

ASSESSMENT REPORT

GEOCHEMICAL SURVEY

SNOW GROUP

ATLIN MINING DIVISION

TATSAMENIE LAKE AREA, B. C.

N.T.S. 104K/Tulsequah Sheet

58° 15' N

132° 24' W

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,962

OWNER: CHEVRON CANADA LIMITED

OPERATOR: CHEVRON CANADA RESOURCES LIMITED

Authors: Mike Thicke

Ken Shannon

November, 1983

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LOCATION AND ACCESS

The SNOW 1 to 6 claim group is situated approximately 161 km southeast of Atlin, B.C. and 83 km northwest of Telegraph Creek, B.C. A helicopter provided access to the claims from a base camp at Bearskin Lake, about 7 km southeast.

CLAIMS

The SNOW claims were staked in September of 1982.

| <u>Claims</u> | <u>Record No.</u> | <u>Record Date</u> | <u>No. of Units</u> |
|---------------|-------------------|--------------------|---------------------|
| SNOW 1 | 1748 | September 22, 1982 | 15 |
| SNOW 2 | 1749 | " | 20 |
| SNOW 3 | 1750 | " | 16 |
| SNOW 4 | 1751 | " | 4 |
| SNOW 5 | 1752 | " | 20 |
| SNOW 6 | 1753 | " | 15 |

The SNOW claims cover previously unstaked ground. Chevron Canada Limited owns the claim group while Chevron Canada Resources Limited is the operator.

REGIONAL GEOLOGY

According to Souther (1971) the SNOW Group is underlain by Pre-Upper Triassic phyllites and greenstones. Pre-Upper Triassic rocks are intruded by post Middle Jurassic diorite in the northern part of the claims. South and west of the SNOW Group lie Tertiary Sloko Group rhyolite and a related north-northwest trending dyke swarm (Souther, 1972). East and west of the claims lie Permian limestone as well as Pre-Upper Triassic phyllites and greenstones. To the north of the SNOW Group is an extensive area of hydrothermally altered Pre-Upper Triassic sedimentary and volcanic rocks.

