5		39
				c	30								d	25		4	5	5		39
				c	50								d	25		4	5	5		39
				c									d	25		4	5	5		39
335.00				c									d	25		4	5	5		39
	100	95	R3	c	30	2							d	25		4	5	5		39
				c	50						Wq	>< 339.7 345.6 WACKE, fine-grained,	d	25		4	5	5		39
				b								grey quartz eyes, no feldspars, scattered								
				b								pyrrhotite and pyrite, occasional clasts.								
				c																
345.00											Xca	>< 345.6 375.0 TUFFITE, calcareous,	d	25		5	2	5		37
	100	100	R3	c	10	2						stringery, like MSlb from earlier holes.	d	25		5	2	5		37
				c	30							replacement of calc sediment.	d	25		5	2	5		37
				c									d	25		5	2	5		37
				c									d	25		5	2	5		37
355.00				c									d	25		5	2	5		37
	100	95	R3	c	30	2							d	25		5	2	5		37
				c	50								d	25		5	2	5		37
				c									d	25		5	2	5		37
				c									d	25		5	2	5		37
365.00				c									d	25		5	2	5		37
	100	100	R3	b	10	3							d	25		5	2	5		37
				c	30								d	25		5	2	5		37
				c	50								d	25		5	2	5		37
				b									b	5	1	2	5	10		23
375.00				b							TSs	>< 375.0 407.0 TALC SEDIMENT, with	b	5	1	2	5	10		23
	100	100	R2	b	10	3						diopside and sulfides	b	5	1	2	5	10		23
				c	35								b	5	1	2	5	10		23
				c	50								b	5	1	2	5	10		23
				c									b	5	1	2	5	10		23
385.00				c									b	5	1	2	5	10		23

ROCK QUALITY:

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

LYN91-76

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
	100	100	R2	c	10	3							b	5	1	2	5	10		23
				c	30								b	5	1	2	5	10		23
				c	50								b	5	1	2	5	10		23
				b									b	5	1	2	5	10		23
395.00				b									b	5	1	2	5	10		23
	100	100	R3	b	30	2							b	5	1	2	5	10		23
				c	60								b	5	1	2	5	10		23
				c									b	5	1	2	5	10		23
				b									d	30		2	5	10		47
405.00				b									d	30		2	5	10		47
	100	95	R3	b	10	3					MSca	>< 407.0 427.0 MASSIVE SULFIDE, amber and	d	30		2	5	10		47
				b	30							auburn sphalerite, calcareous, like MSlb	d	30		2	5	10		47
				c	50							from earlier holes. Replaced calc	d	30		2	5	10		47
				b								sediment.	d	30		2	5	10		47
415.00				b									d	30		2	5	10		47
	100	100	R3	c	10	3							d	30		2	5	10		47
				b	30								d	30		2	5	10		47
				c	50								d	30		2	5	10		47
				c									d	30		2	5	10		47
425.00				b									d	30		2	5	10		47
	100	100	R2	c	30	2					TSs	>< 427.0 480.0 TALC SEDIMENT, with	b	5	1	2		5		13
				c	50							sulfides	b	5	1	2		5		13
				c									b	5	1	2		5		13
				b									b	5	1	2		5		13
435.00				c									b	5	1	2		5		13
	100	95	R3	c	10	3							b	5	1	2		5		13
				c	30								b	5	1	2		5		13
				c	50								b	5	1	2		5		13
				b							SS	^^ 444.6 451.2 Volcaniclastic Sediment,	b	5	1	2		5		13
445.00				b								flat upper contact (75-80 degrees),	b	5	1	2		5		13
	100	100	R2	b	30	2						rounded plag, no obvious quartz, 0.25"								
				a	70							bedded sulfides.								
				a																
				a																
				a									c	8	1	2	9	4		24
													c	8	1	2	9	4		24
455.00													c	8	1	2	9	4		24
	100	95	R2	c	10	3							c	8	1	2	9	4		24
				c	30								c	8	1	2	9	4		24
				c	50								d	20	1	2	9	4		36

