



41104NE0031 63.4932 FOSTER

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OM85-8-P-237

63.4932

NOVAMIN RESOURCES INC.

REPORT OF DIAMOND DRILLING

Foster Township

Espanola, Ontario

REPORT for ONTARIO MINERAL EXPLORATION
PROGRAM

NTS 41-I-4

A.W. Beecham
H.L. King
August 28, 1955



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INTRODUCTION

An ongoing programme of exploration at Fostung by Novamin Resources Inc. (and its predecessors and former joint venture partner, Union Carbide Corporation) has been in operation since 1979. The work done in 1986 in conjunction with the Ontario Mineral Exploration Program, OM85-8-P-237 consisted of 982.52 metres (3223.5 ft) of diamond drilling on the main low grade W-Mo-Cu skarn deposits known as the Fostung property. The results of the drilling are outlined in this report.

Property Description:

The holdings consist of 67 contiguous claims stretching from lot 11, Con. II to lot 2 Con. IV of Foster Township. See Fig. 1. All of the claims are held by Novamin Resources Inc. An application has been made to bring 30 claims to lease. The main group of claims were acquired by option agreements with Messrs T. Tamminen and W. Alanen and by staking by Union Carbide. These options have been exercised. Peripheral groups were added by Sulpetro (and predecessor St. Joseph Explorations) mainly by staking.

Location and Access:

Fostung lies 10 km east of the town of Espanola. Access is excellent. A good gravel road to the West Bay of Lake Panache runs the length of the property and passes within 200 metres of all the important showings. A branch from this road to Hannah and Stratton Lakes crosses the western part of the property from NW to SE.

Topography and Surficial Deposits:

The area is relatively rugged with abundant outcrop. Local relief exceeds 50 metres. A prominent topographic high known as Breccia Hill is located in the western part of the property. To the NE, Nipissing Diabase forms prominent rocky hills along the SE shore of Elizabeth Lake and between Elizabeth and August Lakes. There is a northeast grain due to formation trends, but this is modified by vallies due to faults in at least 3 different directions.

Thin, discontinuous till covers the lower areas and depressions. Some of this has been water-worked as evident from the local occurrence of gravel.

Previous Work:

Since the discovery of scheelite in 1966 by R.M. Ginn while exploring for Texas Gulf, the area has been explored intermittently by various mining companies including Texas Gulf, Cerro Corporation, Vangulf, St. Joseph Exploration, Union Carbide and the Joint Venture of Sulpetro and Union Carbide. The work consisted of prospecting, mapping, various geophysical surveys, soil geochemistry and 34 drill holes. This is described in more detail by Robinson (1979) and Scratch (1982).

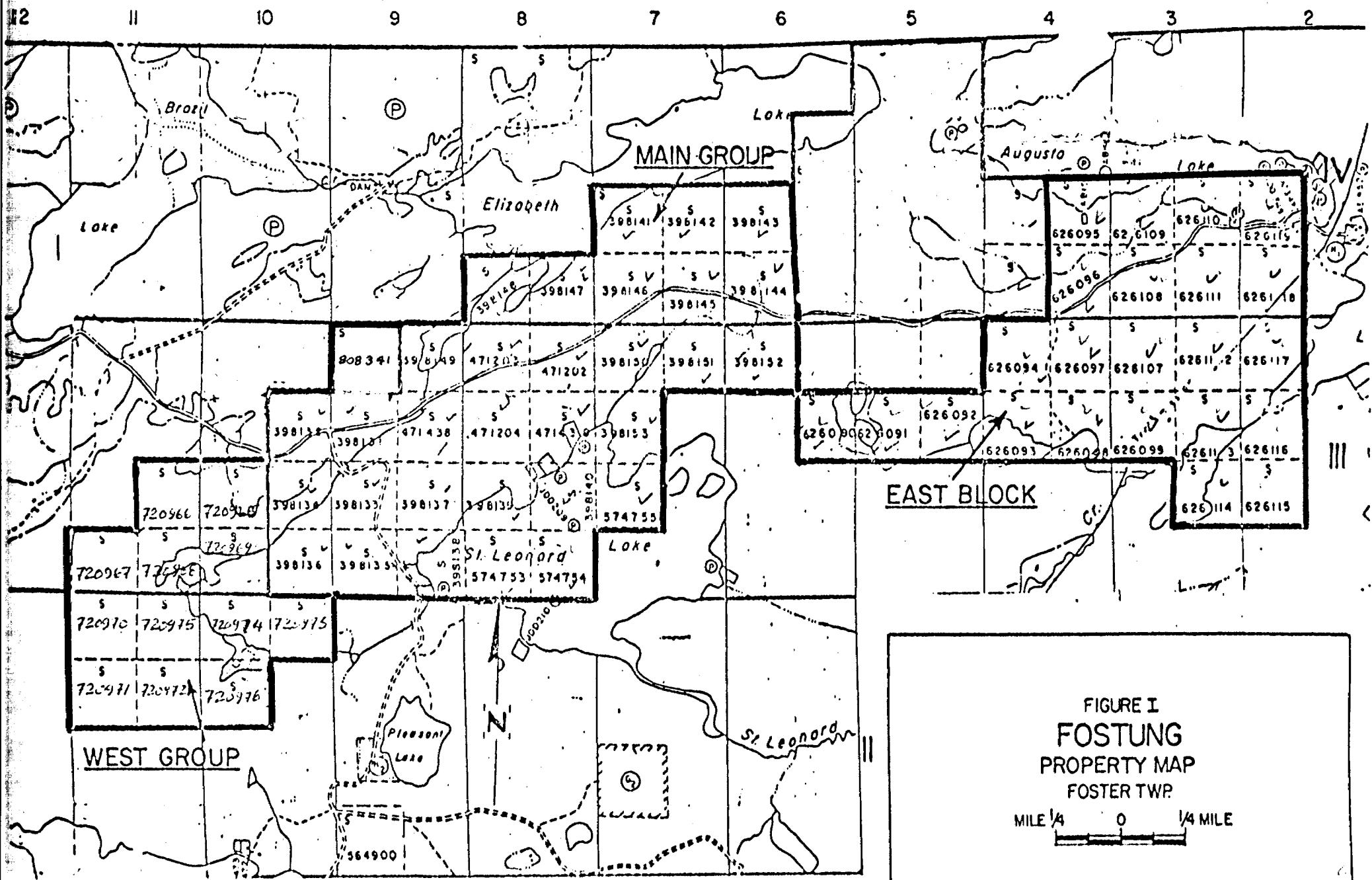


FIGURE I
FOSTUNG
PROPERTY MAP
FOSTER TWP.

MILE $\frac{1}{4}$ 0 $\frac{1}{4}$ MILE

1986

Regional Geology:

The area is underlain by various formations of the Proterozoic, Aronian Supergroup. These formations in ascending stratigraphic order are the Mississagi quartzites, the Bruce conglomerates, the Espanola calcareous siltstones, quartzites and limestones and the Serpent quartzites. The Nipissing Diabase forms regional sheets which are mainly sill-like. The sediments and Nipissing Diabase are folded into NE-SW to E-W open folds. Three directions of faults, NE-SW, NW-SE and E-W disrupt the formations. Late diabase dykes cut the sediments and Nipissing Diabase.

The Fostung skarns are developed in what are believed to be the upper calcareous part of the Espanola Lower Siltstone Member, as described for Merritt Township by Card (1978). The skarns are located on the NW limb of the St. Leonard anticline (or the SE limb of the Elizabeth Lake syncline) adjacent to a prominent strike fault known as the St. Leonard fault in Card's work and at Fostung referred to as the Base Line Fault. The fault is characterized by the occurrence of quartz stockworks-breccias and locally by albrite bodies.

The skarning event has affected the 2150 m.y. Nipissing Diabase, but is cut by late diabase dykes. Contrary to Card's hypothesis, the skarns are not thought to be related to the nearby Nipissing Diabase sheet, but to an as yet undiscovered, buried felsic intrusive intermediate in age between the Nipissing Diabase and the late diabase, i.e. between 2150 and about 1400 m.y.

DIAMOND DRILLING

A drilling programme was started on 9th Feb. and completed on April 21, 1986. A total of 982.52 m (3223.5 ft) was drilled in 3 holes. The purpose was to locate and test the Espanola Limestone within the Fostung skarn system. Although appreciable tungsten concentrations were intersected and the geological picture was enhanced, the Espanola Limestone was not located and it is now inferred that it lies at much greater depths (700 m or deeper) than thought at the onset of drilling.

DH_3115-29

3115-29, a vertical hole located on section 33E at 5 m north of the BL., was deepened from 152.4 to 582.4 m. It was thought that the Espanola Limestone here might lie as shallow as 250 to 300 m. However, a large amount of quartzites inter-bedded with the siltstones produced an unexpected thickening of the Greywacke Member, and although an estimated 250 m stratigraphic thickness of the member was cored, vs. 152 m at Brazil Lake, the attempt to reach the Limestone at this point was abandoned.

Appreciable scheelite is present here and there in calc-silicated quartzites and garnet skarn, but at a grade too low to be considered for underground mining, as listed below:

Summary Assays - 3115-29

| From | To | Core Length (m) | % WO ₃ |
|-------|-------|--------------------|-------------------|
| 220.7 | 222.5 | 1.8 | 0.21 |
| 231.7 | 233.1 | 1.4 | 0.29 |
| 236.0 | 239.4 | 3.4 | 0.11 |
| 295.0 | 297.3 | 1.8 | 0.42 |
| 303.9 | 306.3 | 2.4 | 0.24 |
| 393.1 | 398.6 | 5.5 | 0.22 |
| 428.0 | 429.1 | 1.1 | 0.26 |
| 490.1 | 492.7 | 2.6 | 0.24 |
| 500.5 | 502.0 | 1.5 | 0.48 |
| 505.0 | 508.2 | 3.2 | 0.30 |
| or | | | |
| 490.1 | 508.2 | 18.1 | 0.17 |

DH_F-33-9 (Deepening)

The collar of F-33-9 is on section 52E at 364 m N of the BL. However, the hole deviated to more than 20° west of the section line to end at about section 46E (FT). Below the main calc-silicate section, the hole passed through hornfelsed siltstone and then interbedded siltstone and quartzite. The assemblage is similar to that in 3115-29 but with a higher proportion of siltstone. Significant scheelite is present in 2 garnet skarned horizons and a narrow pyrrhotite-rich skarn. A zone of quartz-molybdenite veins with minor muscovite granite dykes occurs within the interbedded siltstones and quartzites from 670 m to 822 m. Some molybdenite values are present.

A diabase dyke from 864.6 m to 906.7 m appears to mark the Base Line Fault (BLF). Calc-silicated rocks south of the dyke are interpreted as the faulted off-set of the main zone exposed at surface.

It is reasonably certain that F-33-9 narrowly over-shot the Espanola Limestone. The Limestone is indicated to lie at vertical depths greater than 700 m in this area.

Summary of Assays from F-33-9 (Deepening)

| From | To | Core Length(m) | % WO ₃ | % MO ₂ | % Cu | Remarks |
|-------|-------|----------------|-------------------|-------------------|------|---------------------------|
| 640.2 | 647.7 | 7.5 | 0.354 | | | Garnet skarns |
| 672.3 | 674.0 | 1.7 | | 0.55 | | quartz vein zone. |
| 719.0 | 722.5 | 3.0 | | 0.118 | | Quartz-molybdenite veins. |
| 730.7 | 736.3 | 5.6 | | 0.091 | | " " " " |

| From | To | Core Length(m) | % WO ₃ | % Mo ₂ | % Cu | Remarks |
|--------------------|-------|----------------|-------------------|-------------------|-------|---|
| 740.1 | 742.9 | 2.8 | | | 0.115 | dissem. po, py, cp in hornfels |
| 754.3 | 757.2 | 2.9 | | 0.166 | 0.067 | quartz molybdenite veins and hornfels skarn |
| 760.7 | 761.7 | 1.0 | 0.12 | | 0.12 | garnet skarn |
| 768.5 | 794.6 | 26.1 | | 0.075 | 0.027 | quartz molybdenite veins |
| 788.7 | 789.8 | 1.1 | 2.72 | | 0.32 | po-rich skarn |
| 842.3 including | 851.3 | 9.0 | 0.223 | | 0.045 | hornfels and calc-silicated |
| 842.3 | 846.2 | 3.9 | 0.424 | | 0.077 | quartzite and garnet skarn. |

DH. 3115-30

A new hole was collared on Section 56E, planned to be eventually extended as a deep test for the Espanola Limestone. It was drilled only a short distance into the main calc-silicate zone and stopped when minimum budget requirements were met. Only low scheelite concentrations were encountered.

Assays are summarized as follows:

| From | To | Core Length (m) | % WO ₃ |
|-------|-------|--------------------|-------------------|
| 112.0 | 113.0 | 1.0 | 0.21 |
| 123.1 | 124.7 | 1.6 | 0.12 |
| 132.3 | 133.7 | 1.4 | 0.11 |

CONCLUSIONS and RECOMMENDATIONS

This latest drilling has identified additional significant skarn-hosted tungsten mineralization within the Greywacke Member. However, the Espanola Limestone was not located and may lie at depths greater than 700m.

A wide zone of molybdenum porphyry type mineralization was cut in deepening hole F-33-9 indicating a granite related source for the mineralization occurs at depth.

It is recommended that hole 3115-30 be deepened to continue to locate the Espanola Limestone.



REFERENCES

- Beecham, A.W. (Dec. 1983) - Geological Mapping and Diamond Drilling, Fostung Joint Venture, Foster Twp., Report For Ontario Mineral Exploration Program; Sulpetro Minerals Limited.
- Card, K.D. (1976) - Geol. Espanola - White Fish Area, Dist. Sudbury Geosc. Rep. 131; Ont. Div. Mines.
- (1978) - Geol. Sudbury - Manitoulin Area; Dist. Sudbury & Manitoulin; Rep. 166; Ont. Geol. Survey.
- Robinson, Douglas (1979) - Assessment Report on Geological Work, Fostung Property, Foster Twp., Dist. Sudbury; St. Joseph Explorations.
- Scratch, R.B. (Jan. 1982) - Fostung J.V. Foster Twp; Report of Field Work for 1981; Sulpetro Minerals Limited.

APPENDIX A

NOVAMIN RESOURCES INC.

STATEMENT OF EXPENSES

RE FOSTUNG DIAMOND DRILLING
FOR PERIOD FEBRUARY 1 TO MAY 31, 1986

| | |
|----------------------|---------------------|
| Analytical Costs | \$ 3,929.75 |
| Bulldozer | 127.50 |
| Diamond Drilling | 82,102.76 |
| Equipment Rental | 1,950.00 |
| Food & Lodging | 2,956.45 |
| Gas and Oil & Travel | 895.39 |
| Miscellaneous | 1,013.60 |
| Salaries | 20,077.55 |
| Telephone | <u>807.22</u> |
| | <u>\$113,860.22</u> |

I certify that, to the best of my knowledge and belief, the above figures are true and correct.

