3831

GEOCHEMICAL REPORT

on the

Mac and Lair Groups

(Mac Group: PIT 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 77, 80, 82, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 159, 161, 162, 165, 166, 169, 170)

(Lair Group: PIT 57, 58, 59, 60, 160, 163, 164, 167, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202)

Twelve Miles South Southwest of Chukachida Lake, B.C.

Lat. 57° N ; Long. ~~127° W~~

94 E /6 E



Owned by: T.C. Scott

Work done for : SUMAC Mines Ltd.

Field Work

August 23, 1971 to August 30, 1971

By: T.C. Scott

Date: July 26, 1972.

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## Introduction

The Mac and Lair Groups of claims was staked on behalf of and by T.C. Scott during the period June 30 - August 23, 1971. Beginning on August 23 and continuing through to August 30, 1971, a reconnaissance soil and rock geochemical survey was carried out on the claim group. In addition, a detailed soil geochemical survey was carried out on a 100' x 100' grid.

Operations were conducted from a base camp located at the west end of Chukachida Lake which is 12 miles northeast of the claim groups.

The field crew commuted daily to the working area in a helicopter.

## Location and Access

The Mac and Lair Groups lie on the eastern flank of the Spatsizi Plateau in the Upper Stikine River area of northern British Columbia. The groups are adjacent to Lat. 57° 25' 30" North and Long. 127° 11' West. The elevation of the claim groups varies from 4,000 ft. to 6,250 ft. above mean sea level.

Access to the claim groups is by helicopter from one of the following lakes: Metsantan, Toodoggone or Chukachida. All of these can be serviced by float equiped aircraft. The closest road-serviced supply point is Dease Lake which lies 130 miles to the west.

## Climate and Topography

The project area is snow covered from early October until mid-June. Some patches of snow, especially in creek valleys, remain until late July. The brief summer is usually cool with frequent rain. However, the summer of 1971 was unusually dry and warm.


INDEX MAP

SHOWING LOCATION

OF

MAC and LAIR GROUPS

REFERENCE MAP

BRITISH COLUMBIA

3831 M-1

The claim groups occur on the northeast corner of a small range of mountains which occurs between Moosehorn and McClair Creeks, immediately north of Toodoggone River. The slopes range from 10° to 30° with some precipitous cliffs facing north and east. Vegetation on the claim groups consists of alpine meadow and tundra with minor amounts of "buck-brush". A fringe of dense alpine balsam and spruce occurs on the north and east slopes between elevations of 4,000 ft. and 5,000 ft. The alpine meadows and tundra region is frequently interrupted by solifluction slopes and talus. Bedrock is exposed along most of the ridge crest.

Base Map

The base map was prepared by the photographic enlargement of a 1:250,000 Federal Government topographic sheet to a scale of 1:63,360. This map was in turn enlarged a scale of 1" = 1,320' by drafting techniques. A contour interval of 500 ft. was used.

A second map, on a scale of 1 = 100', was prepared to display the results of a detailed soil geochemical survey. The location of this sampling grid with respect to the claim groups is shown on the base map.

Field Procedure:

1. Reconnaissance Geochemistry

   a. A series of soil samples were collected along the ridge crests and along the 5,500 ft. contour within the area of interest. The sample interval was paced to approximately 400 ft. and the locations were plotted on an air photograph for control. A plastic flag with a sample number was left at each sample station. At each station, holes were dug with a mattock and soil

samples from the "B" horizon were taken with a stainless steel trowel.

Each sample was placed in a high-wet-strength kraft soil sample bag labelled with the appropriate sample number.

b. A series of rock specimens were collected from outcrops along the ridges and along the 5,500 ft. contour within the area of interest. The sample interval was paced to approximately 400 ft. and the locations were plotted on an air photograph for control. A plastic flag with a sample number was placed at each sample site. One rock specimen measuring 2" x 2" x 2" was collected from each station and placed in high-wet-strength kraft soil sample bags which were labelled with the appropriate sample number. Each sample was cobbed so as to reduce the amount of weathered rock on the sample.

2. Detailed Geochemistry

A 100 ft. x 100 ft. grid was constructed within the area of interest to facilitate the collection of soil samples and plotting of results. A base line striking 115° was constructed by chain and compase technique. Cross lines of various lengths were constructed at right angles to the base line at 100 ft. intervals. Slope corrections were made during chaining which resulted in a square sampling pattern on a horizontal plane.

Sample stations were constructed every 100 ft. on the base line and the cross lines. Each sample station was marked by a small boulder to which a plastic flag, labelled with the grid coordinate, had been affixed.

Holes were dug at each station with a mattock and soil samples were taken with stainless steel trowels from the "B" horizon.

The soil samples were collected in high-wet-strength kraft soil sample bags labelled with the respective grid coordinates.

Sample Preparation

The soil samples were transported from the field to the base camp where they were dried and sieved through stainless steel screens to -80 mesh. The -80 mesh material was placed in coin envelopes labelled with the respective sample number and shipped to Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C., for analysis.

The rock samples were transported to the base camp, packaged and shipped to Chemex Labs without any preparation in the field. The following is an outline of the preparation for geochemical analysis of the rock samples at Chemex Labs.

PREPARATION PROCEDURE FOR ROCK GEOCHEM SAMPLES - Weighing less than 450 gms.

(1) Samples are sorted, recorded and dried @ approx. 120°F.

(2) Dried samples are processed to -1/8" through geochem crusher only.

(3) The entire crushed sample is pulverized to -100 mesh using rotary pulverizer.

(4) Pulverized sample is rolled 100 times to produce a homogeneous pulp.

(5) 0.5 grams of pulp is weighed into test tube for $HClO_4$-$HNO_3$ digestion and final analyses of ppm Cu, Mo, Pb, Zn, Ag etc. A 5 gram sample is digested to dryness with aqua-regia for the ppb gold analyses.

The Pulverizer and crusher are thoroughly cleaned between samples to reduce contamination problems.

Analytical Procedures

All of the samples were analysed for gold, silver and zinc. The following analytical procedures were used.

PROCEDURE FOR THE ANALYSIS OF TRACE GOLD IN SOIL AND SILT MATERIALS.

Step 1. The sample is dried at 110°F, sieved to -80 mesh and stored in a coin envelope.

Step 2. A 2 gm sample is weighed into a 100 ml beaker.

Step 3. 15 ml of aqua regia (3 parts HCl to 1 part $HNO_3$) is added to the pulp.

Step 4. After sitting for 15 minutes, the sample is heated to dryness.

