



888337  
Surf Inlet

DEPT. OF MINES  
AND PETROLEUM RESOURCES  
Rec'd MAY 6 1977  
SMITHERS, B. C.

DEPARTMENT OF MINES AND PETROLEUM RESOURCES  
VICTORIA

SAMPLE RECEIVED FROM..... T. SCHROETER

ADDRESS..... P. O. Box 877, Smithers, B. C.

LABORATORY No.	SUBMITTER'S MARK	LABORATORY REPORT
17503M	SI 1	Au - 33 ppm Ag - 25 ppm Cu - 1.12%

THIS DOCUMENT, OR ANY PART THEREOF, MAY NOT BE REPRODUCED FOR PROMOTIONAL OR ADVERTISING PURPOSES.

DATE..... May 3, 1977

CHIEF ANALYST AND ASSAYER.



DEPARTMENT OF MINES AND PETROLEUM RESOURCES  
VICTORIA

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SEMI QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Laboratory No.	17503M				
Submitter's No.	SI - 1				
Si	ADDED				
Mn	0.02				
Al	5.0				
Mg	T				
Pb	-				
Ca	-				
Fe	>20.0				
V	T				
Cu	1.5				
Ag	T+				
Zn	-				
Na	-				
K	-				
Ti	T				
Zr	T				
Ni	T				
Co	0.02				
Sr					
Cr	T				
Ba	T				
Traces:	Mo				

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DATE..... May 3, 1977

W. M. Johnson  
CHIEF ANALYST AND ASSAYER

## LAB SERVICES

SUBMITTER TOM SCHROETER DATE SUBMITTED Apr. 19/77  
 Area/property Bullockdale - Surf Inlet Mine NTS 103 H/1  
 Field Number(s) SI-1  
 Lab Number(s) \_\_\_\_\_

## WORK REQUESTED

- Major oxide analysis     complete     partial  
 Trace element analysis     quant.     semi-quant.  
 Assay  
 Soil/silt analysis  
 X-ray analysis     dA requested  
 Arc fusion     quartz  
 Mineral separation

Bulletin     GEM     Talk

Other  Prop Exam.

Date Required ASAP

Special Instructions and Comments X  
X

Nature of sample(s)

Massive pyrite with  
quartz gangue.

Assay (x) for elements desired

Trace element Analysis (ppm) (✓) for elements desired

Quantitative  Semi-Quant.

### OXIDE ANALYSIS

Partial  Complete

(check off oxides desired)

Cu  Cu oxide

Fe  Ba

Pb

Mn  Zr

Zn

V  Ga

Mo  MoS<sub>2</sub>  Mo oxide

Ti  Sn

Au

Ni  Cr

Ag

Co  W

Si

Na  F

Al

K  Cl

Mg

Sr

Ca

Rb

SiO<sub>2</sub>

H<sub>2</sub>O+

TiO<sub>2</sub>

H<sub>2</sub>O-

Al<sub>2</sub>O<sub>3</sub>

CO<sub>2</sub>

Fe<sub>2</sub>O<sub>3</sub>

SO<sub>3</sub>

FeO

P<sub>2</sub>O<sub>5</sub>

MnO

MgO

CaO

Na<sub>2</sub>O

K<sub>2</sub>O



Submitter TOM SCHROETER  
 Number of samples 6  
 Special instructions \_\_\_\_\_  
 Project PRINCESS ROYAL IS.  
 Air photo \_\_\_\_\_

Date submitted JAN. 23/85  
 Date required \_\_\_\_\_

Date started Jan 28/85  
 Date reported 4 MARCH 1985 - Specs to follow.  
16 APRIL 1985 - Specs  
 Chief Analyst Wm [Signature]  
 PRINT CLEARLY (use dark pen or pencil)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80		
NTS FLD NOZNUTM E UTM N RXYAGS PROPERTY COMMENTS																																																																																	
1	103H2WSURF851		128°50'53"03'		MRL24213		SURF INLET																																																																										
	LAB	NOOXIDES	SPEC	XRD	MIN	PR	Au	Ag	Cu	Pb	Zn	Co	Ni	Mo	Cr	Hg	As	Sb	Ba	Sr																																																													
	29630	C	P	SQ	Q	SEP	62	8	0.109	<0.005	<0.003																																																																						
2	103H2WSURF852		128°50'53"03'		MRL24214		SURF INLET																																																																										
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	29631	C	P	SQ	Q	SEP	29.8	31	0.71	<0.005	0.004																																																																						
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	29634	C	P	SQ	Q	SEP	5.8	25	0.74	<0.005	<0.002																																																																						
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**SPECTROGRAPHIC REPORT**

