**APPENDIX B**

**Geological and Geotechnical**

**Drill Logs 1-44 - Volume 3 of 3**

**Noranda Minerals Wisconsin Corp.**

LYNNE PROJECT

17

(p. 1-70)

ORIGINAL

# LYNNE PROJECT

## GEOLOGIC AND GEOTECHNICAL DRILLING LOGS

### Explanation of Terms and Abbreviations

Geotechnical Terms

Run - Footage of rock drilled during each successive drilling interval or "run." The parameters listed below are determined on the basis of each run.

% - Percentage of rock recovered in each run.

RQD - "Rock Quality Determination" - the length of core recovered in solid cylinders, each more than four inches long, expressed as a percentage of the length of the core run.

Rf - "Intact rock strength" - related to an empirical scale, this parameter approximates the unconfined compressive strength of a given rock. For example, "R1" corresponds to very weak rock, whereas "R5" denotes very strong rock.

Fracture frequency - The frequency of fractures or discontinuities in the core.

Jn - Number of joints or fracture sets.

Jrc - "Joint roughness coefficient" - describes the surface roughness of joints or fractures.

Ja - "Joint alteration" - identifies specific alteration minerals or other criteria associated with joints.

SpG - Specific Gravity.

Fol - The orientation of fractures, foliations, or other planar fabrics with respect to the core axis.

## Geologic Terms

**Code** - A letter code identifying the rock type, used for a computerized data base. (Please ignore this acronym and refer to the Lithology.)

**Lithology** - Rock type. A list of rock names with specific meanings to the Lynne Project is given below:

**Massive Sulfide** - Any rock with base-metal sulfide minerals comprising more than 25-30% of the rock volume. The base-metal sulfide minerals logged at Lynne are galena, sphalerite, and chalcopyrite.

**Tuffite** - Any rock with base-metal sulfide minerals comprising more than 10%, but less than 25-30%, of the rock volume.

**Tufa** - A sedimentary rock composed largely of carbonate minerals, predominantly calcite.

**Wacke** - A rhyolitic volcanic to volcaniclastic rock with some evidence of having been reworked or resedimented.

**Sulfides** - The sulfide minerals are identified, and their abundance (volume percent) is estimated. The total amount of sulfide minerals is also estimated. Individual sulfide minerals are identified by the following abbreviations:

| | |
|---|---|
| **Sp - Sphalerite** | **Py - Pyrite** |
| **Cp - Chalcopyrite** | **Po - Pyrrhotite** |
| **Ga - Galena** | **As - Arsenopyrite** |

Noranda Exploration Inc.
Eastern Divison



HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 100' | 180.3 | -61.6 |
| 300' | 182.7 | -61.5 |
| 500' | 185.2 | -62.0 |
| 700' | 186.7 | -61.9 |
| 895' | 189.5 | -61.0 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff
DATE COLLARED: 2-18-91
REMARKS:
CORE SIZE: NQ\HQ

HOLE NO: LYN91-90 (WDNR #239)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-23-91

BEARING: S180.8E INCLINATION: -61.8 T.D: 895'
COORDINATES: L9900 E, 11605 N
ELEV: 1559.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 0.0 61.0 | | | xx 0.0 61.0 OVERBURDEN | |
| 61.0 64.5 | (not recovered) | | | |
| 64.5 70.0 | (HQ core) | | | |
| 61.0 247.0 | | R | xx 61.0 247.0 RHYOLITE | |
| 61.0 105.0 | | Wa | ^^ 61.0 105.0 Agglomerate | |
| 105.0 111.5 | | Rt | ^^ 105.0 111.5 Rhyolite Tuff | |
| 111.5 127.2 | | Wa | ^^ 111.5 127.2 Agglomerate | |
| 127.2 144.0 | | Rb | ^^ 127.2 144.0 Rhyolite Breccia or Agglomerate | |
| 144.0 223.5 | | gR | ^^ 144.0 223.5 Granophyric Rhyolite | |
| 223.5 244.5 | | Rc | ^^ 223.5 244.5 Rhyolite Crystal Tuff | |
| 244.5 247.0 | | Rl | ^^ 244.5 247.0 Rhyolite Lapilli Tuff | |
| 247.0 336.0 | | SL/SS | xx 247.0 336.0 VOLCANICLASTIC SEQUENCE | |
| 247.0 252.0 | | SL | ^^ 247.0 252.0 Siltstone | |
| 252.0 258.7 | | Wl | ^^ 252.0 258.7 Lapilli Wacke | |
| 258.7 301.0 | | SL | ^^ 258.7 301.0 Siltstone | |
| 301.0 307.0 | | SS | ^^ 301.0 307.0 Sandstone | |
| 307.0 311.0 | | SS | ^^ 307.0 311.0 Sandstone | |
| 311.0 313.0 | | SL | ^^ 311.0 313.0 Siltstone | |
| 313.0 316.0 | | SS | ^^ 313.0 316.0 Sandstone | |
| 316.0 336.0 | | SS | ^^ 316.0 336.0 Pillowed Flows (or Sandstone) | |
| 336.0 373.0 | | pR | xx 336.0 373.0 PORPHYRITIC RHYOLITE | |

ORIGINAL

Noranda Exploration Inc.
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HOLE SURVEY DATA

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|---|---|---|
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| 700' | 186.7 | -61.9 |
| 895' | 189.5 | -61.0 |

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LOGGED BY: J. Schaff
DATE COLLARED: 2-18-91
REMARKS:
CORE SIZE: NQ\HQ

HOLE NO: LYN91-90 (WDNR #239)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-23-91

BEARING: S180.8E INCLINATION: -61.8 T.D: 895'
COORDINATES: L9900 E, 11605 N
ELEV: 1559.3' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF 13

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 373.0 607.6 | | Rt | ** 373.0 607.6 RHYOLITE TUFF | |
| 482.0 504.0 | | Wl | ^^ 482.0 504.0 Lapilli Wacke | |
| 504.0 527.5 | | Sk | ^^ 504.0 527.5 Tactite | |
| 527.5 541.0 | | SL | ^^ 527.5 541.0 Siltstone | |
| 541.0 544.5 | | Wch | ^^ 541.0 544.5 Cherty Wacke | |
| 544.5 585.0 | | SL/SS | ^^ 544.5 585.0 Siltstone | |
| 585.0 590.0 | | Wch | ^^ 585.0 590.0 Cherty Wacke | |
| 590.0 595.0 | | R | ^^ 590.0 595.0 Rhyolite | |
| 595.0 598.0 | | W | ^^ 595.0 598.0 Wacke | |
| 598.0 607.6 | | R | ^^ 598.0 607.6 Rhyolite | |
| 607.6 664.0 | | Wl | ** 607.6 664.0 LAPILLI WACKE | |
| 641.4 641.8 | | FZ/SZ | ^^ 641.4 641.8 Fault or Shear Zone | |
| 648.0 648.8 | | Ch | ^^ 648.0 648.8 Chert | |
| 664.0 672.0 | | BP | ** 664.0 672.0 BEDDED TO DISSEMINATED PYRRHOTITE | |
| 672.0 687.0 | | Sk | ** 672.0 687.0 SKARN | |
| 687.0 688.5 | | MS | ** 687.0 688.5 MASSIVE SULFIDE | |
| 688.5 711.0 | | BP | ** 688.5 711.0 BEDDED TO DISSEMINATED PYRRHOTITE AND PYRITE | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 100' | 180.3 | -61.6 |
| 300' | 182.7 | -61.5 |
| 500' | 185.2 | -62.0 |
| 700' | 186.7 | -61.9 |
| 895' | 189.5 | -61.0 |

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PAGE 1 OF 13

CO./STATE: Oneida, WI
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COORDINATES: L9900 E, 11605 N
ELEV: 1559.3' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 711.0 739.0 | | Xp | ** 711.0 739.0 TUFFITE | |
| 728.0 734.0 | | CS | ^^ 728.0 734.0 Decalcified Calcareous Sediment | |
| 734.0 739.0 | | FZ | ^^ 734.0 739.0 Fault Zone | |
| 739.0 742.0 | | xR | ** 739.0 742.0 WACKE, Cherty, Spherulitic | |
| 742.0 455.3 | | SS | ** 742.0 755.3 SANDSTONE | |
| 755.3 895.0 | | QD | ** 755.3 895.0 QUARTZ DIORITE | |
| 755.3 764.0 | | gQD | ^^ 755.3 764.0 Quartz Diorite, Granophyric | |
| 793.0 798.0 | | gQD | ^^ 793.0 798.0 Quartz Diorite, Granophyric | |
| 811.0 817.0 | | gQD | ^^ 811.0 817.0 Quartz Diorite, Granophyric | |
| 841.0 846.0 | | gQD | ^^ 841.0 846.0 Quartz Diorite, Granophyric | |
| 882.0 894.0 | | FZ | ^^ 882.0 894.0 Fault Zone | |
| | | | E.O.H. 895' (total depth) | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 61.0 | | | | | | | | | | | ** 0.0 61.0 OVERBURDEN | | | | | | | | |
| | | | | | | | | | | | ^^ 0.0 40.0 Sand | | | | | | | | |
| | | | | | | | | | | | ^^ 40.0 50.0 Silty sand | | | | | | | | |
| | | | | | | | | | | | ^^ 50.0 61.0 Sand and cobbles | | | | | | | | |
| | | | | | | | | | | R | ** 61.0 247.0 RHYOLITE, grey to black, subtle feldspar phenocrysts | | | | | | | | |
| | | | | | | | | | | Wa | ^^ 61.0 105.0 Agglomerate (or Rhyolite Tuff Breccia ?), grey-black, clasts not equal to matrix, orange (iron ?) staining on fractures, clasts range from rounded rhyolite to angular pumice clasts | | | | | | | | |
| | | | | | | | | | | Rt | ^^ 105.0 111.5 Rhyolite Tuff (?), black, very fine-grained, patchy light green epidote alteration | | | | | | | | |
| | | | | | | | | | | Wa | ^^ 111.5 127.2 Agglomerate, with minor interbedded rhyolite tuff (sandstone), clasts not equal to matrix, angular to rounded | | | | | | | | |

ROCK QUALITY:

