

GEOLOGICAL AND GEOCHEMICAL REPORT

SCUZZY #1-2 MINERAL CLAIMS  
1054-55(9)

NEW WESTMINSTER MINING DIVISION

NTS 92H/13W

LATITUDE 49° 49' N      LONGITUDE 121° 45' W

CLAIMS                      SCUZZY #1 AND #2

OWNER                      K. WAYNE LIVINGSTONE

OPERATOR                  JMT SERVICES CORP.

DATES OF WORK      August 24, 1982-Sept. 22, 1982.

By: James S. Christie, Ph.D.  
Gordon G. Richards, P.Eng.

December 21, 1982

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,003

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## INTRODUCTION

In August 1980, during a programme funded by Territorial Gold Placers Ltd. and JMT Services Corp., float containing molybdenite was discovered by C. Harivel at the headwaters of Big Silver Creek, east of Harrison Lake. Further prospecting upstream produced mineralized float containing molybdenite, pyrite, chalcopyrite, magnetite and sphalerite. A moderately strong gossan on the ridge at the source of the creek was prospected and numerous quartz veins, some containing ferrimolybdite, were seen. Breccia samples were also collected from what was believed to be a pipe.

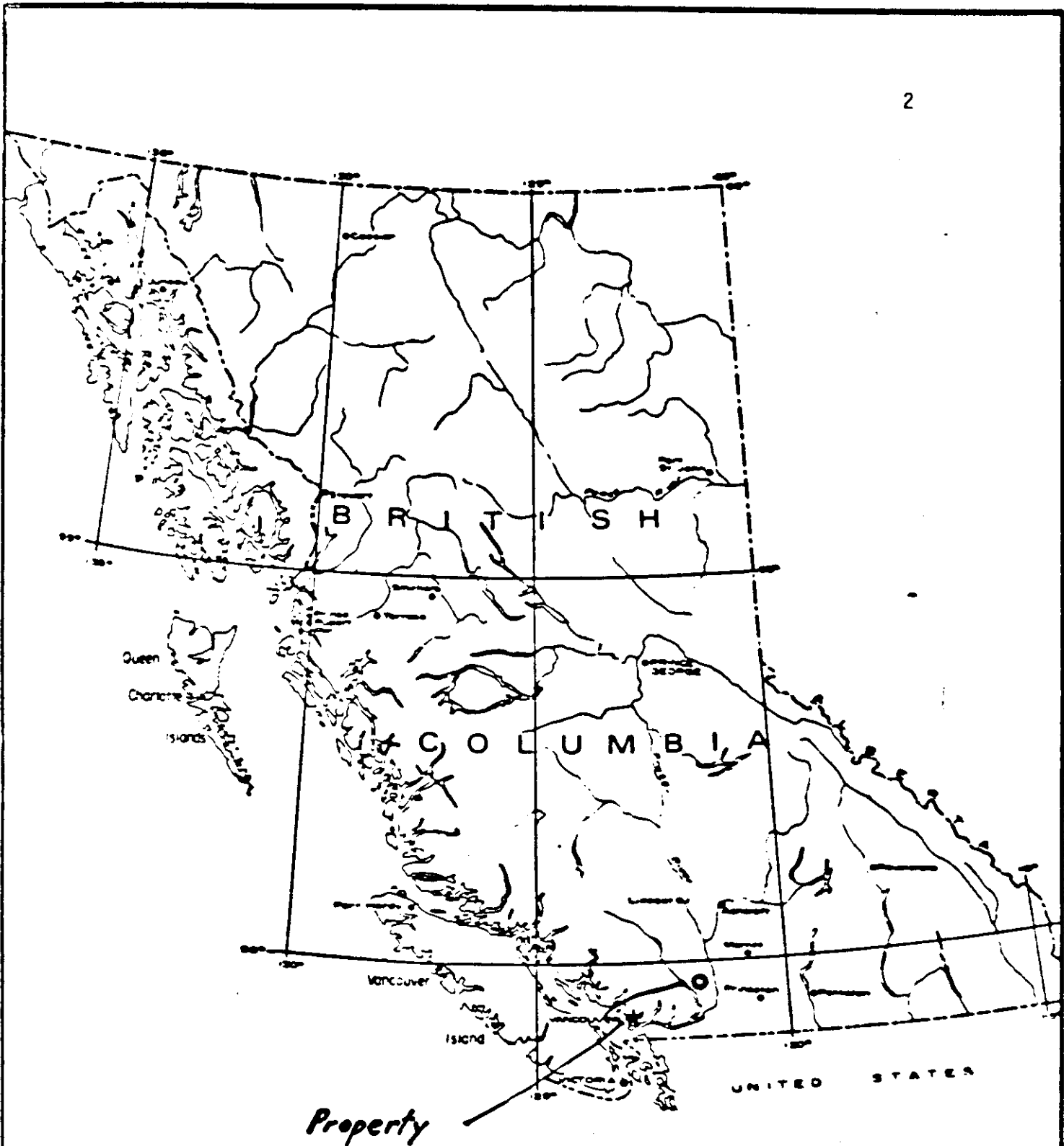
The area was staked in August and the property was mapped and rock chip sampled in September 1981 on a fairly coarse grid. The prospect was shown to be of the stockwork (porphyry) molybdenite type. A large zone of greater than 20 ppm Mo measuring 1500 x 500 metres was identified with peripheral anomalous W geochem values. A breccia complex cut by rhyolitic dykes and aplite is developed within granodiorites of the Scuzzy Plateau. Fracture controlled molybdenite mineralization was observed within the geochem anomaly.