<p><b>1</b> Si&gt;10.0 Al3.0 Mg2.6 Ca21.0 Fe&gt;10.0                  Pb T Cu 1.2 Zn — Mn 0.6 Ag T V T Ti 0.06 Ni T                  Co 0.01 Na 0.5 K &lt; 0.3 W — Sr 0.01 Ba 0.02                  TRACE: - As, Bi, Mo, Zr, Cr, Y, Yb, Au</p>	<p><b>2</b> Si&gt;10.0 Al&lt;0.1 Mg&lt;0.1 Ca&lt;0.1 Fe&gt;10.0                  Pb — Cu 0.8 Zn T Mn 0.02 Ag T V — Ti T Ni T                  Co T Na &lt; 0.3 K &lt; 0.3 W —                  TRACE: - Zr, Ba, Yb</p>	<p><b>3</b> Si&gt;10.0 Al 0.4 Mg &lt; 0.1 Ca &lt; 0.1 Fe &gt; 10.0                  Pb — Cu 1.3 Zn T Mn 0.03 Ag T V — Ti T Ni T                  Co 0.12 Na &lt; 0.3 K &lt; 0.3 W — Mo 0.01                  TRACE: - As, Ba, Yb</p>
<p><b>4</b> Si&gt;10.0 Al 0.3 Mg 0.15 Ca &lt; 0.1 Fe 10.0                  Pb — Cu 1.1 Zn T Mn 0.09 Ag T V — Ti 0.02 Ni T                  Co T Na &lt; 0.3 K &lt; 0.3 W —                  TRACE: - As, Mo, Zr, Ba, Cr, Au†</p>	<p><b>5</b> Si&gt;10.0 Al 0.1 Mg &lt; 0.1 Ca &lt; 0.1 Fe &gt; 10.0                  Pb — Cu 0.8 Zn T Mn 0.08 Ag T V — Ti T Ni T                  Co T Na &lt; 0.3 K &lt; 0.3 W —                  TRACE: - As, Mo, Zr, Ba, Cr, Yb</p>	<p><b>6</b> Si&gt;10.0 Al 0.1 Mg &lt; 0.1 Ca &lt; 0.1 Fe &gt; 10.0                  Pb — Cu 0.4 Zn T Mn 0.06 Ag T V — Ti T Ni T                  Co T Na &lt; 0.3 K &lt; 0.3 W —                  TRACE: - As, Mo, Ba, Cr, Yb</p>

**X-RAY DIFFRACTION REPORT AND COMMENTS**

**KEY**

**COLUMNS 28-31**

UMFC ultramafic	GRNS greenstone	TRCT trachyte
ANDS andesite	MNZN monzonite	TUFF tuff
BSLT basalt	OBSD obsidian	AMPB amphibolite
CRBN carbonate	PNLT phonolite	CLCC calc-silicate
DCIT dacite	QZPP quartz porphyry	GNSS gneiss
DORT diorite	RYLT rhyolite	MRBL marble
GBBR gabbro	SRPN serpentinite	PLLT phyllite
GRNT granite	SNKN shonkinite	SCST schist
GRDR granodiorite	SYNT syenite	HRFL hornfels

**COLUMNS 32-33**

04 Proterozoic	12 Cambrian	21 Mississippian	34 Jurassic
05 Helikian	14 Ordovician	22 Pennsylvanian	36 Cretaceous
06 Hadrynian	16 Silurian	24 Permian	40 Cenozoic
10 Paleozoic	18 Devonian	30 Mesozoic	42 Tertiary
11 Prot.-Paleozoic	20 Carboniferous	32 Triassic	44 Quaternary
			50 Unknown

