

83-#890-11808

8

GEOCHEMICAL REPORT
ON THE
MB GROUP OF CLAIMS
(MB1, MB2, and MB3)

KAMLOOPS MINING DIVISION

NTS 82 M 3 and 82 L 14
51° 00' N, 119° 09' W

Owner: Alpine Silver Ltd.
Operator: Alpine Silver Ltd.
Consultant: VLH Consultants Ltd.
Author: V. Ryback-Hardy, P. Eng.
30 September, 1983

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,808

VLH CONSULTANTS LTD.

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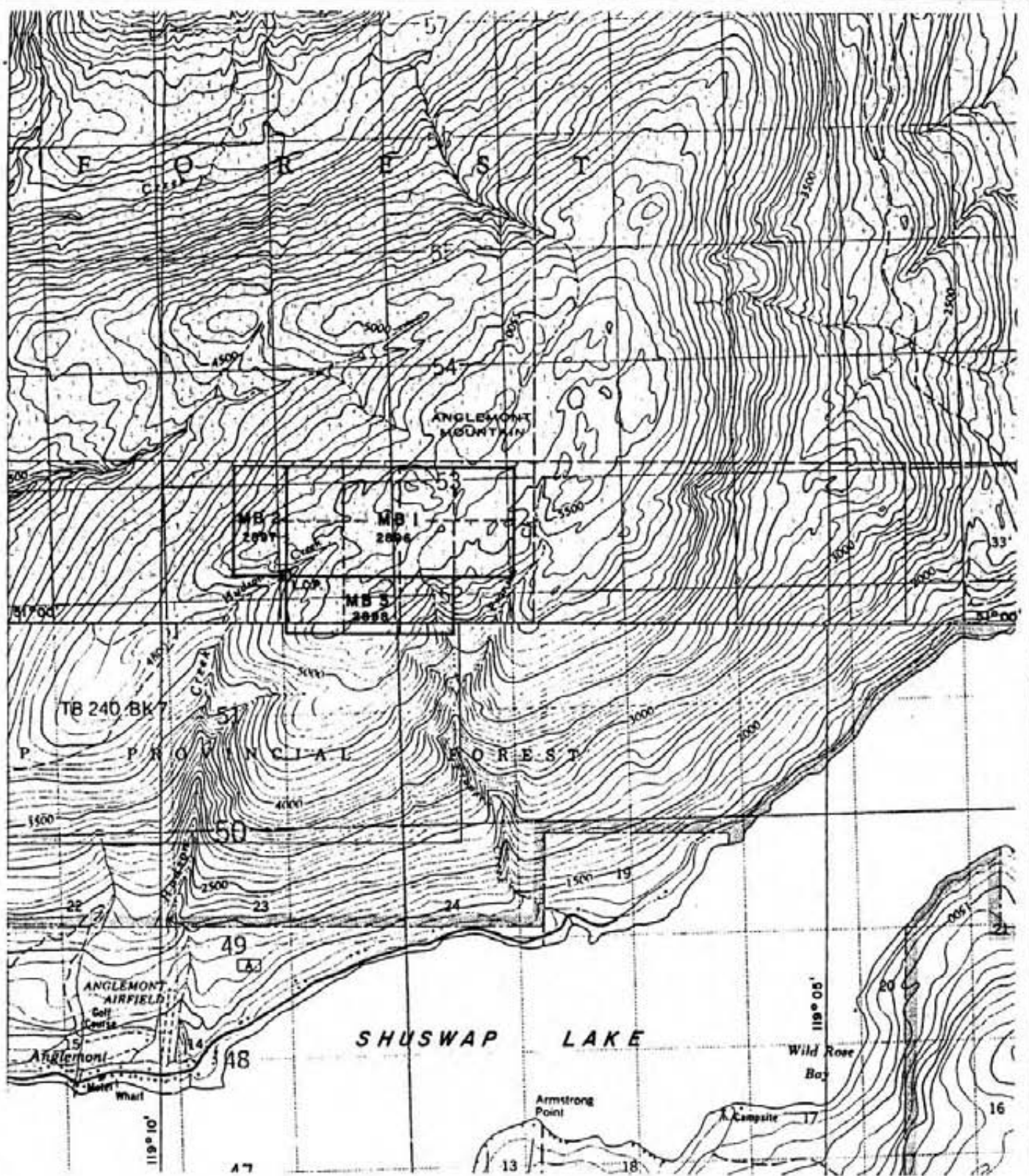
INTRODUCTION

The MB mineral claims are located north of Shuswap Lake, near the upper end of Hudson Creek on the southwest side of Angle Mountain. The moderately steep and well forested area is part of the Shuswap Highland Forest. The area is covered by a good growth of Black Spruce up to a diameter of 0.5 metres.

Access is by the Ross Creek Forestry Development Road which runs into Fraser Road and, in turn, joins the main Shuswap Lake Road about two kilometres east of Anglemont, B. C. Logging spur roads provide road access to within 15 metres of the common legal post for the four mineral claims.

The MB Group consists of the MB1, MB2, and MB3 mineral claims. The claims cover a new showing discovered two years ago as a result of stripping conducted to extend a logging spur road. In August, 1982, a preliminary soil sampling survey was conducted along a grid spaced at 200 metre intervals covering the westerly portions of the MB1 and MB3 claims. Sixty-four soil samples were collected at 50 metre intervals along lines spaced at 100 metre intervals. An area 200 metres wide and 1,000 metres long was covered by the soil grid (3.0 line-kilometres). Two soil samples collected near the south end of the grid on line 1+00 E returned values of 240 and 350 parts per million lead respectively and are considered highly anomalous.

