

PROPERTY FILE 02FSW 280

003323

M.V.T. claims

M.E.I.P. Report - 07

Summary Report

on the

Exploration Activities

M.U.T. (1-6) Group of Mineral Claims  
Nelson Mining Division  
N.T.S. Map Reference 82F/3

Latitude  $49^{\circ}05'N$ ; Longitude  $117^{\circ}12'W$

for

Benson Mines Ltd. (NPL)

by

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

December 12, 1978

PROPERTY FILE

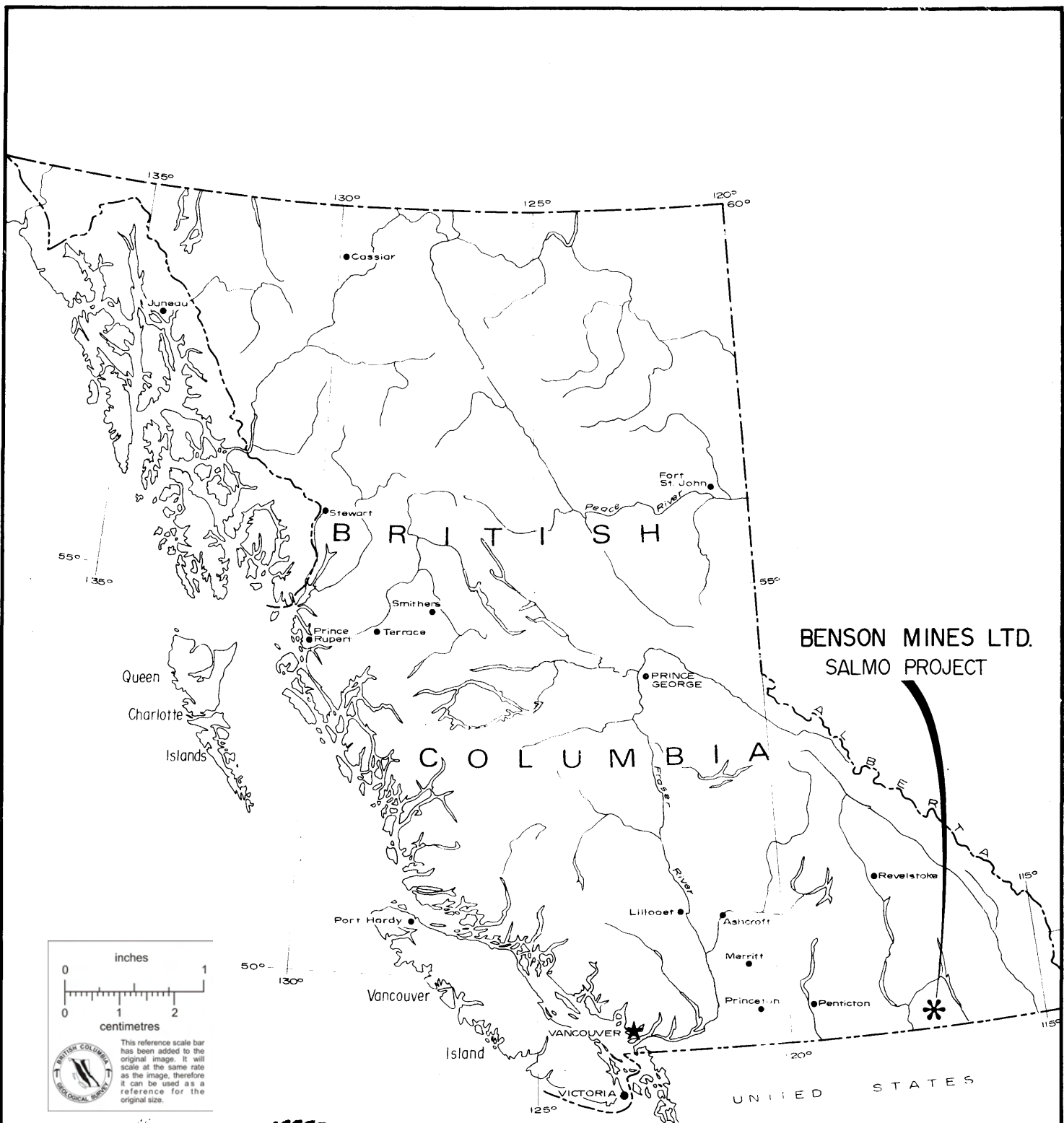
John R. Poloni & Associates Ltd.,  
502 - 8B Avenue,  
Delta, B. C.

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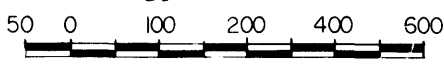
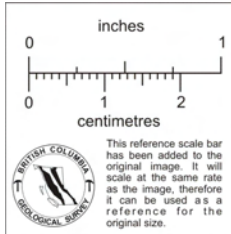
JOHN R. POLONI P. Eng.  
Consulting Geologist

## Table of Contents

	<u>Page No.</u>
1.0 Introduction	2
1.1.0 General Features	2
1.2.0 Property Definition	2
1.2.1 Claims Information	2
1.2.2 History	3
1.3.0 Work Summary	4
1.3.1 Diamond Drilling	4
1.3.2 Geological Mapping	5
1.3.3 Prospecting	5
1.3.4 Physical Work	5
2.0 Diamond Drilling Report	6
3.0 Geological Mapping	8
4.0 Prospecting	9
5.0 Physical Work	10
6.0 Cost Statement	10
6.1 Diamond Drilling	10
6.2 Geology	11
6.3 Prospecting	11
6.4 Physical Work	12
7.0 Interpretation	13
8.0 Appendices	14-22
8.1 Appendix A - Author's Certificate	15
8.2 Appendix B - Assay Data	17-18
- Assay Calculations	19
8.3 Appendix C - Maps	20
8.4 Appendix D - Diamond Drill Logs A-77-1, A-78-1, A-78-2, A-78-3	21



**BENSON MINES LTD.  
SALMO PROJECT**



<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT PROPERTY LOCATION 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 : As shown	DATE : Dec. 12, 1978	1.



## 1.0 Introduction

### 1.1.0 General Features

The M.U.T.(1-6) Group of mineral claims containing 84 units is located at Lost Creek, 12.1 kilometers south of Salmo, B.C. in the Nelson Range physiographic division. Elevations on the claims range from approximately 1000 to 1500 meters above sea level with slopes being steep on the northwesterly side but more moderate to the southeasterly. The property covers two heights of land, the south slopes of Nevada Mountain and the northwest slopes of Lost Mountain.

Access is via road, south from Salmo, B.C. along Highway No. 3 to the South Salmo River for 14.5 kilometers then easterly along the river for 2.3 kilometers to Lost Creek. A 4-wheel drive road leads northerly towards the M.U.T. claims for approximately 6.4 kilometers. The northerly part of the claim group on Nevada Mountain can be reached by gravel road along the north side of Lost Creek.

Plan No. 1 shows the property location and Plan No. 2 shows the Claim Map, Appendix C.

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

### 1.2.0 Property Definition

#### 1.2.1 Claims Information

The M.U.T. Groups of mineral claims lie in the Nelson Mining Division of British Columbia, Plan No. 2. Benson Mines Ltd. of Vancouver holds the claims by option agreement with Mr. Ian G. Sutherland and Mr. John M. Mirko.

Claims data is as follows:

<u>Claim (Units)</u>	<u>Record No.</u>	<u>Expiry Date</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/

### 1.2.2 History

Governmental reports indicate that the Molly Group of Crown Granted claims, contiguous with the M.U.T. 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 a considerable amount of trenching was undertaken. Trenches on the M.U.T. claims were probably undertaken during this period. As the geological and mineralogical nature in the vicinity of the short adit driven on the south side of Lost Creek (M.U.T.#5) is similar to the molybdenite-tungsten showings in the area, the history of discovery is probably similar.

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 preliminary survey grid over part of the claims and the drilling of A-77-1 were undertaken in 1977. Mr. J. Montgomery, P.Eng. and Mr. Gerhard Von Rosen, P.Eng. reported on the M.U.T. project during 1977 and early 1978. During this period Westwind Mines Ltd. held an option

agreement on the property.

The drill hole A-77-1 spotted at 35 meters easterly of a bedrock trench containing tungsten mineralization in medium to intense skarn and hornfels alteration in limestone and limy argillite was drilled to test this mineralization at a projected limestone-granite interface. This hole while not achieving the expected target location, however did intersect several narrow limestone and limy argillite units containing minor tungsten mineralization before hitting the intrusive granite at 149.5 m. Plan No. 6 shows a section, looking northeasterly, of this hole. Holes A-78-1 and A-78-2, were undertaken to further test for the granite-limestone interface.

The main areas of interest on the M.U.T. claims are underlain by argillite, limestone and limy argillite of the Active Formation adjacent to the Lost Creek Stock intrusive contact. Scheelite, and molybdenite, occurs in contact areas in garnet-diopside skarn, in both intrusive and sedimentary environments. Uranium mineralization has been found recently, as fluorescence in platy argillite.

Mineral deposits of interest in the immediate area are the Molly Mine, the Tungsten King and Dodger, the Reeves MacDonald and the H.B. Mine.

### 1.3.0 Work Summary

#### 1.3.1 Diamond Drilling

Three drill holes A-78-1, A-78-2, and A-78-3 were complete for a total of 454.8 meters of A-Q size core. Drill hole data is as follows:

<u>No.</u>	<u>Size</u>	<u>Elev.</u> m	<u>Depth</u> m	<u>Incl.</u>	<u>Bearing</u>
A-78-1	AQ	1508.7	116.7	-90 <sup>o</sup>	
A-78-2	AQ	1508.7	236.3	-70 <sup>o</sup>	NW
A-78-3	AQ	920.5	101.8	.90 <sup>o</sup>	

Drill hole collar locations are shown on Plan No. 3.

### 1.3.2 Geological Mapping

Geological mapping was undertaken on the Tungsten Adit-Lost Creek area as shown in Plan No. 5 by V. M. Ramalingaswamy, geologist in charge during early 1978. Four samples were cut across 0.61 meters in two scarny horizons as mapped in the adit.

Further geological examination was undertaken by the author and Mr. Ian Sutherland, prospector, over previously exposed trenches, road cuts, and outcrops. This work consisted of detailed lamping (ultraviolet) after dark with a daylight reexamination of areas and rock units of interest. This work complemented similar examination made by Mr. Ramalingaswamy and Mr. Mirko.

### 1.3.3 Prospecting

General Prospecting undertaken by the author and Mr. Sutherland as part of the geological reconnaissance consisted of outcrop examination at lower elevations on the property where governmental maps indicated the presence of geology of interest such as limestone and limy argillite units. These areas are presently not covered by control grids.

### 1.3.4 Physical Work

Access road construction both for property access and drill location requirements were undertaken using D-6 size dozer.

In excess of 2000 feet or 609.6 meters of such work was completed as shown on Plans 7 and 10.

A main base line was cut in the vicinity of Drill holes A-77-1, A-78-1 and A-78-2 for 1800 meters at  $N45^{\circ}E$ . Grid lines have yet to be established.

## 2.0 Diamond Drilling Report

Three drill holes were completed during 1978 as part of a further evaluation of M.U.T. claims. As previously stated, section 1.2.2, drill hole A-77-1 designed to test tungsten bearing limestone and limy argillite, altered to medium and intense scarn and hornfels, as seen in surface trenches, encountered only minor tungsten mineralization at depth, before intersecting the intrusive granite at 149.5 meters.

Drill hole A-78-1 was designed to further test for the down dip extension of the mineralized zone sought in A-77-1, as it was felt that the limy horizons could have flattened at depth and thus been missed in A-77-1. A-78-1 was logged by V. M. Ramalingaswamy as cutting principally, broken argillite with very minor scarny brecciated sections and then limy argillite units. Because of the faulted and broken nature of the ground the hole was aborted at 116.7 meters and A-78-2 commenced at 15.2 meters to the north west inclined at  $-70^{\circ}$  to the North West.

Drill hole A-78-2 encountered mainly argillite with thin sections of limy argillite and very minor scarn to a depth of 226.52 meters when the intrusive granite was encountered. The hole was terminated at a final depth of 236.28 meters in bleached intrusive.

Drill hole A-78-3 was undertaken in the vicinity of the Tungsten Adit-Lost Creek to test the grade and extent of the tungsten-molybdenite bearing scarn. Four 0.61 meter samples across two scarn horizons as shown on Plan 5 had assayed as follows:

	<u>WO%</u>	<u>Mo%</u>	<u>Width</u> (approx.)
A-1	0.18	0.018	0.61 meters
A-2	0.68	-	0.61 meters
A-3	0.48	-	0.61 meters
A-4	0.26	-	0.61 meters

This hole was drilled at  $-90^{\circ}$  using AQ size wire line equipment to a final depth of 101.8 meters. Interbedded granite and argillite were encountered from 0.0 to 16.8 meters, argillite from 16.8 - 27.4 meters, silicious sedimentary unit with pegmatite from 27.4 - 30.6 meters, intense scarn to medium scarn 30.6 - 38.4 meters, silicious calcareous bedded unit containing minor scarn, limy units, and two thin basic dikes from 38.4 - 76.1 meters, and argillite from 76.1 - 101.8 meters.

