

80-#1000-#8694

SOIL GEOCHEMISTRY
KOOTENAY BELLE MINE
SHEEP CREEK DISTRICT
NELSON MINING DIVISION
NTS 82F/3E
LATITUDE 49°08' LONGITUDE 117°08'

ARCTEX ENGINEERING SERVICES

L. B. GOLDSMITH, P.ENG.
CONSULTING GEOLOGIST
OWNER, OPERATOR, CONSULTANT, AUTHOR

NOVEMBER, 1980

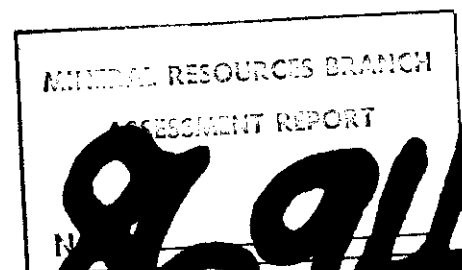


TABLE OF CONTENTS

SUMMARY..... 1

INTRODUCTION..... 2

LOCATION MAP, MAP 1..... 3

CLAIM MAP, MAP 2..... 4

GEOLOGY..... 5

SOIL GEOCHEMISTRY..... 6

CONCLUSIONS..... 9

RECOMMENDATIONS..... 9

COST ESTIMATE..... 10

ENGINEER'S CERTIFICATE..... 11

REFERENCES..... 12

ITEMIZED COST STATEMENT, 1980 PROGRAMME..... 13

APPENDIX: GEOCHEMICAL ANALYSES

GEOLOGY AND SOIL GEOCHEMISTRY, MAP 3

(Pocket inside back cover)

SOIL GEOCHEMISTRY
KOOTENAY BELLE MINE
SHEEP CREEK DISTRICT
NELSON MINING DIVISION, B. C.

SUMMARY

A programme of soil sampling on claims of the Kootenay Belle Mine, a former gold producer, has outlined eight target areas for surface exploration.

Underground workings should be rehabilitated, geologically mapped, and sampled to determine if reserves remain above 6 level.

A cost estimate of \$46,200 to continue surface evaluation through the next stages is presented.

INTRODUCTION

The Kootenay Belle property is located 12 km (7.5 miles) at Az.115° from Salmo, B. C., at the junction of Sheep and Waldie Creeks, on the northwest and west-facing slopes of Yellowstone Peak.

The claims were acquired by the author of this report and his associates on November 9, 1979. From northwest to southeast the claims now held are:

Argyle	L 10155
Wolf	L 3856 (acquired November 9, 1980)
Yosemite	L 3654
Sultana	L 9186
Hide Away	L 5625
Vancouver	L 10006
Rio Tinto	L 4640
Yosemite Fraction	L 10254
Batt Fraction	L 9187
Helena	L 9344

A total of 190 soil samples were collected and analyzed. Soil sampling was supervised and performed by the author. Approximately 9.8 km of grid were established.

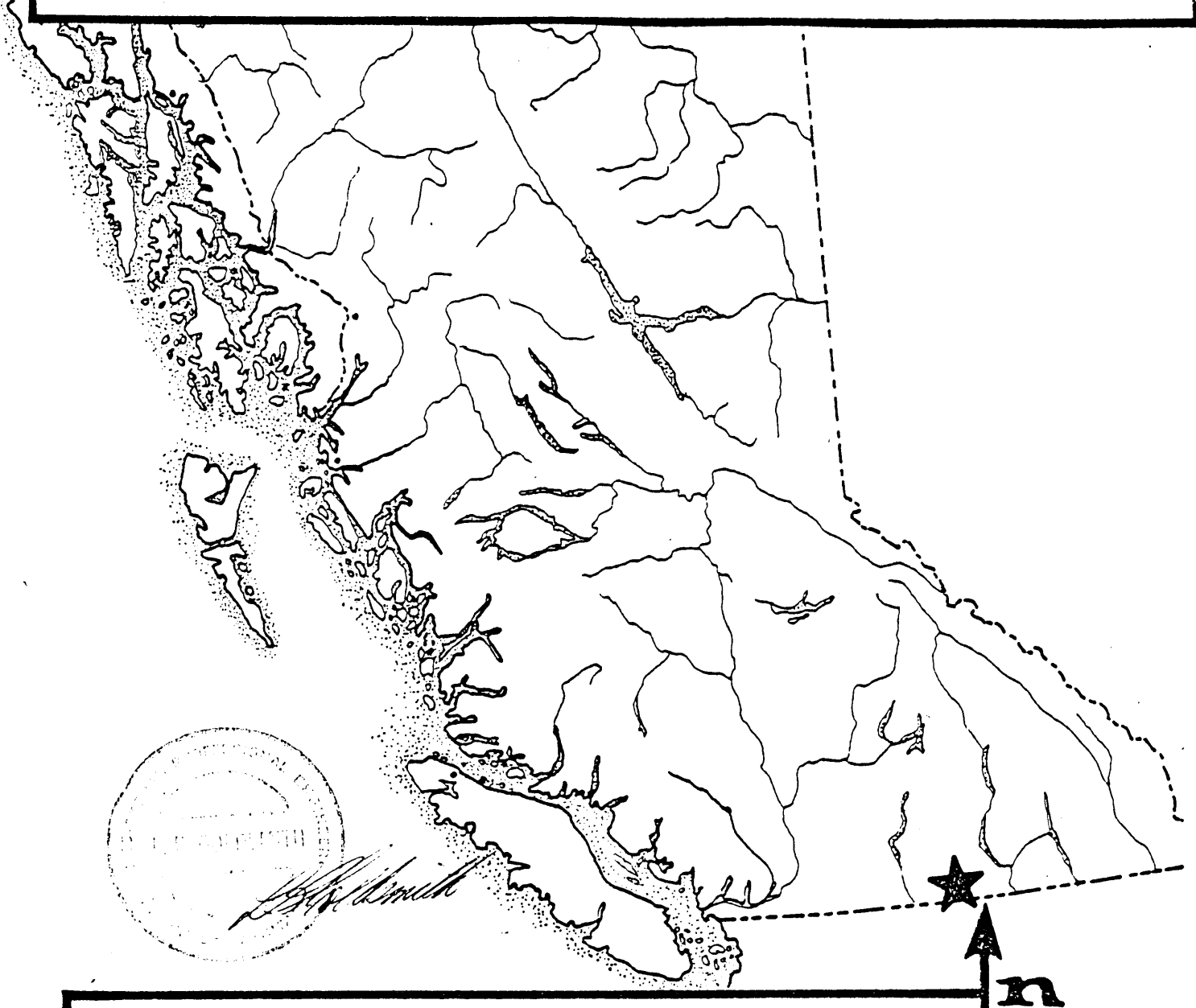
History is summarized in (1), (2), and (4). The property was staked in 1898-99 on high-grade surface exposures. Small shipments were made until 1904 when a stamp mill was installed which operated until 1911. Small tonnages were mined and shipped in most years between 1911 and 1927.

