PROSPECTING REPORT

ON THE

HAM #1 AND HAM #2

MINERAL CLAIMS

IN THE

OMINECA MINING DIVISION

NTS #93-E-6/W1/2

53° 27' N. LAT. 127° 22' W. LONG.

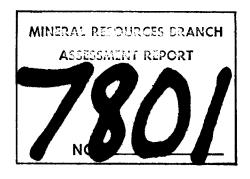
FOR

SILVER STANDARD MINES LIMITED

BY

A. R. C. POTTER PROSPECTOR

SEPTEMBER 26, 1979



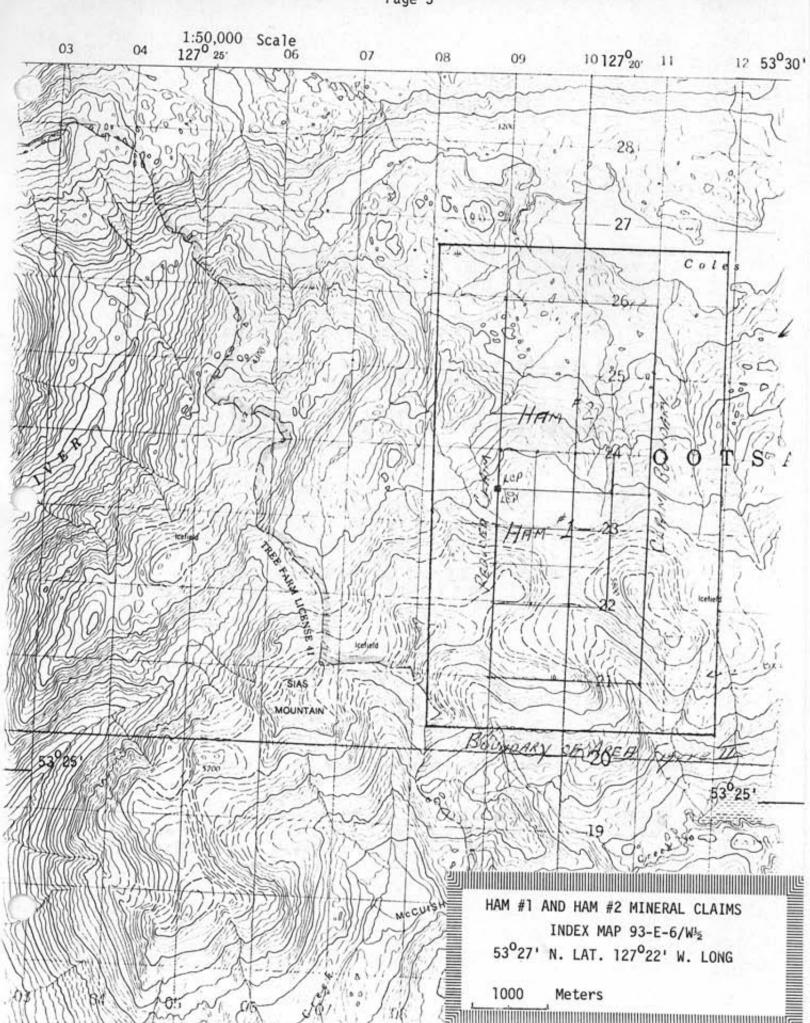
CONTENTS

- 1. TITLE PAGE
- 2. INDEX
- 3. INDEX MAP (FIGURE I)
- 4. INTRODUCTION
- 6. LIST OF SILT SAMPLES & RESULTS
- 7. LIST OF ROCK SAMPLES & RESULTS
- 8. ITEMIZED COST STATEMENT
- 9. AUTHOR'S QUALIFICATIONS

APPENDIX I

- A. PHOTOCOPY OF OBSERVATIONS MADE BY J. R. WOODCOCK OF WOODCOCK CONSULTANTS.
- B. PHOTOCOPY OF CONCLUSIONS AND RECOMMENDATIONS BY J. R. WOODCOCK.
- (FIGURE II): IN POCKET MAP SHOWING GEOCHEMICAL AND ASSAY LOCATIONS,
 MINERAL OCCURRENCES, AND CLAIM LINES.
- (FIGURE III): AIR PHOTO SHOWING CLAIM BOUNDARYS
 MINERALIZED FLOAT TRAIN





INTRODUCTION

This report contains observations made by the author while prospecting the HAM MINERAL CLAIMS and includes appendixed photocopies of a brief report and conclusions by: J. R. Woodcock, Consulting Geological Engineer.

