



9th Floor-1199 West Hastings Street
Vancouver B.C. V6E 3T5
Phone (604) 689-3846

SILVER STANDARD MINES LIMITED

(Non-Personal Liability)

October 2, 1978

The Mining Recorder
Fort Steele Mining Division
Court House
Cranbrook, B.C.

Dear Sir:

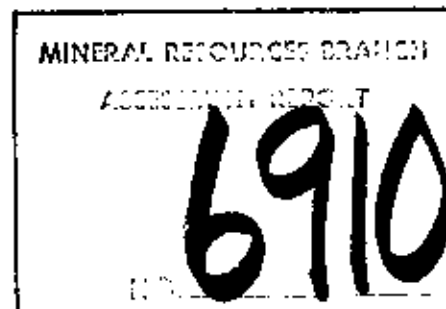
I am enclosing a Diamond Drilling report, a statement of Exploration & Development, and a cheque in the amount of \$1,620.00 for the Alpine Group.

I trust you will find everything in order.

Yours truly,

per: J.S. DeLatre
P.M. McAndless

PMMcA/cmb
Encl.



DIAMOND DRILLING REPORT
ON THE
SOAB #3 MINERAL CLAIM
WITHIN THE
ALPINE GROUP
IN THE
FORT STEELE MINING DIVISION

82 J/3 E

50° 04' N

115° 05' W

FOR
SILVER STANDARD MINES LTD. (N.P.L.)
ROCK JOINT VENTURE

by

J.S. DeLatre
P.M. McAndless

Geologist
Geologist

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INTRODUCTION

- (i) The Alpine Group lies in the Park Ranges of the Rocky Mountains, near the headwaters of the Bull River.

The access to the drill site is by helicopter about 4 air km. S.S.E. from Mile 64 on the Bull River Road. The military grid reference to the drill site is (11 U) PF 378471 (NTS 82 J/3 E).

- (ii) The Alpine Group consists of the mineral claims Soab 1, Soab 2, & Soab 3, totalling 36 units, recorded on the 3rd and 4th of October 1977 (Record No. 311, 312, 310).