KOOTENAY BELLE MINE

SHEEP CREEK, B.C.

NELSON MINING DIVISION

82F 3E

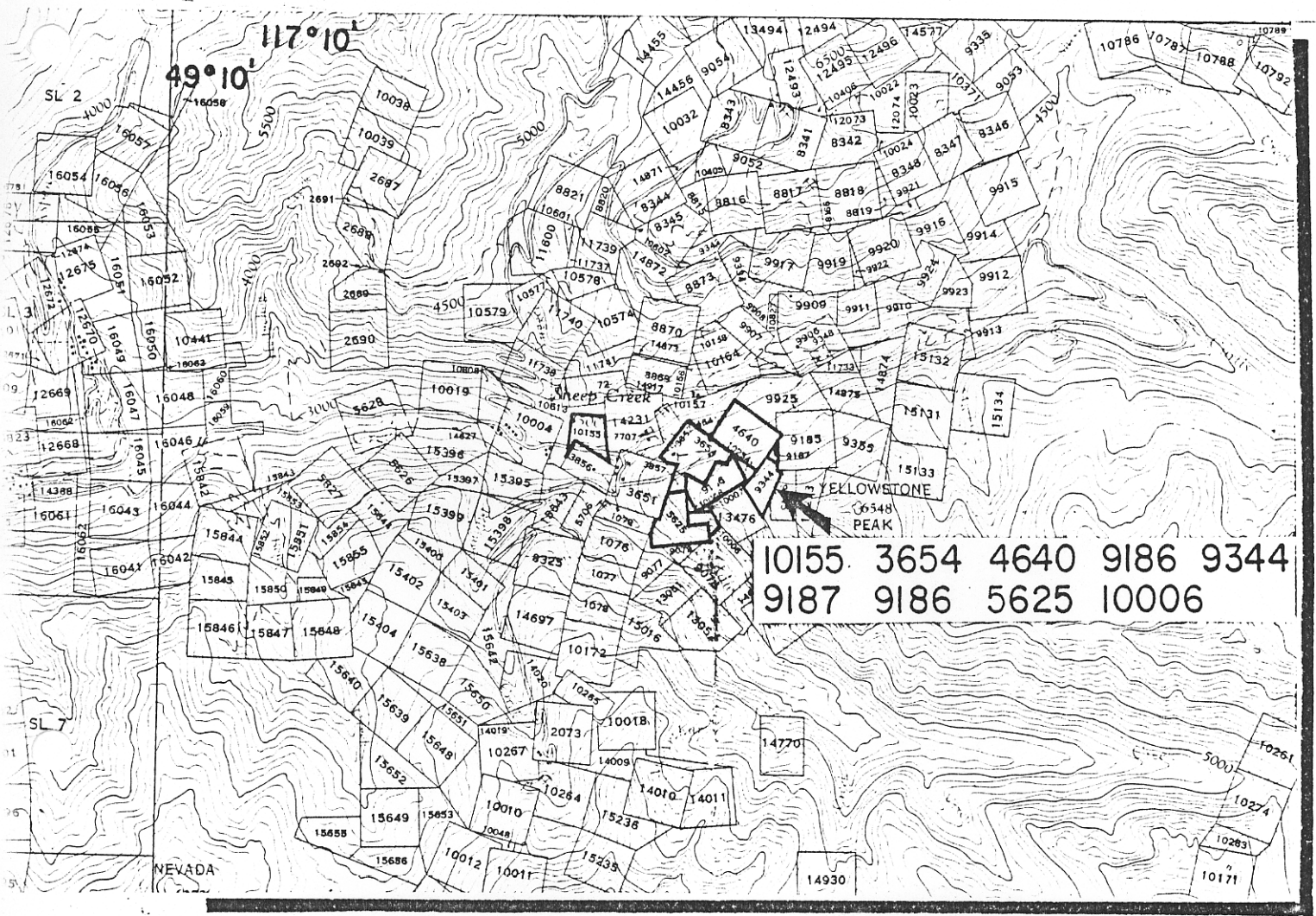


Location map

ARCTEX ENGINEERING SERVICES

OCTOBER 1980

Map 1



CLAIM MAP



KOOTENAY BELLE MINE
SHEEP CREEK, B.C. NELSON MINING DIVISION 82F 3E

ARCTEX ENGINEERING SERVICES

OCTOBER 1980

Map 2

Commencing in 1927 larger tonnages of high-grade were shipped yearly until a mill began to operate in 1934, continuing to the end of 1942. Between 1942 and 1951 small tonnages were extracted, presumably by lessees. In summary (1, p. 51) 292,893 tons were mined to yield 109,937 ounces/Au (0.375 oz Au/ton) and 37,153 ounces/Ag (0.127 oz Ag/ton). The bulk of the production was obtained from the "A" vein, being 204,000 tons containing 84,300 tons, for a grade of 0.413 oz Au/ton.

