

84-#619 - #12750

7/85

GOLD OPTION

Okanagan Falls, B.C.

82 E 6 W

GEOCHEMISTRY 1984

C. D. Spence

August 15, 1984

CLAIMS: Gold, Golden 1, Golden 2.

Osoyoos Mining Division

49° 17' N, 119° 19' W.

OWNER: Gold - P. O. Nielsen

Golden 1 & 2 - K. L. Daughtry

OPERATOR: Rio Algom Exploration Inc.

AUTHOR: C. D. Spence

DATE: August 15, 1984

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,750**

GOLD OPTION  
OKANAGAN FALLS, B.C.

GEOCHEMISTRY 1984

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GOLD OPTION  
Okanagan Falls, B.C.  
82 E 6 W

GEOCHEMISTRY, 1984

After examination of a gold prospect on the Gold property located 27km east of Okanagan Falls on the Shuttleworth Creek road, Rio Algom Exploration negotiated an option agreement with the E & D Joint Venture and carried out a soil sampling programme in July 1984.

Alteration and quartz-carbonate veins are pyritized and contain gold and silver. They occur in andesitic tuffs of Tertiary-age in an outlier on Monashee gneisses and Valhalla granitic rocks and may be correlated with rocks of the White Lake basin to the west.

Soil samples were collected over 22.9km on lines at 50 or 100m spacing, at 25m intervals, and analysed for Ag, As, Au, Cu, Pb, and Sb. Results show a trend of anomalies to the southwest from and along the strike of mineralization. As, Ag and Cu yield the most distinct anomalies while Pb is discontinuously anomalous near known mineralization. Sb is nowhere anomalous and Au is only so in scattered samples.

The trend of anomalies is of interest. Geological mapping and a magnetic survey are recommended.

GOLD OPTION  
Okanagan Falls, B.C.  
82 E 6  
Geochemistry, 1984

## 1. INTRODUCTION

### 1.1 General

This report describes the results of the first phase of work by Rio Algoma Exploration Inc. on three claims held under option from the E & D Joint Venture. The claims, adjoining others held by Lacana Mining Corp. & joint venturers cover a gold prospect which was examined by Rio Algoma in May 1984.

The initial work reported on here comprised a soil sample survey over 2 km of line. Results are given and recommendations made.

### 1.2 Location, Access and Topography

The property is on NTS Map 82 E 6 W and is centered on  $49^{\circ} 17.1' N$  and  $119^{\circ} 19.2' W$ . It lies east of Venner Meadows, twenty-six kilometres from Okanagan Falls on the Shuttleworth Creek logging road. The location of the claims is shown on the map L-6782 in this report.

Access is easy by following the logging road which is suitable for all vehicles and traverses the property from its western to its eastern edge. The main area of current interest is at approximately 27km on this road.

The property lies on the Okanagan plateau with gently rolling topography. It is at 4500 - 4900 ft. elevation with much of the property in a low depression. Solco Creek trends across the western claims and flanks a large area of outwash gravels to the west.

The area is covered mostly by second growth forest with much windfall.

### 1.3 Property

The optioned property consists of three claims as follows and shown on the map L-6782.

<u>CLAIM</u>	<u>UNITS</u>	<u>RECORD</u>	<u>OWNER</u>	<u>DATE</u>
Gold	12	652	P. P. Nielsen	1 March
Golden 1	12	1561	K. L. Daughtry	15 July
Golden 2	20	1562	K. L. Daughtry	15 July

All in the Osoyoos Mining Division.

Field checks show that claims are as shown on this map and not as depicted on claim map issued by the B. C. Ministry of Energy, Mines and Petroleum Resources.

The E & D Joint Venture is formed of K. L. Daughtry and Associates and Energelex Minerals Ltd.

### 1.4 History

Gold - silver mineralization was first uncovered in 1973 and staked as the Au - Rain claims when mineralization was exposed in a road - cut. Some trenching was done. Later that year Teck Corp. performed limited geophysical surveys and sampling and found some anomalous gold. Later work lead to the conclusion that the mineralization was very limited.

In 1975 after the owners carried out some trenching, Granby Mining Corp. sampled trenches and outcrops but concluded that mineralization was erratic. After this and minor work by the holders the claims lay dormant and lapsed in 1978.

P. P. Nielsen staked the Gold claim in 1979 for the present owners and the Golden 1 and 2 claims were added in 1982.

The E & D joint venture carried out an orientation geochemical survey collecting 39 samples on claim - lines in 1980 (Daughtry et al. 1981) and in 1982 after adding to the property carried out an orientation

magnetic survey over 2.1km of flagged line and along the road over the area of geochemically anomalous soils and known showings (Daughtry, 1982). To follow up on this orientation work a fuller survey of 5km of line was done by Nielson Geophysics in 1983 (Nielsen, 1983). Later this same grid was covered by soil sampling at 25m intervals (171 samples). Anomalies were found in arsenic, silver and gold, generally corresponding to an area of low magnetic response.

Lacana Mining Corporation for the Canadian Minerals Joint Venture acquired claims to the north-east of the showing in 1980 and have worked these and others added to the west and east. Lacana have drilled about 20 drill holes on the Venner 1 claim and some of these are about 25m from the Gold Claim. Results of this work are not known.

Rio Algom, following examination of the prospect on the Gold claim, negotiated an option to acquire an interest in the E & D Joint Venture holdings. The agreement is dated 6 July 1984. Work by Rio Algom commenced immediately on conclusion of this agreement.

## 2. GEOLOGY

### 2.1 Regional

The Gold property lies over part of a 10 X 4km outlier of Tertiary volcanic and sedimentary rocks lying on metamorphic rocks of the Monashee Group and parts of the Mesozoic Valhalla granitic rocks (G.S.C. 1961). It has recently been proposed that the Tertiary rocks are thrust over the basement (Templeman - Kluit, 1984 - personal communication).

Tertiary rocks of the inlier, consisting of andesitic and rhyolitic flows and tuffs overlying sedimentary rocks along the southern portion of the inlier, are correlated generally with rocks of the White Lake Basin to the West with which they were probably coextensive prior to faulting etc.

### 2.2 Property

No mapping of the property had been done by Rio Algom at the date of this report. Previous work and brief examination show that the area of mineralization is underlain by green felspar porphyritic andesite flows and related tuffs.

A probably northeasterly trending zone of pyritisation and silicification is exposed on both sides of the road near line 250 N, 25 W. Within this are zones up to 2.5m wide of brecciated quartz - carbonate. Sampling of this by Rio Algom yielded 4.8 g/t Ag, 4.0 g/t Au over a width of 2.5m.

Anomalous arsenic with this mineralization and alteration suggest a target for an epithermal gold-silver system as known in similar Tertiary rocks at the Dusty Mac deposit and the Vault prospect near Okanagan Falls.

## 1. WORK BY RIO ALGOM

To the date of this report Rio Algom completed a soil sampling programme over 22.9km of flagged lines.

Field work was done by Van Alphen Exploration Services of Smithers, B.C. from the 6th to the 13th July, 1984, with travel daily to the property from Okanagan Falls.

Sampling was done following flagging of a base line and grid lines at 50m intervals in the central area and 100m intervals further to the north and south.

Eight hundred and eighty eight samples were collected from stations at 25m spacing. No samples were collected from twenty eight stations where no suitable soil was available.

Samples were of the "B" soil horizon and collected at depths of 10 - 30cm. Samples were placed in Kraft paper bags marked with station coordinates and shipped to Acme Labs in Vancouver. For all samples a 0.5g sub-sample was digested in 3ml 3-1-3 HCL HNO<sub>3</sub> - H<sub>2</sub>O diluted and analysed for 6 elements by Induced Coupled Plasma techniques. Gold content was analysed by Atomic Absortion after digestion of a 10g sample in hot dilute aqua regia and ignition at 600°C

All results are listed on the certificates in Appendix I.

#### 4. GEOCHEMICAL RESULTS

Results of analysis for the six elements, Ag, As, Au, Cu, Pb, Sb, thought to be direct or indirect indicators of the sought mineralization are plotted on the maps with this report. (Dwgs. GC - 8031 V - As, Au; GC - 8032 V - Cu, Pb; GC - 8033 V - Ag, Sb).

Examination of results showed that statistical treatment was valid only for As, Cu and Pb results, as shown in figures 1, 2 and 3.

Anomalous values from these were based on the 95 percentile as follows:

As -	>10ppm
Cu -	>18ppm
Pb -	>11ppm

By inspection, levels for anomalies for the other elements are set at;

Ag -	>0.2ppm
Au -	>15ppb
Sb -	>3ppm

At these levels clear anomalies can be seen in values of arsenic and copper and more vaguely for lead and silver.

