

DIAMOND DRILLING REPORT

on the

LOG 1 and 3 MINERAL CLAIMS

MISSEZULA LAKE AREA

NICOLA MINING DIVISION

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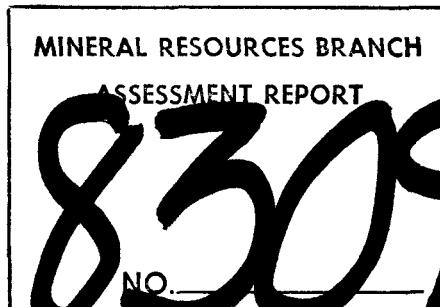
NTS - 92H/15E UTM GRID - Zone 10  
Latitude -  $49^{\circ} 47'$  North - 5 516 950  
Longitude -  $120^{\circ} 34'$  East - 675 300

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BETHLEHEM COPPER CORPORATION  
Suite 2100 - Guinness Tower  
1055 West Hastings Street  
Vancouver, BC V6E 2H8

August 28, 1980

R. G. Simpson  
Project Geologist



8309  
NO.  
Part 2  
of 2

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**BRITISH COLUMBIA**

SCALE 1:5,000,000

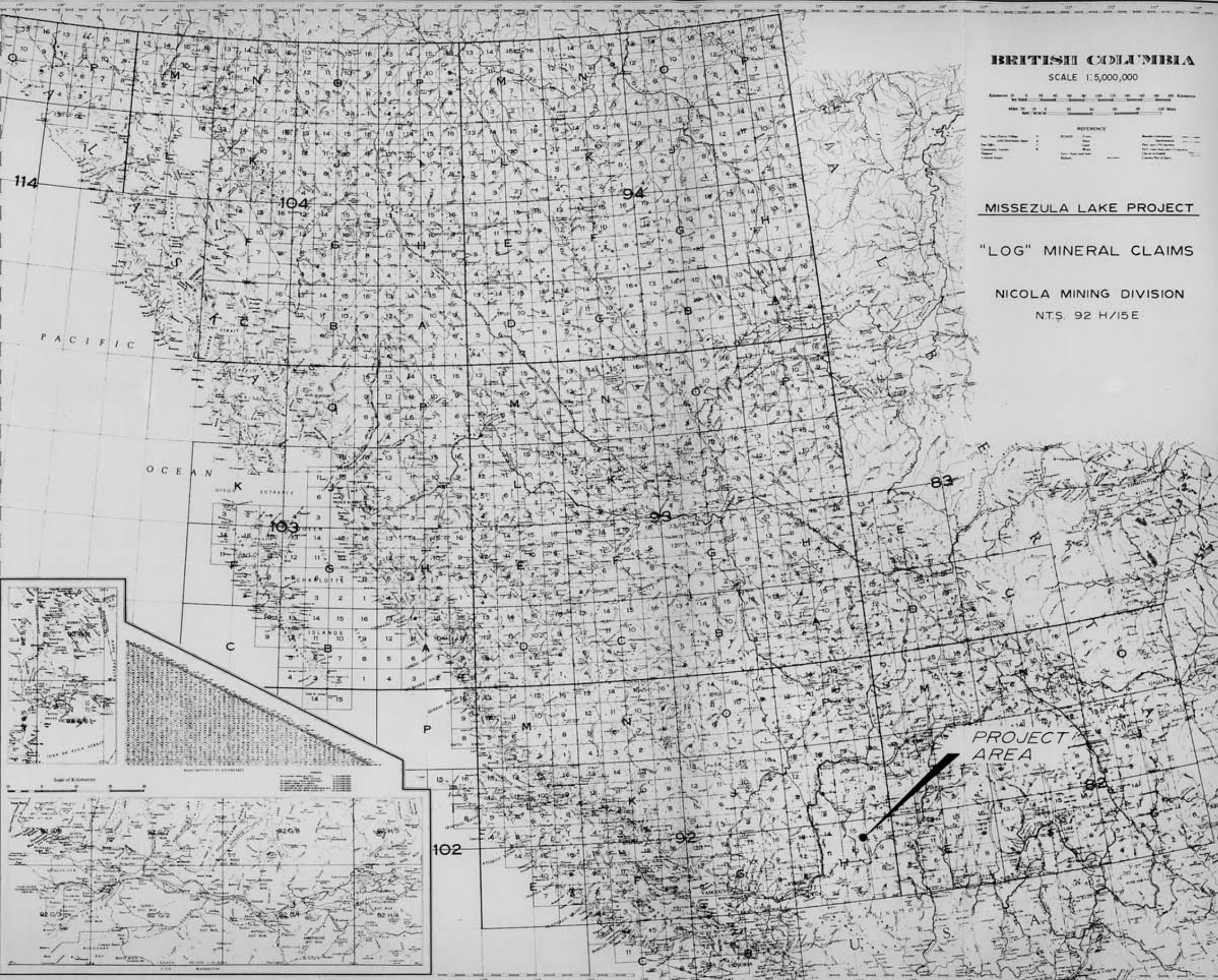
REFERENCE

**MISSEZULA LAKE PROJECT**

**"LOG" MINERAL CLAIMS**

NICOLA MINING DIVISION

NTS 92 H/15E



SECTION A- SUMMARY OF WORKIntroduction

The "LOG" Group of mineral claims was staked by Bethlehem in December 1973 following a large-scale regional exploration program in the general Merritt-Princeton area during 1970, 1971 and 1972.

In late 1974, ten percussion holes totalling 900 metres were drilled and some interesting mineralization sections were encountered in several holes. During 1975, three diamond drill holes totalling 351 metres and one rotary hole of 218 metres were completed with low-grade copper mineralization occurring in three of the four holes. Drilling problems limited the depth penetration to 218 metres.

Induced polarization surveys were conducted over the major part of the claim blocks in May and again in late November of 1979. Two parallel north-northwesterly trending anomalies were outlined, extending through the central and southwest portions of the property. On the basis of these results it was decided to conduct a preliminary investigation of the anomalies by diamond drilling two vertical holes to depths of approximately 210 metres.

Location and Access

The "LOG" claim group is situated over a low north-south trending valley some 3 km west of Missezula Lake at geographic co-ordinates  $49^{\circ}47'$  latitude and  $120^{\circ}33.5'$  longitude. The nearest centres of population are 36 km to the south at Princeton and 38 km to the NNW at Merritt. Access to the property is obtained by a 9.5 km gravel road which runs southeasterly from a point on Highway #5 some 43 km south of Merritt. (See Drawing No. ML-79-1).

Topography and Physical Environment

The area is characterized by generally moderate topography with altitude ranges from 1250 metres to 1370 metres A.S.L. The central portion of the claim block is in the bottom of a low wide north-south trending valley with the eastern and western limits of the property situated on higher ridges. A major portion of the valley floor is clear of any timber cover due to recent logging operations and a forest fire. The remaining area is covered by moderate stands of lodgepole pine and to a lesser extent groves of aspen.

A swampy lake covering approximately 25 hectares occupies the centre of the claim block. In previous reports it has been referred to as Duke Lake but on recent government topographic maps it has been labelled Ketchan Lake. A smaller lake to the northwest is now known as Hook Lake. A number of small sloughs are also situated in the area.

Geology

The property is mainly underlain by Upper Triassic Nicola volcanic rocks and their associated intrusions. It lies within an area which has recently undergone a detailed geological mapping program by the B.C. Department of Mines. (Bulletin 69, V.A. Preto)

Rocks on the claim block belong to the Central Belt of the Nicola Group which is bounded on the west by the Allison Lake pluton and on the east by a major fault system called the Summers Creek Fault. Faults on the property tend to follow a northerly regional trend and share the steep dips of both this fault zone and the Allison Fault to the west. Dips on the property are generally to the east since it lies on the west limb of a major syncline; the axis of this syncline strikes northerly and lies on the east side of Mississula Lake.

The detailed mapping of this area, recently completed by the B.C. Department of Mines (Preliminary Map No. 17), shows that the new claim block boundaries almost entirely surround an intrusive body which is roughly triangular in shape. This body, which varies in composition from a medium-grained syenodiorite to monzonite, is truncated on the east by a NW trending fault. It intrudes a largely subaqueous assemblage of green flows, flow breccia, tuffs and minor sedimentary units and, being similar in composition to the volcanics, it is thought to be about the same age. It contains several occurrences of chalcopyrite mineralization.

A Geological Plan (Drawing No. ML-79-4) was prepared by enlarging a portion of the recently published Preliminary Map No. 17 up to the scale of 1:10,000.

#### Diamond Drilling

Connors Drilling of Vancouver was contracted to drill two vertical holes on the property to investigate recently discovered I.P. anomalies. A Longyear model Super-38 diamond drill was mobilized on December 4, 1979 and drilling began on December 6. Problems were encountered in the first hole (L-79-5) and it was temporarily abandoned at a depth of 92 metres after the core barrel twisted off in loose and caving ground. The drill was moved to the second hole which was successfully completed to a depth of 206 metres on December 23. It was subsequently decided to attempt to deepen hole L-79-5 and in early January 1980, after reaming with a HQ bit down to the previous level, the core barrel was successfully recovered and coring with NQ resumed to a final depth of 203 metres.

Hole L-79-5 was located over the northwestern extension of the main I.P. anomaly west of Ketchan Lake. The drill site lies in a drift-covered area adjacent to the B.C. Hydro powerline. After penetrating 4 metres of overburden, the drill encountered 13 metres of Nicola Group volcaniclastics underlain by massive, grey to green andesite flows with

occasional tuffaceous and volcaniclastic interbeds to a depth of 29 metres. From 29 to 198 metres, fine grained Nicola intrusive rocks ranging from mafic porphyries to fine grained diorites were penetrated. These graded into Nicola andesite which was in turn underlain by epivolcaniclastic material from 202 to 203 metres. Dips of primary bedding within volcaniclastic material averaged approximately 45°. Weak to moderate pyrite mineralization was noted from 9 to 18 metres. The core was strongly altered and sheared from 76 to 93 metres.

Hole L-79-6 was located approximately 1,150 metres south of L-79-5 over the southwestern I.P. anomaly. After penetrating 3 metres of overburden, the drill encountered 14 metres of red to grey vesicular basalt of Pleistocene to Recent age, underlain by a fossil overburden to a depth of 50 metres. From 50 to 206 metres a mixed assemblage of Nicola Group subaqueous volcaniclastic and flow rocks was present, consisting of intercalated tuffs, tuff breccias, andesitic flows and volcaniclastic breccia containing black, graphitic siltstone fragments entrained in a tuffaceous matrix. Fine grained pyrite accumulations occurred along laminae within the siltstone fragments and appear to be of syngenetic origin. Several fault zones containing black, sooty, graphitic gouge were also intersected.

The NQ core was transported to Bethlehem's core storage facilities which are located at its Highland Valley operations. Here the core was split with half the core going for assay and the other half being retained. Detailed geologic logs were prepared and are appended in Section D along with the laboratory assay reports. Drill hole locations are shown on Drawings No. ML-79- 4 and 5 .

No economically significant sulphide mineralization was encountered in either drill hole. Copper content averaged .01% with no sections exceeding .04% Cu.

Listed below is a summary of each of the drill holes:-

|          |   |           |          |
|----------|---|-----------|----------|
| Hole No. | - | L-79-5    | L-79-6   |
| Latitude | - | 100 150 N | 98 700 N |

|               |   |                        |                         |
|---------------|---|------------------------|-------------------------|
| Departure     | - | 99 400 E               | 99 750 E                |
| Elevation     | - | 1290 m A.S.L.          | 1270 m A.S.L.           |
| Overburden    | - | 3.7 m (12')            | 3.4 m (11')             |
| Rock          | - | 199.6 m (655')         | 203.0 m (666')          |
| Total Depth   | - | 203.3 m (667')         | 206.4 m (677')          |
| % Cu          | - | 0.013 (3.7 to 203.3 m) | 0.011 (48.8 to 206.4 m) |
| % Mo          | - | nil                    | tr.                     |
| Mineral Claim | - | LOG 1                  | LOG 3                   |

Conclusions and Recommendations

The two diamond drill holes completed on the LOG 1 and 3 mineral claims failed to intersect any economically significant mineralized zones.

Hole L-79-5 contained sparse pyrite mineralization in the upper 16 metres but the sulphide concentration does not seem to be sufficient to produce the I.P. anomaly in this area.

Hole L-79-6 encountered a significant amount of graphitic material with local pyrite concentrations that probably account for the shallow I.P. response detected to the south.

The main I.P. anomaly extending under Ketchan Lake has not been adequately tested but results from hole L-79-5 are not encouraging with respect to the western extension. Further testing of this anomaly could be adequately performed by a percussion drill due to the relatively shallow depth to the source, but overburden depths in the vicinity of Ketchan Lake may prove prohibitive.

In view of the negative results of this program, further drilling is not recommended at this time.

Respectfully submitted,



R. G. Simpson  
Project Geologist

#### REFERENCES

##### OLD REPORTS

- Lammle, C.A.R.; 1967: Geological and Geophysical Report on the STRIKE-LORNA Mineral Claims for Adera Mining Limited and Plateau Metals Limited.
- Schuur, W.; 1967: Report on I.P. Survey on the STRIKE-LORNA Group Sept. 21, 1966 by Canadian Aere Mineral Surveys Limited for Adera Mining Limited.
- Lammle, C.A.R.; 1971: Geochemical Report on the STRIKE-LORNA Group for Adera Mining Limited and Plateau Metals Limited.
- 

##### BETHLEHEM REPORTS

- Nethery, R.J.; 1975: Percussion Drilling Report on the LOG Group of Mineral Claims, Missezula Lake Area.
- Anderson, R.E.; 1975: Diamond Drilling Report on the LOG 54, 63 and 64 Mineral Claims, Missezula Lake Area.
- Anderson, R.E.; 1976: Diamond Drilling and Control Survey Report on the LOG #1 - 4 Mineral Claims, Missezula Lake Area.
- Anderson, R.E.; 1979: Geophysical Survey Report on the LOG 1 to 4 Mineral Claims, Missezula Lake Area by Phoenix Geophysics Limited.

SECTION B - STATEMENT OF EXPENDITURES

Expense Period - November 27, 1979 to August 28, 1980

1. Contracted Services (see accompanying invoices)

(a) Connors Drilling - diamond drilling contractor

|             |       |            |       |   |                  |
|-------------|-------|------------|-------|---|------------------|
| Invoice No. | 9964  | dated Jan. | 2/80  | - | \$23,166.50      |
| " "         | 9983  | " Jan.     | 8/80  | - | 4,140.00         |
| " "         | 10018 | " Jan.     | 30/80 | - | <u>19,683.37</u> |
|             |       |            |       |   | \$46,989.87      |

|                           |             |
|---------------------------|-------------|
| TOTAL CONTRACTED SERVICES | \$46,989.87 |
|---------------------------|-------------|

2. Bethlehem Expenditures

(a) Personnel

|  |  |  |  |           |
|--|--|--|--|-----------|
| J. R. Bellamy - Chief Geologist                      |  |  |  |           |
| 4 days in general project supervision @ \$139.32/day |  |  |  | \$ 557.28 |

|                                   |    |  |  |  |
|-----------------------------------|----|--|--|--|
| R. G. Simpson - Project Geologist |    |  |  |  |
| Dec. 10, 13, 14, 21 - 4 days      |    |  |  |  |
| Jan. 2-5, 10-12, 24 - 8 days      |    |  |  |  |
| Feb. 18 - 21 - 4 days             |    |  |  |  |
| Aug. 28 - 1 day                   |    |  |  |  |
|                                   | 17 |  |  |  |

|   |  |  |  |             |
|---|--|--|--|-------------|
| 17 days in project supervision, evaluation and report preparation @ \$94.38/day |  |  |  | \$ 1,604.46 |
|---|--|--|--|-------------|

|                                  |    |  |  |  |
|----------------------------------|----|--|--|--|
| J. G. Collins - Field Supervisor |    |  |  |  |
| Nov. 28 - 1 day                  |    |  |  |  |
| Dec. 3, 10, 17, 18,              |    |  |  |  |
| 21, 24, 31 - 7 days              |    |  |  |  |
| Jan. 2, 7, 8, 14,                |    |  |  |  |
| 15, 21, 22 - 7 days              |    |  |  |  |
|                                  | 15 |  |  |  |

|  |  |  |  |             |
|--|--|--|--|-------------|
| 15 days in project supervision @ \$94.91/day |  |  |  | \$ 1,423.65 |
|--|--|--|--|-------------|

|  |  |  |  |           |
|--|--|--|--|-----------|
| E. Andersen - Property Agent                                     |  |  |  |           |
| 3 days in data compilation and report preparation @ \$107.33/day |  |  |  | \$ 321.99 |

|                     |  |  |  |          |
|---------------------|--|--|--|----------|
| A. Emo - Secretary  |  |  |  |          |
| 1 day @ \$61.86/day |  |  |  | \$ 61.86 |

|                      |                 |           |
|----------------------|-----------------|-----------|
| K. Decle - Secretary |                 |           |
| 1 day @ \$44.94/day  | \$ 44.94        |           |
|                      | TOTAL PERSONNEL | \$4014.18 |

(b) Transportation

|                                |                      |           |
|--------------------------------|----------------------|-----------|
| R. G. Simpson - Ford F-150 4WD |                      |           |
| 11 days @ \$35.00/day          | \$ 385.00            |           |
| J. G. Collins - Ford F-150 4WD |                      |           |
| 15 days @ \$35.00/day          | \$ 525.00            |           |
|                                | TOTAL TRANSPORTATION | \$ 910.00 |

(c) Supplies

|                           |                |           |
|---------------------------|----------------|-----------|
| Core boxes - 118 @ \$4.21 | \$ 497.02      |           |
| Sample bags - 236 @ \$.25 | \$ 59.00       |           |
|                           | TOTAL SUPPLIES | \$ 556.02 |

(d) Laboratory - samples processed at Bethlehem's  
Highland Valley operations

|                                   |                  |           |
|-----------------------------------|------------------|-----------|
| 118 Cu/Mo determinations @ \$8.75 | \$1032.50        |           |
| 24 Au assays @ \$4.20             | <u>100.80</u>    |           |
|                                   | TOTAL LABORATORY | \$1133.30 |

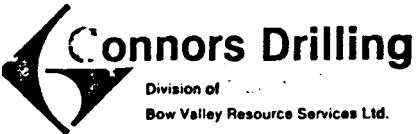
(e) Living Expenses

|   |                       |          |
|---|-----------------------|----------|
| R. G. Simpson for the week ended Dec. 15/79 | \$ 21.90              |          |
| Jan. 5/80                                   | 12.51                 |          |
| Jan. 12/80                                  | <u>42.00</u>          |          |
|   | TOTAL LIVING EXPENSES | \$ 76.41 |

|                              |             |
|------------------------------|-------------|
| TOTAL BETHLEHEM EXPENDITURES | \$ 6,689.91 |
| TOTAL PROJECT EXPENDITURES   | \$53,679.78 |
| TOTAL DRILLING               | 409.7 m     |
| AVERAGE COST/METRE           | \$ 131.02   |

