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REPORT ON THE  
M.U.T. GROUP OF MINERAL CLAIMS  
SALMO PROJECT  
NELSON MINING DIVISION  
for  
BENSON MINES LTD. (N.P.L.)  
by  
John R. Poloni, B. Sc., P. Eng.  
June 23, 1978

REPORT ON THE

M.U.T. GROUP OF MINERAL CLAIMS

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by

John R. Poloni, B. Sc., P. Eng.

June 23, 1978

John R. Poloni and Associates Ltd.,  
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Delta, B.C.

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JOHN R. POLONI P. Eng.  
Consulting Geologist

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## 1.0 SUMMARY AND CONCLUSIONS

The M.U.T. Group of mineral claims and the United Verde crown grants are owned by Benson Mines Ltd. by option and grub staking agreement, respectively. The property is located on Lost Creek approximately 7.5 miles south of Salmo, B.C. in the Nelson Mining Division. The main zones of interest are associated with the contact zones of limestone and limy argillite and intrusives where the presence of skarns containing tungsten and molybdenum are sought. On the United Verde claims quartz veins containing lead zinc and silver have been mined in past years.

The property has the potential of containing skarn zones with economic volumes and grades of tungsten and molybdenite mineralization and also lead-zinc and silver bearing veins which could be mineable.

## 2.0 INTRODUCTION

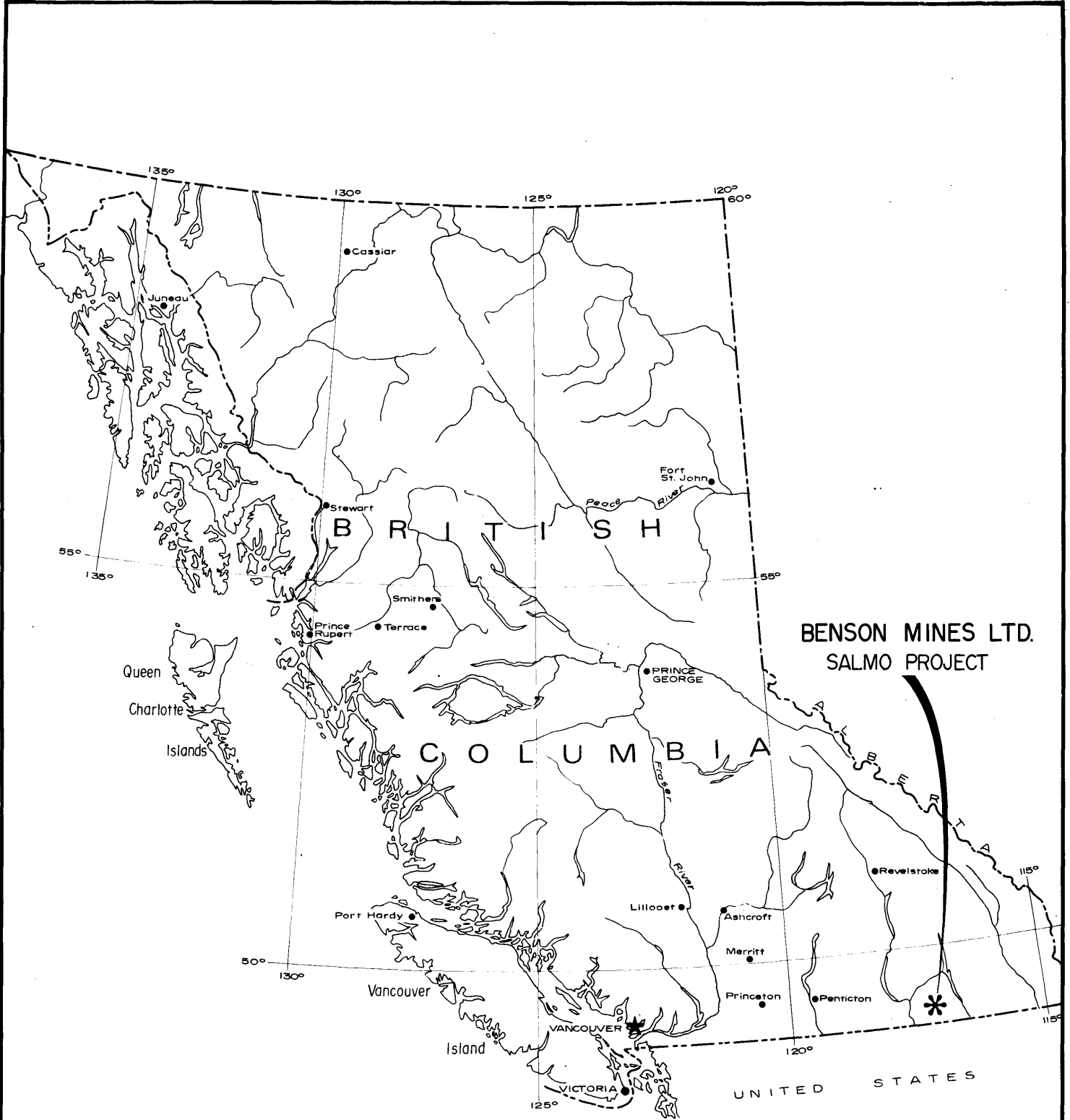
The M.U.T. Group of mineral claims located at Lost Creek, 7.5 miles south of Salmo, B. C., is owned by option agreement by Benson Mines Ltd. of Vancouver, B.C. Recent exploration, including diamond drilling has shown the presence of molybdenum - tungsten minerals in skarn, and silver, lead-zinc minerals in quartz veins in association with a major thrust fault called the Black Bluff fault.

This report is based on a personal examination of the showings, detailed logging of drill hole A-78-2, and a study of previous reports and governmental publications. The author spent the period June 14, 1978 to June 20, 1978 on the property.

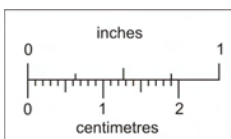
A summary of exploration is presented and recommendations are made for a continued program of work, including, geological and geochemical surveys, trenching and further diamond drilling. This work will cover a detailed examination of the four United Verde crown grants and the M.U.T. Group of six claims containing 84 units. An estimate of costs has been prepared.

LOCATION MAP

Plan No. 1



**BENSON MINES LTD.  
SALMO PROJECT**



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT PROPERTY LOCATION MAP M.U.T. CLAIMS NELSON MINING DIVISION</b>		
<b>JOHN R. POLONI &amp; ASSOCIATES LTD.</b>		
<b>DRAWN:</b> J.R.P.	<b>CHECKED BY:</b> J.R.P.	<b>PLAN No.</b>
<b>SCALE:</b> 1" = 136 Miles	<b>DATE:</b> June 23, 1978	<b>I.</b>

### 3.0 LOCATION AND ACCESSIBILITY

The claims are located on Lost Creek about 7.5 miles south of Salmo, B.C. Plan No. 2. Elevations range from 3,000 to 5,000 feet above sea level with the property covering two heights of land, the south slope of Nevada Mountain and the north west slopes of Lost Mountain.

Access is via road, south from Salmo, B.C. along Highway No. 3 to the South Salmo River for 9 miles, then easterly along the river for 2 miles to Lost Creek. A 4-wheel drive road leads northerly towards the M.U.T. claims for approximately four miles. A branch of this road crossing the south arm of Wilson Creek, leading to the United Verde workings requires upgrading. The northerly part of the claim group on Nevada Mountain, can be reached by a road along the north side of Lost Creek.

The N.T.S. Map reference is 82 F/3; Latitude  $49^{\circ}05'N$  and Longitude  $117^{\circ}12'W$ .



4.0 CLAIM INFORMATION

The M.U.T. Group of claims and the United Verde crown grants lie in the Nelson Mining Division of British Columbia. Plan No. 2.

Benson Mines Ltd. of Vancouver holds the claims by option and grub staking agreements. Claims data is as follows:

<u>Claim (Units)</u>	<u>Record No.</u>	<u>Expiry Date</u>	
<u>Located</u>			
M.U.T. 1 (10)	371 (11)	Nov. 30/	
M.U.T. 2 (10)	372 (11)	Nov. 30/	
M.U.T. 3 (16)	373 (11)	Nov. 30/	
M.U.T. 4 (16)	374 (11)	Nov. 30/	
M.U.T. 5 (16)	377 (12)	Dec. 7/	
M.U.T. 6 (16)	378 (12)	Dec. 7/	
<u>Crown Granted</u>			
United Verde			
<u>Name</u>	<u>Lot No.</u>	<u>Acreage</u>	<u>Date of Purchase</u>
Gold Bar	14445	42.55	June 15/78
Silver Crown	14444	28.71	June 15/78
Silver Bar	14443	43.78	June 15/78
Mispickel	14442	42.82	June 15/78

Mr. E. S. Peters of Vancouver, B.C. has a grub staking agreement with Benson Mines Ltd. on the United Verde crown granted claims.

Claims information was obtained from the officers of Benson Mines Ltd. from Mr. E.S. Peters and from claims maps from the Mining Recorder's office in Vancouver and Nelson, B.C.

## 5.0 HISTORY

### 5.1 PAST HISTORY

Governmental reports indicated that the Molly Group of crown granted claims was originally located for molybdenite and a small shipment made during World War I. In 1942, Joe Gallo, of Howser, discovered Scheelite in association with molybdenite in skarn and considerable trenching was undertaken. Trenches on the M.U.T. claims were probably undertaken during this period. No history of the adit located on Lost Creek, Plans No. 3 and 5, was found in the literature, but as the geological and mineralogical nature is similar to the molybdenite tungsten showings in the area, the history of discovery is probably similar.