Disseminated molybdenite occurs between 29.4 meters to 30.9 meters and several sections of core lamped (ultraviolet) as powellite,  $\text{Ca}(\text{MoW})\text{O}_4$ .

Drill logs for holes A-78-1, A-78-2 and A-78-3 are appended in Appendix 8.4. Drill hole locations are shown on Plan No. 3. Two drill hole sections are included as Plan No. 6 and Plan No. 9.

Core storage locations are as follows:

- 1) A-77-1 with local resident 5 km south of Salmo.
- 2) A-78-1 and A-78-2 in core shed near cabin on M.U.T. claims.
- 3) A-78-3 at 5502-8B Ave., Delta, B.C. at residence of author.

### Cost Statement

Drill hole A-78-1, A-78-2, A-78-3 were drilled under contract by Kootenay Exploration Drilling Ltd., P. O. Box 519, Rossland, B.C. Costs are presented in section 6.0.

### 3.0 Geological Mapping

Geological mapping undertaken on the property consisted of both detailed mapping underground in the Tungsten Adit as shown on Plan No. 5 and surface mapping in the area of recent diamond drilling as shown in Plan No. 10.

The maps submitted were completed in preliminary by V. M. Ramalingaswamy M.Sc., with additions by the author. Plan No. 5 outlining the detail of the Tungsten Adit shows relatively gently dipping sequences of argillite, granite, silicious sediment, silicious limestone, and moderately to intensely altered scarn containing tungsten and molybdenite mineralization. Dips of the sequences are approximately  $33^{\circ}$ - $40^{\circ}$  to the east. Plan No. 10 showing the surface geology in the vicinity of drill hole A-77-1, A-78-1 and A-78-2 defines silicious to limy sedimentary units, argillite, limy argillite, limestone, hornfels and lamprophyredikes. Mineralization in the form of disseminated tungsten (scheelite) in blocky sedimentary units, tungsten in association with concordant quartz veining, and uranium as autunite or uranophane has been encountered in surface mapping and prospecting. Stratigraphic units generally dip gently at  $35^{\circ}$ - $50^{\circ}$  to the southeast. Both major and minor faulting has been encountered with general trends being North to Northwesterly and Northeasterly. Basement intrusive granite was cut in Drill hole A-78-2, and A-77-1 at depths of approximately 225 and 150 meters,

respectively, below outcrop.

Cost statement including geological mapping, line cutting for baseline and a minimal amount of grid cross lines is presented in section 6.0.

#### 4.0 Prospecting

During periods in June, October and November the author undertook geological examinations and general prospecting of the M.U.T. claims in accompaniment with Mr. Ian Sutherland, prospector. This work consisted of lamping (ultraviolet) at night complimented with daylight re-examination of outcrop areas. During the periods in October and November diamond drilling was being done on A-78-3.

Much of the southerly part of the M.U.T. claims is overburden covered and contains heavy growth of vegetation but outcrop frequency is adequate to provide a reasonable picture of the stratigraphic units although all units can not be examined in detail. Road cuts both old and recent were examined.

The northerly part of the claim group is cut by Lost Creek. Here outcrop frequency is much higher than to the south, slopes are steeper and stratigraphic units are better exposed. This prospecting was successful in defining zones of interest for future detailed exploration as tungsten and uranium minerals were found.



## 5.0 Physical Work

Diamond drill site preparation for drill holes A-78-1, A-78-2 and A-78-3 was undertaken using a D-6 dozer under contract. It was also necessary to construct road access to these sites and to water supply. Two different contractors were used at separate periods, initially access and site preparation for A-78-1 and A-78-2, and then during October access and site preparation for A-78-3. During this second period of physical work the "1%" showing area was stripped for further examination. Results of sampling of this showing are indicated in Plan No. 8.

The main base line was cut for approximately 1800 meters in the vicinity of the cabin and drill holes A-78-1, A-78-2 and A-77-1, as a 1 meter wide line clearing with a strike of N45°E. Only temporary chain and compass cross lines were run, and it will be necessary to establish a permanent survey grid, Plan No. 10.

## 6.0 Cost Statement

### 6.1 Diamond Drilling

Kootenay Exploration Drilling Ltd.

A-78-1 and A-78-2 from May 1978 to June 20, 1978

352.7 meters for total Contract Cost = \$13,360.20.

A-78-3 from Nov. 5, 1978 to Nov. 21, 1978

101.8 meters, core boxes, mobilization and

demobilization and gel seal = \$ 4,989.00.

## 6.2 Geology

Geological mapping was done by geologist  
 Mohen Ramalingaswamy during May and  
 June 1978 = \$ 1,250.00

Geologist Mr. G. Von Rosen for period  
 Nov. 30, 1977 to Jan. 12, 1978 and  
 John R. Poloni for periods June 14 -  
 July 4, 1978; October 19-22, 1978;  
 October 26-29, 1978; Nov. 2-10, 1978;  
 Nov. 17-27, 1978 = \$ 6,834.92

## 6.3 Prospecting

John Mirko for period April 21-  
 June 17, 1978 field supervision and  
 management, prospecting, camp construc-  
 tion, line cutting, preparation of  
 drill sites for A-78-1 and A-78-2  
 road construction supervision, assistance  
 in drill and water line set ups.

Wages	= \$ 3,196.00
Field Supplies	= \$ 1,193.25
Accomodation & Travel	= \$ 2,677.28
Red Hawk Truck Rental	= \$ 2,797.30

Ian Sutherland for period Oct. 26 to  
 November 22, 1978 prospecting road  
 cuts, outcrop lamping (ultraviolet)  
 for total cost including wages and  
 expenses = \$ 2,490.00

(Wages at \$60.00/day, truck rental at \$10.00/day,  
 motel and food expenses.) The author assisted in

lampping and prospecting with charges included  
in section 6.2 Geology, above.

#### 6.4 Physical Work

Bulldozer work May (1-13) 1978 for road  
access, for drill site preparation and  
water supply for A-78-1 and A-78-2 under  
contract to Swift Creek Logging at  
\$40.00/hour for D-6 = \$ 2,470.00

Bulldozer work for period Oct, (15-21)  
1978 including drill site preparation  
for A-78-3 and road access to site, and  
dozer stripping of "1% Showing", under  
contract to Four Leaf Logging using a  
D-6. Contract 24 hrs. @ \$40.50/hr.  
and lowbed rental 2½ hrs. @ \$35.00/hr.  
for a total cost = \$ 1,159.50

Road access work and site preparation was  
in excess of 2000' or 610 meters. The  
"1% Showing" was stripped for a length of  
125' (38 meters) and width of 3.0 meters.

Assay costs were:	General Testing	\$	209.50
	Chemex	\$	36.00

## 7.0 Interpretation

The exploration undertaken to date in the form of ultraviolet lamping, geology and diamond drilling has examined several areas of tungsten-molybdenite bearing scarn, limy argillite and limy silicious sediments. Drill hole A-78-3 was successful in intersecting a thick tungsten bearing horizon requiring further drill testing. Uranium mineralization as autunite or uranophane has been discovered in talus slopes also requiring detailed surveys.

8.1 Appendix A

Author's Certificate

CERTIFICATE

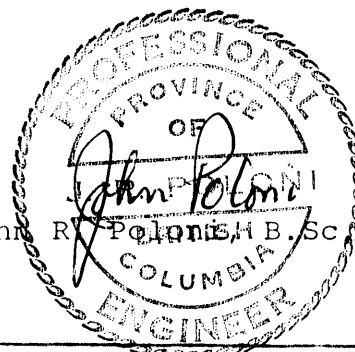
I, John R. Poloni, of 5502 - 8B Avenue, in Delta, in the  
Province of British Columbia,

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 examined the M.U.T. claims as stated  
in this report.
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 12 day of December 1978

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



---

JOHN R. POLONI P.Eng.  
Consulting Geologist

8.2 Appendix B

Assay Data

Assay Calculations

# GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2  
 PHONE (604) 254-1647 TELEEX 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>XXXXXXXXXXXX</del>	<del>XXXXXXXXXXXX</del>	Molybdenite	Zinc	Tungsten	xxx	xx	xxx
	OZ/ST GR/MT	OZ/ST 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			

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

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*R. Naudeau*

**R. NADEAU - Chemist**

~~XXXXXXXXXXXX~~

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 REFEREE AND PROFESSIONAL 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



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TO:  
**BENSON MINES LTD.**  
 404 Somerset Street  
 North Vancouver, B.C.

## CERTIFICATE OF ASSAY

No: **7811-2752**      DATE: **Dec. 6/78**

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

MARKED	GOLD	SILVER	Titanium oxide TiO <sub>2</sub> (%)	Tungsten oxide WO <sub>3</sub> (%)	Molybdenite MoS <sub>2</sub> (%)	XXX	XXX	XXX
9951 D			< 0.001	0.31	0.005			
9953 D			< 0.001	1.90	0.002			
9954 D			< 0.001	0.16	0.002			
9956 D			0.003	0.06	0.007			
9957 D			< 0.001	0.02	0.002			
9958 D			0.003	0.02	0.003			
9959 D			0.002	0.02	0.005			
9960 D			< 0.001	0.02	0.003			
<p>REMARKS: MoS<sub>2</sub> calculated from total molybdenum.</p>								
<p>cc. Mr. John Poloni</p>								

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

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L. VONG

PROVINCIAL ASSAYER

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 OFFICIAL AND OR OFFICIAL CHEMISTS FOR: National Bureau of Standards • The American Chemical Society  
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board of Trade

*Sample listed  
Jest Creek*

# GENERAL TESTING LABORATORIES

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1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2  
PHONE (604) 251-1647 TELEEX 0430254 CABLE SUPERVILLE

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

## CERTIFICATE OF ASSAY

No: 7206-1350 DATE: June 20/73

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

MARKED	<del>1000</del> GOLD	<del>1000</del> SILVER	Tungsten	Molybdenum	COAL	COAL	COAL	COAL
	g/t	g/t	%	%				
E-8013								
A 1			0.18	0.015				
A 2			0.68	-				
A 3			0.48	-				
A 4			0.26	-				

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

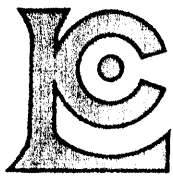
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*[Signature]*  
PROVINCIAL ASSAYER

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REFFER AND/OR OFFICIAL CHEMISTS FOR: National Institute Of Oil Seed Products • The American Oil Chemists' Society  
OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade



ADY #A-77-1  
Selected Minerals

# CHEMEX LABS LTD.

217 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
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

*Bottom*  
↑  
*2.0*



MEMBER  
CANADIAN TESTING  
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

# GENERAL TESTING LABORATORIES

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 PHONE (604) 254-1647 TELEEX 04 507514 CABLE SUPERVISE

TO:  
 BENSON MINES LTD.  
 c/o Mr. Jim Billingsley  
 433 - 355 Burrard Street,  
 Vancouver, B.C.  
 V6C 2G8

## CERTIFICATE OF ASSAY

No: 7810-3055      DATE: Nov. 7/78

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

MARKED	<del>XXXXXXXXXXXX</del>		Tungsten oxide	Lead	Zinc	XXX	XXX	XXX
			WO <sub>3</sub> (%)	PB (%)	Zn (%)			
18946			0.34	0.01	0.72			
18947			0.13	0.01	0.39			
18948			0.04	0.01	0.09			

cc. Mr. J. Poloni

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

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*[Signature]*

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  
 RELIABLE AND/OR OFFICIAL CHEMISTS FOR: Various Grades OF Oiled Products • The American Oil Chemists' Society  
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade

# GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.

1061 EAST PENDER ST., VANCOUVER, B.C., CANADA V6A 1W2  
 PHONE (604) 254-1647 TELETYPE 94-90733 CABLE SUPERVISI

TO:  
**BENSON MINES LTD.**  
 904 - 885 Dunsmuir Street  
 Vancouver, B.C.  
 V6C 1N5  
 Attn: Mr. E.S. Peters

## CERTIFICATE OF ASSAY

No: 7812-0456      DATE: Dec. 15/78

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

MARKED	<del>XXXXXXXXXXXX</del>		Molybdenite	Tungsten oxide	Uranium oxide	XXX	XXX	XXX
			MoS <sub>2</sub> (%)	WO <sub>3</sub> (%)	U <sub>3</sub> O <sub>8</sub> (%)			
651			0.002	trace	0.001			
652			0.002	trace	< 0.001			
653			0.040	trace	< 0.001			
654			0.30	0.32	0.002			
655			0.130	trace	0.002			
656			0.142	1.60	0.003			
657			0.007	trace	0.003			
658			0.010	trace	0.003			
659			0.010	0.06	0.001			
660			0.093	1.09	0.002			
661			0.018	0.06	0.001			
662			0.013	0.022	0.003			
663			0.005	trace	0.002			
664			0.032	0.40	0.006			
665			0.010	trace	< 0.001			
666			0.040	0.83	0.003			
667			0.018	0.10	0.001			
668			0.023	0.15	0.002			
669			0.002	trace	0.001			
670			0.030	0.31	0.002			
671			0.002	trace	0.001			
672			0.022	0.16	0.002			
673			0.003	trace	0.002			
674			0.008	0.24	0.004			
675			0.050	0.08	0.002			
676			0.005	0.02	0.002			
677			0.002	trace	< 0.001			
678			0.001	trace	< 0.001			
679			0.001	trace	< 0.001			
680			0.053	trace	< 0.001			
681			0.013	trace	0.001			
682			0.008	0.16	0.002			
683			0.005	0.02	0.001			
684			0.010	0.12	0.003			
685			0.001	trace	0.001			
686			0.008	0.11	< 0.001			
687			0.002	trace	0.001			

/ Continued on next page ...

