

GEOCHEMISTRY AND GEOLOGY  
OF THE VIKING CLAIMS  
N.T.S. 105-H-13

September 28, 1979 - R. S. Hewton

<u>Claim Name</u>	<u>Tag Number</u>
VIKING 1	YA 35581
VIKING 2	YA 35582
VIKING 3	YA 35583
VIKING 4	YA 35584
VIKING 5	YA 35585

090498

This report has been examined by the Geological Evaluation Unit and is recommended to the Commission to be considered as report of a value in the amount of

\$ 1,000.00

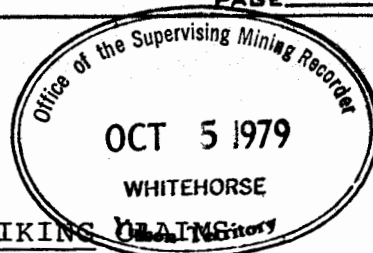
J. A. Morris

Geological Engineer or  
Qualified Mining Engineer

Conditions of registration work under  
Section 93 (1) of the Quartz Mining Act.

  
B. R. BAXTER

 ~~Supervising Mining Recorder~~  
Commissioner of Yukon Territory



GEOCHEMISTRY AND GEOLOGY OF THE VIKING CLAIMS

C O N T E N T S

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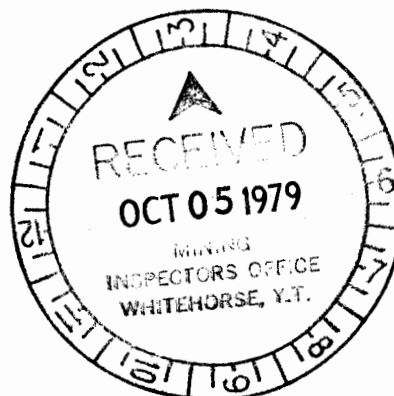


Figure 1: Location  
Figure 2: Claim Outline  
Figure 3: Geochemical Results

Appendix 1: Geochemical Values  
Appendix 2: Assay Certificates  
Appendix 3: Receipts

## VIKING CLAIMS

### INTRODUCTION

During the summer of 1978, Bill Kuhn staked five (5) VIKING claims for Riocanex in N.T.S. 105-H-13. The claims covered a north-facing slope of a mountain 5 km east of Ptarmigan Lake where exposures of a gossan contained massive sulphides. Individual samples collected during 1978 ran as high as 24 oz/ton Ag, 15.5% Pb and 8.4% Zn. Because the showings were discovered in the fall, an examination by Riocanex personnel was not possible until the summer of 1979.

A background search of the area showed that Atlas Explorations worked the area in 1967, including mapping and magnetic surveys. The major concentration of their work was to the northwest of the VIKING claims.

On August 10, 1979, R. S. Hewton and J. McCaffrey visited the claim block and set up a small camp. McCaffrey spent eight days soil sampling, chip sampling the gossans and prospecting. Hewton carried out a preliminary geological examination on August 10 and August 17. In excess of \$3,000 was spent on the examination.

The geochemical data obtained, the assays and a brief geological description are the basis of this report.

### LOCATION AND ACCESS

The VIKING claims are on a north-facing slope of a mountain 5 km east of Ptarmigan Lake in N.T.S. 105-H-13. The property may be reached directly by helicopter from Watson Lake, 215 km to the south-southeast, or by fixed wing aircraft to Ptarmigan Lake and then a 6 km uphill climb.

The lowest elevations on the claims, at 1370 m above sea level, are just above tree line. Most of the property is steep rock cliff, rock talus, or lichen and moss covered hills.

### GEOCHEMISTRY

A total of 131 soil samples were collected from a grid as shown on the accompanying map. Grid lines are spaced 150 m apart and sample intervals are at 50 m.

All samples were collected by hand and placed in Kraft paper bags, then shipped to the Riocanex laboratory in North Vancouver. Samples were dried, sieved to -80 mesh, weighed to 0.6 g and leached with perchloric acid. The lead, zinc, silver and copper contents



- (2) Massive lead and zinc sulphides occur sporadically within this gossan.
- (3) The area of the gossan is limited and the percentage of gossan containing sulphides is limited.
- (4) There is poor prospect for expanding tonnage potential within the gossan or finding areas of improved grade.
- (5) Geochemical soil sampling did not improve the potential of continuity of mineralization and did not locate new areas of mineralization.

