85-875 -
14160
10/86

SOIL GEOCHEMISTRY

IDAHO - ALAMO - QUEEN BESS MINERAL CLAIM GROUP

HOWSON CREEK - IDAHO PEAK AREA

SLOCAN MINING DIVISION

SANDON, B.C.

NTS 82 K/3 E & 82 F/14 W

LATITUDE 49°59'N, LONGITUDE 117°17'W

Locke B. Goldsmith, P.Eng.
Consulting Geologist

November 20, 1985

TABLE OF CONTENTS

SOIL GEOCHEMISTRY

IDAHO - ALAMO - QUEEN BESS MINERAL CLAIM GROUP

HOWSON CREEK - IDAHO PEAK AREA

SLOCAN MINING DIVISION

SANDON, B.C.

NTS 82 K/3 E & 82 F/14 W

SUMMARY

Soil geochemistry across the projected trace of a productive lode has obtained threshold silver and lead values which may have a source in underlying lode systems. Additional geochemical sampling is required. Dependent upon the results of sampling in this sector of the large property, dozer-backhoe trenching and diamond drilling may be required. A cost of $122,000 in three Phases is estimated.

INTRODUCTION

The claim group is located on the northeast side of Idaho Peak approximately 6 km east of the town of New Denver, B.C. Access is via dirt roads northwesterly from Sandon along the Idaho Lookout route and thence on various branches into the Howson Creek basin. The property consists of 34 crown granted claims (10 of which have surface rights), two reverted crown grants, one three-unit staked claim, and three staked fractional claims. Record data of the staked claims are listed below.

Claim Name	*Number of Units*	*Record Number*	*Date of Record*
Friction Fr.	<1	4456(8)	August 17, 1984
Fraction Fr.	<1	4457(9)	August 15, 1984
Bess Extension	3	4455(8)	August 17, 1984
Anaconda Fr.	<1	4529(10)	October 29, 1984

Two productive lode systems, named the Idaho-Queen Bess and Alamo, cross the property. These northeasterly trending lodes are branches of the Standard-Mammoth and Echo lodes which have been mined on the south side of Idaho Peak. Elevations range from 2165 m (7100') on Silver Ridge to 700 m (2300') on Carpenter Creek.

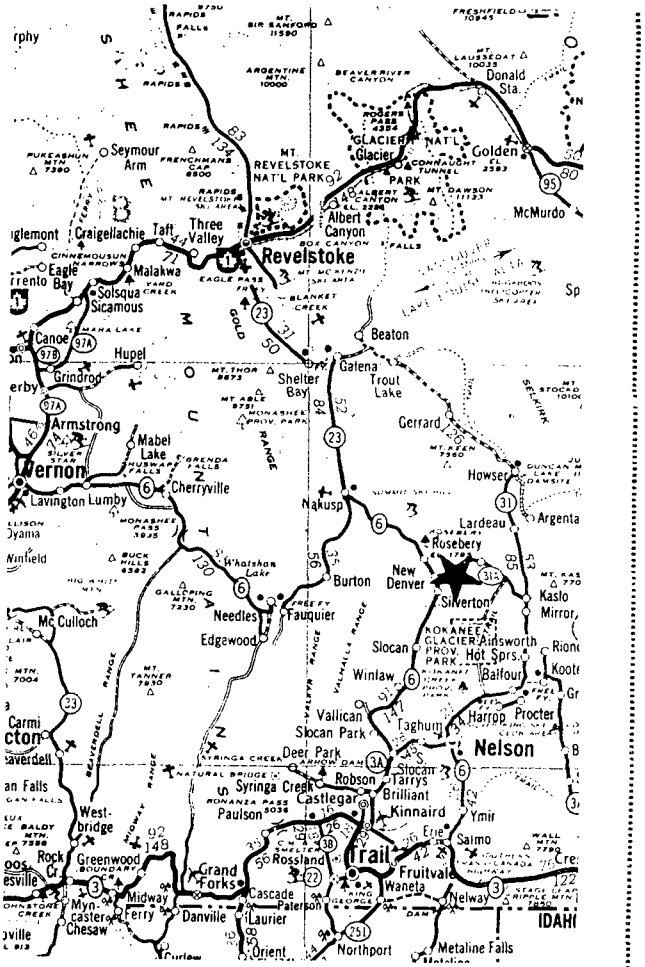
Three former producing mines are situated within the property. MINDEP computer files from the University of British Columbia list the tonnages and grades as shown in the following table. It is known that these figures represent hand-sorted shipments with zinc being excluded, and that additional tonnages have been shipped by lessees. In 1984 the author of this report shipped 11.28 tons grading 12.66% Pb, 19.50% Zn, and 40.00 oz/ton Ag, of which a lead concentrate graded 70.0 oz/ton Ag, from dumps at the Idaho No. 3 level portal.