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

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L. WONG

PROVINCIAL ASSAYER

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  
 REFERRED AND/OR OFFICIAL CHEMISTS FOR: National Institute Of Oil Seed Products • The American Oil Chemists' Society  
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade

# GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2  
 PHONE (604) 264-1647 TELEEX 04 507544 CABLE SUPERVISE

## CERTIFICATE OF ASSAY

TO:  
**BENSON MINES LTD.**

(Continued) ... page 2 ...

No.: 7812-0456      DATE: Dec.15/78

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

MARKED	<del>XXXXXXXXXX</del>		Molybdenite	Tungsten oxide	Uranium oxide	XXXX	XXXX	XXXX
			MoS <sub>2</sub> (%)	WO <sub>3</sub> (%)	UO (%)			
688			0.002	trace	0.002			
689			0.002	trace	0.002			
690			0.003	trace	< 0.001			
REMARKS: MoS <sub>2</sub> calculated from Mo.								
cc. Mr. John Poloni								

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

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**L. WONG**

PROVINCIAL ASSAYER

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

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 RELIABLE AND/OR OFFICIAL CHEMISTS FOR National Institute Of Oilseed Products • The American Oil Chemists Society  
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade

## Assay Data

Sample No.	Interval			'm'	True Width	Assay Data		
	From	To	Width ft.			MoS <sub>2</sub> %	WO <sub>3</sub> %	U <sub>3</sub> O <sub>8</sub> %
651	50.1	53.0	3.0	15.27-16.18		0.002	TR	0.001
				0.91				
652	87.7	90.0	2.3	26.73-27.43		0.002	TR	<.001
				0.70				
653	90.0	92.0	2.0	27.43-28.04		0.040	TR	<.001
				0.61				
654	92.0	94.0	2.0	28.04-28.65		0.30	0.32	0.002
				0.61				
655	94.0	100.8	6.8	28.65-30.72		0.130	TR	0.002
				2.07				
656	100.8	103.0	2.2	30.72-31.39		0.142	1.60	0.003
				0.67				
657	103.0	110.0	7.0	31.39-33.53		0.007	TR	0.003
				2.14				
658	110.0	119.0	9.0	33.53-36.27		0.010	TR	0.003
				2.74				
659	119.0	124.0	5.0	36.27-37.80		0.010	0.06	0.001
				1.53				
660	124.0	126.0	2.0	37.80-38.40		0.093	1.09	0.002
				0.61				
661	126.0	134.5	8.5	38.40-41.00		0.018	0.06	0.001
				2.60				
662	134.5	135.7	1.2	41.00-41.36		0.013	0.22	0.003
				0.36				
663	135.7	138.0	2.3	41.36-42.06		0.005	TR	0.002
				0.70				
664	138.0	139.0	1.0	42.06-42.37		0.032	0.40	0.006
				0.31				
665	139.0	140.0	1.0	42.37-42.67		0.010	TR	<.001
				0.31				
666	140.0	144.0	4.0	42.67-43.89		0.040	0.83	0.003
				1.22				
667	144.0	147.0	3.0	43.89-44.80		0.018	0.10	0.001
				0.91				
668	147.0	153.3	6.3	44.80-46.73		0.023	0.15	0.002
				1.93				
669	153.3	157.7	4.4	46.73-48.07		0.002	TR	0.001
				1.34				
670	157.7	160.0	2.3	48.07-48.77		0.030	0.31	0.002
				0.70				
671	160.0	162.5	2.5	48.77-49.53		0.002	TR	0.001
				0.76				
672	162.5	170.0	7.5	49.53-51.82		0.022	0.16	0.002
				2.29				
673	170.0	174.0	4.0	51.82-53.04		0.003	TR	0.002
				1.22				
674	174.0	178.0	4.0	53.04-54.26		0.008	0.24	0.004
				1.22				
675	178.0	181.0	3.0	54.26-55.17		0.050	0.08	0.002
				0.91				
676	181.0	182.5	1.5	55.17-55.63		0.005	0.02	0.002
				0.46				
677	182.5	185.7	3.2	55.63-56.60		0.002	TR	<.001
				0.97				

A-78-3 Drill Hole  
Assay Data

Sample No.	Interval			'm'	True Width	Assay Data		
	From	To	Width ft.			MoS <sub>2</sub> %	WO <sub>3</sub> %	U <sub>3</sub> O <sub>8</sub> %
678	185.7	191.5	5.8	56.60-58.37		0.001	TR	<.001
				1.77				
679	191.5	199.0	7.5	58.37-60.66		0.001	TR	<.001
				2.29				
680	202.3	203.7	1.4	61.66-62.09		0.053	TR	<.001
				0.43				
681	203.7	204.7	1.0	62.09-62.39		0.013	TR	0.001
				0.31				
682	204.7	206.0	1.3	62.39-62.79		0.008	0.16	0.002
				0.40				
683	206.0	212.0	6.0	62.79-64.62		0.005	0.02	0.001
				1.83				
684	212.0	214.8	2.8	64.62-65.47		0.010	0.12	0.003
				0.85				
685	214.8	218.0	3.2	65.47-66.45		0.001	TR	0.001
				0.98				
686	218.0	219.0	1.0	66.45-66.75		0.008	0.11	<.001
				0.30?				
687	219.0	226.0	7.0	66.75-68.88		0.002	TR	0.001
				2.13				
688	226.0	233.0	7.0	68.88-71.01		0.002	TR	0.002
				2.13				
689	233.0	234.0	1.0	71.01-71.32		0.002	TR	0.002
				0.31				
690	234.0	236.0	2.0	71.32-71.93		0.003	TR	<.001
				0.61				

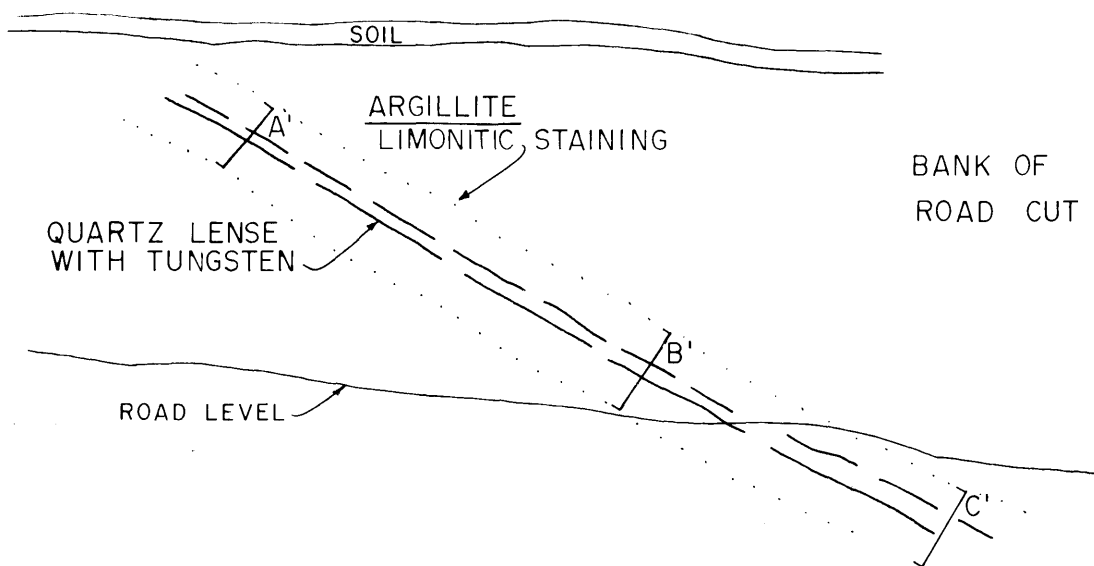


NO.	INTERVAL	FT. M.	CORE WIDTH ft.	ASSAY DATA		
				MoS <sub>2</sub> %	WO <sub>3</sub> %	U <sub>3</sub> O <sub>8</sub> %
	90.0 - 92.0		2.0			
653	27.43- 28.04		0.61	0.040	TR	< 0.001
	92.0 - 94.0		2.0			
654	28.04- 28.65		0.61	0.30	0.32	0.002
	94.0 -100.8		6.8			
655	28.65- 30.72		2.07	0.130	TR	0.002
	100.8 -103.0		2.2			
656	30.72- 31.39		0.67	0.142	1.60	0.003
	103.0 -110.0		7.0			
657	31.39- 33.53		2.14	0.007	TR	0.003
	92.0 -103.0		11.0			
AVG.	28.04- 31.39		3.35	0.163	0.378	0.002
	119.0 -124.0		5.0			
659	36.27- 37.80		1.53	0.010	0.06	0.001
	124.0 -126.0		2.0			
660	37.80- 38.40		0.61	0.093	1.09	0.002
	126.0 -134.5		8.5			
661	38.40- 41.00		2.60	0.018	0.06	0.001
	134.5 -135.7		1.2			
662	41.00- 41.36		0.36	0.013	0.22	0.003
	135.7 -138.0		2.3			
663	41.36- 42.06		0.70	0.005	TR	0.002
	138.0 -139.0		1.0			
664	42.06- 42.37		0.31	0.032	0.40	0.006
	139.0 -140.0		1.0			
665	42.37- 42.67		0.30	0.010	TR	< 0.001
	140.0 -144.0		4.0			
666	42.67- 43.89		1.22	0.040	0.83	0.003
	144.0 -147.0		3.0			
667	43.89- 44.80		0.91	0.018	0.10	0.001
	124.0 -144.0		20.0			
AVG.	37.80- 43.89		6.09	0.028	0.334	0.002
	144.0 -147.0		3.0			
667	43.89- 44.80		0.91	0.018	0.10	0.001
	147.0 -153.3		6.3			
668	44.80- 46.73		1.93	0.023	0.15	0.002
	153.3 -157.7		4.4			
669	46.73- 48.07		1.34	0.002	TR	0.001
	157.7 -160.0		2.3			
670	48.07- 48.77		0.70	0.030	0.31	0.002
	160.0 -162.5		2.5			
671	48.77- 49.53		0.76	0.002	TR	0.001
	162.5 -170.0		7.5			
672	49.53- 51.82		2.29	0.022	0.16	0.002
	170.0 -174.0		4.0			
673	51.82- 53.04		1.22	0.003	TR	0.002
	174.0 -178.0		4.0			
674	53.04- 54.26		1.22	0.008	0.24	0.004
	178.0 -181.0		3.0			
675	54.26- 55.17		0.91	0.050	0.08	0.002
	144.0 -178.0		34.0			
AVG.	43.89- 54.26		10.36	0.014	0.121	0.002
	124.0 -178.0		54.0			
AVG.	37.80- 54.26		16.46	0.019	0.200	0.002
	92.0 -178.0		86.0			
AVG.	28.04- 54.26		22.22	0.035	0.177	0.002

8.3 Appendix CMaps

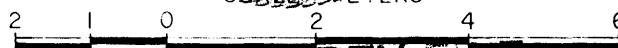
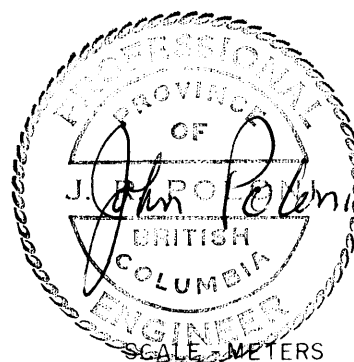
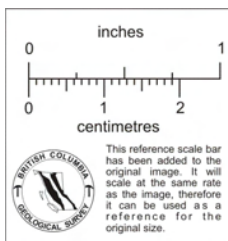
<u>Plan No.</u>	<u>Description</u>	<u>Scale</u>
No. 2	Claim Map	as shown
No. 3	Geology Plan	1" 610 meters
No. 4	Zone of Exploration Interest	1" 610 meters
No. 5	Tungsten Adit-Lost Creek	as shown
No. 6	Section A-A'	as shown
No. 7	Surface Details Tungsten Adit-Lost Creek	as shown
No. 8	Detailed Sampling "1% Showing"	as shown
No. 9	Section B-B' A-78-3	as shown
No. 10	Geology Upper Showings Area	as shown