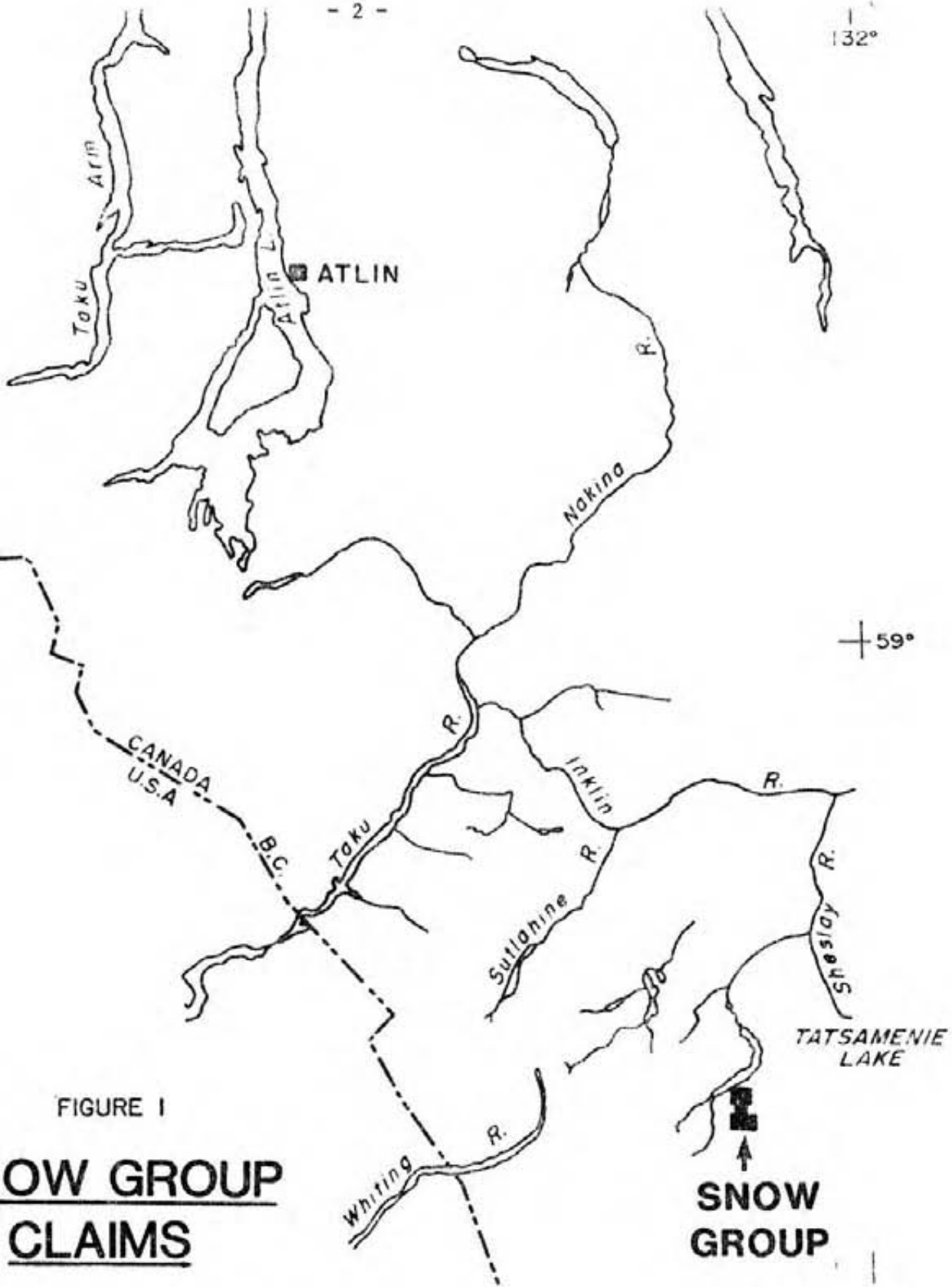


FIGURE 1
SNOW GROUP
CLAIMS

LOCATION MAP
 M523

0 30
 Km

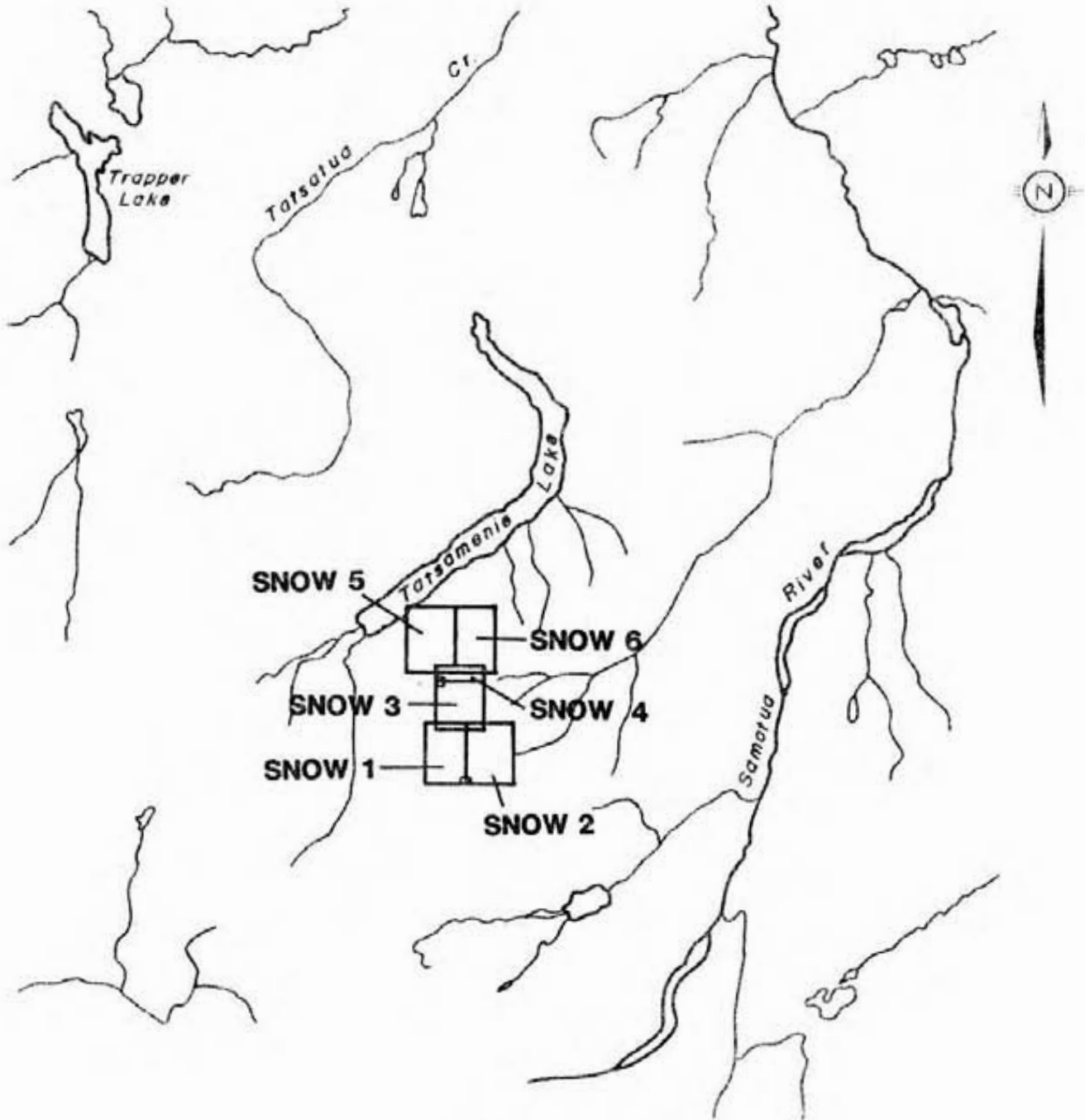


FIGURE 2

SNOW GROUP CLAIMS

0 10 Km

M523

GEOCHEMICAL SURVEY OF CLAIMS

Twenty-four rock samples and 207 soil and talus fine samples were collected from the SNOW Group (Figure 3). Soil development on the claims is poor and in such instances talus fines were sampled. Much of the sampling was done on SNOW 1 and 2 and SNOW 5 and 6 due to the rugged nature of the remainder of the claim group.

Rock samples were placed in heavy duty plastic rock sample bags. Soil and talus fine samples were placed in kraft wet-strength soil bags and dried. Rock and soil samples were then sent to Chemex Labs Limited of North Vancouver.

Soil samples were further dried and then sieved, with the -80 mesh fraction retained for analysis. Rock samples were crushed, dried and pulverized to -100 mesh. For Au determination, a fire assay - atomic absorption technique is used with the fire assay bead being dissolved in HCl and HNO₃ then analyzed by conventional atomic absorption techniques. For Ag, a mixture of HClO₄ and HNO₃ is used to digest the sample, which is followed by atomic absorption spectrophotometry. For arsenic a 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH₄ and the arsenic content determined using flameless atomic absorption. For Sb a 2.0 gm sample is digested with conc. HCl in hot water bath. The iron is reduced to Fe⁺² state and the Sb complexed with I⁻. The complex is extracted with TOPO-MIBK and analyzed via A.A.

