

(2)

SILVER STANDARD MINES LTD (NPL)  
FRENCH PEAK PROJECT 1971

C.F. Kowall

January 1972

673877

SILVER STANDARD MINES LIMITED  
(NON-PERSONAL LIABILITY)  
808-602 WEST HASTINGS STREET  
VANCOUVER 2, B.C.

REPORT

ON

FRENCH PEAK PROJECT - 1971

BABINE LAKE AREA

Cominco Mining Division

by

Charles F. Kowall  
Geologist

January 1972

SILVER STANDARD MINES

TABLE OF CONTENTS

SUMMARY . . . . .	Page 1
INTRODUCTION. . . . .	Page 2
1971 WORK PROGRAM . . . . .	Page 3
DISCUSSION OF DRILLING. . . . .	Page 3
GEOLOGY . . . . .	Page 4
RECOMMENDATIONS . . . . .	Page 6

ATTACHMENTS:

1. Diamond Drill Logs - Holes 1 to 5
2. Claim Map
3. Geological Map of Trench Area
4. Copper Geochem
5. Molybdenum Geochem
6. Silver Geochem
7. Zinc Geochem

- 1 -

SUMMARY

The French Peak property is a porphyry copper prospect. It is located on an overburden-covered plateau at an elevation of about 4500 feet and about ten miles west of the north end of Sabina Lake.

In 1971 a total of 1505 feet of drilling in six holes was done in an area of partially coincident magnetometer, I.P. and copper-molybdenum-silver geochem anomalies. Resulting core assays were generally around 0.1% copper, with the best intersection being 90 feet of 0.25% copper-moly equivalent. The most complex area structurally and geophysically has been drilled. A large area of anomalous I.P. and geochem remains to be tested.

It is not recommended that Silver Standard do any further work on the property. The claims are in good standing for many years. Perhaps another company can be found that is willing to drill the property further, or perhaps in the future 0.25% copper-molybdenum will be worth pursuing.

INTRODUCTION

The French Peak property consists of 26 claims covering a Granitic-type of porphyry copper prospect which has intruded Hazelton Group volcanics and sediments. The property was staked originally by Highland Bell Ltd. and is largely overburden-covered. Highland Bell did a considerable amount of work on the property short of drilling it. Magnetometer and I.P. surveys both showed anomalies partially overlapping strong geochem anomalies for copper, molybdenum and silver. Tranching had shown highly fractured and weathered rock carrying values in copper and silver (0.2% copper and 1 1/2 oz. Ag over 120 feet). Highland Bell then dropped the property, after which it was restaked by Silver Standard. It was thought that unweathered rock might run considerably higher in sulfide content, and if the sulfide was composed of chalcopyrite grade would improve with depth. A drilling program was considered and put into effect during the summer program.

1971 WORK PROGRAM

Work done during the summer of 1971 consisted of the following:

1. A ten-man camp was set up. Supplies and equipment were transported from Mercury Logging Camp at the north end of Babine Lake to the property via Okanagan Helicopters.
2. Six holes were diamond drilled totalling 1505 feet.
3. The geochem grid was extended.
4. The area was closely prospected in the vicinity of the claim group.
5. A few prospecting camps were established in the nearby areas to examine other showings.

DISCUSSION OF DRILLING

A total of 1505 feet of drilling was completed on the property. Six holes were drilled in a 1500-foot area that I feel is the most complex structurally. In addition, magnetometer, I.P., and geochemical surveys had detected anomalies which were all coincident within the area that was drilled. Hornfelsed Hazelton Group rocks on the west are in fault contact with feldspar porphyry to the east. A strong north-south lineament can be seen passing through the contact area. All of the first five drill holes were in pyritic feldspar porphyry. Moderate kaolinization and silicification are also present. Kaolinization becomes intense over widths of 20 to 50 feet in shear zones with considerable sericite-clay gouge. Most

holes averaged around 0.1% copper with 0.02% molybdenite. The best intersections over appreciable width were in hole #3 where 90 feet at the top of the hole averaged 0.25% copper-moly equivalent, and the top 180 feet averaged 0.2% copper-moly equivalent. This hole also showed some gypsum on fracture fillings in the bottom 100 feet. Hole #6 was the only hole to pass from porphyry into hornfels and mineralization there was only about 0.1% copper.

A few 10-foot sections of core assayed 0.3 to 0.44% copper in some of the other holes. It was established that high I.P. results are due to disseminated sulphides as noted throughout the drill core. The magnetic anomaly is due to a magnetic post-mineral porphyry dike and to magnetite disseminated in the hornfelsed Hazelton Group rocks near the porphyry contact.

#### GEOLOGY

The structural geology as well as the rock types involved present an overall interesting structure to test for porphyry mineralization. The intrusive is composed of feldspar porphyry, biotite feldspar porphyry and quartz monzonite, which were emplaced along an unconformity between Hazelton volcanics and sediments. The Hazelton Group was intruded by quartz monzonite, which was intruded by feldspar porphyry, which in turn was intruded by biotite feldspar porphyry. A pyritic halo covers the plateau area and is one and one-half miles in an east-west direction, and one mile in a north-south direction. Strong northerly trending fault-lineaments bound the pyrite zone on its east and west sides. In addition, a strong east-west fault-lineament passes along the northern edge of this zone.

A post-mineral group of acidic to basic dikes occurs near the centre of the pyrite zone in the porphyrys and quartz monzonite. The basic dikes are magnetic; the acidic dikes are not.

The fault-lineaments could represent a system of block faulting which was caused by forceful magnetic intrusion. It is not known if the pyrite-intrusive-hornfels zone is the "graben" or the "horst". It may well be the horst, even though it is a topographic low, as it is well fractured and thus could have eroded down to its present position more quickly than the surrounding graben rocks.

