

SILVER STANDARD MINES LIMITED

(NON-PERSONAL LIABILITY)

9TH FLOOR - 1199 WEST HASTINGS STREET
VANCOUVER, B.C. V6E 3Z0



REPORT

on

GEOCHEMISTRY OF THE WSS 1-32 MINERAL CLAIMS

MacMillan Pass Area
Mayo Mining Division
Yukon Territory

NTS 105 0/1

Latitude - 63° 14' N
Longitude - 130° 05' W



by

Roy C. McMichael, P. Eng.
Geological Engineer



April 1975

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SUMMARY

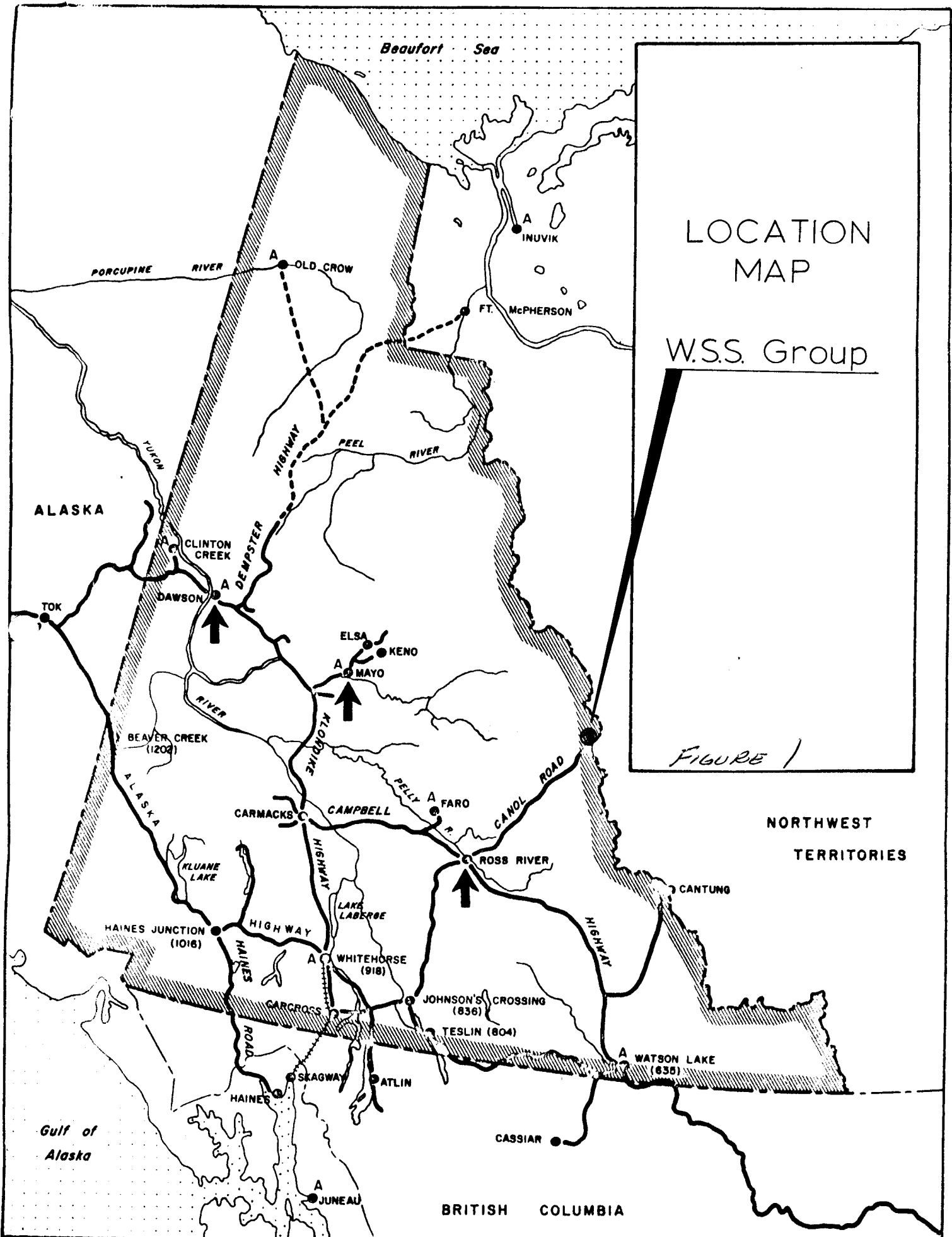
During late August and early September 1974, Silver Standard Mines Ltd. (N.P.L.), in conjunction with Welcome North Mines Ltd. of Vancouver, conducted a mineral exploration program on a lead-zinc prospect in the MacMillan Pass area, Yukon Territory. Initial interest in the area was provided by A. Kulan of Welcome North Mines, and subsequent follow-up work was completed by Mr. A.R.C. Potter, prospector for Silver Standard Mines, and Rick Andrews of Ross River, as helper.