GEOCHEMICAL RESULTS

Gold, silver, arsenic and antimony geochemical values are plotted on Figures 4 to 7 respectively. Rock samples from the SNOW Group generally contained little Au, Ag or As mineralization. Anomalous Sb mineralization (>15.0 ppm) occurs in talus from SNOW 2 claim. Silver mineralization in soil or talus fine samples is absent, while one talus fine sample contains 410 ppb Au. Anomalous Sb mineralization (>15.0 ppm) in soil and talus-fine samples is confined to the northern area of SNOW 1 claim. Sporadic Sb mineralization occurs in SNOW 2 and SNOW 5. Anomalous As mineralization (>300 ppm) occurs mostly within SNOW 1 and sporadically within SNOW 2.

CONCLUSIONS AND RECOMMENDATIONS

Fourteen man-days were spent geochemically sampling the SNOW Group. Approximately 230 rock, soil and talus fine samples were collected mostly from SNOW 1 and 2 and SNOW 5 and 6. Gold and silver geochemical values are low whereas a zone of antimony and arsenic mineralization can be defined on the SNOW 1 claim.

It is recommended that detailed prospecting, sampling and mapping be done in the area of anomalous arsenic and antimony mineralization on SNOW 1.

REFERENCE

Souther, J.G. (1971). Geology and mineral deposits of Tulsequah map-area, British Columbia. Geological Survey of Canada Memoir 362, 84 p.

1983 EXPLORATION PROGRAM

SNOW GROUP

COST STATEMENT

PERIOD: August 21 to September 8.

LABOUR:

| | <u>Position</u> | <u>Field Days</u> | <u>Office Days</u> |
|---------------|-----------------|-------------------|--------------------|