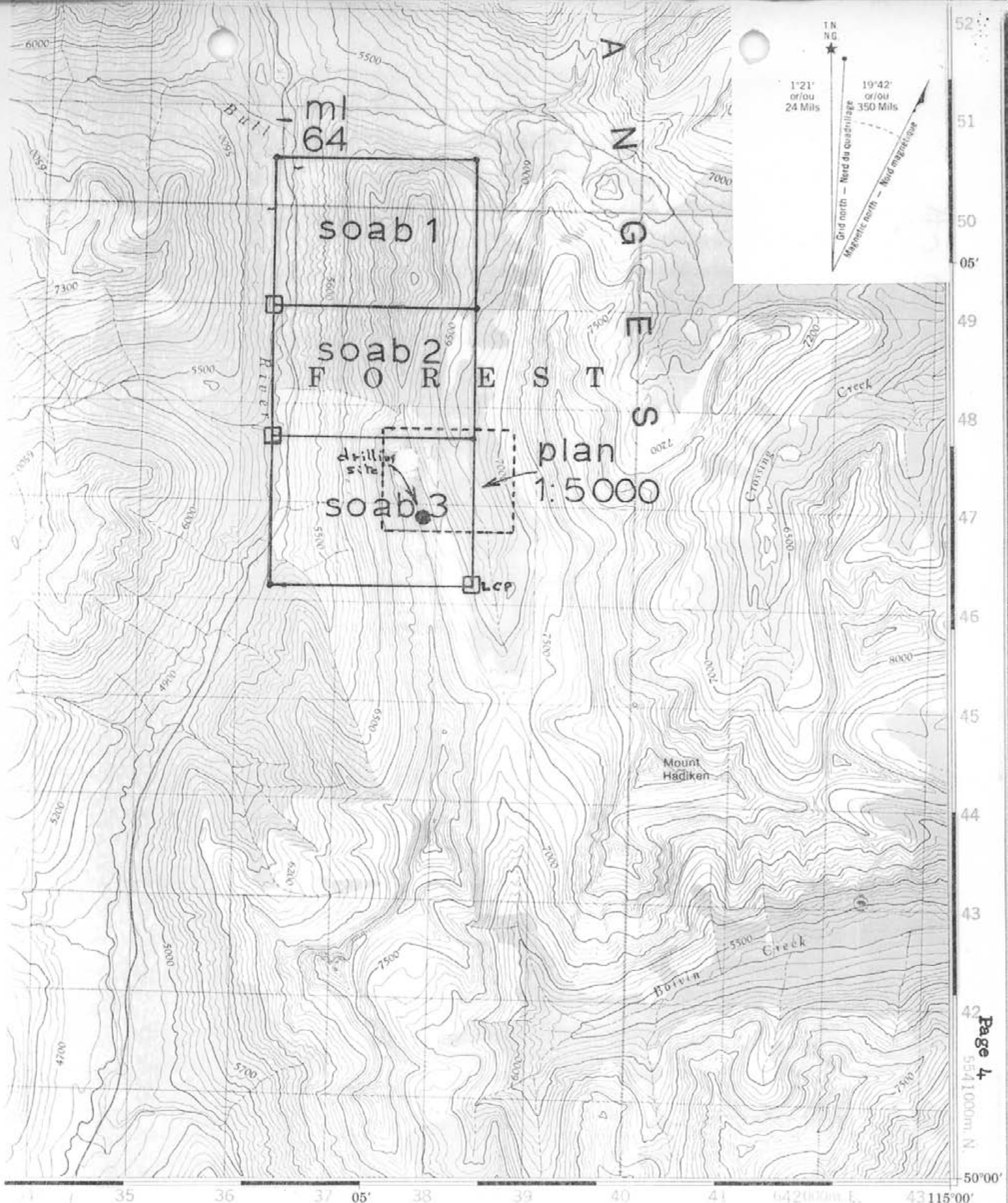
The current owner of this property is Silver Standard Mines Limited (N.P.L.) and the operator is the Rock Joint Venture consisting of Coastal Mining Co. Ltd., Imperial Oil Ltd., and Silver Standard Mines Limited.

- (iii) Funding was provided by the Operator to obtain information on the third dimension of a zinc showing, and a contract for at least 305 meters of diamond core drilling was let to Wink International Exploration Drilling Co., Ltd. The drilling program was carried out from August 26 to September 20, 1978.

The size of the core is B.Q. Eight boreholes were drilled from the same site, and 325 meters of drilling was completed.

- (iv) The drilling was performed on the mineral claim Soab 3.

- (v) The core storage is located about 250 m. east of the drill site, near the camp.