LOOKING NORTH EAST



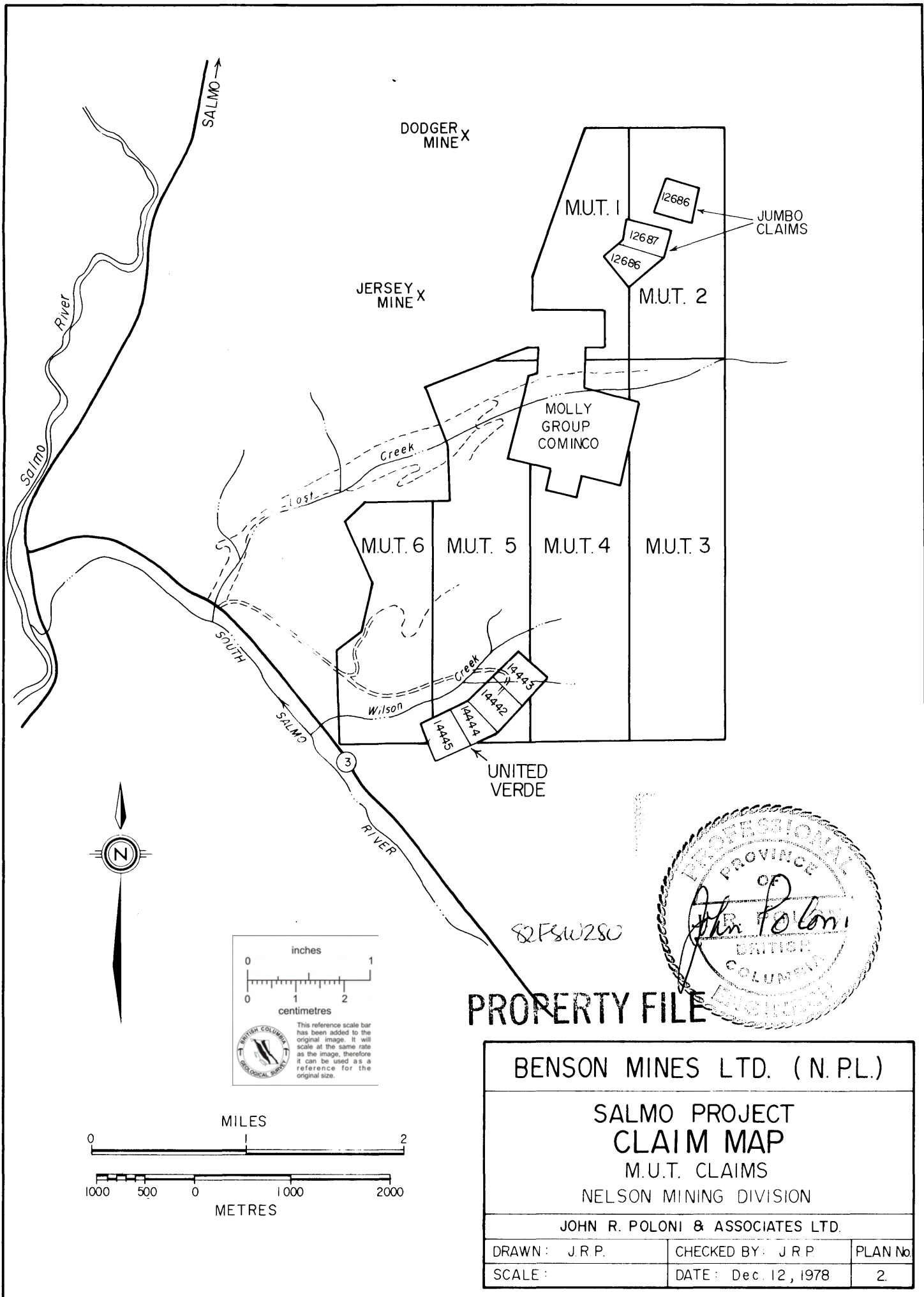
SAMPLE LOCATIONS DATA

	<u>No.</u>	<u>WIDTH</u>	<u>WO<sub>3</sub>%</u>	
A -	18942	1m.	TR	(IN BANK)
B -	18943	1m.	0.09	(IN BANK)
C -	18944	1.5m.	0.15	(ON ROAD)



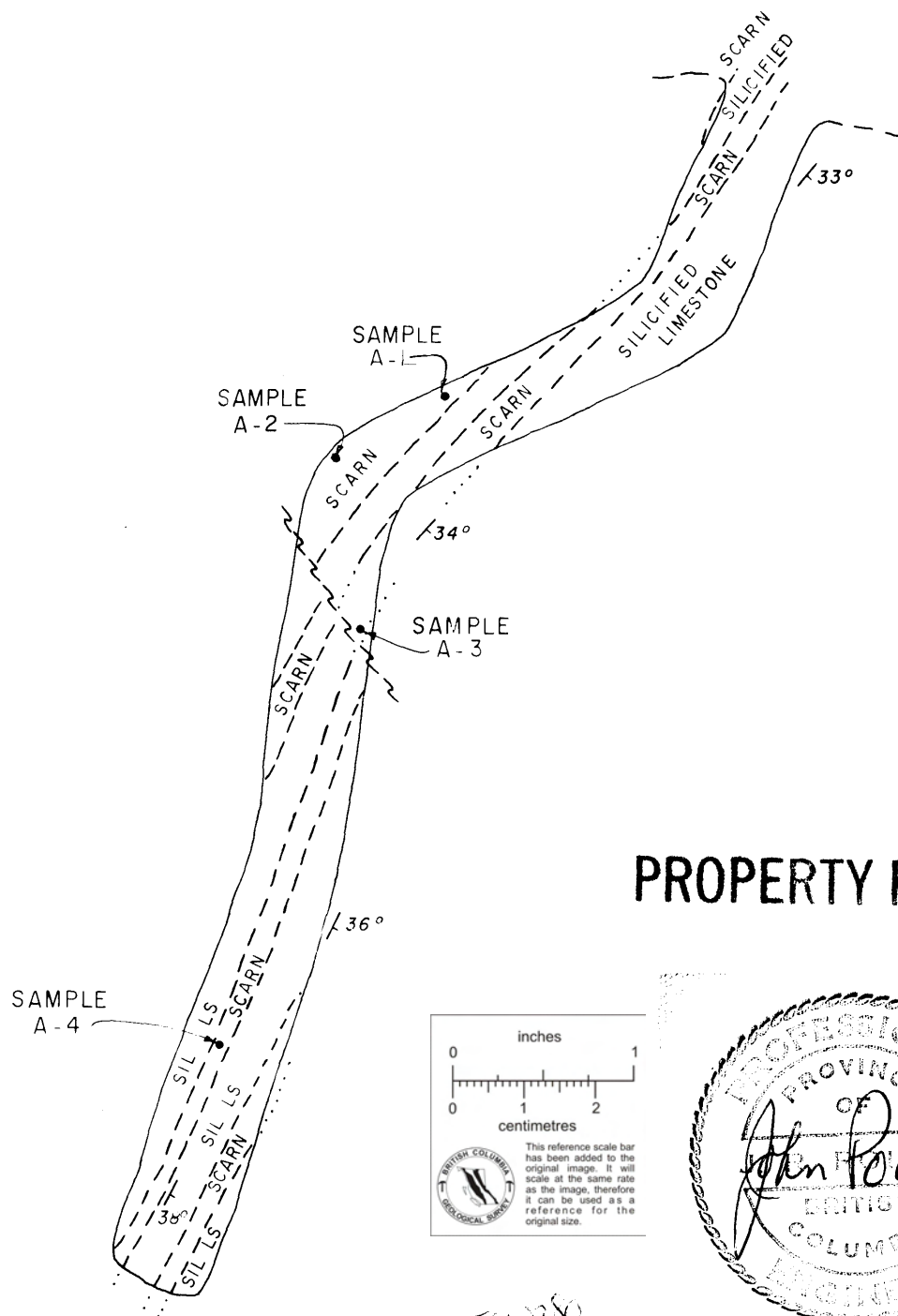
**PROPERTY FILE**

BENSON MINES LTD. (N.P.L.)		
62FSW280 SALMO PROJECT DETAILED SAMPLING "1% SHOWING" NELSON MINING DIVISION		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: As shown	DATE: Dec. 12, 1978	8

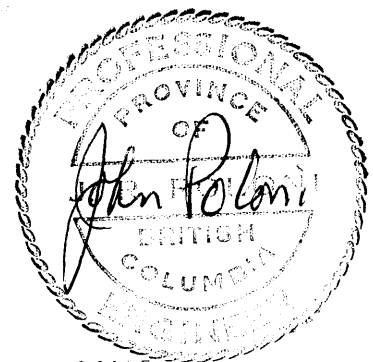
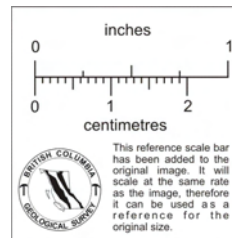


**PROPERTY FILE**

<b>BENSON MINES LTD. (N.P.L.)</b>		
<b>SALMO PROJECT CLAIM MAP</b>		
<b>M.U.T. CLAIMS</b>		
<b>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>	<b>DATE:</b> Dec. 12, 1978	<b>2.</b>



# PROPERTY FILE



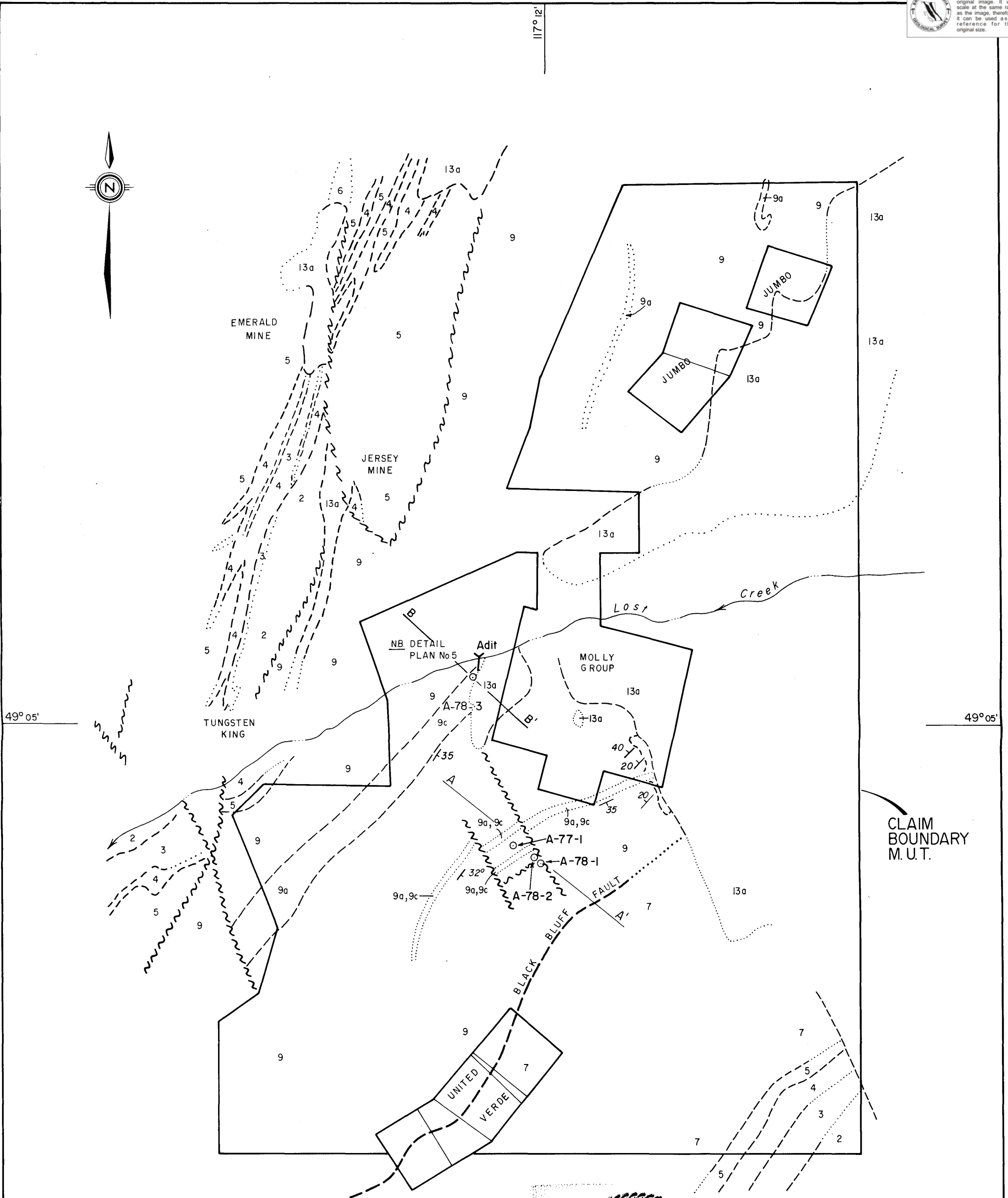
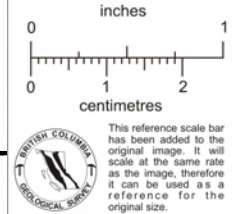
82FSU250



