

PHONE  
683-3093

104G

820629  
VANCOUVER OFFICE:  
808 - 602 WEST HASTINGS ST.

**SILVER STANDARD MINES LIMITED**  
(NON-PERSONAL LIABILITY)

October 17, 1968

Kerr Addison Mines Ltd.  
420 - 1112 West Pender Street  
VANCOUVER, B.C.

Attention: Mr. Wm. Sirola, P. Eng.

Dear Sirs:

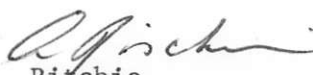
I enclose a brief report by Dr. R.H. Seraphim which summarizes the most important results of Hecla's work at Liard Copper to date.

It has been established that the mineralized zone extends onto the claims of Paramount Mines Ltd. to the north. It is Hecla's intention to explore this extension under an agreement similar to the Hecla-Liard Agreement. Hecla has informed me that the terms of this agreement with Paramount have been fixed, and that in successive years to December 15, 1972 work commitments are \$37,500, \$50,000, \$75,000, \$75,000, a total of \$237,500.

Under the terms of the Liard-Hecla agreement, Liard Copper Mines has the option to participate in the exploration of the Paramount ground to the extent of 30% of the program. Liard Copper is of course without funds. I would appreciate hearing at an early date if your company as a shareholder of Liard has any interest in contributing its share of the costs. A summary is attached which indicates the minimum cost each year in which the option is maintained.

Yours very truly,

SILVER STANDARD MINES LTD. (N.P.L.)

  
A.C. Ritchie  
Executive Vice-President

ACR:dn  
Encls.

c.c. Dr. P.M. Kavanagh  
1600-44 King Street W.  
Toronto, Ontario

RECEIVED  
OCT 18 1968

KERR/ADDISON MINES LTD.

Per.....

SILVER STANDARD MINES LTD. (N.P.L.)

HECLA - PARAMOUNT AGREEMENT

October 7 - 1968

COSTS TO LIARD SHAREHOLDERS

Liard pays 30% - Hecla pays 70%

	<u>by Dec. 15/69</u>	<u>Dec. 15/70</u>	<u>Dec. 15/71</u>	<u>Dec. 15/72</u>	<u>TOTAL</u>
Silver Standard	7,982.78	10,643.70	15,965.55	15,965.55	50,557.58
McIntyre Porcupine	898.65	1,198.20	1,797.30	1,797.30	5,691.45
Dalhousie Oil	902.36	1,203.15	1,804.73	1,804.73	5,714.97
Kerr Addison	1,377.67	1,836.90	2,755.35	2,755.35	8,725.27
Scurry-Rainbow	88.54	118.05	177.07	177.07	560.73
TOTAL Liard share	<u>11,250.00</u>	<u>15,000.00</u>	<u>22,500.00</u>	<u>22,500.00</u>	<u>71,250.00</u>
Hecla share	<u>26,250.00</u>	<u>35,000.00</u>	<u>52,500.00</u>	<u>52,500.00</u>	<u>166,250.00</u>
<u>TOTAL</u>	<u>37,500.00</u>	<u>50,000.00</u>	<u>75,000.00</u>	<u>75,000.00</u>	<u>237,500.00</u>

R.H. Seraphim  
Ph.D., P. Eng.  
Geological Engineering

427-470 Granville St.,  
Vancouver 2, B.C.

MEMO TO: Silver Standard Mines Ltd. (N.P.L.)

RE: Schaft Creek - Liard Copper

I spent September 3 and 4 at Schaft Creek, during which time I examined in detail the maps, new core, and new trenches. Hecla is to be complemented on their competent and thorough exploration now in progress. Results continue to be similar to those obtained by Asarco. The better drill intersections obtained to September 3 are:

Hole #30	-	190 ft.	0.50 Cu	0.062 MoS <sub>2</sub>
Hole #31	-	200 ft.	0.81 Cu	0.028 MoS <sub>2</sub>
Hole #32	-	310 ft.	0.61 Cu	0.057 MoS <sub>2</sub>
Hole #33	-	<u>210 ft.</u>	<u>0.57 Cu</u>	<u>0.048 MoS<sub>2</sub></u>
Weighted average	-	910 ft.	0.62 Cu	0.051 MoS <sub>2</sub>

Total footage low grade = 3368 - ratio =  $\frac{910}{3368} = 3.05 : 1$

The bulldozer has cut some long trenches with about 50% outcrop; the new exposure made being mostly near the saddle of the ridge between Schaft and Mess Creeks. This is near the eastern part of the showings. The trenching has shown that the copper mineralization continues easterly from hole No. 1. A hole, probably No. 36, is planned to be collared about 200 feet east of No. 1, and to be drilled westerly at 50 deg. dip. Holes 32 and 33 were collared east of holes 2 and 3 respectively, and failed to find good copper mineralization until they were well under the better mineralization in holes 2 and 3. However, a strong fracture set, the strongest visible in the new trenches, trends N 15 deg. E.

This set appears the most likely control for at least the easternmost mineralized band or bands. Thus the better mineralization in holes 32 and 2 may be found east of hole 1, and near the collar of the

Schaft Creek - Liard Copper - cont'd:

proposed hole 36. A weaker fracture set, trending about N 30 deg. W is apparent, and a third set, very weak, trends about east-west.

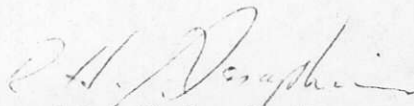
The magnetic survey was completed on lines at 250 foot interval throughout the 2000 S to 2000 N area. The magnetics showed a general north-south trend to the structures, but suggestions of variations from N 30° W to N 15° E can be discerned. The strong magnetic high under the swamp west of holes 19 and 27 is probably caused by the porphyritic basalt, which has not hosted good copper mineralization where it is exposed. Fortunately, although previous workers had expected much porphyritic basalt within the drilled area, practically none has been exposed in either the trenches or drilling this season. The old geological maps will need revision.

The new induced polarity survey added little new area of interest to the Asarco work, but did provide more detail. It was completed on lines at 500 foot interval versus Asarco's 1000 foot interval. It also confirms the general north-south trend. Here, as at most other 'porphyry' properties, it shows the pyrite concentrations, which are practically impossible to separate from the less predominant copper sulfides. However, Harold Linder, the geologist in charge, has gathered fairly conclusive data showing that a central area on the property is practically devoid of pyrite, thus I.P. highs within this area should contain the better grade copper mineralization. This does not preclude the pyrite high areas from containing economic amounts of copper sulfides, and work to date has shown that some pyrite areas do indeed contain 0.6% or better copper.

Unfortunately a couple of holes in progress, Nos. 34 and 35, which are testing I.P. highs in the pyrite free area, are not showing the hoped for good grade copper mineralization.

Schaft Creek - Liard Copper - cont'd:

The Hecla crew are planning to work as late as possible this season. Hecla is, according to private information, negotiating for the Paramount ground to the north of Liard's claims.



R.H. Seraphim, Ph.D., P. Eng.  
Consultant

October 1, 1968