

A PRELIMINARY GEOCHEMICAL  
EVALUATION OF THE  
SPRING #1, #2 and RETO #1, #2  
MINERAL CLAIMS

in the  
Atlin Mining Division  
at  
104 - K - 11W  
58°33'N and 133°30'W

owned and operated  
by  
ISLAND MINING & EXPLORATIONS CO. LTD.  
900 - 475 Howe Street  
Vancouver, B.C.  
V6C 2B3

by  
G.A. CLOUTHIER

submitted  
April 16, 1981

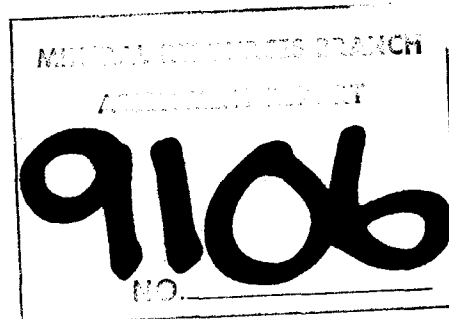


TABLE OF CONTENTS

	Page
INTRODUCTION	1
FIELD WORK	1
GEOLOGY	2
RESULTS	2
RECOMMENDATIONS	3
APPENDIX I STATEMENT OF COSTS	
II STATEMENT OF QUALIFICATIONS	
III CERTIFICATES OF ANALYSIS	
IV REFERENCES	

LIST OF ILLUSTRATIONS

	After page
Figure 1 LOCATION MAP	1
Figure 2 RECONNAISSANCE GEOLOGY	2
Figure 3 ROCK SAMPLE LOCATION MAP	2
Figure 4 SOIL AND SILT SAMPLE LOCATION MAP	2

## INTRODUCTION

### Location and Access

The claims are located in northwestern British Columbia adjacent to the B.C. - Alaska border some 60 km east of Juneau and some 15 km south of the now abandoned Polaris Taku Mine. Float plane transport is available to Border Lake from Atlin, B.C. some 130 km to the north. Access within the area was provided by a Hughes 500D on contract from Trans North Turbo Air out of Whitehorse.

### Property

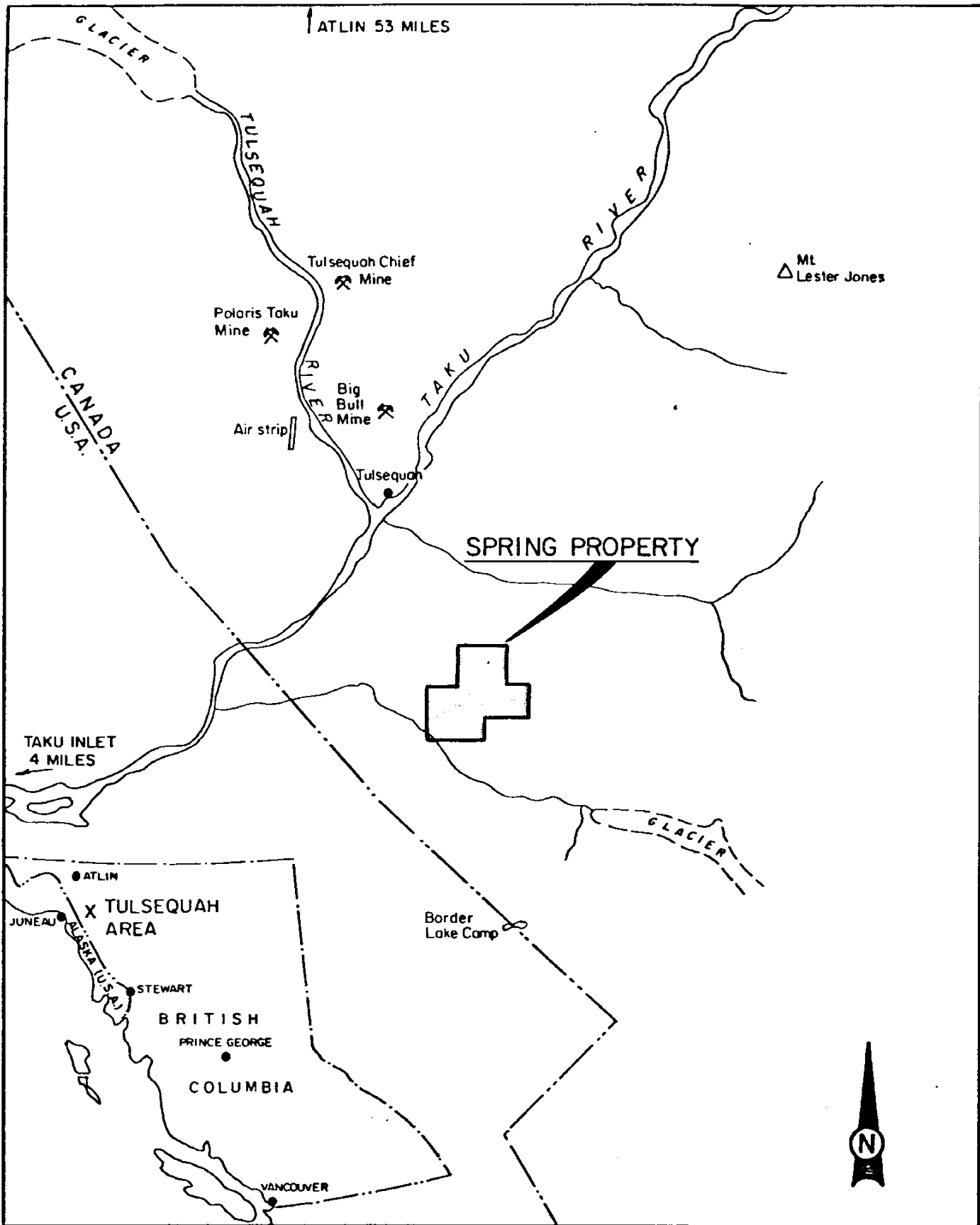
The total property consists of 57 units in 4 separate claims. Spring #1 and #2 were staked in March 1979 by Mr. Frank Onucki and Reto 1 and 2 were staked in July 1980 by the writer. The staking was done to cover a very large limonitic and hematitic gossan exposed on a south facing hill side.