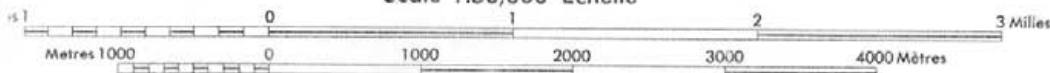


Bull River 46 mi 72 km

INDEX MAP

82 J/3

Scale 1:50,000 Échelle

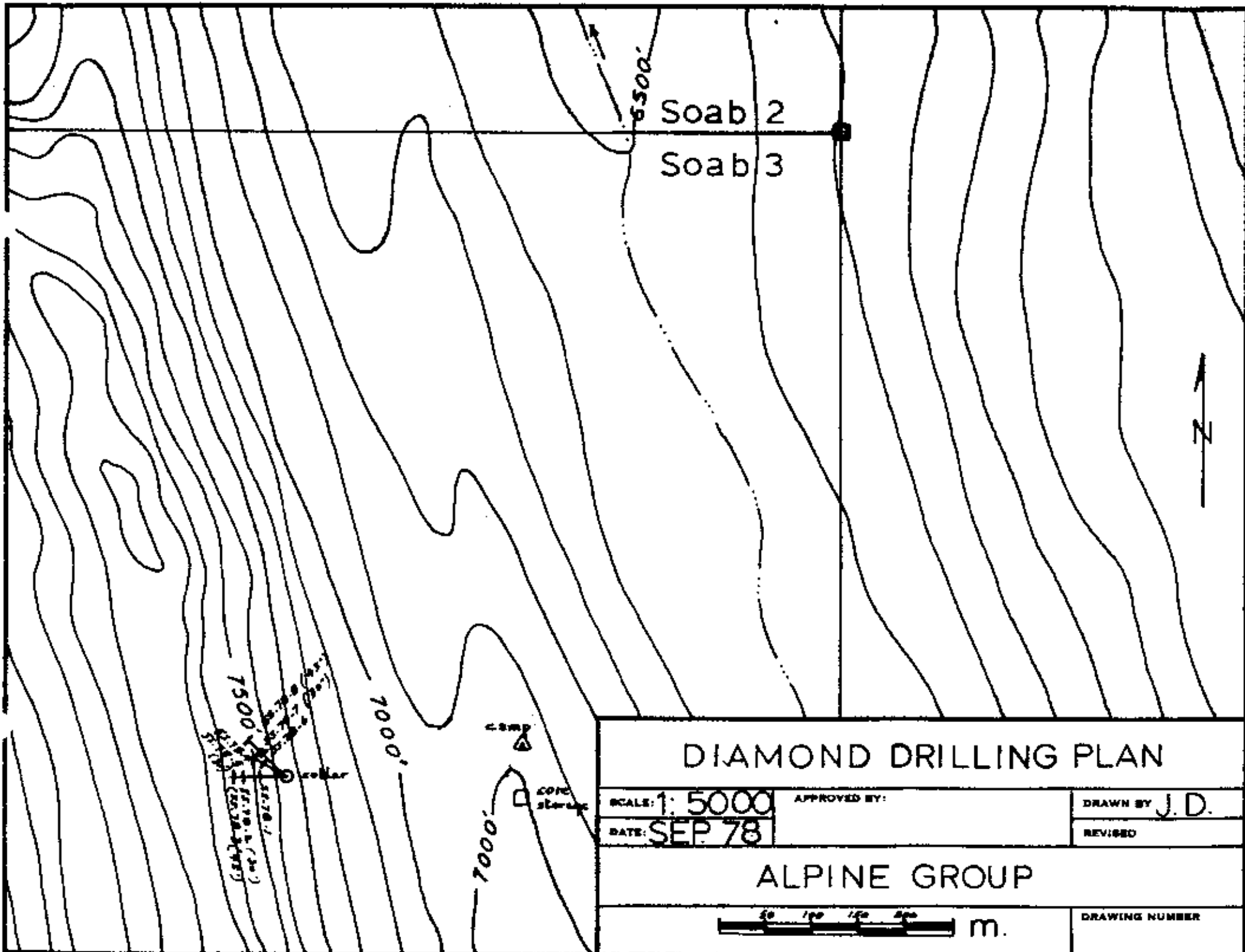


Établie par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Mise à jour à l'aide de photographies aériennes prises en 1972. Vérification des ouvrages en 1975. Renseignements à jour en 1975.

Ces cartes sont en vente au Bureau des Cartes du Canada, ministère de l'Énergie, des Mines et des Ressources, Ottawa, ou chez le vendeur le plus près.

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Page 4
5541000m N
50°00'



Date Started _____

Hole No. SS-78-1

T.D. _____

Page No. 1 of _____

Date Finished _____

Coordinates: P.F. 378474270

Ref. to Claim Corner _____

Collar elev. Approx. 2250 m

Bearing _____

Contractor WINK INTERNATIONAL EXPLORATION DRILLINGInclination HorizontalLogged by De Latorre