| M. Thicke | Geologist | 4 | 2 |
| D. Brown | Geologist | 2 | - |
| G. Walton | Geologist | 1 | - |
| F. Wohlgemuth | Assistant | 1 | - |
| R. Daniel | Assistant | 2 | - |
| M. Gray | Assistant | 1 | - |
| R. Brown | Assistant | 1 | - |
| D. Hodge | Assistant | <u>2</u> | <u>-</u> |
| | Total | 14 | 2 |

| | | |
|--------------------------------|---|------------|
| Cost per field man day \$100. | = | \$1,400.00 |
| Cost per office man day \$150. | = | 300.00 |

DRAFTING:

| | | |
|-----------------------|---|--------|
| 1 day @\$100. per day | = | 100.00 |
|-----------------------|---|--------|

CAMP COSTS:

| | | |
|------------------------|---|--------|
| 14 days @\$60. per day | = | 840.00 |
|------------------------|---|--------|

GEOCHEMISTRY:

| | | |
|-------------------------|---|----------|
| 207 soils @\$16.15 each | = | 3,343.00 |
| 24 rocks @\$17.65 each | = | 423.00 |

HELICOPTER:

| | | |
|---------------------------------------|--|-----------------|
| 3 hrs. @\$500. per hr. including fuel | | <u>1,500.00</u> |
|---------------------------------------|--|-----------------|

| | | |
|--------|--|------------|
| TOTAL. | | \$7,906.00 |
|--------|--|------------|

STATEMENT OF QUALIFICATIONS

I, Mike Thicke, graduated from the University of British Columbia in May, 1980 with a B.Sc. degree in geology. Six seasons have been spent working in exploration geology in B.C., including four since graduation. I am presently employed as a geologist by Chevron Canada Resources Limited of Vancouver, B. C.

