81-# 368-# 9169

# PROSPECTING REPORT

# ON THE

# CAN CLAIM GROUP

# AT

# CANYON CR., BRITISH COLUMBIA
# (KAMLOOPS MINING DIVISION)

LATITUDE 51° 19' LONGITUDE 119° 11'

N.T.S.: 82M6E

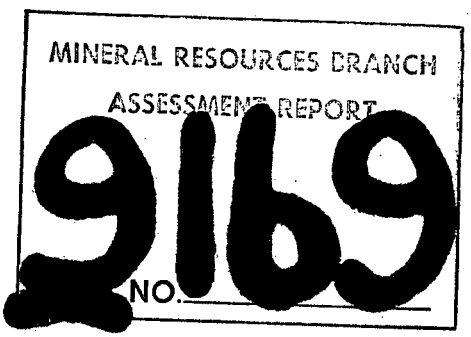
by

D.L. COOK, P.Eng.

I.M. Watson & Associates

for

DENISON MINES LTD.




Submitted on April 30, 1981

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## SUMMARY

Preliminary geochemical sampling, prospecting and preliminary geological mapping of the CAN claims 1 to 6 described.

This work has indicated favourable mineralization of scheelite in skarn float samples.

Further work on the claims is recommended to locate the source of mineralization and test its commercial viability.

## 1. LOCATION & ACCESS (Figure 1)

The CAN property is located 32 km by logging road west from Seymour Arm on Canyon Creek, which drains south-west then north-west into Stukemapten Lake.

Coordinates are: Latitude 51° 19'
Longitude 119° 11'
N.T.S. Map Reference: 82M6E

## 2. CLAIMS

The property consists of six, two-post claims, the CAN 1 to 6 as follows:

| Claim Name | Staking Date | Record Date | Record No. |
|---|---|---|---|
| CAN 1 | May 16, 1980 | June 4, 1980 | 2624 |
| CAN 2 | " | " | 2625 |
| CAN 3 | " | " | 2626 |
| CAN 4 | " | " | 2627 |
| CAN 5 | " | " | 2628 |
| CAN 6 | " | " | 2629 |

## 3. TOPOGRAPHY

Steep-sided, timber-covered valleys rise to moderately rounded or flat-topped hills, characterized by areas of swamp. The CAN claims occupy the slopes of lower Canyon Creek, which exhibits a more extreme topography than elsewhere in the region. This is due to the shattered nature of the rocks caused by intrusion of granite and by related faulting.

Elevations on the property range from 700m at the southern end to 1395m at the northern end.