Step 5. More aqua regia is added and the sample is again evaporated to dryness.

Step 6. The soluble salts are dissolved in 25% HCl and mixed.

Step 7. The gold is extracted as the bromide in 5 ml. of methyl isobutyl ketone.

Step 8. The organic layer is then analysed on the Atomic Absorption Spectrophotometer against prepared standards.

GEOCHEMICAL LABORATORY PROCEDURE FOR THE HANDLING AND ANALYSES OF SOIL AND SILT MATERIALS CONTAINING TRACES OF Cu, Mo, Zn, Ni and Co.

Step 1. Samples are dried @ 110°F and then sieved to -80 mesh consistency through a nylon and stainless steel sieve. Presieved materials are processed starting at Step 2.

Step 2. 0.50 grams of the dry pulp is weighed into a calibrated test tube.

Step 3. 3 mls. of perchloric acid and 1 ml. of nitric acid is added to sample.

Step 4. Samples are digested at low heat initially and then the temperature

is raised to 203°C. Digestion time 2 to 3 hours.

Step 5. Digested samples are cooled, made up to 25 ml. volume with distilled water and solutions are thoroughly mixed.

Step 6. Analyses for Cu, Mo, Zn, Ni and Co by Atomic Absorption procedures. Detection limits as per our brochure.

Bruce W. Brown
Manager Laboratory Division.

Soil Development

Although the area was glaciated relatively recently, field observations indicate that the soil is largely residual in character. The steeper slopes show a considerable amount of down-hill creep (solifluction) and talus occurs in several areas.

The soil profile is only partially developed but the $B_f$ horizon could still be recognized to ensure consistant sampling.

Rock Weathering

The degree to surface weathering of rock within this area varies greatly and increases proportionately to an increase in sulphide content and fracture density. Therefore, each rock specimen collected for geochemical analysis was cobbed such that only the least weathered material was sent for analysis.

Results

Statistical distributions of the results were obtained and the distributions were plotted as histograms. Because of the limited number of samples involved on the reconnaissance survey, the data collected on this survey were combined with those collected on an adjacent property of similar physiographical and geological environments (Moosehorn Group). This provided a larger population for the interpretation of the geochemical nature of the

area. The limits of the zinc anomalies were based on the distribution of zinc values obtained from the detailed soil geochemistry on the Mac and Lair Claim Groups.

Interpretation

Statistical distributions of the results were all found to be approximately log-normal and multi-modal. Since the standard statistical parameters have little meaning in the case of multi-modal distributions, these were not calculated.

The limits of background and anomalous populations were based on the natural grouping of values described by the multi-modal histograms (fig. 2). The mode containing the lowest values was considered to be background while the mode containing the highest values was considered to represent an anomalous condition.

1. Reconnaissance Geochemistry

a) Soil

Because of the limited number of samples involved, the data collected on this survey were combined with those collected on an adjacent property of similar physiographical and geological environments (Moosehorn Group). This provided a larger population for the interpretation of geochemical nature of this area. Past experience has shown that the background for Gold in this area is > 30 ppb, thus an arbitrary value of 1,000 ppb was used to define the lower limit of an anomalous condition.

b) Rock

Since only a limited number of rock samples were analysed geochemically the statistical distributions of the results were not calculated. However, the comparison of these results with the above soil results suggested that rock and soil geochemistry in this area is similar and that the results are in the same order of magnitude. Therefore, the background and anomalous conditions established for the reconnaissance soil geochemical survey was also used

for the reconnaissance rock geochemical survey.

The limits for zinc anomalies were based on the distribution of zinc values obtained from the detailed soil geochemistry below.

2. Detailed Soil Geochemistry

Knowing that these soil samples were from an anomalous zone, new statistical distributions were calculated to accommodate an elevation of the geochemical threshold in the ground underlying the sample grid. This was done in the form of histograms, as explained above. However, the statistical distribution of gold was also plotted and new anomalous limits were defined.

The distribution of the results of the reconnaissance geochemistry has outlined an elongate zone approximately 10,000 ft. long and 2,000 ft. wide that is anomalous in gold and silver. This is enclosed by a zinc anomaly.

The distribution of the results of the detailed geochemistry on the grid defines a zone 4,000 ft. long and 300 ft. wide that displays coincident zinc, silver and gold anomalies.

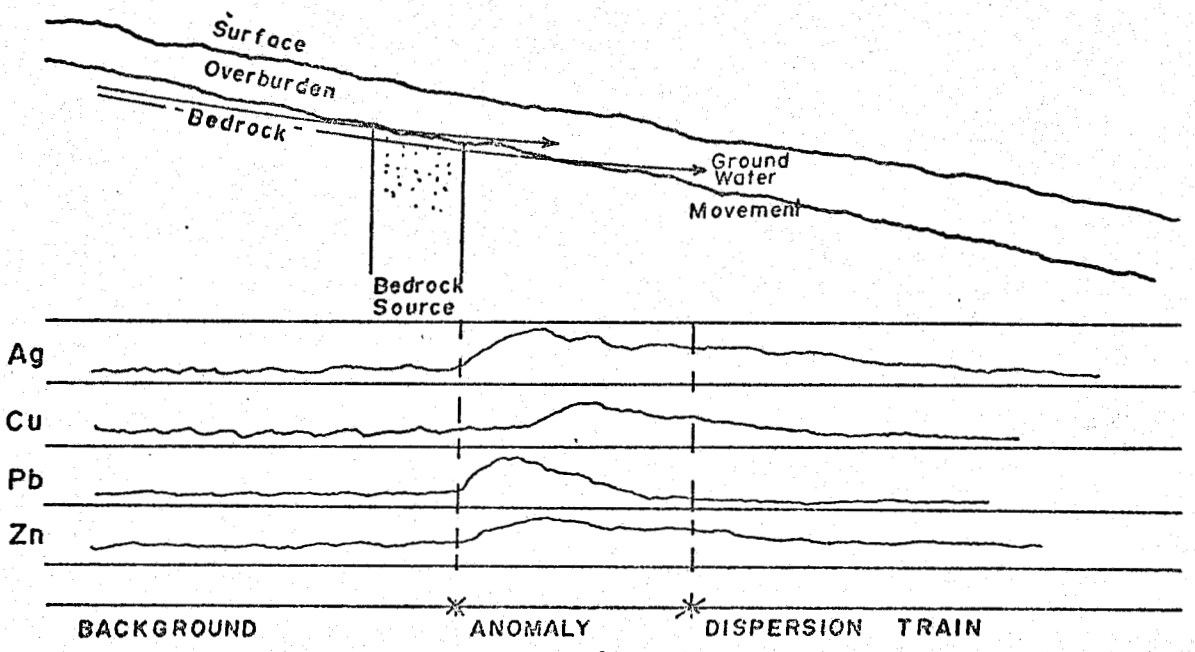
The ground water moving down-hill over the source disperses the metallic elements at different rates depending on the physiochemical nature of the ground water and the chemical nature of the elements involved. Thus the width and exact position of the source material is difficult to determine.