A handwritten signature in cursive script that reads "Mike Thicke". The signature is written in dark ink and is positioned centrally on the page, below the typed text.

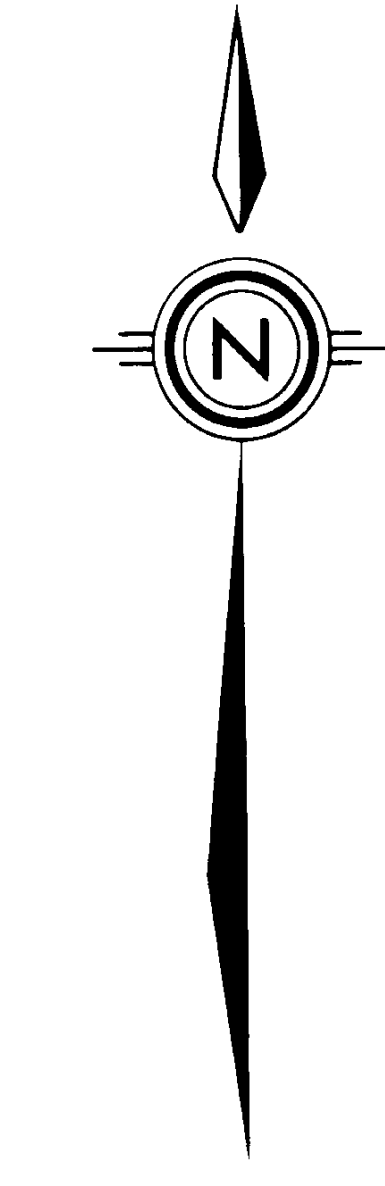
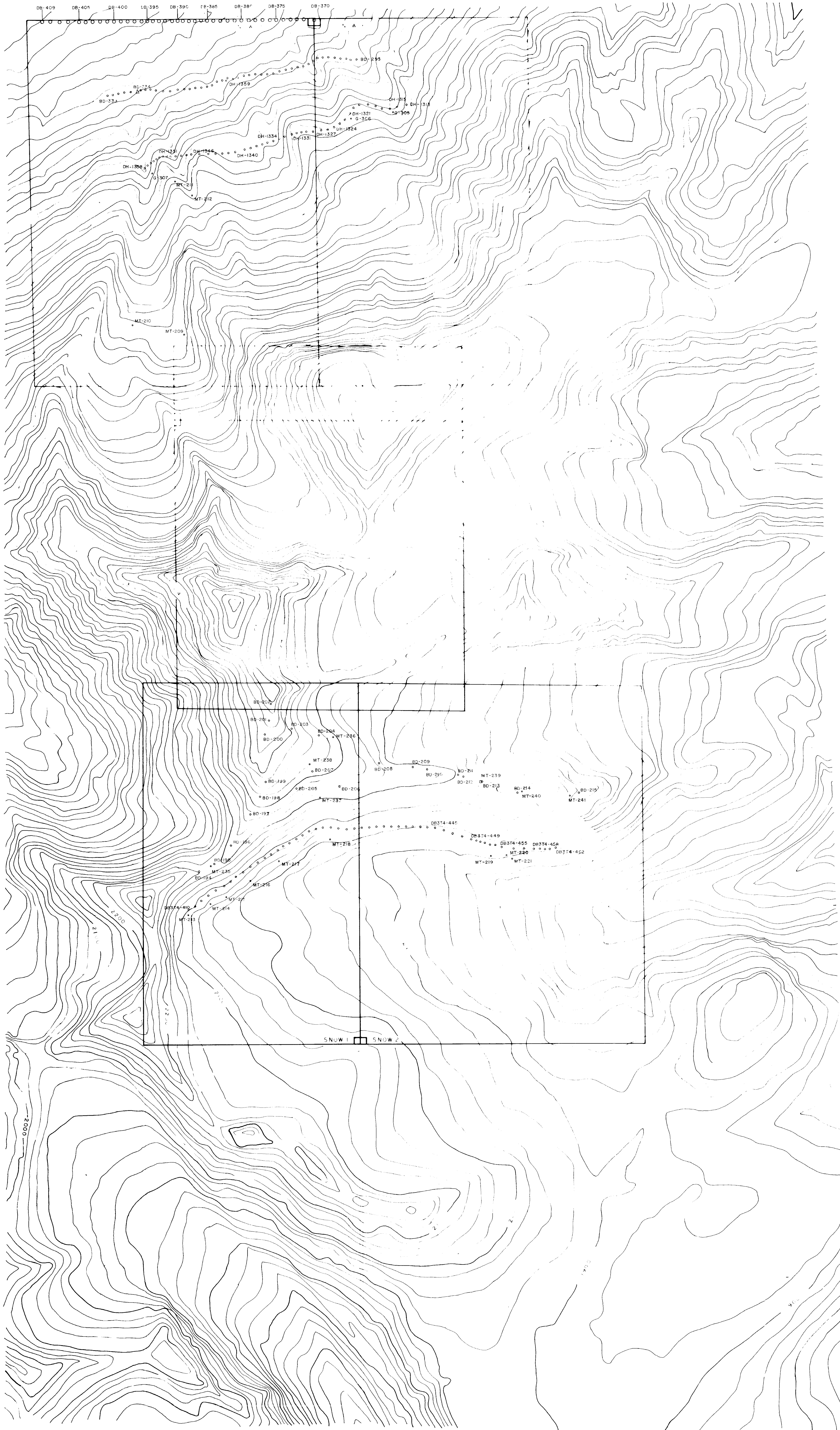
Mike Thicke