Graeme M. Gordon, CMA
Vice President Finance

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 1 OF 32

| PROPERTY FOSTUNG | TP OR AREA FOSTER TOWNSHIP | AZIMUTH - | DATE STARTED February 9, 1986 | CORRECTED DIP TESTS | | | | LOCATION SKETCH OF HOLE |
|-----------------------|---|---------------------------------|----------------------------------|---------------------|------|-------|--------|-------------------------|
| | | | | Depth | Dip | Mag | Tr. | |
| PROJECT 3115 | LOT 6 CONC. SW 1/4; N 1/2 Lot 8, Con III | DIP 90° | DATE COMPLETED March 2, 1986 | | | Az | Azm | |
| | | | | | | | | |
| | | | | | | | | |
| CLAIM NO. S-471204 | CO-ORDINATES. Section 33E/ 7.5 m N of B.L. | LENGTH from 152.4 to 582.4 m | DRILLED BY McKnight Drilling | 302m | -85° | 108.5 | 101° | |
| | | | | 422m | -88° | 121 | 113.5° | |
| GRID NO. | 5285.84N/8166.90E | COLLAR ELEV. 1511.33 | LOGGED BY A. W. Beecham | 504m | -87° | acid | test | |
| | | | | 581m | -88° | 101° | 93.5° | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | ASSAYS | | | | |
|--------|---------|---|------------|---|-------|--------|-----------------|-------------------|-------------------|-------------|--------|
| | | | | | | | DOWN | HOLE | COORDINATES | | |
| | | OBJECTIVES:- STRATIGRAPHIC TEST - LOWER PART ESPANOLA FORMATION | | | | | DEPTH | X 320 ° | Y VERTICAL | Z - Az 050° | |
| | | | | Collar | | 0 | | 0 | 0 | 0 | |
| | | | | 38 m | | 0 | | 38.0 | 0 | 0 | |
| | | | | 114 m | | 0.9 | | 114.0 | +2.5 | | |
| | | | | 189 m | | 2.0 | | 188.9 | +4.9 | | |
| | | | | 264 m | | 1.6 | | 263.4 | +6.8 | | |
| | | | | 362 m | | 0.3 | | 361.9 | 7.8 | | |
| | | | | 463 m | | -2.9 | | 462.8 | +9.4 | | |
| | | | | 542.5m | | -6.2 | | 542.2 | +11.9 | | |
| | | | | 582.4m | | -7.1 | | 582.1 | +12.9 | | |
| | | | | Assays & Analyses by X-Ray Assay Laboratories | | | | | | | |
| | | | | Don Mills, Ontario | | | | | | | |
| | | | | WO ₃ by X.R.F. | | | | | | | |
| | | | | Mo, Cu, Ag D.C.P. | | | | | | | |
| | | | | Au FAD C.P. | | | | | | | |
| 152.4 | 153.5 | SKARNED, CALCAREOUS QUARTZITE Fine sand to silt size calcareous, feldspathic quartzite. Alteration: Dark grey-green mottling of calcareous sections. Structure: bedding 45° Mineralization & Veins: mottled sections 2-4% fine diss Po +/- Py, Diss'd Sch. (scheelite). Minor sch in grey qtz veinlets at 45 & 05°. | | | | | EST % | ASSAYS | GEOCHEM. ANALYSES | | |
| | | | | | | | WO ₃ | % WO ₃ | ppm Mo | ppm Cu | ppm As |
| 153.5 | 157.9 | FINE FELDSPATHIC QUARTZITE & SKARNED, CALCAREOUS QUARTZITE Dark grey fine feldspathic qtzite 60-70% with remainder light grey sil, fine mottled, blotchy dark grey-green rock | 4393 | 152.4 | 152.8 | 0.4 | .15 | .27 | 2 | 370 | 1.5 |
| | | | AVG | 152.1 | 152.8 | 0.7 | | 0.21 | | | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 2 OF 3

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 3 OF 3

| METRES | | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|-------|---------|--|------------|------|----|--------|--------|
| FROM | TO | | | SAMPLE NO. | FROM | TO | LENGTH | |
| | | | Structure: Contacts at 15° - Seems to strike about parallel & a little steeper than quartzite bedding. | | | | | |
| | | | Veins: 2 cm grey qtz calcite conformable with upper Ct. | | | | | |
| 176.0 | 178.3 | | DARK & LIGHT GREY FELDSPATHIC QUARTZITES As above 165.2 - 175.2 | | | | | |
| | | | Structure: bedding 30° - 37°. | | | | | |
| | | | Veins: 178.0 & 178.1 - 5-10 mm veins of blue opaline cellular structure; silica + Po at 35° - 45° - Looks like chrysocolla or turquoise. | | | | | |
| 178.3 | 179.1 | | PORPHYRITIC DIABASE DYKE As above 175.2 - 176.0 m. | | | | | |
| | | | Structure: Ct's 35°. | | | | | |
| 179.1 | 182.7 | | LIGHT GREY FELDSPATHIC QUARTZITE Med grained sand size sediment. Very weakly calcareous. | | | | | |
| | | | Structure: bedding 20°. | | | | | |
| | | | Veins: 179.7 - 5 mm gash vein similar to veins at 178, but with Py & chl inclusions. Minor white qtz veinlets. 182. - 5 cm mottled white & grey qtz at 75-110°. | | | | | |
| | | | Mineralization: tr Po as diss'n & films on fractures. | | | | | |
| 182.7 | 185 | | FRACTURED GREY FELDSPATHIC QUARTZITE Med. grey, brown, fine sand size. | | | | | |
| | | | Structure: broken core from fracture & thin shears near parallel to core, minor bx. | | | | | |
| | | | Veins: Minor Calcite & Py & Po in fractures. | | | | | |
| 185 | 192.9 | | LIGHT GREY FELDSPATHIC QUARTZITE WITH CALC-SILICATES Med. f.g. sand size; 15% darker sections with dark calc-silicate development. | | | | | |

| METRES | | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|-------|---------|--|------------|------|----|--------|--------|
| FROM | TO | | | SAMPLE NO. | FROM | TO | LENGTH | |
| | | | Structure: Nearly massive; Strong fracture zone at 20° from 187.3-187.7 with calcite, chlorite & some sericite(?) . | | | | | |
| | | | Veins: 187 - minor calc-qtz Py-Cp at 15° 187.4 - 5 mm calc-chl Po tr Scheel. 187.9 - 3 mm qtz-calc-sph, + Scheel. | | | | | |
| | | | Mineralization: See 'veins'; Minor Po in qtz & qtz-calcite veinlets; tr Scheel. at 186.7 m. | | | | | |
| | | | Remarks: 186.9-188.1 med green calc-silicate bearing sediment. | | | | | |
| 192.9 | 193.8 | | DARK GREEN CALC-SILICATE (D.C.S.) Scattered small qtz grains in feldspar + calc-silicate matrix (greywacke), weakly magnetic | | | | | |
| | | | Structure: Massive | | | | | |
| | | | Veins: 193.3 - 5 mm qtz-calc. minor purple fluorite vein at 40° . | | | | | |
| | | | Mineralization: fine diss'd Po. | | | | | |
| 193.8 | 211.3 | | GREY FELDSPATHIC QUARTZITE WITH LIGHT GREEN CALC-SILICATE (L.C.S.) Med. f.g. meta-qtz-f.sp. sandstone: Med grey to light grey where bleached & silicified. Weakly calcareous (calc-silicated) from 193.8-195 m. | | | | | |
| | | | Structure: Thin bedded in top few metres. Most is fairly massive or thick-bedded. | | | | | |
| | | | Bedding: 195 m - 20°; 201 - 40°; 206 - 30°; 208 - 28°. | | | | | |
| | | | Structure (cont'd): Broken core, fractured zone, with prominent fractures at 10° & 35°, from 202.5-204.2. | | | | | |
| | | | Alteration: A little fracture controlled bleaching & silicification. | | | | | |
| | | | Veins: Minor light grey qtz & qtz-calc. veinlets. 194.3 - 1 cm grey qtz minor calc 10%; Po 10%. | | | | | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|---------|--|------|----|------------|------|--------|
| | | | FROM | TO | SAMPLE NO. | FROM | |
| | | 207-211 - Mottled with fractured controlled sil'n; with 2-5% light grey qtz & qtz-calc. veinlets. 209.5 - 1 cm grey qtz with tr Moly & tr native Bi(?) Mineralization: tr Py diss'd & on fractures. Remarks: 193.8-195 - Up to 5 or 10% development of light green, calc-silicates particularly in certain beds. Darker sections may contain some fine actinolite. Minor pale green calc-silicates in matrix here and there. 208.3-209 - Dark green calc-silicate-greywacke like rock with dark calc-silicates(?) in matrix. | | | | | |
| 211.3 | 214.2 | DARK GREEN CALC-SILICATE (ARGILLITE-METAGREYWACKE) Top 0.5 m is relatively soft chloritic (argillite) thin bedded which grades in 10-20 cm to a hard greywacke with quartz sand grains & feldspar + dark calc-silicates in the matrix. Structure: Thin bedded at top at 30°. Alteration & Veins: 213-213.6 - fracture controlled bleaching - sil'n + minor milky q.v. up to 8 mm. 213m - 4 mm light grey qtz minor calc + minor Py, tr Moly & tr unidentified white metallic. Mineralization: tr diss'd Py & Po. See 'veins'. | | | | | |
| 214.2 | 217.1 | CALCAREOUS FELDSPATHIC QUARTZITE, MINOR CALC-SILICATES Speckled grey to pale green med. sand size moderately calcareous; composed mainly of quartz & feldspar & probably minor amounts of pale green calc-silicates(?) Structure: Mostly massive, but well bedded at bottom at 25°. Veins, Alteration: Weak development pale green calc-silicates; Minor light grey qtz +/- calc. 214.5 - 6 mm qtz, minor calc, sph, Po, tr Cp. 214.7 - 6-8 mm qtz, minor Po, minor honey-coloured Scheel & tr grey metallic (Asp?). | | | | | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | | | | |
|--------|---------|---|------------|-------|-------|--------|--------|-------------------|-------------------|----------|--------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST | ASSAYS | GEOCHEM. | ANALYSES | ppm Mo | ppm Cu |
| | | Veins: Minor light grey qtz veins with Po & pale green selvage. | | | | | | % WO ₃ | % WO ₃ | ppm Mo | ppm Cu | ppm Zn |
| | | Mineralization: 1-3% diss'd Po, minor Py & tr Cp; mod. to fair diss'n Scheel. | 4419 | 224.0 | 225.5 | 1.5 | 0.1 | .038 | 1 | 340 | 1.0 | |
| 225.4 | 226.2 | ARGILLITE (D-C.S.) Structure: Well bedded at 30°. | | | | | | | | | | |
| | | Mineralization: Scattered streaks, blebs of Po. | 4508 | 225.5 | 227.0 | 1.5 | nil | 4 | 99 | <0.5 | | |
| 226.2 | 231.3 | GREY FELDSPATHIC QUARTZITE + CALCAREOUS QUARTZITE Mod. to light grey fine sand size. | | | | | | | | | | |
| | | Structure: Mostly thick bedded - Well bedded sections at 35 - 45°. | | | | | | | | | | |
| | | Mineralization: tr Py-Po in grey qtzite; 1-3% Py-Po in calc-silitated calcareous quartzite 226.2-226.5 and 230.8-231.2. Minor diss'd Scheel. 230.8-231.2. Qtz veinlets at 231.1 with Po minor Sph. & tr Cp. | 4509 | 227.0 | 228.5 | 1.5 | nil | 2 | 40 | <0.5 | | |
| | | | 4510 | 228.5 | 229.5 | 1.0 | nil | 2 | 33 | <0.5 | | |
| | | | 4511 | 229.5 | 230.8 | 1.3 | nil | 2 | 41 | <0.5 | | |
| | | | 4420 | 230.8 | 231.7 | 0.9 | .05 | .048 | 3 | 500 | 1.0 | |
| 231.3 | 231.7 | ARGILLITE D-C.S. As above. Minor Po. | | | | | | | | | | |
| 231.7 | 232.5 | GARNET SKARN About 60% light grey calc-sil'd calcareous qtzite & 40% pale red garnet-rich streaks & layers. | | | | | | | | | | |
| | | Mineralization: Well min'd. with 2-8% sulphides. Mainly Po-Py with sph. & minor Cp. Mod. strong diss'd Scheel & 5mm q.v. at 231.8 with 50% Scheel. | 4421 | 231.7 | 232.5 | 0.8 | 0.6 | .440 | 3 | 800 | 3 | |
| 232.5 | 235.9 | MASSIVE ARGILLITE (D-C.S.) Fine grained black on cored surface to dark green on fractured surface. | 4422 | 232.5 | 233.1 | 0.6 | tr | .088 | 3 | 100 | <0.5 | |
| | | Structure: Nearly unbedded; weak cleavage on bedding at 33°. | Avg. | 231.7 | 233.1 | 1.4 | | .29 | | 500 | | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | | | | | | |
|--------|---------|---|------------|-------|-------|--------|--------|--------|----------|----------|-----------------|-------------------|--------|-----------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST % | ASSAYS | GEOCHEM. | ANALYSES | WO ₃ | % WO ₃ | ppm Mo | ppm Cu |
| | | Veins & Mineralization: 233 - 3 mm grey qtz - Scheel parting at 35°. 235.1 - 1.5 cm glassy grey qtz, tr Po - 80°. 234-234.3 - 1 cm + bed with close spaced veinlets or ladder vein parallel to core with 25% Py-Po & qtz. Elsewhere minor Py, Po diss'n. | | | | | | | | | | | | |
| 235.9 | 239.5 | CALC-SILICATED, CALCAREOUS QUARTZITES Med. - light grey, med. - fine metasomatized altered calc. qtz-feldspar sandstone - Qtz. sand grains visible. Structure: Most thinly bedded at 40°. | | | | | | | | | | | | |
| | | Alteration: Mottled, 'blotchy' probably due to feldspar &/or calc-silicate development & sil'n. Sil'n along fractures & spreading out along selective beds e.g. at 236.8 m. Most of rock grey & pale green colours only in places - particularly where in contact with argillite 'interbeds'. | 4423 | 235 | 236 | 1.0 | nil | .004 | 3 | 210 | 3 | | | |
| | | Veins: 237.6m - 5 mm grey qtz, 10% Po + Scheel at 35°. Some of Po tarnishes black and there is a black soft metallic mineral rimming & with the Po; 238.4 - 5 mm grey qtz Po, Scheel 75° 239.1 - 8 mm grey qtz, chl, Po at 65° 239.2 - 5-10 mm light grey calc. with Scheel. grains up to 5 mm 239.35 - 1.5 cm grey qtz Po, tr Scheel + 1 cm light grey calcite with 1-2 cm Po - dark calc-silicate selvage at 30° 239.4-239.9 (Sample #4427) - tr Fluor in calc veinlet | | | | | | | | | | | | |
| | | Mineralization: Heavy streaks impregnations Po with minor Cp. at top of unit with weak diss'd Scheel. 236.2-236.5 - 2-8% Py-Po, tr Cp with mod strong diss'n Scheel. 238.7-239.4 - 1-2% Py +/- Po with mod Scheel. | 4424 | 236 | 236.7 | 0.7 | .4 | .23 | 4 | 770 | 2.0 | | | 4 ppm Au |
| | | Remarks: 237.1-238 - Argillite + sil'd argillite - f.g. greywacke. | 4425 | 236.7 | 238.2 | 1.5 | tr | .006 | 2 | 91 | <0.5 | | | <2 ppm Au |
| | | | 4426 | 238.2 | 239.4 | 1.2 | .15 | .16 | 2 | 500 | 1.0 | | | 13 ppm Au |
| | | | 4427 | 239.4 | 239.9 | 0.5 | nil | nil | 3 | 290 | <0.5 | | | |
| | | | Avg. | 236.0 | 239.4 | 3.4 | | .11 | | 375 | | | | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | | | | |
|--------|---------|---|------------|-------|--------|--------|-----------------------|--------------------------|-----------------|-----------------|-----------|--|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST % WO ₃ | ASSAYS % WO ₃ | GEOCHEM. ppm Mo | ANALYSES ppm Cu | ppm | |
| FROM | TO | | | | | | | | | | | |
| 239.5 | 244.8 | ARGILLITE (D.C.S.) + SKARNED CALC. QUARTZITES Argillites as above. Skarned Qtzites: Mottled grey & light to med. green, locally med. - c.q. - Some good c.q. Px-Amph Ak. at 242.2 but generally qtz & f.sp. rich. Sk'd Qtz as follows: 241.8-242.2; 242.7-243.1; 243.7-244 m. Structure: Argillites massive - thickly bedded; thin bedded in places: 241m - 25'; 244m - 20'. | | | | | | | | | | |
| | | Mineralization: Argillites contain tr - up to 1% veinlets & diss'n Py-Po & isolated tr Cp. Sk'd Qtzite: contain 2 up to 10% over 30 cm (at 242.8) Po-Py & minor Cp & moderate diss'n of Scheel. | 4512 | 239.9 | 241.8 | 1.9 | | nil | 3 | 63 | <0.5 | |
| | | | 4428 | 241.8 | 243.3 | 1.5 | .07 | .038 | 3 | 640 | .5 | |
| | | | 4429 | 243.3 | 244.3 | 1.0 | .03 | nil | 4 | 310 | <0.5 | |
| | | | | | | | | | | | <2 ppb Au | |
| 244.8 | 248.2 | LIGHT GREY ALTERED QUARTZITE Fine grained sand size sediment, feldspathic, but qtz dominant. Structure: Massive thick bedded; crackled-incipient bx'n with calc-sil(?) & minor sulph. in matrix. Alteration: Pervasive sil'n. Veins: 245.2 - 1.5 cm pearly grey qtz with up to 4mm massive Py + Po, tr Scheel. | AVG. | 241.8 | -245.3 | 3.5 | | nil | nil | 491 | nil | |
| | | Mineralization: 244.9-245.15 - Calc-sil'd rock with 5-8% Py-Po (Py Po), a little Cp & minor scheelite. Elsewhere minor Po streaks & blebs & diss Py, tr Scheel with Py-Po at 247.7 | 4430 | 244.3 | 245.3 | 1.0 | tr | nil | 5 | 450 | <0.5 | |
| | | | 4431 | 247.3 | 248.3 | 1.0 | tr | nil | 2 | 180 | 2 | |
| | | Remarks: 244.9-245.15 - Calc-Sil'd quartzite (with Py, Po, Cp. Scheel) | | | | | | | | | | |
| 248.2 | 249.3 | DARK CALC-SILICATE (SKARN) Dark grey, med. grained - looks like mafic dyke. Structure: Massive, uniform, Cts. 60 & 75°. | | | | | | | | | | |
| | | Mineralization: 6-10% 'impregnation' Po & weak diss'n Scheel. | 4432 | 248.3 | 249.3 | 1.0 | | 0.036 | 2 | 1600 | 1.0 | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 11 OF 32

