

ASSESSMENT REPORT
ON THE
LEGATE CREEK TOM CLAIMS
OWNED BY
T. CONWAY
AND
SITUATED IN THE
OMINECA MINING DIVISION

LAT. 54°38', LONG. 128°10'

NTS 103I/9

FINANCED BY
SILVER CLOUD MINES LTD.

WORK COMPLETED BETWEEN
MAY 20 - MAY 31, 1981
BY
A&M EXPLORATION LTD.

REPORT BY
G.M. ALLEN, B.Sc., M.Sc.

D.G. ALLEN, P.ENG.

JUNE 8, 1981

MINERAL RESOURCES BRANCH ASSESSMENT REPORT 9181 NO. _____

TABLE OF CONTENTS

INTRODUCTION	1
LOCATION AND ACCESS	1
HISTORY	1
LOCAL ACTIVITY	3
GENERAL GEOLOGY	3
LOCAL GEOLOGY	3
ASSAY RESULTS	5
CONCLUSIONS	5
REFERENCES	7
EXPENSES	8
CERTIFICATE	9
CERTIFICATE	10

APPENDICES

APPENDIX I	Assaying Results
APPENDIX II	Assay Methodology
APPENDIX III	Map

INTRODUCTION

Between May 23 and May 25, 1981, Silver Cloud Mines Ltd. of Vancouver, B.C. financed a program on the Tom and Tom 1 claims comprising general geological investigation, sampling and assaying. The Legate Creek Tom Claims are reported as containing high grade gold and silver veins. These are owned jointly by T. Conway, B. Vanjorek, L. Wenn and W. Currie. The latter three persons owning 25% of the property.

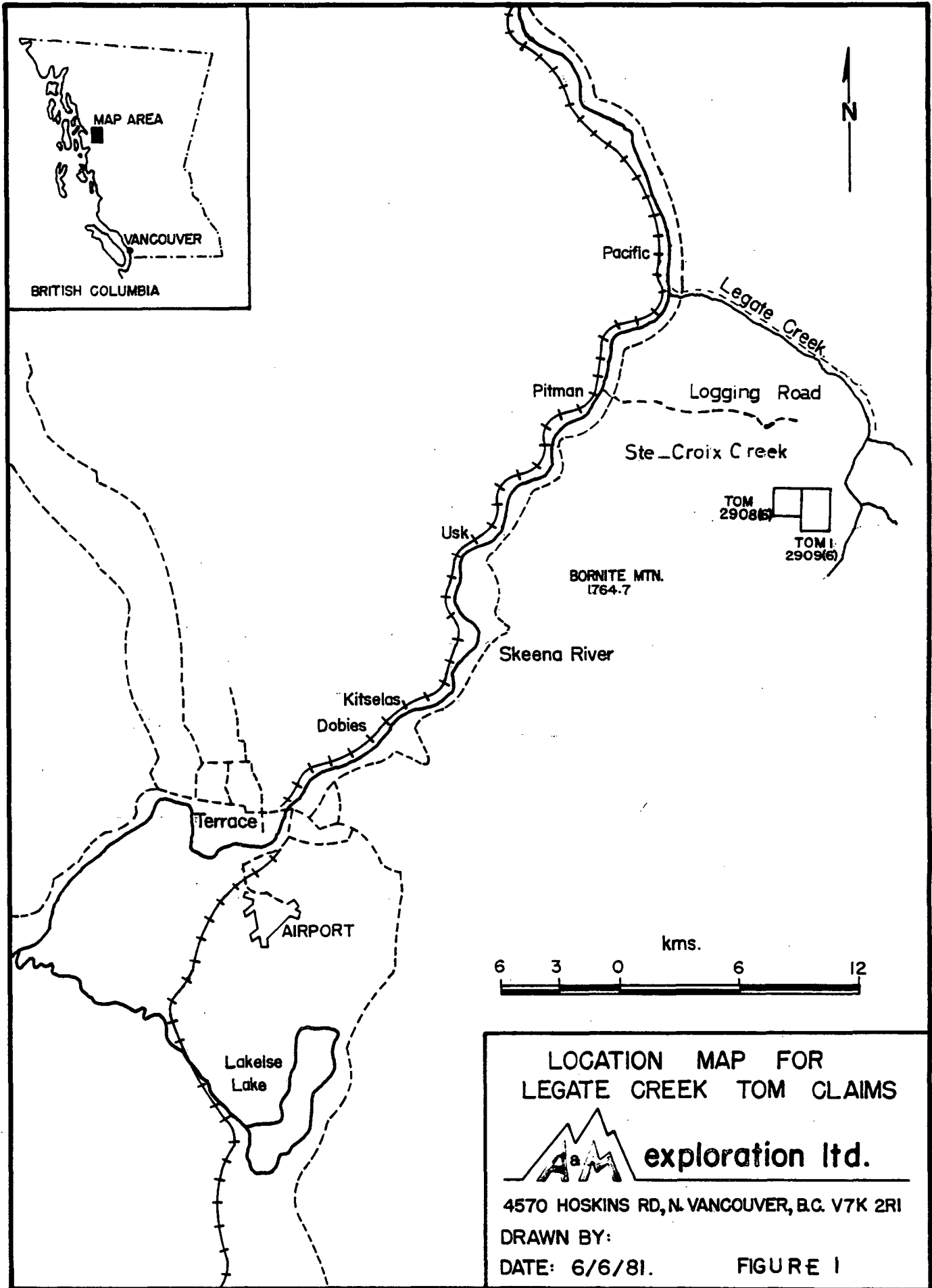
The program was supervised by A & M Exploration Ltd. of North Vancouver, B.C.

