

GEOLOGICAL ASSESSMENT  
AND WORK PROPOSAL

Bacon I, Bacon II, Bacon III

123° 57' Long.

49° 44' Lat.

Vancouver Mining District

92G/12W

June 30, 1983

Consultants:

Chris Westerman, PhD.

David Fleming, BSc.

Compiled By:

Anthony K. Sweet

Professional Prospector

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,333

## TABLE OF CONTENTS

	page
Introduction	1
Geology	1
Mineralization	2
Conclusions	3
Recommendations	3
Statement of Physical Work	5 (fig. 1)
Geological Map (included in back cover pocket)	(fig. 2)
Location Map	6
Claim Map	7 (plan 1)
Certification	8
Itemized Cost Statement	9
Appendix I	Rock Sample Description
Appendix II	Geochemical Survey Sample List

## Introduction

The Bacon claims are located at the northern end of the Sechelt Peninsula (92 G/12W). Refer to the enclosed claim map.

Previous work done in 1972/1974 consisted of small reconnaissance soil sampling grids on the central and extreme north-eastern portions of the Bacon I claim, (assessment rpts. 3757/5007). An adit driven on massive chalcopryrite-sphalerite mineralization has been rumored, but as yet, unsubstantiated.

Significant Cu-Mo-Ag and Cu-Ag-Zn skarns are located 4-7 kilometers south of the claim group (King Midas and Cambrian Chieftan, MMAR 1937/1950, BCDM Bull. 39). Current exploration on the Stein and Chalice mineral claims to the north is focusing on high grade Au-Ag telluride mineralization in quartz-marcasite veins within batholithic rocks.

One day was spent with Kim Sweet observing road cuts on the east side of Ruby Lake, the north and east sides of Klein Lake and along logging roads south-east of Klein Lake.

## Geology

Roof pendant volcanics and associated sediments outcrop within hornblende diorite and are cut by porphyritic diorite dikes. All rocks are in turn cut by fine-grained diorite and andesite dikes striking south-east.

Road cuts along the east side of Ruby Lake expose interbedded mafic volcanics, pyroclastics, banded calc-silicate, chert, hornfels and light green epidote skarn for approximately 500 meters. Bedding strikes  $0/10^{\circ}$  and dips  $75^{\circ}$  north-west.

Discontinuous exposure north of Klein lake consists of mafic volcanics, pyroclastics and laminated micaceous tuff.

South-west of Klein Lake highly pyritic feldspar-hornblende porphyry (diorite) is in contact with dark black pyritic hornfels. Elsewhere, diorite observed was equigranular and medium-coarse grained.

#### Mineralization

Quartz-pyrite veins and pyritic joints and shears in the diorite are conspicuous in outcrop along the highway on the Bacon I and Wally I claims. Several hundred meters south of the Egmont turnoff, north-east striking vertical joints are filled with massive pyrite every 3-5 meters over a 35 meter outcrop. Further south, a quartz-pyrite vein occupies joints striking  $080^{\circ}$ , dipping  $30^{\circ}$  south. Preliminary sampling has indicated no precious metal values but some copper in the 500-700 ppm range ( samples 17565/17570, sample sites are marked with red flagging tape).

Mineralization within pendant rocks along the highway consists of pyrite, pyrrhotite and chalcopyrite along high density conjugate joints and replacement clots, and massive pyrrhotite in siliceous volcanics near the diorite contact (sample flag Bacon #7). A small shear nearby is mineralized with massive pyrite molybdenite. Preliminary sampling indicates copper values of .21% to .55% with anomalous zinc and silver ( samples 17571, 17574).

Banded cherts are highly pyritic locally (sample 17566, Bacon #9).

### Conclusions

1. Skarn mineralization was apparently undiscovered by previous workers.
2. Anomalous copper and zinc soil geochemistry east of known mineralization appears untested (assessment report 3757).
3. Lithology and geochemistry on the Bacon I claim is similar to that of the Cambrian Chieftan.
4. Gold-silver mineralization similar to that on the Chalice claim group could exist on the Bacon claim group. Mineralization and geological controls have yet to be defined.
5. Pyritic disseminations and lenses in banded cherts, associated with mafic volcanics and pyroclastics, make volcanogenic gold and base metal exploration targets reasonable.