A program of reconnaissance prospecting and geochemical sampling has been completed at the WSS Group at a total cost of \$10,050.82.

Recommendations for the 1975 field season include detailed geochemical sampling, geological mapping, and possibly some geophysics.

INTRODUCTIONLOCATION AND ACCESS (Fig. 1):

The WSS 1-32 mineral claims are located six miles northeast of the MacMillan Pass airstrip at coordinates $63^{\circ} 14'$ N Latitude, and $130^{\circ} 04'$ W Longitude. Access to the property is via the North Canol Road. The property lies adjacent to the North Canol Road, 148 miles northeast of Ross River, Yukon Territory. The North Canol Road is passable only during the summer months from June to late September. Additional access is available by fixed-wing aircraft from Ross River to the MacMillan Pass airstrip.



LOCATION
MAP

W.S.S. Group

FIGURE 1

NORTHWEST
TERRITORIES

BRITISH COLUMBIA

HISTORY:

The property was staked in mid-August 1974, by Silver Standard Mines Ltd. of Vancouver, as a result of an interesting gossan discovered by A. Kulan in the MacMillan Pass area. Subsequent to staking, a Silver Standard crew conducted reconnaissance prospecting and soil sampling in order to complete the initial assessment of the area. The following report is a summary of the field work conducted on the WSS Group during the latter stages of the 1974 field season. Low-order surveying, sufficient to act as a control for initial soil sampling and to tie into claim boundaries, was carried out.

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CLAIMS - (Fig.2):

The WSS Group is comprised of 32 full-sized quartz claims, located and recorded in the Mayo Mining Division, Yukon Territory. Relevant claim data is summarized below:

Claim Name	Record Numbers	Staker	Anniversary Date	Registered Owner
WSS 1	Y96759	A. Dieckmann	Sept. 3, 1974	Silver Standard Mines Ltd.
	2 Y96760	"	"	"
	3 Y96761	"	"	"
	4 Y96762	"	"	"
	5 Y96763	"	"	"
	6 Y96764	"	"	"
	7 Y96765	"	"	"
	8 Y96766	"	"	"
	9 Y96767	A. Kulan	"	"
WSS 10	Y96768	"	"	"
	11 Y96769	"	"	"
	12 Y96770	"	"	"
	13 Y96771	"	"	"
	14 Y96772	"	"	"
	15 Y96773	"	"	"
	16 Y96774	"	"	"
	17 Y96775	R. McMichael	"	"
	18 Y96776	"	"	"
	19 Y96777	"	"	"
WSS 20	Y96778	"	"	"
	21 Y96779	"	"	"
	22 Y96780	"	"	"
	23 Y96781	"	"	"
	24 Y96782	"	"	"
	25 Y96783	"	"	"
	26 Y96783	G. Penikis	"	"
	27 Y96785	"	"	"
	28 Y96786	"	"	"
	29 Y96787	"	"	"
WSS 30	Y96788	"	"	"
	31 Y96789	"	"	"
	32 Y96790	"	"	"

The WSS claims are the only claims in the immediate area. No other groups adjoin the WSS Group

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GEOCHEMISTRY (Fig. 3):METHODS:

Reconnaissance silt sampling during the 1974 field season indicated anomalous amounts of copper, lead, zinc and silver in the soils of the WSS Group. Two traverses run over areas of interest produced varied results. The following table gives the range of values found on the WSS property:

RANGE OF VALUES (225 Samples)

<u>metal</u>	<u>high (ppm)</u>	<u>low (ppm)</u>
Cu	370	4
Pb	72	2
Zn	10,000	5
Ag	9.4	0.1

Grid 212 is located at the east end of the property. Two lines, established by chain and compass and spaced 1000 feet apart, have been cut. Samples were collected every 100 feet for a distance of 6000 feet. Line "A" is a single line of samples collected near the west end of the property.