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | | | |
|--------|---------|--|------------|-------|-------|--------|-----------------|-------------------|----------|----------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST % | ASSAYS | GEOCHEM. | ANALYSES | |
| | | Alteration: Light colour probably due to bleaching & silicification 271.6-272.1 - weak development pale green calc-silicates. See 'Remarks'. | | | | | WO ₃ | % WO ₃ | ppm Mo | ppm Cu | ppm Zn |
| | | Mineralization: tr Py & Po; tr Scheel at 268 m; tr Scheel. in calc-sil'd section at 272 m. | | | | | | | | | |
| | | Remarks: 270.5-271.1 - Med. grey protoqtzite. Thin bedded with mafic partings - possibly a little fine biotite?. | | | | | | | | | |
| 272.1 | 279.0 | SILTSTONE (D.C.S.) - GREYWACKE WITH LIGHT GREY QUARTZITE & CALC-SILICATED QUARTZITE As above. 272.1-272.3, siltstone - D.C.S. 272.8-273.1m light grey (altered) quartzite. 273.1-274.8, Sst - Gwk 274.8-275.4, light grey + pale green calc. silicate rock. 275.4-279. protoquartzite + minor light grey & calc-sil'd Qtzite. Structure: Massive to thin bedded; bedding 274 - 15°; 277 - 40° | | | | | | | | | |
| | | Alteration: Strong sil'n (light grey section). Minor calc-sil. development. | | | | | | | | | |
| | | Veins: 272.2 - 2 cm grey mottled qtz - minor Po at 75°. | | | | | | | | | |
| | | Mineralization: Minor conc. diss'd Py in light grey & calc-sil'd Qtzite; 273 - 3% Py tr Cp/10 cm. | | | | | | | | | |
| 279.0 | 283.2 | LIGHT GREY (ALTERED) QUARTZITE + CALC-SIL'D QUARTZITE As above; med to fine qtz-f.sp. sandstone section 282.5-283; strongly calc-sil'd, slightly calcareous quartzite. | | | | | | | | | |
| | | Structure: 282.5 bedding 27° - Mostly massive, poorly bedded. Bottom 20 cm 'crackled' & re-cemented. | | | | | | | | | |
| | | Alteration & Veins: 281 - 3 cm q.v. with 1 cm pale green calc sil'd & calcitic selvage. Calcite associated with vein. 282.4 - tr Fluorite | 4434 | 282.2 | 283.3 | 1.1 | .06 | .006 | 3 | 260 | <0.5 |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 13 OF 37

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | | | | | | |
|--------|---------|--|------------|-------|-------|--------|--------|--------|-------------------|-----------------|-------------------|--------|-----------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST % | ASSAYS | GEOCHEM. ANALYSES | WO ₃ | % WO ₃ | ppm Mo | ppm Cu | ppm Au |
| 374.6 | 383.7 | DARK GREY FELDSPATHIC QUARTZITE (GREYWACKE) As above 361.3-369.2 but more abundant qtz sand & less Fe-Mg minerals. Approaches gwk at bottom. Structure: Mostly massive; thin bedding 08° at 376 m Veins & Alteration: 376.4 - 1 cm qtz + calc + muscovite selvage & minor Po-Py-Cp & tr Fluorite - 40° 378-378.5 - 2-5 mm qtz musc & pale green sericite selvage, minor Po, Py & tr Mo & Sph; veins at 40-45° 380.8-381.5 - 205 mm grey qtz & qtz-calc at 10-15° with light grey bleached - sil'd selvages up to 1 cm thick. Mineralization: See 'veins': tr diss Py & Po. | | | | | | | | | | | | |
| 383.7 | 390.7 | LIGHT GREY CALC-SIL'D (?) QUARTZITE Med. sand size f.spathic quartzite flecked & speckled with stubby - almost acicular white silicate - diopside? or wollastonite from 5% to 30% at top, which is skarn-like. Structure: Massive to thin bedded. Cross beds at 386.7 m; bedding: 386.7 - 08°; 389 - 24°; 390.5 - 12° Veins & Alteration: May be pervasively sil'd; minor qtz veinlets. A little muscovite here & there & as 20%/10 cm at 384.3 Mineralization: 383.7-384.4 - blotchy qtz diopside (??) + f.sp. + musc. skarn with 3-4% Po + Py, minor Cp & tr Mo & weak discontinuous diss'd Scheel; tr Po-Py here & there in qtz veinlets, fractures & diss'n 386 - 5-10 cm musc-rich core with Po, Py, Cp and Scheel.; tr - minor Scheel with fractures & thin q.v. 384.8 & 387.1-388. Minor diss'd Scheel over 10-20 cm at bottom. Remarks: 388.1-388.7 - Dark grey f.spathic quartzite 389.5-389.7 - Dark quartzite | 4454 | 383.6 | 385.1 | 1.5 | .15 | .062 | 100 * | 490 | 1.0 | | 18 ppb Au | |
| 390.7 | 393.1 | MASSIVE SILTSTONE, MINOR PALE GREEN CALC-SILICATES Fine (no sand component) moderate H. Dark green on broken surface - probably due to dark calc-silicate, black on core surface; 'wormy' streaks, pale green calc-silicate in lower part. | 4458 | 391.6 | 393.1 | 1.5 | nil | .006 | 2 | 410 | <0.5 | | | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | ASSAYS | | | | |
|--------|---------|--|------------|-------|-------|--------|-----------------------|-------------------|--------|--------|------|
| | | | | | | | EST % WO ₃ | % WO ₃ | ppm Mo | ppm Cu | ppm |
| 393.1 | 395.6 | Structure: bedding - banding at 05°. Alteration: Chocolate colour when dry - probably due to fine biotite. Mineralization: tr diss'd Py SILICEOUS SKARN (SKARNED CALCAREOUS QUARTZITE) Mottled light grey & light green with med. - dark green or light grey & green with 2-6 mm dark green spots. Matrix seems to be mainly quartz, feldspar with some pale green calc-silicates - possibly bedenbergeite spots & blotches - wisps & streaks pale red garnet. Qtz sand grains still visible - probably an altered calcareous qtz-f.sp. sandstone. | 4459 | 393.1 | 394.6 | 1.5 | .8 | .32 | 5 | 760 | 1.0 |
| | | | 4460 | 394.6 | 395.6 | 1.0 | .6 | .36 | 4 | 620 | 1.0 |
| | | | Avg. | 393.1 | 395.6 | 2.5 | | 0.34 | | 704 | |
| 395.6 | 397.7 | Structure: Cts about 15°. Internal banding 15° - 55°. Veins: 394.5 - 1 cm light grey qtz with minor Po & a little C.G. Scheel - 45°. Mineralization: 2-3% Py & Po as 'patches' & diss'n. Strong diss'n Scheel. MASSIVE SILTSTONE As above 390.7-393. | 4461 | 395.6 | 397.1 | 1.5 | tr | .008 | 5 | 250 | <0.5 |
| | | | 4462 | 397.1 | 398.6 | 1.5 | .15 | .250 | 5 | 760 | <0.5 |
| | | | Avg. | 393.1 | 398.6 | 5.5 | | 0.22 | | | |
| 397.7 | 400.1 | SILTSTONE - FINE FELDSPATHIC QUARTZITE + CALC-SILICATED QUARTZITE Fine protoquartzite - qtz-fsp-rich siltstone; calc-sil'd qtz layers 10-40 cm make up 1/3 of unit. Structure: Banding (bedding): 397 - 17°; 399 - 22° Veins: 398.15 & 398.3 - 5-8 mm white qtz + Po & Scheel - 45° Mineralization: Diss'd Py-Po & local strong diss'd Scheel in calc-sil'd layers. | 4463 | 398.6 | 400.1 | 1.5 | 0.15 | .072 | 11 | 430 | <0.5 |
| | | | Avg. | 393.1 | 400.1 | 7.0 | | 0.19 | | 560 | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 21 OF 32

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | | | |
|--------|---------|---|------------|-------|-------|--------|-----------------|-------------------|----------|----------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST % | ASSAYS | GEOCHEM. | ANALYSES | |
| FROM | TO | | | | | | WO ₃ | % WO ₃ | ppm Mo | ppm Cu | ppm Al |
| | | Alteration: 50% unit affected by blotchy & fracture - controlled light grey bleaching - silicification. | | | | | | | | | |
| | | Structure: Bedding 16° at 442.8 m | | | | | | | | | |
| | | Mineralization: Minor Po & Py | | | | | | | | | |
| 443.9 | 445.1 | SKARNED FELDSPATHIC QUARTZITE Blotchy light grey fine grained qtz-feldspar material with dark green (pynxene?) & minor streaks, blotches pale red garnet | 4472 | 443.8 | 445.3 | 1.5 | .08 | 0.150 | 16 | 570 | 16 |
| | | Structure: bedding - banding 28° | | | | | | | | | |
| | | Mineralization: 2-3% diss'n Py & Po; weak to mod. diss'n Scheel & minor Scheel in qtz veinlets | | | | | | | | | |
| 445.1 | 451.4 | SILTSTONE - ARGILLITE Dark green, fine grained with very fine, 'felty' texture - probably due to tremalite-actinolite. Moderately hard. | | | | | | | | | |
| | | Structure: Mod.-thin bedding: 446 - 13°: 447 - 20°: Abundant soft sediment - discontinuous & 'lensing' beds | | | | | | | | | |
| | | Alteration: Dark brown fine biotite in top 1.5 m; minor pink f.sp'n (or sil) toward bottom. | | | | | | | | | |
| | | Mineralization: 30% fine diss'n, streaks veinlets, Po - Py & tr - minor Cp; Cp more abundant than usual (.05%) from 446.5 - 449 m | | | | | | | | | |
| 451.4 | 461.3 | THIN BEDDED, F.G., FELDSPATHIC QUARTZITE; MINOR CALC-SILICATED QUARTZITE Dark grey, f.sp. rich, fine sand - In places approaches at siltstone or greywacke | 4473 | 451.3 | 452.3 | 1.0 | tr | .008 | 3 | 120 | <0.5 |
| | | Structure: Thin bedded to massive. Bedding at 454 - 19°; 455 - 21°; 458 - 26°. Broken core top 40 cm. Unit moderately fractured with qtz-cement | 4474 | 452.3 | 453.6 | 1.3 | nil | nil | 4 | 20 | <0.5 |
| | | Alteration: See 'remarks'; 451.4-451.7 - brown chert-like sil'n. Light grey bleaching - sil'n along fractures & certain beds. | 4475 | 453.6 | 455.2 | 1.6 | .1 | .024 | 2 | 240 | <0.5 |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 24 OF 37

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | ASSAYS | | | | |
|--------|---------|---|------------|-------|-------|--------|-----------------------|--------------------------|-----------------|-----------------|-------|
| | | | | | | | EST % WO ₃ | ASSAYS % WO ₃ | GEOCHEM. ppm Mo | ANALYSES ppm Cu | ppm A |
| 484.5 | 485.1 | LIGHT GREY CALC-SIL'D QUARTZITE Med - f.g. feldspathic qtzite; pale grey-green mottled with dark grey-green; mainly quartz & f.sp. Structure: Thin bedded at 24° Mineralization: 1-2% diss'n 'patches' of Py & Po; 484.4-485 strong diss'n Scheel; elsewhere minor Scheel | 4477 | 484.4 | 486.1 | 1.7 | .10 | .04 | 7 | 390 | <0.5 |
| 485.1 | 488.6 | MASSIVE SILTSTONE (D.C.S.) Fine grained dark grey, but composed mainly of fine qtz & feldspar - not much auillaceous material. Most is weakly magnetic. Veins: Hairline white calcite veinlets moderately abundant 488 - 5-10 cm? thick grey qtz cut by white calcite in chloritic shear at 05° with 2% diss'd Scheel along 40 cm of core & minor Po Mineralization: Veins diss'n, patches with heavy diss'n, blebs of Po with minor Py & isolated tr Cp; 2% sulphides overall with about 5% in top 1 m; 3 cm bleb Po at 485.7. Minor Scheel as diss'n & in qtz veinlets 485.1-485 & at 487.7 m. | 4478 | 486.1 | 487.6 | 1.5 | nil | .008 | 9 | 140 | <0.5 |
| 488.6 | 490.3 | DIORITE-PORPHYRY (OR LAMPROPHYRE DYKE) Med. grey, spotted with dark green chl'd mafic phenocrysts (hornblende?) - 65% plus feldspar consisting of close-packed 1-3 mm crystals & a few large anhedral phenocrysts to 8 mm. Some acicular mafic & flakes of light brown mica. Structure: Cts about 45° Mineralization: tr Scheel in places with fractures & thin qtz-Py-Po veinlets | 4480 | 488.6 | 490.1 | 1.5 | tr | .050 | 6 | 480 | <0.5 |
| 490.3 | 492.7 | SILICEOUS SKARN(?) Mottled & streaked, pale reddish brown to light blue grey quartz with light brown to white granular feldspar (or white calc-silicate??), dark green streaks (siltstone remnants?) & near bottom up to 25% n-c.g. med. green pyroxene. | Avg. | 487.6 | 490.1 | 2.5 | 0.063 | 628 | ppc | | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | ASSAYS | | | | |
|--------|---------|--|------------|-------|-------|--------|-----------------------|--------------------------|-----------------|-----------------|--------|
| | | | | | | | EST % WO ₃ | ASSAYS % WO ₃ | GEOCHEM. ppm Mo | ANALYSES ppm Cu | ppm Ag |
| | | Mineralization: tr diss'd Py & Po; blebs & diss'n Py, Po & mod. diss'n Scheel over 20 cm in inclusion at 497.8. Mod. diss'n Scheel with inclusions 498.2-498.4; tr Scheel with Po at 496.9 & 497.4 | | | | | | | | | |
| 498.4 | 502.1 | MIXED QTZ-FELDSPAR GARNET AND QTZ-FELDSPAR PYROXENE SKARNS MINOR FELDSPATHIC QUARTZITE 498.4-499.1 - light grey f.sp. qtzite with 30% pale pink garnet rich bands + tr Py, Po & mod. diss'n Scheel. 499.1-499.5 - fine grained grey f.sp. quartzite, minor calc-silicates 499.5-500.3 - as above 498.4-499.1 500.3-500.6 - fine f.sp. quartzite with 'wormy' pale grey-green sil'n-calc-silicate development, tr Scheel 500.6-501.4 - wavy banded qtz-diopside (50-70%) + dark pyroxene(?), only tr Py, minor diss'd Moly qtz layers & strong mod. diss'd Scheel (probably skarned Limestone) 501.4-502.1 - light grey-green altered, sil'd & calc-sil'd quartzite, spotted with dark sulphide patches, minor pale garnet; 1% diss'd Po,Py & strong diss'n Scheel. (this is similar to pale green high grade material at Harrison Zone) | 4486 | 497.7 | 499 | 1.3 | .2 | .050 | 3 | 230 | <0.5 |
| | | Structure: bedding & banding as follows: 499 - 20°; 500.5 - 30° | | | | | | | | | |
| 502.1 | 504.8 | LIGHT GREY QUARTZITE Med. - f.g. sandstone; looks relatively qtz-rich (orthoquartzite or sil'd). Contains minor calc-silicates(?) | 4489 | 502 | 503.5 | 1.5 | tr | .006 | 4 | 170 | <0.5 |
| | | Structure: Massive to thin bedded at 27° | 4490 | 503.5 | 505 | 1.5 | tr | .010 | 4 | 290 | <0.5 |
| | | Alteration: Probably bleached & sil'd | | | | | | | | | |
| | | Mineralization: tr diss'd Py; tr diss Scheel at 503.3 | | | | | | | | | |
| 504.8 | 508.2 | QUARTZ - FELDSPAR - GARNET SKARN & CALC-SILICATED QUARTZITE A quartz-rich altered quartzite with about 10% scattered grains, wisps, bands of pale red garnet, & some dark grey wisps - due mainly to sulphides; speckled with light grey mineral (feldspar or wollastonite or diopside??) | 4491 | 505 | 506.5 | 1.5 | .3 | .170 | 11 | 1100 | 3.0 |
| | | | 4492 | 506.5 | 508.2 | 1.7 | .75 | .41 | 3 | 590 | 2.0 |
| | | Veins: 505.3 - several 5 mm white qtz-calc veinlets at 35° with a little Po, 5% Cp/10 cm, tr Sph & strong diss'd Scheel | AVG. | 505 | 508.2 | 3.2 | | 0.30 | | | |