Depth Interval M		Core Size	Core Recovery %	Graphic Log M	DESCRIPTION OF CORE
From	To				
0	3.35	BQ	74	La	LIMESTONE 0 - 8.35 m.
3.35	3.65		84		Medium gray, fine-grained, massive.
3.65	5.		100		Compaction is prominent between 3.40 and 4.90 m, trend
5.	6.55		90	5 comp.	more or less 45 degrees to the core. Together with
6.55	7.		95		calcite stringers, hairline to 3 mm in thickness,
7.	8.22		93	Box 2	trend 20 degrees to the core.
8.22	9.29		45	Dol ground	6.40 - 6.85 m compaction and calcite stringers as
9.29	10.97		47	10 Zn	above.
10.97	11.88		75		No mineralisation.
11.88	12.34		23	Zn	
12.34	12.95		55	15 brec.	ZEBRA DOLOMITE 8.35 - 24.00 m.
12.95	13.71		45		Dark gray, fine to medium grained dolomite with
13.71	14.		25		light gray and white crystalline segregations of
14.	15.01		99	Box 3	dolomite (1 mm to 1 cm in width). The zebra texture
15.01	15.54		100	core is broken up and ground	can be angular but generally is rounded and comminuted.
15.54	15.85		-		Together with few hairline carbonate stringers
15.85	16.46		90	La	The trend of white-gray dolomite stripes is about
				25	45 degrees to the core. Sphalerite disseminations in
					places (but few and weak ZAF reactions) as at
				29.26	9.50 ; 10.20 ; 10.95 ; 13.30 ; 14.25 ; 14.78 m.
				END	Minor fine grains of pyrite and rust.

Date Started _____

Hole No. SS-78-1

T.D. _____

Page No. 2 of _____

Date Finished _____

Coordinates: _____ N _____ W _____ E _____

Ref. to Claim Corner _____

Collar elev _____

Bearing 270Contractor Wink Intern.Inclination HorizontalLogged by DeJatre

Depth Interval <u>M</u>		Core Size	Core Recovery %	Graphic Log	DESCRIPTION OF CORE
From	To				
16.46	16.76		70		Zabra dolomite (con'd)
16.76	17.68		55		From 15.14 to 15.35 brecciation - Sparse
17.68	17.98		70		Sphalerite disseminations and Zn carbonate zone
17.98	18.74		80		from 20 to 22 m. Jointing fractures well deve-
18.74	19.65		90		lopped. Zn carbonate at 15.30 and 20.35 to 20.87
19.65	20.12		100		along fracture planes (60 degrees to the core).
20.12	20.87		95		
20.87	21.94		95		Box 4
21.94	22.40		80		LIMESTONE 24 - 29.26 m
22.40	23.16		95		25 cm. of gradational ls-dol. contact.
23.16	23.57		75		Limestone as described above but criss-crossed
23.57	24.17		95		by thin calcite stringers trending 30 degrees
24.17	24.84		100		to the core. Few patches of rust. No Zn minera-
24.84	25.60		-		lisation.
25.60	26.97		-		
26.97	27.73		-		box 5
27.93	28.20		-		
28.20	29.26		-		

Date Started _____
 Date Finished _____
 Ref. to Claim Corner _____
 Contractor Wink International

Hole No. SS-78-2 T.O. _____ Page No. 1 of _____
 Coordinates: PT 378471 N _____ E _____
 Collar elev. Approx. 2250 m Bearing 270
 Inclination 30 degrees Logged by De Latre

Depth Interval M		Core Size	Core Recovery	Graphic Log M	DESCRIPTION OF CORE	
From	To					
0	2.43	B 2	88		LIMESTONE 0 - 16.15 m.	
2.43	3.96		100		Medium gray, fine to medium grained, massive.	
3.96	5.48		100		Criss-crossed by thin calcite stringers.	
5.48	7.		-		Compaction between 5.48 - 6.40; 7.77 - 8.07;	
7.	8.53		-		and 8.53 - 9.14 m	
8.53	10.		-		comp.	No mineralisation.
10.	11.58		-			At about 16 m dolomitic transition.
11.58	13.10		-			
13.10	14.63		-			
14.63	16.15		-			
16.15	17.67		-			ZEBRA DOLOMITE 16.15 - 31.10 m.
17.67	19.20		-			Dark gray, fine to medium grained dolomite
19.20	20.72		-			with white-light gray dolomite segregations
20.72	22.25		-			forming bands 1/2 to 2 cm in width, trending
22.25	23.77		-			45 degrees to the core.
23.77	25.30		-			Banded hairline strikers of white dolomite
25.30	26.82		-		trending 30 and 45 degrees to the core at	
26.82	28.34		-		19.96-20.26; 22.55-22.70; and bands (70	
28.34	29.87		-		degrees to core) 19.20-19.50	
					Con'd	