## NOTE

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

BENSON MINES LTD. (N.P.L.)		
SALMO PROJECT TUNGSTEN ADIT-LOST CREEK M.U.T. CLAIMS NELSON MINING DIVISION		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: AS SHOWN	DATE: Dec. 12, 1978	5



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 REEVFS - 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



82FS0280

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

**PROPERTY FILE**

**BENSON MINES LTD. (N.P.L.)**

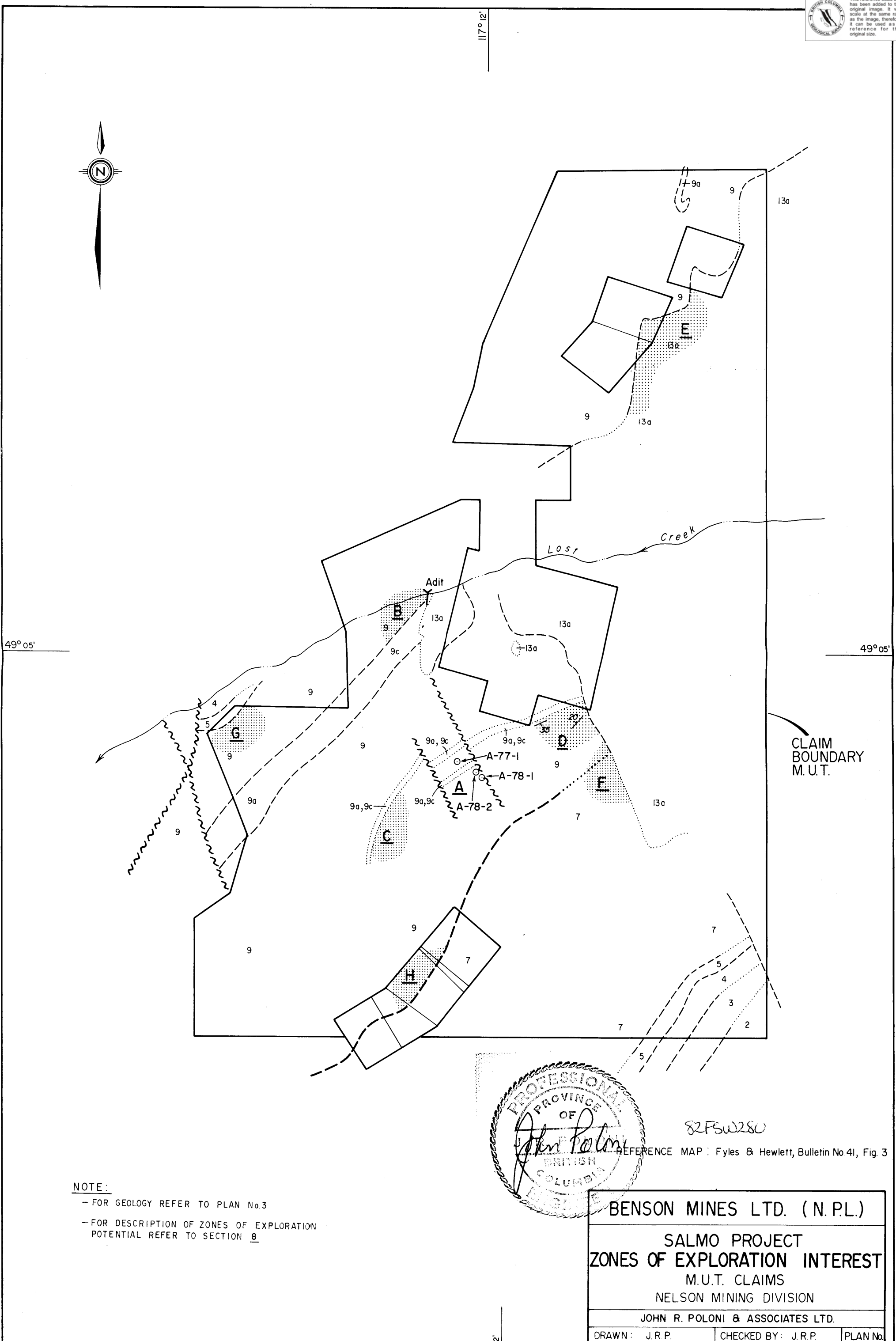
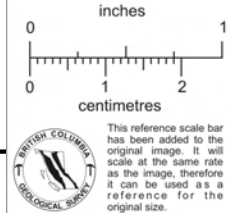
**SALMO PROJECT  
GEOLOGY MAP**

M.U.T. CLAIMS  
NELSON MINING DIVISION

JOHN R. POLONI & ASSOCIATES LTD.

DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No
SCALE: 1:610m.(2000)	DATE: Dec. 12, 1978	3

117° 12'

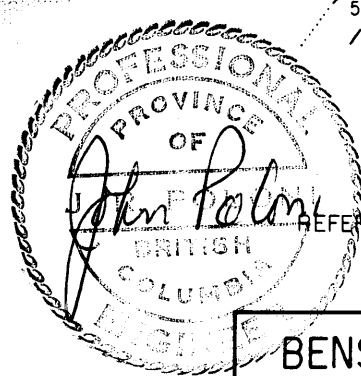


49° 05'

49° 05'

117° 12'

CLAIM  
BOUNDARY  
M.U.T.



82FSW280

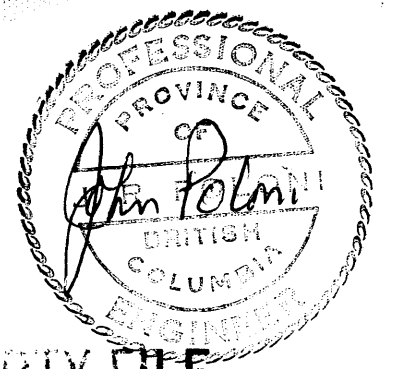
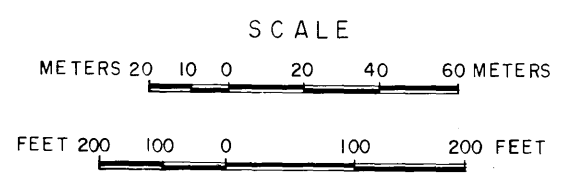
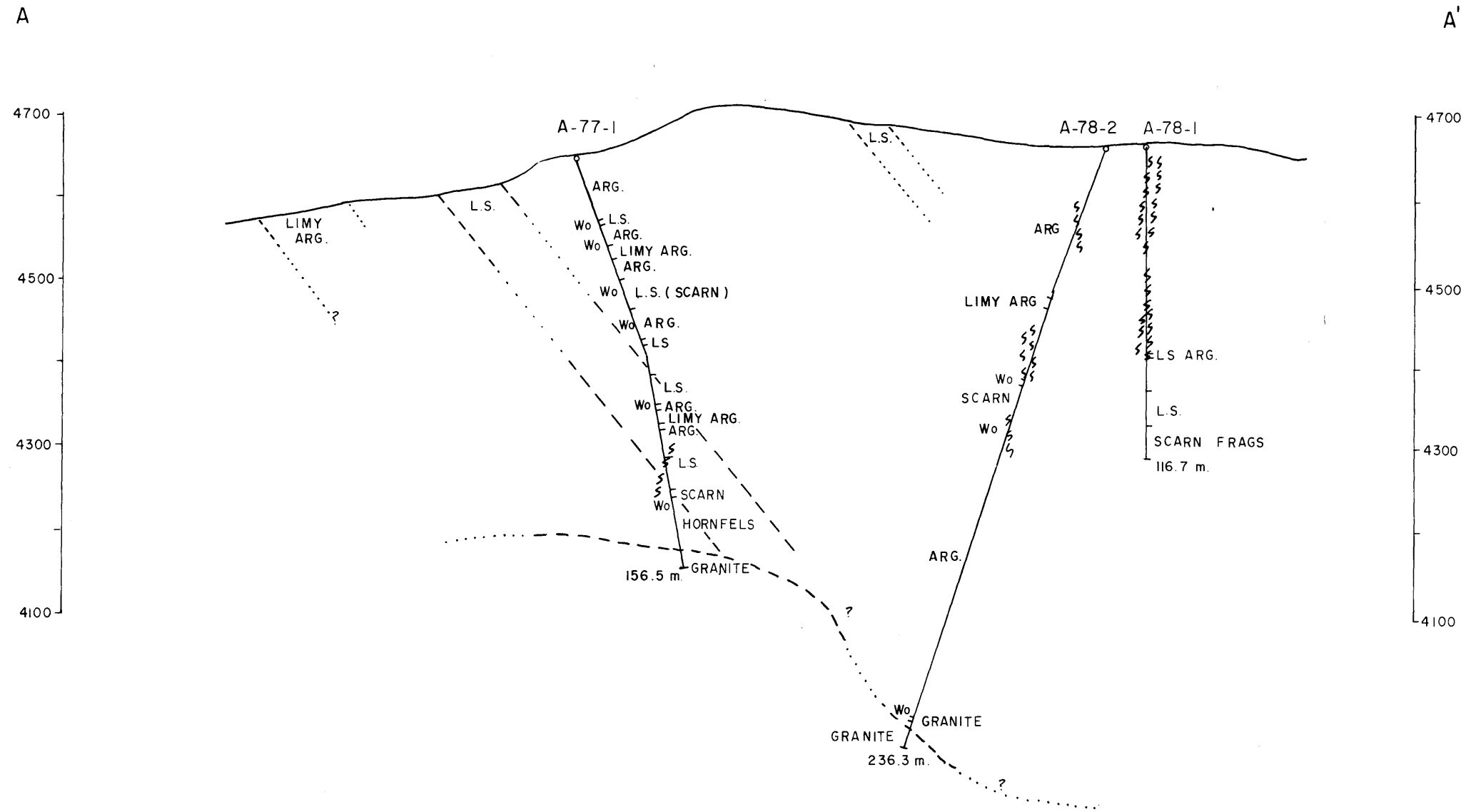
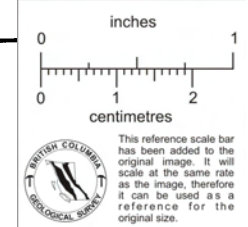
REFERENCE MAP: Fyles & Hewlett, Bulletin No.41, Fig. 3

**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</b>		
<b>ZONES OF EXPLORATION INTEREST</b>		
<b>M.U.T. CLAIMS</b>		
<b>NELSON MINING DIVISION</b>		
<b>JOHN R. POLONI &amp; ASSOCIATES LTD.</b>		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: 1" = 610m. (2000')	DATE: Dec. 12, 1978	4

117° 12'