The United Verde crown grants were originally called the Southern Belle property. These were staked by C.E. Wilson in 1895 and later acquired by the Trail Mining Co. operated by Joe Rozeck, Calvin Hicks and others. Two working levels were established, the lower level consisting of a cross-cut for 136 feet. Drifting amounted to 72 feet on two quartz veins in the lower level. A sample across 12 inches of vein material ran: Au 0.02 oz./ton, Ag 4.0 oz./ton, Pb 3.5% and Zn 1.0%. Work on the upper level amounted to 50 feet of drifting, 20 feet of raise and 31 feet of winze. In the raise, 17 inches of vein material assayed: Au-Tr, Ag 2.40 oz./ton, Pb 6.5% and Zn 1.2%. A few tons of sorted ore were shipped which ran Ag 27.3 oz./ton, Pb 30% and

and Zn 0.8%. (Ref. British Columbia Minister of Mines Report 1918).

The property name was changed from the Southern Belle to the United Verde in 1921, according to the British Columbia Minister of Mines Report. The report states "The principal lead is 15 feet wide between clear well defined walls from which the ore breaks freely. Galena is irregularly disseminated in bunches and stringers throughout the entire width of the lead which is drifted on for 30 feet. The drift, widened to the full width of the vein, showed mineralization throughout, with ore in both faces. A sample across 15 feet gave: gold 0.08 oz., silver 12.9 oz., lead 21.6 percent and zinc 1.3 percent."

## 5.2 RECENT HISTORY

The property was staked as the M.U.T. group of claims in November and December 1976. Geological mapping and sampling of showings, road repair work, the establishment of a survey grid, and the drilling of A-77-1 were undertaken in 1977. The United Verde claims were examined by J. H. Montgomery, P. Eng. in 1977 accompanied by V.M. Ramalingaswamy, geologist in charge of work on the M.U.T. claims. Mr. Montgomery and Mr. Geshard von Ronen, P. Eng. reported of the M.U.T. project during 1977 and early 1978.

Old dumps, surface showings, and vein material, were sampled by V. M. Ramalingaswamy at the United Verde during 1977. Three samples of vein material picked from the dumps assayed between 1.51 - 5.83% Pb, 0.17 - 6.30% Zn and 1.24 - 4.66 oz./ton Ag. Two samples of vein material from

underground in the "Big" vein and the first vein assayed 5.78% Pb, 2.17% Zn, 3.12 oz./ton Ag and 0.28% Pb, 5.54% Zn, 0.66 oz./ton Ag respectively.

Two surface samples of skarn type, limy argillite taken along the access road to the main M.U.T. camp at location C, Plan No. 4 assayed 1.09% and 1.01%  $WO_3$  respectively.

During 1978, two drill holes were completed to June 20, in an attempt to better define the areas of tungsten mineralization found in A-77-1. The results of this work will be discussed in Section 7.0, Work Programs and Results.

## 6.0 GEOLOGY

### 6.1 REGIONAL PICTURE

James T. Fyles and C. G. Hewlett, British Columbia Department of Mines Bulletin No. 41, mapped the stratigraphy and structure of the Salmo Lead-Zinc area. As described in 1959, the area is underlain by late Precambrian and early Paleozoic sedimentary and metamorphic rocks, Mesozoic volcanic rocks, and late Mesozoic and Tertiary granitic rocks. The map area is divided into four belts westerly to easterly, the Mesozoic volcanic area, the Mine Belt, the Black Argillite Belt, and the Eastern Belt. These areas are separated by three eastward and southward dipping regional thrust faults. Granitic masses are later intrusions. Volcanic rocks are found northwest of the Salmo and north of the Pend d'Oreille Rivers. All known major lead-zinc deposits from the Jack Pot to the Reeves MacDonald mines are found in the Mine Belt. Lying east of the Mine Belt, the Black Argillite Belt covers an area up to two miles wide. The Eastern Belt is separated from the Black Argillite Belt by the Black Bluff Thrust Fault. Plan No. 3.

Montgomery J. H. 1977, describes the Argillite Belt as being composed of Unit 9, the Active Formation of Ordovician Age; Unit 5, the Reeves Member of the Laib Formation of Lower Cambrian Age and Unit 4, the Truman member of the same formation and also of Lower Cambrian age. The Eastern Belt is composed of the Upper Laibs Formation also of Lower Cambrian age.

Mineral deposits of interest in the area include the Molly Mine, the Jumbo claims, the Tungsten King and Dodger, the Jack Pot, the Reeves MacDonald and the H. B. Mine.

## 6.2 LOCAL GEOLOGY

The main areas of interest on the M.U.T. claims is underlaid by argillite, limestone and limy argillite of the Active Formation adjacent to the Lost Creek stock intrusive contact. Scheelite and molybdenum occurs in contact areas in garnet-diopside skarn and also in quartz stringers in the altered granite near the contact zone.

On the United Verde claims, lead, zinc and silver mineralization has been found in quartz veins in close proximity to the Black Bluff fault zone. Here Cambrian rocks have overridden Ordovician rocks.

From work undertaken by Ramalingaswamy V. M. in 1977 and observations by the author, sulfides appear to occur in the United Verde mine in quartz veins in zones of crushed argillite and argillaceous limestone.

In view of the favourable geology and the presence of molybdenum, tungsten, silver, lead and zinc mineralization a further program of exploration is warranted.

## 7.0 WORK PROGRAMS AND RESULTS

During 1977 geological, physical and drilling exploration was undertaken on the M.U.T. claims. The results of these surveys have been summarized by V. M. Ramalingaswamy in a report dated March 10, 1978 titled, "Report on Geological, Physical and Drilling Work", M.U.T. Claims Group, Salmo Area, B.C.

Work programs consisted of geological mapping, physical work including building and repair of property and drill site access roads, and diamond drilling. These programs were shown to cost \$19,098.00 with the largest expenditure being for cat work and the diamond drilling of A-77-1.

During 1978 two further drill holes were completed A-78-1 and A-78-2 for a total meterage of 353.0 meters.

Program results on the M.U.T. claims are extremely encouraging and while no wide sections of ore grade materials have yet been encountered, narrow sections of tungsten and molybdenum values of importance have been obtained. Drill hole A-77-1 contained narrow widths of from 0.06 to 0.33%  $WO_3$ . Zone C, Plan No. 4, called the "1% Showing" assayed 1.01 and 1.09%  $WO_3$  across approximately 2.0' in surface outcrop. Trace values of tungsten were observed in both holes A-78-1 and A-78-2 and while no assays were done, sections of the core indicated tungsten by lamping.

The rediscovered adit on Lost Creek, shown as Zone B, Plan No. 4, contains garnet-dropside skarn at a limestone-

granite contact having values of between 0.18 to 0.68%  $WO_3$  in four-2 foot chip samples.

Section 5.2 describes the recent history of the property including the results of an examination of the United Verde crown granted claims. Assays on chip samples of two veins cut by the lower level cross cut gave 5.78% Pb, 2.17% ZN, 3.12 oz. Ag/ton and 0.28% Pb, 5.54% Zn and 0.66 oz. Ag/ton.

Plan No. 6, a section through the area of drilling during 1977-78, indicates that the limestone granite contact was not cut in drilling. Drill hole A-77-1 had cut limestone and skarn containing tungsten minerals ranging from 0.06 to 0.33%  $WO_3$ . Drill hole A-78-1 was located to intersect the assumed or projected zone of contact of the granite with this tungsten bearing skarny limestone, however it entered a highly faulted section of argillite which contained only brecciated sections of limestone. The hole had to be aborted short of projected target. A-78-2, an inclined hole to the North West, cut only argillite and limy argillite with minor tungsten minerals, before being stopped in highly altered granite. Plan No. 6, the present interpretation of the geology, shows that the limestone containing the tungsten minerals cut in A-77-1 was possibly cut off by a granitic protrusion. A further drill hole is warranted, located between A-77-1 and A-78-2 to test for the limestone granite contact area.



## 8.0 EXPLORATION TARGETS

An examination of all pertinent data on the M.U.T. and United Verde claims indicates that several areas are prime targets for exploration for tungsten, molybdenum, lead, zinc and silver mineralization. A listing and description of these zones of interest follows with locations shown as areas A to H inclusive in Plan No. 4.

### Area A

This the present target area where three drill holes have been completed, tungsten mineral intersected but no limestone granite contact area yet tested, section 7.0. At least one further hole is required.

### Area B

The contact zone between a limestone unit over 300 feet thick in the active formation and the intrusives of the Lost Creek stock contain tungsten-molybdenum in skarn as shown Plan No. 5. The adit in the contact zone cuts limestone and skarn and contains mostly potassium feldspar, diopside, tremolite and pyrrhotite. The intrusive is highly altered and devoid of mafics.

Two short drill holes are required to explore this skarn and examine extensions of the tungsten-molybdenum mineralization recently sampled.

### Area C

The "One percent Showing" requires further exploration. This is described as an area of hornfels containing tremolite and secondary biotite over

300 feet thick visible in a road cut. Mineralization is mainly rusty weathering pyrrhotite and pyrite containing tungsten with assays of 1.01 and 1.09%  $WO_3$ . Detailed mapping, soil geochemistry, and bulldozer trenching are necessary initially. Diamond drilling of at least one hole would be necessary after further detailed sampling.

#### Area D

Immediately south of the Molly group of claims and in close proximity to the intrusive contact, is Area D where mapping has shown that the dip direction of bedding is opposite to the regional trend, indicating the possible occurrence of a trough. A well defined trough exists in the contact area skarn on the Molly claims, where the limestone unit has been converted to a wollastonite-garnet skarn. Detailed mapping, and trenching is necessary, with closely controlled soil geochemistry. Diamond drilling will be needed if results of the initial surveys are encouraging.

#### Area E

The Jumbo claims have been explored by adit, drift and winze in the contact zone between limestone or limy argillite and granite. A channel sample across 5 feet assayed 0.50%  $WO_3$  and 0.03%  $MoS_2$  according to Little H.W., Economic Geology Series, No. 17, G.S.C. 1959. While these claims are not controlled by Benson Mines Ltd., areas of similar

geological interest are found in close proximity which require detailed surveys. Geological mapping, soil geochemistry, bulldozer trenching are necessary prior to any diamond drilling.

