

87-149-15967

PERCUSSION DRILLING AND GEOCHEMICAL REPORT

ON THE

GOOSLY 1 AND GOOSLY 2 CLAIM GROUPS

OMINECA MINING DIVISION

BRITISH COLUMBIA

NTS 93L/1W

LATITUDE $54^{\circ}12'11''$ N, LONGITUDE $126^{\circ}22'21.4''$ W

OWNERS

LORNE WARREN AND KENGOLD MINES LTD.

FILMED

OPERATOR

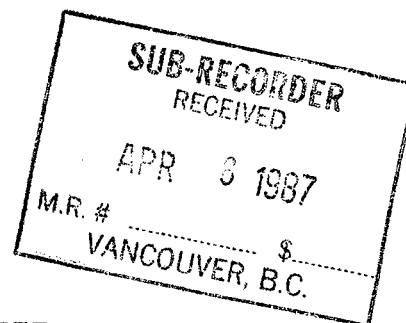
NORMINE RESOURCES LTD.

AUTHOR

GEORGE NORMAN, B.Sc.
NORMAN GEOLOGICAL

FOR

BEMA INDUSTRIES LTD.
900 - 609 WEST HASTINGS STREET
VANCOUVER, B.C. V6B 4W4



JANUARY 1987

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,967

TABLE OF CONTENTS

| | PAGE |
|-----------------------------------|------|
| 1.0 SUMMARY | 1 |
| 1.1 CONCLUSIONS | 2 |
| 1.2 RECOMMENDATIONS | 2 |
| 2.0 INTRODUCTION | 3 |
| 2.1 LOCATION AND ACCESS | 3 |
| 2.2 PHYSIOGRAPHY | 3 |
| 2.3 CLAIM STATUS | 4 |
| 2.4 HISTORY | 4 |
| 2.5 PRESENT WORK | 5 |
| 3.0 REFERENCES | 6 |
| 4.0 DISTRICT GEOLOGY | 7 |
| 4.1 PROPERTY GEOLOGY | 7 |
| 5.0 PERCUSSION DRILLING | 9 |
| 6.0 ROCK GEOCHEMISTRY | 12 |
| 7.0 SOIL GEOCHEMISTRY | 14 |

LIST OF FIGURES

| | |
|--|----------|
| LOCATION MAP | FIGURE 1 |
| LOCATION - GOOSLY 1 AND 2 CLAIM GROUPS | FIGURE 2 |
| CLAIM LOCATION MAP | FIGURE 3 |
| GOOSLY LAKE PROPERTY | FIGURE 4 |
| COMPILATION MAP - WEST GRID | FIGURE 5 |
| COMPILATION MAP - EAST GRID | FIGURE 6 |

LIST OF APPENDICES

| | |
|--|--------------|
| PERCUSSION DRILL GEOLOGIC LOGS | APPENDIX I |
| ROCK GEOCHEMICAL RESULTS | APPENDIX II |
| SOIL GEOCHEMICAL RESULTS | APPENDIX III |
| STATISTICAL STUDY & ANALYTICAL PROCEDURES BY MIN-EN LABORATORIES LTD. | APPENDIX IV |
| STATEMENT OF COST | APPENDIX V |
| STATEMENT OF QUALIFICATION | APPENDIX VI |

1.0 SUMMARY

The Goosly 1 and 2 claim groups consist of 12 mineral claims and comprise 142 units. The claims are under option to Normine Resources Ltd. and Amir Mines Ltd. from L. Warren and Kengold Mines Ltd. of Smithers, B.C.

The Goosly property is located 30 kilometres southeast of the municipality of Houston in west-central British Columbia. Access is by 38 kilometres of good gravel road to the Equity Mine and then by 6 kilometres of logging roads southwest to the northern and central part of the claims.

The main portion of the claims occupy the southwestern slope of an upland plateau where relief is moderate rising to 1,370 metres along the northern boundary of the claims from 900 metres at Goosly Lake.

The Goosly Lake area is within the intermontane tectonic belt, comprised principally of Mesozoic volcanic and sedimentary rocks cut by intrusive rocks ranging in age from early Jurassic to mid-Tertiary. The Mesozoic layered rocks are overlain by extensive areas of Tertiary volcanic rocks but are exposed in erosional windows or in areas adjacent to Tertiary cover rocks. Mesozoic felsic pyroclastic and lesser sedimentary rocks host the Equity silver-copper deposit six kilometres east of the Goosly 2 claim group. Current reserves of the Equity deposit are 15 million metric tonnes of 109 g/t silver, 0.85 g/t gold, 0.35% copper and 0.08% antimony.

Similar rocks to those hosting the Equity deposit have been discovered on Faraway Gold's Sam claim which adjoins the Goosly 2 group on the east. Drill cutting and core exhibit variable quartz-sericite alteration, pyritic breccia and sections of massive sulphides over significant hole lengths. Strongly anomalous silver and zinc values are associated with zones of higher sulphide content, best values include a one metre section of 715 g/t silver and a 0.45 metre section grading 1000 g/t silver.

Much of the Goosly 1 and 2 claims are drift covered. Tertiary volcanic rocks are exposed in road cuts near the northern boundary of the claim block. Late Cretaceous andesite lavas and breccias (Church 1971) are exposed on the Ken claim south of the Goosly Lake and on Kloo Creek.

Orequest Exploration Syndicate conducted soil geochemical bulldozer trenching and limited percussion drilling in the northern part of the property (Cochrane, 1970).

Soil geochemical and geophysical surveys were conducted on the Goosly 1 and Goosly 2 claim groups in 1985.

Soil sampling of the west grid and percussion drilling of induced polarization (I.P.), resistivity and soil geochemical anomalies outlined during 1985 on the east and west grids was carried out during the 1986 exploration program.

Percussion drilling on the Goosly 1 claim group failed to penetrate bedrock within the area of the I.P. anomalies. Drilling of geophysical-geochemical anomalies on the Goosly 2 claim group located three zones of altered pyritic tuff. The altered zones contain geochemical anomalous amounts of As, Mn, Pb, Sb, Zn, Au and Ag.

1.1 CONCLUSIONS

1. The depth of overburden intersected in percussion drilling (to 88 metres) on the West Grid (Goosly 1 claim group) precludes any meaningful reflection of bedrock geochemistry from the soil geochemistry.
2. Induced polarization anomalies within areas of deep overburden on Goosly 1 and Goosly 2 claim groups are thought to be caused by conductive glacial clays or detrital magnetite within gravels.
3. Altered pyritic tuff intersected in PH 86-07 and PH 86-08 contain geochemically anomalous amounts of As, Mn, Pb, Sb, Zn, Au and Ag. The "geochemical signature" of the anomalous elements is similar to what would be expected peripheral to an Equity Silver-Copper type deposit.
4. Porphyritic andesite penetrated in drilling on the Morning claim is considered to be Tip Top Hill volcanic rocks.

1.2 RECOMMENDATIONS

Further percussion drilling to define the geochemically anomalous zones discovered in PH 86-07 and PH 86-08 is recommended followed by diamond drilling of valid targets.

2.0 INTRODUCTION

Normine Resources Ltd. completed a percussion drilling program and a soil geochemical survey on the Goosly 1 and Goosly 2 claim groups located near Equity Silver mine in west-central British Columbia during the period September to November, 1986.

Percussion drilling was done on the Morning, Tet 2, Dave, Sept 1 and Sept mineral claims.

The purpose of the exploration work on the Goosly claims is to explore for a "Equity type" silver-copper deposit which has current reserves of 15 million tonnes of 110 g/ton silver, 0.85 g/ton gold and 0.35% copper. Percussion drilling was targeted to test a number of geophysical and geochemical soil anomalies that were outlined during 1985.

2.1 LOCATION AND ACCESS

The mineral claims are situated at Goosly Lake, 30 kilometres southeast of the municipality of Houston in west-central British Columbia (Figure 1). The geographic centre of the claims is at latitude 54°12' North and longitude 126°22' West.

Houston is on Provincial Highway 16 and the northern CN rail line. The town of Smithers, 64 km northwest of Houston has daily scheduled airline service from Vancouver.

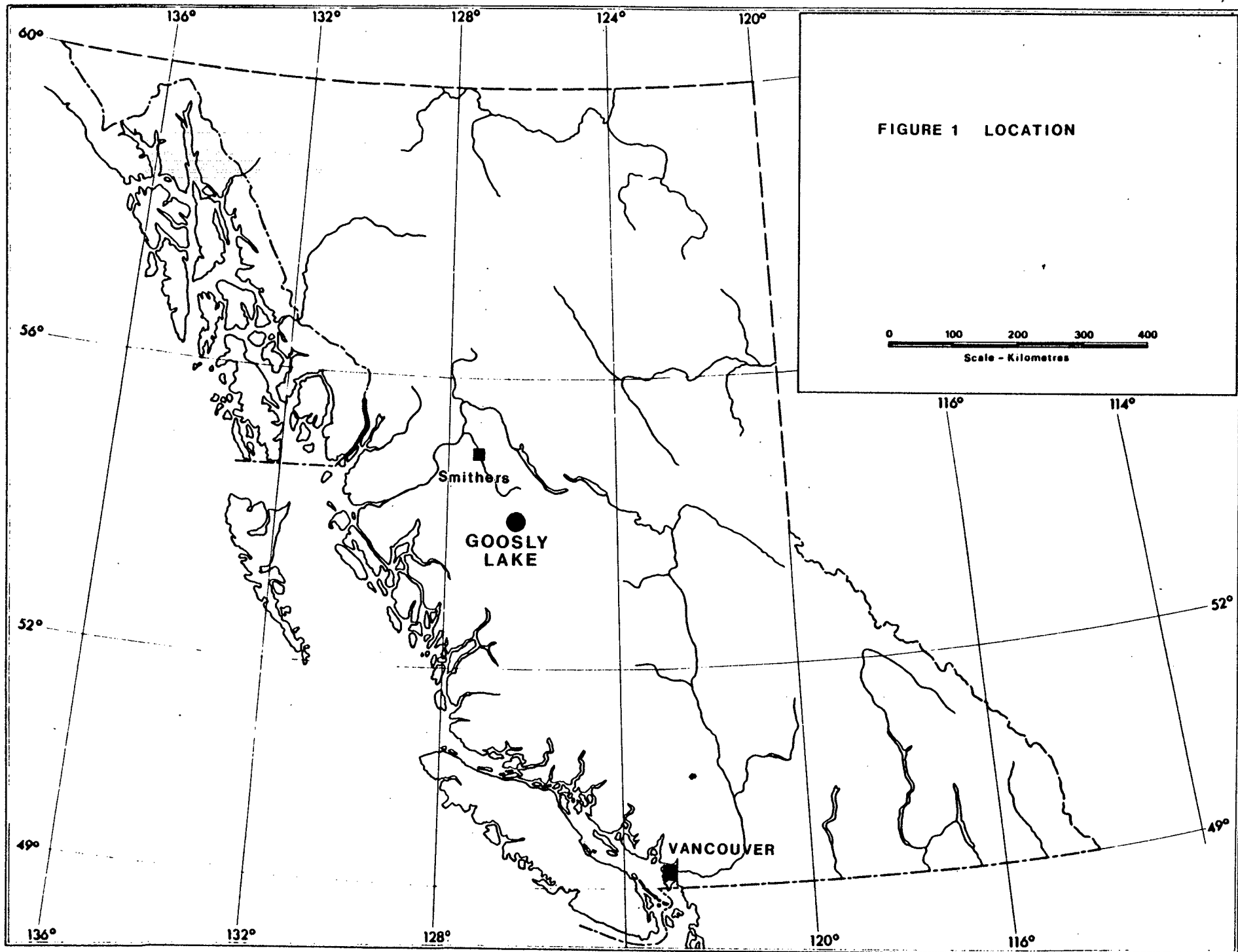
Access to the claims is by 38 kilometres of good surface gravel road linking Houston with Equity mine (Figure 2). Old logging roads, some of which require 4 wheel drive vehicles, provide access to the northern and central part of the claims (Figure 3). Alternate access to the area is afforded by the Buck Creek road to Highway 16.

2.2 PHYSIOGRAPHY

The mineral claims are situated within the Nechako plateau, the northernmost subdivision of the Interior Plateau. The main portion of the claims occupy the southwestern slope of a upland plateau where relief is moderate rising to 1,370 metres along the northern boundary from 900 metres at Goosly Lake.

The logging road into the northeast part of the claim block (Figure 3) is along the break in slope below which the topographic gradient decreases and overburden is extensive.

Much of the original forest cover of jackpine and spruce has been removed by forest fire and recent logging. Small second growth jackpine is extensive in old burn areas.



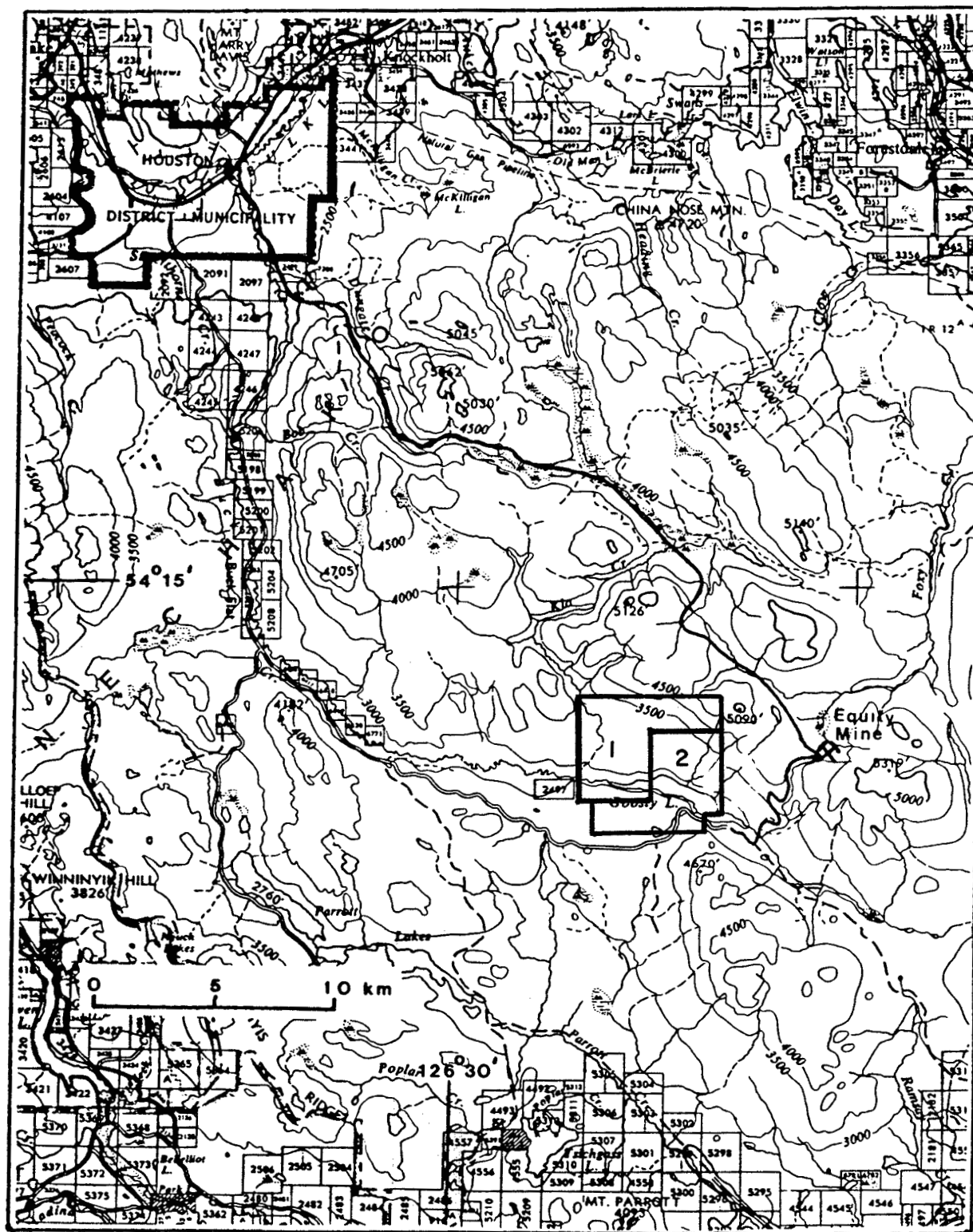


FIGURE 2- LOCATION - GOOSLY 1 CLAIM GROUP
AND
GOOSLY 2 CLAIM GROUP

2.3 CLAIM STATUS

The present claims, known as the Goosly 1 and Goosly 2 claim groups, are owned by Lorne Warren and Kengold Mines Ltd. and are under option to Normine Resources Ltd. and Amir Mines Ltd. All pertinent data relating to the status of the claims is shown in Table I.

TABLE I

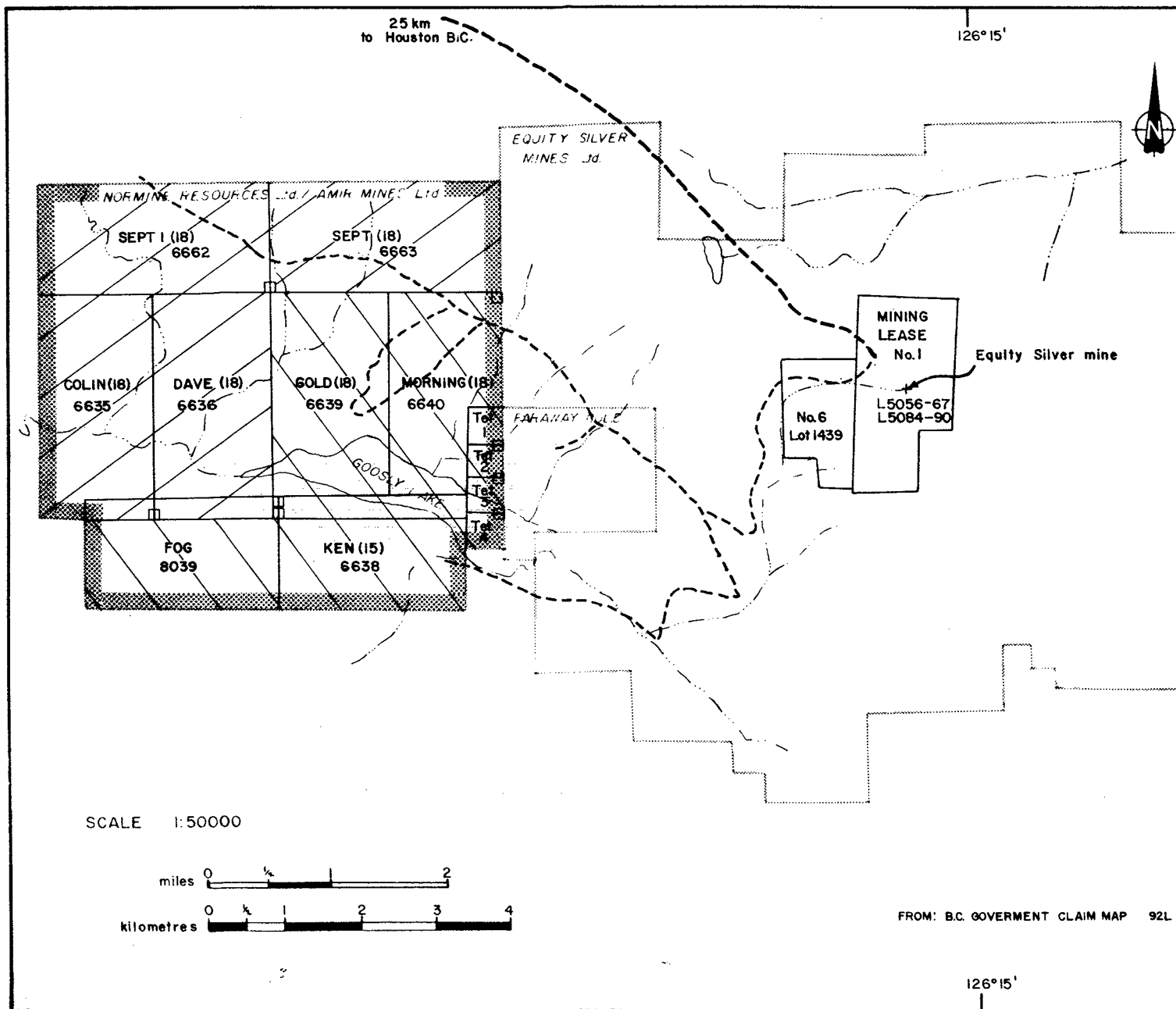
| <u>CLAIM NAME</u> | <u>UNITS</u> | <u>RECORD NO.</u> | <u>GROUP</u> | <u>OWNER</u> | <u>RECORD DATE</u> | <u>EXPIRY DATE</u> |
|-------------------|--------------|-------------------|--------------|--------------------|--------------------|--------------------|
| Colin | 18 | 6635 | Goosly 1 | L. Warren | Sept. 19, 1984 | Sept 19, 1990 |
| Dave | 18 | 6636 | Goosly 1 | L. Warren | Sept. 19, 1984 | Sept 19, 1991 |
| Sept 1 | 18 | 6662 | Goosly 1 | L. Warren | Sept. 21, 1984 | Sept 21, 1990 |
| Sept | 18 | 6663 | Goosly 1 | L. Warren | Sept. 21, 1984 | Sept 21, 1990 |
| Ken | 15 | 6638 | Goosly 2 | L. Warren | Sept. 19, 1984 | Sept 19, 1993 |
| Gold | 18 | 6639 | Goosly 2 | L. Warren | Sept. 19, 1984 | Sept 19, 1993 |
| Morning | 18 | 6640 | Goosly 2 | Kengold Mines Ltd. | Sept. 19, 1984 | Sept 19, 1993 |
| Tet 1 | 1 | 6073 | Goosly 2 | Kengold Mines Ltd. | March 6, 1984 | March 6, 1993 |
| Tet 2 | 1 | 6074 | Goosly 2 | Kengold Mines Ltd. | March 6, 1984 | March 6, 1993 |
| Tet 3 | 1 | 6075 | Goosly 2 | Kengold Mines Ltd. | March 6, 1984 | March 6, 1993 |
| Tet 4 | 1 | 6076 | Goosly 2 | Kengold Mines Ltd. | March 6, 1984 | March 6, 1993 |
| Fog | 15 | 8039 | Goosly 2 | Kengold Mines Ltd. | Oct. 23, 1986 | October 23, 1992 |

2.4 HISTORY

The discovery of the Sam Goosly silver-copper deposit (now Equity Silver mine) in 1968 resulted in the location of numerous mineral claims throughout the general area.

The area of the present claims was held in 1969 by several companies and a variety of exploratory work was carried out.

Orequest Exploration Syndicate conducted soil geochemical surveys, bulldozer trenching and limited percussion drilling in the northern part of the present property (Cochrane, 1970).



LEGEND

- STREAM
- CLAIM BOUNDARY
- CLAIM OUTLINE
- LEGAL CORNER POST
- DAVE (18)
6636 CLAIM NAME(no. of units)
RECORD No.
- IMPROVED GRAVEL ROAD
- GRAVEL ROAD
- GOOSLY 1 CLAIM GROUP
- GOOSLY 2 CLAIM GROUP

NORMINE RESOURCES Ltd.
GOOSLY LAKE, B.C.

CLAIM LOCATION MAP

| | |
|-----------------------------|----------|
| DATE 30/1/85 | JOB NO. |
| REVISED BY | FIG NO 3 |
| BEMA INDUSTRIES LTD. | |

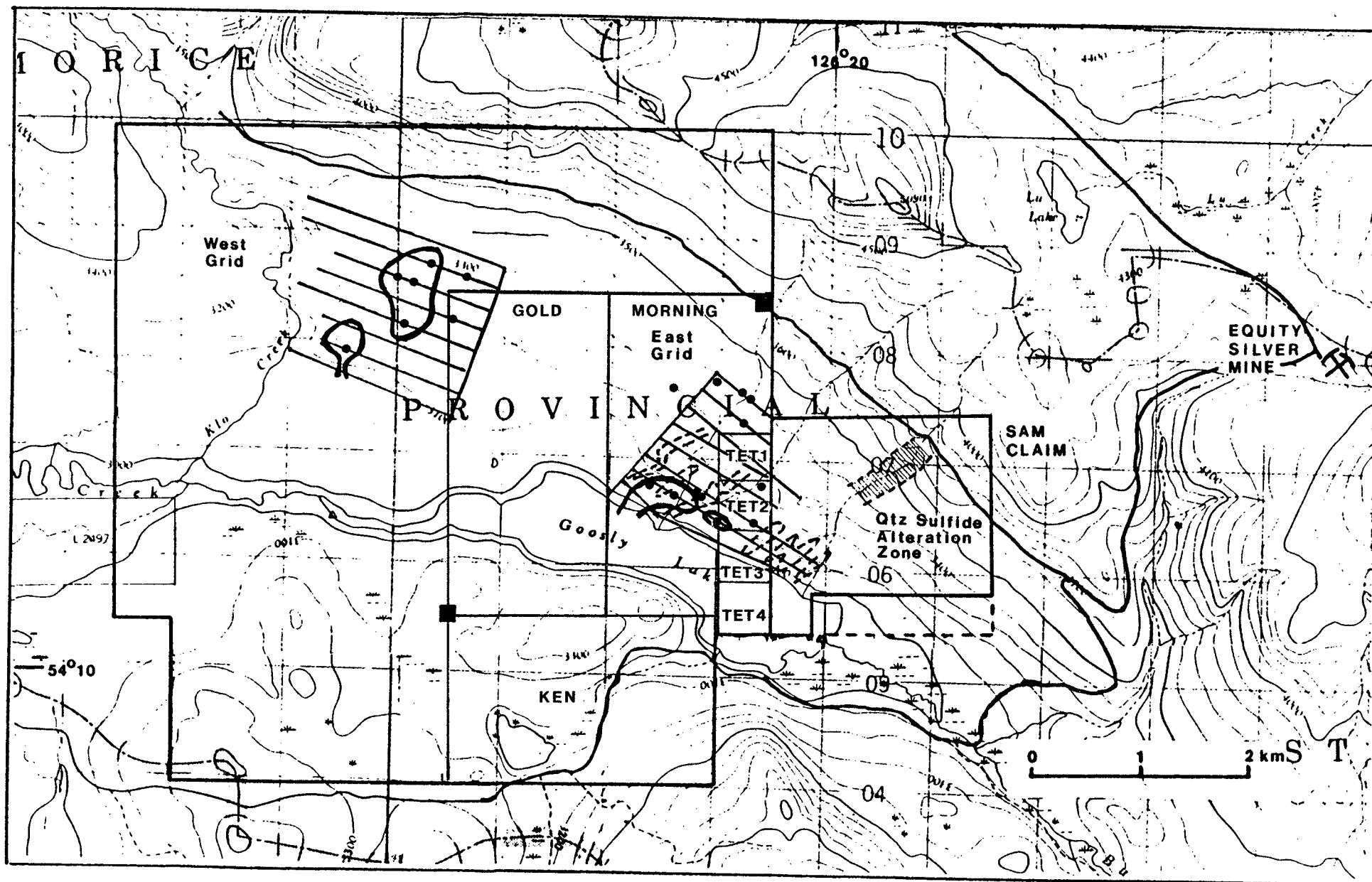





FIGURE 4 - GOOSLY LAKE PROPERTY

-  Chargeability Anomalies (± 7 msec)
-  Mercury Anomalies (± 150 ppm)
-  Percussion Drill Hole

The majority of the current mineral claims comprising the Goosly 1 and Goosly 2 claim groups were located in September of 1984 by Lorne Warren of Smithers, B.C. who subsequently optioned them to Normine Resources and Amir Mines Ltd.

In June of 1985, Bema Industries Ltd. undertook 14.1 kilometres of line cutting on parts of the Dave and Sept 1 mineral claims (West Grid) and 10.5 kilometres of line cutting on the Morning and Tet 1-4 claims (East Grid). A geochemical survey, consisting of the collection of soil samples, was carried out over the East grid. Geophysical surveys including Induced Polarization, magnetometer and VLF-Em surveys were completed over both East and West Grids.

2.5 PRESENT WORK

During 1986 a percussion drill program and a soil geochemical survey were completed over portions of the Goosly 1 and 2 claim groups. Various aspects of the surveys are itemized below:

1. Percussion Drill Program

- a) Percussion Drilling 24 holes, 1326.5m (4352')
- b) Percussion sampling and geologic logging 24 holes, 419 samples
- c) Drill road and drill pad construction via 1150 case and D-7 caterpillars 5.8 km, 29 drill pads
- d) Rock geochemistry
 - 281 percussion samples analyzed for 12 element I.C.P.
 - 58 percussion samples analyzed for 27 element I.C.P.
 - 29 pulp geochem analyzed for Au

2. Soil Geochemical Survey

114 soil geochemical "A" Horizon samples analyzed for Hg
205 soil geochemical "B" Horizon samples, 134 samples analyzed for Au, Zn, As and Ag.

3.0 REFERENCES

- Carter, N.C. (1985): Geochemical and Geophysical Report on the Goosly 2 Claim Group, Assessment Report
- Carter, N.C. (1985) Geophysical Report on the Goosly 1 Claim Group; Assessment Report
- Church, B.N. (1971): Geology of the Owen Lake, Parrott Lakes and Goosly Lake Areas; in Geology Exploration and Mining in British Columbia, 1970, pp. 119-128
- Church, B.N. (1973): Geology of the Buck Creek Area; in Geology Exploration and Mining in British Columbia, 1973, pp. 353-363
- Church, B.N. (1985): Update on the Geology and Mineralization in the Buck Creek Area; in Geological Fieldwork 1984, pp. 175-188
- Cochrane, D.R. (1970): Geochemical Report on Orequest's Goosly Lake Project, B.C. Department of Mines and Petroleum Resources Assessment Report 2335
- Cyr, J.B., Pease, R.B. and Schroeter, T.G. (1984): Geology and Mineralization at the Equity Silver mine, Houston, British Columbia, Canada; Economic Geology, Vol.69, pp.947-968
- Holland, S.S. (1976): Land Forms of British Columbia; Bulletin 48, pp. 68, 69
- Kowalchuk, J.M., Church, B.N., Bradshaw, P.M.D., Barakso, J.J. (1984): Lithogeochemistry at the Equity Silver Mine; Western Miner, April, 1984, pp. 50-54
- MacDonald, A.L.J. (1974): Geological Report on the DG Claim Group, Omineca M.D., B.C. Ministry of Energy Mines and Petroleum Resources, Assessment Report 5195
- Ney, C.S., Anderson, J.M., Penteleyev, A. (1972): Discovery, Geological Setting and Style of Mineralization, Sam Goosly Deposit, B.C., CIM Bulletin Vol.65, pp.53-64
- Nordin, G.D. (1985): Geological report on the Goosly Lake Property, Omineca M.D., private report for Amir Mines Ltd.
- Wojdak, Paul J., Sinclair, A.J. (1984): Equity Silver Silver-Copper-Gold Deposit: Alteration and Fluid Inclusion Studies; Economic Geology, Vol.79, pp.969-990

4.0 DISTRICT GEOLOGY

The Goosly Lake area is within the Intermontane tectonic belt, comprised principally of Mesozoic volcanic and sedimentary rocks cut by intrusive rocks ranging in age from early Jurassic to mid-Tertiary. The Mesozoic layered rocks are overlain by extensive areas of Tertiary volcanic rocks, but are exposed in erosional windows or in areas adjacent to the Tertiary cover rocks. Mesozoic felsic pyroclastic and lesser sedimentary rocks host the Equity silver-copper deposit six kilometres east of the Goosly 2 claim group (Figures 3 and 4). The deposit is a grossly tabular zone which is crudely conformable with the host rocks. Iron-copper-silver-antimony sulfides and lesser galena and sphalerite occur as disseminations, fracture and breccia fillings and veins over a strike length of 1500 metres. Current reserves are 15 million tonnes of 109 g/t silver, 0.85 g/t gold, 0.35% copper and 0.08% antimony. A distinctive clay alteration zone surrounds the deposit and includes quartz, sericite, andalusite, tourmaline, scorzalite, corundum and some dumortierite (Wojdak and Sinclair, 1984).

Bracketing the Equity deposits on the west and east are an Eocene quartz monzonite stock with weak copper-molybdenum mineralization and a slightly younger gabbro-monzonite intrusive complex. A series of dykes occur between the intrusives and many of these cut the mineralized zones.

Similar rocks to those hosting the Equity deposit have been found on Faraway Gold's Sam claim, which adjoins the Goosly 2 group on the east (Figure 4). Drill cuttings and core exhibit variable quartz-sericite alteration, pyrite breccia and sections of massive sulfides over significant hole lengths. Strongly anomalous silver and zinc values are associated with zones of higher sulfide content; best values to date include a 1 metre section grading 715 g/t silver and a .45 metre section grading 1000 g/t silver. The zone as defined to date appears to trend into the Goosly 2 claim group (Figure 4).

4.1 PROPERTY GEOLOGY

Much of the property of the Goosly 1 and 2 claim groups is drift covered with bedrock exposures restricted to higher elevations. Within the Goosly 1 claim group bedrock exposures are restricted to the northern claims at higher elevations and in the vicinity of the Kloo Creek. Tertiary volcanic rocks are exposed in road cuts and along ridges on the Sept 1 and Sept claims. Late Cretaceous andesitic lavas and breccias (Church, 1971) are exposed along Kloo Creek. Tertiary (Eocene) Buck Creek basaltic andesites are exposed south of Goosly Lake of the Fog mineral claims. Percussion drilling during 1986 shows that overburden on the Sept and Dave claims below the break in slope (near access road) is in excess of 88 metres.

As well, much of the Goosly 2 claim group is drift covered with Tertiary Goosly Lake volcanics exposed in road cuts near the northeast boundary of the claim block. Late Cretaceous Tip Top Hill andesitic lavas and breccias (Church 1971) are exposed on the Ken claim south of Goosly Lake and near the boundary with the Sam claim and possibly parts of the present claims north of Goosly Lake.

Percussion drilling on the Morning and Tet 2 claims show that overburden depths vary from in excess of 96 metres near Goosly Lake (within 300 metres) to six metres deep 650 metres upslope. Bedrock penetrated is predominated porphyritic andesite flows with minor tuffs. Olive green, grey, purple-green and reddish coloured andesite flows contain varying percentages of fine feldspar phenocrysts and biotite. Disseminated magnetite/hematite is generally present in amounts less than .5%.

Altered tuff (sericite-quartz-clay) containing pyrite (up to 10% by volume) was intersected in PH 86-07 and PH 86-08. The altered zone in PH 86-08 is underlain by purplish to green coloured fine grained hematic and magnetite volcanic rock with the odd euhedral feldspar phenocryst. The altered zones in PH 86-07 are separated by grey-greenish fine grained volcanic with fine feldspar phenocrysts, .2% disseminated magnetite and weak hematite alteration.

5.0 PERCUSSION DRILLING

INTRODUCTION

The percussion drilling was done by L. Spence Enterprises Ltd. of Vancouver, B.C. During the period October 20 to November 11, 1986 24 percussion drill holes including PH 86-01 to PH 86-22, PH 86-03A and PH 86-19A were drilled for a total of 1,326.5 metres (4,352 feet).

An Atlas Copco hammer drill mounted on a Sherman Tank was utilized for the drilling. The percussion system uses a combination of compressed air and water to retrieve the pulverized rock to surface.

A certain amount of contamination of the sample is unavoidable because the returning rock slurry passes between previously drilled rock and the outside of the drill rod on its way to surface. Casing is generally drilled only to 15-20 metres depth in overburden because the rods usually become very tight and lost rods become costly at \$1,000.00 per 10 foot section.

SAMPLING PROCEDURE

The surface sample was mechanically split at a ratio of 8:1 with the 1/8 portion caught in a settling pail. Rock fragments settle to the bottom and the overflow is allowed to escape. Samples were taken every 10 feet (3.048 metres) down the hole. A small amount of flocculent was mixed with the sample slurry and the mixture allowed to settle for approximately 5 to 7 minutes. The water was drained off and the remaining sample placed in a 10" x 17" Hubco sample bag which being made out of a strong perforated synthetic material allows the water to drain. A small plastic vial was filled with a representative portion of the sample and retained for binocular examination. These vials were marked with hole number and footage and stored in the Company's office located in Vancouver, B.C.

GEOLOGIC LOGGING

The percussion samples were logged by the author at the drill site as the percussion hole was advanced. This allows for immediate decisions on hole problems or the termination of the hole by the geologist. A binocular microscope was used to examine the sample as the fineness of the pulverized material precludes a detailed unaided visual observation. Conclusive rock type determinations are still difficult even with the detailed binocular descriptions.

The sample was also panned to allow visual observation of heavy minerals, in this particular instance predominately magnetite and pyrite were observed.

The water colour of the returned rock slurry was also noted as the water is returned somewhat faster than the rock fragments giving more sharply defined geologic breaks. The following observations concerning water coloration were made:

1. black water colour could be indicative of strong pyritization or massive sulphide;
2. a whitish water colour could be indicative of quartz-sericite-clay alteration;
3. a reddish-purple colouration could be indicative of hematization.

All geologic logs PH 86-01 to PH 86-022 are located in Appendix I.

GEOLOGY

Percussion drill holes PH 86-01 to PH 86-11, PH 86-21 and PH 86-22 were drilled on the Goosly 2 claim groups and PH 86-12 to PH 86-20 were drilled on the Goosly 1 claim group. See Figures 5 and 6 for hole location maps.

PH 86-01 to PH 86-05 tested a westerly trending I.P. anomaly. All of these holes failed to reach bedrock penetrating in excess of 96 metres of till, fine grained sand and silt containing varying amounts of detrital magnetite up to 5-10% by volume. The remainder of the holes drilled on the Goosly 1 claim group were designed to test magnetic and resistivity lows. The holes intersected predominately andesitic volcanics which were usually a light grey, purple green, olive green or reddish (hematitically altered) coloured fine grained feldspar porphyritic andesite containing varying amounts of disseminated magnetite usually in amounts less than 0.5% by volume.

