APPENDIX B

Geological and Geotechnical

Drill Logs 1-44 - Volume 2 of 3

Noranda Minerals Wisconsin Corp.

LYNNE PROJECT

13

(pg 281-350)

DRILL HOLE: LYN91-67

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	I
											E.O.H. 780' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	183.6	-60.3
200'	183.1	-60.5
300'	183.9	-60.5
400'	184.5	-60.6
565'	185.2	-60.1

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 1-28-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-68 (WDNR #227)

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

BEARING: S181.8E INCLINATION: -61.7 T.D: 565'
COORDINATES: L10500 E, 10850 N
ELEV: 1559.9' 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 63.5	(not recovered)			
55.0 94.0		R	>< 55.0 94.0 RHYOLITE	
94.0 118.5		Ch	>< 94.0 118.5 CHERT	
118.5 133.7		CSs	>< 118.5 133.7 CALCAREOUS SEDIMENT, With Sulfides	118.5 133.7 9% Sp
133.7 193.0		R	>< 133.7 193.0 RHYOLITE	
193.0 220.0		SLch	>< 193.0 220.0 INTERBEDDED SILTSTONE AND CHERT	
220.0 265.0		Ch	>< 220.0 265.0 CHERT	
241.0 246.0		Chs	^^ 241.0 246.0 Chert, With Sulfides	241.0 246.0 7% Sp
261.0 265.0		Chs	^^ 261.0 265.0 Chert, With Sulfides	261.0 265.0 9% Sp
265.0 297.5		Rc	>< 265.0 297.5 RHYOLITE CRYSTAL TUFF	
297.5 343.1		SLp	>< 297.5 343.1 SILTSTONE, With Pyrrhotite	297.5 343.1 10% Po
328.0 343.1		Chp	^^ 328.0 343.1 Chert, With Pyrrhotite	328.0 343.1 10% Po

Noranda Exploration Inc.
Eastern Divison

DATE: 10-
PAGE 1 OF

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	183.6	-60.3
200'	183.1	-60.5
300'	183.9	-60.5
400'	184.5	-60.6
565'	185.2	-60.1

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 1-28-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-68 (WDNR #227)

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

BEARING: S181.8E INCLINATION: -61.7 T.D:
COORDINATES: L10500 E, 10850 N
ELEV: 1559.9' SEC: 15 TWP: 37N RANGE

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
343.1 435.3		SS	343.1 435.3 SANDSTONE	
401.7 403.0		TS	401.7 403.0 Talc Sediment	
403.0 416.0		QDd	403.0 416.0 Quartz Diorite Dike	
435.3 509.5		CHP	435.3 509.5 CHERT, WITH PYRRHOTITE	435.3 509.5 25% Po, Py
449.0 456.0		TSp	449.0 456.0 Talc Sediment, With Pyrrhotite	449.0 456.0 25% Po, Py
480.0 494.0		TSs	480.0 494.0 Talc Sediment, With Sulfides	480.0 494.0 5% Sp, 20% Po, Py
509.5 523.5		SS	509.5 523.5 SANDSTONE, Hornfelsed	
523.5 565.0		QD	523.5 565.0 QUARTZ DIORITE	
523.5 560.0		gQD	523.5 560.0 Quartz Diorite, Granophyric	
			E.O.H. 565' (total depth)	

ROCK QUALITY:

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

LYN91-68

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 55.0											** 0.0 55.0 OVERBURDEN								
											^^ 0.0 3.0 Muskeg								
											^^ 3.0 30.0 Fine sand								
											^^ 30.0 50.0 Sand, gravel, and cobbles								
											^^ 50.0 55.0 Boulders								
											Note: @ 55.0 60.0 Broken ledge or boulders								
										R	** 55.0 94.0 RHYOLITE								
										R1	^^ 55.0 69.0 Rhyolite Lapilli Tuff, lt. grey, plag crystals, pumice clasts, glassy matrix, flow								
										gR	^^ 69.0 94.0 Granophyric Rhyolite, very fine-grained, grey, subtle feldspar phenocrysts, visible quartz								
											Note: @ 82.0-84.5 Weak epidote alteration								
									-35C	pRd	Note: @ 88.6 92.0 Porphyritic Rhyolite Dike, very fine-grained, tan to greenish tan, country rock xenoliths, plag crystals with chilled margin								
									-35C	Chc*	** 94.0 118.5 CHERT, crude laminations, garnet @ top @ 94.0-97.0, patchy diopside alteration	a	3		1			4
95.00												a	3		1				4
	99	80	R3	a	10	2						a	3		1				4
96.40					55							a	3		1				4
	100	100	R3	a	10	3						a	3		1				4

ROCK QUALITY:

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

LYN91-68

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
				a	30								a	3			1			4
				b	45								a	3			1			4
				b									a	3			1			4
105.00				b									a	3			1			4
	100	95	R3	b	5	4							a	3			1			4
				b	20								a	3			1			4
				b	50								a	3			1			4
				b	65								a	3			1			4
115.00				b									a	3			1			4
	100	100	R3	b	5	3					CSs	>< 118.5 133.7 CALCAREOUS SEDIMENT, contorted, with sulfides	c	9			1			10
				c	20								c	9			1			10
				c	65								c	9			1			10
				c									c	9				3		12
125.00				c									c	9				3		12
	100	100	R3	c	5	3							c	9				3		12
				c	20						VCS,ca	^^ 129.4 133.7 Sandstone, carbonate & possible talcose alteration	c	9				3		12
				b	60								b	4				3		7
				c									b	4				3		7
				c						-50C	R	>< 133.7 193.0 RHYOLITE								
											Rc	^^ 133.7 145.5 Rhyolite Crystal Tuff								
135.00																				
										-55C	gR	^^ 145.5 167.4 Predominantly Granophyric Rhyolite, with more crystal-rich intervals								
											Rcl	^^ 167.4 193.0 Rhyolite Crystal Lapilli Tuff								

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

LYN91-68

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
										-35F		Note: @ 176.0-178.0 Fracture Zone, carb-filled								
										-50B	SLch	** 193.0 220.0 INTERBEDDED SILTSTONES & CHERT, laminated, ashy intervals, with chert. Scattered blue quartz eyes.								
										-50B										
												Note: @ 200.0-210.0 Core broken								
218.50																				
	100	100	R3	b	25	2				-60B	Ch	** 220.0 265.0 CHERT	a				2	3		5
				b	65								a				2	3		5
				b									a				2	3		5
				b									a				2	3		5
225.00													a				2	3		5
	100	100	R3	b	30	2							a				2	3		5
				b	65								a				2	3		5
229.00													a				2	3		5
	100	80	R3	a	10	3							a					1		1
				a	30								a					1		1
235.00				a	60					-50B			a					1		1
	100	95	R3	b	10	3							a					1		1
				b	40								a					1		1
				b	60						Chs	^^ 241.0 246.0 Chert, with sulfides	c	7			2	3		12
243.00				b									c	7			2	3		12
	100	90	R3	b	10	3							c	7			2	3		12