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

**DRILL HOLE: LYN91-90**

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Rb | ^^ 127.2 144.0 Agglomerate or Rhyolite Tuff Breccia (?), clasts similar composition to matrix except lighter color | | | | | | | |
| | | | | | | | | | | gR | ^^ 144.0 223.5 Granophyric Rhyolite (?), or Dacite, black, fine to very fine-grained, subtle feldspar phenocrysts | | | | | | | |
| | | | | | | | | | | | Note: @ 172.0-185.0 Very fine-grained, (no visible feldspars) | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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: @ 211.0-220.0 Abundant feldspar phenocrysts (plag-phyric) | | | | | | | | |
| | | | | | | | | | | Rc | ^^ 223.5 244.5 Rhyolite Crystal Tuff or Feldspathic Wacke, grey, abundant small anhedral feldspar | | | | | | | | |
| | | | | | | | | | | R1 | ^^ 244.5 247.0 Rhyolite Lapilli (?) Tuff, black, fine-grained matrix, lapilli sized clasts ? | | | | | | | | |
| | | | | | | | | | | SL/SS | ** 247.0 336.0 Volcaniclastic Sequence, of black, fine to very fine siltstones, sandstones, minor lapilli wackes and possibly pillow structures at the base, graded to laminated | | | | | | | | |
| | | | | | | | | | | SL | ^^ 247.0 252.5 Siltstone | | | | | | | | |
| | | | | | | | | | | W1 | ^^ 252.5 258.7 Lapilli Wacke | | | | | | | | |
| | | | | | | | | | | SL | ^^ 258.7 301.0 Siltstone | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 | ^^ 301.0 307.0 Siltstone, with inter-bedded chert or very fine non-laminated grey colored siltstone | | | | | | | | |
| | | | | | | | | | | SS | ^^ 307.0 311.0 Sandstone | | | | | | | | |
| | | | | | | | | | | SL | ^^ 311.0 313.0 Siltstone | | | | | | | | |
| | | | | | | | | | | SS | ^^ 313.0 316.0 Sandstone | | | | | | | | |
| | | | | | | | | | | SS | ^^ 316.0 336.0 Zone of possible intermediate (andesite) pillow lava, occasional concentric pillow (?) borders (rim) (or sandstone) | | | | | | | | |
| | | | | | | | | | | | Note: @ 332.0-336.0 Minor rhyolite lapilli (?) tuff | | | | | | | | |
| | | | | | | | | | | pR | ** 336.0 373.0 PORPHYRITIC RHYOLITE FLOW (?), dark grey to black matrix, subhedral feldspar phenocrysts, strong orange (iron ?) alteration along | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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, minor amount of small subtle blue quartz eyes | | | | | | | | |
| | | | | | | | | | | -80C | Rtm | ** 373.0 607.6 RHYOLITE TUFF OR WACKE (SANDSTONE), plag-phyric, very fine-grained, massive, abundant disseminated to semi-massive magnetite | | | | | | | | |
| 385.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | a | | | | | 3 | | 3 |
| 395.00 | | | | b | | | | | | | | | a | | | | | 3 | | 3 |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | Note: @ 396.0-398.0 Subtle feldspars or plag-phyric zone | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 405.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | Note: @ 412.0-415.0 Plag-phyric to almost porphyritic | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 415.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | Note: @ 421.0-463.0 Same as above, | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 | | | | | | | | (possible rhyolite flow) | | | | | | | | |
| 425.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | a | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 435.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 20 | | | | | | | | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 445.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 455.00 | | | | a | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Wl | ^^ 482.0 504.0 Lapilli Wacke, crude graded bedding, moderate pumice or ash, chert to rhyolite clasts, minor magnetite | | | | | | | | |
| | | | | | | | | | | | Sk | ^^ 504.0 527.5 Tactite (?), medium to dark green, minor magnetite | | | | | | | | |
| | | | | | | | | | | -20F | | Note: @ 506.0-508.7 Fault zone, strong | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | serpentine development | | | | | | | | |
| | | | | | | | | | | SL | ^^ 527.5 541.0 Interbedded Wacke and Laminated Siltstone, graded bedding occasionally contorted | | | | | | | | |
| | | | | | | | | | | Wch | ^^ 541.0 544.5 Cherty Wacke, lapilli clasts (?), light grey, fractured | | | | | | | | |
| | | | | | | | | | | SL/SS | ^^ 544.5 585.0 Siltstone (cherty siltstone to sandstone), black to grey, laminated to massive | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Wch | ^^ 585.0 590.0 Cherty Wacke, medium-grained | | | | | | | | |
| | | | | | | | | | | | R | ^^ 590.0 595.0 Rhyolite, plag-phyric, grey, gradational contacts or chilled (?) margins | | | | | | | | |
| | | | | | | | | | | | W | ^^ 595.0 598.0 Wacke, medium-grained, .5" cherty top @ 595.0 | | | | | | | | |
| | | | | | | | | | | | R | ^^ 598.0 607.6 Rhyolite, plag-phyric, grey, same as @ 590.0-595.0 | | | | | | | | |
| | | | | | | | | | | | | Note: @ 601.0-607.0 Rock is broken up | | | | | | | | |
| | | | | | | | | | | | Wl | ** 607.6 664.0 LAPILLI WACKE, crystal rich, graded to laminated, (fine-grained top @ 607.0), minor interbedded cherty or ashy zones | | | | | | | | |
| 635.00 | | | | | | | | | | | | Note: @ 640.0 start of disseminated to well bedded sulfides/pyrite | | | | | | | | |
| | 100 | 95 | R2 | c | 15 | 3 | | | | | | | | | | | | | | |
| | | | | c | 50 | | | | | | | | | | | | | | | |
| | | | | b | 70 | | | | | | FZ | ^^ 641.4 641.8 Fault or Shear, minor gouge and breccia development | b | 1 | | 6 | 1 | | 8 |
| 644.00 | | | | b | | | | | | | | | b | 1 | | 6 | 1 | | 8 |
| | 100 | 100 | R2 | b | 20 | 2 | | | | | | | b | 1 | | 6 | 1 | | 8 |
| | | | | b | 70 | | | | | | Ch | ^^ 648.0 648.8 Chert | b | 1 | | 6 | 1 | | 8 |
| | | | | c | | | | | | | | | b | 1 | | 6 | 1 | | 8 |
| | | | | c | | | | | | | | | b | 1 | | 6 | 1 | | 8 |
| | | | | | | | | | | | | | b | 1 | | 6 | 1 | | 8 |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 654.00 | | | | c | | | | | | | | | b | 1 | | | 6 | 1 | | 8 |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | | b | 1 | | | 6 | 1 | | 8 |
| | | | | c | 60 | | | | | | | | b | 1 | | | 6 | 1 | | 8 |
| | | | | c | | | | | | | | | b | 1 | | | 6 | 1 | | 8 |
| | | | | c | | | | | | | | | b | 1 | | | 6 | 1 | | 8 |
| 664.00 | | | | c | | | | | | | | | b | 1 | | | 6 | 1 | | 8 |
| | 100 | 95 | R1 | c | 10 | 2 | | | | | BP | ** 664.0 672.0 BEDDED TO DISSEMINATED PYRRHOTITE, protolith possibly lapilli wacke or calcareous sediment | b | 1 | | | 6 | 1 | | 8 |
| | | | | b | 60 | | | | | | | | c | | | 1 | 2 | 10 | | 13 |
| | | | | b | | | | | | | | | c | | | 1 | 2 | 10 | | 13 |
| | | | | b | | | | | | | | | c | | | 1 | 2 | 10 | | 13 |
| 674.00 | | | | c | | | | | | | Sk | ** 672.0 687.0 SKARN, or decalcified calcareous sediment (?), green, contorted look (metasomatism ?), very soft | c | | | 1 | 2 | 10 | | 13 |
| | 100 | 100 | R2 | c | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 684.50 | | | | b | | | | | | | MS | ** 687.0 688.5 MASSIVE SULFIDE | d | 30 | | | 2 | | | 32 |
| | 100 | 100 | R2 | c | 10 | 3 | | | | | BP | ** 688.5 711.0 BEDDED TO DISSEMINATED PYRRHOTITE AND PYRITE | d | 30 | | | 2 | | | 32 |
| | | | | c | 30 | | | | | | | | d | 30 | | | 2 | | | 32 |
| | | | | c | 60 | | | | | | | | d | 30 | | | 2 | | | 32 |
| | | | | c | | | | | | | | | c | | | | 5 | 10 | | 15 |
| 694.50 | | | | c | | | | | | | | | c | | | | 5 | 10 | | 15 |
| | 100 | 95 | R2 | b | 10 | 3 | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | b | 30 | | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | c | 60 | | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | c | | | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | c | | | | | | | | | c | | | | 5 | 10 | | 15 |
| 705.00 | | | | c | | | | | | | | | c | | | | 5 | 10 | | 15 |
| | 100 | 100 | R2 | c | 15 | 3 | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | c | 30 | | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | c | 60 | | | | | | | | c | | | | 5 | 10 | | 15 |
| | | | | c | | | | | | | Xp | ** 711.0 739.0 TUFFITE, abundant pyrite and pyrrhotite | c | | | | 5 | 10 | | 15 |
| 715.00 | | | | c | | | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| | 100 | 100 | R2 | c | 10 | 3 | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| | | | | b | 30 | | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| | | | | c | 60 | | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| | | | | c | | | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| 725.00 | | | | b | | | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | CS | ^^ 728.0 734.0 Decalcified Calcareous Sediment ?, similar to 672.0-687.0, light green | c | 10 | | 1 | 5 | 5 | | 21 |
| | | | | b | 30 | | | | | | | | c | 10 | | 1 | 5 | 5 | | 21 |
| | | | | b | 60 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 | | | | | | | | | b | 10 | | | | | | 10 |
| | | | | b | | | | | | | | | b | 10 | | | | | | 10 |
| 735.00 | | | | | | | | | | | FZ | ^^ 734.0 739.0 Fault Zone, weak brecciation and serpentinite, moderate carbonate veinlets | | | | | | | |
| | 100 | 100 | R2 | a | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | *R | ** 739.0 742.0 CHERTY SPHERULITIC WACKE (?), very subtle feldspars or spherulites (possible dacite dike ?) | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | SS | ** 742.0 755.3 SANDSTONE (?), black to green, carbonate filled fractures, crude bedding | | | | | | | |
| 745.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | a | 1 | 1 | | | 1 | | 3 |
| | | | | b | 30 | | | | | | | | a | 1 | 1 | | | 1 | | 3 |
| | | | | c | 60 | | | | | | | | a | 1 | 1 | | | 1 | | 3 |
| | | | | c | | | | | | | | | a | 1 | 1 | | | 1 | | 3 |
| 755.00 | | | | c | | | | | | | | | b | 1 | 1 | | | 5 | | 7 |
| | | | | | | | | | | | QD | ** 755.3 895.0 QUARTZ DIORITE | b | 1 | 1 | | | 5 | | 7 |
| | | | | | | | | | | | | | b | 1 | 1 | | | 5 | | 7 |
| | | | | | | | | | | | gQD | ^^ 755.3 764.0 Quartz Diorite, Granophyric | | | | | | | | |
| | | | | | | | | | | | gQD | ^^ 793.0 798.0 Quartz Diorite, Granophyric | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 | ^^ 811.0 817.0 Quartz Diorite, Granophyric | | | | | | | | |
| | | | | | | | | | | gQD | ^^ 841.0 846.0 Quartz Diorite, Granophyric | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-90

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | -30F | FZ | ^^ 882.0 894.0 Fault Zone, strong shearing and elongation of phenocrysts, minor carbonate along fractures | | | | | | | | |
| | | | | | | | | | | | E.O.H. 895' (total depth) | | | | | | | | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 178.6 | -59.7 |
| 400' | 181.6 | -59.2 |
| 600' | 183.9 | -58.2 |
| 800' | 185.2 | -57.1 |
| 920' | 187.0 | -55.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: A. Zielinski/T. Harding
DATE COLLARED: 2-18-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-91 (WDNR #199)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-13-91

BEARING: S179.3E INCLINATION: -60.6 T.D: 920'
COORDINATES: L10300 E, 11395 N
ELEV: 1563.9' SEC: 15 TWP: 37N RANGE: 4E



DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 0.0 60.0 | | | ** 0.0 60.0 OVERBURDEN | |
| 60.0 64.0 | (not recovered) | | | |
| 60.0 87.0 | | R | ** 60.0 87.0 RHYOLITE | |
| 87.0 102.0 | | D | ** 87.0 102.0 DACITE | |
| 102.0 118.3 | | R | ** 102.0 118.3 RHYOLITE | |
| 118.3 158.0 | | D | ** 118.3 158.0 DACITE | |
| 118.3 129.8 | | FZ | ^^ 118.3 129.8 Fault Zone | |
| 158.0 236.0 | | SL | ** 158.0 236.0 SILTSTONE | |
| 236.0 272.0 | | D | ** 236.0 272.0 DACITE | |
| 272.0 523.0 | | R | ** 272.0 523.0 RHYOLITE | |
| 428.0 432.0 | | Xch | ^^ 428.0 432.0 Tuffite, Cherty | 428.0 432.0 15% Sp |
| 523.0 550.0 | | SSch | ** 523.0 550.0 SANDSTONE, Cherty | |
| 550.0 565.0 | | SLm | ** 550.0 565.0 SILTSTONE, With Magnetite | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 178.6 | -59.7 |
| 400' | 181.6 | -59.2 |
| 600' | 183.9 | -58.2 |
| 800' | 185.2 | -57.1 |
| 920' | 187.0 | -55.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: A. Zielinski/T. Harding
DATE COLLARED: 2-18-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-91 (WDNR #199)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-13-91

BEARING: S179.3E INCLINATION: -60.6 T.D: 920'
COORDINATES: L10300 E, 11395 N
ELEV: 1563.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-16-91
PAGE 1 OF 14

