REPORT ON GEOLOGICAL, PHYSICAL AND DRILLING WORK,

M.U.T. CLAIMS GROUP C, SALMO AREA, B.C.

WORK PERFORMED DURING MARCH, APRIL, AUGUST, SEPTEMBER,

NOVEMBER AND DECEMBER, 1977.

V.M. RAMALINGASWAMY

MARCH 10, 1978

FILE NO. 166-NELSON

INTRODUCTION

Location and Accessibility:

The M.U.T. group of mineral claims are located in the Nelson Mining Division (N.T.S. 82F 3W; 49° 05'N: 117° 12'W) and cover both sides of the Lost Creek valley. The property is easily accessible by B.C. Route 3 and is 15 km south of the village of Salmo. A 4 wheel drive road leads northerly between Wilson Creek and Lost Creek to the workings, a distance of 6.5 kms.

The northern portion of the claims group is accessible by a road along the Lost Creek.

CLAIMS INFORMATION

The M.U.T. mineral claims consist of:

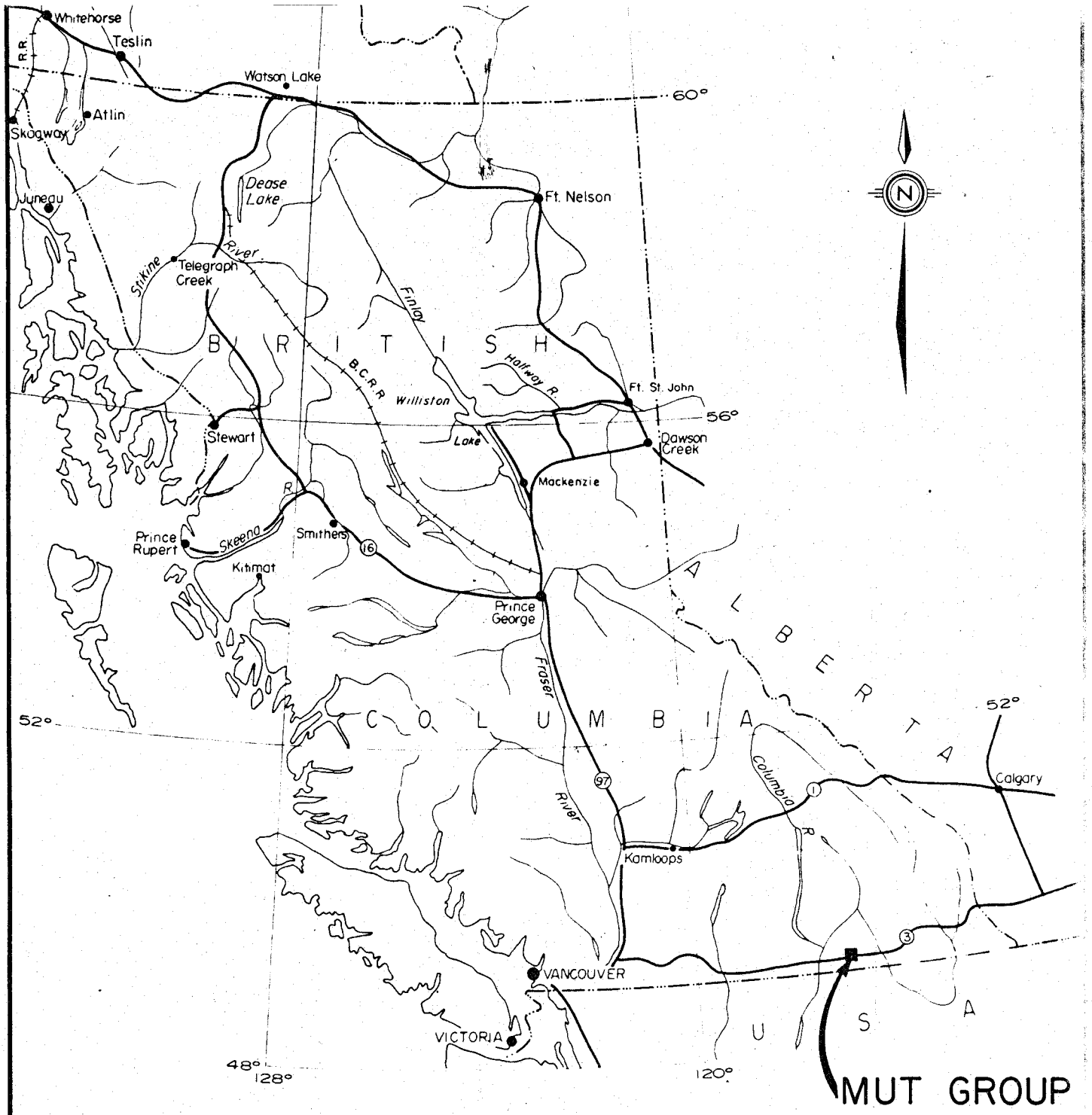
Claim	Units	Record No.	Anniversary
M.U.T. 1	10	371 (11)	Nov. 30,'78
M.U.T. 2	10	372 (11)	Nov. 30,'78
M.U.T. 3	16	373 (11)	Nov. 30,'78
M.U.T. 4	16	374 (11)	Nov. 30,'78
M.U.T. 5	16	377 (12)	Dec. 7,'78
M.U.T. 6	16	378 (12)	Dec. 7,'78

M.U.T. 1 & 4 are grouped as M.U.T. Group A,

M.U.T. 2 & 3 are grouped as M.U.T. Group B, and

M.U.T. 5 & 6 are grouped as M.U.T. Group C.

This report covers M.U.T. Claims Group C.

