

GEOLOGY AND ROCK SAMPLING OF THE
CU - MOLY PROSPECT.

MINERAL CLAIMS:

	<u>Claim No.</u>
Cu - Moly 1	248 (1)
Cu - Moly 6	384 (12)
Cu - Moly 7	390 (12)
Cu - Moly 8	383 (12)
Cu - Moly 9	763 (1)
Cu - Moly 10	764 (1)
Cu - Moly 11	765 (1)
Cu - Moly 12	766 (1)

NEW WESTMINSTER MINING DIVISION

NTS 92J/2E
LATITUDE 50° 02'
LONGITUDE 122° 32.5'

OWNER: G. NAGY
OPERATOR SVEINSON WAY MINERAL SERVICES LTD.

B. WAY AND G. ALLEN
DECEMBER 13, 1980

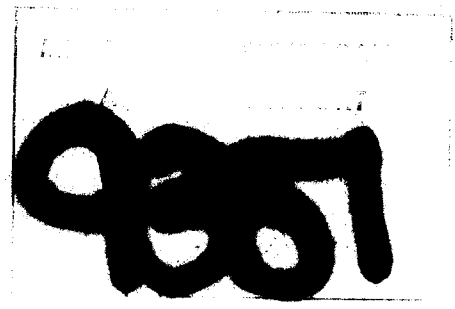


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Drawings

Geology Plan	Cumo 1	In pocket
Assay Plan	Cumo 2	In pocket
Index Map	Cumo 3	In pocket

INTRODUCTION

The Cu-Moly claims occur at a complex contact region of Coast Range granodiorite and the Fire Lake Group adjacent to the Lillooet River, New Westminster Mining Division, British Columbia. Most showings appear along the main log haulage road on the west side of the Lillooet River. Access is best gained by driving south from Pemberton, B. C., parallel to the Lillooet River to a bridge crossing this river at the north end of Harrison Lake and by driving north, again parallel to the Lillooet River, to Kilometer 31. Various trenches and rock cuts with molybdenite and chalcopyrite mineralization mark the mineralized area.

The prospect was probably discovered while the road was being pushed northward. Considerable trenching on mineralized areas has occurred since then. A geochemical soil sampling program was conducted during 1966 by Vanguard Minerals. Subsequently the three diamond drill holes are reported to have been drilled; only one collar location can be found. During 1978 and 1979, owner Mr. G. Nagy of Sardis, B. C. established a small concentrating plant and processed hygrade mineralization from surface pits. His work yielded approximately 1,500 pounds of good quality concentrate. Also during 1978, T. Lewis of the B. C. Department of Energy, Mines and Petroleum Resources conducted reconnaissance geological mapping at a scale of 1:10,000.

Sveinson Way Mineral Services Ltd., acting as general partner for S. W. Exploration Partnership (1980), conducted a field evaluation of the Cu-Moly prospect involving geochem follow-up studies, geological mapping and rock sampling. In exchange for technical information, assays and a report for assessment purposes, Mr. Nagy agreed to give S. W. Exploration Partnership (1980) a first right of refusal concerning the Cu-Moly prospect.

Geochemical anomalies outlined by a soil sampling grid conducted by Vanguard Minerals Ltd. during 1966 were investigated in order to determine the cause of copper and molybdenum enrichment in soil. As well, detailed geological mapping was conducted over an area approximately 400 m by 250 m at a scale of 1:1,000. In areas of mineralization, 89 channel samples were cut over 2 meter lengths and assayed for Cu and MoS_2 . Three grab samples were also assayed for Au, Ag, Cu and MoS_2 . For control, a grid system was established with a true north azimuth as the baseline. In total 2,980 M of control grid were established.

GEOLOGY

The Cu-Moly Property occurs within the Coast Range. Regional geology consists of a thick sequence of eugeosynclinal sediments and volcanics, which were intruded by or "granitized" by a long period of plutonism (Roddick, 1965).

The Fire Lake Group consists of a thick assemblage of strata of sedimentary and volcanic origin dating Upper Jurassic to Lower Cretaceous. Mapping has indicated that granitic debris is more common than in older groups (Roddick, 1965). Sulfide mineralization occurs in contact zones adjacent to a granodiorite pluton.