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 565.0 570.0 | | xR | xx 565.0 570.0 SPHERULITIC RHYOLITE | |
| 570.0 580.0 | | ChT | xx 570.0 580.0 CHERTY TUFF | |
| 580.0 601.0 | | SLm | xx 580.0 601.0 SILTSTONE, With Magnetite | |
| 601.0 606.0 | | Chp | xx 601.0 606.0 CHERT, With Pyrrhotite and Pyrite | 601.0 606.0 10% Po, Py |
| 606.0 609.0 | | SLm | xx 606.0 609.0 SILTSTONE, With Magnetite | |
| 609.0 622.5 | | Chp | xx 609.0 622.5 CHERT, With Pyrrhotite | 609.0 622.5 5% Po, Py |
| 622.5 662.5 | | SL,t | xx 622.5 662.5 SILTSTONE, Talcose | |
| 662.5 695.0 | | xR,Ch | xx 662.5 695.0 INTERBEDDED SPHERULITIC RHYOLITE AND CHERT | |
| 695.0 703.0 | | Chp | xx 695.0 703.0 CHERT, With Pyrrhotite | 695.0 703.0 20% Po, Py |
| 703.0 711.0 | | TS | xx 703.0 711.0 TALC SEDIMENT | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 178.6 | -59.7 |
| 400' | 181.6 | -59.2 |
| 600' | 183.9 | -58.2 |
| 800' | 185.2 | -57.1 |
| 920' | 187.0 | -55.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: A. Zielinski/T. Harding
DATE COLLARED: 2-18-91
REMARKS: Log checked against assays
CORE SIZE: NQ

HOLE NO: LYN91-91 (WDNR #199)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-13-91

BEARING: S179.3E INCLINATION: -60.6 T.D: 920'
COORDINATES: L10300 E, 11395 N
ELEV: 1563.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 10-16-91
PAGE 1 OF 14

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 711.0 733.5 | | ><R | >< 711.0 733.5 SPHERULITIC RHYOLITE | |
| 733.5 799.0 | | SS | >< 733.5 799.0 SANDSTONE | |
| 765.0 770.0 | | TSs | ^^ 765.0 770.0 Talc Sediment, With Sulfides | 765.0 770.0 4% Sp, 1% Ga |
| 780.0 799.0 | | TSs | ^^ 780.0 799.0 Talc Sediment, With Sulfides | 780.0 799.0 4% Ga, 2% Sp, Cp |
| 799.0 820.0 | | Chp | >< 799.0 820.0 CHERT, With Pyrrhotite | 799.0 820.0 10% Po, Py |
| 820.0 822.4 | | TSs | >< 820.0 822.4 TALC SEDIMENT, With Sulfides | |
| 822.4 834.0 | | pR | >< 822.4 834.0 PORPHYRITIC RHYOLITE | |
| 834.0 920.0 | | QD | >< 834.0 920.0 QUARTZ DIORITE | |
| | | | E.O.H. 920' (total depth) | |

ROCK QUALITY:

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

LYN91-91

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 60.0 | | | | | | | | | | | | ** 0.0 60.0 OVERBURDEN | | | | | | | | |
| | | | | | | | | | | | | ^^ 0.0 30.0 Fine sand | | | | | | | | |
| | | | | | | | | | | | | ^^ 30.0 40.0 Silty sand | | | | | | | | |
| | | | | | | | | | | | | ^^ 40.0 60.0 Sand, gravel, and cobbles | | | | | | | | |
| | | | | | | | | | | | Ra | ** 60.0 87.0 AGGLOMERITIC RHYOLITE, at top massive red rhyolite with grey and white clasts, at base black rhyolite with red clasts, occassional ash beds | | | | | | | |
| 64.0 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | c | 40 | 2 | | | | | | | | | | | | | | |
| 65.0 | | | | | 60 | | | | | | | | | | | | | | | |
| | 100 | 80 | R3 | c | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | b | 55 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 75.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | a | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 85.0 | | | | b | | | | | | | | | | | | | | | | |
| | 99 | 95 | R4 | b | 30 | 3 | | | | | D | ** 87.0 102.0 DACITE, calcite filled, diopside altered fractures | | | | | | | | |
| | | | | b | 55 | | | | | | | | | | | | | | | |
| | | | | b | 75 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 95.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | c | 5 | 4 | | | | | | | | | | | | | | |
| | | | | c | 20 | | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | pR | ** 102.0 118.3 RHYOLITE FLOW, porphrytic rhyolite at base, sandstone containing | | | | | | | | |
| | | | | a | 65 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 105.0 | | | | c | | | | | | | | white and red feldspar and quartz at top pR to R1 to SS | | | | | | | | |
| | 100 | 75 | R2 | c | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| 112.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 80 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| 115.0 | | | | | 60 | | | | | | | | | | | | | | | |
| | 99 | 90 | R3 | a | 5 | 3 | | | | | pR | ** 118.3 159.0 DACITE, dark grey, fine-grained, dense | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | a | 55 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | ^^ 118.3 129.8 highly fractured, calcite filled fractures, brecciated | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| | | | | | | | | | | -29F | | | | | | | | | | |
| 125.0 | | | | | | | | | | | | | | | | | | | | |
| | 99 | 85 | R4 | a | 20 | 3 | | | | | | | | | | | | | | |
| | | | | a | 45 | | | | | | | | | | | | | | | |
| | | | | b | 65 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 135.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | b | 15 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | -17F | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 145.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | c | 5 | 2 | | | | | | | | | | | | | | |
| | | | | b | 20 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 155.0 | | | | b | | | | | | | | | | | | | | | | |
| | 99 | 95 | R4 | b | 5 | 2 | | | | | SL | ** 158.0 163.4 SILTSTONE, finely laminated with coarser beds (SS) interspersed | | | | | | | | |
| | | | | b | 20 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | IR | ** 163.4 166.5 INTRUSIVE RHYOLITE, flat contact, mostly quartz | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 165.0 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | a | 20 | 3 | | | | | pD | ** 166.5 184.0 FELDSPATHIC DACITE, rounded white feldspar laths, (diopside altered calcite filled fractures) | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 | 65 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 175.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | c | 25 | 2 | | | | | | | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 184.0 | | | | a | | | | | | | SL/Ra | ** 184.0 236.0 SILTSTONES, ASH TUFFS, small interbeds of sandstones, ash tuffs, contorted bedding, cherty interclasts, interbedded dacite? | | | | | | | |
| | 100 | 90 | R4 | a | 5 | 4 | | | | | | | | | | | | | | |
| | | | | b | 25 | | | | | | | | | | | | | | | |
| | | | | c | 40 | | | | | | | | | | | | | | | |
| 189.0 | | | | | 70 | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | c | 20 | | | | | | | | | | | | | | | |
| 195.0 | | | | c | 70 | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | c | 20 | 2 | | | | | | | | | | | | | | |
| 200.0 | | | | c | 70 | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | c | 15 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| 205.0 | | | | b | 60 | | | | | | | | | | | | | | | |
| | 100 | 80 | R4 | b | 15 | 3 | | | | | | Fault Zone: @ 205.0-215.0, clean fractures two feet apart, high angle | | | | | | | | |
| | | | | c | 25 | | | | | | | | | | | | | | | |
| | | | | c | 65 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 215.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 95 | R4 | c | 5 | 3 | | | | | | | | | | | | | | |
| | | | | c | 20 | | | | | | | | | | | | | | | |
| | | | | c | 35 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 225.0 | | | | c | | | | | | | | | | | | | | | | |
| | 98 | 85 | R4 | b | 5 | 3 | | | | | Ra* | ^^ 227.8 234.0 Ash Tuff, altered, highly fractured, chloritized, brecciated, diopside area rich in pyrite becoming progressively lighter toward base to tan, calcite, serpentine filled fractures | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | a | 70 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 235.0 | | | | a | | | | | | | IR | ** 236.0 261.6 INTRUSIVE RHYOLITE, black fine-grained, porphyritic at top, matrix becoming progressively lighter toward | | | | | | | | |
| | 100 | 100 | R4 | b | 20 | 2 | | | | | | | | | | | | | | |
| | | | | a | 45 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 | | | | | | | | base to tan, calcite, serpentine filled fractures | | | | | | | | |
| 243.5 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | a | 20 | 3 | | | | | | | | | | | | | | |
| | | | | | 45 | | | | | | | | | | | | | | | |
| 245.0 | | | | | 65 | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | a | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 25 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 255.0 | | | | a | | | | | | | | | | | | | | | | |
| | 99 | 80 | R3 | a | 20 | 3 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| | | | | a | 70 | | | | | | D# | ** 261.6 272.0 DACITE, dark grey, fine-grained, containing deformed, replaced feldspars, alteration halos, ellipsoidal hornsfelsed?, calcite filled fracture | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 265.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 25 | | | | | -12F | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| 273.5 | | | | a | | | | | | | pR | ** 272.0 296.7 PORPHYRITIC RHYOLITE, tarnish purple matrix, white feldspar and quartz laths, 1-2mm, epidote alteration at lower contact, calcite filled fractures | | | | | | | |
| | 100 | 100 | R3 | a | 20 | 2 | | | | | | | | | | | | | | |
| 275.0 | | | | | 55 | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 25 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 285.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | a | 15 | 3 | | | | | | | | | | | | | | |
| | | | | b | 35 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 295.0 | | | | a | | | | | | -40C | RI | ** 296.7 305.6 RHYOLITE LAPILLI TUFF, fining up to clasts of rhyolite chert, feldspar | | | | | | | |
| | 100 | 95 | R3 | a | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 45 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | IR | ^^ 302.3 305.6 Intrusive Rhyolite, pink and black matrix | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 305.0 | | | | | | | | | | | D | ** 305.6 316.8 DACITE, cherty at base, calcite filled fractures at top, ashy top | | | | | | | | |
| | 100 | 100 | R2 | a | 30 | 2 | | | | | | | | | | | | | | |
| | | | | a | 55 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 | | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 315.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | b | 15 | 3 | | | | | pR | >< 316.8 347.0 PORPHYRITIC RHYOLITE, flat lower contact, black matrix, white feldspar inclusions, 1-2mm | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 325.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 80 | R4 | a | 10 | 3 | | | | | IR | ^^ 327.3 342.3 Massive Feldspar, quartz, bleached, highly fractured | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | a | 50 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 335.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 100 | R4 | a | 20 | 3 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| | | | | a | 55 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 346.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 80 | R3 | a | 5 | 3 | | | | | gIR | >< 347.0 365.8 INTRUSIVE RHYOLITE granophyric, pink to tan, small white feldspar laths | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 355.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | a | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 365.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 5 | 3 | | | | | Rcl | >< 365.8 451.0 RHYOLITE CRYSTAL LAPILLI TUFF, ashy, pumice fragments at base, grading upward into feldspar, quartz rich, black matrix also chert clasts blue quartz eyes | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 375.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 60 | R3 | b | 5 | 3 | | | | | | Note: @ 376.0 390.0 distinctive high angle fractures | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | a | 55 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 385.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390.0 | | | | b | 60 | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 400.0 | | | | c | | | | | | | | | | | | | | | | |
| | 99 | 85 | R3 | c | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | c | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 410.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 30 | 2 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| 415.0 | | | | b | | | | | | | | | | | | | | | | |
| | 99 | 75 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| 421.0 | | | | b | 45 | | | | | | | | | | | | | | | |
| | 100 | 85 | R3 | b | 35 | 2 | | | | | | | | | | | | | | |
| 425.0 | | | | a | 50 | | | | | | | | | | | | | | | |
| | 100 | 85 | R3 | a | 5 | 3 | | | | | Xch | ^^ 428.0 432.0 Tuffite, cherty, white to clear chert, small bed of amber sphalerite | d | 15 | | 2 | 5 | | | 22 |
| | | | | a | 20 | | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| 433.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | a | 30 | 2 | | | | | | | | | | | | | | |
| 435.0 | | | | | 50 | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 445.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | Rt/Ra | >>< 451.0 509.0 DEBRIS FLOW, SANDSTONE/ RHYOLITE TUFF at base, (minor diopside alteration and calcite filles fractures), grading upward into interbedded ash tuff, (predominant) and massive chert, ash tuff consists of pumice layers and white to light grey spherulitic layers | | | | | | | | |
| 454.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 85 | R3 | a | 25 | 3 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| | | | | a | 55 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 464.0 | | | | a | | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 100 | 85 | R3 | a | 20 | 2 | | | | | | | | | | | | | | |
| 465.0 | | | | | 40 | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | a | 15 | 3 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 475.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 80 | R3 | b | 15 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | a | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 485.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 85 | R3 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 35 | | | | | | | | | | | | | | | |
| | | | | c | 50 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 495.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | c | 25 | 2 | | | | | | | | | | | | | | |
| | | | | b | 40 | | TAH began logging @ 500' | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 505.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 30 | 3 | | | | | | | | | | | | | | |
| | | | | a | 45 | | | | | -40F | R | ** 509.0 523.0 RHYOLITE FLOW, fine-grained light grey ash beds interbedded with crystal tuff, lapilli-sized clasts as well | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 515.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | SS,Ch | ** 523.0 550.0 VOLCANICLASTIC SEDIMENT, interbedded volcaniclastic sediment and chert-diopside. Sediments are laminated with ashy and spherulitic intervals, scattered sulfides | a | | 1 | | 1 | | | 2 |
| 525.0 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | a | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 535.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | a | 10 | 3 | | | | | ChC* | ^^ 536.0 550.0 Predominantly chert-diopside, bedded to massive, could be clasts. | a | | | | 1 | | | 1 |
| | | | | a | 30 | | | | | | | | a | | | | 1 | | | 1 |
| | | | | b | 60 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 | | | | | | | | | | | | | | | | |
| 545.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | SL,m | ** 550.0 565.5 SILTSTONE, with magnetite | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 555.0 | | | | b | | | | | | -27C | | | | | | | | | | |
| | 99 | 90 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | | | | | | | | | |
| 560.0 | | | | a | 60 | | | | | | | | | | | | | | | |
| | 99 | 85 | R2 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 25 | | | | | | | | | | | | | | | |
| | | | | a | 50 | | | | | | >R | ** 565.5 570.0 SPHERULITIC RHYOLITE | | | | | | | | |
| 569.0 | | | | a | | | | | | | ChT | ** 570.0 580.0 CHERTY TUFF, with pyrite | a | | | | 1 | 1 | | 2 |
| | 99 | 85 | R2 | a | 10 | 3 | | | | | | and pyrrhotite | a | | | | 1 | 1 | | 2 |
| | | | | a | 40 | | | | | | | | a | | | | 1 | 1 | | 2 |
| | | | | a | 60 | | | | | | | | a | | | | 1 | 1 | | 2 |
| | | | | a | | | | | | | | | a | | | | 1 | 1 | | 2 |
| | | | | a | | | | | | | SL,m | ** 580.0 601.0 SILTSTONE, with magnetite | a | | | | 1 | 1 | | 2 |
| | | | | a | | | | | | | | | | | | | | | | |
| 585.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 90 | R3 | b | 10 | 3 | | | | | | | a | | | | 1 | | | 1 |
| | | | | b | 30 | | | | | | | | a | | | | 1 | | | 1 |
| | | | | a | 60 | | | | | | | | a | | | | 1 | | | 1 |
| | | | | a | | | | | | | | | a | | | | 1 | | | 1 |
| 595.0 | | | | a | | | | | | | | | a | | | | 1 | | | 1 |
| | 900 | 95 | R3 | a | 10 | 3 | | | | | | | a | | | | 1 | | | 1 |
| | | | | a | 40 | | | | | | | | a | | | | 1 | | | 1 |
| | | | | a | 60 | | | | | | Ch,p | ** 601.0 606.0 CHERT, with pyrite | c | | | | 5 | 5 | | 10 |
| | | | | a | | | | | | | | and pyrrhotite | c | | | | 5 | 5 | | 10 |
| | | | | a | | | | | | | | | c | | | | 5 | 5 | | 10 |
| 605.0 | | | | | | | | | | | SL,m | ** 606.0 609.0 SILTSTONE, with magnetite | c | | | | 5 | 5 | | 10 |
| | 100 | 100 | R3 | a | 10 | 3 | | | | | | | a | | | | 1 | 5 | | 6 |
| | | | | a | 30 | | | | | | Ch,p | ** 609.0 622.5 CHERT, with pyrrhotite | a | | | | 1 | 5 | | 6 |
| | | | | a | 60 | | | | | | | | a | | | | 1 | 5 | | 6 |
| | | | | a | | | | | | | | | a | | | | 1 | 5 | | 6 |
| 615.0 | | | | a | | | | | | | | | a | | | | 1 | 5 | | 6 |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | | | a | | | | 1 | 5 | | 6 |
| | | | | b | 30 | | | | | | | | a | | | | 1 | 5 | | 6 |