ROCK QUALITY:

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

LYN91-68

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	2			2	3		7
				b	60								b	2			2	3		7
				b									b	2			2	3		7
				b									b	2			2	3		7
255.00				b						-60B			b	2			2	3		7
	100	100	R3	c	10	3							b	2			2	3		7
				b	40					-50B			b	2			2	3		7
					60								b	2			2	3		7
260.00													b	2			2	3		7
	100	100	R3	b	30	2					Chs	^^ 261.0 265.0 Chert, with sulfides	c	9			2	3		14
				c	60								c	9			2	3		14
				c							Rc	>< 265.0 297.5 RHYOLITE CRYSTAL TUFF	c	9			2	3		14
				c																
269.60				d								Note: @ 265.0-290.0 Bedded, with ashy								
	100	100										beds								
275.00																				
	100	100																		
278.00																				
	100	100																		
281.00																				
	100	100																		
285.00																				
	100	95	R3	a	30	2														
				b	60						Rc	^^ 290.0 297.5 Bedded to laminated Rhyolite								
				c								Crystal Tuff, with spherulitic patches,								
				b								blue quartz eyes								
295.00				b																
	100	95	R3	b	5	3					SLp	>< 297.5 343.1 SILTSTONE, with	c					8		8
300.00				a	30							pyrrhotite, bedded and disseminated	c					8		8
					60							matrix, hard medium grey, not translucent	c					8		8
	100	90	R2	b	5	2						or crackley. Bedding fluctuates from	c					8		8
301.00					40							30-70 degrees: tight fold @ 305.5,	c					8		8
	100	100	R2	a	5	3						several areas with "curring" beds	c					8		8
305.00				b	30					-45B			c					10		10
					60					-70B			c					10		10
	100	95	R2	b	30	2							c					10		10
				b	60								c					10		10
				c									c					10		10
314.00				b									c					10		10

ROCK QUALITY:

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

LYN91-68

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	c	10	3							c					10		10
				c	30								c					10		10
				b	60								c					10		10
				b						-35B			c					10		10
324.00				b						-40B			c					10		10
	100	100	R3	b	30	2				-35B			c					10		10
				c	60						Chp	^^ 328.0 343.1 Chert, with pyrrhotite	c					10		10
				c									b					5		5
				b									b					5		5
334.00				c									b					5		5
	100	100	R3	b	10	3							b					5		5
				b	30								b					5		5
340.40				b	60								b					5		5
	100	100	R2	b	30	2							b					5		5
				b	60						SS	** 343.1 435.3 SANDSTONE, black, fine-	b					5		5
345.00				b								grained, massive (unit same as @ 300.0-	b					5		5
												343.1, except less pyrrhotite), has	b					5		5
												clastic appearance, some areas laminated,	b					5		5
												graded, no quartz. Some areas have triple	b					5		5
												point-like fracturing-dacite flows.	b					5		5
													b					5		5
													b					5		5
													b					5		5

ROCK QUALITY:

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

LYN91-68

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
										TS	^^ 401.7 403.0 Talc Sediment								
									-35	QDd	^^ 403.0 416.0 Quartz Diorite Dike								
415.00									-35C	SS	^^ 416.0 435.3 Sandstone, with faint talc								
	100	100	R2	a	10	3													
				b	40														
				c	60														
				c															
425.00				c															
	100	90	R2	c	20	2													
				c	40														
				b															
				b															
435.00				c						ChP	>< 435.3 509.5 CHERT-PYRRHOTITE, with	c				4	20		24
	100	100	R2	c	40	2					pyrite, well bedded with occasional	c				4	20		24
				c	60				-84B		minor contortions, bedding angles vary	c				4	20		24
				c							from 35-85 degrees	c				4	20		24
				c								c				4	20		24
445.00				c					-40b			c				4	20		24
	100	100	R2	c	40	2						c				4	20		24
				c	60					TSp	^^ 449.0 456.0 Talc Sediment, with	c				4	20		24
				c							pyrrhotite	c				4	20		24
				c								c				4	20		24
455.00				c								c				4	20		24
	100	100	R2	c	10	2						c				4	20		24
				b	30							c				4	20		24
				b								c				4	20		24
				b								c				4	20		24
465.00				b					-30B			c				4	20		24
	100	100	R2	b	10	2						c				4	20		24
				b	30							c				4	20		24
				b					-40B			c				4	20		24

ROCK QUALITY:

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

LYN91-68

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									c				4	20		24
475.00				b									c				4	20		24
	100	100	R2	b	30	1														
				b							TSs	^^480.0 494.0 Talcose Sediment, with	a	5						5
				b								sulfides	a	5						5
													a	5						5
				b						-45C	QDd	Note: @ 484.0-487.5 Quartz Diorite Dike	a	5						5
485.00				b						-45C			a	5						5
	100	100	R2	b	30	2							a	5						5
				c	60								a	5						5
				c									a	5						5
				c								Note: @ 493.0-507.0 Minor cherty zones,	a	5						5
495.00				c								fractured, chert clasts	c				4	20		24
	100	100	R3	c	10	3							c				4	20		24
				c	30								c				4	20		24
				c	60								c				4	20		24
				b							Chs	^^ 504.0 507.0 Chert, with sulfides	b	8						8
505.00				b									b	8						8
	99	95	R3	b	5	2							b	8						8
507.00					30								c				4	20		24
	99	50	R2	b	60	1							c				4	20		24
508.00													c				4	20		24
	100	95	R2	b	30	1					SS	** 509.5 523.7 SANDSTONE, hornfelsed	c				4	20		24
510.00																				
	50	95	R2	b	60	1														
514.00																				
										-60C	QD	** 523.7 565.0 QUARTZ DIORITE								
											gQD	^^ 523.7 560.0 Granophyric Quartz Diorite								

ROCK QUALITY:

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

LYN91-68

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. 565' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.1	-64.0
200'	182.0	-64.3
300'	182.1	-64.4
400'	183.2	-64.6
500'	184.2	-64.7
685'	184.5	-64.4

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 1-29-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-69 (WDNR #229)

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

BEARING: S181.3E INCLINATION: -65.1 T.D: 685'
COORDINATES: L10500 E, 11070 N
ELEV: 1559.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-17-91
PAGE 1 OF 10

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 50.0			** 0.0 50.0 OVERBURDEN	
50.0 52.5	(not recovered)			
50.0 116.0		D	** 50.0 116.0 DACITE	
116.0 144.5		R	** 116.0 144.5 RHYOLITE	
144.5 191.2		D	** 144.5 191.2 DACITE	
191.2 413.0		R	** 191.2 413.0 RHYOLITE	
413.0 443.5		SLch	** 413.0 443.5 INTERBEDDED RHYOLITE CRYSTAL TUFF AND CHERTY SILTSTONE	
443.5 446.0		Chp	** 443.5 446.0 CHERT, With Pyrrhotite	443.5 446.0 5% Po
446.0 451.4		MSca	** 446.0 451.4 MASSIVE SULFIDE, Calcareous	446.3 451.4 45% Sp, 3% Ga
451.4 558.0		R	** 451.4 558.0 RHYOLITE	
558.0 561.5		TS	** 558.0 561.5 TALC SEDIMENT	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	181.1	-64.0
200'	182.0	-64.3
300'	182.1	-64.4
400'	183.2	-64.6
500'	184.2	-64.7
685'	184.5	-64.4