#### RECOMMENDATIONS

No further work is necessary on the property.

*Robert S. Hewitt*

STATEMENT OF COSTS

The following is an itemized cost statement for costs incurred on the VIKING claims:

Salaries and Wages

2 man days @ \$80 - R. S. Hewton	\$ 160.00	
8 man days @ \$50 - J. McCaffrey	400.00	
2 man days @ \$80 - Report writing		
- R. S. Hewton	<u>160.00</u>	\$ 720.00

Benefits

@ 25% of salaries		180.00
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\*Helicopter

Frontier #802-79 - 21 August	\$1,746.00	
T.N.T. Air #40657 - 17 August	<u>716.20</u>	2,462.20

\*Fixed Wing

T.N.T. Air #3-10837 - 15 August	\$ 120.00	
T.N.T. Air #3-10248 - 18 August	<u>60.00</u>	180.00

\*Geochem Analysis

Bondar-Clegg #C5189 - 29 August	\$ 196.75	
Bondar-Clegg #C5196 - 30 August	72.25	
Bondar-Clegg #C5222 - 5 September	<u>8.50</u>	277.50
Riocanex Lab: 131 soil samples for Ag/Cu/Pb/Zn @ \$4.25		556.75

R. S. Hewton, Expenses

6 meals	\$ 30.75	
Groceries	40.29	
Taxi	<u>5.00</u>	76.04

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\$4,482.49

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\*Invoices attached as Appendix 3.

APPENDIX 1

GEOCHEMICAL RESULTS

## Rio Tinto Canadian Exploration Limited

### LABORATORY REPORT

SAMPLE TYPE (✓)

Soil &/or Stream Sediments

Rock

Water

\_\_\_\_\_

\_\_\_\_\_

Results Sent To R. Hewson

At Whitehorse

Date Reported 30 August 79

Acct. No. 8509

Project Name VIKING

Size Fraction -80 Mesh

Extraction HNO<sub>3</sub> - HCl

Sample Wt. 0.6 g , Volume 12 ml

Analytical Method A.A.

Analyst(s) E.F.P.

#### STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

#### DISTRIBUTION

Log Normal

Normal

Element		Ag	Cu	Pb	Zn			
No. of Samples		111	111	111	111			
Mean. $\bar{x}$								
Std. Dev. $\sigma$								
$\bar{x} + 2\sigma$								

Comments : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Report No. 77-147

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RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (NMBR)	Ag	Cu	Pb	Zn		COMMENTS
1	7917100A	0.1	16	29	74		
2	101	ND	23	23	54		
3	102	0.1	25	47	60		
4	103	0.2	55	55	114		
5	124	ND	36	35	85		
6	125	0.1	41	30	70		
7	126	ND	39	37	102		
8	127	ND	26	44	85		
9	128	ND	24	17	50		
10	129	ND	8	6	12		
1	130	ND	23	17	47		
2	<del>STD</del>	<del>0.1</del>	<del>17</del>	<del>52</del>	<del>956</del>		
3	131	ND	22	12	49		
4	132	ND	29	19	77		
5	133	ND	44	37	76		
6	134	0.1	54	31	86		
7	135	0.1	63	83	132		
8	136	0.1	25	22	32		
9	137	ND	42	44	90		
20	138	0.1	46	41	85		
1	139	0.2	36	24	60		
2	<del>BLANK</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>		
3	140	0.2	60	37	104		
* 4	141	ND	208	8	35		0.24 g
5	142	ND	17	75	48		
6	143	ND	42	23	77		
7	144	0.2	59	39	132		
8	145	ND	26	21	60		
9	146	ND	7	2	7		
30	147	0.1	53	21	105		
1	148	0.1	36	23	89		
2	149	ND	29	22	88		
3	150	ND	29	32	94		
4	151	0.3	42	44	143		
5	152	0.1	11	8	22		
6	153	2.6	240	475	440		
7	154	2.9	315	425	560		
8	155	ND	24	24	122		
9	156	0.1	25	25	56		
40	7917 157	0.1	20	13	41		

RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (NMBR)	Ag	Cu	Pb	Zn	COMMENTS
41	7917158	ND	30	50	73	
2	159	ND	6	2	3	
3	160	ND	13	10	16	
4	161	0.2	18	17	34	
5	162	ND	60	49	106	
6	163	0.5	97	165	266	
7	164	ND	64	60	165	
8	165	ND	19	15	35	
9	166	ND	12	10	19	
50	167	ND	21	21	59	
1	168	ND	46	33	128	
2	169	ND	44	30	90	
<del>3</del>	<del>STD 2</del>	<del>0.8</del>	<del>35</del>	<del>380</del>	<del>205</del>	
4	170	0.2	50	54	113	
5	171	0.5	43	35	86	
6	172	0.3	60	195	105	
7	173	0.2	44	82	102	
8	174	0.6	54	57	100	
9	175	0.8	33	27	56	
60	176	0.1	58	35	108	
1	177	1.9	20	1380	570	
2	178	ND	13	13	50	
<del>3</del>	<del>BLANK</del>	<del>ND</del>	<del>1</del>	<del>ND</del>	<del>ND</del>	
4	179	0.3	54	28	77	
5	180	ND	85	39	108	
6	181	0.2	49	42	74	
7	182	0.3	255	53	126	
8	183	0.1	120	66	136	
9	184	0.2	110	39	88	
70	185	0.2	40	35	98	
1	186	0.2	141	116	162	
2	187	0.2	59	27	86	
3	188	0.2	108	155	270	
4	189	ND	31	25	58	
5	190	0.1	18	17	46	
6	191	ND	16	11	33	
7	192	1.0	158	190	380	
8	193	ND	63	44	116	
9	194	0.3	34	16	76	
80	7917195	0.1	47	40	200	

RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (NMBR)	Ag	Cu	Pb	Zn	COMMENTS
81	7917196	ND	46	31	142	
2	197	ND	77	27	158	
3	198	ND	31	45	82	
4	199	0.5	46	43	88	
5	200	0.3	70	79	190	
6	201	ND	52	33	140	
7	202	ND	59	47	158	
8	203	ND	34	20	102	
9	204	ND	25	20	137	
90	205	ND	54	33	124	
1	206	ND	30	27	90	
2	207	ND	4	2	5	
3	208	ND	9	5	18	
<del>4</del>	<del>STD 3</del>	<del>ND</del>	<del>42</del>	<del>6</del>	<del>64</del>	
5	209	ND	8	4	20	
6	210	ND	48	24	168	
7	211	ND	53	35	134	
8	<del>212</del>	ND	27	25	108	
9	213	ND	37	29	124	
100	214	ND	40	29	114	
1	215	ND	52	42	154	
2	216	ND	59	31	156	
3	217	0.3	69	55	172	
<del>4</del>	<del>BLANK</del>	<del>ND</del>	<del>1</del>	<del>ND</del>	<del>ND</del>	
5	218	0.2	21	20	70	
6	219	ND	19	20	50	
7	220	0.4	42	96	185	
8	221	ND	1	1	1	
9	222	ND	1	1	1	
110	223	ND	65	74	148	
1	224	ND	5	3	10	
2	225	ND	5	11	12	
3	226	0.1	10	8	7	
4	227	0.1	45	47	92	
5	228	0.1	76	31	162	
6	229	0.3	53	34	70	
*	7917230	ND	10	5	16	0.24g
<del>8</del>	<del>7917126</del>	<del>ND</del>	<del>39</del>	<del>35</del>	<del>108</del>	
9	153	ND	42	33	80	
120	7917148	ND	25	20	62	

## Rio Tinto Canadian Exploration Limited

### LABORATORY REPORT

SAMPLE TYPE (✓)

- Soil &/or Stream Sediments
- Rock
- Water
- \_\_\_\_\_
- \_\_\_\_\_

Results Sent To R. Hewton  
 At Whitton

Date Reported 30 Aug '79  
 Acct. No. 8509  
 Project Name VIKING  
 Size Fraction -80 Mesh  
 Extraction HNO<sub>3</sub> - HCl  
 Sample Wt. .6 g , Volume 12 ml  
 Analytical Method A.A.  
 Analyst(s) E.F.P.

#### STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

#### DISTRIBUTION

- Log Normal
- Normal

Element		Ag	Cu	Pb	Zn		
No. of Samples		20	20	20	20		
Mean. $\bar{x}$							
Std. Dev. $\sigma$							
$\bar{x} + 2\sigma$							

Comments: (yellow cap → Vanadium species)

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# RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (NMBR)	Ag	Cu	Pb	Zn				COMMENTS
1	7917104	0.2	58	27	88				
2	05	ND	23	58	92				
3	06	ND	23	18	102				
4	07	ND	80	36	132				
5	08	ND	40	51	105				
6	09	ND	20	24	42				
7	10	0.3	72	156	265				
8	11	ND	45	21	68				
9	12	0.3	64	73	146				
10	13	0.1	64	68	136				
1	14	0.2	63	77	138				
<del>2</del>	<del>STD 1</del>	<del>0.1</del>	<del>17</del>	<del>31</del>	<del>95</del>				
3	15	1.5	168	380	490				
4	16	0.4	70	95	142				
5	17	0.3	75	180	174				
6	18	0.3	54	91	174				
7	19	0.2	52	51	95				
8	20	8.3	340	1130	1500				
9	21	0.3	21	73	65				
20	22	6.4	50	33	104				
1	7917123	0.1	33	22	74				
<del>2</del>	<del>BLANK</del>	<del>ND</del>	<del>1</del>	<del>ND</del>	<del>ND</del>				
<del>3</del>	<del>7917108</del>	<del>0.2</del>	<del>41</del>	<del>51</del>	<del>102</del>				
<del>4</del>	<del>13</del>	<del>0.2</del>	<del>62</del>	<del>68</del>	<del>133</del>				
<del>5</del>	<del>17</del>	<del>0.4</del>	<del>94</del>	<del>180</del>	<del>172</del>				
<del>6</del>	<del>7917122</del>	<del>0.3</del>	<del>51</del>	<del>33</del>	<del>106</del>				
7									
8									
9									
30									
1									
2									
3									
4									
5									
6									
7									
8									
9									
40									

APPENDIX 2

ASSAY CERTIFICATES



# BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y4A 4X2V1

PHONE: (403) 667-6523  
TELEX: 036-8-460

## Certificate of Analysis

Riocanex

Suite 520, 800 W. Pender Street

Vancouver, B.C.

REPORT NO. A-49-94

DATE September 12, 1979

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	oz/ton								
	Au								
D-09	0.002								
D-49	0.002								
D-50	0.002								

BONDAR-CLEGG & COMPANY LTD.

**NOTE:**

Rejects retained two weeks  
Pulps retained three months

*Steven Simpson*



# BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4H2V1

PHONE: (403) 667-6523

TELEX: 036-8-460

## Certificate of Analysis

Riocanex

REPORT NO. A-49-86

Suite 520, 800 W. Pender St.

DATE September 12, 1979

Vancouver, B.C.

I hereby certify that the following are the results of analyses made by us upon the herein described Rock samples

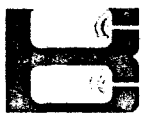
MARKED	oz/ton								
	Au								
D-626	0.002								
D-627	0.002								
D-628	0.002								

BONDAR-CLEGG & COMPANY LTD.

**NOTE:**

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged

..... *Steven Simpson* .....



# BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

## Certificate of Analysis

TO Riocorex  
Suite 520, 800 W. Pender  
Vancouver, B.C.

REPORT NO. A-49-82

DATE August 29, 1979

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	oz/ton	%	%	%					
	Ag	Cu	Pb	Zn					
<i>Big Red</i> D-037	-	-	2.65	6.60					
<i>Whiting</i> D-038	0.07	0.07	0.02	0.04					
" D-039	3.91	0.24	1.47	0.16					
" D-040	0.12	0.06	0.03	0.01					
" D-041	L0.05	0.03	0.01	0.01					
" C-301977	2.01	0.12	0.50	0.27					
" C-301978	0.19	0.08	0.03	0.05					
" C-301979	L0.05	L0.01	0.01	0.02					
" C-301980	L0.05	0.01	L0.01	L0.01					
" C-301981	28.8	0.12	15.4	10.6					

Au to follow  
L denotes less than

BONDAR-CLEGG & COMPANY LTD.

**NOTE:**

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

*Steve Simpson*



# BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1-2V1

PHONE: (403) 667-6523  
TELEX: 036-8-460

## Certificate of Analysis

TO Kioconex  
Suite 520, 800 W. Pender  
Vancouver, B.C.