**COLUMNS 36-43**

Mineral Inventory Number or property name

**COLUMNS 44-80**

Comments

**COLUMN 34**

**SAMPLE TYPE**

1	Single grab sample
2	Channel/chip
3	Composite sample
4	Drill core
5	Talus or transported
6	Soil
7	Silt
8	Other

**COLUMN 35**

**% SULPHIDE**

0	<0.5
1	0.5-1
2	1-10
3	10-50
4	>50

**ANALYTICAL METHOD**

AA	ATOMIC ABSORPTION
AH	HYDRIDE GENERATION
FA	FIRE ASSAY
ES	EMMISSION SPEC
XR	X-RAY FLUORESCENCE
WC	WET CHEMICAL
CL	COLORIMETRIC
CV	COLD VAPOUR

**SAMPLE PREPARATION**

W	TUNGSTEN CARBIDE
C	CERAMIC
S	STEEL



## ANALYTICAL SERVICES REQUEST

Submitter TOM SCHROETER Rec'd MAR 8 1985 Date submitted JAN. 23/85  
 Number of samples 6 Date required \_\_\_\_\_  
 Special instructions \_\_\_\_\_  
 Project PRINCESS ROYAL IS. Area SMITHERS B.C. Priority \_\_\_\_\_  
 Air photo \_\_\_\_\_ Card 1 of 1

Date started Jan 21/85  
 Date reported 4 MARCH 1985

Chief Analyst Wm G. P. Anderson

PRINT CLEARLY (use dark pen or pencil)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
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# SPECTROGRAPHIC REPORT

<b>1</b> Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	<b>2</b> Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	<b>3</b> Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___
<b>4</b> Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	<b>5</b> Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	<b>6</b> Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	

## X-RAY DIFFRACTION REPORT AND COMMENTS

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### KEY

#### COLUMNS 28-31

UMFC ultramafic	GRNS greenstone	TRCT trachyte	SKRN skarn	SNDS sandstone
ANDS andesite	MNZN monzonite	TUFF tuff	GOUG gouge	SHLE shale
BSLT basalt	OBSD obsidian	AMPB amphibolite	ARGL argillite	SLSN siltstone
CBRN carbonatite	PNLT phonolite	CLCC calc-silicate	CHRT chert	MRLZ mineralization
DCIT dacite	QZPP quartz porphyry	GNSS gneiss	COAL coal	MVSP massive sulphide
DORT diorite	RYLT rhyolite	MRBL marble	DLMT dolomite	DISS disseminated
GBBR gabbro	SRPN serpentinite	PLLT phyllite	LMSN limestone	SCKK stockwork
GRNT granite	SNKN shonkinite	SCST schist	MARL marl	VEIN vein
GRDR granodiorite	SYNT syenite	HRFL hornfels	QRTZ quartzite	ALRZ alteration

#### COLUMNS 32 - 33

04 Proterozoic	12 Cambrian	21 Mississippian	34 Jurassic
05 Helikian	14 Ordovician	22 Pennsylvanian	36 Cretaceous
06 Hadrynian	16 Silurian	24 Permian	40 Cenozoic
10 Paleozoic	18 Devonian	30 Mesozoic	42 Tertiary
11 Prot.-Paleozoic	20 Carboniferous	32 Triassic	44 Quaternary
			50 Unknown

#### COLUMNS 36 - 43

Mineral Inventory Number or property name

#### COLUMNS 44 - 80

Comments

#### COLUMN 34

SAMPLE TYPE
1 Single grab sample
2 Channel/chip
3 Composite sample
4 Drill core
5 Talus or transported
6 Soil
7 Silt
8 Other

#### COLUMN 35

% SULPHIDE
0 <0.5
1 0.5-1
2 1-10
3 10-50
4 >50

### ANALYTICAL METHOD

AA	ATOMIC ABSORPTION
AH	HYDRIDE GENERATION
FA	FIRE ASSAY
ES	EMISSION SPEC
XR	X-RAY FLUORESCENCE
WC	WET CHEMICAL
CL	COLORIMETRIC
CV	COLD VAPOUR

### SAMPLE PREPARATION

W	TUNGSTEN CARBIDE
C	CERAMIC
S	STEEL