Area F

The contact zone between the Nelway Dolomite and the Lost Creek stock is a prime exploration target, especially where cut by the Black Bluff regional thrust fault. This area requires preliminary geological and geochemical surveys as no known mineralization is presently indicated.

Area G

Prospecting of this area for the possible occurrence of skarn on the south eastern side of the Reeves Limestone is warranted. This will require preliminary surveys of geochemistry and geology.

Area H

Area H includes the United Verde claims where geological, geochemical surveys and bulldozer trenching are necessary to evaluate the extent of silver, lead-zinc mineralization previously explored and mined by adit, drift, raise and winze.

## 9.0 RECOMMENDATIONS

The geology on the M.U.T. claims is similar to that found on the Tungsten King and Molly Mine properties where scheelite has been found in skarn which has developed in limestone and limy beds of the Active formation. The eight zones of exploration interest, section 8.0, require detail surveys.

### Geochemical Soil Sampling

Survey grids are to be established using 200 foot line and 200 foot station intervals. Soil samples collected, will be analysed for molybdenum, tungsten and in the case of the United Verde claims for lead, zinc and silver.

### Geological Mapping

A geological map of all outcrops should be prepared on a scale of 1:2000 with detailed maps at a smaller scale for areas of prime importance.

### Trenching

Bulldozer trenching is necessary in the area of the "One percent Showing", in Area D south of the Molly claims and on the United Verde claims. Further trenching could be necessary subject to the success of preliminary geology and geochemistry surveys.

### Diamond Drilling

At least three drill holes are necessary to fully test two of the target areas. One hole is required between drill holes A-77-1 and A-78-2. Two holes are required to test Area B where tungsten and molybdenum mineralization has been sampled.

Further drilling is contingent on the results of preliminary surveys, but from the nature of the geology and mineralization found to date, plans should be made to drill at least three further holes.

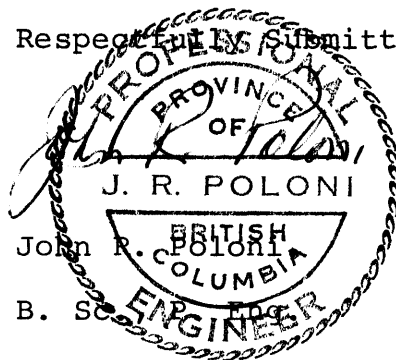
10.0 COST ESTIMATE

1. Line Cutting		
50 line kilometers @ \$70.00		\$ 3500.00
2. Geochemical Surveys - collection		
of samples including sample preparation		
and analysis		6000.00
3. Geological Mapping		3000.00
Geologist for 2 months		
4. Bulldozer Work		
Road Work (United Verde, etc.)		
30 hours @ 50.00		1500.00
Trenching United Verde, One percent		
Showing, Area D		
150 hours @ 50.00		7500.00
Mobilization costs		1500.00
5. Transportation, Food, Camp,		
Supplies, Truck Rental		3000.00
6. Diamond Drilling		
AQ core size		
350 m @ 35.00		12250.00
7. Contingencies		3000.00
		<hr/>
	Total	\$ 41,250.00

June 23, 1978

Delta, B. C.

Respectfully Submitted,



APPENDIX A

References

REFERENCES

1. James T. Fyles and C. G. Hewlett 1959,  
"Stratigraphy and Structure of the Salmo Lead-Zinc Area", British Columbia Department of Mines, Bulletin No. 41.
2. J. H. Montgomery, Ph. D., P. Eng. September 3, 1977,  
Report on the M.U.T. Group of Mineral Claims, Nelson Mining Division, B. C.
3. V. M. Ramalingaswamy, March 10, 1978, Report on  
Geological, Physical and Drilling Work, M.U.T. Claims Group, Salmo, B. C.
4. Gerhard von Rosen, P. Eng., January 12, 1978, Progress  
Report on the M.U.T. Mineral Claims, Salmo, B.C.
5. A. E. Weissenborn, Editor, U.S.G.S., Lead-Zinc Deposits  
in the Kootney Arc., Bulletin No. 61, 1970.
6. Minister of Mines Reports for British Columbia 1918,  
1919, 1920 and 1921.
7. H. W. Little, 1959, Tungsten Deposits of Canada.  
Geological Survey of Canada Economic Geology Series  
No. 17.



APPENDIX B

Certificate

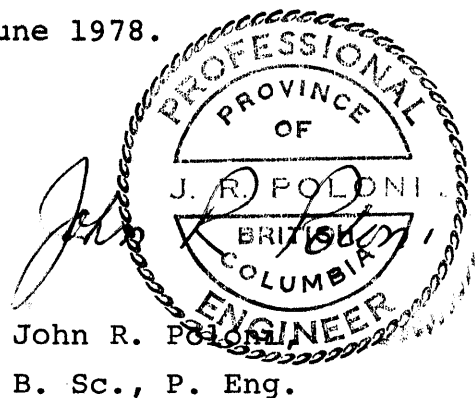
CERTIFICATE

I, John R. Poloni, of 5502 - 8B Avenue, in Delta, in  
the Province of British Columbia,

DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist.
2. I am a graduate of McGill University of Montreal,  
Quebec, where I obtained a B. Sc. degree in  
Geology in 1964.
3. I am a registered Professional Engineer in the  
Geological Section of the Association of Professional  
Engineers of the Province of British Columbia.
4. I have practiced my profession since 1964.
5. I am a Fellow of the Geological Association of  
Canada and a member of the Canadian Institute of  
Mining and Metallurgy.
6. I have personally visited the United Verde property.
7. I have no interest in the properties or securities  
of Benson Mines Ltd. nor do I expect to receive or  
acquire any.

Dated this 23rd day of June 1978.

A circular professional seal for the Province of British Columbia. The outer ring contains the text "PROFESSIONAL ENGINEER" at the top and "PROVINCE OF BRITISH COLUMBIA" at the bottom. The center of the seal contains the name "J. R. POLONI" and a signature. Below the seal, the text "John R. Poloni" and "B. Sc., P. Eng." is printed.

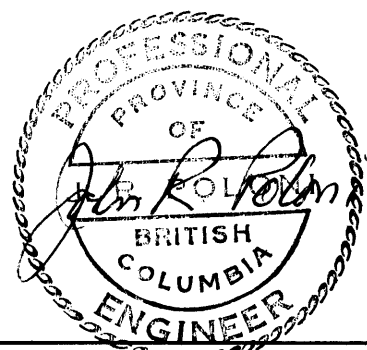
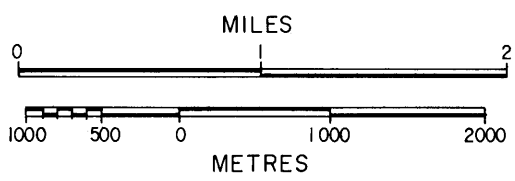
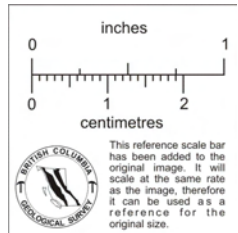
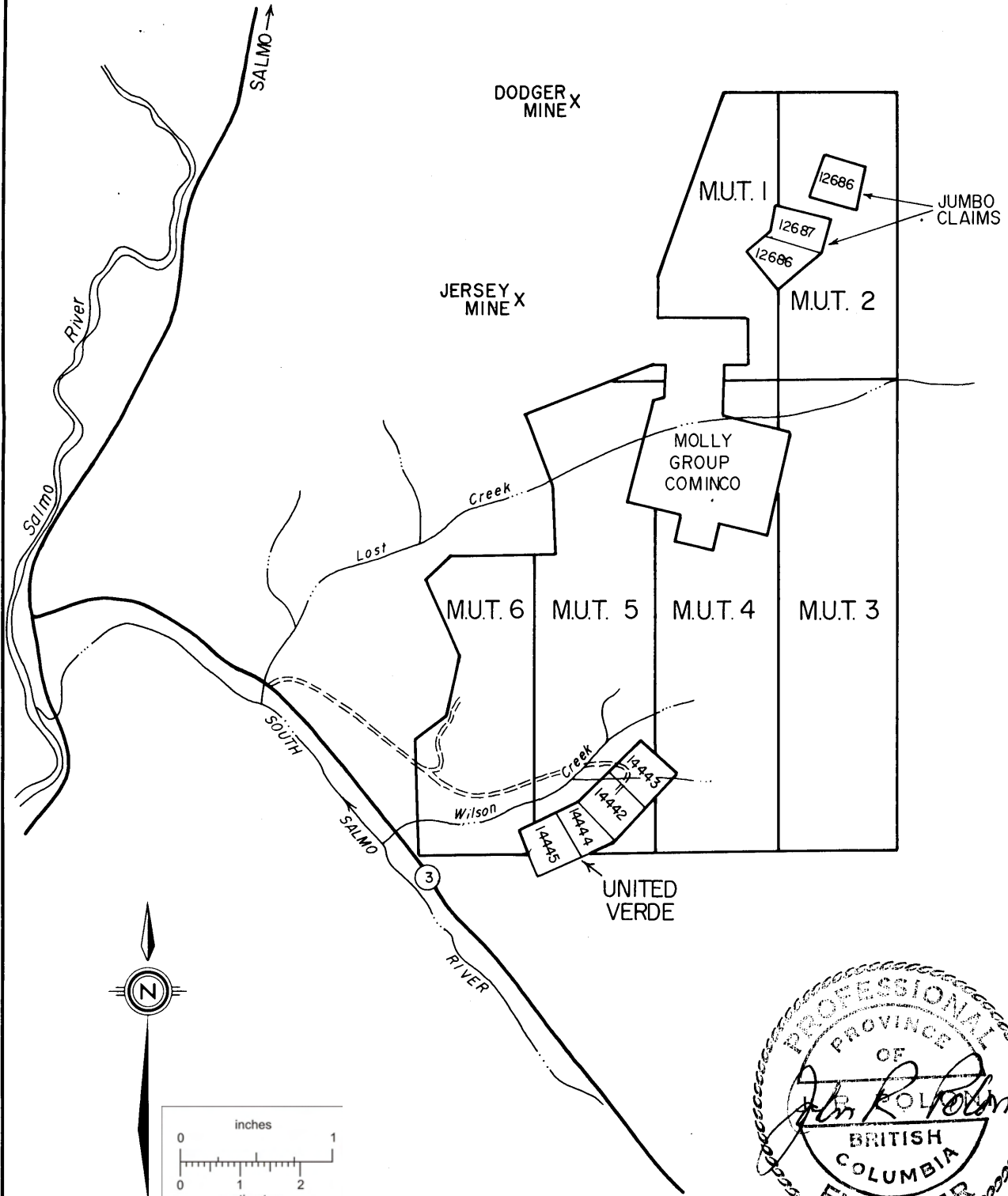
John R. Poloni  
B. Sc., P. Eng.