3. Cost Distribution

| <u>Claim</u> | <u>Hole No.</u> | <u>Length<br/>(metres)</u> | <u>Cost</u>  |
|--------------|-----------------|----------------------------|--|
| LOG 1        | L-79-5          | 203.3                      | \$26,636.81  |
| LOG 2        | L-79-6          | 206.4                      | <u>\$27,042.97</u><br>\$56,679.78<br><u>801230</u><br><u>6469208</u> |



205 - 1201 WEST PENDER STREET, VANCOUVER, B.C. CANADA V6E 2V2  
AREA CODE 604/683 - 2222

Job 22-908

Bethlehem Copper Corporation  
2100 Guiness Tower  
1055 West Hastings Street  
Vancouver, B.C.  
V6E 2H8

INVOICE NO: 9964  
DATE: January 2, 1980

SURFACE DIAMOND DRILLING  
MISSOULA LAKE, B.C.  
DECEMBER 4 - 23, 1979

| FOOTAGE FEE |                         |             |                 |
|-------------|-------------------------|-------------|-----------------|
| D.D.        | Hole #79- <del>45</del> | 0 - 302'    | 302' @ 20.50    |
|             | #79-6                   | 0 - 677'    | 677' @ lump sum |
|             |                         |             | 979'            |
| Credit:     |                         | 23' @ 24.00 |                 |
|             |                         |             | 6,191.00        |
|             |                         |             | 17,000.00       |
|             |                         |             | 23,191.00       |
|             |                         |             | (552.00)        |
|             |                         |             | 22,639.00       |

| FIELD COST WORK |       |          |            |  |
|-----------------|-------|----------|------------|--|
| DATE            | SHIFT | MAN HRS. | DRILL HRS. | REMARKS  |
| Dec. 5/79       | Day   | 9        | 0          | Clearing road to drill site with power saw                 |
| 6               | "     | 10       | 5          | Looking for water  |
| 7               | "     | 4        | 2          | Wait for water   |
| 10              | "     | 8        | 4          | " " " } delete - discussed with Dick Griffiths - Jan. 8/80 |
|                 |       | 19       | 5          |  |

Total man hours 19 ~~5~~ @ 22.50  
Total drill hours 5 ~~11~~ @ 20.00

697.50 \$427.50 / 527.50 /  
220.00 \* 100.00 / 917.50 /

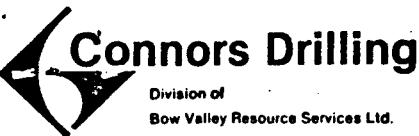
23,556.50

reduce 1979 → \$22826.50  
by

23,166.50

14-938  
JF  
9964

pay - May 1, 80



205 - 1201 WEST PENDER STREET, VANCOUVER, B.C. CANADA V6E 2V2  
AREA CODE 604/683 - 2222

JAN - 9 1980

Job 22-908

Bethlehem Copper Corporation  
2100 Guinness Tower  
1055 West Hastings Street  
Vancouver, B.C.  
V6E 2H8

INVOICE NO: 9983  
DATE: January 8, 1980

SURFACE DIAMOND DRILLING  
MISSOULA LAKE, B.C.  
DECEMBER 31, 1979

THIRD PARTY CHARGE (copy attached)

Harla Water Service statement

3,600.00  
Plus 15% 540.00

4,140.00

(1979 Account)

A/P

14-938

AA

9983

## STATEMENT

HARLA WATER SERVICE  
Box 2566  
MERRITT, B.C.

DATE Dec 31 1979  
Connors Drilling Ltd  
Box 1637 MERRITT B.C.

| DATE | DETAILS                  | DEBIT     | CREDIT | BALANCE |
|------|--------------------------|-----------|--------|---------|
|      | WATER TRUCK              |           |        |         |
|      | RENTAL                   |           |        |         |
|      | 18 days @ 200.00 per day |           |        |         |
|      | AMOUNT OWING             | \$3600.00 |        |         |
|      |                          |           |        |         |
|      |                          |           |        |         |
|      |                          |           |        |         |
|      |                          |           |        |         |
|      |                          |           |        |         |
|      |                          |           |        |         |



Suite 205, 1201 West Pender Street - Vancouver, B.C., Canada V6E 2V2

Dec 31 1979

TO Harla Water Service  
Box 2566  
Merritt

PLEASE DELIVER TO US AT

VIA

| QUAN. | DESCRIPTION (Goods or Services)            | PART NO. | PRICE   |
|-------|--|----------|---------|
|       | Water truck w/1 operator at 200.00 per day |          |         |
|       | for 18 days                                |          | 3600.00 |
|       | rebill <u>plus 15.00</u>                   |          |         |
|       |  |          |         |
|       |  |          |         |
|       |  |          |         |
|       |  |          |         |
|       |  |          |         |
|       |  |          |         |
|       |  |          |         |

3600

R.M.H.

# Connors Drilling

Division of  
Bow Valley Resource Services Ltd.

205 - 1201 WEST PENDER STREET, VANCOUVER, B.C. CANADA V6E 2V2  
AREA CODE 604/683 - 2222

Job 22-908

Bethlehem Copper Corporation  
2100 - 1055 West Hastings Street  
Vancouver, B.C.  
V6E 2H8

INVOICE NO: 10018  
DATE: January 30, 1980

SURFACE DIAMOND DRILLING  
MISSOULA LAKE, B.C.  
JANUARY 1 - 17, 1980

FOOTAGE FEE

|                   |            |                   |            |
|-------------------|------------|-------------------|------------|
| D.D. Hole #L-79-5 | 0 - 302'   | 302' @ Field Cost |            |
|                   | 302 - 677' | 375' @ 20.50      |            |
|                   |            | 677'              | 7,687.50 - |

| <u>FIELD COST WORK</u> |              |                   |   |
|------------------------|--------------|-------------------|---|
| <u>DATE</u>            | <u>SHIFT</u> | <u>SHIFT HRS.</u> | <u>REMARKS</u>                          |
| Jan. 3/80              | Day          | 5                 | Moving to hole L-79-5                   |
| 4                      | "            | 10                | Finish moving & set up                  |
| 5                      | "            | 2 $\frac{1}{2}$   | Reamed HQ & HW to 16'                   |
| "                      | "            | 7                 | Move storage tanks & haul water         |
| "                      | Night        | 10                | Reaming 16 - 82'                        |
| 6                      | Day          | 10                | " 82 - 162'                             |
| "                      | Night        | 10                | " 162 - 262'                            |
| 7                      | Day          | 9                 | " HQ - NW                               |
| "                      | Night        | 10                | " and fishing for core barrel           |
| 8                      | Day          | 8                 | " rods to 302'                          |
| "                      | "            | 1                 | Change mud and flush hole               |
| 11                     | "            | 6 $\frac{1}{2}$   | Fighting sand fault                     |
| "                      | Night        | 6                 | Recovering H casing                     |
| 14                     | Day          | 4                 | Attempt to reach drill, arrange for cat |
| 15                     | "            | 3                 | Wait for road to be cleared             |
|                        |              |                   | - 102 shift hours @ 65.00               |

6,630.00 -

10018

Job 22-908

Bethlehem Copper Corporation  
 2100 - 1055 West Hastings Street  
 Vancouver, B.C.  
 V6E 2H8

INVOICE NO: 10018  
 DATE: January 30, 1980

- 2 -

SUPPLIES CONSUMED ON FIELD COST

|  |                 |
|--|-----------------|
| 1 - HW casing shoe #12212                      | 411.88          |
| 1 - HQ core bit #22000                         | 821.04          |
| 1 - HQ reaming shell #7U7965 (@ 50% of 439.09) | 219.55          |
| 1 - HW casing shoe #13027 (@ 50% of 411.88)    | 205.94          |
| 1 - sub NW/C pin to HQ rod box                 | 59.75           |
| 56 - 2# bags Quick Trol @ 7.80                 | 436.80          |
| 11 - 50# bags Quick Gel @ 4.80                 | 52.80           |
| 2 - 50# bags CC-16 @ 25.00                     | 50.00           |
|  | <u>2,257.76</u> |
| 4% tax (on sub & mud)                          | 23.97           |
| Freight on mud; 762# @ 3.64c                   | 27.74           |
|  | <u>2,309.47</u> |
| Plus 15%                                       | <u>346.42</u>   |
|  | 2,655.89        |

WATER TRUCK RENTAL (copy attached)

|                               |               |
|-------------------------------|---------------|
| Harla Water Service statement | 1,600.00      |
| Plus 15%                      | <u>240.00</u> |
|                               | 1,840.00      |

D6 CAT CHARGES

|            |                  |                  |
|------------|------------------|------------------|
| Dec. 10/79 | 9 hours          |                  |
| Jan. 15/80 | 8 "              |                  |
|            | 17 hours @ 44.50 | 756.50           |
|            | Plus 15%         | <u>113.48</u>    |
|            |                  | 869.98           |
|            |                  | <u>19,683.37</u> |

 14-938  


## STATEMENT

HARRIS WATER SERVICE  
Box 2566  
MERRITT, B.C.

|          |        |    |
|----------|--------|----|
| RECEIVED | JAN 21 | 80 |
| 1/22/80  |        |    |
| DATE     |        |    |

Connors Drilling Ltd.  
Box 1657 MERRITT, B.C.

| DATE    | DETAILS                 | CREDIT        | CREDIT   | BALANCE        |
|---------|-------------------------|---------------|----------|----------------|
|         | WATER TRUCK<br>RENTAL.  |               |          |                |
|         | 8 days @ 200.00 per day |               |          |                |
|         | AMOUNT OWING            |               |          | <u>1600.00</u> |
| 22/5/80 | ACCT. NO. 408           | EQ-LIN C.I.S. | CONTRACT | AMOUNT         |
|         | 5014                    |               |          | 1600.00        |
|         |                         |               |          | 0.00           |
|         |                         |               |          | X4             |
|         |                         |               |          | 51             |
|         | EXTENSIONS: 0.00        |               |          |                |
|         | VOUCHER NO.             |               |          |                |

S D101

|                      |  |     |         |
|----------------------|--|-----|---------|
| 13164                |  | PER | R. Jaff |
|                      |  |     |         |
| FIELD PURCHASE ORDER |  |     |         |

## Connors Drilling

Division of  
Bow Valley Resource Services Ltd.

Suite 205, 1201 West Pender Street - Vancouver, B.C., Canada V6E 2V2

*D*

ec. 10

19 79

TO

TEBIWAY CONTRACTING LTD.

P.O. BOX 435

PRINCETON, B.C.

Baths... Mine

PLEASE DELIVER TO US AT

VIA

| QUAN. | DESCRIPTION (Goods or Services) | PART NO. | PRICE |
|-------|---------------------------------|----------|-------|
|       | per hr                          |          |       |
|       | Road Gravel                     |          | 44.50 |
|       | D.G.C.                          |          |       |
|       | 9 hrs                           |          |       |
|       | CHARGE TO CLIENT                |          |       |
|       |                                 |          |       |
|       |                                 |          |       |
|       |                                 |          |       |
|       |                                 |          |       |
|       |                                 |          |       |
|       |                                 |          |       |
|       |                                 |          |       |
|       |                                 |          |       |

PROJECT NO.  
22-908

CONNORS DRILLING

PER *ch. Westmark*

13121

FIELD PURCHASE ORDER



SECTION C - STATEMENT OF QUALIFICATIONS

RONALD GRAHAM SIMPSON

1. Attended the University of British Columbia and graduated in May 1975 with a B.Sc. degree in Geology.
2. Employed by the Geological Survey of Canada in their Vancouver office from May 1975 to April 1976.
3. Commenced employment with Bethlehem Copper Corporation in April 1976 and has been continuously employed by this firm and involved in the following activities:-
  - (a) Summer 1976 - Exploration geologist attached to the Bear-Twit Project, a diamond drilling venture in the MacKenzie Mountains of the Northwest Territories.
  - (b) Fall 1976 - Project Geologist on a percussion drilling program in West-central BC.
  - (c) Winter-Spring 1977 - Project Geologist on a diamond drilling program at Bethlehem's Highland Valley copper mine.
  - (d) Summer 1977 - Project Geologist in charge of the Plateau Joint Venture, a large scale regional program in the Taseko Lakes area of south-central BC.
  - (e) Fall 1977 - Project Geologist in charge of a percussion drilling program in the Nadina Lake area of West-central BC.
  - (f) Summer 1978 - In charge of the second phase of the Plateau Project (see (d)).
  - (g) Sept. 1978 to May 1979 - Project Geologist on a diamond drilling program at Bethlehem's Highland Valley operations.
  - (h) May 1979 to Oct. 1979 - Project Geologist in charge of the Guichon Project, a regional program in the general Highland Valley area.

## SECTION D - MINERAL TITLE

Property: Missezula Lake Project      Mining Division: Nicola

| Name of Claim         | Record Number                 | Metal Tag Number | Date Recorded | Expiry Date   |
|-----------------------|-------------------------------|------------------|---------------|---------------|
| LOG # 1<br>(12 units) | 26 (8)<br>\$2400 Annual Work; | 06803            | Aug. 28, 1975 | Aug. 28, 1987 |
| LOG # 2<br>(16 units) | 27 (8)<br>\$3200 Annual Work; | 06804            | Aug. 28, 1975 | Aug. 28, 1986 |
| LOG # 3<br>(12 units) | 28 (8)<br>\$2400 Annual Work; | 06805            | Aug. 28, 1975 | Aug. 28, 1986 |
| LOG # 4<br>(16 units) | 29 (8)<br>\$3200 Annual Work; | 06806            | Aug. 28, 1975 | Aug. 28, 1987 |

SECTION E - DRILL HOLE DATA

Drill Hole Record

Drill Hole Logs - L-79-5  
L-79-6

Laboratory Reports

BETHLEHEM COPPER CORPORATION — DRILL HOLE RECORD

PROJECT: MISSEZULA LAKE  
DRILL TYPE: DIAMOND

**FIELD SUPERVISOR:** JON COLLINS, RON SIMPSON  
**PROPERTY LOCATION:** 3 km west of Missoula Lake at Ketchan L



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### DIAMOND DRILL HOLE LOG

Latitude: 100, 150 N

Hole No. I-79-5

Departure: 99,400 E

Commenced: Dec. 6, 1979

Elevation: 1290 m

Completed: Jan 11, 1980

Length: 667'

Logged by: R.G.S.

Overburden: 12'

Sheet No. 1 of 10

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         |    |    |    | ALTERATION |   | VEINING                             |  | FAULTS        |   | RQD |  | CORE REC. |  | HOLE DEPTH |         | ASSAYS  |         |                  | GRAPHIC LOG |   |                                       |
|--|----------------|----------------|---------|----|----|----|------------|---|-------------------------------------|--|---------------|---|-----|--|-----------|--|------------|---------|---------|---------|------------------|-------------|---|---------------------------------------|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms | Cl | Ep |            |   |                                     |  | Frac.<br>Den. | % |     |  | %         |  |            | Tag No. | Cu<br>% | Mo<br>% | Au<br>Oz<br>/Ton |             | X | REMARKS                               |
| 0 - 12 Overburden  |                |                |         |    |    |    |            |   | Thin CA stringers common @ 45 & 30° |  | M             |   | 97  |  |           |  | 12         |         |         |         |                  |             |   | Limonite coating                      |
| NICOLA GROUP 12 - 95   |                |                |         |    |    |    |            |   | "                                   |  | M             |   | 97  |  |           |  | to         | .02     | -       |         |                  |             |   | fractures, mainly jarosite & goethite |
| Mainly interbedded tuffs and coarser volcaniclastics. Moderate bedding dips approx - 45°   |                |                |         |    |    |    |            |   | "                                   |  | M             |   | 97  |  |           |  | 20         |         |         |         |                  |             |   | "                                     |
|  |                |                |         |    |    |    |            |   |                                     |  | -S            |   |     |  |           |  | 30         |         |         |         |                  |             |   |                                       |
| 12 - 55 Med to dark grey, fine grained volcaniclastic. Faint bedding and sedimentary structures. Py (slumping, rip-up clasts) are evident locally. Bedding @ 45° right way up. |                |                |         |    |    |    |            |   | "                                   |  | M             |   | 98  |  |           |  | 9002       |         |         |         |                  |             |   | "                                     |
|  |                |                |         |    |    |    |            |   |                                     |  | M             |   | 98  |  |           |  | 30         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  | -S            |   |     |  |           |  | to         | .01     | -       | tr      |                  |             |   | "                                     |
|  |                |                |         |    |    |    |            |   |                                     |  |               |   |     |  |           |  | 40         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  |               |   |     |  |           |  | to         | .02     | -       |         |                  |             |   | Py on fractures                       |
| 55 - 57 Gradation to mottled grey-green andesitic rock.  |                |                |         |    |    |    |            |   | "                                   |  | M             |   | 95  |  |           |  | 50         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  | -S            |   |     |  |           |  |            |         |         |         |                  |             |   |                                       |
| 57 - 89 Fine-grained, mottled grey-(Py) green andesite, tuffaceous in part w/ occasional rounded mafic ppy fragments. Lower contact sharp irregular and poorly defined.        |                |                |         |    |    |    | M          | W | "                                   |  | M             |   | 98  |  |           |  | 50         |         |         |         |                  |             |   | "                                     |
|  |                |                |         |    |    |    |            |   |                                     |  | M             |   | 98  |  |           |  | to         | .01     | -       |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  | -S            |   |     |  |           |  | 60         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  |               |   |     |  |           |  | to         | .01     | -       |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   | Thin CA & CL str's common           |  | W             |   |     |  |           |  | 60         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  | M             |   | 99  |  |           |  | 70         |         |         |         |                  |             |   |                                       |
| 89 - 93 Lithic tuff; med to light grey, fine to med gr. tuffaceous sediment containing lithic fragments  |                |                |         |    |    |    | M          | W |                                     |  | M             |   | 97  |  |           |  | 70         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  | -S            |   |     |  |           |  | to         | .01     | -       |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  |               |   |     |  |           |  | 80         |         |         |         |                  |             |   |                                       |
|  |                |                |         |    |    |    |            |   |                                     |  |               |   |     |  |           |  | 9007       |         |         |         |                  |             |   |                                       |