On the property the Fire Lake Group has been subdivided into two units. The first has been called Sedimentary Breccia. Composition is predominantly foliated or bedded tuffs or tuffaceous sediments. Breccia blocks averaging 5 to 10 centimeters in diameter are subangular to subrounded. Larger blocks up to several tens of centimeters occur. The tuffaceous rocks contain subrounded to subhedral greenish feldspar or felsic lithic fragments in the 1 to 2 mm size. The groundmass is very fine grained, dark greenish gray, siliceous and chloritic. The matrix which makes up 5% to more than 50% of the rock is in itself a micro breccia consisting of smaller fragments of granodiorite and tuffs which grade into an assemblage of chlorite, biotite, quartz and feldspar. At times bleaching and silication give the breccia an aplitic appearance. Subangular to rounded blocks of granodiorite up to several tens of centimeters form a variable proportion of the sedimentary breccia.

The second subdivision has been called Metasediments and is itself subdivided as follows:

Banded Quartzite and Siliceous Sediments: These rocks are color laminated in 1 to 10 mm bands, are sugary, fine to medium grained and are light cream, purplish to dark brown colored.

Phyllites: Commonly interbedded and interlaminated with Quartzites are metamorphosed argillaceous horizons. These rocks are very fine grained, dark gray and fissile.

Pyroclastic Sediments: These rocks have a fine grained, dark gray siliceous groundmass with some chlorite and sericite development. Up to 30 percent is composed of 1 to 2 mm felsic fragments.

Conglomerate - Sediments sometimes contain up to 20 percent of rounded pebbles of feldspar porphyry, granodiorite and less often amygdaloidal basalt. Pebbles are flattened in the foliation plane and occur up to 2 cm in length.

The sedimentary breccia unit appears to be a slumpage feature occurring within the metasediments. In plan the breccia seems to have a circular shape but exposure is poor. The southern contact of the two rock types appears to be a fault.

Various faults appear to cut the sediments with north and northeasterly trends. Orientation of the granodiorite in the southern portion of the mapped area is unclear. A diamond drill hole is reported to have intersected granodiorite at a shallow depth after collaring in sedimentary breccia, suggesting that the pluton has a shallow northerly dip.

Sulfide mineralization in the form of pyrite, chalcopyrite and molybdenite occur most commonly as fracture-film coatings, fracture fillings and disseminations in the sedimentary breccia unit, although they similarly occur in the metasediments. The most intense mineralization occurs in proximity to the granodiorite contact being hosted by the breccia. Molybdenite was observed on only one occasion in granodiorite although small amounts of pyrite are frequent.

Shear zones within the area may also be mineralized as in the case toward the north end of the grid where minor quartz replacement is accompanied by sphalerite, pyrite and chalcopyrite. Gold mineralization, although not seen, appeared in assays.

SAMPLING PROGRAM

In areas with apparent mineralization and good exposure, channel samples of 2 meter length were cut in order to determine the grade tenure. Unmineralized areas were not sampled; hydrograde mineralization in pits has been removed and consequently cannot be sampled. The average grade, considering all samples, follows:

0.05% MoS₂
0.11% Cu

The sampling is not suggested to be representative of the deposit but serves to indicate that important concentrations of molybdenite occur.

GEOCHEM ANOMALY INVESTIGATION

During 1966 Vanguard conducted a grid soil sampling program over the area of mineralization. Molybdenum and copper anomalies superimpose spatially with fair agreement. The strongest overlies the roadside pits where hygrade molybdenum is reported to have occurred. Disseminated molybdenite and chalcopyrite were observed to underlie the anomaly in the northward direction. Immediately west another anomaly occurs and is underlain by bleached and silicated sedimentary breccia. The granodiorite pluton probably underlies the breccia and some structural activity is suggested in overburden filled areas. Minor molybdenite and chalcopyrite were recognized.

To the south a third anomaly occurs overlying metasedimentary rocks. No molybdenum or copper minerals were observed to explain the enrichment in soil. Again the contact with granodiorite probably lies at a shallow depth beneath the area of greater metal content.