The ridge to the north of the mineralized zone is interesting also because of the presence of a post-mineral extrusive flow. The flow is composed of a very thick body of feldspar porphyry which often displays a columnar-type jointing. This flow is about 500 feet thick and is lying on unaltered shale of the Hazelton Group. The porphyry must have been very viscous, due to a highly acid composition which would account for its thick-bedded characteristic. It covers approximately one square mile. No surface textures common to volcanic flows were seen on top of the porphyry flow. It may have been a thick sill originally, and if overlain by the same shale that underlies it, could have achieved its present position by erosion and removal of the overlying sediments.



RECOMMENDATIONS

1. It is not recommended that Silver Standard do any further work on the property. The claims should be held, however, as the grade of the best intersection approaches open pit minimum grade, and because most of the anomalies are untested and overburden-covered.
  
2. It is possible that the property could be optioned to some other company who would drill or percussion drill the rest of the geochem - I.P. coincident anomalies. Timing, based on high interest in the area, is of importance to consider when looking for a partner. Favourable metal markets would also have a considerable bearing on the matter.

Respectfully submitted,

Charles F. Kowall  
Geologist

SILVER STANDARD MINES

ABBREVIATIONS AND SYMBOLS

ROCK TYPE:

FP	Feldspar porphyry
QM	Quartz monzonite
FD	Felsic dyke
BD	Basaltic dyke
CP	Crowded porphyry
Cu	Chalcopyrite
MoS <sub>2</sub>	Molybdenite
ZnS	Sphalerite
TRH	Tetrahedrite
Fe <sub>2</sub> O <sub>3</sub>	Hematite
Fe <sub>3</sub> O <sub>4</sub>	Magnetite
GR	Granite
P	Porphyry

ALT. ALTERATIONS:

ARG	Argillic (clay)
PoF	Potash Feldspar
Py	Pyrite
SER	Sericite
<1/4"/>1/4"	Quartz stringers/ft.
e.g. - 12/4 -	
12	Quartz stringers/ft.
Less than 1/4"	in width.
4	Quartz stringers/ft.
Greater than 1/4"	in width.

MISCELLANEOUS:

W	Weak
M	Medium
S	Strong
ST	Stringers
FR	Fracture
MAG	Magnetic
DIS	Disseminated

NOTE:

Pyrite	W - 1%
	M - 1.5%
	S - 7.5%

## SILVER STANDARD MINES

## DIAMOND DRILL LOG

Property: French Peak

- 1 -

Commenced: June 17, 1971

Hole No.: 1

Finished: June 20, 1971

Length: 355'

Logged by: Charles Kowall

Location &amp; Direction: See Geological Map

Footage	Description	Sample No.	Length	Cu	Mo	Ag	Zn	Est'd
0-23	Overburden							
23-30	FP - CP 1/0, M ARG, M Py, Py FR 5-10/ft. Many P phenocrysts. Non MAG.	10201	7'	0.06	0.006			
30-40	CP - FP 1/0, W ARG, M Py, Py FR 5-10/ft. Non MAG	10202	10'	0.07	0.005	0.03	0.05	
40-50	CP - FP 2/0, M ARG, M Py, Py FR 5-10/ft. TRH, ZnS, Cu, Clay seam. DIS fine- grain black mineral.	10203	10'	0.03	0.003	0.06	0.01	
50-60	CP - FP 3/0, M Py, Py FR 5-10/ft. TRH, ZnS, Cu, DIS fine-grain black mineral.	10204	10'	0.03	0.003	0.10	0.02	
60-70	CP - FR 4/0, M ARG, M Py, Py ST 5-20/ft. Some Cu on FR, TRH, MoS <sub>2</sub> , ZnS.	10205	10'	0.05	0.010	0.09	0.01	
70-80	CP 4/1, M Py, M SER, TRH, M ARG, Cu, MoS <sub>2</sub> . Some black specks on FR, Py ST 5-20/ft. 87-88 - 1' fine- grained GR P dyke.	10206	10'	0.10	0.010			
80-90	CP 8/1, M ARG, M Py, M SER, Py ST 10-20/ft.	10207	10'	0.17	0.012			>.1% Cu
90-100	CP 8/2, M Py, stringers parallel to hole.	10208	10'	0.23	0.009			>.1% Cu
100-110	CP 8/0, M ARG, M SER, Py ST 10-30/ft., M Py.	10209	10'	0.10	0.005			<.1% Cu MoS <sub>2</sub>
110-120	CP 8/0, M ARG, M SER, M Py, Py ST 10-30/ft.	10210	10'	0.07	0.003			<.1% Cu MoS <sub>2</sub>

## SILVER STANDARD MINES

## DIAMOND DRILL LOG

Hole No. 1 - cont'd:

- 2 -

Footage	Description	Sample No.	Leag.	Cu	Mo	Ag	Zn	Est'd
130-139	CP 6/0, M ARG, M Py, M SER, Py ST 10-30/ft.	10211	10'	0.11	0.002			<.1% Cu MoS <sub>2</sub>
139-140	130-138 FPD, 138-140 CP, light pink-tan ground mass, white-green 1/4" F phenocrysts.	10212	10'	0.06	0.004			
140-150	BFP, up to 1/4" B phenocrysts, pink-tan ground mass, white-green phenocrysts, 2/0, Py ST 10/ft.	10213	10'	0.09	0.007			
150-160	BFP 152, CP 152-160, 8/0, Py ST 10/ft., Mod strong kaolin SER, 154-155 - shear	10214	10'	0.08	0.006	0.16	0.11	
160-170	CP 10/1, 1/16" - 1/4" ST of Cu, ZnS. Some MoS <sub>2</sub> , Py ST 10/ft.	10215	10'	0.31	0.003	0.64	0.51	>.1% Cu
170-180	CP 10/1, 1/16-1/4" ST of Cu, ZnS, some MoS <sub>2</sub>	10216	10'	0.11	0.003	0.23	0.52	>.1% Cu
180-190	CP 6/1, MARG, M Py, M SER, Py ST 10/ft. less mineral.	10217	10'	0.09	0.004	0.08	0.04	<.1% Cu
190-200	CP 6/0, M ARG, M SER, M Py, Py ST 10/ft. less mineral, spotty scattered CP.	10218	10'	0.04	0.002	0.04	0.01	.1% Cu
200-210	CP 5/1, M ARG, M Py, M SER. Spotty scattered Chalco ST.	10219	10'	0.08	0.003			<.1% Cu
210-220	CP 5/1, S ARG, S SER, M Py. Spotty scattered chalco ST.	10220	10'	0.07	0.002			<.1% Cu