ROCK QUALITY:

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

LYN91-91

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 | 60 | | | | | | SL,t | ** 622.5 662.5 SILTSTONE, talcose, not primary talc sediment. Contains clasts and possible quartz eyes, laminated. | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 625.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 90 | R2 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 635.0 | | | | b | | | | | | | | | | | | | | | | |
| | 99 | 90 | R2 | b | 10 | 2 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 645.0 | | | | c | | | | | | | | | | | | | | | | |
| | 99 | 90 | R2 | b | 30 | 2 | | | | | | Note: @ 660.0 Pyrrhotite-calcite fracture, @ 30 degrees to axis, @ 660.0-662.0 clast-rich base | | | | | | | |
| | | | | b | 50 | | | | | -50B | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 655.0 | | | | c | | | | | | -40B | Ch,l | ^^ 655.0 660.5 Chert-pyrrhotite, laminated | | | | | | | | |
| | 99 | 90 | R2 | b | 30 | 2 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | -50B | *R,Ch | ** 662.5 695.0 INTERBEDDED SPHERULITIC RHYOLITE AND CHERT, talcose, crosscutting. 50-60 degree beds/fractures | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 665.0 | | | | b | | | | | | | | | | | | | | | | |
| | 99 | 90 | R2 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | Ch | ^^ 673.0 678.0 Chert, blue-grey | | | | | | | | |
| 675.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | b | 10 | 3 | | | | -65C | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | c | 50 | | | | | -45B | | | | | | | | | | |
| | | | | c | | | | | | | Ch | ^^ 683.0 686.0 Predominantly Chert | | | | | | | | |
| 685.0 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 695.0 | | | | b | | | | | | | Ch,p | ** 695.0 703.0 CHERT, with pyrrhotite, | c | | | | 5 | 15 | | 20 |

ROCK QUALITY:

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

LYN91-91

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 | R2 | c | 10 | 2 | | | | | | laminated | c | | | | 5 | 15 | | 20 |
| | | | | c | 30 | | | | | | | | c | | | | 5 | 15 | | 20 |
| | | | | c | | | | | | | | | c | | | | 5 | 15 | | 20 |
| | | | | b | | | | | | | TS | ** 703.0 711.0 TALC, pyrrhotite, stringery galena, not bedded | c | | | 3 | 3 | 12 | | 18 |
| 705.0 | | | | b | | | | | | | | | c | | | 3 | 3 | 12 | | 18 |
| | 100 | 90 | R2 | b | 10 | 2 | | | | | | | c | | | 5 | 3 | 12 | | 20 |
| | | | | b | 30 | | | | | | TS,s | ^^ 707.0 711.0 Talc with sulfides | c | | | 5 | 3 | 12 | | 20 |
| | | | | b | | | | | | | | | c | | | 5 | 3 | 12 | | 20 |
| | | | | b | | | | | | | | | c | | | 5 | 3 | 12 | | 20 |
| | | | | b | | | | | | | ×R | ** 711.0 733.5 SPHERULITIC RHYOLITE, with talcose intervals and disseminated sulfides | c | | | 5 | 3 | 12 | | 20 |
| 715.0 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 95 | R2 | a | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 725.0 | | | | c | | | | | | | | | | | | | | | | |
| | 99 | 90 | R2 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| 731.5 | | | | b | 50 | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | SS,t | ** 733.5 799.0 SANDSTONE, moderate talcose, stringery | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | a | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 742.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | b | 5 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| 745.0 | | | | b | 60 | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 755.0 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 90 | R2 | b | 10 | 3 | | | | | | Note: @ 763.0 781.0 Core broken, chloritized, slickensided fracture surfaces | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 765.0 | | | | b | | | | | | | | ^^ 765.0 770.0 Talc Sediment, with sulfides | | | | | | | | |
| | 100 | 90 | R1 | a | 10 | 3 | | | | | | | a | 4 | | 1 | | | | 5 |
| | | | | a | 30 | | | | | | | | a | 4 | | 1 | | | | 5 |
| | | | | | | | | | | | | | a | 4 | | 1 | | | | 5 |

ROCK QUALITY:

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

LYN91-91

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 770.0 | | | | a | 60 | | | | | | | | a | 4 | | 1 | | | | 5 |
| | 100 | 90 | R1 | a | 10 | 3 | | | | | | | b | 1 | 1 | | 1 | 6 | | 9 |
| 771.0 | | | | a | 30 | | | | | | | | b | 1 | 1 | | 1 | 6 | | 9 |
| | | | | a | 60 | | | | | | | | b | 1 | 1 | | 1 | 6 | | 9 |
| | 100 | 100 | R2 | a | 20 | 3 | | | | | | | b | 1 | 1 | | 1 | 6 | | 9 |
| | | | | a | 40 | | | | | | | | b | 1 | 1 | | 1 | 6 | | 9 |
| | | | | a | 60 | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | b | | | | | | | TSs | ^^ 780.0 799.0 Talc Sediment, with sulfides | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| 781.0 | | | | b | | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | b | 40 | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | b | 60 | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | c | | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| 791.0 | | | | c | | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | 100 | 100 | R2 | c | 10 | 3 | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | c | 40 | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | b | 60 | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | c | | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| 801.0 | | | | b | | | | | | | Chp | ** 799.0 820.0 CHERT, with pyrrhotite | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | 100 | 100 | R2 | b | 40 | 2 | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | b | 60 | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | b | | | | | | | | | b | 1 | 1 | 4 | 1 | 2 | | 9 |
| | | | | c | | | | | | | | | b | | 1 | | | 2 | | 3 |
| 810.0 | | | | c | | | | | | | | | b | | 1 | | | 2 | | 3 |
| | 100 | 100 | R2 | c | 30 | 2 | | | | | | | b | | 1 | | | 2 | | 3 |
| | | | | c | 60 | | | | | | | | c | | 1 | | 1 | 9 | | 11 |
| | | | | c | | | | | | | | | c | | 1 | | 1 | 9 | | 11 |
| | | | | c | | | | | | | | | c | | 1 | | 1 | 9 | | 11 |
| 820.0 | | | | c | | | | | | | TSs | ** 820.0 822.4 TALC SEDIMENT, pyrrhotite rich, blue quartz veins with chalcopyrite | c | | 1 | | 1 | 9 | | 11 |
| | | | | | | | | | | | | | c | 3 | 2 | 3 | 1 | 9 | | 18 |
| | 100 | 100 | R2 | c | 30 | 2 | | | | | MS | ^^ 821.0 822.4 Massive Sulfide bed at base | c | 3 | 2 | 3 | 1 | 9 | | 18 |
| | | | | | | | | | | | | | c | 3 | 2 | 3 | 1 | 9 | | 18 |
| | | | | | | | | | | -30C | pR | ** 822.4 834.0 PORPHYRIC RHYOLITE, plagphyric, rhyolite (blue quartz eyes) | c | 3 | 2 | 3 | 1 | 9 | | 18 |
| | | | | c | 60 | | | | | | | | c | 5 | 2 | 7 | | 11 | | 25 |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 830.0 | | | | c | | | | | | -45C | | | | | | | | | | |
| | | | | | | | | | | | sQD | ** 834.0 920.0 QUARTZ DIORITE, sheared | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | -15S | | | | | | | | | | |
| | | | | | | | | | -15S | | | | | | | | | | |
| | | | | | | | | | -30C | Md | ^^ 874.5 894.4 Mafic Dike, Fault Zone, calcite chlorite filled fractures @ 880.0 to 885.0, very jumbled, no distinct fabrics | | | | | | | | |

ROCK QUALITY:

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

LYN91-91

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.920' (total depth) | | | | | | | | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 250' | 183.1 | -61.3 |
| 450' | 185.1 | -61.4 |
| 650' | 185.7 | -61.6 |
| 850' | 183.5 | -61.7 |
| 1050' | 189.5 | -61.3 |
| 1216' | 190.2 | -60.6 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-19-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-92 (WDNR #258)

DATE: 7-18-91
PAGE 1 OF 17

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-27-91

BEARING: S181.8E INCLINATION: -61.1 T.D: 1216'
COORDINATES: L10000 E, 12330 N
ELEV: 1557.9' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 0.0 40.0 | | | ><< 0.0 40.0 OVERBURDEN | |
| 40.0 402.5 | | R | ><< 40.0 402.5 RHYOLITE | |
| 82.5 97.5 | | pR | ^^ 82.5 97.5 Rhyolite Porphyry (Dike) | |
| 124.0 132.0 | | pR | ^^ 124.0 132.0 Rhyolite Porphyry (Dike) | |
| 402.5 422.0 | | SS | ><< 402.5 422.0 SANDSTONE | |
| 422.0 502.0 | | WF | ><< 422.0 502.0 WACKE, Feldspathic | |
| 502.0 667.0 | | SL | ><< 502.0 667.0 SILTSTONE | |
| 667.0 756.0 | | R | ><< 667.0 756.0 RHYOLITE | |
| 756.0 781.6 | | SS | ><< 756.0 781.6 SANDSTONE | |
| 781.6 874.7 | | R | ><< 781.6 874.7 RHYOLITE | |
| 874.7 891.0 | | CS | ><< 874.7 891.0 CALCAREOUS SEDIMENT | |