REPORT NO. 6-49-82

DATE September 4, 1979

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

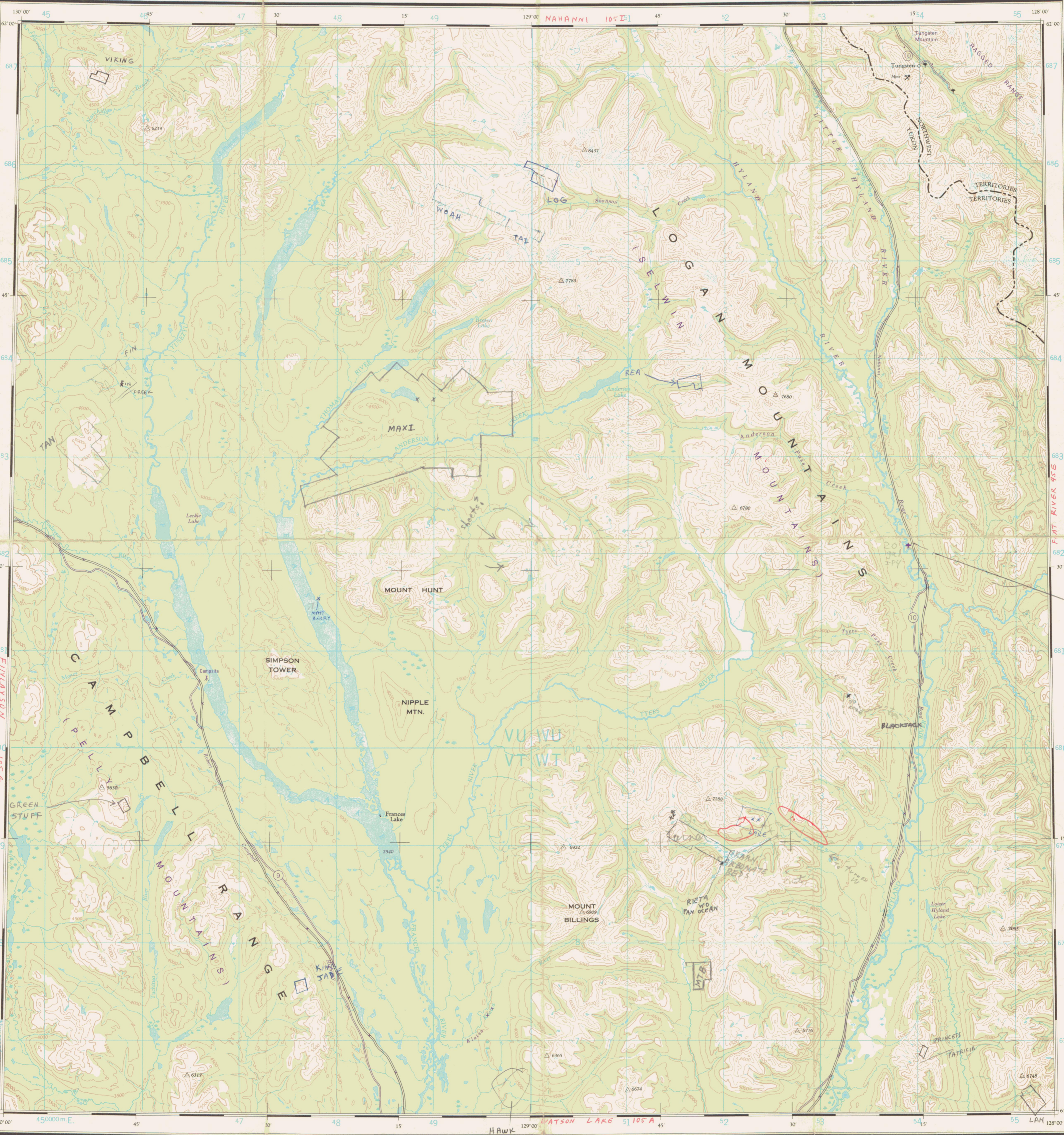
MARKED	oz/ton								
	Au								
D-039	trace								
C-301981	trace								
trace: less than 0.005 oz/ton									