SILVER STANDARD MINES LIMITED is the current Owner-Operator. The claims cover ground rising from the 3100 foot elevation contour, just southwest of Coles Lake to the 6000 foot elevation peaks northwest of Little Whitesail Lake. Access is via helicopter from Houston, B. C., approximately 70 air miles north or float plane from Burns Lake, approximately 80 air miles northeast.

The Ham Claims were located to cover the source of a spectacular molybenite float train in large alaskite boulders.

I first noted this occurrence in July 1967. A 256-1b. grab sample taken at that time assayed 0.12% total molybdenum. Molybearing float samples taken this year yielded assays from 0.042 to 1.28% Mo.

A scintilometer was carried this trip and the area yields a generally high background count in monzonite, with local anomalies up to 5 times background. Most of the alaskite boulders are anomalous and many appear to be "sweating" uranium salts.

Several samples assayed from 0.011 to 0.029% U_3O_8 . The main float train starts at a "point" below a receding snow field and small glacier and marches 2000 ft. north where it has attained a width of approximately 500 feet.

None of the alaskite outcrops. The float indicates an alaskite stock within the monzonite.

The uranium salts are most prevalent near the north end of the moraine, possibly because of longer exposure to the weather or because the salts are precipitating within the moraine.

Clear, green, blue, red, purple and black fluorite was noted in fissures in monzonite.

Float from the east contact (under snow) with calcareous volcanics contains up to 50% garnet, 10% iron pyrite and minor chalcopyrite, glena and sphalerite, with some molybdenite.

One 250 C.P.S. outcrop of pink aplite yielded 1000 ppm Cu, 2000 ppm Pb and 0.029% U $_3$ 08. This sample had no visible lead and minor malachite and chalco. The outcrop was just becoming free of snow the last week in August.

The Ham mineral claims appear to have the potential for a large tonnage of moly/uranium-bearing alaskite grading around 0.12% and 0.02% U_3O_8 .

Next season the boulder sampling recommended by Mr. Woodcock should be carried out. If the boulder sampling yields encouraging results, the probable source area near the glacial pond should be drilled.

Stream and swamp sediment sampling do not appear to work in this area. Lake bottom was slightly anomalous in Cu and Mo but no uranium noted in any geochemistry.

A total of 30 silt and 15 rock samples were taken. A scintellometer was carried on a total of 50 kilometers of reconnaissance traverses. Anomalous areas or areas over background are noted on Figure #II.

GEOCHEMISTRY OF SEDIMENTS P.P.M.

SAMPLE NO.	CU	<u>MO</u>	<u>Pb</u>	ZN	F	U
5045 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64 66 67 68	26 34 32 24 28 24 12 18 28 10 8 10 26 30 24 250 10 12 8 6 16 22 16 10	22 1 1 1 2 5 9 1 5 2 1 1 3 5 8 5 1 1 1 2 2 4 5	10 24 18 26 24 6 1 12 10 4 6 6 12 20 18 4 4 2 1 10 8 38 16 1	38 46 68 70 84 76 64 34 60 34 10 80 12 10 46 80	285 195 210 160 195 215 70 350 300 175 160 250 200 180 115 130 70 85 105 210 380 210 60	1.0 1.5 3.0 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0
		LAK	CE BOTTO	<u>M</u>		
5251 52 53 54 55 56	62 108 68 46 62 44	5 10 18 6 5				4.0 4.0 0.5 1.5