Two conclusions can be made from the distributions.

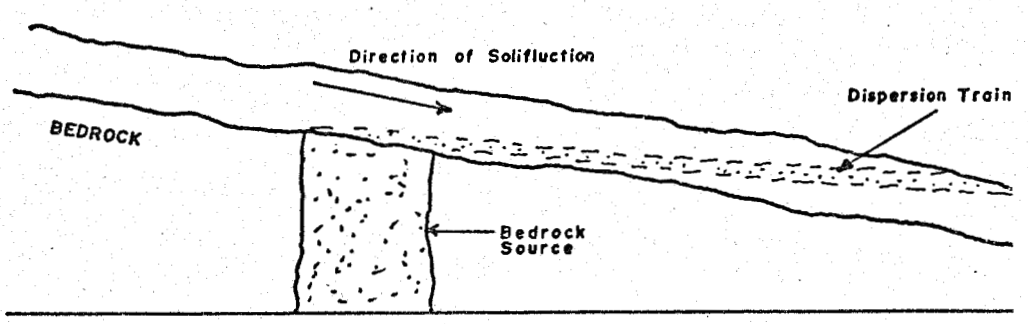
1. The anomalous condition in the soils are down-hill from the actual source.

2. There appears to be several sources from which the metals in question have been dispersed.

A typical profile would be as indicated in the following diagram :




Gold is dispersed from a source primarily by solifluction of residual material. A typical profile would be as indicated in the following diagram :



Conclusions

The reconnaissance rock and soil geochemistry has outlined an anomalous zinc approximately 10,000 ft. long and 2,000 ft. wide. Detailed soil geochemistry over part of this zone has delineated a zone of coincident anomalies in Zn, Ag and Au over a length of 4,000 ft. and width of 300 ft.

As experience in British Columbia to-date has shown, there is no direct relationship between the values attained from the geochemical analysis of soils and the metal content of the underlying bedrock.

Further investigation of the anomalous areas defined by this survey is warranted.

T. C. Scott.

Approved:
July 26, 1972.

Gordon R. Hilchey, P. Eng.

# DECLARATION OF EXPENSES

## Mac and Lair Groups

Men Employed on Survey

| | | | | | |
|---|---|---|---|---|---|
| Gordon Kifiak | Aug. 23 - 30 | 3 days | @$ 22.12* | = | $ 66.36 |
| Mohan Ramalingaswami | Aug. 23 - 30 | 5 days | @$ 23.08* | = | 115.40 |
| Brian Norris | Aug. 23 - 30 | 4 days | @$ 21.15* | = | 84.60 |
| Brent Patriquin | Aug. 23 - 30 | 5 days | @$ 18.27* | = | 91.35 |
| Karl Yeung | Aug. 23 - 30 | 4 days | @$ 21.15* | = | 84.60 |
| Barry Turner | Aug. 23 - 30 | 3 days | @$ 18.27* | = | 91.35 |
| T. Cameron Scott | Aug. 23 - 30 | 2 days | @$ 30.77* | = | 61.54 |
| Dr. T. Rodgers | | ½ day | @$100.00 | = | 50.00 |
| C. J. Sullivan | | ½ day | @$150.00 | = | 75.00 |
| | | 27 man days | | | |

Direct Field Expenditures (see Appendix) — 27 man days @$136.25 — $ 3,678.75

Chemical Analysis

| | | | |
|---|---|---|---|
| RGS samples | 121 samples (3 elements) | @$3.20 | $ 387.20 |
| RGS samples | 83 samples (3 elements) | @$3.80 | 315.40 |
| MGS samples | 340 samples (3 elements) | @$3.20 | 1,088.00 |

Grid Construction

33,900 line feet - 10 man days — -

(time and wages included in the above list of men employed)

Drafting, reproduction, typing, etc. — -

$ 6,189.46

* Rates include C.P.P., W.C.B., Vacation Pay and U.I.C. where applicable. Monthly rates were converted to daily rates (based on 26 day month).

Certified Correct T.C. Scott.

## Appendix

# DECLARATION OF QUALIFICATION

Thomas Cameron SCOTT

Education: - 4 years of University at U.B.C. towards a B.Sc. in Geology (major).

- requires Eng. 100 to complete B.Sc. degree.
- Geological and related courses completed:
    - Introductory Geology, Mineralogy, Mineralography, Structural Geology, Optical Mineralogy, Petrology, Petrography, Economic Geology, Geochemistry, Sedimentology, Theories of Ore Search, Mineral Evaluation, Rock Mechanics.

Experience: 1963, 1964 (Summers)

Newconex Canadian Exploration

- General reconnaissance
    - stream and soil geochemistry
    - prospecting
    - geological mapping

ref.: R. Knutsen (Toronto, Ontario)

1965, 1966 (Summers)

Noranda Exploration Ltd.

- General Reconnaissance - Party Chief
    - stream and soil geochemistry
    - geological mapping
- Detailed Property Work - Party Chief
    - soil geochemistry
    - sampling
    - geophysical surveys
    - road building
    - geological mapping
    - property evaluations

ref.: Dr. A. Soregaroli (Vancouver, B.C.)

1967 (Summer)

Northstar Copper Mines

- Detail Property Work - Party Chief

  - soil geochemistry
  - geological mapping
  - diamond drilling

ref.: Dr. W.H. White, P. Eng. (University of B.C.)

1968 (Spring)

West Coast Mining and Exploration

- Detailed geological mapping

ref.: H. Veerman, P. Eng. (West Vancouver)

1968 to 1969

Arbutus Mining and Exploration Ltd.

- in charge of the direction and execution of all exploration activities:

  - stream and soil geochemistry
  - prospecting
  - geological mapping
  - geophysical surveys
  - diamond drilling

ref.: H. Veerman, P. Eng. (West Coast Mining and Exploration)

1970 (6 months)

Frontier Explorations Ltd.