DIAMOND DRILL LOG

Hole No. 1 - cont'd:

- 3 -

Footage	Description	Sample No.	Lang.	Cu	Mo	Ag	Zn	Est'd
220-230	CP 5/1, S ARG, S SER, M Py. Spotty scattered chalco ST.	10221	10'	0.05	0.002			<.1% Cu
230-240	CP, BQM, 3/0, S ARG, S SER, M Py, B phenocrysts in monzonite.	10222	10'	0.07	0.002			<.1% Cu
240-250	BQM 243, CP 243-250, S ARG, S SER, B phenocrysts in monzonite, M Py.	10223	10'	0.05	0.005			<.1% Cu
250-260	CP 5/1, S ARG, M Py, S SER.	10224	10'	0.08	0.005			>.1% Cu
260-270	CP, Some patches QM, 6/1, S ARG, M Py, S SER.	10225	10'	0.10	0.005			.1% Cu
270-280	CP 6/1, S ARG, M Py, S SER.	10226	10'	0.05	0.004			<.1% Cu
280-290	P - CP 5/0, S ARG, M Py, S SER	10227	10'	0.09	0.005			<.1% Cu
290-300	P - CP 6/0, S ARG, W Py, S SER.	10228	10'	0.06	0.004			.1% Cu
300-310	CP - FP 6/0, M ARG, M Py, M SER, 10-15 Py ST/ ft. 305-308 - porphyritic green dyke. Dyke material not altered.	10229	10'	0.07	0.004			<.1% Cu
310-320	CP - FP 6/0, S ARG, M Py, S SER, 10-15 Py FR/ft.	10230	10'	0.06	0.014			
320-330	BQM, 6/0, M ARG, W Py, S SER 10-15 Py FR/ft.	10231	10'	0.13	0.007			>.2% Cu
330-340	BQM, 6/0, S ARG, S SER, 10-15 Py FR/ft. Abundant 1/16" - 1/4" gypsum veinlets.	10232	10'	0.10	0.014			>.2% Cu

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Hole No. 1 - cont'd:

- 4 -

Footage	Description	Sample No.	Leng.	Cu	Mo	Ag	An	Est'd
340-350	BQM 6/0, S ARG, S SER, 10-15 Py FR/ft. Abundant 1/16" - 1/4" gypsum veinlets.	10233	10'	0.08	0.010			>.2% Cu
350-355	FP 6/0, S ARG, S SER, 10-15 Py FR/ft. Abundant 1/16" - 1/4" gypsum veinlets	10234	5'	0.05	0.006			.1% Cu

END OF HOLE

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Property: French Peak - 5 - Commenced: June 20, 1971  
 Hole No.: 2 Finished: June 25, 1971  
 Length: 213' Logged by: Charles Kowall  
 Location & Direction: See Geological Map

Footage	Description	Sample No.	Leng.	Cu	Mo	Ag	Zn	Est'd
0-15	Overburden							
15-20	CP 6/0, S ARG, M Py, S SER. Bleached biotite, non MAG.	10235	5'	0.04	0.002			<.1% Cu
20-30	BFP, 27-6" of CP, 6/1, M ARG, M Py, M SER, non MAG. 24-26 - CP	10236	10'	0.11	0.007			>.15 Cu
30-4-	BCP, 34-36 CP, 6/3, S ARG, M Py, M SER. Good DIS chalco, some MoS <sub>2</sub> .	10237	10'	0.14	0.007			>.3% Cu
40-50	BFP, CP from 44, 6/1, S ARG, M Py, S SER. Major clay gouge shear 47-54	10238	10'	0.09	0.005			
50-60	Sheared to 54, 3/0, S ARG, M Py, M SER. Highly sheared and FR	10239	10'	0.14	0.007			<.1% Cu
60-70	CP, 5/0, S ARG, M Py, S SER, highly sheared and Fr.	10240	10'	0.09	0.005			<.1% Cu
70-80	CP, 5/0, S ARG, M Py, S SER, major fault zone at 69 - highly sheared and FR.	10241	10'	0.14	0.007			
80-90	CP, S ARG, M Py, S SER. Highly kaolinized - abundant clay seams	10242	10'	0.10	0.008			
90-100	CP, S ARG, M Py, S SER, highly kaolinized - abundant clay seams	10243	10'	0.08	0.005			
100-110	105 - CP less brecciated and altered. S ARG, M Py, S SER - kaolinized	10244	10'	0.01	0.001			.1% Cu

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Hole No. 2 - cont'd:

- 6 -

Footage	Description	Sample No.	Leag.	Cu	Mo	Ag	Zn	Est'd
110-120	FP, 6/1, M ARG, M Py, M SER.	10245	10'	0.01	0.001			
120-130	FP, 6/1, M ARG, M Py, M SER. 124-125 - massive sulphide, 10-15 Py FR/ft.	10246	10'	0.26	0.009			.2% Cu
130-140	FP - CP, M ARG, M Py, M SER, 10-15 Py FR/ft.	10247	10'	0.08	0.005			.1% to .2% Cu
140-150	FP - CP, 8/1, M ARG, M Py, M SER, 10-15 Py FR/ft.	10248	10'	0.11	0.005			.2% to .3% Cu
150-160	FP - CP, 8/2, M ARG, M Py, M SER, 10-15 Py FR/ft.	10249	10'	0.10	0.005			.1% Cu
160-170	FP - CP, M ARG, M Py, M SER, 10-15 Py FR/ft.	10250	10'	0.09	0.004			
170-180	FP - CP, 8/3, M ARG, M Py, M SER, 10-15 Py FR/ft.	10051	10'	0.22	0.005			.3% Cu
180-190	F - CP, 8/1, M ARG, M Py, M SER, 10-15 Py FR/ft.	10052	10'	0.11	0.009			.1% to .2% Cu
190-200		10053	10'	0.11	0.009			
200-210	BQP - CP, 6/1, M ARG, M Py, W SER. Some MoS <sub>2</sub> . 6-10 Py FR/ft.	10054	10'	0.11	0.011			.1% Cu
210-213	CP, 6/1, M ARG, M Py, W SER. Caving in main fault zone. 6-10 Py FR/ft.	10055	3'	0.13	0.017			.1% Cu