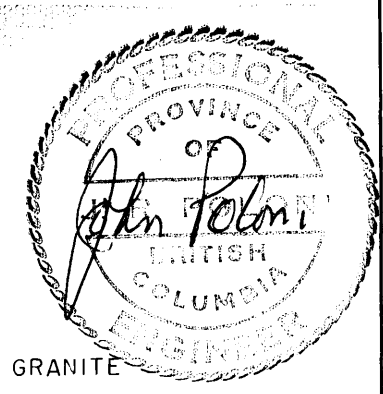
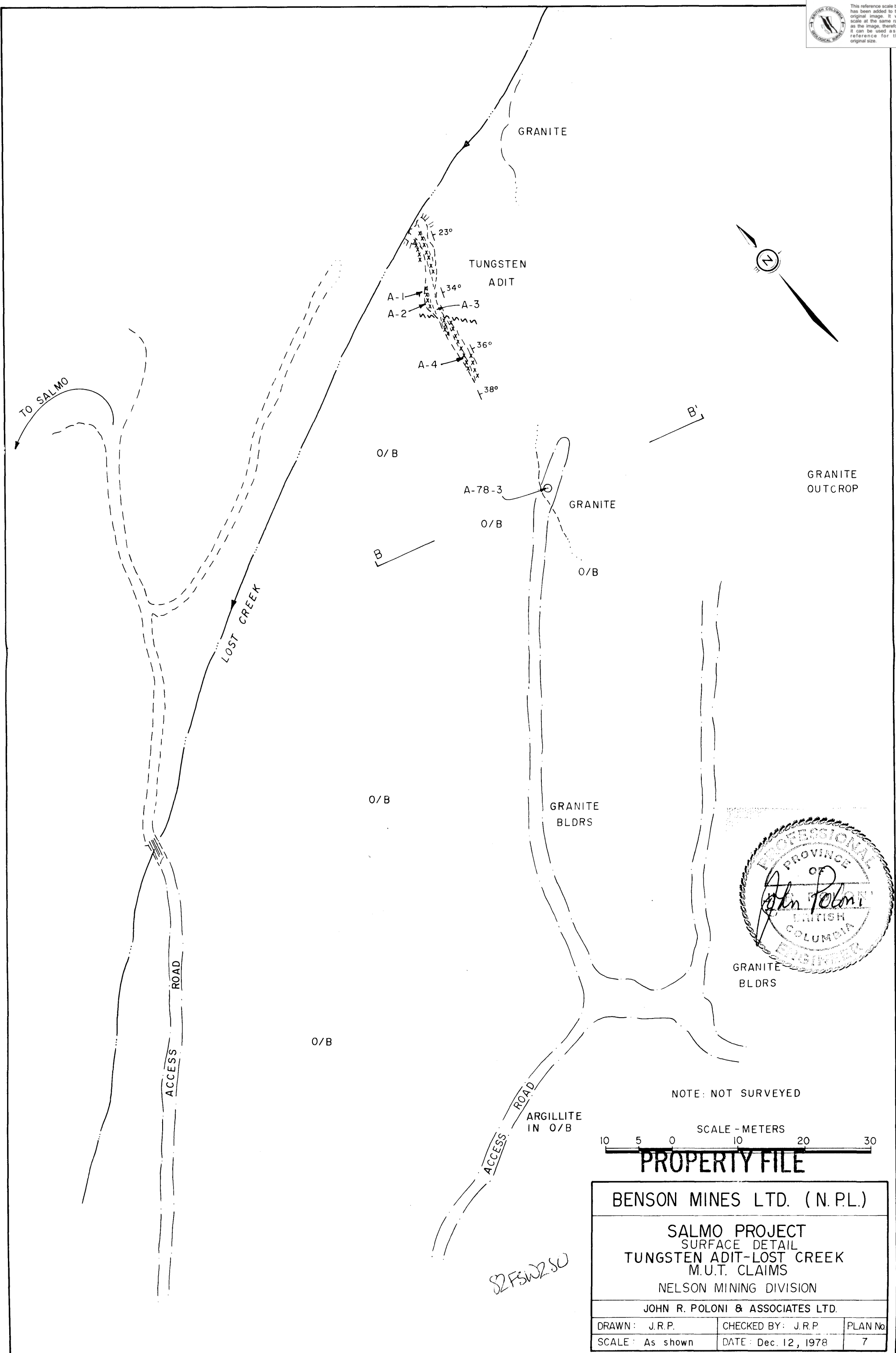
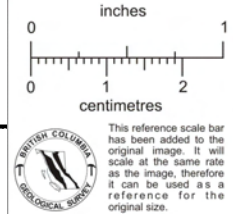


NOTE  
LOOKING N.E.

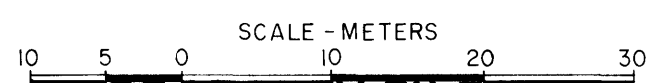
### PROPERTY FILE

BENSON MINES LTD. (N.P.L.)		
SALMO PROJECT SECTION A-A' M.U.T. CLAIMS NELSON MINING DIVISION		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE:	DATE: Dec. 12, 1978	6





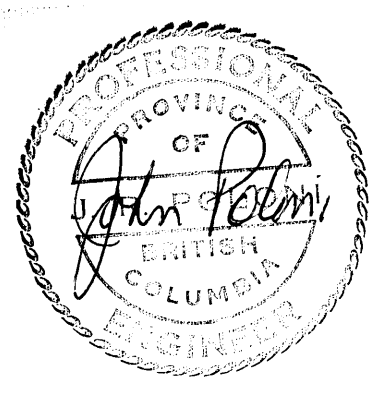
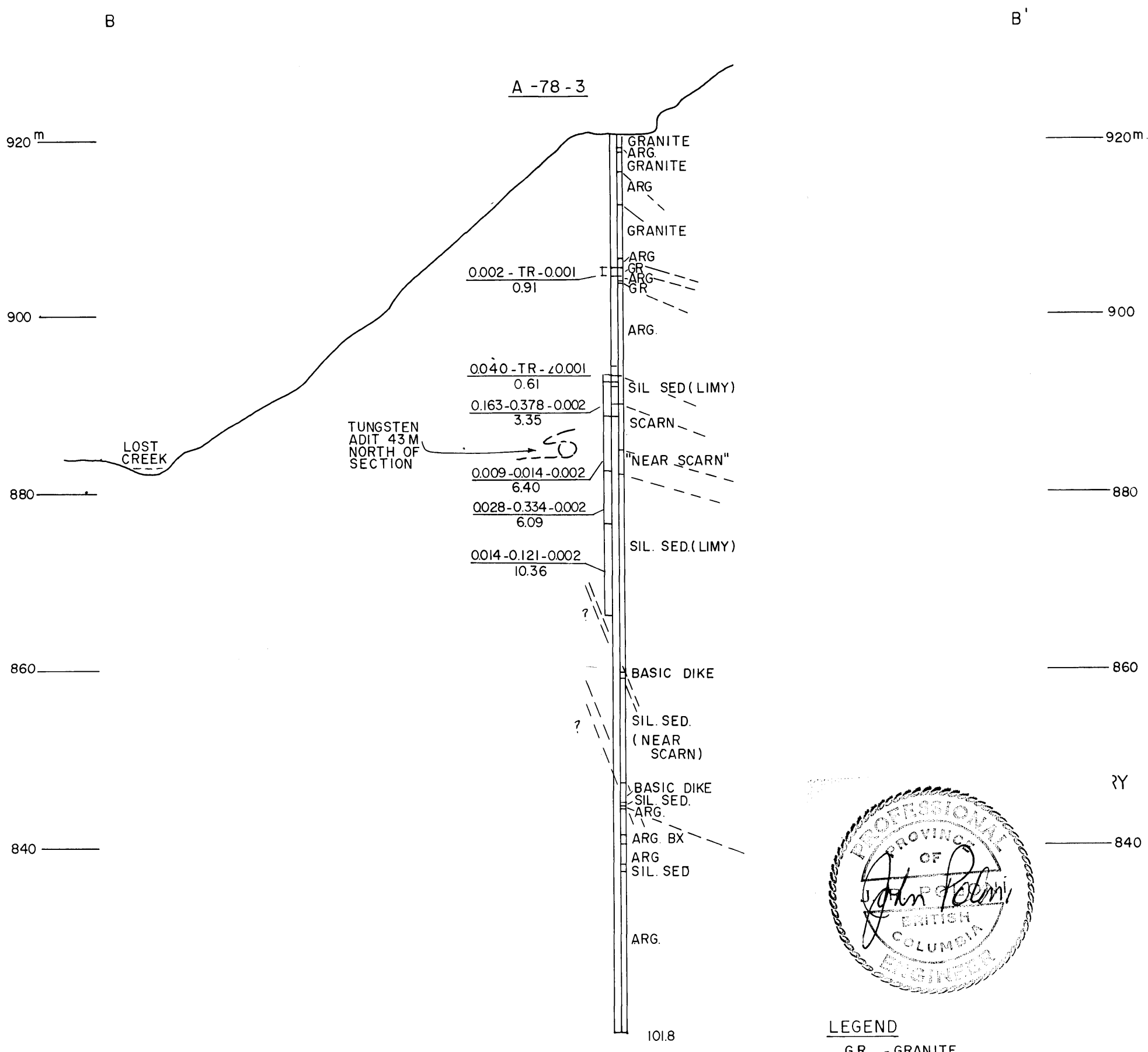
NOTE: NOT SURVEYED



**PROPERTY FILE**

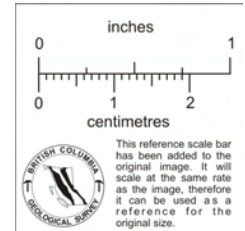
BENSON MINES LTD. (N.P.L.)		
SALMO PROJECT SURFACE DETAIL TUNGSTEN ADIT-LOST CREEK M.U.T. CLAIMS NELSON MINING DIVISION		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: As shown	DATE: Dec. 12, 1978	7

*S2FSW250*



**LEGEND**  
 GR - GRANITE  
 ARG - ARGILLITE  
 SIL. SED. - SILICIOUS SEDIMENT

**ASSAY DATA**  
 MoS<sub>2</sub>% - WO<sub>3</sub>% - U<sub>3</sub>O<sub>8</sub>%  
 METRE



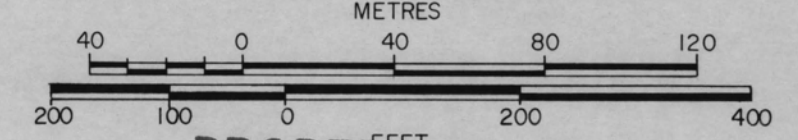
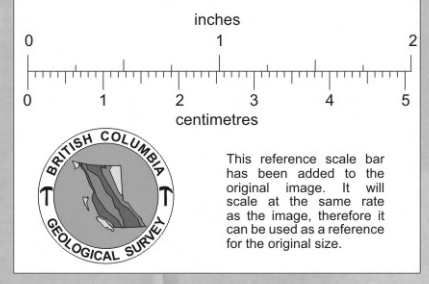
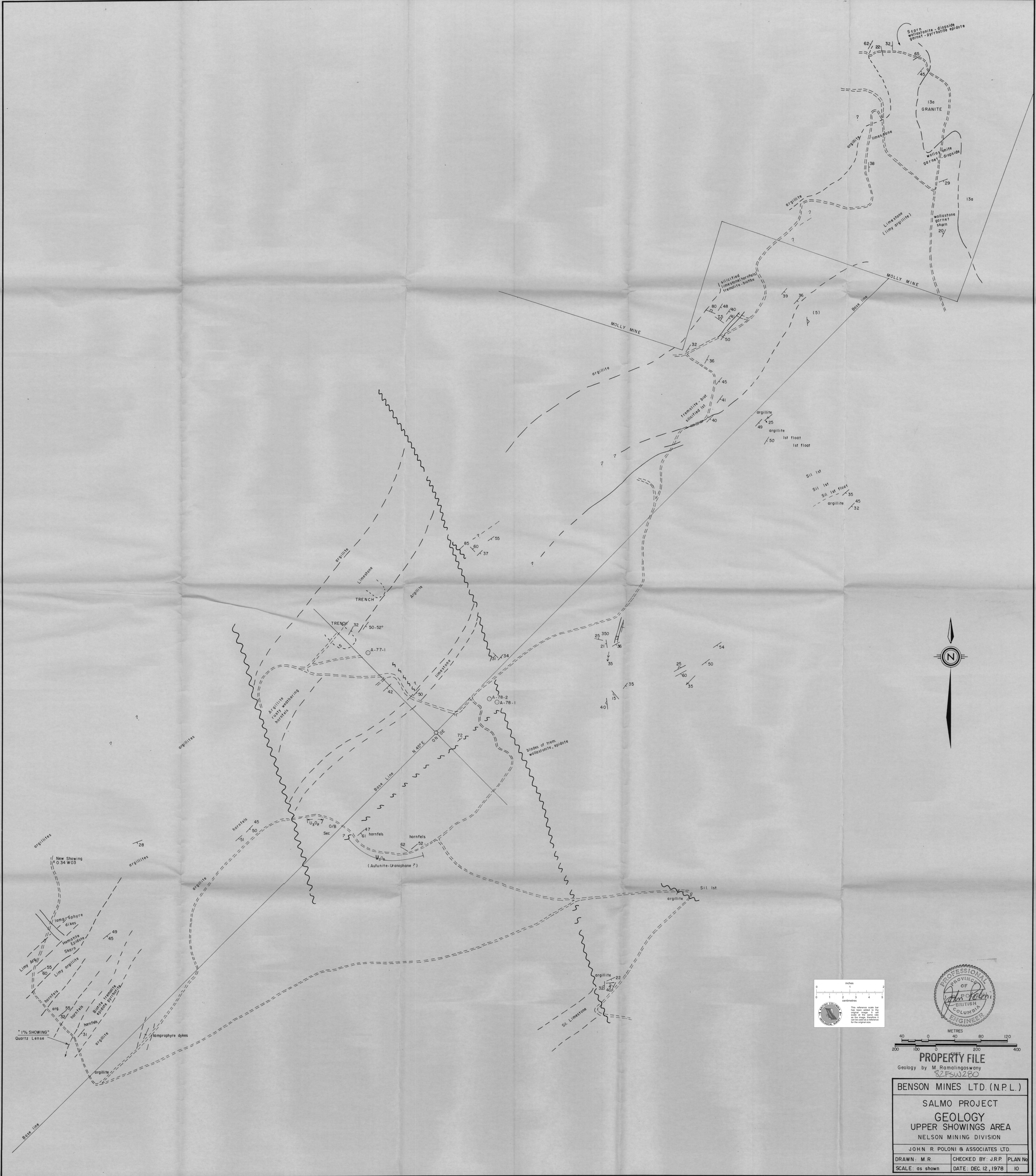
NOTE: SECTION LOOKING NORTH B-B'  
 NOT SURVEYED