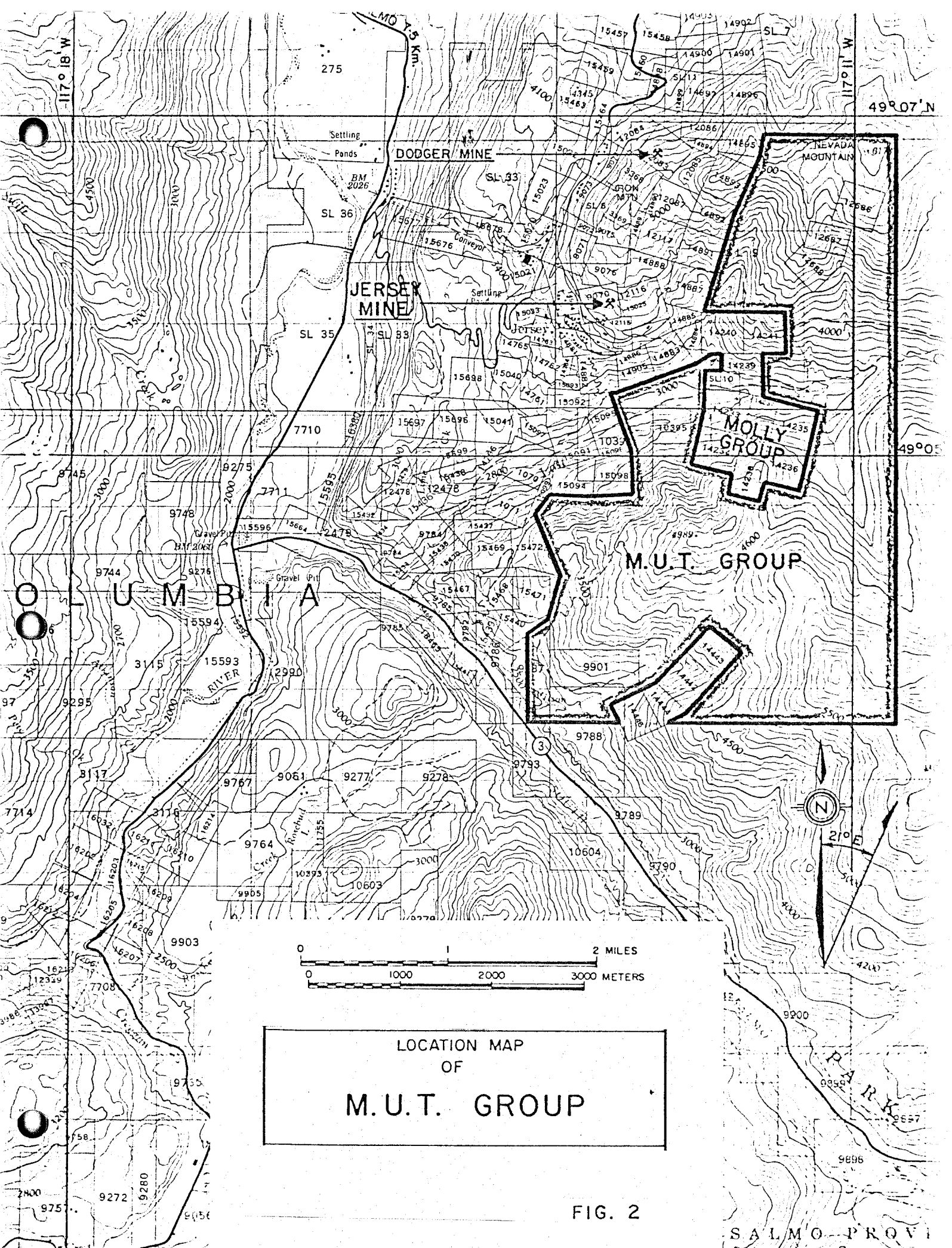


LOCATION MAP

SCALE

MILES 300 150 0 300 600 900 MILES

FIGURE 1



LOCATION MAP
OF
M.U.T. GROUP

FIG. 2

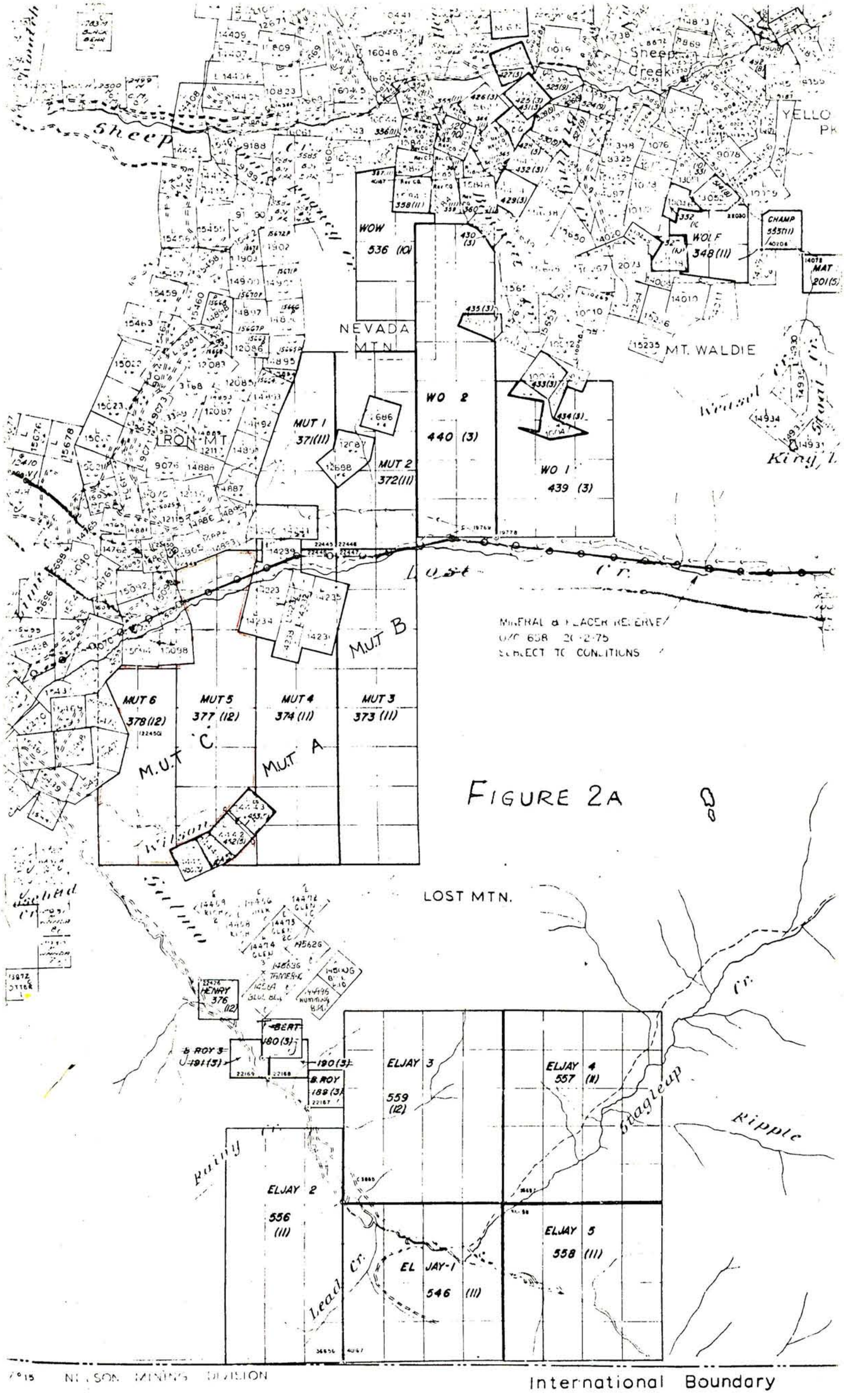

Sheep Creek
NEVADA MTN
MT. WALDIE
WOW 536 (10)
WOLF 348 (11)
CHAMP 555(11)
MAT 201(5)
WO 2 440 (3)
WO 1 439 (3)
MUT 1 371(11)
MUT 2 372(11)
MUT B
MUT A
MUT C
MUT 3 373 (11)
MUT 4 374 (11)
MUT 5 377 (12)
MUT 6 378(12)
MINERAL & PLACER RESERVE
O/C 658 20-2-75
SUBJECT TO CONDITIONS
LOST MTN.
HENRY 376 (12)
BERT 180(3)
B ROY 3 191(3)
B ROY 190(3)
B ROY 189 (3)
ELJAY 3 559 (12)
ELJAY 4 557 (11)
ELJAY 2 556 (11)
ELJAY 1 546 (11)
ELJAY 5 558 (111)
Dragleap
Ripple
Lead Cr.
NELSON MINING DIVISION
International Boundary

FIGURE 2A

GENERAL GEOLOGY

The general geology of the area is described in detail in British Columbia Department of Mines Bulletin 41. The geology in the area consists of early Paleozoic sedimentary rocks, which form the Mine Belt in the west, Argillite Belt in the middle and Eastern Belt in the eastern portion of the area. Mainly early Cambrian Laib Formation rocks occur in the Mine Belt and the Argillite Fault separates them from the Argillite Belt. Ordovician Active Formation argillites form the Argillite Belt. The Black Bluff thrust fault brings the Eastern Belt (Early to late Cambrian Carbonate and phyllitic rocks) over the Argillite Belt.