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### DIAMOND DRILL HOLE LOG

| GENERAL DESCRIPTION<br>(Geology)  |                |                |         |    |    |    | VEINING                       |       |               | FAULTS |      |         | RQD     | CORE    | HOLE        | ASSAYS       |   |                   | GRAPHIC LOG                               |   |
|---|----------------|----------------|---------|----|----|----|-------------------------------|-------|---------------|--------|------|---------|---------|---------|-------------|--------------|---|-------------------|---|---|
|   | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms | Cl | Ep |                               |       | Frac.<br>Den. | %      | REC. | DEPTH   | TAG NO. | Cu<br>% | Mo<br>%     | Au<br>Oz/ton |   | REMARKS           |   |   |
|   | Property       |                |         |    |    |    | Az.                           | Dip:  | Elevation:    |        |      | Length: |         |         | Overburden: |              |   | Sheet No. 2 of 10 |   |   |
|   | Area:          |                |         |    |    |    | Horiz.                        | Vert. |               |        |      |         |         |         |             |              |   |                   |   |   |
| Purpose:  |                |                |         |    |    |    |                               |       |               |        |      |         |         |         |             |              |   |                   |   |   |
| up' to 1 mm in diameter   |                |                |         |    |    |    | QZ-CA str <sup>s</sup> family |       |               |        |      | 80      |         |         |             |              |   |                   |   |   |
| 93 - 95 As above but w/ interbeds<br>of pale green tuff and coarser<br>volcaniclastics @ 45° w/ pale,<br>coarse, angular fragments<br>present.  |                |                |         | M  | W  |    | common                        |       |               | M      |      | 95      |         |         |             | Missing      |   |                   |   |   |
| NICOLA DIORITE (?) 95 - 649.5   |                |                |         | S  | M  |    | EP & CL veining               |       |               |        |      | 90      |         |         |             |              |   |                   |   |   |
| 95 - 147.5 Hornblende (?) Prophyry<br>Dark green fine grained andesite<br>containing HB (?) laths ~ 2 mm<br>exhibiting a slight preferred<br>orientation @ 45° to core axis.<br>Chlorite and epidote alteration<br>obscures original texture. |                |                |         | -S |    |    | Few CA str <sup>s</sup>       |       |               | M      |      | 97      |         |         |             | .01          | - |                   | Red, earthy HE<br>on fractures<br>locally |   |
| 147.5 - 154 As above but weaker<br>HB phenocryst development  |                |                |         | S  | M  |    | "                             |       |               | W      |      | 99      |         |         |             | 110          |   | -                 | "   |   |
|   |                |                |         | S  | S  |    | "                             |       |               | -M     |      |         |         |         |             | 120          |   | .01               | -   | " |
|   |                |                |         | S  | S  |    | CL, EP, CA veining            |       | 133-135       |        |      | 130     |         |         |             |              |   |                   |   | " |
|   |                |                |         |    |    |    | strong                        |       | Fault zone S  |        |      | 95      |         |         |             | .01          | - |                   |   |   |
|   |                |                |         |    |    |    | shears                        |       |               |        |      |         |         |         |             |              |   |                   |   |   |
|   |                |                |         |    |    |    | common                        |       |               |        |      |         |         |         |             |              |   |                   |   |   |
|   |                |                |         |    |    |    | small shears                  |       |               |        |      | 140     |         |         |             | .01          | - |                   |   |   |
|   |                |                |         |    |    |    | common                        |       |               | S      |      | 95      |         |         |             |              |   |                   |   |   |



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### DIAMOND DRILL HOLE LOG

|             |                   |
|-------------|-------------------|
| Latitude:   | Hole No. I-79-5   |
| Departure:  | Commenced:        |
| Elevation:  | Completed:        |
| Length:     | Logged by:        |
| Overburden: | Sheet No. 3 of 10 |

| GENERAL DESCRIPTION<br>(Geology)  | SULPHIDES      |                |         | ALTERATION |    |    | VEINING                                  |                           | FAULTS  |               | RQD       |           | CORE    | HOLE    | ASSAYS  |              |  | GRAPHIC LOG |  |
|---|----------------|----------------|---------|------------|----|----|--|---------------------------|---------|---------------|-----------|-----------|---------|---------|---------|--------------|--|-------------|--|
|   | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |  |                           |         | Frac.<br>Den. | %         | REC.      | DEPTH   | Cu<br>% | Mo<br>% | Au<br>OZ/ton |  |             |  |
|   |                |                |         |            |    |    |  |                           |         |               |           |           | TAG NO. |         |         |              |  | REMARKS     |  |
| 154 - 371 HB (?) - FP Porphyry<br>Fine gr. diorite to andesite,<br>Dark green w/ FP & mafic phenos<br>2 mm in variable proportions.<br>Strong chlorite - epidote alt- |                |                |         | S          | S  |    | CL, EP, CA veining<br>common @ 45° & 75° | strongly<br>sheared       | S       |               | 98        | 150<br>to | .01     | -       |         |              |  |             |  |
|   |                |                |         |            |    |    |  |                           |         |               |           | 9105      |         |         |         |              |  |             |  |
|   |                |                |         | S          | S  | "  |  | few<br>shears             | S       | 98            | 160<br>to | .01       | -       | tr      |         |              |  |             |  |
| 190.5 Faint foliation @ 45°   |                |                |         |            |    |    |  |                           |         |               | 170<br>to |           |         |         |         |              |  |             |  |
| 210 - 250 Same as above but<br>med. grey colour   |                |                |         | S          | S  | "  |  |                           | M       | 98            |           | .02       | -       |         |         |              |  |             |  |
|   |                |                |         | S          | S  | "  |  | 182.5-190<br>Fault zone S |         | 80            | 180<br>to | .02       | -       |         |         |              |  |             |  |
|   |                |                |         | -VS        |    |    |  | subparallel<br>to core    |         |               |           |           |         |         |         |              |  |             |  |
|   |                |                |         |            |    |    |  | 192-196<br>shear zone S   |         | 90            | 190<br>to | .01       | -       |         |         |              |  |             |  |
|   |                |                |         |            |    |    | 195' OZ vlets @ 45°                      | 45° (2)                   |         |               |           |           |         |         |         |              |  |             |  |
|   |                |                |         |            |    |    | CL - CA - EP<br>veining common           | strongly<br>sheared       | M<br>-S | 95            | 200<br>to | .01       | -       |         |         |              |  |             |  |
|   |                |                |         | S          | S  | "  |  | "                         | M<br>-S | 97            | 210<br>to | .01       | -       |         |         |              |  |             |  |
|   |                |                |         |            |    |    |  |                           |         |               | 9021      |           |         |         |         |              |  |             |  |



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### DIAMOND DRILL HOLE LOG

Latitude: Hole No. L-79-5  
 Departure: Commenced:  
 Elevation: Completed:  
 Length: Logged by:  
 Overburden: Sheet No. 4 of 10

| GENERAL DESCRIPTION<br>(Geology)                        | SULPHIDES      |                |         | ALTERATION |     |    | VEINING   |                       | FAULTS     |    | RQD           |    | CORE      | HOLE  | ASSAYS  |         |         | GRAPHIC LOG |  |
|---|----------------|----------------|---------|------------|-----|----|---|-----------------------|------------|----|---------------|----|-----------|-------|---------|---------|---------|-------------|--|
|   | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl  | Ep |   |                       |            |    | Frac.<br>Den. | %  | REC.<br>% | DEPTH | TAG NO. | Cu<br>% | Mo<br>% |             |  |
|   |                |                |         |            |     |    | CL, EP, CA veining<br>common                                | 222-223<br>shear zone | S          |    | 96            |    | 220       | to    | .01     | -       |         |             |  |
|   |                |                |         | S          | S   |    |   |                       |            |    |               |    | 9022      |       |         |         |         |             |  |
|   |                |                |         |            |     |    |   |                       |            |    |               |    | 230       | to    | .01     | -       |         |             |  |
|   |                |                |         | S          | M   |    | CA str <sup>S</sup> common,<br>few CL & EP str <sup>S</sup> |                       | S          |    | 97            |    |           |       |         |         |         |             |  |
| 250 - 304 Strongly chloritized,<br>epidotized & sheared |                |                |         | S          | S   |    | EP veining common<br>CA str- common                         | 249-253<br>shattered  | S          |    | 85            |    | 240       | to    | -       | -       |         |             |  |
|   |                |                |         |            |     |    |   |                       |            |    |               |    |           |       |         |         |         |             |  |
|   |                |                |         | S          | S   | "  |   | 257-271               |            |    |               |    | 250       | to    | .01     | -       |         |             |  |
|   |                |                |         | -VS        | -VS |    |   |                       | shear zone | VS |               | 75 |           |       |         |         |         |             |  |
|   |                |                |         |            |     |    |   |                       |            |    |               |    | 260       | to    | .02     | -       |         |             |  |
|   |                |                |         |            |     |    |   |                       |            | VS |               | 45 |           |       |         |         |         |             |  |
|   |                |                |         |            |     |    |   | "                     |            |    |               |    | 270       | to    | .01     | -       |         |             |  |
|   |                |                |         |            |     |    |   |                       |            | S  |               | 90 |           |       |         |         |         |             |  |
|   |                |                |         | VS         | VS  |    |   |                       |            |    |               |    | 280       | to    | .01     | -       |         |             |  |
|   |                |                |         | VS         | VS  |    | "   | strong<br>shearing    | S          |    | 90            |    |           |       |         |         |         |             |  |
|   |                |                |         |            |     |    |   |                       |            |    |               |    | 9028      |       |         |         |         |             |  |



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### DIAMOND DRILL HOLE LOG

|            |          |                   |
|------------|----------|-------------------|
| Latitude:  | Hole No. | L-79-5            |
| Departure: |          |                   |
| Commenced: |          |                   |
| Elevation: |          |                   |
| Completed: |          |                   |
| Horiz.     | Vert.    | Length:           |
| Purpose:   |          | Overburden:       |
|            |          | Sheet No. 5 of 10 |

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         | ALTERATION |    |    | VEINING  |  | FAULTS |               | RQD | CORE      | HOLE                     | ASSAYS  |         |              | GRAPHIC LOG |         |
|--|----------------|----------------|---------|------------|----|----|--|--|--------|---------------|-----|-----------|--------------------------|---------|---------|--------------|-------------|---------|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |  |  |        | Frac.<br>Den. | %   | REC.<br>% | DEPTH<br>TAG NO.         | Cu<br>% | Mo<br>% | Au<br>OZ/ton | X           | REMARKS |
| 298' core barred twisted off in loose, caving ground - hole temporarily abandoned on Dec. 11/79  |                |                |         |            | VS | VS | Strong EP & CL veining                           |  |        | S             | 95  |           | 290<br>to<br>298<br>9029 | .01     | -       |              |             |         |
| Jan. 5, 1980<br>Hole reamed to 290 w/ HQ bit, core barrel retrieved & coring w/ NQ   |                |                |         | S          | S  |    | few EP & CL str <sup>s</sup>                     |  |        | VS            | 95  |           | 299<br>to<br>310<br>9082 | .02     | -       |              |             |         |
| VS   |                |                |         | -S         |    |    | "  |  |        | M             | 97  |           | 310<br>to<br>320<br>9083 | .01     | -       |              |             |         |
| 304 - 333 Dark green to grey fine gr/ diorite to andesite variably FP & HB ppytic w/ strong EP-CL alt-   |                |                |         | M          | M  |    | Thin CA & QZ str <sup>s</sup>                    |  |        | S             | 90  |           | 330<br>to<br>9084        | .01     | -       |              |             |         |
|  |                |                |         | -S         | -S |    | common, few EP vlets & str <sup>s</sup>          |  |        | M             | 96  |           | 340<br>to<br>9085        | .01     | -       |              |             |         |
| 333 - 343 v. strong EP veining & alteration, mod-strong CL <sup>n</sup>  |                |                |         | -S         | -S |    | EP str <sup>s</sup> & vlets abundant w/ QZ       |  |        | -S            |     |           | 350<br>to<br>9086        | .01     | -       | tr           |             |         |
|  |                |                |         | M          | M  |    | assoc. Most @ 60-80°                             |  |        | M             | 97  |           | 360<br>to<br>9087        | .01     | -       |              |             |         |
| 343 - 371 Less EP veining QZ - CA str <sup>s</sup> common  |                |                |         | -S         | VS |    | EP & QZ - CA str <sup>s</sup> common, few EP     |  |        | -S            |     |           |                          |         |         |              |             |         |
| 371 - 570 Fine gr. diorite Dark green, massive, fairly uniform appearance. Original texture rendered indistinct by propylitic alt <sup>n</sup> (CL & EP) FP ppytic sections occur locally but are not distinct |                |                |         | S          | VS |    | Thin QZ-CA str <sup>s</sup> common, few EP vlets |  |        | M             | 97  |           |                          |         |         |              |             |         |



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### DIAMOND DRILL HOLE LOG

Latitude: \_\_\_\_\_ Hole No. I-79-5  
 Departure: \_\_\_\_\_ Commenced: \_\_\_\_\_  
 Elevation: \_\_\_\_\_ Completed: \_\_\_\_\_  
 Length: \_\_\_\_\_ Logged by: \_\_\_\_\_  
 Overburden: \_\_\_\_\_ Sheet No. 6 of 10

| GENERAL DESCRIPTION<br>(Geology) | SULPHIDES      |                |         | ALTERATION |    |    | VEINING                  |                         | FAULTS        |   | RQD       |                       | CORE                      | HOLE    | ASSAYS       |     |         | GRAPHIC LOG |  |  |
|----------------------------------|----------------|----------------|---------|------------|----|----|--------------------------|-------------------------|---------------|---|-----------|-----------------------|---------------------------|---------|--------------|-----|---------|-------------|--|--|
|                                  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |                          |                         | Frac.<br>Den. | % | REC.<br>% | DEPTH<br>—<br>TAG NO. | Cu<br>%                   | Mo<br>% | Au<br>oz/ton | X   | REMARKS |             |  |  |
|                                  |                |                |         |            |    |    | EP & QZ str <sup>S</sup> | common                  |               |   | M         | 97                    | 360                       | to      | .01          | -   |         |             |  |  |
|                                  |                |                |         | M          | S  |    |                          |                         |               |   |           | 9088                  |                           |         |              |     |         |             |  |  |
|                                  |                |                |         | -S         |    |    |                          |                         |               |   |           |                       | 370                       | to      | .01          | -   |         |             |  |  |
|                                  |                |                |         |            |    |    | Thin CA, QZ & EP         | str <sup>S</sup> common |               |   | S         | 90                    |                           |         |              |     |         |             |  |  |
|                                  |                |                |         | M          | M  |    |                          |                         |               |   |           |                       | 380                       | to      | .01          | -   |         |             |  |  |
|                                  |                |                |         | -S         | -S |    |                          |                         |               |   |           |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         |            |    |    | "                        |                         |               |   | M         | 85                    |                           |         |              |     |         |             |  |  |
|                                  |                |                |         | M          | M  |    |                          |                         |               |   | -S        |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         | -S         | -S |    |                          |                         |               |   |           |                       | 390                       | to      | .01          | -   |         |             |  |  |
|                                  |                |                |         |            |    |    | "                        | 396 minor               |               |   |           |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         | M          | M  |    |                          | gouge @50'              | M             |   | 98        |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         | -S         | -S |    |                          |                         |               |   |           |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         |            |    |    | "                        | "                       |               |   | M         | 95                    | 400                       | to      | .01          | -   | tr      |             |  |  |
|                                  |                |                |         |            |    |    | "                        | "                       |               |   |           |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         |            |    |    | "                        | "                       |               |   | M         | 97                    | 410                       | to      | .01          | -   |         |             |  |  |
|                                  |                |                |         |            |    |    | "                        | "                       |               |   |           |                       |                           |         |              |     |         |             |  |  |
|                                  |                |                |         |            |    |    | "                        | "                       |               |   |           |                       | 422-23                    |         |              |     |         |             |  |  |
|                                  |                |                |         |            |    |    |                          |                         |               |   |           |                       | Gouge sections<br>@ ~ 50' | 96      | 420          | .01 | -       |             |  |  |
|                                  |                |                |         |            |    |    |                          |                         |               |   |           |                       | M                         | 9094    | .            | .   | .       |             |  |  |
|                                  |                |                |         |            |    |    |                          |                         |               |   |           |                       | -S                        |         |              |     |         |             |  |  |



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## DIAMOND DRILL HOLE LOG

| DIAMOND DRILL HOLE LOG |        |       | Latitude:   | Hole No. L-79-5   |
|------------------------|--------|-------|-------------|-------------------|
| Property               | Az.    | Dip:  | Departure:  | Commenced:        |
| Area:                  | Horiz. | Vert. | Elevation:  | Completed:        |
| Purpose:               |        |       | Overburden: | Sheet No. 7 of 10 |



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### DIAMOND DRILL HOLE LOG

|             |                   |
|-------------|-------------------|
| Latitude:   | Hole No. I-79-5   |
| Departure:  | Commenced:        |
| Elevation:  | Completed:        |
| Length:     | Logged by:        |
| Overburden: | Sheet No. 8 of 10 |

| GENERAL DESCRIPTION<br>(Geology) | SULPHIDES      |                |         | ALTERATION |    |    | VEINING                         |  | FAULTS |               | ROD |      | CORE    | HOLE    | ASSAYS  |              |  | GRAPHIC LOG |  |         |
|----------------------------------|----------------|----------------|---------|------------|----|----|---------------------------------|--|--------|---------------|-----|------|---------|---------|---------|--------------|--|-------------|--|---------|
|                                  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |                                 |  |        | Frac.<br>Den. | %   | REC. | DEPTH   | Cu<br>% | Mo<br>% | Au<br>oz/ton |  |             |  | REMARKS |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | TAG NO. |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | 500     |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | EP-QZ vlets common              |  |        |               |     |      | to      | .01     | -       | .007         |  |             |  |         |
|                                  |                |                |         |            |    |    | EP & QZ str <sup>s</sup> common |  |        |               |     |      | 9107    |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | 510     |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | to      | .01     | -       |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | —       |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | 520     |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | to      | .02     | -       |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | —       |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | 530     |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | to      | .01     | -       |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | —       |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | 540     |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | to      | .02     | -       |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | —       |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | 550     |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | to      | .01     | -       |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | —       |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | 560     |         |         |              |  |             |  |         |
|                                  |                |                |         | S          | S  |    | "                               |  |        |               |     |      | to      | .01     | -       |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | —       |         |         |              |  |             |  |         |
|                                  |                |                |         |            |    |    |                                 |  |        |               |     |      | 9108    |         |         |              |  |             |  |         |