SCALE - METERS  
 10 5 0 10 20 30

52FSW280

PROPERTY FILE		
BENSON MINES LTD. (N.P.L.)		
SALMO PROJECT SECTION A-78-3 B-B' M.U.T. CLAIMS NELSON MINING DIVISION		
JOHN R. POLONI & ASSOCIATES LTD.		
DRAWN: J.R.P.	CHECKED BY: J.R.P.	PLAN No.
SCALE: As shown	DATE: Dec. 12, 1978	9





**PROPERTY FILE**  
 Geology by M. Ramalingaswamy  
**BENSON MINES LTD. (N.P.L.)**  
**SALMO PROJECT**  
**GEOLOGY**  
 UPPER SHOWINGS AREA  
 NELSON MINING DIVISION  
 JOHN R. POLONI & ASSOCIATES LTD.  
 DRAWN: M.R. CHECKED BY: J.R.P. PLAN No.  
 SCALE: as shown DATE: DEC. 12, 1978 10



8.4 Appendix D

Diamond Drill Log A-77-1, A-78-1

A-78-2, A-78-3

**PROPERTY FILE**















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

DEPTH	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	CRYSTAL GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY		
	TYPE	MINS							No	LENGTH	wt. %	wt. %	wt. %
88	diss.	Scheelite	chem.					88.9 to 94.3					
	fracture	base Scheelite				grey	25°	Silicified limestone - contact metamorphosed to garnet (gross.) - diopside skarn with veins of quartz - calcite - diop -	71307	91.88 to 92.04	16.0%	.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.			grey	25°	94.3 to 97.7 silicified argillite with quartz segregations. pyrite and pyrrhotite along bedding					
	"	Sphalerite py, Scheelite				grey							
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				grey							
	diss & fract.	fluorite pyrite Cpy?	chem & text			dark grey	25°		71305	99.1 to 99.37	27.0%	.01%	.01
100	diss	Scheelite				dark grey							
	diss	Scheelite				grey	25°						
103	"	Sphalerite py, pyrite Scheelite				grey							



HOLE No. PROJECT INCLINATION: 70°SE AZIMUTH: N30E COORDINATES: 49° 05'N , 117° 12'W SCALE: 1cm = 1meters LOGGED BY: VNR

DEPTH	SECONDARY MINERALIZATION		GREGGIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDDING	REMARKS	SAMPLING		ASSAY		
	TYPE	MINS							No	LENGTH			
117	matrix	Spl. pyrite pyrrhoite	prim.		CLAY SILT FINE MEDIUM COARSE	black grey	20°	118 to 118.5 argillaceous limestone Contact met. qtz, chlorite, phlogopite sph. from 118.5 to 118.8 Major fault zone 120.5 - 121.2					
120	vein, fracture	pyrr. qtz	tectonic			dark gray		124 - Cross-cutting vein - pyrite, pyrrhoite, secondary biotite, diopside & garnet - bedding destroyed completely.					
	diss. vein	Scheelite pyrite, pyrrhoite sp.	chem.			gray	20°	126.1 to 126.4 skarn - trem-diop. (?) garnets					
125	diss. vein	trace scheelite pyrrhoite pyrite.	tect			dark gray		127 - appearance of k-spar. 128 to 128.7, 129.5 to 130.0 mottled texture.					
	vein	py, qz km, gt.	chem.			gray	20°	130.3, 131.4 Hornfels with veinlets.					
	vein	Sphalerite pyrrhoite pyrite scheelite	tect chem			dark gray		131.4 skarn with k-felspar.					
130	vein.	same as above	tect chem			dark gray	20°						
	vein	same as above scheelite trace				dark gray							



HOLE No. PROJECT INCLINATION:  $\delta 70^{\circ}SE$  AZIMUTH: N130E COORDINATES:  $49^{\circ}05'N$ ,  $117^{\circ}12'W$  SCALE: 1metre-1cm LOGGED BY: VMR

DEPTH	SECONDARY MINERALIZATION		ASSOCIATION TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	SEDGING	REMARKS	SAMPLING		ASSAY		
	TYPE	MINS							No	LENGTH	Pb	Zn	
133	vein	trace Scheelite pyrrhotite pyrite	tect		CLAY SILT FINE MEDIUM COARSE	grey	20°	135.3 to 147.7 Hornfels with bedding plane fractures.					
135	vein	Sphalerite	tect					137 to 138.2 Secondary biotite to 140.9 qtz veins with pyrrhotite					
	vein	Sphalerite	tect			dark grey	20°	142. to 142.7 veins with secondary bt & k-spar alteration. Sphalerite					
								144.3 to 145.1 Hornfels with hairline fractures with alteration envelopes.					
140	vein	Sphalerite	tect			dark grey	20°	145.8 to 146.2 secondary biotite. 147.2 k-spar bordering quartz veinlets.	71302	142 to 142.7	0.036%	1.46%	Co 7.0%
	vein	Sphalerite trace Cpy Sphalerite	tect			grey	20°						
145	vein E	Sphalerite pyrite	tect										
	bands	Sphalerite	tect			dark grey	20°	148.5 to 149.5 Spotted hornfels heavily inlain with purple brown sec. biotite in places dipside & qtz (148.7) k-spar (149)					
	vein	pyrite pyrrhotite	tect			to brown							

HOLE No. A-77-1

PROJECT

MUT SALMOPage 14 of 14INCLINATION: 70 SE AZIMUTH: N130E COORDINATES: 49° 05' N, 117° 12' W SCALE: 1mch-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		%
149					CLAY SILT FINE MUD MAYBE							
150												
155								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 <del>with molybdenite</del> . Sericite mostly green. at. 150.4, 150.9, 151.2, 151.4, 152.5, 153.2 Molybdenite at 152.3, 153.2.	71301	152.35		036%
156	END	OF	HOLE					② k-spar & secondary bt. veinlets with alteration envelopes 154.6, 155, 155.6 with molybdenite (trace) Qtz-ser-py is later.				

HOLE NO. A-78-1PROJECT: M.U.T. PROJECT JALMO, B.C

Page 1 of 8

LOCATION: South of Lost Creek, Mt MTN

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

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

NTS: \_\_\_\_\_ ELEV: (4950)??INCLINATION: 90° AZIMUTH: \_\_\_\_\_TOTAL DEPTH 116.7 metres.

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

SURVEY		
LENGTH	DIP	AZIMUTH

HOLE STARTED: May 1978  
HOLE COMPLETED: " 1978DRILLED BY: KOOTENAY EXPLORATION DRILLING  
ROSSLAND, B.C.~~\_\_\_\_\_~~  
CORE SIZE: AQ RECOVERY: 95 %SCALE 1 metre = 1cm.LOGGED BY V. M. RAMALINGASWAMY

DEPTH	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	CRYSTAL OR EXAMIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY						
	TYPE	MINS							No.	LENGTH							
1																	
2								argillite-									
3						dark grey	20	2.7, 3.9 crenulate bedding									
4						grey	20	single steepens.									
5							20	interbedded limy bands closely spaced together.									
6							20	5.2 crenulate.									
7						grey to dark grey	20	5.6 dense folds.									
8	veinlet	qtz-cal pyrrh.	test.				90°	8.0 qtz-cal veinlet with sp. pyrrh. ch(?)									
9	vein	qtz-cal	test				90°	8.2 - 8.5 nose of a fold - cren.									
10	vein	"	test				20	8.6 - qtz-cal veinlet									
11	"	"	"				20	9.0-9.1 "									
12						black	20	9.2 limy band with spots(?)									
13						grey to dark grey	20	9.8 fault zone - black arg. gongc.									
14	veinlet	qtz-cal	test					qtz-cal-pyrr veinlet.									

1 cm = 1 m















DEPTH METRES	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN.							NO	LENGTH				
93							20°	93.6 to 93.9 light colored limy argillite with recrystallized porphins.						
95			Chert				50°	blades of tremolite, calcite, qtz & pyrrhotite. 93.9 to 94.7 Crumblings with graphitic slip planes. 94.7 to 94.9 dark & light colored bands 94.9 to 96 black argillite with a few lighter colored bands. 96 to 99.7 fault zone with gouge at 99.3 to 99.7 perp. fractures at 97.6 graphitic slip planes at 98.6 to 99.4.						
100								99.6 to 106.1 light colored limestone contact metamorphosed with tremolite chlorite, calcite & pyrrhotite in porphins. Calcite & pyrrhotite perp to bedding, recrystallized in porphins. 106 → fractured up lat. with graphitic porphins.						
105							30°	106.1 to 116.7 Fault zone with intense gouge. Fragments of high grade skarn trapped in the fault zone.						
109														

lim, cal  
qtz, pyr

lim,  
cal

cal, epi,  
po

cal, epi,  
po

lim,  
cal, epi,  
po

light  
grey  
to  
green

CLAY  
SILT  
FINE  
MED  
CASE









DEPTH METRES	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING		ASSAY			
	TYPE	MINS.							No	LENGTH				
28					CLAY SILT FINE MED COARSE		25°	29.2 same as above with 2nd bt. Crenulations through out.						
30														
		Calcite po.	fect	//			60°	31.1 fault zone with crenulations on both sides.						
							50	32.6, 33, Calcite veinlets with pyrochite.						
35														
							90°	37.2 fault zone with crenulations. bedding perp. to fault plane with calcite, qtz fillings.						
	fact.	Calcite trm. po.	fect	//										
40	"	"	"	//			25°							
	"	"	"	//										
44							65°							

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°	crumulations						
45	fract.	Calcite po												
							40°	47.6 crumulations with graphitic slips.						
	fracture	Calcite po												
50							30°	50. purp fractures to bedding 51.1 lighter colored limy 52.0 argillite band. 52.7 53.6 crumulations.						
							70°	55.2 purp fractures.						
55		Calcite						57.1 Calcite po, vein. 58.3						
		Calcite po						58 to 58.8 Calcite, qtz, po, Wollastonite veins						
		Bill						59.7 to 60 lighter limy argillite						
60							30°							



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

DEPTH	SECONDARY MINERALIZATION		BRECCIA TYPE	LITHOLOGY	GRAIN SIZE				COLOR	BEDDING	REMARKS	SAMPLING		ASSAY				
	TYPE	MINS.			CLAY	SILT	FINE	MED.				CRSE.	No.	LENGTH				
METRES																		
76											77.1 to 79.9 Oreumination, highly fractured - fault zone with gouge at 79.9							
80	veinlets	calcite, trem, po	breccia	Fault							80.4 to 85.2 Fault zone with gouge and highly fractured rock graphitic slip planes.							
85	fracture	calcite, trem	breccia	Fault							85.2 to 87.5 interbedded argillite with limy argillite. limy argillite has tiny clots of tremolite.							
90				Fault zone							87.5 to 92.1 highly conchoidal rock with fault gouge							
92	veinlets	Calcite, trem, po	breccia	Fault zone							From 88.8 to 92.1 the fault zone is filled with calcite, trem, woll, epi and pyrochloite veinlets.							