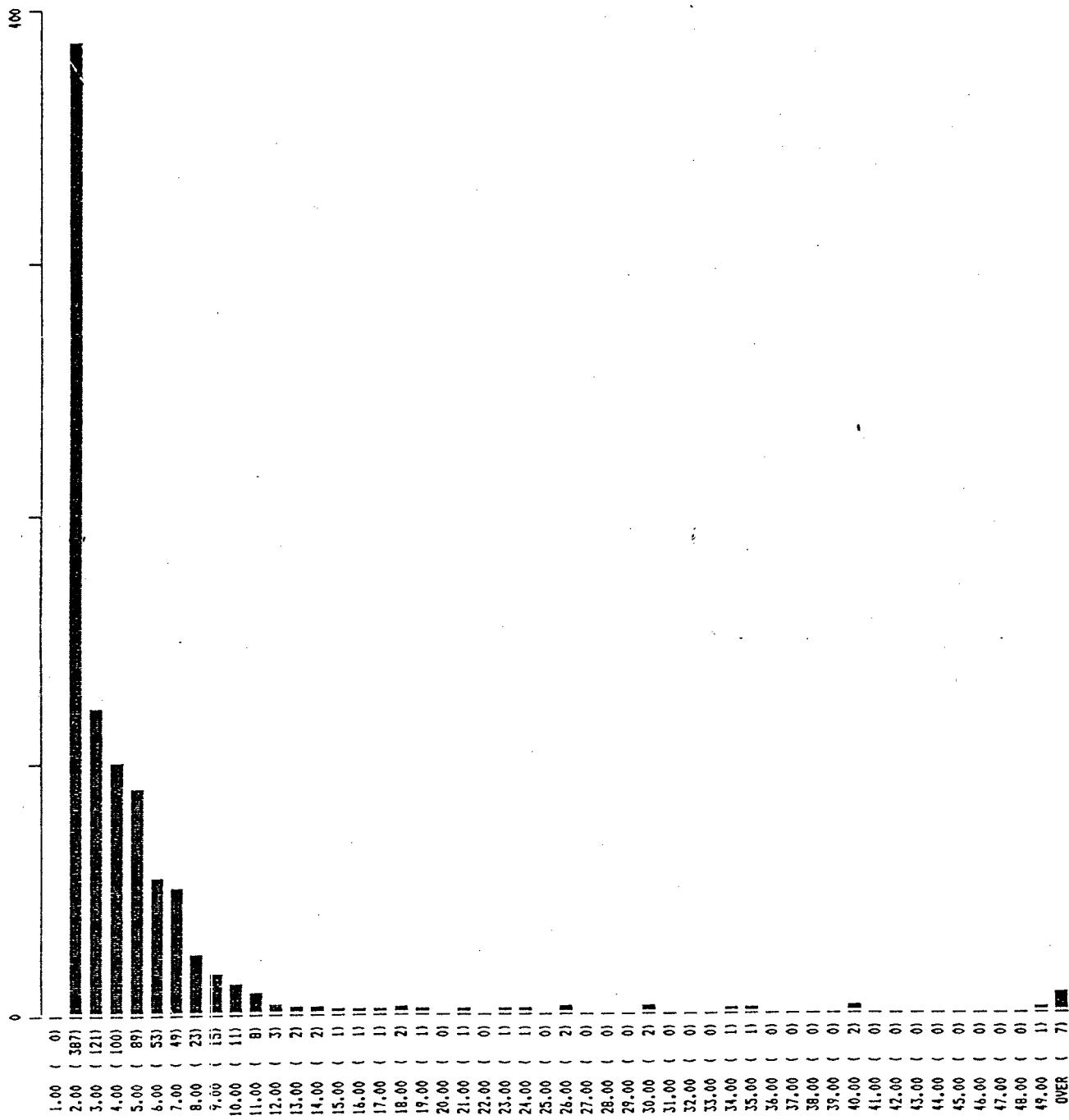
Gold ranging from 5 - 480ppb shows no pattern, with high values scattered over the central part of the grid.

Antimony, apart from several higher values that may not be anomalous, is low over the entire grid.

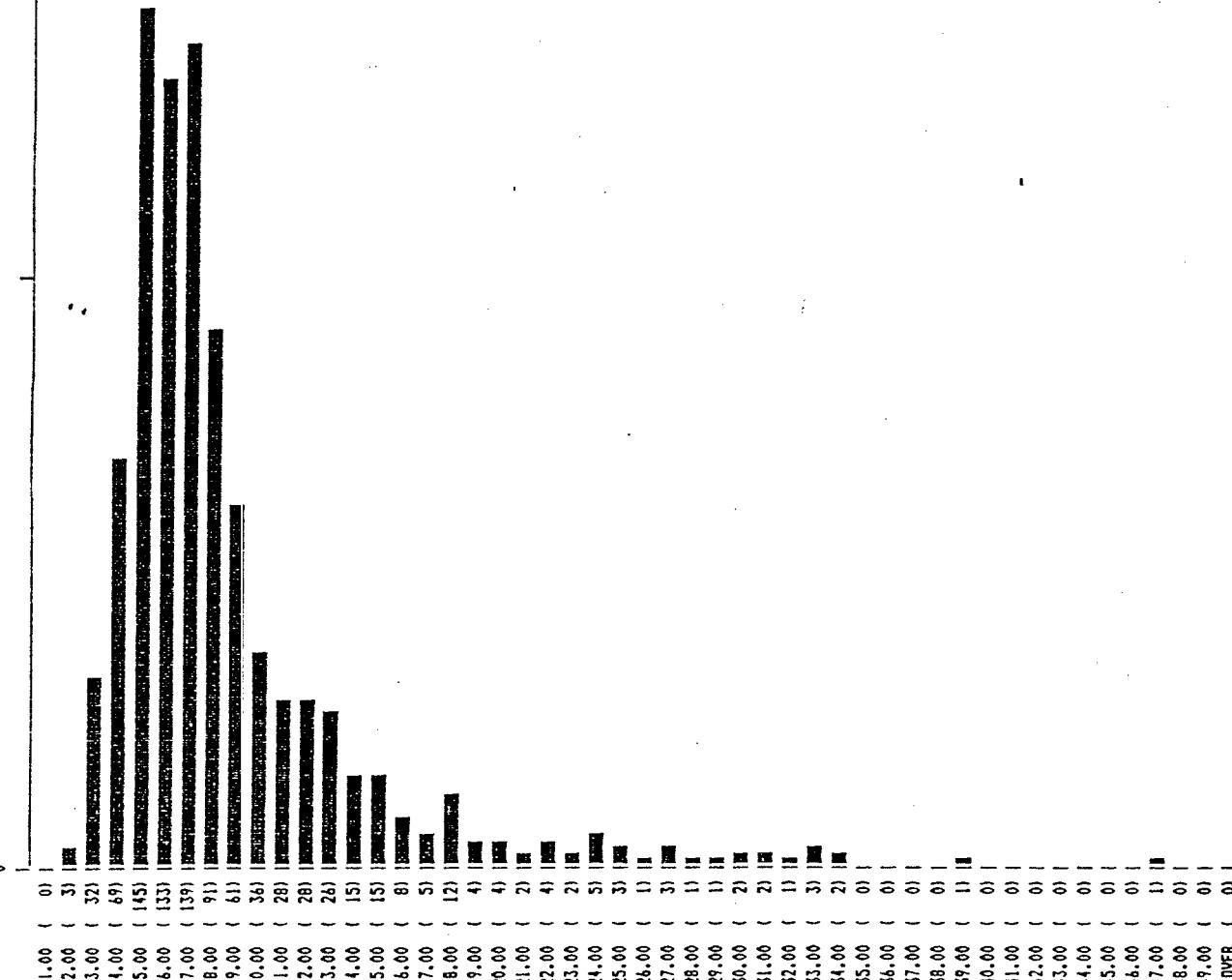
Silver, while mostly at 0.1ppm has scattered stations at 0.3 - 0.7ppm but, apart from a recognizable concentrations near the road and known mineralization on lines 150 - 450 N, and at the western ends of lines 200 and 250 S, presents no strong pattern or highly anomalous values.

Arsenic is clearly anomalous in the area southeast of known mineralization and in a smaller anomaly to the west.