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### DIAMOND DRILL HOLE LOG

|             |                   |
|-------------|-------------------|
| Latitude:   | Hole No. I-79-5   |
| Departure:  | Commenced:        |
| Elevation:  | Completed:        |
| Length:     | Logged by:        |
| Overburden: | Sheet No. 9 of 10 |

| GENERAL DESCRIPTION<br>(Geology) | SULPHIDES      |                |         | ALTERATION |    |    | VEINING   |  | FAULTS        |   | RQD       | CORE  | HOLE    | ASSAYS  |         |              | GRAPHIC LOG |         |
|----------------------------------|----------------|----------------|---------|------------|----|----|---|--|---------------|---|-----------|-------|---------|---------|---------|--------------|-------------|---------|
|                                  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |   |  | Frac.<br>Den. | % | REC.<br>% | DEPTH | TAG NO. | Cu<br>% | Mo<br>% | Au<br>oz/tbn |             | REMARKS |
|                                  |                |                |         |            |    |    |   |  |               |   |           |       | 570     |         |         |              |             |         |
|                                  |                |                |         |            |    |    |   |  |               |   |           |       | to      | .01     | -       |              |             |         |
|                                  |                |                |         | S          | S  |    | EP-QZ vlets common;<br>QZ-CA & EP str <sup>S</sup> common       |  | W             |   | 98        |       |         |         |         |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  | -M            |   |           |       | 9109    |         |         |              |             |         |
|                                  |                |                |         |            |    |    |   |  |               |   |           |       | 580     |         |         |              |             |         |
|                                  |                |                |         |            |    |    |   |  | W             |   | 99        |       | to      | .01     | -       |              |             |         |
|                                  |                |                |         |            |    |    |   |  |               |   |           |       |         |         |         |              |             |         |
|                                  |                |                |         |            |    |    |   |  |               |   |           |       | 590     |         |         |              |             |         |
|                                  |                |                |         |            |    |    | few EP & QZ vlets<br>EP, QZ & CA str <sup>S</sup> fairly common |  | W             |   | 99        |       | to      | .02     | -       |              |             |         |
|                                  |                |                |         |            |    |    | "   |  |               |   |           |       |         |         |         |              |             |         |
|                                  |                |                |         |            |    |    |   |  |               |   |           |       | 600     |         |         |              |             |         |
|                                  |                |                |         | S          | M  | "  |   |  | W             |   | 99        |       | to      | .03     | -       | tr           |             |         |
|                                  |                |                |         | -S         |    |    |   |  |               |   |           |       |         |         |         |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  | W             |   | 99        |       | 610     |         |         |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  |               |   |           |       | to      | .02     | -       |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  |               |   |           |       | 620     |         |         |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  | W             |   | 99        |       | to      | .04     | -       |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  |               |   |           |       | 630     |         |         |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  | W             |   | 99        |       | to      | .02     | -       |              |             |         |
|                                  |                |                |         | "          | "  | "  |   |  |               |   |           |       |         | 9115    | -       | -            |             |         |



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### DIAMOND DRILL HOLE LOG

|             |            |          |
|-------------|------------|----------|
| Latitude:   | Hole No.   | I-79-5   |
| Departure:  | Commenced: |          |
| Elevation:  | Completed: |          |
| Length:     | Logged by: |          |
| Overburden: | Sheet No.  | 10 of 10 |

| GENERAL DESCRIPTION<br>(Geology)  | SULPHIDES      |                |         | ALTERATION |    |    | VEINING                    |  | FAULTS |  | ROD           |   | CORE      |         | HOLE<br>DEPTH<br>TAG NO. | ASSAYS |   |  | GRAPHIC LOG |         |
|---|----------------|----------------|---------|------------|----|----|----------------------------|--|--------|--|---------------|---|-----------|---------|--------------------------|--------|---|--|-------------|---------|
|   | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |                            |  |        |  | Frac.<br>Den. | % | REC.<br>% | Cu<br>% | Mo<br>%                  |        |   |  |             | REMARKS |
| NICOLA GROUP 649.5 - 663  |                |                |         |            |    |    | Few QZ-CA str <sup>S</sup> |  |        |  |               |   |           |         | 640                      |        |   |  |             |         |
| contact indistinct  |                |                |         |            |    |    | W                          |  |        |  |               |   |           |         | to                       | .02    | - |  |             |         |
| 649.5 - 663 Grey-green mottled andesite. Lower contact sharp @ 70°  |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | 650                      |        |   |  |             |         |
| 663 - 666 Epivolcaniclastics, med. grained w/ lt to dark grey, angular volcanic fragments = 1 mm diam. w/in a dk, grey, fine gr. matrix.  |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | 9116                     |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | 650                      |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | 9117                     |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | 660                      |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | 9118                     |        |   |  |             |         |
| 666 - 667 Dk grey to black laminated siltstone w/ laminae @ 50° (-40° dip). Contact poorly exposed due to shattering but it is sharp and it appears that the siltstone may be a large fragment. |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | to                       |        |   |  |             |         |
| 667 End of hole   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | —                        |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | to                       |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | —                        |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | to                       |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | —                        |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | to                       |        |   |  |             |         |
|   |                |                |         |            |    |    |                            |  |        |  |               |   |           |         | —                        |        |   |  |             |         |



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### DIAMOND DRILL HOLE LOG

|                     |                       |
|---------------------|-----------------------|
| Latitude: 98,700 N  | Hole No. L-79-6       |
| Departure: 99,750 E | Commenced: Dec. 12/79 |
| Elevation: 1270 m   | Completed: Dec. 23/79 |
| Length: 677'        | Logged by: R.G.S.     |
| Overburden: 11'     | Sheet No. 1 of 10     |

| GENERAL DESCRIPTION<br>(Geology)  | SULPHIDES      |                |         | ALTERATION |    |    | VEINING |  | FAULTS |               | RQD |         | CORE REC.<br>% | HOLE DEPTH<br>TAG NO. | ASSAYS |  | GRAPHIC LOG  |                |
|---|----------------|----------------|---------|------------|----|----|---------|--|--------|---------------|-----|---------|----------------|-----------------------|--------|--|--------------|----------------|
|   | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |         |  |        | Frac.<br>Den. | %   | Cu<br>% | Mo<br>%        |                       |        |  | REMARKS      |                |
| 0 - 11' OVERBURDEN  |                |                |         |            |    |    |         |  |        | W-            | 97  |         |                | 11                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        | M             |     |         |                | to 20                 |        |  |              |                |
| BASALT FLOWS 11 - 56<br>(Pleist-Recent olivine valley basalts)  |                |                |         |            |    |    |         |  |        |               |     |         |                | 20                    |        |  |              |                |
| 11 - 29 Fine grained, light grey<br>basalt flow, locally fragmented with<br>occasional vesicles. Local flow<br>banding indicates dips of 30° to<br>subhorizontal  |                |                |         |            |    |    |         |  |        | M             | 93  |         |                | to                    |        |  | flow banding |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | —                     |        |  |              |                |
| 29' base of flow  |                |                |         |            |    |    |         |  |        | M             | 50  |         |                | 30                    |        |  |              | ash            |
| 29 - 36 Red-brown ash layer poor<br>recovery, semi-consolidated   |                |                |         |            |    |    |         |  |        |               |     |         |                | to                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | —                     |        |  |              |                |
| 36 - 56 Vesicular basalt flow (top).<br>Moderately to highly vesicular texture<br>w/ vesicle size ranging from ~1mm to<br>30 mm in diam. Colour ranges from<br>dk & med greys to brown and reddish<br>brown |                |                |         |            |    |    |         |  |        |               |     | 60      |                | 40                    |        |  |              | vesicular flow |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | to                    |        |  |              |                |
| FOSSIL OVERBURDEN 56 - 165  |                |                |         |            |    |    |         |  |        |               |     | 10      |                | 50                    |        |  |              |                |
| 56 - 65 Red oxidized earthy material  |                |                |         |            |    |    |         |  |        |               |     |         |                | to                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | —                     |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | 60                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | to                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | —                     |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | 70                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | to                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | —                     |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | 15                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | to                    |        |  |              |                |
|   |                |                |         |            |    |    |         |  |        |               |     |         |                | —                     |        |  |              |                |



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## DIAMOND DRILL HOLE LOG

Latitude: Hole No. L-79-6

Departure: Commenced:

Elevation: Completed:

Length: Logged by:

Overburden: Sheet No. 2 of 10

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         | ALTERATION |    |    | VEINING |  |  | FAULTS        |   |           | RQD |         | CORE           | HOLE<br>DEPTH | ASSAYS |  |         | GRAPHIC LOG |  |  |
|--|----------------|----------------|---------|------------|----|----|---------|--|--|---------------|---|-----------|-----|---------|----------------|---------------|--------|--|---------|-------------|--|--|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |         |  |  | Frac.<br>Den. | % | REC.<br>% | —   | TAG NO. | Cu<br>%        | Mo<br>%       |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         |                |               |        |  | REMARKS |             |  |  |
| 65 - 165 fossil overburden boulders, cobbles & pebbles of volcanic & intrusive origin in matrix of yellow-brown clays, and brown sandy material. Very poor recovery. Dark green Nicola volcanic & fragmental rocks dominate as the clasts. |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 80<br>to<br>—  |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 20             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 90<br>to<br>—  |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 25             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 100<br>to<br>— |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 50             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 30             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 30             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 20             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 130<br>to<br>— |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 25             |               |        |  |         |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |           |     |         | 140<br>to<br>— |               |        |  |         |             |  |  |



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### DIAMOND DRILL HOLE LOG

|            |                   |
|------------|-------------------|
| Latitude:  | Hole No. L-79-6   |
| Departure: | Commenced:        |
| Area:      | Elevation:        |
| Purpose:   | Completed:        |
|            | Length:           |
|            | Overburden:       |
|            | Sheet No. 3 of 10 |

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         |    |    |    | ALTERATION |  | VEINING | FAULTS | RQD | CORE<br>REC.<br>% | HOLE<br>DEPTH<br>TAG NO. | ASSAYS  |         |              | GRAPHIC LOG |                     |
|--|----------------|----------------|---------|----|----|----|------------|--|---------|--------|-----|-------------------|--------------------------|---------|---------|--------------|-------------|---------------------|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms | Cl | Ep |            |  |         |        |     |                   |                          | Cu<br>% | Mo<br>% | Au<br>oz/ton | REMARKS     |                     |
| NICOLA GROUP 165 - 677   |                |                |         |    |    |    |            |  |         |        |     |                   | 150                      |         |         |              |             |                     |
| EPITOCANICLASTICS 180-   |                |                |         |    |    |    |            |  |         |        |     |                   | 50                       |         |         |              |             |                     |
| TUFF BRECCIA 165 - 190(?)  |                |                |         |    |    |    |            |  |         |        |     |                   |                          |         |         |              |             |                     |
| Fragments of black aphanitic argillaceous rock in light grey green tuffaceous matrix   |                |                |         |    |    |    |            |  |         |        |     |                   | 160                      |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | 55                       |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | to                       | .02     | .001    |              |             | old bedrock surface |
| 172 - 180 dark, incompetent matrix appears very graphitic  |                |                |         |    |    |    |            |  |         |        |     |                   | 9030                     |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | 170                      |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | to                       | .01     | .001    | tr           |             | graphitic           |
| CRYSTAL-LITHIC TUFF 190? - 222   |                |                |         |    |    |    |            |  |         |        |     |                   | 30                       |         |         |              |             |                     |
| very light green to grey tuffaceous volcanic with small < 2 mm. irregular crystal clasts and rounded qz. fragments. Quartz veining is prevalent with at least two stages evident from offsets. |                |                |         |    |    |    |            |  |         |        |     |                   | 180                      |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | to                       | .02     | .001    |              |             | MISMATCH            |
| VOLCANICLASTIC BRECCIA 222 - 239.5   |                |                |         |    |    |    |            |  |         |        |     |                   | 35                       |         |         |              |             |                     |
| Irregular fragments of black, laminated, qz. veined graphitic argillite in a med fine gr, grey-green volcaniclastic matrix. Highly shattered from 222 - 237                                    |                |                |         |    |    |    |            |  |         |        |     |                   | "                        |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | M                        | 98      |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | -S                       |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | 190                      |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | to                       | .02     | -       | .01          |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | 200                      |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | to                       | .01     | -       |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | -M                       |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | 219 - 220                |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | shear zone W             | 98      |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | @ 10°                    |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | -M                       |         |         |              |             |                     |
|  |                |                |         |    |    |    |            |  |         |        |     |                   | 9035                     |         |         |              |             |                     |



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### DIAMOND DRILL HOLE LOG

Latitude: Hole No. L-79-6

Departure: Commenced:

Elevation: Completed:

Length: Logged by:

Overburden: Sheet No. 4 of 10

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         | ALTERATION |    |    | VEINING  | FAULTS | RQD | CORE | HOLE<br>DEPTH | ASSAYS        |   |           | GRAPHIC LOG  |         |         |    |   |
|--|----------------|----------------|---------|------------|----|----|--|--------|-----|------|---------------|---------------|---|-----------|--------------|---------|---------|----|---|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |  |        |     |      |               | Frac.<br>Den. | % | REC.<br>% | —<br>TAG NO. | Cu<br>% | Mo<br>% | Au | X |
|  |                |                |         |            |    |    | QZ veining in<br>argillite fragments                                 |        |     | M    | 80            |               |   |           | 220          | .01     | -       |    |   |
|  |                |                |         |            |    |    |  |        |     | -VS  |               |               |   |           | to           |         |         |    |   |
|  |                |                |         |            |    |    |  |        |     |      |               |               |   |           | 9036         |         |         |    |   |
| CRYSTAL-LITHIC TUFF 239.5 - 243<br>as before   |                |                |         |            |    |    | "  |        |     | VS   | 65            |               |   |           | 230          | .01     | .001 tr |    |   |
| 243 - 244.5 Large fragment of<br>black, argillaceous, laminated<br>(-45°) graphitic siltstone w/ qz<br>stringers   |                |                |         |            |    |    | "  |        |     | M    | 97            |               |   |           | to           | .01     | .001    |    |   |
| ANDESITE-DACITE FLOW 244.5 - 257.5<br>similar comp <sup>n</sup> & colour to tuff.<br>Finely porphyritic w/ pyroxene<br>crystals showing preferred orien-<br>tation locally (-45°) within a fine<br>gr. lt. green-grey matrix. Plag-<br>ioclase crystals are also abundant. |                |                |         |            |    |    |  |        |     | M    | 97            |               |   |           | 240          | .01     | .001    |    |   |
|  |                |                |         |            |    |    | QZ str <sup>s</sup> common in<br>fragments, few<br>present in matrix |        |     | VS   | 70            |               |   |           | 250          | .01     | .001    |    |   |
|  |                |                |         |            |    |    |  |        |     |      |               |               |   |           | to           |         |         |    |   |
|  |                |                |         |            |    |    |  |        |     |      |               |               |   |           | 260          | .02     | .001 tr |    |   |
| CRYSTAL TUFF 257.5-258.5<br>contact subtle & gradational   |                |                |         |            |    |    | "  |        |     | W    | 90            |               |   |           | 270          | .02     | .001    |    |   |
| BRECCIA 258.5.- 271<br>as before w/ black graphitic silt-<br>stone fragments, highly sheared<br>& shattered  |                |                |         |            |    |    | "  |        |     | -VS  |               |               |   |           | 280          | .01     | .001    |    |   |
|  |                |                |         |            |    |    | (Py)   |        |     | S    | 80            |               |   |           | to           |         |         |    |   |
|  |                |                |         |            |    |    |  |        |     |      |               |               |   |           | 9042         |         |         |    |   |



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### DIAMOND DRILL HOLE LOG

Latitude: Hole No. L-79-6  
 Departure: Commenced:  
 Elevation: Completed:  
 Length: Logged by:  
 Overburden: Sheet No. 5 of 10

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES |          |          | ALTERATION |    |    | VEINING | FAULTS | RQD | CORE REC. | HOLE DEPTH | ASSAYS     |     |      | GRAPHIC LOG |      |      |    |   |         |
|--|-----------|----------|----------|------------|----|----|---------|--------|-----|-----------|------------|------------|-----|------|-------------|------|------|----|---|---------|
|  | Py to Cp  | Bn to Cp | % Py     | Ms         | Cl | Ep |         |        |     |           |            | Frac. Den. | %   | %    | TAG NO.     | Cu % | Mo % | Au | X | REMARKS |
|  |           |          |          |            |    |    |         |        |     |           |            |            |     |      |             |      |      |    |   |         |
| FLOW BRECCIA 271 - 278   |           |          |          |            |    |    |         |        |     | M         | 90         | 290        | to  | .01  | .001        |      |      |    |   |         |
| contact gradational. Med to dark grey, fine grained fragments within pale green-grey tuffaceous rock containing abundant small pyroxene xtals. |           |          | var 2-5% |            |    |    |         |        |     | -S        |            | 9043       |     |      |             |      |      |    |   |         |
|  |           |          |          |            |    |    |         |        |     |           |            | 301 - 33   | VS  | 300  |             |      |      |    |   |         |
|  |           |          |          |            |    |    |         |        |     | Gouge     | 40         | to         | .02 | .001 |             |      |      |    |   |         |
|  |           |          |          |            |    |    |         |        |     |           |            |            |     |      |             |      |      |    |   |         |
| CRYSTAL TUFF 278 - 280.5   |           |          |          |            |    |    |         |        |     |           |            | 310        | to  |      |             |      |      |    |   |         |
| FLOW BROCC 280.5 - 278   |           |          |          |            |    |    |         |        |     | VS        | 50         | .01        | -   |      |             |      |      |    |   |         |
| as before  |           |          |          | "          |    |    |         |        |     |           |            |            |     |      |             |      |      |    |   |         |
| DEFORMED SILTSTONE 280.5 - 301   |           |          |          |            |    |    |         |        |     |           |            | 320        | to  | .01  | TR          |      |      |    |   |         |
| Black, highly deformed brecciated pyritic siltstone w/ strong QZ veining (pre-def <sup>n</sup> ) giving zebra texture appearance.              |           |          |          | "          |    |    |         |        |     | VS        | 50         |            |     |      |             |      |      |    |   |         |
| 296.5 - 298 Deformed lt. grey vol- caniclastic w/ bedding ~ 45°  |           |          |          |            |    |    |         |        |     |           |            | 330        | to  | .01  | -           |      |      |    |   |         |
|  |           |          |          |            |    |    |         |        |     | VS        | 90         |            |     |      |             |      |      |    |   |         |
| FAULT ZONE 301 - 331   |           |          |          |            |    |    |         |        |     |           |            | 340        | to  | .01  | -           | tr   |      |    |   |         |
| Gouge - black, graphitic sooty sections and pale grey clayey sections alternately.   |           |          |          |            |    |    |         |        |     | Gouge     | VS         | 90         |     |      |             |      |      |    |   |         |
| Py common locally  |           |          |          |            |    |    |         |        |     |           |            |            |     |      |             |      |      |    |   |         |
| 318 - 325 Black, highly organic silt- stone, coal-like appearance  |           |          |          |            |    |    |         |        |     |           |            | 350        | to  | .01  | -           |      |      |    |   |         |
| 325 - 331 Gouge; tuffaceous rock   |           |          |          |            |    |    |         |        |     | VS        | 90         |            |     |      |             |      |      |    |   |         |
|  |           |          |          |            |    |    |         |        |     |           |            | 9049       |     |      |             |      |      |    |   |         |



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### DIAMOND DRILL HOLE LOG

Latitude:

Hole No. L-79-6

Departure:

Commenced:

Elevation:

Completed:

Length:

Logged by:

Overburden:

Sheet No. 6 of 10

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         | ALTERATION |    |    | VEINING  | FAULTS                          | RQD           |    | CORE<br>REC.<br>% | HOLE<br>DEPTH<br>TAG NO. | ASSAYS  |         |    | GRAPHIC LOG |         |  |
|--|----------------|----------------|---------|------------|----|----|--|---------------------------------|---------------|----|-------------------|--------------------------|---------|---------|----|-------------|---------|--|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |  |                                 | Frac.<br>Den. | %  |                   |                          | Cu<br>% | Mo<br>% | Au | X           | REMARKS |  |
| CRYSTAL TUFF 331 - 344<br>highly shattered tuffaceous rock<br>lt. green-grey   |                |                |         |            |    |    | QZ veining moderate  | 364 minor<br>gouge @10°         | VS            | 97 |                   | 360<br>to<br>9050        | .01     | -       |    |             |         |  |
| FAULT GOUGE 344 - 356<br>Black, sooty gouge w/ light tuffaceous fragments and sections   |                | Py             |         |            |    |    | "  |                                 | M             | 98 |                   | 370<br>to<br>380         | .01     | TR      | tr |             |         |  |
| TUFFACEOUS VOLC. 356 - 364<br>pale green, highly sheared & shattered tuffaceous rock.  |                |                |         |            |    |    | "  |                                 | M             | 97 |                   | to<br>390                | .01     | -       |    |             |         |  |
| TUFF & ASH-FLOW BRCC 364 - 396<br>Mainly pale green tuffaceous rocks w/ occassional banding @ 45°.<br>Short breccia sections containing black siltstone fragments occur sporadically & contain Py as blebs & disseminations. |                |                |         |            |    |    | few EP str <sup>s</sup><br>QZ & QZ-HE str <sup>s</sup><br>common to abundant |                                 | W<br>-M       | 96 |                   | to<br>400                | .01     | -       |    |             |         |  |
| 395 - 397 Gradational contact from pale green tuffaceous volc to darker green andesitic flow.  |                |                |         |            |    |    | "  |                                 | W<br>-M       | 98 |                   | to<br>410                | .01     | -       |    |             |         |  |
| ANDESITE FLOW 396 - 406  |                |                |         |            |    |    | weak QZ veining  |                                 | M             | 97 |                   | 420<br>to<br>9056        | .01     | -       |    |             |         |  |
|  |                |                |         |            |    |    | QZ str <sup>s</sup> common   | 424-425<br>healed<br>gouge @20° | M             | 97 |                   |                          |         |         |    |             |         |  |



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### DIAMOND DRILL HOLE LOG

| GENERAL DESCRIPTION<br>(Geology)   | VEINING   |          |            |    |    |    | FAULTS                                |      | RQD |      | CORE REC.<br>% | HOLE DEPTH<br>TAG NO. | ASSAYS |     |        | GRAPHIC LOG |                 |
|--|-----------|----------|------------|----|----|----|---------------------------------------|------|-----|------|----------------|-----------------------|--------|-----|--------|-------------|-----------------|
|  | SULPHIDES |          | ALTERATION |    |    |    | Frac.                                 | Den. | %   | Cu % | Mo %           | Au                    |        |     |        | X           | REMARKS         |
|  | Py to Cp  | Bn to Cp | % Py       | Ms | Cl | Ep |                                       |      |     |      |                |                       |        |     |        |             |                 |
|  |           |          |            |    |    |    |                                       |      |     |      |                |                       |        |     |        |             |                 |
| 396 - 406 Med to dark green andesite<br>med fine grained. Abundant QZ<br>str <sup>s</sup> irregular and discontinuous.<br>QZ-HE or jasperoid str <sup>s</sup> also<br>present. Flow banding @ 45° common |           |          |            |    |    |    |                                       |      |     | W    | 98             |                       | 430 to | .01 | -      |             |                 |
| TUFF 406 - 421   |           |          |            |    |    |    |                                       |      |     | W    | 97             |                       | 9057   |     |        |             |                 |
| Pale green, gradational contact<br>w/ overlying ANDS   |           |          |            |    |    |    |                                       |      |     | W    | 97             |                       | 440 to | .01 | -      |             |                 |
| TUFF BRECCIA 421 - 614.5   |           |          |            |    |    |    |                                       |      |     | W    | 97             |                       | 450 to | .01 | -      |             |                 |
| Pale grey quartzose, clastics<br>matrix containing pale yellow to<br>near white tuff fragments which<br>are oriented at -45°   | M         | M        |            |    |    |    | QZ veining common                     |      |     | W    | 96             |                       | 460 to | .01 | - .007 |             | HE on fractures |
| 442 - 445 Irregular flow banding in<br>matrix  |           |          |            |    |    |    | irreg. & discont.<br>str <sup>s</sup> |      |     | W    | 96             |                       | ---    |     |        |             | "               |
| 448 - 459 Tuff less brecciated<br>Med. green colour  | M         | M        |            |    |    |    | "                                     |      |     | W    | 98             |                       | 470 to | .01 | -      |             | "               |
| 459 - 463 Banding @ 30° pale green<br>tuff fragments   | -S        | -S       |            |    |    |    | Few EP-QZ str <sup>s</sup>            |      |     | W    | 98             |                       | ---    |     |        |             | "               |
| 463 - 466 Gradational contact<br>ANDESITE 466 - 610  | M         | M        |            |    |    |    | "                                     |      |     | W    | 97             |                       | 480 to | .01 | -      |             | "               |
| Med to dark green, Med-fn gr<br>andesite flows w/ minor  | -S        | -S       |            |    |    |    | EP & QZ str <sup>s</sup>              |      |     | W    | 98             |                       | 490 to | .01 | -      |             | "               |



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### DIAMOND DRILL HOLE LOG

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         |    |    |    | ALTERATION |       | VEINING                           |               | FAULTS |           | RQD         | CORE    | HOLE    | ASSAYS  |    |  | GRAPHIC LOG                                      |                   |  |
|--|----------------|----------------|---------|----|----|----|------------|-------|-----------------------------------|---------------|--------|-----------|-------------|---------|---------|---------|----|--|--|-------------------|--|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms | Cl | Ep |            |       |                                   | Frac.<br>Den. | %      | REC.<br>% | DEPTH       | TAG NO. | Cu<br>% | Mo<br>% | Au |  |  | REMARKS           |  |
|  | Property       |                |         |    |    |    | Az.        | Dip:  |                                   |               |        |           | Elevation:  |         |         |         |    |  |  |                   |  |
|  | Area:          |                |         |    |    |    | Horiz.     | Vert. |                                   |               |        |           | Length:     |         |         |         |    |  |  | Logged by:        |  |
| Purpose:   |                |                |         |    |    |    |            |       |                                   |               |        |           | Overburden: |         |         |         |    |  |  | Sheet No. 8 of 10 |  |
| interbedded tuff beds, usually pale brown-white  |                |                |         |    |    |    | S          | VS    | QZ & EP str <sup>s</sup> v.       |               |        |           | 500         |         |         |         |    |  | HE on fractures & shears                         |                   |  |
| 531 - 537 White tuffaceous interbed strongly sheared w/ minor gouge  |                |                |         |    |    |    |            |       | common                            |               |        |           | to          | .01     | -       | .007    |    |  | "  |                   |  |
| 537 - 610 Andesite flow rocks. Med fine gr, dk green, pyroxene crystals ± 3 mm in finer gr, chloritized & epidotized matrix. |                |                |         |    |    |    | S          | VS    | "                                 |               |        |           | 9064        |         |         |         |    |  | "  |                   |  |
| QZ & EP veining is strong. QZ-HE str <sup>s</sup> seem to be latest stage of veining, cutting older QZ & EP str <sup>s</sup> |                |                |         |    |    |    | S          | S     | "                                 |               |        |           | 510         | to      | .01     | -       |    |  | MISMATCH   |                   |  |
|  |                |                |         |    |    |    | S          | VS    | "                                 |               |        |           | 520         | to      | .01     | -       |    |  | "  |                   |  |
|  |                |                |         |    |    |    |            |       | small shears common               |               |        |           | 530         | to      | .01     | -       |    |  | HE locally on shears & w/ QZ-EP str <sup>s</sup> |                   |  |
|  |                |                |         |    |    |    | S          | VS    | EP & QZ str <sup>s</sup> abundant |               |        |           | 540         | to      | .01     | -       |    |  | "  |                   |  |
|  |                |                |         |    |    |    | S          | VS    | "                                 |               |        |           | 550         | to      | .01     | -       |    |  | "  |                   |  |
|  |                |                |         |    |    |    | S          | VS    | "                                 |               |        |           | 560         | to      | .01     | -       |    |  | "  |                   |  |
|  |                |                |         |    |    |    | S          | VS    | "                                 |               |        |           | 9070        | to      | .01     | -       |    |  | "  |                   |  |



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## DIAMOND DRILL HOLE LOG

| GENERAL DESCRIPTION<br>(Geology)   | DIAMOND DRILL HOLE LOG |                |           |    |            |       |  |                              | Latitude: |               |           | Hole No. I-79-6 |                   |         |             |  |              |
|--|------------------------|----------------|-----------|----|------------|-------|--|------------------------------|-----------|---------------|-----------|-----------------|-------------------|---------|-------------|--|--------------|
|  | Property               |                |           |    | Az.        | Dip:  | Elevation:                                       |                              |           | Commenced:    |           |                 |                   |         |             |  |              |
|  | Area:                  |                |           |    | Horiz.     | Vert. | Length:  |                              |           | Completed:    |           |                 |                   |         |             |  |              |
|  | Purpose:               |                |           |    |            |       | Overburden:                                      |                              |           | Logged by:    |           |                 | Sheet No. 9 of 10 |         |             |  |              |
| GENERAL DESCRIPTION<br>(Geology)   |                        |                | SULPHIDES |    | ALTERATION |       | VEINING  |                              | FAULTS    | RQD           | CORE      | HOLE            | ASSAYS            |         | GRAPHIC LOG |  |              |
|  | Py<br>to<br>Cp         | Bn<br>to<br>Cp | %<br>Py   | Ms | Cl         | Ep    |  |                              |           | Frac.<br>Den. | %         | REC.<br>%       | DEPTH<br>TAG NO.  | Cu<br>% | Mo<br>%     | Au                                       | X<br>REMARKS |
| 610 - 614.5 becoming lighter in colour, finer gr & more tuffaceous   |                        |                |           | S  | VS         |       | QZ-EP, QZ & QZ He str & vlets common to abundant |                              |           | W             | 99        | 570<br>to       | .01               | -       | tr          | Dk red He w/<br>QZ & on fractures        |              |
|  |                        |                |           |    |            |       | Most @ 60-85°                                    |                              |           |               |           | 9071            |                   |         |             | "  |              |
|  |                        |                |           | S  | VS         |       | "  |                              |           | W             | 99        | 580<br>to       | .01               | -       |             | "  |              |
| TUFF 610 - 645.5   |                        |                |           |    |            |       |  |                              |           |               |           |                 |                   |         |             | "  |              |
| 610 - 618.5 Pale green tuff & crystal tuff   |                        |                |           | S  | VS         |       | "  |                              |           | W             | 99        | 590<br>to       | .01               | -       |             | "  |              |
| 618.5 - 621 Very light yellow-green tuff - contact sharp @ 45°   |                        |                |           | S  | VS         |       | "  |                              |           | W             | 98        | 600<br>to       | .01               | -       |             | "  |              |
| 621 - 624 breccia section med. grey laminated volcanoclastics & black laminated siltstone fragments in pale green tuff, matrix - possibly a submarine ash flow |                        |                |           | S  | VS         |       | "  |                              |           | W             | 98        | 610<br>to       | .01               | -       |             |  |              |
|  |                        |                |           | S  | "          |       |  | 614.5 shear<br>@ 45°         |           | W             | 97        |                 |                   |         |             |  |              |
|  |                        |                |           |    |            |       |  |                              | -M        |               |           |                 |                   |         |             |  |              |
| 624 - 633 Pale yellow green tuff   | Py                     |                |           |    |            |       | Few QZ str's                                     |                              |           | M             | 98        | 620<br>to       | .01               | -       | tr          | Py in black<br>argillaceous<br>fragments |              |
| 633 - 634 Large sooty black siltstone fragment w/ Py   |                        |                |           |    |            |       |  |                              | -S        |               |           |                 |                   |         |             |  |              |
| 634 - 645.5 highly fractured & shattered pale tuffaceous rocks   | Py                     |                |           |    |            |       | "  | 634<br>strongly<br>shattered | S         | 95            | 630<br>to | .01             | -                 |         | "           |  |              |
|  |                        |                |           |    |            |       |  |                              |           |               |           | 9077            |                   |         |             |  |              |



BETHLEHEM  
COPPER  
CORPORATION

### DIAMOND DRILL HOLE LOG

|             |                    |
|-------------|--------------------|
| Latitude:   | Hole No. I-79-6    |
| Departure:  | Commenced:         |
| Elevation:  | Completed:         |
| Length:     | Logged by:         |
| Overburden: | Sheet No. 10 of 10 |

| GENERAL DESCRIPTION<br>(Geology)   | SULPHIDES      |                |         | ALTERATION |    |    | VEINING |  |  | FAULTS        |   |      | RQD     |         | CORE |      | HOLE<br>DEPTH | ASSAYS  |      |  | GRAPHIC LOG |  |  |
|--|----------------|----------------|---------|------------|----|----|---------|--|--|---------------|---|------|---------|---------|------|------|---------------|---------|------|--|-------------|--|--|
|  | Py<br>to<br>Cp | Bn<br>to<br>Cp | %<br>Py | Ms         | Cl | Ep |         |  |  | Frac.<br>Den. | % | REC. | Cu<br>% | Mo<br>% | Au   |      |               | REMARKS |      |  |             |  |  |
| 645.5 - 649 Gouge section - black sooty graphitic material apparent dip of 60° (30° to vert core axis)   |                |                | Py      |            |    |    |         |  |  | VS            |   | .75  |         |         |      | 640  |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   | .01           | -       |      |  |             |  |  |
| LAMINATED VOLCANICLASTICS  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | 9078 |               |         |      |  |             |  |  |
| 649 - 677 BOH  |                |                | Py      |            |    |    |         |  |  |               |   |      |         |         |      | 650  |               |         |      |  |             |  |  |
| 649 - 665.5 White to lt & med & dk grey laminated volcaniclastic med to fine grained laminae w/ volcanic fragments flattened and elongated along laminae planes. Fine grained PY is common in darker fine grained sections and appears to be syngenetic. Laminae normally dip @ 45° but occasionally steeper to as much as 60° over small sections |                |                | Py      |            |    |    |         |  |  |               |   |      |         |         |      | to   | .01           | -       | tr   |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | 660  |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   | .01           | -       |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | 670  |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   | .01           | -       | .007 |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | 677  |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | 9081 |               |         |      |  |             |  |  |
| 665.5 - 677 BOH FLOW BRECCIA   |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   |               |         |      |  |             |  |  |
| Larger pale grey to near white tuffaceous fragments in dark grey fine gr. matrix. Fragments range from ~1mm up to several cm's in diameter, are variably angular & show elongation & flattening along laminae bedding plane @ 45° (up to 60° locally)  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | —    |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | —    |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | —    |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | to   |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | —    |               |         |      |  |             |  |  |
|  |                |                |         |            |    |    |         |  |  |               |   |      |         |         |      | —    |               |         |      |  |             |  |  |

ASHCROFT, B.C.

DATE Dec 14, 1979

## GEOLOGY - Cu

SHIFT \_\_\_\_\_

|    | D. Drill<br>Cu | WEIGHT<br>TAKEN | L-79-5 |  |  |  | ASSAY<br>% Cu |
|----|----------------|-----------------|--------|--|--|--|---------------|
| 1  | 9001           | 1/2 x 250       | 12-20  |  |  |  | .02           |
| 2  | 9002           |                 | 20-    |  |  |  | .01           |
| 3  | 9003           |                 |        |  |  |  | .01           |
| 4  | 9004           |                 |        |  |  |  | .02           |
| 5  | 9005           |                 |        |  |  |  | .01           |
| 6  | 9006           |                 |        |  |  |  | .01           |
| *  | 9007           |                 | 70-80  |  |  |  | .01           |
| 8  | 9009           |                 | 90-100 |  |  |  | .01           |
| 9  | 9010           |                 |        |  |  |  | .01           |
| 10 | 9011           |                 |        |  |  |  | —             |
| 11 | 9012           |                 |        |  |  |  | .01           |
| 12 | 9013           |                 |        |  |  |  | .01           |
| 13 | 9014           |                 |        |  |  |  | .01           |
| 14 | 9015           |                 |        |  |  |  | .01           |
| 15 | 9016           |                 |        |  |  |  | .01           |
| 16 | 9017           |                 |        |  |  |  | .02           |
| 17 | 9018           |                 |        |  |  |  | .02           |
| 18 | 9019           |                 |        |  |  |  | .01           |
| 19 | 9020           |                 | 200-10 |  |  |  | .01           |
| 20 | 9021           |                 | 210    |  |  |  | .01           |
| 21 | 9022           |                 | 220    |  |  |  | .01           |
| 22 | 9023           |                 |        |  |  |  | .01           |
| 23 | 9024           |                 |        |  |  |  | —             |
| 24 | 9025           |                 | 250-60 |  |  |  | .01           |
| 25 |                |                 |        |  |  |  |               |
| 26 |                |                 |        |  |  |  |               |
| 27 |                |                 |        |  |  |  |               |
| 28 |                |                 |        |  |  |  |               |
| 29 |                |                 |        |  |  |  |               |
| 30 |                |                 |        |  |  |  |               |

K NOTE 9008 MISSING.

ASSAYER \_\_\_\_\_ + P.M. \_\_\_\_\_

## THLEHEM COPPER CORPORATION LTD

ASHCROFT, B.C.