Altered pyritic rocks were intersected in PH 86-07 and PH 86-08. Pyrite concentrations were in amounts up to 10% by volume. The altered rocks are composed of clay-sericite quartz and could be altered fine grained tuffs. Minor pyrite (.1-.2%) was noted in PH 86-09 and PH 86-10.

Percussion holes PH 86-12 to PH 86-18 drilled on the Goosly 2 claim tested a series of northeasterly trending I.P. anomalies. All holes failed to penetrate bedrock and intersected overburden consisting of either clay-boulder till, pebble gravel, sand, silt or clay. A thick section of clay was intersected in PH 86-12. PH 86-12 was drilled to 90.5 metres and may have penetrated bedrock at the bottom of the hole.

Percussion holes PH 86-19, 19A and 20, also drilled on Goosly 1 claim, are located on the access road near the entrance to the west grid, see Figure 5. Outcrop near the road was examined by the author and is believed to be Tip Top Hill andesite. A description is given below:

"Medium olive green coloured, medium to fine grained porphyritic andesite with approximately 20% tan-whitish (2 mm x 8 mm) euhedral feldspar laths and less than 1% 1-2 mm biotite phenocrysts and .1 to .2% disseminated magnetite."

PH 86-19, 19A and 20 intersected volcanics similar to the above description as well as a light grey coloured finely porphyritic volcanic with varying amounts of disseminated magnetite and hematitic alteration.

6.0 ROCK GEOCHEMISTRY

A total of 339 percussion samples from holes PH 86-01 to 11 and PH 86-19 to 22 were submitted to Min-En Laboratories Ltd. of North Vancouver for analyses. Overburden samples from PH 86-12 to 18 were not submitted for analysis and are stored at Lorne Warren's warehouse, Newens Road, Smithers, B.C.

Min-En Laboratories Ltd. geochemically analyzed the above samples via I.C.P. for the followed elements: Ag, As, Cd, Cu, Fe, Mn, Mo, Ni, Pb, Sb, V, Zn, and Au; in addition 58 of the above samples were geochemically analyzed for: Al, B, Ba, Be, Bi, Ca, Co, K, Li, MG, Na, P, Sr and Th. The results are shown in Appendix II.

Min-En Laboratories Ltd. as well, carried out a statistical study of the results, analytical procedures, histograms and cumulative probability plots (for elements: Ag, Mn, Pb, Zn, As, Cu, Ni, Sb, Au) which are included in Appendix IV. A summary of the statistical results are shown in Table II.

TABLE II

| <u>Element</u> | <u>Value Range</u> | <u>Mean</u> | <u>Background (2)</u> | <u>Standard Deviation ()</u> | <u>Threshold (mean + 2)</u> |
|----------------|--------------------|-------------|----------------------------|-----------------------------------|----------------------------------|
| Ag | 0.1 - 1.1 | .47 | 0.38 | 0.19 | 0.85 |
| As | 1 - 111 | 10.14 | 36.02 | 18.01 | 46 |
| Cu | 13 - 154 | 27.12 | 21.96 | 10.98 | 49 |
| Pb | 8 - 203 | 33.38 | 46.32 | 23.16 | 80 |
| Sb | 3 - 15 | 7.1 | 4.04 | 2.02 | 11 |
| Zn | 23 - 757 | 58.09 | 116.74 | 58.37 | 175 |
| Mn | 189 - 3353 | 789.52 | 862.78 | 431.39 | 1650 |
| Au | 3 - 50* | 5.95 | 6.94 | 3.47 | 25* |
| Ni | 2 - 71 | 12.71 | 13.34 | 6.67 | 26 |

Note all values in ppm except for *ppb.

Based on the results of the above statistics rock geochemical anomalies have been determined and listed in Table III.

TABLE III
ROCK GEOCHEMICAL ANOMALIES

| <u>ANOMALY NO.</u> | <u>PERCUSSION HOLE NO.</u> | <u>METRAGE (FOOTAGE)</u> | <u>ANOMALOUS ELEMENTS (VALUE RANGE PPM PPB) [WELL ABOVE BACKGROUND]</u> | <u>ROCK TYPE</u> |
|--------------------|--------------------------------|------------------------------|---|---|
| I | PH 86-08 | 14.3-57.0 (47-87) | As(39-111), Mn(1185-3353) Pb(610-203), Sb(6-12) Zn(118-757), Au(5-20)* Ag[.4-.8] | Altered tuff ser-clay-qtz alter py to 5% |
| II | PH 86-09 | 50.9-60.0 (167-197) | Ag(.9), As(22-44) Mn(1120-3014), Sb(11-14) Ag(.9-1.1), Pb[55-70] | Dacite/Andesite hem-ser alter'n .1-.2 diss Mt |
| III | PH 86-10 | 8.2-26.5 (27-87) | Ag(.9-1.1), Sb(10-11) | Porphyritic and- esite and tuff - ser alter'd |
| IV | PH 86-07 | 75.3-78.3 (247-257) | Ag(.9), As(87), Cu(154) Sb(15), Pb[64] | Altered zone (75.3-83.5m) qtz-ser altered w/ py up to 10% |
| V | PH 86-07 | 32.6-44.8 (107-147) | Mn(1801-2030), Au(5-20) Pb(49-86), ZN(72-213) | Altered whitish grn rock qtz w/ py to 5%, ser altered (32.0- 44.8m) |

Referring to correlation of coefficients tabulated in Appendix IV the following elements correlate in decreasing order.

Ag with Sb, Mn, As, Cu
As with Pb, Mn, Sb, Zn, Ag, Cu
Cu with Sb, Mn, Ag, As, Ni
Mn with Pb, As, Zn, Sb, Ag, Cu, Au
Ni with Cu, Sb
Pb with Zn, As, Mn, Sb, Ag
Sb with As, Mn, Ag, Pb, Zn, Ni
Zn with Pb, Ag, Mn, Sb, Au
Au with Zn, Mn

The strongest two element correlations in decreasing order are with:

Pb-Zn, Pb-As, Pb-Mn, As-Mn, Mn-Zn, As-Zn, As-Sb, Mn-Sb, Ag-Sb, Pb-Sb.

7.0 SOIL GEOCHEMISTRY

During the period September 22 to 25 sixteen man days were spent collecting soil samples from the West grid (Goosly 1 claim group) which had been previously established during 1985.

A total of 114 "A" horizon samples and 205 "B" horizon samples were collected from 50 metre stations along lines spaced at 200 metre intervals and from approximately 14 kilometres of grid.

Samples collected from every second sample site were shipped to Min-En Laboratories, Vancouver, for analyses. A total of 114 "A" horizon samples were analyzed for mercury and 134 "B" horizon samples were analyzed for Cu, Zn, Ag and As.

The results of the percussion drilling program that followed show that the gridded area is underlain by thicknesses of glacial till, sand and gravels in excess of 89 metres which precludes any meaningful reflection of bedrock geochemistry from the soil geochemistry. As a result the data has not been statistically studied or contoured.

The results of the survey are shown in Appendix III.

APPENDIX I

PERCUSSION DRILL GEOLOGIC LOGS

Page 1 of 2

GRID LOCATION: L 12 N 44+52 (2m N)
ELEVATION:
DATE Start/Finish: Oct 20/Oct 20/1986
LOGGED BY: G. Norman
NOTE: Depths are 3' along because of 3' SCAL " "
casing stick up. DESCRIPTION Conve

SCALE: 1"=20'

" " $1 \text{ cm} = 2.4 \text{ m}$
conversion $1 \text{ ft} = .3048 \text{ m}$

| DEPTH | UNIT | WATER | MT | DESCRIPTION | CONVERSION | SAMPLE NUMBER | ASSAY |
|-------|--------|-------|-------|--|---------------|---------------|-------|
| FT | METERS | COLOR | | | 1ft = 0.3048m | FOR ANAL | |
| 0 | 0 | | | 0-40' TILL | | | |
| | | | | Brown clay rich till w/ pebbles to 1cm (rounded) hematitic frag., fragments w/ olivine xtls, qtz fragments and f-g Magnetite 1-2%. | | 10 | |
| 0 | 3.1 | | | | | 20 | |
| 20 | 6.1 | | | | | 30 | |
| 30 | 9.1 | | | | | 40 | |
| 40 | 12.2 | | | 40-320' VOLCANIC SAND (SANDSTONE)? Driller says bedrock at 40' | | 50 | |
| | | | 5% | w/ 20% hematitic grns some rounded, 10% lt yellow lim. grns. 30% v-f-g qtz-calc. frag. grns, 5% Mt grains. | | 60 | |
| 50 | 15.2 | | | Brown color, 20% hem. grns/frag., 5% yellowish lim. frag. 40% qtz, 10% calc. | | 70 | |
| 60 | 18.3 | | | as above | | 80 | |
| | | | 5% | | | 90 | |
| 70 | 21.3 | | | 10% gray black volc. frag-grns some w/ vesicles 10% hem. grns 50% whitish qtz-calc. v-micro-granular, v-f-magnetite 5% | | 100 | |
| 80 | 24.4 | | | | | 110 | |
| | | | 5% | | | 120 | |
| 90 | 27.4 | | | 40% whitish minerals qtz-calc., some olivine xtls. 21% 1-3% phlogopite 15% hem. frag-grns: gray brn rock w/ hem. spots Mt ~5% | | 130 | |
| 100 | 30.5 | | | | | 140 | |
| | | | 1% | | | 150 | |
| 110 | 33.5 | | | | | 160 | |
| 120 | 36.6 | | | | | 170 | |
| 130 | 39.6 | | | with trace of qtz w/ py. | | 180 | |
| 140 | 42.7 | | | | | 190 | |
| 150 | 45.7 | | | rock particles, hem. volc, lt grn. volc & predomin. of gray volc frag. | | 200 | |
| 160 | 48.8 | | | 30% qtz-calc. particles, 5% hem. frag. | | 210 | |
| | | | 3% 5% | | | 220 | |
| 170 | 51.8 | | | | | 230 | |
| 180 | 54.9 | | | | | 240 | |

| SAMPLE NUMBER | AL ASSI |
|------------------|------------|
| FCU-082 | |

| DEPTH | UNIT | MT | DESCRIPTION | Conversion 1 ft = 30.48 m | NUMBER | ASS |
|-------|------|----|---|--|--------|-----|
| Feet | Feet | | | | Feet | |
| 180 | 54.9 | 5% | 30% white calc - qtz particles. 10% hem. particles. | | 190 | |
| 200 | 57.9 | 5% | 50% qtz-calc particles 15% hem. reddish volc. 20% lt gray volc | 5% fine Mt | 200 | |
| 220 | 61.0 | " | " " " | | 210 | |
| 240 | 64.0 | 5% | 70% qtz-calc particles 10% hem. frag. some lt grn mineral? 5% Mt. | | 220 | |
| 260 | 67.1 | " | " " " | | 230 | |
| 280 | 70.1 | 5% | " " " | | 240 | |
| 300 | 73.2 | 5% | 50% wht minerals qtz-calc, 5% lt grnser. particles 21% olivine mineral 15-20% hem. particles | 5-10% Mt. | 250 | |
| 320 | 76.2 | 5% | 5% tan ash frag., 10% hem. frag. 30% qtz calc., some black bas. frag. 1% phlogopite, 1% olivine xths. | hard at 258. 5% | 260 | |
| 340 | 79.2 | 1% | Similar to above w/ addition of brn tan ash frag. (probably silt frag ~20%, 40% qtz-calc, 41% olivine, 10% hem. frag. odd seric fleck, some bluish frag., 1% grn ser. frag. | | 270 | |
| 360 | 82.3 | 5% | 30-40% tan ash (probably silt bd), 20% qtz-calc. 1% bio - phlogopite, 5% greenish frag. 21% olivine. 1% black frag. | | 280 | |
| 380 | 85.3 | 5% | " " " | | 290 | |
| 400 | 88.4 | 5% | 5% hem. altered grns 10% wht qtz-calc. 20% tan buff ash-silt | some black frag. - basalt? 2% phlogopite 30% wht micro qtz-calc. | 300 | |
| 420 | 91.4 | 5% | 30% tan ash-silt grns. 1-2% phlogopite, 10% hem altered frags 1% grn frag. 1% blue grns ~5% | 30% qtz-calc. 2% plag. | 310 | |
| 440 | 94.5 | | " " " | | 320 | |
| 460 | 97.5 | | | | | |

HOLE: PH26-02

GRID LOCATION: GOOSLY
ELEVATION: L 12N 48+00E (2m S).

ANGLE: 90°

TYPE: Percussion

DATE Start/Finish: Oct 20/

DEPTH: 142'

LOGGED BY: G. NORMAN

SCALE: 1"=20'

" " 1cm=2.4m

Conversion 1ft=.3048m

SAMPLE
NUMBER
ASS.

| DEPTH feet | UNIT meters | | | | | | DESCRIPTION | | |
|---------------|----------------|--|--|--|--|----|--|--|--|
| 0 | | | | | | | 0-35' <u>TILL</u> Boulder - pebble till w/ clay matrix. | | |
| 7 | 2.1 | | | | | | | | |
| 17 | 5.2 | | | | | | | | |
| 27 | 8.2 | | | | | | | | |
| 37 | 11.3 | | | | | | 35-97' <u>VOLCANIC SEDIMENT / TUFF</u> Appears to be a rock w/ a great variance in rock fragment types, consisting of | | |
| 47 | 14.3 | | | | | 2 | 1) hematitic frag ~ 5-15% 2) grey volcanic fragments, some w/ v-line amygd | | |
| 57 | 17.4 | | | | | | 3) odd seritic fragments, qtz w/ fine serite 4) limonitic frag - to ~ 10% 5) some bluish frag or mineral | | |
| 7 | 20.4 | | | | | 1 | Also minerals as qtz - v-line grained - 20-30% possibly matrix to sedimentary tuff. Calcite white clasts ~ 10% - 20% ; ~ 1-2% phengite | | |
| 7 | 23.5 | | | | | 2 | x10s. Rock also contains 1-5% dissem. Mt. | | |
| 7 | 26.5 | | | | | | 67-87' Rock could be more like a sand to gravel not that consolidated and part of overburden? | | |
| 7 | 29.6 | | | | | 3% | 50% of rock frag are 3mm (sand size) Many grains are rounded. Similar lithology breakdown as above. | | |
| 7 | 32.6 | | | | | | 87-97' Becoming finer grained but similar lithology. | | |
| 7 | 35.7 | | | | | 3 | 97-142' <u>VOLCANIC SILT</u> Very fine grained (< .2mm) with similar lithology to above. 15% hem. grains. | | |
| 127 | 38.7 | | | | | 5 | Grains are very well sorted. | | |
| 137 | 41.8 | | | | | | | | |
| 42 | 43.3 | | | | | | | | |

HOLE: PH 86-03

GRID LOCATION: 13+00N 46+55

ANGLE: 90°

ELEVATION:

TYPE: *Percussion*

ELEVATION:
DATE Start/Finish: Oct 22/86/Oct 22/86

DEPTH: 47', 14.3m

LOGGED BY: G. Norman

SCALE: 1"=20'

" " $1\text{ cm} = 2.4\text{ in}$
Conversion $1\text{ ft} = .3048\text{ m}$

| | |
|--------|-----|
| SAMPLE | AL |
| NUMBER | ASS |
| EX-152 | |

| DEPTH | | UNIT | DESCRIPTION | Conversion 1ft=.3048m | NUMBER | ASS. |
|-------|------|------|---|-----------------------|---------|------|
| ft | m | | | | Ex Page | |
| 0 | 0 | | 0-15' <u>TILL</u> Brown clay matrix w/ blders and pebbles. | | 7 | |
| 7 | 2.1 | | 15-17' <u>CLAY TILL</u> Brown clay w/ pebbles | | 17 | |
| 17 | 5.2 | | 17-25' <u>PEBBLE-SANDY TILL</u> | | 25 | |
| 25 | 8.2 | | 25-47' <u>VOLCANIC SANDSTONE</u> Very similiar material in holes PH-86-01, 02 w/ a wide variance in volcanic rock frag. pebbles. Most clasts are rounded-subrounded and the unit is well sorted w/ size from 4.5m - 2mm Rough % breakdown of common rock types: minerals. | | 37 | |
| 47 | 14.3 | | ~15% hematitic volcanic pebbles. ~10% limonitic clasts. ~5% grey volcanic pebbles - larger ones to 2mm | | 47 | |

HOLE:PH 86-03A

GRID LOCATION: 13+00 N 46+81 E

ANGLE: 90°

ELEVATION:

TYPE: Percussion

ELEVATION:
DATE Start/Finish: Oct 22/Oct 22/86

DEPTH: 47', 14.3m

LOGGED BY: G. NORMAN

SCALE: 1"=20'

" " $1\text{cm} = 2.4\text{m}$

[illegible]

HOLE: PH86-04

GRID LOCATION: 10+15N 46+47E

ANGLE: -90

ELEVATION:

TYPE: Percussion

DATE Start/Finish: Oct. 22/Oct 23 1986.

DEPTH: 287', 87.5m

LOGGED BY: G. NORMAN

SCALE: 1"=20'

| DEPTH ft | UNIT m | DESCRIPTION | Conversion 1ft = .3048m | SAMPLE NUMBER for logs | AU ASSA |
|-------------|-----------|---|---------------------------------|------------------------------|------------|
| 0-0 | | 0-22' <u>TILL</u> Brown clay rich till w/ some blders, (porph grey volc.) | 1cm = 2.4m | 7 | |
| 7-2.1 | | | | 17 | |
| 17-5.2 | | 22.-117' <u>VOLCANIC SAND / SANDSTONE</u> Very fine grained rock, high % of tan ash-silt. frag ~ 30%, 10% hem frag, 5% Mn frag, reddish frag. | | 27 | |
| 27-8.2 | | most frag. are rounded - subrounded becoming coarser grained in 29' ave size ~ 1-2mm. some pebbles to 5cm of grey black volc., wider variety of | | 37 | |
| 37-11.3 | | ie. 1/4 hem. alter volc., some w/ hb needles 2/ 1/4 grey ash till or silt frag. 3/ 1/4 blue frag. 4 olive colored frag. | 5% limonitic frag. | 47 | |
| 47-14.3 | | 1-2% - rounded pebbles up to 1cm. similar to above | 1-2% Mt sand | 57 | |
| 7-17.4 | | | | 67 | |
| 7-20.4 | | | | 77 | |
| 7-23.5 | | some rounded pebbles to .4mm. | | 87 | |
| 7-26.5 | | - somewhat finer grained, w/ 10% hem. frag. also 30% dk mafic volc. frag. | 4% and calc frag. | 97 | |
| 7-29.6 | | 1% 1% brn. frag., 1% grey volc. frag. | ~ 1% Mt. | 107 | |
| 107-32.6 | | | | 117 | |
| 117-35.7 | | 117-287' <u>SILT / SAND</u> Very fine grained frags. - 50% qtz-calc. grns, 5% hem grns 5% black volc. grns 1% phlogopite. < 1% v-f-g Mt. | | 127 | |
| 127-38.7 | | somewhat coarser grains w/ some pebbles to 5cm. w/ matrix of .1mm grns, larger grns are subrounded | | 137 | |
| 137-41.8 | | 20% hem. grns, qtz-calc grns, dk volc. grns → 1/2cm. v-f-g. | | 147 | |
| 7-44.8 | | v-f-g 40% micro quartz-calc., 15% hem frag 1% tan frag some phlogopite, 1% grey frag ~ 1.1mm grain size | | 157 | |
| 7-47.9 | | | | 167 | |
| 7-50.9 | | v-f-g. 40% micro quartz-calc., 10% hem frag 5% dk volc. frag. | grain size < .1mm ~ 2.5% Mt. | 177 | |
| 177-54.0 | | 2.5% | | | |

ANGLE: -90
TYPE: Percussion
DEPTH: 287

ELEVATION:
DATE Start/Finish: Oct 22/Oct 23/86.
LOGGED BY: G. NORMAN SCAI

SCALE: 1"=20'

| DEPTH | UNIT | % | DESCRIPTION | Conversion | SAMPLE NUMBER | AU ASSA |
|-------|------|------|---|----------------------------|---------------|---------|
| 54.0 | | Mt | SILT/SAND | 1cm = 2.4m 1ft = .3048m | | |
| 57.0 | | | Similar to previous page. | | 187 | |
| 60.0 | | L.S. | " " " " | | 197 | |
| 63.1 | | | Similar to above w/ 30% qtz - minor calc., bright hem. altered volc. 1 dark hem. frag, 5% dk gray volc. larger ones subrounded; olive colored frag. black frag. larger grains to 2mm are rounded to subrounded. | | 207 | |
| 66.1 | | | " " " " | | 217 | |
| 69.2 | | | " " " " | | 227 | |
| 72.2 | | .1 | " " " " | | 237 | |
| 75.3 | | | " " " " | | 247 | |
| 78.3 | | | Medium grey brown. similar to above. w/ many various rock types, well sorted malicid Tidal & Delta silt grain size 0.05mm - .5mm. w/ 50% qtz - (.4-1mm). | | 257 | |
| 81.4 | | L.I. | calc. grains, 5% hem. 15 ft tan ash (prob. silt frag.) odd size qtz, 1% lim grains, odd blue frag. | | 267 | |
| 84.4 | | | 80% v-f-g micis rounded qtz grains ~ .1mm or less 5% uncler ash or silt frag, soft. 5% hem frag, 5% grey/black volc. The higher percent qtz represents a more washed sand-silt. | | 277 | |
| 87.5 | | | | | 287 | |

Page 1 of 2

GRID LOCATION: L12 N 42+00 E
ELEVATION:
DATE Start/Finish: Oct23/Oct24/86
LOGGED BY: G. NORMAN SCAL.

SCALE: 1"=20'

| DEPTH ft | | UNIT meters | % | | DESCRIPTION | conversion 1ft = .3048m | SAMPLE NUMBER ELECTRIC | ASS. |
|-------------|--------|----------------|----|----|--|-------------------------|------------------------------|------|
| ft | meters | | Mt | Py | | | | |
| 0 | 0 | | | | 0-10' <u>BLACK ORGANICS</u> | | NOSAMPLE | |
| 7 | 2.1 | | | | 10-23' <u>TILL</u> Sandy pebble cobble till. | | 7 | |
| 7 | 5.2 | | | | 23'-25' <u>CLAY TILL</u> | | 17 | |
| 7 | 8.2 | | | | 25'-27' <u>SILT</u> | | 27 | |
| 7 | 8.2 | | | | 27-37' | | NOSAMPLE | |
| 37 | 11.3 | | | | NO SAMPLE RETURN. | | 37 | |
| 37 | 11.3 | | | | 37-42' <u>SAND</u> f-g sand. | | | |
| 47 | 14.3 | | | | 42'-45' <u>PEBBLE GRAVEL</u> w/ rounded pebbles to 1/2 in. | | 47 | |
| 57 | 17.4 | | | | 45'-57' <u>SAND/PEBBLES</u> - coarse grained sand w/ pebbles ave grn size of sand is 2-3mm. Lithology of sand - 15% hematite vols frag, 30% grey volc, black f-g volc frag, limonitic fine 1%, 2% ep altered frag, clasts are well rounded to subangular. | | 57 | |
| 67 | 20.4 | 4.5% | | | 57'-69' <u>COARSE SAND/SILT</u> 60% coarse sand (3mm grains) - 40% silt frns. | | 67 | |
| 77 | 23.5 | 4.5% | | | 69'-147' <u>FINE GRAINED SAND/SILT</u> fine grned sand - silt 2.1mm grns or less. 15% hem. particles 20% qtz, also grey volc, lim. frag. very similar to above w/ 4.5% Mt grains, w/ odd particles of wood. | | 77 | |
| 87 | 26.5 | 4.5 | | | | | 87 | |
| 97 | 29.6 | 4.5 | | | 40% f-sand as above w/ 1-1.5mm grns most subrounded w/ 15% hem. grns, 5% grey volc, some lim grns, some silic grns 5% qtz - calc, 60% silt w/ 8% qtz grns ~ .1mm 10% hem. grns 5% grey volc. some lim. frag. | | 97 | |
| 107 | 32.6 | 4.5 | | | 70% silt - 30% sand lith. similar to above breakdown. | | 107 | |
| 117 | 35.7 | 4.5 | | | 80% silt - 20% sand 80% of silt grns - qtz < .1mm. 21% phlogopite 3% grey volc, 5% hem grns 7% lim grns. | | 117 | |
| 127 | 38.7 | 4.5 | | | 90% silt - 10% sand .1mm - .3mm. well sorted. Similar lithology to above. w/ 5% hem grns ~ 80% qtz calc. | | 127 | |
| 137 | 41.8 | 4.5 | | | " " " " | | 137 | |
| 147 | 44.8 | 4.5 | | | " " " " | | 147 | |
| 157 | 47.9 | 4.5 | | | 147'-267' <u>SILT</u> grey v-f-grns / minor less well sorted. w/ 10% hem. grns 70% v-f qtz-calc. 5% grey volc. some lt green silic frag, some bluish grns, lt grey volc and minor phlogopite. and. 1-2 Mt grns. | | 157 | |
| 167 | 50.9 | 20 | | | " " " " | | 167 | |
| 177 | 54.0 | " | | | " " " " | | 177 | |

HOLE: FH86-05

GRID LOCATION:

ANGLE:

ELEVATION:

TYPE:

DATE Start/Finish:

DEPTH:

LOGGED BY:

SCALE: 1"=20'

" " 1cm=2.4m
conversion 1ft=.3048m

| DEPTH | UNIT | DESCRIPTION | CONVERSION | SAMPLE NUMBER | ASSI |
|-------|------|--|------------|---------------|------|
| 177 | 54.0 | SILT CONT'D as per previous page | | 187 | |
| 177 | 57.0 | 10% lt grey volec, 5% organic hem. {red hem grns (.1-.3mm) 40% qtz-calc, dk grey volec, 10% brn calc, lt grn volec minor fsp, <1% black organics | | 197 | |
| 177 | 60.0 | " " " " | | 207 | |
| 177 | 63.1 | 2.1mm grn size, 90% qtz minor calc, 1% hem grns. 1% grey volec, fine coal or organics | | 217 | |
| 217 | 66.1 | " " " " | | 227 | |
| 227 | 69.2 | as above w/ wood chips to 3mm. | | 237 | |
| 237 | 72.2 | " " " " | | 247 | |
| 247 | 75.3 | Silt w/ 5-10% v-f-g sand, multicolored, 30% qtz, 20% limonitic grns, odd py grn, 2% grey volec. some bluish grains, .1-.2 v-f-rt grns | | 257 | |
| 257 | 78.3 | " " " " | | 267 | |
| 267 | 81.4 | 267' end of hole 81.4m. | | | |

PROJECT: GOOSLY

E. GRID

Page 1 of 2

HOLE: PH 86-06 GRID LOCATION: 20+42N 37+32E

ANGLE: 90° ELEVATION:

TYPE: Percussion DATE Start/Finish: Oct 24/00

DEPTH: 297' (90.5m) LOGGED BY: G. Norman

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | Wt. Cuts | % Mt | DESCRIPTION | conversion 1ft = 30.48m | SAMPLE NUMBER Feet | ASS. |
|---------------|--------------|-------------|----------|---|----------------------------|--------------------------|------|
| 0 | 0 | | | 0-15' <u>TILL</u> Light brown clay rich till w/ pebbles | | NOSAMPLE | |
| 2.1 | | | | 15'-17' <u>SAND</u> Coarse sand w/ variety of rock types. | | 7 | |
| 5.2 | | | | 17'-25' <u>PEBBLE GRAVEL and COARSE SAND</u> Well rounded pebbles to 1cm, coarse sand to 4mm. various volcanic pebbles | | 17 | |
| 8.2 | | | | 25'-27' <u>COARSE SAND</u> | | 27 | |
| 11.3 | | | | 27'-37' <u>PEBBLE GRAVEL</u> 50% pebbles to 1cm; 50% coarse grained sand. well rounded pebbles - grey volc, hematitically altered, sand ~ 1mm or less, 5/5% hem. frag, bi. volc; 9/2% 10% old phlogopite xls. | | 37 | |
| 14.3 | | | | 37'-59' <u>COARSE SAND</u> Coarse sand ~ 1-3mm w/ some pebbles to 4mm. Many different rock types (most all volc.) - 5% hem. grains, 10% lim. grns, 2% yellow calc - 9/2% 5% grey volc. odd pyrite gr 9/2% w/ser frag; ~ 1-12% v-f-grit. | | 47 | |
| 17.4 | | | | 59'-66' <u>VERY FINE SAND, SILT.</u> - 4.1mm grns. 80% qtz granules, 5% gry volc. | | 57 | |
| 20.4 | | | | 66'-69' <u>COARSE SAND</u> ~ 2mm grains. | | 67 | |
| 23.5 | | | | 69'-95' <u>PEBBLE GRAVEL / COARSE SAND</u> 69'-77' pebble gravel - 50% pebbles - 50% sand. pebbles 3mm - 3cm of various volc types as mentioned above. | | 77 | |
| 26.5 | | | | 77'-95' coarse sand and pebble gravel (pebbles to 5mm) - coarse sand contains: 10% hem grains, 30% lim. grns 5% gry volc., 5% qtz 10% purple volc. and 4.1% Mt | | 87 | |
| 29.6 | | grn | 2.1 | 95'-137' <u>ANDESITE</u> | | 97 | |
| 32.6 | | " | | Light grey f-g volc. w/ fine bio. and. 12-13% diagen. Mt. | | 107 | |
| 35.7 | | " | | moderately hematitically altered f-g volc w/ fine bio. (probably above rock only hem.) | | 117 | |
| 38.7 | | " | .2 .3 | 40% rock frag 14 gry grn. 30% rock frag - hematitically altered. | | 127 | |
| 41.8 | | " | 1-2% | 137'-149' <u>HEMATITIC ANDESITE</u> Reddish brn hematitically altered, finely vesicular w/ diagen specular hematite | | 137 | |
| 44.8 | | rosa | | 149'-152' <u>ANDESITE</u> Fine grained med green volc. | | 147 | |
| 47.9 | | | | 152'-167' <u>HEMATITIC ANDESITE</u> as per 137'-149' | | 157 | |
| 50.9 | | | | 167'-177' <u>GREY ANDESITE</u> Fine grained grey - grey green volcanic w/ calcite amorph or vns. w/ ~ 1% Mt. 60-80% simple ~ 5% hem frag. | | 167 | |
| 54.0 | | | .1 | | | 177 | |

HOLE: PH86-06

GRID LOCATION:

ANGLE:

ELEVATION:

TYPE:

DATE Start/Finish:

DEPTH:

LOGGED BY:

SCALE: 1"=20'

" " 1cm=2.4m

| DEPTH | UNIT | water color | | | | | | DESCRIPTION | Conversion | 1ft=.3048m | SAMPLE NUMBER | AU ASSA |
|-------|------|--------------------|--|--|--|--|-----|---|------------|------------|---------------|---------|
| 17 | 54.0 | reddish | | | | | | 177-179' <u>TUFF/Flow?</u> Gray tuff or volc. flow? | | | 177 | |
| 17 | 57.0 | grey | | | | | .1 | 179-198' <u>HEMATITIC VOLCANIC (ANDESITE)</u> Reddish hematitically (st+) altered volcanic. very finely vesicular, w/ 1% dissemin Mt. | | | 187 | |
| 107 | 60.0 | 198 grey grn | | | | | | 198-207' <u>ASH TUFF</u> Gray volcanic ash /tuff? w/ 30% hematitic frag. | | | 207 | |
| 207 | 63.1 | | | | | | | 207-217' <u>ANDESITE</u> Gray grn volc w/ ~ 1/2% dissemin Mt, w u f-grained bio specks. (60% of rock - also 10% hem. frag.). | | | 217 | |
| 217 | 66.1 | reddish | | | | | | 217-226' <u>HEMATITIC ANDESITE Flow or TUFF</u> Reddish hematitically altered rock w/ specular hematite very fine. vesicular; amygdalae or small particles of ash. | | | 227 | |
| 227 | 69.2 | | | | | | | 226-247' <u>GREY ANDESITE</u> Fine grained grey volcanic w/ ~ 1% dissemin Mt. | | | 237 | |
| 257 | 72.2 | | | | | | 1% | " " " " | | | 247 | |
| 277 | 75.3 | | | | | | | " " " " | | | 257 | |
| 277 | 78.3 | | | | | | | " " " " | | | 267 | |
| 277 | 81.4 | | | | | | | 35% whitish fragments, probably fsp. phenocrysts. 40% grey volc. frag. 15% hem. frag. | | | 277 | |
| 277 | 84.4 | | | | | | .2 | 50% grey volc w/ dissemin Mt., 2% lim. 10% wht - clay alter volc. 5% hem. altered volc. w/ Mt. | | | 287 | |
| 207 | 87.5 | | | | | | .5 | 90% grey volc. w/ dissemin Mt. 10% hem. volc. | | | 297 | |
| 297 | 90.5 | | | | | | 2.5 | 1-2% calc - wh + qtz. | | | | |

HOLE: PH86-07

GRID LOCATION: L24+00N 43T06E

ANGLE: 90

ELEVATION:

TYPE: Percussion

DATE Start/Finish: Oct 26/

DEPTH: 317', 96.6m

LOGGED BY: G. Norman

SCALE: 1"=20'

| DEPTH | UNIT | WATER | MT | PY | DESCRIPTION | Conversion | SAMPLE NUMBER | AL ASS? |
|-------|------|-----------------|----|----|--|----------------------------|---------------|---------|
| 0 | 0 | brn | | | 0-15' <u>TILL</u> Brown clay rich boulder till. | 1cm = 2.4m 1ft = .3048m | 7 | |
| 7 | 2.1 | brn | | | 15'-17' <u>SAND</u> Brown coarse grn sand. grn < 3mm | | 17 | |
| 17 | 5.2 | brn | | | 17'-27' <u>TILL</u> Brown clay rich till, becoming sandy at 27' | | 27 | |
| 27 | 8.2 | brn | | | 27'-33' <u>COARSE SAND</u> 33'-46' <u>PEBBLE GRAVEL</u> | | 37 | |
| 37 | 11.3 | brn | | | 33'-40' 50% pebbles to 1/2 cm. 40'-46' decrease in % pebbles 50% → 10 increase in sand to 90% | | 47 | |
| 47 | 14.3 | brn | | | 46'-52' <u>FINE SAND</u> 52'-57' <u>ANDESITE ?</u> Lt grn f-g volc. | | 57 | |
| 57 | 17.4 | lt whitish g.g. | | | 57'-82' <u>TUFF</u> Light gry (clay rich) volc w/ fine particles, minor specks py. (Soft whitish matrix altered w/ particles) | | 67 | |
| 67 | 20.4 | " | | | " " " " | | 77 | |
| 77 | 23.5 | " | | | 82'-147' <u>DACITE</u> Lt gry - whitish gry volc w/ micro-fsp xths and diatom. Mt to 1/2% - some frag w/ lt green tinge (ser?) | | 87 | |
| 77 | 26.5 | " | | | 105'-147' <u>ALTERED ZONE</u> 105' to 7' whitish to lt grn. altered rock some frag w/ fsp. diatom Mt < 1% Some qtz - frag w/ trace py | | 97 | |
| 77 | 29.6 | 105 | | | 107'-109' High pyrite - some frag w/ 20% - qtz altered | | 107 | |
| 77 | 32.6 | whitish | | | 109'-127' Lt gry alter rock w/ ~1% diatom py | | 117 | |
| 77 | 35.7 | " | | | 127'-138' qtz altered rock w/ diatom py. block mineral. (detrital) and w/ 2% diatom Mt at ~135' | | 127 | |
| 77 | 38.7 | 128 black | | | | | 137 | |
| 77 | 41.8 | | | | 138'-147' Whitish altered rock (qtz-ser) w/ frag w/ up to 20% py. and overall py content of 5%. | | 147 | |
| 77 | 44.8 | whitish | | | <u>TUFF / DACITE</u> 147'-157' Whitish (clay altered) w/ traces pyrite Tuff; frag of lt gry volc w/ fine fsp, odd qtz frag w/ py | | 157 | |
| 77 | 47.9 | " | | | 157'-167' <u>DACITE</u> Whitish altered volc. w/ lt grn ser. altered fsp, odd frag w/ py. diatom. Mt. ~1% | | 167 | |
| 77 | 50.9 | " | | | 167'-177' whitish altered rock altered (qtz-ser) (grn) and w/ specks diatom. py. diatom Mt. | | 177 | |
| 77 | 54.0 | | | | | | | |

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | Wedge Color | Ser | Qtz | Carb | Hem | Mt | Py | DESCRIPTION | Conversion 1ft = .3048m | SAMPLE NUMBER | AU ASSA |
|---------------|--------------|--------------------------------|-----|-----|------|--------|------------|----|--|-------------------------|------------------|------------|
| 17 | 54.0 | gray | | | | | .2 | L1 | <u>DACITE</u> <u>CONTD</u> Gray w/ lt greenish tinge colored volc w/ fine fsp, dissem Mt. ~ .2% and ~ .1% py odd qtz grains w/ up to 15% py | | 177 | |
| 187 | 57.0 | " | | | | | .3 | L1 | w/ 'wk hem' alter'n. *frag w/ qtz bx py' blockmineral* | | 187 | |
| 197 | 60.0 | gray w/ reddish tinge | | | | W | .3 | tr | - fsp → lt grn ser (rich) | | 197 | |
| 207 | 63.1 | 216 | | | | M W | | | 207-216 rock becoming more hematitic, euhedral fsp to 1mm. odd qtz grn + 3% py dissem. | | 207 | |
| 217 | 66.1 | reddish " | | | | M | | | 216-227 similar volcanic as above w/ hem. specks! dissem Mt. odd qtz grn + 30% py | | 217 | |
| 227 | 69.2 | " | | | | S | .2 | | 227-247 Rusty colored hematitic volcanic, possible above volc. only hem. altered, some | | 227 | |
| 237 | 72.2 | " | | | | S | | | " " " " | | 237 | |
| 247 | 75.3 | wht gr | | | | | | | 247-274 (ALTERED ZONE) DACITE? 247-255 whitish rock qtz-ser. w/ frags w/ up to 10% dissem py. - overall py ~ 1-2 (in pen) | | 247 | |
| 257 | 78.3 | " | S | S | | | 1-2 1-3 | | 255-259 with ~ 1% dissem py. 259-262 qtz altered rock w/ 1-3% py. 262-268 qtz-ser altered rock w/ 10% dissem pyrite | | 257 | |
| 267 | 81.4 | gray | S | S | | | 1-3 2-4 | | 268-274 " " " " 23% " " " " .3 dissem | | 267 | |
| 277 | 84.4 | gray purple | | | | | .3 | | 274-277 <u>DACITE</u> ? Lt gray-grn weakly hem. rock. 277-290 Lt whitish gray volc w/ .3% dissem Mt. | | 277 | |
| 287 | 87.5 | wht gr | | | | | | | 290-317 whitish colored rock w/ str carbonate alter'n weak ser. weak hem alter'n traces py. | | 287 | |
| 297 | 90.5 | whitish | W | | S | W | .3 | tr | w/ ser altered fsp xls. odd qtz grn + py. | | 297 | |
| 307 | 93.6 | whitish | W | | S | | .1 | tr | " " " " | | 307 | |
| 317 | 96.6 | W | | | S | | .2 | - | " " " " | | 317 | |

