

83-566-11439

PRELIMINARY GEOLOGICAL REPORT  
ON THE CASTLE I TO IV  
AND QUEEN I TO III LOCATED  
MINERAL CLAIMS  
49° 04' LATITUDE 116° 55' LONGITUDE

N.I.S. 82-F-2 W 1/2

OWNER:            Tod Proskin  
                  #107 - 436 7th Street  
                  New Westminster, B.C.  
                  V3M 3L3

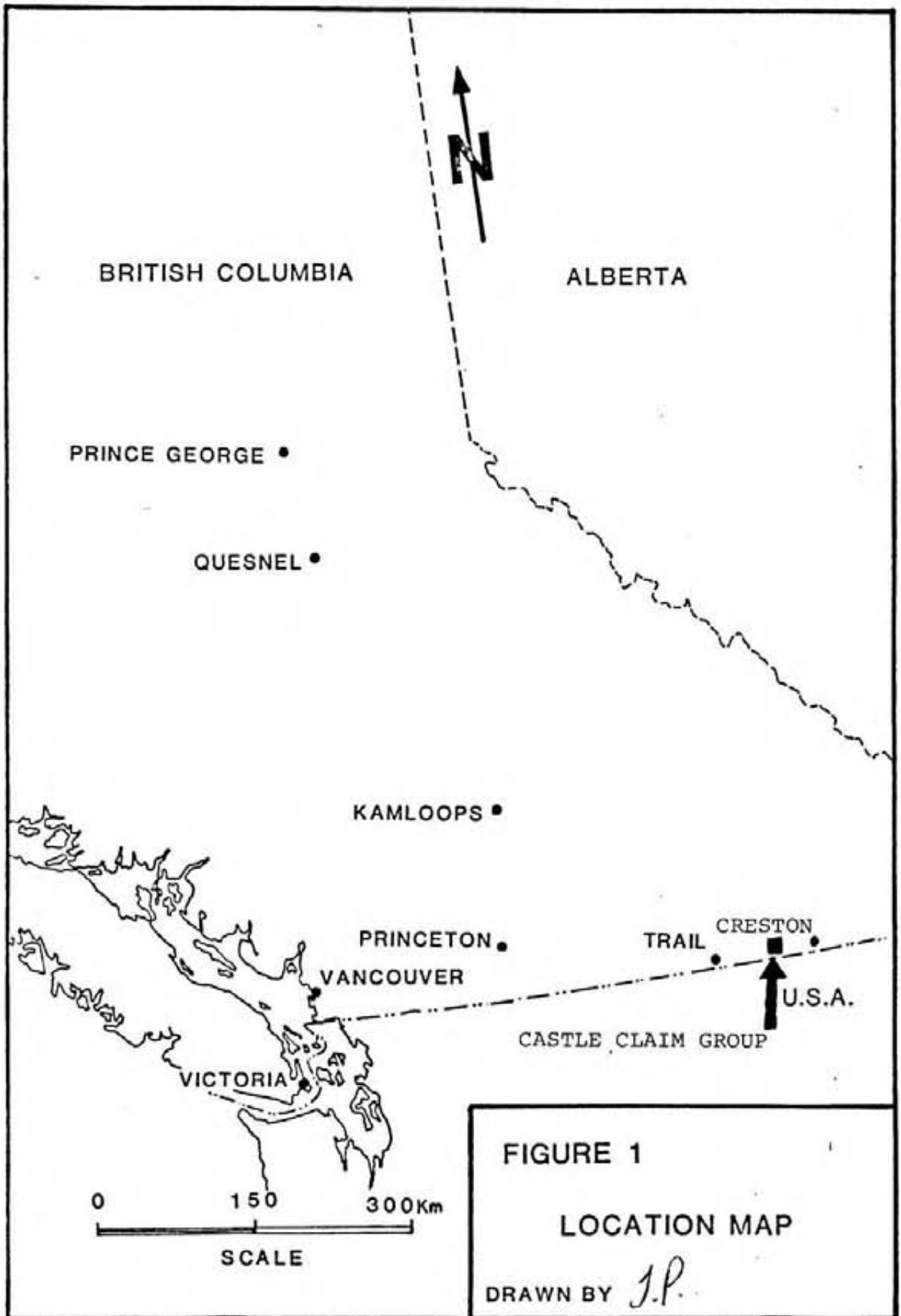
AUTHORS:        Norman W. Stacey  
                  Geologist  
  