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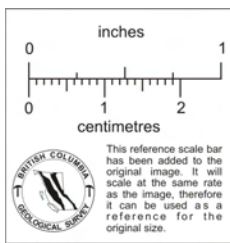
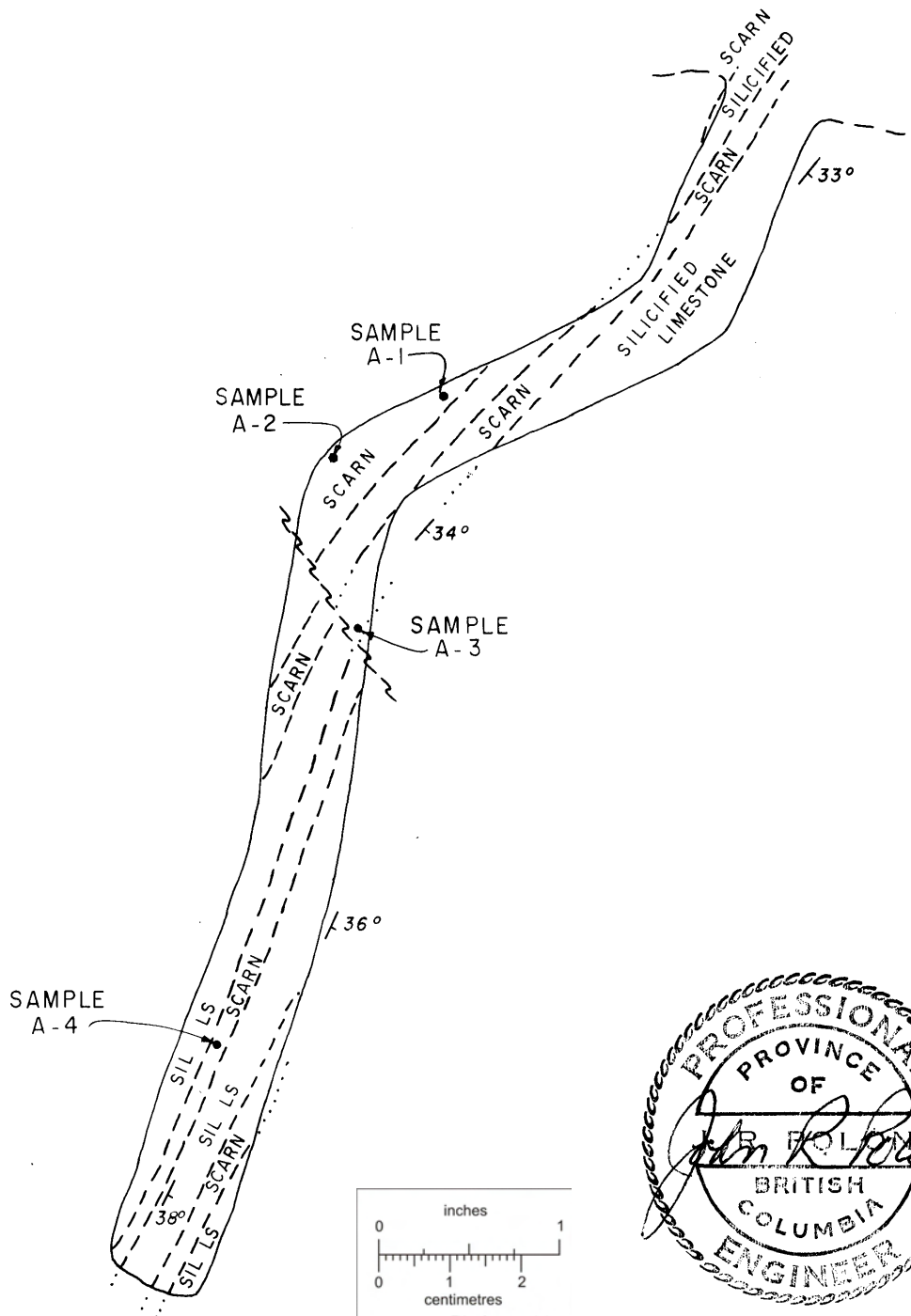
JOHN R. POLONI P. Eng.  
Consulting Geologist

APPENDIX C

<u>Maps</u>	<u>Scale</u>
Plan #2 Claim Map M.U.T. Claims	As shown
Plan #3 Geology Map M.U.T. Claims	1:2000
Plan #4 Zones of Exploration Interest	1:2000
Plan #5 Tungsten Adit Lost Creek	As shown
Plan #6 Section A-A <sup>1</sup>	As shown



<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT CLAIM MAP M.U.T. CLAIMS NELSON MINING DIVISION</b>		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: 1" = 2000'	DATE: June 23, 1978	2.



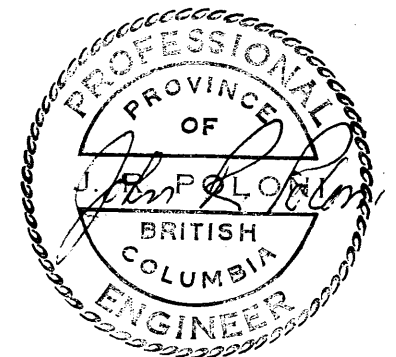
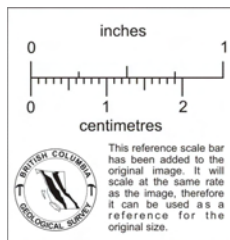
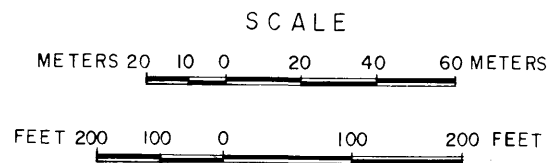
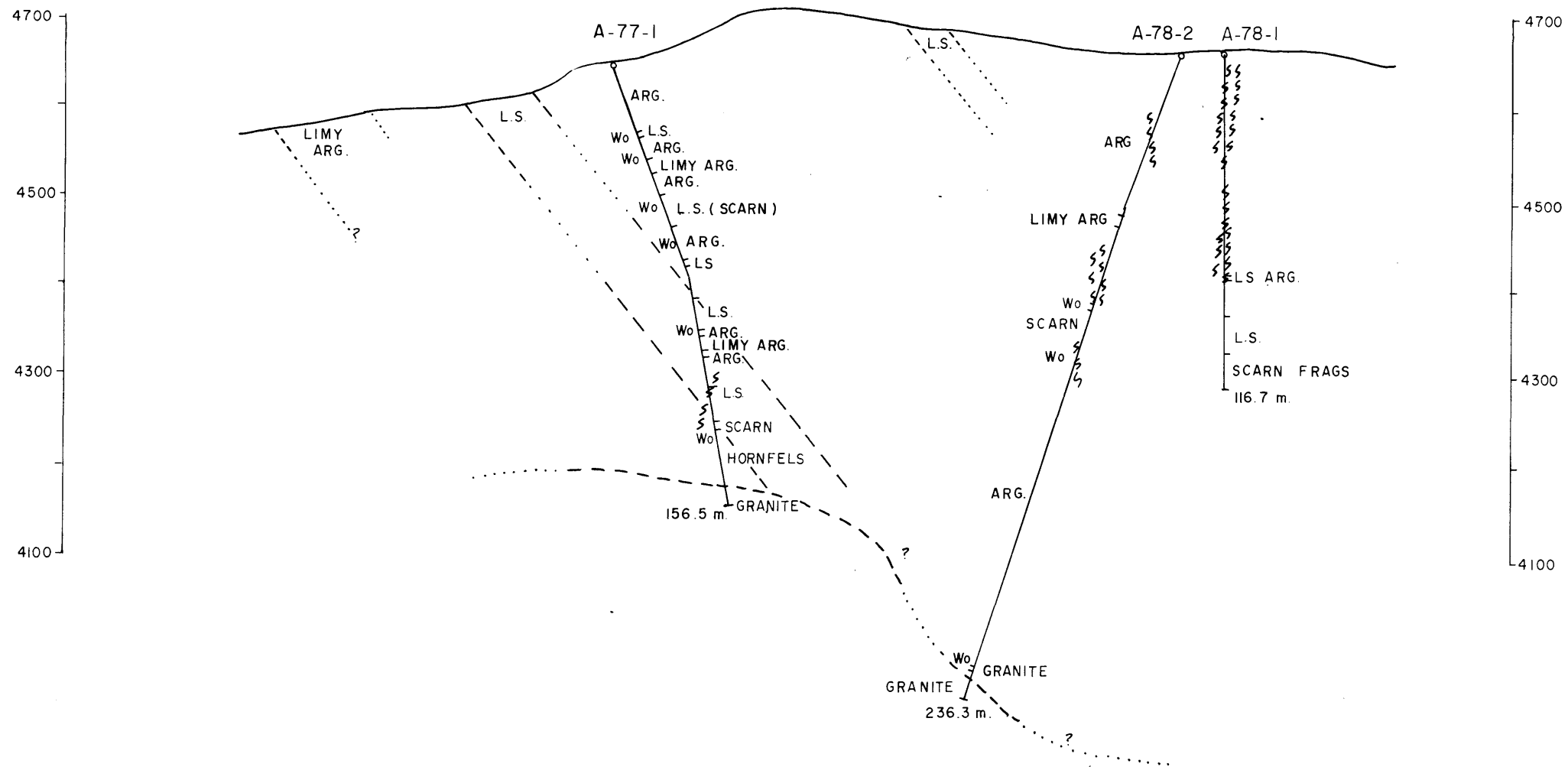
**NOTE**

MAPPED BY: V.M. RAMALINGASWAMY  
 SCARN: PYRRHOTITE, K-SPAR, DIOPSIDE  
 TREMOLITE, SCHEELITE, POWELLITE, Mo.  
 SILICIOUS LIMESTONE: TREMOLITE, WOHASTONITE,  
 TRACE SCHEELITE  
 FOR ASSAY DATA REFER TO APPENDIX C.