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 1-29-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-69 (WDNR #229)

DATE: 10-17-91
PAGE 1 OF 10

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

BEARING: S181.3E INCLINATION: -65.1 T.D: 685'
COORDINATES: L10500 E, 11070 N
ELEV: 1559.9' SEC: 15 TWP: 37N RANGE: 4E

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
561.5 574.8		Chp	>< 561.5 574.8 CHERT, With Pyrrhotite	561.5 574.8 50% Po, Py
574.8 619.3		D	>< 574.8 619.3 DACITE	
619.3 685.0		QD	>< 619.3 685.0 QUARTZ DIORITE	
			E.O.H. 685' (total depth)	

ROCK QUALITY:

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

LYN91-69

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 3.0 Muskeg								
											^^ 3.0 25.0 Fine sand								
											^^ 25.0 30.0 Sand and gravel								
											^^ 30.0 50.0 Sand, gravel, cobbles, and boulders								
											Note: @ 35.0-45.0 Lost circulation								
										D	>< 50.0 116.0 DACITE								
										pDd	^^ 50.0 77.5 Plag Phyric Dacite Dike, bleached or chilled at base, high angle (30 degrees), lower contact								
									-30C	W1	^^ 77.5 91.2 Lapilli Wacke, dacitic (black) matrix, with rhyolite clasts, and crystal-rich base, some Fe-staining								

ROCK QUALITY:

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

LYN91-69

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
									-60C	D	^^ 91.2 116.0 Dacite, dark black, fine-grained, massive, scalloped lower contact								
										R	>< 116.0 144.5 RHYOLITE								
										Rt	^^ 116.0 130.3 Rhyolite Tuff, very silicic, almost glassy								
									-65B		Note: @ 121.0-121.5 Rhyolite Crystal Tuff Beds, blue quartz, @ 127.0-130.3 fracture zone, shearing, brecciation								
									-50F										
										pR	^^ 130.3 137.0 Porphyritic Rhyolite								
									-80C	Rt	^^ 137.0 143.0 Rhyolite Tuff, glassy								
										Wq	^^ 143.0 144.5 Rhyolite Crystal Tuff, distinct banding of ashy material and distinct black quartz eyes, tuffaceous clasts @ top								
										D	>< 144.5 191.2 DACITE, dark black, massive, faintly laminated to 154.0, then plag crystals to 171.0. Base has calcite-filled veinlets.								

ROCK QUALITY:

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

LYN91-69

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
									-20C	R	>< 191.2 413.0 RHYOLITE								
									-20F -25F	gRd	^^ 191.2 211.8 Granophyric Rhyolite Dike, Fe-alteration along fractures, looks shattered-possible fracture zone.								
									-20F	Rt	^^ 211.8 231.5 Rhyolite Tuff, granophyric, glassy, faint blue quartz eyes								
									-20F -30F -15F		Note: @ 218.0-240.0 Fracture Zone, brecciated carb-gouge, core broken @ 20-30 degrees								

ROCK QUALITY:

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

LYN91-69

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	~~ 231.5 333.5 Rhyolite Crystal Tuff to Rhyolite Crystal Lapilli Tuff								
									-80F										

ROCK QUALITY:

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

LYN91-69

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
										Rt	^^ 333.5 363.2 Rhyolite Tuff, medium to lt. grey, glassy or ashy, with granophyric intervals and crystal tuff beds								
										Rcl	^^ 363.2 369.2 Rhyolite Crystal Lapilli Tuff, granophyric rhyolite, faint blue quartz eyes Note: @ 369.2-378.8 Granophyric Rhyolite, faint blue quartz eyes								
									-60C	Rcl	^^ 378.8 413.0 Rhyolite Crystal Lapilli Tuff								

ROCK QUALITY:

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

LYN91-69

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
											SLch	>< 413.0 443.5 INTERBEDDED RHYOLITE CRYSTAL TUFF AND CHERTY SILTSTONE, distinct bedding, cherty lenses, blue quartz-rich crystal beds, several spherulitic zones. 1-2% iron sulfides.	a					1	1	2
													a					1	1	2
										-60B			a					1	1	2
													a					1	1	2
													a					1	1	2
426.00													a					1	1	2
	100	100	R2	b	10	2							a					1	1	2
				b	30								a					1	1	2
				b									a					1	1	2
				b						-70B			a					1	1	2
435.00				b							Rc	^^ 435.0 440.0 Rhyolite Crystal Tuff	a					1	1	2
	100	95	R3	b	5	3							a					1	1	2
				b	30								a					1	1	2
				b	60								a					1	1	2
				b							Chp	>< 443.5 446.0 CHERT, with pyrrhotite	a					1	1	2
445.00				b							MSca	>< 446.0 451.4 MASSIVE SULFIDE, calcareous, bedded to contorted	b					1	5	6
	100	90	R3	b	25	2				-50B			b					1	5	6
				c	60									e	45		3	1	2	51
				c							Rc	>< 451.4 558.0 RHYOLITE, predominantly grey rhyolite crystal tuff, with pumice clasts toward top, becoming more silicic toward base		e	45		3	1	2	51
				c										e	45		3	1	2	51
455.00				b																	

ROCK QUALITY:

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

LYN91-69

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
											Rd	^^ 554.0 558.0 Rhyolite Dike, Fe-staining, quartz rich, along fracture ?							
555.00																				
	100	95	R3	a	10	3														
				b	30						TS	>< 558.0 561.5 TALC SEDIMENT, with 2-3% Fe-sulfide	a				1	2	3
				b	60								a				1	2	3
				b									a				1	2	3
				b						-85C	Chp	>< 561.5 574.8 CHERT, with pyrrhotite, laminated, 40-50% Fe-sulfides		e			10	40	50
														e			10	40	50
														e			10	40	50
565.00										-65C	pR	^^ 565.7 568.5 Porphyritic Rhyolite, dark matrix, blue quartz eyes		e			10	40	50
	100	95	R3	b	30	2				-80C				e			10	40	50
				b	60									e			10	40	50
				c										e			10	40	50
				c							D	>< 574.8 619.3 DACITE, medium to dark black, 1% Fe-sulfides along fractures		e			10	40	50
575.00				b																
	100	90	R3	b	15	2														
578.00				b	40															
										-50C	QD	>< 619.3 685.0 QUARTZ DIORITE, inter-								

OCK QUALITY:

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

LYN91-69

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
											bedded fine-grained and coarse-grained areas, no granophyre, but two quartz diorite dikes @ 617.5-619.3, margin hornfelsed								
											E.O.H. 685' (total depth)								