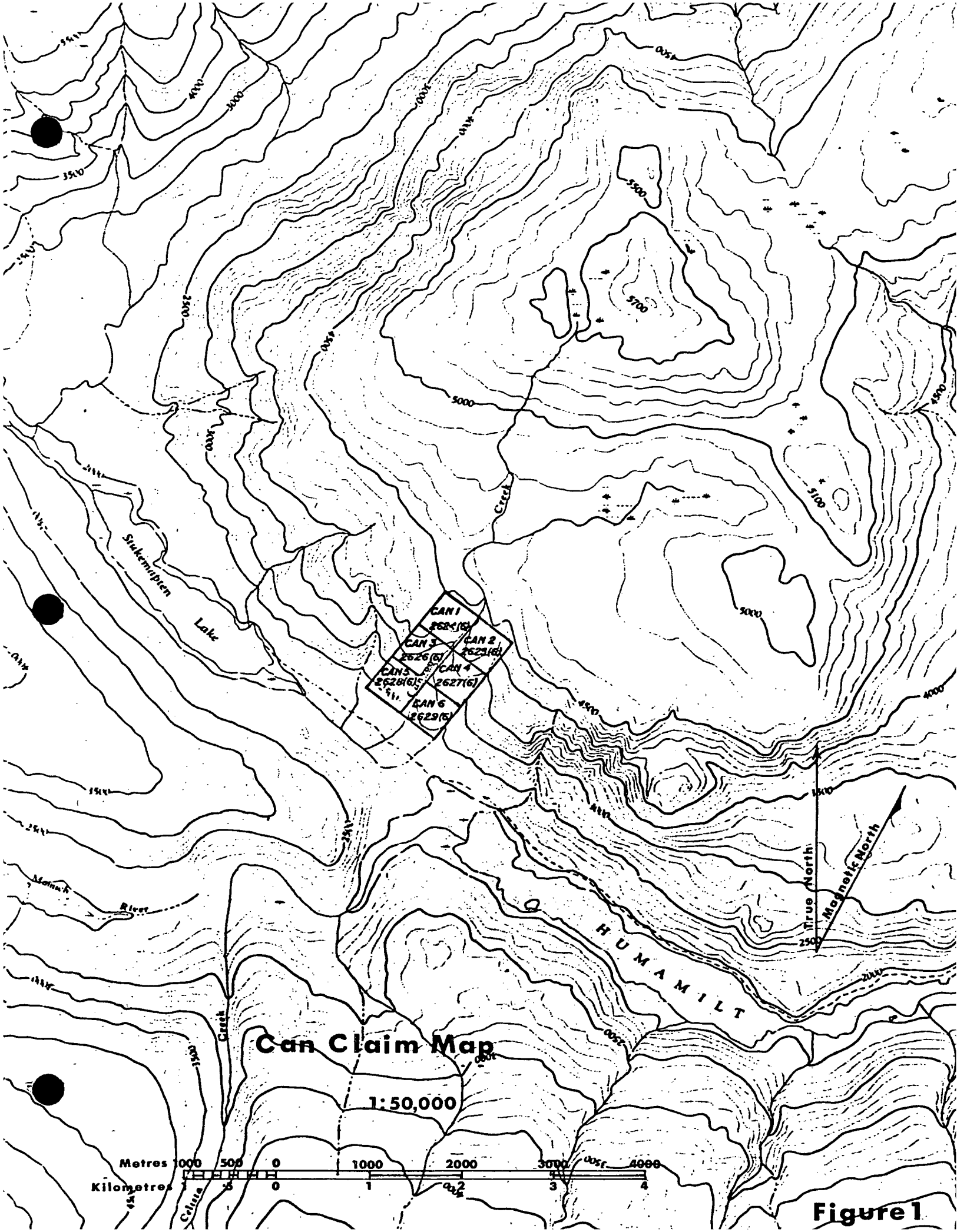

CAN 1
2624(6)
CAN 2
2623(6)
CAN 3
2626(6)
CAN 4
2627(6)
CAN 5
2628(6)
CAN 6
2629(6)
Stukemuipten
Lake
Creek
HUMAMILT
True North
Magnetic North
Can Claim Map
1:50,000
Metres 1000 500 0 1000 2000 3000 4000
Kilometres 1 .5 0 1 2 3 4

Figure 1

## 4. SUMMARY OF WORK DONE

Subsequent to the present staking, panned concentrates and stream silts were taken at three locations up Canyon Creek. This was done to determine the upper limits of scheelite in the stream silts and also to identify any anomalous Cu, Mo, Pb, Zn or Sn.

The stream bed was prospected for skarn and limestone; abundance, size and degree of rounding were used as criteria for tracing boulders to source.

Skarn boulders were examined with an ultra-violet lamp to determine scheelite content.

A topographic map of the claim area at 1:5000 scale was prepared by Pacific Survey Corporation, Vancouver, from air photographs. This was used as a base (see Figure 2) for plotting geological, geochemical and claim data.

The field work was carried out by geologists D.L. Cook and I.M. Watson and by assistant M.R. Davies.

The work was done over two days (May 17 and August 23, 1980) and covered segments of all 6 claims.

## 5. GENERAL GEOLOGY

The regional geology consists of schist, paragneiss and granitoid gneiss of the Shuswap Metamorphic Complex (Proterozoic and Paleozoic with possible Archaean) containing minor bands of quartzite, marble and amphibolite.

The Shuswap Metamorphic Terrane is a narrow belt of high-grade metamorphic rocks in south-eastern British Columbia in the core zone of the Eastern Cordilleran Fold Belt. Metamorphic grades are mainly upper almandine amphibolite facies but can be as low as green schist facies in the eastern margins of the Terrane.

Structurally there is no comprehensive understanding of the Shuswap Terrane. However, in a general sense three phases of folding have been recognized; poorly known early megascopic recumbent folds followed by upright or overturned folds trending west followed by open folds trending north. The latter phase was contemporary with steep fracturing and faulting. One of these faults is mapped south of the CAN claims (see G.S.C. Open File 637). The faulting seen on the CAN claims may be related to the northern projection of this fault.