The property presently consists of the following mineral



VLH CONSULTANTS LTD

ALPINE SILVER LTD.

MB No.1 CLAIM

LOCATION MAP

SHUSWAP AREA, BRITISH COLUMBIA

SCALE 1:50000

DATA BY: V.R.H.
DATE: SEPT. '85

DRAWN BY: K.L.J.
DATE: SEPT. '85

FIG.No.
2

N.T.S. 82 M 3 E

claims in the Kamloops Mining Division.

Claim Name	Units	Record Number	Record Date
MB1	8	2896	August 18
MB2	2	2897	August 18
MB3	3	2898	August 18

The current owner and operator is Alpine Silver Ltd., 780 - 885 Dunsmuir Street, Vancouver, B. C. V6C 1N8.

The claims are underlain by paleozoic graphitic schists in contact with limestone, dolomite, and limy quartzites. Approximately 50 metres north of the common Legal Corner Post, a 1.5 to 2.0 metre wide flatly dipping quartz vein striking west north west contains significant amounts of argentiferous galena. Further south, disseminated galena was noted in dolomitic limestone bands near the contact with the schists. The claims are being investigated for the possibility of the occurrence of economic deposits of lead and silver in quartz veins or the possible occurrence of replacement type metasomatic deposits near the contact between graphitic schists and limestone.

The current exploration work conducted on the property in August, 1983 consisted of a soil sampling survey. Two hundred and sixty-five soil samples were collected over a grid at 50 metre intervals along lines spaced at 200 metre intervals.

A total of 13,000 metres of grid was established using a hip-chain and compass. The stations were marked and numbered with orange vinyl tape.

DETAILED TECHNICAL DATA AND INTERPRETATION

GEOCHEMISTRY

The soils were collected from the 'B' horizon at an average depth of 0.3 metres using a mattock; then stored in Kraft paper envelopes. The samples were forwarded to Min-En Laboratories Ltd. 705 West 15th Street, North Vancouver, B. C. V7M 1T2. The samples were dried, sieved and the -80 mesh fraction was analysed by standard atomic absorption techniques after a nitric, perchloric acid digestion.

The samples were analysed for Cu, Pb, Zn and Ag. The sample locations were plotted relative to the common Legal Corner Post of the four claims. The geochemical metal values in parts per million were plotted at the corresponding stations at a scale of 1:2,500 and contoured.

The mean (μ) and standard deviations (σ) of the population was determined for each metal and the following parameters were determined.

Metal	Values in ppm.			
	Cu	Pb	Zn	Ag
Mean (μ)	30	28	64	1.3
Probably Anomalous ($\mu+2\sigma$)	>60	>104	>124	>2.2
Definitely Anomalous ($\mu+3\sigma$)	>75	>142	>154	>2.7

Inspection of the contoured sample values indicates a subdued response to underlying mineralization. This may be due to several complex factors such as eH and pH of soils and depth of overburden. Several observations can be made as follows:

(a.) A zone geochemically anomalous in silver occurs along the common boundary between MB 1 and MB 3 between stations 9+00E and 10+50E and a one sample anomaly (3.0 ppm) occurs at 3+00N on L12+00E. These areas require additional close spaced geochemical sampling and soil profiling.

(b.) A one station high in lead (590 ppm) with a correlating high in copper (134 ppm) occurs at 2+50N on L16+00E. This anomalous station would be the highest priority target for further exploration. Detailed geochemical sampling and profiling followed by bulldozer trenching is warranted.

GEOPHYSICS

The magnetometer survey was conducted with a Scintrex Proton Precession Magnetometer Model MP-2 which reads directly to one gamma. The instrument reads the total intensity of the earth's magnetic field. The approximate field strength in this area is approximately 58,000 gammas. A magnetic baseline was established using multiple time dependent readings. These base stations were

occupied at intervals not exceeding two hours throughout the day. Diurnal corrections were thus applied to the magnetometer readings using a straight line correction.

The magnetometer survey indicated a trough-like low extending northeasterly from about 0+50E on the baseline to 1+50N on line 2+00E. This magnetic feature appears to indicate a structural trend (possibly a fault) that has influenced the course of Hudson Creek in this area. It is interesting to note that occurrences of quartz ankerite mariposite alteration have been noted in the area of this magnetic low. It is reported that a sample of this mariposite (unverified) returned economic values in silver. This area warrants follow-up sampling to verify the report of high silver values.

Respectfully submitted,



V. Ryback-Hardy, P. Eng.



ITEMIZED COST STATEMENT

Itemized Cost Statement for work performed on the MB1 mineral claims during August 6 to August 17, 1983.

Wages (Period August 6 to August 17, 1983)

V. Ryback-Hardy	2 days @ \$330.00 per day	\$660.00
A. Bolton	11 days @ \$100.00 per day	1,100.00
J. Travis	11 days @ \$100.00 per day	1,100.00
B. Woods	11 days @ \$100.00 per day	1,100.00
TOTAL		\$3,960.00
Transportation and Fuel		\$125.00
Vehicle Rental		350.00
Accommodation 35 man-days at \$40.00 per man-day		1,400.00
Equipment and Consumables		610.39
Report Preparation professional services V. Ryback-Hardy		600.00
Typing and Blueprinting		150.00
Drafting		600.00

TOTAL		\$7795.39



STATEMENT OF QUALIFICATIONS

I, Victor Ryback-Hardy, 11691 Trumpeter Drive, Richmond, B. C., V7E 3X4, do hereby certify that:

1. I graduated from the University of British Columbia with a Bachelor of Applied Science (Geological Engineering) in 1970.
2. I am a registered Professional Engineer (Geological) in the province of British Columbia (Reg. No. 8825).
3. I have practiced my profession since 1970.
4. I have no interest, direct or indirect, in the MB Claims nor in the securities of Alpine Silver Ltd.
5. The work covered by this report was conducted under my direct supervision during August, 1983.