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				c									d	20	1	2	9	4		36
465.00				b							X,t	^^ 465.0 475.0 Tuffite, talcose, amber	d	20	1	2	9	4		36
	100	95	R3	b	3	3						sphalerite	d	20	1	2	9	4		36
				b	30								d	20	1	2	9	4		36
				b	60								d	20	1	2	9	4		36
				b									d	20	1	2	9	4		36
				b									d	20	1	2	9	4		36
475.00													d	20	1	2	9	4		36
	100	100	R2	b	10	3							d	20	1	2	9	4		36
				c	30						Xcp	** 480.0 505.2 TUFFITE, chalcopyrite	d		15		5	10		30
				c	50							rich	d		15		5	10		30
				b									d		15		5	10		30
485.00				b									d		15		5	10		30
	100	100	R2	c	30	1							d		15		5	10		30
				c									d		15		5	10		30
				c									d		15		5	10		30
				c									d		15		5	10		30
495.00				c									d		15		5	10		30
	100	100	R3	b	10	2							d		15		5	10		30
				b	50								d		15		5	10		30
				c									d		15		5	10		30
				c									d		15		5	10		30
505.00				c							SS/SL	** 505.2 579.6 SANDSTONE, SILTSTONES	d	6	20	2		7		35
	100	95	R3	b	5	3														
				b	30						SLp,t	^^ 505.2 531.0 Siltstones, ash layers,	c				2	9		11
				b	50							interbedded pyrrhotite, talcose	c				2	9		11
				b									c				2	9		11
				B									c				2	9		11
													c				2	9		11
515.00													c				2	9		11
	100	100	R2	b	10	3							c				2	9		11
				b	30								c				2	9		11
				b	50								c				2	9		11
				b									c				2	9		11
525.00				b									c				2	9		11
	100	95	R2	b	10	3							c				2	9		11
				b	30								c				2	9		11
				a	50						Rt*	^^ 531.0 561.0 RHYOLITE TUFF ?, cherty	c				2	9		11
				b								beds, epidote alteration, black quartz								

ROCK QUALITY:

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

LYN91-76

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
535.00				b								spherules at base, calcite filled								
	100	90	R3	a	5	3						fractures, minor sulfides								
				a	30															
				b	50								a	1			1	2		4
				b									a	1			1	2		4
545.00				a									a	1			1	2		4
	100	75	R2	a	10	3							a	1			1	2		4
				a	30								a	1			1	2		4
				a	50								a	1			1	2		4
				b									a	1			1	2		4
555.00				b									a	1			1	2		4
	100	80	R2	a	10	2							a	1			1	2		4
				a	30								a	1			1	2		4
				a																
				a							SS	^^ 561.0 579.6 Sandstone, siltstones,	b	2	3		1	2		8
564.00				a								cross-bedding, epidote alteration, highly	b	2	3		1	2		8
	100	95	R2	b	10	3						fractured zone, sulfide stringers,	b	2	3		1	2		8
				b	30							calcite filled fractures, blue chert	b	2	3		1	2		8
				b	50							veins	b	2	3		1	2		8
				b									b	2	3		1	2		8
574.00				a									b	2	3		1	2		8
	100	100	R2	b	10	3							b	2	3		1	2		8
				b	30								b	2	3		1	2		8
				b	50					-20C	QD	>< 579.6 650.0 QUARTZ DIORITE, interbedded	b	2	3		1	2		8
				a								granophyric and crystaline beds, sheared,	b	2	3		1	2		8
584.00				a								high angle contact								
	100	100	R3	a	30	2														
585.00					50															

ROCK QUALITY:

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

LYN91-76

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											Note: @ 614.0-625.0 Moderate shearing @ 25 degrees to axis								
											Note: @ 632.0-640.0 Moderate shearing @ 20-25 degrees to axis								
											E.O.H. 650' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.4	-58.3
200'	180.7	-59.3
300'	180.2	-59.3
450'	181.1	-59.6