ORIGINAL

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 250' | 183.1 | -61.3 |
| 450' | 185.1 | -61.4 |
| 650' | 185.7 | -61.6 |
| 850' | 183.5 | -61.7 |
| 1050' | 189.5 | -61.3 |
| 1216' | 190.2 | -60.6 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-19-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-92 (WDNR #258)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-27-91

BEARING: S181.8E INCLINATION: -61.1 T.D: 1216'
COORDINATES: L10000 E, 12330 N
ELEV: 1557.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91
PAGE 1 OF 17

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 891.0 897.7 | | Rtp | 891.0 897.7 RHYOLITE TUFF, With Pyrrhotite | 891.0 897.7 10% Po, Py |
| 897.7 930.8 | | CS,t | 897.7 930.8 CALCAREOUS SEDIMENTS, Talcose | |
| 930.8 935.5 | | BPca,t | 930.8 935.5 BEDDED PYRRHOTITE, Calcareous, Talcose | 930.8 935.5 25% Po, Py |
| 935.5 946.5 | | CSp,t | 935.5 946.5 CALCAREOUS SEDIMENT, Talcose, With Pyrrhotite | 935.5 946.5 8% Po |
| 946.5 950.5 | | BP | 946.5 950.5 BEDDED PYRITE, PYRRHOTITE | 946.5 950.5 40% Po, Py |
| 950.5 965.0 | | Xca,t | 950.5 965.0 TUFFITE, Calcareous, Talcose | 950.5 965.0 10% Sp |
| 965.0 967.2 | | BP | 965.0 967.2 BEDDED PYRRHOTITE | 965.0 967.2 30% Po |
| 967.2 984.8 | | CSsp | 967.2 984.8 CALCAREOUS SEDIMENTS, With Sulfides | 967.2 984.8 5% Sp, 5% Po |
| 984.8 1026.0 | | TSs | 984.8 1026.0 TALCOSE SEDIMENTS, With Sulfides | 984.8 1026.0 8% Sp |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 250' | 183.1 | -61.3 |
| 450' | 185.1 | -61.4 |
| 650' | 185.7 | -61.6 |
| 850' | 183.5 | -61.7 |
| 1050' | 189.5 | -61.3 |
| 1216' | 190.2 | -60.6 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: T. Harding
DATE COLLARED: 2-19-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-92 (WDNR #258)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-27-91

BEARING: S181.8E INCLINATION: -61.1 T.D: 1216'
COORDINATES: L10000 E, 12330 N
ELEV: 1557.9' SEC: 15 TWP: 37N RANGE: 4E

DATE: 7-18-91


DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 1026.0 1067.0 | | Rt | ** 1026.0 1067.0 RHYOLITE TUFF | |
| 1067.0 1069.5 | | BP,l | ** 1067.0 1069.5 BEDDED PYRRHOTITE, Laminated | 1067.0 1069.5 45% Po, Py |
| 1069.5 1094.0 | | CSsp | ** 1069.5 1094.0 CALCAREOUS SEDIMENT, With Pyrrhotite & Sulfides | 1069.5 1078.0 5% Sp, 5% Po, Py |
| 1094.0 1117.0 | | Rc | ** 1094.0 1117.0 RHYOLITE CRYSTAL TUFF | |
| 1097.0 1097.5 | | *R | ^^ 1094.0 1097.5 Spherulitic Rhyolite | |
| 1117.0 1216.0 | | QD | ** 1117.0 1216.0 QUARTZ DIORITE | |
| | | | E.O.H. 1216' (total depth) | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ) 40.0 | | | | | | | | | | | >< 0.0 40.0 OVERBURDEN | | | | | | | | |
| | | | | | | | | | | R | >< 40.0 402.5 RHYOLITE | | | | | | | | |
| | | | | | | | | | | Ra | ^^ 40.0 82.5 Rhyolite Flow, ashy lt. grey matrix with plag-phyric elongate clasts | | | | | | | | |
| | | | | | | | | | | | Note: @ 72.0-82.5 Increase in size of clasts and feldspathic wacke intervals | | | | | | | | |
| | | | | | | | | | -80 | pR | ^^ 82.5 97.5 Plag-phyric Rhyolite, dark blue quartz eyes | | | | | | | | |
| | | | | | | | | | -75 | Ra | ^^ 97.5 124.0 Rhyolite Flow, ashy matrix | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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: @ 112.0-124.0 Fault Zone, @ 112.0-116.0 foliation @ 20 degrees to axis, @ 116.0-117.0 fault breccia | | | | | | | | |
| | | | | | | | | | | pR | ^^ 124.0 132.0 Rhyolite Porphyry, plagphyric, dark matrix, with blue quartz eyes | | | | | | | | |
| | | | | | | | | | | Ra | ^^ 132.0 223.0 Rhyolite Flow, ashy matrix with plagphyric clasts | | | | | | | | |
| | | | | | | | | | -20 | | Note: @ 157.0-162.0 Core broken, oxidized, hi-angle fracture zone ? | | | | | | | | |
| | | | | | | | | | -18 | | | | | | | | | | |
| | | | | | | | | | | | Note: @ 175.0-205.0 Fracture Zone ?, core broken, oxidized, shattered and brecciated intervals | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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: @ 205.0-223.0 Core oxidized | | | | | | | | |
| | | | | | | | | | | Rt | ^^ 223.0 232.0 Hyaloclastite, cherty, epidote alteration, shatter fractures | | | | | | | | |
| | | | | | | | | | | | ^^ 232.0 249.0 Rhyolite Tuff | | | | | | | | |
| | | | | | | | | | | gR | ^^ 249.0 260.0 Granophyric Rhyolite | | | | | | | | |
| | | | | | | | | | | Rt | ^^ 260.0 270.5 Rhyolite Tuff, medium grey, fine-grained, epidote alteration, shatter fractures | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | pR | ^^ 270.5 272.0 Rhyolite Porphyry, with blue quartz eyes, dark matrix | | | | | | | | |
| | | | | | | | | | | | Note: @ 272.0-272.5 Sheared, fractures @ 45 degrees | | | | | | | | |
| | | | | | | | | | -45F | Rt | ^^ 272.0 280.0 Rhyolite Tuff | | | | | | | | |
| | | | | | | | | | -45F | | Note: @ 276.0-277.5 Fault zone | | | | | | | | |
| | | | | | | | | | | gIR | ^^ 280.0 372.0 Granophyric to Intrusive Rhyolite | | | | | | | | |
| | | | | | | | | | | | Note: @ 282.0-286.0 Fracture Zone, chlorite, oxidized | | | | | | | | |
| | | | | | | | | | -10F | | Note: @ 300.0-312.0 Fracture Zone, oxidixed, core broken | | | | | | | | |
| | | | | | | | | | -10F | | | | | | | | | | |

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Note: @ 350.0-367.0 Core broken at high angle (10-20 degrees) to core axis | | | | | | | | |
| | | | | | | | | | | Ra | ^^ 372.0 402.5 Rhyolite Flow, grey glassy matrix with red porphyritic rhyolite clasts. Clast sizes increase toward base. | | | | | | | | |
| | | | | | | | | | -40B<br>-35B | SS | ** 402.5 422.5 SANDSTONE, dark green grey, "grainy", massive, scattered magnetite | | | | | | | | |