<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT TUNGSTEN ADIT-LOST CREEK M.U.T. CLAIMS NELSON MINING DIVISION</b>		
<b>JOHN R. POLONI &amp; ASSOCIATES LTD.</b>		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No
SCALE: AS SHOWN	DATE: June 23, 1978	5

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A'



NOTE  
 LOOKING N.E.

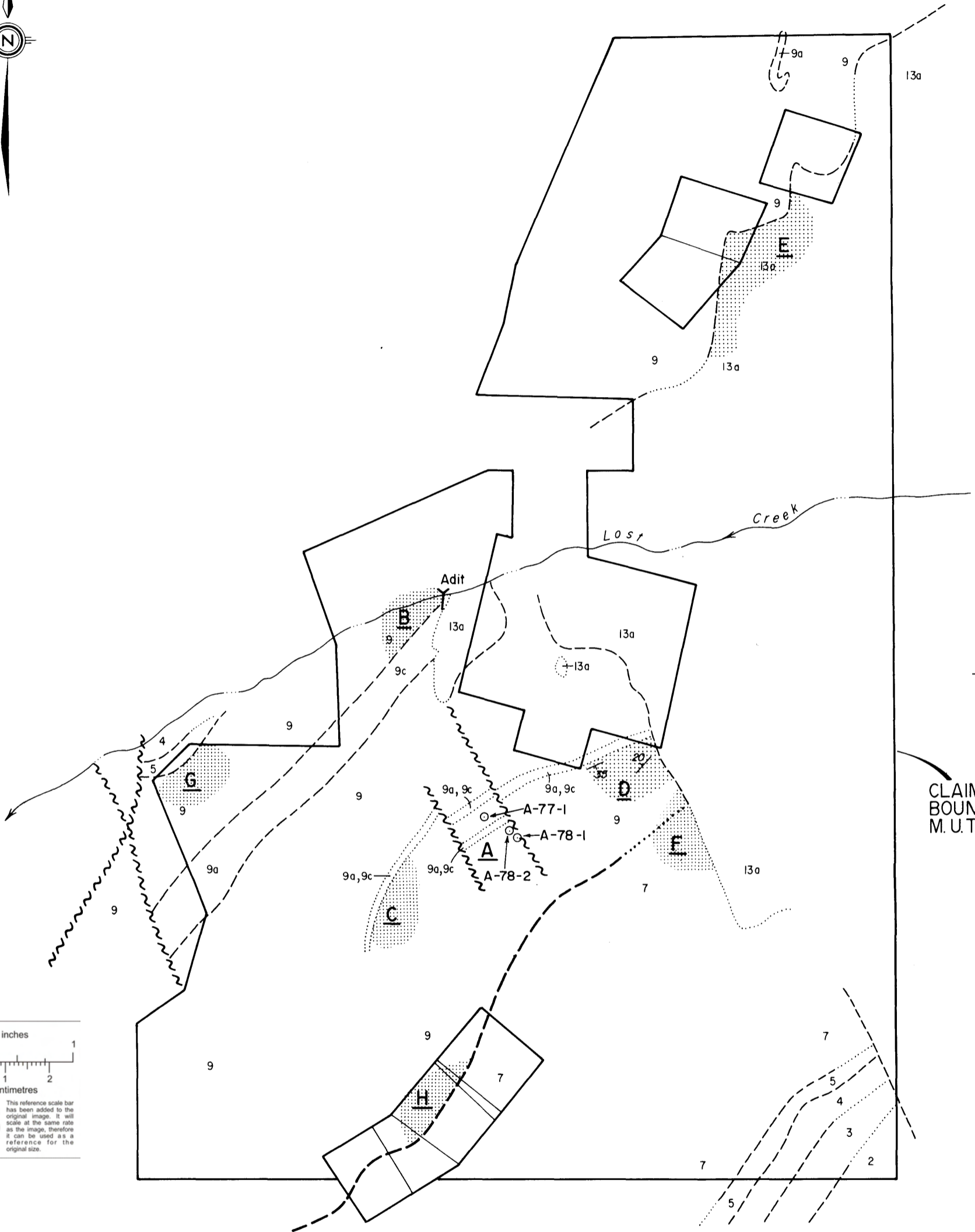
BENSON MINES LTD. (N.P.L.)		
SALMO PROJECT		
M.U.T. CLAIMS NELSON MINING DIVISION		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: 1" = 2000'	DATE: June 23, 1978	6



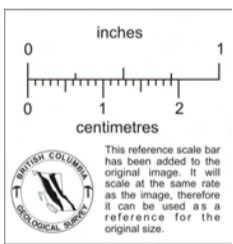
117° 12'

49° 05'

49° 05'



CLAIM  
BOUNDARY  
M.U.T.



REFERENCE MAP : Fyles & Hewlett, Bulletin No.41, Fig. 3

**NOTE :**

- FOR GEOLOGY REFER TO PLAN No.3
- FOR DESCRIPTION OF ZONES OF EXPLORATION POTENTIAL REFER TO SECTION 8



<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT ZONES OF EXPLORATION INTEREST M.U.T. CLAIMS NELSON MINING DIVISION</b>		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN : J.R.P.	CHECKED BY : J.R.P.	PLAN No.
SCALE : 1" = 2000'	DATE : June 23, 1978	4

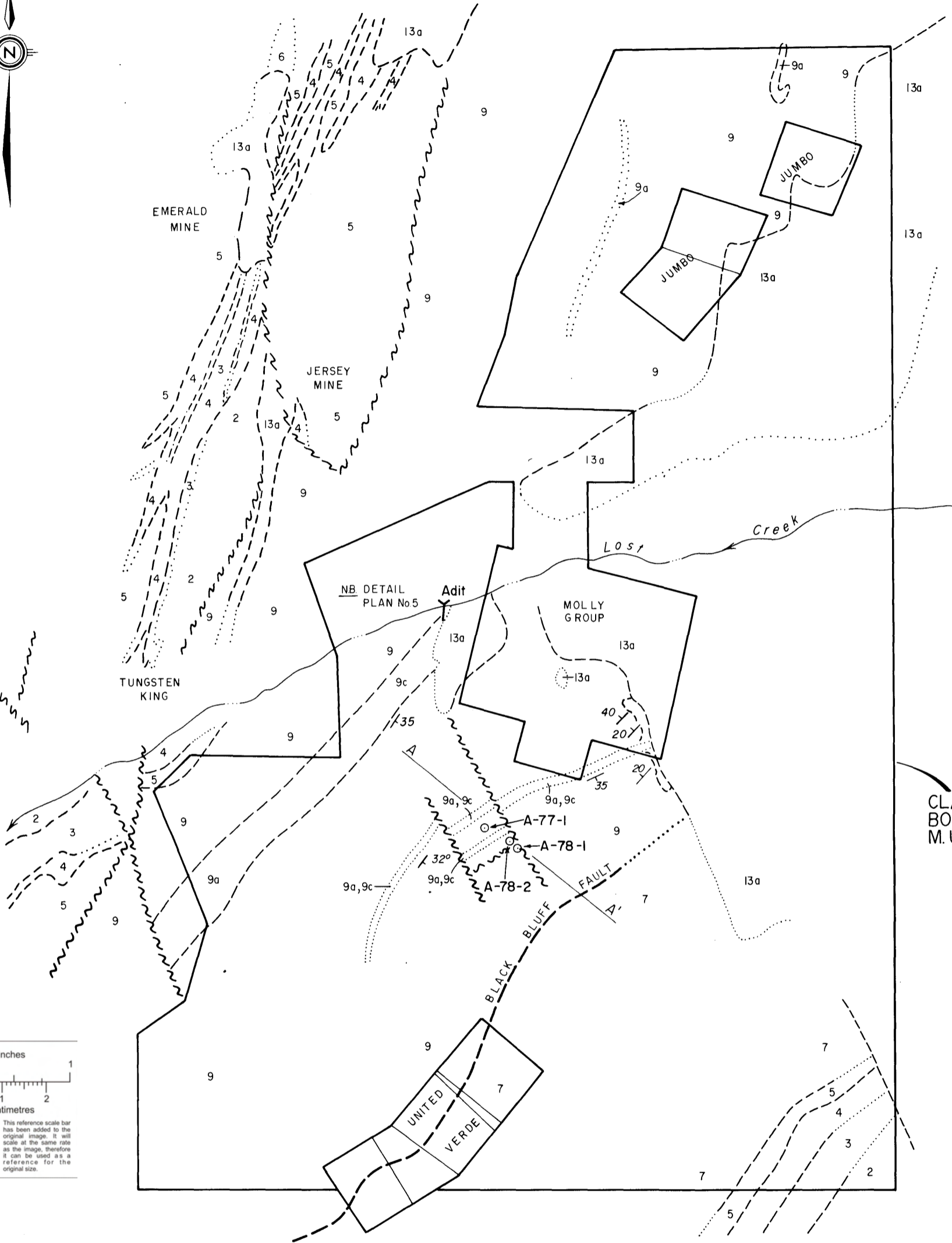
117° 12'



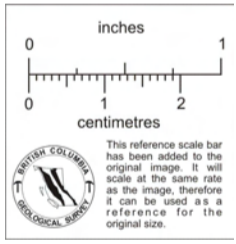
117° 12'

49° 05'

49° 05'



CLAIM BOUNDARY M.U.T.