Noranda Exploration Inc.
Eastern Divison

DATE: 10-14-91
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HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.3	-60.9
300'	181.9	-61.2
500'	184.5	-60.6
700'	186.0	-60.9
960'	188.6	-60.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/L. Kennedy
DATE COLLARED: 1-31-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-70 (WDNR #196)

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

BEARING: S180.3E INCLINATION: -60.9 T.D: 960'
COORDINATES: L10100 E, 11495 N
ELEV: 1564.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 64.0			** 0.0 64.0 OVERBURDEN	
64.0 67.0	(not recovered)			
64.0 96.5		R	** 64.0 96.5 RHYOLITE	
68.8 79.0		WI	^^ 68.8 79.0 Lapilli Wacke	
96.5 134.5		R	** 96.5 134.5 RHYOLITE	
134.5 160.0		AG	** 134.5 160.0 AGGLOMERATE	
150.5 151.2		IR	^^ 150.5 151.2 Intrusive Rhyolite Dike	
160.0 168.5		SS	** 160.0 168.5 SANDSTONE	
168.5 223.0		W	** 168.5 223.0 WACKE	
223.0 228.5		D	** 223.0 228.5 DACITE DIKE	
228.5 241.0		AG	** 228.5 241.0 AGGLOMERATE	
241.0 265.0		D	** 241.0 265.0 DACITE DIKE	
265.0 274.0		SS	** 265.0 274.0 SANDSTONE	

Noranda Exploration Inc.
Eastern Divison

DATE: 10-14-91
PAGE 1 OF 14

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.3	-60.9
300'	181.9	-61.2
500'	184.5	-60.6
700'	186.0	-60.9
960'	188.6	-60.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/L. Kennedy
DATE COLLARED: 1-31-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-70 (WDNR #196)

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

BEARING: S180.3E INCLINATION: -60.9 T.D: 960'
COORDINATES: L10100 E, 11495 N
ELEV: 1564.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
274.0 285.0		W	** 274.0 285.0 WACKE	
285.0 288.0		D	** 285.0 288.0 DACITE DIKE	
288.0 298.0		BP	** 288.0 298.0 BEDDED PYRRHOTITE	
298.0 308.0		Wch	** 298.0 308.0 WACKE, Cherty	
308.0 349.5		Wl	** 308.0 349.5 LAPILLI WACKE	
349.5 364.0		IR	** 349.5 364.0 INTRUSIVE RHYOLITE DIKE	
364.0 375.0		W	** 364.0 375.0 WACKE	
375.0 441.0		Wl	** 375.0 441.0 LAPILLI WACKE	
437.0 439.0		pR	^^ 437.0 439.0 Porphyritic Rhyolite Sill	
441.0 445.0		Sk	** 441.0 445.0 TACTITE	
445.0 447.0		Ch	** 445.0 447.0 CHERT	

Noranda Exploration Inc.
Eastern Divison

DATE: 10-14-91

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.3	-60.9
300'	181.9	-61.2
500'	184.5	-60.6
700'	186.0	-60.9
960'	188.6	-60.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/L. Kennedy
DATE COLLARED: 1-31-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-70 (WDNR #196)

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

BEARING: S180.3E INCLINATION: -60.9 T.D: 960'
COORDINATES: L10100 E, 11495 N
ELEV: 1564.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
447.0 463.3		SS	** 447.0 463.3 SANDSTONE	
463.3 534.8		LR	** 463.3 534.8 LYNNE RHYOLITE	
473.0 485.3		D	^^ 473.3 485.3 Dacite Dike	
498.0 517.0		IR	^^ 498.0 517.0 Intrusive Rhyolite Dike	
524.0 528.8		IR	^^ 524.8 528.8 Intrusive Rhyolite Dike	
534.8 562.0		Wlch	** 534.8 562.0 LAPILLI WACKE, Cherty	
548.2 557.0		D	^^ 548.2 557.0 Dacite Dike	
562.0 574.0		VCS	** 562.0 574.0 VOLCANICLASTIC SEDIMENT	
574.0 580.0		TSp	** 574.0 580.0 TALCOSE SEDIMENT, With Pyrrhotite	
580.0 591.0		Chp,t	** 580.0 591.0 CHERT, With Talc, Pyrrhotite and Chalcopyrite	
591.0 597.5		TSp,s	** 591.0 597.5 TALCOSE SEDIMENT, With Pyrrhotite, And Galena	
597.5 623.5		gIR	** 597.5 623.5 INTRUSIVE RHYOLITE DIKE, Granophyric	
623.5 627.5		SS	** 623.5 627.5 SANDSTONE	

Noranda Exploration Inc.
Eastern Divison

DATE: 10-14-91

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.3	-60.9
300'	181.9	-61.2
500'	184.5	-60.6
700'	186.0	-60.9
960'	188.6	-60.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/L. Kennedy
DATE COLLARED: 1-31-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-70 (WDNR #196)

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

BEARING: S180.3E INCLINATION: -60.9 T.D: 960'
COORDINATES: L10100 E, 11495 N
ELEV: 1564.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
627.5 633.1		X	627.5 633.1 TUFFITE	
633.1 650.0		SS	633.1 650.0 SANDSTONE	
642.0 645.0		TS	642.0 645.0 Talc Sediment	
650.0 663.5		BP	650.0 663.5 BEDDED PYRRHOTITE	
660.0 663.5		TS	660.0 663.5 Talc Sediment	
663.5 671.0		X	663.5 671.0 TUFFITE	
671.0 699.5		CS	671.0 699.5 CALCAREOUS SEDIMENT	
699.5 788.0		X	699.5 788.0 TUFFITE	
788.0 799.5		TSz	788.0 799.5 TALCOSE SEDIMENT, With Stringer Sulfides	
799.5 803.5		VCS,tz	799.5 803.5 SANDSTONE, With Talc, Stringer Sulfide, Rare Chert	
803.5 809.2		VCS	803.5 809.2 SANDSTONE, Weak Talc Alteration	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	178.3	-60.9
300'	181.9	-61.2
500'	184.5	-60.6
700'	186.0	-60.9
960'	188.6	-60.5

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/L. Kennedy
DATE COLLARED: 1-31-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-70 (WDNR #196)

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

BEARING: S180.3E INCLINATION: -60.9 T.D: 960'
COORDINATES: L10100 E, 11495 N
ELEV: 1564.8' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
809.2 822.0		Xz,t	** 809.2 822.0 TUFFITE, Stringer Sulfides, Talcose	
822.0 838.0		QD	** 822.0 838.0 QUARTZ DIORITE DIKE	
838.0 860.0		MS	** 838.0 860.0 MASSIVE SULFIDE	
843.0 846.0		QD	^^ 843.0 846.0 Quartz Diorite Dike	
860.0 960.00		QD	** 860.0 960.0 QUARTZ DIORITE	
860.0 871.0		gQD	^^ 860.0 871.0 Quartz Diorite, Granophyric	
			E.O.H. 960' (total depth)	