These belts are intruded by Cretaceous Nelson batholithic rocks.

LOCAL GEOLOGY

Though this report concerns M.U.T. Group C, it is more appropriate to cover all the claim groups as one with regard to geology. The claims area consist of predominantly argillites with interbedded limestones of the Ordovician Active Formation. These rocks strike north-east and dip south-east on the south side of Lost Creek, whereas the rocks predominantly strike north-south and dip east on the north side of Lost Creek. These Active Formation rocks have been thrusted over by the Black Bluff Fault by the Upper Cam-

brian Nelway limestones and phyllites.

The Active and Nelway Formation rocks were intruded by the Cretaceous Lost Creek granites (Nelson Batholithic rocks) in the eastern portion of the claims.

MINERAL DEPOSITS IN THE AREA

Mineral Deposits of interest in the area include the Molly Mine, the Jumbo, the Tungsten King and the Emerald (Feeney, Dodger) Mine.

The Molly Mine is located within the M.U.T. claim group on the south side of Lost Creek. Here scheelite occurs in skarn formed in limy argillite and interbedded limestone of the Active Formation near its contact with the granite of Lost Creek Stock. The molybdenite mineralization occurs in the concentric fractures and is disseminated within the peripheral shell of the granite intrusion near the contact with the limestones (see Figure 3)

The Jumbo prospect also occurs within the M.U.T. claims group, but on the north side of Lost Creek. Here also scheelite occurs in contact metamorphosed limestone and argillite near the contact with the Lost Creek Stock granite.

The Tungsten King property lies just outside the western boundary of the M.U.T. claims on the north side of Lost Creek.

Here scheelite mineralization occurs in the skarn formed due to contact metamorphism of the Reeves limestone and Truman argillite by the Emerald stock.

The Emerald, Dodger and Feeney mines are all located just beyond the northwestern boundary of the M.U.T. claims. Here again, as in the case of Tungsten King scheelite has been mined from the skarn zone formed in the Reeves limestone near the contact with the Emerald and Dodger stocks.

MINERALIZATION

Three types of mineralization occur within the claims area.

1. Scheelite-molybdenite mineralization in skarn zones.
2. Molybdenite mineralization in the granite, and
3. Lead-zinc-silver veins in the Black Bluff fault zone.

Scheelite-molybdenite mineralization occurs in the skarns formed due to contact metamorphism of limy argillites with interbedded limestones by the granite of the Lost Creek granite. Extensive silicification of the distal portions of the limestone from the contact is common, and grading into high grade grossular garnet-diopside-epidote-potash feldspar at the proximal portions. Scheelite occurs as fracture controlled as well as disseminated. Scheelite with blue-white flourescence is present in silicified limestones and is more fracture controlled than disseminated. Scheelite with

cream yellow flourescence is present near the contact. This relationship can very well be seen at the skarn south-east of the Molly Mine. The areas favourable for the occurence of the skarn zones is shown in Figure 3.

Molybdenite mineralization occurs in the peripheral shell in the granite near the contact with argillite with interbedded limestone. It is present as sheeted zone in concentric fractures. The molybdenite mineralization also carries some uranium. The other type of mineralization is molybdenite with porphyry type affinities, encountered in the drill hole. This will be described in detail in the following chapter.

Argentiferous galena-sphalerite mineralization occurs in the Black Bluff Fault in the United Verde crown grants in the southern portion of the claims group. The mineralization is probably remobilized from stratabound mineralization occuring in the Nelway limestone.

RECENT WORK AND RESULTS

The work done on M.U.T. Group C consists of:

1. Geological Mapping
2. Physical Work
3. Drilling

Geological Mapping: The geological mapping was done on a scale of

1 cm to 125 metres for the area immediately surrounding the Molly Mine. This is main area of interest at the present time. Figure 3 is the result of this work. Many areas of interest with respect to skarn zones shown in the map were the result of this mapping. This mapping will be expanded next year to cover all the areas covered by the mineral claims.

Physical Work: This work consists of improvement of existing roads, construction of new roads in support for drilling, and trenches. The work has been shown in detail in Figure 4.

Drilling: The drill hole was located 30 meters south of the trench A. The rocks exposed in the trench are silicified limestone and hornfelsed argillite. Scheelite occurs in minute fractures in silicified limestone in the trench. The hole was planned such that the contact of granite with the limestone will be intersected.

A thick sequence of limestone and limy argillite (50 metres true width) was intersected showing stronger alteration and more evident tungsten mineralization at depth. About 40 metres of highly hornfelsed rocks were cored before bleached and altered granite was encountered. The fractures in the granite showed alteration envelopes with molybdenite mineralization. Two stages of alteration were observed; quartz-sericite-pyrite and k-feldspar-secondary biotite. Some disseminated molybdenite was also observed (see drill logs).

CONCLUSIONS AND RECOMMENDATIONS

Geological mapping along with drill hole data has shown that a significant sized skarn zone probably occurs at the contact of the limestones encountered in the drill hole, A-77-1 and the granite in an area immediately east, north-east and south-east of the drill site, A-77-1 (see Figure 3A). The sequence of planned drill holes are shown in Figure 3.

Other areas for the possible occurence of skarns are also shown in Figure 3.

Targets can be outlined using:

1. Magnetic surveys (very useful in defining skarn zones, because of the presence of mafic minerals and bleached granite.
2. Geochemical surveys for Molybdenum, Lead,Zinc and Tungsten; lead and zinc anamolies outline limestones and molybdenum outlines granite.
3. The possible targets then explored by diamond drilling.
4. Geological mapping should be extended to the whole area of the M.U.T. claims.

CERTIFICATE OF EXPENDITURES

The following is a statement of expenditures incurred on the M.U.T. Group C claims during the months of March, April, August, September, November and December, 1977. The total number of weeks worked are 14.