                  Tod Proskin  
                  Prospector  
  
                  Sept. 10, 1983  
  
                  Vancouver, B.C.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,439**

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SiO <sub>2</sub> ASSAYS	.
2	
GEOCHEM ASSAY CERTIFICATE	.
I.C.P. GEOCHEMICAL ANALYSIS	.



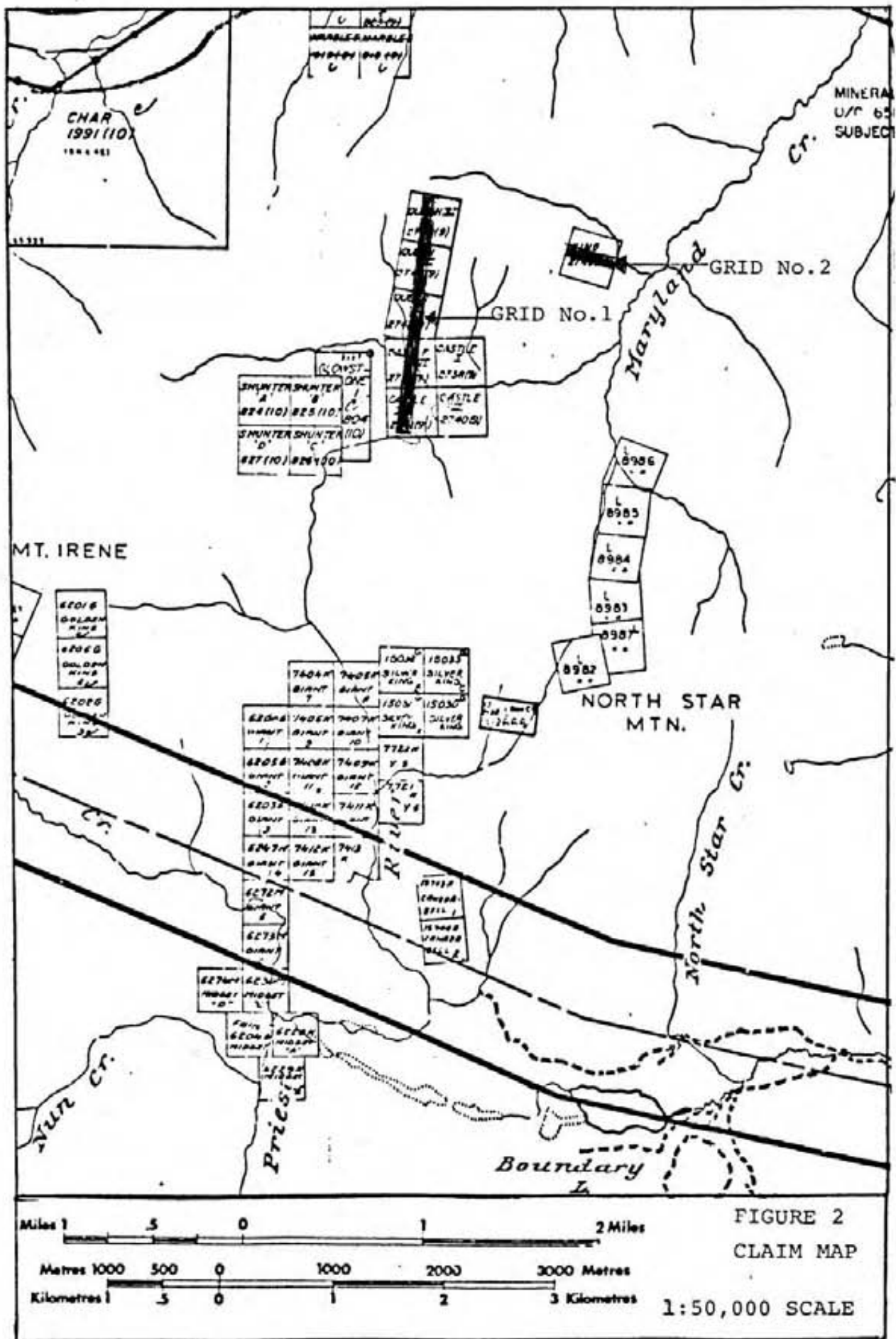


FIGURE 2  
CLAIM MAP

1:50,000 SCALE

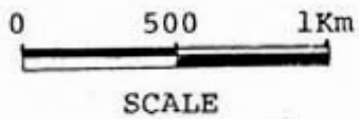
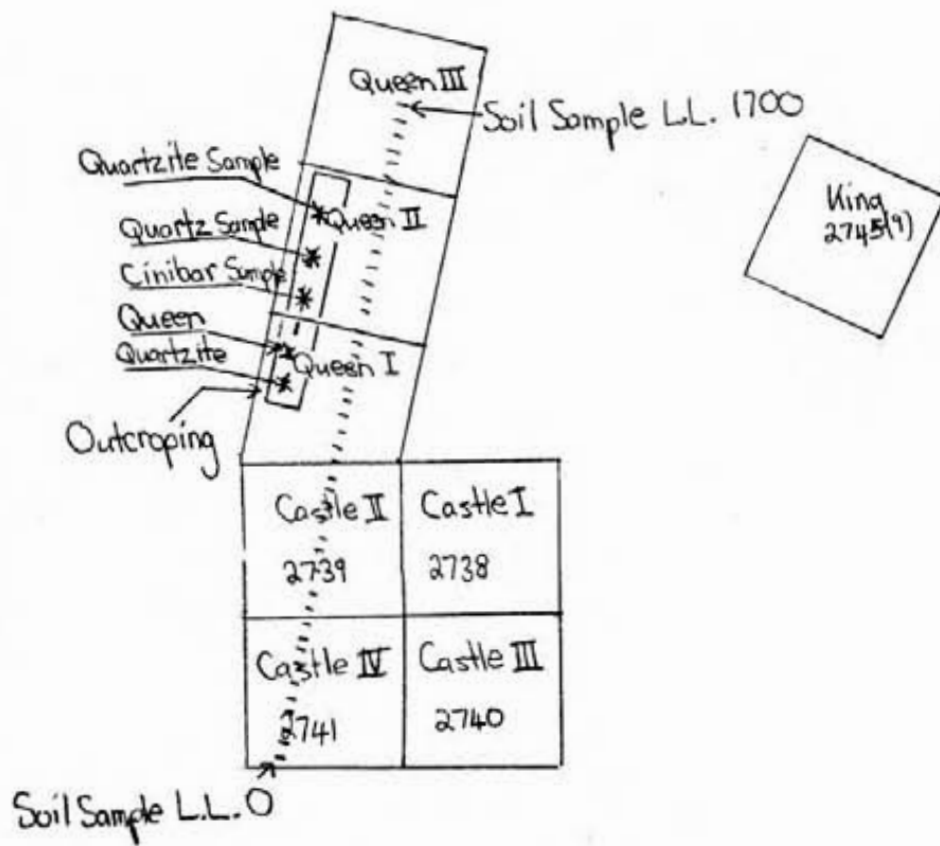


FIGURE 3  
SAMPLE LOCATIONS

Prospecting for the "Lost Sweed" gold mine during late 1982 resulted in the discovery of an encouraging exploration target including significant quartz bodies. Claims were located to cover these and a gold in soil survey initiated with a test line. The area is underlain by sediments including limestone, proximal to an intrusive body; an environment consistent with the "Porphyry" exploration model. Silver and lead deposits are known in similar environments some 3 to 5 km south and reported on the nearby Shunter Claims.

Gold was produced from quartz some 18 km northwest in the Sheer Creek Mining Camp.

#### LOCATION ACCESS AND PHYSIOGRAPHY

The property is accessible by a gentle gradient forestry road up Maryland Creek, departing the paved Provincial Highway 3 at a point approx. 40 km west of Creston, B.C. Alternative access is from the south by the Upper Priest River forestry road.