ROCK SAMPLE ASSAYS

SAMPLE NO.	U ₃ 0 ₈	Me —	F.
18704	0.029%	0.59 %	5.70%
18705	0.002%		
18706	22 PPM		
18707	0.011%	1.28 %	
18708			
18941	0.008%		
18942	0.001%		
18943	0.027%		
18944	0.011%		
18945	33 PPM		
18946	23 PPM		
18947	4.0 PPM		
N78-290R	4.10 PPM	0.40 %	
291R	11.90 PPM	0.10 %	
292R	6.46 PPM	0.042%	

ITEMIZED COST STATEMENT

HAM GROUP

TOTAL ALLOWABLE COSTS FOR ASSESSMENT

AUGUST 15 TO SEPTEMBER 10, 1978

Α.	WAGES - PROSPECTOR 25 Days @ \$77.50 - HELPER 25 Days @ \$40.00		1,937.50 1,000.00
В.	FOOD AND ACCOMMODATION - 53 Days @ \$25.00	·	2,937.50 1,325.00
С.	TRANSPORTATION		
	1) Helicopter - 11 hrs. @ \$375.00	\$	4,125.00
	2) Fixed Wing Charters - 3.2 hrs. @ \$100.00	\$	320.00
	3) Return Airline Fares-Vancouver/Smithers 3 @ \$144.00	\$	432.00
	4) Truck Rental - 20 Days @ \$25.00	\$	500.00
D.	INSTRUMENT RENTAL		
	Saintellometer for above period	\$	100.00
Ε.	COMMUNICATIONS		
	Radio Telephone Rental	\$	191.70
F.	ASSAYING AND ANALYSIS		
	45 Samples = 182 Analysis @ \$.83	\$	149.96
G.	PREPARATION OF THIS REPORT	\$	300.00
н.	CONSULTING ENGINEER		
	3 days @ \$275 per day	\$	825.00
	TOTAL ALLOWABLE COSTS FOR ASSESSMENT:	\$1	1,206.16

STATEMENT OF AUTHOR'S QUALIFICATIONS

I completed Grade Seven at the Blue Hawk School, Peace River School District 3559, Alberta, in 1947.

I have been employed as a Professional Prospector since 1956 (23 years).

A. R. C. Potter

26 September 1979



J.R. Woodcock Consultants Ltd.

AUG30

721 - 602 WEST HASTINGS STREET - VANCOUVER, B.C. V6B 1P2 - PHONE (604) 685-6720

SIEVER STANDARD
MINES LITHTED (N.P.L.)

August 29, 1978

Mr. W. Dunn, Silver Standard Mines Ltd., #904 - 1199 West Hastings St., Vancouver, B. C. V6E 3T5

Dear Bill:

On August 22, I examined the molybdenite mineralization that Al Potter has found below a glacier south of Coles Lake, British Columbia. The molybdenite mineralization occurs in large blocks of alaskite in the terminal moraine of a glacier. The molybdenite occurs in pockets, generally alone; however it is also associated with chalcopyrite and/or quartz and in many places the rock near these pockets is sericitized (green tint to the plagioclase). This type of mineralization would fall into the class of a "deuteric" or "magmatic" type in that it has formed during the last crystallization stages of the intrusive rather than being introduced along fractures subsequent to the solidification of the intrusive. Many such occurrences can be found in British Columbia, especially along the eastern margin of the Coast Crystalline Complex. The one at Coles Lake admittedly is more spectacular and contains more molybdenite than most such occurrences.

The history of these deuteric deposits is that, although they are spectacular, grades are generally less than expected and none of them have been economic. It does not necessarily mean that one never will be economic.

The abundant float in the terminal moraine at your Coles Lake prospect occurs mainly in two places. The most spectacular mineralization occurs in a long linear train of float which extends almost up to the present ice edge of the glacier. Further down the hill at the terminus of the moraine is some more spectacular float and Al Potter reports additional float throughout the moraine but not in such concentrations. Al has suggested that the source of the upper spectacular line of float is under the glacier and that possibly the float in the lower area near the terminus of the glacier is more local and has come from another source underneath the moraine debris. These are good suggestions.