END OF HOLE



## SILVER STANDARD MINES

DIAMOND DRILL LOG

Property: French Peak - 7 -  
 Hole No.: 3  
 Length: 495'  
 Location & Direction: See Geological Map

Commenced: June 25, 1971  
 Finished: June 30, 1971  
 Logged by: Charles Kowall

Footage	Description	Sample No.	Lang.	Cu	Mo	Ag	Zn	Est'd
0-23	Overburden							
23-30	B CP, 4/0, W ARG, M Py, M SER, 10-15 Py FR/ft.	10056	7'	0.15	0.011			<.1% Cu
30-40	B CP, 4/0, W ARG, M Py, M SER, 36-42 - fracture zone	10057	10'	0.16	0.009			.2% to .3% Cu
40-50	B CP, 6/1-2, W ARG, M Py, M SER, 10-15 Py FR/ft.	10058	10'	0.29	0.014			
50-60	QB CP, 6/3, M ARG, M Py, M SER, 10-15 Py FR/ft.	10059	10'	0.19	0.010			.2% to .3% Cu
60-70	QB CP, 6/3, M ARG, M Py, M SER, Some mafic, 10-15 Py FR/ft.	10060	10'	0.29	0.010			.2% to .3% Cu
70-80	QB CP, 8/3, M ARG, M Py, M SER, Some mafic, 10-15 Py FR/ft.	10061	10'	0.44	0.015			.2% to .3% Cu
80-90	QB CP, 8/3, M ARG, M Py, M SER, Some mafic, 10-15 Py FR/ft.	10062	10'	0.17	0.011			.2% to .3% Cu
90-100	QB CP, 8/3, M ARG, M Py, M SER, 10-15 Py FR/ft.	10063	10'	0.18	0.013			.2% to .3% Cu
100-110	QB CP, 6/1, M ARG, M Py, M SER, 10-15 Py FR/ft.	10064	10'	0.14	0.010			
110-120	QB CP, 6/1, M ARG, M Py, M SER, 10-15 Py FR/ft.	10065	10'	0.09	0.014			.1% to .2% Cu
120-130	B CP, 6/0, M ARG, M Py, M SER, 10-15 Py FR/ft.	10066	10'	0.07	0.014			.1% Cu

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Hole No. 3 - cont'd:

- 8 -

Footage	Description	Sample No.	Leng.	Cu	Mo	Ag	Zn	Est'd
130-140	B Cp, 6/0, M ARG, M Py, M SER. 130-bleached coarse HFLS, 10-15 Py FR/ft. 140-bleached HFLS - many hairline FR.	10067	10'	0.08	0.012			<.1% Cu
140-150	HFLS, M ARG, M Py, M SER, 10-15 Py FR/ft.	10068	10'	0.15	0.012			.1% Cu
150-160	HFLS to 152, QBYP 152-160, 10-15 Py FR/ft, M ARG, M Py, M SER. Much water - fault at contact.	10069	10'	0.15	0.008			.1% to .2% Cu
160-170	QP P, 6/2, M ARG, M Py, M SER, 10-15 Py FR/ft.	10070	10'	0.17	0.010			.2% Cu
170-180	QP P CP, 8/2, M ARG, M Py, M SER, 10-15 Py FR/ft.	10071	10'	0.15	0.012			.2% Cu
180-190	CP QEP (B), 4/0, W ARG, W Py, M SER, Fe <sub>2</sub> O <sub>3</sub> on FR, 5 Py FR/ft.	10072	10'	0.12	0.007			.1% Cu
190-200	QEP (B), 6/0, M ARG, M Py, M SER, Fe <sub>2</sub> O <sub>3</sub> and Fe <sub>3</sub> O <sub>4</sub> on FR.	10073	10'	0.11	0.008			>.2% Cu
200-210	CP (B), 4/0, M ARG, M Py, M SER. Some Fe <sub>2</sub> O <sub>3</sub> and Fe <sub>3</sub> O <sub>4</sub> on FR.	10074	10'	0.11	0.007			.1% Cu
210-220	QP - CFP, 4/0, M ARG, M Py, M SER, 5 Py FR/ft. Mafics bleached. Hemarsite	10075	10'	0.07	0.008			.1% to .2% Cu
220-230	Q - FP, 4/0, S ARG, M Py, M SER, 5 Py FR/ft. Mafics bleached, increasing alteration	10076	10'	0.11	0.006			.2% Cu

DIAMOND DRILL LOG

Hole No. 3 - cont'd:

- 9 -

Footage	Description	Sample No.	Leng.	Cu	Mo	Au	Ag	Est'd
230-240	BQM - CP, 6/1, S ARG, M Py, S SER. Core very broken - fault, Some magnetite, hematite ST	10077	10'	0.07	0.003			.2% Cu
240-250	Cp, 5/1, S ARG, M Py, S SER. Some magnetite, hematite St, Core very broken - fault	10078	10'	0.08	0.004			.1% to .2% Cu
250-260	F P, 2/0, S ARG, M Py, S SER. Non MAG, 260-end of fault	10079	10'	0.10	0.005			.1% Cu
260-270	F P, 5/2, S ARG, M Py, S SER. Non MAG. 265-269 - qtz sulphides sericite-clay	10080	10'	0.06	0.005	0.003	0.12	.1% to .2% Cu
270-280	QFP, 0/0, W ARG, W Py, W SER. Pink-run dyke, Non MAG	10081	10'	0.02	0.001			<.1% Cu
280-290	Pink-green F P dyke, W ARG, W Py, W SER. Non MAG. Some biotite phasas, some biotite bleached	10082	10'	0.01	0.007			<.1% Cu
290-300	F P dyke, 298-QFP, M ARG, M Py, M SER	10083	10'	0.02	0.001			.1% Cu
300-310	QFP, 8-10/0, M ARG, M Py, M SER, green phenocrysts, Some gypsum, hematite	10084	10'	0.15	0.002			.2% Cu
310-320	qFP, 15/0, M ARG, M Py, M SER. Green phenocrysts, hematite, gypsum ST. 321 - sphalerite ST	10085	10'	0.11	0.001			.2% Cu
320-330	QFP, 329 - RQFP, 6/0, M ARG, M Py, M SER, hematite, gypsum St. Some sphalerite	10086	10'	0.24	0.004			.1% Cu