LOCATION AND ACCESS

The property is located approximately 35 km. N 55° E of the Terrace Airport. Access is by helicopter from Terrace and by logging road up Legate Creek from the Yellowhead Highway about 12 km. and another 6 km. by foot. The Yellowhead Highway crosses Legate Creek about 2 km. south of Pacific, an old railway town. Refer to Figure 1.

HISTORY

Many claims have been staked in the Legate Creek area. Placer gold deposits were worked in the 1880's on Chindemash Creek on the west of Legate Creek and on the Kleanza Creek on the south.



In the 1920's and 30's a series of claims were staked covering high grade gold and silver veins in the headwaters of Legate Creek. One of these was named the Zona May. This was described by the Annual Report, Minister of Mines, B.C., 1928, the Geological Survey of Canada, Summary Report 1925, and in the Geological Survey Memoir 212. It has been thought that this claim was located on the most southerly portion of Legate Creek, however, the western arm of Legate Creek matches the description written in the 20's and 30's on this property. It is believed that the Tom claims are the former Zona May claims.

In the last fifty years access to this showing has been limited by snow and ice cover and even today snowslides and steep terrain greatly hinder any attempts at evaluating the property.

The Tom claims have considerable economic potential if the two foot wide vein found by the early prospectors contains grades as recorded ie. 0.16 oz Au, 92 oz Ag, 17.28% Zn, 6.10% Pb and 1.42% Cu. At current metal prices this grade of ore would be worthwhile mining under the right conditions.

On May 23 and 24 the author visited the Tom claims to sample the exposed vein and to study the local geology in the area. A total of five rock chip samples, three float, and nine silt samples were taken. More samples were not possible as snow cover and snowslides were too prevalent. Detailed mapping was also limited to the few outcrops that were exposed through the snow.

LOCAL ACTIVITY

The Terrace Area is known to contain a number of mineral deposits which include gold, silver, copper, lead and zinc. Before 1930 several claim groups were developed and some high grade ores were shipped. Most of these high grade deposits were small. Little activity has occurred since the 1930's. In the Legate Creek area only the Frisco Group, located 7 km. east of the Tom Claims, and the M & K Group of claims located 6 km. east of the Tom Claims shipped high grade handpicked ore.

GENERAL GEOLOGY

The Terrace area is on the eastern contact of the Coast Range Batholith. The batholith intrudes Mesozoic volcanics and sedimentary rocks. The area rocks are intruded by acidic and basic dikes.

LOCAL GEOLOGY

Lower and Middle Jurassic Hazelton volcanic rocks form the host rock in the Legate Creek Tom Claim area. The volcanic series consists of andesite and rhyolite flows.