Mine	*Short Tons*	*Ag oz/ton*	*Au oz/ton*	*Pb %*	*Zn %*
Idaho	21825	73.2	0.0008	11.4	0.549
Alamo	8659	103.0	0.0012	37.8	11.7
Queen Bess	18918	76.3	0.0014	49.4	0.166

SLOCAN MINING DIVISION

IDAHO-ALAMO-QUEEN BESS PROJECT

NEW DENVER AREA, B.C. 82F/14W-82/K3W



NOVEMBER 1985

TO ACCOMPANY REPORT BY

LOCKE B. GOLDSMITH, P.ENG.,

CONSULTING GEOLOGIST

REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

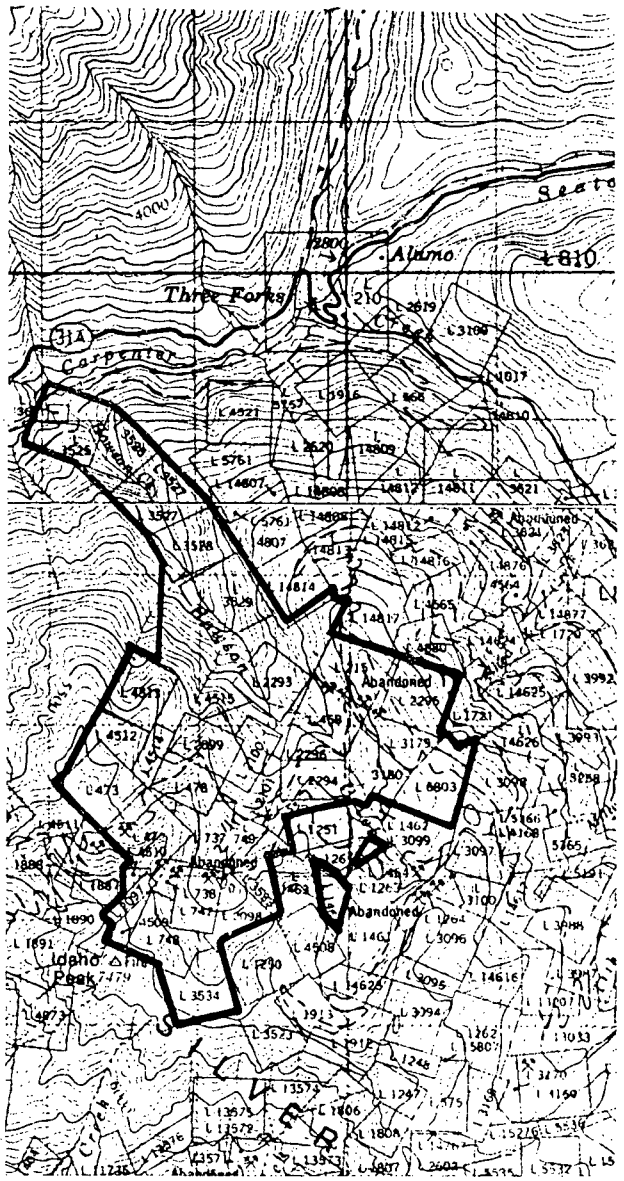
LOCATION MAP

KILOMETRES

0 24 48 96

IDAHO-ALAMO-QUEEN BESS PROJECT

NEW DENVER AREA, B.C. 82F/14W-82/K3W



117°19'
50°00

SLOCAN MINING DIVISION

0 500 1000 m.