LEGEND

- 13a GRANITE
- 9 ACTIVE FORMATION - BLACK ARGILLITE
- 9a GREY LIMESTONE & ARGILLACEOUS LIMESTONE
- 9a SILICIFIED ARGILLITE & LIMESTONE
- 7 PHYLLITE, SCHIST, MICACEOUS QUARTZITE, LIMESTONE
- 6 BLACK PHYLLITE & ARGILLITE
- 5 REEVES - LIMESTONE, MINOR DOLOMITE
- 4 TRUMAN - PHYLLITE, ARGILLITE, LIMESTONE LENSES
- 3 RENO - GREY, BLOCKY MICACEOUS QUARTZITE
- 2 NEVADA - WHITE QUARTZITE, BROWN MICACEOUS QUARTZITE
- MAJOR TRUST FAULT
- ~ ~ ~ FAULT
- - - - - CONTACT, DEFINITE - ASSUMED



REFERENCE MAP : Fyles & Hewlett, Bulletin No.41, Fig. 3

<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT GEOLOGY MAP M.U.T. CLAIMS NELSON MINING DIVISION</b>		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: 1" = 2000'	DATE: June 23, 1978	3

117° 12'



APPENDIX D

1. Sample location and description  
United Verde
2. Assay Data United Verde
3. Assay Data - One percent Showing
4. Assay Data - Tungsten adit Lost Creek
5. Assay Data - A-77-1 Selected intervals
6. Drill Logs - A-77-1, A-78-1, A-78-2.

UNITED VERDE 1977

INITIAL ADIT SAMPLES

<u>Assay No.</u>	<u>Sample No.</u>	<u>Location and Description</u>
61901	U.V. 77-1	5', Easterly open cut on South Wilson Cr.
61902	U.V. 77-2	6', CU. stain crushed zone, minor qtz. ca. veins
	U.V. 77-3	15', Same as above - sample omitted.
61904	U.V. 77-4	3', Vein with CU. Stain.
61905	U.V. 77-5	5', Vein, qtz. & crushed gouge.
61906	U.V. 77-6	4', Vein, same as above.
61907	U.V. 77-7	5', Veinlets of qtz. in crushed argillite.
61908	U.V. 77-8	5', Heavy oxidized fault zone, veinlets qtz.
61909	U.V. 77-9	Banded dolomite at end of 3rd adit.
61910	U.V. 77-10	Samples on dump from big vein.
61911	U.V. 77-11	Dump rock #2 adit portal.
61912	U.V. 77-12	Dump rock #1 adit portal.
61913	U.V. 77-13	4', Big vein, north side.
61914	U.V. 77-14	First X-cut drift on first vein.



LIMITED VERDE

# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

(2)

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO: Capcan Investments  
904 - 845 Dunsmuir  
Vancouver, B.C.

ATTN: Mr. E. Peters

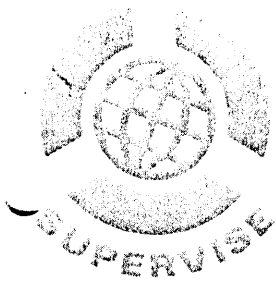
CERTIFICATE NO. 32453  
INVOICE NO. 20046  
RECEIVED May 18, 1977  
ANALYSED May 20, 1977

SAMPLE NO. :	% Cu	% Pb	% Zn	oz/ton Ag	
61901	0.02	0.04	0.09	0.02	
2	0.01	<0.01	0.38	0.08	
4	0.01	0.41	0.82	0.17	
5	0.01	0.14	0.40	0.03	
6	0.03	1.33	0.22	1.03	
7	0.02	0.04	0.36	0.08	
8	<0.01	0.20	0.35	0.13	
9	<0.01	0.01	<0.01	<0.01	
10	0.29	1.51	6.30	1.44	DUMP? SEM MATERIAL
11	0.12	5.83	0.17	4.66	DUMP? " "
12	0.03	1.84	3.53	1.24	DUMP? " "
13	0.29	5.78	2.17	3.12	SEM QTZ 4/6
61914	0.33	0.28	5.54	0.66	" " "



MEMBER  
CANADIAN TESTING  
ASSOCIATION

*Stan Amadori*  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA



1% Showing  
LAMPED GRAB

# GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2  
PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

TO: MR. ERNIE PETERS *Zone 1/2 x 2'*  
WEST WIND MINES LTD.  
904 - 885 Dunsmuir Street  
Vancouver, B.C.

## CERTIFICATE OF ASSAY

No.: 7709-2958      DATE: Oct. 7/77

We hereby certify that the following are the results of assays on: **Ore and Rock samples**

MARKED	<del>oz/st</del>	<del>oz/st</del>	Molybdenite	Zinc	Tungsten	xxx	xx	xxx
	GR/MT	GR/MT	MoS <sub>2</sub> (%)	Zn (%)	WO <sub>3</sub> (%)			
E-071485								
01 - 9 - 77			< 0.001	0.079	1.09			
02 - 9 - 77			< 0.001	0.011	1.01			
03 - 9 - 77			-	-	trace			

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORED FOR A MAXIMUM OF ONE YEAR.

REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED.

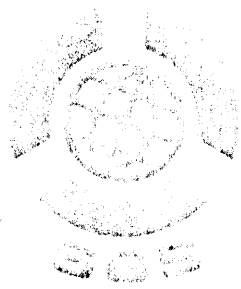
*R. Naudeau*

**R. NADEAU - Chemist**

~~PROVISED~~

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists' Society • Canadian Testing Association  
REFEREE AND OR OFFICIAL CHEMISTS FOR: Vancouver Merchants Exchange • National Institute Of Oilseed Products • The American Oil Chemists' Society  
OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade • Vancouver Merchants Exchange



*Tuxplan adit  
Foot creek*

# GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2  
PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

TO:  
**DANSON MINES LTD.**  
**904 - 885 Dunsmuir Street**  
**Vancouver, B.C.**

## CERTIFICATE OF ASSAY

No.: **7806-1350** DATE: **June 20/78**

We hereby certify that the following are the results of assays on: **Ore**

MARKED	<del>99.99% GOLD</del>	<del>99.99% SILVER</del>	Tungsten	Molybdenum	XXX	XXX	XXX	XXX
			WO (%)	Mo (%)				
<b>W-8013</b>								
<b>A 1</b>			<b>0.18</b>	<b>0.018</b>	<b>2'</b>	<b>CHIP</b>		
<b>A 2</b>			<b>0.68</b>	<b>-</b>	<b>2'</b>	<b>"</b>		
<b>A 3</b>			<b>0.48</b>	<b>-</b>	<b>2'</b>	<b>"</b>		
<b>A 4</b>			<b>0.26</b>	<b>-</b>	<b>2'</b>	<b>"</b>		

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORED FOR A MAXIMUM OF ONE YEAR.

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED.

*[Signature]*  
**I. WOLFE**

PROVINCIAL ASSAYER

**COPY**

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists' Society • Canadian Testing Association  
REFEREE AND OR OFFICIAL CHEMISTS FOR: National Institute Of Oilseed Products • The American Oil Chemists' Society  
OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade



DDH \*A-77-1

Selected INTERVALS

# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO: Westwind Mines  
904 - 885 Dunsmuir  
Vancouver, B.C.

CERTIFICATE NO. 33366  
INVOICE NO. 22940  
RECEIVED Dec. 20/77  
ANALYSED Dec. 22/77

ATTN:

SAMPLE NO. :	% Mo	% Pb	% Zn	% WO <sub>3</sub>	
71301	0.036				
71302		< 0.01	1.46		
71303				0.06	BOTTOM ↑ TOP
71304				0.08	
71305				0.08	
71306				0.33	
71307				0.15	
71308				0.22	
71309				0.16	
71310				0.30	
71311				0.08	
71312				0.08	



MEMBER  
CANADIAN TESTING  
ASSOCIATION

*[Signature]*  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA



HOLE No. A-77-1

PROJECT

M.U.T. SALMO

Page 2 of 11

INCLINATION: 70° SE AZIMUTH: N130° E COORDINATES: 49° 05' N, 117° 12' W SCALE: 1cm = 1meter LOGGED BY: V.M.R.

DEPTH	SECONDARY MINERALIZATION		GEOLOGIC TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MINS							No	LENGTH				
13m								Silicified limestone - 12.5m to 12.8m Syngenetic pyrite, sericitic cleavages.						
15						black	30°	14-15m fault zone						
			chem. & tectonic					12.8 to 24m Argillite - syngenetic pyrite & pyrrhotite with graphitic shears.						
	veinlet							17.3 m. fracture filled with epidote - perp. to bedding, suggesting proximity of skarn or contact metamorphism of argillite.						
20	veinlet													
						black	30°							
	veinlet													
25	vein diss.					grey	40°	24 to 24.3 Contact met. limestone with epi-quartz-pyrite-veinlets. few grains of blue-white scheelite						
						black								

28°





HOLE No. A-77-1

PROJECT MUT. SALMO

Page 4 of 11

INCLINATION: 70° SE AZIMUTH: N130E COORDINATES: 49° 05' N, 117° 12' W SCALE: 1 meter = 1 cm LOGGED BY: V.M.R.