Victor Ryback-Hardy

V. Ryback-Hardy, P. Eng.



APPENDIX 1

GEOCHEMICAL RESULTS

MIN-EN Laboratories Ltd.

705 WEST 15th STREET,
NORTH VANCOUVER, B.C., CANADA V7M 1T2
TELEPHONE (604) 980-5814

ANALYTICAL REPORT

Project Date of report August 25/83.

File No. 3-806 Date samples received August 19/83.

Samples submitted by:

Company: VLH Consultants

Report on: 265 soils Geochem samples

..... Assay samples

Copies sent to:

1. VLH Consultants, Vancouver, B.C.

2.

3.

Samples: Sieved to mesh -80 Ground to mesh

Prepared samples stored discarded

rejects stored discarded

Methods of analysis: nitric, perchloric digestion, A.A.

Remarks:

SPECIALISTS IN MINERAL ENVIRONMENTS

COMPAT

LH Consultants Ltd.

GEOCHEMICAL ANALYSIS DATA SHEET

F. 103-806

PROJECT No.: _____

MIN - EN Laboratories Ltd.

DATE: Aug. 2

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

1983.

ATTENTION: _____

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Sample. Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb			
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	160
A1020		25	40	70				1.2							
21		31	32	53				1.0							
22		33	30	52				1.3							
23		17	20	30				1.1							
24		27	22	67				1.0							
25		21	19	44				.9							
26		16	32	42				1.1							
27		24	21	48				1.3							
28		38	58	115				1.4							
29		20	23	48				.6							
30		21	20	38				1.0							
31		23	21	73				.9							
32		29	24	63				1.1							
33		18	18	52				.8							
34		No Sample						.							
35		36	19	60				1.4							
36		20	24	42				1.1							
37		25	23	84				1.2							
38		40	30	108				2.1							
A1039		59	31	70				1.9							
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CERTIFIED BY



GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: _____

MIN - EN Laboratories Ltd.

DATE: Aug. 2

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

ATTENTION: _____

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
A1040		34	34	75			1.0									
41		31	39	83			1.2									
42		33	38	76			1.2									
43		34	30	60			1.0									
44		35	26	61			1.3									
45		22	19	60			.9									
46		21	16	28			1.2									
47		24	25	43			1.1									
48		28	14	36			1.2									
49		22	24	42			1.1									
50		22	28	43			1.2									
51		26	22	39			.9									
52		17	12	42			.7									
53		13	23	20			.7									
54		17	20	26			.9									
55		31	30	73			.8									
56		25	20	40			.9									
57		26	31	76			.9									
58		30	23	71			1.0									
A1059		21	19	49			.8									
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GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: _____

MIN - EN Laboratories Ltd.

DATE: Aug. 2

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

ATTENTION:

1983

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb				
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
A1060		20	24	45			0.9									
61		31	35	84			1.2									
62		34	22	63			1.0									
63		14	19	27			1.3									
64		21	20	43			1.4									
65		39	32	137			2.1									
66		31	28	86			1.9									
67		47	36	117			2.0									
68		40	86	135			1.0									
69		34	52	91			2.0									
70		32	25	64			1.2									
71		31	38	170			1.9									
72		22	26	46			1.2									
73		27	25	59			0.8									
74		25	28	38			0.9									
75		24	18	40			0.7									
76		25	20	46			1.5									
77		24	18	41			1.3									
78		36	34	95			1.0									
A1079		37	30	70			1.2									
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COMPAS

VLH Consultants

GEOCHEMICAL ANALYSIS DATA SHEET

F. No. 3-806

PROJECT No.:

MIN - EN Laboratories Ltd.

DATE: Aug. 2

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

ATTENTION:

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb			
81	86	95	100	105	110	115	120	125	130	135	140	145	150	155	160
A 1080		42	25	80			11								
81		33	34	99			08								
82		18	14	32			09								
83		27	21	76			10								
84		20	18	37			11								
85		22	14	50			12								
86		21	17	35			11								
87		23	19	53			18								
88		20	14	38			11								
89		33	17	47			24								
90		28	15	59			13								
91		28	15	61			09								
92		19	13	37			09								
93		16	33	36			11								
94		30	43	102			15								
1600E 1215PM 95		134	590	96			15								
96		23	28	37			08								
97		55	125	100			22								
98		32	24	45			13								
A 1099		52	42	109			12								
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GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: _____

MIN - EN Laboratories Ltd.

DATE: **Aug. 25**

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1983.

ATTENTION:

Sample. Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb				
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
A.02.001		37	38	107			14									
A.20.01A		67	34	76			18									
2		44	30	110			19									
3		19	17	35			09									
4		28	14	41			09									
5		16	12	28			10									
6		16	11	24			10									
7		27	31	56			12									
8		27	9	50			13									
9		28	21	69			12									
10		19	10	56			10									
11		32	16	50			14									
12		20	9	61			13									
13		22	27	45			12									
14		25	20	55			12									
15		27	24	50			19									
16		34	32	42			38									
17		22	24	56			12									
18		29	11	116			26									
19		47	20	74			31									
20		41	23	77			17									
21		85	32	107			18									
22		38	28	117			19									
23		48	17	105			18									
24		33	10	82			18									
25		67	27	191			17									
26		33	14	100			18									
27		27	13	72			22									
28		60	46	100			18									
A.20.29		45	17	90			21									

GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: _____

MIN - EN Laboratories Ltd.