GEOLOGY

Mathews (1) describes a succession of Precambrian (?) sediments, chiefly quartzites with subordinate amounts of argillite. A composite stratigraphic section is estimated to contain between 2210' and 3400' of clastics. Lower Cambrian limestones and argillites in excess of 1000' thick overlie the Precambrian rocks. Granitic and quartz-porphyry dykes and sills are emplaced within the sediments. Both pre- and post-vein basic dykes are known. Metamorphism of the sedimentary rocks is low except in proximity to granitic intrusives where andalusite-mica schists may be developed.

North-trending tight folds overturned to the west are the dominant structure in the Sheep Creek camp. Plunge is southward at 10° to 30°. The axial planes are oriented approximately 015°, 55°-75°E. At least four sets of faults have dissected the folded strata. Of the four, the northeastern-trending dextral strike-slip group is the most important because the vein deposits are contained therein.

Gold mineralization has been mined in quartz veins. Empirically, grade of ore is best where faults with coincident quartz veining cross

quartzites and where the trend of the fault swings from northeast to easterly. Pyrite, galena, and sphalerite are minor constituents of the quartz, rarely exceeding 10-20% of the full vein width. Gold occurs as microscopic particles along boundaries between quartz grains (1/3 of the quantity) and on quartz-sulphide grain boundaries (2/3). Veins vary in width from hairline fractures to 5 feet, the wide sections appearing to be created by conditions of faulting and wall rock lithology (1, p. 56).

SOIL GEOCHEMISTRY

Base line for the main grid was established at Az. 043° with cross-lines oriented at Az. 133°. Line spacing is 100 metres with sample intervals at 50 metres. Base line on the Argyle grid is Az. 095° with crosslines at 005°. Samples were taken with a narrow elongate spade at depths of 20 cm below the organic debris.

Analyses for gold, copper, lead, and zinc were performed by Loring Laboratories Ltd., 629 Beaverdam Rd. N.E., Calgary, Alberta. Samples are screened to -80 mesh and 500 mg of the fine fraction is weighed into test tubes. Aquaregia is added and the sample is digested in a water bath at 100°C for three hours. Test tubes are then bulked to the 10 ml level, mixed, and allowed to settle overnight. The samples are then put through the atomic absorption, with appropriate standards, and the results reported in parts per million, or in the case of gold, in parts per billion.

Probability plots were constructed for Au and Pb values. Two log normal populations were present for each of these metals with partitioning as:

	Au, ppb	Pb, ppm
Background	-120	-60
Threshold	120-150	60-90
Anomalous	+150	+90

The highest values in each metal are probably caused by contamination from mining/milling, causing the anomalous population to appear to be composed of two or more discrete populations. Anomalous gold and lead values tend to occur together near the Kootenay Belle veins.

Copper and zinc have only one population without discernible anomalous values.

There is a trend for values to increase from grid north to south by at least two divisions of logarithmic ranking.

Discussion of Geochemical Results

1. 4+00S, 00 to 0+50W; 5+00S to 1+50W; 6+00S, 0+50W to 1+00W

Anomalous gold and lead values are tentatively attributed to subcrop of the Kootenay Belle "A" and "B" veins, and to contamination from mining operations including breakthrough of stopes to surface. This interpretation should be examined closely on the ground because the eastward extension of the highly productive Queen fissure is believed to cross the property in the vicinity of 5+00S, 1+00 to 1+50W.

2. 9+00S, 2+00E to 2+50E

Anomalous gold values probably originate from the Vancouver vein or from a short adit thereon. Worthy of note is the fact that lead values are low.

3. 11+00S, 2+50E

An anomalous gold value occurs in the vicinity of the Hide Away fissure upon which a 60 foot adit was driven in early exploration (3, p. 42-45). It was then thought that this fissure could be the Vancouver vein, and could be productive easterly and at depth into the Vancouver claim.

4. 6+00S, 4+00W; 7+00S, 3+5-W to 4+00W

Contamination from tram lines and milling operations is suspected. A small amount of examination for verification is required.

5. 9+00S, 1+00E

A gold value of 320 ppb cannot be explained from known veins or contamination. This lies within or near the favourable Upper Nugget quartzite which hosts the productive Kootenay Belle veins.

6. 5+00S, 2+50E

An anomalous gold value of 310 ppb is of interest because persistent threshold to high-background values tail off downslope to the northwest and west.

7. 2+00S, 3+50E

Although the gold value of 180 ppb is located within the Motherlode quartzite which is empirically less favourable than the Nugget quartzite to host ore, the surrounding area should be prospected.

8. 4+00S, 3+00W

A threshold gold value, and persistent high-background gold values on lines to the north, east and south should not be disregarded. An eastern projection of the Yellowstone fissure should cross the property in this vicinity.

No anomalous values were present on the Argyle grid.

CONCLUSIONS

Soil geochemistry has been effective in redefining known mineralized occurrences and in suggesting additional targets for exploration. Gold and lead as trace elements appear to be pathfinders.

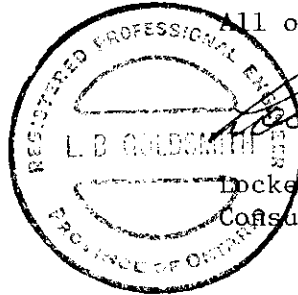
RECOMMENDATIONS

1. Geochemical anomalies 1 through 8 should be investigated and, where warranted, detailed with close-spaced (25 metre x 25 metre) soil sampling.
2. The Argyle grid should be extended southerly into the newly-acquired Wolf claim.
3. VLF-electromagnetics should be tested over the eastern unmined extension of the Kootenay Belle "A" vein and the Vancouver fissure. If crossovers are obtained, surveys should be completed where soil geochemical anomalies are outlined (25 metre x 25 metre grid) to assist in mapping fault zones.
4. Detailed surface geological mapping to refine the government geology should be completed.
5. Evaluation of mineralization exposed in underground workings should begin as soon as possible. The programme will be the subject of a separate report.