ROCK QUALITY:

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

DRILL HOLE: LYN91-70

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 64.0											** 0.0 64.0 OVERBURDEN								
											^^ 0.0 40.0 Fine sand								
											^^ 40.0 50.0 Silty sand								
											^^ 50.0 64.0 Sand and gravel								
										R	** 64.0 96.5 RHYOLITE, abundant feldspar phenocrysts, moderate iron oxide (red) alteration, patchy zones of light green epidote alteration								
67.0										W1	^^ 68.8 79.0 Lapilli Wacke to Agglomerate, cherty clasts								
70.0																			
71.0																			
75.0																			
85.0																			
95.0										R	** 96.5 134.5 RHYOLITE, black, aphanitic with occasional plag-phyric zones, patchy zones of light green epidote alteration, visible quartz on fresh surface								
105.0																			

DRILL HOLE: LYN91-70

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
115.0																			
121.0																			
126.0											Note: @ 134.2-134.5 Contact zone or small zone of wacke development								
135.0										AG	** 134.5 160.0 AGGLOMERATE, abundant subhedral feldspar in matrix								
145.0																			
152.5									-35C	IR	^^ 150.5 151.2 Intrusive Rhyolite Dike, aphanitic, medium green								
155.0											Note: @ 158.5-160.0 Gradational contact between sandstone and agglomerate								
										SS	** 160.0 168.5 SANDSTONE, black, very fine-grained								
165.0										W	** 168.5 223.0 WACKE OR FELDSPATHIC WACKE, medium-grained, yellow-brown to black in color, dark green (mafic ?) matrix								
173.0																			
182.0																			

ROCK QUALITY:

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

DRILL HOLE: LYN91-70

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
192.0																			
200.0																			
205.0																			
207.0																			
213.0																			
224.0										D	** 223.0 228.5 DACITE DIKE, Plag-phyric, large feldspar phenocrysts								
232.5										AG	** 228.5 241.0 AGGLOMERATE OR LAPILLI TUFF, .5-1" subrounded clasts, matrix supported, clasts do not equal matrix Note: @ 241.0-247.0 Chilled margin or rock similar to the sandstone unit								
241.0										D	** 241.0 265.0 DACITE DIKE, Plag-phyric, large feldspar phenocrysts								
245.0																			
247.0																			
255.0																			

ROCK QUALITY:

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

DRILL HOLE: LYN91-70

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: @ 261.0-265.0 Chilled margin, subtle feldspar phenocrysts								
265.0										SS	** 265.0 274.0 SANDSTONE, black, very fine-grained								
275.0										W	** 274.0 285.0 WACKE, coarse-grained, possible turbidity flow, minor "accidental" lapilli sized clasts								
	100	100	R3	b	10	2													
				b	60														
				b															
				c															
285.0				c						D	** 285.0 288.0 DACITE DIKE, plag-phyric								
	100	100	R3	b	10	2													
				c	60					BP	** 288.0 298.0 BEDDED PYRRHOTITE	c					12		12
				c								c					12		12
				c								c					12		12
				c								c					12		12
295.0												c					12		12
	100	95	R3	c	15	2				Wch	** 298.0 308.0 WACKE, Cherty	c					12		12
				c	50														
				c															
				a															
305.0				a															
	100	100	R3	a	10	3				Wlch	** 308.0 349.5 LAPILLI WACKE, very cherty matrix, chert clasts, minor agglomerate sized clasts, fractured								
				a	30														
				a	50														
				a															
315.0				a															
324.0																			
323.5																			
											Note: @ 331.0-334.5 Zone of orange (iron oxide ?) alteration								
334.5																			

DRILL HOLE: LYN91-70

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
344.5																			
									-50C	IR	** 349.5 364.0 INTRUSIVE RHYOLITE DIKE, aphanitic with very subtle feldspar phenocrysts, orange to grey-tan								
355.0																			
									-50C	W	** 364.0 375.0 WACKE (?), subtle feldspar phenocrysts, black, fine-grained								
365.0																			
375.0										WI	** 375.0 441.0 LAPILLI WACKE, predominatly chert clasts, chlorite altered pumice or ash								
385.0																			
395.0																			
405.0																			

ROCK QUALITY:

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

DRILL HOLE: LYN91-70

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	Ta	Mt
415.0																					
425.0																					
435.0																					
									-90C	pIR	^^ 437.0 439.0 Porphyritic Rhyolite Sill (?), 2-4 mm subhedral feldspar phenocrysts, blue quartz eyes										
										Sk	** 441.0 445.0 TACTITE, skarn altered rock, light green diopside alteration										
445.0										Ch	** 445.0 447.0 CHERT, black, minor chlorite altered pumice or ash										
										SS	** 447.0 463.3 SANDSTONE, medium-grained, green, possible crystal ash flow tuff, dark green mafic matrix										
455.0																					
									-40C												
465.0										LR	** 463.3 534.8 LYNNE RHYOLITE, feldspar rich, oocasional lapilli sized fragments										
475.0										D	^^ 473.3 485.3 Dacite Sill or Dike, black, aphanitic to plag-phyric, patchy light green epidote altered feldspars (?)										

ROCK QUALITY:

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

DRILL HOLE: LYN91-70

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
485.0									-70C										
495.0										IR	^^ 498.0 517.0 Intrusive Rhyolite Dike, tan to black, aphanitic to subtle plag-phyric zones								
503.5																			
505.0																			
515.0									-35C										
523.0										IR	^^ 524.8 528.8 Intrusive Rhyolite Dike, black, aphanitic								
532.0										Wlch	** 534.8 562.0 LAPILLI WACKE, Cherty, possible turbidity or debris flow, clasts mainly chert								
540.0																			
									-45C	D	^^ 548.2 557.0 Dacite Dike, plag-phyric, black								
550.0																			
560.0	100	95	R2	b	10	3				VCS	** 562.0 574.0 VOLCANICLASTIC SEDIMENT,								

ROCK QUALITY:

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

DRILL HOLE: LYN91-70

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	30							interbedded volcaniclastics, debris flows								
565.0				b	60							& sediments, contorted bedding, occasional								
	100	95	R2	b	30	2						lapilli to agglomerate sized clasts,								
				b	50							weak talcose alteration								
				c																
				c							TSp	** 574.0 580.0 TALC SEDIMENT, with								
				b								pyrrhotite								
575.0																				
	99	55	R2	b	10	2						Note: @ 578.0-582.4 Heavily fractured								
												rock, possible fault or shear zone, strong								
												serpentinite development								
580.0				a	60						Chpt	** 580.0 591.0 CHERT, with talc,								
												pyrrhotite, and chalcopyrite								
	100	75	R2	a	20	2														
				b	60							Note: @ 584.0-591.0 Zone of rounded chert	b		1		4			5
585.0				b								clasts ? or possibly soft sediment	b		1		4			5
	100	95	R2	b	10	3						deformation, stringer sulfides	b		1		4			5
				b	40								b		1		4			5
				b	60						TSp	** 590.0 597.5 TALCOSE SEDIMENT, with	b		1		4			5
				b								pyrrhotite, and galena	b		1		4			5
595.0				c									b		1		4			5
											gIR	** 597.5 623.5 INTRUSIVE RHYOLITE DIKE	b		1		4			5
												OR SILL, Granophyric, large feldspars and								
												blue quartz eyes, black matrix								
605.0																				
615.0																				
625.0											SS	** 623.5 627.5 SANDSTONE, black, fine-								
												grained								
	99	70	R3	a	10	2														
627.4					40						X,t	** 627.5 633.1 TUFFITE, weakly talcose	b	7	1	2				10