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DRILL LOG

HOLE NO. 3115-29

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DRILL LOG

HOLE NO. 3115-29

SHEET 20 OF 32

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 30 OF 32

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS | | |
|--------|---------|---|------------|-------|-------|--------|-----------------------|---------------|------------------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | EST % WO ₃ | ASSAYS ppb Au | GEOCHEM ANALYSES |
| | | Mineralization: tr - minor Py-Po diss'n & with minor qtz veinlets; Scheel with est grades tr to 0.05 WO ₃ diss'n in calc-sil'd sections & in qtz veinlets; 552.3-552.6; 555-555.5; 557.3-557.7; at 559 & 562-563 | | | | | | | |
| 563 | 567.2 | FRACTURED PORPHYRITIC DIABASE (FAULT) As above | | | | | | | |
| | | Structure & Veins: Fractured with streaky white calcite veins at 20°, 60° & 90°. Finely broken core at top. Top Ct at about 25° with up to 8 mm gouge; lower Ct at 35-40° with up to 1 cm gouge & broken core. | | | | | | | |
| 567.2 | 582.4 | FRACTURED GREY SIL'D QUARTZITE An altered m.-f.q. feldspathic quartzite. Med. - light grey, very hard. Original sandy texture visible in places | 4516 | 567.2 | 568.2 | 1.0 | | 3 | |
| | | Structure: Intensely fractured with broken core throughout; gouge at upper Ct. | 4517 | 568.2 | 569.2 | 1.0 | | 6 | |
| | | Alteration: Intense silicification & bleaching speckled material here & there & as q.v. selvages contain a little muscovite | 4518 | 570.1 | 571.1 | 1.0 | | 4 | |
| | | | 4519 | 572.1 | 573.5 | 1.4 | | 15 | |
| | | | 4520 | 573.5 | 574.5 | 1.0 | | 3 | |
| | | Veins: A few small mottled blue-grey up to 5 mm here & there with minor Py & Po; tr natural Bi in q.v. at 576 m. A little muscovite in q.v. selvages. | 4521 | 574.5 | 575.5 | 1.0 | <2 | | |
| | | Mineralization: Scattered Py euhedra with concentrations up 3%/30 cm. Minor Py veinlets; avg 1/2 or less overall. tr Scheel at 578.8 m and on 3 cm siliceous-calc-sil'd rock with Po & Py (inclusion) | 4522 | 575.5 | 577.0 | 1.5 | | 4 | |
| | | Remarks: Looks similar silicified rocks on Breccia Hill | 4523 | 577.6 | 579.5 | 1.9 | | 7 | |
| 582.4 | | END OF HOLE | 4524 | 579.5 | 581.0 | 1.5 | | 5 | |
| | | DRILLING NOTES: Core Size - BQ | 4525 | 581.0 | 582.4 | 1.4 | | 5 | |
| | | Casing broken off at about 2 m below surface but marked by BQ drill rod. It can be re-entered. | | | | | | | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-29

SHEET 32 OF 32

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 1 OF 3

| PROPERTY FOSTUNG | TP OR AREA FOSTER | AZIMUTH 140° (collar) | DATE STARTED March 10, 1986 | CORRECTED DIP TESTS | | | LOCATION SKETCH OF HOLE |
|-----------------------|---|------------------------------------|---|---------------------|--|--|-------------------------|
| | | | | | | | |
| PROJECT 3115 | LOT & CONC. SW1/4, S $\frac{1}{2}$ LOT 8; CON IV | DIP -70 $\frac{1}{2}$ | DATE COMPLETED April 17, 1986 | | | | |
| CLAIM NO. S-398148 | CO-ORDINATES. 5928.57N/8380.52E | LENGTH 541.02 to 947.32 | DRILLED BY McKnight Diamond Drilling | | | | |
| GRID NO. | (1980 Survey grid) | COLLAR ELEV. Set-up El: 1504.22 | LOGGED BY D.Windsor; A.Beecham | | | | |

| METRES | SECTION | Core Size: AQ | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | DOWN HOLE SURVEY | | | |
|--------|---------|---------------|---|------------|------|----|--------|-----------------------|---------|---------|---------|
| | | | | | | | | Depth | Dip | Mag Az. | Tr Az. |
| 541.02 | 548.8 | | OBJECTIVES:- To test for Espanola Limestone | | | | | Collar | -70° | 140° | 197 |
| | | | BROWN GREY CALC SILICATE (SPOTTED BIOTITE HORNFELS - ALTERED SILTSTONE) | | | | | 122 m | -65° | 153.5 | tropar |
| | | | Dark grey and brown green calc-silicates with light grey alteration | | | | | 244 m | -59° | 152.0 | " |
| | | | spotting (hornfels?) | | | | | 366 m | -58° | 154.5 | " |
| | | | - brown and grey altering bands | | | | | 488 m | -52° | 161 | " |
| | | | Structure: Mostly massive, thin bedded sections at 60° | | | | | 564 m | -53° | - | acid |
| | | | Alteration: 2-5mm light spotting as follows: | | | | | 564 m | no dip | 175.5 | 168 |
| | | | 541.4-542.0 | | | | | 616.6 | -48° | tropar | acid |
| | | | 544.2-544.7 | | | | | 637.0m | -45° | 170.0 | 162.3 |
| | | | 545.7-547.0 | | | | | 732.4m | -41° | tropar | acid |
| | | | - bleached zone at 542.2-542.5 - 2% py | | | | | 808 m | -38° | 170.0 | 162.3 |
| | | | - chlorite-silicified zone from: | | | | | 853.4m | -36.5° | tropar | acid |
| | | | 542.8-543.0 - chlorite, pyrite, sericite | | | | | 946 m | -34° | - | - |
| | | | - some qtz veining: 1% pyrite in stringers | | | | | | | | acid |
| | | | | | | | | DOWN HOLE COORDINATES | | | |
| | | | | | | | | Depth | x(140°) | y(vert) | z(230°) |
| | | | | | | | | Collar | 0 | 0 | 0 |
| | | | | | | | | 61 m | 20.9 | 57.3 | 0 |
| | | | | | | | | 183 m | 71.0 | 167.9 | 12.0 |
| | | | | | | | | 305 m | 123.5 | 272.5 | 25.1 |
| | | | | | | | | 427 m | 195.1 | 375.9 | 41.1 |
| | | | | | | | | 526 m | 252.0 | 453.9 | 63.1 |
| | | | | | | | | 590.3m | 287.7 | 505.1 | 77.4 |
| | | | | | | | | 627 m | 310.6 | 532.5 | 86.8 |
| | | | | | | | | 685 m | 348.5 | 573.6 | 102.5 |
| | | | | | | | | 770 m | 407.8 | 629.3 | 127.1 |
| | | | | | | | | 831 m | 452.2 | 666.60 | 145.5 |
| | | | | | | | | 900 m | 503.4 | 707.69 | 166.7 |
| | | | | | | | | 947.32m | 539.68 | 734.39 | 181.7 |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 2 OF 31

| METRES | SECTION | DESCRIPTION | | | | | ASSAY | GEOCHEM. ANALYSES | | | |
|--------|---------|--|------------|-------|-------|--------|-------|-------------------|--------|--------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | | % WO ₃ | ppm Mo | ppm Cu | ppm Ag |
| | | Veins & Mineralization: 544.8 - 1cm qtz. vein with 20% pyrrhotite - magnetic 548.8 - 1cm qtz. vein with 3% pyrrhotite; 35° to core angle; (1; 2mm bleb purple vitreous mineral (fluorite)) | | | | | | | | | |
| 548.8 | 549.8 | PALE GREEN CALC-SILICATE (CALC-SILICATED F.SP QUARTZITE) pale green, f.g., | 4526 | 542.0 | 543.0 | 1.0 | nil | 3 | 36 | 0.5 | |
| | | Structure: Massive | | | | | | | | | |
| | | Mineralization: tr to 1% py - 548.53 - few specks scheelite in fracture - 2-5% py in small a.v. | 4527 | 548.8 | 549.8 | 1.0 | nil | 2 | 97 | 0.5 | |
| 549.8 | 565.8 | LIGHT - DARK GREY BROWN CALC-SILICATES (SPOTTED BICTITE, HORNFELS) As above: More quartz veining approx. 30% light grey alteration spotting hard - medium to fine grained | | | | | | | | | |
| | | Structure: Core angle 60-70°; massive to thin bedded in places; | | | | | | | | | |
| | | Alteration: light grey spotting (hornfels?) - found most often in the brown sections - some minor bleaching - minor chlorite alterations | | | | | | | | | |
| | | Veins: 550.6 - 2cm q.v. 5% po magnetic 552.0 - 17cm q.v. 30° C.A. - 5cm massive po (makes up 30% of vein) 1% cpy scheelite ½% 552.4 - 1cm q.v., po, few specks scheelite 553.1 - 4cm q.v. tr. scheelite. 20% diss py - slight fizz in fractures. | 4528 | 551.9 | 553.4 | 1.5 | 0.020 | 13 | 530 | 2.5 | |
| | | 555.26 - 2cm q.v. - true width - 18cm of core, Moly 5%, po 5%, 1% cpy, magnetic 556.2 - 2cm q.v. - some calcite (true width) 559.0 - 10cm - (2cm true width) q.v. - 5% po, 5% cpy, magnetic 561.27 - 2cm qtz, chlorite (garnetiferous)? - fine diss. scheelite - ½% - 4% po, cpy | 4529 | 554.1 | 555.2 | 1.1 | nil | 64 | 120 | 2 | |
| | | | 4530 | 557.5 | 558.5 | 1.0 | nil | 17 | 39 | < 0.5 | |
| | | | 4531 | 558.5 | 559.5 | 1.0 | nil | 24 | 970 | 5.0 | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAY | GEOCHEM. ANALYSES | | | |
|--------|---------|---|------------|-------|-------|--------|-------|-------------------|--------|--------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | | % WO | ppm Mo | ppm Cu | ppm Ag |
| | | 615.3 - 10cm - white with green q.v. - moly? diss | 4547 | 614.6 | 615.6 | 1.0 | | nil | 73 | 250 | 1.5 |
| | | 616.2; 616.3; 616.4; 3 areas - each 2cm wide of silicified calc-silicate - containing cream qtz - 1 speck scheelite | | | | | | | | | |
| | | 616.9; 5mm - q.v. - contains - bleb of sph & 2% py | | | | | | | | | |
| | | 620.8; 10cm - q.v. - silicification - contains approx. 3% fine diss scheelite in fractures | 4548 | 620.7 | 621.7 | 1.0 | | 0.012 | 7 | 32 | <0.5 |
| | | 621.5 - 6cm - green alteration - tr scheelite | | | | | | | | | |
| | | 622.6 - 13cm altered - silicified zone - minor diss - scheelite | 4549 | 622.5 | 623.5 | 1.0 | | nil | 13 | 16 | <0.5 |
| | | 624.1; 624.3: 2cm sections of typical alteration 1% scheelite | 4550 | 624.0 | 624.6 | 0.6 | | 0.012 | 11 | 51 | 6.5 |
| | | 625.2 - 1cm q.v. - 1% py, (po?) along border - trace scheelite | | | | | | | | | |
| | | 625.9 - 10cm alteration zone and q.v. - fine diss scheelite - trace found in qtz stringers - po in qtz stringers | | | | | | | | | |
| | | 626.4 - 5mm white q.v. - 5% py, po - 1% fine diss moly | 4551 | 625.6 | 626.6 | 1.0 | | nil | 100 | 150 | 1.5 |
| | | Remarks: Unit is uniform and has sharp contact with next unit | | | | | | | | | |
| 628.2 | 633.0 | ALTERED SILICIFIED CALC-SILICATE (Siltstone) Unit is almost completely silicified; mottled grey-pink-cream; there are a few sections of massive dark grey calc-silicate as found in the last unit - non-magnetic; hard; with some fix in hairline fractures | | | | | | | | | |
| | | Alteration: no hornfelsing (spotting) - looks like a well healed breccia where fragments "hazy" borders 30% light grey - pale green siliceous sections, streaks | | | | | | | | | |
| | | Veins & Mineralization: 628.6 - 20cm q.v. - white bull qtz - last 10cm contains 30-40% po; 2% cpy, py?; 1-1% sch., Moly & nat Bi | | | | | | | | | |
| | | Scheelite as follows: 628.4 tr 628.5 tr 628.6 - 1% | | | | | | | | | |
| | | 629.7 - 1% | | | | | | | | | |
| | | 629.9 - 1% | | | | | | | | | |
| | | 630.4 trace in fracture | 4552 | 628.3 | 629.3 | 1.0 | | 0.010 | 120 | 410 | 6.5 |
| | | 630.55 trace | 4553 | 629.3 | 630.3 | 1.0 | | nil | 3 | 93 | 0.5 |
| | | Remarks: intense alteration in bottom 30cm may contain fragments of next unit. | 4554 | 630.3 | 631.3 | 1.0 | | nil | 2 | 54 | <0.5 |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | EST. % | ASSAY | GEOCHEM. ANALYSES | | | | |
|--------|---------|---|------------|-------|-------|--------|--------|---------------------|-------------------|-----------------|-------|-----|----|
| | | | | | | | | | WO ₃ | WO ₃ | ppm | ppm | |
| FROM | TO | | | | | | | | | | Mo | Cu | Ag |
| 633.0 | 640.3 | PALE GREEN MASSIVE CALC-SILICATE massive - pale green hard; non-magnetic Dark grey black mineral - appears to be banded at 45° to core from 634.8 to 636.0m (10-20% wormy remnants of dark green calc-silicates) Structure: massive to thin banded at 42-52° Mineralization: scheelite: trace at 634.0, 634.3, 634.4, 635.5 | | | | | | | | | | | |
| 640.3 | 647.4 | GARNET SKARN Light grey - green - pink, orange - reg brown medium-f.g., blotchy - magnetic as follows: strong from 644.0-644.8; 645.74-646.2; moderate from 646.4-647.4 - strong 'fizz' with acid in calcite filled fractures - section is 'hard' except for section as follows: Assemblages appear to be qtz-px-garnet qtz-px-garnet, qtz-px-garnet - plagioclase and/or vesuvianite - pale yellow to colourless long prismatic crystals - vesuvianite, ? topaz or cassiterite from 642-642.6m amphibole - feldspar as 644-644.6; some f.g garnet - dark amphibole +/- qtz? Dark mottling due to amphibole and/or dark (edenbergite) Px Structure: Core angle about 60° - section with garnet is generally uniform in texture - veining is minute and consists of small qtz stringers Mineralization: Overall average of scheelite in section is 14% - it is disseminated and size ranges from 4mm to very fine - flourescent colour is yellow and blue - the blue being more predominant - strongest mineralized zones as follows: 643.7-644.2; 644.9- 646.0; 646.4-647.0 | 4555 | 639.2 | 640.2 | 1.0 | nil | 0.004 | 1 | 4 | < 0.5 | | |
| | | | 4556 | 640.2 | 641.7 | 1.5 | .2 | .170 | 15 | 94 | .5 | | |
| | | | 4557 | 641.7 | 643.2 | 1.5 | .25 | .280 | 25 | 220 | 1.0 | | |
| | | | 4558 | 643.2 | 644.7 | 1.5 | .35 | .520 | 17 | 790 | 4.0 | | |
| | | | 4559 | 644.7 | 646.2 | 1.5 | .5 | .540 | 20 | 2500 | 6.5 | | |
| | | | 4560 | 646.2 | 647.7 | 1.5 | .2 | .260 | 90 | 580 | 1.0 | | |
| | | | AVG | 640.2 | 647.7 | 7.5m | 0.354 | (0.0056) | 616 | | | | |
| | | Estimated The above units contain from 10 to 30% scheelite The remainder of the section contains between 1 & 5% scheelite Sulphide mineralization is predominantly pyrrhotite - see magnetic as follows: - po up to 30%; cpy with po - 2%; py-diss in upper part of section | | | | | | %MoS ₂) | | | | | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 8 OF 11