Date Started: _____

Hole No. SS578-3

T.O. _____

Page No. 1 of _____

Date Finished: _____

Coordinates: P.P. 378.471 NCollar elev. Approx. 2250 mBearing 270

Ref. to Claim Corner: _____

Inclination 45 degreesLogged by De LatzeContractor: Wink International

Depth Interval <u>M</u>		Core Size	Core Recovery %	Graphic Log <u>M</u>	DESCRIPTION OF CORE
From	To				
0	2.43	B Q	85		MASSIVE LIMESTONE 0 - 29.26 m
2.43	3.96		100		Medium gray, fine to medium grained limestone with few thin calcite stringers (up to 2mm in width, trending 60 degrees to the core.
3.96	5.48		-		Compaction zigzag lines trending parallel to the core, as follows:
5.48	8.53		-		2.45 - 3 m ; 7.92 - 9.90 ; 11.43 - 15.54;
8.53	10.		-		at 22.45 and at 24.38
10.	11.58		-		
11.58	13.10		-		
13.10	14.63		-		
14.63	16.15		-		
16.15	17.67		-		
17.67	19.20		-		
19.20	20.72		-		
20.72	22.25		-	MOTTLED LIMESTONE 29.26 - 40.84 m	
22.25	23.77		-	Medium gray with darker narrow anastomosing fucooidlike pattern of dark dolomite, trending parallel to the core. Few irregular calcite masses (up to 1 by 2 cm in size) and calcite stringers (up to 2 mm in width) trending 45 degrees to the core.	
23.77	25.29		-	No zebra texture and no mineralisation.	
25.29	26.82		-		
26.82	28.34		-		
28.34	29.87		-		
29.87	31.39		-		
31.39	32.91		-		

Date Started _____

Note No. SS-78-3

T.O. _____

Page No. 2

of _____

Date Finished _____

Coordinates: _____

N _____

Ref. to Claim Corner _____

Collar elev. _____

Bearing 270Contractor WinkInclination 45 degreesLogged by DeLab

Depth Interval <u>M</u>		Core Size	Core Recovery %	Graphic Log
From	To			
32.91	34.45	B Q	100	
34.45	35.96		-	
35.96	37.49		-	
37.49	39.		-	
39.	40.53		-	
40.53	42.06		-	
42.06	43.58		-	
43.58	45.11		-	
45.11	46.63		-	
46.63	48.15		-	
48.15	49.68		-	
49.68	51.20		-	
51.20	52.73		-	
52.73	54.25		-	
54.25	55.77		-	
55.77	57.30		-	

DESCRIPTION OF CORE

MASSIVE LIMESTONE 40.84 - 57.30 m

As describe above but with fewer thin calcite stringers and small pods and trending 20 to 30 degrees to the core.

From 52.12 to 57.30 slightly mottled texture with few thin calcite stringers (or partly dolomitised), 20 and 45 degrees to the core.

No mineralisation.

Date Started _____

Date Finished _____

Ref. to Claim Corner _____

Contractor Wink InternationalHole No. SS-78-4 T.O. _____ Page No. _____ of _____Coordinates: PT 378 471 N _____ E _____Collar elev. Approx. 2250 m Bearing 300Inclination Horizontal Logged by DeLatre

Depth Interval <u>m</u>		Core Size	Core Recovery %	Graphic Log <u>m</u>	DESCRIPTION OF CORE
From	To				
0	2.13	B Q	98		
2.13	3.65		100		
3.65	5.18		-		
5.18	6.70		-		
6.70	8.22		-		
8.22	9.75		-		
9.75	11.27		95		
11.27	12.80		100		
12.80	14.32		-		
14.32	15.84		-		
15.84	17.37		95		
17.37	18.59		100		
18.59	20.11		-		
20.11	20.42		-		
20.42	21.94		-		
21.94	23.46		-		
23.46	24.99		90		
24.99	26.06		90		
26.06	26.82		80		
26.82	28.04		20		
28.04	29.56		100		

LIMESTONE 0 - 9.45 m

Medium gray, fine grained, massive.