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-6-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-77 (WDNR #231)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-8-91

BEARING: S180E INCLINATION: -59.5 T.D: 450'
COORDINATES: L9400 E, 11090 N
ELEV: 1560.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 38.0			** 0.0 38.0 OVERBURDEN	
38.0 42.5	(not recovered)			
38.0 178.7		R	** 38.0 178.7 RHYOLITE	
38.0 124.0		Rch	^^ 38.0 124.0 Rhyolite Tuff, Cherty	
124.0 139.0		IR	^^ 124.0 139.0 Intrusive Rhyolite	
139.0 153.2		Rtch	^^ 139.0 153.2 Rhyolite Tuff, cherty	
153.2 178.7		W	^^ 153.2 178.7 Wacke	
178.7 227.0		D	** 178.7 227.0 DACITE	
227.0 263.3		SL	** 227.0 263.3 SILTSTONE	
263.3 269.0		TS	** 263.3 269.0 TALCOSE SEDIMENT	
269.0 306.0		D	** 269.0 306.0 DACITE	
306.0 390.3		TS	** 306.0 390.3 TALCOSE SEDIMENT	
306.0 312.0		TSp	^^ 306.0 312.0 Talcose Sediment, With Pyrrhotite	
324.0 330.0		TSp	^^ 324.0 330.0 Talcose Sediment, With Pyrrhotite	
338.5 357.0		BP	^^ 338.5 357.0 Bedded Pyrrhotite	
357.0 364.0		TSl	^^ 357.0 364.0 Talcose Sediment, Laminated	
370.0 390.3		TSp	^^ 370.0 390.3 Talcose Sediment, With Pyrrhotite	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	179.4	-58.3
200'	180.7	-59.3
300'	180.2	-59.3
450'	181.1	-59.6

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-6-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-77 (WDNR #231)

DATE: 5-14-91
PAGE 1 OF 7

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-8-91

BEARING: S180E INCLINATION: -59.5 T.D: 450'
COORDINATES: L9400 E, 11090 N
ELEV: 1560.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
390.3 399.0		Rt	** 390.3 399.0 RHYOLITE TUFF, Hornfelsed	
399.0 450.0		gOD	** 399.0 450.0 QUARTZ DIORITE, Granophyric	
			E.O.H. 450' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-77

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
0.0 38.0											** 0.0 38.0 OVERBURDEN								
										R	** 38.0 178.7 RHYOLITE								
										Rch	^^ 38.0 124.0 Cherty Tuff, lt. grey, glassy								

ROCK QUALITY:

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

DRILL HOLE: LYN91-77

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	TotalZ	Sp	Cp	Ga	Py	Po	As	T
										AG	^^ 117.5 124.0 Agglomeritic Base, epidote, chloritic alteration and 2-4" subrounded clasts								
										gIR	^^ 124.0 139.0 Intrusive Rhyolite, Granophyric, lt. grey								
										ChT	^^ 139.0 153.2 Cherty Tuff								
										W	^^ 153.2 178.7 Wacke								
155.00											Note: @ 153.2 161.0 Wacke, feldspathic, altered								
	100	100	R3	b 10	3														
				b 30							Note: @ 155.0-156.0 Bedded Pyrrhotite								
				b 50															
				b							Note: @ 161.0 178.7 Wacke								
				b															
165.00																			
										D	** 178.7 227.0 DACITE, dark black, with plag-phyric intervals								

ROCK QUALITY:

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

LYN91-88

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											E.O.H. 770' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
200'	180.6	-62.7
400'	183.1	-62.4
600'	184.0	-62.3
800'	183.7	-63.0
1000'	184.1	-62.8
1191'	185.1	-61.8

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-16-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-09 (WDNR #255)