COST ESTIMATE

Detailed and reconnaissance soil geochemical sampling	\$10,000
VLF-electromagnetics	5,000
Geological mapping	12,000
Analyses	3,000
Vehicle, supplies, room, board	5,000
Engineering, supervision	4,000
Reporting	3,000
	<hr/>
	\$42,000
Contingencies @ 10%	4,000
	<hr/>
TOTAL	\$46,200

All of which is respectfully submitted,



Locke B. Goldsmith
 Locke B. Goldsmith, P.Eng.
 Consulting Geologist

Vancouver, B. C.

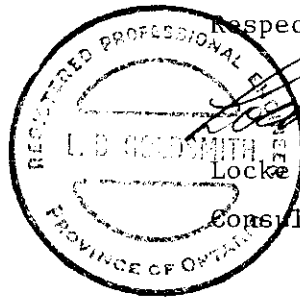
November 29, 1980

ENGINEER'S CERTIFICATE

LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and a Registered Professional Geologist in the State of Oregon. My address is 301 - 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University and have done postgraduate study at Michigan Tech, University of Nevada, and University of British Columbia. I am a graduate of the Haileybury School of Mines and am a Certified Mining Technician.
3. I have been engaged in mining exploration for 22 years.
4. I have authored the report entitled "Soil Geochemistry, Kootenay Belle Mine, Sheep Creek District, Nelson Mining Division". The report is based on field work conducted and supervised by the author.
5. I control, with associates, 100% interest in the property.
6. I consent to the use of this report in a prospectus or in a statement of material facts related to the raising of funds.

Respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B. C.

November 29, 1980

REFERENCES

- (1) Mathews, W. H., 1953, Geology of the Sheep Creek Camp; BCDM Bulletin
No. 31
- (2) McGuire, R. A., 1942, Sheep Creek Gold Mining Camp; Transactions,
CIMM, Vol. XLV, 1942, pp. 169-190.
- (3) Walker, J. F., 1929, Mineral Developments in Salmo Map-Area, British
Columbia; GSC Summary Report, 1929, Pt. A.
- (4) _____, 1934, Geology and Mineral Deposits of Salmo Map-Area,
British Columbia; GSC Memoir 172.

COST STATEMENT, 1980 PROGRAMME

(a) Wage Scales:

L. B. Goldsmith, Consulting Geologist

September 11, $\frac{1}{2}$ 13, $\frac{1}{2}$ 14, $\frac{1}{2}$ 17, 18, 19, $\frac{1}{2}$ 21, $\frac{1}{2}$ 22, 23, 24,November 27, 28, 29, total $10\frac{1}{2}$ days @ \$300/day \$ 3,150.00

G. Bennett, Prospector

September 11-24, total 13 days @ \$130/day 1,690.00

P. Harker, Prospector

September 11-24, total 13 days @ \$130/day 1,690.00

(b) Food:

Total 695.20 divided by $33\frac{1}{2}$ field days =

rate of \$20.75/field day 695.20

Accommodation @ 6.87/field day, total \$230.00 230.00

(c) Transportation:

Approximately 20 mile round trip to the property

from Salmo, 13 trips = 260 miles plus two

round trips from Silverton @ 240 miles each,

480 miles, total 740 miles @ \$.25/mile = \$185.00 185.00

(d) Surveys:

Geochemical Survey

L. B. Goldsmith, September 11, $\frac{1}{2}$ 13, $\frac{1}{2}$ 14, $\frac{1}{2}$ 13, $\frac{1}{2}$ 14, $\frac{1}{2}$ 17, 18, 19, $\frac{1}{2}$ 21, $\frac{1}{2}$ 22, 23, 24, total7 $\frac{1}{2}$ days @ \$300/day, total \$2250.00

G. Bennett, September 11-24, total 13 days

@ \$130/day, total \$1690.00

P. Harker, September 11-24, total 13 days

@ \$130/day, total \$1690.00

(e) Analyses:

190 soil samples, cost \$1365.75

= \$7.19 /sample

1365.75

(f) Report:

L. B. Goldsmith, November 27, 28, 29,

total 3 days @ \$300/day, \$900.00

M. Izard, drafting \$420.00

M. Izard, drafting supplies 47.47

\$467.47

467.47

L. Borleske, typing 30.00

30.00

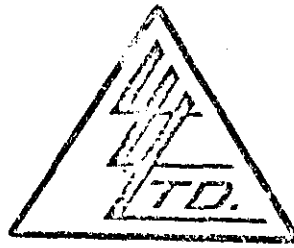
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\$ 9513.42

APPENDIX

To: Mr. Locke B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2E0



File No. 20252
Date September 30, 1980
Samples Soil

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Page # 1

SAMPLE No.	FPM Cu	FPM Pb	FPM Zn
<u>"Soil Samples"</u>			
A 00+00W BL+00	30	22	70
0+50N	28	28	140
1+00N	32	28	220
1+50N	32	30	190
2+00N	24	29	157
2+50N	34	40	138
3+00N	40	25	110
A 1+00W BL	29	40	134
1+50N	28	27	138
3+00N	34	26	114
2+50E	34	28	143
A 2+00W BL	38	30	156
0+50N 1	27	23	146
0+50N 2	16	20	170
1+00N 1	27	25	158
1+00N 2	32	28	108
1+50N	32	26	98
2+00N	29	28	80
2+50N	34	24	102
3+00N	38	25	130
A 3+00W BL	38	38	146
0+50N	44	40	150
1+00N	52	43	190
1+50N	39	28	138
2+00N	46	25	118
2+50N	50	30	180
3+00N	40	50	210
00+00S 0+50W	15	22	43
1+00W	22	28	45

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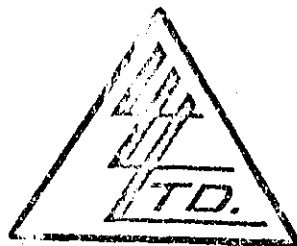
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Pulps Retained one month
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made in advance.