Some compaction in places and calcite stringers trending 20 degrees to the core.

No mineralisation.

ZEBRA DOLOMITE 8.35 - 24. m

Dark gray, fine to medium grained dolomite with light gray-white crystalline segregations of dolomite.

Limestone band 18.29 to 18.50. Minor rust at 10.51 and 12.80.

Zinc carbonate mineralisation (very minor ZnS) scattered between 21.92 - 25.45, specially between 23.47 - 25.45.

Very minor pyrite or rust. Mineralisation along jointing fracture planes.

LIMESTONE 28.35 - 29.56 m

As described above.

Hole No. _____

Date Started _____
 Date Finished _____
 Ref. to Claim Corner _____
 Contractor: Wink International

Hole No. SS-78-6 T.O. _____ Page No. 1 of _____
 Coordinates: FF 378 471 N _____
 Collar elev. Approx. 2250 m. Bearing 315
 Inclination Horizontal Logged by Delatre

Depth Interval <u>M</u>		Core Size	Core Recovery %	Graphic Log <u>M</u>
From	To			
0	3.65	B 2	100	
3.65	5.18	-	-	
5.18	5.63	-	-	
5.63	6.70	-	-	
6.70	7.92	-	-	
7.92	9.14	-	-	
9.14	10.36	-	-	
10.36	11.27	-	-	
11.27	11.88	-	-	
11.88	12.80	-	-	
12.80	14.63	-	-	
14.63	15.85	-	-	
15.85	17.37	-	-	
17.37	18.44	-	-	
18.44	19.35	-	-	
19.35	20.11	-	95	
20.11	20.42	-	100	
20.42	21.94	-	100	
21.94	23.47	-	90	
23.47	24.38	-	100	

DESCRIPTION OF CORE
LIMESTONE 0 - 10.21 m
Medium gray, medium graine, massive.
Thin carbonate stringers trending 70 degrees to the core. Minor compaction at 5.50 and between 6.40 and 7. No mineralisation.
DOLomite 10.21 - 15.85 m
Dark gray, medium grained dolomite (dolomitised limestone) with few small segregations of white dolomite and thin, irregular dolomite stringers
No Zn mineralisation or pyrite.
ZEBRA DOLomite 15.85 - 32.92 m
Typical zebra texture (irregular bands of dark gray and light gray-white bands well developed.
No mineralisation visible before about 25 m.
Skimpy Zn carbonate at 28.04 and between 29.87 and 32.31.

Date Started _____
 Date Finished _____
 Ref. to Claim Corner _____
 Contractor Wink

Hole No. SS-78-6 T.D. _____ Page No. 2 of _____
 Coordinates: _____ N _____
 Collar elev. _____ Bearing 315
 Inclination Horiz. Logged by DeLatre

Depth Interval M		Core Size	Core Recovery %	Graphic Log M	DESCRIPTION OF CORE
From	To				
24.38	24.84	B	100		LIMESTONE 32.92 - 35.66 m.
24.84	25.90		-		As Ls above; few calcite stringers mostly at 45 degrees to the core.
25.90	26.51		88		Dark compaction lines at 34.75 and 35.35 - 35.66.
26.51	28.04		100		No trace of mineralisation.
28.04	29.56		50		
29.56	30.32		90		
30.32	31.09		100		
31.09	32.30		-		
32.30	33.53		-		
33.53	34.22		-		
34.22	35.66		-		

[Handwritten signature]

Date Started _____
 Date Finished _____
 Ref. to Claim Corner _____
 Contractor **Wink International**

Hole No. **SS-78-7** T.D. _____ Page No. **1** of _____
 Coordinates: **PF 378 471**
 Collar elev. **Approx. 2250 m.** Bearing **315**
 Inclination **30 degrees** Logged by **De Latre**

32.