1 : 50,000

N

CLAIM MAP

REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

NOVEMBER 1985

TO ACCOMPANY REPORT BY

LOCKE B. GOLDSMITH, P.ENG.,

CONSULTING GEOLOGIST

A total of 1 km of grid was established. Lines are 100 m apart with stations at 50 m intervals.

GEOLOGY

The claims are underlain by argillite, quartzite, and limestone of the Upper Triassic to Lower Jurassic Slocan Group. Strike of bedding is usually north to northwest; dips range from steep easterly through flat to steep westerly. It is not always possible to determine tops of bedding. One small argillite outcrop was noted at 0+00E 4+05 S.

Two major lode systems trend northeasterly and dip approximately 40°-50° southerly, although local variations between 20° and 70° have been measured. Numerous places along these faults contain silver-lead-zinc mineralization, but shoots of economic proportions are localized in zones of dilatency between competent wallrocks. Other mineralized zones are known on and near the property; these may be hosted in narrow fractures or joints which are either in a regional pattern or are transverse between major fault-fissures.

SOIL GEOCHEMISTRY

A total of 20 soil samples was collected with a narrow, elongate spade from 30-45 cm below organic debris. The area of sampling is a flat-topped ridge with very little outcrop. Material is usually rusty-brown silt. Exceptions occur at 1+00E 4+00S and 4+50S, where the silt is olive to grey-brown in colour; south ends of the lines were extended to cover an area where mineralization is known and this is reflected in the high silver values. Coarse granitic sand was noted at 1+00E 3+00S where metal quantities are low.

The following table displays statistical data concerning metal abundance derived from lognormal probability plots. Years of soil sampling results over Slocan Group rocks have been compiled into this information.

	Ag *ppm*	*Pb* *ppm*	*Zn* *ppm*
Background	< 2.3	< 38	} Possibly two populations
Threshold	2.3 to 4.9	38 to 150	
Anomalous	> 4.9	>150	>980

Threshold values of silver at 0+00E 0+50S, 0+00E 2+00S, 0+00E 3+50S, and 1+00E 2+50S, and lead at 0+00E 0+00S, 0+00E 3+50S, and 1+00E, 2+50S may mark the trace of lodes.

CONCLUSIONS

Lodes which cross the claims have hosted important deposits of high-grade silver-lead-zinc. Geochemical results suggest that a lode or lodes may cross the 2nd Extension Fraction claim. Exploration should continue where lodes can be inferred to be concealed by soil cover.

RECOMMENDATIONS

Phase 1

Soil sampling, both reconnaissance and follow-up with detail, should be completed along the ridge from L 215 to L 6803. The Queen Bess lode will be crossed with this coverage, thus providing additional geochemical signatures above an economic deposit.

Phase 2

Dozer-backhoe trenching should be considered after the geochemical results are evaluated.

Phase 3

Diamond drilling to probe portions of lodes where favourable lithological and structural conditions may be anticipated may be required. Budget for 1000 metres of discovery drilling should be available.

COST ESTIMATE

Phase 1	
Geochemical sampling, with analyses, support, supervision	$ 12,000
Phase 2	
Dozer-backhoe trenching, with supervision	10,000
Phase 3	
Diamond driling, 1000 m, including supervision, analyses, support, allow	100,000
Total, Phases 1, 2 & 3	$122,000

Results of each Phase should be compiled into an engineering report; continuance to the subsequent Phase should be contingent upon receiving favourable conclusions and recommendations from an Engineer.

Respectfully submitted,

Locke B. Goldsmith

Locke B. Goldsmith, P.Eng.
Consulting Geologist

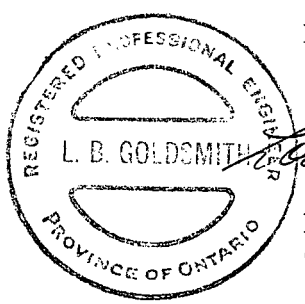
Vancouver, B.C.
November 20, 1985

ENGINEER'S CERTIFICATE

LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and the Northwest Territories, 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, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 27 years.
4. I have authored the report entitled, "Soil Geochemistry, Idaho-Alamo-Queen Bess Mineral Claim Group, Howson Creek - Idaho Peak Area, Slocan Mining Division, Sandon, B.C.", dated November 20, 1985. The report is based upon fieldwork and research supervised by the author.
5. I control 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 20, 1985

REFERENCES

Billingsley, Paul. April 10, 1951. Resume of geology of Queen Bess property and recommendations. Private report for Kelowna Exploration Company Limited.