Geological Work (5 weeks)

	Dollars
Travel	83.00
Truck Rental (@ $25/day)	290.00
Field Supplies	25.00
Motel	230.00
Food	160.00
Consulting Geologists' Fees	
J.H. Montgomery..April 2, 1977	244.00
G. von Rosen...September 27, 1977	393.00
Preparation of Reports	16.00
Total	1441.00

Physical Work (3 weeks)

Road construction & improvement of existing roads (construction 600 metres, improvement 6.2 km.) 2 trenches (1 metre X 10 metres X 2 metres & .7 metre X 7 metres X 1.5 metres)	520.00
Personnel — 1 caterpillar (D7) & 1 helper.	
Travel (M.U.T. A,B & C- $ 150.00)	50.00
Truck Rental ($ 25.00/day)	175.00
Food and Motel	240.00
Field Supplies	25.00
Total	1010.00

Drilling (November 17 to 30, 1977)

	Dollars
Drilling AQ WL 102 metres out of the total 156.1 metres Logan Diamond Drilling, Salmo, B.C.	4759.00
Cat work, ploughing the snow and pulling water tanks in support of drilling ($ 32.00/Hr).....	2290.00
Travel.....	250.00
Truck Rental.....	850.00
Motel ($ 20.00/day) 6 weeks.....	840.00
Food.....	600.00
Field Supplies.....	80.00
Consulting Geologist Fees (G. von Rosen, Nov 30, 1977)..	750.00
Total.....	10419.00

Total Expenditures Incurred

	Dollars
Geological Work.....	1441.00
Physical Work.....	1010.00
Drilling.....	10419.00
Total.....	12870.00

The above expenditures were paid by Westwind Mines Ltd.,
904-845 Dunsmuir St.
Vancouver, B.C.

CERTIFICATE OF QUALIFICATIONS

I, V. Mohan Ramalingaswamy, hereby declare that:

1. I obtained the degree of B.Sc. Honours in Geological Sciences, Indian Institute of Technology, Kharagpur, India, 1968.

2. I graduated with an M.S. degree in Economic Geology, University of Washington, Seattle, U.S.A., 1975.

3. I have been employed by major mining companies as an exploration geologist since 1970.

4. I personally worked on the M.U.T. Property since the claims were staked in November-December, 1976.

5. I personally logged the core from the Drill Hole, A-77-1.

Dated: 10 March, 1978

V. Ramalingaswamy

V. M. Ramalingaswamy

1120 Heywood Street
North Vancouver, B.C.
V7L 1H4

HOLE NO. A-77-1 PROJECT: M.U.T. SALMO

LOCATION: Near Upper Trench near Cabin
COORDINATES: 117°12'; 49°04'7'
UTM:
NTS: 82F3E ELEV: 4650' (Approx)
INCLINATION: 70° SE AZIMUTH: N130°E
TOTAL DEPTH 512
HORIZ. PROJ. ____ VERT. PROJ: ____

SURVEY		
LENGTH	DIP	AZIMUTH

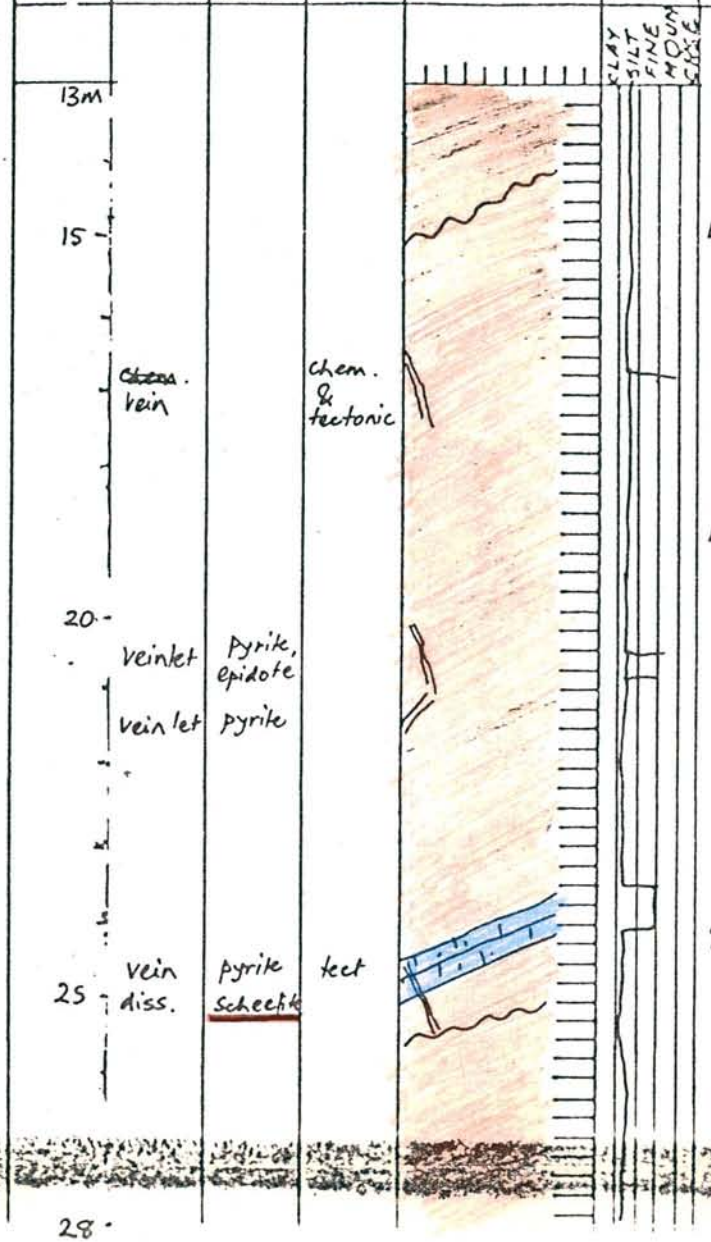
HOLE STARTED: Nov 20 1977
HOLE COMPLETED Dec 16, 1977
DRILLED BY: LOGAN DIAMOND DRILLING

CORE SIZE: AQ RECOVERY: 90-95 %
SCALE 1centimeter - 1meter
LOGGED BY V. M. RAMALINGASWAMY

DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE (CLAY SILT FINE MEDIUM COARSE)	COLOR	BEDDING	REMARKS	SAMPLING No.	SAMPLING LENGTH	ASSAY
0								Argillite with light colored calcitic bands.			
						black	30°	4.5m to 9m. Calcite, Pyrrhotite, pyrite filled fractures perp. to bedding. In places calcite changing to epidote.			
5	Veinlet	Lim, Cal Po, Py	tect ~~lim~~, ~~Cal~~ ~~Po~~, ~~Py~~			black	30°				
10						black	30°				

HOLE No. A-77-1 PROJECT M.U.T. SALMO Page 2 of

INCLINATION: 70°S/E AZIMUTH: N130°E COORDINATES: 117°12', 49°047' SCALE: 1cm - 1meter LOGGED BY: V.M.



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

HOLE No. A-77-1 PROJECT M.U.T. SALMO Page 3 of

INCLINATION: 70°S E AZIMUTH: N130°E COORDINATES: 117° 12' : 49° 047' SCALE: 1cm - 1meter LOGGED BY: V.M.