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | -45B | W | >< 422.5 502.0 WACKE | | | | | | | | |
| | | | | | | | | | | Wql | ~~ 422.5 443.0 Quartz Lapilli Wacke | | | | | | | | |
| | | | | | | | | | | | Note: @ 428.0-434.0 Epidote-Amphibole alteration | | | | | | | | |
| | | | | | | | | | | | | a | | | | | 2 | | 2 |
| | | | | | | | | | | Wf | ~~ 443.0 445.5 Feldspathic Wacke | | | | | | | | |
| | | | | | | | | | | W* | ~~ 445.5 452.0 Wacke, altered, Ep-Am-Gt alteration (Sk ?), "tactite ?" | | | | | | | | |
| | | | | | | | | | | Wf | ~~ 452.0 455.0 Feldspathic Wacke | | | | | | | | |
| | | | | | | | | | | Wf* | ~~ 455.0 502.0 Wacke, feldspathic, altered, Ep-Amp-(Gt) alteration, "tactite ?" | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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: @ 490.0-502.0 Coarsens toward base; looks somewhat like Rcl but greener and more bedded | | | | | | | | |
| | | | | | | | | | -30C | SL | >< 502.0 667.0 SILTSTONE, with cherty and wacke intervals, subtle laminations | | | | | | | | |
| | | | | | | | | | | | Note: @ 505.5 516.5 Predominantly wacke | | | | | | | | |
| | | | | | | | | | | | Note: @ 536.0-543.0 Predominantly Wacke | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | -40B | SL | ^^ 572.0 600.0 Predominantly Siltstone, with bedding approximately 35 degrees to core axis | | | | | | | | |
| | | | | | | | | | -30B | | | | | | | | | | |
| | | | | | | | | | -30B | | | | | | | | | | |
| | | | | | | | | | | SL/SS | ^^ 600.0 667.0 Interbedded Siltstone, Sandstone (or fine-grained quartz wacke) | | | | | | | | |
| | | | | | | | | | | | Note: @ 635.5 637.0 Chert clasts (1") oxidized rims | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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: @ 650.0-658.0 Fracture Zone, core crumbled; chlorite-carb (Se) along fractures | | | | | | | | |
| | | | | | | | | | | | Note: @ 658.0-667.0 Bleached, could be rhyolite tuff | | | | | | | | |
| | | | | | | | | | | R | ** 667.0 756.0 RHYOLITE | | | | | | | | |
| | | | | | | | | | | Rcl | ^^ 667.0 712.0 Rhyolite Crystal Lapilli Tuff | | | | | | | | |
| | | | | | | | | | | Wl | ^^ 712.0 756.0 Wacke, Lapilli, lapilli size increases with depth | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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: @ 744.0-751.0 Fractured, oxidized, chlorite | | | | | | | | |
| | | | | | | | | | | SS | ** 756.0 781.6 SANDSTONE | | | | | | | | |
| | | | | | | | | | | SSm | ^^ 756.0 759.0 Sandstone, with magnetite, pyrrhotite | | | | | | | | |
| | | | | | | | | | | SS | ^^ 759.0 781.6 Sandstone | | | | | | | | |
| | | | | | | | | | | R | ** 781.6 874.7 RHYOLITE | | | | | | | | |
| | | | | | | | | | | Wq | ^^ 781.6 787.7 Quartz Wacke | | | | | | | | |
| | | | | | | | | | | ChT | ^^ 787.7 815.5 Cherty Tuff, with scattered fist-size lapilli, granophyric | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 | ^^ 815.5 822.4 Cherty Siltstone | a | | | | 1 | 1 | | 2 |
| | | | | | | | | | | | | | a | | | | 1 | 1 | | 2 |
| | | | | | | | | | | | | | a | | | | 1 | 1 | | 2 |
| | | | | | | | | | | | Wf | ^^ 822.4 845.7 Feldspathic Wacke, looks like reworked rhyolite crystal tuff with blue quartz eyes | a | | | | 1 | 1 | | 2 |
| | | | | | | | | | | | ChT | ^^ 845.7 856.0 Cherty Tuff | | | | | | | | |
| 856.00 | | | | | | | | | | | WIf | ^^ 856.0 864.7 Feldspathic Lapilli Wacke, Rc protolith | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | b | 30 | | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | WIf/SL | ^^ 864.7 874.7 Interbedded Feldspathic Lapilli Wacke and Siltstone with magnetite and pyrrhotite, Rc protolith for WIf | | | | | | | | |
| 866.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 | 50 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 876.00 | | | | b | | | | | | | CS | ** 874.7 891.0 CALCAREOUS SEDIMENT | a | | | | 3 | 4 | | 7 |
| | 100 | 100 | R2 | b | 5 | 3 | | | | | | | a | | | | 3 | 4 | | 7 |
| | | | | c | 30 | | | | | | | | a | | | | 3 | 4 | | 7 |
| | | | | c | 50 | | | | | | | | a | | | | 3 | 4 | | 7 |
| | | | | b | | | | | | | | | | | | | | | | |
| 886.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | Rtp | ** 891.0 897.7 RHYOLITE TUFF, with Pyrrhotite | b | | | | 2 | 8 | | 10 |
| 896.00 | | | | b | | | | | | | | | b | | | | 2 | 8 | | 10 |
| | 100 | 100 | R2 | c | 10 | 3 | | | | | | | b | | | | 2 | 8 | | 10 |
| | | | | c | 30 | | | | | | CS,t | ** 897.7 930.8 CALCAREOUS SEDIMENTS, talcose | b | | | | 2 | 8 | | 10 |
| | | | | b | 50 | | | | | | | | b | | | | 2 | 5 | | 7 |
| | | | | c | | | | | | | | | b | | | | 2 | 5 | | 7 |
| 906.00 | | | | c | | | | | | | | | b | | | | 2 | 5 | | 7 |
| | 100 | 100 | R3 | c | 10 | 2 | | | | | | | b | | | | 2 | 5 | | 7 |
| | | | | c | 30 | | | | | | | | b | | | | 2 | 5 | | 7 |
| | | | | c | | | | | | | | | b | | | | 2 | 5 | | 7 |
| | | | | c | | | | | | | | | b | | | | 2 | 5 | | 7 |
| 916.00 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 30 | 2 | | | | | | | | | | | | | | |
| | | | | c | 50 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 926.00 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | | | | | | | | | |
| | | | | c | 60 | | | | | | BPca,t | ** 930.8 935.5 BEDDED PYRRHOTITE, calcareous, talcose | d | | | | 25 | | | 25 |
| | | | | c | | | | | | | | | d | | | | 25 | | | 25 |
| 936.00 | | | | c | | | | | | | | | d | | | | 25 | | | 25 |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | CSp,t | ** 935.5 946.5 CALCAREOUS SEDIMENT, talcose, with pyrrhotite | d | | | | 25 | | | 25 |
| | | | | c | 30 | | | | | | | | b | | | | 8 | | | 8 |
| | | | | c | | | | | | | | | b | | | | 8 | | | 8 |
| 946.00 | | | | c | | | | | | | | | b | | | | 8 | | | 8 |
| | 100 | 100 | R2 | c | 30 | 2 | | | | | BP | ** 946.5 950.5 BEDDED PYRRHOTITE & PYRITE | b | | | | 8 | | | 8 |
| | | | | c | 60 | | | | | | Xca,t | ** 950.5 965.0 TUFFITE, calcareous, | d | | | | 40 | | | 40 |
| | | | | | | | | | | | | | d | | | | 40 | | | 40 |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 | | | | | | | | talcose | c | 10 | | | | | | 10 |
| | | | | c | | | | | | | | | c | 10 | | | | | | 10 |
| 956.00 | | | | c | | | | | | | | | c | 10 | | | | | | 10 |
| | 100 | 100 | R2 | c | 30 | 1 | | | | | | | c | 10 | | | | | | 10 |
| | | | | c | | | | | | | | | c | 10 | | | | | | 10 |
| | | | | c | | | | | | | | | c | 10 | | | | | | 10 |
| | | | | c | | | | | | | | | c | 10 | | | | | | 10 |
| 965.00 | | | | c | | | | | | | BP | ** 965.0 967.2 BEDDED PYRRHOTITE | c | 10 | | | | | | 10 |
| | 100 | 100 | R2 | b | 10 | 3 | | | | | | | d | | | | | 30 | | 30 |
| | | | | b | 30 | | | | | | CSs | ** 967.2 984.8 CALCAREOUS SEDIMENT, with sulfides | c | 5 | | | | 5 | | 10 |
| | | | | c | 60 | | | | | | | | c | 5 | | | | 5 | | 10 |
| | | | | b | | | | | | | | | c | 5 | | | | 5 | | 10 |
| | | | | b | | | | | | | | | c | 5 | | | | 5 | | 10 |
| 975.00 | | | | | | | | | | | | | c | 5 | | | | 5 | | 10 |
| | 100 | 100 | R2 | c | 5 | 3 | | | | | | | c | 5 | | | | 5 | | 10 |
| | | | | b | 30 | | | | | | | | c | 5 | | | | 5 | | 10 |
| | | | | c | 60 | | | | | | | | c | 5 | | | | 5 | | 10 |
| | | | | c | | | | | | | TSs | ** 984.8 1026.0 TALCOSE SEDIMENTS, with sulfides | c | 5 | | | | 5 | | 10 |
| 986.00 | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | 100 | 100 | R2 | c | 40 | 1 | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| 996.00 | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | 100 | 95 | R2 | c | 40 | 1 | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| 1006.00 | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | 100 | 100 | R2 | c | 40 | 1 | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| 1016.00 | | | | c | | | | | | | | | b | 8 | | | | | | 8 |
| | 100 | 95 | R2 | c | 30 | 2 | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | 50 | | | | | | | | b | 8 | | | | | | 8 |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 1026.00 | | | | b | | | | | | | Rt | ^^ 1026.0 1067.0 Rhyolite Tuff, fine-grained, silicified, with pyrrhotite | | | | | | | |
| | 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.

DRILL HOLE: LYN91-92

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 | | | | | | | along fractures | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 1036.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 2 | | | | | | | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 1046.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 10 | 2 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 1056.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | c | 10 | 3 | | | | | | | | | | | | | | |
| | | | | c | 30 | | | | | | | | | | | | | | | |
| | | | | c | 50 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 1066.00 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 30 | 1 | | | | | BP,l | ^^ 1067.0 1069.5 Bedded Pyrrhotite, laminated | d | | | | 5 | 40 | | 45 |
| | | | | c | | | | | | | | | d | | | | 5 | 40 | | 45 |
| | | | | c | | | | | | | | | d | | | | 5 | 40 | | 45 |
| | | | | c | | | | | | | CSsp | ^^ 1069.5 1094.0 Calcareous Sediment, with sulfides and pyrrhotite | d | | | | 5 | 40 | | 45 |
| | | | | c | | | | | | | | | b | 4 | | | | 5 | | 9 |
| 1076.00 | | | | | | | | | | | | | b | 4 | | | | 5 | | 9 |
| | 99 | 90 | R2 | c | 10 | 2 | | | | | | | b | 4 | | | | 5 | | 9 |
| | | | | a | 30 | | | | | | | | | 4 | | | | 5 | | 9 |
| | | | | a | | | | | | | | | b | 4 | | | | 5 | | 9 |
| | | | | b | | | | | | | | | b | 4 | | | | 5 | | 9 |
| 1086.00 | | | | c | | | | | | | | | b | 4 | | | | 5 | | 9 |
| | | | | | | | | | | | | | b | 4 | | | | 5 | | 9 |
| | | | | | | | | | | | | | b | 4 | | | | 5 | | 9 |
| | | | | | | | | | | | Rc | ** 1094.0 1117.0 RHYOLITE CRYSTAL TUFF | b | 4 | | | | 5 | | 9 |
| | | | | | | | | | | | *R | ^^ 1094.0 1097.5 Spherulitic Rhyolite | | | | | | | | |
| | | | | | | | | | | | Rc | ^^ 1097.5 1117.0 Rhyolite Crystal Tuff, blue quartz eyes, scattered pyrite cubes | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | QD | ^^ 1117.0 1216.0 Quartz Diorite | | | | | | | | |

DRILL HOLE: LYN91-92

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | E.O.H. 1216' (total depth) | | | | | | | | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 180.2 | -61.0 |
| 400' | 182.0 | -61.1 |
| 600' | 184.6 | -60.9 |
| 800' | 185.7 | -60.1 |
| 1000' | 186.4 | -59.2 |
| 1240' | 189.2 | -58.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-21-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-93 (WDNR #259)

DATE: 7-18-91
PAGE 1 OF 18

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-26-91

BEARING: S180E INCLINATION: -60.8 T.D: 1240.0
COORDINATES: L10000 E 11925 N
ELEV: 1558.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 0.0 62.0 | | | ** 0.0 62.0 OVERBURDEN | |
| 62.0 79.5 | | SS | ** 62.0 79.5 SANDSTONE | |
| 79.5 145.0 | | R | ** 79.5 145.0 RHYOLITE | |
| 79.5 84.0 | | Wf | ^^ 79.5 84.0 Feldspathic Wacke | |
| 84.0 94.0 | | Rt | ^^ 84.0 94.0 Rhyolite Tuff | |
| 94.0 112.0 | | Rl | ^^ 94.0 112.0 Lapilli Tuff | |
| 112.0 128.0 | | Rt | ^^ 112.0 128.0 Rhyolite Tuff | |
| 128.0 139.5 | | Wa | ^^ 128.0 139.5 Agglomerate | |
| 139.5 143.5 | | xR | ^^ 139.5 143.5 Spherulitic Rhyolite | |
| 145.0 192.3 | | D | ** 145.0 192.3 DACITE | |
| 192.3 220.0 | | R | ** 192.3 220.0 RHYOLITE | |
| 192.3 211.5 | | Rc | ^^ 192.3 211.5 Rhyolite Crystal Tuff | |
| 220.0 242.0 | | SS | ** 220.0 242.0 SANDSTONE | |
| 242.0 252.0 | | R | ** 242.0 252.0 RHYOLITE | |
| 252.0 285.0 | | SL | ** 252.0 285.0 SILTSTONE | |

Noranda Exploration Inc.
Eastern Divison

DATE: 7-18-91


HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 180.2 | -61.0 |
| 400' | 182.0 | -61.1 |
| 600' | 184.6 | -60.9 |
| 800' | 185.7 | -60.1 |
| 1000' | 186.4 | -59.2 |
| 1240' | 189.2 | -58.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-21-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-93 (WDNR #259)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-26-91

BEARING: S180E INCLINATION: -60.8 T.D: 1240.0'
COORDINATES: L10000 E 11925 N
ELEV: 1558.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 285.0 319.0 | | SS | ** 285.0 319.0 SANDSTONE | |
| 319.0 699.0 | | R | ** 319.0 699.0 RHYOLITE | |
| 319.0 332.6 | | Rb | ^^ 319.0 332.6 Rhyolite Tuff Breccia | |
| 332.6 426.0 | | SS | ^^ 332.6 426.0 Sandstone | |
| 426.0 457.0 | | pR | ^^ 426.0 457.0 Porphyritic Rhyolite | |
| 457.0 476.0 | | SS | ^^ 457.0 476.0 Sandstone | |
| 476.0 518.0 | | Rl | ^^ 476.0 518.0 Lapilli Tuff | |
| 518.0 524.7 | | pR | ^^ 518.0 524.7 Porphyritic Rhyolite | |
| 524.7 528.0 | | Rtch | ^^ 524.7 528.0 Rhyolite Tuff | |
| 528.0 561.0 | | Rc | ^^ 528.0 561.0 Rhyolite Crystal Tuff | |
| 561.0 568.0 | | Rb | ^^ 561.0 568.0 Rhyolite Tuff Breccia | |
| 568.0 580.0 | | Rlch | ^^ 568.0 580.0 Cherty Lapilli Tuff | |
| 580.0 587.6 | | Rt | ^^ 580.0 587.6 Rhyolite Tuff | |
| 587.6 643.0 | | Rlch | ^^ 587.6 643.0 Cherty Lapilli Tuff | |
| 650.0 665.0 | | Rt | ^^ 650.0 665.0 Rhyolite Tuff | |
| 665.0 673.3 | | gR | ^^ 665.0 673.3 Granophyric Rhyolite | |
| 673.3 689.7 | | SS | ^^ 673.3 689.7 Sandstone | |
| 689.7 699.0 | | IR | ^^ 689.7 699.0 Intrusive Rhyolite | |
| 699.0 716.6 | | Rt/SS | ** 699.0 716.6 INTERBEDDED RHYOLITE CRYSTAL TUFF, AND SANDSTONE | |
| 713.0 717.3 | | W | ^^ 713.0 717.3 Wacke | |
| 716.6 728.5 | | SL | ** 716.6 728.5 SILTSTONE | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 180.2 | -61.0 |
| 400' | 182.0 | -61.1 |
| 600' | 184.6 | -60.9 |
| 800' | 185.7 | -60.1 |
| 1000' | 186.4 | -59.2 |
| 1240' | 189.2 | -58.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-21-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-93 (WDNR #259)