HOLE: PH86-08

GRID LOCATION: 25100N 48114E

ANGLE: 90°

ELEVATION:

TYPE: Percussion

DATE Start/Finish: Oct 26/

DEPTH: 294', 89.6m

LOGGED BY: G. NORM

SCALE: 1"=20'

| DEPTH | UNIT | water color | Intensity | Mt | Py | DESCRIPTION | Conversion | SAMPLE NUMBER | ASS. |
|------------|------|-------------------|-----------|----|-----|---|---------------------------|---------------|------|
| | | M | % | | % | | 1m = 2.4m 1ft = .3048m | | |
| 0 - 0 | | blown | | | | 0 - 15' <u>TILL</u> Brown clay rich till w/ bones y/vok. | | 7 | |
| 7 - 2.1 | | " | | | | 15' - 27' <u>SANDY TILL</u> Sandy till w/ some py grains to 3mm. | | 17 | |
| 7 - 5.2 | | " | | | | 27' - 33' <u>Weathered Bedrock?</u> Lt brn very soft clay altered material, paleo surface weathered, or altered ash layer? | | 27 | |
| 37 - 8.2 | | | | | | | | 37 | |
| 37 - 11.3 | | | | | | 33' - 47' <u>ANDESITE?</u> Lt green - purple colored f-g vлк. | | 47 | |
| 47 - 14.3 | | | | | | 47 - 192' <u>ALTERED TUFF</u> Soft white altered (clay-ser?) rock w/ fine particles and frag of dark-med green ser. altered w/ 3-4%. | | 57 | |
| 57 - 17.4 | | med dk gry | | | 1 | 57 - whitish - lt grn ser. altered tuff. w/ particles and darker grn ser. altered particles w/ 34% py dissem. | | 67 | |
| 67 - 20.4 | | whitish gry | | | 1-2 | " " " " | | 77 | |
| 7 - 23.5 | | " | | | 3 | " " " " | | 87 | |
| 7 - 26.5 | | " | | | 3 | " " " " | | 97 | |
| 7 - 29.6 | | Hgrj w/ grn frags | | | 3-5 | Increase in qtz fragments as compared to dark-Hgrn silicified frag. | | 107 | |
| 7 - 32.6 | | " | | | 1/2 | Light green - whitish ser - qtz altered rock w/ 1/2 % dissem. py cubes. | | 117 | |
| 7 - 35.7 | | " | | | 2 | " " " " | | 127 | |
| 127 - 38.7 | | 135 Hgrn | | | 3/5 | Lt green ser frag. w/ small particles (abundant) | | 137 | |
| 137 - 41.8 | | lt gry | | | 1/2 | Light green - whitish ser - qtz alter rock w/ 1/2 dissem. py cubes | | 147 | |
| 147 - 44.8 | | " | | | 3 | " " " " | | 157 | |
| 157 - 47.9 | | 305 milky white | | | 1-2 | " " " " | | 167 | |
| 167 - 50.9 | | " | | | 3-5 | Whitish qtz altered rock w/ 5-10% py, some frags - 15% py. | | 177 | |
| 77 - 54.0 | | 174 med gry | | | 3-5 | " " " " | | | |

HOLE: PH 86-08

GRID LOCATION: 25+00N 48+14E

ANGLE: -90

ELEVATION:

TYPE: percussion

DATE Start/Finish:

DEPTH: 294', 90.5m

LOGGED BY: G. NORMAN

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | water color | hem | Calc | qtz | Ser | Mt | Py | DESCRIPTION | Conversion 1ft = .3048m | SAMPLE NUMBER | AU ASSA |
|---------------|--------------|--|-----|------|-----|-----|----|----|---|-------------------------|------------------|------------|
| 1 | 54.0 | 172 172 172 | | | M | 5 | | 1% | ALTERED TUFF CONT. | | 177 | |
| 107 | 57.0 | | | | | | .1 | | | | 187 | |
| 197 | 60.0 | 192 192 | | | | | .1 | .2 | 192'-294' HEMATITIC VOLCANIC CANDESITE | | 197 | |
| 207 | 63.1 | w/ purple tinted purple reddish | M | | | | .2 | .1 | Weakly hematitic volcanic w/ old euhedral fsp phenocryst. w/ .1% dissem. Mt. - 197 - purple - lt grn colored moderately hem | | 207 | |
| 217 | 66.1 | " | M | | | | .2 | .1 | altered w/ weak. lt grn ser - ch? patches, dissem Mt ~.2% and micro fsp phenocryst euhedral. | | 217 | |
| 227 | 69.2 | " | M | | | W | .2 | .1 | " | | 227 | |
| 237 | 72.2 | " | M | | | | .2 | .1 | " | | 237 | |
| 247 | 75.3 | grs wk purple tinted | M | | | | | .1 | " | | 247 | |
| 257 | 78.3 | " | M | | | | .2 | .1 | " | | 257 | |
| 267 | 81.4 | " | M | | | | .2 | .1 | Purplish - hematitic volc. w/ lt grn ser altered fsp phenocrysts still some frag w/ traces of py conglomeration? | | 267 | |
| 277 | 84.4 | " | M | | | | .4 | .1 | " | | 277 | |
| 287 | 87.5 | " | M | | | | .1 | tr | the lt grn ser frag - part of hem. volc or not? | | 287 | |
| 294 | 89.6 | " | M | | | | .1 | tr | Lt purple - greenish volc. w/ lt grn ser - fsp w/ wk - mod hem. alkali. .1% dissem Mt. | | 294 | |
| | | | | | | | | | end of hole 294' (89.6) | | | |

HOLE: PH 86-09

GRID LOCATION: 17N 50E30

ANGLE: 90°

ELEVATION:

TYPE: Percussion

DATE Start/Finish: Oct 29/86

DEPTH: 277, 84.4m

LOGGED BY: G. Norman

SCALE: 1"=20'

| DEPTH ft | UNIT Meters | water color | Intensity Hem carb Ser Qtz Mt PY | DESCRIPTION | conversion 1cm=2.4m 1ft=.3048m | SAMPLE NUMBER Footage | ASS. |
|-------------|----------------|------------------|-------------------------------------|---|-----------------------------------|-----------------------------|------|
| 0 | 0 | brn | | 0-19' <u>TILL</u> Med. brown clay rich, bldg - cobb & till. | | No Sample | |
| 7 | 2.1 | | | 7-19' some strongly limonitic frag w/ dissem py. | | 7 | |
| 17 | 5.2 | brn | | | | 17 | |
| 27 | 8.2 | brn | | 19'-27' Light green mod-sericic volc. w/ weak-med hem. alteration | | 27 | |
| 37 | 11.3 | grn | W | 27-32' <u>Purple Volc (Andesite)</u> Fine grained purpleish (hematitic) volc. | | 37 | |
| 47 | 14.3 | grn | | 32-37' <u>PORPHYRITIC DACITE</u> Lt grn (sericic) fsp porphyritic volc w/ dissem. Mt. fsp to 2mm. | | 47 | |
| 57 | 17.4 | grn | W | 37-47' Lt grn (str sericic-chl?) w/ hematite patches; dissem. Mt, traces pydissem. | | 57 | |
| 67 | 20.4 | purple grn | M | 48-52' becomes str 52-62' <u>TUFF</u> Very soft purplish colored tuff w/ fine particles. | | 67 | |
| 77 | 23.5 | grn grn | M | 62-94' <u>DACITE</u> Light grn-purple (sericite-hem) altered volc. w/ dissem. Mt. | | 77 | |
| 87 | 26.5 | lt grn | M | 71-82 Stronger lt grn sericite - less hem. 82-94 becomes whitish - lt grn w/ introduction of carb. alter'n and w/ dissem. Mt, trace of py. | | 87 | |
| 97 | 29.6 | | S | 94-99' <u>TUFF</u> whitish - lt grn. sericically altered tuff w/ fine particles | | 97 | |
| 107 | 32.6 | grn dk grn | M-S S | 99-117' <u>DACITE</u> Lt grn - whitish volc w/ (grnish sericite or chl alter'n). of fsp w/ ~.2% py dissem. individ. fsp to .5%. | | 107 | |
| 117 | 35.7 | grn grn | M-S S | frag set tuff also w/ pyrite as above w/ dissem py to 1%. | | 117 | |
| 127 | 38.7 | grn grn | M W W | 117-118' <u>Maroon Volc.</u> Med-str hematized bed. | | 127 | |
| 137 | 41.8 | grn grn | | 118-277' <u>DACITE / ANDESITE</u> Dark to lt grn ser (chl?) volc. w/ med carbonate alteration and w/ .1-.2. dissem. Mt. w/ fine fsp (w/ 2m) and trace dissem. py | | 137 | |
| 147 | 44.8 | grn grn | | " " " " Becomes more hematitic at 145', still lt grn ser. patches and w/ dissem specular hem. 'Mt' | | 147 | |
| 157 | 47.9 | grn grn | W W | Lt greenish-maroon colored (ser-hem alter'n) w/ dissem. Mt, odd frag w/ py, micro fsp plenos. | | 157 | |
| 167 | 50.9 | grn | W W | " " " " | | 167 | |
| 177 | 54.0 | grn | W S | " " " " | | 177 | |

GRID LOCATION:
ELEVATION:
DATE Start/Finish:
LOGGED BY: G. NORMAN

SCALE: 1"=20'

[illegible]

HOLE: PH 86-10

GRID LOCATION: L16+00N' 52+02.7m E

ANGLE: -90°

ELEVATION:

TYPE: Percussion

DATE Start/Finish: Oct 30/Oct 31

DEPTH: 257', 78.3

LOGGED BY: G. NORMAN

SCALE: 1"=20'

" " 1cm = 2.4m

conversion 1ft = .3048m

SAMPLE
NUMBERAL
ASSI

| DEPTH f + | UNIT | water color | qt. | carb ep | ser | Mt | py | DESCRIPTION | SAMPLE NUMBER | AL ASSI |
|--------------|------|--------------------------|-----|------------|-----|----|----|--|------------------|------------|
| 0 - 0 | | brn | | | | | | 0-15' <u>TILL</u> Boulder rich fill w/ gray volc blders; hem. Hbls minor limonitic blders. Clay rich section 12-15' | 1 | |
| 7 - 2.1 | | bra | | | | | | 15'-18' <u>SAND</u> | | |
| 7 - 5.2 | | br. | | | | | | 18'-23' <u>CLAY TILL</u> Brown clay rich fill w/ cobbles & pebbles (1m) | 17 | |
| 27 - 8.2 | | brn grn | | | | | | 23'-76' <u>PERPHYRIC ANDESITE</u> Dark green chl-ep alter'd. porphyritic volc. w/ 1-2mm. wht fsp. (euhedral) xths. 2.1% dissem. | 27 | |
| 37 - 11.3 | | " | | | | | | Mt., chl matrix, wht fsp., minor hem. alter'n. | 37 | |
| 47 - 14.3 | | gry | | | | | | Increase in hematite alter'n still fsp perph. volc., some carb. vblts., minor lt grn ser. | 47 | |
| 57 - 17.4 | | " | | | | | | " " " " " " | 57 | |
| 67 - 20.4 | | " | | | | | | Purplish-lt grn., fsp porphyry. w/ strong lt grn ser alter'n. lt dusting of wht sericite, fine fsp (clmm) wk hem. (maroon color). | 67 | |
| 7 - 23.5 | | lt gry | | | | | | 76'-80' <u>TUFF</u> Whitish color w/ tinge of lt green coloration (sericite alter'n). tuft w/ fine particles, very soft, weak dissem Mt. (→ hem). | 77 | |
| 7 - 26.5 | | gry | | | | | | 80'-87' <u>DACITE (Flow or TUFF?)</u> lt grn f-g sericitic. | 87 | |
| 7 - 29.6 | | purp gry | | | | | | 87'-132' <u>DACITE / ANDESITE?</u> Purplish-maroon w/ light green tone. (mod hem. altered) wk. lt grn sericite, w/ micro immac wht euhedral + anhedral fsp phenos. Dissem Mt. ~1%. | 97 | |
| 7 - 32.6 | | lt | | | | | | Strong hematite alter'n 114-132: w/ specular hematite. Textures obscured. odd small fsp discern. | 107 | |
| 117 - 35.7 | | purp red | | | | | | +132-145. w | 117 | |
| 127 - 38.7 | | " | | | | | | | 127 | |
| 137 - 41.8 | | purp gry | | | | | | 132'-145' weaker hematite alter'n w/ increase in lt grn sericite | 137 | |
| 147 - 44.8 | | 145 purp | | | | | | 145'-157' stronger hem. alter'n as before w/ dissem Mt. 1-3%. weak dusting of wht. sericite. | 147 | |
| 157 - 47.9 | | 148 gry wk purp | | | | | | 157-167 carb alter'n addition - whlts? amyg. Still hematitic (mod) volc. w/ fine fsp. (lots euhedral) in hem. matrix. Increase in lt grn sericite, whitish sericite, wht fsp ~ 1mm. fts. | 157 | |
| 17 - 50.9 | | gry | | | | | | 167-177- lt grn w/ wk purple coloration, lt grn sericite w/ wk hem. - dissem Mt ~ 2.11' Calc vblts. | 167 | |
| 77 - 54.0 | | gry | | | | | | | 177 | |

GRID LOCATION:

ELEVATION:

DATE Start/Finish:

LOGGED BY:

SCALE: 1"=20'

| DEPTH | | UNIT | WGR | hem | carb | qtz | ser | Mt | py | DESCRIPTION | SAMPLE NUMBER | AU ASSA |
|-------|------|---------|-----|-----|------|-----|-------|-----|--------|--|---------------|---------|
| Ft | | Meters | | | | | | | | | | |
| 1 | 54.0 | med gry | | | | | | | | - Lt grn colored (lt grn ser alter'n) w/ white sericite flecks, also hem. staining, dissem Mt 2.1% | 177 | |
| 11 | 57.0 | dk gry | W | S | | | S | 2.1 | | - Strong wht ser in matrix and fsp rths w/ lt grn ser. | 187 | |
| 197 | 60.0 | gry | W | S | | | S | " | | wht carbonate - vnts - amyg? wk maroon color (wk hem) alter'n of matrix as well. V-strong carb. porticles - vnts or amyg? strong lt grn ser. as well as wht ser. specks, fsp still conspic, wk hem. dis rth 2.1 | 197 | |
| 207 | 63.1 | Lt gry | W | M | | | S | " | | 11 11 11 | 207 | |
| 217 | 66.1 | Milky | - | S | W | | S | " | 2.1 tr | Lt grn sericitically altered rock. w/ 1% carb. porticles odd wht qtz - sericite frag w/ py. dissem. | 217 | |
| 227 | 69.2 | med gry | W | | W | | S | " | tr | Lt grn - purplish rock w/ str sericite; wk hem alter'n dissem Mt 2.1. | 227 | |
| 237 | 72.2 | 3H | | | | | M | " | - | " " " " | 237 | |
| 247 | 75.3 | gry-grn | W | | | | " | tr | - | check: " " " " | 247 | |
| 257 | 78.3 | " | | | | | minor | - | - | " " " " | 257 | |

PROJECT:

Page 1 of 2

HOLE: PH 86-11

GRID LOCATION: E. GRID 23154N

ANGLE: -90°

ELEVATION: 40+45E

TYPE: percussion

DATE Start/Finish: Oct 31/Nov 1

DEPTH: 217' (66.1m)

LOGGED BY: G. NORMAN

SCALE: 1"=20'

1" = 10m = 2.4m

Conversion 1" = .3048m

SAMPLE
NUMBER
FOOTAGEAL
ASS.

| PTH ft | UNIT Feet | wake color | hum | ep | qtz | ser | Mt | py | DESCRIPTION | Conversion 1" = .3048m | SAMPLE NUMBER FOOTAGE | AL ASS. |
|-----------|--------------|---------------------------------|-----|----|-----|-----|----------------|-------|--|------------------------|-----------------------------|------------|
| 0 | 0 | bin | | | | | | | 0-9' <u>TILL</u> Clay rich bldw, cobble till, 70% clay matrix | | 7 | |
| 7 | 2.1 | bin | | | | | | | 9'-18' <u>SANDY PEBBLE TILL.</u> | | | |
| 1 | 5.2 | bin | | | | | | | 18'-27' <u>ALTERED TUFF/DAKITE?</u> Light whitish to lt grn volcanic w/ lt grn ser alter'n w/ wk dissem py. - qtz alter'n? | | 17 18 | |
| 27 | 8.2 | bin grn | | | | S | 2.1 | minor | 27'-99' <u>ANDESITE.</u> Light olive green colored volcanic w/ small frag - broken tsp? and w/ phenocrysts of phlogopite (pink) | | 27 | |
| 37 | 11.3 | " | | M | | | 2.1 | | possible micro qtz grains? w/ dissem. Mt 2.1-2.2% olive grn colored epictite? w/ chl? or olivine? | | 37 | |
| 47 | 14.3 | " | | M | | | .2 | | " " " " " " | | 47 | |
| 57 | 17.4 | " | | | | | .1 | | " " " " " " | | 57 | |
| 67 | 20.4 | bin w/ pink tinge | W | | | W | .1 | | 68' - some lt grn ser alkin - weak hemming stronger at 66' w/ wk hem. alter'n dissem Mt | | 67 | |
| 77 | 23.5 | " w/ pink tinge | M | | | S | 2.1 | | lt grn - pinkish brown colored rock w/ strong pow. lt grn sericite, specks of hem. w/ dissem. Mt, phly xfs blacked, stronger hem. alter'n at 75' | | 77 | |
| 87 | 26.5 | " w/ pink tinge | W | | | M | 2.1 | | " odd limonitic 'frag' 86' olive grn colored rock w/ ep. chl alter'n | | 87 | |
| 97 | 29.6 | bin grn to olive | | M | | | .5 1.0 2 | | Similar text. Lorraine w/ possible v-line frag? Tuff? 1.5-1.4% Mt. | | 97 | |
| 107 | 32.6 | " | | M | | | .1 | | 98-99 short section w/ lt grn ser (chl) alkin w/ 2-3% dissem. phlogopite - bio. dissem Mt. 1.2 | | 107 | |
| 117 | 35.7 | " | | M | | | .2 | | 99'-127' <u>ANDESITE/BASALT.</u> olive grn colored rock (olivine-ep) and (tuff?) w/ dissem Mt. phlogopite phenos. | | 117 | |
| 127 | 38.7 | med bin w/ grn tinge | | W | | | .3 | | weaker ep alter'n w/ dissem Mt. fine plag xfs. probable a andesite - basalt flow. | | 127 | |
| 137 | 41.8 | grn bin 132 bin grn | | | | M | .3 | trace | 127-132 Grayish to lt grn (w lt grn ser alter'n) dk grn ser specks (alter'n of particles? also dissem Mt. trace py. | | 137 | |
| 147 | 44.8 | grn bin 145 olive | | | | W | M | .2 | 132-137 - olive grn color as per 99-127 137-152 Grayish to lt grn as per 127-132 w/ flecks of phlogopite to 2mm, possible qtz-ser alter'n - many particles w/ dissem. Mt. plag xfs. | | 147 | |
| 157 | 47.9 | grn bin 152 | | | | W | M | .1 | lt grn-grn rock w/ dissem Mt, phlogopite phenocrysts. 152-155 olive grn colored section again. | | 157 | |
| 167 | 50.9 | grn grn grn | | | | M | S | .1 | 155 - lt grn grn colored rx as before w/ ser. alter'n. darker grn ser specks (frag.) in grn qtz alter'n mol.? dissem. Mt. 1%, flecks of phlogopite, trace up py. | | 167 | |
| 177 | 54.0 | grn bin | | | | M | 2.1 | - | " " " " " " | | 177 | |

Page 2 of 2

GRID LOCATION:

ELEVATION:

DATE Start/Finish:

LOGGED BY: G. NORMAN

SCALE: 1"=20'

[illegible]

HOLE: PH 86-12
 ANGLE: -90°
 TYPE: Percussion
 DEPTH: 297', 90.5

GRID LOCATION: 20+02.75N 24+03E
 ELEVATION:
 DATE Start/Finish: NOV2/
 LOGGED BY: G. NORMAN

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | W.C. color | DESCRIPTION | Conversion 1m = 2.4m 1ft = .3048m | SAMPLE NUMBER | AU ASSA |
|---------------|--------------|---------------|---|---|-----------------------|------------|
| 0 | 0 | | 0-17' <u>TILL</u> Brown clay rich bluish till w/ dk volc bldns and pebbles, sandy ~ 6-7' | | | |
| 7 | 2.1 | brn | brn clay w/ coarse sand grns ~ 5%, pebbles, bldns. | | 17 | |
| 17 | 5.2 | brn | 17-27' <u>FINE SAND</u> very fine grn brn sand. | | very little sample 27 | |
| 27 | 8.2 | | 27-33' <u>TILL</u> Clay rich bluish, pebble till. | | 37 | |
| 33 | | gry | | | | |
| 37 | 11.3 | brn | 33-53' <u>CLAY</u> Grey brn clay - (greasy feel) | | 47 | |
| 47 | 14.3 | gry brn | 53-54' <u>COARSE SAND and CLAY.</u> | | 57 | |
| 54 | 17.4 | " | 54-102' <u>GREY BROWN CLAY.</u> gray brn - silty clay - greasy text odd Sand grns. | | 67 | |
| 67 | 20.4 | " | " " " " | | 77 | |
| 77 | 23.5 | " | Somewhat gritty text w/ coarse sand grns | | 87 | |
| 87 | 26.5 | " | " " " " | | 97 | |
| 97 | 29.6 | " | 102'-106' <u>TILL</u> Sandy w/ pebbles clay rich till. | | 107 | |
| 107 | 32.6 | | 106'-136' <u>GRITTY SILT-CLAY</u> Grey brn mixture of clay, silt (60:40) w/ 5% sand grns | | 117 | |
| 117 | 35.7 | gry blk | 115-116 with ~ 15% sand grns as before | | 127 | |
| 127 | 38.7 | gry brn | 136-138 <u>GREY BLACK SILT.</u> | | 137 | |
| 137 | 41.8 | " | 138-146 <u>SILT/SAND</u> Grey black silt - very fine grn sand | | 147 | |
| 147 | 44.8 | " | 146-148 <u>TILL</u> Clay rich w/ sand - silt and 5% pebbles | | 157 | |
| 157 | 47.9 | " | 148-167 <u>SILT-CLAY</u> Grey - gry brn silt-clay mixture (30:70) | | 167 | |
| 167 | 50.9 | " | 167- <u>CLAY-SILT</u> Grey brn mixture of clay, silt 40:50 w/ 10% coarse sand grns ~ 2mm (greasy-gr. txyt.) | | 177 | |
| 177 | 54.0 | | | | | |

HOLE: PH 8C-12

GRID LOCATION: W.GRID - 20+02.75N

ANGLE:

ELEVATION:

24 to 3 E

TYPE:

DATE Start/Finish:

DEPTH:

LOGGED BY:

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | well color | | | | | | | | DESCRIPTION | Conversion 1ft = .3048m | SAMPLE NUMBER | AU ASSA |
|---------------|--------------|---------------|--|--|--|--|--|--|--|---|-------------------------|------------------|------------|
| 17 | 54.0 | | | | | | | | | CLAY SILT CONT'D | | | |
| 17 | 54.0 | gray brn | | | | | | | | Gray brn clay-silt mix (40:60) w/ 5-10% sand grains. w/a greasy-gritty text. | | 177 | |
| 187 | 57.0 | " | | | | | | | | as before - sand grains contamination? blobs of clay-silt smooth? or interbeds? | | 187 | |
| 197 | 60.0 | " | | | | | | | | 70% gray brn flecks of clay-silt. 30% sand grns. | | 197 | |
| 207 | 63.1 | " | | | | | | | | 60% " " " " " " " " 40% " | | 207 | |
| 217 | 66.1 | " | | | | | | | | " " " " " " " " " " | | 217 | |
| 227 | 69.2 | " | | | | | | | | " " " " " " " " " " | | 227 | |
| 237 | 72.2 | " | | | | | | | | " " " " " " " " " " | | 237 | |
| 247 | 75.3 | " | | | | | | | | 70% sand grains. 30% brn gray clay grains. | | 247 | |
| 257 | 78.3 | " | | | | | | | | 259'-267' SAND Brown med-gr sand w/a variety of rock types and minerals also soft silt frag (-2mm). | | 257 | |
| 267 | 81.4 | " | | | | | | | | 267'-287' SAND SILT 60% med-coarse sand. } interbeds or mixture? 40% lt gray brn silt | | 267 | |
| 277 | 84.4 | " | | | | | | | | " " " " " " " " " " | | 277 | |
| 287 | 87.5 | " | | | | | | | | 287'-295' FINE SAND 70% fine sand (.5-.1mm) 30% brn silt w/ variety of rock types, 50% grs, 2% hem grns | | 287 | |
| 297 | 90.5 | " | | | | | | | | 1-3% black volc. clear calc. - 1%, some bluish grns, 30% .5-1mm brn-silt grns. | | 297 | |
| | | | | | | | | | | 295'-297' ANDESITE SAND? Bedrock? w/ high % of lt gray purplish volc frag w/ some clastic Mt. | | | |
| | | | | | | | | | | end of hole 297' lost circ. rods stuck. (90.5m) | | | |

PROJECT: GOOSLY

HOLE: PH86-13

GRID LOCATION: 20+02.5N 26+75E Page 1 of 1

ANGLE: -90

ELEVATION:

TYPE: Percussion

DATE Start/Finish: NOV 2/NOV 2/86

DEPTH: 57', 17.4m

LOGGED BY: G. NORMAN

SCALE: 1"=20'

| DEPTH Feet | UNIT Meters | Water color | | | | Mt | PY | DESCRIPTION | Conversion 1ft=.3048m | SAMPLE NUMBER | AU ASS# |
|---------------|----------------|----------------|--|--|--|----|----|---|--------------------------|------------------|------------|
| | | | | | | | | | | | |
| 0 | 0 | | | | | | | 0-10' <u>BLACK ORGANICS.</u> | | | |
| 1 | 2.1 | brn | | | | | | 10'-25' <u>TILL</u> Brown clay rich bluish-cobble-pebble till | | 7 | |
| 7 | 5.2 | " | | | | | | 25'-28' <u>PEBBLE GRAVEL</u> w/15% pebbles 1cm or bigger; 85% coarse sand | | 17 | |
| 27 | 8.2 | " | | | | | | 28'-37' <u>COARSE SAND</u> grn size ~ 2-3mm | | 27 | |
| 37 | 11.3 | " | | | | | | 37'-44' <u>PEBBLE GRAVEL</u> w/40% pebbles (variety of volc types 1/2 cm or 7) | | 37 | |
| 47 | 14.3 | " | | | | | | 44'-47' <u>COARSE SAND & PEBBLES.</u> coarse sand 2-3mm w/20% fine pebbles ~ 4-5mm | | 47 | |
| 57 | 17.4 | | | | | | | 47'-57' <u>SAND</u> Fine to med. grn sand well sorted w/a variety of volc. types (5% hem volc, 40% grt grns, purple volc, 1% blk volc, 5% lim grn, brn speckled) w minor dissem Mt & L 1% | | 57 | |
| | | | | | | | | end of hole 57'(17.4m) - Pushed casing to 52' | | | |
| | | | | | | | | rods still sticking - Driller doesn't want to proceed with casing in gravel/sand for he might loose the casing. | | | |

SCALE: 1"=20'

[illegible]

PROJECT:

Page 1 of 1

HOLE: PHEG-15 GRID LOCATION: 17+64N 19+94E
 ANGLE: -90 ELEVATION:
 TYPE: Percussion DATE Start/Finish: NOV 3/NOV 4/66
 DEPTH: 141', 43.0m LOGGED BY: G. Norman

SCALE: 1"=20'

" " 1cm = 2.4m
conversion 1ft = 30.48mSAMPLE
NUMBER AU
ASSA

| DEPTH F T | UNIT Feet | DESCRIPTION | SAMPLE NUMBER | AU ASSA |
|--------------|--------------|--|------------------|------------|
| 0 | 0 | 0-26' <u>TILL</u> | | |
| 7 | 2.1 | 0-10' Brown clay rich bluish cobble till 90% clay 10% rock material | 7 | |
| 17 | 5.2 | 10'-26' <u>CLAY TILL</u> Brown clay rich till w/ 5% pebbles ~ 1/2 cm | 17 | |
| 27 | 8.2 | 26'-27' <u>SAND</u> Coarse grained sand, silt | 27 | |
| 37 | 11.3 | 27'-36.5' <u>CLAY TILL</u> 85% brn clay 10% coarse sand 5% bluish | 37 | |
| 47 | 14.3 | 36.5'-48' <u>SAND</u> coarse 36.5'-44' Med grnd. sand-silt 10% 80% (4mm) 10% | 47 | |
| 57 | 17.4 | 44'-46' Medium grnd sand 46'-47' Fine grnd sand | 57 | |
| 7 | 20.4 | 47'-48' Coarse grnd sand 48'-54' <u>TILL</u> | 67 | |
| 7 | 23.5 | Sandy-pebbly Till w/ 20% clay, 30% sand 20% pebbles | 77 | |
| 7 | 26.5 | 54'-62' <u>SILT/SAND</u> 70% silt, 20% fine sand, 10% small pebbles ~ 4-5mm. 2.1% Mt. | 87 | |
| 7 | 29.6 | 62'-63' <u>TILL</u> Sandy-pebbly till with 20% clay, 30% sand 30% silt, 30% pebbles | 97 | |
| 107 | 32.6 | 63'-70' <u>SILT/SAND (OUTWASH)</u> 70% silt, 20% fgsand, 5% pebbles ~ 4mm | 107 | |
| 117 | 35.7 | 70'-80' <u>SAND</u> Grey med. grnd sand w/ lt brn silt bds 3-2.1mm w/ variety of rock types 20% silt minor pebbles 6.5mm (2%), 2.1% Mt. | 117 | |
| 127 | 38.7 | 80'-87' <u>GRAVEL</u> poorly sorted sand w/ 30% silt 30% med sand, 30% coarse sand-pebbles w/ 2.1% Mt. | 127 | |
| 139 | 41.8 | 87'-132' <u>SILT-CLAY-SAND</u> 87-99 Lt brown silt clay matrix w/ 70% sand grains | 137 | |
| 1 | 43.0 | 94'-132' Lt brn silt-clay matrix w/ 30-50% 2mm sand grains | 141 | |
| | | 132'-137' <u>SAND</u> Fine-med. grnd brn sand w/ 2.1% Mt. | | |
| | | 137'-140' <u>SAND/SILT</u> Fine grnd. dk brn-gry sand/silt | | |
| | | 140'-141' <u>SILT</u> - 1/4 brn | | |
| | | end of hole 141' (43.0) | | |

PROJECT: GOOSLY

PROJECT: G-1027 Page 1 of 1

HOLE: PH 86-16 GRID LOCATION: 13+985N 22+98E
ANGLE: -90 ELEVATION:
TYPE: Percussion DATE Start/Finish: Nov 4/86
DEPTH: 47', 14.3m LOGGED BY: G. NORMAN SCALE: 1"=20'

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | WATER Gauge | DATE | DESCRIPTION | Conversion 1ft = 30.48cm | SAMPLE NUMBER | AU ASSA |
|---------------|--------------|----------------|------|---|-----------------------------|------------------|------------|
| 0 | | | | 0-8' <u>TILL</u> Brn. hard clay w/ large volc. blders, hem purple volc. dk grn blders | | 7 | |
| 7 | 2.1 | | | 8'-27' <u>SAND</u> 8'-12' Med grn brn sand. 12'-17' med-coarse grn sand. 17'-20' Fine grnd sand. 20'-27' Coarse grnd sand. | | 17 | |
| 17 | 5.2 | | | | | 27 | |
| 27 | 8.2 | | | 27'-34' <u>PEBBLE GRAVEL</u> 50% pebbles & 1/2 cm. 50 sand. | | 37 | |
| 37 | 11.3 | | | 34'-37' <u>SAND</u> coarse grnd sand. w/ L.I. Mt | | 47 | |
| 47 | 14.3 | | | 37'-47' <u>PEBBLE GRAVEL</u> 40% pebbles (1cm or L) ~ 40 sand / 50 silt Note: ended hole 47' (14.3) riller didn't think he would get casing out if we proceeded deeper. | | | |

Page / of ,

GRID LOCATION: 9+99N 19+03E

ELEVATION:

DATE Start/Finish: *Nov 5*

LOGGED BY: G NORMAN

SCALE: 1"=20'

| DEPTH Feet | UNIT Feet | | | | | MT | DESCRIPTION | Conversion $1\text{ft} = 2.4\text{m}$ $1\text{ft} = 30.48\text{cm}$ | SAMPLE NUMBER | AU ASSA |
|---------------|--------------|--|--|--|-----|----|--|---|------------------|------------|
| 0 | 0 | | | | | | 0-10 GRAVELLY TILL Brn clay-silt w/ 50% pebbles, cobbles & bldgs. min. | | 7 | |
| 7 | 2.1 | | | | | | 10'-17.5' SAND 10-12 brn f-g sand 12-17.5 coarse sand w/ ~20% f-m grnd sand | | 17 | |
| 17 | 5.2 | | | | | | 17.5'-19.5' SANDY TILL Brn clay - 30% sand - 50% : 20% pebbles ~ 1/2 cm | | 27 | |
| 27 | 8.2 | | | | | | 19.5'-27' SAND fine grnd sand | | 37 | |
| 37 | 11.3 | | | | | | 27'-34' SANDY-PEBBLY TILL 50% brn clay w/ 40% interst sand grns ; 10% pebble | | 47 | |
| 47 | 14.3 | | | | .1% | | 34'-44' COARSE SAND Poorly sorted coarse (60%) ; fine-med sand (20%) w/ ~ .1% Mt | | 57 | |
| 57 | 17.4 | | | | .1% | | 44'-71' SANDY-PEBBLY TILL 70% coarse sand grns and 10% 4mm pebbles in 20% brn clay matrix w/ .2% Mt | | 67 | |
| 71 | 20.4 | | | | .2 | | 71'-75' SAND Fine-coarse grnd sand w/ ~10% silt. | | 77 | |
| 77 | 23.5 | | | | L.1 | | 75'-89.5' PEBBLY SAND coarse grnd sand w/ L.1% Mt grns sand grns up to 3mm. w/ 5-10% pebbles to 5mm. | | 87 | |
| 87 | 26.5 | | | | L.1 | | 89.5'-97' SAND coarse grnd sand w/ L.1% Mt grns, sand grns 1-3mm | | 97 | |
| 97 | 29.6 | | | | L.1 | | 97'-107' PEBBLY SAND coarse gin sand w/ 10% pebbles > 5mm. | | 107 | |
| 107 | 32.6 | | | | | | 107' end of holes - rods becoming too tight to proceed. | | | |

PROJECT: GOOSLY

Page 1 of 1

HOLE: PH86-19A

GRID LOCATION: WEST GRID 25+75N

ANGLE: -90

ELEVATION:

TYPE: Percussion

DATE Start/Finish: NOV 6 / 86

DEPTH: 47', 14.3

LOGGED BY: G. NORMAN

SCALE: 1"=10'

" " $1\text{cm} = 2.4\text{m}$

conversion $1\text{ft} = .3048\text{m}$

| DEPTH F | UNITS | MT | DESCRIPTION | CONVERSION 1ft = .3048m | SAMPLE NUMBER | AU ASSA |
|------------|-------|----|---|-------------------------|------------------|------------|
| 0 | 0 | | 0 - 1' <u>ORGANICS</u> | | | |
| 2.1 | | | 1' - 47' <u>PORPHYRITIC ANDESITE</u> | | 7 | |
| 17 | 5.2 | .2 | Medium olive grn color rock - med. fine grained volcanic porphyritic in ten fsp ~ 20% & 2mm x 6mm euhedral laths < 1% 1-2m brn bio. phlogop. b. | | 17 | |
| 27 | 8.2 | .2 | w/ ~ .1 - .2 dissemin Mt. (As per outcrop 50' away) | | | |
| | | .2 | lost water at ~ 19 & 32' Brn clay indicates clay gauge. Lost water abandon. hole at 47' | | 27 | |
| 37 | 11.3 | .2 | | | 37 | |
| 47 | 14.3 | | no sample | | NO sample 47 | |
| | | | end of hole at 47' (14.3m) | | | |

HOLE: PH86-20

ANGLE: -90

TYPE: Percussion

DEPTH: 150', 45.7

GRID LOCATION: ON MAIN ROAD TO

ELEVATION: WEST GRID, 26+30N 24+06E

DATE Start/Finish: NOV 6/86

LOGGED BY: G. NORMAN

SCALE: 1"=20'