### Recommendations

An exploration program should be initiated involving:

1. Reconnaissance stream sediment sampling and reconnaissance geological mapping over the entire claim group.
2. Systematic sampling and detailed mapping of known mineralization, including the highly pyritic banded cherts.
3. Detailed prospecting in areas of anomalous soil geochemistry outlined by previous workers.

4. Stream sediment samples should be analyzed for Cu, Pb, Zn, Ag, Mo, W and Au. Roughly estimated, 50 samples will be required to cover the property.

Total cost for the program is estimated at @ \$3,500.00.

Work should be conducted prior to the anniversary date in order to eliminate units of no potential.

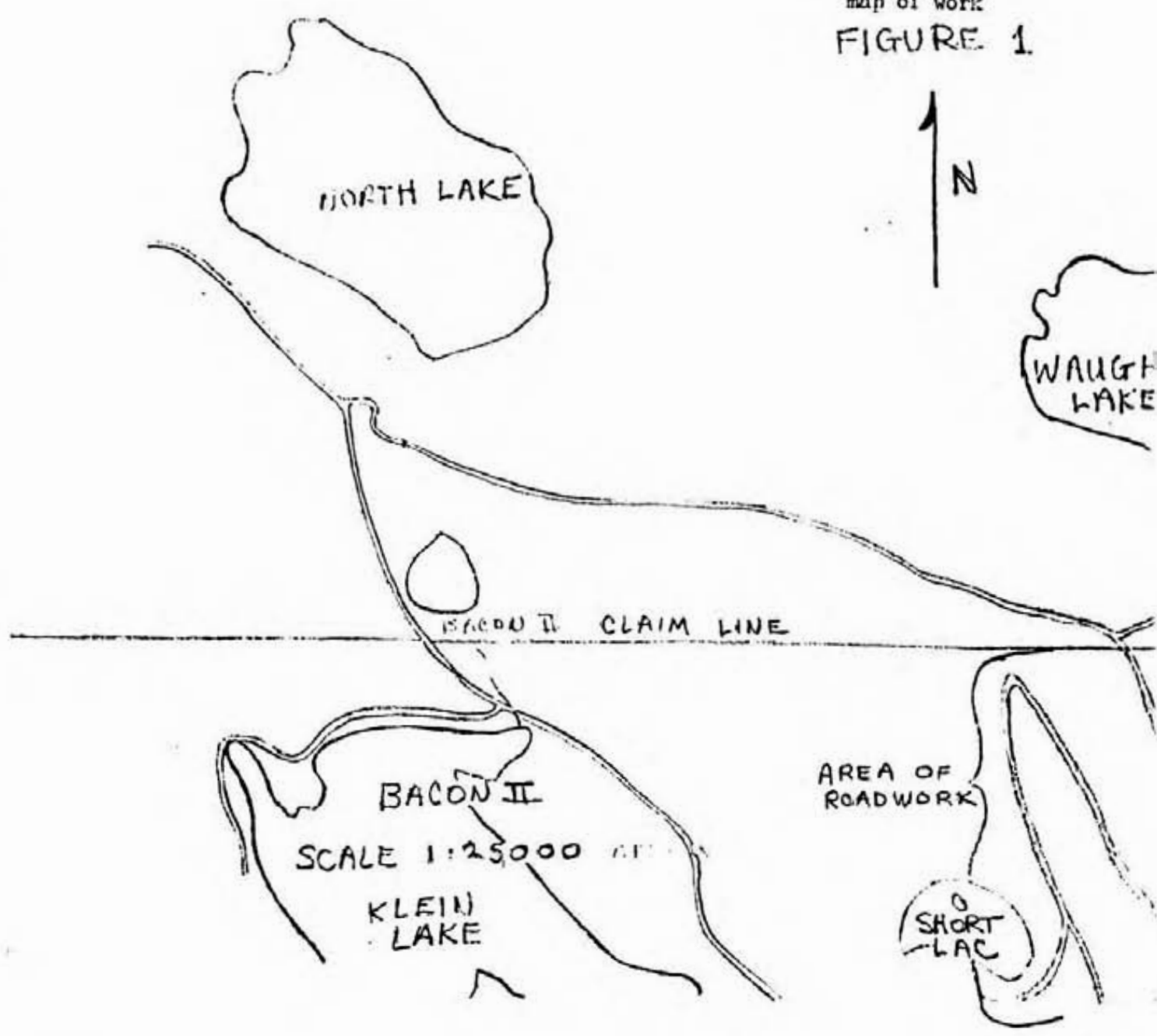
Statement of Physical Work on the Bacon II Claim, Bacon Group,

Egmont, B.C. 92G12W

The forestry road was cleared for a length of 1,600 meters and a width of 20 meters, from Waugh Lake to the small lake ( Short lac ) on Bacon II. A total of twenty full work days of chainsaw brushing and clearing was spent on the claims from March 20, 1982 to March 18, 1983.