All samples collected on the WSS property were marked with the grid designation and sent to Acme Labs in Ross River, Yukon Territory. The samples were dried and sieved with the -80 mesh fraction being saved for analysis. The samples were then digested with hot acid and analyzed by the atomic absorption method.

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INTERPRETATION:

From the cursory examination given the property to this point, the most favorable area is at the west end of the property, as indicated by the geochemistry of Line "A". Anomalous values over the area of interest ranged from 490 ppm zinc to 3450 ppm zinc and 50 ppm lead to 72 ppm lead. One random soil sample returned a value of 10,000 ppm zinc (1%). The area is underlain by a soft, black pyritic shale.

Due to the regressive nature of this unit, very little outcrop is exposed except where drainages have cut canyons and gullies through the unit. These drainages are anomalous and as such, unexposed mineralized material may be spread over a relatively large area.

The soil sample plot at the west end of the property is considered the prime target area for extension. However, no conclusions can be reached until a more detailed sampling program can be completed. It is reasonable to assume that the zone may have substantial length. Four hundred feet east and 500 feet east samples returned values of 10,000 parts per million and 4200 parts per million zinc respectively. Additional occurrences of mineralization (galena, sphalerite) several thousand feet east of Line "A" are also within the pyritic shale unit.

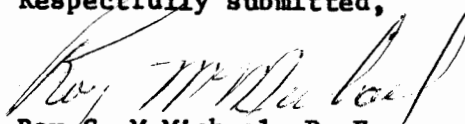
The results of Grid 212 are not anomalous. Only two randomly spaced samples (10 S, 5 W and 9 S, 14 W) returned significant values, and it is felt that the area is not of economic interest.

STATEMENT OF EXPENDITURES

WSS GROUP

Engineering & Supervision	\$ 1,186.31	
Prospecting	2,400.96	
Sampling & Assaying	808.86	
Line Cutting	850.00	
Rotary Wing Charters	734.40	
Truck Expense	2,506.11	
Communications	263.15	
Transportation - Personnel	24.00	
Camp & Accommodation	<u>1,277.03</u>	
		\$ <u>10,050.82</u>

Respectfully submitted,

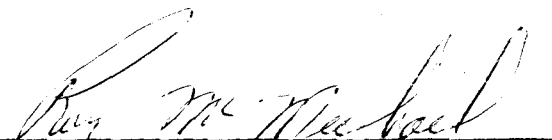

Roy C. McMichael, P. Eng.
Geological Engineer

April 1975

CERTIFICATE OF QUALIFICATIONS

I, Roy C. McMichael, with business and residential addresses in Vancouver, B.C., do hereby certify that:

1. I am a geological engineer in the permanent employ of Silver Standard Mines Ltd. (N.P.L.), of 904-1199 West Hastings Street, Vancouver, B.C.
2. I am a graduate of Colorado School of Mines (Geological Engineering, 1966).
3. I am a registered Professional Engineer of the Province of British Columbia (Reg'n No. 8093).
4. I have practiced and supervised in the field of geological engineering for seven (7) years.
5. I have personally visited and observed claim posts during my examination, and believe them to be located in accordance with the appropriate regulations.



Roy C. McMichael, P. Eng.
Geological Engineer

SILVER STANDARD MINES
MACMILLAN PASS PROJECT
WSS GROUP

SHEET 105-0-1

LATITUDE 63° 00' TO 63° 15'
LONGITUDE 130° 00' TO 130° 30'

CANADA
DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
NORTHERN ADMINISTRATION AND LANDS BRANCH
MINING AND LANDS DIVISION

SCALE 1/2 MILE TO 1 INCH

ISSUED UNDER THE AUTHORITY OF THE MINISTER
OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NOTICE

THIS MAP IS ISSUED AS A PRELIMINARY GUIDE
FOR WHICH THE DEPARTMENT OF INDIAN
AFFAIRS AND NORTHERN DEVELOPMENT WILL
ACCEPT NO RESPONSIBILITY FOR ANY ERRORS,
INACCURACIES OR OMISSIONS WHATSOEVER.