RECOMMENDATION

Geological mapping to date has shown that sulfide mineralization occurs in low concentrations away from the granodiorite contact. The metals of interest are molybdenum and copper. Adjacent to this contact, however, evidence suggests that better metal grade may occur both as disseminations and pods.

The most cost effective way to test this idea would utilize drilling, preferably using coring methods.

Prior to drilling, however, geological mapping should be continued to delineate the contact regions in greater detail. Mapping should also be expanded to include a greater area. Several thin section studies should be made of the breccia unit for an understanding of its origin as well as the alteration phases. A fracture orientation pattern study should be completed and the nature of the disseminated mineralization studied.

Randomly selected pulps retained from assay work should be tested for precious metal content and a multi-element spectrographic analysis done on at least one sample. Several anomalies located by the Vanguard soil sample survey remain to be examined and explained by ground traverse.

Following these geological studies, three short diamond drill holes should be completed, their location being determined following completion of the geological mapping.

REFERENCES

Roddick, J. A., 1965: Vancouver North,
Coquitlam and Pitt Lake
Map Areas, British Columbia;
G.S.C., Memoir 335.

STATEMENT OF QUALIFICATION

Work performed on claims held by G. Nagy of Sardis, B. C. was conducted under my direction.

I am a geologist having graduated from the University of Alberta in 1973. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta. I have practiced my profession for eight years.


Currently I am a principal in the firm Sveinson Way Mineral Services Ltd. which conducted the work reported herein.

Field work was completed by G. J. Allen, a 1975 graduate in geological sciences. He is fully experienced in geochemical techniques and interpretations and in geological mapping. He was assisted by D. Christie.

B. Way
Sveinson Way Mineral Services Ltd.
#223 Hangar #3
Municipal Airport
Edmonton, Alberta

G. Allen
1670 Botwood Lane
Cowichan Bay, British Columbia

D. Christie
1535 Nanton Avenue
Vancouver, British Columbia



STATEMENT OF EXPENDITURES

Travel:	Vancouver to property, return, expediting @ \$.30/mile 200 mi. x 2 =	\$ 120.00
Assays:	92 samples Cu @ \$5.50	506.00
Assays:	92 samples MoS ₂ @ \$7.50	690.00
Assays:	3 samples Au & Ag @ \$9.50	28.50
Assays:	3 samples Pb @ \$5.50	16.50
Assays:	3 samples Zn @ \$5.50	16.50
Assays:	Overweight charge	129.60
Geologist:	6 days @ \$110/day Field June 25-30/80	660.00
	1 day @ \$90/day Report Sept. 9/80	90.00
	1 day @ \$90/day Maps Sept. 10/80	90.00
	2 days @ \$120/day Field & Report Aug.23/80 Dec.9/80	240.00
Assistant:	6 days @ \$60/day June 25-30/80	360.00
Food:	6 days @ \$25/day	150.00
Equipment:	apportioned use	165.00
		<u>\$3,262.10</u>
		<u><u>\$3,262.10</u></u>