Number of days	20
Amount per day	\$100.00
<b>TOTAL</b>	<b>\$2,000.00</b>

map of work  
FIGURE 1







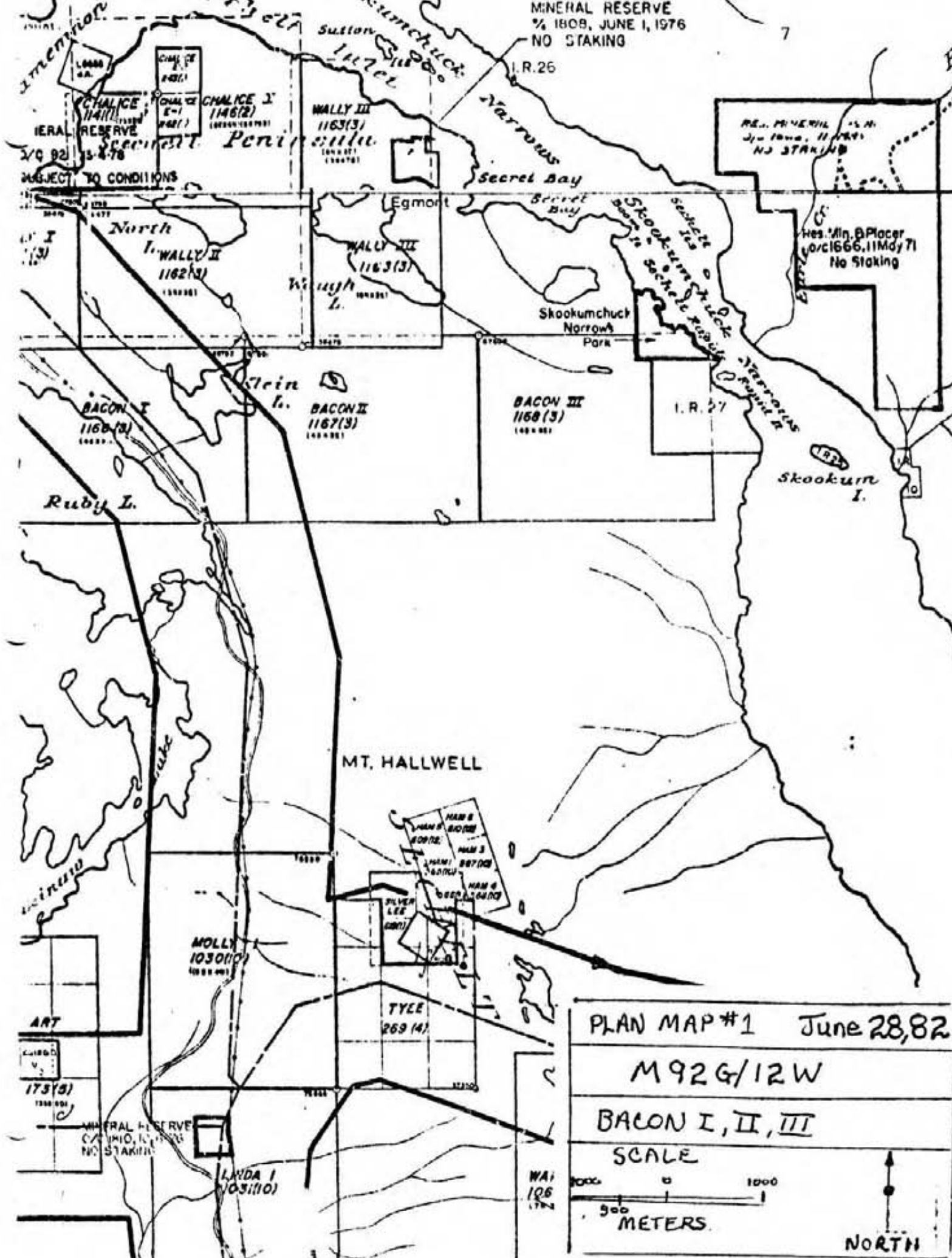
**BALON III  
MINERAL CLAIMS**

**LOCATION  
MAP  
1 : 250,000**



MINERAL RESERVE  
1/4 1808, JUNE 1, 1976  
NO STAKING

7



RE. PERMIT 12 N  
JUN 1976, 11 1979  
NO STAKING

Res. Min. 6 Placer  
0/CI 666, 11 May 71  
No Staking

PLAN MAP #1 June 28, 82

M 92 G/12 W

BACON I, II, III

SCALE

0 500 1000  
METERS

NORTH

Certification

I, Anthony K. Sweet, of Sechelt, B.C., do hereby certify that:

1. I have been a prospector continuously since 1976.
2. I have worked for the following companies:  
Green Valley Mining  
Lakewood Mining  
Climex Mining of B.C.  
Chalice Mining
3. The information for accompanying report was based on work done personally and from Mineral Inventory assesment reports and government publications.
4. I am a Director of Chalice Mining.

*Anthony K. Sweet*

Itemized Cost Statement

name	dates, 1983	total days
Warren Smallwood	Jan. 1-10	10
John Smallwood	Jan. 1-10	10
Anthony Sweet	Jan. 1-10, Feb. 22	11
David Fleming	Feb. 22	1
Steven Hodgson	Feb. 23-28	5
Fraser Bakewell	Mar. 2-11	9
Robert Grandillo	Mar. 2-11	<u>9</u>
		55 days
Rates paid - \$12.50/hour		
TOTAL:	\$100.00/diem	\$5,500.00

Appendix I

Chalice Mining

Bacon Prospect

Sample list

C. Westermín

CHALICE PROSPECT  
N.T.S. 92F/16E, 92G/13W

SAMPLE LIST

EXAMINATION BY C.J. WESTERMAN, FEBRUARY 17-21, 1983

All samples prefixed by Project No. 8302:

- WR01 Junction Highway 101 and Egmont Road - float, medium-grained leucocratic-quartz diorite, with 5% dissem. pyrite.
- WR02 North Lake Vein - grabs of mineralized vein - pyrite, quartz.
- WR03 North Lake Vein - 1 metre chip of apparently barren c.gr biotite granodiorite in footwall of vein. Trace hematite on fractures.
- WR04 Pit C1 - mineralized grabs, including a band of f.gr. massive pyrite and several pieces of pyritic stock work in silicified biotite granodiorite.
- WR05 Pit C2 - material similar to WR04.
- WR06 Cliff Zone C3 - 3.8 metre chip along stockwork pyrite vein zone in c.gr. biotite granodiorite.
- WR07 C5 - grabs from leu. qtz. pyrite vein, with 15 cm silicified qtz. pyrite stockwork in biotite granodiorite.
- WR08 C6 - mineralized grabs, patchy pyrite quartz stockwork in silicified zone cutting biotite granodiorite.
- WR09 C4 - character sample grab, pyrite quartz stockwork in biotite granodiorite.
- WR10 Showing at 525N, 275W - 1.5 m chip sample across weak pyrite quartz stockwork with a 4 cm qtz. pyrite vein at each margin.

SAMPLE LIST (cont'd.)

- WR11 Ruby Lake - 20 cm wide pyritic shear zone cutting intermediate to felsic f.gr. volcanic (tuffs?). Grabs.
- WR12 Ruby Lake - grabs, weak pyrite quartz vein zones in hybrid hornblende diorite.
- WR13 Ruby Lake - grabs, flat lying thin pyritic shears cutting a hornblende andesitic unit.
- WR14a Ruby Lake - grabs, weak, rusty weathering zones in thin banded cherts and (?) flow-banded rhyodacites.
- WR14b Ruby Lake - grabs, rusty weathering pyritic thin-banded dacitic tuffs (?) - unit about 10 m wide.
- WR15 Highway 101 Junction, Egmont Road - large outcrop, complex foliated hornblende andesites, dacites, cherts; multiple grabs of weakly, rusty-weathering material.
- WR16 Beach West of STEIN Adit - weakly pyritic quartz-calcite breccia in rhyodacite-chert breccia, multiple grabs area 3 m x 1 m.
- WR17 As WR16 - grabs across 1.5 m width.
- WR18 STEIN Adit - mineralized grabs, 1 m square pyrite-quartz breccia in silicified rhyodacite-chert breccia. May not be in-situ.
- WR19 STEIN Adit - 75 cm chip across east side of entrance, pyrite-quartz breccia.
- WR20 STEIN Adit - 55 cm chip across west side of entrance, rhyodacite chert breccia with minor pyrite-quartz stringers.
- WR21 STEIN Adit - 50 cm chip located approximately 10 m from entrance, material as WR19, east side of roof.