### Work Summary

Under the direction of the writer a total of 50 rock samples and 43 soil samples were collected in the gossan area. A two man team of experienced prospectors collected the rock samples during the course of their prospecting and several follow-up soil geochemistry lines were put in later.

## FIELD WORK

Initial geologic evaluation of the prospect established an area of heavy pyrrhotite mineralization with lesser amounts of pyrite, sphalerite, chalcopyrite and galena. The prospecting and sampling was carried out in an attempt to delineate and evaluate the extent of the mineralization.



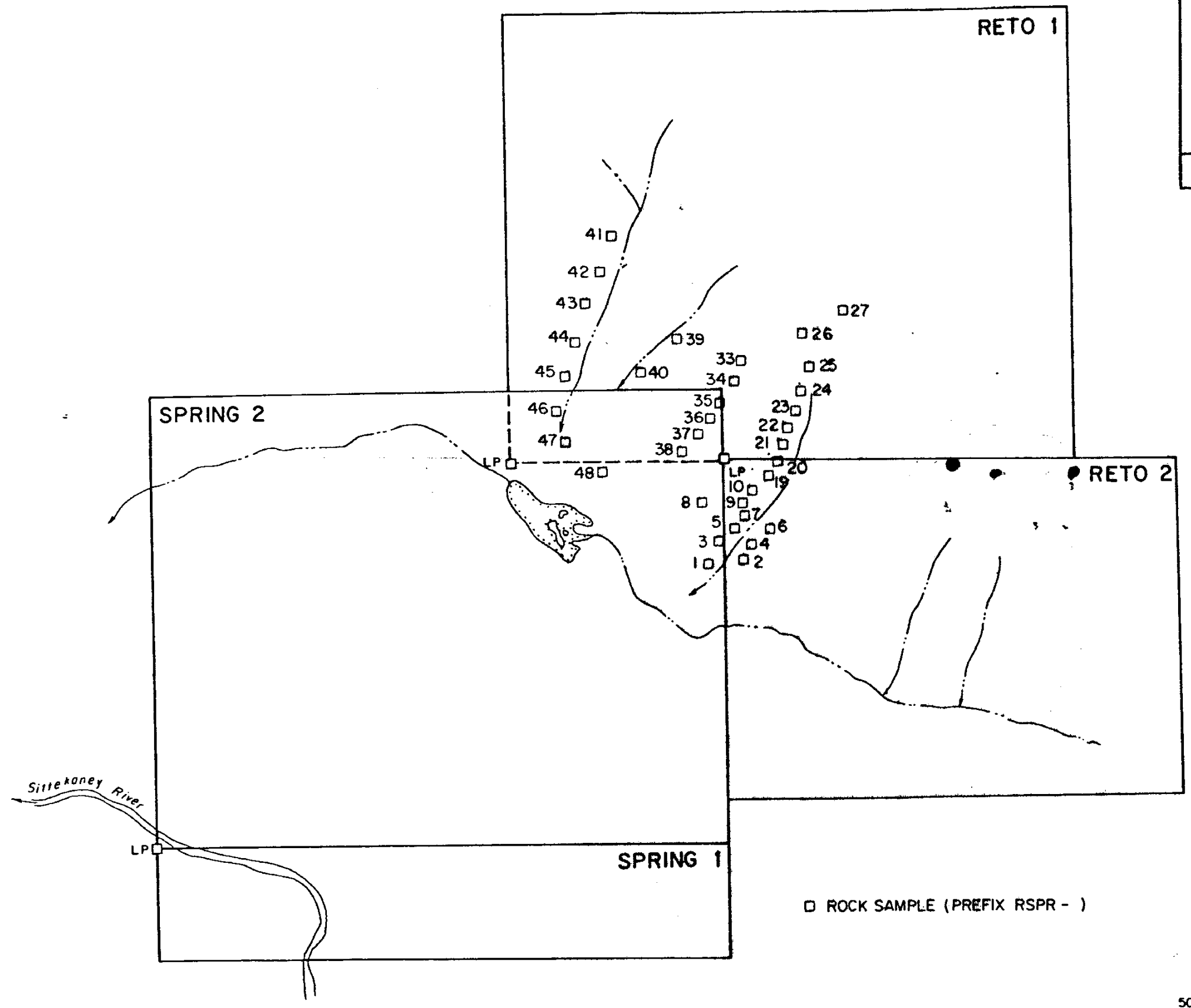
ISLAND MINING & EXPLORATIONS CO. LTD.  
**LOCATION MAP - SPRING PROPERTY**  
 TULSEQUAH B.C. AREA



ISLAND MINING & EXPLORATIONS CO. LTD.