DEPTH '	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE (CLAY SILT FINE MOUN SAND)	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH meters	ASSAY WO_3
								31.5 to 35.5 Interbedded limestone with argillite converted to medium grade skarn clots of tremolite - epidote - secondary biotite (some garnet?)			
28						black					
	vein					grey	30°				
30											
	Vein diss.	qtz Sph (tr) Scheelite	Chem & tectonic			light grey			71312	31.1 to 31.19	-.08%
	diss.	Scheelite	"								
	diss.	Scheelite	"								
	Vein	Scheelite Pyrr. Py.	"			dark grey	30°	34-35 Band of contact met. argillite (Hornfels) filled with quartz segregations filled with pyrite - 3 stages of deformation. Scheelite related to final stage.			
	"	"	"								
35	Vein	qtz. Pyrr. Py.	tect.								
	Vein	"	"			grey					
								35-37 Silicified limestone with bands of dark grey skarned lst. 1/3 meter Scheelite at 38m.	71311	36.16 to 36.30	.08%
	diss.	Scheelite (tr)	chem								
	diss.	Scheelite (1/3 m)	"			grey	30°				
40								38.6 to 39 m Mottled textured hornfels with % clots of trem. & epidote			
	diss.	Scheelite	Chem					40.9 to 48.8 m. Highly hornfelsed hard argillite with quartz - calcite pyrrhotite pyrite veinlets. Trace Scheelite			
						black					
43								Cross-faults displacing bedding plane cleavage.			

HOLE No. A-77-1 PROJECT MUT. SALMO Page 4 of

INCLINATION: 70°SE AZIMUTH: N130E COORDINATES: 117° 12' , 49° 047' SCALE: 1meter-1cm LOGGED BY: V.M.R

DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE (CLAY SILT FINE MOUN COARSE)	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY WO_3 %
										Meters	
43.	Vein	qtz-pyrr py-cal	tect			dark grey to black					
45	Vein	qtz-sph cal-pyrr	"								
	Vein	qtz-pyrr cal	"								
	"	"	"					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.			
	"	"	"			grey, brown green			71310	49.61 to 49.70	.30
	diss.	scheelite pyrrhotite	chem								
50	diss.	scheelite pyrrhotite	"			grey, brown green			71309	51.68 to 51.79	.16
	diss.	scheelite	"					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			
						dark grey					
	Vein	quartz-pyrrhotite	tect								
						purple brown		← appearance of secondary biotite.			
55	diss.	scheelite	chem								
	Vein	qtz. cal	tect								
	"	"	"								
	diss.	scheelite							71308	57.4 to 57.77	.22
58											

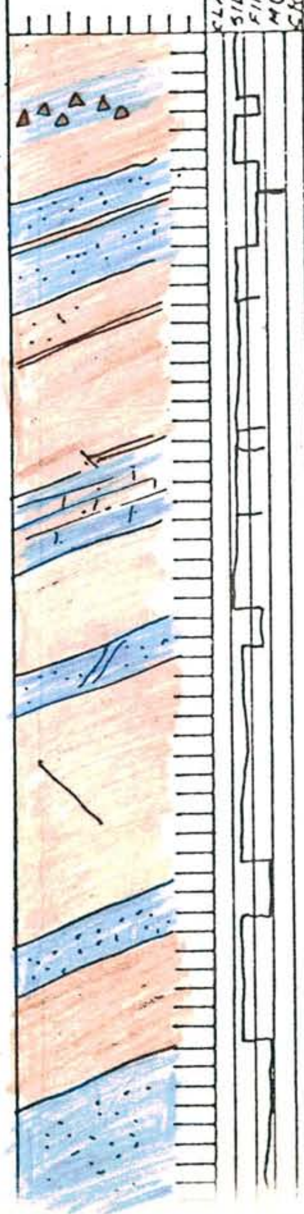
HOLE No. A-77-1 PROJECT

INCLINATION: 70° SE AZIMUTH: N130E COORDINATES: 117° 12' : 49° 047' SCALE: 1meter - 1cm LOGGED BY: V.M.R.

DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY
58	diss.	Scheel	chem.			dark grey	30°	64.7 to 70.8 Contact metamorphosed hard argillaceous limestone. - Segregations of quartz. Some pyrite. Quartz - calcite veinlets. Scheelite observed is a little less than the samples assayed.			
60	diss. with fracture	Scheelite	"			grey to dark grey	30°				
	diss. & fracture	Scheelite	"								
65	diss. & fracture	Scheelite	"			dark grey					
	vein	qtz. Sph. Cal - pyr. Scheelite	tectonic				30°				
	vein	scheelite	chem.								
	vein diss.	Scheelite pyrite	chem.					Fault zone .3 meters wide.			
	vein	sphalerite pyrite	tect			dark grey		70.8 to 72.1 Tectonically brecciated argillaceous limestone with calcite veinlets & fine grained pyrite. Scheelite less			
70	"	qtz pyrite	tect				30°				
	vein	calcite	tectonic breccia			grey					
	vein	qtz. cal py.	tectonic			dark grey					
73											

HOLE No. A-77-1 PROJECT M.U.T. SALMO Page 6 of 11

INCLINATION: 70° SE AZIMUTH: N130°E COORDINATES: 117° 12' : 49° 04.7' SCALE: 1cm - 1m LOGGED BY: V.M.R.



DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY			
73				black	35°							
		cal, py.	tect breccia									
75				grey, to dark grey		77.6 to 85.6 Argillite with bedding plane segregations of quartz. with bands of silicified arg. limestone trem - epi (at 82.6 to 83.1)						
	diss.	scheelite sph.										
	diss.	py.										
	diss.	scheelite										
				black								
		calcite dol.	slump bxn.	grey		85.6 to 88.5 Silicified skarny limestone. spotted mottled texture. The porphyroblasts are epidote and tremolite. (85.7 – 86, 87.9 to 88.5) Interbedded argillite (86.7 to 87.7) Some k-spar at 87.7						
80				grey								
	vein	trace.	tect.									
	diss.	Scheel.										
	vein	calcite		black								
				grey to green								
85	fract.	trace Scheelite	tect									
	diss.	Scheel.		black								
				grey to green		88 to 88.6 trace of diss. coarse grained scheelite.						
88		trace Scheelite										

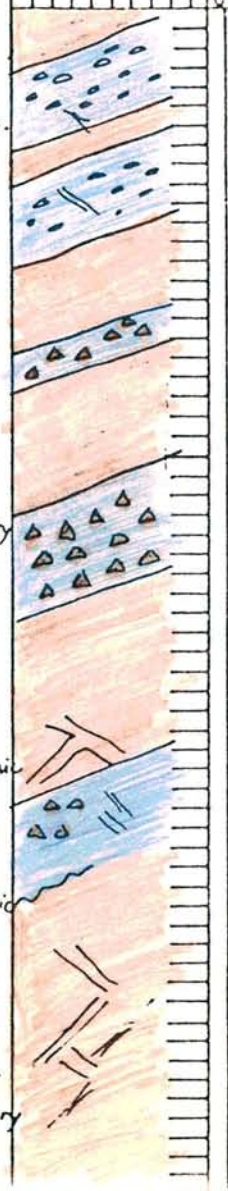
HOLE No. A-77-1 PROJECT MUT SALMO Page 7 of 11