- in charge of the direction and execution of geological mapping, trenching, sampling and diamond drilling.

ref.: E.O. Chisholm, P. Eng. (Vancouver, B.C.)

1971 to-date

Sumitomo Metal Mining Canada Ltd.

- Party chief in charge of reconnaissance exploration.

  - stream and soil geochemistry
  - geological mapping

The above Declaration of Qualification is true and correct to the best of my knowledge.

July 26, 1972

G. R. Hilchey

Gordon R. Hilchey, P. Eng

# PITMAN PROJECT - 1971

## Direct Field Expenditures

| | |
|---|---|
| Camp Equipment | $ 4,257 |
| Fuel - gasoline | 2,912 |
| - fuel oil, propane | 399 |
| Catering | 9,351 |
| Communications | 1,506 |
| Transportation | 20,321 |
| Helicopter Rental | 41,913 |
| | $80,659 |

## Total Man Days

| Period | Days | No. of Men | Man Days |
|---|---|---|---|
| June 8 - Aug. 4 | 58 | 6 | 348 |
| Aug. 5 - Aug. 31 | 27 | 8 | 216 |
| Sept.1 - Sept. 7 | 7 | 4 | 28 |
| | | | 592 |

## Direct Field Expenditures per Man Day

$$\frac{\$80,659}{592} = \$136.25$$

## Mac and Lair Groups

Reconnaissance Geochemistry - Maps: Pitman 71-3a, b, c.

1. Gold: Plotting intervals 100, 500 and 1000 ppb were used.

2. Silver, Lead, Copper: Plotting intervals were based on analysis of respective histograms.

3. Zinc: Plotting interval based on zinc histogram of MGS Grid samples.

It was felt that the Mac and Lair Groups were physiographically and geologically similar to the Moosehorn Group, thus the results of reconnaissance sampling from both areas were combined to give a higher sample population.

## Mac and Lair Groups

Detailed Geochemistry - MGS Soil Grid

- Maps: Pitman 71-3a, b, c

1. Gold, Silver, Zinc: Plotting intervals used were based on analysis of respective histograms.

S/R Pitman - Log Normal Distribution of Ag in ppm.
- McClair and Moosehorn Anomalies - RGS + P13-413 to 558

| Class No. | Range from | Range to | Mid Point | Population |
|---|---|---|---|---|
| 1 | | .420 | .354 | 109 |
| 2 | .420 | .595 | .500 | 40 |
| 3 | .595 | .840 | .705 | |
| 4 | .840 | 1.18 | .999 | 22 |
| 5 | 1.18 | 1.66 | 1.41 | 18 |
| 6 | 1.66 | 2.36 | 1.99 | 20 |
| 7 | 2.36 | 3.34 | 2.71 | 15 |
| 8 | 3.34 | 4.72 | 3.98 | 10 |
| 9 | 4.72 | 6.65 | 5.60 | 14 |
| 10 | 6.65 | 9.40 | 7.95 | 9 |
| 11 | 9.40 | 13.3 | 11.2 | 2 |
| 12 | 13.3 | 18.7 | 15.7 | 7 |
| 13 | 18.7 | 26.4 | 22.3 | 4 |
| 14 | 26.4 | 37.5 | 31.5 | 3 |
| 15 | 37.5 | 52.5 | 42.5 | 273 Total |
| 16 | 52.5 | 74.5 | 62.5 | |
| 17 | 74.5 | 106.0 | 89.5 | |



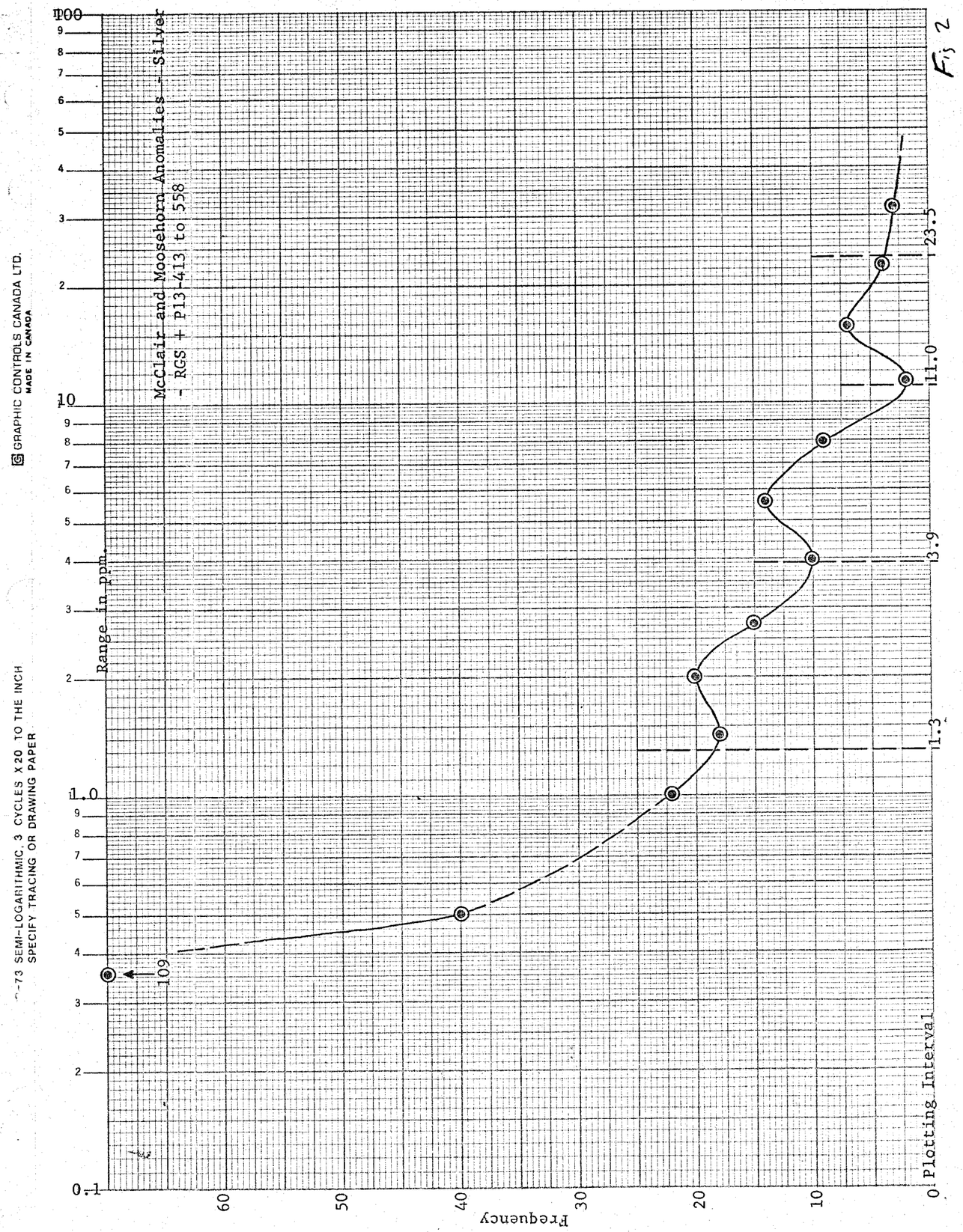



Fig 2

S/R Pitman - Log Normal Distribution of Zn in ppm.
- McClair Creek Anomaly, MGS Grid