A. J. D. M. E. / s / a. c. c. l. l. l.
Licenced Assayer of British Columbia

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P.O. Box 29,
Silverton, B.C. VOG 2B0

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Date September 30, 1980
Samples Soil



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Page # 2

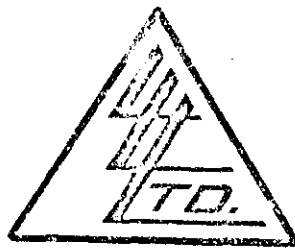
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00+00S	BL	54	56	150	
	0+50E	25	36	78	
	1+00E	12	18	24	
	1+50E	34	25	34	
	2+00E	46	26	60	
	2+25E	28	39	59	
1+00S	0+50W	44	34	162	
	1+00W	22	28	110	
	2+00W	18	20	49	
	BL	32	48	116	
	0+50E	18	60	144	
	1+00E	30	25	98	
	1+50E	16	14	50	
	2+25E	22	24	52	
	2+50E	16	26	50	
	3+00E	15	32	62	
	3+50E	62	66	46	
	2+00S	0+50W	23	20	60
		1+00W	28	24	86
		1+50W	16	25	155
1+86W		24	27	55	
2+00W		30	42	124	
BL		24	30	78	
0+50E		24	32	88	
1+00E		18	33	130	
1+50E		40	40	94	
2+00E		10	18	20	
2+50E		10	22	28	
3+00E		14	24	24	
3+50E		11	34	22	
4+00E		15	32	40	

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Page # 3

SAMPLE No.		PPM Cu	PPM Pb	PPM Zn
2+00S	4+50E	18	20	38
	5+00E	30	32	100
3+00S	0+50W	44	62	124
	1+00W	16	34	100
	1+50W	20	40	220
	2+00W	24	28	16
	6+00W	46	32	80
	BL	36	62	400
	1+00E	20	44	140
	1+50E	38	32	110
	2+00E	12	26	27
	2+50E	12	24	44
	3+00E	26	28	100
	3+50E	20	28	32
	4+00E	12	18	48
	4+50E	10	18	42
	5+00E	34	20	64
	5+50E	40	22	94
4+00S	BL	24	144	150
	0+50W	34	40	116
	1+00W	28	36	132
	1+50W	25	45	190
	2+00W	18	76	240
	2+50W	20	38	108
	3+00W	14	30	104
	3+50W	20	26	66
	4+00W	36	38	194
	BL	25	58	148
	0+50E	26	46	120
	1+00E	50	66	176

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Page # 4

SAMPLE No.	PPM Cu	PPM Pb	PPM Zn	
4+00S	1+50E	22		
	2+00E	14	34	
	2+50E	12	21	
	3+00E	12	24	
	3+50E	28	18	
	4+00E	25	26	
	4+50E	14	21	
	5+00E	12	16	
	5+50E	28	18	
	6+00E	32	18	
	5+00S	0+50W	37	28
		1+00W	140	72
		1+50W	60	150
		2+00W	29	52
2+50W		40	62	
3+00W		22	58	
3+50W		27	24	
4+00W		28	34	
BL		104	24	
0+50E		32	860	
1+00E		30	52	
1+50E		34	52	
2+00E		20	58	
2+50E		14	44	
3+00E	14	30		
6+00S	0+50W	44	22	
	1+00W	30	164	
	1+50W	19	114	
	2+00W	16	86	
	2+50W	18	82	
	3+00W	13	26	
		17	24	

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Page # 5

SAMPLE No.		PPM Cu	PPM Pb	PPM Zn
6+00S	3+50W	18	24	42
	4+00W	26	126	148
	BL	30	62	78
	0+50E	15	30	31
	1+00E	28	36	84
	1+50E	28	40	80
	2+00E	27	30	70
	2+50E	22	38	120
	7+00S	0+50W	26	84
1+00W		22	58	124
1+50W		16	42	140
2+00W		44	40	108
2+50W		36	52	158
3+00W		14	34	126
3+50W		20	34	54
4+00W		148	450	112
BL		52	50	128
0+50E		30	40	100
1+00E		24	28	84
1+50E		20	26	94
2+00E		21	25	90
2+50E	30	64	108	
8+00S	0+50W	25	74	179
	1+00W	31	56	240
	1+50W	22	38	160
	BL	26	48	120
	0+50E	25	42	94
	1+00E	35	65	120
	1+50E	34	32	100
	2+00E	26	22	60
	2+50E	25	24	68

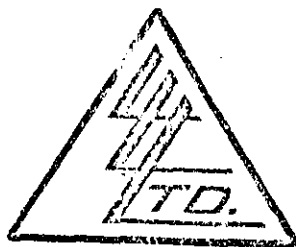
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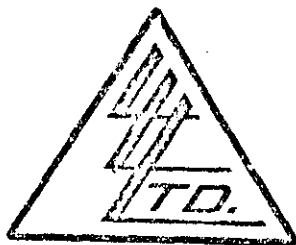
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	3+50E	38	42	108	
	4+00E	36	40	94	
9+00S	0+50W	24	54	260	
	1+00W	28	42	220	
	BL	20	78	166	
	0+50E	26	60	138	
	1+00E	35	54	240	
	1+50E	52	60	150	
	2+00E	44	64	130	
	2+50E	30	38	66	
	3+00E	30	38	90	
	3+50E	22	35	92	
	4+00E	20	50	104	
	10+00S	0+50W	36	66	124
		BL	25	66	260
0+50E		38	116	170	
1+00E		30	108	144	
1+50E		40	54	170	
2+50E		34	44	92	
3+00E		52	44	76	
3+50E		50	50	100	
4+00E		27	66	280	
11+00S	BL	28	40	108	
	0+50E	24	56	200	
	1+00E	40	68	146	
	1+50E	28	148	136	
	2+50E	40	60	130	
12+00S	BL	22	36	80	
	0+50E	14	34	84	
	1+00E	25	38	103	

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 unless specific arrangements
 made in advance.