SPRING PROPERTY  
ROCK SAMPLE LOCATION  
MAP

Figure 3 | NTS 104K - 11W



9106  
NO.

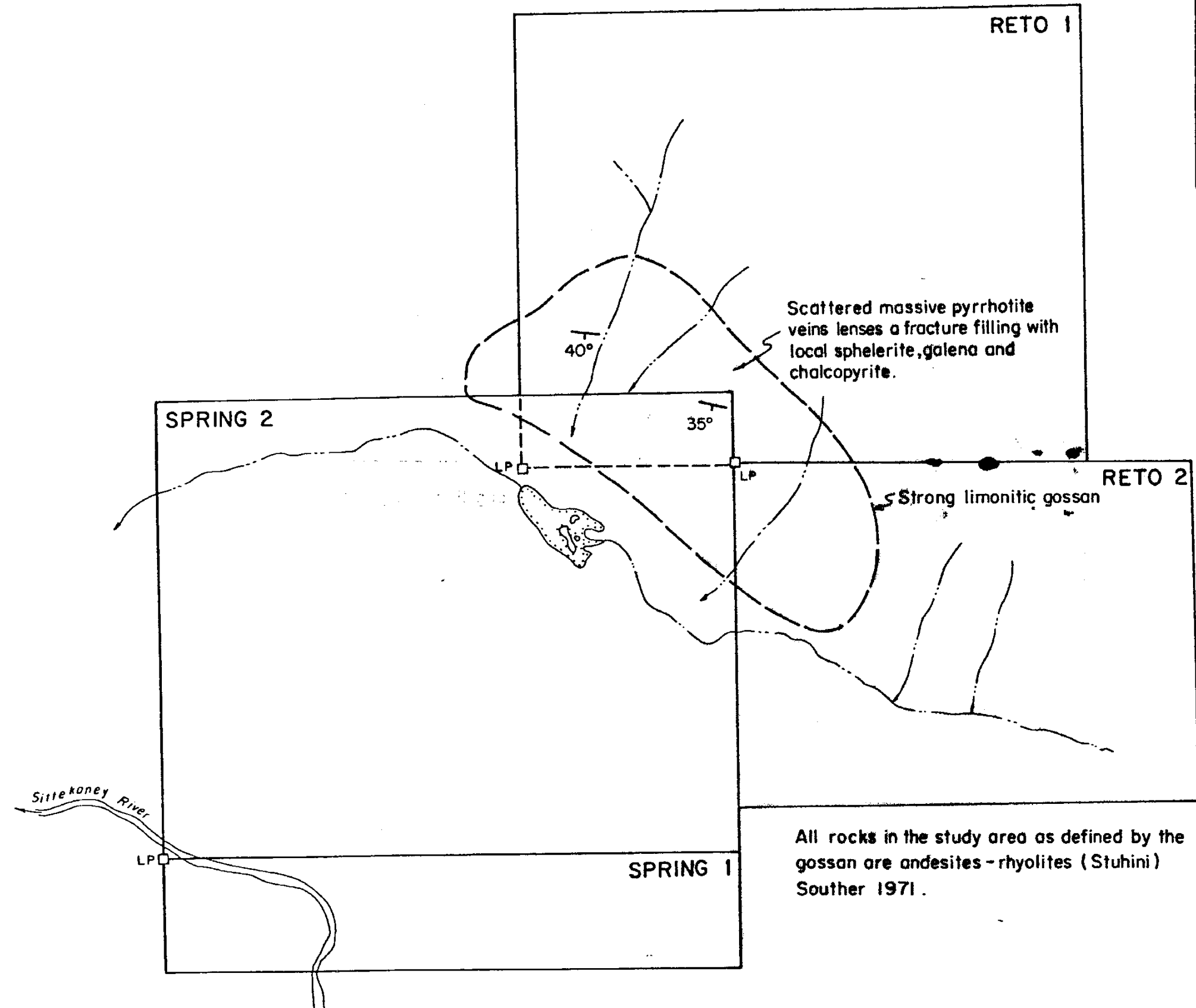
□ ROCK SAMPLE (PREFIX RSPR - )



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SPRING PROPERTY  
PROSPECTING GEOLOGY

Figure 2 N.T.S. 104 K - 11W



9106

All rocks in the study area as defined by the gossan are andesites - rhyolites (Stuhini) Souther 1971.





Figures 2, 3, and 4 show the basic area of interest and the sample locations. Analytical results appear in Appendix III at the back of the report.

#### GEOLOGY

The Spring property in the area of examination is underlain by a sequence of intermediate to acid volcanic rocks believed to be Stuhini Formation of Triassic age. Regionally this formation is predominantly basaltic to andesitic, however many of the economically significant deposits in the area are associated with the much more limited acid phases. The presence of phylites in the survey area and the mineralization albeit rather sporadic; makes the Spring an interesting exploration bet. The gossan area is a large dip slope so that stratigraphic exposure is somewhat problematic and much of the mineralization occurs in creek gullies.