DATE: 7-18-91
PAGE 1 OF 18

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-26-91

BEARING: S180E INCLINATION: -60.8 T.D: 1240.0'
COORDINATES: L10000 E 11925 N
ELEV: 1558.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 728.5 738.0 | | R | ** 728.5 738.0 RHYOLITE | |
| 738.0 764.0 | | SS | ** 738.0 764.0 SANDSTONE | |
| 764.0 787.8 | | CS | ** 764.0 787.8 CALCAREOUS SEDIMENT | |
| 779.0 782.0 | | Rc | ^^ 779.0 782.0 Rhyolite Crystal Tuff | |
| 787.8 795.0 | | SL | ** 787.8 795.0 SILTSTONE | |
| 795.0 838.0 | | *R | ** 795.0 838.0 SPHERULITIC RHYOLITE | |
| 804.0 811.0 | | | Note: @ 804.0 811.0 Cherty, Ashy | |
| 815.0 821.0 | | | Note: @ 815.5 821.0 Ashy | |
| 838.0 860.0 | | Ch | ** 838.0 860.0 CHERT | |
| 838.0 860.0 | | Chp | ^^ 838.0 860.0 Chert, With Pyrrhotite | |
| 860.0 911.3 | | TS | ** 860.0 911.3 TALCOSE SEDIMENT | |
| 911.3 936.0 | | TSp | ** 911.3 936.0 TALC SEDIMENT WITH PYRRHOTITE | |
| 936.0 948.5 | | TSp | ** 936.0 948.5 VOLCANICLASTIC SEDIMENT, With Pyrrhotite | |

Noranda Exploration Inc.
Eastern Divison

DATE: 7-18-91
PAGE 1 OF 18

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 200' | 180.2 | -61.0 |
| 400' | 182.0 | -61.1 |
| 600' | 184.6 | -60.9 |
| 800' | 185.7 | -60.1 |
| 1000' | 186.4 | -59.2 |
| 1240' | 189.2 | -58.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-21-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-93 (WDNR #259)

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-26-91

BEARING: S180E INCLINATION: -60.8 T.D: 1240.0'
COORDINATES: L10000 E 11925 N
ELEV: 1558.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| 948.5 960.0 | | Chp | ** 948.5 960.0 CHERT, With Pyrrhotite | |
| 960.5 973.5 | | TSp | ** 960.5 973.5 TALC SEDIMENT, With Pyrrhotite | |
| 973.5 986.0 | | Chp | ** 973.5 986.0 CHERT, With Pyrrhotite | |
| 986.0 1007.3 | | D | ** 986.0 1007.3 DACITE | |
| 1007.3 1036.0 | | Chp | ** 1007.3 1036.0 CHERT, With Pyrrhotite | |
| 1036.0 1057.0 | | SS | ** 1036.0 1057.0 SANDSTONE | |
| 1057.0 1067.3 | | Chp | ** 1057.0 1067.3 CHERT, With Pyrrhotite | |
| 1067.3 1240.0 | | QD | ** 1067.3 1240.0 QUARTZ DIORITE | |
| 1085.0 1097.5 | | Rt | ^^ 1085.0 1097.5 Rhyolite Tuff | |
| 1097.5 1100.5 | | gQD | ^^ 1097.5 1100.5 Granophyric Quartz Diorite | |
| 1100.5 1108.7 | | Rt | ^^ 1100.5 1108.7 Rhyolite Tuff | |
| 1161.0 1164.0 | | SZ | ^^ 1161.0 1164.0 Shear Zone | |
| 1170.0 1188.0 | | SZ | ^^ 1170.0 1188.0 Shear Zone | |

Noranda Exploration Inc.
Eastern Divison

HOLE SURVEY DATA

| Footage | Bearing | Inclination |
|---|---|---|
| 300' | 180.2 | -61.0 |
| 400' | 182.0 | -61.1 |
| 500' | 184.6 | -60.9 |
| 900' | 185.7 | -60.1 |
| 1000' | 186.4 | -59.2 |
| 1240' | 189.2 | -58.5 |

PROJECT: LYNNE P.D. 1876
CONTRACTOR: Midwest Drilling Co.
LOGGED BY: J. Schaff/T. Harding
DATE COLLARED: 2-21-91
REMARKS:
CORE SIZE: NQ

HOLE NO: LYN91-93 (WDNR #259)

DATE: 7-18-91
PAGE 1 OF 18

CO./STATE: Oneida, WI
SCALE: 1"=10'
DATE COMPLETED: 2-26-91

BEARING: S180E INCLINATION: -60.8 T.D: 1240.0'
COORDINATES: L10000 E 11925 N
ELEV: 1558.1' SEC: 15 TWP: 37N RANGE: 4E

DRILL HOLE SUMMARY

| FOOTAGE | ROCK QUALITY | CODE | GEOLOGIC UNITS | MINERALIZATION & ALTERATION |
|---|---|---|---|---|
| | | | E.O.H. 1240.0' (total depth) | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62.0 | | | | | | | | | | | ** 0.0 62.0 OVERBURDEN | | | | | | | | |
| | | | | | | | | | | SS | ** 62.0 79.5 SANDSTONE, black to green, very fine-grained, massive | | | | | | | | |
| | | | | | | | | | | R | ** 79.5 145.0 RHYOLITE | | | | | | | | |
| | | | | | | | | | | Wf | ^^ 79.5 84.0 Feldspathic Wacke?, plag-phyric, minor flow texture, ashy? | | | | | | | | |
| | | | | | | | | | | Rt | ^^ 84.0 94.0 Rhyolite Tuff or Sandstone | | | | | | | | |
| | | | | | | | | | | Rl | ^^ 94.0 112.0 Lapilli Tuff (?), or Wacke, irregularly shaped cherty, ashy and rhyolitic clasts | | | | | | | | |
| | | | | | | | | | | Rt | ^^ 112.0 128.0 Rhyolite Tuff or Sandstone, minor calcite vienlets along fractures, trace stringer pyrite | | | | | | | | |
| | | | | | | | | | | Wa | ^^ 128.0 139.5 Agglomerate to Crystal Lapilli Wacke, graded bedding, minor | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LMN91-93