[Signature]
 Licensed Assayer of British Columbia

To: Mr. Locke B. Goldsmith,
 P.O. Box 29,
 Silverton, B.C. VOG 2B0



File No. 20252
 Date September 30, 1980
 Samples Soil

Certificate of
 ASSAY OF
 LORING LABORATORIES LTD.

Page # 7

SAMPLE No.		PPM Cu	PPM Pb	PPM Zn
12+00S	1+50E	38	44	96
	2+00E	26	42	138
13+00S	BL	40	28	166
	0+50E	18	36	74
	1+00E	25	56	160
	1+50E	26	36	90
	2+00E	32	34	70

Gold to Follow

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

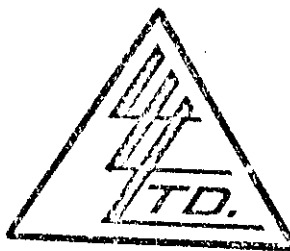
Rejects Retained one month.

Pulps Retained one month
 unless specific arrangements
 made in advance.

[Signature]
 Licensed Assayer of British Columbia

To: Mr. Locke B. Goldsmith,
 P.O. Box 29,
 Silverton, B.C. VOG 2B0

File No. 20252
 Date September 30, 1980
 Samples Rock



Certificate of
 ASSAY OF
 LORING LABORATORIES LTD.

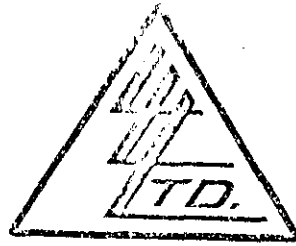
Page # 8

SAMPLE No.	PPM Cu	PPM Pb	PPM Zn
<u>"Rock Samples"</u>			
5+00S B	4	14	20
6+00S O+60W "A"	4	14	4
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>			

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

[Handwritten Signature]
 Licensed Assayer of British Columbia

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



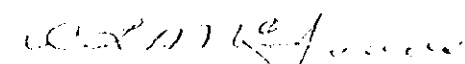
File No. 20137
Date October 23, 1980
Samples Rock
Continuation of File # 20252

Certificate of
ASSAY of
LORING LABORATORIES LTD.

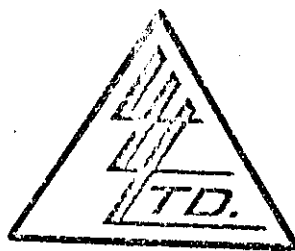
Page # 1

SAMPLE No.	PPB Au
<p><u>"Rock Samples"</u></p> <p>5+00S B</p> <p>6+00S 0+60W "A"</p>	<p>10</p> <p>70</p>
<p>I Herby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>	

Objects Retained one month.
Samples Retained one month
unless specific arrangements
made in advance.


Licensed Assayer of British Columbia

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



File No. 20437
Date October 23, 1980
Samples Soil
Continuation of File # 20252

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

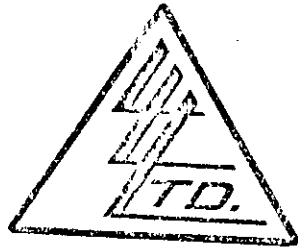
Page # 2

SAMPLE No.	PPB Au
<u>"Soil Samples"</u>	
A 00+00W BL+00	80
0+50N	20
1+00N	10
1+50N	-10
2+00N	-10
2+50N	10
3+00N	20
A 1+00W BL	90
1+50N	50
3+00N	-10
2+50E	-10
A 2+00W BL	20
0+50N 1	-10
0+50N 2	-10
1+00N 1	-10
1+00N 2	-10
1+50N	-10
2+00N	-10
2+50N	-10
3+00N	-10
A 3+00W BL	-10
0+50N	10
1+00N	10
1+50N	10
2+00N	-10
2+50N	10
3+00N	10
00+00S 0+50W	-10
1+00W	-10
	-10
(-) = Less Than	
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>	

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

C. M. W. Jones
Licensed Assayer of British Columbia

To: Mr. L.B. Goldsmith,
 P.O. Box 29,
 Silverton, B.C. V0G 2E0



File No. 20437
 Date October 23, 1980
 Samples Soil
 Continuation of File # 20252

Certificate of
 ASSAY of
 LORING LABORATORIES LTD.

Page # 3

SAMPLE No.	FPB Au
00+00S BL	
0+50E	-10
1+00E	-10
1+50E	10
2+00E	10
2+25E	10
1+00S 0+50W	-10
1+00W	-10
2+00W	-10
BL	-10
0+50E	-10
1+00E	-10
1+50E	-10
2+25E	40
2+50E	30
3+00E	10
3+50E	-10
2+00S 0+50W	40
1+00W	-10
1+50W	40
1+86W	-10
2+00W	-10
BL	10
0+50E	-10
1+00E	-10
1+50E	-10
2+00E	-10
2+50E	-10
3+00E	-10
3+50E	40
4+00E	180
	20

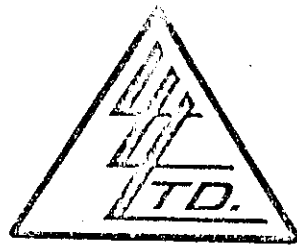
(-) = Less Than

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Subjects Retained one month.
 Slips Retained one month
 unless specific arrangements
 made in advance.

W. M. J. Jones
 Licensed Assayer of British Columbia

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



File No. 20437
Date October 23, 1980
Samples Soil
Continuation of File # 20252

Certificate of
ASSAY of
LORING LABORATORIES LTD.