" " 1cm = 2.4m

Conversion 1ft = .3048m

SAMPLE
NUMBERAU
ASSA

| DEPTH Feet | UNIT Meters | DESCRIPTION | SAMPLE NUMBER | AU ASSA |
|---------------|----------------|---|------------------|------------|
| 0 | 0 | 0-13' TILL Brn clay rich bluish till | 7 | |
| 7 | 2.1 | 13'-39' PORPHYRITIC ANDESITE (olive green) | 13 | |
| 17 | 5.2 | olive green colored, med. grained porphyritic volcanic - porphyritic in tan fsp ~20% to 2x5mm. subvolcanic laths ~1% 1-2mm br. phenocrysts. in olive grn (pyroxene rich?) matrix. also contains. | 17 | |
| 27 | 8.2 | .1-.2% dissem. Mt. Above description from o.c. as well ~160' away. The percussion sample makes it difficult to discern size % of fsp. | 27 | |
| 7 | 11.3 | 39'-42' ANDESITE (GREY). Lt grey fine grained rock w/ minor fsp xlt | 37 | |
| 7 | 14.3 | and ~5% fine br. 1.5mm - 2mm. phenocrysts and w/ ~.1-.2% dissem. Mt. | 47 | |
| 7 | 17.4 | 42'-47' PORPHYRITIC ANDESITE (olive green) olive green colored andesite as per 13-39' | 57 | |
| 7 | 20.4 | 47'-101' ANDESITE (GREY) Grey-silver grey fine grn volc. as per 39-42. | 67 | |
| 77 | 23.5 | 56-51' olive green volc. as per 42-47, | 7 | |
| 87 | 26.5 | " " " " | 7 | |
| 97 | 29.6 | " " " " | 97 | |
| 107 | 32.6 | 101'-150' VOLCANIC FLOW - SILL? BASALT? Dark grey f-g volcanic (to grey green) w/ odd fsp phenocryst and weak (.1 to) str. 10% dissem Mt. | 107 | |
| 117 | 35.7 | | 117 | |
| 127 | 38.7 | | 127 | |
| 137 | 41.8 | | 137 | |
| 147 | 44.8 | | 147 | |
| 150 | 45.7 | end of hole 150' (45.7m) | 150 | |

HOLE: PH 86-21

GRID LOCATION: 24+30N 44+10 E

ANGLE: -90

ELEVATION:

TYPE: Percussion

DATE Start/Finish: Nov 10/86

DEPTH: 257', 76.3m

LOGGED BY: G. NORMAN

SCALE: 1"=20'

" " 1cm=2.4m

Conversion 1ft=.3048m

| DEPTH Ft | UNIT Meters | water color | hem | | ser | py | Mt | DESCRIPTION | SAMPLE NUMBER Feet | AC ASSA |
|-------------|----------------|--------------------------------|-----|--|-----|--------|-----|--|--------------------------|------------|
| 0 | 0 | brn | | | | | | 0-44' <u>TILL</u> | | |
| 7 | 2.1 | " | | | | | | 0-17' Brn clay rich till w/ bltters of grey volc. pebbles to 1cm. | 7 | |
| 17 | 5.2 | " | | | | | | 17-44' clay rich w/ sand grains and pebbles | 17 | |
| 27 | 8.2 | | | | | | | | 27 | |
| 37 | 11.3 | 35.5 gry | | | | | | 35.5' clay till w/ large blades of purple-hem. altered volc. | 37 | |
| 41 | 14.3 | gry b.n 44 | | | | | .1 | 44'-52' <u>OLIVE GREEN ANDESITE / GREY ANDESITE</u> Lt grn-olive green f-g volc? and lt gry rock w/ fine fsp; specks of white sericite. | 47 | |
| 57 | 17.4 | gry 52 | | | | | | 52'-65' <u>TUFF</u> Lt whitish gray soft clay-ser. alter tuff w/ fine particles mixed gray fragments w/ser; odd frag w/ pyrite (dissem). | 57 | |
| 7 | 20.4 | gry | | | | tr | <.1 | 65'-80' <u>DYKE?</u> Black f-g rock? | 67 | |
| 17 | 23.5 | 65 blk. | | | | | | | 77 | |
| 37 | 26.5 | 80 gry blk. 86 | | | | | .1 | 80'-86' Gray black f-g rock w/ wht (wkly ser alter'd) fsp phenocryst ~10-15%. | 87 | |
| 97 | 29.6 | med gry 94 | | | | | .1 | 86'-94' <u>TUFF</u> whitish soft alter'd rock. w/ some lt grn ser. | 97 | |
| 107 | 32.6 | dk gry | | | | W | .1 | 94'-257' <u>ANDESITE</u> Finely porphyritic, grayish colored volc. w/ ~10-15% fsp phenocrysts set in a grayish f-g matrix. weak to med. alter'n of fsp → lt grn ser. and containing ~1% dissem. Mt. | 107 | |
| 117 | 35.7 | med gry to dk gry | | | | W | .2 | 107'-117' Lt grn ser alter'n. stronger. | 117 | |
| 127 | 38.7 | dk gry | W | | | M | .2 | 117'-127' rock starting to become wkly hematitically alter'd. | 127 | |
| 137 | 41.8 | " | " | | | M | <.1 | lt gray porphyritic volc., lt gray matrix w/ whitish-lt grn ser. alter'd fsp ~15% ~1mm anhedral; w/ <.1 dissem. Mt, minor wht ser. specks. | 137 | |
| 147 | 44.8 | " | " | | | W M | .1 | 137' increase in wht ser specks, decrease in hematite alter'n. | 147 | |
| 157 | 47.9 | dk gry w/ pink purple | | | | W | <.1 | " " " " " " | 157 | |
| 167 | 50.9 | " | W | | | W M | <.1 | " " " " " " | 167 | |
| 177 | 54.0 | dk gry | | | | W | <.1 | 167' wht sericite alter'n disappears, lt grn sericite somewhat weaker, although still some v-f-g ser. alter'd fsp phenos. | 177 | |

GRID LOCATION:

ELEVATION:

DATE Start/Finish:

LOGGED BY: G. NORMAN

SCALE: 1"=10'

" " $1 \text{ cm} = 2.4 \text{ m}$

[illegible]

TYPE: Percussion DATE Start/Finish: NOV 10/NOV 11/86
 DEPTH: 317', 96.6m LOGGED BY: G. NORMAN

SCALE: 1"=20'

" " 1cm = 2.4m

Conversion 1ft = .3048m

| DEPTH | water color | hem | carb | qtz | clay | ser | py | Mt | DESCRIPTION | SAMPLE NUMBER | AU ASSA |
|-------|-------------|-----|------|-----|------|-----|----|----|---|---------------|---------|
| 0 | Fe t | | | | | | | | 0-30' <u>TILL</u> | Footage | |
| 7 | brn | | | | | | | | Brown clay matrix w/ sand grains ~30% and | 7 | |
| 17 | 2.1 | | | | | | | | also w/ pebbles cobbles and blders | 17 | |
| 17 | " | | | | | | | | " " " " | 27 | |
| 17 | 5.2 | | | | | | | | " " " " | 37 | |
| 17 | 8.2 | | | | | | | | " " " " | 47 | |
| 17 | 11.3 | | | | | | | | 37'-42' <u>HEMATITIC VOLCANIC</u> | 57 | |
| 17 | " | | | | | | | | Fine grained moderately hematized volcanic | 67 | |
| 17 | 14.3 | | | | | | | | 42'-55' <u>ANDESITE</u> | 77 | |
| 17 | " | | | | | | | .1 | olive green to lt brn f-g rock. some fsp. | 87 | |
| 17 | 17.4 | | | | | | | | phenocryst to ~1mm and olive green pyroxene | 97 | |
| 17 | grg | | | | | | | | Xf's, also some dk green chlorite or zeolite | 107 | |
| 17 | 20.4 | | | | | | | | amygdales. Weak hematitic tinge, dissem. | 117 | |
| 17 | " | | | | | | | | Mt ~1% | 127 | |
| 17 | 23.5 | | | | | | | | 55'-92' <u>GREY BASALT / CRYSTAL TUFF</u> | 137 | |
| 17 | " | | | | | | | | Fine grained grey colored rock w/ dark green | 147 | |
| 17 | 26.5 | | | | | | | | alter fsp Xf's or frag. and minor olive grn. | 157 | |
| 17 | lt grg | | | | | | | | pyroxene or olivine. Weak hem. alter'n. Odd zoned | 167 | |
| 17 | 29.6 | | | | | | | | amygdale. Possibly a Xf Tuff or flow? also odd | 177 | |
| 17 | " | | | | | | | | agate qtz grain. | 187 | |
| 17 | 32.6 | | | | | | | | 92'-157' <u>ALTERED TUFF</u> | 197 | |
| 17 | vt grg | | | | | | | .1 | whitish - lt grey altered tuff, some frag are | 207 | |
| 17 | 35.7 | | | | | | | | very strongly clay altered - very soft & grains | 217 | |
| 17 | " | | | | | | | .1 | of quartz and sericite flakes. Quartz grains | 227 | |
| 17 | 38.7 | | | | | | | .2 | are 1mm or L. up to ~30%. | 237 | |
| 17 | 41.8 | | | | | | | | 117'-127' - Some grey - grey blue f-g frag. | 247 | |
| 17 | " | | | | | | | | as well as above some dissem. Hf | 257 | |
| 17 | 44.8 | | | | | | | | Sample contains % of qtz ~80% - from break | 267 | |
| 17 | 47.9 | | | | | | | | down of tuff, also 10% med grey v-f-g tuff? | 277 | |
| 17 | 50.9 | | | | | | | | 5% lt brn. - limonitic. frag w/ dissem. Hf (common) | 287 | |
| 17 | 54.0 | | | | | | | | lt grey qtz altered tuff w/ white ser. flakes. | 297 | |
| 17 | 57.0 | | | | | | | | sld grain w/ dissem. py ! odd py grain ~1mm | 307 | |
| 17 | 60.0 | | | | | | | | fine grain whitish clay alter frag w/ qtz particles | 317 | |
| 17 | 63.0 | | | | | | | | and ser. flakes, also tuff frag not altered | 327 | |
| 17 | 66.0 | | | | | | | | but similar in text - lt grey w/ frag. hem. specks | 337 | |
| 17 | 69.0 | | | | | | | | Some frag. laminated. Frag w/ 10 py. Some w/ | 347 | |
| 17 | 72.0 | | | | | | | | 2-3mm lt green clay altered fsp frag. | 357 | |
| 17 | 75.0 | | | | | | | | 157'-317' <u>PORPHYRITIC ANDESITE</u> | 367 | |
| 17 | 78.0 | | | | | | | | lt grey f-med. grained fsp porphyritic | 377 | |
| 17 | 81.0 | | | | | | | | andesite w/ ~30-40% white - lt green | 387 | |
| 17 | 84.0 | | | | | | | | clay alter fsp to 3mm. ~1% biot. with f-g matrix. | 397 | |

TYPE: Percussion DATE Start/Finish:
 DEPTH: 317', 96.6 m LOGGED BY: G. NORMAN

SCALE: 1"=20'

| DEPTH | water color metres | hem | carb | qtz | clay | ser | py | lt | DESCRIPTION | Conversion 1ft = .3048 m | SAMPLE NUMBER | AU ASSA |
|-------|-------------------------|-----|------|-----|------|--------|-------------|----------|--|--|---------------|---------|
| 7 | 54.0 gray | | | | | | | | PORPHYRITIC ANDESITE CONT'D | 1cm = 2.4m | 177 | |
| 17 | 57.0 | | | | M | W | L.1 | .2 | as above. | dissem Mt .1-.2. | 187 | |
| 197 | 60.0 | W | | | M | W | tr | .3 | " | " | 197 | |
| 207 | 63.1 | W | | | | | odd grn | .1 | Lt grey rock w/ dissem Mt ~.1% - wk hem. alterin. w/ 10-15% wht - lt grn. clay alter (wk ser.) fsp w/ minor bio. and odd grn of pyrite ~1mm. | | 207 | |
| 217 | 66.1 220 | M | | | | | tr | .1 | " " " " | w/ qtz grn w/ v-f-py. | 27 | |
| 227 | gray w/ purple tinge | | | | | | L.05 | .3 | Gray to wk purple colored rock w/ .3 dissem Mt w/ ~10% lt green - wht fsp. minor bio. flakes; f-g grey-purple mod to wk hem alt'd matrix | | 227 | |
| 237 | 72.2 | | | | | | tr | .5 | " " " " | w/ fsp not as clay alter'd. | 237 | |
| 247 | 75.8 | | | | | | tr | 2 | Greyish purple colored rock w/ 10% wht - lt grn. clay - ser alter'd fsp. plencicysts, w/ 2% dissem. Mt, wk hem alt'd matrix, fsp to 3mm. also 6-1mm. and up to 3% bio | | 247 | |
| 257 | 78.3 | | | | | | - | .3 | " " " " | " " " " | 257 | |
| 267 | 81.4 | | | | | | - | .2 .3 | " " " " | w/ odd sericite flake. | 267 | |
| 277 | 84.4 87.5 | | | | | | L.1 | .3 | " " " " | w/ hem. alter'n becoming stronger → mod. | 277 | |
| 287 | 87.5 | | | | | M 3 | L.1 L.05 | .2 | " " " " | w/ increase in lt grn ser. alter'n some frag (ser alt'd) w/ dissem py <.1%. | 287 | |
| 297 | 90.5 | | W | | | M 3 | L.05 | .2 | " " " " | Strong lt grn ser. alter'n, some qtz alt'd frag. w/ dissem. py L.05% bio → ser. | 297 | |
| 307 | 93.6 purple tinge | | W | | | | H | .3 | " " " " | alter'n becoming weaker w/ increase in hem alter'n trace py. | 307 | |
| 317 | 96.6 | | | | | M W | odd grn | .1 | Lt brn - wk hem alt'd matrix w/ fine fsp some emb. laths. also some lt green wk ser frag w/ minor pyrite | | 317 | |

APPENDIX II

ROCK GEOCHEMICAL RESULTS

PROJECT NO:

Scale

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P1+2

ATTENTION: M. BELEY

1 meter = 3.28 ft.

(604) 980-5814 OR (604) 988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 28, 1986

| (VALUES IN PPM) | AG | AS | CD | CU | FE | MN | MO | NI | PB | SB | V | ZN |
|----------------------|----|----|-----|----|--------|------|----|----|-----|----|------|----|
| PH86-01 20-30 (Feet) | .4 | 1 | 4.6 | 23 | 102610 | 493 | 2 | 20 | 149 | 6 | 77.5 | 59 |
| PH86-01 30-40 80M | .4 | 1 | 3.0 | 20 | 77980 | 790 | 2 | 19 | 28 | 5 | 62.1 | 33 |
| PH86-01 40-50 | .3 | 1 | 4.5 | 19 | 91950 | 667 | 2 | 14 | 33 | 6 | 70.5 | 35 |
| PH86-01 50-60 | .3 | 1 | 3.8 | 19 | 92140 | 545 | 2 | 13 | 22 | 7 | 67.0 | 37 |
| PH86-01 60-70 | .3 | 1 | 6.2 | 24 | 108340 | 542 | 3 | 12 | 25 | 7 | 75.2 | 37 |
| PH86-01 70-80 | .3 | 1 | 2.3 | 24 | 91930 | 442 | 2 | 13 | 23 | 5 | 63.6 | 32 |
| PH86-01 80-90 | .3 | 1 | 2.2 | 47 | 102540 | 424 | 2 | 15 | 18 | 6 | 71.6 | 44 |
| PH86-01 90-100 | .4 | 1 | 3.9 | 35 | 93730 | 368 | 1 | 15 | 14 | 5 | 64.5 | 35 |
| PH86-01 100-110 | .3 | 1 | 5.5 | 28 | 95090 | 405 | 2 | 19 | 18 | 5 | 67.6 | 37 |
| PH86-01 110-120 | .3 | 1 | 4.4 | 30 | 101990 | 443 | 3 | 12 | 17 | 7 | 72.4 | 41 |
| PH86-01 120-130 | .3 | 1 | 2.9 | 29 | 113250 | 579 | 3 | 17 | 16 | 7 | 79.1 | 44 |
| PH86-01 130-140 | .4 | 1 | 2.8 | 23 | 101860 | 516 | 2 | 18 | 16 | 6 | 69.9 | 38 |
| PH86-01 140-150 | .3 | 1 | 3.8 | 23 | 101030 | 508 | 1 | 12 | 19 | 6 | 68.7 | 37 |
| PH86-01 150-160 | .4 | 1 | 3.3 | 21 | 99950 | 477 | 2 | 19 | 19 | 6 | 66.4 | 32 |
| PH86-01 160-170 | .3 | 1 | 3.4 | 23 | 101040 | 550 | 1 | 11 | 18 | 6 | 69.1 | 37 |
| PH86-01 170-180 | .3 | 1 | 4.2 | 21 | 92170 | 619 | 2 | 17 | 17 | 6 | 65.8 | 37 |
| PH86-01 180-190 | .4 | 1 | 3.5 | 19 | 87210 | 568 | 4 | 13 | 22 | 6 | 61.7 | 37 |
| PH86-01 190-200 | .4 | 1 | 4.3 | 20 | 92740 | 611 | 3 | 11 | 26 | 7 | 65.8 | 38 |
| PH86-01 200-210 | .3 | 1 | 4.5 | 21 | 98520 | 644 | 5 | 17 | 26 | 7 | 69.8 | 38 |
| PH86-01 210-220 | .4 | 1 | 4.6 | 22 | 91650 | 628 | 3 | 17 | 23 | 7 | 69.2 | 40 |
| PH86-01 220-230 | .4 | 1 | 3.4 | 21 | 92410 | 595 | 3 | 11 | 23 | 6 | 68.5 | 39 |
| PH86-01 230-240 | .3 | 1 | 4.3 | 22 | 97960 | 620 | 4 | 12 | 23 | 7 | 70.4 | 38 |
| PH86-01 240-250 | .4 | 1 | 5.1 | 20 | 90830 | 595 | 3 | 18 | 20 | 6 | 64.6 | 37 |
| PH86-01 250-260 | .3 | 1 | 4.2 | 21 | 94470 | 582 | 3 | 12 | 22 | 7 | 69.1 | 36 |
| PH86-01 260-270 | .3 | 1 | 3.9 | 25 | 98120 | 583 | 4 | 17 | 27 | 8 | 70.5 | 36 |
| PH86-01 270-280 | .4 | 1 | 4.8 | 33 | 99610 | 603 | 4 | 9 | 18 | 8 | 72.6 | 37 |
| PH86-01 280-290 | .3 | 4 | 5.3 | 26 | 107810 | 648 | 4 | 16 | 30 | 9 | 76.2 | 41 |
| PH86-01 290-300 | .4 | 1 | 5.5 | 25 | 99470 | 584 | 3 | 10 | 26 | 8 | 72.2 | 37 |
| PH86-01 300-310 | .3 | 2 | 4.0 | 22 | 93760 | 584 | 5 | 11 | 20 | 8 | 75.8 | 35 |
| PH86-01 310-320 | .4 | 6 | 3.3 | 21 | 75310 | 568 | 6 | 24 | 29 | 7 | 67.0 | 37 |
| PH86-02 17-27 | .3 | 1 | 3.7 | 20 | 77330 | 547 | 3 | 16 | 22 | 5 | 72.7 | 44 |
| PH86-02 27-37 80M | .3 | 2 | 3.2 | 20 | 72350 | 514 | 3 | 14 | 27 | 5 | 64.5 | 40 |
| PH86-02 37-47 | .4 | 1 | 4.8 | 22 | 90600 | 717 | 4 | 14 | 22 | 6 | 69.7 | 39 |
| PH86-02 47-57 | .4 | 1 | 4.4 | 22 | 97500 | 572 | 4 | 14 | 17 | 7 | 71.4 | 40 |
| PH86-02 57-67 | .3 | 1 | 4.4 | 24 | 104040 | 471 | 3 | 13 | 19 | 6 | 70.6 | 39 |
| PH86-02 67-77 | .3 | 1 | 4.4 | 29 | 118430 | 543 | 2 | 11 | 21 | 8 | 82.0 | 43 |
| PH86-02 77-87 | .4 | 1 | 3.4 | 28 | 119290 | 521 | 2 | 10 | 13 | 7 | 78.4 | 40 |
| PH86-02 87-97 | .3 | 1 | 5.3 | 27 | 124450 | 531 | 3 | 13 | 14 | 7 | 79.7 | 43 |
| PH86-02 97-107 | .3 | 1 | 3.7 | 32 | 117980 | 537 | 2 | 14 | 18 | 8 | 79.6 | 42 |
| PH86-02 107-117 | .3 | 1 | 4.9 | 36 | 110270 | 581 | 3 | 18 | 20 | 8 | 78.0 | 43 |
| PH86-02 117-127 | .3 | 1 | 5.6 | 30 | 109000 | 1173 | 6 | 16 | 22 | 7 | 73.7 | 47 |
| PH86-02 127-137 | .3 | 1 | 4.6 | 23 | 103520 | 733 | 2 | 12 | 15 | 6 | 71.4 | 39 |
| PH86-02 137-147 | .4 | 1 | 3.4 | 21 | 97860 | 589 | 2 | 13 | 17 | 6 | 68.3 | 35 |
| PH86-03 7-17 | .3 | 1 | 3.3 | 26 | 117950 | 562 | 3 | 16 | 20 | 7 | 80.9 | 39 |
| PH86-03 17-25 | .4 | 1 | 4.9 | 28 | 132080 | 797 | 1 | 10 | 17 | 8 | 91.4 | 48 |
| PH86-03 27-37 | .3 | 1 | 3.1 | 25 | 120250 | 863 | 1 | 14 | 26 | 7 | 84.3 | 39 |
| PH86-03 37-42 | .4 | 1 | 4.5 | 24 | 114660 | 518 | 2 | 13 | 19 | 6 | 83.1 | 35 |
| PH86-04 7-17 | .4 | 1 | 4.7 | 22 | 93170 | 548 | 3 | 9 | 19 | 6 | 61.9 | 35 |
| PH86-04 17-27 | .3 | 1 | 4.0 | 22 | 139870 | 506 | 1 | 6 | 16 | 6 | 72.3 | 31 |
| PH86-04 27-37 | .4 | 1 | 5.2 | 21 | 95550 | 486 | 3 | 9 | 20 | 7 | 62.7 | 40 |
| PH86-04 37-47 | .6 | 1 | 4.3 | 20 | 105850 | 489 | 2 | 10 | 18 | 6 | 65.1 | 38 |
| PH86-04 47-57 | .4 | 1 | 5.0 | 21 | 105120 | 525 | 4 | 9 | 25 | 7 | 67.8 | 43 |
| PH86-04 57-67 | .3 | 1 | 3.2 | 22 | 107730 | 590 | 3 | 13 | 27 | 8 | 68.4 | 42 |
| PH86-04 67-77 | .4 | 1 | 5.2 | 21 | 97230 | 529 | 3 | 13 | 20 | 6 | 64.2 | 38 |
| PH86-04 77-87 | .3 | 1 | 3.6 | 22 | 101640 | 610 | 3 | 11 | 18 | 7 | 66.7 | 40 |
| PH86-04 87-97 | .3 | 1 | 4.0 | 21 | 90880 | 531 | 3 | 10 | 20 | 6 | 62.4 | 37 |
| PH86-04 97-107 | .4 | 1 | 3.6 | 21 | 87570 | 525 | 2 | 15 | 17 | 6 | 62.3 | 44 |
| PH86-04 107-117 | .3 | 2 | 3.4 | 21 | 77570 | 485 | 4 | 15 | 26 | 6 | 58.5 | 37 |
| PH86-04 117-127 | .4 | 4 | 4.3 | 23 | 77080 | 530 | 4 | 18 | 22 | 6 | 62.0 | 45 |
| PH86-04 127-137 | .3 | 5 | 2.9 | 22 | 65520 | 486 | 7 | 15 | 23 | 6 | 56.2 | 41 |

PROJECT NO:

Scale

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P1+2

ATTENTION: M.BELEY

1 meter = 3.28 ft

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: NOV 28, 1986

(VALUES IN PPM) AU-PPB

PH86-01 20-30 (feet) 5

PH86-01 30-40 BOM 5

PH86-01 40-50 5

PH86-01 50-60 10

PH86-01 60-70 10

PH86-01 70-80 5

PH86-01 80-90 3

PH86-01 90-100 5

PH86-01 100-110 5

PH86-01 110-120 5

PH86-01 120-130 5

PH86-01 130-140 10

PH86-01 140-150 5

PH86-01 150-160 5

PH86-01 160-170 15

PH86-01 170-180 5

PH86-01 180-190 3

PH86-01 190-200 5

PH86-01 200-210 5

PH86-01 210-220 5

PH86-01 220-230 5

PH86-01 230-240 5

PH86-01 240-250 3

PH86-01 250-260 5

PH86-01 260-270 5

PH86-01 270-280 5

PH86-01 280-290 3

PH86-01 290-300 5

PH86-01 300-310 5

PH86-01 310-320 5

PH86-02 17-27 5

PH86-02 27-37 BOM 5

PH86-02 37-47 5

PH86-02 47-57 10

PH86-02 57-67 5

PH86-02 67-77 10

PH86-02 77-87 5

PH86-02 87-97 5

PH86-02 97-107 5

PH86-02 107-117 5

PH86-02 117-127 5

PH86-02 127-137 5

PH86-02 137-147 5

PH86-03 7-17 3

PH86-03 17-25 5

PH86-03 27-37 5

PH86-03 37-47 5

PH86-04 7-17 5

PH86-04 17-27 10

PH86-04 27-37 5

PH86-04 37-47 5

PH86-04 47-57 5

PH86-04 57-67 5

PH86-04 67-77 5

PH86-04 77-87 5

PH86-04 87-97 10

PH86-04 97-107 5

PH86-04 107-117 5

PH86-04 117-127 10

PH86-04 127-137 5

| (VALUES IN PPM) | AS | AS | CD | CU | FE | MN | MO | NI | PB | SE | V | ZN |
|------------------------|----|----|-----|----|--------|------|----|----|----|----|-------|----|
| PH86-04 137-147 (sect) | .4 | 6 | 3.4 | 28 | 74270 | 544 | 5 | 20 | 36 | 7 | 64.2 | 47 |
| PH86-04 147-157 | .4 | 1 | 4.4 | 32 | 78840 | 560 | 5 | 17 | 24 | 6 | 62.8 | 42 |
| PH86-04 157-167 | .6 | 4 | 4.7 | 35 | 93670 | 714 | 4 | 17 | 21 | 8 | 69.2 | 45 |
| PH86-04 167-177 | .4 | 2 | 4.5 | 35 | 99390 | 812 | 4 | 20 | 23 | 8 | 71.3 | 45 |
| PH86-04 177-187 | .4 | 2 | 3.7 | 32 | 89450 | 688 | 4 | 18 | 18 | 7 | 64.1 | 42 |
| PH86-04 187-197 | .4 | 1 | 3.1 | 31 | 90030 | 638 | 2 | 19 | 24 | 6 | 67.2 | 42 |
| PH86-04 197-207 | .4 | 1 | 4.4 | 32 | 92800 | 617 | 4 | 19 | 21 | 6 | 69.0 | 38 |
| PH86-04 207-217 | .6 | 1 | 4.0 | 29 | 87810 | 577 | 2 | 17 | 20 | 6 | 63.8 | 38 |
| PH86-04 217-227 | .4 | 1 | 3.4 | 30 | 84540 | 561 | 2 | 11 | 28 | 6 | 60.9 | 39 |
| PH86-04 227-237 | .4 | 1 | 3.1 | 28 | 89930 | 587 | 3 | 16 | 23 | 7 | 65.6 | 38 |
| PH86-04 237-247 | .4 | 1 | 4.6 | 26 | 82660 | 575 | 4 | 11 | 21 | 6 | 62.9 | 41 |
| PH86-04 247-257 | .4 | 1 | 4.2 | 32 | 87150 | 590 | 5 | 19 | 25 | 7 | 65.6 | 43 |
| PH86-04 257-267 | .3 | 3 | 2.3 | 24 | 49110 | 353 | 4 | 9 | 19 | 3 | 36.2 | 24 |
| PH86-04 267-277 | .3 | 1 | 4.4 | 27 | 78440 | 602 | 5 | 14 | 24 | 6 | 62.1 | 41 |
| PH86-04 277-287 | .4 | 1 | 4.3 | 24 | 76630 | 613 | 4 | 12 | 21 | 6 | 60.8 | 45 |
| PH86-05 17-27 | .3 | 1 | 5.6 | 17 | 86400 | 578 | 4 | 7 | 20 | 6 | 62.6 | 41 |
| PH86-05 27-37 N/S | | | | | | | | | | | | |
| PH86-05 37-47 | .4 | 1 | 4.8 | 23 | 99280 | 486 | 4 | 9 | 28 | 7 | 67.1 | 58 |
| PH86-05 47-57 | .6 | 1 | 5.1 | 25 | 99650 | 491 | 2 | 10 | 22 | 6 | 66.7 | 56 |
| PH86-05 57-67 | .4 | 1 | 5.0 | 23 | 97640 | 468 | 4 | 13 | 20 | 6 | 65.7 | 45 |
| PH86-05 67-77 | .3 | 1 | 4.7 | 34 | 81620 | 435 | 4 | 17 | 16 | 5 | 62.2 | 44 |
| PH86-05 77-87 | .3 | 1 | 4.2 | 40 | 81820 | 375 | 4 | 16 | 19 | 5 | 60.6 | 44 |
| PH86-05 87-97 | .3 | 1 | 4.1 | 41 | 80460 | 371 | 3 | 16 | 16 | 5 | 58.9 | 42 |
| PH86-05 97-107 | .3 | 1 | 3.2 | 46 | 75050 | 333 | 3 | 15 | 10 | 5 | 55.6 | 42 |
| PH86-05 107-117 | .4 | 1 | 4.7 | 48 | 78800 | 468 | 5 | 16 | 14 | 6 | 58.8 | 45 |
| PH86-05 117-127 | .4 | 1 | 5.7 | 43 | 83240 | 582 | 5 | 15 | 20 | 6 | 65.6 | 45 |
| PH86-05 127-137 | .3 | 1 | 5.3 | 37 | 87860 | 681 | 3 | 17 | 12 | 6 | 64.0 | 44 |
| PH86-05 137-147 | .4 | 1 | 3.2 | 34 | 78060 | 559 | 3 | 16 | 16 | 5 | 58.6 | 42 |
| PH86-05 147-157 | .4 | 1 | 3.4 | 33 | 77730 | 537 | 2 | 18 | 20 | 6 | 59.8 | 46 |
| PH86-05 157-167 | .4 | 3 | 4.0 | 26 | 68380 | 536 | 3 | 16 | 17 | 5 | 57.4 | 43 |
| PH86-05 167-177 | .5 | 1 | 4.8 | 33 | 99190 | 630 | 4 | 14 | 26 | 6 | 69.9 | 45 |
| PH86-05 177-187 | .7 | 1 | 5.2 | 30 | 84890 | 516 | 3 | 11 | 29 | 6 | 59.6 | 41 |
| PH86-05 187-197 | .3 | 1 | 4.2 | 28 | 83750 | 534 | 2 | 10 | 32 | 6 | 63.1 | 45 |
| PH86-05 197-207 | .5 | 1 | 3.8 | 34 | 85740 | 529 | 6 | 11 | 33 | 7 | 71.8 | 46 |
| PH86-05 207-217 | .5 | 5 | 5.0 | 32 | 83970 | 565 | 5 | 9 | 33 | 7 | 69.1 | 43 |
| PH86-05 217-227 | .7 | 1 | 4.7 | 29 | 93220 | 573 | 4 | 8 | 34 | 8 | 73.3 | 43 |
| PH86-05 227-237 | .5 | 2 | 6.2 | 32 | 95910 | 539 | 8 | 9 | 37 | 8 | 82.6 | 47 |
| PH86-05 237-247 | .5 | 1 | 5.3 | 28 | 82960 | 523 | 5 | 8 | 35 | 5 | 61.7 | 40 |
| PH86-05 247-257 | .5 | 1 | 3.4 | 28 | 85370 | 506 | 4 | 5 | 27 | 7 | 70.2 | 39 |
| PH86-05 257-267 | .3 | 1 | 6.1 | 30 | 82430 | 525 | 4 | 7 | 32 | 6 | 67.8 | 39 |
| PH86-06 7-17 | .7 | 1 | 7.1 | 31 | 145720 | 685 | 2 | 11 | 25 | 8 | 100.3 | 43 |
| PH86-06 67-77 | .7 | 1 | 2.1 | 25 | 120620 | 674 | 3 | 10 | 16 | 7 | 77.4 | 42 |
| PH86-06 77-87 | .3 | 1 | 4.0 | 26 | 127290 | 640 | 3 | 11 | 18 | 6 | 82.2 | 44 |
| PH86-06 87-97 | .5 | 1 | 5.6 | 40 | 130130 | 564 | 4 | 4 | 16 | 6 | 76.9 | 45 |
| PH86-06 97-99 | .5 | 1 | 4.2 | 23 | 118140 | 507 | 3 | 3 | 18 | 4 | 68.3 | 36 |
| PH86-06 99-107 | .2 | 1 | 5.8 | 25 | 125490 | 593 | 2 | 4 | 16 | 6 | 76.7 | 46 |
| PH86-06 107-117 | .5 | 1 | 3.7 | 22 | 114370 | 446 | 3 | 5 | 14 | 5 | 69.9 | 40 |
| PH86-06 117-127 | .5 | 1 | 3.7 | 25 | 114290 | 459 | 2 | 6 | 19 | 6 | 72.0 | 43 |
| PH86-06 127-137 | .9 | 1 | 5.4 | 28 | 145790 | 587 | 3 | 7 | 16 | 7 | 87.3 | 52 |
| PH86-06 137-147 | .5 | 1 | 3.1 | 36 | 129100 | 472 | 2 | 13 | 17 | 6 | 68.6 | 35 |
| PH86-06 147-157 | .5 | 1 | 5.3 | 32 | 120970 | 430 | 2 | 19 | 14 | 6 | 71.6 | 34 |
| PH86-06 157-167 | .3 | 1 | 3.1 | 28 | 123950 | 475 | 3 | 20 | 17 | 7 | 92.0 | 38 |
| PH86-06 167-177 | .3 | 1 | 4.4 | 35 | 135310 | 570 | 2 | 10 | 16 | 5 | 89.1 | 49 |
| PH86-06 177-187 | .5 | 1 | 4.4 | 42 | 161520 | 734 | 2 | 5 | 18 | 7 | 90.5 | 46 |
| PH86-06 187-197 | .5 | 1 | 3.8 | 35 | 143590 | 673 | 2 | 7 | 17 | 7 | 78.6 | 41 |
| PH86-06 197-207 | .5 | 1 | 4.9 | 37 | 175500 | 857 | 4 | 6 | 17 | 8 | 98.4 | 45 |
| PH86-06 207-217 | .5 | 1 | 4.0 | 37 | 192630 | 1057 | 3 | 5 | 18 | 8 | 107.1 | 46 |
| PH86-06 217-227 | .9 | 1 | 5.1 | 51 | 203070 | 1090 | 4 | 4 | 20 | 7 | 108.5 | 44 |
| PH86-06 227-237 | .3 | 1 | 4.4 | 48 | 197760 | 910 | 5 | 4 | 17 | 7 | 108.5 | 43 |
| PH86-06 237-247 | .5 | 1 | 5.2 | 45 | 204010 | 934 | 4 | 5 | 17 | 6 | 111.3 | 46 |

PROJECT NO: *conversion scale* 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P3+4