The mineralization occurs for the most part in cross-cutting fractures veins and lenses and though extensive is not strong overall. One showing appears to be conformable and cut samples show some metal banding however the exposure is restricted to several metres. Down dip the acid volcanics and mineralization go under glacial cover in the valley floor.

#### RESULTS

The rock sample results are very sporadic but they do show enhancement in copper, zinc, and silver, and, where analyzed for, gold in the survey area. All of the rock samples are grab samples and many are biased toward mineral rich zones. They are sufficiently anomalous to suggest that the area required more thorough geological mapping and routine sampling. It's noteworthy that of 11 samples

APPENDIX I

STATEMENT OF COSTS

Spring

Assays:

50 rock samples average cost \$10.00/sample	500.00	
43 soil samples @ 7.00	<u>301.00</u>	801.00

Helicopter:

8 hours @ 360.00/hour	2,880.00	
22 gal hour X 8 hrs. X \$2.00/ gal	<u>352.00</u>	3,232.00

Personnel:

G.A. Clouthier (Geologist) 6 days @ \$150.00	900.00	
Reto Schmidt (Prospector) 6 days @ \$80.00	480.00	
Melvin Jack (Prospector) 6 days @ \$65.00	390.00	
Doug Schmidt (Assistant) 3 days @ \$60.00	180.00	
John MacDonald (Assistant) 3 days @ \$60.00	<u>180.00</u>	2,130.00