Elevations range from approx. 5,000 feet in the valley floor to 6,000' on the ridges. Slopes are steep to moderate, traversable on foot and workable with tracked crawlers.

The slopes have been extensively logged with deciduous regrowth and sparse subeconomic conifers remaining.

The area would be expected to be snow free from May until mid October for field activities. Snowfall may be expected to be heavy but would be manageable to maintain access should a year round operation develop.

#### GEOLOGY

The property is depicted by Rice (1940) as being underlain by "laminated argillite, magnesian limestone, quartzite" of both Mount Nelson Formation and the underlying Dutch Creek Formation of Late Precambrian, Upper Purcell Formation. These are unconformably overlain to the west by conglomerate of Toby Formation of basal Windermere series. This conglomerate is in turn overlain by sheared andesitic volcanic rocks of Irene Volcanic Formation. This is intruded some 7 km west of the subject property by an extensive "granite, granodiorite and quartz diorite" pluton of Mesozoic age.

The upper Purcell and Windermere series strike regionally north-northwest south of the property, with a flexure in the vicinity of the property to a northeast strike, northward.

The published airborne magnetic map (Creston 1:63360) verifies

the regional geology with the following notable: i) The Upper Purcell series of low magnetic response have a very marked flexure from north-northeast to northeast with the hinge line underlying the subject ground. ii) The Mesozoic pluton of modest response appears from isomagnetic lines to have a southeast extension underlying the property at depth, and perhaps causing the flexure. iii) The Irene Volcanic Formation to the west are coincident with a markedly higher magnetic signature.

#### FIELD WORK

Mr. Tod Proskin, prospector initiated reconnaissance and claimstaking from September 14th to 17th 1982. He subsequently prospected, sampled and soil sampled on the property from the 21st to 26th of September, 1982.

A total of 42 soil samples were collected from a line, initiating central to the Castle II and running northward up the Queen I, II and III claims. Samples were analysed for gold and results are appended.

Five samples from a quartz body central to the Queen I and II were collected and assayed for siliceous, geochemically analysed for copper, silver, gold and mercury, and 30 element scan tested by inductively coupled argon plasma techniques. Results are appended.

#### RESULTS

Gold in soil proved generally disappointing with a high of 40 parts per billion, but only five values above the detection limit of 5 ppb. It should be noted that the samples were run for gold only, and not copper, lead, zinc or silver. Four of the five "quartz" samples yielded a significant siliceous content but were also high in contaminants, notably iron.

A reconnaissance report on the nearby Shunter claims (Trenholme, 1982) describes a "one inch seam of tetrahedrite in massive white dolomite" and notes its presence elsewhere in thin bedded limestone. Samples in that report yielded from 32-38 to 52-81 ounces of silver per ton along with significant copper lead and zinc.

#### CONCLUSION

The property is depicted as covering sedimentary units which include lithologies amenable to replacement type mineralization. A nearby pluton has a geomagnetic response consistent with it continuing beneath the property at depth and providing a heat source from mineralizing fluids. A structural flexure depicted in both regional mapping and geomagnetically may have developed the conduits and structural conditions for mineralization.

Quartz bodies on the property have not been inspected for extent orientation and mineralogy but may be expressions of a conduit system.

#### RECOMMENDATIONS

Prospecting should be undertaken to determine the presence and extent of carbonate facies. The quartz bodies should be mapped for extent, orientation and their mineralogy, and especially bounding their contacts, inspecting for ore forming minerals and temperature indicating minerals such as malpasite.

Should indications prove favourable or mineralization be noted, a soil geochemical survey should be undertaken to include silver, copper, lead and zinc.

Stream sediment sampling for these elements could be undertaken immediately as a guide to prospecting.

Geophysics, particularly Very Low Frequency Electromagnetics may be a useful tool in defining the extent of quartz or carbonate facies in a graphitic argillite or other conductive host, beneath cover.



BIBLIOGRAPHY

7

LITTLE H.W. (1960) Nelson Map-Area, West Half, British Columbia (82 F W 1/2). Geol. Surv. Cdn. Mem 308.