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 9 OF 31

| METRES | SECTION | DESCRIPTION | | | | | EST. | ASSAY | GEOCHEM. ANALYSES | | | |
|--------|---------|--|------------|-------|-----|--------|-----------------|-----------------|-------------------|-----|------|--------------------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | | | % | % | ppm | ppm |
| FROM | TO | | | | | | WO ₃ | WO ₃ | Mo | Cu | Ag | |
| | | Alteration: Small pods pale green sericite & small books grey muscovite near bottom Ct | | | | | | | | | | |
| | | Mineralization: Scattered grains Py; tr Moly at bottom Ct. | | | | | | | | | | |
| 672.5 | 674.0 | QUARTZ VEIN Similar to vein at 670: light grey and dark blue - grey mottled approx. 5% sheaves & selvages of grey muscovite. A little light green sericite | | | | | | | | | | |
| | | Mineralization: 1-3% coarse Moly with musc. especially at contacts | | | | | | | | | | |
| | | Minor scattered grains of Py tr Cp; tr scheel at 673.3 | 4565 | 672.3 | 674 | 1.7 | tr | nil | 3300 | 200 | .5 | (0.55% |
| | | | | | | | | | | | | MoS ₂) |
| 674.0 | 681 | LIGHT GREY FELDSPATHIC QUARTZITE Light grey fine to medium sand size Finely speckled with white feldspar | | | | | | | | | | |
| | | Alteration: Top metre has fine sheeted, bleached fractures (sil'n) & in fine grained; unit bleached; weak development fine muscovite | | | | | | | | | | |
| | | Structure: 1.6m lost core between 674.5 & 677.6 Broken core at top contact | | | | | | | | | | |
| | | Veins: 678.3 - 3cm mottled light grey tr Py, 2cm musc selvage with minor moly - 45° | | | | | | | | | | |
| | | Mineralization: 677.5 minor 'sooty' moly (?) or graphite + Py on slip tr Py as scattered grains, diss? | | | | | | | | | | |
| 681 | 686.2 | DARK GREY FELDSPATHIC QUARTZITE WITH LIGHT GREY FELDSPATHIC QUARTZITE 60-75% med grained dark grey pro to quartzite - gwk with light grey (bleached) sections | | | | | | | | | | |
| | | Structure: Most is massive; rare banding (bedding?) at 55-60° | | | | | | | | | | |
| | | Alteration: Minor musc in light sections a small scattered flecker | | | | | | | | | | |
| | | Veins: 681.64-682.16 - true thickness about 35cm white and dark grey mottled qtz with minor Py tr Asp & isolated tr Bi. Ctr at 40° & 50° | 4566 | 681.6 | 683 | 1.4 | nil | nil | 81 | 180 | <0.5 | |

| METRES | SECTION | DESCRIPTION | | | | | EST. | ASSAY | GEOCHEM. ANALYSES | | | | |
|--------|---------|---|------------|-------|-------|--------|------|-----------------|-------------------|----|-----|-----|-------------------------------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | | | % | % | ppm | ppm | ppm |
| | | 682.8 - 6-8cm mottled light and dark grey qtz with 2cm bleb Po minor Cp and musc - selvage with a little Moly - 45° 684.3 - 9cm light grey mottled qtz minor Py 7 weak musc selvage 55° | | | | | | WO ₃ | WO ₃ | Mo | Sn | Cu | Ag |
| | | Mineralization: See veins: tr Py as scattered euhedra tr Moly on strips at 683.5 & 685.6m | | | | | | | | | | | |
| 686.2 | 687.8 | SPOTTED HORNFELS (Altered Siltstone) Dark grey fine - med. grained rock with both dark grey and light grey 4-8mm spots; qtz-feldspar rich with fine muscovite & fine biotite or chlorite? Minor beds light grey f'sp quartzite | | | | | | | | | | | |
| | | Structure: Well bedded - banded at 65-70°; Section broken core; | | | | | | | | | | | |
| | | Mineralization: tr Py in qtz veinlets | | | | | | | | | | | |
| 687.8 | 689.5 | LIGHT, DARK GREY FELDSPATHIC QUARTZITE As above 674-686.2 | | | | | | | | | | | |
| | | Structure: well fractured with broken core | | | | | | | | | | | |
| 689.5 | 695.8 | DIABASE DYKE Massive dark grey med grained speckled with 1-2mm light grey, feldspar clusters. Strongly magnetic | | | | | | | | | | | |
| | | Structure: 20cm parallel dyke (included in section) or qtzite inclusions at top contact - Ct at 70-45° fractured & chlontic - sharp & chilled lower Ct chilled at about 45° | | | | | | | | | | | |
| 695.8 | 698.8 | LIGHT GREY FELDSPATHIC QUARTZITE + GREYWACKE As above Gwk beds 698.8-697.9 (Gwk has qtz sand with interstitial qtz feldspar, some mafic minerals) | | | | | | | | | | | |
| | | Veins: 696.3-13cm mottled white & grey qtz, minor musc-flecks & pale green ser. selvages 60° 695.9 - 2-3cm grey mottled qtz with Py chl tr Moly - 45° | | | | | | | | | | | |
| | | Mineralization: 696.8-697.2 - 8% diss'n & veinlets of Py + a little Moly - with musc & some qtz veinlets (obscured because of broken core) | 4567 | 695.8 | 697.2 | 1.4 | nil | nil | 700 | 25 | 660 | 0.5 | (0.117 %MoS ₂) |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | EST | ASSAY | GEOCHEM. ANALYSES | | | | |
|--------|---------|--|------------|-------|-------|--------|--------------------|-------|-------------------|-----|-----|-----|----|
| | | | | | | | | | % | % | ppm | ppm | |
| FROM | TO | | | | | | WO | WO | Mo | Sn | | | |
| 698.8 | 700.4 | HORNFELS - (ALTERED SILTSTONE) Dark grey, uniform, weakly spotted in placed only moderate hardness - probably f'sp which are major constituent are altered; chlontic - possibly some biotite, minor fine muscovite Structure: weak to moderate schistosity at 60-75° | | | | | | | | | | | |
| 700.4 | 704.9 | ALTERED LIGHT GREY FELDSPATHIC QUARTZITE As above Structure: Mostly massive. Local banding at 50° Alteration & Veins: 15% of unit pale green due to sericite spreading out from fractures & qtz veins; Wide selvages of light grey - pale brown mica (muscovite) a long q.v. and some fractures affect 5-10% of unit 700.6 - 1-2cm white mottled q.v. tr Moly Py, 45° 701.2 - qtz-musc veinlet minor Moly 701.4-701.6 - white qtz veinlets, green sericite, selvages tr Moly 701.9 - qtz veinlet tr Asp 702.3 - 2-4mm nearly solid Asp with minor qtz at 20° 702.9 - 1cm white qtz - musc - selvage, minor Py tr Wolframite?20 703.1 - 11cm white qtz + 3cm musc selvage at 65° 704 - 2cm qtz pale green ser., thin Moly partings tr Schiel; 50° Mineralization: See veins; Minor diss'n of Py here and there | 4568 | 700.4 | 701.9 | 1.5 | nil | nil | 74 | 5 | 120 | 4.5 | |
| | | 4569 | 701.9 | 703.4 | 1.5 | " | nil | 25 | 5 | 5 | 5 | 56 | |
| | | 4570 | 703.4 | 704.9 | 1.5 | tr | | 140 | 5 | 130 | 4.5 | 2 | |
| 704.9 | 706.1 | QUARTZ VEIN - 'GREISSEN' ZONE White & med grey mottled qtz veins up to 20cm make up ½ of unit; approx. 20% light grey qtzite. Remainder wide muscovite vein selvages & masses within veins; Pale green sericite well developed as vein selvages near upper Ct Structure: Upper Ct a fracture at 5-10°, elsewhere veins at 40-70° Mineralization: Py 2-3% blebs scattered enhedra, & diss'n in qtzite; Minor Cp with Py tr Asp intergrown with Py at 705.3 & in q.v. at bottom; ½-1% Moly on selvages of q.v. slips and with Cp; tr scheel at 705.0 | 4571 | 704.9 | 706.3 | 1.4 | | | 460 | 20 | 630 | 5 | 37 |
| | | | | | | | (0.077% | | | | | | |
| | | | | | | | MoS ₂) | | | | | | |

| METRES | | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|--------|---------|---|------------|------|----|--------|--------|
| FROM | TO | | | SAMPLE NO. | FROM | TO | LENGTH | |
| 706.1 | 706.3 | | F.P. DYKE Light brown medium to fine grained 15% 0.5-2mm white anhedral f.sp phenocrysts with f.sp qtz. matrix and approx. 5% fine muscovite, irregular contact with hornfels, with small dykelets injected into hornfels | | | | | |
| 706.3 | 708.2 | | SPOTTED HORNFELS (Altered Siltstone) Alteration: light grey spots rich in light brown white mica (muscovite Brownish hue in places suggests fine biotite present, wcrmy pale green-brown calcite - ser alt'n in bottom 20cm Structure: banding-bedding 65-70° Veins: 707.5-707.9 - Vein zone - conformable; 20% light blue grey mottled or white qtz, with light grey bleached (sil'd) material, minor pale green, muscovite sericite tr Py, Po Cp Remarks: 15cm pale brown f.sp phryic muscovite-bearing dyke has sharp contact with q.v. - Ct with hornfels has small off-shoots & pale brown calcitic selvage: tr Moly in dyke | | | | | |
| 708.2 | 708.8 | | LIGHT GREY FELDSPATHIC QUARTZITE As above | | | | | |
| 708.8 | 709.65 | | F.P BRECCIA DYKE Matrix as above at 671 & 706.2; 4-5% muscovite Structure: Intrusive Bx with 30% angular qtzite clasts up to 15cm; Cts irregular at about 45° & 25° Alteration & Veins: A little Fe-bearing carb(?) around clasts 708.8 - 3-5cm white qtz vein; pale green rhomb of sericitized mineral, minor Py, musc. 709. - 4-8 cm as above + tr Mo 709.4 - 3cm white qtz vein + musc tr Mo, tr Asp Mineralization: tr diss'd Py | | | | | |
| .65 | 711.8 | | SERICITIZED FELDSPATHIC QUARTZITE Pale green, dark grey, light grey; alt's f.sp quartzite - proto-quartzite: | | | | | |

| METRES | SECTION | DESCRIPTION | | | | | GEOCHEM ANALYSES | |
|--------|---------|---|------------|-------|-------|--------|----------------------------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | ppm Mo | ppm Cu |
| | | 719.9 - 16cm mottled grey qtz with seams & partings Moly in bx'd zone at 60° | 4580 | 719.5 | 721 | 1.5 | 220 | 85 |
| | | 721.1 - 10cm mottled grey qtz; 1-4mm Moly Selvages 70° | 4581 | 721 | 722.5 | 1.5 | 1200 | 180 |
| | | 721.5-721.85 - banded vein zone light grey qtz + musc & pale green sericite; a few % Py & partings & dess & Moly - 40° | | | | | | |
| | | 722.5 - 1cm qtz-Py + Moly films - 50° | Avg. | 719.5 | 722.5 | 3.0 | (0.118% MoS ₂) | |
| | | Mineralization: See veins: Minor conc'n Py | | | | | | |
| | | 720-720.3 - films Moly in matrix of angular bx | | | | | | |
| | | Minor to tr Moly here & there throughout unit with qtz veinlets & films on fractures | | | | | | |
| | | Remarks: 712.25-712.53 - diabase dyke chilled contacts at 65° magnetic | | | | | | |
| 723.1 | 725.5 | FELDSPATHIC QUARTZITE + SPOTTED HORNFELS About half & half dark grey, light grey m-f.g. sand size Sections of spotted muscovite bearing hornfels 5 to 30 cm making up 10% of unit | | | | | | |
| | | Structure: bedding 70-75°; short sections of broken core | | | | | | |
| | | Alteration: some bleaching sil'n above fractures: a little musc. in hornfels & qtz veinlet selvages | | | | | | |
| | | Veins: 725m - 4cm white qtz minor musc., Py, Po, Cp, Moly; 75° | | | | | | |
| | | Mineralization: Minor parting Moly at 723.4 tr Py diss'n rim qtz veinlets; | | | | | | |
| 725.5 | 727.2 | HORNFELS - ALTERED SILTSTONE - ARGILLITE As above; 30cm grey f.sp qtzite at 726m; Grades to dark grey f.sp qtzite in placed | | | | | | |
| | | Alteration: Weak musc. spotting here & there | | | | | | |
| | | Veins: 726.6 - 10cm pale green ser'd f.sp with grey qtz, minor musc. *Moly parting at bottom 50-70° | | | | | | |
| | | Mineralization: 726.9 - 1% scheel with diss'd Po over 5cm in calcitic section | | | | | | |

| METRES | SECTION | DESCRIPTION | | | | | GEOCHEM. ANALYSES |
|--------|---------|---|------------|-------|-------|--------|---|
| | | | SAMPLE NO. | FROM | TO | LENGTH | |
| | | Structure: Mostly massive; hornfels banded (bedded) at 43° at 733m; mod-frac'd; | | | | | |
| | | Alteration: Pale green pervasive & fracture-controlled sericite 734.6-735.3m; fine biotite? in hornfels | | | | | |
| | | Mineralization: tr Py as scattered subes | | | | | |
| 735.3 | 736.2 | QUARTZ VEINS + FELDSPATHIC QUARTZITE 50% mottled blue grey qtz largest vn 20cm at bottom with blebs Py a little Cp & 3-5mm selvage of Moly. Moly in veins from 735.6-736.2; 5% Py as clusters of cubes in quartz over 50cm in middle, musc. selvages, qtzite sericitized | 4585 | 735.2 | 736.3 | 1.1 | 2000 500 31 (0.091% MoS ₂) |
| 736.2 | 740.4 | I/B GREYWACKE, HORNFELS - ARGILLITE & LIGHT GREY FELDSPATHIC QUARTZITE 736.2-736.8 - argillite - spotted hornfels 736.8-737.2 - gwk + hornfels 737.2-737.6 - light grey feldspar qtzite bleached, sil'd 737.6-738.4 - gwk 50% affected by pale green sericite alt'n; 738.4-740.1 - dark green gwk with short sections of hornfels 740.2-740.4 - thin bedded gwk with 30% heavy Po Py minor Cp with 2cm solid Po-Cp at 740.3 | AVG. | 730.7 | 736.3 | 5.6m | |
| | | Structure: bedding 737 - 45°; 740 - 45°; Flame structure at bottom Ct | | | | | |
| | | Veins: Minor qv here & there with a little Po & Cp 739.3 - 10cm light grey qtz. tr Py 40° 740 - 5cm grey qtz - calc minor chl 45° | | | | | |
| | | Mineralization: see above; tr scheel in 2cm solid Po-Cp at 740.3 yellow fluor. min in qv at 739.6m | | | | | |
| 740.4 | 743.0 | SPOTTED HORNFELS - ARGILLITE Fine grained dark green - black, relatively soft | | | | | |
| | | Structure: bedded in places and weak cleavage at 60-65° | | | | | |
| | | Alteration: Dark brown colour in places indicates fine biotite; About 1/4 unit with 5mm light grey musc. bearing spots; A few sections flecked with fine muscovite | | | | | |