## SILVER STANDARD MINES

## DIAMOND DRILL LOG

Hole No. 3 - cont'd:

- 10 -

Footage	Description	Sample No.	Leag.	Cu	Mo	Ag	Zn	Est'd
330-340	BQFP, S/O, hematite, M ARG, M Py, M SER	10087	10'	0.11	0.002		0.01	.2% Cu
340-350	BQFP, 20/2, M ARG, M Py, M SER. Also has bleached and non-bleached biotite, hematite.	10088	10'	0.07	0.001			.1% to .2% Cu
350-360	BQFP, 24/2, S ARG, M Py, S SER, hematite.	10089	10'	0.09	0.002			.1% Cu
360-370	BQFP, 20/2, S ARG, M Py, S SER, hematite.	10090	10'	0.09	0.003			.1% Cu
370-380	BQFP, 22/2, M ARG, M Py, M SER, hematite.	10091	10'	0.08	0.002			.1% Cu
380-390	BQFP, 20/2, M ARG, M Py, M SER, scattered hematite.	10092	10'	0.09	0.005			.1% Cu
390-400	QFP - light and BCP dull green phases, 20/2, M Py, M SER, M Py, 6" Fault - clay and sand at 400', scattered hematite	10093	10'	0.08	0.007			.1% Cu
400-410	QFP, BCP, 22/2, M ARG, M Py, M SER, scattered hematite.	10094	10'	0.08	0.003			.1% Cu
410-420	QFP-BCP - light and dull green phases, 18/2, 414-416' - green porphyry dyke, M ARG, M Py, M SER, hematite.	10095	10'	0.06	0.005			.1% Cu
420-430	QFP, 15/2, M ARG, M Py, M SER, Hematite.	10096	10'	0.09	0.003			.1% Cu
430-440	QFP, 0/0, S ARG, M Py, S SER, Hematite - major fault.	10097	10'	0.06	0.002			.2% Cu

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Hole No. 3 - cont'd:

- 11 -

Footage	Description	Sample No.	Lang.	Cu	Mo	Ag	Zn	Est'd
440-450	QFP, fault gouge, 0/0, S ARG, M Py, S SER, 9' lost core	10098	10'	0.15	0.005			<.1% Cu
450-460	FP - fault gouge, S ARG, M Py, S SER, 5' lost core.	10099	10'	0.03	0.001			<.1% Cu
460-470	QFP, FP, fault gouge, 10/0, S ARG, M Py, S SER, 3' lost core	10100	10'	0.02	0.001			<.1% Cu
470-480	BQFP, QFP, 6/0, M ARG, M Py, M SER.	10151	10'	0.01	0.001			.1% Cu
480-490	BQFP, QFP, 8/0, M ARG, M Py, M SER.	10152	10'	0.01	0.001			.1% Cu
490-495	BQFP, QFP, 8/0, M ARG, M Py, M SER	10153	5'	0.01	0.001			<.1% Cu

END OF HOLE

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Property: French Peak - 12 -  
 Hole No.: 4  
 Length: 268'  
 Location & Direction: See Geological Map

Commenced: June 30, 1971  
 Finished: July 5, 1971  
 Logged by: Charles Kowall

Footage	Description	Sample No.	Leng.	Cu	Mo	Ag	Zn	Est'd
0-21	Overburden							
21-30	QFP CP, 3/0, M ARG, M Py, M SER. Some biotite, some Qtz ST, DIS Py, MAG, core quite broken.	10154	9'	0.11	0.010			<.1% Cu
30-40	BQFP, QFP, 3/0, M ARG, M Py, M SER, DIS Py, some Qtz ST, MAG, core quite broken.	10155	10'	0.08	0.014			<.1% Cu
40-50	BQFP, QFP, 3/0, M ARG, M Py, M SER, magnetite and biotite, some Qtz ST, core quite broken, DIS Py.	10156	10'	0.08	0.005			<.1% Cu
50-60	BQFP, 2/0, M ARG, M Py, M SER, magnetite and biotite, DIS Py, core quite broken	10157	10'	0.14	0.013			.1% Cu
60-70	CP, BQFP, 2/0, M ARG, M Py, M SER, magnetite and biotite, DIS Py, core quite broken.	10158	10'	0.13	0.021			.1% Cu
70-80	BQFP, 3/0, M ARG, M Py, M SER, DIS Py, Non-MAG, core quite broken	10159	10'	0.05	0.005			>.1% Cu
80-90	BQFP, QFP, 2/0, M ARG, M Py, M SER, DIS Py, core quite broken, non- MAG.	10160	10'	0.05	0.010			>.1% Cu
90-100	BQFP, QFP, 2/0, M ARG, M Py, M SER, DIS Py, core quite broken, non- MAG.	10161	10'	0.06	0.008			>.1% Cu

DIAMOND DRILL LOG

Hole No. 4 - cont'd:

- 13 -

Footage	Description	Sample No.	Leag.	Cu	Mo	Ag	Zn	Est'd
100-110	QFP, BQFP, 4/0, M ARG, M Py, M SER, Cu, MoS <sub>2</sub> , DIS Py, core quite broken. Non MAG.	10162	10'	0.07	0.008			.1% Cu
110-120	BQFP, QFP, 5/0, M ARG, M Py, M SER, Cu, MoS <sub>2</sub> , 10-15 Py FR/ft, core quite broken, non-MAG.	10163	10'	0.08	0.008			.1% Cu
120-130	BQFP, QFP, 6/0, M ARG, M Py, M SER, 10-15 Py FR/ft, core quite broken, Cu, MoS <sub>2</sub> .	10164	10'	0.14	0.019			.2% Cu
130-140	BQFP, 5/0, M ARG, M Py, M SER, 10-15 Py FR/ft, core quite broken, Cu, MoS <sub>2</sub> .	10165	10'	0.15	0.010			>.1% Cu
140-150	QFP, 6/0, M ARG, M Py, M SER, 10-15 Py FR/ft, Cu, MoS <sub>2</sub> , core not so broken.	10166	10'	0.08	0.010			.1% Cu
150-160	QFP, 6/0, M ARG, M Py, M SER, 10-15 Py FR/ft, Cu, MoS <sub>2</sub> , core not so broken	10167	10'	0.06	0.007			.1% Cu
160-170	QFP, 5/0, M ARG, M Py, M SER, 10-15 Py FR/ft, core not so broken, Cu, MoS <sub>2</sub> .	10168	10'	0.09	0.019			.1% Cu
170-180	QFP, BQFP, 5/0, M ARG, M Py, M SER, 10-15 Py FR/ft, core not so broken, Cu, MoS <sub>2</sub> .	10169	10'	0.10	0.012			.1% Cu
180-190	QFP, BQFP, 5/0, M ARG, M Py, M SER, 10-15 Py FR/ft, core broken, Cu, MoS <sub>2</sub> .	10170	10'	0.08	0.006			.1% Cu

## SILVER STANDARD MINES

DIAMOND DRILL LOG

Hole No. 4 - cont'd:

- 14 -

Footage	Description	Sample No.	Lang.	Cu	Mo	Ag	Zn	Est'd
190-200	BQFP, QFP, 5/0, M ARG, M Py, M SER, 10-15 Py FR/ft, core broken, Cu MoS <sub>2</sub> .	10171	10'	0.08	0.010			.1% Cu
200-210	BQFP, QFP, 6/1, M ARG, M Py, M SER, 10-15 Py FR/ft, core broken, Cu, MoS <sub>2</sub> .	10172	10'	0.12	0.011			.1% Cu
210-220	BQFP, QFP, 5/1, M ARG, M Py, M SER, 10-15 Py FR/ft, core broken, Cu, MoS <sub>2</sub> .	10173	10'	0.07	0.011			.1% Cu
220-230	BQFP, QFP, 6/1, M ARG, M Py, M SER, 10-15 Py FR/ft, core broken, Cu, MoS <sub>2</sub> .	10174	10'	0.08	0.003			.15 Cu
230-235	235 - basalt dyke, Cu, MoS <sub>2</sub> .	10175	5'	0.11	0.010			.2% Cu
235-257	Basalt dyke - no samples							
257-260	QFP, M ARG, M Py, M SER.	10176	3'	0.04	0.008			.1% Cu
260-268	BQFP, M ARG, M Py, M SER, Cu, MoS <sub>2</sub> .	10177	8'	0.10	0.013			.2% Cu

END OF HOLE



## SILVER STANDARD MINES

DIAMOND DRILL LOG

Property: French Peak - 15 -  
 Hole No.: 5  
 Length: 174'  
 Location & Direction: See Geological Map

Commenced: July 5, 1971  
 Finished: July 6, 1971  
 Logged by: Charles Kowall

Footage	Description	Sample No.	Leag.	Cu	Mo	Ag	Zn	Est'd
0-17	Overburden							
17-20	QFP, 5/0, M ARG, M Py, M SER 10 Py FR/ft.	10178	3'	0.12	0.010			.1% Cu
20-30	QFP, 5/0, M ARG, M Py, M SER, 10 Py FR/ft.	10179	10'	0.05	0.003			.15 Cu
30-40	QFP, 5/0, M ARG, M Py, M SER, 10 Py FR/ft, hematite ST.	10180	10'	0.12	0.006			.20 Cu
40-50	QFP, 5/0, M ARG, M Py, M SER.	10181	10'	0.09	0.007			.2% Cu
50-60	QFP, 54 - HFSL, 6/0, M ARG, M Py, M SER, fragmental volcanics, greenish-gray groundmass, pink-white fragments, 20-30 Py ST/ft.	10182	10'	0.16	0.020			.1% Cu
60-70	HFSL, 6/0, M ARG, M Py, M SER, 20-30 Py FR/ft, fragmental volcanics, greenish-gray groundmass, slightly magnetic.	10183	10'	0.12	0.014			.1% Cu
70-80	HFSL, 6/0, M ARG, M Py, M SER, 20-30 Py ST/ft, fragmental volcanics, greenish-gray groundmass, slightly magnetic.	10184	10'	0.02	0.022			.04 MoS <sub>2</sub> .1% Cu
80-90	HFSL, 6/0, M ARG, M Py, M SER, 20-30 Py ST/ft, 82-83 - shear - Qtz, Cu, Py, clay. Frag- mental volcanics, greenish- gray groundmass, slightly magnetic	10185	10'	0.04	0.013			.1% Cu .01 MoS <sub>2</sub>