Depth Interval M		Core Size	Core Recovery %	Graphic M ^o	DESCRIPTION OF CORE
From	To				
0	2.13	B 2	95		LIMESTONE 0 - 22.40 m
2.13	3.65		100		Medium gray, medium grained, massive.
3.65	5.18		-		Relatively few thin calcite stringers 30 and
5.18	6.70		-		45 degrees to the core and few calcite veinlets
6.70	9.75		-		1/2 cm thick at 45 degrees to the core. Some
9.75	11.27		-		vugs. Good porosity.
11.27	12.80		-		Irregular lines of compaction. (From parallel
12.80	14.32		-		to 70 degrees to the core.)
14.32	15.85		-		No mineralisation.
15.85	17.37		-		
17.37	18.90		-		DOLOMITE 22.40 - 31.24 m
18.90	20.42		-		Dark gray, medium grained. No zebra texture.
20.42	21.94		-		Criss-crossed by thin white dolomite stringers
21.94	23.47		85		trending 30-40 degrees to the core. Few iso-
23.47	25.		100		lated white dolomite segregations, 1 to 2 cm
25.	26.51		90		in size, between 24.69 - 25.30. Good porosity.
26.51	28.04		100		No mineralisation. No ZAP reaction.
28.04	29.56		-		Small pyrite nodule at 25.13 m.
29.56	31.09		-	Bracciated at 26.51 (2 cm width)	
				29.57-29.80 (45 deg. to core);	
				30.17 (5 cm width; numerous hairline dol.	
				stringers 45 deg. to core)	

Date Started _____
 Date Finished _____
 Ref. to Claim Corner _____
 Contractor **Wink International**

Hole No. **SS-78-8** T.D. _____ Page No. **2** of _____
 Coordinates: **P 2 378 471** N _____
 Collar elev. **Approx. 2250 m.** Bearing **315**
 Inclination **45 degrees** Logged by **Delatre**

Depth Interval M		Core Size	Core Recovery %	Graphic Log M	DESCRIPTION OF CORE	
From	To					
0	2.13	B Q	90		LKESTONS 0 - 61.57 m	
2.13	3.65		100			
3.65	5.18		-			Massive, medium grained, medium gray, with
5.18	6.70		-			thin calcite stringers (up to 4-5 mm in width)
6.70	8.23		-		Box 2	trending 45 degrees to the core.
8.23	9.75		-			zigzag compaction lines trending parallel to
9.75	11.27		-			the core: 12.19 - 13.11
11.27	12.80		-			16.76 - 23.16
12.80	14.32		-			Fracture (joint) parallel to the core (minor
14.32	15.85		-		Box 3	rust) 10.05 to 11.58 ; 28.35
15.85	17.37		-			Between 23.16 and 26.21 limestone is inter-
17.37	18.89		-			twined with calcite stringers (up to 3mm in
18.89	20.42		-			width) giving a brecciated appearance, 30 -
20.42	21.94		-			40 degrees to the core
21.94	23.47		-		Box 4	No mineralisation.
23.47	25.		-			
25.	26.51		-			
26.51	28.04		-			
28.04	29.56		-	Box 5		
29.56	31.09		-			

[Signature]
 Hole No. _____

Date Started _____

Hole No. SS-78-8 T.D. _____ Page No. 2 of _____

Date Finished _____

Coordinates: _____ N _____

Ref. to Claim Corner _____

Collar size _____ Bearing 315

Contractor Wink

Inclination 45 degrees Logged by DeLatre

Depth Interval M		Core Size	Core Recovery %	Graphic Log M	DESCRIPTION OF CORE
From	To				
31.09	32.61	B 2	100		Limestone as above.
32.61	34.13	-	-		
34.13	35.66	-	-		Box 6
35.66	37.18	-	-		
37.18	38.71	-	-		
38.71	40.23	-	-		
40.23	41.75	-	-		
41.75	43.28	-	-		
43.28	44.80	-	-		Box 7
44.80	46.33	-	-		
46.33	47.85	-	-		
47.85	49.37	-	-		
49.37	50.90	-	-		
50.90	52.42	-	-		Box 8
52.42	53.95	-	-		
53.95	55.47	-	-		
55.47	57.	-	-		
57.	58.52	-	-		
58.52	60.04	-	-	Box 9	
60.04	61.57	-	-		
					61.57 END



CHEMEX LABS LTD.