DRILL HOLE: LYN91-70

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
	100	85	R3	b	10	3							b	7	1	2				10
				c	30								b	7	1	2				10
				b	60						SS	** 633.1 650.0 SANDSTONE, black, very fine to fine-grained	b	7	1	2				10
635.0				a																
	99	50	R3	a	5	3														
638.4					20															
					60															
	100	95	R2	b	30	2					TS	^^ 642.0 645.0 Talc Sediment, greenish black, diopside alteration ?								
				b	50															
				b																
645.0				b																
	100	95	R2	b	50	1					BP	** 650.0 663.5 BEDDED PYRRHOTITE	c					15		15
				c									c					15		15
				c									c					15		15
				c									c					15		15
655.0				c									c					15		15
	100	95	R2	c	20	2					TS	^^ 660.0 663.5 Talc Sediment, greenish black, diopside alteration ?	c					15		15
				b	50															
				b																
				b																
				c							Xt	** 663.5 671.0 TUFFITE, talcose, diopside alteration	c	10						10
665.0													c	10						10
	100	90	R2	b	10	3							c	10						10
				b	30								c	10						10
				b	60						CSc	** 671.0 699.5 CALCAREOUS SEDIMENT, contorted bedding, minor amount of concentric clasts (metasomatically altered ?) minor disseminated sulfides (<5%)	c	10						10
				b																
675.0				c																
	100	95	R2	c	30	2														
				c	60															
				c																
684.0				c																
	100	100	R2	c	5	3														
				c	30															
				b	60															
				b																
				b																
694.0																				
	100	100	R2	b	5	3														
				b	40															
				b	60						X	** 699.5 788.0 TUFFITE, bedded to contorted, weak diopside (skarn) alteration,	c	10				2		12
				b									c	10				2		12

ROCK QUALITY:

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

LYN91-71

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
									-80C	Rcl	^^ 253.4 365.0 Rhyolite Crystal Lapilli Tuff								

ROCK QUALITY:

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

LYN91-71

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
											Md	^^ 329.0 344.0 Dacite Dike, fine-grained, dark calcite filled fractures, massive, associated with fault below, upper contact spun.								
										-25C -25F	FZ	^^ 344.0 349.0 Fault Zone, oxidation, brecciation, carbonate								
											Rc	^^ 349.0 365.0 Rhyolite Crystal Tuff								
355.0																				
	100	100	R2	c	10	3														
				b	30															
				b	50															
				a																
365.0				a							SL,m	>< 365.0 373.0 SILTSTONE, with magnetite, diopside alteration	b				1	4		5
	100	100	R3	b	10	3							b				1	4		5
				b	30								b				1	4		5
				b	50								b				1	4		5
				b							ChP	>< 373.0 385.0 CHERT, WITH PYRRHOTITE, with clasts	b				1	4		5
375.0				c									b				1	4		5
	100	100	R3	c	10	2							b				1	4		5
379.0				c	30								b				1	4		5
	99	95	R2	c	10	3							b				1	4		5
				a	30								b				1	4		5
				a	50						TS	>< 385.0 388.0 TALC SEDIMENT	b				1	4		5
387.0				a																
	98	85	R2	a	10	3														
				a	30							Note: @ 386.0-389.0 Core broken								
					50															
390.0											D	>< 388.0 402.0 DACITE, dark black, dense, shatter veinlets with calcite								

ROCK QUALITY:

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

LYN91-71

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	>< 402.0 435.0 SANDSTONE, grey green massive, looks grainy								
										-14F										
											D	>< 435.0 446.0 DACITE								
												^^ 443.0 451.0 Several 2-4" Tonalite Dikelets								
										-25C	SS	>< 446.0 459.0 SANDSTONE, grey green massive, looks grainy								
455.0																				
	100	90	R2	b	30	2														
				c	60															
460.0				b							BPch	>< 459.0 469.0 BEDDED PYRRHOTITE, with laminated cherty intervals fractures, talcose at base	f	5			3	55	63
	100	100	R3	b	10	3							f	5			3	55	63
				c	50								f	5			3	55	63
				c	60								f	5			3	55	63
											BPch,s	^^ 459.0 462.0 Bedded Pyrrhotite, cherty, with sulfides	f	5			3	55	63
													e				3	55	58
													e				3	55	58
465.0													e				3	55	58
	100	95	R2	b	20	3							e				3	55	58

ROCK QUALITY:

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

LYN91-71

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						TSp	⋇⋇ 469.0 474.0 TALC-PYRRHOTITE SEDIMENT	c					15		15
				c	60								c					15		15
				b							SS	⋇⋇ 474.0 493.5 SANDSTONE, hornfelsed	c					15		15
475.0				b																
												Note: @ 475.0-480.0 Several Tonalite Dikelets								
											QD	⋇⋇ 493.5 615.0 QUARTZ DIORITE								
										-30C										
											gQD	~~ 493.5 501.8 Granophyric Quartz Diorite								

ROCK QUALITY:

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

LYN91-71

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. 615' (total depth)								

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.8	-66.6
500'	183.2	-66.7
1000'	192.3	-65.0
1500'	201.3	-62.7
2000'	204.1	-58.1
2229'	204.5	-56.5

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

HOLE NO: LYN91-72 (WDNR #249)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-19-91

BEARING: S180E INCLINATION: -64 T.D: 2229'
COORDINATES: L10000 E, 13150 N
ELEV: 1553' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-15-91
PAGE 1 OF 33

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
0.0 19.0			** 0.0 19.0 OVERRBURDEN	
19.0 159.2		D	** 19.0 159.2 DACITE	
159.2 320.0		W,SL	** 159.2 320.0 WACKES, SILTSTONES	
320.0 411.0		D	** 320.0 411.0 DACITE	
411.0 933.0		R	** 411.0 933.0 RHYOLITE	
411.0 468.0		IR	^^ 411.0 468.0 Intrusive Rhyolite	
468.0 593.4		Rcl	^^ 468.0 593.4 Predominantly Rhyolite Crystal Lapilli Tuff	
593.4 608.0		IR	^^ 593.4 608.0 Intrusive Rhyolite	
608.0 821.5		Rcl	^^ 608.0 821.5 Predominantly Rhyolite Crystal Lapilli Tuff	
834.0 933.0		Wl	^^ 834.0 933.0 Lapilli Wacke	
933.0 965.0		Ch	** 933.0 965.0 CHERT	
965.0 975.0		Wf	** 965.0 975.0 FELDSPATHIC WACKE	
975.0 1099.0		D	** 975.0 1099.0 DACITE	
1099.0 1162.0		R	** 1099.0 1162.0 RHYOLITE	