Plutonic rocks consist of:

a. Post-tectonic, massive, cross-cutting bodies with some foliated margins, e.g. Scotch Cr. pluton (Cretaceous). The porphyry occurring on the CAN claims is thought to be of this type.

b. Syn-tectonic or pre-tectonic e.g. Long Ridge Pluton (early Jurassic or Paleozoic).

Syenite and felsite dykes trending north-east near Seymour Arm are massive and crosscut the country rocks. They are post-tectonic and probably Cretaceous age.

## 6. PROPERTY GEOLOGY

a) Lithology

In the area of the CAN claims, the geology consists of a thick sequence of quartz-biotite schists with local bands of marmorized limestone, intruded by a mass of porphyritic biotite quartz monzonite. Granitic dykes intruding the metasediments adjacent to the plug on CAN 3 & 4 are almost certainly related to the quartz monzonite.

Numerous boulders of garnet-diopside and scheelite-pyrrhotite-chalcopyrite skarn indicate that the limestone has undergone contact metasomatism, probably in the area of the rusty granitic dyke on CAN No. 3.

b) Structure

Visible structures on the CAN property are generally a reflection of the effects of intrusion by the quartz-monzonite pluton and associated dykes; major faulting along the north-westerly striking southern contact of the pluton has produced intense deformation by fracturing and folding, and no dominant sedimentary trend could be recognized.

c) Mineralization

Mineralization consists of scheelite and minor chalcopyrite in pyrrhotite-rich skarn boulders occurring in and along Canyon Creek. These boulders occur with increasing frequency up to 1000 metres elevation. Examination of the float has revealed mineralization similar to that occurring with the rusty granitic dyke on CAN No. 3 (see map) at about 1040 metres elevation on the west side of Canyon Creek. So far only a cursory preliminary examination of this area has been possible, and further detail prospecting, sampling and mapping are planned. Four float specimens, selected on the basis of highest fluorescing scheelite content and high chalcopyrite, were assayed for gold, copper and tungsten with the following results:

| No. | Gold (oz.per ton) | Elevation | Copper(Cu)% | Tungsten(W)% |
|---|---|---|---|---|
| 12 | <0.002 | 701m | 0.16 | 1.16 |
| 13 | 0.002 | 759m | 0.07 | 7.25 |
| 14 | 0.002 | 960m | 0.24 | 0.43 |
| 15 | 0.002 | Composite between 700m and 1000m | 0.14 | 1.17 |

## 7. GEOCHEMISTRY

Three panned concentrates and three silt samples were taken from three locations in the stream bed. These are shown as OCT 9 to OCT 11 on Figure 3.

Analyses of these samples are as follows:

| | | | Ppm | | | | | |
|---|---|---|---|---|---|---|---|---|
| Elevation | Scheelite Count | W | Sn | Cu | Mo | Pb | Zn |
| OCT 9 | 1039m | 7 | <2 | <2 | 12 | 1 | 8 | 72 |
| OCT 10 | 980m | 17 | 5 | <2 | 38 | 3 | 4 | 78 |
| OCT 11 | 838m | 231 | 15 | <2 | 42 | 2 | 4 | 82 |

## 8. CONCLUSIONS & RECOMMENDATIONS

Preliminary prospecting of the property has shown:

a) The frequency and grade of scheelite-bearing skarn float is sufficient to suggest a significant source.

b) A clearer indication of the source is given by the presence of a mineralized float cut-off near granitic rocks intruding limestone.

Recommendations are as follows:

a) Continue prospecting to locate the mineralized skarn source.

b) Map and sample the mineralized outcrop and adjacent rocks, to determine whether drilling is warranted.