DATE: Aug. 25

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

ATTENTION:

1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb				
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
A 2069		5.6	2.9	10.3			1.5									
70		1.9	2.2	3.2			0.9									
71		2.3	2.4	5.2			1.1									
72		2.2	2.5	5.1			1.3									
73		1.3	1.5	2.2			0.9									
74		2.0	2.4	3.5			0.8									
75		2.0	2.1	7.4			1.5									
76		2.1	4.3	6.0			1.2									
77		2.9	2.9	4.5			2.2									
78		2.8	4.4	6.8			1.2									
79		no sample					.									
80		2.3	4.0	8.6			1.2									
81		2.5	4.2	7.4			1.2									
82		3.6	7.1	6.9			1.3									
83		2.0	2.5	5.0			1.4									
84		1.8	1.3	3.1			1.3									
85		1.9	1.9	3.8			1.6									
86		2.0	2.3	5.0			1.6									
87		3.9	2.8	7.1			1.5									
A 2088		3.4	2.1	7.1			2.0									
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APPENDIX II

GEOCHEMICAL PROCEDURES

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke

705 WEST 15th STREET

NORTH VANCOUVER, B.C.

CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

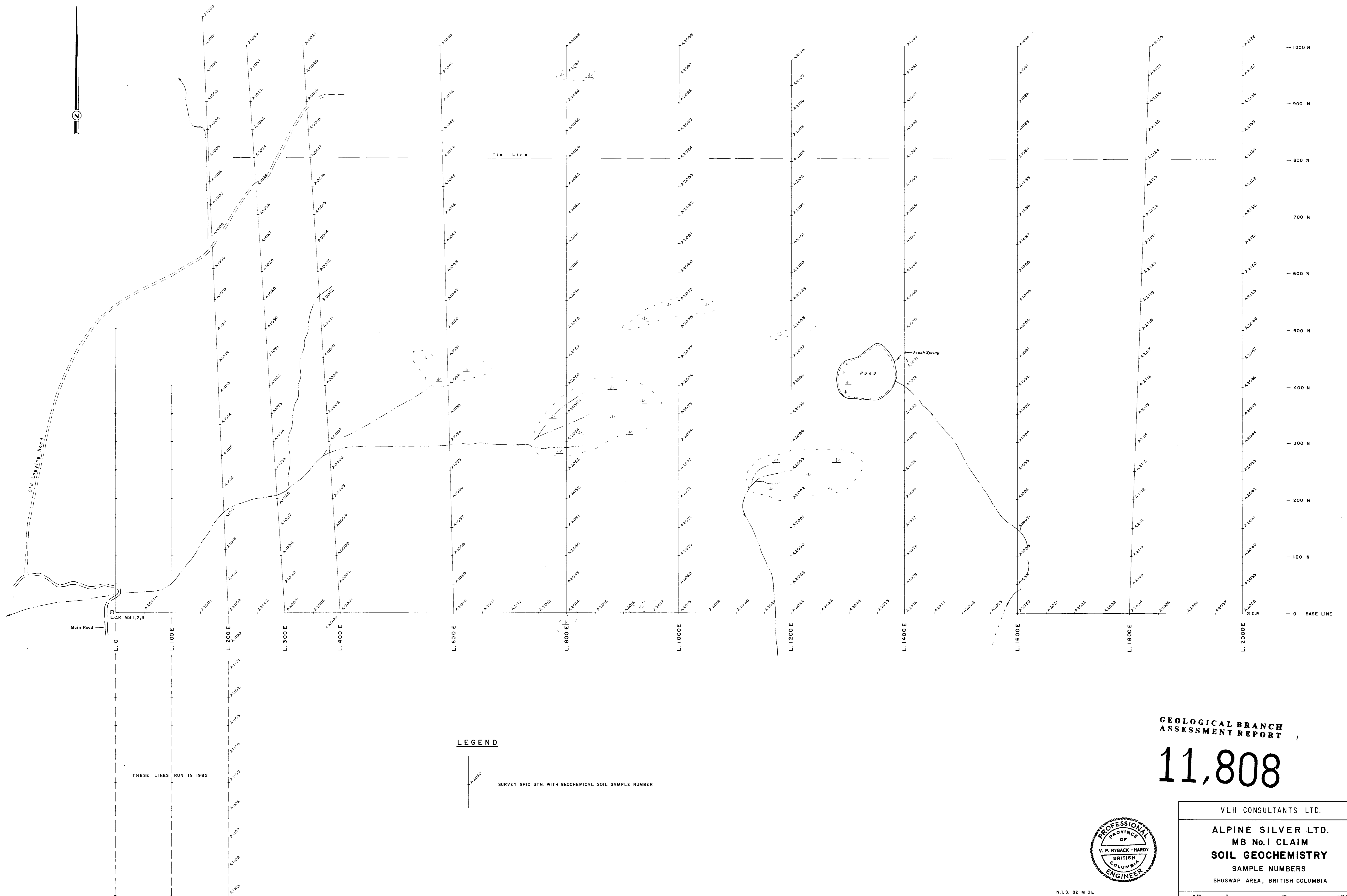
1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH_2H_2 -Air flame combination but the Molybdenum determination is carried out by C_2H_2 - N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

For Arsenic analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzeit method using $\text{Ag CS}_2\text{N} (\text{C}_2\text{H}_5)_2$ as a reagent. The detection limit obtained is 1.2 ppm.