DATE: 5-14-91
PAGE 1 OF 10

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-22-91

BEARING: S180E INCLINATION: -62 T.D: 1191'
COORDINATES: L9800 E, 12330 N
ELEV: 1553' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 33.0			** 0.0 33.0 OVERBURDEN	
33.0 123.0		D	** 33.0 123.0 DACITE	
123.0 180.0		R	** 123.0 180.0 RHYOLITE	
180.0 475.7		D/SS	** 180.0 475.7 DACITE OR SANDSTONE	
187.5 218.0		Rcl	^^ 187.5 218.0 Rhyolite Crystal Lapilli Tuff	
281.0 290.0		FZ	^^ 281.0 290.0 Fracture Zone	
290.0 311.3		Rf	^^ 290.0 311.3 Rhyolite Flow	
475.7 791.0		SL	** 475.7 491.0 SILTSTONE	
491.0 643.5		SS	** 491.0 643.5 SANDSTONE	
643.5 675.5		R	** 643.5 675.5 RHYOLITE, Granophyric And Cherty Tuff	
675.5 740.0		D	** 675.5 740.0 DACITE	
740.0 970.5		R	** 740.0 970.5 RHYOLITE	
740.0 758.0		SLch	^^ 740.0 758.0 Siltstone, Cherty	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
200'	180.6	-62.7
400'	183.1	-62.4
600'	184.0	-62.3
800'	183.7	-63.0
1000'	184.1	-62.8
1191'	185.1	-61.8

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-16-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-89 (WDNR #255)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-22-91

BEARING: S180E INCLINATION: -62 T.D: 1191'
COORDINATES: L9800 E, 12330 N
ELEV: 1553' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-14-91
PAGE 1 OF 10

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
758.0 772.7		ChT,l	^^ 758.0 772.7 Cherty Tuff, Laminated	
772.7 871.0		ChT	^^ 772.7 871.0 Predominantly Cherty Tuff	
871.0 882.0		SLm	^^ 871.0 882.0 Siltstone, With Magnetite	
882.0 919.0		gR	^^ 882.0 919.0 Granophyric Rhyolite	
919.0 938.0		WTq	^^ 919.0 938.0 Quartz Lapilli Wacke	
938.0 970.5		*R	^^ 938.0 970.5 Predominantly Spherulitic Rhyolite	
970.5 1013.2		SL	** 970.5 1013.2 SILTSTONE	
1013.2 1017.0		TS	** 1013.2 1017.0 TALCOSE SEDIMENT	
1017.0 1022.0		SLp	** 1017.0 1022.0 SILTSTONE, With Pyrrhotite	
1022.0 1050.0		TSp,CSp	** 1022.0 1050.0 INTERBEDDED TALCOSE, CALCAREOUS SEDIMENTS, With Pyrrhotite	
1050.0 1053.0		SLp	** 1050.0 1053.0 SILTSTONE, With Bedded Pyrrhotite	
1053.0 1191.0		QD	** 1053.0 1191.0 QUARTZ DIORITE	
1053.0 1071.0		gQD	^^ 1053.0 1071.0 Granophyric	
			E.O.H. 1191' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-89

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
0.0 33.0											** 0.0 33.0 OVERBURDEN								
										0	** 33.0 123.0 DACITE, black, plag-phyric, large feldspar phenocrysts (up to 10 mm) Note: @ 33.0-46.0 Moderate epidote alteration along high angle fractures								

ROCK QUALITY:

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

DRILL HOLE: LYN91-89

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										R	** 123.0 180.0 RHYOLITE								
										pIR	^^ 123.0 143.7 Porphyritic Intrusive (?) Rhyolite, plag-phyric with abundant blue quartz eyes, black matrix								
										Wch	^^ 143.7 180.0 Wacke, cherty tuff matrix, with feldspathic wacke clasts, coarsens downward to predominantly feldspathic wacke at base								
											Note: @ 174.0 Dacite clasts @ base								
										D/SS	** 180.0 475.7 DACITE or SANDSTONE								
										D	^^ 180.0 187.5 Dacite, tiny plag phenos,								