APPENDIX A

A S S A Y C E R T I F I C A T E S



39249 }

1500 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-54554

Certificate of Analysis

TO SW Exploration Partnership

223 No. 3 Hangar Municipal Airport

Edmonton, Alberta T5G 2Z3

A20 - 661

June 27, 1980

Cu-MoLY CHANNEL SAMPLES

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	PERCENT		MARKED	PERCENT		MARKED	PERCENT	
	Cu	MoS ₂		Cu	MoS ₂		Cu	MoS ₂
39176	0.26	0.098	39196	0.02	0.030	39216	0.12	0.123
39177	0.16	0.063	39197	0.05	0.115	39217	0.17	0.015
39178	0.14	0.033	39198	0.12	0.102	39219	0.06	0.037
39179	0.15	0.023	39199	0.05	0.027	39220	0.11	0.028
39180	0.12	0.029	39200	0.07	0.064	39221	0.21	0.117
39181	0.08	0.010	39201	0.03	0.080	39222	0.05	0.022
39182	0.08	0.015	39202	0.03	0.070	39223	0.13	0.077
39183	0.08	0.012	39203	0.12	0.092	39224	0.23	0.082
39184	0.03	0.002	39204	0.08	0.180	39225	0.32	0.13
39185	0.04	0.004	39205	0.02	0.093	39226	0.21	0.060
39186	0.06	0.020	39206	0.02	0.008	39227	0.23	0.027
39187	0.03	0.007	39207	0.07	0.022	39228	0.30	0.092
39188	0.02	0.003	39208	0.13	0.055	39229	0.31	0.072
39189	0.02	<0.002	39209	0.19	0.025	39230	0.16	0.098
39190	0.03	0.006	39210	0.30	0.177	39231	0.30	0.108
39191	0.02	0.002	39211	0.27	0.178	39232	0.05	0.087
39192	0.01	0.008	39212	0.28	0.082	39233	0.01	0.030
39193	0.01	0.013	39213	0.11	0.040	39234	0.02	0.027
39194	0.02	0.060	39214	0.04	0.020	39235	0.01	0.008
39195	0.02	0.003	39215	0.11	0.077	39236	0.02	0.025

NOTE:

Rejects retained two weeks

Pulps retained three months

unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.
 REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

R. K. Ross



BONDAR-CLEGG & COMPANY LTD.

1500 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-54554

Certificate of Analysis

TO SW Exploration Partnership

A20 - 661

June 27, 1980

Page 2

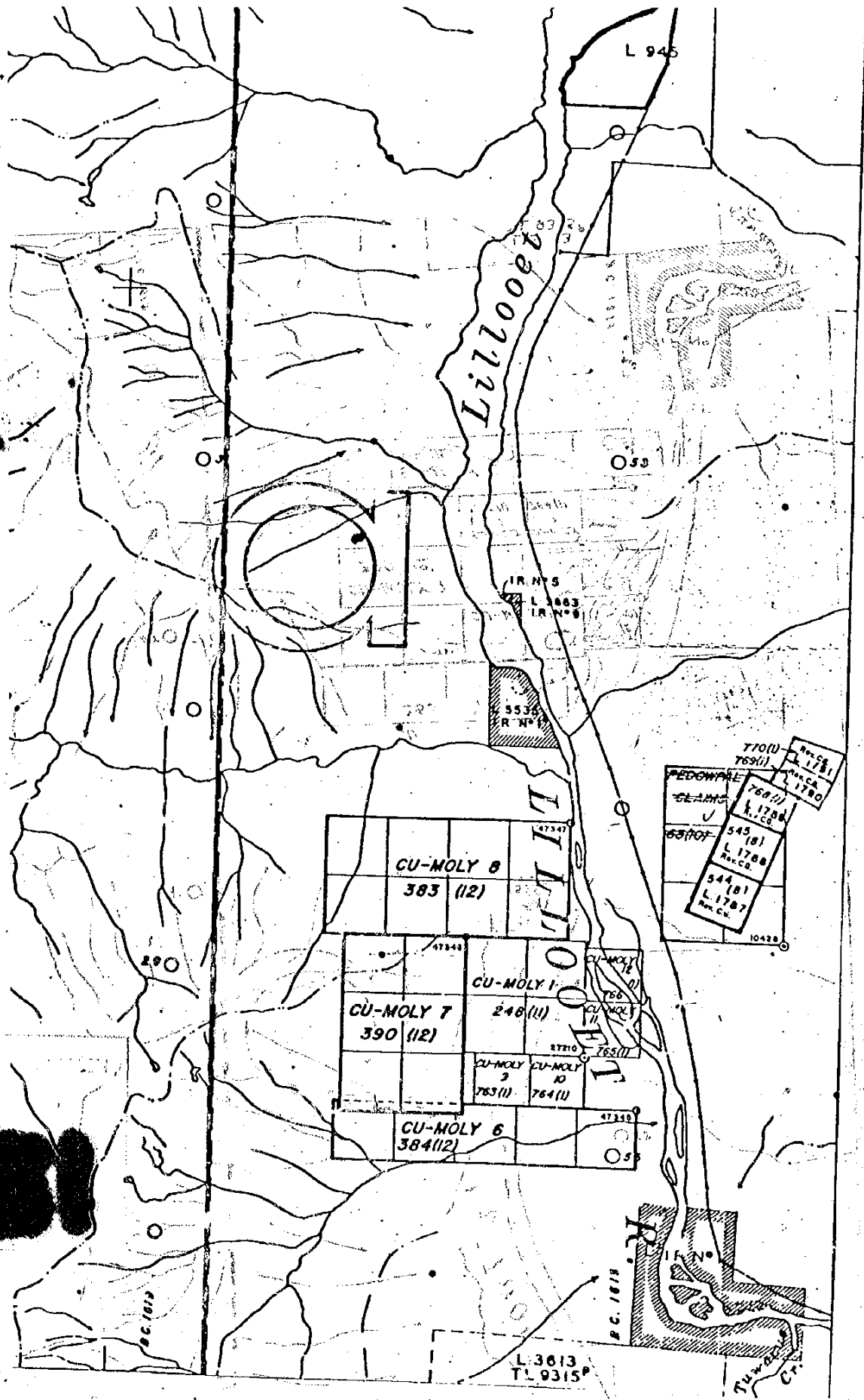
I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	PERCENT	PERCENT	MARKED	PERCENT	PERCENT	MARKED	PERCENT	PERCENT
	Cu	MoS ₂						
39237	0.03	0.060						
39238	0.07	0.015						
39239	0.04	0.006						
39240	0.03	0.048						
39241	0.05	0.036						
39242	0.03	0.033						
39243	0.16	0.097						
39244	0.10	0.055						
39245	0.05	0.043						
39246	0.25	0.059						
39247	0.25	0.133						
39248	0.22	0.047						
39250	0.11	0.050						
39251	0.13	0.047						
39252	0.08	0.010						
39253	0.16	0.012						
39254	0.13	0.008						
39255	0.10	0.043						
39256	0.12	0.015						