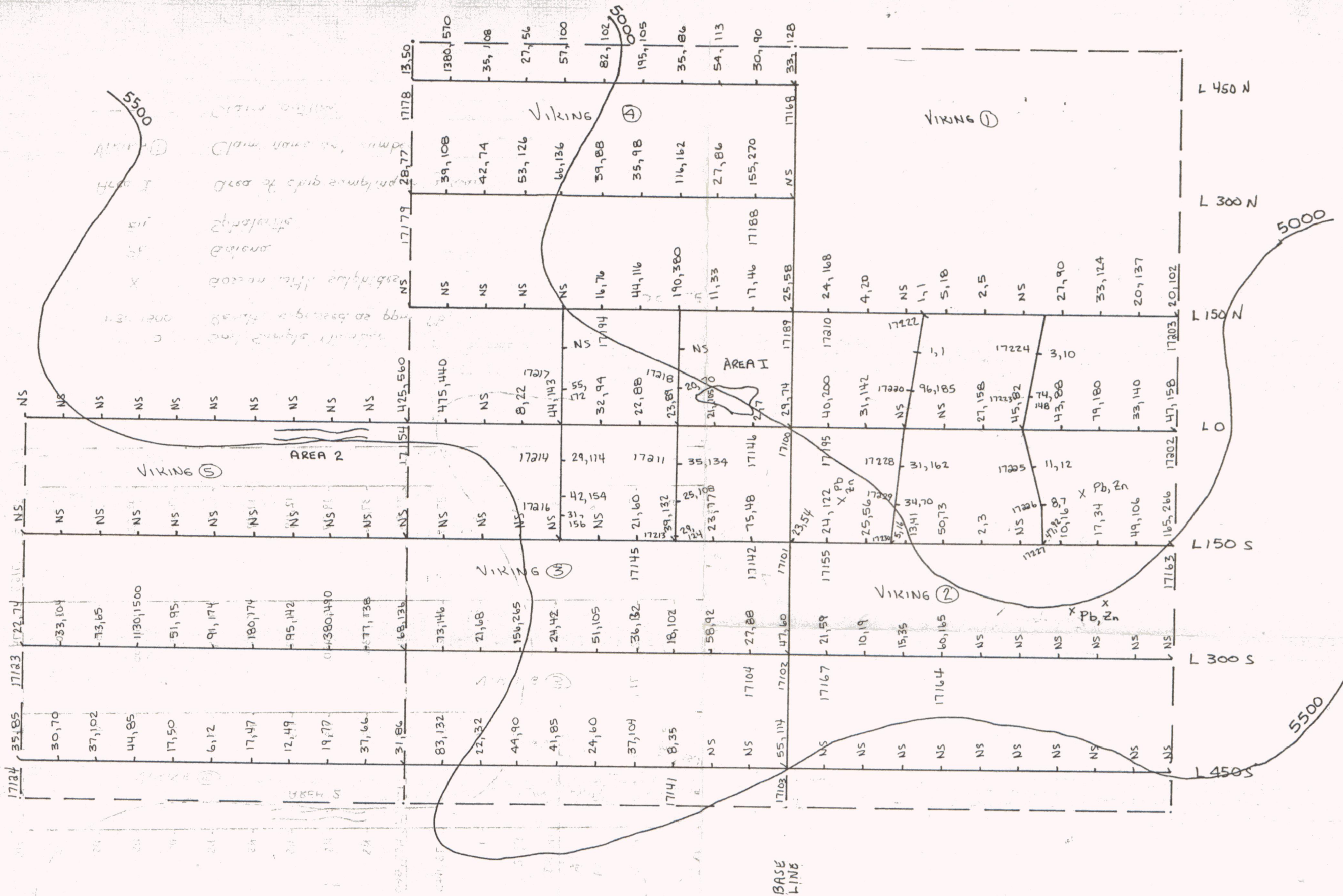
BONDAR-CLEGG & COMPANY LTD.

**NOTE:**

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

*Steven Simpson*





- 17200 Soil Sample Number
- 1130, 1500 Results expressed as ppm Pb, Zn
- X Gossan with sulphides
- Pb Galena
- Zn Sphalerite
- Area 1 Area of chip sampling in gossan
- Viking ① Claim name and number
- - - Claim outline

SCALE 1:5000

**Riocanex**  
 (WESTERN CANADA OFFICE)  
 #520 - 800 W. PENDER STREET  
 VANCOUVER, B.C. V6C 2V6  
 PHONE (604) 685-1295 TELEX 04-54341

VIKING CLAIMS  
 N.T.S. 105 H 13

September 1979 R.S. HEWTON