The current programme was undertaken to assess the degree of fracturing and intensity of mineralization within the Mo geochem anomaly, and the potential for developing diamond drill targets. The precious metal content of some of the veins was also checked. Seven rock chip samples were assayed for Cu-Mo-Au-Ag and geochemically analyzed for W, Sn and F.

The local and regional fracture patterns are evident on B.C. air photo #4008:43. An overlay was prepared on an enlargement of this photo such that the orientation of air photo linears could be compared with the mineralized fractures in the field. The field work was completed on September 26th by helicopter from Pemberton.

## LOCATION AND ACCESS

The Scuzzy property is centered on an east-west trending ridge about 5 km east of the north-south valley occupied by Big Silver Creek, which drains into Harrison Lake. Helicopter service from Pemberton and Agassiz provides convenient access to the property on which landing sites are numerous (See Fig. 1) .



*Property*

<b>JMT SERVICES CORP.</b>			
<b>SCUZZY PROPERTY LOCATION MAP</b>			
SCALE			
1:30		1:30	
Prepared by:	Date:	NTS MAP AREA	DRAWING No.
Drawn by:	Revised:	93 - E	

FIGURE 1

Elevations on the property range from 3000' to 6300' with the core area from 4700' to 6200' asl.. Much of the property is above timberline and access to all parts is generally good. Some areas within the central area are very steep and inaccessible.

To the south, a large unnamed tributary to Big Silver Creek has had recent logging activity by B.C. Forest Products Ltd. and a good road passes within 3 km of the property.

#### MINERAL CLAIMS

Two claims, SCUZZY #1 and #2, comprising 32 units cover the property. They have a common LCP, as shown on Figure 2.