Fluorine analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific ion electrode. Detection limit of this test is 10 ppm F.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

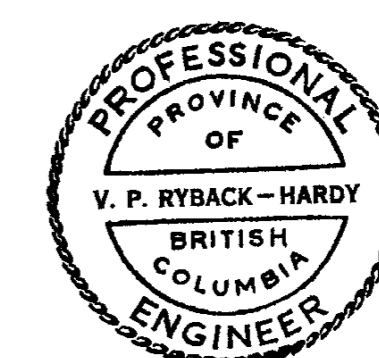
11,808

LEGEND

— A1000
SURVEY GRID STN. WITH GEOCHEMICAL SOIL SAMPLE NUMBER

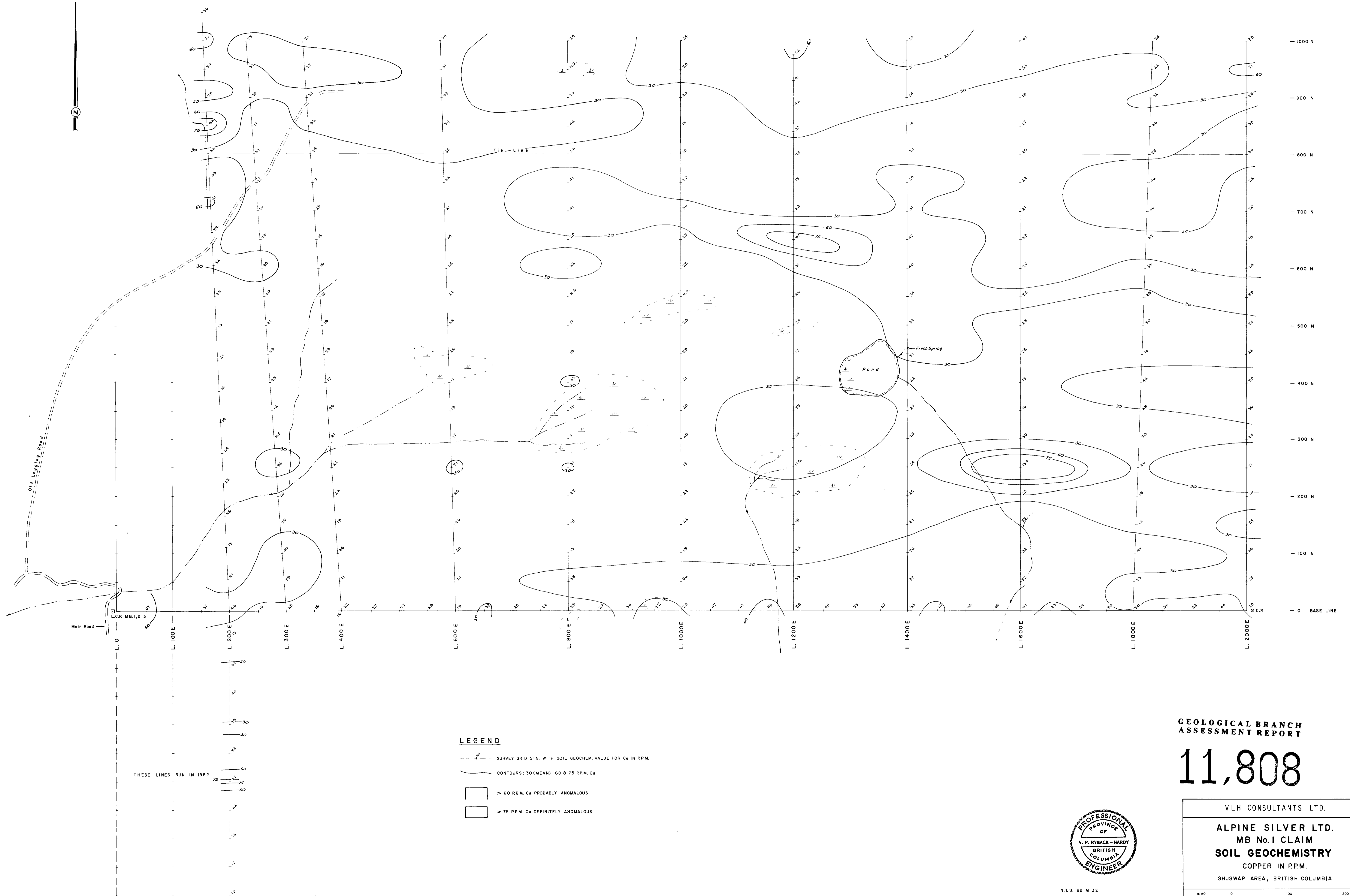
THESE LINES RUN IN 1982

N.T.S. 82 M 3E



VLH CONSULTANTS LTD.
ALPINE SILVER LTD.
MB No. 1 CLAIM
SOIL GEOCHEMISTRY
SAMPLE NUMBERS
SHUSWAP AREA, BRITISH COLUMBIA

MAPPED BY: V.R.H. DATE: AUG. '83
DRAWN BY: K.L.J. DATE: SEPT. '83
FIGURE No. 3



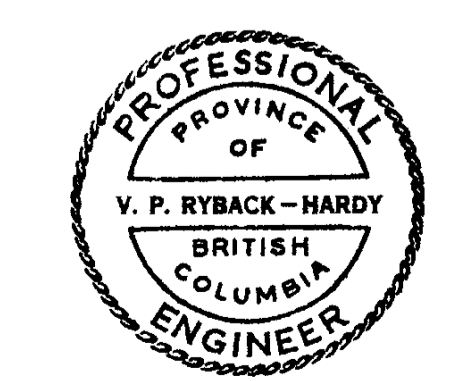
LEGEND

- SURVEY GRID STN. WITH SOIL GEOCHEM VALUE FOR Cu IN P.P.M.
- CONTOURS: 30 (MEAN), 60 & 75 P.P.M. Cu
- > 60 P.P.M. Cu PROBABLY ANOMALOUS
- > 75 P.P.M. Cu DEFINITELY ANOMALOUS

