

**BARRINGER**

**Laboratories (Alberta) Ltd.**

4200B - 10 STREET N.E., CALGARY, ALBERTA, CANADA T2E6K3  
PHONE: (403) 250-1901

AUTHORITY: B. CROSS

**GIANT YELLOWKNIFE MINES LTD.**

EXPLORATION DEPARTMENT

BAG 3000

YELLOWKNIFE, NWT. X1A 2M2

**BARRINGER**

**Laboratories (NWT) Ltd.**

P.O. BOX 884, YELLOWKNIFE, NWT. CANADA X1A 2N6  
PHONE: (403) 920-4500

21-OCT-88

PAGE: 1 OF 4

COPY: 2 OF 2

P. O. : 105272, 320

WORK ORDER: 5281D-88

\*\*\* FINAL REPORT \*\*\*

**GEOCHEMICAL LABORATORY**

**SAMPLE TYPE: WATER**

**SAMPLE NUMBER**

Calcium -ppm  
Potassium -ppm  
Silica -ppm  
Titanium -ppm  
Copper -ppm

Arsenic -ppm  
Iron -ppm  
Manganese -ppm  
Zinc -ppm  
Chromium -ppm

Nickel -ppm  
Lead -ppm  
Cadmium -ppm  
Gold -ppm  
Silver -ppm

Strontium -ppm  
Tungsten -ppm  
Antimony -ppm  
Thorium -ppm  
Sulphur -ppm

Tannic acid -ppm  
Humic acid -ppm  
T.O.C. -ppm  
Sulfide -ppm

FEED SOLUTION

TO CIL #1

DUPLICATES

236.3 239.5  
15.75 15.25  
4.86 4.42  
<0.01 0.02  
7.9 7.88

17.55 19.53  
0.4 0.53  
0.02 0.01  
<0.01 <0.01  
<0.01 <0.01

0.85 0.95  
0.01 0.01  
<0.01 <0.01  
0.11 0.11  
0.04 0.01

0.43 0.39  
<0.1 <0.1  
0.92 1.14  
0.06 <0.05  
200.0 190.0

11.0 10.0  
<2.0 <2.0  
18.0 18.0  
26.9 43.4

TAILINGS SOLUTION

FROM CIL #6

DUPLICATES

214.1 224.9  
15.75 15.5  
3.66 3.66  
0.02 0.02  
9.35 8.35

24.4 24.58  
1.03 1.18  
0.01 0.01  
<0.01 <0.01  
<0.01 <0.01

1.08 1.05  
0.01 0.03  
<0.01 <0.01  
<0.01 <0.01  
0.11 0.12

0.35 0.4  
<0.1 <1.0  
1.58 1.61  
<0.05 <0.05  
180.0 190.0

13.0 14.0  
6.0 8.0  
19.0 19.0  
36.7 35.5

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P.O. BOX 884, YELLOWKNIFE, NWT, CANADA X1A 2N6  
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PAGE: 2 OF 4

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**GEOCHEMICAL LABORATORY REPORT****SAMPLE TYPE: WATER**
 RECYCLE  
 POND  
 WATER

 ELECTROWINNING CELL FEED  
 CARBON STRIP SOL<sup>N</sup>
**SAMPLE NUMBER**
 START  
 OF STRIP CYCLE

 FINISH  
 After 12 hrs

Calcium	-ppm	182.1
Potassium	-ppm	14.25
Silica	-ppm	3.32
Titanium	-ppm	0.03
Copper	-ppm	8.83

1.09	1.43
14.85	14.84
NA	NA
0.04	0.03
88.28	92.64

Arsenic	-ppm	13.8
Iron	-ppm	0.14
Manganese	-ppm	<0.01
Zinc	-ppm	<0.01
Chromium	-ppm	<0.01

112.6	165.8
<0.01	0.06
0.01	<0.01
0.76	1.17
0.15	0.15

Nickel	-ppm	0.9
Lead	-ppm	0.01
Cadmium	-ppm	<0.01
Gold	-ppm	<0.01
Silver	-ppm	0.13

288.1	211.9
0.05	0.01
<0.01	0.11
7.1	1.27
3.4	0.02

Strontium	-ppm	0.56
Tungsten	-ppm	<0.1
Antimony	-ppm	1.09
Thorium	-ppm	<0.05
Sulphur	-ppm	140.0