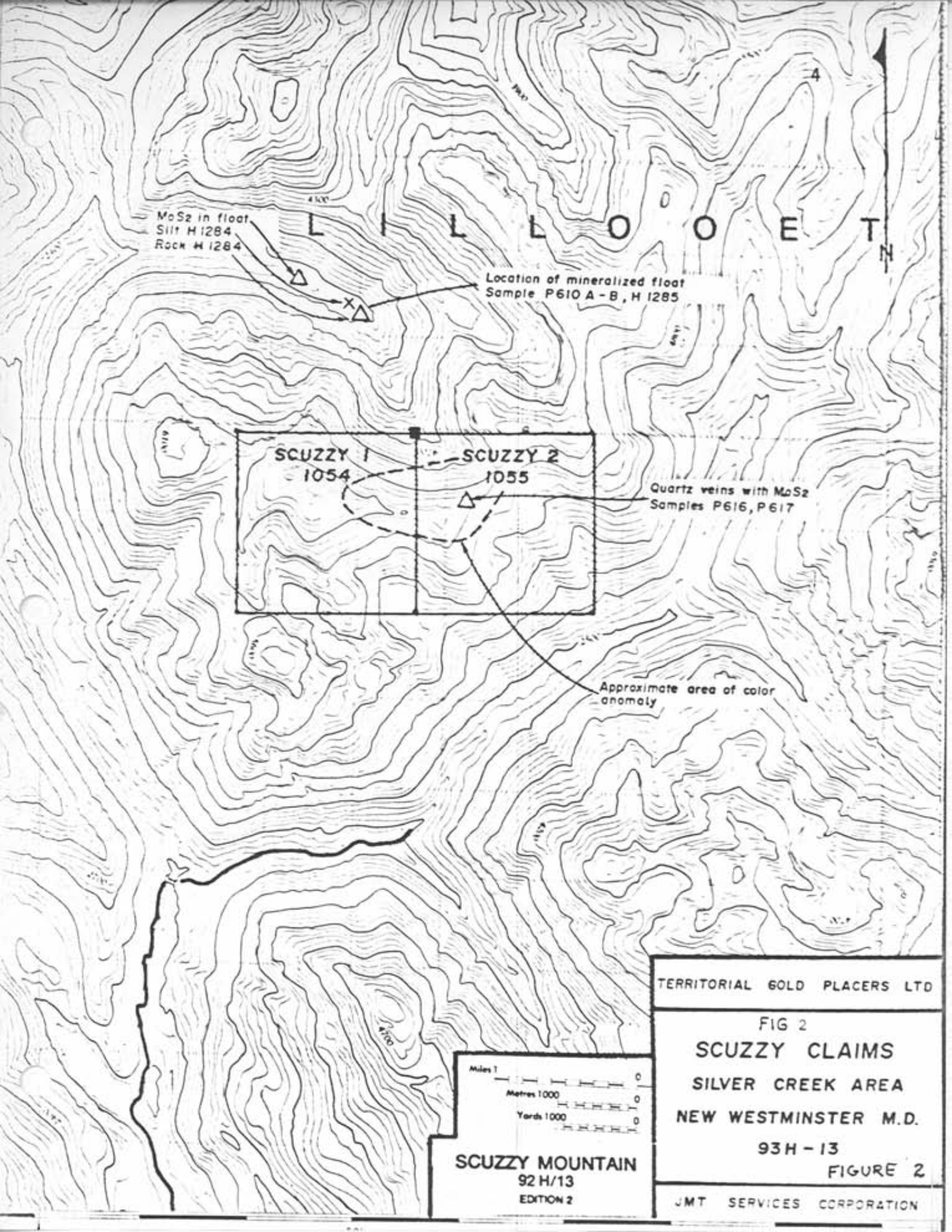
CLAIM NAME	RECORD NUMBER	EXPIRY DATE
SCUZZY #1	1054 (9)	September 23, 1984
#2	1055 (9)	September 23, 1983

#### PHOTO LINEARS

Aerial photograph BC 4008:43 was enlarged four times to an approximate scale of 1:3000. Photo linears were traced onto an overlay (Fig. 3) to study fracture directions, intensity of fracturing and the spatial relationship of fracturing to the molybdenum porphyry system described in a previous assessment report. The 20 ppm Mo contour from this previous report is shown on Figure 3, as are the two traverses A and B-C that were done in conjunction with the fracture study.

There are three prominent fracture directions, two of which form slightly accurate patterns on the photo. 050° is the most prominent direction with strikes changing to 060° to the SW and to 045° to the NE. 125° is another prominent direction with strikes changing to 115° to the SE and 140° to the NW. The third most prominent direction is 025° to 035°. Other obvious but less prominent directions are 080° - 090° and 360°.

Fracturing, seemingly related to the moly-porphyry system on the claims is extensive enough that it extends to the limits of air photo BC 4008:43. However the fracture density on this air photo is extremely high when compared to air photographs of adjacent parts of the Scuzzy plateau. Fracture density within the area of >20 ppm Mo appears less intense on the air photo than the surrounding rock. On the ground, fracturing is much more



MoS<sub>2</sub> in float  
Silt H 1284  
Rock H 1284

L I L L O O E T N

Location of mineralized float  
Sample P610 A-B, H 1285

SCUZZY 1  
1054

SCUZZY 2  
1055

Quartz veins with MoS<sub>2</sub>  
Samples P616, P617

Approximate area of color  
anomaly

TERRITORIAL GOLD PLACERS LTD

FIG 2

SCUZZY CLAIMS

SILVER CREEK AREA

NEW WESTMINSTER M.D.

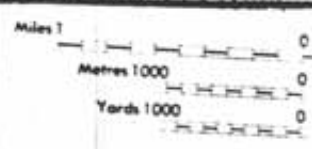
93H-13

FIGURE 2

SCUZZY MOUNTAIN

92 H/13

EDITION 2



JMT SERVICES CORPORATION

intense within the >20 ppm Mo contour but the development of secondary hydrothermal mineral within the fractures and within alteration envelopes appears to have closed and annealed many fractures such that they are not obvious on the air photograph.