DSPTH	SECONDARY MINERALIZATION		SPECIFIC TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MINs							No	LENGTH			Wt %	
43	Vein	qtz-pym ps-cal	ket											
45	Vein	qtz-sph cal-pym	"											
	Vein	qtz-pym cal	"											
	"	"	"											
	"	"	"											
	diss.	scheelite pyrrhotite	chem					48.8 to 51.1. Medium to high grade skarn Alternate bands of fine grained garnets (grossular) and diopsides, minor epi. & trem. The lighter bands (pure) of limestones appear to have reacted more intensely.	71310	49.61 49.70	9cm			30%
50	diss.	scheelite pyrrhotite	"					51.1 to 56.9 & Trm. to 59.9 Hornfels with silicification, purple secondary biotite and diopside, pyrite epidote in veins. Some mottled texture between 55.4 to 55.9	71309	51.68 to 51.79	11cm			16%
	diss.	scheelite	"											
	Vein	quartz pyrrhotite	ket											
55	diss.	scheelite	chem					← appearance of secondary biotite.						
	Vein	qtz-cal	ket											
	"	"	"											
58	diss.	scheelite	chem						71308	57.4 to 57.77	37cm			22%





HOLE No. PROJECT INCLINATION: 70° SE AZIMUTH: N130 E COORDINATES: 49° 05' N, 117° 12' W SCALE: 1 meter - 1 cm LOGGED BY: V. M.

DEPTH	SECONDARY MINERALIZATION		STRUCTURE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN.S							TYPE	NO	LENGTH	Gr%	Wt	Wt
88	diss.	Scheelite	chem.					88.9 to 94.3						
	fracture	trace Scheelite				grey	25°	Silicified limestone - contact metamorphosed to garnet (gross.) - diopside skarn with veins of quartz - calcite - diop.	71307	91.88 to 92.04	16.01	.15%	45	
90	diss. & vein	Scheelite fluorite calcite Scheelite	chem & text.			grey		90 to 90.2 mottled texture with K. spar. spi - from veins.	71306	92.38 to 92.46				
	"	Scheelite calcite	chem text.				25°	94.3 to 97.7						
	"	Sphalerite Py, Scheelite				grey		Silicified argillite with quartz segregations. pyrite and pyrrhotite along bedding						
95	"	"	"			dark grey	25°	97.7 to 98.6 silicified contact met. limestone with calcite. secondary biotite, quartz, epidote - veins.						
		Pyrrhotite				grey		102.5 alteration along fracture.	71304	97.8 to 97.98	15.0	.01	.08	
	diss.	Scheelite Sphalerite												
	diss & fract.	fluorite pyrite Cpy?	chem & text				25°		71305	99.1 to 99.37	27.5	.01	.01	
100	diss	Scheelite				dark grey								
	diss	Scheelite												
103		Sphalerite Py, Pyrr Scheelite	"			grey	25°							





HOLE No. PROJECT INCLINATION:  $\hat{P}$  70° SE AZIMUTH: N130E COORDINATES: 49° 05' N, 117° 12' W SCALE: 1m = 1cm LOGGED BY: VMR

DEPTH	SECONDARY MINERALIZATION		OROSSIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY		
	TYPE	MINS							No	LENGTH	Pb	Zn	
133	vein	trace Scheelite pyrrhotite pyrite	tekt		CLAY SILT FINE MEDIUM COARSE	grey	20°	135.3 to 147.7 Hornfels with bedding plane fractures.					
135	vein	Sphalerite	tekt					137 to 138.2 Secondary biotite to 140.9 qtz veins with pyrrhotite					
	vein	Sphalerite	tekt			dark grey	20°	142. to 142.7 Veins with secondary bt & k-spar alteration. Sphalerite					
140								144.3 to 145.1 Hornfels with hairline fractures with alteration envelopes.					
	vein	Sphalerite	tekt			dark grey	20°	145.8 to 146.2 secondary biotite. 147.2 k-spar bordering quartz veinlets.	71302	142 to 142.7	0.36%	1.46%	Co. 7m
	vein	Sphalerite trace sp. Sphalerite	tekt			grey	20°						
145	vein	Sphalerite pyrite	tekt										
	sands	Sphalerite pyrite pyrrhotite	tekt			dark grey to brown	20°	148.5 to 149.5 Spotted hornfels heavily inlain with purple brown sec. biotite, in places diopside & qtz (148.7) k-spar (149)					



DEPTH M	SECONDARY MINERALIZATION		BX* TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING L	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN'S							NO	LENGTH				
195					GRY BL		80°	<p>ARG AS ABOVE Crystall 195.90 - 196.00 Speckled Variety. Minor Qtz-calc films Py</p> <p>ARG 196.00 - 203.46 Speckled VARIETY, MINOR. Qtz-Calc INCL + STD. Grey BL, Py</p> <p>ARG 203.46 - 210.79 AS ABOVE @ 210.00 - 210.03 Qtz Calc STR @ 85°</p> <p>ARG 210.79 - 218.30 AS ABOVE Dense Black Variety, Py XTALS AND Smeared</p> <p>ARG 218.30 - 225.67 @ 219.62 - 219.92 Sil Bleached Sect<sup>n</sup> with Py-Pyrr 65°</p> <p>@ 224.18 - 224.27 Bleached Sil Sect<sup>n</sup> POSSIBLE SCARN 65°</p> <p>@ 225.48 - 225.51 Sil Sect<sup>n</sup> 80°</p> <p>ARG 225.67m - 226.52 ARG AS ABOVE</p> <p>GRANITE 226.52 - 226.90</p> <p>ARG 226.90 - 229.11 ARG AS ABOVE TRACE Scheelite</p>						



DEPTH M	SECONDARY MINERALIZATION		BX. TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING ↓	REMARKS	SAMPLING		ASSAY			
	TYPE	MINS							NO	LENGTH				
160.		TR Scheelite Py Pyrr TR Scheelite				Grey- Black	80°	<p>ARG 159.39-166.5</p> <p>@ 160.66-160.70 Qtz Splend with py pyrr, TR Scheelite</p> <p>@ 161.3 Seamy sct with scheelite &amp; m</p> <p>@ 161.52-161.56 Qtz INCL</p> <p>G Blend Py Pyrr</p> <p>ARG generally has grey colour mottled appearance with Qtz calcite films at ± 60° to core</p>						
165						grey Black	80°	<p>ARG 166.5-173.46.</p> <p>Grey variety with Qtz Calcite splend &amp; STR. Thin Sect<sup>n</sup> of seamy material. minor py pyrr &amp; Biotite in narrow sections.</p> <p>@ 167.42-167.44 Seamy with Biotite STR.</p> <p>@ 170.69-170.74 Qtz <del>FTT</del></p> <p>@ 70°</p>						
170								<p>@ 172.60-172.65 SILICIOUS STR @ 70° G Blend.</p>						
175						Black	80°	<p>ARG 173.46-180.74</p> <p>Black dense variety @ Limbo Spotted Minor Qtz Calcite splend &amp; films</p>						

DEPTH M	SECONDARY MINERALIZATION		BX TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING °	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN S							NO	LENGTH				
145		Py, Pyrr Zinc			FINE	BL	80°	OTZ-CALL FIL @137.71 - 137.80 OTZ LAMIN. ATED ZONE. CONTAINING Py, Pyrr, Biotite, ZINC? @141.70 - 141.74. GRINDLE, Py CALL IN FILM II Co CORE.						
150		Py, Pyrr ZNS.			FINE	BL. GREY	80°	ARG 144.66 - 151.83 AS ABOVE, UNIFORM TEXTURED BLACK HUNCKONS CALL-OTZ FILM ⊥ TO COLL @144.66 - 144.90 CALL-OTZ FIL IN II CORE WITH RA TRACES ARG. @146.90 - 146.94 DISS Py Pyrr, SPHALERITE. @149.71 - 149.84 BLEACHED (LIGHTLY) MINERALIZED SECTN WITH Py, Pyrr, SPHALERITE @151.50 - 151.60 BLEACHED SECTN FINELY DISS Pyrr + ZNS? ARGINITE 151.83 - 159.39 (AS ABOVE) @152.30 - 152.41 BLEACHED SECTN @153.78 - 153.93 OTZ INCL. WITH Pyrr @ FCS. @155.5 - 155.8 Bleached Sectn						
155							80°							

Mr. M

LOGGED

HOLE NO A-78-Z

PROJECT - MUT

DEPTH	TYPE		BX	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	NO	LENGH
	TYPE	THICKNESS								
130								<p>SECTION 130.0-131.0            GRANULAR SANDS            CONTAINING DARK SEMI-            CLAYED AND SILICIFIED            MATERIALS.</p> <p>① 130.5-131.0            SANDS TO SOFT SANDS            ON THE SANDSTONE            CHANGE TO SLT @ 131</p> <p>① 131.0-131.5            FINE SANDS            IN SLOTTED SAND</p> <p>① 131.5-132.0            SANDS</p> <p>① 132.0-133.0            SANDS</p> <p>① 133.0-134.0            SANDS</p> <p>① 134.0-135.0            SANDS</p> <p>① 135.0-136.0            SANDS</p> <p>① 136.0-137.0            SANDS</p> <p>① 137.0-138.0            SANDS</p> <p>① 138.0-139.0            SANDS</p> <p>① 139.0-140.0            SANDS</p>		
140								<p>SECTION 140.0-141.0            GRANULAR SANDS            CONTAINING DARK SEMI-            CLAYED AND SILICIFIED            MATERIALS.</p> <p>① 140.5-141.0            SANDS TO SOFT SANDS            ON THE SANDSTONE            CHANGE TO SLT @ 141</p> <p>① 141.0-141.5            FINE SANDS            IN SLOTTED SAND</p> <p>① 141.5-142.0            SANDS</p> <p>① 142.0-143.0            SANDS</p> <p>① 143.0-144.0            SANDS</p> <p>① 144.0-145.0            SANDS</p> <p>① 145.0-146.0            SANDS</p> <p>① 146.0-147.0            SANDS</p> <p>① 147.0-148.0            SANDS</p> <p>① 148.0-149.0            SANDS</p> <p>① 149.0-150.0            SANDS</p>		









INCLINATION

AZIMUTH

COORDINATES

SCALE 1cm-1metre

LOGGED BY

DEPTH METRES	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MINS.							NO.	LENGTH				
76					CLAY SILT FINE MED. COARSE			77.1 to 79.9 Oreminerals highly fractured - fault zone with gouge at 79.9						
80	veinlets	calcite epi, trm po	best fault					80.4 to 85.2 fault zone with gouge and highly fractured rock graphite slip planes.						
85	fracture	calcite trm	best chem					85.2 to 87.5 interbedded argillite with heavy argillite. heavy argillite has string clots of tremolite.						
90								87.5 to 92.1 highly crushed rock with fault gouge						
92	veinlets	calcite epi, trm Woll, epi po	best					From 88.8 to 92.1 the fault zone is filled with calcite, trm, Woll, epi and pyrrhotite veinlets.						