Camp Costs (includes pilot)

30 days @ \$35.00/man day		1,050.00
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Miscellaneous Transportation and Report

Preparation costs		<u>500.00</u>
-------------------	--	---------------

TOTAL		7,713.00
-------	--	----------

*G.A. Clouthier*

APPENDIX II

STATEMENT OF QUALIFICATIONS

Gerald A. Clouthier

I graduated from U.B.C. with a B.Sc. degree in Honors Geology in 1970. I have been employed continuously in base metal and coal exploration throughout the Western Hemisphere. During this time I've been involved in most phases of exploration, geology, geophysics and geochemistry. I am a Member of the CIMM and a Fellow of the Geological Association of Canada.

APPENDIX III

CERTIFICATES OF ANALYSIS



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER B.C.  
CANADA V7J 2C1  
TELEPHONE (604) 954-0221  
TELEX 043-52557

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

*Spring*

TO: Omni Resources Incorp.  
1409-675 W. Hastings St.  
Vancouver, B.C.

Certificate No. 54509  
Invoice No. 37250  
Received July 13/80  
Analysed July 24/80

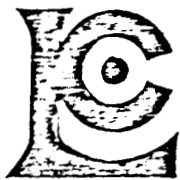
### ROCKS

Sample No.	PPM Cu	PPM Mo	PPM Zn	PPM Ag	PPB Au	PPM W
R.S.P.R. 1	250		68	1.0		1
2	210		62	0.8		1
3	390		80	1.4		175
6	196		28	1.6		1
12	154		58	1.2		1
13	355		58	2.4		1
15	126		1600	2.4		1
17	285		>4000	5.8		1
18	124		34	1.0		1
R.S.P.R. 19	32		30	0.4		1

38318				3.2	<10	R.S.P.R. 5
38320				4.4	40	R.S.P.R. 8
38321				>20	10	R.S.P.R. 9
38322		69	180	1.6	<10	10
38323				5.6	<10	11
38324				>20	6200	14
38325				2.8	40	16
38326				12	320	20
38327				>20	880	17a
38328				>20	80	19
38329B				14	4300	R.S.P.R. 24

Also on 69058

*Hart Bielle*



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 AREA CODE: 604  
 TELEX: 043-52597

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*Spring*

## CERTIFICATE OF ASSAY

CERTIFICATE NO. 69058

TO: Omni Resources Incorp.,  
 1409 - 675 W. Hastings St.,  
 Vancouver, B.C.  
 V6B 1N2

INVOICE NO. 37355

RECEIVED July 13, 1980

ATTN:

ANALYSED July 29, 1980

SAMPLE NO. :	% Cu	% Zn	% Ni	oz/ton Ag	oz/ton Au	
38317 B	0.12			0.01	<0.003	RSPR 4
38318	0.04	0.81				RSPR 5
38319	0.12	13.9		0.34	0.005	RSPR 7
38320	0.13	1.64				RSPR 8
38321	0.61	0.74	<0.01			RSPR 9
38322	0.03					RSPR 10
38323	0.02	0.64				RSPR 11
38324	0.04	0.02				RSPR 14
38325	0.01	0.03				RSPR 16
38326 B	0.05	1.15				RSPR 20

From #54509



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*R. Swait*





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## CERTIFICATE OF ANALYSIS

TO: Omni Resources Inc.  
1409 - 675 W. Hastings St.  
Vancouver, B.C.  
V6B 1N2

Certificate No.: 54726  
Invoice No.: 37336  
Received: July 20/80  
Analysed: July 29/80

ATTN: Mr. Ernie Berguinson CC: G.A. Clouthier ROCKS

SAMPLE NO.:	PPM Cu	PPM Mo	PPM Zn	PPM Ag	PPB Au
21	730		610	2.2	
23	1000		350	1.2	
24	650		1300	1.2	
25	320		74	1.0	
26	160		52	0.8	
28	112		200	1.8	
29	142		790	2.6	
30	74		92	0.2	
31	680		38	0.4	
33	196		68	1.8	
35	184		26	0.2	
(36) 37	72		320	2.2	
39	140		34	0.4	
40	128		64	0.2	
41	76		44	0.1	
42	108		48	0.1	
44	170		142	1.4	
45	90		138	0.4	
46	90		112	0.2	
47	74		92	0.1	
48	84		295	0.1	
49	160		72	0.1	
RSPR 50	490		106	0.2	