_____. Circa 1949. Geological exploration in the Slocan District, B.C. Private report for Kelowna Exploration Company Limited.

_____. Circa 1946 to 1956. Numerous geological plans, sections, and interpretations, Queen Bess property and remainder of Slocan camp. Kelowna Exploration Company Limited and Kelowna Mines Hedley Ltd.

Sharp, W.M. March 20, 1950. A report on the geology of the Queen Bess Mine. Private report for Kelowna Exploration Company Limited.

Kelowna Exploration Company Limited. Circa 1937 to 1953. Numerous geological plans, sections, drill logs, and interpretations by various investigators including W.M. Sharp, L. Cramer, E.B. Mayo, A. Buller, and assistants, including Queen Bess, Ruth-Hope, Silversmith, Slocan Star, Carnation, Mascot, Mammoth, Monarch, Monitor, Richmond-Eureka, Payne, Washington, and other mine areas.

Hedley, M.S. 1952. Geology and ore deposits of the Sandon area, Slocan Mining Camp, B.C. BCDM Bull. No. 29.

Cairnes, C.E. 1935. Description of Properties, Slocan Mining Camp, B.C. GSC Memoir 184.

Robinson, M. Geological maps of the Slocan district. Unpublished.

MINDEP Computer Files. University of British Columbia.

COST STATEMENT, 1985 PROGRAMME

1. Personnel

L.B. Goldsmith, ½ Sept. 23, Oct. 8, total 1½ days @ $400/day		$ 600.00

2. Accommodation, Food

$34.00 ÷ 1.5 man days = $22.67/man/day		34.00

3. Travel

4x4 vehicle, 1 day @ $45/day	$45.00	
70 km @ $0.30/km	21.00	
Gas	7.00	
	$73.00	73.00

4. Analyses

20 soil samples cost $132.00 = ¢6.60/sample	132.00

5. Report

Drafting, prints, typing, photocopying, report materials	343.70
Total	$1,182.70

APPENDIX

Gold F.A.-A.A. Combo Method ppb:

For low grade samples and geochemical materials, 10 gram samples are fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO3 and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

Detection limit: 5 ppb

Copper, Lead, Zinc, Silver ppm:

1.0 gm sample is digested with perchloric-nitric acid ($HClO_4$-HNO_3) for approximately 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper, lead, zinc and silver are determined by atomic absorption techniques. Silver and lead are corrected for background absorption.

Detection limit: Copper, Zinc - 1 ppm
Silver - 0.2 ppm
Lead - 2 ppm

Arsenic ppm:

A 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with $NaBH_4$ and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : GOLDSMITH, MR. L. B.

#301-1855 BALSAM STREET
VANCOUVER, B.C.
V6K 3M3

CC: L.B. GOLDSMITH

CERT. # : A8517370-001-A
INVOICE # : I8517370
DATE : 17-OCT-85
P.O. # : NONE
BESS PROJECT

Sample description	Prep code	Pb ppm	Zn ppm	Ag ppm			
BESS 0+00E 0+00S	201	40	97	2.0	--	--	--
BESS 0+00E 0+50S	201	19	178	2.5	--	--	--
BESS 0+00E 1+00S	201	30	61	0.9	--	--	--
BESS 0+00E 1+50S	201	7	33	0.6	--	--	--
BESS 0+00E 2+00S	201	13	50	3.4	--	--	--
BESS 0+00E 2+50S	201	25	72	0.7	--	--	--
BESS 0+00E 3+00S	201	27	215	0.8	--	--	--
BESS 0+00E 3+50S	201	40	98	2.7	--	--	--
BESS 0+00E 4+00S	201	107	850	1.4	--	--	--
BESS 0+00E 4+50S	201	38	230	0.6	--	--	--
BESS 1+00E 0+00S	201	17	100	1.5	--	--	--
BESS 1+00E 0+50S	201	26	105	1.4	--	--	--
BESS 1+00E 1+00S	201	11	78	0.7	--	--	--
BESS 1+00E 1+50S	201	37	178	1.7	--	--	--
BESS 1+00E 2+00S	201	17	24	1.3	--	--	--
BESS 1+00E 2+50S	201	59	63	4.7	--	--	--
BESS 1+00E 3+00S	201	8	72	0.4	--	--	--
BESS 1+00E 3+50S	201	32	75	1.7	--	--	--
BESS 1+00E 4+00S	201	30	118	4.3	--	--	--
BESS 1+00E 4+50S	201	120	300	4.0	--	--	--