RIO ALGOM PROJECT # 8808 FILE # 84-1583 & 84-1

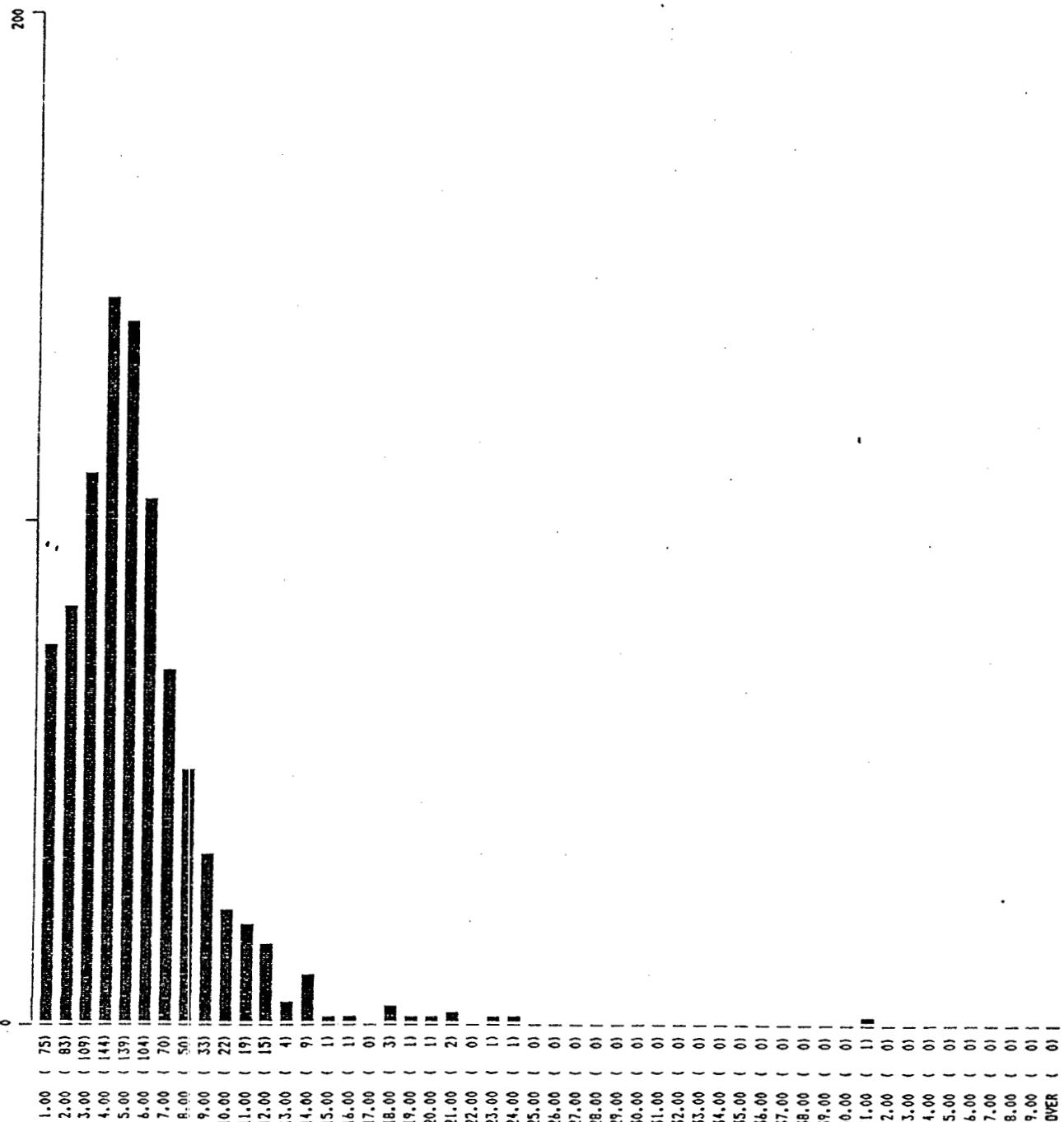


200



SAMPLE SIZE : 888 MAX : 47 MIN : 2 S.D. : 5.21 MEDIAN : 7  
 MEAN : 8.4

RIO ALGOM PROJECT # 8808 FILE # B4-1583 &amp; B4-1596



SAMPLE SIZE : 888 MAX : 41 MIN : 1 MEDIAN : 5  
 MEAN : 5.28 S.D. : 3.42

Copper is anomalous in three areas, the main and strongest are of which is on the eastern end of lines 100 - 400 S and on the trend formed by anomalies for arsenic and silver, and the gold - silver mineralization.

Lead is anomalous in scattered single or double station anomalies and in a vague area around the mineralization, ie. east of the base line from 100 - 300 N.

Only anomalous areas for copper, silver and arsenic can and have been contoured on the maps.

## 5. CONCLUSIONS

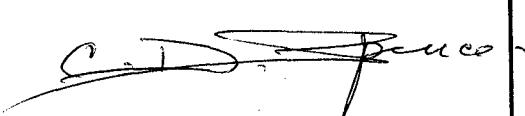
The soil sampling shows no strong anomaly over or continuous with known mineralization. Weak or vague concentrations, however, of lead, arsenic silver and some gold occur over the altered mineralized exposures. More distinct arsenic and copper anomalies together form a southwesterly trend continuous with this area. This pattern of anomalies is not understood but may be due to the very variable nature and thickness of overburden and/or a metal zoning in a large mineralizing system. This essentially anomalous area southwest from the eastern margin of the Gold claim to Solco Creek is continuous with the area drilled by Lacana. Though anomalies are not strong, background is low and this general zone warrants more work.

## 6. RECOMMENDATIONS

Based on past work which in general detected the same pattern geochemically and because work by Lancana has shown that a gold - bearing zone was reflected in only isolated anomalous values, especially for gold, it is proposed that work be continued and that, as originally planned, the area of the grid be covered by geological mapping, rock geochemistry, a detailed magnetic survey and VLF survey. Consideration should be given to using total field and gradiometric methods for the magnetic survey.

Vancouver  
July 1984



  
C. D. Spence

## REFERENCES

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- GEM (1976) pp E26-27 AU, RAIN
- (1975) p E21 AU
- (1974) p 56 AU and DUSTY MAC
- (1973) p 47 AU
- G.S.C. (1961) Map 15. Kettle River W. Half 1.253,440
- Nielsen, P.P. (1983) Geophysical Assessment Report on the GOLDEN and GOLD Mineral Claims, Osoyoos Mining Division.

## APPENDIX II

### STATEMENT OF QUALIFICATIONS

1. I am a geologist residing at 675 Burley Drive, West Vancouver, B.C. and am employed by Rio Algom Exploration Inc. of Suite 520, 800 West Pender Street, Vancouver, B.C.
2. I graduated from the Royal School of Mines, London, England in 1955 with a B.Sc. Honours (Special) in Mining Geology and have practised my profession since then.
3. I have worked for Rio Algom and associated companies since July 1955 in several provinces in Canada and in B.C. since 1974 as Manager Western Canada of Rio Algom.
4. I am a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
5. I supervised the programme of soil sampling done by contractors on the Gold property in July 1984.



C. D. Spence

Vancouver, B.C.  
July 1984

ACME ANALYTICAL LABORATORIES LTD.  
877 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 16 1984

DATE REPORT MAILED: July 20/84

### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-3 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOIL AU\* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Bepp* DEAN TOYE. CERTIFIED B.C. ASSAYER

RIO ALGOM PROJECT # 8808 FILE # 84-1583

PAGE 1

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
ON 425W	8	5	.2	2	2	5
ON 400W	5	3	.1	2	2	5
ON 375W	8	8	.1	13	2	5
ON 350W	7	5	.1	10	2	5
ON 325W	6	1	.1	3	2	5
ON 300W	6	5	.1	26	2	5
ON 275W	10	5	.1	30	2	5
ON 250W	8	5	.1	19	2	5
ON 225W	6	5	.1	12	2	5
ON 200W	8	8	.1	40	2	5
ON 175W	8	10	.4	49	2	30
ON 150W	6	4	.1	17	2	5
ON 125W	4	2	.1	5	2	10
ON 100W	3	4	.1	3	2	5
ON 75W	10	4	.1	5	2	5
ON 50W	3	3	.1	2	2	5
ON 25W	6	6	.3	4	2	5
ON 0E	12	9	.1	2	2	5
ON 25E	29	6	.1	3	2	5
ON 50E	5	4	.1	2	2	5
ON 75E	7	8	.1	3	2	5
ON 100E	9	7	.1	3	2	5
ON 125E	8	6	.1	2	2	5
ON 150E	6	5	.1	2	2	5
ON 175E	5	3	.1	2	2	15
ON 200E	5	4	.1	4	2	5
ON 225E	5	3	.1	3	2	5
ON 250E	6	6	.1	6	2	5
ON 275E	6	5	.1	6	2	5
ON 300E	6	9	.1	2	2	5
ON 325E	6	6	.1	2	2	5
ON 350E	6	6	.1	2	2	5
ON 375E	7	3	.1	2	2	5
ON 400E	5	3	.1	2	2	5
ON 425E	10	3	.1	2	2	5
ON 450E	6	4	.1	2	2	5
ON 475E	8	4	.1	2	2	10
STD S-1/AU-0.5	125	116	34.1	119	86	510

RIO ALGOM

PROJECT # 8808

FILE # 84-1583

PAGE 2

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
ON 500E	9	6	.3	4	2	5
ON 525E	11	5	.1	2	2	5
ON 550E	8	6	.1	3	2	5
ON 575E	8	8	.1	4	2	5
ON 600E	10	4	.1	3	2	5
ON 625E	11	3	.1	3	2	5
ON 650E	15	2	.1	4	2	5
ON 675E	10	4	.1	4	2	5
ON 700E	12	5	.1	4	2	5
ON 725E	7	1	.1	2	2	5
ON 750E	5	5	.1	2	2	5
ON 775E	7	4	.1	2	2	5
ON 800E	8	6	.1	3	2	5
ON 825E	8	7	.1	2	2	5
ON 850E	7	8	.1	2	2	10
ON 875E	6	6	.1	3	2	5
ON 900E	5	6	.1	2	2	5
ON 925E	5	3	.1	2	2	5
ON 950E	6	6	.1	2	2	5
ON 975E	4	6	.1	2	2	5
ON 1000E	4	6	.1	2	2	5
0.5S 425W	8	4	.1	3	2	5
0.5S 400W	7	4	.1	5	2	5
0.5S 375W	5	2	.1	7	2	10
0.5S 350W	7	4	.1	7	2	5
0.5S 325W	7	2	.1	7	2	5
0.5S 300W	8	4	.1	76	2	5
0.5S 275W	7	4	.1	73	2	5
0.5S 250W	18	14	.7	419	7	15
0.5S 225W	13	7	.1	92	3	5
0.5S 200W	5	3	.1	40	2	5
0.5S 175W	7	3	.1	24	2	10
0.5S 150W	8	2	.1	6	2	5
0.5S 125W	11	5	.1	6	2	5
0.5S 100W	7	4	.1	6	2	5
0.5S 50W	7	5	.1	3	2	5
0.5S 25W	10	4	.1	4	2	5
STD S-1/AU-0.5	124	117	35.1	128	80	520