| Class No. | Range from | to | Mid-Point | Population |
|---|---|---|---|---|
| 1 | 2.7 | 3.3 | 3.0 | |
| 2 | 3.3 | 4.1 | 3.7 | |
| 3 | 4.1 | 4.9 | 4.5 | |
| 4 | 4.9 | 6.1 | 5.5 | |
| 5 | 6.1 | 7.4 | 6.7 | |
| 6 | 7.4 | 9.1 | 8.2 | |
| 7 | 9.1 | 11.1 | 10.0 | |
| 8 | 11.1 | 13.5 | 12.2 | |
| 9 | 13.5 | 16.5 | 15.0 | |
| 10 | 16.5 | 20.2 | 18.3 | |
| 11 | 20.2 | 24.6 | 22.3 | |
| 12 | 24.6 | 30.1 | 27.2 | 1 |
| 13 | 30.1 | 36.7 | 33.2 | |
| 14 | 36.7 | 44.8 | 40.6 | 1 |
| 15 | 44.8 | 54.7 | 49.5 | 3 |
| 16 | 54.7 | 66.8 | 60.4 | 8 |
| 17 | 66.8 | 81.5 | 73.7 | 21 |
| 18 | 81.5 | 99.5 | 90.1 | 32 |
| 19 | 99.5 | 121.5 | 110.2 | 34 |
| 20 | 121.5 | 148.3 | 134.2 | 28 |
| 21 | 148.3 | 181.1 | 163.9 | 40 |
| 22 | 181.1 | 221.1 | 200.1 | 33 |
| 23 | 221.1 | 270.03 | 244.3 | 21 |
| 24 | 270.03 | 329.7 | 298.3 | 45 |
| 25 | 329.7 | 402.5 | 364.3 | 28 |
| 26 | 402.5 | 491.4 | 444.8 | 12 |
| 27 | 491.4 | 599.8 | 542.9 | 8 |
| 28 | 599.8 | 732.3 | 662.7 | 11 |
| 29 | 732.3 | 893.9 | 809.1 | 7 |
| 30 | 893.9 | 1091 | 987.6 | 3 |
| 31 | 1091 | 1332.1 | 1206 | 1 |
| 32 | 1332.1 | 1626.3 | 1472 | |
| 33 | 1626.3 | 1985.2 | 1794 | 1 |
| 34 | 1985.2 | 2423 | 2193 | |
| 35 | 2423 | 2958 | 2677 | |
| 36 | 2958 | 3611 | 3263 | |
| 37 | 3611 | 4409 | 3989 | 2 |