INCLINATION: 70°SE AZIMUTH: N130E COORDINATES: 117° 12' , 49° 04 7' SCALE: 1metre - 1cm LOGGED BY: V. M. R

DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY	ASSAY	ASSAY	ASSAY WO_3
88	diss.	Scheelite chem.						88.9 to 94.3						
	fracture	trace scheelite					25°	Silicified limestone - contact metamorphosed to garnet (gross.) -						
						grey		diopside skarn with veins of		88.88 to				.15%
90	diss. & vein	Scheelite Hownite calcite Scheelite	chem & text.			to light grey		quartz - calcite - diop -	71307	92.04				
								90 to 90.2 mottled texture with	71306	92.38 to 92.48				.33%
	"	scheelite calcite	chem text.				25°	K-spar - epi - from veins.						
								94.3 to 97.7						
	"	Sphalerite Py, Scheelite				grey		silicified argillite with quartz segregations. pyrite and pyrrhotite along bedding						
95	"	"	"											
						dark grey		97.7 to 98.6 silicified contact met. limestone with						
							25°	calcite - secondary biotite, quartz, epidote - veins.						
		Pyrrhotite								97.8 to				.08%
	diss.	Scheelite Sphalerite				grey		102.5 alteration along fracture.	71304	97.98				
	diss & fract.	Pyrite Cpy?	chem & text				25°		71305	99.1 to 99.37				.08%
100	diss	Scheelite				dark grey								
	diss	Scheelite					25°							
103		Sphalerite Py, Pyrr. Sc scheelite	"			grey								

HOLE No. A-77-1 PROJECT M.U.T SALMO Page 8 of 11

INCLINATION: 70°SE AZIMUTH: N130°E COORDINATES: 117°12' , 49°047' SCALE: 1cm - 1metre LOGGED BY: V.M.R.



DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY	ASSAY	ASSAY	ASSAY WO_3
103						grey		103.8 to 104.2, 104.9 to 105.3 Contact met. coarse mottled texture with gts - Epi. some k-spars.						
105	Vein	pyrrhotite Cpy, garnet Epi k-spar diop	chem.			grey	20°	105.8 to 106.2 Same as above with primary slump breeciation.						
						dark grey		109.7 to 110.3 & 110.5 to 111.5 Solution collapse breeciation - matrix with sphalerite & calcite. Fragments - black argillite. Zebra texture observed in fragments.						
		pyrite, pyrrhotite				grey	24°							
						dark grey								
110	slump & solution	trace Scheelite Sph. py.	primary			light grey								
							25°	112.4, 112.6, 112.8 - 113.9 Argillite converted to high grade hornfels & secondary biotite in fragments.						
		pyrrhotite pyrite, calcite epidote Scheelite	tectonic			grey		At 113.8 bedding destroyed Diopside, grossular gt. along Vein perp. to bedding. blocky argillites. some sphalerite zones.	71303	113.33 to 113.5				.08%
	tectonic													
115		Scheelite pyrrhotite pyrite Sphalerite	tectonic				25°							
117		Sphalerite pyrrhotite	tect & primary											

A-77-1 M.U.T SALMO Page 9 of 11

HOLE No: PROJECT

INCLINATION: 70°SE AZIMUTH: N130E COORDINATES: 117°12' , 49°047' SCALE: 1cm - 1metre LOGGED BY: VMR

DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY
117						black		118 to 118.5 argillaceous limestone			
	matrix	Sph. pyrite pyrrhotite	prim.			grey	20°	Contact met. qtz, chlorite, phlogopite			
								Sph. from 118.5 to 118.8			
								Major fault zone 120.5 - 121.2			
								+			
120						dark grey					
	Vein, fracture	pyrr. qtz	tectonic					124 - Cross-cutting vein - pyrite, pyrrhotite, secondary biotite, diopside & garnet - bedding destroyed completely.			
	diss. Vein	Scheelite pyrite, pyrrhotite cpy.	chem.			grey	20°				
	diss.	trace Scheelite	Chem					126.1 to 126.4 Skarn - trem.-diop. (?) garnets			
125						dark grey		127 - appearance of K-spar.			
	vein	pyrrhotite pyrite,	tect					128 to 128.7, 129.5 to 130.0 Mottled texture.			
		py, qtz kam, gt.	chem.					130.3, 131.4 Hornfels with veinlets.			
	Vein	Sphalerite pyrrhotite pyrite scheelite	tect chem			grey	20°	131.4 Skarn with K-felspar.			
130	Vein.	same as above	tect chem			dark grey					
							20°				
	Vein	same as above " scheelite				dark grey					