## RIO ALGOM PROJECT # 8808 FILE # 84-1583

PAGE 3

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
0.5S 0E	5	8	.1	2	2	5
0.5S 25E	5	5	.1	2	2	5
0.5S 50E	16	9	.1	2	2	5
0.5S 75E	7	5	.1	2	2	5
0.5S 100E	24	5	.1	2	2	5
0.5S 125E	4	4	.1	2	2	20
0.5S 150E	11	5	.1	5	2	5
0.5S 175E	8	9	.1	2	2	5
0.5S 200E	3	3	.1	4	2	5
0.5S 225E	4	4	.1	2	2	5
0.5S 250E	3	3	.1	2	2	5
0.5S 275E	3	3	.1	2	2	5
0.5S 300E	4	3	.1	2	2	5
0.5S 325E	3	3	.1	2	2	5
0.5S 350E	4	3	.1	2	2	5
0.5S 375E	5	3	.1	2	2	5
0.5S 400E	7	5	.1	2	2	5
0.5S 425E	4	1	.1	2	2	45
0.5S 450E	7	1	.1	2	2	5
0.5S 475E	7	2	.1	2	2	5
0.5S 500E	6	5	.1	2	2	5
1S 500W	7	4	.1	2	2	5
1S 475W	5	3	.1	2	2	5
1S 450W	10	4	.1	2	2	5
1S 425W	6	3	.1	2	2	5
1S 400W	16	7	.1	2	2	80
1S 375W	10	3	.1	3	2	5
1S 350W	20	6	.1	7	2	5
1S 325W	13	4	.1	8	2	15
1S 300W	6	4	.1	4	2	5
1S 275W	5	2	.1	2	2	5
1S 250W	7	6	.2	3	2	5
1S 225W	9	5	.1	3	2	5
1S 200W	10	7	.1	2	2	10
1S 175W	6	1	.1	2	2	5
1S 150W	8	4	.1	3	2	5
1S 125W	7	1	.1	5	2	5
STD S-1/AU-0.5	124	117	34.4	120	79	510

RIO ALGOM

PROJECT # 8808

FILE # 84-1583

PAGE 4

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
1S 100W	10	5	.3	5	2 2	5 5 5 5
1S 75W	7	4	.1	4	2 2	5 5 5 5
1S 50W	3	4	.1	3	2 2	5 5 5 5
1S 25W	7	6	.1	3 3	2 2	5 5 5 5
1S 0E	5	5	.1	7	2 2	5 5 5 5
1S 25E	7	2	.1	5	2 2	5 5 5 5
1S 50E	10	5	.1	5	2 2	5 5 5 5
1S 75E	6	4	.1	5	2 2	5 5 5 5
1S 100E	5	2	.1	5	2 2	5 5 5 5
1S 125E	3	2	.1	5	2 2	5 5 5 5
1S 150E	4	6	.1	3	2 2	210
1S 175E	4	5	.1	2	2 2	5 5 5 5
1S 200E	4	5	.1	6	2 2	5 5 5 5
1S 225E	3	5	.1	2	2 2	5 5 5 5
1S 250E	5	5	.1	2	2 2	10
1S 275E	5	4	.1	2	2 2	5 5 5 5
1S 300E	15	5	.1	2	2 2	5 5 5 5
1S 325E	7	5	.4	2	2 2	5 5 5 5
1S 350E	11	6	.1	2	2 2	5 5 5 5
1S 375E	6	5	.1	2	2 2	5 5 5 5
1S 400E	8	5	.1	2	2 2	5 5 5 5
1S 425E	7	4	.1	2	2 2	5 5 5 5
1S 450E	7	3	.1	2	2 2	5 5 5 5
1S 475E	5	4	.1	2	2 2	5 5 5 5
1S 500E	6	5	.1	2	2 2	5 5 5 5
1.5S 350W	23	8	.2	5	2 2	5 5 5 5
1.5S 325W	7	6	.1	3	2 2	5 5 5 5
1.5S 300W	5	4	.1	3	2 2	5 5 5 5
1.5S 275W	5	5	.1	3	2 2	5 5 5 5
1.5S 250W	4	6	.1	2	2 2	5 5 5 5
1.5S 225W	5	5	.1	2	2 2	5 5 5 5
1.5S 200W	4	5	.1	2	2 2	5 5 5 5
1.5S 175W	5	5	.1	2	2 2	5 5 5 5
1.5S 150W	7	6	.1	2	2 2	5 5 5 5
1.5S 125W	4	4	.1	2	2 2	5 5 5 5
1.5S 100W	5	4	.1	2	2 2	5 5 5 5
1.5S 75W	5	5	.1	2	2 2	5 5 5 5
STD S-1/AU-0.5	123	114	33.9	121	78	515

RIO ALGOM

PROJECT # 8808

FILE # 84-1583

PAGE 5

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
1.5S 50W	5	6	.2	4	2	5
1.5S 25W	4	5	.1	2	2	2
1.5S 0E	4	5	.1	2	2	2
1.5S 25E	6	4	.1	2	2	2
1.5S 50E	13	4	.1	4	2	2
1.5S 75E	6	4	.1	2	2	2
1.5S 100E	4	5	.1	2	2	2
1.5S 125E	9	4	.1	2	2	2
1.5S 150E	8	6	.1	2	2	2
1.5S 175E	5	6	.1	2	2	2
1.5S 200E	7	5	.1	2	2	2
1.5S 225E	5	4	.1	2	2	2
1.5S 250E	9	4	.1	2	2	2
1.5S 275E	3	5	.1	2	2	2
1.5S 300E	7	5	.1	2	2	2
1.5S 325E	4	3	.1	2	2	2
1.5S 350E	5	4	.1	2	2	2
1.5S 375E	4	3	.1	2	2	2
1.5S 400E	3	3	.1	2	2	2
1.5S 425E	8	3	.1	2	2	2
1.5S 450E	9	3	.1	2	2	2
1.5S 475E	8	3	.1	2	2	2
1.5S 500E	5	2	.1	2	2	2
2S 425W	12	4	.1	6	2	2
2S 400W	47	9	.5	9	2	2
2S 375W	33	11	.3	14	2	2
2S 350W	7	4	.1	2	2	2
2S 325W	7	3	.1	2	2	2
2S 300W	5	3	.1	2	2	2
2S 275W	7	2	.1	2	2	2
2S 250W	5	2	.1	2	2	2
2S 225W	5	2	.1	2	2	2
2S 200W	6	2	.1	2	2	2
2S 175W	6	1	.1	2	2	2
2S 150W	6	5	.1	2	2	2
2S 125W	6	4	.1	2	2	2
2S 100W	4	1	.1	2	2	2
STD S-1/AU-0.5	124	117	34.9	124	78	510

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
2S 75W	5	4	.1	3	2	5
2S 50W	4	1	.1	2	2	5
2S 25W	5	4	.1	2	2	5
2S 0E	7	2	.1	2	2	15
2S 25E	5	1	.1	2	2	5
2S 50E	5	4	.1	2	2	5
2S 75E	7	4	.1	2	2	5
2S 100E	5	2	.1	2	2	5
2S 125E	7	2	.1	2	2	5
2S 150E	4	4	.1	2	2	5
2S 175E	5	3	.1	3	2	5
2S 200E	6	1	.2	2	2	5
2S 225E	8	4	.4	4	2	5
2S 250E	5	2	.1	3	2	15
2S 275E	6	1	.1	2	2	5
2S 300E	5	3	.1	3	2	25
2S 325E	5	2	.1	2	2	15
2S 350E	4	1	.1	2	2	5
2S 375E	6	4	.1	4	2	30
2S 400E	5	3	.1	2	2	5
2S 425E	7	5	.1	2	2	5
2S 450E	3	1	.1	2	2	15
2S 475E	5	2	.1	2	2	5
2S 500E	5	3	.1	2	2	5
2.5S 500W	17	8	.3	4	2	30
2.5S 475W	30	5	.5	4	3	15
2.5S 450W	20	6	.2	2	3	5
2.5S 425W	22	14	.3	5	3	5
2.5S 400W	15	6	.2	9	2	10
2.5S 375W	34	5	.3	2	2	5
2.5S 350W	11	5	.1	7	2	5
2.5S 325W	7	2	.1	3	2	5
2.5S 300W	5	3	.2	3	2	5
2.5S 275W	5	5	.1	5	2	5
2.5S 250W	5	3	.1	5	2	5
2.5S 225W	13	4	.1	3	3	15
2.5S 200W	6	6	.1	3	2	5
STD S-1/AU-0.5	124	117	33.0	125	84	510

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PAGE 7

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
2.5S 175W	12	4	.1	4	2	5
2.5S 150W	7	4	.1	4	2	5
2.5S 125W	6	4	.1	3	2	5
2.5S 100W	7	4	.1	2	2	5
2.5S 75W	6	7	.1	3	2	5
2.5S 50W	5	3	.1	3	2	25
2.5S 25W	5	5	.1	3	2	5
2.5S 0E	7	4	.1	3	2	5
2.5S 25E	7	2	.1	3	2	5
2.5S 50E	6	4	.1	2	2	5
2.5S 75E	7	1	.1	4	2	5
2.5S 100E	6	6	.1	4	2	5
2.5S 125E	6	4	.1	5	2	5
2.5S 150E	7	3	.1	5	2	5
2.5S 175E	7	3	.1	2	2	5
2.5S 200E	7	4	.1	2	2	10
2.5S 225E	6	4	.1	2	2	5
2.5S 250E	6	1	.1	2	2	5
2.5S 275E	8	2	.1	2	2	5
2.5S 300E	7	3	.1	2	2	5
2.5S 325E	12	4	.2	4	2	5
2.5S 350E	6	1	.1	2	2	10
2.5S 375E	8	4	.1	4	2	25
2.5S 400E	9	2	.1	4	2	5
2.5S 425E	7	2	.1	2	2	5
2.5S 450E	8	1	.1	2	2	5
2.5S 475E	6	3	.1	2	2	5
2.5S 500E	5	1	.1	2	2	5
3S 450W	18	6	.1	2	2	5
3S 425W	17	6	.1	2	2	5
3S 400W	18	5	.1	2	2	5
3S 375W	25	6	.1	3	2	5
3S 350W	13	3	.2	6	2	5
3S 325W	15	5	.1	4	2	5
3S 300W	27	7	.1	4	2	5
3S 275W	9	2	.1	5	2	5
3S 250W	10	4	.1	5	2	5
STD S-1/AU-0.5	125	116	34.8	128	79	510