340 Total

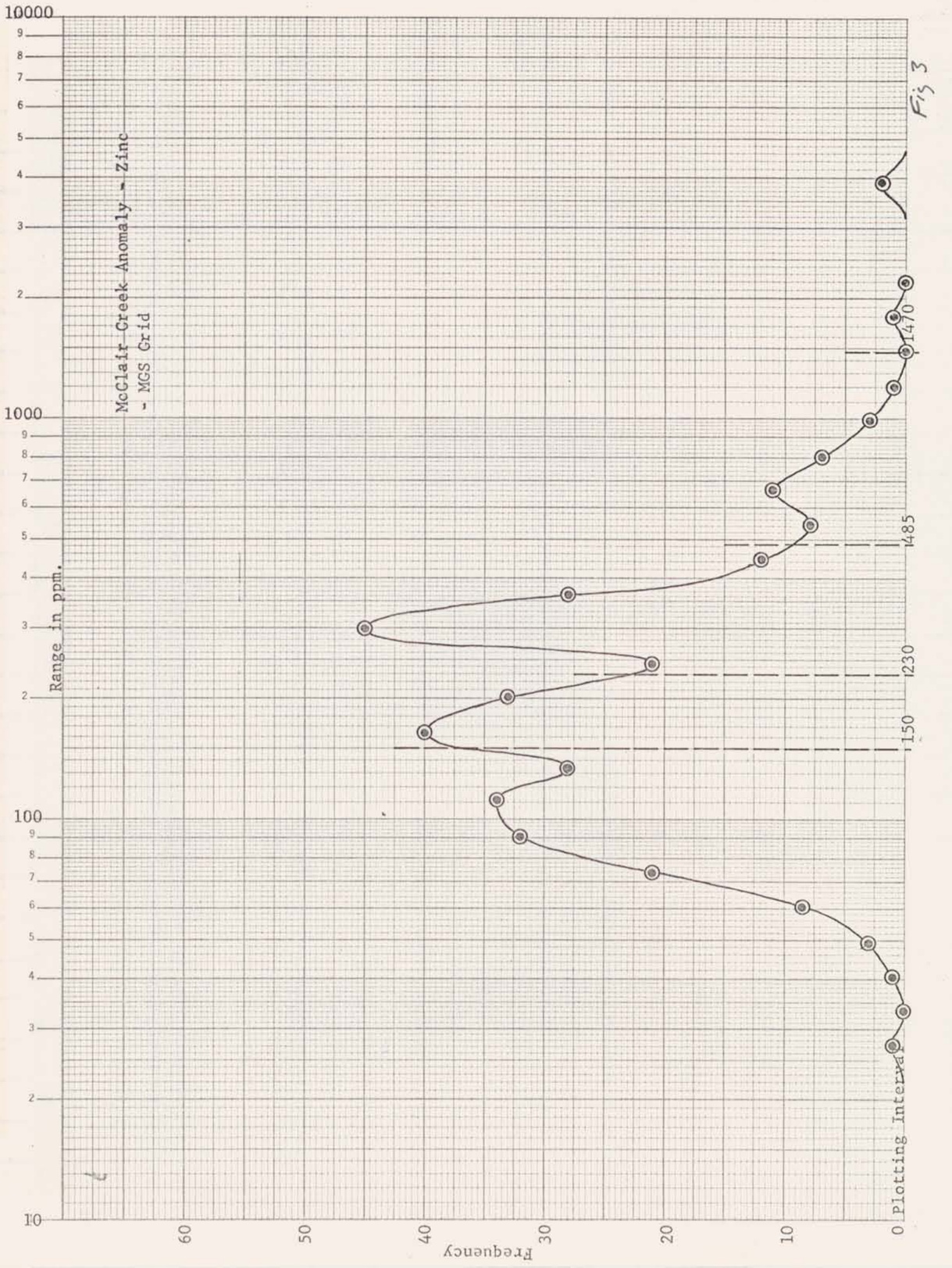
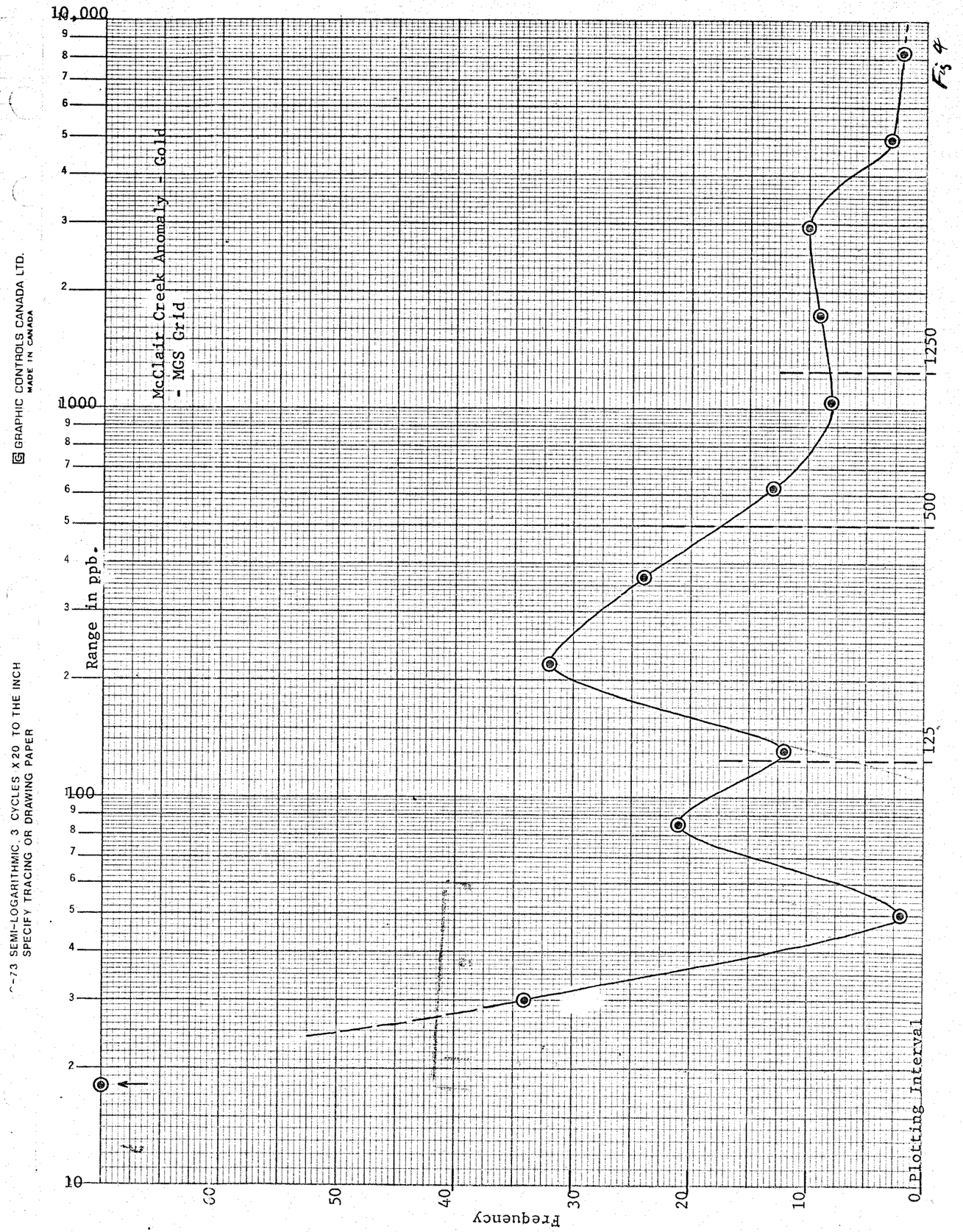



Fig 3

S/R Pitman - Log Normal Distribution of Au in ppb.
- McClair Creek Anomaly, MGS Grid

| Class No. | Range from | Range to | Mid Point | Population |
|---|---|---|---|---|
| 1 | 13.9 | 23.2(<30) | 18.0 | 170 |
| 2 | 23.3 | 39.0 | 30.0 | 34 |
| 3 | 39.1 | 65 | 50.5 | 2 |
| 4 | 66 | 102 | 85.0 | 21 |
| 5 | 103 | 171 | 131 | 12 |
| 6 | 172 | 284 | 220 | 32 |
| 7 | 285 | 482 | 368 | 24 |
| 8 | 483 | 805 | 620 | 13 |
| 9 | 806 | 1340 | 1040 | 8 |
| 10 | 1341 | 2260 | 1750 | 9 |
| 11 | 2261 | 3795 | 2930 | 10 |
| 12 | 3800 | 6400 | 4950 | 3 |
| 13 | 6410+ (>5000) | | 8250 | 2 |
| | | | | 340 Total |





S/R Pitman - Log Normal Distribution of Ag in ppm.
- McClair Creek Anomaly - MGS Grid

| Class No. | Range from | Range to | Mid Point | Population |
|---|---|---|---|---|
| 1 | | .420 | .354 | 41 |
| 2 | .420 | .595 | .500 | 44 |
| 3 | .595 | .840 | .705 | |
| 4 | .840 | 1.18 | .999 | 31 |
| 5 | 1.18 | 1.66 | 1.41 | 43 |
| 6 | 1.66 | 2.36 | 1.99 | 25 |
| 7 | 2.36 | 3.34 | 2.71 | 31 |
| 8 | 3.34 | 4.72 | 3.98 | 25 |
| 9 | 4.72 | 6.65 | 5.60 | 46 |
| 10 | 6.65 | 9.40 | 7.95 | 24 |
| 11 | 9.40 | 13.3 | 11.2 | 17 |
| 12 | 13.3 | 18.7 | 15.7 | 4 |
| 13 | 18.7 | 26.4 | 22.3 | 6 |
| 14 | 26.4 | 37.5 | 31.5 | 1 |
| 15 | 37.5 | 52.5 | 42.5 | 340 Total |
| 16 | 52.5 | 74.5 | 62.5 | |
| 17 | 74.5 | 106.0 | 89.5 | |