STATEMENT OF QUALIFICATIONS

I, Ken Shannon, have worked as a geologist in B. C. on a seasonal basis since graduation from the University of British Columbia with a B.Sc. (Hons. Geology) in 1975. A M.Sc. degree was awarded from the Department of Geology at U.B.C. in May, 1982. I am employed as a geologist by Chevron Canada Resources Limited of Vancouver, B. C. Work on the SNOW claims was done under my supervision.

A handwritten signature in cursive script that reads "Ken Shannon". The signature is written in dark ink and is positioned to the right of the typed text.

KEN SHANNON



GEOLOGICAL BRANCH
ASSESSMENT REPORT

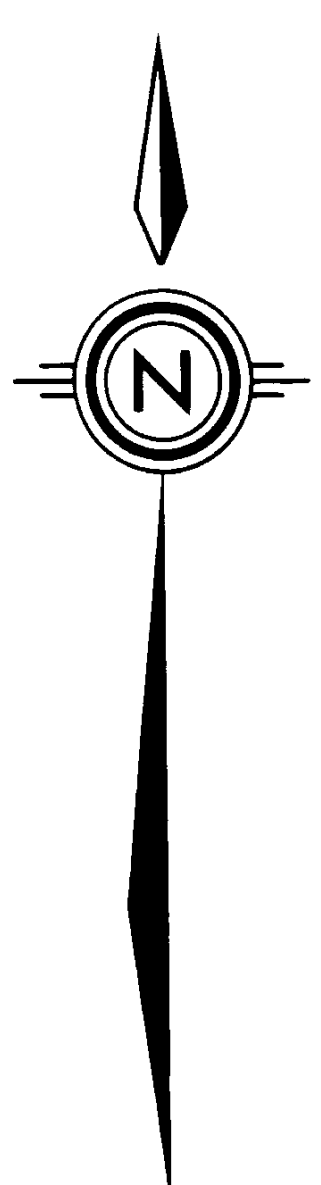
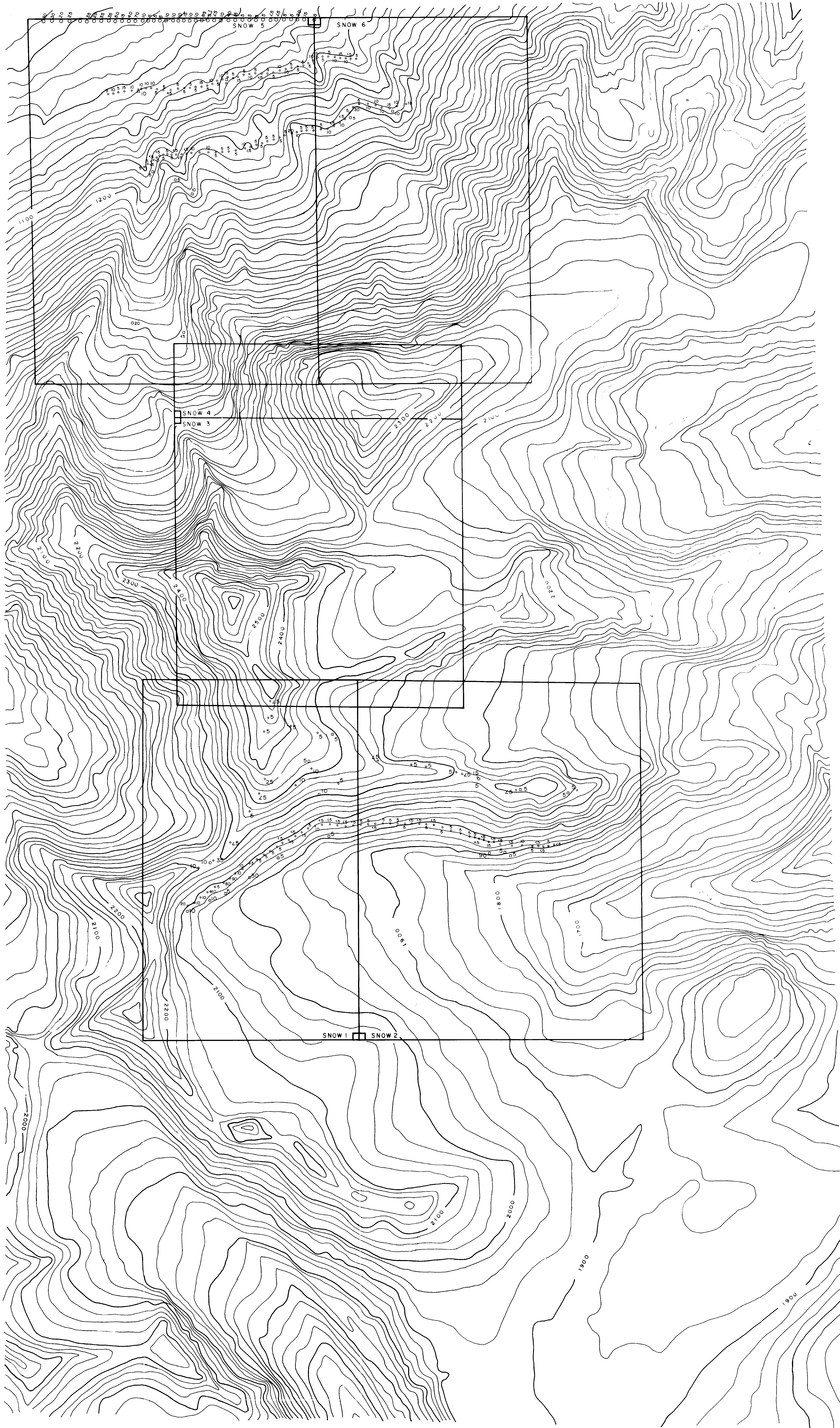
11,962