DATE DEC 14 1979

GEOLOGY Mo

SHIFT II

|    | D. DRILL | WEIGHT TAKEN | (Mo) | L-79-5 |  |  | ASSAY %Mo |
|----|----------|--------------|------|--------|--|--|-----------|
| 1  | 9001     | 2 1/2 x 50   |      | 12-20  |  |  | -0        |
| 2  | 9002     |              |      |        |  |  | -0        |
| 3  | 9003     |              |      |        |  |  | -0        |
| 4  | 9004     |              |      |        |  |  | -0        |
| 5  | 9005     |              |      |        |  |  | -0        |
| 6  | 9006     |              |      |        |  |  | -0        |
| 7  | 9007     |              |      |        |  |  | -0        |
| 8  | 9008 +   | MISSING      |      |        |  |  | -0        |
| 9  | 9009     |              |      |        |  |  | -0        |
| 10 | 9010     |              |      |        |  |  | -0        |
| 11 | 9011     |              |      |        |  |  | -0        |
| 12 | 9012     |              |      |        |  |  | -0        |
| 13 | 9013     |              |      |        |  |  | -0        |
| 14 | 9014     |              |      |        |  |  | -0        |
| 15 | 9015     |              |      |        |  |  | -0        |
| 16 | 9016     |              |      |        |  |  | -0        |
| 17 | 9017     |              |      |        |  |  | -0        |
| 18 | 9018     |              |      |        |  |  | -0        |
| 19 | 9019     |              |      |        |  |  | -0        |
| 20 | 9020     |              |      |        |  |  | -0        |
| 21 | 9021     |              |      |        |  |  | -0        |
| 22 | 9022     |              |      |        |  |  | -0        |
| 23 | 9023     |              |      |        |  |  | -0        |
| 24 | 9024     |              |      |        |  |  | -0        |
| 25 | 9025     |              |      |        |  |  | -0        |
| 26 |          |              |      |        |  |  | -0        |
| 27 |          |              |      |        |  |  |           |
| 28 |          |              |      |        |  |  |           |
| 29 |          |              |      |        |  |  |           |
| 30 |          |              |      |        |  |  |           |

ASSAYER PM + JES

## PHILADELPHIA COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE DEC. 15 1979

GEOLOGY - Cu

SHIFT III

|    | D. DRILL | WEIGHT TAKEN | L-79-5<br>(Cu)                     |  |  |  | ASSAY % Cu |
|----|----------|--------------|------------------------------------|--|--|--|------------|
| 1  | 9026     | 1/2 x 250    | 260-70                             |  |  |  | .02        |
| 2  | 9027     |              |                                    |  |  |  | .01        |
| 3  | 9028     |              |                                    |  |  |  | .01        |
| 4  | 9029     |              | 290- <sup>298</sup> <del>252</del> |  |  |  | .01        |
| 5  |          |              | 6-19449                            |  |  |  |            |
| 6  | 10973    | 1/2 x 250    | 960-970                            |  |  |  | .02        |
| 7  | 10973    |              |                                    |  |  |  | .10        |
| 8  | 10974    |              | 980-993 E.O.N.                     |  |  |  | .01        |
| 9  |          |              |                                    |  |  |  |            |
| 10 |          |              |                                    |  |  |  |            |
| 11 |          |              |                                    |  |  |  |            |
| 12 |          |              |                                    |  |  |  |            |
| 13 |          |              |                                    |  |  |  |            |
| 14 |          |              |                                    |  |  |  |            |
| 15 |          |              |                                    |  |  |  |            |
| 16 |          |              |                                    |  |  |  |            |
| 17 |          |              |                                    |  |  |  |            |
| 18 |          |              |                                    |  |  |  |            |
| 19 |          |              |                                    |  |  |  |            |
| 20 |          |              |                                    |  |  |  |            |
| 21 |          |              |                                    |  |  |  |            |
| 22 |          |              |                                    |  |  |  |            |
| 23 |          |              |                                    |  |  |  |            |
| 24 |          |              |                                    |  |  |  |            |
| 25 |          |              |                                    |  |  |  |            |
| 26 |          |              |                                    |  |  |  |            |
| 27 |          |              |                                    |  |  |  |            |
| 28 |          |              |                                    |  |  |  |            |
| 29 |          |              |                                    |  |  |  |            |
| 30 |          |              |                                    |  |  |  |            |

ASSAYER

JTS

## HELEH COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE DEC 15 1979GEOLOGY - Mo SHIFT III

|    | D. DRILL | WEIGHT TAKEN | L-79-5<br>Mo |   |  |  |  | ASSAY %Mo |
|----|----------|--------------|--------------|---|--|--|--|-----------|
| 1  | 9026     | 2 1/2 x 50   |              | — |  |  |  | —         |
| 2  | 9027     |              |              | — |  |  |  | —         |
| 3  | 9028     |              |              | — |  |  |  | —         |
| 4  | 9029     |              |              | — |  |  |  | —         |
| 5  |          |              | 13-79-439    |   |  |  |  |           |
| 6  | 10972    | 2 1/2 x 50   | 960-970      | — |  |  |  | —         |
| 7  | 10973    |              |              | — |  |  |  | —         |
| 8  | 10974    |              | 980-993      | — |  |  |  | —         |
| 9  |          |              |              |   |  |  |  |           |
| 10 |          |              |              |   |  |  |  |           |
| 11 |          |              |              |   |  |  |  |           |
| 12 |          |              |              |   |  |  |  |           |
| 13 |          |              |              |   |  |  |  |           |
| 14 |          |              |              |   |  |  |  |           |
| 15 |          |              |              |   |  |  |  |           |
| 16 |          |              |              |   |  |  |  |           |
| 17 |          |              |              |   |  |  |  |           |
| 18 |          |              |              |   |  |  |  |           |
| 19 |          |              |              |   |  |  |  |           |
| 20 |          |              |              |   |  |  |  |           |
| 21 |          |              |              |   |  |  |  |           |
| 22 |          |              |              |   |  |  |  |           |
| 23 |          |              |              |   |  |  |  |           |
| 24 |          |              |              |   |  |  |  |           |
| 25 |          |              |              |   |  |  |  |           |
| 26 |          |              |              |   |  |  |  |           |
| 27 |          |              |              |   |  |  |  |           |
| 28 |          |              |              |   |  |  |  |           |
| 29 |          |              |              |   |  |  |  |           |
| 30 |          |              |              |   |  |  |  |           |

ASSAYER \_\_\_\_\_

(THELEM COPPER CORPORATION LTD)

ASHCROFT, B.C.

L-79-5  
(Extension)

EA✓

DATE Jan 16, 1980

## GEOLOGY Cu

SHIFT II

|    | D. Drill<br>(#) | WEIGHT<br>TAKEN | L-79-5         |  |  |  | ASSAY<br>% Cu |
|----|-----------------|-----------------|----------------|--|--|--|---------------|
| 1  | 9082            | 1.4250          | 299<br>360-310 |  |  |  | .02           |
| 2  | 083             |                 |                |  |  |  | .01           |
| 3  | 084             |                 |                |  |  |  | .01           |
| 4  | 085             |                 |                |  |  |  | .01           |
| 5  | 086             |                 |                |  |  |  | .01           |
| 6  | 087             |                 |                |  |  |  | .01           |
| 7  | 088             |                 |                |  |  |  | .01           |
| 8  | 089             |                 |                |  |  |  | .01           |
| 9  | 090             |                 |                |  |  |  | .01           |
| 10 | 9091            |                 |                |  |  |  | .01           |
| 11 | 092             |                 |                |  |  |  | .01           |
| 12 | 093             |                 |                |  |  |  | .01           |
| 13 | 094             |                 | 420-430        |  |  |  | .01           |
| 14 | 095             |                 |                |  |  |  | .02           |
| 15 | 096             |                 |                |  |  |  | .01           |
| 16 | 097             |                 |                |  |  |  | .01           |
| 17 | 9098            |                 | 460-470        |  |  |  | .03           |
| 18 |                 |                 |                |  |  |  |               |
| 19 |                 |                 |                |  |  |  |               |
| 20 |                 |                 |                |  |  |  |               |
| 21 |                 |                 |                |  |  |  |               |
| 22 |                 |                 |                |  |  |  |               |
| 23 |                 |                 |                |  |  |  |               |
| 24 |                 |                 |                |  |  |  |               |
| 25 |                 |                 |                |  |  |  |               |
| 26 |                 |                 |                |  |  |  |               |
| 27 |                 |                 |                |  |  |  |               |
| 28 |                 |                 |                |  |  |  |               |
| 29 |                 |                 |                |  |  |  |               |
| 30 |                 |                 |                |  |  |  |               |

ASSAYER A.S.

## THELEM COPPER CORPORATION LTD

ASHCROFT, B.C.

DATE Jan 16, 1980

GEOLOGY - Mo

SHIFT AM

|    | D. DRILL<br>M.O. | WEIGHT<br>TAKEN | 4-79-5                               |  |  | % Mo | ASSAY |
|----|------------------|-----------------|--------------------------------------|--|--|------|-------|
| 1  | 9082             | 21 y 250        | <sup>293</sup><br><del>300.310</del> |  |  | 0    |       |
| 2  | 083              |                 |                                      |  |  |      |       |
| 3  | 184              |                 |                                      |  |  |      |       |
| 4  | 085              |                 |                                      |  |  |      |       |
| 5  | 086              |                 |                                      |  |  |      |       |
| 6  | 087              |                 |                                      |  |  |      |       |
| 7  | 088              |                 |                                      |  |  |      |       |
| 8  | 089              |                 |                                      |  |  |      |       |
| 9  | 090              |                 |                                      |  |  |      |       |
| 10 | 091              |                 |                                      |  |  |      |       |
| 11 | 092              |                 |                                      |  |  |      |       |
| 12 | 093              |                 |                                      |  |  |      |       |
| 13 | 094              |                 |                                      |  |  |      |       |
| 14 | 095              |                 |                                      |  |  |      |       |
| 15 | 096              |                 |                                      |  |  |      |       |
| 16 | 097              |                 |                                      |  |  |      |       |
| 17 | 9098             |                 | 460-470                              |  |  | 0    |       |
| 18 |                  |                 |                                      |  |  |      |       |
| 19 |                  |                 |                                      |  |  |      |       |
| 20 |                  |                 |                                      |  |  |      |       |
| 21 |                  |                 |                                      |  |  |      |       |
| 22 |                  |                 |                                      |  |  |      |       |
| 23 |                  |                 |                                      |  |  |      |       |
| 24 |                  |                 |                                      |  |  |      |       |
| 25 |                  |                 |                                      |  |  |      |       |
| 26 |                  |                 |                                      |  |  |      |       |
| 27 |                  |                 |                                      |  |  |      |       |
| 28 |                  |                 |                                      |  |  |      |       |
| 29 |                  |                 |                                      |  |  |      |       |
| 30 |                  |                 |                                      |  |  |      |       |

ASSAYER A.S. & P.M.

## BETHLEHEM COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE 1-24- 1980SHIFT IIL-79-5

|    | Cu.<br>Lb or DD | WEIGHT<br>TAKEN | PCR.    | ASSAY<br>%Cu |
|----|-----------------|-----------------|---------|--------------|
| 1  | 9099            | 2x250           | 460-470 | .016         |
| 2  | 9100            |                 |         | .02          |
| 3  | 01              |                 | .013    | .01          |
| 4  | 02              | 500-510         | .012    | .01          |
| 5  | 03              |                 | .009    | .01          |
| 6  | 04              |                 | .015    | .02          |
| 7  | 05              |                 | .013    | .01          |
| 8  | 06              |                 | .019    | .02          |
| 9  | 07              | 550-560         | .011    | .01          |
| 10 | 08              |                 | .011    | .01          |
| 11 | 09              |                 | .014    | .01          |
| 12 | 10              |                 | .011    | .01          |
| 13 | 11              |                 | .019    | .02          |
| 14 | 12              | 600-610         | .030    | .03          |
| 15 | 13              |                 | .022    | .02          |
| 16 | 14              |                 | .037    | .04          |
| 17 | 15              |                 | .021    | .02          |
| 18 | 16              |                 | .020    | .02          |
| 19 | 17              |                 | .020    | .02          |
| 20 | E.O.H 9118      | 160-667         | .025    | .03          |
| 21 |                 | E.O.H.          |         |              |
| 22 |                 |                 |         |              |
| 23 |                 |                 |         |              |
| 24 |                 |                 |         |              |
| 25 |                 |                 |         |              |
| 26 |                 |                 |         |              |
| 27 |                 |                 |         |              |
| 28 |                 |                 |         |              |
| 29 |                 |                 |         |              |
| 30 |                 |                 |         |              |

ASSAYER \_\_\_\_\_

## MILLENNIUM COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE Sun. 08, 1980

## GEOLOGY - Mo

SHIFT III

|    | D. Drill<br>M.O. | WEIGHT<br>TAKEN | L-79-<br>G |  | % Mo |  | ASSAY<br><del>AS</del> |
|----|------------------|-----------------|------------|--|------|--|------------------------|
| 1  | 9044             | 2X X250         | 300-310    |  | .001 |  |                        |
| 2  | 9045             |                 |            |  | 0    |  |                        |
| 3  | 9046             |                 |            |  | TR   |  |                        |
| 4  | 9047             |                 |            |  | 0    |  |                        |
| 5  | 9048             |                 |            |  | 0    |  |                        |
| 6  | 9049             |                 |            |  | 0    |  |                        |
| 7  | 9050             |                 |            |  | 0    |  |                        |
| 8  | 9051             |                 |            |  | TR   |  |                        |
| 9  | 9052             |                 |            |  | 0    |  |                        |
| 10 | 9053             |                 | 390-400    |  | 0    |  |                        |
| 11 |                  |                 |            |  |      |  |                        |
| 12 |                  |                 |            |  |      |  |                        |
| 13 |                  |                 |            |  |      |  |                        |
| 14 |                  |                 |            |  |      |  |                        |
| 15 |                  |                 |            |  |      |  |                        |
| 16 |                  |                 |            |  |      |  |                        |
| 17 |                  |                 |            |  |      |  |                        |
| 18 |                  |                 |            |  |      |  |                        |
| 19 |                  |                 |            |  |      |  |                        |
| 20 |                  |                 |            |  |      |  |                        |
| 21 |                  |                 |            |  |      |  |                        |
| 22 |                  |                 |            |  |      |  |                        |
| 23 |                  |                 |            |  |      |  |                        |
| 24 |                  |                 |            |  |      |  |                        |
| 25 |                  |                 |            |  |      |  |                        |
| 26 |                  |                 |            |  |      |  |                        |
| 27 |                  |                 |            |  |      |  |                        |
| 28 |                  |                 |            |  |      |  |                        |
| 29 |                  |                 |            |  |      |  |                        |
| 30 |                  |                 |            |  |      |  |                        |

ASSAYER AS

## BILLEHORN COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE Jan 08, 1932

## GEOLOGY - Cu

SHIFT II

|    | D. DRILL<br>CU | WEIGHT<br>TAKEN | 4.79-<br>6 |  |  |  | ASSAY<br>4.0% |
|----|----------------|-----------------|------------|--|--|--|---------------|
| 1  | 9044           | 1/2 x 250       | 300-310    |  |  |  | .02           |
| 2  | 9045           |                 |            |  |  |  | .01           |
| 3  | 9046           |                 |            |  |  |  | .01           |
| 4  | 9047           |                 |            |  |  |  | .01           |
| 5  | 9048           |                 |            |  |  |  | .01           |
| 6  | 9049           |                 |            |  |  |  | .01           |
| 7  | 9050           |                 |            |  |  |  | .01           |
| 8  | 9051           |                 |            |  |  |  | .01           |
| 9  | 9052           |                 |            |  |  |  | .01           |
| 10 | 9053           |                 | 390-400    |  |  |  | .01           |
| 11 |                |                 |            |  |  |  |               |
| 12 |                |                 |            |  |  |  |               |
| 13 |                |                 |            |  |  |  |               |
| 14 |                |                 |            |  |  |  |               |
| 15 |                |                 |            |  |  |  |               |
| 16 |                |                 |            |  |  |  |               |
| 17 |                |                 |            |  |  |  |               |
| 18 |                |                 |            |  |  |  |               |
| 19 |                |                 |            |  |  |  |               |
| 20 |                |                 |            |  |  |  |               |
| 21 |                |                 |            |  |  |  |               |
| 22 |                |                 |            |  |  |  |               |
| 23 |                |                 |            |  |  |  |               |
| 24 |                |                 |            |  |  |  |               |
| 25 |                |                 |            |  |  |  |               |
| 26 |                |                 |            |  |  |  |               |
| 27 |                |                 |            |  |  |  |               |
| 28 |                |                 |            |  |  |  |               |
| 29 |                |                 |            |  |  |  |               |
| 30 |                |                 |            |  |  |  |               |

ASSAYER



## HILEM COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE 1-8- 1980SHIFT II

|    | MO.<br>Geo DD | WEIGHT<br>TAKEN | 6-79-<br>6 |        |  | ASSAY<br>% |
|----|---------------|-----------------|------------|--------|--|------------|
| 1  | 9030          | 2 1/2 YSO       | 165-170    | .010   |  | .0006      |
| 2  | 31            |                 |            | (.010) |  | .0006      |
| 3  | 32            |                 |            | .010   |  | .0006      |
| 4  | 37            |                 |            | (.005) |  | .0003      |
| 5  | 34            |                 |            | .005   |  | .0003      |
| 6  | 35            |                 |            | .010   |  | .0006      |
| 7  | 36            |                 |            | .004   |  | .0003      |
| 8  | 37            |                 |            | .010   |  | .0006      |
| 9  | 38            |                 |            | .010   |  | .0006      |
| 10 | 39            |                 |            | .015   |  | .0009      |
| 11 | 40            |                 |            | .023   |  | .0012      |
| 12 | 41            |                 |            | .015   |  | .0009      |
| 13 | 42            |                 |            | .020   |  | .0012      |
| 14 | 7043          |                 | 290-300    | .025   |  | .0015      |
| 15 |               |                 |            |        |  |            |
| 16 |               |                 |            |        |  |            |
| 17 |               |                 |            |        |  |            |
| 18 |               |                 |            |        |  |            |
| 19 |               |                 |            |        |  |            |
| 20 |               |                 |            |        |  |            |
| 21 |               |                 |            |        |  |            |
| 22 |               |                 |            |        |  |            |
| 23 |               |                 |            |        |  |            |
| 24 |               |                 |            |        |  |            |
| 25 |               |                 |            |        |  |            |
| 26 |               |                 |            |        |  |            |
| 27 |               |                 |            |        |  |            |
| 28 |               |                 |            |        |  |            |
| 29 |               |                 |            |        |  |            |
| 30 |               |                 |            |        |  |            |

ASSAYER \_\_\_\_\_

ASHCROFT, B.C.

EA✓

DATE 1-8- 1980SHIFT II

|    | Cu.<br>Geo. P.D. | WEIGHT<br>TAKEN          | L-79-<br>6 |  |  |  | ASSAY<br>% Cu |
|----|------------------|--------------------------|------------|--|--|--|---------------|
| 1  | 9030             | $\frac{1}{2} \times 250$ | 165-170    |  |  |  | .02           |
| 2  | 31               |                          |            |  |  |  | .01           |
| 3  | 32               |                          |            |  |  |  | .02           |
| 4  | 33               |                          |            |  |  |  | .02           |
| 5  | 34               |                          | 200-210    |  |  |  | .01           |
| 6  | 35               |                          |            |  |  |  | .01           |
| 7  | 36               |                          |            |  |  |  | .01           |
| 8  | 37               |                          |            |  |  |  | .01           |
| 9  | 38               |                          |            |  |  |  | .01           |
| 10 | 39               |                          | 250-260    |  |  |  | .01           |
| 11 | 40               |                          |            |  |  |  | .02           |
| 12 | 41               |                          |            |  |  |  | .02           |
| 13 | 42               |                          |            |  |  |  | .01           |
| 14 | 9043             |                          | 290-300    |  |  |  | .01           |
| 15 |                  |                          |            |  |  |  |               |
| 16 |                  |                          |            |  |  |  |               |
| 17 |                  |                          |            |  |  |  |               |
| 18 |                  |                          |            |  |  |  |               |
| 19 |                  |                          |            |  |  |  |               |
| 20 |                  |                          |            |  |  |  |               |
| 21 |                  |                          |            |  |  |  |               |
| 22 |                  |                          |            |  |  |  |               |
| 23 |                  |                          |            |  |  |  |               |
| 24 |                  |                          |            |  |  |  |               |
| 25 |                  |                          |            |  |  |  |               |
| 26 |                  |                          |            |  |  |  |               |
| 27 |                  |                          |            |  |  |  |               |
| 28 |                  |                          |            |  |  |  |               |
| 29 |                  |                          |            |  |  |  |               |
| 30 |                  |                          |            |  |  |  |               |

ASSAYER



## BETHLEHEM COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE 1-24- 1980L-79-5SHIFT II

|    | Mo.<br>Bar DD | WEIGHT<br>TAKEN |         |  |  |  | ASSAY<br><del>800</del> %Mo |
|----|---------------|-----------------|---------|--|--|--|-----------------------------|
| 1  | 9099          | 27450           | 460-470 |  |  |  | —                           |
| 2  | 9100          |                 |         |  |  |  | —                           |
| 3  | 01            |                 |         |  |  |  | —                           |
| 4  | 02            |                 |         |  |  |  | —                           |
| 5  | 03            |                 |         |  |  |  | —                           |
| 6  | 04            |                 |         |  |  |  | —                           |
| 7  | 05            |                 |         |  |  |  | —                           |
| 8  | 06            |                 |         |  |  |  | —                           |
| 9  | 07            |                 |         |  |  |  | —                           |
| 10 | 08            |                 |         |  |  |  | —                           |
| 11 | 09            |                 |         |  |  |  | —                           |
| 12 | 10            |                 |         |  |  |  | —                           |
| 13 | 11            |                 |         |  |  |  | +                           |
| 14 | 12            |                 |         |  |  |  | —                           |
| 15 | 13            |                 |         |  |  |  | —                           |
| 16 | 14            |                 |         |  |  |  | —                           |
| 17 | 15            |                 |         |  |  |  | —                           |
| 18 | 16            |                 |         |  |  |  | —                           |
| 19 | 17            |                 |         |  |  |  | —                           |
| 20 | F O H 9118    |                 | 660-667 |  |  |  | —                           |
| 21 |               |                 |         |  |  |  |                             |
| 22 |               |                 |         |  |  |  |                             |
| 23 |               |                 |         |  |  |  |                             |
| 24 |               |                 |         |  |  |  |                             |
| 25 |               |                 |         |  |  |  |                             |
| 26 |               |                 |         |  |  |  |                             |
| 27 |               |                 |         |  |  |  |                             |
| 28 |               |                 |         |  |  |  |                             |
| 29 |               |                 |         |  |  |  |                             |
| 30 |               |                 |         |  |  |  |                             |

ASSAYER P.M.