RICE H.M.A. (1940) Map 603A Nelson (East Half) Geological Map of 1:253,440 Scale Copy reproduced from Library, Geol. Surv. Can. Vancouver, B.C.

TRENHOLME L.S. (P.ENG) (1982) Reconnaissance Report. Ernie Shunter Silver-Lead Prospect. Priest River Area. Copy provided by Tod Proskin.

MAP 84756 (1970) Creston, British Columbia Sheet 82-F-2. Isomagnetic Lines of Absolute total field from Airborne Magnetic Survey. Geol. Surv. Can. and B.C. Ministry Mines and Pet. Res.

N.T.S. 82-F-2W Topographic Map 1:50,000

M 82F-2W Claim Map 1:50,000

STATEMENT OF QUALIFICATIONS

8

I, Norman W. Stacey of #305, 2320 Trinity Street do state that:

1. I graduated in 1974 from the University of Auckland, New Zealand, with a B. Sc. degree in Geology and Applied Geophysics.
2. I am a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
3. I have written this report at the request of Mr. Tod Proskin, based on the references cited, his fieldnotes and information provided by him.

NORMAN W. STACEY  
GEOLOGIST  
HOWSER, B.C.  
SEPT. 10, 1983

## Statement of Cost

9

Personnel	\$	c
Mr. Tod Proskin - Prospector September 14th, 15th, 16th, 17th Travel, Recon & Staking 4 At \$100/Day Apply Half-Rates	\$200.00	
September 21st, 22, 23, 24, 25, 26 Travel, Prospect, Sample, Geochem 6 At \$100/Day All On Property	\$600.00	
Mr. Norman Stacey - Geologist July 15, Sept. 10, 1983 Review and Report 2 At \$200/Day	\$400.00	
Expenses		
Vehicle 4 W.D. 10 Days @ \$50/Day - All Found	\$500.00	
Food And Accom. Sept. 14, 15, 16, 17, 21, 22, 23, 24, 25. 9 Days @ \$35/Man/Day	\$315.00	
Field Supplies - Bags, Flasks, Topofil, Maps Etc.	\$ 50.00	
Typing, Reproducting, Drafting	\$100.00	
Geochem - Soils	\$178.50	
SiO2 Assays	\$ 37.50	
Geochem - Rocks	\$ 71.00	
I.C.P. Analyses	\$ 27.50	
		-----
Total Applicable To Property	\$2,479.50	
To Be Applied		



To: Tod Proskin  
432 - 8th St.,  
New Westminster, B.C.  
V3M 3R7

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B. C. V6A 1R6

Telephone: 253 - 3158

File No. 82-1218B

Type of Samples Pulps

Disposition \_\_\_\_\_

# ASSAY CERTIFICATE

No.	Sample	SiO <sub>2</sub> %							No.
1	SULFIDE	91.40							1
2	QUARTZ	95.20							2
3	CINLBAR	97.30							3
4	QUEEN	81.30							4
5	QUARTZITE	95.50							5
6									6
7									7
8									8
9									9
10									10
11									11
12									12
13									13
14									14
15									15
16									16
17									17
18									18
19									19
20									20

All reports are the confidential property of clients.

DATE SAMPLES RECEIVED Sept. 25, 1982

DATE REPORTS MAILED Oct. 8, 1982

ASSAYER

*Dean Toye*

DEAN TOYE, B.Sc.  
CHIEF CHEMIST  
CERTIFIED B.C. ASSAYER



To: Tod Proskin  
432 - 8th St.,  
New Westminster, B.C.  
V3M 3R7

82-1218 A

File No. \_\_\_\_\_

Type of Samples Rocks

Disposition \_\_\_\_\_

### GEOCHEMICAL ASSAY CERTIFICATE

FA

SAMPLE No.	Cu	Ag	Au ppb	Hg ppb																	
Sulfide	25	.1	1	10																	1
Quartz	11	.1	2	5																	2
Cinlbar	6	.1	2	30																	3
Queen	14	.1	1	5																	4
Quartzite	5	.1	1	5																	5
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																					40