## SILVER STANDARD MINES

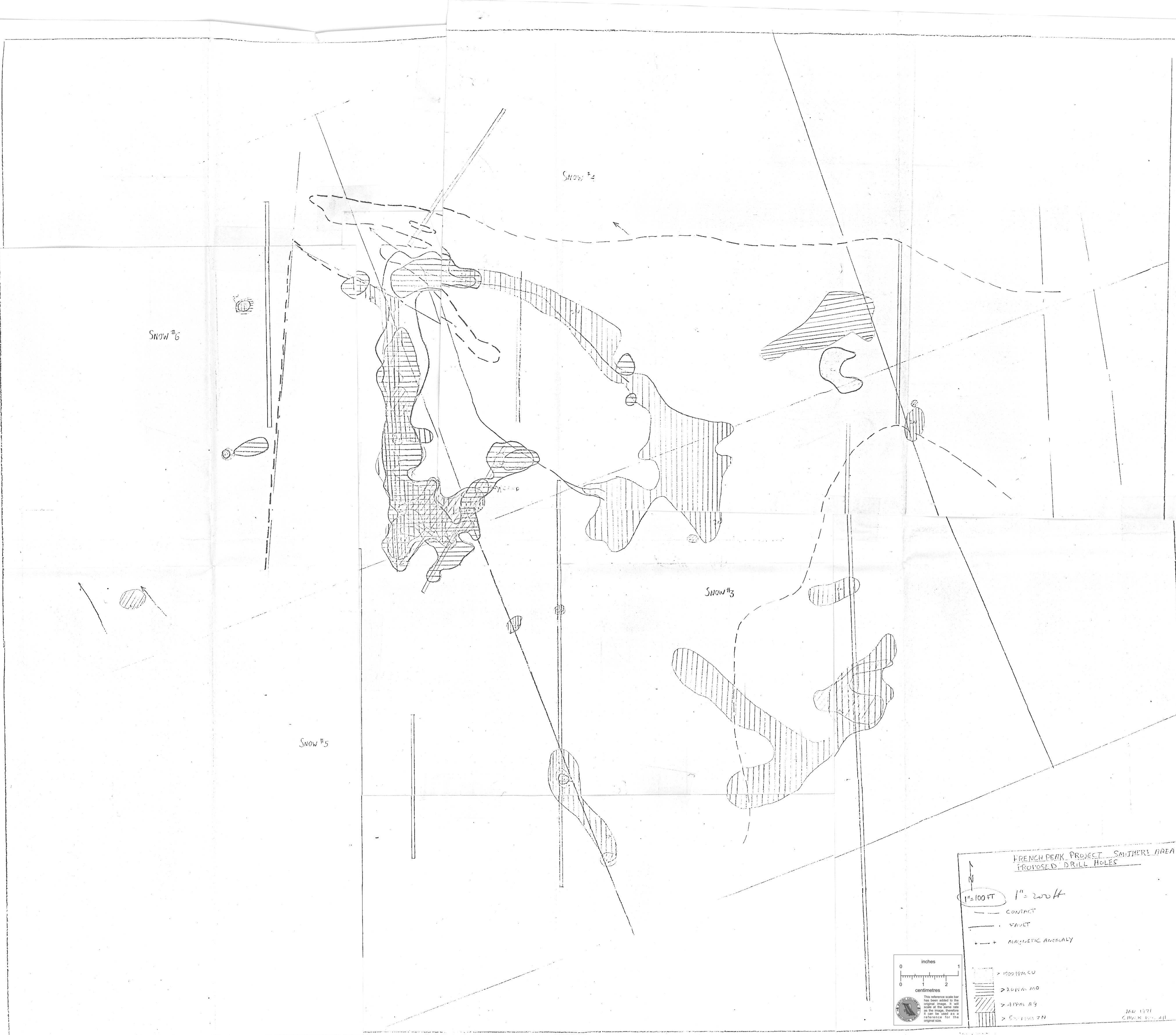
DIAMOND DRILL LOG

Hole No. 5 - cont'd:

- 16 -

Footage	Description	Sample No.	Length	Cu	Mo	Ag	Zn	Est'd
90-100	HFLS, 6/0, M ARG, M Py, M SER, fragmental volcanics, greenish-grey groundmass, slightly magnetic	10186	10'	0.09	0.026			.1% Cu
100-110	HFLS, 3/0, M ARG, M Py, M SER, tuffs, breccia, slightly magnetic	10187	10'	0.05	0.004			.1% Cu
110-120	HFLS, 3/0, M ARG, M Py, M SER, tuffs, rhyolite tuffs, breccia, green shears, less pyrite.	10188	10'	0.06	0.014			>.1% Cu
120-130	HFLS, 2/0, M ARG, M SER, W Py, tuffs, rhyolitic tuffs, breccia	10189	10'	0.06	0.014			>.1% Cu
130-140	HFLS, 0/0, M ARG, W Py, M SER, tuffaceous, fragmental, chlorite alt.	10190	10'	0.05	0.014			>.1% Cu
140-150	HFLS, 0/0, tuffaceous, fragmental, chlorite alt. M ARG, W Py, M SER	10191	10'	0.04	0.015			>.1% Cu
150-160	HFLS, 0/0, M ARG, W Py, M SER, tuffaceous, fragmental, chlorite alt.	10192	10'	0.03	0.005			>.1% Cu
160-170	HFLS, 0/0, M ARG, M SER, W Py, tuffaceous, fragmental, chlorite alt.	10193	10'	0.07	0.005			>.1% Cu
170-174	HFLS, 0/0, M ARG, M SER, W Py, tuffaceous, fragmental, chlorite alt.	10194	4'	0.02	0.002			>.1% Cu