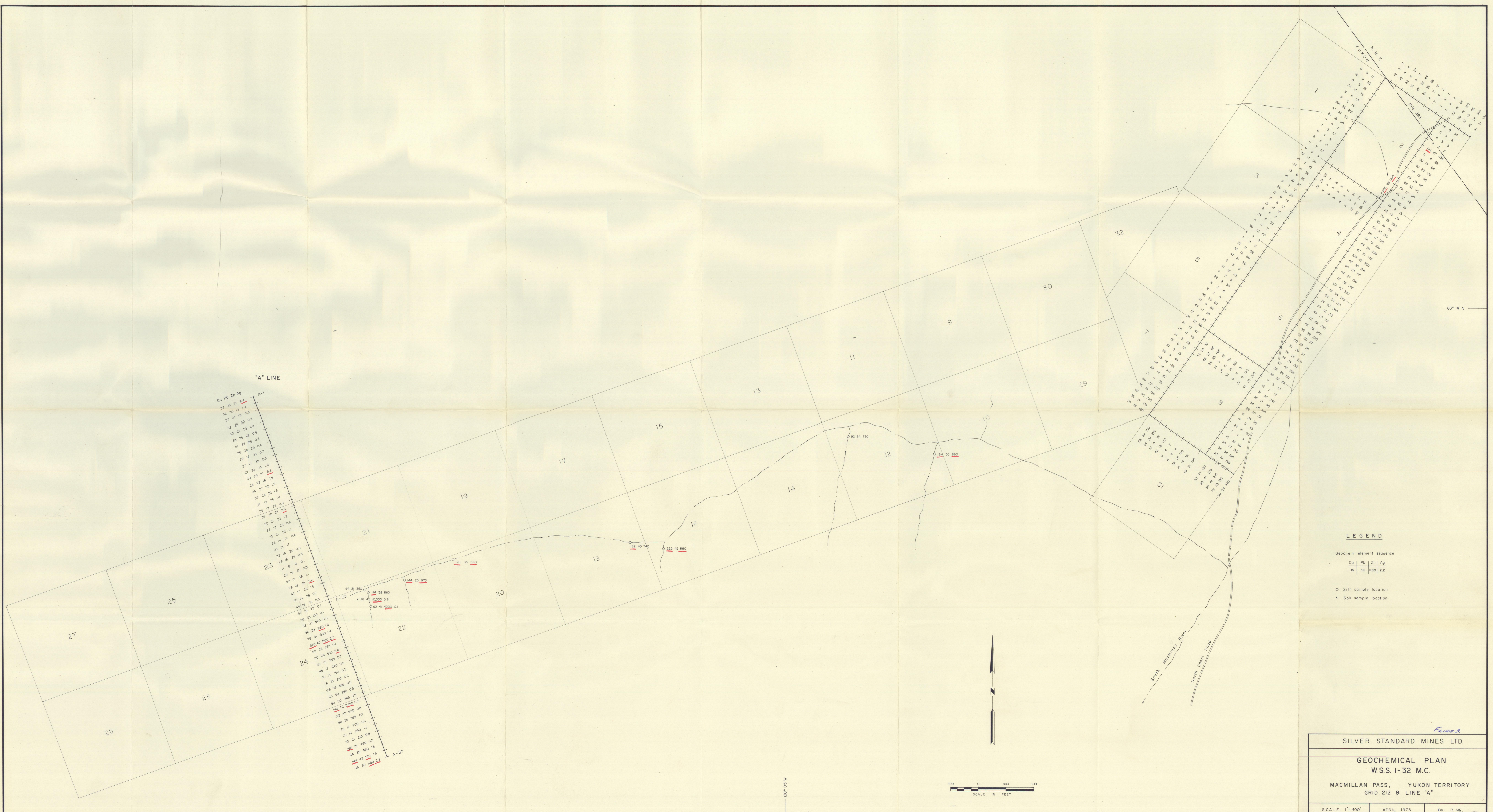
FIGURE 2

105-0-7	105-0-8	105-0-9
105-0-E	105-0-1	105-0-4
105-0-15	105-0-16	105-0-13

WHITEHORSE
21 NOV 73
28 OCT 85
16 DEC 88

PRICE 25 CENTS





"A" LINE

Block	Cu	Pb	Zn	Ag
37	35	10	9.2	
32	30	11	1.4	
37	27	18	0.2	
52	25	50	0.2	
50	27	33	1.0	
41	25	22	0.5	
36	24	29	0.4	
29	17	32	0.7	
27	17	32	0.5	
27	22	33	1.8	
29	24	21	2.2	
24	22	18	1.5	
24	27	22	1.2	
35	24	22	1.3	
37	19	26	1.4	
35	17	26	0.9	
36	20	25	2.5	
30	21	22	1.2	
27	17	28	0.9	
33	21	30	1.1	
36	14	19	0.4	
25	15	17		
35	19	20	0.9	
28	18	25	0.3	
11	8	8	0.1	
29	19	20	0.3	
52	19	38	1.1	
76	22	40	1.2	
47	17	26	1.5	
40	16	28	0.7	
44	19	46	0.3	
67	19	72	0.1	
56	33	154	0.1	