ATTENTION: M.BELEY

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 28, 1986

(VALUES IN PPM) AU-PPB

| | |
|------------------------|-----|
| PH86-04 137-147 (feet) | 5 |
| PH86-04 147-157 | 10 |
| PH86-04 157-167 | 5 |
| PH86-04 167-177 | 5 |
| PH86-04 177-187 | 5 |
| PH86-04 187-197 | 5 |
| PH86-04 197-207 | 5 |
| PH86-04 207-217 | 5 |
| PH86-04 217-227 | 5 |
| PH86-04 227-237 | 5 |
| PH86-04 237-247 | 5 |
| PH86-04 247-257 | 3 |
| PH86-04 257-267 | 5 |
| PH86-04 267-277 | 3 |
| PH86-04 277-287 | 5 |
| PH86-05 17-27 | 5 |
| PH86-05 27-37 | N/S |
| PH86-05 37-47 | 10 |
| PH86-05 47-57 | 5 |
| PH86-05 57-67 | 5 |
| PH86-05 67-77 | 5 |
| PH86-05 77-87 | 5 |
| PH86-05 87-97 | 3 |
| PH86-05 97-107 | 5 |
| PH86-05 107-117 | 5 |
| PH86-05 117-127 | 5 |
| PH86-05 127-137 | 5 |
| PH86-05 137-147 | 10 |
| PH86-05 147-157 | 10 |
| PH86-05 157-167 | 5 |
| PH86-05 167-177 | 5 |
| PH86-05 177-187 | 5 |
| PH86-05 187-197 | 5 |
| PH86-05 197-207 | 10 |
| PH86-05 207-217 | 10 |
| PH86-05 217-227 | 5 |
| PH86-05 227-237 | 5 |
| PH86-05 237-247 | 5 |
| PH86-05 247-257 | 5 |
| PH86-05 257-267 | 3 |
| PH86-06 7-17 | 10 |
| PH86-06 67-77 | 5 |
| PH86-06 77-87 | 5 |
| PH86-06 87-97 | 5 |
| PH86-06 97-99 | 5 |
| PH86-06 99-107 | 5 |
| PH86-06 107-117 | 5 |
| PH86-06 117-127 | 5 |
| PH86-06 127-137 | 5 |
| PH86-06 137-147 | 5 |
| PH86-06 147-157 | 10 |
| PH86-06 157-167 | 5 |
| PH86-06 167-177 | 10 |
| PH86-06 177-187 | 5 |
| PH86-06 187-197 | 5 |
| PH86-06 197-207 | 5 |
| PH86-06 207-217 | 10 |
| PH86-06 217-227 | 5 |
| PH86-06 227-237 | 5 |
| PH86-06 237-247 | 10 |

| (VALUES IN PPM) | AG | AS | CD | CU | FE | MN | MO | NI | PB | SB | V | ZN |
|------------------------|-----|----|-----|----|--------|------|----|----|----|----|-------|----|
| PH86-06 247-257 (feet) | .5 | 1 | 5.4 | 49 | 183280 | 876 | 5 | 6 | 17 | 6 | 112.8 | 57 |
| PH86-06 257-267 | .5 | 1 | 4.7 | 52 | 179690 | 786 | 4 | 7 | 20 | 7 | 106.9 | 53 |
| PH86-06 267-277 | .3 | 1 | 4.1 | 81 | 185160 | 694 | 4 | 11 | 22 | 6 | 107.2 | 56 |
| PH86-06 277-287 | .5 | 1 | 5.5 | 55 | 183890 | 661 | 4 | 6 | 23 | 6 | 108.3 | 49 |
| PH86-06 287-297 | .9 | 1 | 4.3 | 43 | 205030 | 785 | 3 | 4 | 22 | 6 | 110.2 | 49 |
| PH86-07 7-17 | .5 | 1 | 3.3 | 30 | 133690 | 697 | 3 | 21 | 18 | 7 | 88.5 | 54 |
| PH86-07 17-27 | .3 | 1 | 4.2 | 26 | 128220 | 615 | 4 | 15 | 18 | 7 | 84.2 | 47 |
| PH86-07 27-37 | .3 | 1 | 2.8 | 25 | 125620 | 617 | 3 | 13 | 24 | 8 | 83.8 | 48 |
| PH86-09 7-17 | .9 | 1 | 5.7 | 30 | 118580 | 727 | 6 | 18 | 26 | 9 | 87.9 | 73 |
| PH86-09 17-22 | .5 | 1 | 3.5 | 22 | 100260 | 618 | 5 | 10 | 21 | 6 | 78.5 | 41 |
| PH86-09 22-27 | .9 | 10 | 5.2 | 26 | 77780 | 1058 | 7 | 14 | 38 | 8 | 74.4 | 46 |
| PH86-09 27-37 | .9 | 11 | 5.7 | 24 | 85690 | 830 | 9 | 15 | 34 | 9 | 85.7 | 58 |
| PH86-09 37-47 | .7 | 1 | 2.9 | 22 | 75020 | 1000 | 4 | 8 | 32 | 6 | 47.6 | 33 |
| PH86-09 47-57 | .3 | 1 | 5.8 | 31 | 150960 | 750 | 2 | 5 | 21 | 8 | 65.8 | 27 |
| PH86-09 57-67 | .3 | 1 | 5.2 | 32 | 128720 | 922 | 3 | 2 | 22 | 7 | 53.8 | 29 |
| PH86-09 67-77 | .7 | 20 | 5.0 | 29 | 68570 | 862 | 7 | 14 | 48 | 8 | 65.1 | 51 |
| PH86-09 77-87 | .5 | 16 | 6.6 | 27 | 56040 | 854 | 7 | 14 | 47 | 8 | 60.1 | 47 |
| PH86-09 87-97 | .3 | 21 | 5.3 | 26 | 42240 | 1200 | 10 | 14 | 53 | 8 | 48.2 | 48 |
| PH86-09 97-107 | .5 | 28 | 5.5 | 26 | 41360 | 1144 | 11 | 15 | 53 | 8 | 28.6 | 60 |
| PH86-09 107-117 | .5 | 25 | 4.1 | 23 | 42060 | 1610 | 9 | 15 | 43 | 8 | 31.3 | 51 |
| PH86-09 117-127 | .5 | 26 | 5.0 | 28 | 46420 | 1247 | 7 | 15 | 50 | 8 | 51.6 | 54 |
| PH86-09 127-137 | .5 | 28 | 4.1 | 23 | 48410 | 973 | 8 | 18 | 56 | 8 | 56.2 | 48 |
| PH86-09 137-147 | .5 | 25 | 3.9 | 26 | 47010 | 933 | 7 | 17 | 49 | 9 | 48.7 | 46 |
| PH86-09 147-157 | .3 | 24 | 2.8 | 22 | 47950 | 1156 | 7 | 10 | 41 | 8 | 48.0 | 50 |
| PH86-09 157-167 | .5 | 25 | 5.3 | 35 | 59780 | 1435 | 8 | 14 | 49 | 9 | 70.1 | 49 |
| PH86-09 167-177 | .9 | 44 | 8.1 | 43 | 69490 | 3014 | 10 | 19 | 70 | 14 | 106.1 | 68 |
| PH86-09 177-187 | .9 | 38 | 7.2 | 32 | 69350 | 1701 | 11 | 15 | 63 | 12 | 115.4 | 55 |
| PH86-09 187-197 | .9 | 22 | 6.0 | 28 | 68690 | 1120 | 9 | 10 | 55 | 11 | 88.4 | 46 |
| PH86-09 197-207 | .9 | 4 | 5.4 | 27 | 96830 | 973 | 6 | 7 | 37 | 9 | 78.2 | 40 |
| PH86-09 207-217 | .7 | 18 | 4.4 | 24 | 53250 | 1034 | 8 | 11 | 44 | 8 | 64.1 | 49 |
| PH86-09 217-227 | 1.1 | 4 | 5.9 | 24 | 87710 | 996 | 6 | 10 | 47 | 9 | 68.5 | 56 |
| PH86-09 227-237 | .9 | 9 | 5.5 | 26 | 85980 | 1022 | 8 | 10 | 40 | 9 | 69.1 | 52 |
| PH86-09 237-247 | .5 | 11 | 7.2 | 26 | 68190 | 954 | 8 | 12 | 45 | 9 | 72.3 | 53 |
| PH86-09 247-257 | .9 | 18 | 6.5 | 25 | 66340 | 963 | 7 | 14 | 46 | 10 | 76.2 | 58 |
| PH86-09 257-267 | .9 | 17 | 7.1 | 30 | 56620 | 841 | 8 | 15 | 49 | 10 | 69.1 | 60 |
| PH86-09 267-277 | .7 | 22 | 5.4 | 27 | 53680 | 819 | 8 | 11 | 42 | 9 | 49.8 | 48 |
| PH86-10 7-17 | .7 | 1 | 4.8 | 25 | 121690 | 624 | 3 | 19 | 24 | 8 | 83.7 | 55 |
| PH86-10 17-27 | .5 | 1 | 4.2 | 26 | 117580 | 564 | 3 | 12 | 18 | 7 | 80.4 | 50 |
| PH86-10 27-37 | .9 | 1 | 9.5 | 35 | 111770 | 1027 | 6 | 8 | 45 | 10 | 92.7 | 35 |
| PH86-10 37-47 | .9 | 23 | 6.5 | 27 | 59460 | 931 | 9 | 14 | 53 | 10 | 80.0 | 42 |
| PH86-10 47-57 | 1.1 | 1 | 6.6 | 35 | 132520 | 1114 | 4 | 7 | 35 | 11 | 105.1 | 29 |
| PH86-10 57-67 | .9 | 1 | 6.2 | 39 | 150780 | 1026 | 4 | 5 | 22 | 11 | 109.7 | 25 |
| PH86-10 67-77 | .9 | 21 | 6.5 | 38 | 73720 | 1004 | 10 | 16 | 61 | 11 | 98.8 | 43 |
| PH86-10 77-87 | .9 | 24 | 5.3 | 38 | 54350 | 921 | 9 | 15 | 56 | 10 | 83.4 | 49 |
| PH86-10 87-97 | .7 | 17 | 4.6 | 19 | 47190 | 736 | 8 | 10 | 53 | 9 | 66.0 | 49 |
| PH86-10 97-107 | .7 | 15 | 5.0 | 25 | 72110 | 849 | 8 | 10 | 57 | 10 | 74.3 | 50 |
| PH86-10 107-117 | .9 | 1 | 6.5 | 26 | 133920 | 865 | 2 | 6 | 24 | 9 | 80.4 | 28 |
| PH86-10 117-127 | .9 | 1 | 6.8 | 26 | 143710 | 771 | 1 | 5 | 19 | 9 | 72.6 | 23 |
| PH86-10 127-137 | .7 | 1 | 6.0 | 26 | 150750 | 812 | 2 | 5 | 20 | 9 | 79.4 | 24 |
| PH86-10 137-147 | .5 | 1 | 6.5 | 31 | 140380 | 1035 | 4 | 6 | 24 | 10 | 78.1 | 27 |
| PH86-10 147-157 | .5 | 6 | 4.9 | 40 | 91470 | 988 | 6 | 6 | 39 | 9 | 65.2 | 33 |
| PH86-10 157-167 | .7 | 12 | 4.8 | 25 | 72330 | 690 | 7 | 10 | 46 | 9 | 71.3 | 39 |
| PH86-10 167-177 | .7 | 14 | 5.6 | 23 | 58130 | 675 | 7 | 12 | 47 | 9 | 67.2 | 42 |
| PH86-10 177-187 | .5 | 22 | 5.1 | 24 | 51550 | 952 | 9 | 12 | 50 | 9 | 60.7 | 53 |
| PH86-10 187-197 | .5 | 17 | 3.4 | 20 | 46910 | 939 | 10 | 13 | 46 | 8 | 55.2 | 43 |
| PH86-10 197-207 | .7 | 16 | 5.4 | 26 | 56980 | 971 | 8 | 8 | 47 | 10 | 60.1 | 46 |
| PH86-10 207-217 | .7 | 16 | 3.9 | 26 | 46610 | 1269 | 9 | 15 | 44 | 8 | 48.1 | 49 |
| PH86-10 217-227 | .9 | 19 | 4.9 | 26 | 55820 | 1024 | 8 | 14 | 42 | 9 | 66.5 | 47 |
| PH86-10 227-237 | .7 | 24 | 5.4 | 24 | 68610 | 908 | 9 | 11 | 55 | 10 | 80.2 | 46 |
| PH86-10 237-247 | .9 | 27 | 3.8 | 23 | 51830 | 852 | 11 | 15 | 56 | 10 | 72.0 | 50 |

PROJECT NO:

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P5+6

ATTENTION: M. BELEY *conversion* 1 meter = 3.28 ft.

(604) 980-5814 OR (604) 988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 28, 1986

(VALUES IN PPM) AU-PPB

PH86-06 247-257 (feet) 5

PH86-06 257-267 3

PH86-06 267-277 5

PH86-06 277-287 5

PH86-06 287-297 5

PH86-07 7-17 5

PH86-07 17-27 5

PH86-07 27-37 5

PH86-09 7-17 5

PH86-09 17-22 5

PH86-09 22-27 5

PH86-09 27-37 5

PH86-09 37-47 5

PH86-09 47-57 5

PH86-09 57-67 10

PH86-09 67-77 5

PH86-09 77-87 5

PH86-09 87-97 3

PH86-09 97-107 5

PH86-09 107-117 5

PH86-09 117-127 5

PH86-09 127-137 5

PH86-09 137-147 5

PH86-09 147-157 5

PH86-09 157-167 5

PH86-09 167-177 3

PH86-09 177-187 5

PH86-09 187-197 5

PH86-09 197-207 5

PH86-09 207-217 5

PH86-09 217-227 3

PH86-09 227-237 5

PH86-09 237-247 10

PH86-09 247-257 5

PH86-09 257-267 5

PH86-09 267-277 5

PH86-10 7-17 5

PH86-10 17-27 5

PH86-10 27-37 5

PH86-10 37-47 5

PH86-10 47-57 5

PH86-10 57-67 3

PH86-10 67-77 5

PH86-10 77-87 5

PH86-10 87-97 5

PH86-10 97-107 5

PH86-10 107-117 5

PH86-10 117-127 10

PH86-10 127-137 3

PH86-10 137-147 5

PH86-10 147-157 5

PH86-10 157-167 5

PH86-10 167-177 5

PH86-10 177-187 5

PH86-10 187-197 5

PH86-10 197-207 5

PH86-10 207-217 3

PH86-10 217-227 5

PH86-10 227-237 10

PH86-10 237-247 5

PROJECT NO:

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P7+8

ATTENTION: M.BELEY *Conversion Scale* 1 meter = 3.28 feet.

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: NOV 28, 1986

| (VALUES IN PPM) | AG | AS | CD | CU | FE | MN | MO | NI | PB | SB | V | ZN |
|------------------------|----|----|-----|----|--------|------|----|----|----|----|-------|----|
| PH86-10 247-257 (feet) | .8 | 32 | 6.4 | 22 | 33960 | 842 | 10 | 18 | 59 | 9 | 53.0 | 53 |
| PH86-11 7-17 | .6 | 5 | 4.4 | 24 | 82160 | 637 | 5 | 21 | 29 | 6 | 76.4 | 49 |
| PH86-11 17-27 | .6 | 9 | 3.8 | 22 | 86200 | 561 | 4 | 18 | 27 | 6 | 72.1 | 51 |
| PH86-11 18-27 | .4 | 4 | 2.0 | 25 | 80160 | 367 | 5 | 8 | 28 | 5 | 65.2 | 54 |
| PH86-11 27-37 | .4 | 1 | 2.4 | 19 | 102500 | 464 | 2 | 7 | 18 | 5 | 71.5 | 54 |
| PH86-11 37-47 | .3 | 3 | 1.5 | 24 | 74140 | 285 | 4 | 5 | 22 | 5 | 66.1 | 40 |
| PH86-11 47-57 | .4 | 5 | 3.4 | 16 | 64030 | 247 | 5 | 8 | 26 | 4 | 57.0 | 34 |
| PH86-11 57-67 | .3 | 1 | 2.2 | 16 | 65440 | 222 | 4 | 7 | 21 | 4 | 47.9 | 36 |
| PH86-11 67-77 | .3 | 1 | 1.3 | 14 | 56690 | 189 | 2 | 5 | 18 | 3 | 29.9 | 32 |
| PH86-11 77-87 | .3 | 3 | 1.1 | 15 | 65370 | 239 | 4 | 5 | 22 | 4 | 52.9 | 39 |
| PH86-11 87-97 | .4 | 1 | 3.6 | 16 | 83000 | 389 | 4 | 4 | 25 | 4 | 60.7 | 46 |
| PH86-11 97-107 | .3 | 1 | 2.6 | 17 | 80590 | 384 | 3 | 5 | 12 | 4 | 56.3 | 54 |
| PH86-11 107-117 | .4 | 1 | 3.6 | 19 | 89050 | 365 | 3 | 6 | 18 | 4 | 57.4 | 55 |
| PH86-11 117-127 | .3 | 1 | 3.3 | 16 | 94120 | 373 | 2 | 4 | 19 | 4 | 58.9 | 48 |
| PH86-11 127-137 | .3 | 1 | 2.0 | 15 | 88960 | 285 | 2 | 5 | 18 | 4 | 57.2 | 46 |
| PH86-11 137-147 | .3 | 1 | 1.8 | 16 | 92700 | 344 | 3 | 6 | 17 | 4 | 58.1 | 54 |
| PH86-11 147-157 | .3 | 1 | 2.8 | 16 | 104980 | 410 | 1 | 5 | 15 | 4 | 58.4 | 47 |
| PH86-11 157-167 | .4 | 1 | 2.2 | 17 | 107270 | 402 | 1 | 5 | 17 | 4 | 59.1 | 43 |
| PH86-11 167-177 | .3 | 1 | 4.1 | 15 | 82260 | 277 | 2 | 6 | 15 | 4 | 52.2 | 39 |
| PH86-11 177-187 | .3 | 1 | 2.1 | 14 | 73550 | 252 | 3 | 4 | 17 | 4 | 46.5 | 41 |
| PH86-11 187-197 | .3 | 1 | 3.1 | 14 | 70350 | 232 | 2 | 7 | 16 | 3 | 44.2 | 34 |
| PH86-11 197-207 | .4 | 1 | 2.7 | 15 | 75000 | 263 | 4 | 6 | 15 | 4 | 47.8 | 38 |
| PH86-11 207-217 | .3 | 3 | 2.2 | 14 | 64480 | 246 | 4 | 6 | 20 | 4 | 46.0 | 39 |
| PH86-19 7-17 | .3 | 16 | 3.6 | 24 | 80640 | 510 | 5 | 23 | 36 | 7 | 79.4 | 54 |
| PH86-19 17-22 | .4 | 12 | 4.3 | 27 | 93640 | 625 | 4 | 20 | 29 | 8 | 78.4 | 54 |
| PH86-19 22-27 | .3 | 1 | 3.3 | 21 | 100880 | 504 | 2 | 10 | 20 | 5 | 72.2 | 50 |
| PH86-20 7-13 | .3 | 6 | 3.7 | 24 | 95840 | 553 | 4 | 15 | 32 | 7 | 77.0 | 54 |
| PH86-20 13-17 | .3 | 1 | 3.4 | 20 | 101760 | 459 | 3 | 5 | 15 | 5 | 68.8 | 44 |
| PH86-20 17-27 | .3 | 1 | 3.0 | 19 | 92310 | 349 | 3 | 5 | 20 | 5 | 66.6 | 48 |
| PH86-20 27-37 | .3 | 8 | 3.8 | 22 | 82610 | 375 | 5 | 7 | 35 | 5 | 73.4 | 55 |
| PH86-20 37-47 | .3 | 1 | 3.9 | 20 | 91830 | 488 | 8 | 8 | 20 | 6 | 80.3 | 61 |
| PH86-20 47-57 | .3 | 1 | 4.3 | 18 | 115150 | 487 | 3 | 6 | 19 | 5 | 79.5 | 47 |
| PH86-20 57-67 | .5 | 1 | 4.3 | 19 | 125020 | 449 | 3 | 5 | 16 | 6 | 76.1 | 43 |
| PH86-20 67-77 | .3 | 1 | 4.1 | 21 | 124980 | 489 | 3 | 5 | 15 | 5 | 78.0 | 44 |
| PH86-29 77-87 | .5 | 1 | 3.8 | 21 | 119530 | 487 | 3 | 4 | 14 | 5 | 77.7 | 46 |
| PH86-20 87-97 | .3 | 1 | 4.6 | 20 | 106660 | 368 | 4 | 7 | 15 | 5 | 75.3 | 46 |
| PH86-20 97-107 | .5 | 1 | 6.3 | 34 | 147370 | 892 | 3 | 23 | 21 | 8 | 111.2 | 47 |
| PH86-20 107-117 | .7 | 1 | 5.9 | 33 | 133660 | 787 | 6 | 28 | 27 | 8 | 115.5 | 50 |
| PH86-20 117-127 | .3 | 1 | 5.9 | 33 | 125640 | 630 | 3 | 33 | 26 | 8 | 112.5 | 47 |
| PH86-20 127-137 | .5 | 1 | 5.6 | 23 | 122140 | 534 | 3 | 8 | 12 | 5 | 85.9 | 43 |
| PH86-20 137-147 | .5 | 1 | 7.7 | 41 | 126940 | 643 | 4 | 25 | 25 | 6 | 108.4 | 45 |
| PH86-20 147-150 | .3 | 1 | 6.2 | 40 | 127550 | 546 | 3 | 25 | 16 | 6 | 115.1 | 41 |
| PH86-21 7-17 | .5 | 1 | 5.8 | 24 | 121020 | 657 | 4 | 14 | 20 | 7 | 85.5 | 46 |
| PH86-21 17-22 | .2 | 1 | 5.2 | 22 | 123160 | 630 | 3 | 12 | 21 | 6 | 88.6 | 41 |
| PH86-21 22-27 | .3 | 1 | 5.6 | 22 | 107700 | 517 | 3 | 10 | 24 | 6 | 75.2 | 49 |
| PH86-21 27-37 | .5 | 1 | 5.6 | 25 | 132050 | 581 | 3 | 13 | 18 | 7 | 80.3 | 49 |
| PH86-21 37-47 | .5 | 1 | 6.3 | 26 | 107990 | 608 | 6 | 14 | 31 | 8 | 82.5 | 46 |
| PH86-21 47-57 | .5 | 37 | 4.8 | 25 | 44680 | 613 | 11 | 16 | 58 | 8 | 64.0 | 59 |
| PH86-21 57-67 | .3 | 31 | 5.1 | 27 | 32520 | 539 | 9 | 17 | 50 | 7 | 41.8 | 61 |
| PH86-21 67-77 | .5 | 60 | 5.5 | 25 | 34880 | 573 | 16 | 20 | 57 | 8 | 61.1 | 66 |
| PH86-21 77-87 | .5 | 44 | 5.4 | 30 | 49670 | 1247 | 11 | 17 | 61 | 10 | 76.3 | 60 |
| PH86-21 87-97 | .3 | 36 | 6.8 | 25 | 49290 | 682 | 10 | 15 | 56 | 9 | 68.2 | 54 |
| PH86-21 97-107 | .5 | 26 | 5.8 | 18 | 55950 | 664 | 9 | 11 | 49 | 8 | 63.1 | 47 |
| PH86-21 107-117 | .3 | 23 | 7.3 | 16 | 71040 | 830 | 10 | 12 | 43 | 9 | 79.7 | 49 |
| PH86-21 117-127 | .5 | 20 | 5.4 | 16 | 77840 | 1017 | 9 | 10 | 49 | 9 | 83.2 | 48 |
| PH86-21 127-137 | .5 | 6 | 6.4 | 17 | 99280 | 867 | 9 | 5 | 36 | 9 | 82.8 | 38 |
| PH86-21 137-147 | .3 | 18 | 6.2 | 17 | 80040 | 768 | 9 | 11 | 44 | 9 | 81.7 | 36 |
| PH86-21 147-157 | .3 | 25 | 6.6 | 15 | 71190 | 825 | 9 | 12 | 44 | 9 | 74.0 | 36 |
| PH86-21 157-167 | .5 | 32 | 5.6 | 20 | 58820 | 929 | 11 | 13 | 53 | 9 | 72.8 | 42 |
| PH86-21 167-177 | .5 | 40 | 6.7 | 18 | 56270 | 870 | 11 | 15 | 56 | 10 | 74.4 | 46 |

PROJECT NO:

1 meter = 3.28 feet 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P7+B

ATTENTION: M. BELEY

(604) 980-5814 OR (604) 980-4524

* TYPE ROCK GEOCHEM * DATE: NOV 28, 1986

(VALUES IN PPM) AU-PPB

| | |
|------------------------|----|
| PH86-10 247-257 (feet) | 5 |
| PH86-11 7-17 | 5 |
| PH86-11 17-27 | 5 |
| PH86-11 18-27 | 5 |
| PH86-11 27-37 | 10 |
| PH86-11 37-47 | 5 |
| PH86-11 47-57 | 5 |
| PH86-11 57-67 | 5 |
| PH86-11 67-77 | 5 |
| PH86-11 77-87 | 5 |
| PH86-11 87-97 | 5 |
| PH86-11 97-107 | 5 |
| PH86-11 107-117 | 5 |
| PH86-11 117-127 | 5 |
| PH86-11 127-137 | 5 |
| PH86-11 137-147 | 10 |
| PH86-11 147-157 | 3 |
| PH86-11 157-167 | 5 |
| PH86-11 167-177 | 5 |
| PH86-11 177-187 | 3 |
| PH86-11 187-197 | 5 |
| PH86-11 197-207 | 5 |
| PH86-11 207-217 | 5 |
| PH86-19 7-17 | 10 |
| PH86-19 17-22 | 5 |
| PH86-19 22-27 | 5 |
| PH86-20 7-13 | 5 |
| PH86-20 13-17 | 10 |
| PH86-20 17-27 | 5 |
| PH86-20 27-37 | 3 |
| PH86-20 37-47 | 5 |
| PH86-20 47-57 | 5 |
| PH86-20 57-67 | 5 |
| PH86-20 67-77 | 10 |
| PH86-29 77-87 | 5 |
| PH86-20 87-97 | 5 |
| PH86-20 97-107 | 5 |
| PH86-20 107-117 | 3 |
| PH86-20 117-127 | 5 |
| PH86-20 127-137 | 5 |
| PH86-20 137-147 | 5 |
| PH86-20 147-150 | 5 |
| PH86-21 7-17 | 3 |
| PH86-21 17-22 | 5 |
| PH86-21 22-27 | 5 |
| PH86-21 27-37 | 5 |
| PH86-21 37-47 | 5 |
| PH86-21 47-57 | 5 |
| PH86-21 57-67 | 3 |
| PH86-21 67-77 | 5 |
| PH86-21 77-87 | 5 |
| PH86-21 87-97 | 5 |
| PH86-21 97-107 | 5 |
| PH86-21 107-117 | 5 |
| PH86-21 117-127 | 5 |
| PH86-21 127-137 | 5 |
| PH86-21 137-147 | 10 |
| PH86-21 147-157 | 5 |
| PH86-21 157-167 | 5 |
| PH86-21 167-177 | 5 |

PROJECT NO:

Scale

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P9+10

ATTENTION: M.BELEY 1 meter = 3.28 ft.

(604) 980-5814 OR (604) 988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 28, 1986

| (VALUES IN PPM) | AS | AS | CD | CU | FE | MN | MO | NI | PB | SB | V | ZN |
|------------------------|----|----|-----|----|--------|------|----|----|----|----|-------|----|
| PH86-21 177-187 (feet) | .5 | 32 | 8.5 | 26 | 80080 | 766 | 9 | 8 | 49 | 11 | 86.2 | 43 |
| PH86-21 187-197 | .3 | 24 | 5.3 | 22 | 92540 | 753 | 8 | 8 | 37 | 11 | 92.0 | 32 |
| PH86-21 197-207 | .5 | 17 | 6.9 | 18 | 95200 | 831 | 9 | 10 | 35 | 11 | 92.8 | 39 |
| PH86-21 207-217 | .5 | 11 | 5.9 | 21 | 91090 | 711 | 7 | 8 | 31 | 9 | 86.7 | 37 |
| PH86-21 217-227 | .9 | 23 | 6.1 | 23 | 80650 | 872 | 7 | 11 | 37 | 10 | 79.5 | 37 |
| PH86-21 227-237 | .5 | 18 | 4.9 | 16 | 66510 | 900 | 7 | 15 | 41 | 8 | 61.3 | 36 |
| PH86-21 237-247 | .5 | 22 | 6.8 | 13 | 70350 | 1128 | 7 | 8 | 39 | 9 | 50.2 | 43 |
| PH86-21 247-257 | .3 | 18 | 5.3 | 13 | 52440 | 913 | 7 | 7 | 28 | 7 | 33.5 | 42 |
| PH86-22 17-27 | .3 | 1 | 5.5 | 21 | 121890 | 548 | 2 | 14 | 8 | 7 | 75.8 | 41 |
| PH86-22 27-37 | .5 | 1 | 7.0 | 31 | 131010 | 652 | 4 | 25 | 12 | 8 | 100.5 | 51 |
| PH86-22 27-30 | .7 | 1 | 7.9 | 36 | 136790 | 756 | 3 | 28 | 19 | 9 | 100.2 | 56 |
| PH86-22 37-47 | .5 | 1 | 8.0 | 40 | 167100 | 820 | 5 | 39 | 30 | 11 | 129.0 | 71 |
| PH86-22 47-57 | .5 | 1 | 7.9 | 35 | 153210 | 810 | 1 | 50 | 15 | 8 | 110.5 | 60 |
| PH86-22 57-67 | .3 | 1 | 7.0 | 31 | 153700 | 1107 | 3 | 71 | 24 | 9 | 111.3 | 53 |
| PH86-22 67-77 | .5 | 1 | 6.6 | 40 | 142160 | 1131 | 3 | 38 | 19 | 8 | 111.0 | 46 |
| PH86-22 77-87 | .5 | 1 | 6.3 | 63 | 121310 | 884 | 4 | 27 | 27 | 8 | 118.8 | 60 |
| PH86-22 87-97 | .3 | 1 | 5.8 | 49 | 97820 | 682 | 3 | 28 | 29 | 7 | 100.7 | 69 |
| PH86-22 97-107 | .3 | 1 | 5.3 | 28 | 91220 | 601 | 5 | 26 | 19 | 5 | 67.6 | 55 |
| PH86-22 107-117 | .5 | 1 | 5.6 | 27 | 97850 | 614 | 3 | 21 | 27 | 6 | 68.5 | 50 |
| PH86-22 117-127 | .3 | 1 | 3.4 | 21 | 78910 | 520 | 5 | 21 | 24 | 5 | 53.1 | 41 |
| PH86-22 127-137 | .3 | 1 | 3.3 | 20 | 69490 | 422 | 3 | 17 | 22 | 3 | 46.8 | 35 |
| PH86-22 137-147 | .3 | 2 | 3.9 | 25 | 57670 | 451 | 4 | 17 | 36 | 5 | 48.6 | 47 |
| PH86-22 147-157 | .3 | 1 | 4.1 | 19 | 46680 | 325 | 3 | 8 | 31 | 4 | 40.2 | 44 |
| PH86-22 157-167 | .5 | 10 | 6.8 | 29 | 53580 | 464 | 7 | 12 | 37 | 6 | 48.3 | 46 |
| PH86-22 167-177 | .3 | 22 | 5.1 | 24 | 47060 | 493 | 7 | 14 | 43 | 7 | 47.8 | 51 |
| PH86-22 177-187 | .5 | 16 | 5.5 | 25 | 62140 | 617 | 9 | 14 | 46 | 8 | 63.8 | 48 |
| PH86-22 187-197 | .5 | 16 | 5.4 | 23 | 65290 | 561 | 7 | 12 | 39 | 8 | 73.1 | 45 |
| PH86-22 197-207 | .3 | 12 | 5.4 | 22 | 57350 | 587 | 7 | 16 | 42 | 7 | 56.8 | 47 |
| PH86-22 207-217 | .3 | 19 | 6.9 | 25 | 54260 | 638 | 8 | 16 | 44 | 7 | 62.0 | 48 |
| PH86-22 217-227 | .2 | 19 | 6.6 | 24 | 71710 | 791 | 7 | 13 | 39 | 9 | 75.8 | 43 |
| PH86-22 227-237 | .5 | 15 | 6.9 | 27 | 80540 | 770 | 9 | 13 | 39 | 9 | 80.0 | 52 |
| PH86-22 237-247 | .5 | 11 | 7.4 | 32 | 94550 | 939 | 7 | 14 | 51 | 10 | 93.6 | 48 |
| PH86-22 247-257 | .5 | 10 | 7.5 | 37 | 103300 | 864 | 8 | 13 | 42 | 11 | 102.6 | 55 |
| PH86-22 257-267 | .5 | 12 | 7.8 | 22 | 104960 | 884 | 9 | 18 | 45 | 12 | 104.5 | 54 |
| PH86-22 267-277 | .5 | 22 | 6.9 | 27 | 95570 | 836 | 9 | 14 | 51 | 11 | 97.1 | 50 |
| PH86-22 277-287 | .7 | 20 | 5.6 | 28 | 71600 | 838 | 8 | 14 | 45 | 9 | 78.5 | 49 |
| PH86-22 287-297 | .5 | 17 | 5.7 | 27 | 66950 | 787 | 7 | 20 | 41 | 8 | 71.3 | 51 |
| PH86-22 297-307 | .5 | 17 | 7.2 | 26 | 79260 | 877 | 7 | 14 | 42 | 10 | 83.7 | 48 |
| PH86-22 307-317 | .5 | 8 | 7.0 | 31 | 83380 | 788 | 8 | 13 | 42 | 9 | 83.7 | 38 |
| PH86-01 30-40 | .5 | 1 | 5.9 | 21 | 117470 | 722 | 3 | 12 | 17 | 7 | 77.8 | 46 |
| PH86-02 27-37 | .7 | 1 | 4.2 | 22 | 124310 | 651 | 2 | 12 | 13 | 7 | 82.6 | 41 |
| PH86-03 25-27 | .5 | 1 | 5.3 | 26 | 137220 | 705 | 3 | 12 | 20 | 8 | 93.2 | 46 |

PROJECT NO:

Scale

1 meter = 3.28 feet 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1202/P9+10

ATTENTION: M. BELEY

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 28, 1986

(VALUES IN PPM) AU-PPB

PH86-21 177-187 feet 5

PH86-21 187-197 3

PH86-21 197-207 5

PH86-21 207-217 5

PH86-21 217-227 10

PH86-21 227-237 5

PH86-21 237-247 3

PH86-21 247-257 5

PH86-22 17-27 5

PH86-22 27-37 10

PH86-22 27-30 5

PH86-22 37-47 5

PH86-22 47-57 5

PH86-22 57-67 10

PH86-22 67-77 5

PH86-22 77-87 5

PH86-22 87-97 3

PH86-22 97-107 3

PH86-22 107-117 5

PH86-22 117-127 5

PH86-22 127-137 10

PH86-22 137-147 5

PH86-22 147-157 5

PH86-22 157-167 10

PH86-22 167-177 10

PH86-22 177-187 5

PH86-22 187-197 5

PH86-22 197-207 5

PH86-22 207-217 5

PH86-22 217-227 5

PH86-22 227-237 5

PH86-22 237-247 10

PH86-22 247-257 5

PH86-22 257-267 5

PH86-22 267-277 10

PH86-22 277-287 5

PH86-22 287-297 5

PH86-22 297-307 10

PH86-22 307-317 5

PH86-01 30-40 5

PH86-02 27-37 3

PH86-03 25-27 10

COMPANY: NORMINE RESOURCES

MIN-EN LABS ICP REPORT

(ACT:GE027) PAGE 1 OF 3

PROJECT NO: ^{Scale} 1 meter = 3.26 ft. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1133

ATTENTION: R. BARCLAY

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: NOV 7, 1986

| (VALUES IN PPM) | AG | AL | AS | B | BA | BE | BI | CA | CD | CO | CU | FE |
|-----------------|----|-------|-----|----|-----|-----|----|-------|------|----|----|--------|
| PH86-08 07-17 | .8 | 15080 | 1 | 18 | 248 | 3.0 | 2 | 11020 | 4.3 | 9 | 29 | 92100 |
| PH86-08 17-27 | .8 | 13520 | 1 | 14 | 216 | 2.7 | 2 | 10040 | 3.9 | 7 | 24 | 88960 |
| PH86-08 27-37 | .4 | 15770 | 1 | 21 | 188 | 3.0 | 1 | 11900 | 5.9 | 8 | 25 | 102100 |
| PH86-08 37-47 | .8 | 18180 | 18 | 26 | 143 | 4.9 | 5 | 17150 | 6.3 | 9 | 38 | 60420 |
| PH86-08 47-57 | .4 | 16780 | 80 | 26 | 175 | 5.6 | 4 | 20910 | 6.6 | 9 | 34 | 50420 |
| PH86-08 57-67 | .6 | 16330 | 59 | 28 | 270 | 5.6 | 4 | 23410 | 4.5 | 9 | 30 | 50100 |
| PH86-08 67-77 | .6 | 15790 | 64 | 27 | 206 | 5.7 | 4 | 14480 | 9.0 | 9 | 24 | 45930 |
| PH86-08 77-87 | .4 | 21410 | 99 | 31 | 163 | 7.1 | 6 | 20310 | 8.4 | 11 | 26 | 59580 |
| PH86-08 87-97 | .6 | 18270 | 100 | 30 | 153 | 6.9 | 6 | 16440 | 11.0 | 11 | 35 | 58080 |
| PH86-08 97-107 | .6 | 19840 | 65 | 31 | 124 | 6.6 | 6 | 19300 | 11.0 | 10 | 38 | 53930 |
| PH86-08 107-117 | .8 | 20460 | 39 | 30 | 123 | 6.0 | 6 | 20400 | 6.7 | 8 | 29 | 51820 |
| PH86-08 117-127 | .8 | 15580 | 108 | 27 | 174 | 7.0 | 7 | 18780 | 7.4 | 12 | 36 | 54110 |
| PH86-08 127-137 | .4 | 18720 | 89 | 30 | 226 | 6.3 | 6 | 19880 | 6.4 | 10 | 34 | 49400 |
| PH86-08 137-147 | .8 | 22380 | 67 | 33 | 220 | 6.6 | 7 | 22700 | 6.2 | 9 | 33 | 50800 |
| PH86-08 147-157 | .6 | 15780 | 88 | 27 | 237 | 6.7 | 7 | 18870 | 6.3 | 9 | 35 | 49600 |
| PH86-08 157-167 | .4 | 17210 | 111 | 30 | 158 | 7.9 | 7 | 11350 | 5.6 | 11 | 33 | 54600 |
| PH86-08 167-177 | .4 | 18920 | 63 | 26 | 164 | 6.6 | 7 | 16900 | 6.3 | 9 | 29 | 49270 |
| PH86-08 177-187 | .6 | 19810 | 31 | 31 | 180 | 6.3 | 6 | 30720 | 6.5 | 9 | 28 | 58010 |
| PH86-08 187-197 | .4 | 19750 | 15 | 31 | 205 | 5.6 | 5 | 31210 | 5.5 | 7 | 34 | 59930 |
| PH86-08 197-207 | .4 | 15940 | 7 | 25 | 128 | 4.4 | 4 | 21910 | 5.0 | 7 | 23 | 51610 |
| PH86-08 207-217 | .4 | 16330 | 7 | 25 | 225 | 4.8 | 4 | 27440 | 4.5 | 6 | 23 | 46920 |
| PH86-08 217-227 | .4 | 19130 | 8 | 28 | 255 | 4.6 | 5 | 20110 | 5.9 | 8 | 26 | 57800 |
| PH86-08 227-237 | .8 | 24940 | 3 | 35 | 309 | 4.9 | 5 | 19060 | 6.8 | 10 | 25 | 87230 |
| PH86-08 237-247 | .6 | 22450 | 1 | 31 | 264 | 4.2 | 2 | 17080 | 5.2 | 10 | 24 | 111330 |
| PH86-08 247-257 | .4 | 23630 | 1 | 31 | 262 | 4.1 | 3 | 16240 | 5.4 | 9 | 25 | 108980 |
| PH86-08 257-267 | .4 | 25110 | 1 | 33 | 207 | 3.9 | 3 | 16040 | 5.1 | 10 | 23 | 121350 |
| PH86-08 267-277 | .4 | 24400 | 1 | 32 | 210 | 3.8 | 1 | 15570 | 6.3 | 9 | 17 | 122630 |
| PH86-08 277-287 | .8 | 24430 | 1 | 35 | 183 | 4.1 | 3 | 17040 | 5.8 | 10 | 15 | 129460 |
| PH86-08 287-297 | .8 | 23820 | 4 | 31 | 189 | 4.1 | 1 | 26650 | 5.4 | 10 | 14 | 126900 |