END OF HOLE



Snow #6

Snow #2

Snow #3

Snow #5

FRENCH PEAK PROJECT, SMITHERS AREA  
PROPOSED DRILL HOLES

1" = 100 FT    1" = 200 FT

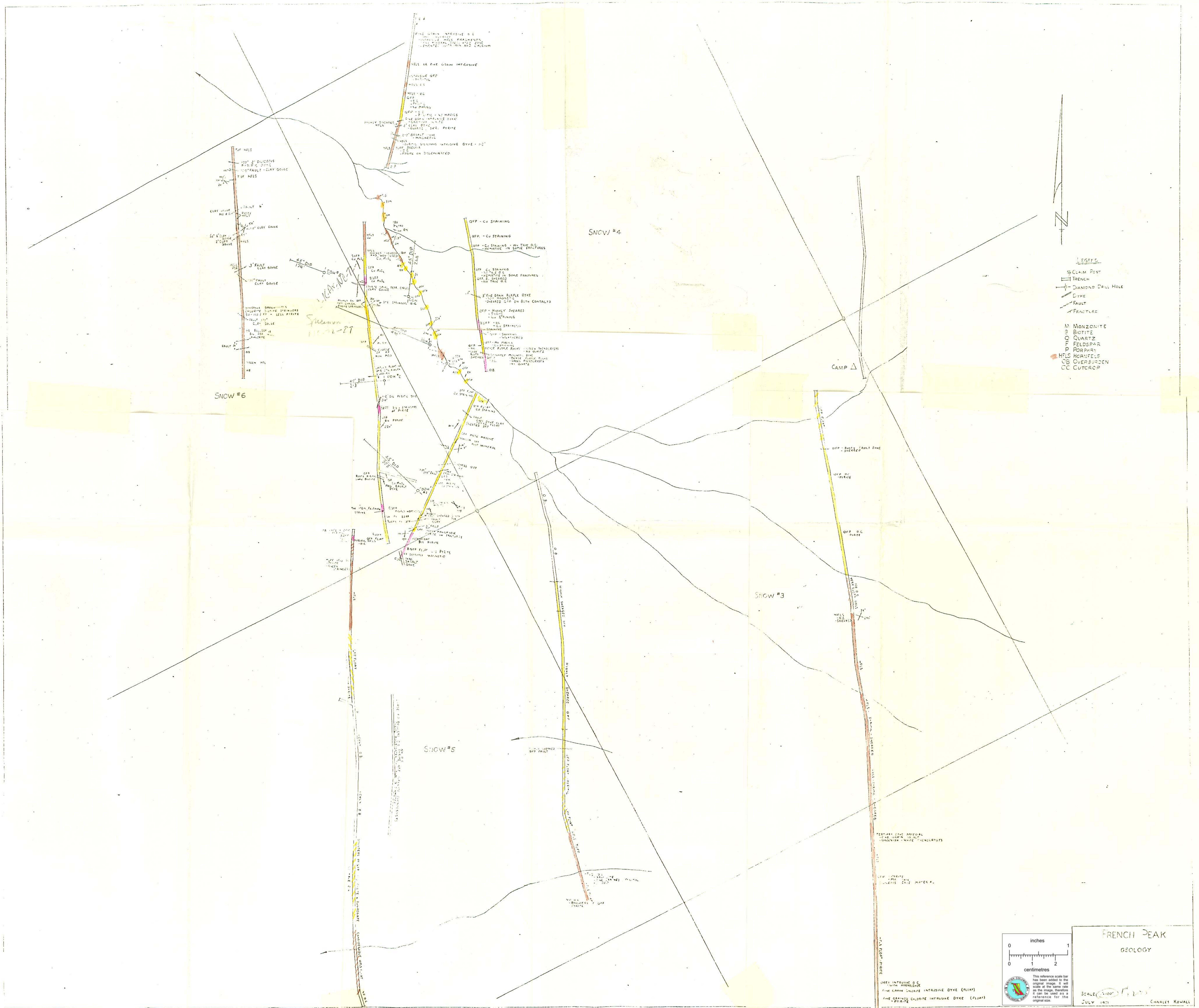
--- CONTACT  
 - - - FAULT  
 - + - + MAGNETIC ANOMALY

0 1 2 inches  
 0 1 2 centimetres

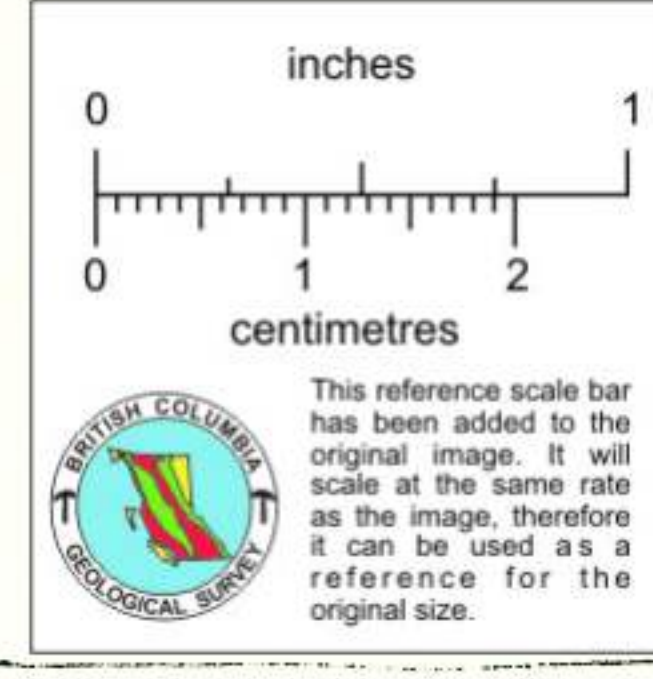
> 1500 GAUSS  
 > 2000 GAUSS  
 > 4000 GAUSS  
 > 5000 GAUSS

JAN 1971  
 C. B. K. INC. 411

This reference scale bar has been added to the original drawing. It will show the scale and can be used as a reference for the original size.



- LEGEND**
- CLAIM POST
  - ▬ TRENCH
  - ⊙ DIAMOND DRILL HOLE
  - DYKE
  - FAULT
  - FRACTURE
- ROCK TYPES**
- M MONZONITE
  - B BIOTITE
  - Q QUARTZ
  - F FELDSPAR
  - P PORPHYRY
  - H HORNBLITE
  - CB COVERED
  - CC CUTCROP



**FRENCH PEAK  
GEOLOGY**

SCALE 1:1000

JULY 1971

CHARLES KOWALL

THIS REFERENCE SCALE BAR  
HAS BEEN ADDED TO THE  
ORIGINAL MAP. IT IS  
SCALE AT THE SAME RATE  
AS THE ORIGINAL MAP.  
IT CAN BE USED AS A  
REFERENCE FOR THE  
ORIGINAL SIZE.

THIS INTRUSIVE IS  
WITH PRESENCE  
THE GRAB INCLUDE INTRUSIVE DYKE (FLUAT)  
AND GRAB INCLUDE INTRUSIVE DYKE (FLUAT)  
NO. 0 C  
PACIFIC WELLS FLOW