| METRES | SECTION | DESCRIPTION | | | | | EST | ASSAY | GEOCHEM. ANALYSES | | | | | |
|--------|---------|--|------------|-------|-------|--------|-----------------|-----------------|---------------------|---------|------|------|-----|-----|
| | | | SAMPLE NO. | FROM | TO | LENGTH | | | % | % | ppm | ppm | ppm | ppb |
| FROM | TO | | | | | | WO ₃ | WO ₃ | Mo | Sn | Cu | Ag | Au | |
| | | Mineralization: 3% diss'n & 1-8mm cubes Py scattered grains Asp. & tr Cp | | | | | | | | | | | | |
| 756.5 | 757.0 | QUARTZ VEIN light - dark grey mottled; abundant musc. layers & selvages 3-5% Py streaks, diss'n & large blebs, scattered Asp well min'd with Moly - with partings & streaks up to 2-3mm thick EST'd grade 0.5% Mo | 4589 | 755.7 | 757.2 | 1.5 | tr. | - | 1900 | 15 | 360 | <5 | 63 | |
| 757.0 | 759 | LIGHT GREY FELDSPATHIC QUARTZITE, MINOR HORNFELS Dark grey mottling due to sulphides & very minor mafics (may be some calc-silicates present?); 757.1-757.4 hornfels Structure: Mostly massive, thin bedding at 758m at 54° | AVG. | 754.3 | 759.2 | 2.9 | | | (.166 | (0.067 | | | | |
| | | | | | | | | | %MOS ₂) | % Cu) | | | | |
| 759 | 763 | HORNFELS WITH FELDSPATHIC QUARTZITE, MINOR GARNET SKARN Uniform to spotted dark green 759.7-760 - impure feldspar quartzite 761-761.3 - sil amph Sk-impure feldspar atrite 761.3-761.5 - garnet skarn 761.5-761.8 - impure feldspar quartzite Structure: banded - bedded to massive bedding 48° at 761 | | | | | | | | | | | | |
| | | Mineralization: 1-3% diss Po-Py with quartzite + skarn sections noted above; scheel with Po, but more restrictive, with mod diss'n 4590 759.7-760; at 761.1 & from 761.3-761.6m | 4590 | 759.7 | 760.7 | 1.0 | .04 | 0.080 | 40 | | 230 | <0.5 | - | |
| | | | 4591 | 760.7 | 761.7 | 1.0 | .07 | 0.120 | 38 | | 1200 | <0.5 | - | |
| 763 | 774.5 | LIGHT GREY FELDSPATHIC QUARTZITE WITH HORNFELS As above; Med grey mottling Uniform to spotted hornfels as follows: 763.9-764.2; 764.9-765.3; 769.7-770; 770.5-770.8; 772.2-772.3; Structure: Unit moderately to strongly fractured & cemented with qtz. - fractures every 1-5cm; some sections broken core especially toward bottom; Banding at 764 - 56°; 771 - 50°; 772 - 60° Alteration: a little pervasive pale green sericites in top 1m + at 770.4m; Musc. as q.v. selvages, in hornfels sections & speckled thru rock here & there: Light grey colour - bleaching & weak silicification. | AVG. | 759.7 | 761.7 | 2.0 | | 0.10 | | 715 | | | | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 20 OF 31

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | EST | ASSAY | GEOCHEM. ANALYSES | |
|--------|---------|--|------------|-------|-------|--------|-----------------|-----------------|-----------------------------|----------|
| | | | | | | | | | % | ppm |
| FROM | TO | | | | | | WO ₃ | WO ₃ | Mo | Cu |
| 779.3 | 780.2 | QUARTZ VEIN 60% mottled light and dark grey with pale green sericitized quartzite, a little coarse muscovite minor calcite, 2-4% blebs Po 1-2% Moly as diss'n & partings up to 2 or 3 mm, minor Py, tr Cp | 4598 | 779.0 | 780.5 | 1.5 | | | 1000 | 730 |
| 780.2 | 780.8 | LIGHT GREY FELDSPAR QUARTZITE As above tr Py & tr Moly on slip at 780.5 | | | | | | | | |
| 780.8 | 782.5 | SPOTTED HORNFELS + DARK AND LIGHT GREY FELDSPAR QUARTZITE As above: unit about 30% qtz-gwk Both biotite & musc. present | | | | | | | | |
| | | Structure: bedding - cleavage at 40° | 4599 | 780.5 | 782 | 1.5 | | | 48 | 100 |
| | | Veins: 781.3 - 10cm dark grey & light grey mottled qtz incl. 2-3cm pale grey ser'd selvages 10% Po blebs 50° | | | | | | | | |
| 782.5 | 786.9 | LIGHT GREY & DARK GREY FELDSPAR QUARTZITE 60% light grey to pale green feldspathic quartzite 40% dark grey biotite feldspar quartzite for gwké 784 - 10cm spotted hirnfels | | | | | | | | |
| | | Structure: Most is thin bedded at 35° | | | | | | | | |
| | | Alteration & Veins: Light grye sections appear to be bleched & altered equivalent of dark grey section - flecked with pale green sericite, numerous small grey qtz veinlets in some sections | | | | | | | | |
| | | A little musc. as flecks here & there Light grey to white conformable qv with Moly diss'n & selvages minor Po here & there + isolated tr black metallic (illmenite?) with layer veins as folows: | | | | | | | | |
| | | 10cm at 782.5; 5cm at 782.8; 2cm at 783.6, stockwork 784.4-784.7; 784.8 - 15cm grey mottle qtz vein with minor musc, sericite, Po & 1-2% Moly - 40° | | | | | | | | |
| | | 785.5-785.7 - 5mm-1cm grey q.v. with Moly selvages minor Po tr Cp 783.3 - 1cm q.v. with selvaged pale green columnar minerals; | 4600 | 782.0 | 783.5 | 1.5 | nil | nil | 630 | 78 <0.5 |
| | | Mineralization: See Veins: Qtz veins with 1-2% Moly spaced at 8mm to 30cm from 782.5-786.1 | 4601 | 783.5 | 785 | 1.5 | nil | nil | 260 | 91 <0.5 |
| | | | 4602 | 785.0 | 786.5 | 1.5 | nil | nil | 640 | 150 <0.5 |
| | | | AVG. | 768.5 | 786.5 | 18.0 | | | (0.076 % MoS ₂) | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 23 OF 31

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|---------|--|------------|------|----|--------|--------|
| | | | SAMPLE NO. | FROM | TO | LENGTH | |
| | | Alteration: Short lighter brown, more biotite-rich sections here & there. | | | | | |
| | | Mineralization: Minor Gf - +/- moly on slip at 804 m. | | | | | |
| 805.9 | 808.9 | LIGHT GREY FELDSPATHIC QUARTZITE with Spotted Hornfels As above. 806.2 - 806.4 Weakly hornfelsed gwk. 806.9 - 807.4 Spotted musc.-biot hornfels. | | | | | |
| | | Structure: Well bedded at 60° to massive, well fract. (every 1-5 cm) | | | | | |
| | | Alteration: Minor pale green ser. alteration of f.sp. A little musc. & qtz.-musc. veinlets. | | | | | |
| | | Veins: Minor qtz-musc. +/- Py-Po veins. 805.9 - 1-2 cm grey qtz & Py, Po tr nat Bi - 75°. 806.5 - 806.9 - 1-10 mm grey qtz & white hard acicular mineral & Py, Po tr Moly. 60-80°. | | | | | |
| | | Mineralization: See 'Veins'. Minor conc. Py (pyritohedra) here & there esp. near qv. | | | | | |
| 808.9 | 809.25 | MUSC. GRANITE DYKE Grey, m.g., equigranular; - quartz-rich; 5-8% musc. very minor biotite. | | | | | |
| | | Structure: Ctr. at 80 & 135° - Lower ct. cross-cuts bedding in qtzite. | | | | | |
| | | Mineralization: 1-2% Py, tr Cp, tr Moly. | | | | | |
| 809.25 | 812.4 | LIGHT GREY FELDSPATHIC QUARTZITE As above, minor sections hornfelsed gwk. | | | | | |
| | | Structure: Well bedded at 60°. | | | | | |
| | | Alteration: Speckled due to weak ser. alteration(?) of feldspar. Some sections flecked with fine musc. Unit generally bleached. | | | | | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | ASSAYS | |
|--------|---------|--|------------|-------|-------|--------|--------------------|-------|
| | | | | | | | ppm | ppm |
| | | Veins: Minor grey & grey mottled qtz-musc. veins & veinlets with minor Py, Po & tr to minor Moly. at 809.9, 811-811.4 & 812-812.2. | 4608 | 811 | 812.3 | 1.3 | | Mo Cu |
| | | Mineralization: See 'Veins', minor diss'n & veinlets of Py. | | | | | 320 | 78 |
| | | | | | | | (0.053%) | |
| | | | | | | | MoS ₂) | |
| 812.4 | 815.9 | SPOTTED BIOTITE MUSCOVITE HORNFELS & FELDSPATHIC QUARTZITE As above, bottom 0.5 m, grades in qwk. 813.1 - 813.6 Weakly calcareous, calc-silicated(?) or alt'd (f.sp.) feldspathic quartzite. | | | | | | |
| | | Structure: bedding 45-60°; more arenaceous sections moderately fractured. 815 - 815.7 broken core due to fracture parallel to core. | | | | | | |
| | | Mineralization: quartzite from 813.1 - 813.6 contains 2-3% diss'd minor Po and discont weak diss'n schiel & tr Mo. tr diss schiel. with Py at 814.4 & with 5 mm q.v. at 814.9; 815 - tr Mo on 'slip'. | | | | | | |
| 815.9 | 822.8 | ALTERED LIGHT GREY FELDSPATHIC QUARTZITE As above; Minor spotted (hornfelsed) qwk 816.5 - 817.1. | | | | | | |
| | | Structure: Moderately to poorly fractured with calcite cement. | | | | | | |
| | | Alteration & Veins: Light parts, speckled due to mod. pale green ser'n of feldspar; fine musc. flecks throughout 817.9 - 818.5 qtz musc. veining (q.v. up to 2 cm) with minor Po, Py & tr Moly; tr Cn; incl. 5cm musc. rock; | 4609 | 818 | 819.5 | 1.5 | 140 | 67 |
| | | 819-822.4 - 3m-1cm qtz minor Py, Moly veins - spaced 15-30cm | 4610 | 819.5 | 821 | 1.5 | 270 | 48 |
| | | 819.4 - 1cm grey q.v. tr Asp | 4611 | 821 | 822.5 | 1.5 | 170 | 45 |
| | | 816.2-816.4 - qtz veinlets up to 1cm with abundant Py in wall rock, musc. & tr scheel; | AVG. | 818 | 822.5 | 4.5 | (0.032%) | |
| | | Remarks: 819.8-820 - pale green very hard weakly f.sp phyric felsite dyke; | | | | | MoS ₂) | |
| 822.8 | 833.8 | HORNFELSED GREYWACKE Minor Light Grey Feldspathic Quartzite Medium grey with vague light grey spotting & mottling, due to aggregates of fine muscovite; qtz (sand) grains surrounded by qtz-feldspar biotite & muscovite. Short biotite rich sections are probably hornfelsed siltstone - argillite; Sections light grey - pale green quartzite as follows: 824.2-825.2; 830.1-830.5 | | | | | | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|---------|--|------|----|------------|------|--------|
| | | | FROM | TO | SAMPLE NO. | FROM | |
| | | Structure: Mostly massive & unbedded; bedding angle; 825m-500; 832-45°; | | | | | |
| | | Alteration & Veins: A little pale green sericite in sections of light grey quartzite (see above) Minor qtz & qtz-musc. +/- Py veins; 829.7 - 1cm grey qtz with Moly selvages 35° 830.9 - 1cm grey qtz + musc. minor Py & tr Bi parallel to core 831-831.5 - bleached, seritized with 5-15mm grey qtz musc. tr Moly; | | | | | |
| 833.8 | 842.3 | LIGHT GREY FELDSPATHIC QUARTZITE Medium grained qtz-feldspar arenite; Minor sections of hornfelsed, mottled - spotted qwk as in previous unit; - speckled appearance; a little coarser grained than previous units | | | | | |
| | | Structure: Massive - poorly bedded; Weak fracturing in places cemented with white calcite; | | | | | |
| | | Veins: 834.7-834.9 - grey q.v. up to 1cm with tr Moly 836.8 - 1cm qtz with tr Moly 840 - 5mm grey qtz with diss'd Moly; | | | | | |
| | | Mineralization: tr - minor diss'd Py here & there; | | | | | |
| 842.3 | 847.5 | I/B BIOTITE +/- MUSCOVITE HORNFELS (SILTSTONE) & GARNET SKARN Hornfels is dark grey to dark brown uniform, fine grained biotitic or spotted with muscovite; garnet skarn is thin banded avg. 25% pale red with quartz, feldspar & sulphides; appears to be formed from calcareous, feldspathic quartzite; Garnet skarn - calc-sil'd quartzite as follows: 842.5-842.7; 843.5-843.9; 844.1-844.3; 845.6-845.8; 846-846.2; Short sections of qtz-fsp amphibole skarn generally separating garnet skarn & biotite hornfels | | | | | |
| | | Structure: Hornfels thick bedded - massive, skarn-qtzite thin bedded; bedding angles avg. 48°; | | | | | |
| | | Alteration: a little 'wormy' light grey sil'n | | | | | |
| | | Veins: 844.1 - 2cm light grey qtz + f.sp tr Moly - 50° 844.3 - 2cm light grey qtz + f.sp tr Moly - 35° | | | | | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 28 OF 31

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. F-33-9

SHEET 30 OF 31

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | EST. | ASSAY | GEOCHEM. ANALYSES | | | |
|--------|---------|--|------------|-------|-------|--------|-----------------|--------------------------------------|-------------------|-----|------|---------------|
| | | | | | | | | | % | % | ppm | ppm |
| FROM | TO | | | | | | WO ₃ | WO ₃ | Mo | Cu | Ag | |
| | | 925.5 - 1-2 cm grey qtz minor musc tr Moly. | | | | | | | | | | |
| | | 926.5 - 1-2 cm grey-white qtz minor Po, tr Cp. | | | | | | | | | | |
| | | 934.5 - 3 cm light grey mottled qtz minor Po, tr Cp & minor Scheel. | | | | | | | | | | |
| | | 934.8 - 2 cm white qtz, minor Po, tr Cp. | | | | | | | | | | |
| | | 937.2 - 0.5 cm light grey qtz & musc. - X-cutting: 15° to core. | | | | | | | | | | |
| | | 938.7 - 3 cm light grey-white mottled with 25% Po blebs, tr Cp & minor Moly | | | | | | | | | | |
| | | 942.3 - 2 cm grey qtz-white feldspar with Po, minor Cp & Scheel. | | | | | | | | | | |
| | | Alteration: A few particularly dark layers have brown hue due probably to fine biotite & are weakly spotted with muscovite clusters | | | | | | | | | | |
| | | Mineralization: See veins; Minor Py & Po & tr Cp mainly in pale green calc-silicate | 4628 | 923.8 | 925 | 1.2 | .07 | 0.018 | 50 | 80 | <0.5 | |
| | | | 4629 | 925 | 926.1 | 1.1 | .03 | 0.030 | 13 | 65 | <0.5 | |
| | | 922.7-923.8 - 1-3% diss'd Po in siltstone; Weak to locally mod. diss'n Scheel. in calc. sil. bands: 920.9-921.2; | 4630 | 930.6 | 932.1 | 1.5 | .08 | 0.076 | 22 | 160 | <0.5 | |
| | | 923.9-924.2; 925.3-925.5 at 926 at 927.4; short sections 929.6-937.8; at 940.1; 942.3-943.3 & 946-947.2 m. | 4631 | 932.1 | 933.6 | 1.5 | tr | 0.006 | 40 | 160 | <0.5 | |
| | | | 4632 | 933.6 | 935.2 | 1.5 | .08 | 0.040 | 49 | 150 | <0.5 | |
| | | | Avg. | 930.6 | 935.2 | 4.5 | | 0.041 | - | - | - | |
| | | Remarks: Looks like poorly altered part of main F-33-10 skarn zone | | | | | | | | | | |
| | | - calcareous siltstone member | 4633 | 942.2 | 943.3 | 1.1 | .07 | 0.034 | 27 | 330 | <0.5 | |
| 947.32 | | END OF HOLE | | | | | | | | | | |
| | | GENERAL COMMENTS | | | | | | | | | | |
| | | - Concentration of quartz-molybdenite +/- quartz musc.-sericite veins with narrow muscovite granite dykes from 670-822 m. | | | | | | ANALYSES BY X-RAY ASSAY LABORATORIES | | | | |
| | | | | | | | | Don Mills, Ontario | | | | |
| | | - Across larger diabase dyke (from 885-907 m) there is an abrupt change of rock assemblage - to north feldspathic quartzites i/b with muscovite spotted hornfelsed siltstone - south of dyke dominantly dark grey green greywacke (dark green calc-silicate) with subordinate light grey - light green (diopside or wollesonite) calc. silicate. Rocks south of dyke are similar to main F-33-10 skarn zone (calcareous siltstone member). i.e. - diabase dyke from 885 - 907m is thought to move the Base Line Fault. | | | | | | Au by F.A.DCP | | | | |
| | | | | | | | | Cu DCP | | | | |
| | | | | | | | | Mo DCP | | | | Geochemical |
| | | | | | | | | Ag DCP | | | | Determination |
| | | | | | | | | Sn EMS | | | | |
| | | | | | | | | WO ₃ XRF Assay | | | | |

NOVAMIN RESOURCES INC.