The Coast Range Batholith has intruded the volcanic rocks in the area and is made up of diorite and quartz diorite. The granitic rocks are cut by dikes of granodiorite,

quartz diorite, and diorite phases. These dikes are usually vertical and less than 20 feet in width. Mineralized vein deposits are associated with these dikes.

On the east side of the south fork of Legate Creek, below a glacier at elevation 1226 m, lies what is thought to be the western extension of the originally described Zona May vein. The vein is exposed in two areas about 300 meters apart immediately below the glacier above a large snowslide area. The vein strikes 85° and 110° and dips 75° N. At the time of this visit the vein was sampled only at the eastern location. Access to the other showing of the vein was not possible because of snow and ice slides from above.

The vein structure appears to continue to the Northwest to a talus slope which is iron stained. T. Conway said that the vein can be seen above the glacier during the summer months on the east side of the cirque.

The quartz vein is intruded into a very coarse grained quartz diorite which has intruded the volcanics. About 10 meters of wall rock is altered on either side of the vein.

Five channel samples were taken and assayed for gold and silver. Two of these were taken across the quartz vein which was 0.3 m wide. The other three samples were taken in the host quartz diorite adjacent to the vein structure.

Exposed glacial moraine was sampled in the snow field and snowslide area below the showings. See Appendix II for locations. Silty material in the moraine was sampled to see if the local rocks were anomalous in copper, lead, zinc,

silver and gold. Stream sediment samples were collected below the snowslides in the three branches of the creeks. A silt was also picked up where the three creeks converge. These samples were also tested for copper, lead, zinc, silver and gold.

Three sets of composite float samples were taken from the creek bed at the bottom of the snowslide. The float which contained chalcopyrite, galena and pyrite were put together and analysed for the above mentioned metals.

ASSAY RESULTS

The sample sites are located on Appendix II and the assay results are shown in Appendix I. The samples were assayed by Rossbacher Laboratory, 2225 South Springer Avenue, Burnaby, B.C. Standard assay procedures were followed, the details of which are shown in Appendix III.

The results of the tests were not encouraging and certainly not as high grade as previous reports for this area have indicated. The zone of the ore body seen did not show any mineralization.

CONCLUSIONS

Work completed to date does not provide an adequate base from which a conclusive evaluation can be made. More favourable snow and ice conditions at higher elevations are

needed.

The following points must be considered when future work is being done:

1) other claims in the area have found small tonnages of high grade base metals.

2) a parallel vein structure is possible on the Tom Claims because the United St. Croix showings, which are located to the N W, are a series of quartz veins. The Tom Claims vein strikes toward these showings. A parallel vein structure would enhance the possibility of greater tonnages of high grade material.

3) float in the creek below the snowslide area is mineralized indicating potential ore in the area.

4) previous work indicates that very high grade deposits are found in the area.

REFERENCES

- Kindle, E.D., 1937, Mineral Resources of Terrace Area, Coast District, British Columbia, Memoir 205, Geological Survey of Canada.
- Duffell, S. and Souther, J.G., 1964, Geology of Terrace Map-Area, British Columbia, Memoir 329, Geological Survey of Canada.
-1918, Report of Minister of Mines, British Columbia.
-1925, Report of Minister of Mines, British Columbia
-1928, Annual Report of Minister of Mines, British Columbia.
-1915, Summary Report, pt. A, p. 112, Geological Survey of Canada.

EXPENSESWAGES

Senior Engineer

Field may 23-26	4 days @ \$300/day	\$1,200.00
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Report Preparation and Meetings		
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May 29-31	3 days @ \$300/day	900.00
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Junior Engineer

Field May 23-26	4 days @ \$100/day	400.00
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Food and Accomodation

Meals may 23-24		52.65
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Accomodation 2 nights @ \$33.92		67.84
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Transportation

Airfare Vancouver - Terrace 3 x \$216.00		648.00
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(Senior Engineer, Junior Engineer & owner)

Taxi (Terrace)		20.40
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Transport of Equipment		40.00
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Transport of Samples		27.72
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Transportation and Parking (Vancouver)		21.00
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Helicopter 3 hours @ \$462.58/hr.		1,387.75
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Assaying		152.75
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Miscellaneous: Phone, film, drafting, typing.		<u>250.00</u>
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\$5,168.11

I certify that the above listed expenses are correct.