COMPANY: NORMINE RESOURCES

MIN-EN LABS ICP REPORT

(ACT:6ED27) PAGE 2 OF 3

PROJECT NO:

Scale
meter = 3.26 ft. 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1133

ATTENTION: R. BARCLAY

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM *

DATE: NOV 7, 1986

| VALUES IN PPM | K | LI | MG | MN | MO | NA | NI | P | PB | SB | SR | TH |
|-----------------|------|----|-------|------|----|------|----|------|-----|----|----|----|
| PHB6-08 07-17 | 1570 | 8 | 7870 | 731 | 6 | 870 | 17 | 1430 | 25 | 4 | 85 | 1 |
| PHB6-08 17-27 | 1470 | 7 | 6900 | 520 | 5 | 930 | 9 | 1220 | 22 | 3 | 79 | 1 |
| PHB6-08 27-37 | 1940 | 8 | 7400 | 748 | 6 | 1040 | 10 | 1080 | 40 | 4 | 75 | 1 |
| PHB6-08 37-47 | 2760 | 11 | 6960 | 1644 | 10 | 400 | 11 | 720 | 95 | 6 | 42 | 1 |
| PHB6-08 47-57 | 2140 | 11 | 5270 | 1566 | 10 | 360 | 12 | 890 | 77 | 10 | 48 | 1 |
| PHB6-08 57-67 | 2340 | 10 | 4400 | 1594 | 9 | 360 | 13 | 790 | 61 | 8 | 50 | 1 |
| PHB6-08 67-77 | 2590 | 8 | 3420 | 1628 | 10 | 300 | 12 | 880 | 171 | 10 | 55 | 1 |
| PHB6-08 77-87 | 2210 | 17 | 7740 | 2449 | 13 | 350 | 16 | 910 | 142 | 12 | 53 | 1 |
| PHB6-08 87-97 | 2750 | 11 | 5110 | 3353 | 13 | 350 | 20 | 920 | 203 | 12 | 54 | 1 |
| PHB6-08 97-107 | 2690 | 12 | 5770 | 2119 | 12 | 390 | 15 | 820 | 175 | 10 | 52 | 1 |
| PHB6-08 107-117 | 2670 | 12 | 5600 | 2468 | 11 | 350 | 17 | 810 | 90 | 8 | 49 | 1 |
| PHB6-08 117-127 | 2280 | 7 | 3350 | 2501 | 12 | 370 | 17 | 1090 | 92 | 12 | 59 | 1 |
| PHB6-08 127-137 | 2150 | 9 | 4340 | 2299 | 12 | 410 | 12 | 1070 | 81 | 9 | 64 | 1 |
| PHB6-08 137-147 | 2670 | 13 | 6460 | 2562 | 12 | 390 | 17 | 1150 | 76 | 9 | 59 | 1 |
| PHB6-08 147-157 | 2790 | 7 | 3740 | 2402 | 11 | 280 | 13 | 960 | 86 | 11 | 52 | 1 |
| PHB6-08 157-167 | 2960 | 8 | 3600 | 1185 | 13 | 250 | 15 | 1150 | 80 | 13 | 58 | 1 |
| PHB6-08 167-177 | 2440 | 7 | 3170 | 1295 | 10 | 240 | 11 | 870 | 70 | 10 | 57 | 1 |
| PHB6-08 177-187 | 2600 | 9 | 4040 | 1655 | 11 | 330 | 11 | 910 | 73 | 8 | 67 | 1 |
| PHB6-08 187-197 | 2410 | 8 | 3910 | 1367 | 9 | 420 | 10 | 840 | 61 | 7 | 74 | 1 |
| PHB6-08 197-207 | 2130 | 6 | 3770 | 1087 | 8 | 430 | 10 | 790 | 51 | 6 | 60 | 1 |
| PHB6-08 207-217 | 1920 | 7 | 3340 | 1129 | 8 | 390 | 9 | 750 | 48 | 5 | 67 | 1 |
| PHB6-08 217-227 | 2250 | 8 | 6690 | 1084 | 9 | 560 | 10 | 880 | 47 | 6 | 67 | 1 |
| PHB6-08 227-237 | 2750 | 15 | 10830 | 1121 | 10 | 740 | 11 | 950 | 51 | 5 | 82 | 1 |
| PHB6-08 237-247 | 2630 | 14 | 10080 | 986 | 10 | 760 | 5 | 790 | 44 | 7 | 73 | 1 |
| PHB6-08 247-257 | 2240 | 12 | 9930 | 954 | 10 | 1270 | 4 | 860 | 37 | 5 | 83 | 1 |
| PHB6-08 257-267 | 2390 | 13 | 10990 | 989 | 9 | 1540 | 5 | 860 | 32 | 5 | 85 | 1 |
| PHB6-08 267-277 | 2310 | 11 | 10030 | 915 | 8 | 1520 | 5 | 710 | 32 | 6 | 89 | 1 |
| PHB6-08 277-287 | 2690 | 11 | 10210 | 926 | 9 | 1420 | 4 | 780 | 36 | 6 | 82 | 1 |
| PHB6-08 287-297 | 2860 | 10 | 9320 | 978 | 9 | 1130 | 4 | 700 | 37 | 7 | 77 | 1 |

PROJECT NO: *Scale* 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1133

ATTENTION: R. BARCLAY *1 meter = 3.28 ft.* (604) 980-5814 OR (604) 988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 7, 1986

| (VALUES IN PPM) | U | V | ZN | AU-PPB |
|---------------------------|---|-------|-----|--------|
| PHB6-08 07-17 <i>feet</i> | 1 | 82.5 | 69 | 50 |
| PHB6-08 17-27 | 1 | 69.1 | 54 | 20 |
| PHB6-08 27-37 | 1 | 74.8 | 131 | 10 |
| PHB6-08 37-47 | 1 | 50.7 | 152 | 15 |
| PHB6-08 47-57 | 1 | 47.3 | 152 | 5 |
| PHB6-08 57-67 | 1 | 41.3 | 118 | 10 |
| PHB6-08 67-77 | 1 | 34.0 | 446 | 10 |
| PHB6-08 77-87 | 1 | 61.8 | 313 | 20 |
| PHB6-08 87-97 | 1 | 52.8 | 757 | 10 |
| PHB6-08 97-107 | 1 | 53.0 | 480 | 5 |
| PHB6-08 107-117 | 1 | 46.9 | 236 | 10 |
| PHB6-08 117-127 | 1 | 33.2 | 204 | 10 |
| PHB6-08 127-137 | 1 | 35.9 | 161 | 5 |
| PHB6-08 137-147 | 1 | 44.0 | 159 | 5 |
| PHB6-08 147-157 | 1 | 29.6 | 167 | 5 |
| PHB6-08 157-167 | 1 | 25.6 | 179 | 10 |
| PHB6-08 167-177 | 1 | 30.8 | 162 | 5 |
| PHB6-08 177-187 | 1 | 49.4 | 139 | 5 |
| PHB6-08 187-197 | 1 | 54.3 | 102 | 5 |
| PHB6-08 197-207 | 1 | 51.2 | 110 | 3 |
| PHB6-08 207-217 | 1 | 43.9 | 99 | 5 |
| PHB6-08 217-227 | 1 | 63.6 | 114 | 10 |
| PHB6-08 227-237 | 1 | 80.8 | 99 | 5 |
| PHB6-08 237-247 | 1 | 86.9 | 92 | 5 |
| PHB6-08 247-257 | 1 | 85.6 | 86 | 5 |
| PHB6-08 257-267 | 1 | 95.0 | 75 | 10 |
| PHB6-08 267-277 | 1 | 95.2 | 81 | 5 |
| PHB6-08 277-287 | 1 | 103.7 | 76 | 5 |
| PHB6-08 287-297 | 1 | 107.1 | 73 | 10 |

| (VALUES IN PPM) | AG | AL | AS | B | BA | BE | BI | CA | CD | CO | CU | FE |
|---------------------|----|-------|----|----|------|-----|----|-------|-----|----|-----|-------|
| PH-86-07 37-47 feet | .2 | 12690 | 1 | 13 | 176 | 2.6 | 1 | 8330 | 2.3 | 8 | 22 | 92050 |
| PH-86-07 47-57 | .2 | 14790 | 1 | 15 | 180 | 3.3 | 3 | 7940 | 2.2 | 8 | 22 | 84510 |
| PH-86-07 52-57 | .1 | 22200 | 8 | 22 | 141 | 4.8 | 8 | 8070 | 4.5 | 10 | 22 | 59490 |
| PH-86-07 57-67 | .1 | 23120 | 7 | 25 | 136 | 4.9 | 6 | 19820 | 4.2 | 8 | 31 | 43990 |
| PH-86-07 67-77 | .2 | 23290 | 20 | 25 | 140 | 5.5 | 5 | 31310 | 5.5 | 8 | 30 | 50020 |
| PH-86-07 77-87 | .2 | 24280 | 5 | 26 | 147 | 5.1 | 7 | 28570 | 4.7 | 8 | 29 | 39440 |
| PH-86-07 87-97 | .2 | 24640 | 2 | 26 | 332 | 5.1 | 8 | 37700 | 5.4 | 8 | 25 | 52350 |
| PH-86-07 97-107 | .2 | 22080 | 16 | 22 | 629 | 5.0 | 6 | 35830 | 4.7 | 7 | 26 | 42120 |
| PH-86-07 107-117 | .4 | 22330 | 17 | 24 | 498 | 5.6 | 9 | 44570 | 6.3 | 8 | 29 | 41140 |
| PH-86-07 117-127 | .3 | 28670 | 6 | 31 | 773 | 5.8 | 7 | 46880 | 6.1 | 9 | 42 | 44480 |
| PH-86-07 127-137 | .4 | 24450 | 27 | 25 | 658 | 6.0 | 7 | 40720 | 6.0 | 9 | 38 | 58100 |
| PH-86-07 137-147 | .4 | 19320 | 21 | 22 | 424 | 5.2 | 6 | 38290 | 5.9 | 8 | 24 | 38940 |
| PH-86-07 147-157 | .2 | 22340 | 3 | 26 | 359 | 4.7 | 5 | 37320 | 3.5 | 7 | 26 | 43090 |
| PH-86-07 157-167 | .4 | 20090 | 1 | 22 | 1302 | 4.3 | 6 | 38190 | 5.5 | 6 | 18 | 35750 |
| PH-86-07 167-177 | .4 | 16950 | 15 | 19 | 790 | 4.6 | 4 | 31090 | 4.6 | 7 | 26 | 45310 |
| PH-86-07 177-187 | .5 | 20180 | 11 | 24 | 713 | 4.9 | 7 | 31420 | 4.9 | 8 | 21 | 68500 |
| PH-86-07 187-197 | .4 | 20170 | 8 | 24 | 285 | 4.9 | 5 | 26460 | 4.6 | 8 | 16 | 62390 |
| PH-86-07 197-207 | .4 | 22460 | 9 | 28 | 444 | 5.4 | 6 | 32120 | 5.4 | 8 | 13 | 74440 |
| PH-86-07 207-217 | .4 | 18370 | 24 | 25 | 391 | 5.3 | 6 | 27470 | 4.7 | 9 | 13 | 79780 |
| PH-86-07 217-227 | .6 | 18350 | 32 | 26 | 462 | 5.9 | 6 | 25020 | 5.2 | 9 | 16 | 76690 |
| PH-86-07 227-237 | .5 | 17670 | 18 | 23 | 468 | 4.8 | 5 | 35220 | 4.2 | 7 | 37 | 60890 |
| PH-86-07 237-247 | .8 | 23160 | 31 | 28 | 502 | 6.2 | 9 | 40020 | 5.2 | 10 | 56 | 61700 |
| PH-86-07 247-257 | .9 | 19670 | 87 | 27 | 151 | 7.8 | 12 | 45810 | 5.2 | 12 | 154 | 64020 |
| PH-86-07 257-267 | .5 | 23460 | 18 | 28 | 506 | 5.6 | 7 | 38850 | 5.0 | 9 | 31 | 63750 |
| PH-86-07 267-277 | .6 | 21280 | 19 | 24 | 300 | 5.4 | 6 | 46520 | 4.4 | 9 | 20 | 78090 |
| PH-86-07 277-287 | .6 | 17470 | 7 | 23 | 333 | 4.2 | 2 | 45440 | 3.9 | 8 | 16 | 79100 |
| PH-86-07 287-297 | .5 | 13720 | 1 | 17 | 270 | 3.7 | 2 | 39430 | 2.5 | 6 | 16 | 58870 |
| PH-86-07 297-307 | .5 | 13650 | 1 | 18 | 299 | 3.5 | 1 | 35980 | 2.8 | 6 | 15 | 66540 |
| PH-86-07 307-317 | .6 | 13000 | 1 | 17 | 407 | 3.7 | 4 | 40610 | 3.9 | 6 | 15 | 60060 |

PROJECT NO: 600SLY 86-07 ^{Conversion} 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 6-1122

ATTENTION: R. BARCLAY ^{Scale} 1 meter = 3 20 ft.

(604) 980-5814 DR (604) 988-4524

* TYPE ROCK GEOCHEM *

DATE: NOV 4, 1986

| (VALUES IN PPM) | K | LI | MG | MN | MO | NA | NI | P | PB | SB | SR | TH |
|---------------------|------|----|-------|------|----|-----|----|------|----|----|-----|----|
| PH-86-07 37-47 feet | 1350 | 8 | 7150 | 446 | 5 | 940 | 13 | 1220 | 15 | 5 | 69 | 1 |
| PH-86-07 47-57 | 1800 | 9 | 6480 | 453 | 6 | 810 | 12 | 1080 | 16 | 5 | 65 | 1 |
| PH-86-07 52-57 | 3890 | 11 | 7480 | 493 | 10 | 510 | 17 | 840 | 30 | 5 | 62 | 1 |
| PH-86-07 57-67 | 3810 | 9 | 6870 | 636 | 9 | 260 | 12 | 550 | 31 | 4 | 60 | 1 |
| PH-86-07 67-77 | 3130 | 9 | 6120 | 901 | 11 | 330 | 11 | 740 | 35 | 6 | 64 | 1 |
| PH-86-07 77-87 | 2830 | 12 | 7000 | 744 | 11 | 290 | 11 | 480 | 36 | 4 | 66 | 1 |
| PH-86-07 87-97 | 2370 | 11 | 7870 | 1301 | 10 | 370 | 13 | 550 | 41 | 5 | 92 | 1 |
| PH-86-07 97-107 | 1790 | 10 | 7010 | 1441 | 10 | 340 | 13 | 450 | 44 | 5 | 86 | 1 |
| PH-86-07 107-117 | 2180 | 11 | 6600 | 2030 | 11 | 450 | 16 | 630 | 62 | 6 | 101 | 1 |
| PH-86-07 117-127 | 2370 | 14 | 8770 | 1853 | 11 | 470 | 17 | 760 | 50 | 4 | 104 | 1 |
| PH-86-07 127-137 | 2020 | 11 | 7990 | 1801 | 11 | 510 | 16 | 430 | 49 | 8 | 99 | 1 |
| PH-86-07 137-147 | 2290 | 8 | 5250 | 1602 | 9 | 490 | 14 | 350 | 86 | 6 | 86 | 1 |
| PH-86-07 147-157 | 2280 | 10 | 6730 | 1055 | 10 | 490 | 15 | 310 | 42 | 4 | 84 | 1 |
| PH-86-07 157-167 | 2320 | 9 | 6230 | 1000 | 9 | 410 | 11 | 280 | 38 | 3 | 79 | 1 |
| PH-86-07 167-177 | 2100 | 8 | 6530 | 1030 | 9 | 340 | 11 | 600 | 34 | 6 | 70 | 1 |
| PH-86-07 177-187 | 3000 | 9 | 7830 | 1320 | 10 | 430 | 12 | 720 | 36 | 6 | 78 | 1 |
| PH-86-07 187-197 | 3000 | 9 | 8460 | 943 | 9 | 450 | 11 | 840 | 37 | 7 | 72 | 1 |
| PH-86-07 197-207 | 3590 | 10 | 8390 | 1020 | 10 | 470 | 9 | 880 | 36 | 7 | 80 | 1 |
| PH-86-07 207-217 | 3440 | 8 | 7250 | 908 | 9 | 370 | 8 | 640 | 34 | 9 | 69 | 1 |
| PH-86-07 217-227 | 3960 | 6 | 5940 | 962 | 9 | 340 | 8 | 600 | 40 | 10 | 73 | 1 |
| PH-86-07 227-237 | 3050 | 7 | 6930 | 1218 | 10 | 330 | 10 | 790 | 36 | 8 | 81 | 1 |
| PH-86-07 237-247 | 3040 | 11 | 10230 | 1224 | 12 | 300 | 11 | 850 | 47 | 9 | 87 | 1 |
| PH-86-07 247-257 | 2770 | 9 | 8400 | 1399 | 14 | 270 | 14 | 890 | 64 | 15 | 84 | 1 |
| PH-86-07 257-267 | 2850 | 12 | 10540 | 1279 | 11 | 300 | 13 | 870 | 39 | 8 | 86 | 1 |
| PH-86-07 267-277 | 2740 | 11 | 9070 | 1546 | 10 | 280 | 9 | 820 | 39 | 9 | 97 | 1 |
| PH-86-07 277-287 | 3160 | 7 | 6840 | 1470 | 9 | 270 | 7 | 710 | 27 | 7 | 84 | 1 |
| PH-86-07 287-297 | 3080 | 5 | 4800 | 1121 | 8 | 250 | 7 | 700 | 22 | 6 | 70 | 1 |
| PH-86-07 297-307 | 3270 | 5 | 4700 | 1057 | 7 | 240 | 5 | 660 | 16 | 6 | 65 | 1 |
| PH-86-07 307-317 | 2890 | 5 | 5180 | 1112 | 8 | 260 | 9 | 730 | 27 | 7 | 74 | 1 |

PROJECT NO: 600SLY 86-07 ^{Conversion} 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7N 1T2

FILE NO: 6-1122

ATTENTION: R. BARCLAY ^{Scale} _{metre} = 3.28 ft. (604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: NOV 4, 1986

| (VALUES IN PPM) | U | V | ZN |
|------------------|---|-------|-----|
| PH-86-07 37-47 | 1 | 77.4 | 64 |
| PH-86-07 47-57 | 1 | 75.7 | 71 |
| PH-86-07 52-57 | 1 | 68.7 | 92 |
| PH-86-07 57-67 | 1 | 49.2 | 66 |
| PH-86-07 67-77 | 1 | 54.6 | 61 |
| PH-86-07 77-87 | 1 | 58.8 | 58 |
| PH-86-07 87-97 | 1 | 63.5 | 91 |
| PH-86-07 97-107 | 1 | 59.1 | 71 |
| PH-86-07 107-117 | 1 | 39.7 | 167 |
| PH-86-07 117-127 | 1 | 56.0 | 72 |
| PH-86-07 127-137 | 1 | 77.2 | 77 |
| PH-86-07 137-147 | 1 | 31.6 | 213 |
| PH-86-07 147-157 | 1 | 48.4 | 87 |
| PH-86-07 157-167 | 1 | 40.1 | 75 |
| PH-86-07 167-177 | 1 | 51.6 | 67 |
| PH-86-07 177-187 | 1 | 77.5 | 64 |
| PH-86-07 187-197 | 1 | 69.2 | 58 |
| PH-86-07 197-207 | 1 | 78.6 | 56 |
| PH-86-07 207-217 | 1 | 85.4 | 57 |
| PH-86-07 217-227 | 1 | 102.7 | 62 |
| PH-86-07 227-237 | 1 | 85.9 | 56 |
| PH-86-07 237-247 | 1 | 99.4 | 64 |
| PH-86-07 247-257 | 1 | 57.4 | 60 |
| PH-86-07 257-267 | 1 | 93.2 | 58 |
| PH-86-07 267-277 | 1 | 86.0 | 59 |
| PH-86-07 277-287 | 1 | 71.2 | 54 |
| PH-86-07 287-297 | 1 | 51.8 | 51 |
| PH-86-07 297-307 | 1 | 38.3 | 46 |
| PH-86-07 307-317 | 1 | 44.2 | 51 |

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: NORMINE RESOURCES

Project: GOOSLY 86-07

Attention: R. BARCLAY

File: 6-1122/P1

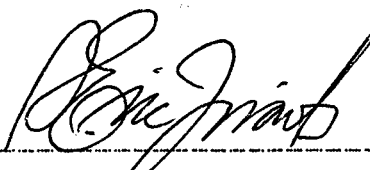
Date: NOV 6/86

Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Conu. Number | Scale Con 1mch = 3.28 | AU-WET PPB |
|------------------------|--------------------------|---------------|
| PH-86-07 37-47 | <i>sect</i> | 5 |
| PH-86-07 47-57 | | 10 |
| PH-86-07 52-57 | | 5 |
| PH-86-07 57-67 | | 5 |
| PH-86-07 67-77 | | 5 |
| PH-86-07 77-87 | | 5 |
| PH-86-07 87-97 | | 5 |
| PH-86-07 97-107 | | 5 |
| PH-86-07 107-117 | | 20 |
| PH-86-07 117-127 | | 10 |
| PH-86-07 127-137 | | 5 |
| PH-86-07 137-147 | | 5 |
| PH-86-07 147-157 | | 5 |
| PH-86-07 157-167 | | 10 |
| PH-86-07 167-177 | | 5 |
| PH-86-07 177-187 | | 5 |
| PH-86-07 187-197 | | 10 |
| PH-86-07 197-207 | | 5 |
| PH-86-07 207-217 | | 5 |
| PH-86-07 217-227 | | 5 |
| PH-86-07 227-237 | | 5 |
| PH-86-07 237-247 | | 3 |
| PH-86-07 247-257 | | 5 |
| PH-86-07 257-267 | | 5 |
| PH-86-07 267-277 | | 10 |
| PH-86-07 277-287 | | 5 |
| PH-86-07 287-297 | | 5 |
| PH-86-07 297-307 | | 5 |
| PH-86-07 307-317 | | 5 |

Certified by



MIN-EN LABORATORIES LTD.

APPENDIX III

SOIL GEOCHEMICAL RESULTS

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

ONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY B HORIZON
Attention: R. BARCLAY

File: 6-915/P1
Date: OCT 11/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | CU PPM | ZN PPM | AG PPM | AS PPM |
|---------------|--------|--------|--------|--------|
| BN 16E | 20 | 73 | 0.6 | 3 |
| BN 17E | 19 | 82 | 0.6 | 4 |
| BN 18E | 22 | 98 | 0.3 | 2 |
| BN 19E | 22 | 148 | 0.4 | 1 |
| BN 22E | 16 | 134 | 0.8 | 7 |
| BN 23E | 15 | 132 | 0.6 | 1 |
| BN 24E | 22 | 94 | 0.7 | 3 |
| BN 25E | 16 | 275 | 0.7 | 2 |
| BN 26E | 25 | 106 | 0.7 | 1 |
| BN 27E | 18 | 134 | 0.8 | 1 |
| BN 28E | 22 | 243 | 1.0 | 4 |
| BN 30E | 19 | 120 | 0.8 | 2 |
| L10N 15+00E | 23 | 80 | 0.6 | 4 |
| L10N 16+00E | 24 | 74 | 0.6 | 3 |
| L10N 17+00E | 19 | 98 | 0.6 | 1 |
| L10N 18+00E | 22 | 101 | 0.6 | 5 |
| L10N 19+00E | 18 | 178 | 0.5 | 1 |
| L10N 20+00E | 18 | 58 | 0.3 | 1 |
| L10N 21+00E | 19 | 283 | 0.7 | 1 |
| L10N 22+00E | 18 | 55 | 0.4 | 2 |
| L10N 23+00E | 20 | 154 | 0.8 | 2 |
| L10N 24+00E | 24 | 77 | 0.4 | 1 |
| L10N 25+00E | 24 | 73 | 0.6 | 1 |
| L10N 26+00E | 20 | 104 | 0.6 | 2 |
| L10N 27+00E | 22 | 138 | 0.7 | 1 |
| L10N 28+00E | 15 | 49 | 0.3 | 1 |
| L10N 29+00E | 18 | 170 | 0.8 | 1 |
| L10N 30+00E | 20 | 49 | 0.5 | 1 |
| L12N 16E | 23 | 78 | 0.4 | 2 |
| L12N 17E | 18 | 252 | 0.6 | 1 |

40MESH

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC


Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY B HORIZON
Attention: R. BARCLAY

File: 6-915/P2
Date: OCT 11/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | CU PPM | ZN PPM | AG PPM | AS PPM | |
|---------------|--------|--------|--------|--------|--------|
| L12N 18E | 38 | 134 | 1.2 | 3 | 40MESH |
| L12N 19E | 37 | 107 | 0.8 | 2 | 40MESH |
| L12N 20E | 19 | 140 | 0.6 | 1 | |
| L12N 21E | 16 | 179 | 0.4 | 1 | |
| L12N 22E | 24 | 61 | 0.6 | 8 | |
| L12N 23E | 18 | 125 | 0.4 | 1 | |
| L12N 24E | 32 | 139 | 0.7 | 1 | |
| L12N 25E | 18 | 100 | 0.4 | 1 | |
| L12N 26E | 18 | 157 | 0.4 | 1 | |
| L12N 27E | 18 | 235 | 0.5 | 1 | |
| L12N 28E | 16 | 62 | 0.4 | 3 | |
| L12N 29E | 16 | 124 | 0.4 | 2 | |
| L12N 30E | 18 | 60 | 0.3 | 1 | |
| L14N 11E | 20 | 75 | 0.6 | 1 | |
| L14N 12E | 18 | 48 | 0.5 | 8 | |
| L14N 13E | 21 | 92 | 0.6 | 3 | |
| L14N 14E | 25 | 101 | 0.7 | 1 | |
| L14N 15E | 20 | 84 | 0.6 | 1 | |
| L14N 16E | 21 | 97 | 0.6 | 1 | |
| L14N 17E | 20 | 98 | 0.8 | 4 | |
| L14N 18E | 19 | 150 | 0.6 | 1 | |
| L14N 19E | 21 | 210 | 0.7 | 1 | |
| L14N 20E | 24 | 68 | 0.5 | 1 | |
| L14N 21E | 19 | 127 | 0.6 | 1 | |
| L14N 22E | 20 | 158 | 0.6 | 1 | |
| L14N 23E | 18 | 63 | 0.5 | 6 | |
| L14N 24E | 20 | 124 | 0.6 | 4 | |
| L14N 25E | 22 | 93 | 0.6 | 2 | |
| L14N 28E | 18 | 74 | 0.5 | 1 | |
| L14N 29E | 18 | 59 | 0.6 | 1 | |

Certified by 

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY B HORIZON
Attention: R. BARCLAY

File: 6-915/P3
Date: OCT 11/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | CU PPM | ZN PPM | AG PPM | AS PPM | |
|---------------|--------|--------|--------|--------|--------|
| L14N 30E | 20 | 81 | 1.2 | 4 | |
| L16N 13E | 19 | 100 | 1.0 | 3 | |
| L16N 14E | 24 | 50 | 0.5 | 2 | |
| L16N 15E | 21 | 123 | 0.8 | 1 | |
| L16N 16E | 18 | 126 | 0.8 | 2 | |
| L16N 17E | 43 | 71 | 1.0 | 1 | |
| L16N 18E | 18 | 44 | 0.6 | 1 | |
| L16N 19E | 20 | 83 | 0.7 | 1 | |
| L16N 20E | 19 | 54 | 0.6 | 1 | |
| L16N 21E | 20 | 50 | 0.4 | 1 | 20MESH |
| L16N 22E | 12 | 25 | 0.3 | 2 | 20MESH |
| L16N 23E | 20 | 163 | 0.4 | 2 | |
| L16N 24E | 21 | 93 | 0.7 | 2 | |
| L16N 25E | 22 | 60 | 0.8 | 2 | |
| L16N 26E | 18 | 138 | 0.8 | 2 | |
| L16N 27E | 33 | 65 | 0.6 | 1 | 20MESH |
| L16N 28E | 20 | 52 | 0.5 | 7 | |
| L16N 29E | 34 | 77 | 0.6 | 8 | |
| L16N 30E | 27 | 74 | 1.0 | 3 | 20MESH |
| L18N 13E | 18 | 75 | 0.5 | 10 | |
| L18N 14E | 19 | 65 | 0.6 | 3 | |
| L18N 15E | 17 | 69 | 0.4 | 1 | |
| L18N 16E | 18 | 68 | 0.7 | 2 | |
| L18N 17E | 26 | 54 | 0.6 | 1 | |
| L18N 18E | 26 | 77 | 1.0 | 3 | |
| L18N 19E | 18 | 95 | 0.5 | 1 | |
| L18N 21E | 18 | 94 | 0.6 | 1 | |
| L18N 22E | 19 | 115 | 0.6 | 3 | |
| L18N 23E | 18 | 153 | 0.6 | 2 | |
| L18N 25E | 24 | 160 | 1.0 | 1 | |

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environment.*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY B HORIZON
Attention: R. BARCLAY

File: 6-915/P4
Date: OCT 11/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | CU PPM | ZN PPM | AG PPM | AS PPM |
|---------------|-----------|--------|--------|--------|
| L18N 26E | 18 | 64 | 0.4 | 1 |
| L18N 28E | 32 | 69 | 0.5 | 1 |
| L18N 29E | 26 | 52 | 0.2 | 5 |
| L18N 30E | 32 | 60 | 0.4 | 3 |
| L20N 10E | 20 | 68 | 0.3 | 1 |
| L20N 11E | 17 | 56 | 0.5 | 1 |
| L20N 12E | 21 | 109 | 0.4 | 1 |
| L20N 13E | 25 | 185 | 0.9 | 1 |
| L20N 14E | 24 | 140 | 0.8 | 1 |
| L20N 15E | 25 | 195 | 0.8 | 1 |
| L20N 16E | 30 | 81 | 0.4 | 1 |
| L20N 17E | 22 | 75 | 0.4 | 1 |
| L20N 18E | 24 | 100 | 0.4 | 1 |
| L20N 19E | 29 | 65 | 0.5 | 4 |
| L20N 20E | 24 | 84 | 0.4 | 1 |
| L20N 21E | 28 | 110 | 0.6 | 1 |
| L20N 22E | 23 | 62 | 0.4 | 1 |
| L20N 23E | 36 | 68 | 0.5 | 1 |
| L20N 24E | 20 | 54 | 0.2 | 1 |
| L20N 26E | 29 | 57 | 0.5 | 9 |
| L20N 27E | 32 | 64 | 0.4 | 3 |
| L20N 28E | 25 | 70 | 0.5 | 1 |
| L20N 29E | 23 | 45 | 0.4 | 2 |
| L20N 30E | 27 | 68 | 0.4 | 3 |
| L22N 10E | 18 | 57 | 0.3 | 1 |
| L22N 11E | 24 | 69 | 0.4 | 1 |
| L22N 12E | 20 | 70 | 0.3 | 3 |
| L22N 13E | 24 | 116 | 0.5 | 1 |
| L22N 14E | NO SAMPLE | | | |
| L22N 15E | 21 | 60 | 0.4 | 1 |

Certified by


MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Special tests in Mineral Environment.*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY B HORIZON
Attention: R. BARCLAY

File: 6-915/P5
Date: OCT 11/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | CU PPM | ZN PPM | AG PPM | AS PPM |
|---------------|--------|--------|--------|--------|
| L22N 16E | 21 | 92 | 0.8 | 1 |
| L22N 17E | 20 | 68 | 0.6 | 1 |
| L22N 18E | 27 | 134 | 1.0 | 8 |
| L22N 19E | 34 | 96 | 0.6 | 6 |
| L22N 20E | 19 | 58 | 0.6 | 2 |
| L22N 21E | 24 | 75 | 0.6 | 1 |
| L22N 22E | 28 | 137 | 1.3 | 1 |
| L22N 23E | 20 | 63 | 0.4 | 1 |
| L22N 24E | 26 | 80 | 0.6 | 6 |
| L22N 25E | 25 | 58 | 0.7 | 5 |
| L22N 26E | 22 | 47 | 0.6 | 5 |
| L22N 27E | 19 | 42 | 0.6 | 3 |
| L22N 28E | 33 | 64 | 0.6 | 2 |
| L22N 29E | 27 | 87 | 0.6 | 2 |
| L22N 30E | 42 | 120 | 0.7 | 2 |

Certified by



MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.**Specialists in Mineral Environments**

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY A HORIZON
Attention: MR. R. BARCLAY

File: 6-915/P1
Date: OCT 9/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | HG PPB | |
|---------------|--------|--------|
| 8N 15+50E | 75 | |
| 8N 16+00E | 70 | |
| 8N 17+00E | 90 | 40MESH |
| 8N 17+50E | 60 | |
| 8N 18+50E | 65 | |
| 8N 19+00E | 75 | |
| 8N 19+50E | 130 | 40MESH |
| 8N 20+00E | 135 | 20MESH |
| 8N 20+50E | 160 | |
| 8N 21+00E | 130 | |
| 8N 23+00E | 90 | |
| 8N 23+50E | 75 | |
| 8N 24+00E | 130 | 40MESH |
| 8N 25+50E | 105 | |
| 8N 26+00E | 145 | |
| 8N 27+00E | 95 | |
| 8N 28+00E | 75 | |
| 8N 29+00E | 110 | 40MESH |
| 8N 29+50E | 115 | 40MESH |
| 10N 18+00E | 75 | |
| 10N 21+50E | 95 | 40MESH |
| 10N 22+00E | 65 | |
| 10N 24+50E | 80 | |
| 10N 27+50E | 120 | 40MESH |
| 10N 29+00E | 60 | |
| 10N 30+00E | 170 | 40MESH |
| 12N 16+00E | 40 | |
| 12N 16+50E | 30 | |
| 12N 17+00E | 50 | |
| 12N 18+00E | 65 | |

Certified by

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

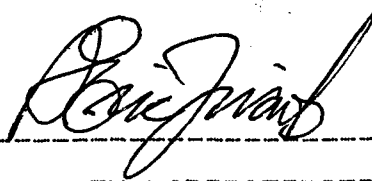
Company: NORMINE RESOURCES
Project: NORMINE GOOSLY A HORIZON
Attention: MR. R. BARCLAY

File: 6-915/P2
Date: OCT 9/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | HG PPB | |
|---------------|-----------|--------|
| 12N 18+50E | 45 | |
| 12N 19+00E | 125 | |
| 12N 20+00E | 110 | |
| 12N 21+00E | 115 | |
| 12N 21+50E | 110 | |
| 12N 22+00E | 130 | |
| 12N 23+50E | 80 | |
| 12N 24+00E | 105 | |
| 12N 25+50E | 60 | |
| 12N 26+50E | 110 | 20MESH |
| 12N 27+00E | 75 | |
| 12N 28+00E | 140 | |
| 12N 30+00E | 155 | |
| 14N 14+50E | 85 | |
| 16N 16+50E | 90 | 40MESH |
| 16N 17+00E | 115 | 40MESH |
| 16N 18+50E | 110 | 20MESH |
| 16N 19+50E | 95 | 40MESH |
| 16N 20+50E | 140 | 20MESH |
| 16N 21+00E | 100 | |
| 16N 21+50E | 135 | 20MESH |
| 16N 22+50E | 90 | 20MESH |
| 16N 24+50E | 105 | |
| 16N 25+50E | 125 | |
| 16N 27+00E | 125 | 40MESH |
| 16N 27+50E | 75 | 40MESH |
| 16N 28+00E | 130 | |
| 16N 28+50E | 100 | 20MESH |
| 16N 29+00E | 90 | |
| 16N 29+50E | 80 | |

Certified by



MIN-EN LABORATORIES LTD.