SAMPLE LIST (cont'd.)

- WR22 STEIN Adit - 90 cm chip located approximately 10 m from entrance, west side of roof, material as WR20
- WR23 Beach West of STEIN Adit - material as WR16, grabs across 1.5 m width.
- WR24 Float From Fire Road Near T and PC Veins - f.gr. dacite dike with 4-5% disseminated pyrite, grab.

WL.01 HM

"Heavy Mineral" silt sample from small creek flowing SW across volcanic pendant into Ruby Lake. Sampled above highway from pool as base of short outcrop area across which creek runs. Not a particularly good sample.





Δ WA 110 Rock sample location  
 ○ WL01 Stream sediment sample

CHALICE PROSPECT SECHART PENINSULA NTS 92 F/16E, 92G 13W
RUBY LAKE PENDANT
C. J. WESTERMAN FEB, 1983.

# MIN-EN Laboratories Ltd.

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

## ANALYTICAL REPORT

Project 8302 OEX Chalice Date of report March 2/83.  
File No. 3-77 Date samples received Feb. 23/83.  
Samples submitted by: C.J. Westerman  
Company: Welcome North Mines  
Report on: 9 rocks, 1 HM Geochem samples  
9 Assay samples

### Copies sent to:

1. Welcome North Mines, Vancouver, B.C.
2. C.J. Westerman, North Vancouver, B.C.
- 3.

Samples: Sieved to mesh Ground to mesh -80 rock geochem.  
-100 assay

Prepared samples stored  discarded   
rejects assay stored  discarded  geochem

Methods of analysis: Assays Ag-Acid digestion-chemical analysis.

Au-Fire Assay. Geochem Cu, Pb, Zn, Ag-nitric, perchloric  
digestion. A.A., As-Spectrophotometric., Au-Aqua Regia. AA  
Remarks: HM-specific gravity flotation and routine geochem  
analysis.

SPECIALISTS IN MINERAL ENVIRONMENTS



COMPAN

Welcome North Mines

PROJECT No. 8302 OEX Chalice

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

ATTENTION: C.J. Westerman

FOR W&A USE ONLY  
MIN - EN LABORATORIES LTD.

Heavy Mineral

3.77  
Mar 2,  
1983.

Sample Number	10	15	20	25	30	35	40	45	50	Heavy Mineral	
	Cu ppm	Pb ppm	Zn ppm	Co ppm	Ag ppm	Hg ppm					
8302WL	01HM	15	11	305			05		6	10	7.44

K... /

### Certificate of Assay

WELCOME North Mines,  
1027-470 Granville St.,  
Vancouver, B.C.

8302-OEX  
PROJECT No. Chalice

DATE: Mar. 2/83.

File No. 3-77

SAMPLE No.		Ag oz/ton	Au oz/ton		
14812-8302-WR01		.02	.001		
13	03	.01	.003		
14	08	.91	.391		
15	10	.30	.184		
16	19	.03	.021		
17	20	.01	.008		
18	21	.02	.006		
19	22	.03	.003		
14820-8302-WR24		.01	.004		

MINE-EN Laboratories Ltd.  
CERTIFIED BY: .....

Appendix II

Chalice Mining  
Bacon Prospect

Geochemical Survey  
Sample list

## LAB PREPARATION OF GEOLOGICAL, GEOCHEMICAL AND BIOLOGICAL MATERIALS

Sample handling and preparation procedures are as important as field sampling techniques. A poorly prepared sample is neither representative of the material obtained in the field nor can it be analysed with any degree of confidence. For this reason we spend considerable time studying handling and preparation procedures for each project.