THESE LINES RUN IN 1982

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,808



N.T.S. 82 M 3E

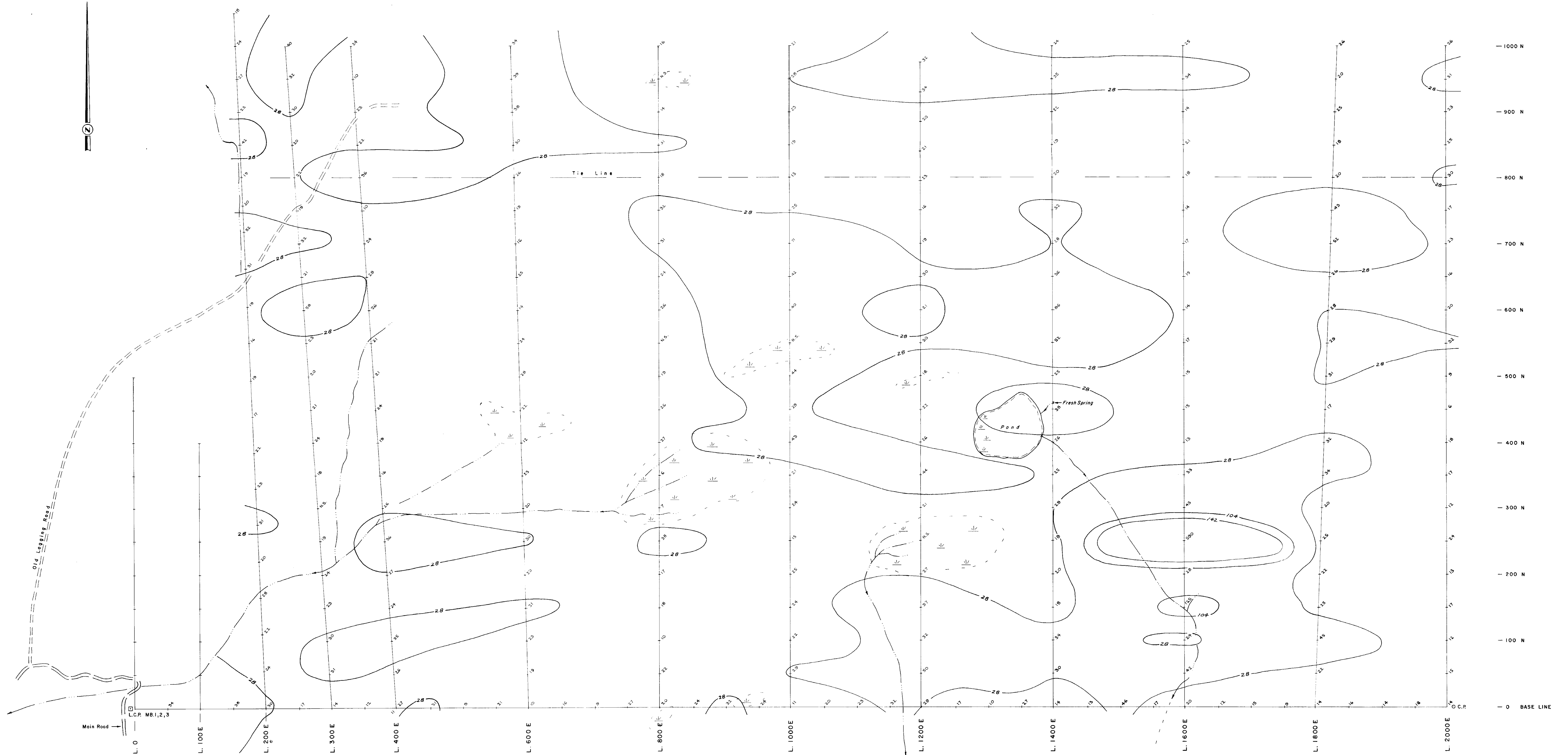
VLH CONSULTANTS LTD.

ALPINE SILVER LTD.
 MB No. 1 CLAIM
SOIL GEOCHEMISTRY
 COPPER IN P.P.M.

SHUSWAP AREA, BRITISH COLUMBIA

SCALE: 1:2500

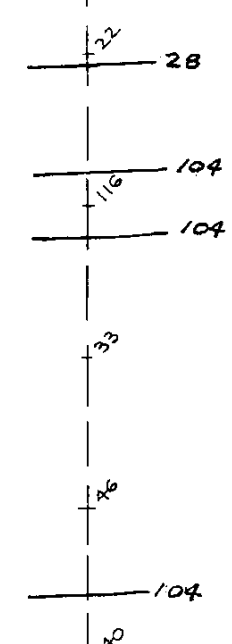
MAPPED BY: V.R.H. DATE: AUG '83
 DRAWN BY: K.L.J. DATE: SEPT '83
 FIGURE No. 4



LEGEND

- SURVEY GRID STN WITH SOIL GEOCHEM VALUE FOR Pb IN P.P.M.
- CONTOURS: 28 (MEAN), 104 & 142 P.P.M. Pb
- > 104 P.P.M. Pb PROBABLY ANOMALOUS
- > 142 P.P.M. Pb DEFINITELY ANOMALOUS

THESE LINES RUN IN 1982

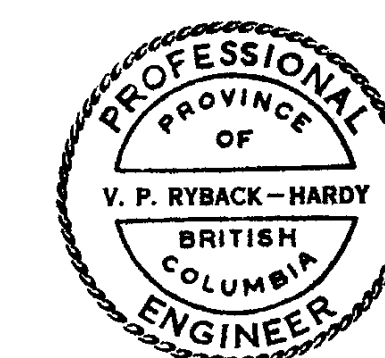


**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

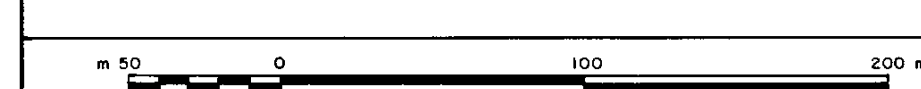
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VLH CONSULTANTS LTD.