INCLINATION \_\_\_\_\_ AZIMUTH \_\_\_\_\_ COORDINATES \_\_\_\_\_, \_\_\_\_\_ SCALE 1cm - 1metre LOGGED BY \_\_\_\_\_

DEPTH	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MINS.							No	LENGTH				
METRES					CLAY SILT FINE MED. COARSE									
44							50°	Crinulations						
45	Calcite	po		Calcite										
							40°	47.6 Crinulations with graphitic slips.						
	Calcite	po		Calcite										
50							30°	50. purp fractures to bedding 51.1 lighter colored limy 52.0 argillate band. 52.7 53.6 Crinulations.						
							70°	55.2 purp fractures.						
55	Calcite			Calcite				57.1 Calcite po. vein 58.3						
	Calcite	po		Calcite				58 to 58.8 Calcite qtz, po, wollastonite veins						
								59.7 to 60 lighter limy argillate						
60							30°							

HOLE No A-72-2PROJECT HUTPAGE 3 OF     INCLINATION      AZIMUTH      COORDINATES     ,      SCALE 1cm-1metre LOGGED BY     

DEPTH METRES	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MINS.							NO	LENGTH				
28							25°	29.2 Same as above with 2nd bt. Crenulations through out.						
30														
			Calcite po.	fact	/		60°	31.1 Fault zone with crenulations on both sides.						
							50	32.6, 33, Calcite veinlets with pyrochlore.						
35														
							90°	37.2 Fault zone with crenulations. Bedding prop. to fault plane with calcite, qtz fillings.						
	fact.		Calcite tr. con. po	fact	///									
40	"	"	"	"	///		25°							
	"	"	"	"	///									
44							65°							









HOLE No. A-78-1

PROJECT M.U.T. SALMO

PAGE 6 OF 8

INCLINATION VERTICAL AZIMUTH \_\_\_\_\_

COORDINATES \_\_\_\_\_

SCALE 1cm - 1metre LOGGED BY VMR

DEPTH METRES	SECONDARY MINERALIZATION	BRECCIA TYPE	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY			
								No.	LENGTH				
77					dark grey grey	20° 80°	77.2 → 77.3 limy argillite with limy bands.						
80	veinlet veinlet	Calcite Calcite tect.			black dark grey	60° 80°	78.4 to 79.6 Crenulations - 79.6 tectonic bx with Calcite matrix fragments are argillite						
85	fault zone						79.6 to 83.0 darker colored argillite with graphitic slip planes. Lighter colored bands Calcite veinlets perp to bedding planes. (pyrrhotite) Crenulations. 83 to 83.8 argillite with lighter colored bands with syngenetic pyrrhotite						
90	veinlet	Calcite Sed, tect Calcite Calc, qtz hematite tect					83.8 to 86.6 part of the fault zone - with graphitic portions, bedding cannot be recognized - Calcite veinlets. 86.6 to 89.2 argillite with slip planes. 89.2 to 90.8 lighter colored limy argillite with brecciated portions (tectonic & sedimentary)						
93							90.8 to 93.2 darker colored argillite with graphitic slip planes - crenulations 92.5 to 93.3 light colored band at 91.4.						







HOLE NO A-78-1

PROJECT M. U. T. JALMD

PAGE 3 OF 8

INCLINATION VERTICAL AZIMUTH \_\_\_\_\_ COORDINATES \_\_\_\_\_, \_\_\_\_\_ SCALE 1cm. = 1metre LOGGED BY VME

DEPTH METRES	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE CLAY SILT FINE MED. CR&E	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY				
	TYPE	MINS.							No.	LENGTH					
29							20	Creonulations due to faulting.							
30	veinlet	qtz. cal pyrr.				black	30°								
	"	"				black		34.9 to 36.1 fault zone with many faults.							
35						black	20								
40	veinlet	qtz cal pyrr.				black	80	39.1 to 40.5 fault zone graphitic clay planes.							
	veinlet	qtz cal pyrr.				black	80°	41.5 to 43.5 fault zone with cal. qtz veins in the zone.							
						black		Creonulations.							
45		qtz. cal Sch. chl.				white	20	44.8 to 45.6 qtz cal veins in tectonically broken zone.							



HOLE NO. A-78-1

PROJECT: M.U.T. PROJECT PALMO, B.C.

Page 1 of 8

LOCATION: Souk of Lost Creek, Mt MTN

COORDINATES: \_\_\_\_\_

UTM: \_\_\_\_\_

NTS: \_\_\_\_\_ ELEV: 4950 ft.

INCLINATION: 90° AZIMUTH: \_\_\_\_\_

TOTAL DEPTH 116.7 metres.

HORIZ. PROJ. \_\_\_\_\_ VERT. PROJ. \_\_\_\_\_

SURVEY		
LENGTH	DIP	AZIMUTH

HOLE STARTED: \_\_\_\_\_  
HOLE COMPLETED: \_\_\_\_\_

DRILLED BY: KOOTENAY EXPLORATION DRILLING  
ROSSLAND, B.C.

~~LOGGED BY:~~ \_\_\_\_\_  
CORE SIZE: A0 RECOVERY: 95 %

SCALE 1 metre - 1cm

LOGGED BY V. M. RAMALINGASWAMY

DEPTH	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY					
	TYPE	MINS							No.	LENGTH						
1					CLAY SILT FINE MEDIUM COARSE											
2								argillite-								
3						dark grey	20	2.7, 2.9 Oenula Lewis bedding								
4						grey	20	angle steepens. interbedded limy bands closely spaced together.								
5						grey	20	5.2 lamination 5.6 dark beds.								
6						grey & dark grey	20									
7	veinlet	qtz-cal pyrph.	act.					8.0 qtz-cal veinlet with ep. pyrph. sch(?)								
8	vein	qtz-cal	act.					8.2 - 8.5 nose of a fold seen								
9	veinlet	"	act.					8.6 - qtz-cal veinlet								
10	"	"	"					9.0-9.1 9.2 limy band with spots(?)								
11						black		9.8 10.4 fault zone - black arg. gouge.								
12						grey to dark grey	20									
13	veinlet	qtz-cal	act.					qtz-cal-pyrph veinlet.								

1 cm = 1 m

HOLE No. A-77-1

PROJECT

MUT SALMOPage 14 of 18INCLINATION: 70 SE AZIMUTH: N130E COORDINATES: 49° 05' N, 117° 12' W SCALE: 1mtr-1cm LOGGED BY: V.M.R.

DEPTH	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY	
	TYPE	MINS							No	LENGTH	Mo	
149												
150												
155												
156												
	END	OF	HOLE									

149.5 to 156.10

Granite - altered and bleached  
the mafic minerals are completely  
destroyed. In place spotted.  
Highly silicified. Two stages  
of alteration.

① Quartz-sericite-pyrite  
~~with molybdenite~~. Sericite  
mostly green. at.

150.4, 150.9, 151.2, 151.4.

152.5, 153.2

Molybdenite at 152.3, 153.2.

② k-spar & secondary bt.

veinlets with alteration envelopes  
154.6, 155, 155.6 with molybdenite (trace)

Qtz-ser-py is later.

71301 152.35-

.036%

DIAMOND DRILL RECORD

Hole No. A-78-2

PROPERTY MUT GROUP BENSON MINES LTD

Sheet No. 13-14

Location: Claim No. \_\_\_\_\_  
 Lat \_\_\_\_\_  
 Dep \_\_\_\_\_  
 Elevation of Collar \_\_\_\_\_  
 Datum \_\_\_\_\_  
 Bearing \_\_\_\_\_

Started \_\_\_\_\_  
 Completed \_\_\_\_\_  
 Ultimate Depth \_\_\_\_\_  
 Proposed \_\_\_\_\_

Direction at Start: Dip \_\_\_\_\_

Date	Feet Drilled	Total Depth	SECTION			REMARKS (LOG)	Core Recovery	Foliation Inclination
			From	To	Feet			
		↑	225.67	226.52	0.85	ARG (AS ABOVE)		
	Repeat		226.52	226.90	0.38	GRANITE - BLEACHED ALTERED.		
	of Page					JEWELRY OF TYPE GENERALLY		
	13.	↓	226.90	229.11	2.21	ARG (AS ABOVE) TR. Scheelike		
			229.11	230.28	1.17	GRANITE GREY GREEN VARIETY BLEACHED		
						MINOR Py. POSSIBLE WHISPS OF MOLYBDENUM		
			230.28	230.60	0.32	ARG AS ABOVE		
			230.60	236.28	5.68	GRANITE (AS ABOVE)		
						END OF HOLE		
						775' or 236.28 m		

Drilled by: \_\_\_\_\_

J. Poloni  
 Geologist in Charge