## RIO ALGOM PROJECT # 8808 FILE # 84-1583

PAGE 8

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
3S 225W	9	7	.3	7	2	5
3S 200W	7	5	.3	5	3	5
3S 175W	7	4	.1	5	2	5
3S 150W	7	5	.1	6	2	5
3S 125W	6	5	.1	5	2	5
3S 100W	10	7	.1	6	2	5
3S 75W	6	5	.1	3	2	5
3S 50W	8	4	.1	5	2	5
3S 25W	4	4	.1	2	2	5
3S 0E	7	5	.1	6	2	5
3S 25E	5	4	.1	2	2	5
3S 50E	7	4	.1	3	2	5
3S 75E	7	3	.1	5	2	5
3S 100E	6	4	.1	5	2	5
3S 125E	7	5	.1	8	2	5
3S 150E	6	2	.1	4	2	5
3S 175E	8	8	.1	5	2	5
3S 200E	9	6	.1	5	2	5
3S 225E	7	3	.1	2	2	5
3S 250E	8	2	.1	3	2	5
3S 275E	7	4	.1	7	2	5
3S 300E	7	1	.1	3	2	5
3S 325E	7	3	.1	4	2	5
3S 350E	7	1	.1	4	2	5
3S 375E	8	4	.1	4	2	5
3S 400E	9	1	.1	5	2	5
3S 450E	13	6	.1	4	2	5
3S 475E	13	4	.1	5	2	5
3S 500E	6	2	.1	2	2	5
4S 500W	6	2	.1	2	2	5
4S 475W	15	5	.1	3	2	5
4S 450W	25	6	.1	2	2	5
4S 425W	9	5	.3	2	2	5
4S 400W	7	4	.1	4	2	5
4S 375W	12	5	.1	4	2	5
4S 350W	8	6	.2	3	2	5
4S 325W	8	4	.1	3	2	5
STD S-1/AU-0.5	124	115	35.5	127	82	530

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SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
4S 300W	8	5	.5	2	2	5
4S 275W	8	6	.2	2	2	5
4S 250W	4	5	.1	2	2	5
4S 225W	9	3	.1	2	2	5
4S 200W	16	6	.1	2	2	5
4S 175W	3	3	.1	2	2	5
4S 150W	2	4	.1	2	2	5
4S 125W	4	1	.1	2	2	5
4S 100W	5	4	.1	2	2	5
4S 75W	4	5	.1	2	2	5
4S 50W	28	8	.2	2	2	5
4S 25W	6	3	.1	2	2	5
4S 0E	3	3	.1	2	2	5
4S 25E	5	3	.1	2	2	5
4S 50E	5	3	.1	2	2	5
4S 75E	2	2	.1	2	2	5
4S 100E	9	2	.1	2	2	5
4S 125E	9	5	.1	2	2	5
4S 150E	3	2	.1	2	2	5
4S 175E	4	1	.1	2	2	5
4S 200E	8	5	.1	2	2	5
4S 225E	3	1	.1	2	2	5
4S 250E	3	2	.1	2	2	5
4S 275E	3	1	.2	2	2	5
4S 300E	3	3	.1	2	2	5
4S 325E	3	2	.1	2	2	5
4S 350E	3	2	.1	2	2	5
4S 375E	3	4	.1	2	2	5
4S 400E	5	4	.1	2	2	5
4S 425E	7	2	.1	2	2	5
4S 450E	5	4	.1	2	2	5
4S 475E	5	1	.1	2	2	5
4S 500E	5	4	.1	2	2	5
5S 550W	4	2	.1	2	2	5
5S 525W	4	3	.1	2	2	5
5S 500W	8	4	.1	2	2	5
5S 475W	5	3	.1	2	2	5
STD S-1/AU-0.5	126	118	33.0	122	83	510

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PAGE 10

SAMPLE#	CU PPM	FB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
5S 450W	8	5	.2	3	2	5
5S 425W	7	5	.1	2	2	5
5S 400W	13	7	.1	2	2	5
5S 375W	18	8	.1	2	2	5
5S 350W	14	5	.1	2	2	5
5S 325W	9	6	.1	3	2	5
5S 300W	5	4	.1	2	2	5
5S 275W	5	4	.1	2	2	5
5S 250W	7	6	.1	2	2	5
5S 225W	15	5	.1	4	2	5
5S 200W	12	8	.1	4	2	5
5S 175W	6	3	.1	2	2	5
5S 150W	8	6	.1	2	2	5
5S 125W	12	9	.1	2	2	5
5S 100W	5	6	.1	2	2	5
5S 75W	8	4	.1	2	2	5
5S 50W	14	5	.1	2	2	5
5S 25W	24	11	.1	2	2	5
5S 0E	34	8	.1	2	2	5
5S 25E	21	7	.1	2	2	5
5S 50E	39	12	.2	2	2	5
5S 75E	18	4	.1	2	2	5
5S 100E	13	5	.1	2	2	5
5S 125E	13	5	.1	2	2	5
5S 150E	31	8	.2	2	2	5
5S 175E	22	7	.1	2	2	5
5S 200E	17	4	.2	2	2	5
5S 225E	15	6	.2	2	2	5
5S 250E	33	6	.3	2	2	5
5S 275E	15	5	.2	2	2	5
5S 300E	15	7	.2	3	2	5
5S 325E	8	3	.1	2	2	5
5S 350E	9	3	.1	2	2	5
5S 375E	8	5	.3	2	2	5
5S 400E	7	5	.1	2	2	5
5S 425E	6	6	.1	2	2	5
5S 450E	5	4	.1	2	2	5
STD S-1/AU-0.5	123	116	31.9	118	80	520

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SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
5S 475E	7	6	.1	2	2	5
5S 500E	5	5	.1	4	2	5
6S 600W	8	7	.1	2	2	5
6S 575W	7	3	.1	2	2	5
6S 550W	8	6	.1	2	2	5
6S 525W	7	4	.1	2	2	5
6S 500W	5	6	.1	7	2	5
6S 475W	5	5	.1	4	2	5
6S 450W	5	4	.2	2	2	5
6S 425W	3	3	.1	3	2	5
6S 400W	6	5	.1	6	2	5
6S 375W	9	4	.1	2	2	5
6S 350W	7	2	.1	5	2	5
6S 325W	8	3	.1	7	3	5
6S 300W	9	3	.2	7	4	5
6S 275W	32	11	.1	9	2	5
6S 250W	18	3	.1	5	2	5
6S 225W	24	10	.1	7	2	5
6S 200W	16	7	.1	2	2	5
6S 175W	4	2	.1	3	2	5
6S 150W	9	5	.1	4	2	5
6S 125W	8	7	.1	2	2	5
6S 100W	9	2	.1	2	2	5
6S 50W	4	1	.1	9	3	5
6S 25W	10	6	.1	4	2	5
6S 0E	6	1	.1	4	2	5
6S 25E	6	5	.1	5	2	5
6S 50E	5	2	.1	5	2	5
6S 75E	6	4	.1	3	2	5
6S 100E	5	2	.1	4	2	5
6S 125E	6	7	.1	5	2	5
6S 150E	5	4	.1	6	2	5
6S 175E	5	1	.1	5	2	5
6S 200E	4	3	.1	4	2	5
6S 225E	6	3	.1	5	2	5
6S 250E	6	4	.1	6	2	5
6S 275E	4	2	.1	5	2	5
STD S-1/AU-0.5	124	117	34.0	121	77	520

## RIO ALGOM PROJECT # 8808

PAGE 12

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
6S 300E	5	6	.1	2	2	5
6S 325E	3	3	.1	2	2	5
6S 350E	7	3	.1	4	2	5
6S 375E	7	5	.1	2	2	5
6S 400E	4	6	.1	2	2	5
6S 425E	5	4	.1	4	2	5
6S 450E	6	7	.1	2	2	5
6S 475E	7	3	.1	7	2	5
6S 500E	6	7	.1	3	2	5
7S 650W	19	12	.1	2	2	15
7S 625W	7	9	.1	2	2	5
7S 600W	6	5	.1	6	2	5
7S 575W	7	5	.1	2	2	10
7S 550W	8	11	.1	2	2	5
7S 525W	7	5	.1	7	2	5
7S 500W	4	2	.1	5	2	5
7S 475W	3	1	.1	2	2	5
7S 450W	6	5	.1	2	2	5
7S 425W	6	3	.1	2	2	5
7S 400W	5	4	.4	4	2	5
7S 375W	7	3	.1	5	2	5
7S 350W	8	1	.1	7	2	5
7S 325W	4	1	.1	4	2	5
7S 300W	6	1	.2	11	2	5
7S 275W	8	5	.1	9	2	5
7S 250W	5	5	.1	6	2	5
7S 225W	4	1	.1	7	2	10
7S 200W	7	9	.4	6	2	5
7S 175W	5	4	.1	2	2	5
7S 150W	7	3	.1	4	2	10
7S 125W	25	4	.1	11	2	5
7S 100W	5	3	.1	4	2	5
7S 75W	10	6	.1	2	2	5
7S 50W	6	1	.1	4	2	5
7S 25W	18	7	.2	6	2	5
7S 0E	8	3	.2	8	3	5
7S 25E	18	5	.3	11	3	5
STD S-1/AU-0.5	125	118	34.4	130	86	500