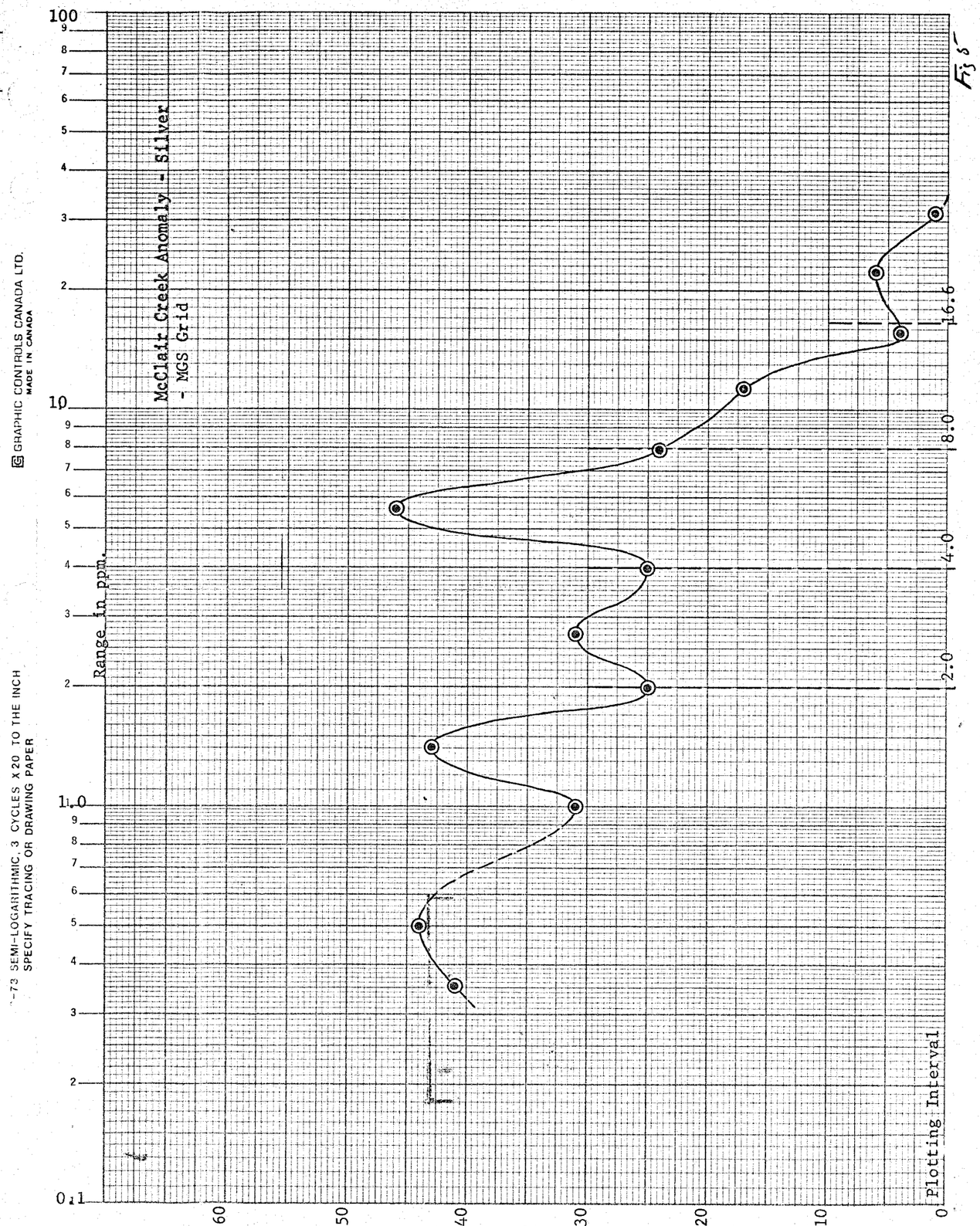



Fig 8


SYMBOLS

| | |
|---|---|
| Placer Deposit, abandon | ⚔P |
| Legal Post, initial | |
| final | |
| Claims: "Pit" | 163 |
| UTM 10,000m. Grid Coordinates | 6370000m N |
| Geochemical Sample Locations: | |
| silt | ○ 13-93 |
| soil | △ 14-1, RGS 53 |
| rock | □ RGR 106 |
| Rock Sample Locations: | |
| chip | ⊢ 15-28 |
| channel | |
| grab | |

LEGEND

Ag in ppm

| | |
|---|---|
| 1.3 — 3.8 | |
| 3.9 — 10.9 | |
| 11.0 — 23.4 | |
| 23.5+ | |



To Accompany Geochemical Report
by T.C. Scott on
Mac and Lair Groups
Twelve Miles South Southwest of Chukachida Lake, B.C.
Omineca Mining Division
Dated: 26 July, 1972

SULLIVAN RODGERS
— SUMAC —

PITMAN — 'Pit Group'
(McCLAIR PROPERTY)
Reconnaissance Geochemistry
Grid Location
Claims
SILVER

| | | |
|---|---|---|
| Map No. 71-4b | | |
| Date: Sept., 1971 | Scale: 1" = 1320' | N.T.S.: 94 E |

T.C.S.