MIN-E LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY A HORIZON
Attention: MR. R. BARCLAY

File: 6-915/P1
Date: OCT 9/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | Hg PPB | |
|---------------|-----------|--------|
| 8N 15+50E | 75 | |
| 8N 16+00E | 70 | |
| 8N 17+00E | 90 | 40MESH |
| 8N 17+50E | 60 | |
| 8N 18+50E | 65 | |
| 8N 19+00E | 75 | |
| 8N 19+50E | 130 | 40MESH |
| 8N 20+00E | 135 | 20MESH |
| 8N 20+50E | 160 | |
| 8N 21+00E | 130 | |
| 8N 23+00E | 90 | |
| 8N 23+50E | 75 | |
| 8N 24+00E | 130 | 40MESH |
| 8N 25+50E | 105 | |
| 8N 26+00E | 145 | |
| 8N 27+00E | 95 | |
| 8N 28+00E | 75 | |
| 8N 29+00E | 110 | 40MESH |
| 8N 29+50E | 115 | 40MESH |
| 10N 18+00E | 75 | |
| 10N 21+50E | 95 | 40MESH |
| 10N 22+00E | 65 | |
| 10N 24+50E | 80 | |
| 10N 27+50E | 120 | 40MESH |
| 10N 29+00E | 60 | |
| 10N 30+00E | 170 | 40MESH |
| 12N 16+00E | 40 | |
| 12N 16+50E | 30 | |
| 12N 17+00E | 50 | |
| 12N 18+00E | 65 | |

Certified by

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

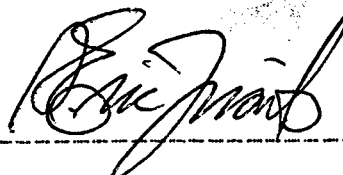
Company: NORMINE RESOURCES
Project: NORMINE GOOSLY A HORIZON
Attention: MR. R. BARCLAY

File: 6-915/P2
Date: OCT 9/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | HG PPB | |
|---------------|-----------|--------|
| 12N 18+50E | 45 | |
| 12N 19+00E | 125 | |
| 12N 20+00E | 110 | |
| 12N 21+00E | 115 | |
| 12N 21+50E | 110 | |
| 12N 22+00E | 130 | |
| 12N 23+50E | 80 | |
| 12N 24+00E | 105 | |
| 12N 25+50E | 60 | |
| 12N 26+50E | 110 | 20MESH |
| 12N 27+00E | 75 | |
| 12N 28+00E | 140 | |
| 12N 30+00E | 155 | |
| 14N 14+50E | 85 | |
| 16N 16+50E | 90 | 40MESH |
| 16N 17+00E | 115 | 40MESH |
| 16N 18+50E | 110 | 20MESH |
| 16N 19+50E | 95 | 40MESH |
| 16N 20+50E | 140 | 20MESH |
| 16N 21+00E | 100 | |
| 16N 21+50E | 135 | 20MESH |
| 16N 22+50E | 90 | 20MESH |
| 16N 24+50E | 105 | |
| 16N 25+50E | 125 | |
| 16N 27+00E | 125 | 40MESH |
| 16N 27+50E | 75 | 40MESH |
| 16N 28+00E | 130 | |
| 16N 28+50E | 100 | 20MESH |
| 16N 29+00E | 90 | |
| 16N 29+50E | 80 | |

Certified by



MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.*Specialists in Mineral Environments*

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

DNE: (604) 980-5814 DR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY A HORIZON
Attention: R. BARCLAY

File: 6-915/P3
Date: OCT 9/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | HG PPB | |
|---------------|-----------|--------|
| 6N 30+00E | 130 | 40MESH |
| 18N 15+50E | 140 | |
| 18N 17+00E | 95 | |
| 9N 18+50E | 90 | 20MESH |
| 18N 19+50E | 105 | 20MESH |
| 8N 20+00E | 45 | 40MESH |
| 8N 20+50E | 60 | 40MESH |
| 18N 21+00E | 30 | 40MESH |
| 18N 23+50E | 50 | 40MESH |
| 8N 26+50E | 35 | |
| 18N 27+00E | 85 | 40MESH |
| 8N 27+50E | 80 | |
| 8N 28+50E | 60 | 40MESH |
| 18N 29+00E | 75 | |
| 8N 29+50E | 80 | |
| 18N 30+00E | 120 | 40MESH |
| 20N 10+50E | 90 | |
| 0N 11+50E | 70 | 20MESH |
| 20N 12+00E | 55 | 40MESH |
| 20N 12+50E | 50 | |
| 0N 15+50E | 75 | |
| 20N 16+00E | 95 | |
| 0N 16+50E | 110 | 40MESH |
| 0N 18+00E | 135 | 40MESH |
| 20N 18+50E | 130 | 40MESH |
| 0N 19+00E | 80 | |
| 20N 20+00E | 120 | |
| 20N 21+00E | 80 | |
| 0N 22+00E | 100 | |
| 0N 22+50E | 90 | |

Certified by



MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7N 1T2

P NE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of GEOCHEM

Company: NORMINE RESOURCES
Project: NORMINE GOOSLY A HORIZON
Attention: R. BARCLAY

File: 6-915/P4
Date: OCT 9/86
Type: SOIL GEOCHEM

We hereby certify the following results for samples submitted.

| Sample Number | HG PPB | |
|---------------|-----------|--------|
| 20N 23+00E | 115 | 40MESH |
| 20N 23+50E | 105 | 40MESH |
| 20N 24+00E | 160 | 20MESH |
| 20N 24+50E | 120 | 40MESH |
| 20N 25+00E | 110 | 40MESH |
| 20N 25+50E | 90 | |
| 20N 26+00E | 115 | 40MESH |
| 20N 26+50E | 130 | 40MESH |
| 20N 27+00E | 100 | |
| 20N 27+50E | 100 | |
| 20N 28+00E | 100 | |
| 20N 28+50E | 70 | |
| 20N 29+00E | 95 | 40MESH |
| 20N 29+50E | 90 | 20MESH |
| 20N 30+00E | 90 | |
| 22N 11+00E | 55 | |
| 22N 11+50E | 70 | |
| 22N 12+00E | 75 | |
| 22N 13+00E | 50 | |
| 22N 13+50E | 110 | 40MESH |
| 22N 14+00E | 100 | 40MESH |
| 22N 14+50E | 95 | |
| 22N 15+00E | 70 | 40MESH |
| 22N 30+00E | 90 | |

Certified by

MIN-EN LABORATORIES LTD.

APPENDIX IV

STATISTICAL STUDY & ANALYTICAL PROCEDURES
BY MIN-EN LABORATORIES LTD.

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pretreated with HNO_3 and HClO_4 mixture.

After pretreatments the samples are digested with Acqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 0.005 ppm (5ppb).

PHONE 980-5814

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 26 ELEMENT ICP

Ag, Al, As, B, Bi, Ca, Cd, Co, Cu, Fe, K, Mg, Mn, Mo,
Na, Ni, P, Pb, Sb, Sr, Th, U, V, Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formatted by routing computer dotline print out.

SPECIALISTS IN MINERAL ENVIRONMENTS

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

FILE#: 6-1122/1133/1202

[illegible]

MIN-EN LABORATORIES LTD.**SPECIALISTS IN MINERAL ENVIRONMENTS**

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 986-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON SB

COMPANY: NORMINE RESOURCES

DATE: JAN 14/87

ATTN: GEORGE NORMAN

SAMPLE TYPE: ROCK

PROJECT: GOOSLY 86-07

ANALYSIS TYPE: ICP

FILE#: 6-1122/1133/1202

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 15.00 PPM

MINIMUM VALUE: 3.00 PPM

MEAN: 7.10 PPM

STD. DEVIATION: 2.02 PPM

COEFF. OF VARIATION: .28

5 HIGHEST SB VALUES:

PH-86-07 247-257 15 PPM

PH86-09 167-177 14 PPM

PH86-08 157-167 13 PPM

PH86-08 77-87 12 PPM

PH86-08 87-97 12 PPM

HISTOGRAM FOR SB

CLASS INTERVAL = .3

MID CLASS
PPMCLASS
%

| | |
|---------|-------|
| < 6.00 | 20.35 |
| 6.15 | 23.30 |
| 6.45 | 0.00 |
| 6.75 | 0.00 |
| 7.05 | 17.40 |
| 7.35 | 0.00 |
| 7.65 | 0.00 |
| 7.95 | 15.93 |
| 8.25 | 0.00 |
| 8.55 | 0.00 |
| 8.85 | 0.00 |
| 9.15 | 11.80 |
| 9.45 | 0.00 |
| 9.75 | 0.00 |
| 10.05 | 5.90 |
| 10.35 | 0.00 |
| 10.65 | 0.00 |
| 10.95 | 3.24 |
| 11.25 | 0.00 |
| 11.55 | 0.00 |
| 11.85 | 0.00 |
| > 12.00 | 2.06 |

0.00%

11.65%

23.30%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON SB

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

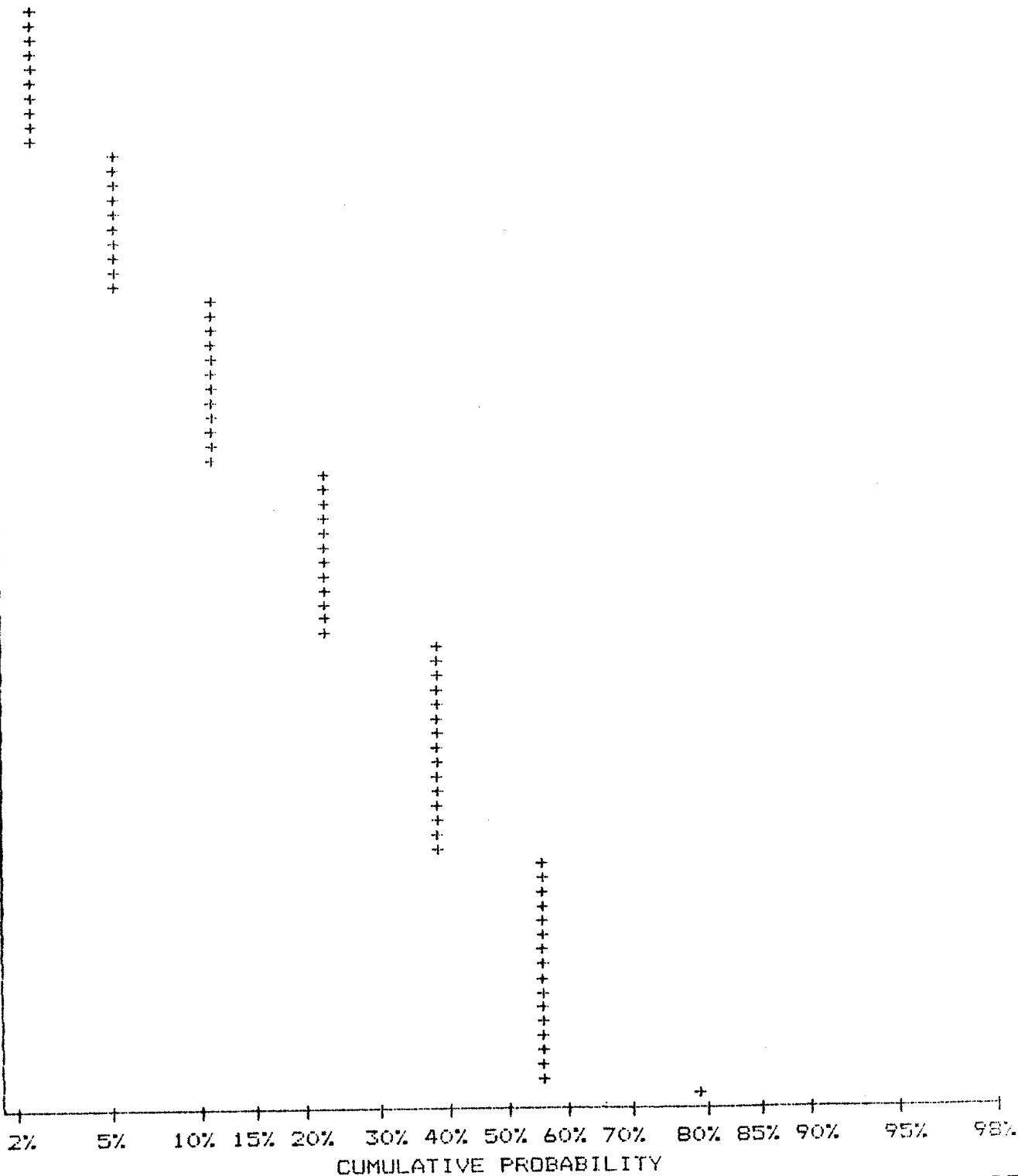
FILE#: 6-1122/1133/1202

DATE: JAN 14/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|-------------------------|-------------------------|
| 12.31 | .88 |
| 12.08 | .88 |
| 11.86 | 2.36 |
| 11.65 | 2.36 |
| 11.43 | 2.36 |
| 11.23 | 2.36 |
| 11.02 | 2.36 |
| 10.82 | 5.60 |
| 10.62 | 5.60 |
| 10.43 | 5.60 |
| 10.24 | 5.60 |
| 10.05 | 5.60 |
| 9.86 | 11.50 |
| 9.68 | 11.50 |
| 9.51 | 11.50 |
| 9.34 | 11.50 |
| 9.17 | 11.50 |
| 9.00 | 11.50 |
| 8.83 | 23.30 |
| 8.67 | 23.30 |
| 8.51 | 23.30 |
| 8.36 | 23.30 |
| 8.21 | 23.30 |
| 8.06 | 23.30 |
| 7.91 | 39.23 |
| 7.76 | 39.23 |
| 7.63 | 39.23 |
| 7.48 | 39.23 |
| 7.35 | 39.23 |
| 7.21 | 39.23 |
| 7.08 | 39.23 |
| 6.95 | 56.64 |
| 6.83 | 56.64 |
| 6.70 | 56.64 |
| 6.58 | 56.64 |
| 6.46 | 56.64 |
| 6.34 | 56.64 |
| 6.23 | 56.64 |
| 6.11 | 56.64 |
| 6.00 | 79.65 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON AG

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 1.10 PPM

MINIMUM VALUE: .10 PPM

MEAN: .47 PPM

STD. DEVIATION: .19 PPM

COEFF. OF VARIATION: .40

5 HIGHEST AG VALUES:

PH86-09 217-227 1.1 PPM

PH86-10 47-57 1.1 PPM

PH-86-07 247-257 .9 PPM

PH86-06 127-137 .9 PPM

PH86-06 217-227 .9 PPM

HISTOGRAM FOR AG

CLASS INTERVAL = .03

| MID CLASS | CLASS |
|-----------|-------|
| PPM | % |

| | | |
|---|-----|-------|
| < | .30 | 3.83 |
| | .32 | 29.50 |
| | .35 | 0.00 |
| | .38 | 0.00 |
| | .41 | 21.24 |
| | .44 | 0.00 |
| | .47 | 0.00 |
| | .50 | 23.60 |
| | .53 | 0.00 |
| | .56 | 0.00 |
| | .59 | 5.01 |
| | .62 | 0.00 |
| | .65 | 0.00 |
| | .68 | 0.00 |
| | .71 | 6.19 |
| | .74 | 0.00 |
| | .77 | 0.00 |
| | .80 | 3.24 |
| | .83 | 0.00 |
| | .86 | 0.00 |
| | .89 | 6.19 |
| > | .90 | 1.18 |

0.00%

14.75%

29.50%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON AG

COMPANY: NORMINE RESOURCES

DATE: JAN 7/87

ATTN: GEORGE NORMAN

SAMPLE TYPE: ROCK

PROJECT: GOOSLY 86-07

ANALYSIS TYPE: ICP

FILE#: 6-1122/1133/1202

UPPER
LIMIT
(PPM)

CUMMUL.
FREQ.
(%)

.88 7.67

.86 7.67

.83 7.67

.81 7.67

.79 10.91

.77 10.91

.75 10.91

.73 10.91

.71 10.91

.69 17.11

.67 17.11

.65 17.11

.63 17.11

.62 17.11

.60 22.12

.58 22.12

.57 22.12

.55 22.12

.54 22.12

.52 22.12

.51 22.12

.49 45.72

.48 45.72

.47 45.72

.45 45.72

.44 45.72

.43 45.72

.42 45.72

.41 45.72

.40 66.96

.38 66.96

.37 66.96

.36 66.96

.35 66.96

.34 66.96

.34 66.96

.33 66.96

.32 66.96

.31 66.96

.30 96.17

2% 5% 10% 15% 20% 30% 40% 50% 60% 70% 80% 85% 90% 95% 98%

CUMULATIVE PROBABILITY

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON AS

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 111.00 PPM

MINIMUM VALUE: 1.00 PPM

MEAN: 10.14 PPM

STD. DEVIATION: 18.01 PPM

COEFF. OF VARIATION: 1.78

5 HIGHEST AS VALUES:

PH86-08 157-167 111 PPM

PH86-08 117-127 108 PPM

PH86-08 87-97 100 PPM

PH86-08 77-87 99 PPM

PH86-08 127-137 89 PPM

HISTOGRAM FOR AS

CLASS INTERVAL = 2.15

MID CLASS
PPM

CLASS
%

1.00 .29

2.06 61.06

4.23 3.54

6.38 2.95

8.53 2.36

10.68 2.36

12.83 1.18

14.98 3.54

17.13 4.42

19.28 2.36

21.43 2.65

23.58 2.36

25.73 1.77

27.88 1.18

30.03 .88

32.18 1.18

34.33 0.00

36.48 .59

38.63 .59

40.78 .29

42.93 0.00

> 44.00 4.42

0.00%

30.53%

61.06%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 986-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON AS

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICF

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|-------------------------|-------------------------|
| 89.13 | 1.18 |
| 79.43 | 2.36 |
| 70.79 | 2.36 |
| 63.10 | 3.24 |
| 56.23 | 4.13 |
| 50.12 | 4.13 |
| 44.67 | 4.13 |
| 39.81 | 5.01 |
| 35.48 | 6.19 |
| 31.62 | 7.37 |
| 26.18 | 8.26 |
| 25.12 | 10.00 |
| 22.39 | 13.57 |
| 19.95 | 17.40 |
| 17.78 | 20.94 |
| 15.85 | 25.07 |
| 14.13 | 26.25 |
| 12.55 | 26.55 |
| 11.22 | 27.73 |
| 10.00 | 29.20 |
| 8.91 | 30.97 |
| 7.94 | 32.45 |
| 7.08 | 32.45 |
| 6.31 | 33.63 |
| 5.62 | 35.40 |
| 5.01 | 35.40 |
| 4.47 | 36.87 |
| 3.98 | 38.94 |
| 3.55 | 38.94 |
| 3.16 | 38.94 |
| 2.82 | 41.00 |
| 2.51 | 41.00 |
| 2.24 | 41.00 |
| 2.00 | 43.36 |
| 1.78 | 43.36 |
| 1.58 | 43.36 |
| 1.41 | 43.36 |
| 1.26 | 43.36 |
| 1.12 | 43.36 |
| 1.00 | 99.71 |



MIN-EN LABORATORIES LTD.**SPECIALISTS IN MINERAL ENVIRONMENTS**

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON CU

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 154.00 PPM

MINIMUM VALUE: 13.00 PPM

MEAN: 27.12 PPM

STD. DEVIATION: 10.98 PPM

COEFF. OF VARIATION: .40

5 HIGHEST CU VALUES:

PH-86-07 247-257 154 PPM

PH86-06 267-277 81 PPM

PH86-22 77-87 63 PPM

PH-86-07 237-247 56 PPM

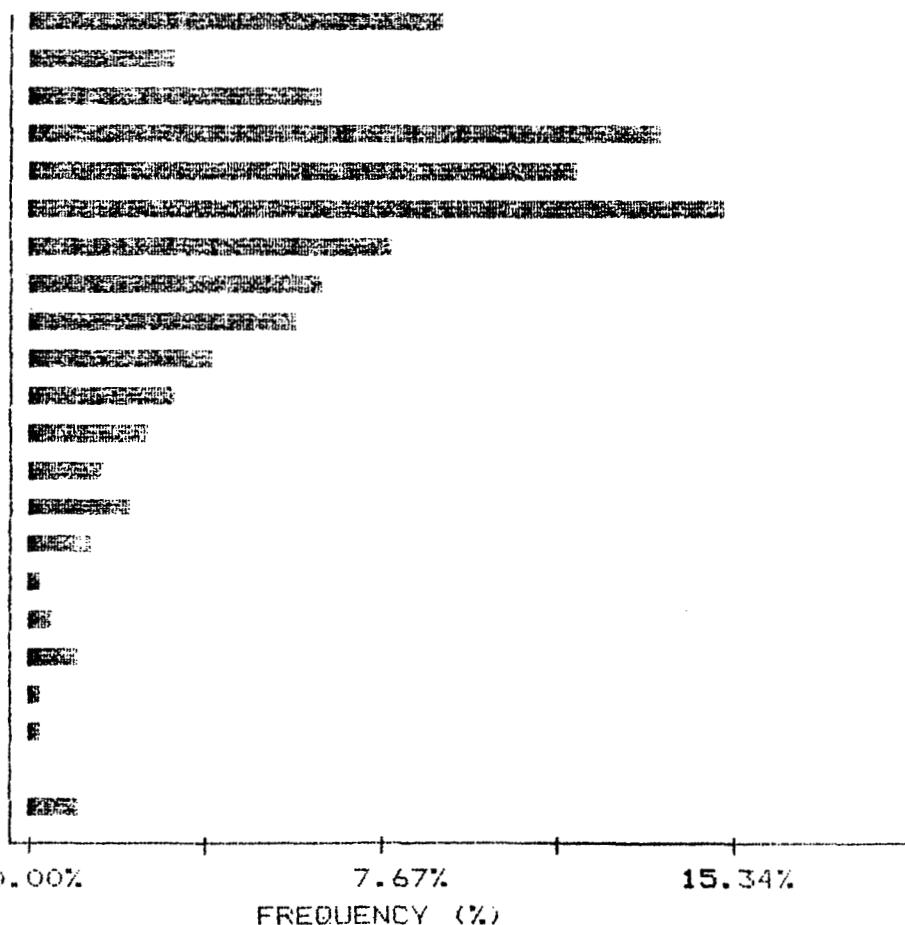
PH86-06 277-287 55 PPM

HISTOGRAM FOR CU

CLASS INTERVAL = 1.9

| UID CLASS | CLASS |
|-----------|-------|
| PPM | % |

| | | |
|---|-------|-------|
| < | 17.00 | 9.14 |
| | 17.95 | 3.24 |
| | 19.85 | 6.49 |
| | 21.75 | 13.86 |
| | 23.65 | 12.09 |
| | 25.55 | 15.34 |
| | 27.45 | 7.96 |
| | 29.35 | 6.49 |
| | 31.25 | 5.90 |
| | 33.15 | 4.13 |
| | 35.05 | 3.24 |
| | 36.95 | 2.65 |
| | 38.85 | 1.77 |
| | 40.75 | 2.36 |
| | 42.65 | 1.47 |
| | 44.55 | .29 |
| | 46.45 | .59 |
| | 48.35 | 1.18 |
| | 50.25 | .29 |
| | 52.15 | .29 |
| | 54.05 | 0.00 |
| > | 55.00 | 1.18 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON CU

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

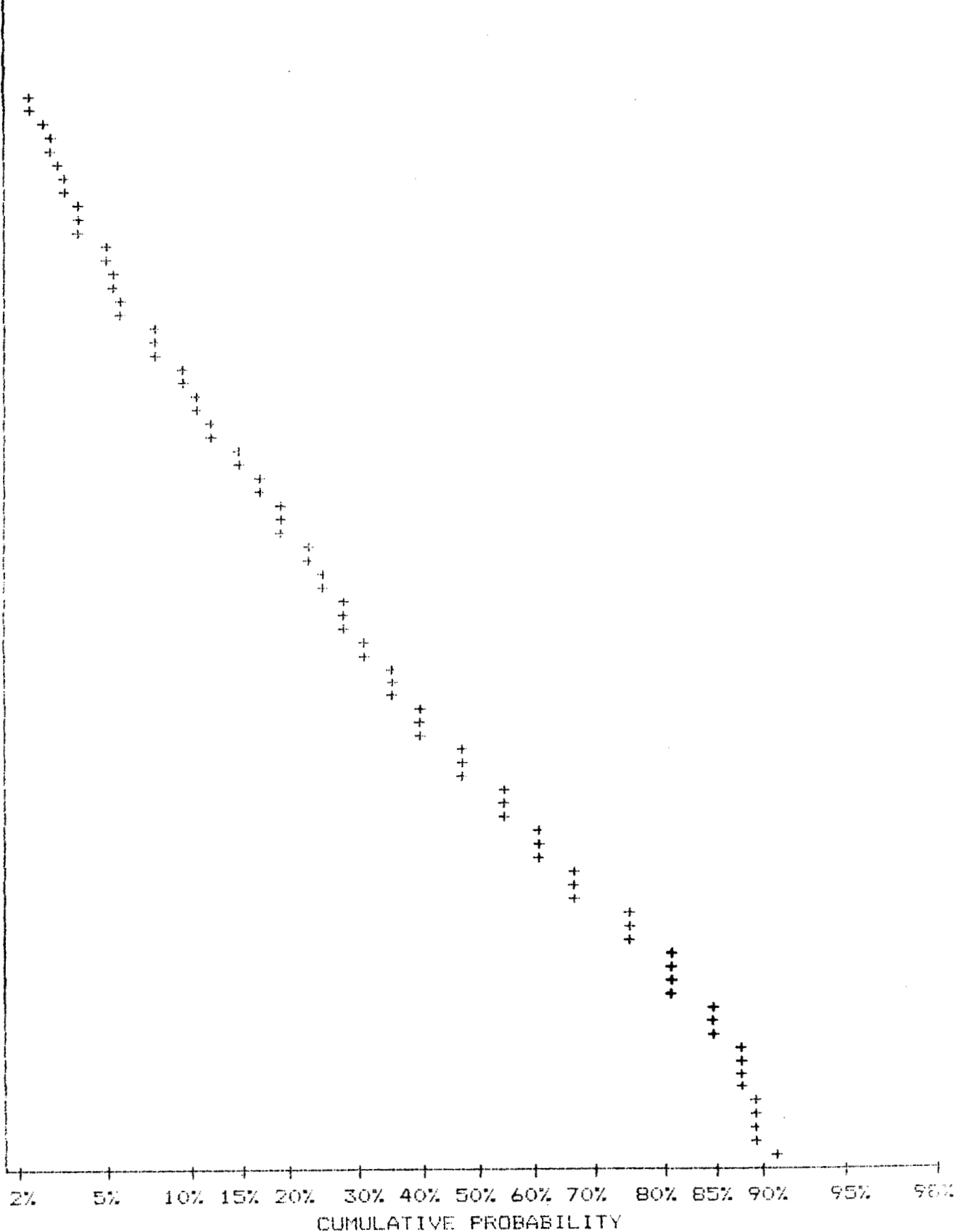
FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICF

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|-------------------------|-------------------------|
| 49.95 | 2.06 |
| 48.59 | 2.65 |
| 47.26 | 3.24 |
| 45.97 | 3.83 |
| 44.71 | 4.13 |
| 43.50 | 4.13 |
| 42.31 | 5.01 |
| 41.16 | 5.60 |
| 40.03 | 6.19 |
| 38.95 | 8.26 |
| 37.88 | 9.73 |
| 36.86 | 11.21 |
| 35.85 | 12.35 |
| 34.87 | 15.63 |
| 33.91 | 17.76 |
| 33.00 | 19.76 |
| 32.10 | 19.76 |
| 31.23 | 23.01 |
| 30.36 | 25.66 |
| 29.55 | 26.91 |
| 28.73 | 32.15 |
| 27.95 | 36.58 |
| 27.20 | 36.58 |
| 26.45 | 40.12 |
| 25.74 | 46.36 |
| 25.02 | 48.36 |
| 24.34 | 55.46 |
| 23.66 | 61.95 |
| 23.03 | 61.95 |
| 22.41 | 67.55 |
| 21.79 | 75.22 |
| 21.20 | 75.22 |
| 20.62 | 81.42 |
| 20.06 | 81.42 |
| 19.52 | 85.25 |
| 18.99 | 87.91 |
| 18.46 | 87.91 |
| 17.97 | 89.38 |
| 17.48 | 89.38 |
| 17.00 | 90.86 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON MN

COMPANY: NORMINE RESOURCES

DATE: JAN 7/87

ATTN: GEORGE NORMAN

SAMPLE TYPE: ROCK

PROJECT: GOOSLY 86-07

ANALYSIS TYPE: ICF

FILE#: 6-1122/1133/1202

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 3353.00 PPM

MINIMUM VALUE: 189.00 PPM

MEAN: 789.52 PPM

STD. DEVIATION: 431.39 PPM

COEFF. OF VARIATION: .55

5 HIGHEST MN VALUES:

PH86-08 87-97 3353 PPM

PH86-09 167-177 3014 PPM

PH86-08 137-147 2562 PPM

PH86-08 117-127 2501 PPM

PH86-08 107-117 2468 PPM

HISTOGRAM FOR MN

CLASS INTERVAL = 105.15

| MID CLASS PPM | CLASS % |
|------------------|------------|
|------------------|------------|

| | |
|-----------|-------|
| < 343.00 | 5.01 |
| 417.58 | 8.85 |
| 522.73 | 21.53 |
| 627.88 | 17.11 |
| 733.03 | 8.26 |
| 838.18 | 10.32 |
| 943.33 | 8.85 |
| 1048.48 | 5.90 |
| 1153.63 | 4.13 |
| 1258.78 | 2.36 |
| 1363.93 | .88 |
| 1469.08 | .88 |
| 1574.23 | 1.47 |
| 1679.38 | 1.18 |
| 1784.53 | .29 |
| 1889.68 | .29 |
| 1994.83 | .29 |
| 2099.98 | .29 |
| 2205.13 | 0.00 |
| 2310.28 | .29 |
| 2415.43 | .59 |
| > 2468.00 | 1.18 |

██████████

████████████████████

██

██

██

██

██

████████████████████

████████████████

██████████

██

██

████

████

|

|

|

|

|

|

██

████

0.00%

10.77%

21.53%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON MN

COMPANY: NORMINE RESOURCES

DATE: JAN 7/87

ATTN: GEORGE NORMAN

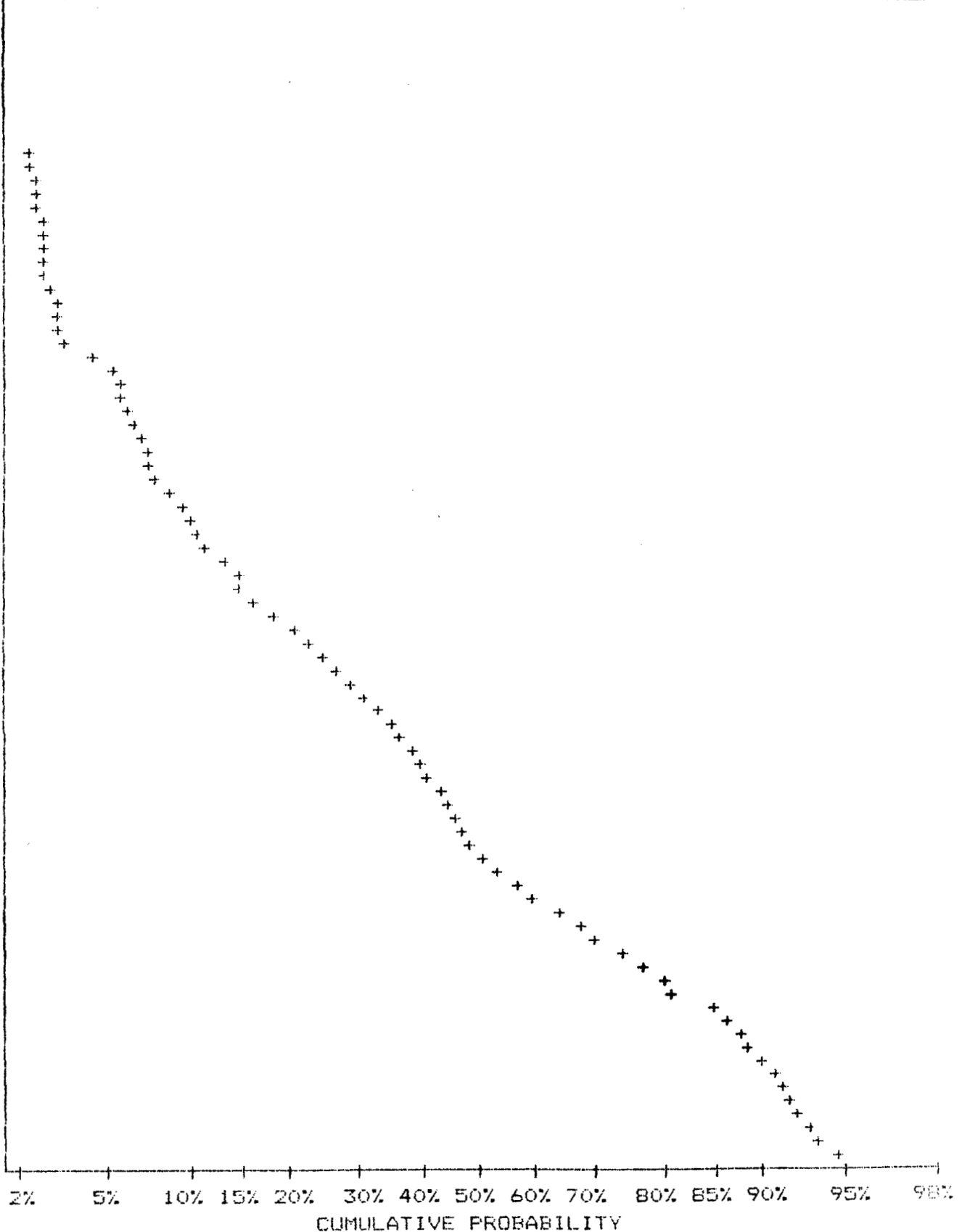
SAMPLE TYPE: ROCK

PROJECT: GOOSLY 86-07

ANALYSIS TYPE: ICP

FILE#: 6-1122/1133/1202

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|-------------------------|-------------------------|
| 2632.01 | .59 |
| 2502.07 | .88 |
| 2378.34 | 2.06 |
| 2260.81 | 2.36 |
| 2149.12 | 2.36 |
| 2043.27 | 2.65 |
| 1942.16 | 2.95 |
| 1846.17 | 3.24 |
| 1754.92 | 3.54 |
| 1668.41 | 3.83 |
| 1585.92 | 5.60 |
| 1507.45 | 6.19 |
| 1432.99 | 7.08 |
| 1362.54 | 7.67 |
| 1295.02 | 8.26 |
| 1231.14 | 9.73 |
| 1170.19 | 11.21 |
| 1112.52 | 13.86 |
| 1057.40 | 15.63 |
| 1005.21 | 19.17 |
| 955.57 | 23.01 |
| 908.48 | 27.73 |
| 863.59 | 31.86 |
| 820.85 | 35.99 |
| 780.37 | 39.82 |
| 741.68 | 42.48 |
| 705.18 | 45.13 |
| 670.50 | 48.67 |
| 637.29 | 52.21 |
| 605.90 | 58.41 |
| 575.97 | 64.90 |
| 547.50 | 70.80 |
| 520.49 | 77.58 |
| 494.58 | 81.42 |
| 470.12 | 86.43 |
| 447.13 | 89.09 |
| 424.86 | 90.86 |
| 404.05 | 92.04 |
| 383.98 | 92.92 |
| 365.00 | 94.99 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON NI

COMPANY: NORMINE RESOURCES

DATE: JAN 7/87

ATTN: GEORGE NORMAN

SAMPLE TYPE: ROCK

PROJECT: GOOSLY 86-07

ANALYSIS TYPE: ICP

FILE#: 6-1122/1133/1202

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 71.00 PPM

MINIMUM VALUE: 2.00 PPM

MEAN: 12.71 PPM

STD. DEVIATION: 6.67 PPM

COEFF. OF VARIATION: .52

5 HIGHEST NI VALUES:

PH86-22 57-67 71 PPM

PH86-22 47-57 50 PPM

PH86-22 37-47 39 PPM

PH86-22 67-77 38 PPM

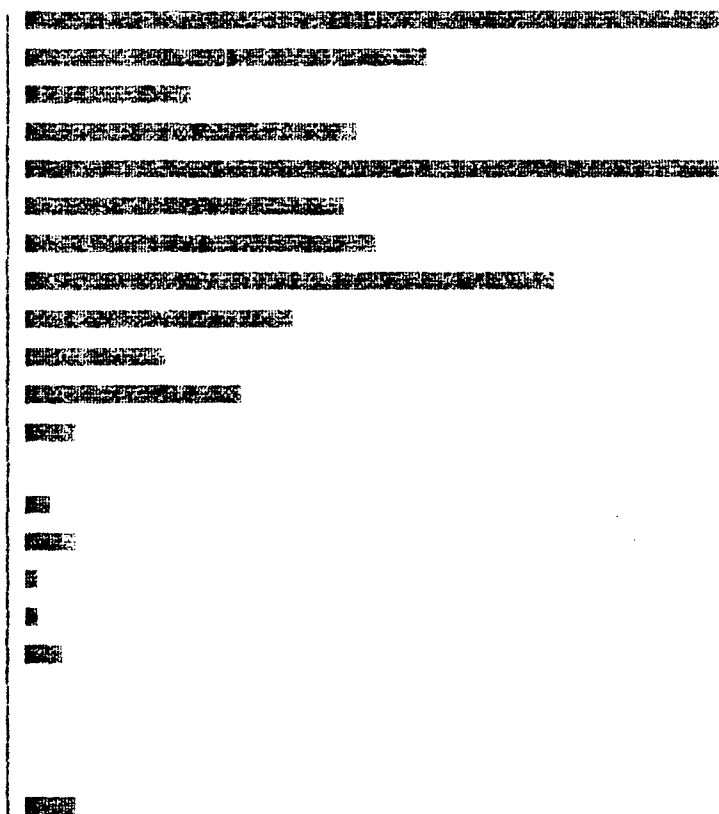
PH86-20 117-127 33 PPM

HISTOGRAM FOR NI

CLASS INTERVAL = 1.3

| MID CLASS | CLASS |
|-----------|-------|
| PPM | % |

| | |
|---------|-------|
| 7.00 | 15.93 |
| 7.65 | 9.14 |
| 8.95 | 3.83 |
| 10.25 | 7.67 |
| 11.55 | 15.93 |
| 12.85 | 7.37 |
| 14.15 | 7.96 |
| 15.45 | 12.09 |
| 16.75 | 6.19 |
| 18.05 | 3.24 |
| 19.35 | 5.01 |
| 20.65 | 1.18 |
| 21.95 | 0.00 |
| 23.25 | .59 |
| 24.55 | 1.18 |
| 25.85 | .29 |
| 27.15 | .29 |
| 28.45 | .88 |
| 29.75 | 0.00 |
| 31.05 | 0.00 |
| 32.35 | 0.00 |
| > 33.00 | 1.18 |