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

Footage	Bearing	Inclination
100'	177.8	-66.6
500'	183.2	-66.7
1000'	192.3	-65.0
1500'	201.3	-62.7
2000'	204.1	-58.1
2229'	204.5	-56.5

PROJECT: LYNNE P.O. 1876
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CORE SIZE: NQ

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BEARING: S180E INCLINATION: -64 T.D: 2229'
COORDINATES: L10000 E, 13150 N
ELEV: 1553' SEC: 15 TWP: 37N RANGE: 4E

DATE: 5-15-91
PAGE 1 OF 33

DRILL HOLE SUMMARY

FOOTAGE	ROCK QUALITY	CODE	GEOLOGIC UNITS	MINERALIZATION & ALTERATION
1162.0 1211.0		SL	** 1162.0 1211.0 SILTSTONE	
1211.0 2118.9		R	** 1211.0 2118.9 RHYOLITE, Predominantly Fine-grained, Cherty Or Ashy Tuffs And Crystal Tuffs With Blue Quartz Eyes	
2118.9 2229.0		QD	** 2118.9 2229.0 QUARTZ DIORITE	
2118.9 2121.0		gQD	^^ 2118.9 2121.0 Quartz Diorite, Granophyric	
			E.O.H. 2229' (total depth)	

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
0.0 19.0											** 0.0 19.0 OVERBURDEN								
										D	** 19.0 159.2 DACITE, patchy epidote alteration @ 19.0-79.0, plag-phyric (tiny crystals) @ 47.0-75.0								

DRILL HOLE: LYN91-72

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	I
											^^ 79.0 134.0 Dark grey, black, massive								
											^^ 134.0 144.0 Carbonate-filled fractures								
									-45F		^^ 148.5 153.0 Possible sheared interval								
									-45S		Note: @ 149.0 Reddish staining								

DRILL HOLE: LYN91-72

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	I
										W,SL	** 159.2 320.0 WACKES, SILTSTONE								
										W1	^^ 159.2 170.5 Lapilli Wacke, quartz feldspar wacke with pR fragments (0.5-1") upper contact is unclear								
									-60C	D	^^ 170.5 182.6 Dacite								
											^^ 182.6 187.2 Bleached, altered, could be wacke but contacts are vague								
										W,SL	^^ 193.0 246.0 Interbedded Siltstone, Wacke								
									-50C										

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
										D	^^ 246.0 257.5 Dacite								
									-50C	SL	^^ 257.5 279.6 Siltstone, dark green-black, laminated, cherty and clastic-rich intervals								
										D	^^ 279.6 303.3 Dacite								
									-40F -35F		Note: @ 284.0-288.0 Fracture zone, quartz epidote-chlorite carb along fractures								
									-50B	SL	^^ 303.3 320.0 Siltstone								

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	I
										W*	^^ 317.5 320.0 Wacke, altered								
										D	** 320.0 411.0 DACITE, carb veinlets								
									-40C	pRd	^^ 344.6 347.4 Rhyolite Porphyry Dike								
									-35C	D	^^ 347.4 411.0 Dacite, carb veinlets								
											Note: @ 351.0-354.0 Fractures								
									-30C		^^ 382.7 387.0 Minor shearing, alteration along fractures								
									-60C										

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
									-40C	R	** 411.0 933.0 RHYOLITE								
										gIR	^^ 411.0 468.0 Intrusive Rhyolite, pinkish, 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
										Rc	^^ 468.0 471.0 Rhyolite Crystal Tuff								
									-50C	W	^^ 471.0 474.0 Wacke								
										pR	^^ 474.0 484.3 Rhyolite Porphyry								
									-35C	Md	^^ 484.3 490.6 Mafic Dike, bottom contact broken								
										Rc	^^ 490.6 520.5 Rhyolite Crystal Tuff, with blue quartz eyes, pinkish granophyric matrix								
									-45C	D,SL	^^ 520.5 525.0 Dacite or Siltstone								
									-50C	Rlc	^^ 525.0 540.0 Rhyolite Lapilli Crystal Tuff, dark grey matrix with plag crystals, with pR and quartz fragments								
									-35C		Note: @ 538.0-538.5 Mafic Dike								
									-60C	W	^^ 540.0 554.5 Wacke								

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
										Rcl	^^ 554.5 593.4 Rhyolite Crystal Lapilli Tuff, dark grey matrix with plag crystals, with pR and quartz fragments								
										IR	^^ 593.4 608.0 Intrusive Rhyolite, pinkish, granophyric, with banded alteration and patchy epidote alteration								
										Rcl	^^ 608.0 637.1 Rhyolite Lapilli Crystal Tuff, pinkish, crystal-rich matrix with pR and dark lapilli. Possible epidote or chloritic alteration								

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
									-70C	Md	^^ 637.1 656.5 Mafic Dike, black, massive aphanitic								
									-30C	Rlc	^^ 656.5 721.6 Rhyolite Lapilli Crystal Tuff, same as above, except more flesh-colored, with redder pR clasts. Clast size increase downward with base approaching breccia size.								

DRILL HOLE: LYN91-72

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	I
									-60C	Md	^^ 721.6 729.8 Mafic Dike or Dacite Flow, dark black, massive upper contact flat, embayed and probably depositional, lower contact sharp								
									-35C	Rcl	^^ 729.8 821.5 Rhyolite Lapilli Crystal Tuff, beige-green, with subrounded cherty and pR clasts in crystal matrix								

DRILL HOLE: LYN91-72

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	I
									-55C	D/SS	^^ 821.5 834.0 Dacite or Sandstone								
									-21C	W1/AG	^^ 834.0 877.0 Lapilli Wacke/Agglomerate, greenish altered wacke, matrix with sub-rounded chert clasts, >2"								

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
										W	^^ 877.0 919.9 Wacke, massive, dark blue grey, looks grainy, with possible lithics								
									-20F		Note: @ 881.0-884.5 Fracture zone								
									-70										
									-35F	Rd	^^ 919.9 927.5 Rhyolite Dike, Granophyric								

DRILL HOLE: LYN91-72

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 -40F	CODE				Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
										W	^^	927.5	933.0	Wacke, as above								
										Ch	**	933.0	965.0	CHERT, banded, multi-colored								
										Wf	**	965.0	975.0	FELDSPATHIC WACKE								
										D	**	975.0	1099.0	DACITE								

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	I
										D#	^^ 1022.0 1032.0 Altered Dacite or Tuff								
										D	^^ 1032.0 1038.0 Dacite, dark blue grey, fine-grained								
										D	^^ 1038.0 1099.0 Dacite, plag-phyric								