All the directions of fracturing mentioned above were observed on the ground at many locations along the two traverse lines shown on Figure 3.

Mineralization cannot be related to any particular set of fractures.

## GEOLOGY

### A. Central Moly Zone

A traverse was made through the central moly zone. Fracture controlled molybdenite is the predominant sulfide although minor pyrite, chalcopyrite and pyrrhotite are associated. The molybdenite occurs in spectacular coarse grained rosettes along the selvages of the larger quartz veins as much as 10 cm in width. Finer grained platy molybdenite and disseminated molybdenite occur on the selvages of narrow quartz stringers, and ribbon quartz veins and along the walls of the interstitial cavities in some breccias, occasionally forming thick blebs of solid molybdenite. Molybdenite also occurs with other sulfides as fine coatings along tight fractures. Conspicuous molybdenite is restricted to approximately the innermost 200 metre central core of the molybdenite zone. Outwards, molybdenite becomes harder to detect visually as the 20 ppm Mo contour drawn by Harivel (1981) is approached.

Mineralized fractures form three prominent sets trending 085° - 095°, 130° - 150° and 055° - 65°. Dips are generally steep except for some of the 085° - 095° structures which have dips as low as 25°. There are in addition irregular curvilinear fractures with flat to gentle dips.

Although the molybdenite mineralization is strong and the occurrences spectacular, the density of mineralized fractures is insufficient to expect commercial grade mineralization at surface. Nonetheless there is abundant reason to believe that the exposures at surface represent a high level in the porphyry system (occurrence of fracture magnetite and high W values), and that better molybdenite mineralization may be possible at depth below the central moly zone.

A variety of rock types occur in the central moly zone although the principal host rock is very coarse grained granodiorite, cut by rhyolitic

quartz porphyry and aplite dykes. These rock types are included in a breccia complex which is silicified and cut by narrow quartz feldspar porphyry dykes.

#### B. Sericite Fracture Zones

About ten very prominent fractures occur along the second traverse at B on Figure 3. They trend 050°, are spaced about 10 m apart, and contain abundant coarse sericite approximately one-half metre wide with quartz veinlets containing pyrite, molybdenite and chalcopyrite. In the field they extended at least 200 m southwest where they disappeared over the ridge line. To the northeast they project under snow.

#### C. Quartz-Moly Breccia

A quartz matrix breccia at C on Figure 3 and H 1009 on Figure 3 of the previous report was examined in some detail. About 5% of the breccia (locally 10 - 20%) is a quartz matrix containing occasional blebs of coarse molybdenite up to 10 cm wide but generally two to four centimetres across. The molybdenite occasionally has minor associated pyrite and heavy Mn staining. Otherwise the quartz is white and free of other minerals. The breccia fragments are angular and measure one-half to five metres in maximum dimension often displaying only minor rotation. A true breccia texture with fragments that have obviously been rotated and moved occurs only where the quartz matrix forms a higher percentage of the rock (i.e., 10-20%).

#### ASSAY AND GEOCHEMISTRY

Seven rock chip samples of sulfide mineralization including samples of strongly mineralized quartz molybdenite vein material were submitted for assay and geochem. These samples were comprised of 5 - 20 chips and weighed about 1 kilogram each. They were considered to be representative of the various types of sulfide mineralization found in the system. All of the analytical work was done by Chemex Labs Ltd., 212 Brooksbank Ave., North Vancouver, B.C., using the following techniques:

- a) Copper Molybdenum Assays - Standard wet chemical
- b) Gold Silver Assays - Standard fire assay
- c) Tungsten Geochem - Pyrosulphate fusion - HCL leach -  
Colorimetric
- d) Tin Geochem - Ammonia Iodide Extraction - Atomic  
Adsorption
- e) Fluorine Geochem - Carbon fusion - Specific ion-electro  
finish



#### DISCUSSION OF RESULTS

Assay and geochem results are appended to this report. Molybdenum values obtained range from .004% Mo in strongly pyritic mineralization to 8.270% Mo in 10 cm wide quartz molybdenite veins. Copper, silver and gold values are low in all of the material submitted for assay.

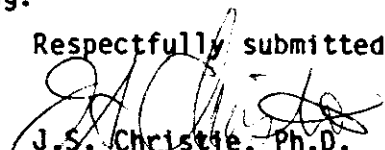
Tungsten values are anomalous in all samples (5 ppm is considered anomalous), although it is more highly concentrated in samples with visible molybdenite. On sample C-177, across a 0.5 m wide rusty weathering zone with pyrite, pyrrhotite, magnetite, chalcopyrite and molybdenite assayed greater than 1000 ppm Tungsten.