0 400m

LEGEND

- ROCKS
- △ SILT
- SOIL

| | |
|--|------------------------|
| Chevron Canada Resources Limited Minerals Staff | |
| SNOW GROUP ROCK, SOIL & SILT SAMPLE LOCATIONS | |
| FIGURE No 3 | PROJECT No M523 |
| DATE OCT. 1983 | SCALE 1:10,000 |
| NTS No 104K | FILE No |
| COMPILED BY M.T. | |



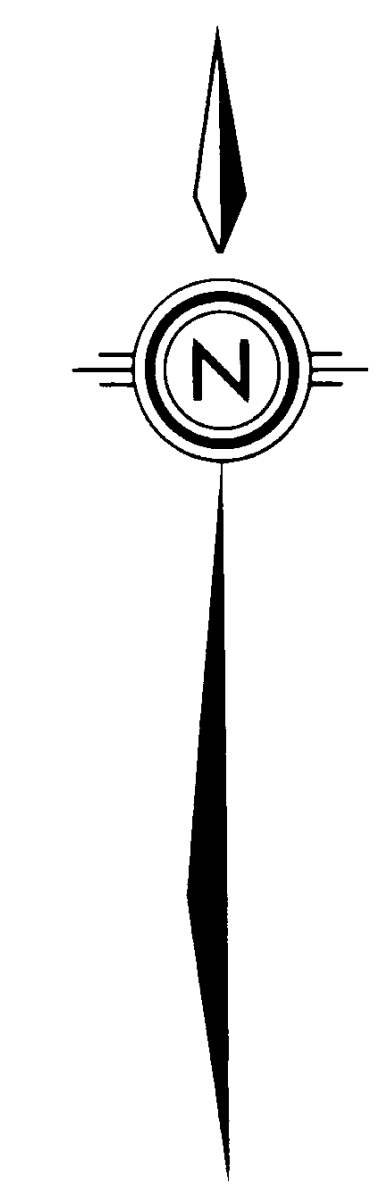
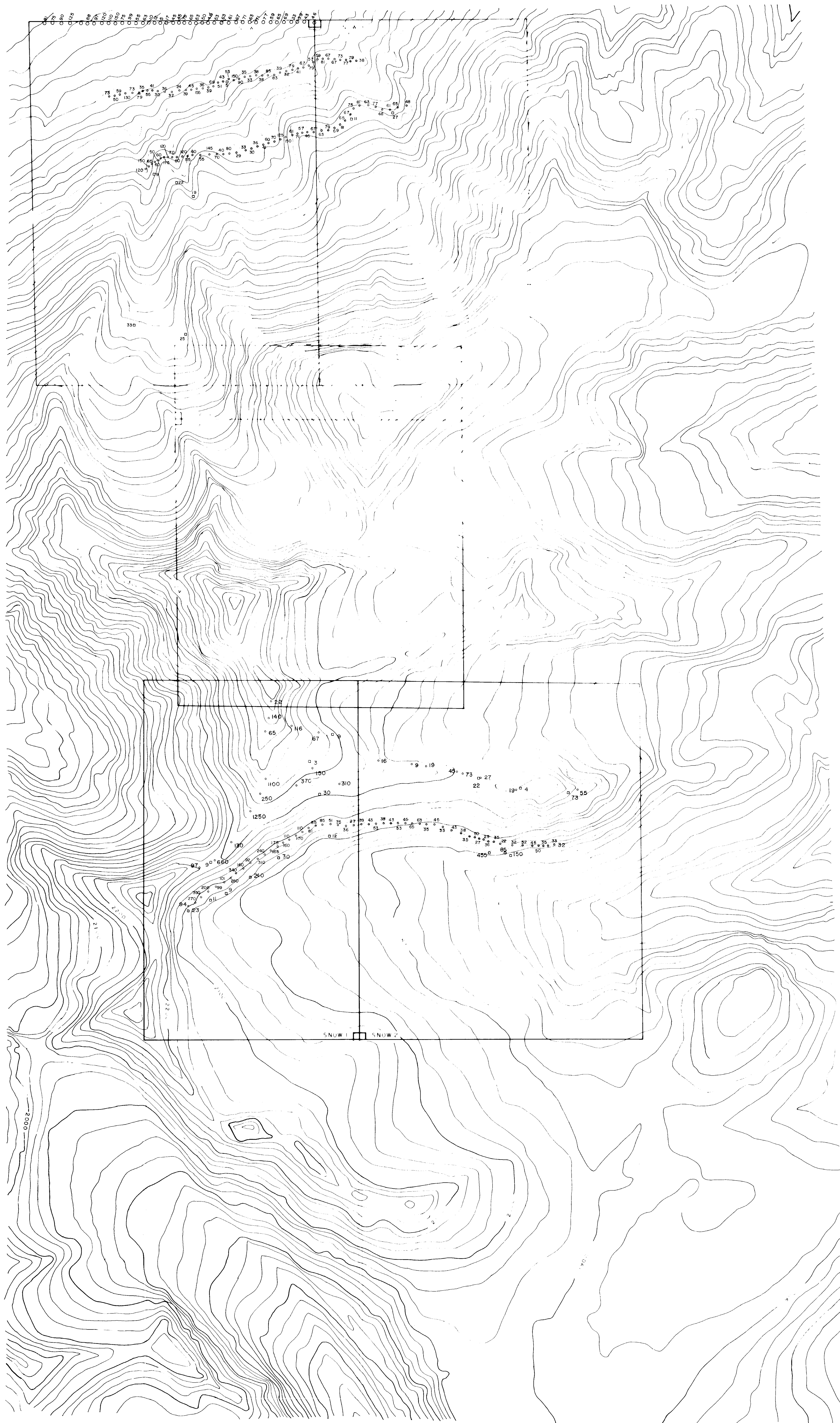
GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,962

0 400 m

LEGEND
 □ ROCKS
 Δ SILT
 ○ SOIL
 25, 90 Au ppb


| | | |
|---|-------------------------|-----------------------|
| Chevron Canada Resources Limited Minerals Staff | | |
| SNOW GROUP GEOCHEMISTRY Au - ppb | | |
| FIGURE No. 4 | PROJECT No. M523 | |
| DATE 04T, 1983 | REVISIONS | SCALE 1:10,000 |
| NTS No. 104K | | FILE No. |
| COMPILED BY M.T. | | |