*Coring*

Certified By: Hart Biddle



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## CERTIFICATE OF ANALYSIS

TO: Omni Resources Inc.  
1409 -675 W. Hastings St.  
Vancouver, B.C.  
V6B 1N2

Certificate No.: 54726 - 1  
Invoice No.: 37336  
Received: July 20/80  
Analysed: July 29/80

ATTN: Mr. Ernie Berguinson

CC: G.A. Clouthier

SAMPLE NO.:	PPM Mo	PPM Ag	PPB Au		Also on # 69239.
BAG # RSPR 20		0.4	10	TAG # 38330B	
22		2.8	<10	38331	Spine
32		3.4	<10	38334	
34		1.0	<10	38335	
36a		0.8	<10	38336	
0.000 38		0.8	20	38337	

Certified By: Hart Biddle



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 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE ~~604-525-9721~~ 604-525-9721  
 AREA CODE: 604  
 TELEX: 043-52597

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## CERTIFICATE OF ASSAY

CERTIFICATE NO. 69239  
 INVOICE NO. 37511  
 RECEIVED July 20/80  
 ANALYSED Aug. 1/80

TO: Omni Resources Inc.  
 Ste. 900 - 475 Howe St.  
 Vancouver, B.C.

ATTN: V6C 2B3  
 Mr. Ernie Berguinson

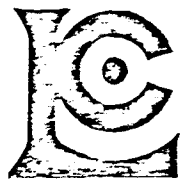
CC: G.A. Clouthier

SAMPLE NO. :	%	%	%	oz/ton	oz/ton	TAG
	Cu	Pb	Zn	Ag	Au	NO.
RSPR 20	0.02		0.01			38330B
22	0.08		4.11			38331
27	0.12		10.3	10.40	0.005	38332
32	0.02	0.10	0.06			38334
34	0.01		0.02			38335
36a	0.01					38336
38	0.04		<0.01			38337



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TELEX 043-52597

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## CERTIFICATE OF ANALYSIS

Client: Omni Resources Inc.,  
c/o G. A. Clouthier  
Box 119  
Atlin, B.C.

CERT. # : A8010002-001-A  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample Description	Cu ppm	Mo ppm	Pb ppm	Zn ppm
3	164	1	--	--
5	120	1	--	--
8	170	1	--	--
9	148	1	--	--
11	164	1	--	--
12	162	1	--	--
13	200	2	--	--
14	124	2	--	--
15	196	1	--	--
16	66	1	--	--
17	138	3	--	--
18	138	2	--	--
19	118	1	--	--
20	285	2	--	--

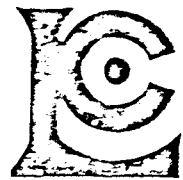
*Hart Biddle*

Certified by .....



MEMBER

QUALITY TESTING



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C7  
TELEPHONE (604) 954-0221  
TELEX: 043-52597

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• GEOCHEMISTS

• REGISTERED ASSAYERS

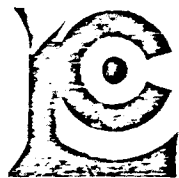
## CERTIFICATE OF ANALYSIS

: Omni Resources Inc.,  
c/o G. A. Cloutier  
Box 119  
Atlin, B.C.

CERT. # : A8010003-001-2  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample Description	Ag ppm			
3	0.1	--	--	--
5	0.1	--	--	--
6	0.1	--	--	--
9	0.1	--	--	--
11	0.1	--	--	--
12	0.1	--	--	--
13	0.1	--	--	--
14	0.1	--	--	--
15	0.1	--	--	--
16	0.1	--	--	--
17	0.1	--	--	--
18	0.1	--	--	--
19	0.1	--	--	--
20	0.1	--	--	--

Certified by *Hart Biele*



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TELEX 043-52597

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• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

Client: Dmni Resources Inc.,  
c/o S. A. Cloutnier  
Box 119  
Atlin, B.C.