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | interbedded chert, fractured | | | | | | | | |
| | | | | | | | | | | *R | ^^ 139.5 143.5 Spherulitic Rhyolite (?), or very large anhedral feldspars in rhyolite | | | | | | | | |
| | | | | | | | | | | D | ** 145.0 192.3 DACITE, black, very fine-grained, massive pillows @ 145.0-146.0, becoming sandier, grainier @ depth. Patchy epidote. | | | | | | | | |
| | | | | | | | | | | R | ** 192.3 220.0 RHYOLITE | | | | | | | | |
| | | | | | | | | | | Rc | ^^ 192.3 195.0 Rhyolite Crystal Tuff, with abundant feldspar and minor quartz, medium grey, occasional cherty clasts, coarsens with depth | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 | ** 220.0 242.0 SANDSTONE, black, fine to medium-grained, epidote alteration | | | | | | | | |
| | | | | | | | | | -70 | | | | | | | | | | |
| | | | | | | | | | | | Note: @ 235.5 242.0 Moderate patchy to more massive light green epidote alteration | | | | | | | | |
| | | | | | | | | | | R | ** 242.0 252.0 RHYOLITE, silty or cherty laminated cap to crystal tuff with occasional clasts increasing toward base | | | | | | | | |
| | | | | | | | | | | SL | ** 252.0 285.0 SILTSTONE, black, very fine-grained, well laminated | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 | ** 285.0 319.0 SANDSTONE, black, very fine-grained, occasional laminated siltstones | | | | | | | | |
| | | | | | | | | | | | Note: @ 298.5 Small shear or fault | | | | | | | | |
| | | | | | | | | | | | Note: @ 314.0 320.0 Coarse-grained almost a feldspathic wacke | | | | | | | | |
| | | | | | | | | | | R | ** 319.0 699.0 RHYOLITE | | | | | | | | |
| | | | | | | | | | | Rb | ^^ 319.0 332.6 Rhyolite Tuff Breccia black to tan, fine-grained black matrix with ryolite clasts | | | | | | | | |
| | | | | | | | | | | SS | ^^ 332.6 426.0 Sandstone or Rhyolite Tuff, black, very fine-grained, minor clasts or blotches of material similar to matrix (lapilli tuff?) | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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: @ 381.0 Small zone of subtle feldspars (dacite?) | | | | | | | | |
| | | | | | | | | | | | Note: @ 415.0 426.0 Sandstone becoming green in color | | | | | | | | |
| | | | | | | | | | | pR | ^^ 426.0 457.0 Rhyolite, tan to dark grey, porphyritic to almost a rhyolite breccia texture, orange (iron?) staining along fractures | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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: @ 445.0 455.0 Possible flow or interbedded tuff, rhyolite flows and breccia? | | | | | | | | |
| | | | | | | | | | | SS | ^^ 457.0 476.0 Sandstone or Rhyolite Tuff, black, very fine-grained, massive, minor light green patchy zones of epidote alteration | | | | | | | | |
| | | | | | | | | | | R1 | ^^ 476.0 518.0 Rhyolite Lapilli Tuff, to grey, moderatly developed flow banding, minor blue quartz eyes. | | | | | | | | |
| | | | | | | | | | | | Note: @ 497.0 497.5 Fault or shear zone, stung brecciation and serpentine development | | | | | | | | |
| | | | | | | | | | | | Note: @ 516.0 518.0 Agglomerate(?), sized | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 | | clasts (457.0 518.0 possibly a flow sequence grading upwards, agglomerate, rhyolite lapilli tuff and sandstone) | | | | | | | | |
| | | | | | | | | | | pR | ^^ 518.0 524.7 Porphyritic Rhyolite (dike or sill?), tan, abundant euhedral feldspar and minor blue quartz eyes. | | | | | | | | |
| | | | | | | | | | | Rtch | ^^ 524.7 528.0 Rhyolite Tuff, cherty or siliceous, strongly fractured | | | | | | | | |
| | | | | | | | TAH began logging @ 550' | | | Rc | ^^ 528.0 561.0 Rhyolite Crystal Tuff, grey-black, bedded at base @ 559.0-561.0 | | | | | | | | |
| | | | | | | | | | | Rb | ^^ 561.0 568.0 Rhyolite Breccia or flow, porphyritic matrix, clasts = matrix. | | | | | | | | |
| | | | | | | | | | | Rlch | ^^ 568.0 699.0 Lapilli Tuff, cherty, good flow banding or bedding (wacke?), abundant ash or elongated pumice | | | | | | | | |
| | | | | | | | | | -40 | Rt | ^^ 580.0 587.6 Rhyolite Tuff or dacite dike?, black, fine-grained, minor subtle feldpars | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | -50 | Rlch | ^^ 587.6 643.0 Cherty Lapilli Tuff to cherty tuff, grey-black, good | | | | | | | | |
| | | | | | | | | | | | | Note: @ 604.0 608.0 Porphyritic Rhyolite (dike?) | | | | | | | | |
| 637.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | b | 20 | 3 | | | | | | Note: @ 636.0 637.0 Mafic dike?, black, very fine-grained | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | a | 70 | | | | | | | | | | | | | | | |
| 645.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 20 | 2 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | Rt | ^^ 650.0 665.5 Rhyolite Tuff or Sandstone, black, very fine-grained, massive | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 655.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 20 | 3 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | 70 | | | | | | | Note: @ 665.5 Small shear or fault | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 665.00 | | | | b | | | | | | -35 | gR | ^^ 665.5 673.3 Granophyric Rhyolite, | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 | | | | | | subtle feldspars, greenish-black, high | | | | | | | | |
| | | | | b | 25 | | | | | | | angle fractures could be intruded | | | | | | | | |
| 670.00 | | | | b | 60 | | | | | | | along fractures | | | | | | | | |
| | 100 | 100 | R2 | a | 5 | 3 | | | | | | | | | | | | | | |
| | | | | a | 25 | | | | | | SS | ^^ 673.3 689.7 Sandstone, minor to | | | | | | | | |
| | | | | b | 60 | | | | | | | moderate magnetite content, trace | | | | | | | | |
| | | | | b | | | | | | | | stringer sulfides (pyrrhotite and | | | | | | | | |
| | | | | b | | | | | | | | chalcopyrite) along fractures | | | | | | | | |
| 680.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | a | 25 | 3 | | | | | | | | | | | | | | |
| | | | | a | 50 | | | | | | | | | | | | | | | |
| | | | | b | 70 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | IR | ^^ 689.7 699.0 Intrusive Rhyolite (?)), | | | | | | | | |
| 690.00 | | | | b | | | | | | | | aphanitic, orangish-tan, abundant | | | | | | | | |
| | 100 | 100 | R3 | a | 10 | 2 | | | | | | xenoliths of country rock, fracture | | | | | | | | |
| 695.00 | | | | b | 25 | | | | | | | contact | | | | | | | | |
| | 100 | 95 | R3 | a | 5 | 2 | | | | | | | | | | | | | | |
| | | | | a | 15 | | | | | | Rc | ** 699.0 716.6 INTERBEDDED RHYOLITE | | | | | | | | |
| | | | | a | | | | | | | | CRYSTAL TUFF, and sandstones, plag-rich | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 705.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | b | 30 | 3 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | c | 75 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | W | ^^ 713.0 717.3 Wacke | | | | | | | | |
| 715.00 | | | | c | | | | | | | | | | | | | | | | |
| | 99 | 85 | R3 | c | 10 | 2 | | | | | SL | ** 716.6 728.5 SILTSTONE | | | | | | | | |
| | | | | b | 40 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 725.00 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | b | 20 | 3 | | | | | | | | | | | | | | |
| | | | | a | 50 | | | | | | | | | | | | | | | |
| | | | | b | 70 | | | | | | R | ** 728.5 738.0 RHYOLITE | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 735.00 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | c | 10 | 2 | | | | | | | | | | | | | | |
| | | | | b | 75 | | | | | | | | | | | | | | | |
| 739.00 | | | | b | | | | | | | SS | ** 738.0 764.0 SANDSTONE, black, very fine-grained, moderate magnetite contact | | | | | | | | |
| | 100 | 95 | R3 | a | 50 | 2 | | | | | | | | | | | | | | |
| | | | | a | 80 | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 749.00 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 95 | R3 | a | 50 | 2 | | | | | | | | | | | | | | |
| | | | | a | 80 | | | | | | | | | | | | | | | |
| 755.00 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 45 | 2 | | | | | | | | | | | | | | |
| | | | | a | 70 | | | | | | | | | | | | | | | |
| 759.00 | | | | a | | | | | | | | | | | | | | | | |
| | 99 | 95 | R3 | b | 20 | 3 | | | | | | | | | | | | | | |
| | | | | a | 35 | | | | | | | | | | | | | | | |
| 765.00 | | | | a | 70 | | | | | | CS | ** 764.0 787.8 CALCAREOUS SEDIMENT, light green, contorted appearance, protolithology tuff, possibly crystal tuff, has cherty clasts, diopside rich zones, possible talc. | | | | | | | | |
| | 100 | 100 | R3 | a | 15 | 3 | | | | | | | | | | | | | | |
| | | | | b | 45 | | | | | | | | | | | | | | | |
| | | | | b | 70 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 775.00 | | | | b | | | | | | | | | | | | | | | | |
| | 100 | 100 | R3 | b | 20 | 3 | | | | | | | | | | | | | | |
| | | | | a | 35 | | | | | | Rc | ^^ 779.0 782.0 Rhyolite Crystal Tuff, coarse-grained, minor blue quartz eyes | | | | | | | | |
| | | | | c | 70 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 785.00 | | | | | | | | | | | | | | | | | | | | |
| | 99 | 95 | R2 | c | 5 | 3 | | | | | SL | ** 787.8 795.0 SILTSTONE, well laminated, minor magnetite | | | | | | | | |
| | | | | a | 25 | | | | | | | | | | | | | | | |
| | | | | b | 55 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 795.00 | | | | a | | | | | | | *R | ** 795.0 838.0 SPHERULITIC RHYOLITE (?), 2-4 mm concentric feldspars (?) in a black fine-grained matrix. | | | | | | | | |
| | | | | | | | | | | | | Note: @ 795.0 811.0 Rock very broken, | | | | | | | | |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | fault gouge @ 805.0 | | | | | | | | |
| | | | | | | | | | | | | Note: @ 804.0 811.0 Cherty or ashy, grey, strongly fractured | | | | | | | | |
| | | | | | | | | | | | | Note: @ 815.0 821.0 Ashy grey to white, minor interbedded (1-2" beds of) spherulitic rhyolite | | | | | | | | |
| 833.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 95 | R2 | c | 25 | 2 | | | | | | | | | | | | | | |
| | | | | c | 45 | | | | | | Ch | ** 838.0 860.0 CHERT | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | Ch | ^^ 838.0 860.0 Chert, with pyrrhotite, interbedded laminated Siltstone, minor disseminated magnetite | | | | | | | | |
| | | | | c | | | | | | | | | | | | | | | | |
| 843.00 | | | | | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 30 | 2 | | | | | | | | | | | | | | |
| | | | | b | 50 | | | | | | | | | | | | | | | |
| | | | | b | | | | | | -70 | | | | | | | | | | |
| | | | | b | | | | | | | | | | | | | | | | |
| 853.50 | | | | b | | | | | | | | | | | | | | | | |
| | 99 | 90 | R2 | b | 20 | 2 | | | | | | | | | | | | | | |
| | | | | b | 60 | | | | | | | | | | | | | | | |
| | | | | c | | | | | | | TS | ** 860.0 911.3 TALCOSE SEDIMENT, very strong talc, green, trace sulfides | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| 864.00 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | 40 | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| 874.00 | | | | c | | | | | | | | | | | | | | | | |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | | a | 1 | | | | | | 1 |
| | | | | | | | | | | | | | a | 1 | | | | | | 1 |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | -50 | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| 884.00 | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | 100 | 95 | R2 | c | 50 | 1 | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| 894.50 | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | 100 | 100 | R2 | c | 50 | 1 | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | | | | | 1 |
| | | | | c | | | | | | | | | a | 1 | | 1 | 1 | | | 3 |
| 905.00 | | | | c | | | | | | | | | a | 1 | | 1 | 1 | | | 3 |
| | 100 | 100 | R2 | c | 30 | 2 | | | | | | | a | 1 | | 1 | 1 | | | 3 |
| | | | | c | 50 | | | | | | | | a | 1 | | 1 | 1 | | | 3 |
| | | | | c | | | | | | | TSp | ** 911.3 936.0 TALC SEDIMENT-PYRRHOTITE, | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | | (?), crudley bedded, trace sphalerite and | c | | | | 4 | 7 | | 11 |
| 915.00 | | | | c | | | | | | | | galena | c | | | | 4 | 7 | | 11 |
| | 100 | 100 | R2 | c | 50 | 1 | | | | | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | -80 | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | | | c | | | | 4 | 7 | | 11 |
| 925.00 | | | | c | | | | | | | | | c | | | | 4 | 7 | | 11 |
| | 100 | 100 | R2 | c | 50 | 1 | | | | | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | -85 | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | | | c | | | | 4 | 7 | | 11 |
| 935.00 | | | | c | | | | | | | VCSp | ** 936.0 948.5 VOLCANICLASTIC SEDIMENT, | c | | | | 4 | 7 | | 11 |
| | 100 | 100 | R3 | c | 10 | 2 | | | | | | with pyrrhotite | c | | | | 4 | 7 | | 11 |
| | | | | b | 30 | | | | | | | | c | | | | 4 | 7 | | 11 |
| | | | | b | | | | | | | | Note: Stringer pyrite in high angle | c | | | | 4 | 7 | | 11 |
| | | | | a | | | | | | | | fractures (30 degrees to core axis) | c | | | | 4 | 7 | | 11 |
| 945.00 | | | | a | | | | | | | | | c | | | | 4 | 7 | | 11 |
| | 100 | 100 | R2 | b | 10 | 2 | | | | | Chp | ** 948.5 960.0 CHERT, with pyrrhotite | c | | | | 4 | 7 | | 11 |
| | | | | b | 30 | | | | | | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | -50 | | | c | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | | | c | | | | 4 | 7 | | 11 |
| 955.00 | | | | b | | | | | | | | | c | | | | 4 | 7 | | 11 |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | | c | | | | 4 | 7 | | 11 |

ROCK QUALITY:

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

DRILL HOLE: LYN91-93

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 | | | | 4 | 7 | | 11 |
| | | | | c | | | | | | | TSp | ** 960.5 973.5 TALC, with pyrrhotite, | a | | | | 4 | 1 | | 5 |
| | | | | c | | | | | | | | cherty, rounded chert clasts, | a | | | | 4 | 1 | | 5 |
| 965.00 | | | | c | | | | | | | | disseminated to bedded sulfides (pyrite, | a | | | | 4 | 1 | | 5 |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | pyrrhotite and minor sphalerite) | a | | | | 4 | 1 | | 5 |
| | | | | c | 30 | | | | | | | | a | | | | 4 | 1 | | 5 |
| | | | | c | | | | | | | | | a | | | | 4 | 1 | | 5 |
| | | | | c | | | | | | | Chp | ** 973.5 986.0 CHERT, with pyrrhotite, | a | 1 | | | 3 | 1 | | 5 |
| 975.00 | | | | c | | | | | | | | laminated, grey, minor rounded cherty | a | 1 | | | 3 | 1 | | 5 |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | clasts, minor bedded sulfides | a | 1 | | | 3 | 1 | | 5 |
| | | | | b | 40 | | | | | -60 | | | a | 1 | | | 3 | 1 | | 5 |
| | | | | b | | | | | | | | | a | 1 | | | 3 | 1 | | 5 |
| | | | | b | | | | | | | | | a | 1 | | | 3 | 1 | | 5 |
| 985.00 | | | | b | | | | | | -40 | | | a | 1 | | | 3 | 1 | | 5 |
| | 100 | 90 | R3 | b | 20 | 2 | | | | | D | ** 986.0 1007.3 DACITE, black, fine- | a | 1 | | | 3 | 1 | | 5 |
| | | | | a | 40 | | | | | | | grained, minor feldspars, moderately | | | | | | | | |
| | | | | a | | | | | | | | fractured with calcite infilling | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 995.00 | | | | a | | | | | | | | | | | | | | | | |
| | 100 | 95 | R2 | a | 10 | 2 | | | | | | | | | | | | | | |
| | | | | a | 40 | | | | | | | Note: @ 999.5 1002.0 Minor shearing or | | | | | | | | |
| | | | | a | | | | | | -35 | | fault | | | | | | | | |
| | | | | a | | | | | | | | | | | | | | | | |
| 1005.00 | | | | a | | | | | | | | | | | | | | | | |
| | 99 | 95 | R3 | a | 10 | 2 | | | | | Chp | ** 1007.3 1036.0 CHERT, with pyrrhotite, | | | | | | | | |
| | | | | a | 40 | | | | | | | grey abundant disseminated sulfides | b | 1 | | | 1 | 6 | | 8 |
| | | | | b | | | | | | | | | b | 1 | | | 1 | 6 | | 8 |
| 1010.00 | | | | | | | | | | -70 | | | b | | | | | 8 | | 8 |
| | 100 | 100 | R3 | b | 20 | 2 | | | | | | | b | | | | | 8 | | 8 |
| | | | | b | 40 | | | | | | | | b | | | | | 8 | | 8 |
| 1015.00 | | | | b | | | | | | | | | b | | | | | 8 | | 8 |
| | 100 | 100 | R2 | c | 20 | 2 | | | | | | | b | | | | | 8 | | 8 |
| | | | | c | 50 | | | | | | | | b | 2 | | | | 8 | | 10 |
| | | | | c | | | | | | -80 | | | b | 2 | | | | 8 | | 10 |
| | | | | c | | | | | | | | | b | | | | | 8 | | 8 |
| 1025.00 | | | | c | | | | | | | | | b | | | | | 8 | | 8 |
| | 100 | 100 | R2 | c | 10 | 2 | | | | | | | b | | | | | 8 | | 8 |
| | | | | c | 30 | | | | | | | | b | | | | | 8 | | 8 |
| | | | | c | | | | | | | | | c | 10 | 1 | 1 | | 1 | | 13 |
| | | | | c | | | | | | | | | c | 10 | 1 | 1 | | 1 | | 13 |