Prep. Code*	Sample Type	Description Prep. Procedure	Price/Sample
<b>GEOCHEM</b>			
201	Soil or Sediment	Dry, sieve through – 80 mesh screen	\$ 0.60
202	Soil or Sediment	Dry, sieve through – 80 mesh screen save + 80 mesh fraction	1.00
203	Soil or Sediment	Dry, sieve through – 35 mesh screen then ring grind to approx. – 100 mesh	2.00
217	Soil or Sediment	Ring grind to approx. – 100 mesh	2.00
205	Rock or Core	Crush, subsample and ring grind to approx. – 100 mesh. Over 2 lbs. see code 251	2.50
235	Pan Concentrate	Ring Grind to approx. – 100 mesh	2.00
210	Vegetation	Milled to – 20 mesh	4.00
213	Stream Sediments Pan Concentrates	Separation of Heavy Minerals having a specific gravity greater than 2.96. Ring grind to – 100 mesh	14.00
214	Pulp	No sample preparation required	N/C
<b>ASSAY</b>			
207	Rock or Core (Precious metals)	Primary and secondary jaw crushing, tertiary cone crushing, rotary pulverize and screen to – 100 mesh. Screen is examined for 'metallics'	3.75
208	Rock or Core	Primary and secondary jaw crushing, tertiary cone crushing. Ring grind to approx. – 100 mesh	3.25
209	Concentrate	Ring grind and screen to – 100 mesh	3.75
225	Assay Material	No sample preparation required	N/C
<b>MISCELLANEOUS</b>			
221	Water	Water sample	N/C
227	Pulp	Rolling charge (Homogenizing pulp)	1.00
261	Pulp	Compositing charge (Combining pulps)	1.00 per included sample
231		1 - Assay ton fire assay – surcharge	1.00
216		Screen to – 140 mesh – surcharge	1.00
230		Screen to – 200 mesh – surcharge	2.00
219		Samples requiring additional drying	2.00
251		Overweight charge on assay samples > 15 lbs. and geochem samples > 2 lbs.	0.25/lb.

\*Occurs in the first column of each certificate.  
Prices in Canadian dollars or U.S. equivalent.





# CHEMEX LABS LTD.

BROOKSBANK  
 1100 VANCOUVER  
 CANADA V7J  
 TELEPHONE: (604) 984-  
 TELEFAX: 043-5

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## CERTIFICATE OF ANALYSIS

TO : CLIMEX MINING OF B.C.  
 BOX 1531  
 SECHLT, B.C.  
 V0N 1A0

CERT. # : A8210609-0  
 INVOICE # : 18210609  
 DATE : 22-MAR-82  
 P.O. # : NONE

Parameter Description	Sample # 1	Sample # 2
Sample preparation code	222	222
Aluminium (pct)	>10	>10
Antimony (ppm)	<50	<50
Arsenic (ppm)	70	70
Barium (ppm)	1000	700
Beryllium (ppm)	<2	<2
Bismuth (ppm)	<5	<5
Carbon (ppm)	<20	<20
Cadmium (ppm)	<20	<20
Calcium (pct)	2	2
Chromium (ppm)	200	150
Cobalt (ppm)	20	20
Copper (ppm)	300	20
Germanium (ppm)	<5	<5
Iron (pct)	20	15
Lead (ppm)	1000	500
Magnesium (pct)	1	2
Manganese (ppm)	700	700
Molybdenum (ppm)	<100	<100
Nickel (ppm)	20	20
Niobium (ppm)	<200	<200
Potassium (pct)	1	1
Silicon (pct)	30	30
Silver (ppm)	2	<2
Sodium (pct)	1	2
Thorium (ppm)	<500	<500
Tin (ppm)	<10	<10
Titanium (ppm)	>5000	>5000
Vanadium (ppm)	700	300
Zinc (ppm)	200	150
Zirconium (ppm)	500	500

### SEMQUANTITATIVE SPECTROGRAPH ANALYSIS I

#### Sample description information

Sample # 1 17562  
 Sample # 2 17563

#### Preparation code description

222 Spectro: ring



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 ASSOCIATION

Certified by *HR. [Signature]*



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TELEX 043

## CERTIFICATE OF ANALYSIS

TO : CHALICE MINING INC.

BOX 2240  
SECHelt, B.C.  
V0N 3A0

CERT. # : A8310735  
INVOICE # : I8310735  
DATE : 25-MAR-83  
P.O. # : NONE

Sample description	Prep code	ANALYSIS				
KL+00	217	20				
KL+25	217	<10				
KL+50	217	15				
KL+75	217	<10				
KL+100	217	<10				
KL+125	217	<10				
KL+150	217	<10				
KL+175	217	<10				
KL+200	217	<10				
KL+225	217	<10				
KL+250	217	<10				
KL+275	217	10				
KL+300	217	<10				
KL+325	217	<10				
KL+350	217	<10				
KL+375	217	<10				
KL+400	217	<10				
KL+425	217	<10				
KL+450	217	<10				
KL+475	217	<10				
KL+500	217	<10				
KL+525	217	<10				
KL+550	217	20				
KL+575	217	<10				
KL+600	217	<10				
KL+625	217	<10				
KL+650	217	<10				
KL+675	217	<10				
KL+700	217	<10				
KL+725	217	<10				
KL+750	217	<10				
KL+775	217	<10				
KL+800	217	<10				
KL+850	217	10				



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Checked by *Wendy Buckler*



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## CERTIFICATE OF ANALYSIS

TO : CHALICE MINING INC.