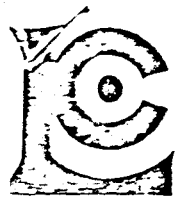
CERT. # : A8010008-002-A  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample Description	Cu DDT	Mo DDT	Pb DDM	Zn DDM
5	190	2	--	--
6	172	3	--	--
7	168	3	--	--
8	150	4	--	--
9	42	9	--	--
10	32	9	--	--
11	26	5	--	--
12	54	11	--	--
13	28	2	--	--
14	64	6	--	--
15	178	6	--	--
16	320	17	--	--

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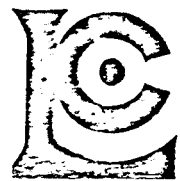
## CERTIFICATE OF ANALYSIS

: Omni Resources Inc.,  
c/o G. A. Clouthier  
Box 119  
Atlin, B.C.

CERT. # : A8010008-002-B  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample Description	Ag ppm			
5	0.1	--	--	--
6	0.1	--	--	--
7	0.1	--	--	--
8	0.4	--	--	--
9	0.2	--	--	--
10	0.1	--	--	--
11	3.4	--	--	--
12	0.1	--	--	--
13	0.1	--	--	--
14	0.1	--	--	--
15	0.1	--	--	--
16	0.4	--	--	--

Certified by H. J. Ridd



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## CERTIFICATE OF ANALYSIS

: Omni Resources Inc.,  
c/o G. A. Clouthier  
Box 119  
Atlin, B.C.

CERT. # : A8010003-003-A  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample description	Cu DDT	Mg DDT	Pb DDM	Zn DDM
7	104	1	--	--
8	104	1	--	--
9	38	1	--	--
10	74	2	--	--
11	40	1	--	--
12	220	1	--	--
13	184	2	--	--
14	180	1	--	--
15	58	2	--	--
16	100	1	--	--
17	188	1	--	--
18	118	2	--	--
19	116	3	--	--
20	245	8	--	--
21	200	1	--	--
22	250	5	--	--
23	300	3	--	--

Certified by *Hart Biddle*





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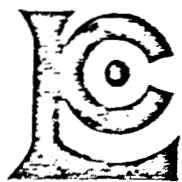
## CERTIFICATE OF ANALYSIS

: Omni Resources Inc.,  
c/o G. A. Clouthier  
Box 119  
Atlin, B.C.

CERT. # : A8010002-003-B  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample Description	Ag ppm			
7	0.1	--	--	--
8	0.1	--	--	--
9	0.1	--	--	--
10	0.1	--	--	--
11	0.1	--	--	--
12	0.1	--	--	--
13	0.1	--	--	--
14	0.1	--	--	--
15	0.1	--	--	--
16	0.1	--	--	--
17	0.1	--	--	--
18	0.1	--	--	--
19	0.1	--	--	--
20	1.0	--	--	--
21	0.8	--	--	--
22	1.2	--	--	--
23	3.6	--	--	--

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• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

Client: Omni Resources Inc.,  
c/o G. A. Clouthier  
Box 119  
Atlin, B.C.

CERT. # : A8010008-006-  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample description	Cu ppm	Mo ppm	Pb ppm	Zn ppm
SAS 245	335	15	--	--
SAS 250	68	3	--	--
SAS 255	36	1	--	--
SAS 260	78	1	--	--
SAS 265	72	3	--	--
SAS 270	30	1	--	--
SAS 275	24	1	--	--
SAS 280	96	1	--	--

*Hart Biddle*

Certified by .....



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CANADA V7J 2C1  
TELEPHONE (604) 964-0221  
TELEX 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

: Omni Resources Inc.,  
c/o G. A. Clouthier  
Box 119  
Atlin, B.C.

CERT. # : A8010008-006-B  
INVOICE # : 38416  
DATE : 30-AUG-80

Sample Description	Ag ppm			
AS 245	1.6	--	--	--
AS 250	1.0	--	--	--
AS 255	0.1	--	--	--
AS 260	0.2	--	--	--
AS 265	1.0	--	--	--
AS 270	0.1	--	--	--
AS 275	0.8	--	--	--
AS 280	0.4	--	--	--

Certified by *Hart Biddle*



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APPENDIX IV

REFERENCES

Souther, J.G. Geology and Mineral Deposits of Tulsequah  
Map Area, GSC Memoir 362, 1971.