## PHILEMEN COPPER CORPORATION LTD

ASHCROFT, B.C.

DATE 14 JAN 1980

GEOLOGY - Cu

SHIFT 2

|    | <u>Geo<br/>D. Drill Cu</u> | <u>WEIGHT<br/>TAKEN</u> | <u>4.79<br/>6</u> |  |  |  | <u>ASSAY<br/>% Cu</u> |
|----|----------------------------|-------------------------|-------------------|--|--|--|-----------------------|
| 1  | 9054                       | 1X250                   | 400-410           |  |  |  | .007                  |
| 2  | 55                         |                         |                   |  |  |  | .011                  |
| 3  | 56                         |                         |                   |  |  |  | .011                  |
| 4  | 57                         |                         |                   |  |  |  | .009                  |
| 5  | 58                         |                         |                   |  |  |  | .011                  |
| 6  | 59                         |                         |                   |  |  |  | .019                  |
| 7  | 60                         |                         |                   |  |  |  | .010                  |
| 8  | 61                         |                         |                   |  |  |  | .007                  |
| 9  | 62                         |                         |                   |  |  |  | .008                  |
| 10 | 63                         |                         |                   |  |  |  | .013                  |
| 11 | 64                         |                         |                   |  |  |  | .009                  |
| 12 | 65                         |                         |                   |  |  |  | .010                  |
| 13 | 66                         |                         |                   |  |  |  | .010                  |
| 14 | 67                         |                         |                   |  |  |  | .007                  |
| 15 | 68                         |                         |                   |  |  |  | .009                  |
| 16 | 69                         |                         | 550-560           |  |  |  | .008                  |
| 17 | 70                         |                         |                   |  |  |  | .008                  |
| 18 | 71                         |                         |                   |  |  |  | .009                  |
| 19 | 72                         |                         |                   |  |  |  | .008                  |
| 20 | 73                         |                         |                   |  |  |  | .008                  |
| 21 | 74                         |                         | 100-610           |  |  |  | .008                  |
| 22 | 75                         |                         |                   |  |  |  | .006                  |
| 23 | 76                         |                         |                   |  |  |  | .004                  |
| 24 | 77                         |                         |                   |  |  |  | .008                  |
| 25 | 78                         |                         |                   |  |  |  | .004                  |
| 26 | 79                         |                         | 650-660           |  |  |  | .003                  |
| 27 | 80                         |                         |                   |  |  |  | .004                  |
| 28 | 81                         |                         | 670-677 E.O.H.    |  |  |  | .007                  |
| 29 |                            |                         |                   |  |  |  |                       |
| 30 |                            |                         |                   |  |  |  |                       |

ASSAYER P.M.

## WILEMEN COPPER CORPORATION LTD.

ASHCROFT, B.C.

DATE 15/01 1980GEOLOGY - Mo

SHIFT \_\_\_\_\_

|    | Geo<br>D. DRILL Mo. | WEIGHT<br>TAKEN | <u>4-79</u><br><u>-6</u> |  |  |  | ASSAY<br>T. Mo. |
|----|---------------------|-----------------|--------------------------|--|--|--|-----------------|
| 1  | 9054                | 2½ x 50         | 400-410                  |  |  |  | —               |
| 2  | 55                  |                 |                          |  |  |  | 7               |
| 3  | 56                  |                 |                          |  |  |  |                 |
| 4  | 57                  |                 |                          |  |  |  |                 |
| 5  | 58                  |                 |                          |  |  |  |                 |
| 6  | 59                  |                 |                          |  |  |  |                 |
| 7  | 60                  |                 |                          |  |  |  |                 |
| 8  | 61                  |                 |                          |  |  |  |                 |
| 9  | 62                  |                 |                          |  |  |  |                 |
| 10 | 63                  |                 |                          |  |  |  |                 |
| 11 | 64                  |                 |                          |  |  |  |                 |
| 12 | 65                  |                 |                          |  |  |  |                 |
| 13 | 66                  |                 |                          |  |  |  |                 |
| 14 | 67                  |                 |                          |  |  |  |                 |
| 15 | 68                  |                 |                          |  |  |  |                 |
| 16 | 69                  |                 |                          |  |  |  |                 |
| 17 | 70                  |                 |                          |  |  |  |                 |
| 18 | 71                  |                 |                          |  |  |  |                 |
| 19 | 72                  |                 |                          |  |  |  |                 |
| 20 | 73                  |                 |                          |  |  |  |                 |
| 21 | 74                  |                 |                          |  |  |  |                 |
| 22 | 75                  |                 |                          |  |  |  |                 |
| 23 | 76                  |                 |                          |  |  |  |                 |
| 24 | 77                  |                 |                          |  |  |  |                 |
| 25 | 78                  |                 |                          |  |  |  |                 |
| 26 | 79                  |                 |                          |  |  |  |                 |
| 27 | 80                  |                 |                          |  |  |  |                 |
| 28 | (E6H) 81            | 670-677 E.O.H.  |                          |  |  |  | —               |
| 29 | 8                   |                 |                          |  |  |  |                 |
| 30 |                     |                 |                          |  |  |  |                 |

ASSAYER P.M.



BETHLEHEM  
COPPER  
CORPORATION

CALULATION SHEET

SUBJECT: MISSOURI LAKE 1979/80 DRILLING

Au assays (spot checks)

BY: R.G.S.

DATE: Feb. 1980

SHEET 1 of 1

FILE No.:

| DDH    | FOOTAGE   | TAG NO. | Au<br>oz/Ton |
|--------|-----------|---------|--------------|
| L-79-5 | 30 - 40   | 9003    | tr           |
|        | 90 - 100  | 9009    | .007         |
|        | 160 - 170 | 9016    | tr           |
|        | 250 - 260 | 9025    | (missing)    |
|        | 350 - 360 | 9087    | tr           |
|        | 400 - 410 | 9092    | tr           |
|        | 500 - 510 | 9102    | .007         |
|        | 600 - 610 | 7112    | tr           |
|        | 660 - 667 | 9118    | tr           |
|        |           |         |              |
| L-79-6 | 170 - 180 | 9031    | tr           |
|        | 190 - 200 | 9033    | .010         |
|        | 230 - 240 | 9037    | tr           |
|        | 260 - 270 | 9040    | tr           |
|        | 340 - 350 | 9048    | tr           |
|        | 370 - 380 | 9051    | tr           |
|        | 460 - 470 | 9060    | .007         |
|        | 500 - 510 | 9064    | .007         |
|        | 570 - 580 | 9071    | tr           |
|        | 620 - 630 | 9076    | tr           |
|        | 650 - 660 | 9079    | tr           |
|        | 670 - 680 | 9081    | .007         |
|        | 180 - 190 | 9032    | tr           |
|        | 200 - 210 | 9034    | tr           |
|        | 210 - 220 | 9035    | tr           |
|        | 220 - 230 | 9036    | tr           |

SECTION F - ILLUSTRATIONS

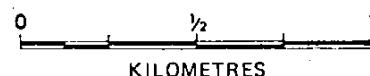
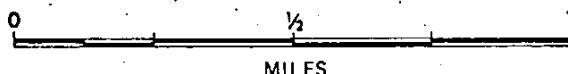
| <u>Drawing No.</u> | <u>Title</u>          | <u>Scale</u> |
|--------------------|-----------------------|--------------|
| ML-79-1            | General Location Plan | 1:250 000    |
| ML-79-2            | Location Plan         | 1: 50 000    |
| ML-79-3            | Mineral Claim Plan    | 1: 10 000    |
| ML-79-4            | Geological Plan       | 1: 10 000    |
| ML-79-5            | Drill Hole Plan       | 1: 10 000    |

BRITISH COLUMBIA  
DEPARTMENT OF MINES AND PETROLEUM RESOURCES

PRELIMINARY MAP NO. 17  
JULY, 1975

GEOLOGY OF THE  
ALLISON LAKE - MISSEZULA LAKE AREA  
BRITISH COLUMBIA

GEOLOGY BY: V. A. PRETO, S. J. ATKINSON, AND J. NEBOCAT, 1974



LEGEND

PLEISTOCENE AND RECENT

[9] RED AND GREY, VESICULAR OLIVINE VALLEY BASALT

LOWER CRETACEOUS

KINGSVALE GROUP

[8] PLAGIOCLASE AND AUGITE-PLAGIOCLASE ANDESITE PORPHYRY

LOWER TO MIDDLE JURASSIC

[7] ALLISON LAKE PLUTON

7a - REDDISH GREY TO RED, LOCALLY MIAROLITIC BIOTITE-HORNBLENDE GRANITE AND QUARTZ MONZONITE

7b - GREY HORNBLENDE GRANODIORITE

7c - GREY TO DARK GREY, LOCALLY MIGMATITIC HORNBLENDE DIORITE AND QUARTZ DIORITE

7d - HORNFELSED, MIGMATIZED, AND SILICIFIED VOLCANIC ROCKS WITHIN OR NEAR THE PLUTON

UPPER TRIASSIC

[6] DIORITE AND MONZONITE

6a - GREY, MEDIUM-GRAINED PYROXENE DIORITE AND MONZONITE

6b - GREEN HORNBLENDE PORPHYRY

[5] PINK AND GREY, MEDIUM-GRAINED PORPHYRATIC MONZONITE AND SYENITE

5a - MONZONITE VEIN BRECCIA

[4] LEUCOCRATIC, PYRITIC QUARTZ PORPHYRY, LOCALLY HIGHLY SHEARED AND MYLONITIZED

NICOLA GROUP

EASTERN BELT

[3] LAHAR DEPOSITS AND ASSOCIATED VOLCANIC CONGLOMERATE, SANDSTONE, SILTSTONE, AND TUFF; MINOR INTERLAYERED FLOW ROCKS

3a - THINLY LAMINATED, GREY-WEATHERING VOLCANIC SANDSTONE, SILTSTONE, AND SHALE, TYPICALLY GRADED AND/OR CROSSBEDDED

3b - MASSIVE TO CRUDELY LAYERED LAHAR DEPOSITS WITH ABUNDANT CLASTS OF PINK SYENITE AND PURPLE TRACHYTE; DISCONTINUOUS LENSES OF VOLCANIC CONGLOMERATE AND GRIT, AND OCCASIONAL LENSES OF REDDISH, IMPURE LIMESTONE

3c - REDDISH TO GREENISH GREY CRYSTAL, LITHIC, AND LAPILLI TUFF AND VOLCANIC SANDSTONE, LOCALLY WITH LENSES OF IMPURE LIMESTONE

3d - PURPLE AND GREY LOCALLY ANALCITE-BEARING AUGITE-PLAGIOCLASE TRACHYANDESITE AND TRACHYBASALT PORPHYRY, LOCALLY WITH BLOCKS OF FOSSILIFEROUS LIMESTONE

### CENTRAL BELT

#### 2 ANDESITIC FLOWS, VOLCANIC BRECCIA AND LAHAR DEPOSITS, VOLCANIC SILTSTONE

- 2a - MASSIVE GREENISH GREY TO GREY AUGITE-PLAGIOCLASE ANDESITE PORPHYRY, EXTENSIVELY AUTOBRECCIATED
- 2b - MASSIVE, GREEN VOLCANIC BRECCIA AND LAHAR DEPOSITS
- 2c - MASSIVE, RED VOLCANIC BRECCIA AND LAHAR DEPOSITS
- 2d - DARK GREY, THINLY LAMINATED, PYRITIC TUFF

#### 1 MASSIVE FLOWS, BRECCIA, AND LITHIC TUFF

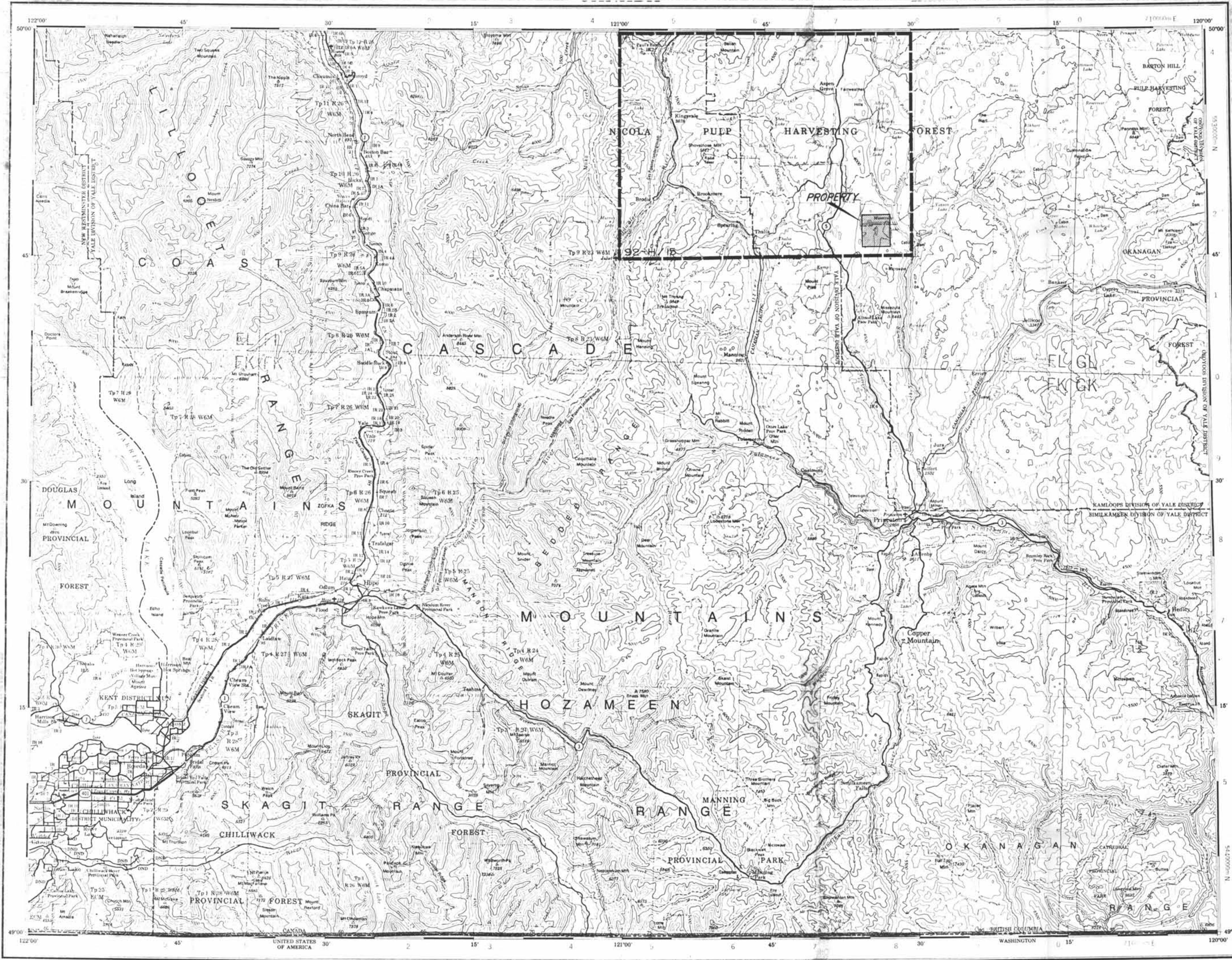
- 1a - MASSIVE DARK GREEN SUBAQUEOUS BASALTIC TO ANDESITIC FLOWS WITH PLAGIOCLASE AND/OR PYROXENE PHENOCRYSTS
- 1b - AUTOBRECCIATED EQUIVALENTS OF 1a AND FLOW BRECCIA FROM 1a FLOWS
- 1c - GREEN, CALCAREOUS AQUAGENE BRECCIA AND POSSIBLY PILLOW BRECCIA OF COMPOSITION SIMILAR TO 1a
- 1d - MASSIVE TO BEDDED TUFF AND LITHIC TUFF, LOCALLY WITH CALCAREOUS LENSES; MINOR SILTSTONE, SANDSTONE, AND CONGLOMERATE
- 1e - IMPURE LIMESTONE AND LIMESTONE BRECCIA
- 1f - GREEN, MASSIVE TO CRUDELY BEDDED DACITIC LITHIC TUFF WITH LIGHT GREY RHYOLITIC FRAGMENTS

py - PYRITE  
mal - MALACHITE  
cp - CHALCOPYRITE  
cc - CHALCOCITE  
mt - MAGNETITE  
bn - BORNITE  
cu - NATIVE COPPER

az - AZURITE  
po - PYRRHOTITE  
arg - ARGENTITE  
td - TETRAHEDRITE  
gn - GALENA  
ls - LIMESTONE

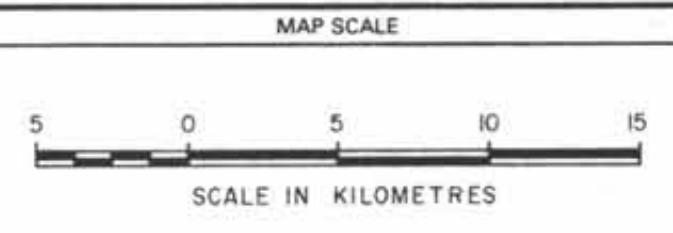
### S Y M B O L S

|  |           |
|--|-----------|
| AREA OF PREDOMINANT OUTCROP                                  | .....     |
| FAULT  | .....     |
| AREA OF INTENSE SHEARING                                     | .....     |
| PREVALENT FRACTURE DIRECTION: INCLINED, VERTICAL             | .....     |
| SECONDARY FOLIATION: INCLINED, VERTICAL                      | .....     |
| BEDDING: VERTICAL, INCLINED, RIGHT SIDE UP                   | .....     |
| PROSPECT: TRENCH, PIT  | .....     |
| GEOLOGICAL CONTACT: DEFINED, ASSUMED                         | .....     |
| POWER TRANSMISSION LINE                                      | .....     |
| NATURAL GAS PIPELINE   | .....     |
| FOSSIL LOCALITY  | ..... (F) |
| MICROSYENITE PORPHYRY CLASTS IN FRAGMENTAL<br>VOLCANIC ROCKS | ..... S   |