The widespread nature and abundance of the float would indicate a stock or dike source or a combination of the two in which the mineralization is more widespread than with most deuteric deposits. However one must face the following facts when appraising this property:

- (a) The mineralization is of deuteric type rather than the stockwork type.
- (b) Some of the most spectacular mineralization occurs in one large boulder and a sample weighing more than 200 pounds from this boulder taken by Norm Burmeister assayed 0.12% MoS₂. Many of the boulders on the moraine contained little or no MoS₂. It is impossible to even indicate the grade of the material in the source area by sampling the material on the moraine; however the maximum grade that can be obtained on the moraine should be indicative of the maximum grades occurring at the rock surface under the ice. I doubt that leaching or grinding of soft molybdenite is a very important factor in trying to estimate the grade in the source area.
- (c) The only exploration technique to be used here is diamond drilling to try and locate the source area underneath the ice and to determine whether or not there are sufficient grades in this source area. In such a locality with only helicopter support, a drill program would be expensive and I would guess that a minimum of \$150,000 would be needed.

The above three factors indicate to me that a major mining company, especially one that is looking for stockwork molybdenite deposits and is familiar with their characteristics, would be reluctant to finance such a program. Therefore I cannot recommend further work on the property.

An interesting sideline from Al Potter's prospecting is the high radioactivity that he finds associated with the mineralized alaskite. With a mineral light, he has identified what he believes to be yellow and greenish uranium salts on some fracture surfaces. Therefore some uranium analyses should be obtained for the blocks of this alaskite.

Intrusive rocks containing abundant uranium have been and still are being appraised as an economic source of uranium. However in many cases these are now being considered as a source for a supergene concentration of uranium in a Tertiary or Recent sedimentary horizon. At Coles Lake such a sedimentary horizon does not exist. There are abundant swamps which receive ground water seepage from the moraine area and these might be tested. However the geological significance of this is probably more important. I have seen such molybdenite bearing acidic intrusives in the Stikine area and suggest that they probably occur in many places along the eastern contact of the batholith. Therefore suitable geological environments for uranium concentration in the vicinity of similar intrusives in other parts of the batholith might be considered for some prospecting.

I have submitted the grab samples for uranium and molybdenum analyses and will send you the results when I get them.

Yours very truly,

AR (Coadeock



J.R. Woodcock Consultants Ltd.

OCT 6 -

721 - 602 WEST HASTINGS STREET - VANCOUVER, B.C. V6B 1P2 - PHONE (604) 685-6720

SILVER SEADDARD MINES EINTEN (N.P.C.)

October 5, 1978

Mr. William Dunn, Silver Standard Mines Ltd., 9th Floor, 1199 W. Hastings St., Vancouver, B. C. V6E 3T5

Dear Bill:

Re: Coles Lake Molybdenum Prospect

After my quick visit to your molybdenum property near Coles Lake I wrote a preliminary report in which I mentioned that this would be classed as a deuteric type molybdenite prospect rather than a stockwork molybdenite prospect and I stated that, although this is the most spectacular mineralization of that type that I have seen, I thought that companies searching for stockwork molybdenite deposits would be reluctant to option the property and drill it.

On that trip I took three samples for analyses. One was a molybdenite-rich sample from the large boulder previously sampled by Norm Burmeister. My selected sample assayed 0.4% Mo and 4.1 ppm U. A second sample was taken from a large radioactive boulder near the terminus of the moraine. This second sample was taken mainly to test the uranium content of the radioactive boulder. It did not have the abundant conspicuous molybdenite of the first sample. However, the sample assayed 0.19% Mo and 11.9 ppm U. A third sample was taken of some black radioactive material that formsirregular lenses and stringers in some outcrops. This small selected material assayed 0.042% Mo and 4.5 ppm U.

In view of the rapidly increasing demand and price for molybdenum, this prospect might merit some additional attention. In order to establish the maximum probable grade for the mineralized rock it would be necessary to systematically sample a large number of the mineralized and slightly mineralized quartz monzonite boulders that appear on these moraines in the two places that I noted in my previous report. Such sampling would require a prospector to blast the boulders open and an engineer to systematically sample the boulders and plot them on the enlarged air photograph.

When Al Potter returns to town from the season's work we should get together and discuss the property and the merits of further work.

Yours very truly

J. R. Woodcock

JRW:mb Encls.