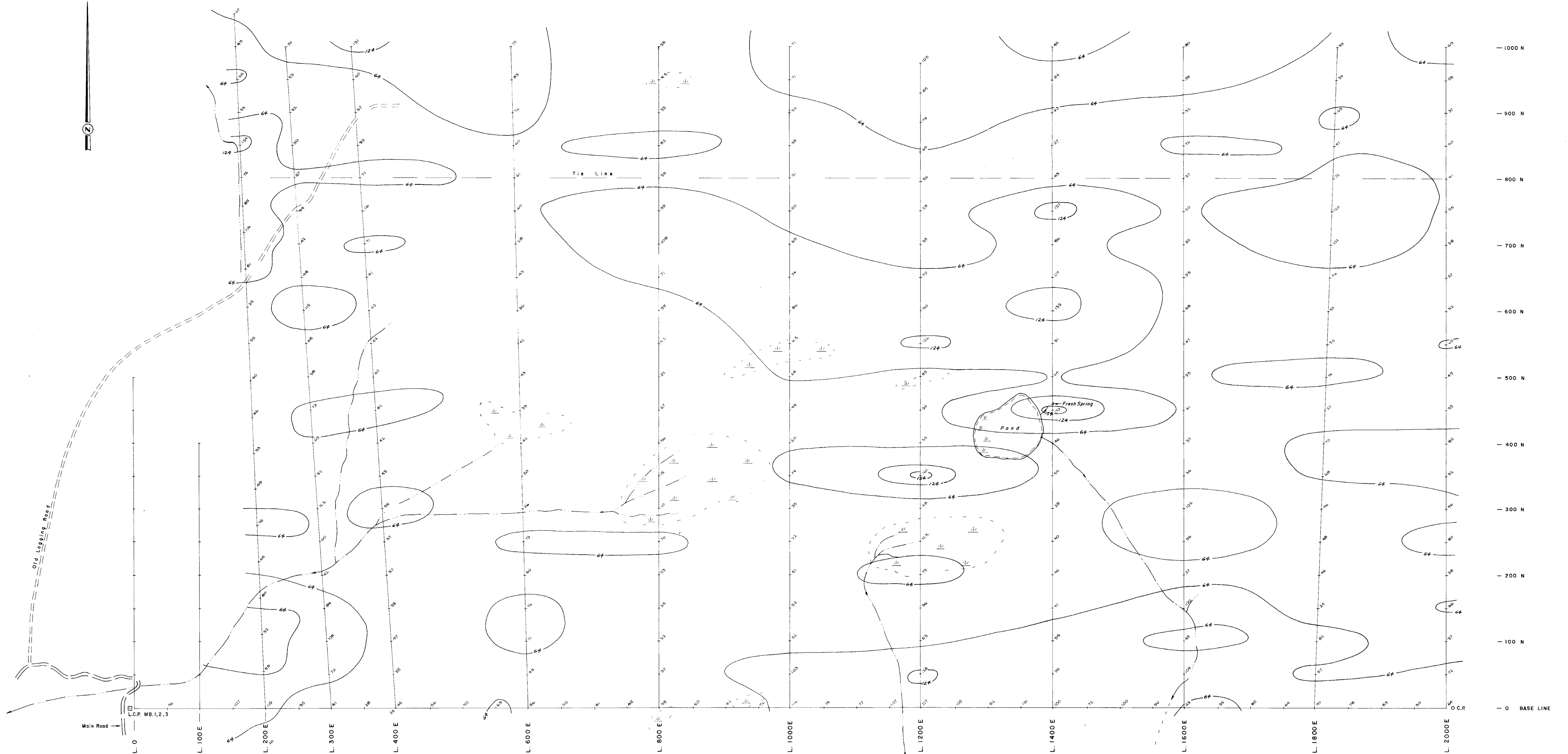
ALPINE SILVER LTD.
MB No. 1 CLAIM
SOIL GEOCHEMISTRY
LEAD IN P.P.M.
SHUSWAP AREA, BRITISH COLUMBIA



N.T.S. 82 M 3E



MAPPED BY: V.R.H. DATE: AUG '83
DRAWN BY: K.L.J. DATE: SEPT '83
FIGURE No. 5



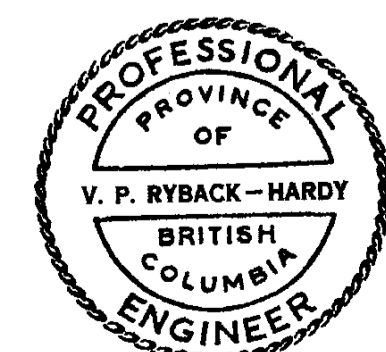
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
200 N
100 N
0 BASE LINE

THESE LINES RUN IN 1982

- LEGEND**
- SURVEY GRID STN. WITH SOIL GEOCHEM. VALUE FOR Zn IN PPM.
 - CONTOURS: 64 (MEAN), 124 & 154 PPM Zn
 - > 124 PPM Zn PROBABLY ANOMALOUS
 - > 154 PPM Zn DEFINITELY ANOMALOUS