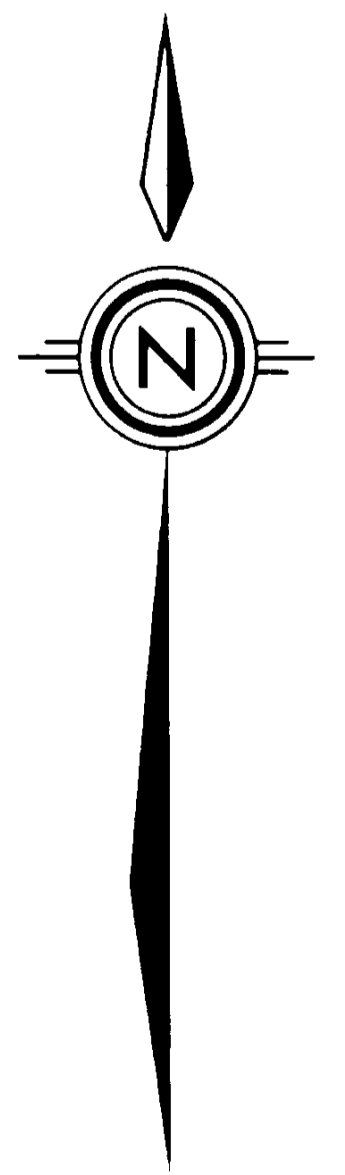
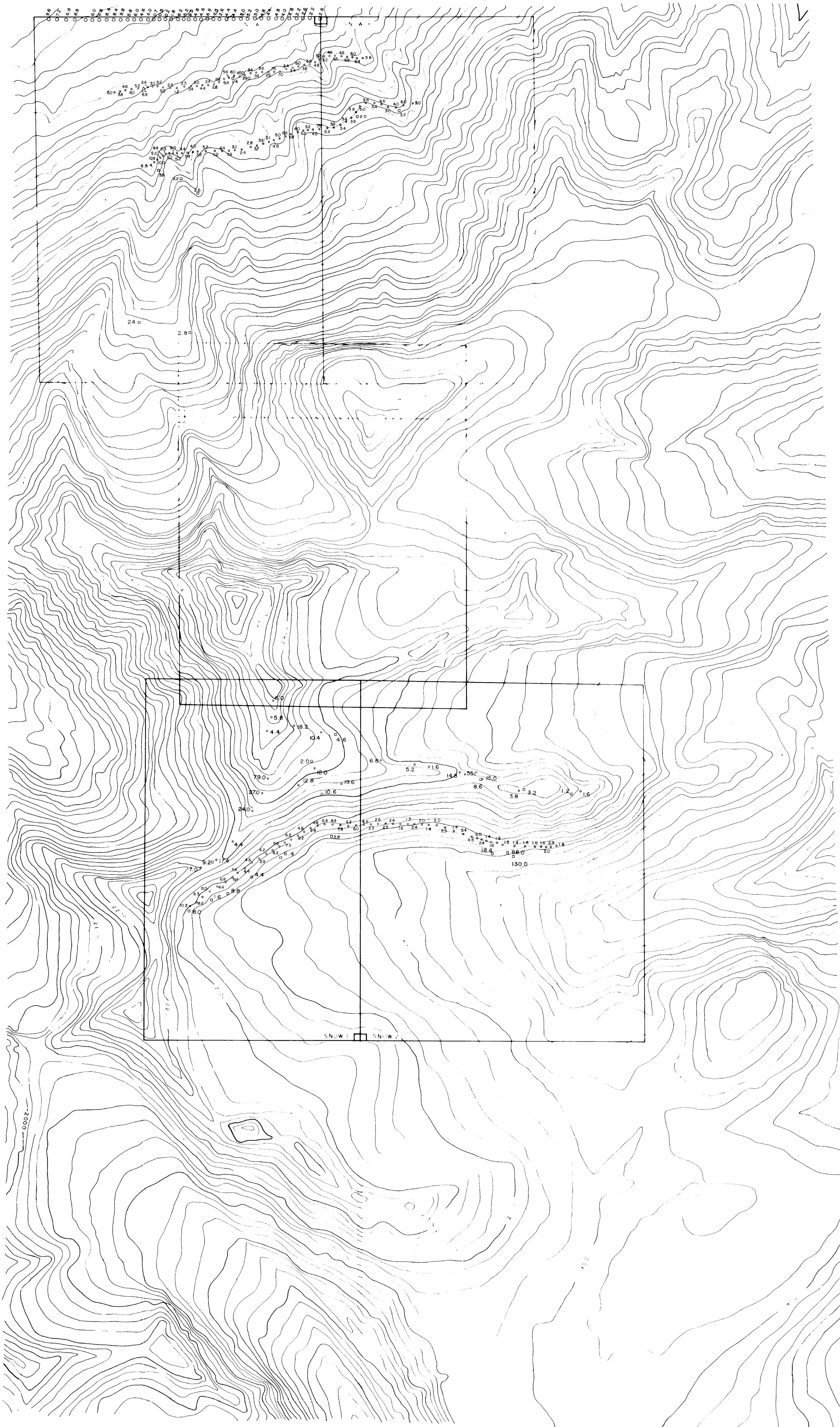


GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,962
400 m

LEGEND
 □ ROCKS
 △ SILT
 ○ SOIL
 240 As ppm

| | |
|---|-------------------------|
|  Chevron Canada Resources Limited Minerals Staff | |
| SNOW GROUP GEOCHEMISTRY As - ppm | |
| FIGURE No. 6 | PROJECT No. M523 |
| DATE OCT. 1983 | REVISIONS |
| NTS No. 104K | SCALE 1:10,000 |
| COMPILED BY M.T. | FILE No. |



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,962
0 400m

- LEGEND
- ROCKS
 - △ SILT
 - SOIL
 - 10.6 Sb ppm

Chevron Canada Resources Limited
Minerals Staff

SNOW GROUP
GEOCHEMISTRY
Sb - ppm

| | |
|-------------------------|------------------------|
| FIGURE No 7 | PROJECT No M523 |
| DATE OCT. 1983 | REVISIONS |
| NTS No 104K | SCALE 1:10,000 |
| COMPILED BY M.T. | FILE No |