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
									-5	R	** 1099.0 1162.0 RHYOLITE								
										gR	^^ 1099.0 1122.0 Granophyric Rhyolite, pink								
										IR	^^ 1122.0 1138.0 Intrusive Rhyolite								
									-40C	Md	^^ 1138.0 1141.0 Mafic Dike								
										IR	^^ 1141.0 1162.0 Intrusive Rhyolite								

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
										SL/W	** 1162.0 1211.0 SILTSTONE/WACKE								
									-45		Note: @ 1187.0-1194.0 Fault zone, shattering, brecciation in hanging wall								
										R	** 1211.0 2229.0 RHYOLITE								
										R*	^^ 1211.0 1224.0 Spherulitic Rhyolite								
										R	^^ 1224.0 1244.0 Rhyolite Flow, with pumice, clasts-stretched, glassy matrix								

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
										Rt*	^^ 1244.0 1295.0 Rhyolite Tuff, with spherulitic or altered interbeds								
										Rt,ch	^^ 1295.0 1351.0 Rhyolite Tuff, cherty, ashy, fine-grained, with spherulitic interbeds								

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	I
965.00											*R	^^ 965.5 970.5 Spherulitic Rhyolite								
	98	90	R2	a	15	3					SL	** 970.5 1013.2 SILTSTONE								
				a	45															
				b	75						SL	^^ 970.5 987.0 Siltstone								
				a																
				b																
975.00																				
	99	85	R2	a	5	3														
				a	45															
				b	75															
				b																
985.00				b																
	99	90	R2	b	5	3					SL	^^ 987.0 994.0 Siltstone	a				3			3
				b	45								a				3			3
				b	75								a				3			3
				a							SLch	^^ 994.0 1013.2 Siltstone, cherty	a				3			3
995.00				a																
	99	90	R2	b	15	2														
				b	65															
				a																
				b																
1005.00				a																
	100	100	R2	b	5	3														
				b	30															
				b	70															
				c							TS	** 1013.2 1017.0 TALCOSE SEDIMENT,	a	1				2	1	4
1015.00				c								(Wacke), with arsenopyrite	a	1				2	1	4
													a	1				2	1	4
	100	100	R2	c	10	2					SLp	** 1017.0 1022.0 SILTSTONE, with	a	1				2	1	4
				c	50							pyrrhotite	b					7		7
				b									b					7		7
				c							TS/CS	** 1022.0 1050.0 TALCOSE SEDIMENT/	b					7		7
				c								CALCAREOUS SEDIMENT	b					7		7
													b					7		7
											TS	^^ 1022.0 1025.5 Talcose Sediment	b					7		7
													a	3				1		4
1025.00											TSp,CSp	^^ 1025.5 1050.0 Interbedded Talcose	a	3				1		4

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	% 100	RQD 100	Rf R2	ABCDE		Jn 2	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	T
				c	10							Sediment, Calcareous Sediment, with pyrrhotite	a					5		5
				b	40								a					5		5
				b									a					5		5
				b									a					5		5
1035.00				a									a					5		5
	CRUSHED												a					5		5
1036.00													a					5		5
	98	85	R2	a	30	2						Note: @ 1039.0 "Oolites" like Lyn91-56	a					5		5
				b	50								a					5		5
				b									a					5		5
				b									a					5		5
1045.00				b									a					5		5
	100	95	R2	b	30	2					SLp	** 1050.0 1053.0 SILTSTONE, with bedded pyrrhotite	a					5		5
				a	50								c	2				10		12
				b							QD	** 1053.0 1191.0 QUARTZ DIORITE	c	2				10		12
				b									c	2				10		12
				b							gQD	^^ 1053.0 1071.0 Granophyric Quartz Diorite	c	2				10		12
1055.00													c	2				10		12
												Note: @ 1053.0-1063.0 Mafic Dike @ 20 degrees to axis								
												^^ 1063.0 1105.0 Dark matrix, with blue quartz eyes								

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
											^^ 1105.0 1142.0 Coarse-grained								
										gOD	^^ 1142.0 1162.5 Granophyric								
											Note: @ 1157.0-1161.0 Quartz-filled fractured @ 25 degrees to axis								

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
											E.O.H. 1191' (total depth)								

DRILL HOLE: LYN91-77

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	I
									-60C	SL	** 227.0 263.3 SILTSTONE								
										SL	^^ 227.0 235.0 Siltstone, occasionally laminated, lt. grey, cherty interbeds								
										D	^^ 235.0 263.3 Interbedded Dacite Sediments								
255.00																			

DRILL HOLE: LYN91-89

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	ACDE	Jn	Jrc	Ja	SpG	Fol	CODE	Lithology	Total%	Sp	Cp	Ga	Py	Po	As	I	2
										gR	^^ 882.0 919.0 Granophyric Rhyolite	a								
											Note: @ 903.0-914.0 Fault zone, 0-5 degrees to axis, chlorite in fault, trace with blocks of granophyric rhyolite									
										Wlq	^^ 919.0 938.0 Quartz Lapilli Wacke, rhyolite crystal tuff with blue quartz eyes and lithic (chert) clasts									
										*R	^^ 938.0 958.0 Spherulitic Rhyolite									
										ChT	^^ 958.0 965.3 Cherty Tuff									

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
											Note: @ 845.0-850.0 Scattered pyrrhotite and pyrite	a				1	1		2
												a				1	1		2
												a				1	1		2
											Note: @ 857.0-858.0 Scattered pyrite and pyrrhotite								
										SLm	^^ 871.0-882.0 Siltstone, grey green, with scattered pyrrhotite, pyrite, and magnetite	a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2
												a				1	1		2

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	** 740.0 970.5 RHYOLITE								
									-40	SL	^^ 740.0 758.0 Siltstone, cherty, with pyrrhotite. Lapilli wacke intervals ~ 4-6" thick.	a					4	4
												a						4	4
												a						4	4
												a						4	4
												a						4	4
												a						4	4
												a						4	4
												a						4	4
												a						4	4
										ChT	^^ 758.0 772.7 Cherty Tuff, laminated, light grey siltstone, with white chert blobs, laminae, and beds (@ 765.0-768.0)	a					4	4
										gR	^^ 772.7 783.0 Granophyric Rhyolite								
										ChT	^^ 783.0 798.0 Cherty Tuff, with laminated intervals								
										ChT	^^ 798.0 871.0 Cherty Tuff								

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
											fractures								
										Rch	^^ 649.0 672.0 Cherty Tuff or Cherty Sandstone								
									^20F		Note: @ 659.3 Chlorite-Se lined fracture								
										gR	^^ 672.0 675.5 Granophyric Rhyolite								
										D	** 675.5 740.0 DACITE, dark grey, black, very fine-grained, patchy epidote alteraton								
											Note: @ 685.5-694.7 Lt. grey, very fine-grained								

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
											Note: @ 617.0-625.0 Fault Zone, shearing, fault breccia, with red alteration								
										R	** 643.5 675.5 RHYOLITE								
										gR	^^ 643.5 649.0 Granophyric Rhyolite, and quartz clasts or intrusions along								