G. Allen, P. Eng. (Ont.)

July 6, 1981



G. M. Allen

CERTIFICATE

I, G.M. Allen of the City of Vancouver, in the Province of British Columbia, hereby certify that:

I am a consulting mining engineer at 4570 Hoskins Rd., N. Vancouver, B.C. V7K 2R1;

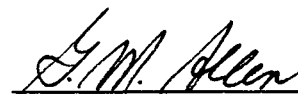
I am a graduate of Haileybury School Of Mines and of the South Dakota School of Mines with a B.Sc. and M.Sc. in Mining Engineering, and have been active in mine exploration, development, and mining for more than 10 years;

This report is compiled from data obtained during visits to the property on May 23 - 24, 1981, from information gathered from T. Conway, and a study of pertinent government reports and maps;

I have no direct or indirect interest in Silver Cloud Mines Ltd. and do not expect to receive such interest as a result of writing this report;

I am a member of the Association of Professional Engineers of Ontario, and the American Institute of Mining and Metallurgical Engineers.

Dated this 8th day of June 1981, at Vancouver, B.C.


G.M. Allen



CERTIFICATE

I, Donald G. Allen certify that:

1. I am a practising Professional Geological Engineer, resident at 4570 Hoskins Road, North Vancouver, B.C.
2. I am a graduate of the University of British Columbia with degrees in Geological Engineering. (B.A.Sc., 1964; M.A.Sc., 1966)
3. I have been practising my profession for the last fifteen years.
4. I am a member in good standing of the Association of Professional Engineers of British Columbia.
5. This report is based on sources listed under References, and from field data obtained by G.M. Allen. I have not visited the property but have worked on prospects which have a similar geological setting. I have provided technical background for the project and can certify that the work has been performed by qualified personnel.
6. I hold no interest, nor do I expect to receive any, in the Tom Claims or in Silver Cloud Mines Ltd.
7. I consent to the use of this report in a Statement of Material Facts or in a Prospectus by Silver Cloud Mines Ltd.

North Vancouver, B.C.
June 30, 1981

Donald G. Allen
P. Eng. (B.C.)

Donald G. Allen

APPENDIX I

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

TO: A & M EXPLORATION LTD.
4570 HOSKINS ROAD
N. VANCOUVER, B.C.

CERTIFICATE NO. 81102

INVOICE NO. 1300

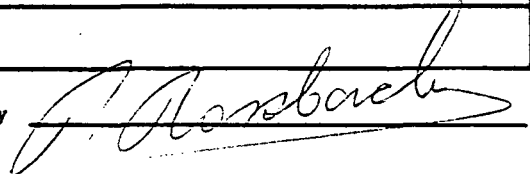
DATE RECEIVED

DATE ANALYSED June 1, 1961.

ATTN: RE. Silver Cloud Mining

SAMPLE NO.:	oz/t		%	
	Au	Ag	Pb	Zn
81-106 TD 1 R	0.001	0.04		
81-106 TD 2 R	0.001	0.14		
81-106 TD 3 R	0.012	0.04		
81-106 TD 4 R	0.002	0.26		
81-106 TD 5 R	0.001	0.14		
81-106 TD 7R F	0.069	1.78	0.38	0.04
81-106 TD 8 F	0.124	0.66	1.58	0.36
81-106 TD 15 F	0.002	0.04		

Certified by



Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
 BURNABY, B. C.
 CANADA
 TELEPHONE: 299-6910
 AREA CODE: 604
 CERTIFICATE NO. 81102