NOTE: cc Mr. G. Allen

BONDAR-CLEGG & COMPANY LTD.
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

Reacts retained two weeks



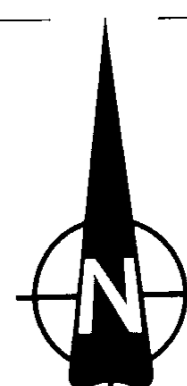
Index Map

92 J/2 E

Cu-Moly I
248 (II)

Cu-Moly 12
766 (I)

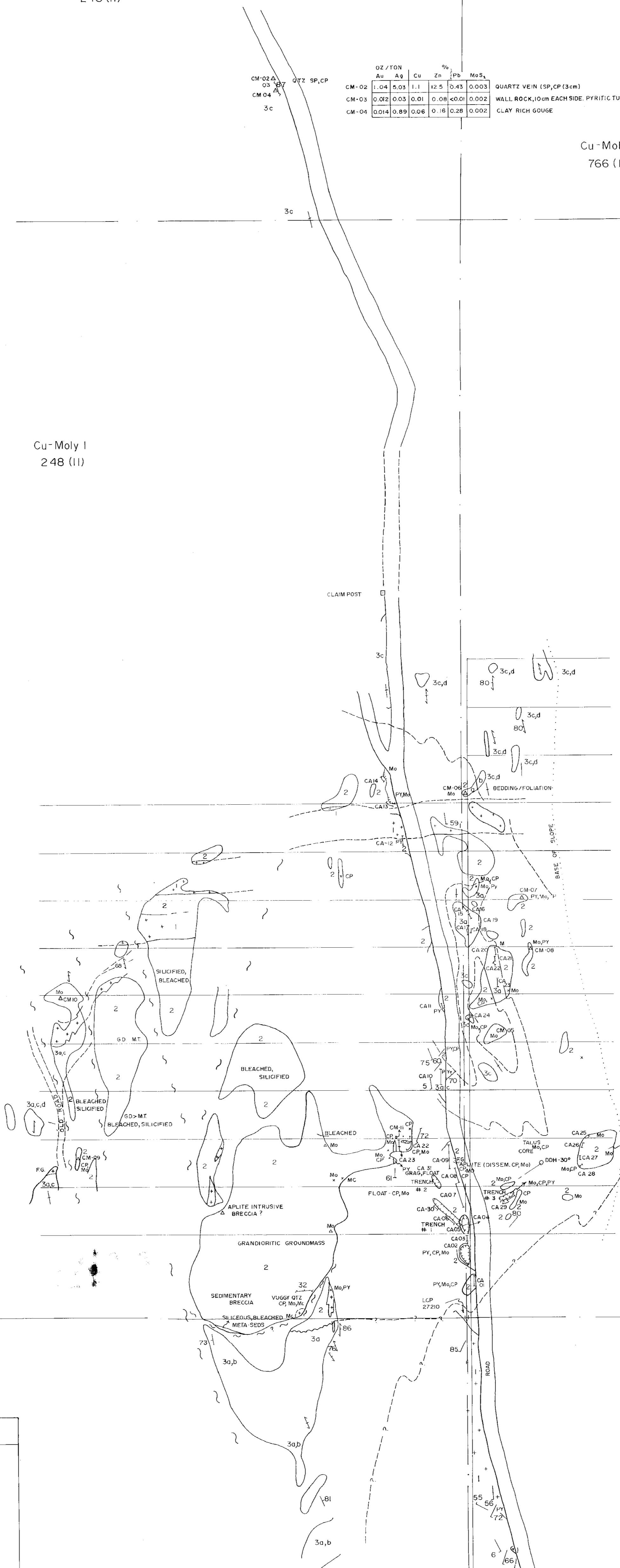
Cu-Moly I
248 (II)