30X 2240  
SECHLT. B.C.  
VON 3A0

CERT. # : A831022  
INVOICE # : 1831022  
DATE : 3-FEB-1  
P.O. # : NONE

Sample description	Prep code	Cu ppm	Zn ppm	Ag ppm	AU-AA ppb	
17 L. KLEIN	205	155	105	0.3	70	--
17565 #2	205	700	43	0.7	<10	--
17566 #9	205	210	43	0.5	<10	--
17567 #13	205	1100	245	1.7	<10	--
17569 #10	205	133	55	0.6	10	--
17570 #1	205	505	48	1.2	20	--
17571 #8	205	500	310	5.5	<10	--
17572 #5	205	163	140	0.2	<10	--
17573 #4	205	155	23	0.2	<10	--
17574 #7	205	2150	255	3.4	10	--
P.P.	205	--	--	0.6	<10	--
83-CF-1	205	--	--	0.2	<10	--
83-CF-2	205	--	--	0.2	<10	--
83-CF-3	205	--	--	0.2	<10	--
83-CF-4	205	--	--	0.2	<10	--
83-CF-5	205	--	--	0.8	<10	--
83-CF-6	205	--	--	0.5	10	--
83-CF-8	205	--	--	0.1	<10	--
83-CF-9	205	--	--	0.5	<10	--



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TELEX 043

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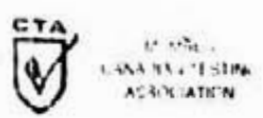
TO : CHALICE MINING INC.

BOX 2240  
SECHelt, B.C.  
VAN 3A0

DEPT. # : A8310332  
INVOICE # : 12310332  
DATE : 11-FEB-8  
P.O. # : NONE

Sample description	Prep	Ag	Sn	As	AU-AA	
	PPM	PPM	PPM	PPM	PPM	
53 CF-9	205	--	--	0.1	10	--
53 CF-10	205	--	--	0.1	20	--
17575 #11	205	195	17	0.1	20	--
17576 #6	205	118	48	0.1	10	--
17577 #14	205	670	63	0.1	10	--
17578 #3	205	400	47	0.1	10	--
17580 #12	205	205	24	0.1	40	--

*Handwritten signature*





# CHEMEX LABS LTD.

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NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221

TELEX 043-52597

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TO : CHALICE MINING INC.