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,808



N.T.S. 82 M 3 E

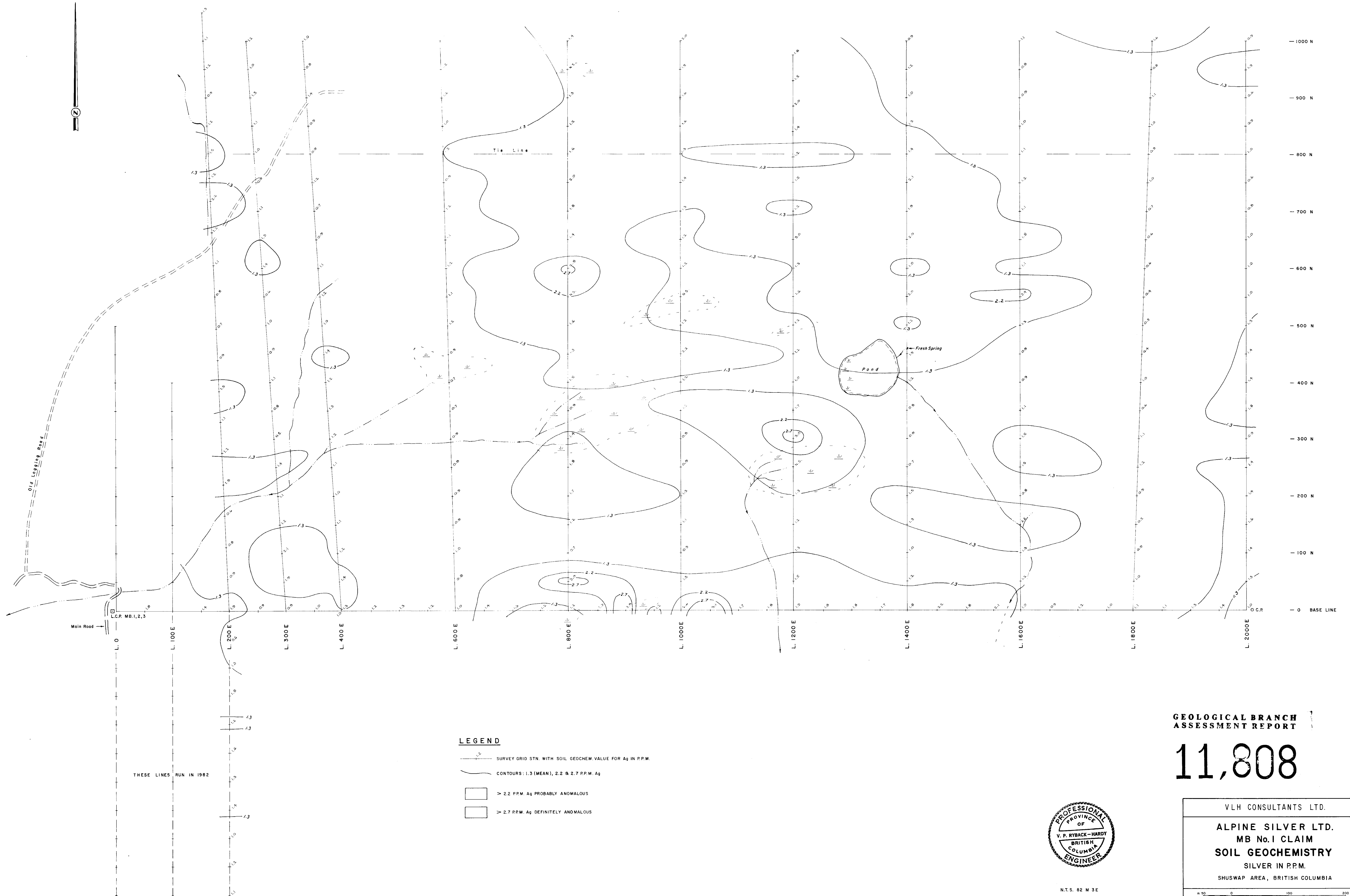
VLH CONSULTANTS LTD.

**ALPINE SILVER LTD.
MB No.1 CLAIM
SOIL GEOCHEMISTRY
ZINC IN PPM.**

SHUSWAP AREA, BRITISH COLUMBIA

SCALE 1:12500

MAPPED BY: V.R.H. DATE: AUG. '93
DRAWN BY: K.L.J. DATE: SEPT. '93
FIGURE No. 6



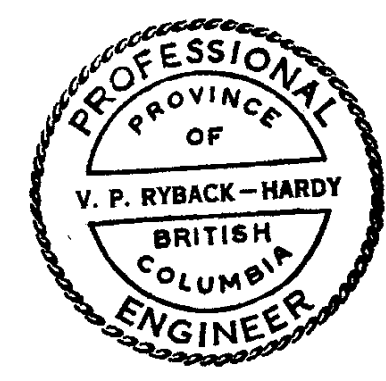
LEGEND

- SURVEY GRID STN. WITH SOIL GEOCHEM. VALUE FOR Ag IN P.P.M.
- CONTOURS: 1.3 (MEAN), 2.2 & 2.7 P.P.M. Ag
- > 2.2 P.P.M. Ag PROBABLY ANOMALOUS
- > 2.7 P.P.M. Ag DEFINITELY ANOMALOUS

THESE LINES RUN IN 1982

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,808



N.T.S. 82 M 3E

VLH CONSULTANTS LTD.

ALPINE SILVER LTD.
MB No. 1 CLAIM
SOIL GEOCHEMISTRY
SILVER IN P.P.M.

SHUSWAP AREA, BRITISH COLUMBIA

SCALE: 1:2500

MAPPED BY: V.R.H. DATE: AUG. '83
DRAWN BY: K.L.J. DATE: SEPT. '83
FIGURE No. 7