## RIO ALGOM PROJECT # 8808

PAGE 13

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
7S 50E	11	4	.2	3	4	5
7S 75E	10	6	.1	2	3	5
7S 100E	4	4	.1	2	2	5
7S 125E	7	4	.1	5	3	5
7S 150E	7	6	.1	2	2	5
7S 175E	8	7	.1	2	2	5
7S 200E	7	11	.1	2	2	5
7S 225E	6	8	.1	2	2	5
7S 250E	6	4	.1	2	2	5
7S 275E	4	3	.1	2	2	5
7S 300E	5	6	.1	2	2	5
7S 325E	4	5	.1	2	2	5
7S 350E	15	7	.1	2	2	5
7S 375E	9	6	.1	2	2	5
7S 400E	5	8	.1	2	2	5
7S 425E	6	7	.1	2	2	5
7S 450E	6	7	.1	2	2	5
7S 475E	5	5	.1	2	2	5
7S 500E	14	5	.1	2	2	5
8S 700W	15	18	.1	2	2	5
8S 650W	4	9	.1	2	2	5
8S 625W	7	10	.1	2	2	5
8S 600W	8	9	.1	2	2	5
8S 575W	8	8	.1	2	2	5
8S 550W	14	11	.1	2	2	5
8S 525W	5	5	.1	2	2	5
8S 500W	6	5	.1	2	2	5
8S 475W	6	4	.1	2	2	5
8S 450W	6	4	.1	2	2	5
8S 425W	11	7	.1	2	2	5
8S 400W	5	5	.1	5	2	5
8S 375W	8	5	.1	2	2	5
8S 350W	6	5	.1	2	2	5
8S 325W	6	4	.1	2	2	5
8S 300W	6	7	.1	2	2	5
8S 275W	8	7	.1	2	2	5
8S 250W	10	8	.1	2	2	5
STD S-1/AU-0.5	126	119	32.1	143	81	530

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FILE # 84-1583

PAGE 14

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
8S 225W	6	6	.4	6	2	5
8S 200W	4	3	.1	5	2	5
8S 175W	4	3	.1	4	2	5
8S 150W	4	3	.1	4	2	5
8S 125W	12	7	.1	3	2	5
8S 100W	6	6	.2	5	2	5
8S 75W	18	9	.2	2	2	5
8S 50W	9	5	.1	10	2	5
8S 25W	7	6	.1	8	2	5
8S 0E	10	7	.1	7	2	5
8S 25E	6	1	.1	2	2	5
8S 50E	5	4	.1	2	2	5
8S 75E	5	2	.1	4	2	5
8S 100E	5	1	.1	7	2	5
8S 125E	9	8	.1	4	2	5
8S 150E	6	7	.1	6	2	5
8S 175E	3	3	.1	4	2	5
8S 200E	5	1	.1	2	2	5
8S 225E	6	4	.1	3	2	5
8S 250E	16	4	.1	5	2	5
8S 275E	5	2	.1	2	2	5
8S 300E	6	2	.1	2	2	5
8S 325E	27	10	.1	10	2	5
8S 350E	10	2	.1	8	2	5
8S 375E	7	3	.1	5	2	5
8S 400E	8	4	.3	10	2	5
8S 425E	5	3	.1	7	2	5
8S 450E	6	3	.1	8	2	5
8S 475E	6	7	.1	6	2	5
8S 500E	3	2	.1	7	2	5
9S 700W	7	6	.1	8	2	5
9S 675W	8	1	.1	8	2	5
9S 650W	8	2	.1	8	2	5
9S 625W	7	2	.1	5	2	5
9S 600W	6	1	.1	8	2	5
9S 575W	11	6	.1	10	2	5
9S 550W	12	5	.1	6	2	5
STD S-1/AU-0.5	124	117	33.4	124	81	520

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
9S 525W	9	8	.3	8	2	5
9S 500W	8	7	.1	5	2	5
9S 475W	9	6	.1	5	2	5
9S 450W	8	7	.1	5	2	5
9S 425W	7	4	.1	5	2	5
9S 400W	9	8	.1	4	2	5
9S 375W	8	7	.1	2	2	5
9S 350W	8	8	.1	2	2	5
9S 325W	11	6	.1	3	2	5
9S 300W	8	6	.1	2	2	5
9S 275W	8	7	.1	4	2	5
9S 250W	12	7	.1	2	2	5
9S 225W	9	8	.1	4	2	5
9S 200W	9	7	.1	4	2	5
9S 175W	11	6	.1	5	2	5
9S 150W	8	9	.1	3	2	5
9S 125W	6	7	.1	6	2	5
9S 100W	18	10	.1	2	2	5
9S 75W	7	4	.1	3	2	5
9S 50W	9	8	.1	4	2	5
9S 25W	4	5	.1	2	2	5
9S 0E	7	3	.1	4	2	5
9S 25E	8	5	.1	4	2	5
9S 50E	7	4	.1	2	2	5
9S 75E	8	3	.1	3	2	5
9S 100E	22	15	.1	4	2	5
9S 125E	8	6	.1	4	2	5
9S 150E	6	5	.1	2	2	5
9S 175E	7	3	.1	2	2	5
9S 200E	6	4	.1	2	2	5
9S 225E	11	6	.1	4	2	5
9S 250E	11	2	.1	2	2	5
9S 275E	15	6	.1	2	2	5
9S 300E	27	10	.1	3	2	5
9S 325E	20	6	.1	4	2	5
9S 350E	10	3	.1	2	2	5
9S 375E	7	7	.1	4	2	5
STD S-1/AU-0.5	123	116	34.4	124	80	510

RIO ALGOM PROJECT # 8808 FILE # 84-1583

PAGE 16

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
9S 400E	14	10	.1	4	2	5
9S 425E	6	4	.1	3	2	5
9S 450E	8	6	.1	3	2	5
9S 475E	7	5	.1	2	2	5
9S 500E	6	7	.1	3	2	5
10S 700W	7	5	.1	2	2	5
10S 675W	5	4	.1	2	2	5
10S 650W	10	11	.1	2	2	5
10S 625W	7	6	.1	2	2	5
10S 600W	7	8	.1	3	2	5
10S 575W	5	8	.1	3	2	5
10S 550W	9	4	.1	4	2	5
10S 525W	10	5	.1	5	2	5
10S 500W	6	4	.1	3	2	5
10S 475W	12	6	.1	2	2	5
10S 450W	7	8	.1	4	2	5
10S 425W	9	4	.1	7	2	5
10S 400W	7	5	.1	5	2	5
10S 375W	7	5	.2	3	2	5
10S 350W	8	9	.1	6	2	5
10S 325W	4	1	.1	5	2	5
10S 300W	13	5	.2	2	2	5
10S 275W	6	3	.1	5	2	5
10S 250W	11	4	.3	0	2	5
10S 225W	11	7	.3	9	2	5
10S 200W	9	9	.1	5	2	5
10S 175W	9	6	.1	3	2	5
10S 150W	6	8	.1	4	2	5
10S 125W	7	7	.1	4	2	5
10S 100W	5	4	.1	6	2	5
10S 75W	5	2	.1	3	2	5
10S 50W	4	4	.1	4	2	5
10S 25W	6	5	.1	5	2	5
10S 0E	7	6	.1	9	2	5
10S 25E	5	6	.1	4	2	5
10S 50E	13	18	.1	7	2	5
10S 75E	7	4	.1	7	2	5
STD S-1/AU-0.5	125	118	34.0	122	77	510

RIO ALGOM

PROJECT # 8808

FILE # 84-1583

PAGE 17

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
10S 100E	6	7	.2	4	2	5
10S 125E	10	9	.1	3	2	5
10S 150E	4	2	.1	6	2	5
10S 175E	7	5	.1	5	2	5
10S 200E	31	9	.1	2	2	5
10S 225E	12	7	.1	3	2	15
10S 250E	5	4	.1	4	2	5
10S 275E	5	4	.1	2	2	5
10S 300E	14	6	.1	5	2	65
10S 325E	30	8	.1	5	2	5
10S 350E	24	10	.1	3	2	5
10S 375E	16	7	.1	3	2	5
10S 400E	6	5	.1	5	2	5
10S 425E	6	5	.1	4	2	5
10S 450E	5	3	.1	3	2	5
10S 475E	4	3	.1	4	2	5
10S 500E	5	5	.1	4	2	5
STD S-1/AU-0.5	124	117	31.7	125	80	510

A&E ANALYTICAL LABORATORIES LTD.  
852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 17 1984

DATE REPORT MAILED: July 20/84

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-3 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,Nb AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOIL AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER

RIO ALGOM PROJECT # 8808 FILE # 84-1596

PAGE 1

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
10N 500W	14	10	.2	5	2	5
10N 475W	15	9	.1	7	2	5
10N 450W	9	9	.1	8	2	5
10N 425W	13	8	.1	7	2	5
10N 400W	14	9	.2	7	2	5
10N 375W	12	9	.1	8	2	5
10N 350W	14	13	.3	5	2	5
10N 325W	12	11	.2	7	2	5
10N 300W	13	4	.2	6	2	5
10N 275W	13	7	.1	5	2	5
10N 250W	12	8	.1	5	2	5
10N 225W	13	11	.1	3	2	5
10N 200W	10	5	.1	5	2	5
10N 175W	10	9	.1	7	2	5
10N 150W	16	12	.2	6	2	5
10N 125W	8	7	.2	2	2	5
10N 100W	11	9	.2	5	2	30
10N 75W	12	7	.2	4	2	5
10N 50W	5	1	.2	2	2	5
10N 25W	14	21	.5	3	2	5
9N 0W	17	23	.3	2	4	5
9N 500W	9	11	.3	7	2	5
9N 475W	8	4	.3	4	2	5
9N 450W	11	3	.3	6	3	5
9N 425W	10	6	.2	9	3	5
9N 400W	9	6	.1	4	2	5
9N 375W	9	1	.3	2	2	5
9N 350W	9	6	.2	3	2	5
9N 325W	7	5	.2	2	2	5
9N 300W	13	6	.2	7	2	5
9N 275W	13	8	.2	5	2	5
9N 250W	7	7	.2	5	2	5
9N 225W	8	8	.3	6	2	5
9N 200W	9	7	.4	7	3	5
9N 175W	8	6	.2	7	2	5
9N 150W	12	5	.4	6	3	5
9N 125W	4	4	.3	2	3	5
STD S-1/AU-0.5	125	118	33.9	122	88	530