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8309**  
NO.  
part 2  
of 2

NOTE:  
UTM GRID - ZONE 10

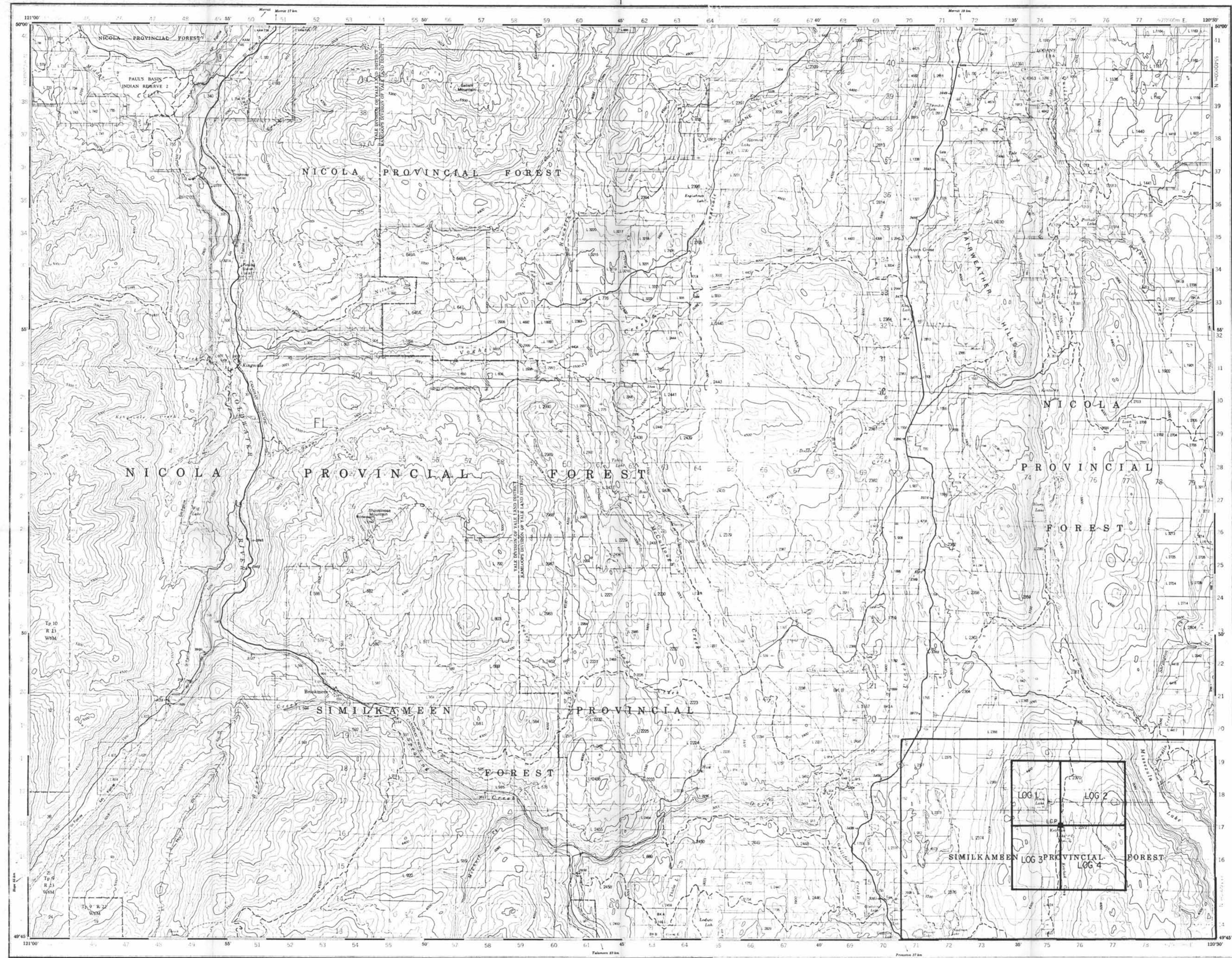


| REVISIONS | No.       | Date    | MADE BY  | DESCRIPTION |
|-----------|-----------|---------|----------|-------------|
|           | 1         |         |          |             |
|           | 2         |         |          |             |
|           | 3         |         |          |             |
|           | 4         |         |          |             |
|           | 5         |         |          |             |
| DATE      | DRAWN BY  | CHECKED | APPROVED |             |
|           | AUG. 1979 | E.A.    |          |             |

**B** BETHLEHEM  
COPPER  
CORPORATION

MISSEZULA LAKE PROJECT  
"LOG CLAIMS"  
GENERAL LOCATION PLAN

| MAP INDEX NUMBER | SCALE     | DRAWING NUMBER |
|------------------|-----------|----------------|
| N.T.S. 92-H      | 1:250,000 | ML-79-1        |

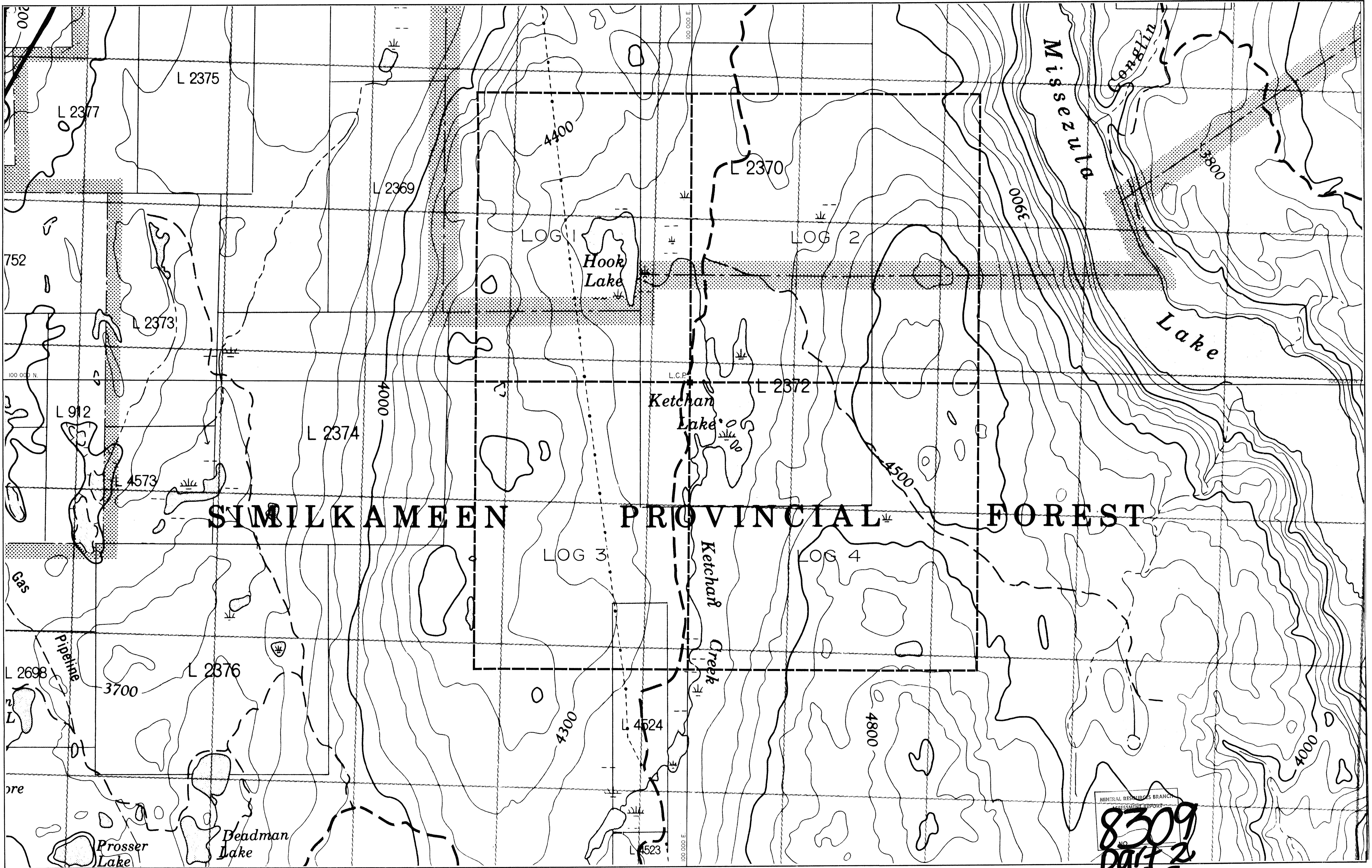


20  
21  
22  
23  
24  
25  
26  
27  
28

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT

| MAP SCALE |   |      |      | No.  | Date     | MADE BY | DESCRIPTION | REVISIONS | MISSEZULA LAKE PROJECT<br>"LOG CLAIMS"<br>LOCATION PLAN |             |         |          |                  |            |                  |
|-----------|---|------|------|------|----------|---------|-------------|-----------|---|-------------|---------|----------|------------------|------------|------------------|
| 1000      | 0 | 1000 | 2000 |      |          |         |             |           | DATE  | DRAWN BY    | CHECKED | APPROVED | OFFICE           | DEPARTMENT | MAP INDEX NUMBER |
| 1000      | 0 | 1000 | 2000 | 3000 | AUG 1979 | E.A.    |             |           | VANCOUVER   | EXPLORATION |         |          | N.T.S. 92-H / 15 | 1:50,000   | ML-79-2          |

NOTE:  
UT.M. GRID - ZONE 10



| MAP SCALE       |   |     |     | No.                            | Date | MADE BY | DESCRIPTION | REVISIONS |           |             |                  |           |                |
|-----------------|---|-----|-----|--------------------------------|------|---------|-------------|-----------|-----------|-------------|------------------|-----------|----------------|
| 200             | 0 | 200 | 400 | 600                            |      |         |             |           |           |             |                  |           |                |
| SCALE IN METRES |   |     |     | 1                              |      |         |             |           |           |             |                  |           |                |
|                 |   |     |     | 2                              |      |         |             |           |           |             |                  |           |                |
|                 |   |     |     | 3                              |      |         |             |           |           |             |                  |           |                |
|                 |   |     |     | 4                              |      |         |             |           |           |             |                  |           |                |
|                 |   |     |     | 5                              |      |         |             |           |           |             |                  |           |                |
|                 |   |     |     | DATE DRAWN BY CHECKED APPROVED |      |         |             |           | OFFICE    | DEPARTMENT  | MAP INDEX NUMBER | SCALE     | DRAWING NUMBER |
|                 |   |     |     | SEPT. 1979 Altair / m.k. E.A.  |      |         |             |           | VANCOUVER | EXPLORATION |                  | I: 10,000 | ML-79-3        |

**BETHLEHEM COPPER CORPORATION**

**MISSEZULA LAKE PROJECT "LOG CLAIMS" MINERAL CLAIM PLAN**

8309  
part 2  
of 2

Note:  
This map represents an enlargement of Preliminary Map No. 17, July, 1975.  
Geology of the Allison Lake - Missezula Lake Area, British Columbia.  
Geology by: V.A. Preto, S.J. Atkinson, and J. Nebocat, 1974  
British Columbia Department of Mines and Petroleum Resources

- PERCUSSION DRILL HOLE
- △ DIAMOND DRILL HOLE

| MAP SCALE       |   | No. | Date | MADE BY | DESCRIPTION |
|-----------------|---|-----|------|---------|-------------|
| 200             | 0 |     |      |         |             |
| SCALE IN METRES |   |     |      |         |             |
| 200             | 0 | 200 | 400  | 600     |             |
| REVISIONS       |   |     |      |         |             |
| 1               |   |     |      |         |             |
| 2               |   |     |      |         |             |
| 3               |   |     |      |         |             |
| 4               |   |     |      |         |             |
| 5               |   |     |      |         |             |

SEPT. 1980

0.m.b.

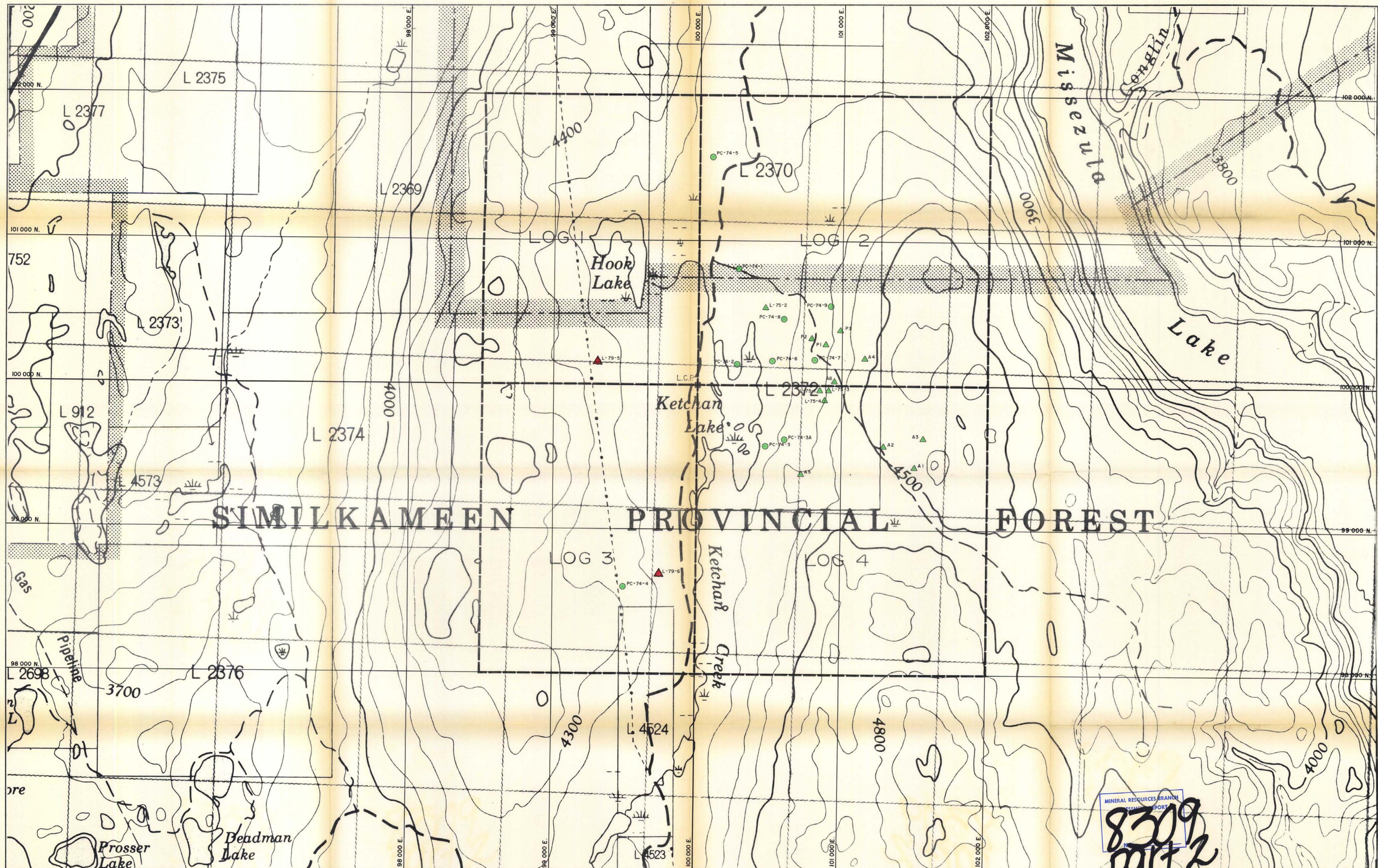
E.A.

APPROVED

**BETHLEHEM  
COPPER  
CORPORATION.**

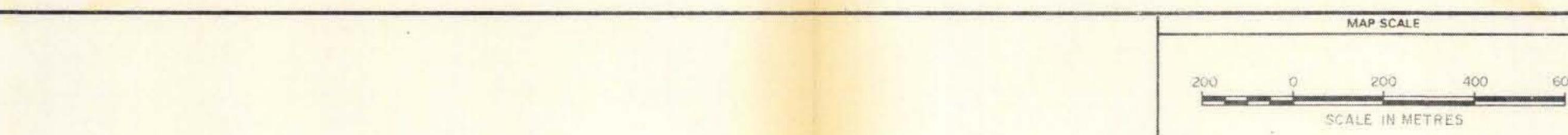
MISSEZULA LAKE PROJECT  
"LOG CLAIMS"  
GEOLOGICAL PLAN

|                  |       |                |
|------------------|-------|----------------|
| MAP INDEX NUMBER | SCALE | DRAWING NUMBER |
| 1 : 10 000       |       | ML-79-4        |



| Hole Designation | Drill Type     | Year    | Company                      |
|------------------|----------------|---------|------------------------------|
| P1, P2           | DIAMOND        | 1962    | Platoe Metals Ltd.           |
| P3               | "              | 1966    | "                            |
| A1 to 6          | "              | "       | Adero Mining Ltd.            |
| PC-74-1 to 9     | PERCUSSION     | 1974    | Bethlehem Copper Corporation |
| L-75-1 to 3      | DIAMOND        | 1975    | " " "                        |
| L-75-4           | ROTARY/DIAMOND | "       | "                            |
| L-79-5, 6        | DIAMOND        | 1979/80 | " " "                        |

○ PERCUSSION DRILL HOLE  
△ DIAMOND DRILL HOLE



| No | Date | MADE BY | DESCRIPTION |
|----|------|---------|-------------|
| 1  |      |         |             |
| 2  |      |         |             |
| 3  |      |         |             |
| 4  |      |         |             |
| 5  |      |         |             |

REVISIONS

|      |          |         |          |
|------|----------|---------|----------|
| DATE | DRAWN BY | CHECKED | APPROVED |
|------|----------|---------|----------|

NOV 1979 Altair / m.k. E.A.

BETHLEHEM COPPER CORPORATION MISSEZULA LAKE PROJECT "LOG CLAIMS" DRILL HOLE PLAN

OFFICE: VANCOUVER DEPARTMENT: EXPLORATION MAP INDEX NUMBER: SCALE: DRAWING NUMBER: I. 10,000 ML-79-5