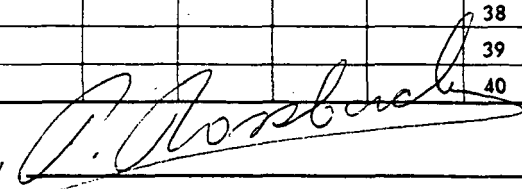
CERTIFICATE OF ANALYSIS

INVOICE NO. 1300

TO: A & M EXPLORATION LTD.
 4570 HOSKINS ROAD
 N. VANCOUVER, B.C. V7K 2P1

DATE ANALYSED JUNE 1, 1981
 PROJECT SILVER CLOUD MINING

No.	Sample	pH	Mo	Cu	Ag	Zn	Pb	ppb Ag					No.
01	81-106TD 6 s			54	0.2	98	32	10					01
02	7 s			36	0.4	80	26	10					02
03	8 s			74	0.6	142	42	10					03
04	9 s			38	0.2	80	22	10					04
05	10 s			74	0.6	148	42	10					05
06	11 s			68	0.4	150	38	10					06
07	12 s			72	0.4	118	26	10					07
08	13 s			78	0.4	126	26	10					08
09	81-106TD 14 s			76	0.4	162	40	10					09
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Certified by 

APPENDIX II

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

Jan. 1980.

ANALYTICAL METHODS CURRENTLY IN USE AT ROSSBACHER LABORATORY LTD.

(1)

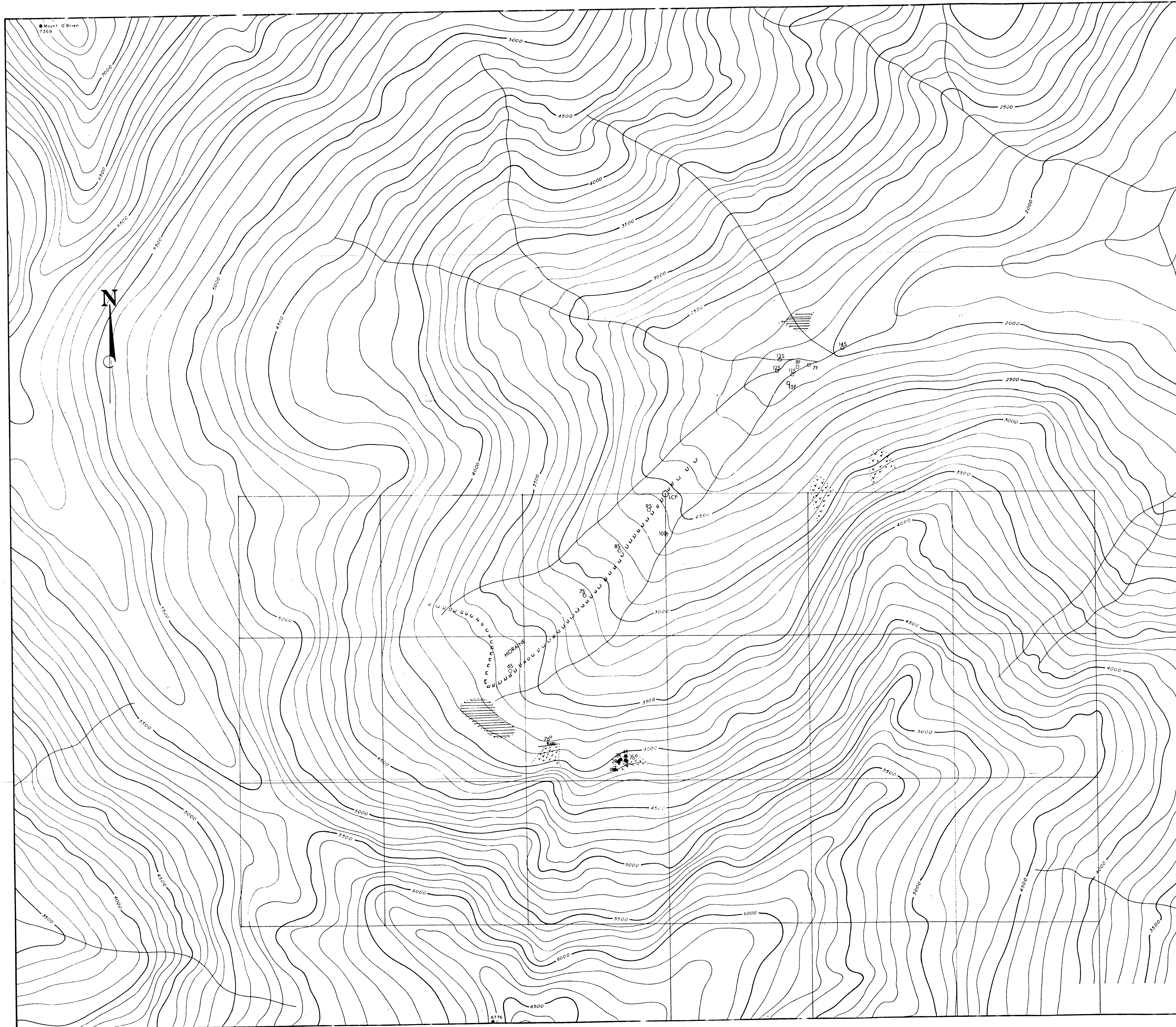
A. SAMPLE PREPARATION.