VOI rev. 4/85

Certified by ..... Hartt Bichler

117° 18'

50°00'

82K/3W
82F/14W

HIGHWAY 31-A

CARPENTER CR.

TO NEW DENVER
approx. 8 Km.

L736 MILL SITE

DETROIT

3000

3500

4000

4500

5000

5500

6000

6500

7000

L3525

RUTLAND FR.

L3526

HOWSON CR.

RUGBY FR.

L3527

CEDAR

L3528

CURRANT

4455 (8)
BESS EXTENSION

L3529

4456 (8)

FRICTION FR.

ROAD

L215

L4513

AMAZON

L2293

CONCORD

QUEEN BESS

AMERICAN GIRL

YOUNG DOMINION

L2295

QUEEN FR.

L4512

BALDWIN

L4514

L2099

L4515

THISTLE

L2100

EASTERN

DAISY

L458

YOUNG DOMINION FR.

L2296

FIRST EXTENSION

L3179

L3180

MENTOR FR.

4457 (8)

FRACTION FR.

2ND EXTENSION FR.

0+00
1+00S
4+50S
1+00E

L6803

40/97 2.0
17/100 1.5
19/178 2.5
26/105 1.4
30/61 0.9
11/78 0.7
7/33 0.6
37/178 1.7
13/50 3.4
17/24 1.3
25/72 0.7
59/63 4.7
27/215 0.8
8/72 0.4
40/98 2.7
32/75 1.7
107/850 1.4
30/118 4.3
38/230 0.6
120/800 4.0

HIGH ORE FR.

ST. JOHN

ROAD

CUMBERLAND

L473

L478

CAPE FR.

L2101

L2294

4529(10) (L572)

ANACONDA FR.

L749

IDAHO

L472

ALAMO

L737

V FR.

L4510
MAZEPPA

IVY LEAF

L738

MARY S FR.

L3533

L1464

4591 (12)
DAYBREAK

14/90 0.8
27/68 0.8
19/290 2.1
12/97 0.6
17/80 0.8
32/96 0.5
14/88 0.7
34/156 0.4
15/89 0.4
50/337 0.7
11/86 0.6
102/515 0.8
DOZER TRENCH
15/108 0.5
10/94 1.0
8/104 0.6
6/102 0.6
15/112 0.9
12/118 1.9
27/193 0.5
12/101 1.0
13/158 0.6
11/70 1.5

ROCK (●) ASSAYED:
29.5% Pb
16.40% Zn
27.84 oz./ton Ag

KEY
SOIL SAMPLE LOCATION ⊙
Pb Zn
38/230
0.6
Ag
P.P.M.

CONTINENTAL

L2097

TONKA FR.

L4509

MORN FR.

L748

TWIN LAKES

L747

CLARENCE

L2098

Pb
Ag
P.P.M.

1789(2)
CHETOPAH
L3534

4+00N
2+00N
0+00
2+00W
4+00W

TRACE OF LODE SYSTEM

ASSUMED FAULT

AFTER HEDLEY, 1952

SLOCAN MINING DIVISION

IDAHO-ALAMO-QUEEN BESS PROJECT

NEW DENVER AREA, B.C. 82F/14W-82/K3W

Pb-Zn-Ag GEOCHEMISTRY 1:5000

NOVEMBER 1985

TO ACCOMPANY REPORT BY

LOCKE B. GOLDSMITH, P.ENG.,

CONSULTING GEOLOGIST

N

METRES 0 50 100 250