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

DRILL HOLE: LYN91-89

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											chilled upper margin, lower contact broken								
									-30F		Note: @ 186.0-187.5 Fault zone								
										Rcl	^^ 187.5 218.0 Rhyolite Crystal Lapilli Tuff								
										D	^^ 218.0 281.0 Dacite, epidote alteration and Fe-staining along fractures, plag-phyric intervals								
											Note: @ 245.0-265.0 Increased Ep, Fe alteration								

ROCK QUALITY:

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

DRILL HOLE: LYN91-89

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										FZ	^^ 281.0 290.0 Fault Zone, Fe alteration, some brecciation, reddish rhyolite dike								
										Ra	^^ 290.0 299.3 Rhyolite Flow								
										Rt	^^ 299.3 311.3 Rhyolite Tuff, fine-grained, medium grey, with alteration spots								
										D/SS	^^ 311.3 355.0 Dacite or Sandstone, dark grey, fine-grained, patchy epidote alteration, plag-phyric intervals								

ROCK QUALITY:

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

DRILL HOLE: LYN91-89

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										Ra	^^ 355.0 358.3 Rhyolite Flow, brecciated top, with Fe-staining								
										D/SS	^^ 358.3 475.7 Dacite or Sandstone								
									-30		Note: @ 362.0-370.0 Fracturing, calcareous along fractures, with epidote and Fe-staining, fault ?								
									-27										

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

DRILL HOLE: LYN91-89

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
									-40		Note: @ 422.0-424.0 Fault Zone with chlorite and pink carbonate along fractures. Highly fractured throughout with brecciations in hanging wall.								
										SL	** 475.7 491.0 SILTSTONE, medium grey, finely laminated, both contacts semi-vague								

ROCK QUALITY:

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

DRILL HOLE: LYN91-89

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										SS	** 491.0 643.5 SANDSTONE, with scattered laminated intervals, medium to dark grey, looks grainy with tiny crystals and clasts, not dark, fine-grained, and massive like dacite								
											Note: @ 507.5-511.0 Fault Zone, chlorite, Fe-staining, fault breccia								
									-30		Note: @ 563.6-570.0 Fault Zone, with Fe-staining and epidote alteration								

DRILL HOLE: LYN91-82

ROCK QUALITY:

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

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

Run	%	RQD	Rf	ABCDE		Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				c									a					1		1
795.00				b									a					1		1
	100	95	R2	b	30	2							a					1		1
				b	50								a					1		1
				b									a					1		1
802.00				b									a					1		1
	100	95	R2	b	30	2							a					1		1
				b	50								a					1		1
805.00													a					1		1
	99	90	R2	b	10	3							a					1		1
				a	30								a					1		1
				a	50								a					1		1
				b																
815.00				b																
	100	95	R2	c	5	2														
				b	40															
				b																
822.00				b																
	99	95	R2	c	10	2														
				c	30															
				c																
				c																
				c							QD	** 832.8 1049.6 QUARTZ DIORITE								
832.00																				
	100	90	R2	b	10	2					gQD	^^ 832.0 851.0 Granophyric quartz diorite								
				b	30					-10C										
				c						-20C		Note: @ 843.0 847.0 Shear Zone, hi-								
				c								angle with chlorite								
842.00				c																
	100	100	R3	b	10	2														
				b	30															
				c																
				c																
852.00				c																

ROCK QUALITY:

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

DRILL HOLE: LYN91-82

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
									-25C		Note: @ 900.0 933.0 Fault Zone, very strong shearing and stretching of phenocrysts, minor gouge @ 901.0								
									-20C										
									-20F										
									-35F										
									-35F										

ROCK QUALITY:

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

DRILL HOLE: LYN91-82

SULFIDES: % (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I
									-35C		Note: @ 955.0 958.0 Fault or shear zone, minor orange (iron) staining								
									-20F		Note: @ 965.0 967.0 Fault or shear zone								
										Md	^^ 1022.7 1024.6 Mafic dike, black, aphanitic, contains xenoliths of quartz								