DRILL LOG

HOLE NO. 3115-30

SHEET 1 OF 7

| PROPERTY FOSTUNG | | TP OR AREA FOSTER | AZIMUTH 136 | DATE STARTED April 19, 1986 | CORRECTED DIP TESTS | | | | LOCATION SKETCH OF HOLE | |
|-----------------------|--|--|--------------------------------|-------------------------------------|---------------------|--|--|--|-------------------------|--|
| PROJECT 3115 | | LOT & CONC. SE $\frac{1}{4}$ S $\frac{1}{2}$ LOT 8/CON IV | DIP $78\frac{1}{4}^{\circ}$ | DATE COMPLETED April 21, 1986 | | | | | | |
| CLAIM NO. S-398147 | | CO-ORDINATES. 5853.28N/8595.08E | LENGTH 146.22 m | DRILLED BY McKnight Drilling Co. | | | | | | |
| GRID NO. | | 167.8m grid N of B.L. CORE SIZE BQ | COLLAR ELEV. 1502.93m | LOGGED BY Art Beecham | | | | | | |
| | | | | | | | | | | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO | FROM | TO | LENGTH | ASSAYS | | | | |
|--------|---------|--|-----------|------|----|--------|------------------------|--------|---------|-----------|--------|
| | | | | | | | TROPARD | TESTS | | | |
| | | OBJECTIVES:- Test for Espanola Limestone under F-33-10 Zone; | | | | | | | | | |
| 0 | 6.7 | CASING | | | | | Depth | Dip | Mag.Az | Tr.Az. | |
| 6.7 | 40.5 | FRACTURED, GREY FELDSPATHIC QUARTZITE with MINOR SILTSTONE - DARK GREEN CALC-SILICATE Medium to dare grey medium grained to locally gritty feldspathic quartzite. Light grey speckled sections with altered feldspar or pale calc-silicates; a little fine muscovite. Sections of dark grey - black massive siltstone - dark calc-silicate or dark quartzite as follows: 6.9-8.1; 16.6-17; 17.3-18.1; 36.2-37.5; 38.5-39.0m | | | | | 50m | 79° | 142° | 134.5° | |
| | | Structure: Mostly massive: Bedding at 37m at 60° Moderately strongly fractured with numerous sections of broken core particularly above about 16m, or with calcite cement - Minor healed bx at 23 | | | | | 144m | 78° | 143° | 135.5° | |
| | | Alteration: A little wormy and fracture controlled bleaching - sil'n | | | | | DOWN HOLE CO-ORDINATES | | | | |
| | | Veins: 23.7-12cm band at calcite + pink sil'n or feldspathization, tr scheel 65-80° 31.5-1cm grey mottled qtz minor Py-15 38-2cm grey mottled qtz minor Py weak musc selvage - 15' | | | | | DEPTH | X | (140°) | Y (VERT.) | Z(230) |
| | | Mineralization: tr Py here and there; tr cp on fractures at 7.9m; tr scheel here and there in qtz + Py veinlets and in fractures: 17.9-2cm of 1% disseminated scheel with disseminated Py in siliceous skarn or q.v.? 23-23.5 tr disseminated scheel 28.7 $\frac{1}{2}\%$ scheel disseminated over 10 cm | | | | | Collar | 0 | 0 | 0 | |
| | | | | | | | 25m | 5.1 | 24.5 | -0.36 | |
| | | | | | | | 97m | 18.8 | 95.2 | -1.7 | |
| | | | | | | | 146.22 | 28.96m | 143.30m | -2.47m | |

| METRES | SECTION | DESCRIPTION | | | | | ASSAYS |
|--------|---------|--|------|----|------------|------|--------|
| | | | FROM | TO | SAMPLE NO. | FROM | |
| 40.5 | 58.7 | <p>GREY, THIN-BEDDED FELDSPATHIC QUARTZITRE Minor Calc-Silicated Quartzite Mostly medium to light grey finely speckled due to feldspar and/or white calc-silicate minerals; - medium to coarse quartz rich feldspathic arenite; 54.4-58.7 - predominantly dark grey quartzite with dark green calc-silicate matrix</p> <p>Structure: Thin 2-5mm, uniform bedding through except massive (thick bedded) section 49.7-53.2 Bedding angles: 42°-72°; 45°-67°; 48°-67°; 55°-62°; 58°-55° (Indicates N.W. dip of about 40°) Minor sections broken core; only weak fracturing with calcite cement.</p> <p>Veins: 45.5-1cm dark grey mottled quartz + calc. minor disseminated Py and 2cm diffuse pale green calcite (+/- sericite) selvages - 15°</p> <p>Mineralization: Py as minor films and disseminated here and there 42.7 - Minor Py, Scheel and trace Cp in qtz veinlets;</p> | | | | | |
| 58.7 | 59.5 | <p>FAULT ZONE Coarse, unhealed bx gouge seams up to 5mm at 30° +/-, broken core; minor Py</p> | | | | | |
| 59.5 | 66.2 | <p>GREY, THIN BEDDED FELDSPATHIC QUARTZITE As above and flecked with fine pale green calc-silicates;</p> <p>Structure: Bedding 58°: moderately fractured prominent fract. at 10-15° a</p> <p>Veins: Minor white qtz veinlets with trace Po, Py, Cp here & there</p> | | | | | |
| 66.2 | 67.0 | <p>FAULT ZONE Prominent fracture at 10-0°; highly fractured, broken throughout; -5mm gouge and qtz vein at 25° marks main fracture; -Minor white calc. veinlets & small vug</p> <p>Mineralization: Minor Po & trace scheelite in q.v. Minor Py in small vug;</p> | | | | | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | EST-% | ASSAY% | GEOCHEM. ANALYSES | | |
|--------|---------|--|------------|------|------|--------|-------|--------|-------------------|-----------------|-----|
| | | | | | | | | | WO ₃ | WO ₃ | % |
| FROM | TO | | | | | | | | Mo | Cu | Aq |
| 67.0 | 83.0 | GREY, THIN-BEDDED FELDSPATHIC QUARTZITE WITH CALC-SILICATED QUARTZITE As above flecked with fine pale calc-silicates incl. small tremolite rosettes + alt feldspars; Sections of more strongly calc-silicated quartzites which are blotchy pale and with green-grey wormy alteration, probably developed in more calcareous beds as follows: 69.4-69.9; 73.4-73.6; 76.3-76.5; 76.9-77.3° 78-78.7; 81.6-82.5; Unit very weakly calcareous, especially in calc-silicated sections; Structure: Thin bedding; 68m-60°; 70m-50°; 75.51m-50°; 80m-60° Veins: Minor light grey qtz with a little Py +/- Po tr Cp 79.6-1cm blebby vein white qtz, calc. & minor coarse fluorite Mineralization: (see veins); scheelite here & there as minor weak dissems. in qtz partings and veinlets: 67.9 - tr dissems. scheel over 10cm; 70.7 - $\frac{1}{2}$ tr dissems. scheel over 10cm 77-78.7: A few concentrations of scheelite up to .5%/10cm dissems in calc-silicated layers Minor - tr Py & Po with scheelite dissems. | 4635 | 77.0 | 78.6 | 1.6 | 0.5 | 0.034 | 2 | 260 | 0.5 |
| 83.0 | 91.2 | MASSIVE GREY FELDSPATHIC QUARTZITE, CALC-SILICATED QUARTZITE 83-84.5 - feldspathic quartzite with 30% bleached - calc-silicated sections 84.5-87.8 - feldspathic quartzite weakly speckled with pale calc-silicates 87.8-91.2 - dark grey protoquartzite - greystack with varying amounts dark green fine calc-silicates in matrix Structure: Moderately fractured: mostly unbedded or thick bedded Bedding angle at 88m-55° Veins: 86.4-87.8 - 10% stockwerk of 1-2cm milky white q.v. at various core angles 40° - 135° to 0° Py & Po - in minor amounts to 15% of veins + tr, Cp & scheel from 96.7-97.2m 89.6-1cm grey qtz minor Py, Po, scheel 90.4-90.5 - Two 5mm q.v. with 15% Po & dissems Po in wall rock Mineralization: See veins; Weak to mod. dissems. scheel with minor Py & Po at 84m & 86-87.6; (most of scheel in qtz stockwork is dissemed in calc-silicated rock). 90.6 minor scheel dissems over 10cm | 4636 | 86 | 87.5 | 1.5 | .08 | 0.044 | 10 | 580 | 1.0 |

| METRES | SECTION | DESCRIPTION | | | | | EST * | ASSAY | GEOCHEM. ANALYSES | | | | |
|--------|---------|---|------|-----|------------|------|-------|--------|-------------------|-----------------|-----|-----|-----|
| | | | FROM | TO | SAMPLE NO. | FROM | TO | LENGTH | | | | | |
| 91.2 | 104.3 | DARK GREEN WITH PALE GREEN CALC-SILICATE dark phase, 90-95% pale phase 5-10%; Dark phase consists mainly of dark grey to dark green medium-fine grained rock composed of qtz, feldspar and 10-over 50% light to dark green calc-silicate including small rosettes of tremolite. Light phase is pale green to grey f.g. qtz feldspar rich with pale calc-silicate minerals (diopside?) Pale green forms wavy masses and layers in dark green material; Pale green material moderately calcareous Structure: layering, at 55-62° Mineralization: Minor disseminated Py & Po here & there Isolated occurrences of scheelite here & there. Better concentrations as follows: 97.6-98.2 tr scheelite 98.7 $\frac{1}{2}$ %/10cm 98.9-99.2 fract. nearly parallel to core with films of scheelite Remarks: Beds of fine grained chocolate brown biotite hornfels 3cm at 99.5 and 15cm at 99.7 | | | | | | | WO ₃ | WO ₃ | ppm | ppm | ppm |
| 104.3 | 117.5 | MIXED PALE GREEN & DARK GREEN CALC-SILICATES with ACTINOLITE SKARN As previous unit except about 50:50 pale and dark phases; Structure: banding & bedding at 45° at top, 60° at 114m; Only weakly to moderately fractured Mineralization: Very minor Py, Po 105.9-106.4 tr disseminated scheelite in coarse Act. skarn 112.3-112.8 medium grained disseminated scheelite - mod. to strong Veins: 115-116.7 - 5mm to 1cm grey qtz. calcite minor Py & isolated scheelite grains - red brown chert-like selvage - vein parallel to core. Remarks: layers and wisps medium-coarse grained actinolite skarn mainly between dark and light phases; 105.8-106.4 banded actinolite skarn & pale green - grey calc-silicate; | 4637 | 112 | 113 | 1.0 | 0.2 | 0.210 | 12 | 220 | 2.0 | | |

| METRES | SECTION | DESCRIPTION | SAMPLE NO. | FROM | TO | LENGTH | EST % | ASSAY | GEOCHEM. ANALYSES | | | |
|--------|---------|---|------------|-------|-------|--------|-------|-------|-------------------|-----------------|------|-----|
| | | | | | | | | | WO ₃ | WO ₃ | ppm | ppm |
| 117.5 | 123 | PALE GREEN CALC-SILICATE with DARK GREEN CALC-SILICATE 75% light grey to pale green qtz-feldsp. rich fine grained rock. White quartzo-feldspathic streaks; mottled streaked with pale green calc-sil; Minor actinolite skarn between dark and light phases. Dark green varies from dark grey quartz-feldsp. rich siltstone - protoquartzite with minor calc-sil. to fine dark green rock; some fracture controlled dark minerals - (actinolite?) Structure: banding at 60°; Mineralization: 122.4-122.7 tr fract.-controlled scheel; | | | | | | | | | | |
| | | Remarks: 121.8-122.15 f.g. chocolate brown biotite hornfels | 4638 | 122.4 | 123.1 | 0.7 | tr | .066 | 99 | 140 | 2.0 | |
| 123 | 125.9 | PALE GREEN CALC-SILICATE WITH GARNET SKARN & MINOR DARK GREEN CALC-SILICATE Similar to previous unit except wisps scattered clusters & bands pale, red garnet make up 10-20% of unit; Section mod- strongly calcareous Structure: banding 65° Mineralization: Weak to strong disseminations med-f.g. scheel with Po mainly with garnet skarn; Best conc. Po & scheelite 2% and 1% resp. from 123.2-123.7; 124.5-124.65 scheel-sph minor Po in pale red skarn layer. | 4639 | 123.1 | 124.7 | 1.6 | 0.2 | .120 | 38 | 85 | 1.5 | |
| | | | 4640 | 124.7 | 126.0 | 1.3 | 0.03 | .012 | 5 | 46 | 1.0 | |
| 125.9 | 127.2 | SILTSTONE WITH PALE GREEN CALC-SILICATE As above. Siltstone is dark gren-qtz-f.sp.rich silt to fine f.sp'c protoquartzite Mineralization: Minor Po veinlets & dissem. $\frac{1}{2}$ % scheel/lcm at 127.1m; | 4641 | 126.0 | 127.0 | 1.0 | nil | nil | 52 | 160 | <0.5 | |
| 127.2 | 127.8 | WHITE SPECKLED CALC-SILICATE Distinct light grey f.g. qtz-feldspar matrix with 10-30%, 0.5 to 1mm light spots - diopside or wollastonite. Spots weakly calcareous. Top 10cm strongly calcareous - May be as useful marker; Bedding angles 55° Mineralization: tr scheelite at top Ct | 4642 | 127.0 | 128.0 | 1.0 | tr | .012 | 12 | 51 | 1.0 | |