0.00%

7.96%

15.93%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON NI

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

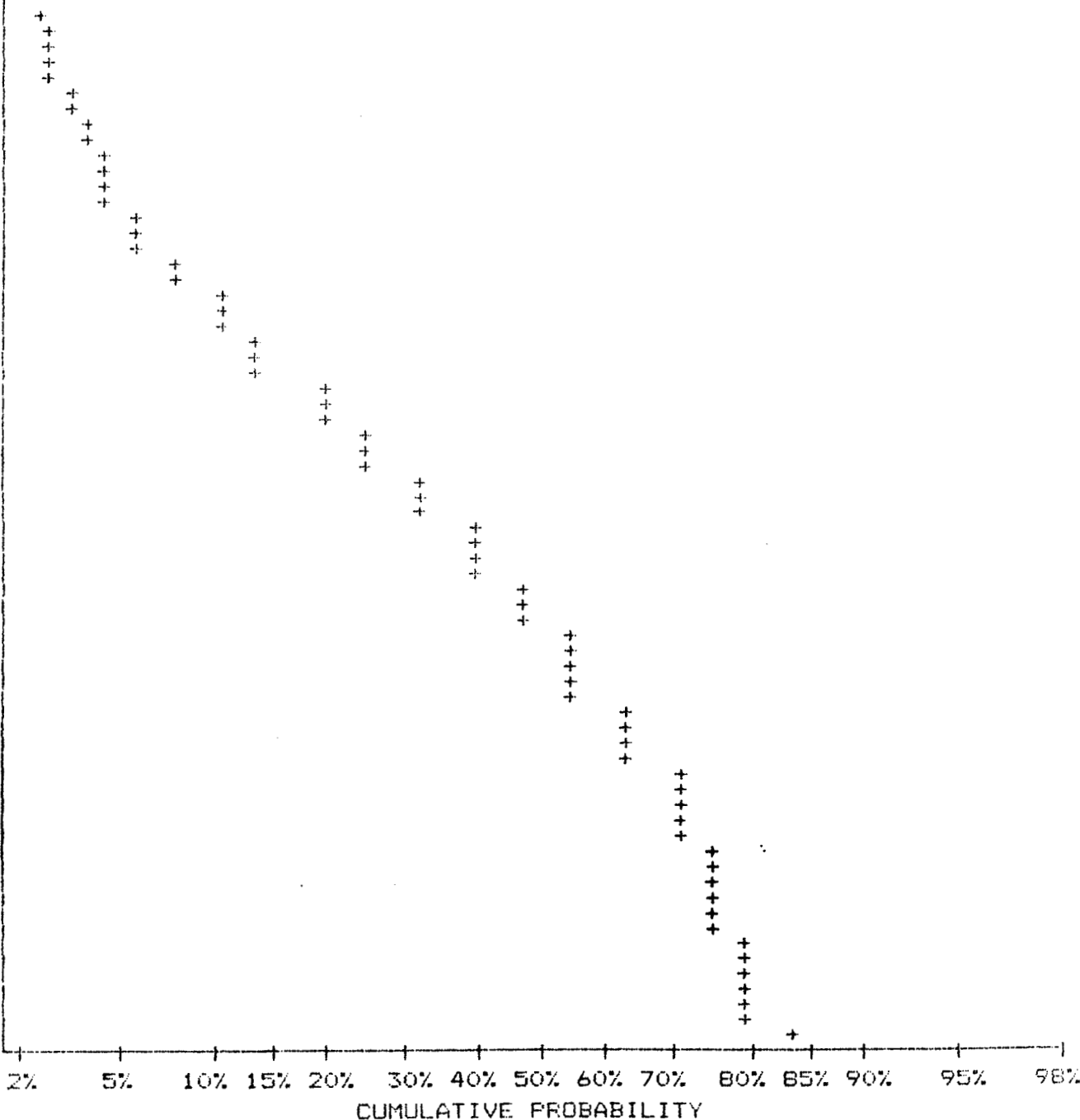
FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|-------------------------|-------------------------|
| 35.24 | 1.18 |
| 33.82 | 1.18 |
| 32.44 | 1.47 |
| 31.12 | 1.47 |
| 29.86 | 1.47 |
| 28.65 | 1.47 |
| 27.48 | 2.36 |
| 26.37 | 2.65 |
| 25.30 | 2.95 |
| 24.27 | 3.83 |
| 23.29 | 4.13 |
| 22.34 | 4.72 |
| 21.43 | 4.72 |
| 20.57 | 5.90 |
| 19.73 | 8.26 |
| 18.93 | 10.91 |
| 18.16 | 10.91 |
| 17.42 | 14.16 |
| 16.72 | 20.35 |
| 16.04 | 20.35 |
| 15.39 | 25.37 |
| 14.76 | 32.45 |
| 14.16 | 32.45 |
| 13.59 | 40.41 |
| 13.03 | 40.41 |
| 12.50 | 47.79 |
| 12.00 | 55.16 |
| 11.51 | 55.16 |
| 11.05 | 55.16 |
| 10.60 | 63.72 |
| 10.16 | 63.72 |
| 9.75 | 71.39 |
| 9.36 | 71.39 |
| 8.97 | 75.22 |
| 8.61 | 75.22 |
| 8.26 | 75.22 |
| 7.92 | 79.94 |
| 7.60 | 79.94 |
| 7.29 | 79.94 |
| 7.00 | 84.07 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON PB

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 203.00 PPM

MINIMUM VALUE: 8.00 PPM

MEAN: 33.38 PPM

STD. DEVIATION: 23.16 PPM

COEFF. OF VARIATION: .69

5 HIGHEST PB VALUES:

PH86-08 87-97 203 PPM

PH86-08 97-107 175 PPM

PH86-08 67-77 171 PPM

PH86-01 20-30 149 PPM

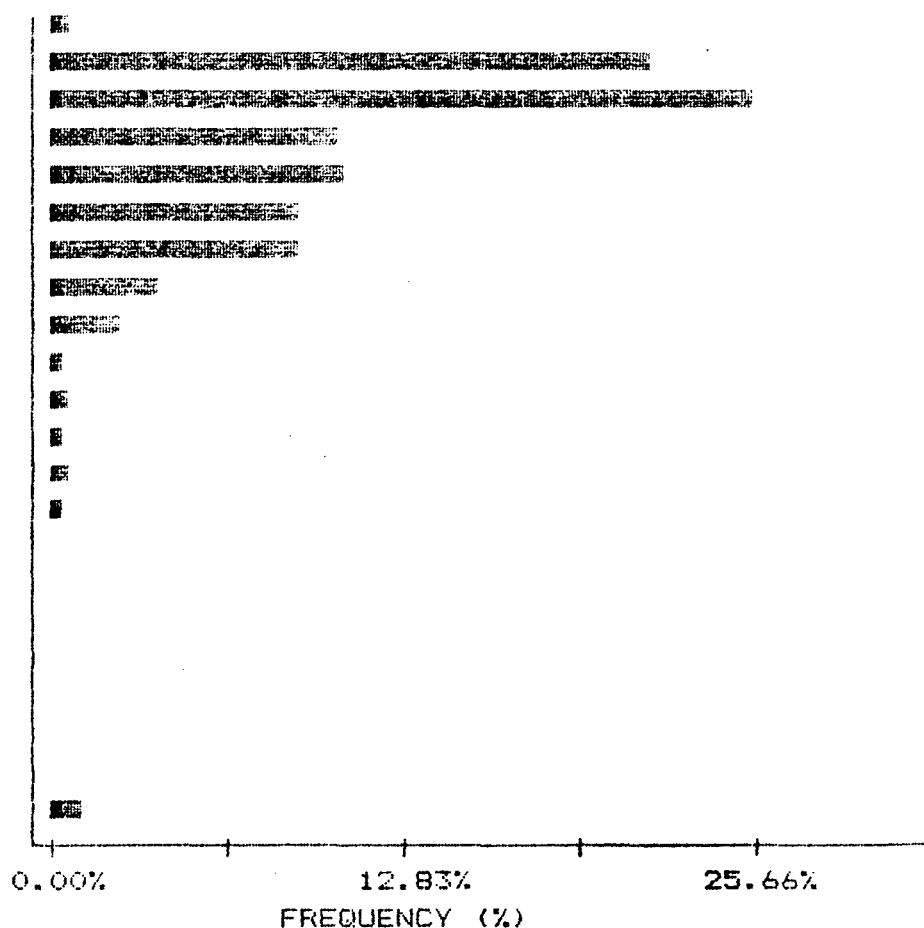
PH86-08 77-87 142 PPM

HISTOGRAM FOR PB

CLASS INTERVAL = 6.5

| MID CLASS | CLASS |
|-----------|-------|
| PPM | % |

| | |
|----------|-------|
| < 12.00 | .86 |
| 15.25 | 22.12 |
| 21.75 | 25.66 |
| 28.25 | 10.62 |
| 34.75 | 10.91 |
| 41.25 | 9.14 |
| 47.75 | 9.14 |
| 54.25 | 4.13 |
| 60.75 | 2.65 |
| 67.25 | .59 |
| 73.75 | .88 |
| 80.25 | .59 |
| 86.75 | .88 |
| 93.25 | .59 |
| 99.75 | 0.00 |
| 106.25 | 0.00 |
| 112.75 | 0.00 |
| 119.25 | 0.00 |
| 125.75 | 0.00 |
| 132.25 | 0.00 |
| 138.75 | 0.00 |
| > 142.00 | 1.18 |



SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON PB

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

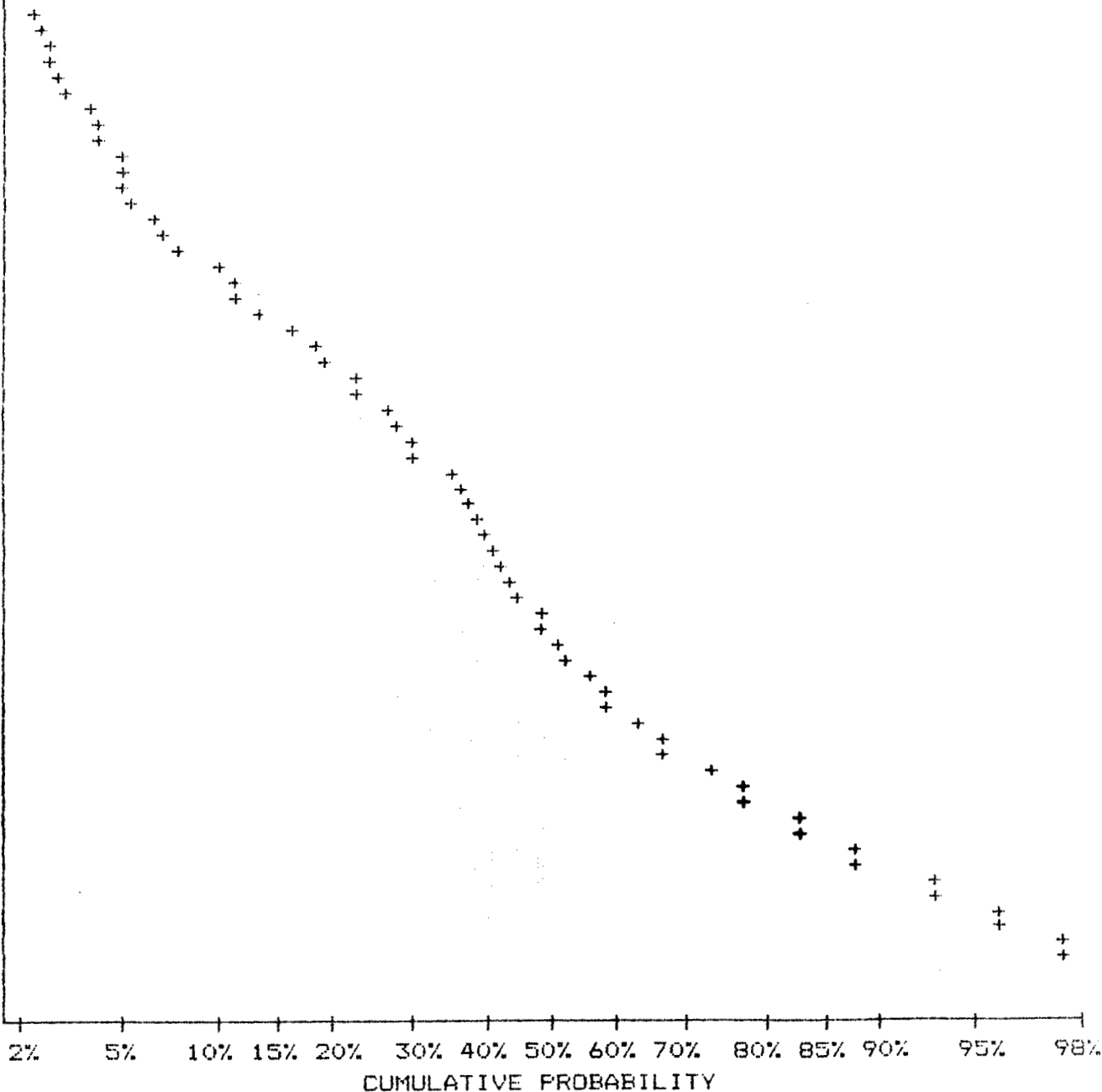
FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|-------------------------|-------------------------|
| 148.31 | 1.18 |
| 139.06 | 1.47 |
| 130.37 | 1.47 |
| 122.23 | 1.47 |
| 114.60 | 1.47 |
| 107.45 | 1.47 |
| 100.74 | 1.47 |
| 94.44 | 1.77 |
| 86.55 | 2.36 |
| 83.02 | 2.95 |
| 77.83 | 3.54 |
| 72.97 | 4.42 |
| 68.42 | 5.01 |
| 64.15 | 5.01 |
| 60.14 | 7.06 |
| 56.39 | 8.26 |
| 52.87 | 11.80 |
| 49.50 | 14.10 |
| 46.48 | 18.58 |
| 43.57 | 23.01 |
| 40.85 | 27.14 |
| 38.30 | 30.09 |
| 35.90 | 35.69 |
| 33.66 | 38.35 |
| 31.50 | 41.00 |
| 29.59 | 43.07 |
| 27.74 | 46.02 |
| 26.02 | 48.97 |
| 24.38 | 53.69 |
| 22.86 | 59.00 |
| 21.43 | 64.01 |
| 20.10 | 66.96 |
| 18.84 | 77.29 |
| 17.66 | 83.19 |
| 16.56 | 88.50 |
| 15.53 | 93.22 |
| 14.56 | 95.87 |
| 13.66 | 97.64 |
| 12.80 | 98.23 |
| 12.00 | 99.12 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON ZN

COMPANY: NORMINE RESOURCES

DATE: JAN 7/87

ATTN: GEORGE NORMAN

SAMPLE TYPE: ROCK

PROJECT: GOOSLY 86-07

ANALYSIS TYPE: ICF

FILE#: 6-1122/1133/1202

NUMBER OF SAMPLES: 339

5 HIGHEST ZN VALUES:

MAXIMUM VALUE: 757.00 PPM

PH86-08 87-97 757 PPM

MINIMUM VALUE: 23.00 PPM

PH86-08 97-107 480 PPM

MEAN: 58.09 PPM

PH86-08 67-77 446 PPM

STD. DEVIATION: 58.37 PPM

PH86-08 77-87 313 PPM

COEFF. OF VARIATION: 1.00

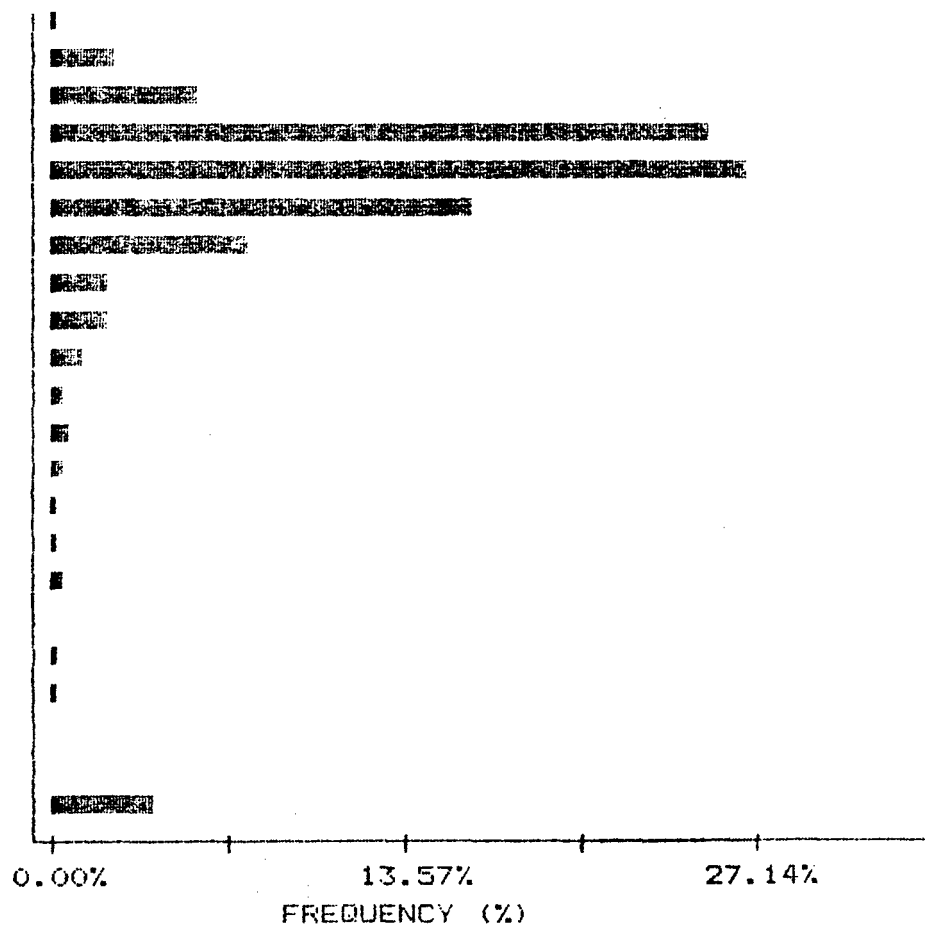
PH86-08 107-117 236 PPM

HISTOGRAM FOR ZN

CLASS INTERVAL = 6.45

| MID CLASS | CLASS |
|-----------|-------|
| PPM | % |

| | |
|----------|-------|
| < 23.00 | .29 |
| 26.23 | 2.65 |
| 32.68 | 5.90 |
| 39.13 | 25.66 |
| 45.58 | 27.14 |
| 52.03 | 16.52 |
| 58.48 | 7.67 |
| 64.93 | 2.36 |
| 71.38 | 2.36 |
| 77.83 | 1.47 |
| 84.28 | .59 |
| 90.73 | .88 |
| 97.18 | .59 |
| 103.63 | .29 |
| 110.08 | .29 |
| 116.53 | .59 |
| 122.98 | 0.00 |
| 129.43 | .29 |
| 135.88 | .29 |
| 142.33 | 0.00 |
| 148.78 | 0.00 |
| > 152.00 | 4.13 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON ZN

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

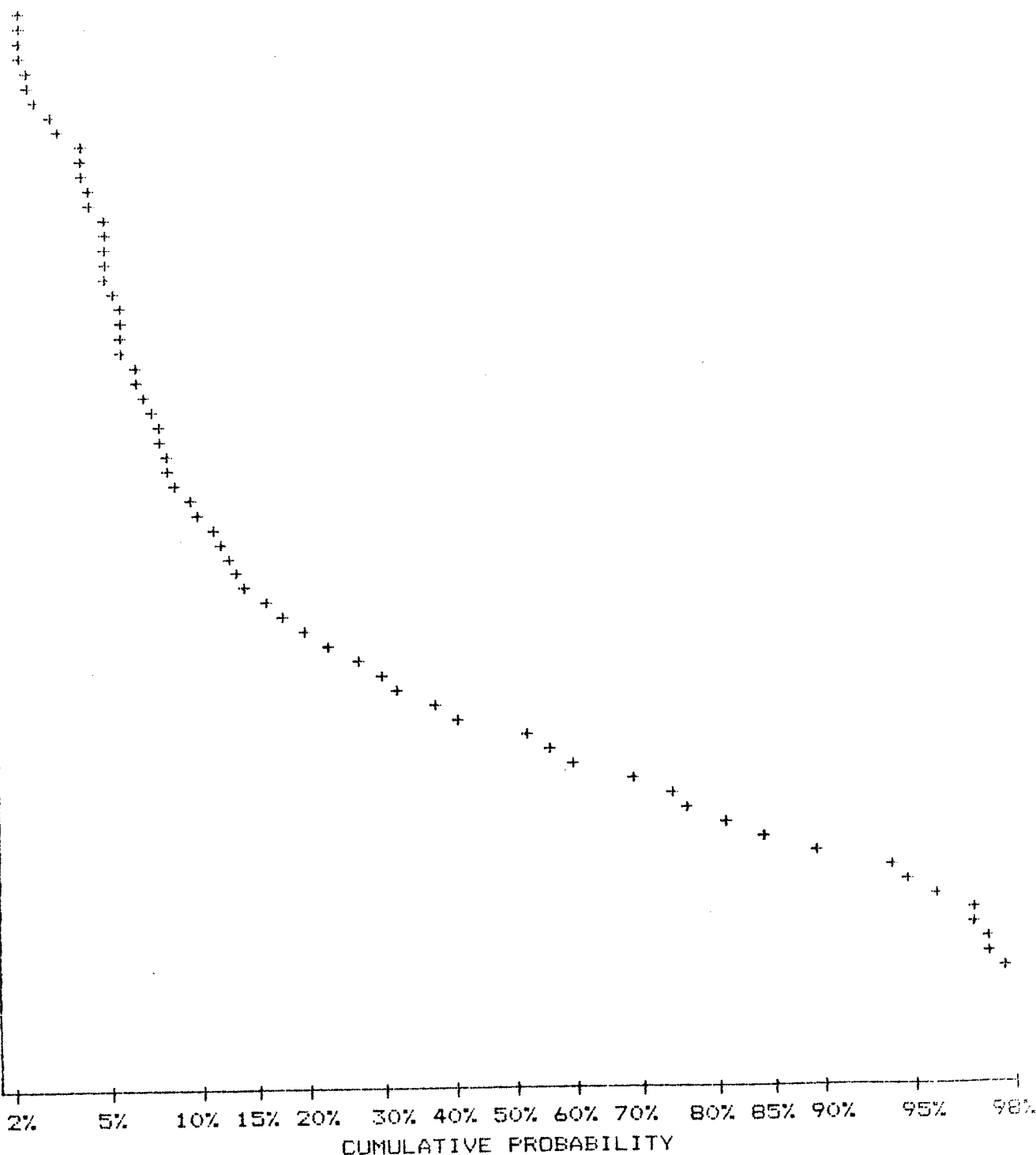
FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|--------------------------|-------------------------|
| 237.54 | 1.18 |
| 223.72 | 1.47 |
| 210.73 | 1.77 |
| 198.49 | 2.06 |
| 186.94 | 2.06 |
| 176.05 | 2.36 |
| 165.85 | 2.95 |
| 156.22 | 3.83 |
| 147.13 | 4.42 |
| 138.60 | 4.72 |
| 130.52 | 5.01 |
| 122.96 | 5.01 |
| 115.80 | 5.31 |
| 109.07 | 5.90 |
| 102.74 | 5.90 |
| 96.76 | 6.78 |
| 91.15 | 7.37 |
| 85.86 | 8.26 |
| 80.87 | 8.55 |
| 76.15 | 8.85 |
| 71.74 | 10.62 |
| 67.57 | 12.39 |
| 63.64 | 14.16 |
| 59.94 | 17.11 |
| 56.46 | 20.35 |
| 53.18 | 27.73 |
| 50.09 | 32.45 |
| 47.17 | 42.18 |
| 44.44 | 56.64 |
| 41.86 | 69.62 |
| 39.42 | 76.99 |
| 37.12 | 84.96 |
| 34.98 | 94.10 |
| 32.94 | 95.87 |
| 31.03 | 97.05 |
| 29.23 | 97.35 |
| 27.53 | 98.23 |
| 25.92 | 98.82 |
| 24.43 | 99.12 |
| 23.00 | 99.71 |



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON AU

COMPANY: NORMINE RESOURCES

ATTN: GEORGE NORMAN

PROJECT: GOOSLY 86-07

FILE#: 6-1122/1133/1202

DATE: JAN 7/87

SAMPLE TYPE: ROCK

ANALYSIS TYPE: ICP

NUMBER OF SAMPLES: 339

MAXIMUM VALUE: 50.00 PPB

MINIMUM VALUE: 3.00 PPB

MEAN: 5.95 PPB

STD. DEVIATION: 3.47 PPB

COEFF. OF VARIATION: .58

5 HIGHEST AU VALUES:

PH86-08 07-17 50 PPB

PH-86-07 107-117 20 PPB

PH86-08 17-27 20 PPB

PH86-08 77-87 20 PPB

PH86-08 37-47 15 PPB

HISTOGRAM FOR AU

CLASS INTERVAL = .6

| MID CLASS | CLASS |
|-----------|-------|
| PPB | % |

| | |
|---------|-------|
| < 3.00 | .29 |
| 3.30 | 8.55 |
| 3.90 | 0.00 |
| 4.50 | 0.00 |
| 5.10 | 73.75 |
| 5.70 | 0.00 |
| 6.30 | 0.00 |
| 6.90 | 0.00 |
| 7.50 | 0.00 |
| 8.10 | 0.00 |
| 8.70 | 0.00 |
| 9.30 | 0.00 |
| 9.90 | 15.93 |
| 10.50 | 0.00 |
| 11.10 | 0.00 |
| 11.70 | 0.00 |
| 12.30 | 0.00 |
| 12.90 | 0.00 |
| 13.50 | 0.00 |
| 14.10 | 0.00 |
| 14.70 | 0.00 |
| > 15.00 | 1.47 |

0.00%

36.87%

73.75%

FREQUENCY (%)

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

ANALYSIS TYPE: ICF

+

CUMULATIVE PROBABILITY

APPRNDIX V

STATEMENT OF COST

STATEMENT OF COST
GOOSLY 1 CLAIM GROUP

PERCUSSION DRILLING (Nov. 1 to Nov. 6, 1986)

| | | |
|-----------------------|---------------------------|---------------|
| L. Spence Enterprises | 308.5 m @ \$24.60/m | \$ 7,589.10 |
| | 25 man hours @ \$20.00/hr | <u>500.00</u> |

\$ 8,090.00

LABOUR - PERCUSSION DRILLING - FIELD (Oct. 30 - Nov. 6, 1986)

| <u>NAME</u> | <u>POSITION</u> | <u>DAYS</u> | <u>DATE</u> | <u>COST/DAY</u> | <u>TOTAL</u> |
|-------------|---------------------|-------------|--------------------------|-----------------|---------------|
| G. Norman, | Project Geologist | 7.5 | Oct. 30-Nov. 6 | \$225.00 | \$ 1,687.50 |
| R. Barclay | Project Coordinator | 1 | Oct. 1 | 250.00 | 250.00 |
| B. Kahlert | Project Engineer | 2.5 | Oct. 17-19 (prorated) | 300.00 | 750.00 |
| L. Warren | Field Advisor | 3.5 | Nov. 3-5 | 175.00 | 612.50 |
| C. Anderson | Field Assistant | 5 | Nov. 1-5 | 125.00 | 625.00 |
| B. Sauer | Slasher | 4.5 | Oct. 31, Nov. 1-4 | 150.00 | 675.00 |
| B. Anderson | Slasher | 4.0 | Oct. 31, Nov. 1-4 | 150.00 | <u>600.00</u> |
| TOTAL | | | | | \$ 5,200.00 |

LABOUR - SOIL GEOCHEMICAL SURVEY - FIELD (Sept. 21 - Sept. 25, 1986)

| <u>NAME</u> | <u>POSITION</u> | <u>DAYS</u> | <u>DATE</u> | <u>COST/DAY</u> | <u>TOTAL</u> |
|-------------|-----------------|-------------|------------------|-----------------|---------------|
| L. Warren | Supervisor | 2.5 | Sept. 21, 22, 25 | \$175.00 | \$ 437.50 |
| B. Anderson | Compassman | 4.5 | Sept. 21-25 | 150.00 | 675.00 |
| B. Sauer | Compassman | 4.5 | Sept. 21-25 | 150.00 | 675.00 |
| C. Anderson | Assistant | 4.25 | Sept. 21-25 | 125.00 | 531.25 |
| D. Coles | Assistant | 4.25 | Sept. 21-25 | 125.00 | <u>531.25</u> |
| TOTAL | | | | | \$ 2,850.00 |

TRUCK RENTAL

| | | |
|--------------------------------------|-------------------------|---------------|
| Norman Geological (Oct. 31 - Nov. 6) | 4x4 7 days @ 900/mo | \$ 203.23 |
| CJL Enterprises (Oct. 30 - Nov. 6) | 4x4 14 days @ 65.00/day | <u>910.00</u> |
| TOTAL | | 1,113.23 |

EQUIPMENT RENTAL

| | | |
|---|--------------------|-------------|
| D-7 Caterpillar - Groot Bros. Contracting (Oct. 31-Nov. 4) | | |
| 31.5 hr @ \$86.00/hr | \$ 2,709.00 | |
| hauling charges | 363.12 | |
| | <u>\$ 3,072.12</u> | |
| Generator - CJL Enterprises Ltd. (Nov. 1 - 6) | | |
| 6 days @ 23.57/day | 141.42 | |
| 2 Power Saws (Nov. 1 - 6) 8 days @ 25/day | <u>200.00</u> | |
| TOTAL | | \$ 3,413.54 |
| <u>CAMP RENTAL</u> (Oct. 31 - Nov. 6) 6 man camp, 1 wk @ 355/wk | | \$ 355.00 |

GEOCHEMICAL ANALYSES

A. SOIL GEOCHEMISTRY

| | | |
|---|--------------------|--|
| 114 soil geochem A-Horizon - Mercury @ \$4.50 | \$ 513.00 | |
| 134 soil geochem B-Horizon @ \$6.80 | 911.20 | |
| Cu, Zn, Ag, As, Ag | | |
| 248 sample preparation @ .85 | 210.80 | |
| | <u>\$ 1,635.20</u> | |

B. ROCK GEOCHEMISTRY

| | | |
|---|------------------|-------------|
| 19 rock geochem 12 element I.C.P. @ \$10.50 | \$ 199.50 | |
| 19 rock sample preparation @ \$2.50 | 47.50 | |
| TOTAL | <u>\$ 247.00</u> | \$ 1,881.20 |

EQUIPMENT & SUPPLIES

| | | |
|---------------------------------|---------------|-------------|
| Groceries | 668.96 | |
| Propane | 106.30 | |
| Gas and stove oil | 260.36 | |
| Office Supplies, Field Supplies | <u>361.32</u> | |
| TOTAL | | \$ 1,396.94 |

| | | |
|-------------------------|--|-----------|
| <u>MOTELS AND MEALS</u> | | \$ 144.92 |
|-------------------------|--|-----------|

| | | |
|----------------------------|--|-----------|
| <u>FREIGHT AND COURIER</u> | | \$ 369.35 |
|----------------------------|--|-----------|

COMMUNICATIONS B.C. Tel (Sept. 15 - Nov. 15, 1986) - (prorated 23%) \$ 343.97

REPRODUCTIONS 35.65

REPORT PREPARATION (Jan. 7 - Jan. 22)

| | | | | | |
|------------|--------------------|----------|-----------------|--------|--------------|
| G. Norman | Project Geologist | \$225.00 | Jan. 7-9, 12-22 | 4 | \$ 900.00 |
| G. Nordin | Senior Geologist | 300.00 | Jan. 22 | 0.1 | 30.00 |
| R. Barclay | Project Consultant | 250.00 | Jan. 22 | 0.1 | 25.00 |
| L. Wilson | Secretary | \$15/hr | Jan. 19 | 2.5 hr | 30.00 |
| L. Connor | Draftsperson | \$17/hr | Jan. 17 | 2 hr | 34.00 |

| | |
|----------------------------------|----------------------|
| Report Reproduction (estimation) | 50.00 |
| TOTAL | <u>\$ 1,069.00</u> |

GRAND TOTAL \$ 26,262.80

STATEMENT OF COST
GOOSLY 2 CLAIM GROUP

PERCUSSION DRILLING (Oct. 19 - Nov. 1, Nov. 7 - Nov. 11, 1986)

| | | |
|-----------------------|---------------------------|-----------------|
| L. Spence Enterprises | 1018.3 m @ \$24.60/m | \$ 25,050.18 |
| | 74 man hours @ \$20.00/hr | <u>1,480.00</u> |

\$ 26,530.18

LABOUR - PERCUSSION DRILLING - FIELD (Oct. 14 - Nov. 13, 1986)

| <u>NAME</u> | <u>POSITION</u> | <u>DAYS</u> | <u>DATE</u> | <u>COST/DAY</u> | <u>TOTAL</u> |
|-------------|---------------------|-------------|---|-----------------|-----------------|
| G. Norman | Project Geologist | 28.5 | Oct. 8-10, Oct. 14-29, Nov. 7-14, 17, 19, 26, 27, 28 | \$225.00 | \$ 6,412.50 |
| R. Barclay | Project Coordinator | 1.0 | Oct. 16 | 250.00 | 250.00 |
| B. Kahlert | Project Engineer | 2.5 | Oct. 14-16 | 300.00 | 750.00 |
| L. Warren | Field Advisor | 11.5 | Oct. 14-19, Nov. 9-13 | 175.00 | 2,012.50 |
| C. Anderson | Field Assistant | 24 | Oct. 14-29, Nov. 7-14 | 125.00 | 3,000.00 |
| B. Sauer | Slasher | 6.5 | Oct. 14, 26-30 Nov. 5 | 150.00 | 975.00 |
| B. Anderson | Slasher | 11.5 | Oct. 14-24, Nov. 5 | 150.00 | <u>1,725.00</u> |
| TOTAL | | | | | \$ 15,125.00 |

TRUCK RENTAL

| | | |
|---|--------------------------|---------------|
| Norman Geological (Oct. 14-31, Nov. 7-14) | 4x4 26 days @ 900/mo | \$ 754.84 |
| CJL Enterprises (Oct. 15-25, Nov. 7-14) | 4x4 19 days @ 65.00/day | 1,235.00 |
| CJL Enterprises (Oct. 14-16, Nov. 7-10) | 2x4 6.5 days @ 62.00/day | <u>403.00</u> |
| TOTAL | | 2,392.84 |

EQUIPMENT RENTAL

| | |
|--|--------------|
| D-7 Caterpillar - Groot Bros. Contracting (Nov. 5) | |
| 4.5 hr @ \$86.00/hr | \$ 387.00 |
| hauling charges | <u>51.88</u> |
| | \$ 438.88 |

EQUIPMENT RENTAL, Continued

| | | |
|---|---------------|-------------|
| 1150 Case - L. Spence Enterprises Ltd. (Oct. 14-31) | | |
| 25 hours @ \$65.00/hr | 1,625.00 | |
| Generator - CJL Enterprises Ltd. (Oct. 18-31, Nov. 7-14) | | |
| 22 days @ 23.30/day | 512.60 | |
| 2 Power Saws - CJL Enterprises Ltd. (Oct. 14-31, Nov. 7-14) | | |
| 26 days @ 25/day | <u>650.00</u> | |
| TOTAL | | \$ 3,226.48 |

GEOCHEMICAL ANALYSES

ROCK GEOCHEMISTRY - MIN-EN LABORATORIES LTD.

| | | |
|--|---------------|-------------|
| 29 rock geochem 27 element I.C.P. @ \$ 7.50 | 217.50 | |
| 29 rock geochem 27 element I.C.P. Au wet @ \$12.00 | 348.00 | |
| 58 rock preparation @ 3.00/sample | 174.00 | |
| 262 rock geochem 12 element I.C.P. @ 10.50 | 2,751.00 | |
| 262 rock preparation @ 2.50/sample | 655.00 | |
| 29 pulp geochem Au @ 4.50 | 130.50 | |
| Statistical study on 339 samples | <u>123.60</u> | |
| TOTAL | | \$ 4,399.60 |

EQUIPMENT & SUPPLIES

| | | |
|---------------------------------|---------------|-------------|
| Groceries | 782.46 | |
| Propane | 322.41 | |
| Gas and stove oil | 871.64 | |
| Office Supplies, Field Supplies | <u>748.28</u> | |
| TOTAL | | \$ 2,724.55 |

MOTELS AND MEALS

\$ 485.16

FREIGHT AND COURIER

\$ 1,155.64

COMMUNICATIONS

B.C. Tel (Sept. 15 - Nov. 15, 1986) - (prorated 77%)

\$ 547.82

REPRODUCTIONS

119.36

REPORT PREPARATION (Jan. 7 - Jan. 22)

| <u>NAME</u> | <u>POSITION</u> | <u>COST/DAY</u> | <u>DATE</u> | <u>DAYS</u> | <u>TOTAL</u> |
|----------------------------------|--------------------|-----------------|-----------------|-------------|-------------------|
| G. Norman | Project Geologist | \$225.00 | Jan. 7-9, 12-22 | 10.0 | \$ 2,250. |
| G. Nordin | Senior Geologist | 300.00 | Jan. 22 | 0.4 | 120. |
| R. Barclay | Project Consultant | 250.00 | Jan. 22 | 0.4 | 100. |
| L. Wilson | Secretary | \$15/hr | Jan. 20 | 7.5 hr | 112. |
| L. Connor | Draftsperson | \$17/hr | Jan. 17, 18, 21 | 5 hr | 85. |
| Report Reproduction (estimation) | | | | | 200. |
| TOTAL | | | | | <u>\$ 2,867.</u> |
| GRAND TOTAL | | | | | <u>\$ 59,574.</u> |

APPENDIX VI

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATION

I, GEORGE E. NORMAN, the author of the foregoing report hereby certify:

1. that I am a self employed Consulting Geologist, operating under the name of Norman Geological since 1985, resident at 28 West 43rd Avenue, Vancouver, B.C.;
2. that I have been registered with the Association of Professional Engineers Geologist and Geophysicists of Alberta since 1975 and am a graduate of the University of Alberta with B.Sc. (Honours Geology 1973);
3. that I am a registered Fellow with the Geological Association of Canada;
4. that I have worked for a number of major mining firms as exploration geologist, consultant geologist and mine geologist in B.C., Yukon and N.W.T. during my fourteen years of practical exploration experience. I have been previously been employed by the following exploration/consulting firms: Terra Mines Ltd. (1984); Fox Geological Consultants Ltd. (1983-1984); Bema Industries Ltd. (1980-1983); Utah Mines Ltd. (1976-1980); and Kaiser Exploration and Mining Company (1973-1974);
5. that the foregoing report is based on the 1986 field exploration program, October 14 to November 13, 1986 and a review of previous reports.

DATED the 22nd day of January, 1987.



GEORGE E. NORMAN, B.Sc.