ROCK QUALITY:

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

DRILL HOLE: LYN91-82

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
											diorite								
									-30C		Note: @ 1041.0 1043.0 Minor shear zone								
									-35C										
											E.O.H. 1049.6' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.2	-66.4
200'	180.8	-66.5
300'	181.2	-66.5
400'	181.7	-66.5
550'	182.7	-66.4

PROJECT: LYNNE P.D. 1076
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-10-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-83 (WDNR #217)

DATE: 5-15-91
PAGE 1 OF 1

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-12-91

BEARING: S180E INCLINATION: -66.5 T.D: 550'
COORDINATES: L9500 E, 11175 N
ELEV: 1562' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 39.0			** 0.0 39.0 OVERBURDEN	
39.0 42.5	(not recovered)			
4.25 50.0	(HQ core)			
39.0 122.5		Rt	** 39.0 122.5 RHYOLITE TUFF, fine-grained to cherty	
74.5 82.0		D	^^ 74.5 82.0 Dacite	
122.0 141.5		D	** 122.5 141.5 DACITE	
141.5 237.0		R	** 141.5 237.0 RHYOLITE	
141.5 168.5		gR	^^ 141.5 168.5 Granophyric Rhyolite	
168.5 171.0		Rlc	^^ 168.5 171.0 Rhyolite Lapilli Crystal Tuff	
171.0 237.0		Rt	^^ 171.0 237.0 Rhyolite Tuff	
237.0 307.0		D	** 237.0 307.0 DACITE	
307.0 382.5		R	** 307.0 382.5 RHYOLITE	
307.0 316.2		Rlc	^^ 307.0 316.2 Rhyolite Lapilli Crystal Tuff	
316.2 333.5		Rt	^^ 316.2 333.5 Rhyolite Tuff	
333.5 352.0		Rc	^^ 333.5 352.0 Rhyolite Crystal Tuff	
352.0 356.2		gQD	^^ 352.0 356.2 Quartz Diorite, Granophyric	
356.2 362.0		D,md	^^ 356.2 362.0 Dacite or Mafic Dike	
362.0 382.5		gQD	^^ 362.0 382.5 Quartz Diorite, Granophyric	

Noranda Exploration Inc.
Eastern Divison

DATE: 5-15-91
PAGE 1 OF 1

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	180.2	-66.4
200'	180.8	-66.5
300'	181.2	-66.5
400'	181.7	-66.5
550'	182.7	-66.4

PROJECT: LYNNE P.O. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-10-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-83 (WDNR #217)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-12-91

BEARING: S180E INCLINATION: -66.5 T.D: 550'
COORDINATES: L9500 E, 11175 N
ELEV: 1562' SEC: 15 TWP: 37N RANGE: 4

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
382.5 387.0		TS	** 382.5 387.0 TALCOSE SEDIMENT	
385.0 387.5		MSt	^^ 385.0 387.0 Massive Sulfide	385.0 387.0 40% Sp
387.0 550.0		sQD	** 387.0 550.0 QUARTZ DIORITE, Sheared to Well-Foliated	
			E.O.H. 550' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-83

SULFIDES: (T)

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

Run	%	RQD	Rf	ABCDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
0.0 39.0											** 0.0 39.0 OVERBURDEN								
										R	** 39.0 122.5 RHYOLITE								
										Rt	^^ 39.0 74.5 Rhyolite Tuff								
									-48B										
									-30F -15		Note: @ 53.0 57.0 Fault with carb-chlorite, and reddish alteration								
									-30F		Note: @ 66.0 69.0 Fracture Zone reddish alteration, shearing								
										O	^^ 74.5 82.0 Dacite altered								
									-45 -60										
										Ra	^^ 82.0 97.0 Ashy Tuff								
									-60										
										gR	^^ 97.0 122.5 Granophyric Rhyolite								