52	27	500	0.6	
96	32	330	1.4	
78	31	330	1.4	
370	48	820	2.7	
60	28	200	1.0	
100	28	200	2.0	
65	13	240	0.6	
49	15	150	0.3	
78	33	310	0.2	
08	56	480	0.6	
60	50	240	0.3	
80	50	240	0.3	
100	72	1400	0.3	
102	37	630	0.8	
84	24	300	0.7	
76	17	200	0.6	
10	18	240	1.1	
70	21	210	0.8	
60	19	460	0.7	
64	29	490	1.9	
104	42	310	1.9	
96	39	180	2.2	

LEGEND

Geochem element sequence
 Cu | Pb | Zn | Ag
 96 | 39 | 180 | 2.2

O Silt sample location
 X Soil sample location

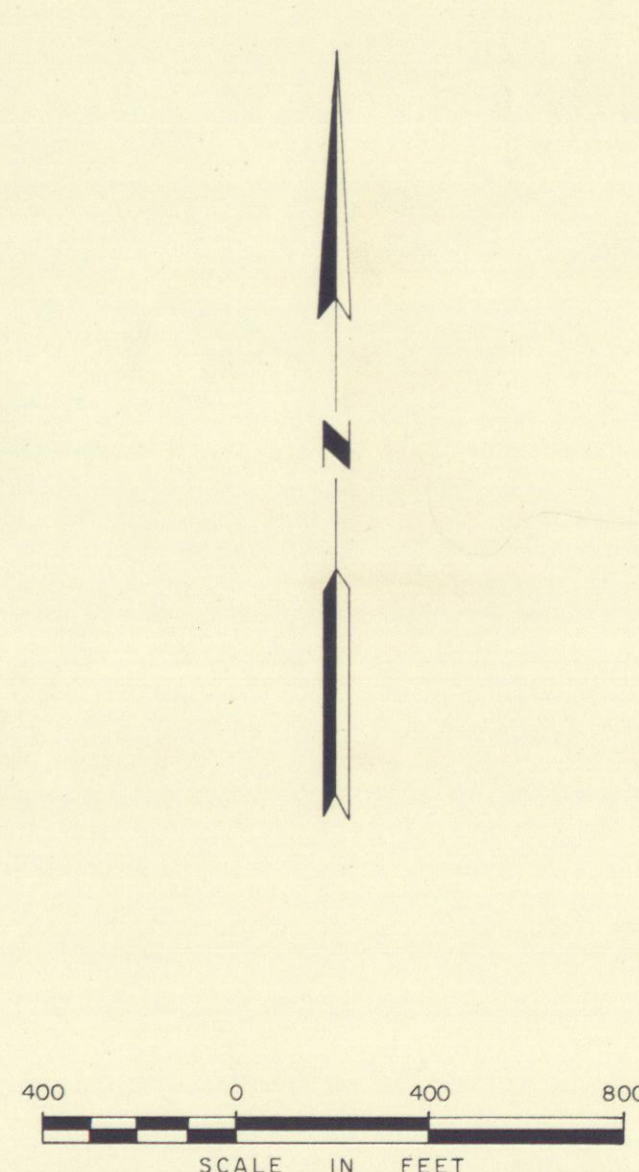
Figure 3

SILVER STANDARD MINES LTD.

GEOCHEMICAL PLAN
 W.S.S. I-32 M.C.

MACMILLAN PASS, YUKON TERRITORY
 GRID 212 8 LINE "A"

SCALE: 1"=400' APRIL 1975 By: R. M.S.



100° 05' W