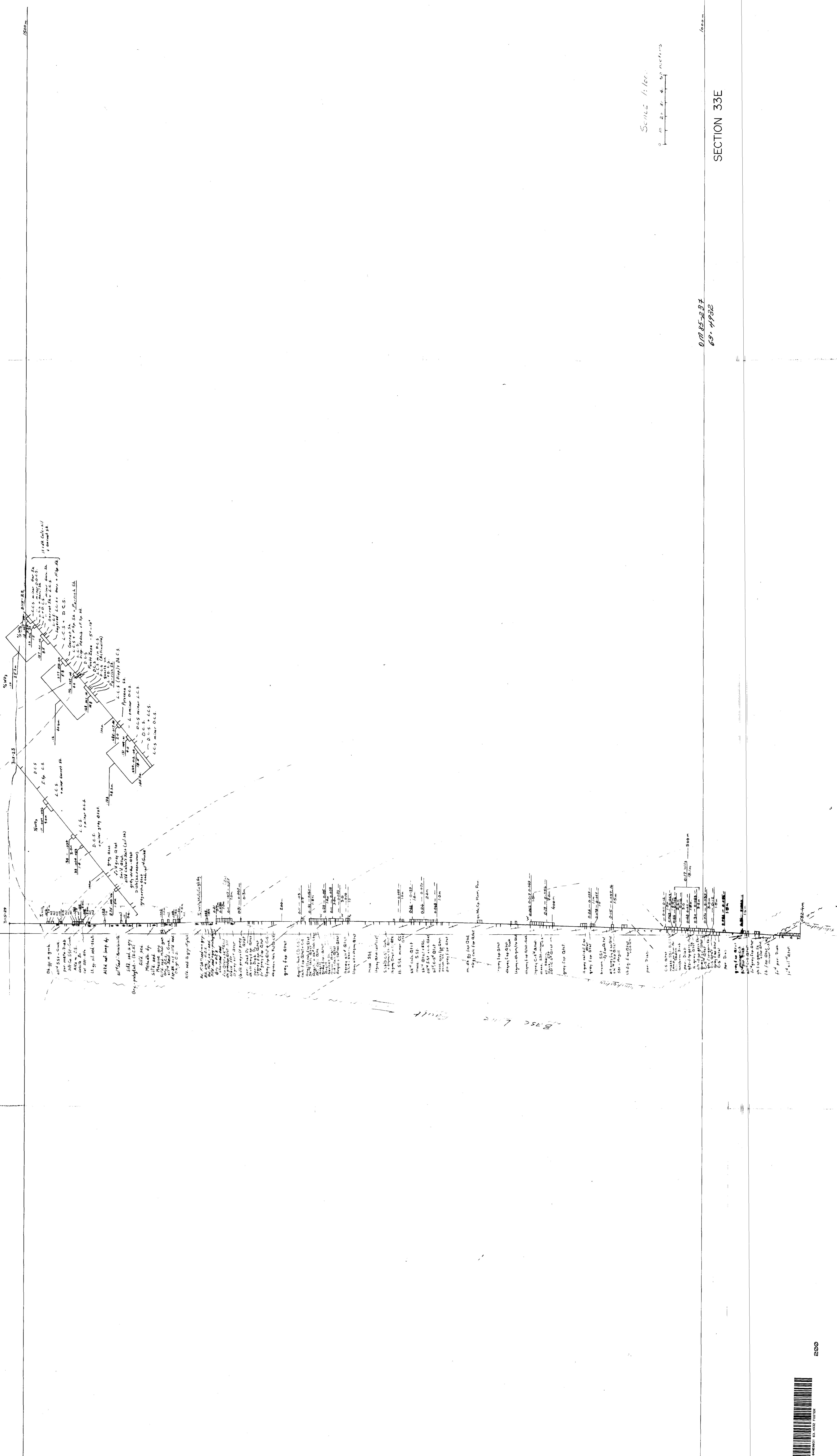
| METRES | SECTION | DESCRIPTION | | | | | EST % | ASSAY | GEOCHEM. ANALYSES | | | | |
|--------|---------|---|------|----|------------|-------|-------|--------|-------------------|-----------------|----------------------------|-----|-----|
| | | | FROM | TO | SAMPLE NO. | FROM | TO | LENGTH | % | ppm | ppm | ppm | |
| 127.8 | 129.4 | PALE GREEN CALC-SILICATE MINOR ACTINOLITE SKARN As above; possibly some dark px | | | | | | | WO ₃ | WO ₃ | Mo | Cu | Ag |
| | | Mineralization: 128.3-128.5 tr scheel in fracture & qtz veinlets with minor Cp-Po vns; | | | 4643 | 128.0 | 129.5 | 1.5 | .05 | .006 | 42 | 150 | 1.5 |
| 129.4 | 134.8 | PALE GREEN CALC-SILICATE WITH PALE RED GARNET SKARN MINOR DARK GREEN CALC-SILICATE & ACTINOLITE SKARN As above. About 15% pale red garnet skarn - mostly coarse sub-hedral to enhedral garnets as layers up to 15cm & wisps. Garnet sections & some pale green material mod-calcareous (not completely reacted.) Less 5% wisps, remnants dark green - calc-sil. Some wisps dark amphibole & as fracture selvages; tr vesuvianite at 130.2m Structure: banding at 40-50° Veins: 133.4-134.9, Several, 0.5 to 1cm grey calc-gtz veins at -5° to core with up to 5mm actinolite? - rich selvage, minor Po, sph & scheel Mineralization: Discont. weak to strong dissem scheel with Po, minor Py & local Moly. conc. scheel up to 1% over 20cm Minor sph here and there in very pale garnet skarn. Scheel blue & pale yellow fluoresc. 132.3-132.6 ½-1% scheel 4% Po, minor Py and a little Moly; | | | 4644 | 129.5 | 131.1 | 1.6 | .05 | .062 | 17 | 64 | 1.5 |
| | | | | | 4645 | 131.1 | 132.3 | 1.2 | .06 | .036 | 54 | 63 | 1.5 |
| | | | | | 4646 | 132.3 | 133.7 | 1.4 | .2 | .110 | 260 | 150 | 1.5 |
| | | | | | 4647 | 133.7 | 134.9 | 1.2 | .08 | .048 | 16 | 190 | 2.0 |
| 134.8 | 143.4 | PALE GREEN CALC-SILICATE WITH DARK GREEN CALC-SILICATE MINOR SPECKLED WHITE CALC-SILICATE As above; 134.8-136.5 - Pale green calc-sil 136.5-143.4 - Pale & dark green calc-sil in about equal proportions 137.4-137.7 - Speckled white calc-sil as at 127.5 + pale green calc sil, minor pale garnet skarn; strongly calcareous; 139.8 - 5cm speckled pink calc-sil A few sections here and there strongly calcareous; Structure: Banding at 40° | | | AVG. | 129.5 | 134.9 | 5.4 | | .066 | (0.015% MoS ₂) | | |

NOVAMIN RESOURCES INC.

DRILL LOG

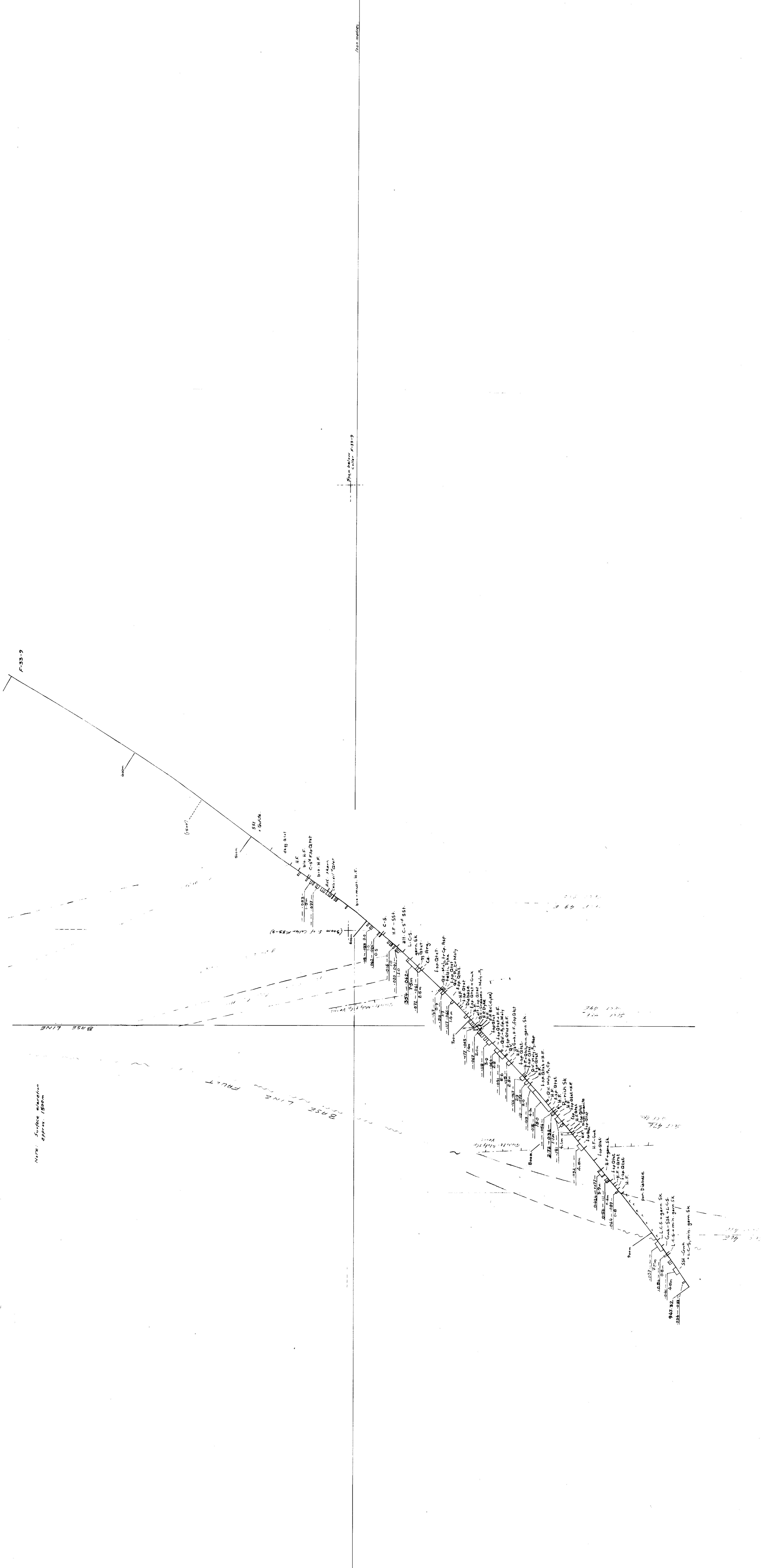
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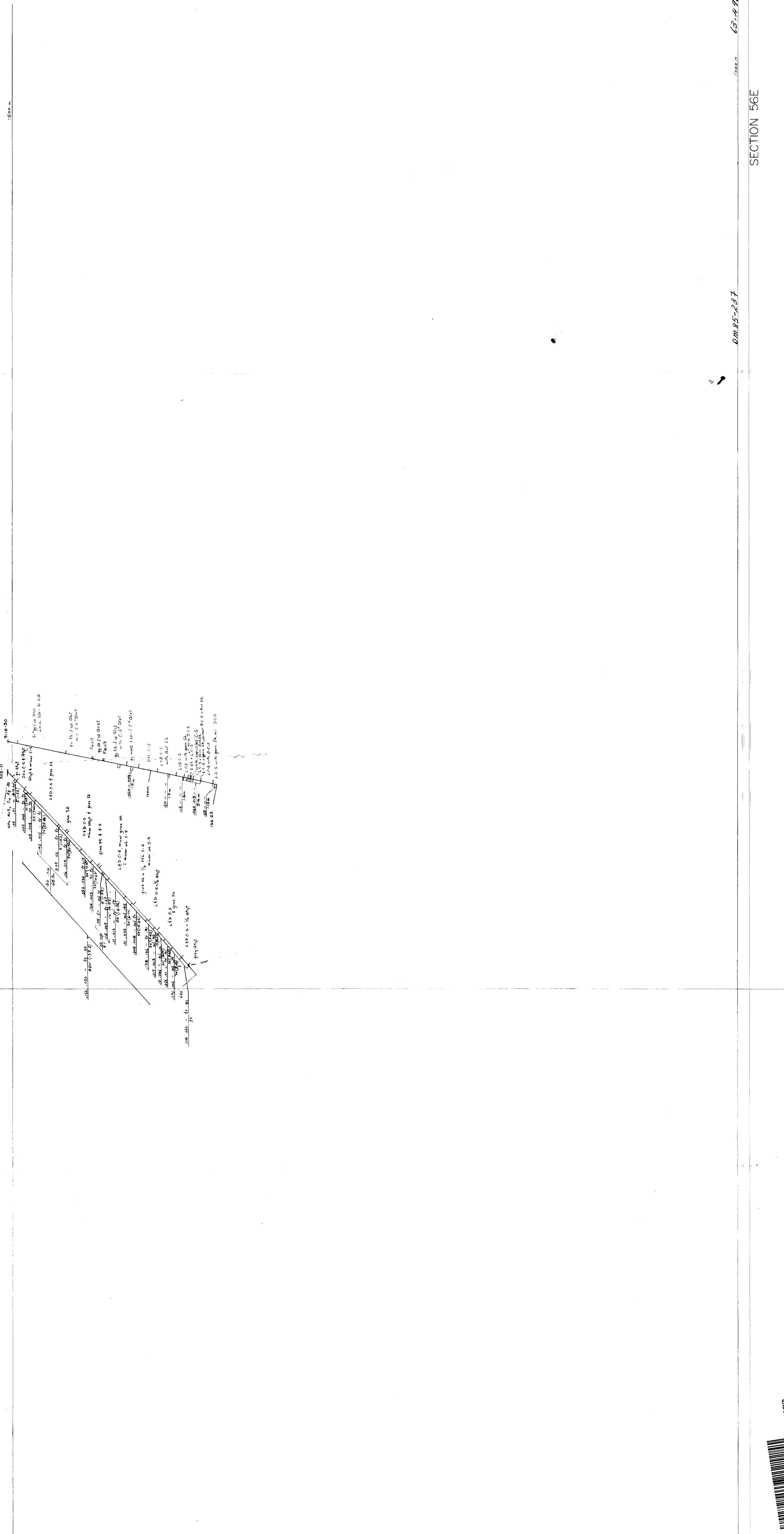
SHEET 7 OF 7



COMPOSITE SECTION 46E - 50E

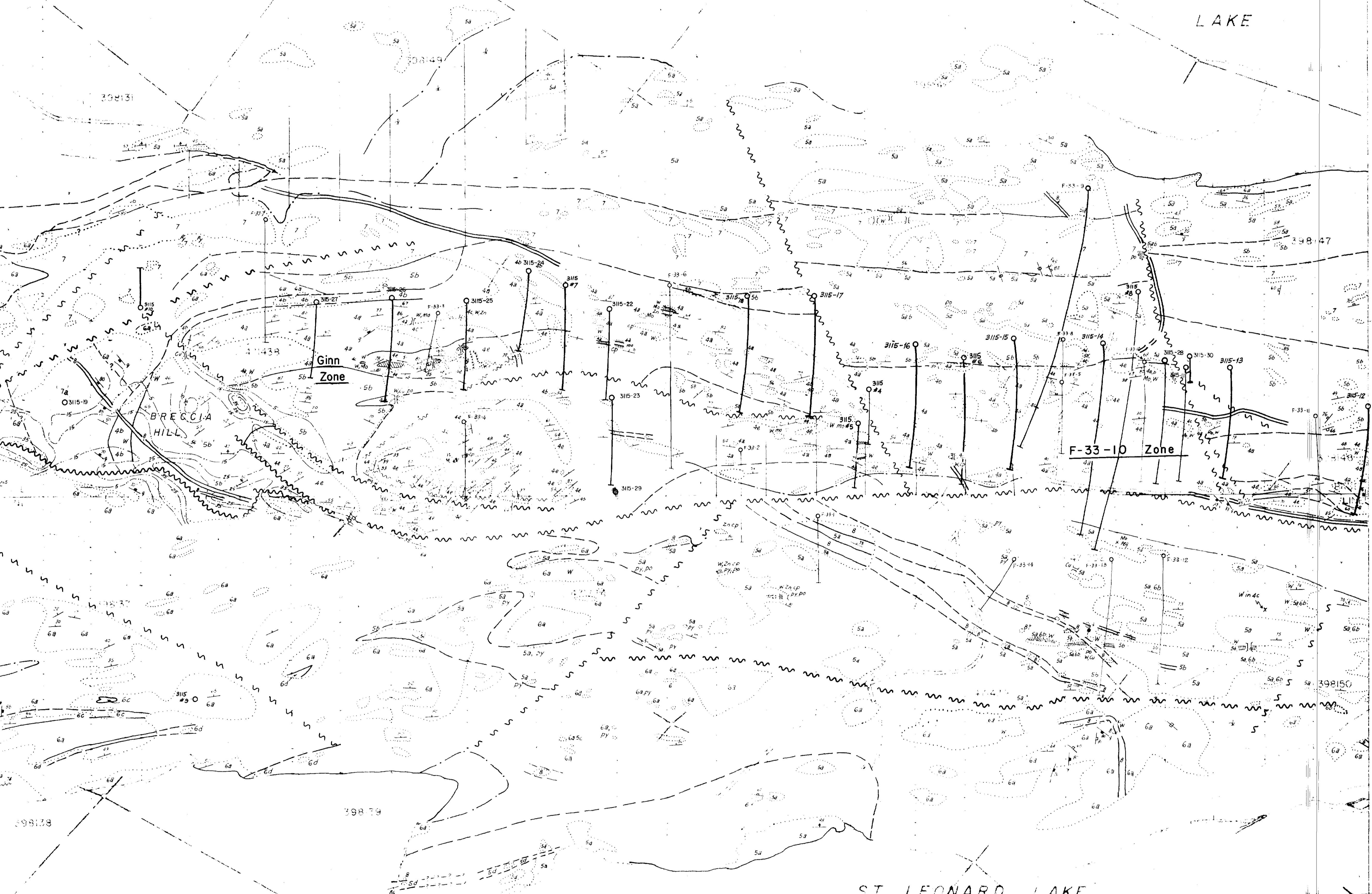
60. 88-2





ELIZABETH

LAKE



574753

574754

574755

1986 DRILLING : Deepen holes F-33-9 and 315-29
Drill hole No. 315-30

FOR LEGEND SEE SHEET 3

DDH. INFORMATION UPDATED 25/11/83
26/08/86



NEILSON EXPLORATIONS LIMITED

ESTATE PROJECT
ELIZABETH LAKE, ONT

LOCATION OF 1986 DRILLING

DM 85-237

634 932