## APPENDIX I

### STATEMENT OF EXPENDITURES
### EXPENSE PERIOD MAY 17, 1980 to APRIL 30, 1981

| | |
|---|---|
| **Personnel:** | |
| D.L. Cook, P.Eng. Party Chief<br>May 17 & August 23, 1980 and 2 days travel<br>4 days at $250/day | $1,000 |
| I.M. Watson, P.Eng.<br>August 23, 1980 and 2 days travel<br>3 days at $250/day | 750 |
| M. Davies, Field Assistant<br>May 17, 1980 and 2 days travel<br>3 days at $40/day | 120 |
| **Transportation:** | |
| Rentway 3/4 ton pick-up for transport of personnel to and from property<br>3 days at $50/day | 150 |
| **Lodging & Meals:** | |
| Anglemont Motel billings<br>$20/day for 2 men for 2 nights | 80 |
| Meals for 2 men for 1 day | 40 |
| Seymour Arm Hotel billings<br>$20/day for 3 men for 2 nights | 120 |
| Meals for 3 men for 1 day | 60 |
| **Radio Rentals:** (Cercomm Electronics) | |
| Cercomm Electronics 3 hand held radios<br>1 day at $60/month | 13 |
| **Geochemical Analysis:** | |
| Rossbacher Laboratories<br>2 silt samples (W, Mo, Cu, Pb, Zn, Sn) | 14.90 |
| 4 rock assays (copper, gold and tungsten) | 78.00 |

APPENDIX I continued

| | |
|---|---|
| Topographic Map: | |
| Pacific Surveys contoured map of claim area at 1:5000 scale | 400.00 |
| Report Preparation: | |
| D.L. Cook<br>2 days at $250/day | 500.00 |
| | $3,325.90 |

## APPENDIX II

### AUTHORS QUALIFICATIONS

I, D.L. Cook of North Vancouver, British Columbia, hereby certify:

1. That I am a practising geologist and reside at 4771 McNair Place, North Vancouver, B.C.

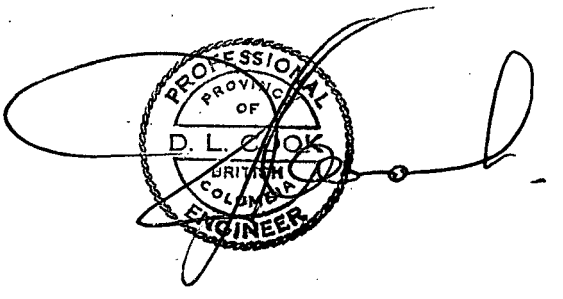
2. That I am a graduate of the University of Western Australia (B.Sc. 1962).

3. That I have been practising my profession of Geology for over 17 years.

4. That I am a member of the Association of Professional Engineers of the Province of British Columbia.

5. That I have been employed in the capacity of an exploration geologist for Mount Isa Mines Ltd. (Australia) Carpentaria Exploration Co. Pty. Ltd. (Australia), Sunshine Mining Ltd. (Idaho), Union Carbide Exploration Co. Ltd., (Canada), Shell Canada Resources Ltd. (Canada) and others on a consulting basis.

6. That this report is based on the field work conducted during the 1980/81 season by myself as party chief, one geologist and one field assistant.