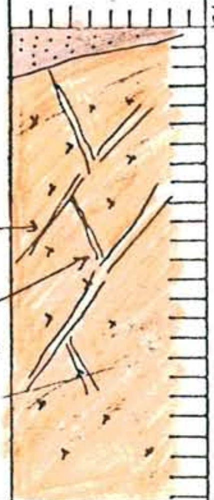
HOLE No. PROJECT

INCLINATION: $70°SE AZIMUTH: N130E COORDINATES: 117°12', 49°047' SCALE: 1metre-1cm LOGGED BY: VMR

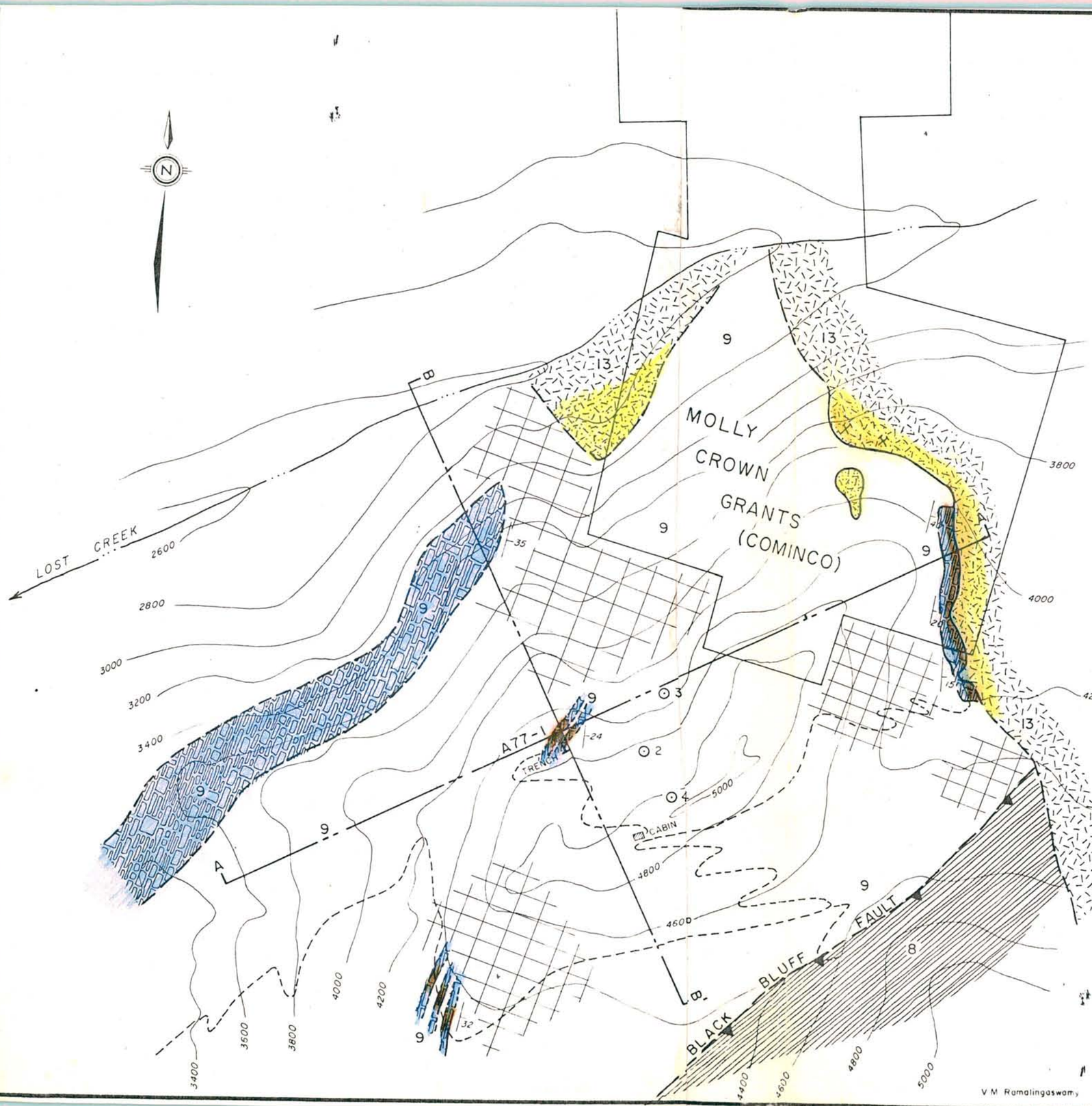
DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY Pb	ASSAY Zn
133		trace Scheelite pyrrhotite pyrite	feet			grey	20°	135.3 to 147.7 Hornfels with bedding plane fractures.				
	vein					20°		137 to 138.2 to 140.9 Secondary biotite qtz veins with pyrrhotite				
135	vein	Sphalerite	feet					142. to 142.7 Veins with secondary bt & k-spar alteration. Sphalerite				
	vein	Sphalerite	feet			dark grey	20°	144.3 to 145.1 Hornfels with hairline fractures with alteration envelopes.				
								145.8 to 146.2 secondary biotite.				
140								147.2 k-spar bordering quartz veinlets.	71302	142 to 142.7	.036%	1.46%
	vein	Sphalerite	feet			dark grey	20°					
	vein	Sphalerite trace Cpy Sphalerite	feet									
						grey	20°					
145	vein B	Sphalerite pyrite	feet									
	bands	Sphalerite pyrite	feet			dark grey to brown	20°	148.5 to 149.5 Spotted hornfels heavily inlain with purply brown sec. biotite, in places diopside & qtz (148.7), k-spar (149)				
	vein	pyrrhotite										

HOLE No. A-77-1 PROJECT MUT SALMO Page 10 of

INCLINATION: 70 SE AZIMUTH: N130E COORDINATES: 117°12', 49°04.7' SCALE: 1 metre - 1 cm LOGGED BY: V.M.

DEPTH	SECONDARY MINERALIZATION TYPE	SECONDARY MINERALIZATION MINS	BRECCIA TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE (CLAY, SILT, FINE, MEDIUM, COARSE)	COLOR	BEDDING	REMARKS	SAMPLING No	SAMPLING LENGTH	ASSAY Mo %
149 – 156.1			qtz-ser-py; k-spar-2ry bt.					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. Qtz.ser-py is later.	71301	152.5 (6 cm)	.036% Mo.
	END	OF	HOLE								

V. Ramalingaswamy
March 10, 1978



LEGEND

13 GRANITE: CRETACEOUS NELSON BATHOLITHIC ROCKS – LOST CREEK STOCK

13 BLEACHED AND ALTERED GRANITE (DESTRUCTION OF MAFICS).

9 ARGILLITES: ORDOVICIAN ACTIVE FORMATION

9 LIMESTONES: INTERBEDDED WITH ARGILLITES – ACTIVE FORMATION

SKARN: CONTACT METAMORPHISM OF ABOVE LIMESTONES & ARGILLITES. & HORNFELS (SILICIFICATION OF DISTAL PORTIONS & GRADING INTO HIGH GRADE GROS. GARNET – DIOPSIDE – EPIDOTE – K-SPAR AT PROXIMAL PORTIONS OF CONTACT ZONE WITH ABOVE GRANITE; SECONDARY BIOTITE, IN HORNFELS)

8 LIMESTONE & PHYLLITES: UPPER CAMBRIAN NELWAY FORMATION

NOTE CONTOUR ELEVATIONS GIVEN ARE IN FEET

DIAMOND DRILL HOLE A77-1

⊙2 PLANNED DIAMOND DRILL HOLES (WITH NUMBERS INDICATING SEQUENCE)