RIO ALGOM

PROJECT # 8808

FILE # 84-1596

PAGE 2

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
9N 100W	6	7	.1	2	2	5
9N 75W	4	2	.1	2	2	20
9N 50W	5	2	.1	3	2	5
9N 25W	5	12	.1	4	2	5
9N 0W	5	8	.1	6	2	5
8N 500W	13	12	.1	2	2	5
8N 475W	11	14	.1	8	2	5
8N 450W	10	12	.1	6	2	5
8N 425W	14	11	.1	6	2	5
8N 400W	9	10	.1	6	2	5
8N 375W	9	8	.1	6	3	5
8N 350W	10	16	.1	10	2	5
8N 325W	14	12	.1	8	2	5
8N 300W	9	14	.2	6	3	5
8N 275W	8	8	.1	7	2	5
8N 250W	11	14	.3	6	2	5
8N 225W	15	12	.1	8	2	5
8N 200W	9	11	.2	6	2	5
8N 175W	9	6	.1	3	2	5
8N 100W	3	5	.1	2	2	5
8N 75W	33	10	.1	2	2	5
8N 50W	5	4	.1	2	2	5
8N 25W	5	3	.1	3	2	5
8N 0W	19	11	.2	2	2	5
7N 500W	11	10	.2	6	2	5
7N 475W	12	9	.2	7	2	5
7N 450W	12	12	.1	7	3	5
7N 425W	8	12	.2	7	3	5
7N 400W	9	10	.2	6	3	5
7N 375W	12	14	.1	6	3	5
7N 350W	12	11	.2	5	3	5
7N 325W	10	8	.1	7	3	5
7N 300W	10	10	.1	5	2	5
7N 275W	10	7	.1	6	3	5
7N 250W	7	10	.1	2	3	5
7N 225W	4	4	.1	2	4	5
7N 175W	5	4	.1	2	2	5
STD S-1/AU-0.5	124	117	36.5	133	92	510

RIO ALGOM PROJECT # 8808 FILE # 84-1596

PAGE 3

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
7N 150W	12	10	.2	12	2	5
7N 125W	5	8	.1	5	2	5
7N 75W	6	2	.1	9	2	5
7N 50W	9	8	.2	8	2	5
7N 0W	8	4	.1	7	2	5
6N 500W	13	7	.1	8	2	5
6N 475W	10	8	.1	11	2	5
6N 450W	8	9	.1	7	2	5
6N 425W	8	9	.1	5	2	5
6N 400W	12	11	.1	8	2	5
6N 375W	6	9	.1	6	2	5
6N 350W	11	11	.1	7	2	5
6N 325W	6	2	.1	2	2	5
6N 300W	5	3	.1	5	2	5
6N 250W	8	7	.1	9	2	5
6N 225W	9	14	.2	7	2	5
6N 200W	6	2	.3	6	2	5
6N 125W	15	4	.3	5	3	10
6N 100W	7	7	.3	4	2	5
6N 75W	4	5	.1	5	2	5
6N 50W	5	4	.2	4	2	5
6N 25W	11	24	.2	2	2	5
6N 0W	5	7	.2	4	2	5
5N 375W	7	7	.1	4	2	5
5N 350W	3	2	.1	4	2	5
5N 325W	10	8	.2	7	2	5
5N 300W	12	5	.2	8	2	5
5N 275W	6	8	.3	5	2	5
5N 250W	3	6	.4	2	2	10
5N 225W	4	3	.1	3	2	5
5N 200W	3	2	.1	3	2	5
5N 175W	3	2	.1	2	2	480
5N 150W	7	1	.1	2	2	20
5N 125W	6	3	.1	3	2	5
5N 100W	5	4	.1	5	2	10
5N 75W	7	3	.2	3	2	5
5N 50W	5	8	.1	5	2	5
STD S-1/AU-0.5	121	118	36.0	134	86	520

RIO ALGOM

PROJECT # 8808

FILE # 84-1596

PAGE 4

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
5N 25W	6	1	.1	3	2	5
5N 0W	11	5	.1	2	2	5
4.5N 425W	5	3	.1	2	2	5
4.5N 400W	7	3	.1	2	2	5
4.5N 375W	4	1	.1	2	2	5
4.5N 350W	3	2	.1	2	2	5
4.5N 325W	8	2	.1	2	2	5
4.5N 300W	6	4	.1	2	2	5
4.5N 275W	6	1	.1	4	2	5
4.5N 250W	7	1	.2	2	2	5
4.5N 225W	7	1	.1	2	2	5
4.5N 200W	5	2	.1	2	2	5
4.5N 175W	13	7	.1	2	2	5
4.5N 150W	5	6	.2	2	2	5
4.5N 125W	4	4	.1	2	2	5
4.5N 100W	5	6	.1	2	2	5
4.5N 75W	9	7	.2	2	2	5
4.5N 50W	6	3	.3	2	2	5
4.5N 25W	3	3	.2	2	2	5
4.5N 0W	5	4	.2	2	2	5
4N 450W	5	2	.1	3	2	10
4N 425W	4	1	.2	2	2	5
4N 400W	4	2	.1	2	2	5
4N 375W	6	1	.1	2	2	5
4N 350W	21	2	.1	3	2	5
4N 325W	5	5	.1	3	2	5
4N 300W	9	6	.1	4	2	5
4N 275W	5	5	.1	2	2	5
4N 250W	6	7	.1	3	2	40
4N 225W	18	3	.2	2	2	5
4N 200W	7	1	.2	2	2	5
4N 175W	7	5	.2	3	2	245
4N 150W	4	1	.1	2	2	5
4N 125W	3	4	.1	3	2	10
4N 100W	5	5	.2	3	2	5
4N 75W	7	5	.3	3	2	5
4N 50W	5	5	.2	4	2	5
STD S-1/AU-0.5	123	116	35.1	126	87	520

RIO ALGOM

PROJECT # 8808

FILE # 84-1596

PAGE 5

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
4N 25W	5	3	.1	2	2	15
4N 0W	7	1	.1	2	2	5
3.5N 450W	7	7	.1	2	2	5
3.5N 425W	5	1	.1	2	2	5
3.5N 400W	2	5	.1	2	2	5
3.5N 375W	13	3	.1	2	2	5
3.5N 350W	13	4	.1	2	2	5
3.5N 325W	8	3	.2	2	2	5
3.5N 300W	7	7	.1	2	2	5
3.5N 275W	7	8	.1	3	2	5
3.5N 250W	5	2	.1	2	2	5
3.5N 200W	7	6	.2	3	2	5
3.5N 175W	6	6	.2	7	2	5
3.5N 150W	7	7	.2	9	2	5
3.5N 125W	12	12	.5	18	2	5
3.5N 100W	7	1	.2	2	2	25
3.5N 75W	9	3	.2	2	2	5
3.5N 50W	8	5	.1	3	2	5
3.5N 25W	13	7	.3	3	2	5
3.5N 0W	7	4	.1	4	2	5
3N 475W	6	5	.1	2	2	5
3N 450W	5	3	.1	2	2	5
3N 425W	7	3	.1	2	2	5
3N 400W	5	6	.1	2	2	5
3N 375W	14	5	.1	4	2	5
3N 350W	17	6	.2	2	2	45
3N 325W	9	12	.2	3	2	5
3N 300W	9	8	.1	3	2	5
3N 275W	16	5	.2	3	2	5
3N 250W	5	7	.1	5	2	5
3N 225W	9	1	.1	2	2	5
3N 200W	5	5	.2	4	2	5
3N 175W	5	5	.2	4	2	5
3N 150W	8	10	.3	11	2	5
3N 25W	10	10	.5	13	2	30
3N 0W	6	6	.3	5	2	5
2.5N 450W	6	3	.2	3	2	5
STD S-1/AU-0.5	125	118	35.8	130	89	510