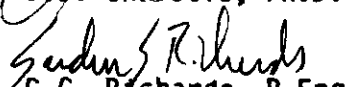
Fluorine is anomalous in most samples but more strongly so in samples collected near breccia bodies. Tin values are all low.

#### CONCLUSIONS AND RECOMMENDATIONS

Present work has confirmed the existence of a porphyry molybdenum system on the Scuzzy Property. Ore grade mineralization is not likely to occur at or near surface but a deeper moly target exists and is worth pursuing. Porphyry moly deposits often have shells of magnetite at high levels, above the ore shells, and show considerable variation in pyrite content. For these reasons, it is recommended that a magnetometer survey and a deep-look IP Survey be done prior to diamond drilling.

Respectfully submitted,

  
J.S. Christie, Ph.D.

  
G.G. Richards, P.Eng.

## SCUZZY - STATEMENT OF COSTS


## Geologists

J.S. Christie	Aug. 24, Sept. 15, 16	3 days @ \$225	675.00
G.G. Richards	Aug. 24, Sept. 15, 16	3 days @ \$225	675.00
Meals:	4 mealdays @ \$30		120.00
Gas			67.00
Gimlex Jimmy (4 x 4)	- 3 days - 390 km		175.20
JMT Jimmy (4 x 4)	- 3 days - 150 km		132.00
Pemberton Helicopters	- #2797		1600.00
Chemex Labs			238.00
Field Supplies - flagging, .....	string, bags, etc.		50.00
Hotel			128.40
Report, draughting, typing			750.00
		<b>Total</b>	<b>4,610..60</b>

STATEMENT OF QUALIFICATIONS

I, Gordon G. Richards, of Vancouver, British Columbia, do hereby certify that,

1. I am a Professional Engineer of the Province of British Columbia, residing at 6195 Lynas Lane, Richmond, B.C., V7C 3K8.
2. I am a graduate of the University of British Columbia, B.A.Sc., 1968, M.A.Sc.m 1974.
3. I have practised my profession as a mining exploration geologist, continuously since 1968.
4. This report is based on my personal knowledge of the district, and mapping of the geology at the property.

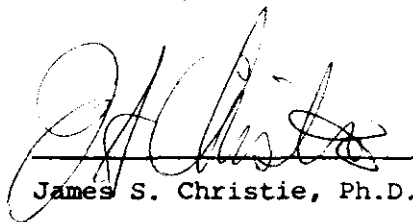


Gordon G. Richards, P.Eng.

STATEMENT OF QUALIFICATIONS

I, James S. Christie of Vancouver, British Columbia do hereby certify that,

1. I am a Professional Geologist residing at 3921 West 31st Avenue, Vancouver, B.C. , V6S 1Y4
2. I am a graduate of the University of British Columbia B. Sc., Honours Geology - 1965; Ph.D. Geology - 1973
3. I have practised my profession as a mining exploration geologist, continuously since 1965.
4. I am a Fellow of the Geological Association of Canada.
5. I am a Member of the Geological Society of America.
6. This report is based on my personal knowledge of the district, and mapping of the geology at the property.

  
James S. Christie, Ph.D.





# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE (604) 984-0221  
TELEX 043-52597

RECEIVED OCT 5 1982

## CERTIFICATE OF ASSAY

TO : JMT SERVICES CORPORATION

8827 HUDSON STREET  
VANCOUVER, B.C.  
V6B 4N1

CERT. # : A8213595-001-A  
INVOICE # : I8213585  
DATE : 5-OCT-82  
P.O. # : NCNE  
SCUZZY

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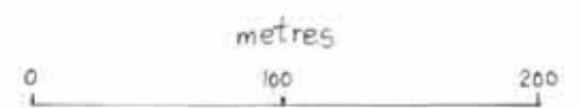
Sample description	Prep code	Cu %	Pb %	Ag FA oz/T	Au FA oz/t		
R 1305	207	0.03	0.016	0.08	<0.003	--	--
R 1307	207	<0.01	0.004	0.03	<0.003	--	--
C 177	207	0.01	0.060	0.03	<0.003	--	--
C 178	207	0.01	0.704	0.04	<0.003	--	--
C 179	207	<0.01	1.140	0.01	<0.003	--	--
C 180	207	<0.01	1.130	0.04	<0.003	--	--
C 131	207	0.02	8.270	0.13	0.003	--	--