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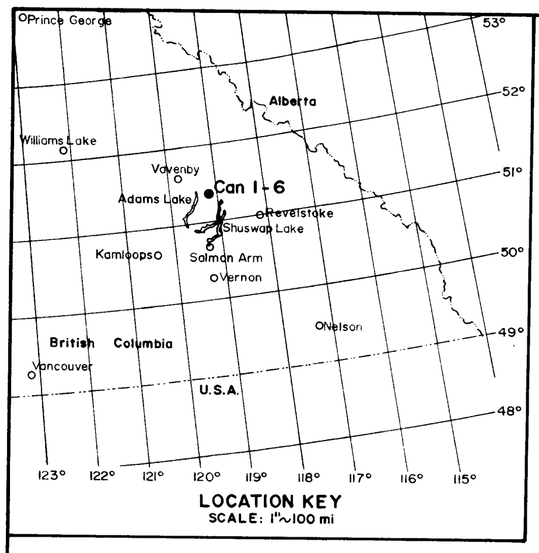
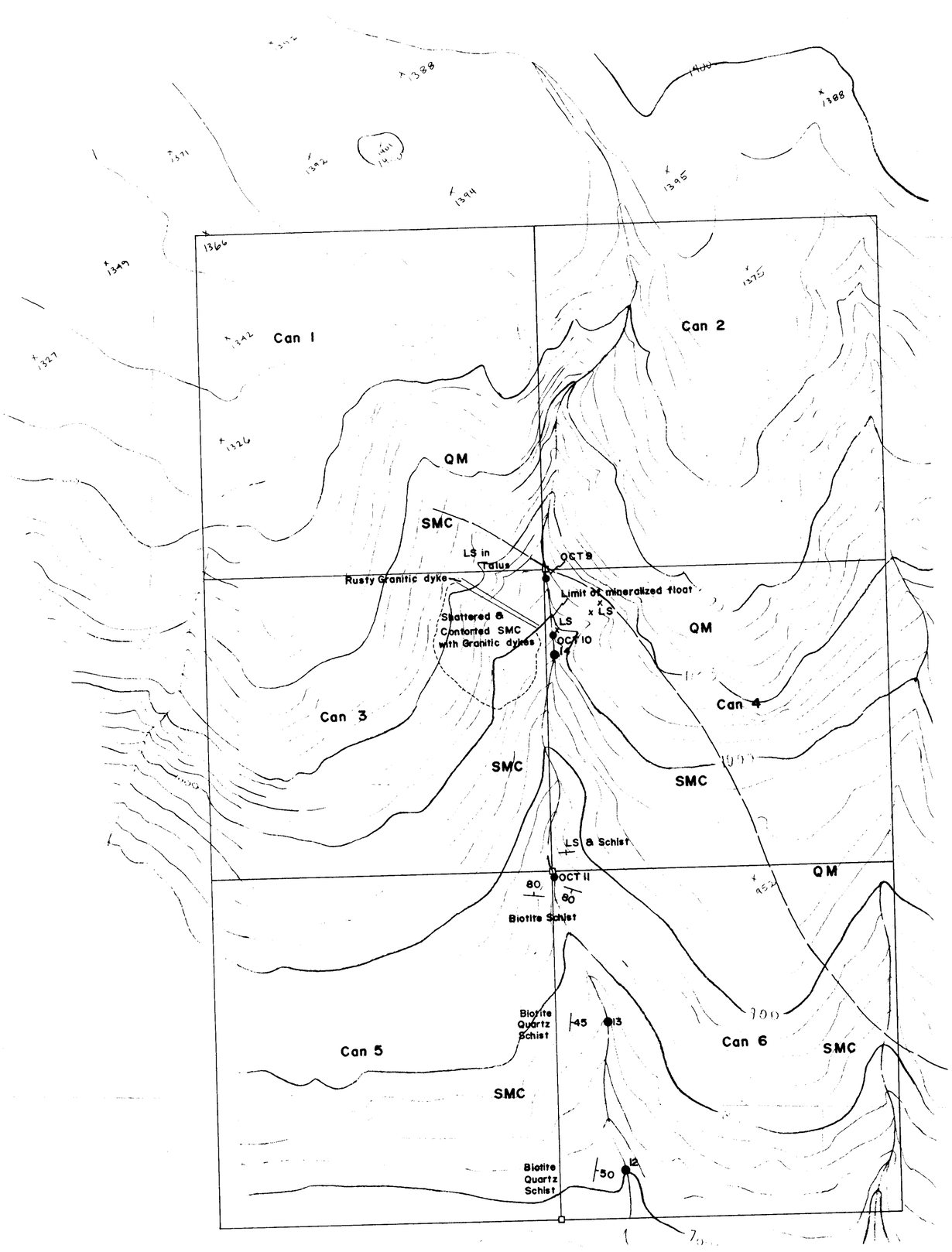
I.M. Watson & Associates




LOCATION KEY
SCALE: 1"~100 mi




## LEGEND

| | |
|---|---|
| QM | Porphyritic quartz monzonite |
| SMC | Biotite quartz schist & limestone (LS) of the Shuswap Metamorphic Complex |

## SYMBOLS

| | |
|---|---|
| □ | Claim Post (located by altimeter & chaining) |
| /45 | Strike & Dip |
| ●14 | Scheelite, Pyrrhotite Skarn Float & sample number |
| ●OCT9 | Stream sample & number |
| × | Outcrop |
| ~~~ | Precise Geological Contact |
| – – – | Approximate Geological/Fault Contact |

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9169
NO.

| | |
|---|---|
| DENISON MINES LTD., EXPLORATION DIVISION | |
| TUNGEX PROJECT | |
| CANYON CREEK, B.C. | |
| N.T.S: 82 M/6 E | Contour interval: 20 m |
| Date: April, 1981 | Datum: G.S.C. |
| SCALE: 1:5000 | |
| 100 50 0 100 200 300 m | |
| I.M. WATSON & ASSOCIATES LTD. | |

FIG. 2