BOX 2240  
SECHELT, B.C.  
V0N 3A0

CERT. # : A8310964-001

INVOICE # : I8310964

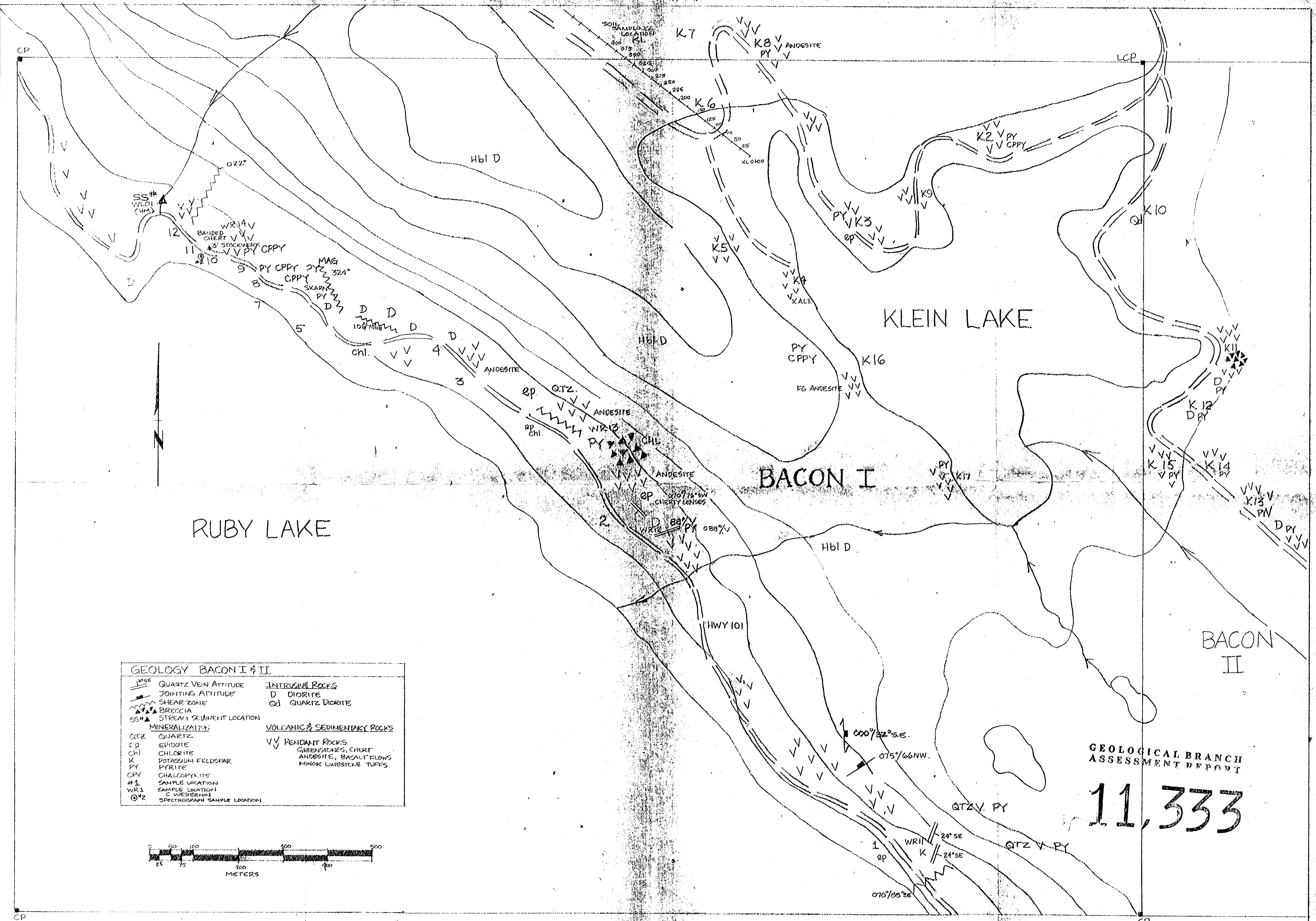
DATE : 18-APR-83

P.O. # : NCNE

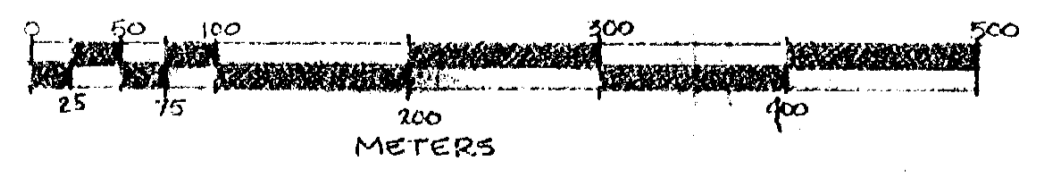
Sample description	Prep code	Cu pct	Mo pct	Ag ppm	AU-AA gpb
KLEIN #2	205	55	4	0.1	<10



Certified by *Hart Buchler*



GEOLOGY BACON I & II		
	QUARTZ VEIN ATTITUDE	<b>INTRUSIVE ROCKS</b>
	JOINTING ATTITUDE	D DIORITE
	SHEAR ZONE	Qd QUARTZ DIORITE
	BRECCIA	
	STREAM SEDIMENT LOCATION	<b>VOLCANIC &amp; SEDIMENTARY ROCKS</b>
<b>MINERALIZATION:</b>		
QTZ	QUARTZ	VV PENDANT ROCKS
CP	EPIDOTE	GREENSLANES, CHERT
Chl	CHLORITE	ANDESITE, BASALT ELDONS
K	POTASSIUM FELDSPAR	MINOR LIMESTONE TUFFS
PY	PYRITE	
CPPY	CHALCOPHYRITE	
#1	SAMPLE LOCATION	
WR1	SAMPLE LOCATION	
①	SAMPLE LOCATION	
②	SPECTROGRAPH SAMPLE LOCATION	



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**11,333**