.....  
Registered Assayer, Province of British Columbia

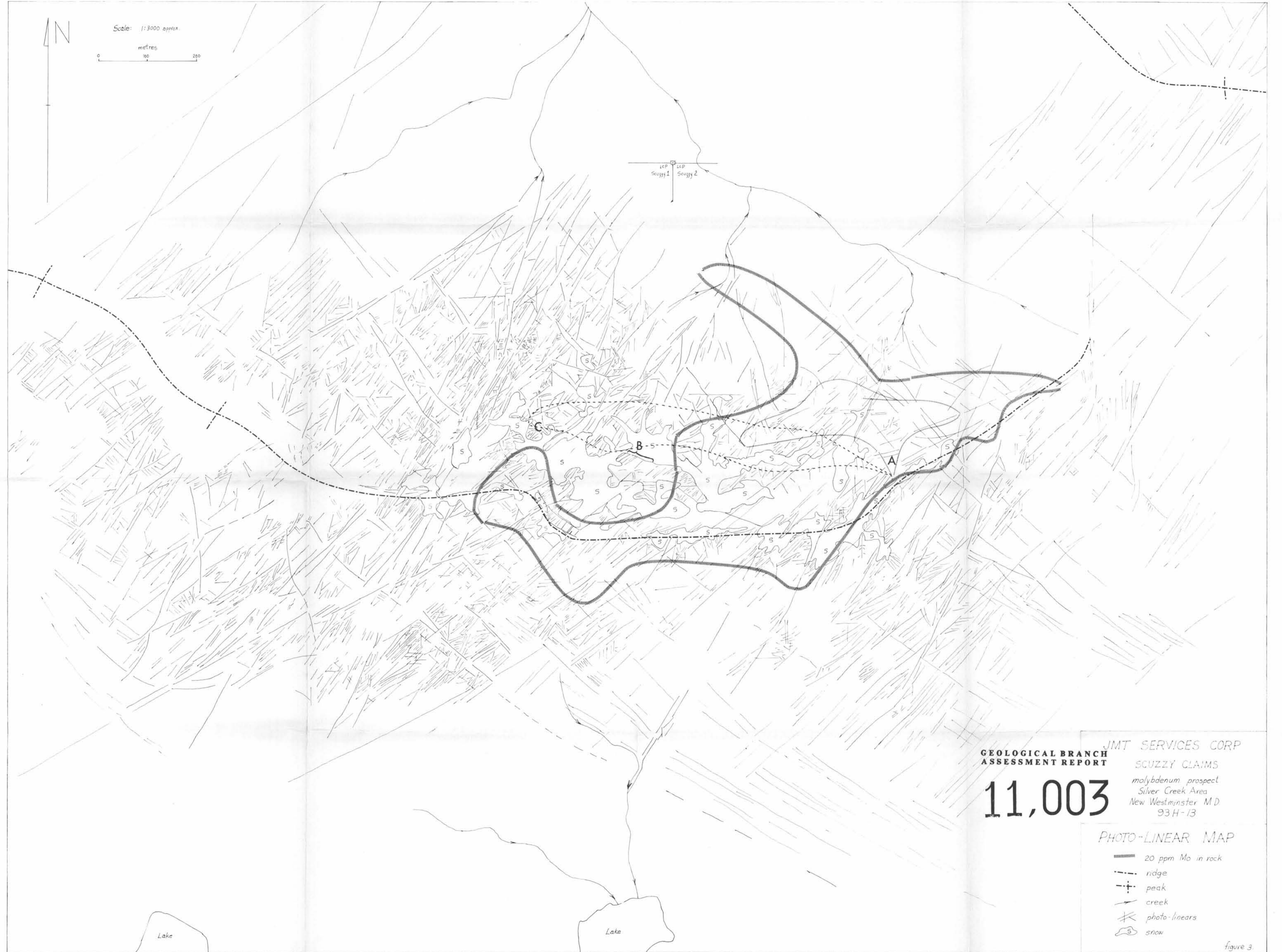




Scale: 1:3000 approx.



ICP  
Scuzzy 1    ICP  
Scuzzy 2



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**  
**11,003**

JMT SERVICES CORP  
SCUZZY CLAIMS  
molybdenum prospect  
Silver Creek Area  
New Westminster M.D.  
93H-13

**PHOTO-LINEAR MAP**



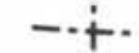



-  20 ppm Mo in rock
-  ridge
-  peak
-  creek
-  photo-linears
-  snow

figure 3