PROSPECTIVE AREAS FOR DETAILED EXPLORATION

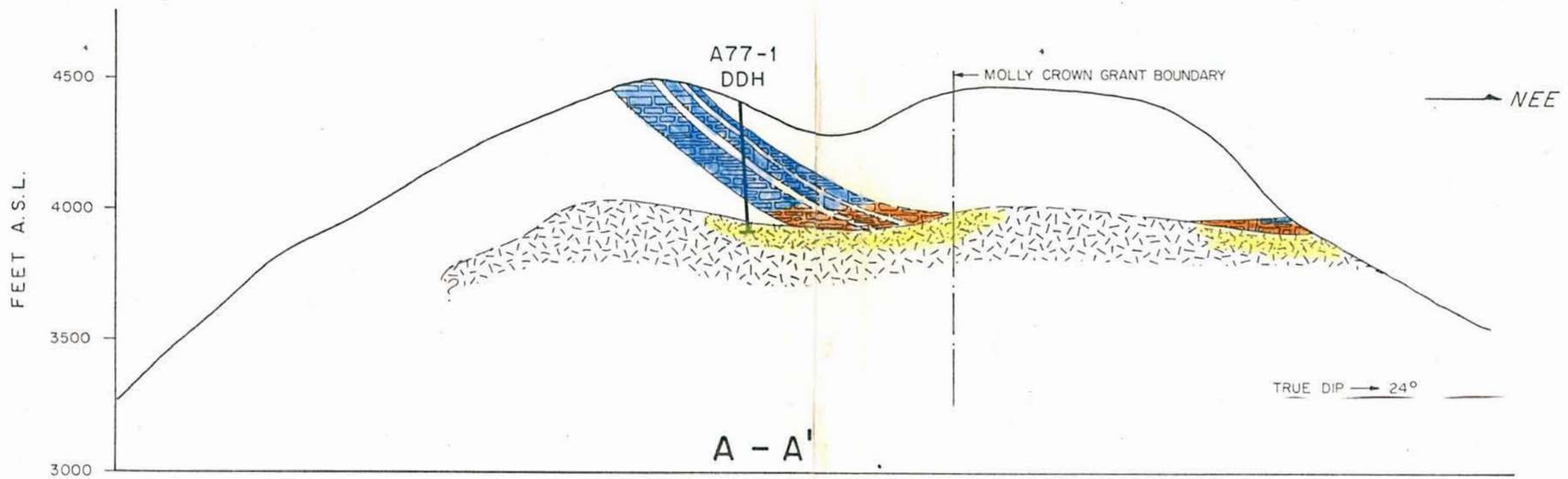
CAT ROAD

0 1000 2000 FEET
0 250 500 METERS

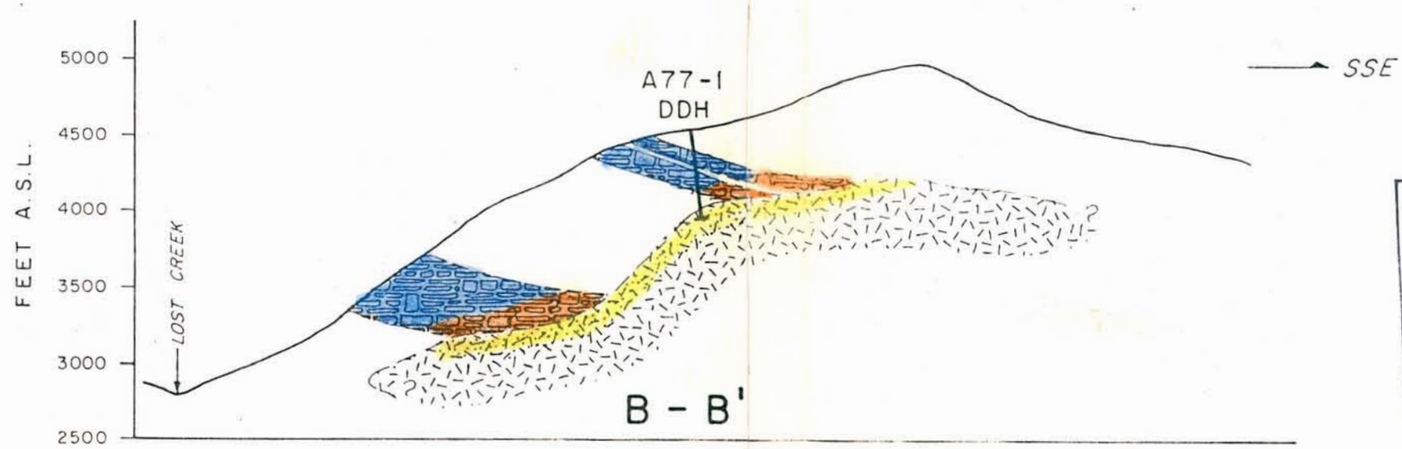
NOTE Fyles, J T and Hewlett, C G (1959) "Stratigraphy and Structure of Salmo Lead – Zinc Area" B C Department of Mines Bulletin No 41

FIGURE 3

M.U.T. GROUP
SALMO B.C.
PLAN OF
GEOLOGY



VERTICAL SCALE OF A-A'
EXAGGERATED 2 TIMES.



HORIZONTAL AND VERTICAL SCALES IDENTICAL ON B-B'

FIGURE 3A

0 1000 3000 FEET
0 250 500 METERS

M.U.T. GROUP
SALMO B.C.
SECTIONS
A - A' AND B - B'

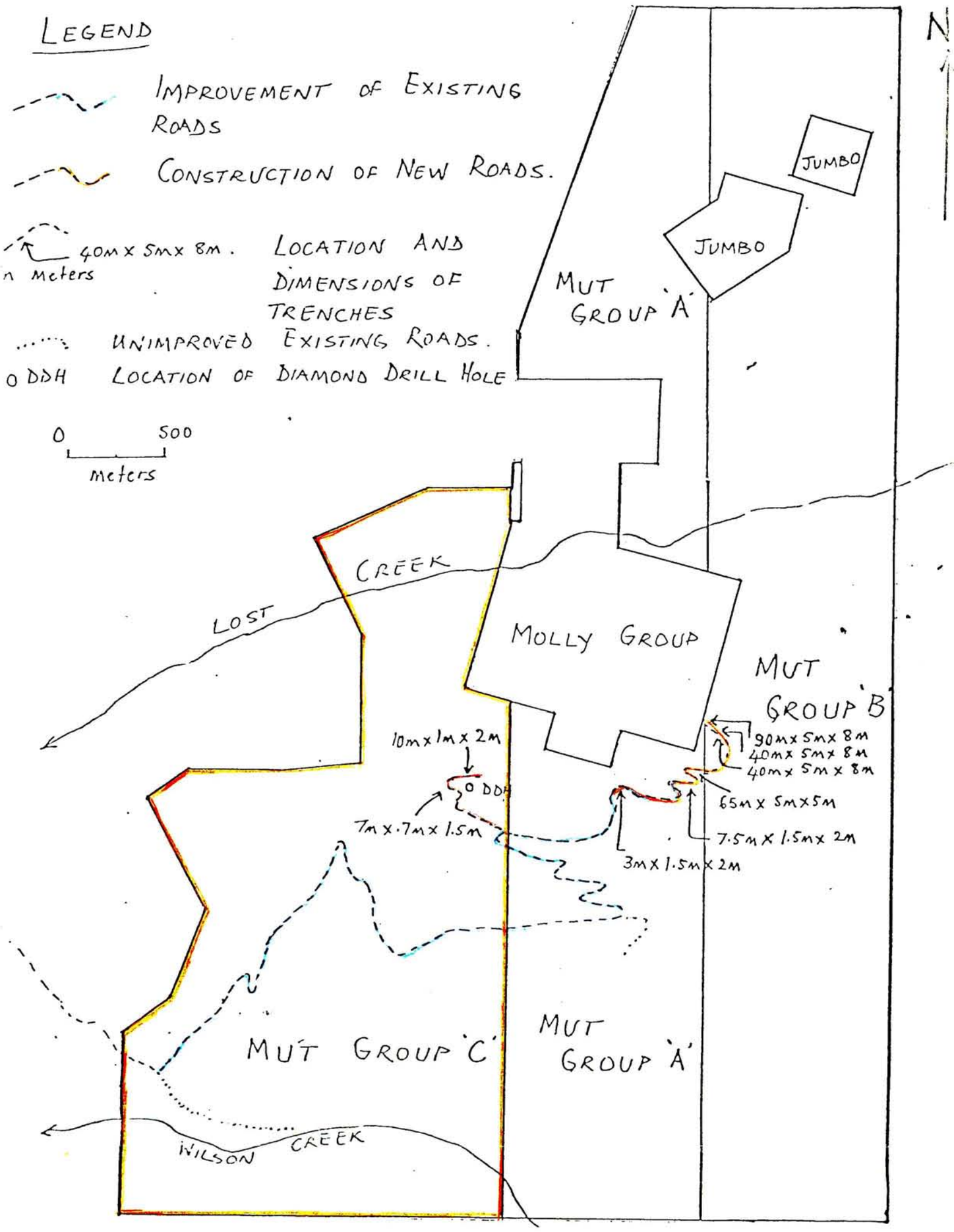


FIGURE 4

PHYSICAL WORK ON THE MUT GROUP OF CLAIMS.

SALMO AREA - MAP NO. 82F/3E

NELSON MINING DIVISION