DZ / TON	% ₁					MoS ₁
	As	Ag	Cu	Zn	Pb	
CM-02	1.04	5.03	1.1	12.5	0.43	0.003
CM-03	0.002	0.03	0.01	0.08	<0.01	0.002
CM-04	0.014	0.89	0.06	0.16	0.28	0.002

QUARTZ VEIN (SP, CP (3cm))
WALL ROCK, 10cm EACH SIDE, PYRITIC TUFFS
CLAY RICH GOUGE

2+00N -
2+20N -
2+00N -
1+00N -
1+60N -
1+40N -
1+20N -
1+00N -
0+80N -
0+60N -
0+40N -
0+20N -
0+00N -



Cu-Moly II
765 (I)

Cu-Moly 10
764 (I)

S.W. EXPLORATION PARTNERSHIP (1980)
NTS-92J2

Cu-Moly
1:1000
1cm = 10M

SYMBOLS

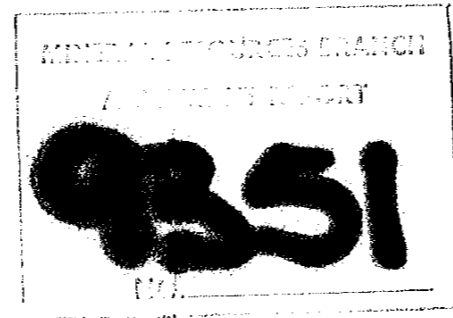
OUTCROP	SANDING, BEDDING
CREEK	FOLIATION (BEDDING?)
BASE OF SLOPE (LIMIT OF ALLUVIAL COVER)	JOINT
TRENCH, PIT	SHEAR, FAULT (? QUARTZ VEIN)
GEOLOGICAL CONTACT	MINERALIZATION
FAULT	CP CHALCOPRITE
CAOI CHANNEL SAMPLE	Py PYRITE
CMOI GRAB SAMPLE	Mo MOLYBDENITE
	MC MALACHITE
	GD-MT GRANDIORITE + META-TUFF

GEOLOGY

1	INTRUSIVE GRANDIORITE
2	SEDIMENTARY BRECCIA WITH GRANDIORITE, INTERMEDIATE META-TUFF AND FELSIC INTRUSIVE CLASTS
3	META-SEDIMENTS

a) BANDED QUARTZITES AND SILICEOUS SEDIMENTS
b) PHYLLITES
c) INTERMEDIATE PYROCLASTIC SEDIMENTS, TUFF TO LAPILLI
d) CONGLOMERATIC PHASE OF 3c