1. Geochem. Soil and Silt: Samples are dried, and sifted to minus ⁸⁰100 Mesh, through stainless steel, or nylon screens.
2. Geochem. Rock : Samples are dried, crushed to minus $\frac{1}{4}$ inch, split, and pulverized to minus 100 mesh.

B. METHOD OF ANALYSIS.

1. Multi element. (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb.): 0.5 Gram sample is digested for four hours with a 15:85 mixture of Nitric-Perchloric acid.
The resulting extract is analyzed by Atomic Absorption spectroscopy, using Background Correction where appropriate.
2. Tungsten: 1.0 Gram sample is sintered with a carbonate flux, and dissolved.
The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.
3. Tin: 0.5 Gram sample is sublimated by fusion with Ammonium Iodide, and dissolved.
The resulting solution is analyzed colorimetrically by use of Gallein.
4. Fluorine: 0.5 Gram sample is fused with a Carbonate Flux, and dissolved.
The resulting solution is analyzed for Fluorine by use of an Ion Selective Electrode.
5. Gold: 10.0 Gram sample is dissolved in Aqua Regia.
The resulting solution is subjected to a Methylisobutyl Ketone extraction, which extract is analyzed for Gold using Atomic Absorption Spectroscopy.
6. pH: An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.

7. Arsenic: 0.25 Gram sample is digested with Nitric-Perchloric acid.
Arsenic from the solution is converted to arsine, which in turn reacts with silver D.D.C. The resulting solution is analyzed by colorimetry.
8. Antimony: 0.50 Gram sample is fused with Ammonium Chloride and dissolved.
The resulting solution is analyzed colorimetrically by use of brilliant green.
9. Barium: 0.50 Gram sample is repeatedly digested with HClO_4 - HNO_3 and HF.
The solution is analyzed by Atomic Absorption Spectroscopy.
10. Mercury: 1.00 Gram sample is digested with HNO_3 .
The solution is analyzed by Atomic Absorption Spectroscopy, using a cold vapor generation technique.
11. Rapid Silicate Analysis: 0.10 Gram sample is fused with Lithium Metaborate, and dissolved in HNO_3 .
The solution is analyzed by Atomic Absorption for SiO_2 , Al_2O_3 , Fe_2O_3 , MgO , CaO , Na_2O , K_2O , TiO_2 P_2O_5 , and MnO .
12. Partial Extraction and Fe/Mn oxides: 0.5 Gram sample is extracted using one of the following: Hot or cold 0.5 N. HCL, 2.5% E.D.T.A, Ammonium Citrate, or other selected organic acids.
The solution is analyzed by use of Atomic Absorption Spectroscopy.
13. Biogeochemical: Samples are dried, and ashed at 550°C . and the resulting ash analyzed as in #1, multielement analysis.



LEGEND

	CRETACEOUS OR LATER INTRUSIVES veins consisting of quartz and calcite
	CRETACEOUS OR LATER INTRUSIVES granodiorite, diorite, quartz diorite
	JURASSIC (LOWER & MIDDLE) HAZELTON GROUP andesite, rhyolite
	Strike and dip 70°
	MORAINES
	Outcrop
	7F Float
	2R Rock
	7S Silt

MINERAL RESOURCES BRANCH
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**LEGATE CREEK TOM CLAIMS
GEOLOGY AND CLAIM MAP**
SCALE 1CM=50M
DATE JUNE 22, 1981
DRAWN BY GA

APPENDIX 2
 exploration Ltd.