Page # 4

SAMPLE No.	PPB Au
2+00S 1+50E	10
5+00E	-10
3+00S 0+50W	90
1+00W	-10
1+50W	10
2+00W	30
6+00W	-10
BL	20
1+00E	-10
1+50E	30
2+00E	10
2+50E	-10
3+00E	10
3+50E	20
4+00E	10
4+50E	30
5+00E	30
5+50E	10
4+00S BL	160
0+50W	130
1+00W	20
1+50W	40
2+00W	30
2+50W	40
3+00W	150
3+50W	10
4+00W	10
BL	50
0+50E	30
1+00E	20
1+50E	I.S.

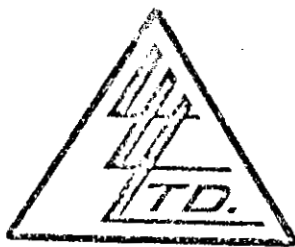
(-) = Less Than
I.S. = Insufficient Sample

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

W. D. M. J. C. C.
Licensed Assayer of British Columbia

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



File No. 20437
Date October 23, 1980
Samples Soil
Continuation of File # 20252

Certificate of
ASSAY of
LORING LABORATORIES LTD.

Page # 5

SAMPLE No.	PPB Au
4+00S	
2+00E	-10
2+50E	-10
3+00E	-10
3+50E	10
4+00E	40
4+50E	40
5+00E	-10
5+50E	-10
6+00E	-10
5+00S	
0+50W	880
1+00W	300
1+50W	150
2+00W	70
2+50W	10
3+00W	90
3+50W	50
4+00W	20
BL	11800
0+50E	160
1+00E	50
1+50E	60
2+00E	30
2+50E	30
3+00E	30
6+00S	
0+50W	170
1+00W	190
1+50W	90
2+00W	70
2+50W	70
3+00W	20
3+50W	20

(-) = Less Than

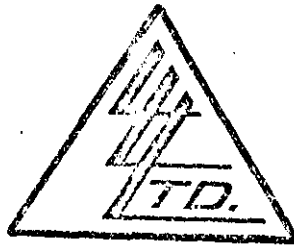
I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.

[Signature]
Licensed Assayer of British Columbia

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



File No. 20437
Date October 23, 1980
Samples Soil
Continuation of File # 20252

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 6

SAMPLE No.	PPB Au
6+00S	860
4+00W	40
BL	30
0+50E	110
1+00E	150
1+50E	-10
2+00E	-10
2+50E	-10
7+00S	-10
0+50W	-10
1+00W	-10
1+50W	-10
2+00W	-10
2+50W	100
3+00W	10
3+50W	490
4+00W	2900
BL	-10
0+50E	20
1+00E	20
1+50E	40
2+00E	50
2+50E	150
8+00S	110
0+50W	20
1+00W	10
1+50W	-10
BL	10
0+50E	10
1+00E	-10
1+50E	-10
2+00E	10
2+50E	20
3+00E	50

(-) = Less Than

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

P. Endrey

Assayer

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



File No. 20437
Date October 23, 1980
Samples Soil
Continuation of File # 20252

Certificate of
ASSAY of
LORING LABORATORIES LTD.

Page # 7

SAMPLE No.	PPB Au
8+00S 3+50E	20
4+00E	10
9+00S 0+50W	-10
1+00W	40
BL	-10
0+50E	-10
1+00E	320
1+50E	20
2+00E	200
2+50E	1800
3+00E	-10
3+50E	20
4+00E	-10
10+00S 0+50W	10
BL	-10
0+50E	20
1+00E	-10
1+50E	-10
2+50E	60
3+00E	-10
3+50E	40
4+00E	-10
11+00S BL	-10
0+50E	-10
1+00E	-10
1+50E	60
2+50E	280
12+00S BL	-10
0+50E	-10
1+00E	-10
1+50E	-10

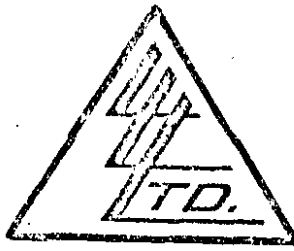
(-) = Less Than

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

P. Enley
Assayer

To: Mr. L.B. Goldsmith,
P.O. Box 29,
Silverton, B.C. VOG 2B0



File No. 20437
Date October 23, 1980
Samples Soil
Continuation of File # 20252

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 8

SAMPLE No.	PPB Au
12+00S 2+00E	20
13+00S BL	-10
0+50E	-10
1+00E	50
1+50E	-10
2+00E	-10

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

Assayer

LEGEND

Stratigraphy

MINERAL RESOURCES BRANCH
 8694

PROBABLY POST-TRIASSIC

7 GRANITE AND GRANODIORITE

LOWER CAMBRIAN (?)