HOLE NO A-78-Z

PROJECT - MUT

FA 9  
LOGGED \_\_\_\_\_

DEPTH M	SECONDARY MINERALIZATION		BX TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING °	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN S							NO	LENGTH				
130	SCARN	Py PyRR CHALC TR Sulfide			fine	24	80°	ARGILLITE 130.38-137.59 GENERALLY AS ABOVE BUT CONTAINING WIDER SECTIONS SULFIDES AND SLIGHTLY MORE ARGILLATION. @130.54-130.68 MASS. SULFIDES TO 50% CONTAINING Py, PyRR, AND CHALC IN OR EMERGE. CS BLEND @ 85° @131.12-131.40. Py PyRR IN SLIGHTLY LIMP SLT @131.49-131.56 SCARN @133.35-133.45 SPECKLED REG. POSSIBLE SCARN?? @134.74-135.00 BLEACHED SECTN. DISS. Py - ALSO Py ON PLACES & IN THIN QZ FIL PINK FELDSPAR IN FILM? ARGILLITE 137.59-144.66 BLACK UNIFORM TEXTURED R <sub>x</sub> AS ABOVE WITH MINOR						
135														
140					fine	24	80°							



HOLE NO A-70-Z

PROJECT MUT

A E 10

LOGGED

DEPTH M	SECONDARY MINERALIZATION		BX TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING Z	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN'S							NO	LENGTH				
145		Py, Pyrr Zn			FINE	RL	80°	QTZ-CALC FIL @137.71 - 137.80 QTZ LAMIN. ATED ZONE. CONTAINING PY, PYRR, BISTITE, ZINC? @141.70 - 141.80 GADOLITE, PY CALC IN FILM II Co CORE						
					FINE	RL	80°	ALG 144.66 - 151.83 AS ABOVE, UNIFORM TEXTURED BLACK MUNCTIONS CALGITE FILM ⊥ TO CORE @144.66 - 144.90 CALC-QTZ FIL AS II CORE WITH TRACES ALG. @146.90 - 146.94 DISS PY PYRR, SPHALERITE. @149.71 - 149.84 BLEACHED (SLIGHTLY) MINERALIZED SECTN WITH PY, PYRR, SPHALERITE @151.50 - 151.60 BLEACHED SECTN FINELY DISS PYRR + ZNS? ARGILITE 151.83 - 159.39 (AS ABOVE) @152.30 - 152.41 BLEACHED SECTN @153.78 - 153.93 QTZ INCL. WITH PYRR @ FCS. @155.5 - 155.8 Bleached Sectn						
150		PY, PYRR ZNS.					80°							
155							80°							



DEPTH M	SECONDARY MINERALIZATION		BX - TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING L	REMARKS	SAMPLING		ASSAY			
	TYPE	MIN							NO	LENGTH				
180								<p>ARG - 180.74 - 188.90</p> <p>spotted variety 186.36 then</p> <p>dense black variety, minor</p> <p>qtz calc films @ 70-75°</p> <p>Thin sects of Pj, P44r.</p>						
185														
190														

80° ±

HOLE NO A-78-2

PROJECT MUT

PAGE 13

LOGGED

DEPTH M	SECONDARY MINERALIZATION		BX TYPE	LITHOLOGY	GRAIN SIZE	COLOUR	BEDDING °	REMARKS	SAMPLING		ASSAY				
	TYPE	MIN S							NO	LENGTH					
195					GRY BL		80°	<p>ARG AS ABOVE GRY BL 128.90 - 196.00 Speckled Variety. MINOR QTZ - calc films Py</p> <p>ARG 196.00 - 203.46 Speckled VARIETY. MINOR. QTZ - CALC INCL &amp; STD. GRAY 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 SMELTS</p> <p>ARG 218.30 - 225.67 @ 219.62 - 219.92 SIL Bleached SECTN with Py - PyRR 65° @ 224.18 - 224.27 Bleached SIL SECTN POSSIBLE SCARN 65° @ 225.48 - 225.81 SIL SECTN 90°</p> <p>ARG 225.67m - 226.52 ARG AS ABOVE</p> <p>GRANITE 226.52 - 226.90 ARG 226.90 - 229.11 ARG AS ABOVE TRACE schistite</p>							

DIAMOND DRILL RECORD

Hole No. A-78-2

PROPERTY M.U.T 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 m			
		↑	225.67	226.52	0.85	ARG (AS ABOVE)		
	Repeat	↑	226.52	226.90	0.38	GRANITE - BLEACHED ALTERED.		
	of Page					SECTIONS OF MAFICS GENERALLY		
	13.	↓	226.90	229.11	2.21	ARG (AS ABOVE) TR. Scheelite		
			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

DIAMOND DRILL RECORD

Hole No. A-78-3

PROPERTY

M.U.T CLAIMS

Sheet No. 1 of 9

Location: Claim No. M.U.T '5

BENSON MINES LTD.

Lat \_\_\_\_\_

Dep \_\_\_\_\_

Elevation of Collar 3020' (920.49)m

Datum \_\_\_\_\_

Bearing \_\_\_\_\_

Started Nov 5, 1978

Completed Nov 21, 1978

Ultimate Depth 334 ft. (101.8m)

Proposed \_\_\_\_\_

Direction at Start: Dip -90°

@ 165' - 90°  
@ 330' - 90°

CORE SIZE AQ

Date	Feet Drilled	Total Depth	SECTION			REMARKS (LOG)	Core Recovery	Foliation Inclination
			From	To	Feet			
			0.0	4.5	4.5' 1.37m	GRANITE - ALTERED BUFF BROWN TO PINK WITH LIMONITIC STAINING		
			4.5	5.7	1.2' 0.37	ARGILLITE - SILICIOUS VARIETY WITH MINOR DISSEMINATED SULFIDES, PYRITE		
			5.7	14.0	8.3' 2.53	GRANITE - ALTERED, LIMONITIC SPECKLING SULFIDES PYRITE MINOR MO <sub>2</sub>		
			14.0	26.5	12.5' 3.81	ARGILLITE - THIN BEDDED WITH MINOR PYRITE AS FILMS AND PDS. BEDDING AT 30° - 45°		
			26.5	46.5	20.0' 6.10	GRANITE - SILICIOUS QUARTZY INCLUSIONS WITH SEAMS & PDS PYRITE, MINOR		

Drilled by: KOOTENAY EXPLORATION DRILLING LTD

JOHN R. POLONI  
Geologist in Charge

DIAMOND DRILL RECORD

Hole No. 78-3

PROPERTY \_\_\_\_\_

Sheet No. 2 of 9

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			
						MoS <sub>2</sub> . FRACTURED, WITH LIMONITIC FILAMENTS		
						TANGANIANESE, AND FODDY PYRRHOTITE		
			46.5	50.2	3.7' 1.13	ARGILLITE - DENSE BLACK VARIETY WITH QUARTZ		
						FILAMENTS AND INCLUSIONS BOTH CONCORDANT & DISCORDANT. PYRITE DISSEMINATED		
						AND AS FILMS. CS AT 80°		
			50.2	53.2	3.0' 0.91	GRANITE - BLEACHED SILICIOUS, MICA, AND		
						MINOR HINT MoS <sub>2</sub>		
			53.2	54.0	0.8' 0.24	ARGILLITE - BROKEN CORE, NEAR CS POSSIBLE		
						FAULT @ 85°		
			54.0	55.0	1.0' 0.31	GRANITE - BLEACHED, WITH MINOR LIMONITE		
						CS @ 55°		

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

Geologist in Charge \_\_\_\_\_

DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 3 of 9

PROPERTY \_\_\_\_\_

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			
			55.0	56.0	1.0' 0.31	ARGILLITE - WITH QUARTZ INCLUSIONS, PYRITE AS FOSS AND FILMS.		
			56.0	90.0	34.0' 10.36	ARGILLITE - DENSE BLACK @ TIMES SOMEWHAT CONTORTED, PYRITE THROUGHOUT AS FILMS & FOSS BEDDING @ 65° @ 70.3 - 70.8 INTRUSIVE WITH MINOR SPECKLED $110S_2$ & PYRITE @ 87.6 - 87.8 QUARTZ FILAMENT WITH FAIR PYRITE, CONTORTED CS @ 40°		
			90.0	100.5	10.5' 3.20	SILICIOUS SEDIMENTARY UNIT WITH SECTIONS OF PEGMATITIC PINK FELDSPAR, SCARN @ 92.0 - 96.5 FINELY DISSEMINATED		

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

\_\_\_\_\_  
 Geologist in Charge



DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 4 of 9

PROPERTY \_\_\_\_\_

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			
						<p><i>As<sub>2</sub>S<sub>3</sub>, POSSIBLE POWELLITE?</i></p> <p><i>@ 96.5-101.5 DISSEMINATED As<sub>2</sub>S<sub>3</sub> IN SILICIOUS UNIT WITH LIME SECTIONS</i></p> <p><i>POWELLITE?</i></p>		
			100.5	117.3	<p><i>16.8</i> <i>5.12</i></p>	<p><i>SCARN - As<sub>2</sub>S<sub>3</sub> FOR 0.3' FROM 100.5-100.8</i></p> <p><i>MINOR As<sub>2</sub>S<sub>3</sub> INFREQUENTLY IN MORE SILICIOUS SECTIONS. POWELLITE?</i></p>		
			117.3	126.0	<p><i>8.7</i> <i>2.65</i></p>	<p><i>"NEAR" SCARN @ TIMES SILICIOUS WITH VERY MINOR SULFIDES. POWELLITE?</i></p>		
			126.0	199.1	<p><i>73.1</i> <i>22.28</i></p>	<p><i>SILICIOUS BEDDED UNIT @ TIMES WITH VERY FINE SULFIDES PYRITE, NEAR CS @ 60° SLUPTYPE, UNIT BECOMES SLIGHTLY</i></p>		

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

Geologist in Charge \_\_\_\_\_

DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 5019

PROPERTY \_\_\_\_\_

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			
						SCARNY @ 129.0', CONTAINS THIN LIMY		
						MEMBERS SOMEWHAT CONTORTED INFREQ-		
						UENTLY. BEDDING 45-50°. POWELLITE?		
						@ 147.0 - 150.9 LIMONITIC FILMS		
						@ 161.7 - 161.8 LIMESTONE (BLUE)		
						@ 164.8 - 165.1 ALTERED GRANITE		
						@ 165.1 - 181.0 SLIGHTLY SCARNY		
						@ 181.0 - 195.5 SILICIOUS "NEAR" SCARN		
						BEDDING @ 65°		
						@ 195.5 - 195.6 ARGILLITE		
						@ 195.6 - 199.1 "NEAR" SCARN, SILICIOUS		
						SEDIMENT, BEDDING CONTORTED & @		

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

\_\_\_\_\_  
 Geologist in Charge

DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 6049

PROPERTY \_\_\_\_\_

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			
						TIMES ALMOST PARALLEL TO CORE		
			199.1	202.6	3.5 1.07	BASIC DIKE, WITH PODOY & FINELY DISSEMINATED SULFIDES (PYRITE)		
						NEAR CS @ 20°, FARCS @ 40°		
			202.6	242.0	39.4 12.01	SILICIOUS "NEAR" SCARN AS ABOVE		
						@ 203.1 - 203.9 HOS <sub>2</sub> AS PDS & THAN FILMS IN SCARN		
						@ 210.0 - 212.5 SCARN		
						@ 212.5 - 216.0 "NEAR" SCARN - SILICIOUS		
						@ 216.0 - 221.5 SCARN - SULFIDES @ 219.0 FOR 0.5'		
						@ 221.5 - 224.1 SILICIOUS UNIT, BEDDING		

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

Geologist in Charge

DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 7 of 9

PROPERTY \_\_\_\_\_

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			
						@ 40° LIMY		
						@ 224.1 - 229.9 SCARN		
						@ 229.9 - 235.9 "NEAR" SCARN, SILICIOUS UNIT		
						@ 235.9 - 242.0 SEDIMENT - LIMY		
						ARGILLITE BEDDING @ 40°		
			242.0	248.8	6.8 2.07	BASIC DIKE WITH CALCITE FRAGMENTS AND PODS, FINEGRAINED NEAR CS		
						@ 20°		
			248.8	249.3	0.5 0.15	SILICIOUS LIMONITIC UNIT WITH MINOR MOS <sub>2</sub>		
			249.3	249.7	0.4 0.12	DIKE AS ABOVE		

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

Geologist in Charge \_\_\_\_\_

DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 849

PROPERTY \_\_\_\_\_

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			
			249.7	261.0	11.3' 3.44	ARGILLITE - WITH QUARTZ SILICIOUS BANDS.		
			261.0	263.3	2.3' 0.70	BRECCIA ZONE CEMENTED ARGILLITE AND QUARTZ FRAGMENTS TO 0.1' WITH MINOR LIMONITE		
			263.3	272.0	8.7 2.65	ARGILLITE WITH THIN SEAMS OF SULFIDES (PYRITE) NEAR CS @ 65°		
			272.0	274.8	2.8 0.85	SILICIOUS UNIT WITH MINOR ARGILLITE		
			274.8	334.0	59.2 18.04	ARGILLITE - POKER CHIP VARIETY BEDDING @ 65° WITH THIN SEAMS SULFIDES (PYRITE). SECTIONS OF QUARTZ		

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

\_\_\_\_\_  
 Geologist in Charge

DIAMOND DRILL RECORD

Hole No. 78-3

Sheet No. 9 of 9

PROPERTY \_\_\_\_\_

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			
						BEDDING GENERALLY CONCORDANT FOR		
						0.1' - 0.2', INFREQUENT THIN FILAMENTS		
						OF QUARTZ DISCORDANT.		
						END OF HOLE 334.0'		
						(101.8 m)		

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

\_\_\_\_\_  
Geologist in Charge