RIO ALGOM

PROJECT # 8808

FILE # 84-1596

PAGE 6

SAMPLE#	CU PPM	FB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
2.5N 425W	18	7	.1	2	2	5
2.5N 400W	19	4	.1	2	2	5
2.5N 375W	5	5	.1	2	2	5
2.5N 350W	6	11	.1	2	2	5
2.5N 325W	8	5	.1	2	2	5
2.5N 300W	7	6	.1	2	2	5
2.5N 275W	8	5	.1	2	2	5
2.5N 250W	7	8	.1	2	2	5
2.5N 225W	9	5	.1	4	2	5
2.5N 200W	11	6	.2	10	2	20
2.5N 175W	13	19	.3	16	2	5
2.5N 150W	11	13	.1	12	2	5
2.5N 125W	9	10	.3	15	2	5
2.5N 100W	8	9	.2	7	2	10
2.5N 75W	7	8	.1	2	2	5
2.5N 50W	9	13	.2	7	2	5
2.5N 0W	13	12	.2	9	2	15
2N 475W	6	3	.1	2	2	5
2N 450W	6	6	.1	2	2	5
2N 425W	4	5	.1	2	2	5
2N 400W	6	2	.1	2	2	5
2N 375W	6	9	.1	2	2	5
2N 350W	6	5	.1	2	2	5
2N 325W	19	8	.1	7	2	5
2N 300W	26	41	.2	26	2	5
2N 275W	8	8	.1	9	2	5
2N 250W	9	12	.1	2	2	5
2N 225W	6	6	.1	2	2	5
2N 200W	4	7	.1	2	2	5
2N 175W	11	9	.2	3	2	5
2N 150W	24	6	.2	8	2	10
2N 125W	22	11	.2	6	2	5
2N 100W	6	10	.2	2	2	5
2N 75W	14	20	.3	2	2	40
2N 50W	9	9	.2	4	2	5
2N 25W	8	6	.3	4	2	5
2N 0W	6	7	.2	2	2	5
STD S-1/AU-0.5	124	117	34.2	122	94	510

RIO ALGOM PROJECT # 8808 FILE # 84-1596

PAGE 7

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
1.5N 450W	6	2	.1	2	2	55
1.5N 425W	10	1	.1	2	2	55
1.5N 400W	8	9	.1	5	2	55
1.5N 375W	5	1	.1	2	2	55
1.5N 350W	7	1	.1	18	2	5
1.5N 325W	12	6	.3	34	2	555
1.5N 300W	7	2	.1	10	2	555
1.5N 275W	6	4	.1	7	2	55
1.5N 250W	7	2	.1	6	2	55
1.5N 225W	6	1	.1	4	2	15
1.5N 200W	6	1	.1	6	2	55
1.5N 175W	7	14	.2	7	2	555
1.5N 150W	4	5	.1	6	2	55
1.5N 125W	9	2	.1	5	2	55
1.5N 100W	6	4	.1	6	2	15
1.5N 75W	8	1	.1	11	2	60
1.5N 50W	10	3	.1	11	2	115
1.5N 25W	23	21	.7	21	2	10
1.5N 0W	7	2	.1	4	2	5
1N 450W	4	1	.1	2	2	5
1N 425W	4	1	.1	2	2	55
1N 400W	8	3	.1	9	2	55
1N 375W	5	2	.1	2	2	55
1N 350W	7	1	.2	14	2	205
1N 325W	11	11	.1	30	2	5
1N 300W	12	5	.1	35	2	5
1N 275W	5	2	.1	8	2	555
1N 250W	9	14	.1	23	2	555
1N 225W	7	1	.1	8	2	55
1N 200W	6	1	.1	5	2	55
1N 175W	6	1	.1	5	2	55
1N 150W	5	4	.1	5	2	55
1N 125W	6	1	.1	6	2	55
1N 100W	5	1	.1	4	2	55
1N 75W	6	1	.1	3	2	5
1N 50W	7	4	.2	7	2	5
1N 25W	7	1	.1	6	2	5
STD S-1/AU-0.5	123	116	34.7	133	83	520

RIO ALGOM

PROJECT # 8808

FILE # 84-1596

PAGE 8

SAMPLE#	CU PPM	PB PPM	AG PPM	AS PPM	SB PPM	AU* PPB
1N OW	7	5	.1	2	2	5
0.5N 450W	6	6	.1	2	2	5
0.5N 425W	4	4	.1	2	2	5
0.5N 400W	5	6	.1	2	2	5
0.5N 375W	5	1	.1	6	2	5
0.5N 350W	11	12	.1	74	2	5
0.5N 325W	14	13	.1	83	2	5
0.5N 300W	20	18	.4	78	2	5
0.5N 275W	6	7	.1	3	2	5
0.5N 250W	4	2	.1	10	2	5
0.5N 225W	8	9	.1	11	2	5
0.5N 200W	6	4	.1	5	2	5
0.5N 175W	6	8	.3	10	2	10
0.5N 150W	7	10	.2	10	2	5
0.5N 125W	7	10	.2	5	2	5
0.5N 100W	5	9	.2	2	2	5
0.5N 75W	6	5	.1	2	2	5
0.5N 50W	4	7	.1	2	2	5
0.5N 25W	4	8	.1	2	2	5
0.5N OW	5	6	.1	2	2	5

STD S-1/AU-0.5 124 117 34.1 123 87 510

## Appendix III

COST STATEMENT

Gold Option

1984

PERSONNEL

R. M. Cann-2 days- July 8-9 @ \$105.00 = \$210.00

C. D. Spence-1 day- July 12 @ \$165.00 = \$165.00  
\$375.00Benefits - 25% X \$375.00 = \$93.75  
\$468.75 \$468.75TRANSPORT

Air Fare - Vancouver - Penticton - Vancouver

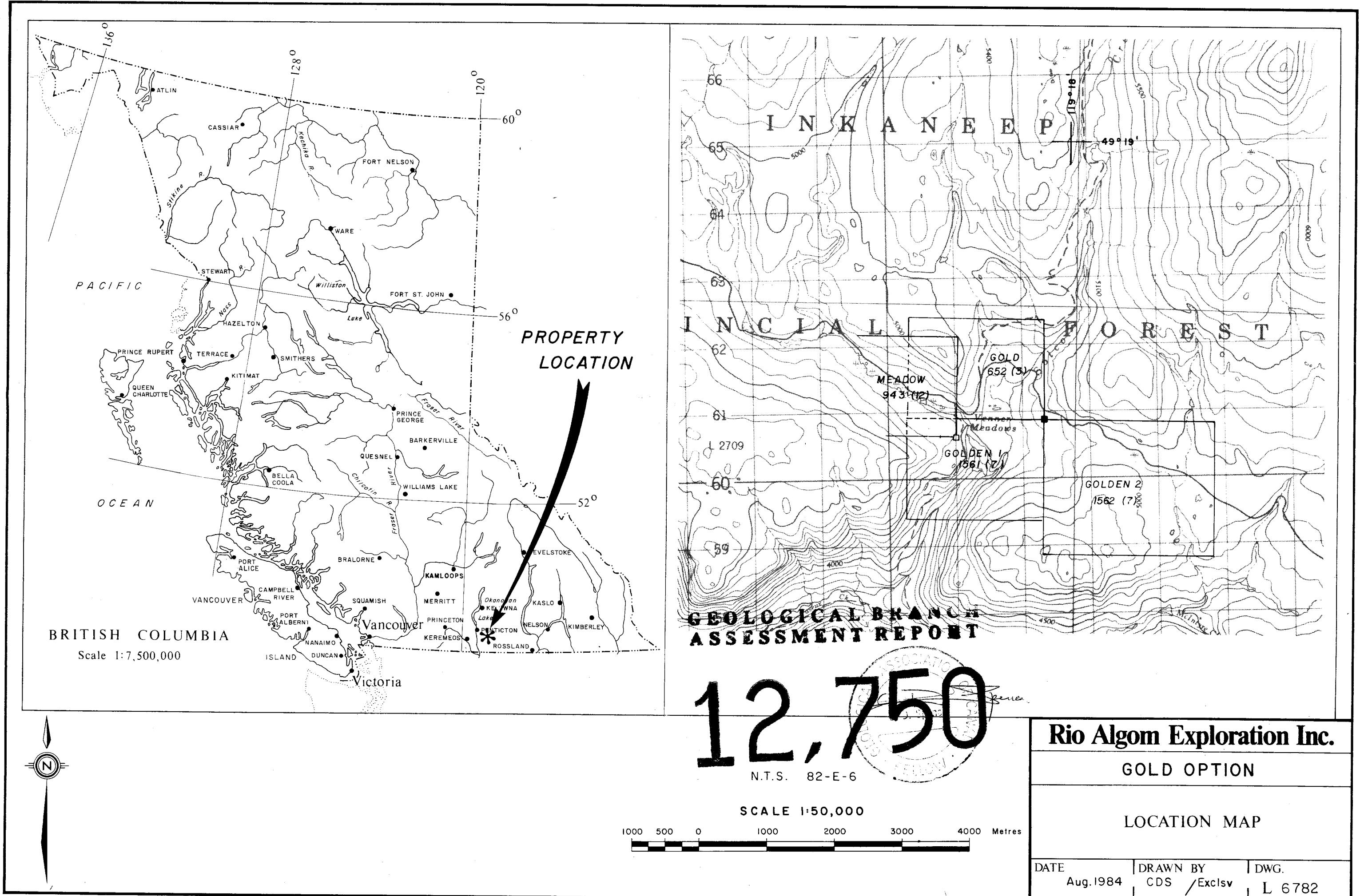
R. M. Cann \$162.00

CONTRACTORSVan Alphen Exploration Services  
\*Soil Sampling 916 sites \$5996.00REPORT PREPARATION

\$200.00

\$6826.75

\* Analytical Costs, incurred after 14 July to be applied in subsequent claim year.





GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**12,750**



Rio Algom Exploration Inc.


GOLD OPTION  
SOILS  
ppm As, ppb Au

DATE: July 1984 DRAWN BY CDS /ym DWG. GC 803IV

SCALE 1:2000  
Contour Interval 100 Feet  
50 0 50 100 150 Metres

> 10 ppm As  
> 10 ppb Au

N.T.S.  
83 E / 6 W





GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**12,750**



Rio Algom Exploration Inc.

GOLD OPTION

SOILS

ppm Ag, ppm Sb

DATE July 1984 DRAWN BY CDS ym. DWG GC-8033V

> 2 ppm Ag  
> 3 ppm Sb

> 2 ppm Ag  
> 3 ppm Sb