G. ALLEN '80



1+80W | 1+60W | 1+40W | 1+20W | 1+00W | 0+80W | 0+60W | 0+40W | 0+20W | BASELINE | 0+20E | 0+40E | 0+60E

Cumo 1

Au-1.04g/t, Ag-5.03g/t
 Cu-1.10%, MoS₂-0.003%
 Pb-0.43%, Zn-12.50%
 CM 02
 Au-0.012g/t, Ag-0.03g/t
 Cu-0.01%, MoS₂-0.003%
 Pb-0.01%, Zn-0.08%
 CM 03
 Au-0.014g/t, Ag-0.05g/t
 Cu-0.06%, MoS₂-0.002%
 Pb-0.28%, Zn-0.16%
 CM

Cu-Moly 12
766 (I)

Cu Moly I
248 (II)



Cu-Moly I
248 (II)

CLAIM POST

21+40N
2+20N
2+00N

[0.02, 0.053]
 [0.02, 0.003] CA 14
 Cu-0.01% CM
 MoS₂-0.028% MoS₂

1+80N
1+60N

[0.02, 0.060]
 [0.01, 0.13] CA 15
 [0.01, 0.008]
 [0.02, 0.006] CA 12
 CM-07 Cu-0.06%
 MoS₂-0.042%
 CA15 [0.12, 0.002]
 [0.05, 0.115]
 CA16 [0.07, 0.064]
 [0.05, 0.027]
 CA19 [0.08, 0.160]
 [0.14, 0.082]
 CH-08 Cu-0.01%
 MoS₂-0.029%
 CA20 [0.02, 0.098]
 CA21 [0.05, 0.087]
 CA22 [0.01, 0.050]
 CA23 [0.01, 0.008]
 [0.02, 0.027]

1+40N
1+20N
1+00N

ΔCM10 Cu-0.01%
 MoS₂-0.020%
 0.03, 0.006 CA11
 CA24 [0.03, 0.060]
 [0.02, 0.025]
 CA25 [0.01, 0.033]
 MoS₂-0.002%

0+80N
0+60N

[0.02, 0.002]
 [0.02, 0.003] CA 11
 [0.03, 0.007] CA 10
 Cu-0.26%
 MoS₂-0.027%
 CA 32 [0.04, 0.020]
 [0.04, 0.004]
 [0.03, 0.002]
 [0.08, 0.012]
 [0.04, 0.015] CA 25
 CA 17 [0.04, 0.015]
 [0.08, 0.010]
 [0.04, 0.009] CA 27
 CA 28 [0.03, 0.044]
 [0.05, 0.036]

0+40N
0+20N

ΔCM09 Cu-0.01%
 MoS₂-0.003%
 [0.25, 0.133]
 [0.14, 0.098]
 [0.31, 0.172] CA07
 [0.23, 0.027] CA10
 [0.31, 0.065] CA10
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 [0.23, 0.088]
 [0.13, 0.077]
 [0.15, 0.022]
 [0.4, 0.020]
 [0.28, 0.040]
 [0.27, 0.178]
 [0.30, 0.177]
 CA02
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 CA97
 CA98
 CA99
 CA100

0+00N

Cu Moly II
765 (I)

1+80W
1+60W
1+40W
1+20W
0+00W
0+80W
0+60W
0+40W
0+20W
0+00W
0+20E
0+40E
0+60E

Cu-Moly IO
764 (I)

2+00S

4+00S

6+00S

8+00S

10+00S

MILLSITE

CM-04
Cu-0.01%
MoS₂-0.02%

CHANNEL	CA-OI	RESULTS	CM-OI (RESULTS)	GRAB SAMPLES
	[0.19, 0.025]	[0.19, 0.025]		
	[0.15, 0.005]	[0.15, 0.005]		
	[0.07, 0.022]	[0.07, 0.022]		
SAMPLE NO.	RESULTS	RESULTS		
	Cu%, MoS ₂ %	Cu%, MoS ₂ %		

CHANNEL SAMPLES

LILLOET RIVER

S.W. EXPLORATION PARTNERSHIP (1980)

Cu-Moly

9351

10 0 10 20
metres
SCALE 1:1000

6+00 5+00 4+00 3+00 2+00 1+00 12+00S 1+00E 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00

Cumod