LAIB GROUP

6 LIMESTONE AND ARGILLITE

RENO FORMATION

5 ARGILLITE, ARGILLACEOUS QUARTZITE, DARK QUARTZITE, GRIT.

QUARTZITE RANGE FORMATION

4 NEVADA MEMBER — QUARTZITE, ARGILLACEOUS QUARTZITE.

3 UPPER AND MIDDLE NUGGET MEMBERS — QUARTZITE AND ARGILLACEOUS QUARTZITE.

2 LOWER NUGGET MEMBERS — ARGILLITE AND ARGILLACEOUS QUARTZITE.

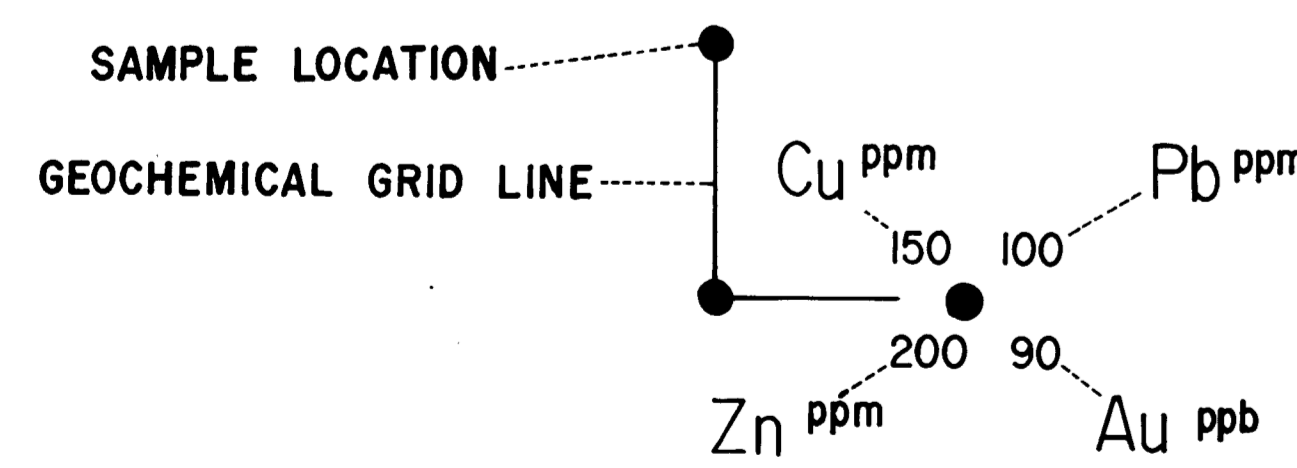
1 MOTHERLODE MEMBER — QUARTZITE, MINOR ARGILLITE, GRIT, GREEN SCHIST.

Symbols

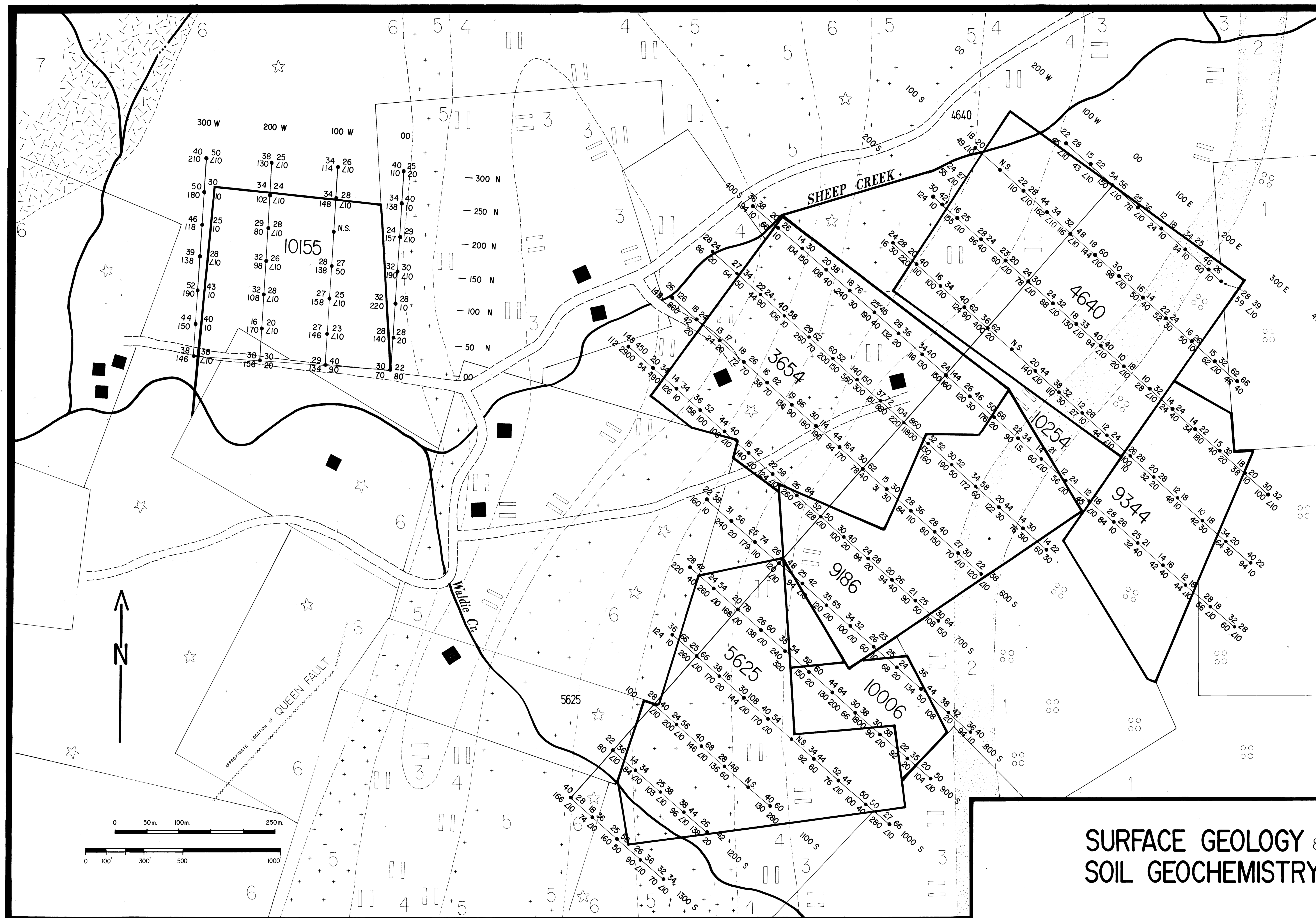
- ROAD
- STREAM
- CREEK
- CLAIM BOUNDARY
KOOTENAY BELLE MINE GROUP
- OTHER

BUILDING

ASSUMED AND APPROXIMATE GEOLOGICAL BOUNDARY.



SOIL SAMPLE VALUES



KOOTENAY BELLE MINE

GEOLOGY AFTER W.H. MATTHEWS
 D.M.B. 31, 1953

SURFACE GEOLOGY & SOIL GEOCHEMISTRY

SHEEP CREEK PROPERTY

NELSON MINING DIVISION N.T.S.: 82F/3E

L.B. GOLDSMITH, P.Eng.
 CONSULTING GEOLOGIST

ARCTEX ENGINEERING SERVICES
 OCTOBER 1980

1103