0.04	0.03
<0.1	<0.1
0.17	0.37
<0.05	<0.05
280.0	250.0

Tannic acid	-ppm	9.0
Humic acid	-ppm	58.0
T.O.C.	-ppm	19.0
Sulfide	-ppm	27.9

1300.0	740.0
8800.0	500.0
5700.0	5800.0
35.2	3.5

42008 - 10 STREET N.E., CALGARY, ALBERTA, CANADA T2E 6K3  
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P.O. BOX 864, YELLOWKNIFE, NWT, CANADA X1A 2N  
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PAGE: 3 OF 4

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EXPLORATION DEPARTMENT  
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YELLOWKNIFE, NWT. X1A 2M2

P. O. : 105272, 320

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\*\*\* FINAL REPORT \*\*\*

## GEOCHEMICAL

## CARBON SAMPLES

SAMPLE TYPE: OTHE

REGENERATED

STRIPPED

STRIPPED

LOADED

BATCH 88-03

88-09

88-11

88-04

S A M P L E N U M B E

Calcium	-ppm	2240.0	4600.0	6080.0	3620.0
Potassium	-ppm	64.0	24.0	32.0	24.0
Silica	-ppm	NA	NA	NA	NA
Titanium	-ppm	2.0	<1.0	<1.0	<1.0
Copper	-ppm	43.0	28.0	28.0	359.0
Arsenic	-ppm	20.0	200.0	182.0	342.0
Iron	-ppm	132.0	56.0	28.0	32.0
Manganese	-ppm	27.0	23.0	9.0	8.0
Zinc	-ppm	48.0	31.0	26.0	48.0
Chromium	-ppm	1.0	<1.0	<1.0	1.0
Nickel	-ppm	237.0	512.0	88.0	1200.0
Lead	-ppm	8.0	5.0	4.0	3.0
Cadmium	-ppm	<1.0	<1.0	<1.0	1.0
Gold	-ppm	<0.02	<0.02	<0.02	<0.02
Silver	-ppm	32.8	53.6	7.5	58.5
Strontium	-ppm	6.0	12.0	17.0	8.0
Tungsten	-ppm	<2.0	<2.0	<2.0	<2.0
Antimony	-ppm	<1.0	<1.0	<1.0	<1.0
Thorium	-ppm	<2.5	<2.5	<2.5	<2.5
Sulphur	-ppm	1700.0	1600.0	1400.0	3200.0
T.O.C.	-ppm	NA	NA	NA	NA

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SAMPLE TYPE: OTHER

SAMPLE NUMBER		VIRGIN CARBON	FEED SOLIDS To CIL#1	TAILINGS SOLIDS
Calcium	-ppm	303.0	4.59%	4.1%
Potassium	-ppm	8920.0	88.0	96.0
Silica	-ppm	NA	NA	NA
Titanium	-ppm	1.0	3.0	2.0
Copper	-ppm	6.0	51.0	63.0
Arsenic	-ppm	1.0	3330.0	3490.0
Iron	-ppm	2.0	5.24%	4.74%
Manganese	-ppm	5.0	867.0	835.0
Zinc	-ppm	<1.0	606.0	624.0
Chromium	-ppm	<1.0	57.0	32.0
Nickel	-ppm	<1.0	70.0	67.0
Lead	-ppm	<1.0	431.0	466.0
Cadmium	-ppm	<1.0	4.0	4.0
Gold	-ppm	<0.02	1.28	1.56
Silver	-ppm	0.2	6.5	1.84
Strontium	-ppm	6.0	24.0	26.0
Tungsten	-ppm	<2.0	<2.0	<2.0
Antimony	-ppm	<1.0	5.0	6.0
Thorium	-ppm	<2.5	<2.5	<2.5
Sulphur	-ppm	900.0	7700.0	8300.0
T.O.C.	-ppm	NA	2000.0	2000.0

SIGNED: \_\_\_\_\_

C. Douglas Read,  
LABORATORY MANAGER

## FOOTNOTES:

P=QUESTIONABLE PRECISION; \*=INTERFERENCE; TR=TRACE; ND=NOT DETECTED;  
IS=INSUFFICIENT SAMPLE; NA=NOT ANALYZED; MS=MISSING SAMPLE