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All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Sept 25, 1982

DATE REPORTS MAILED Sept. 30, 1982

ASSAYER Dean Toy

DEAN TOYE, B.Sc.  
CHIEF CHEMIST  
CERTIFIED B.C. ASSAYER



To: Tod Proskin  
 432 - 8th St.,  
 New Westminster, B.C.  
 V3M 3R7

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B. C. V6A 1R6

phone: 253 - 3158

File No. 82-1407

Type of Samples Soils

Disposition \_\_\_\_\_

**GEOCHEMICAL ASSAY CERTIFICATE**

SAMPLE No.	Au ppb									
LL - 0	5									1
50	5									2
100	5									3
150	5									4
200	5									5
250	5									6
300	5									7
350	5									8
400	5									9
450	5									10
500	5									11
550	5									12
575	10									13
600	5									14
625	5									15
650	5									16
675	5									17
700	5									18
725	5									19
750	10									20
775	5									21
800	5									22
850	5									23
900	40									24
950	5									25
1000	5									26
1050	5									27
1100	5									28
1150	10									29
1200	5									30
1250	10									31
1300	5									32
1350	5									33
1400	5									34
1450	5									35
1500	5									36
1550	5									37
LL - 1600 N	5									38
										39
										40

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 All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 22, 1982

DATE REPORTS MAILED Oct. 28, 1982

ASSAYER Dean Toye

DEAN TOYE, B.Sc.  
 CHIEF CHEMIST  
 CERTIFIED B.C. ASSAYER



To: Tod Proskin  
432 8th St.  
NewWestminster B.C.  
V3M-3R7

File No. 82-1407

Type of Samples soils

Disposition \_\_\_\_\_

### GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au ppb									
LL - 1650 N	5									1
1700	5									2
LL - 1700 NA	5									3
										4
Q-3	5									5
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All results are in PPM.  
DIGESTION:.....  
DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 22, 1982

DATE REPORTS MAILED Oct. 28, 1982

ASSAYER Dean Toye

DEAN TOYE, B.Sc.  
CHIEF CHEMIST  
CERTIFIED B.C. ASSAYER

## ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.  
THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Si, Sr, Cr AND B. Au DETECTION 3 pps.  
SAMPLE TYPE - PULP

DATE RECEIVED OCT 1982

DATE REPORTS MAILED

*Oct 25/82*

ASSAYER

*H. Co*

DEAN TOYE, CERTIFIED B.C. ASSAYER

EMERALD STAR FILE # 02-10104 RE-RUN

PAGE 11

SAMPLE #	Mo pps	Cu pps	Pb pps	Zn pps	Ag pps	Ni pps	Co pps	Mn pps	Fe %	As pps	U pps	Au pps	Th pps	Sr pps	Cd pps	Sb pps	Bi pps	V pps	Ca %	P %	La pps	Cr pps	Mg %	Ba pps	Ti %	B pps	Al %	Na %	K %	ppm
SULFIDE	3	26	11	14	.1	7	8	116	3.32	21	2	ND	2	1	1	3	2	2	.01	.03	2	9	.02	11	.01	2	.15	.01	.05	2
QUARTZ	2	11	7	8	.1	4	10	79	2.17	26	2	ND	2	1	1	2	2	2	.01	.01	2	14	.01	4	.01	2	.07	.01	.02	2
CINLBAR	2	9	3	4	.1	4	1	103	.84	2	2	ND	2	1	1	2	2	2	.01	.01	2	11	.04	2	.01	2	.07	.01	.01	2
QUEEN	1	15	12	50	.1	10	5	72	2.89	2	2	ND	6	4	1	2	2	7	.03	.02	11	20	.44	19	.01	3	1.05	.01	.10	2
QUARTZITE	1	7	3	3	.1	3	1	100	.65	2	2	ND	2	1	1	2	2	2	.03	.01	2	10	.01	5	.01	2	.07	.01	.04	2
STD A-1	1	30	39	180	.2	35	12	963	2.65	8	2	ND	2	38	1	2	2	56	.65	.10	7	72	.76	281	.08	5	1.89	.02	.21	2