217 BROOKSBANK AVE
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE 985-0648
AHLA CODE 604
TELEX 043 52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Silver Standard Mines Ltd.,
904 - 1199 West Hastings Street,
Vancouver, B. C.
V6E 3T5
ATTN: P. McAndless, Alex Jones

PROJECT ALPINE-27

CERTIFICATE NO. 34437
INVOICE NO. 28231
RECEIVED Sept. 22, 1978
ANALYSED Sept. 26, 1978

SAMPLE NO. :	X Zn
17388	0.01
17389	0.01
17390	0.01
17391	0.01
17392	0.04
17393	0.12
17394	0.45
17395	0.01
17396	0.01
17397	< 0.01
17398	< 0.01
17399	< 0.01
17400	0.01



MEMBER
CANADIAN TESTING
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

COST STATEMENT

ALPINE GROUP

TOTAL ALLOWABLE COSTS FOR ASSESSMENT \$38,222.91

1. Payroll Distribution

Period	: Aug 17-Sept 21/78	
Total Man Days	: 66	
Average Wage/Man Day	: \$65.00	
Total Wages	:	\$4,290.00

2. Room and Board

Period	: Aug 17-Sept 21/78	
No. of Days	: 36	
Average Cost/Day	: \$34.43	
Total Cost	:	\$1,239.48

3. Transportation

a) Rotary Wing

Period	: Aug 19-Sept 21/78	
Total Hours	: 21.3	
Rate/Hour	: \$340.00	
Total Cost	:	\$7,242.00

b) Truck

Period	: Aug 17-Sept 21/78	
No. of Days	: 36	
Rental Cost/Day	: \$25.00	
Total Cost	:	\$900.00

4. Diamond Drilling

Period	: Aug 26-Sept 21/78	
Total No. of Meters	: 325	
Cost/Meter (incl. mob, demob., transp., fuel, etc.)	: \$21.65	
Total Cost	:	\$23,076.43

71.00

ALPINE GROUP CONT'D.

5. Assaying

No. of core samples	:	25	
Cost/Sample	:	\$5.00	
Total Cost	:		\$125.00

6. Supervision

Period	:	Aug 31-Sept 8/78	
Total Man Days	:	9	
Cost/Man Day	:	\$150.00	
Total Cost	:		\$1,350.00

TOTAL ALLOWABLE COSTS FOR ASSESSMENT			<u>\$38,222.91</u>
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SILVER STANDARD MINES LIMITED

(Non-Personal Liability)

STATEMENT OF QUALIFICATIONS

I, John S. DeLatre, with residential address in Vancouver, B.C., do hereby certify that:

1. I am a geologist in the temporary employ of Silver Standard Mines Limited (NPL) of 904-1199 W. Hastings Street, Vancouver, B.C. V6E 3T5.
2. I am a graduate of the University of Paris (Sorbonne), with a degree in applied geology (1956).
3. I have gained wide experience in field geology and mineral exploration in Canada since 1957.

Respectfully submitted,

J.S. DeLatre
Geologist



SILVER STANDARD MINES LIMITED

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STATEMENT OF QUALIFICATIONS

I, Patrick M. McAndless, with residential address in White Rock, B.C., do hereby certify that:

1. I am a geologist in the permanent employ of Silver Standard Mines Limited (NPL), of 904-1199 W. Hastings Street, Vancouver, B.C. V6E 3T5.
2. I am a graduate of the University of British Columbia (B.Sc. 1970).
3. I have practiced in the field of mineral exploration since 1970.
4. I am a member of the Geological Association of Canada and Canadian Institute of Mining.

Respectfully submitted,

P.M. McAndless
Geologist