Rock Geochemistry
"RGR" Series

| Sample No | Zn (ppm) | Ag (ppm) | Au (ppb) | Sample No | Zn (ppm) | Ag (ppm) | Au (ppb) |
|---|---|---|---|---|---|---|---|
| RGR 49 | 130 | - | - | RGR 114 | 83 | - | - |
| 50 | 500 | 0.5 | - | 115 | 92 | - | - |
| 51 | 83 | - | - | 116 | 120 | 88 | 2690 |
| 52 | 78 | - | - | 117 | 134 | - | - |
| 53 | 80 | - | - | 118 | 98 | - | - |
| 54 | 158 | 0.5 | - | 119 | 113 | 1.0 | - |
| 55 | 218 | 0.5 | - | 120 | 292 | 0.5 | - |
| 46 | 154 | - | - | 121 | 98 | - | - |
| 60 | 63 | - | - | 122 | 80 | - | - |
| 61 | 51 | - | - | 123 | 86 | - | - |
| 62 | 51 | - | - | 124 | 100 | - | - |
| 63 | 44 | - | - | 125 | 78 | 0.5 | - |
| 64 | 36 | - | - | 127 | 138 | - | - |
| 65 | 83 | - | - | 128 | 640 | 0.5 | - |
| 66 | 1675 | - | - | 129 | 69 | - | - |
| 67 | 56 | - | - | 130 | 282 | 0.5 | - |
| 68 | 92 | - | - | 131 | 110 | 0.5 | - |
| 69 | 91 | - | - | 132 | 142 | - | - |
| 70 | 56 | - | - | 133 | 116 | - | - |
| 71 | 72 | - | - | 134 | 120 | 0.5 | - |
| 72 | 120 | 0.5 | - | 135 | 72 | - | - |
| 73 | 98 | - | - | 136 | 42 | - | - |
| 74 | 72 | - | - | 137 | 138 | - | - |
| 75 | 78 | - | - | 138 | 116 | - | - |
| 76 | 95 | - | - | 139 | 92 | - | - |
| 77 | 70 | - | - | | | | |
| 78 | 107 | 1.5 | - | | | | |
| 79 | 110 | - | - | | | | |
| 90 | 89 | - | - | | | | |
| 81 | 110 | 0.5 | - | | | | |
| 82 | 162 | 0.5 | - | | | | |
| 83 | 100 | - | - | | | | |
| 84 | 95 | - | - | | | | |
| 85 | 134 | - | - | | | | |
| 86 | 1000 | - | - | | | | |
| 87 | 400 | - | - | | | | |
| 88 | 150 | - | - | | | | |
| 89 | 197 | 3.0 | - | | | | |
| 90 | 134 | - | - | | | | |
| 91 | 100 | - | - | | | | |
| 92 | 123 | - | - | | | | |
| 93 | 167 | - | - | | | | |
| 94 | 154 | 0.5 | - | | | | |
| 95 | 95 | - | - | | | | |
| 96 | 68 | - | - | | | | |
| 97 | 65 | - | - | | | | |
| 98 | 65 | 0.5 | - | | | | |
| 99 | 134 | 0.5 | - | | | | |
| 100 | 284 | - | - | | | | |
| 101 | 167 | - | - | | | | |
| 102 | 4 | - | - | | | | |
| 103 | 290 | - | - | | | | |
| 104 | 142 | - | - | | | | |
| 105 | 107 | 0.5 | - | | | | |
| 106 | 74 | - | - | | | | |
| 107 | 6 | - | - | | | | |
| 108 | 4 | - | - | | | | |
| 109 | 1 | 1. | - | | | | |
| 110 | 135 | - | - | | | | |
| 111 | 150 | - | - | | | | |
| 112 | 142 | - | - | | | | |
| 113 | 118 | - | - | | | | |

Values less than 0.5 ppm Ag or less than 30 ppb Au are denoted by "-".

Soil Geochemistry
"RGS" Series

| Sample No | Zn (ppm) | Ag (ppm) | Au (ppb) | Sample No | Zn (ppm) | Ag (ppm) | Au (ppb) |
|---|---|---|---|---|---|---|---|
| RGS 22 | 24 | 3.0 | - | RGS 84 | 113 | 0.5 | - |
| 23 | 69 | 1.5 | - | 85 | 167 | 1.5 | - |
| 24 | 129 | - | - | 86 | 104 | 2.0 | - |
| 25 | 192 | - | - | 87 | 218 | 2.0 | - |
| 26 | 368 | 0.5 | - | 58 | 400 | 1.0 | 170 |
| 27 | 72 | - | - | 89 | 78 | - | - |
| 28 | 89 | - | - | 90 | 30 | - | - |
| 29 | 384 | 0.5 | 30 | 91 | 113 | - | 270 |
| 30 | 44 | 0.5 | - | 92 | 104 | - | - |
| 31 | 100 | - | - | 93A | 400 | 0.5 | - |
| 32 | 680 | 2.0 | - | 93 | 116 | - | 750 |
| 33 | 154 | 1.5 | - | 94 | 766 | - | 30 |
| 34 | 89 | - | 30 | 95 | 1000 | 1.0 | - |
| 35 | 123 | - | - | 96 | 500 | 9.0 | 320 |
| 36 | 197 | 0.5 | - | 98 | 733 | 0.5 | - |
| 37 | 28 | 13. | 750 | 99 | 1000 | 1.5 | - |
| 38 | 13 | 27.5 | 840 | 100 | 187 | 0.5 | - |
| 39 | 75 | - | - | 101 | 680 | 7.5 | 320 |
| 40 | 3760 | 5.5 | 780 | 102 | 620 | 3.5 | 30 |
| 41 | 995 | 17.0 | 170 | 103 | 116 | 1.0 | - |
| 42 | 733 | 8.5 | - | 104 | 400 | 0.5 | - |
| 43 | 58 | 19.5 | 450 | 105 | 500 | 2.5 | - |
| 44 | 420 | 14.5 | 240 | 106 | 154 | - | - |
| 45 | 177 | 15.5 | - | 107 | 42 | 29. | > 1000 |
| 45A | 72 | 0.5 | - | 108 | 70 | 4.5 | 30 |
| 46 | 127 | 1.5 | - | 109 | 327 | 5.5 | 30 |
| 47 | 100 | - | - | 110 | 492 | 2.5 | - |
| 48 | 1640 | 2.0 | 3600 | 111 | 80 | 2.0 | - |
| 49 | 138 | - | - | 112 | 264 | 5.5 | 80 |
| 50 | 19 | - | - | 113 | 292 | 1.0 | 30 |
| 51 | 130 | - | - | 114 | 210 | 1.0 | - |
| 52 | 21 | 6.0 | - | 115 | 292 | 2.0 | - |
| 53 | 72 | - | - | 116 | 282 | 2.5 | 80 |
| 54 | 68 | 0.5 | - | 117 | 154 | 0.5 | 30 |
| 55 | 75 | - | - | 118A | 75 | - | - |
| 57 | 75 | 0.5 | - | 118B | 89 | - | 80 |
| 58 | 134 | - | - | 118C | 98 | - | - |
| 59 | 130 | - | - | 118D | 78 | 0.5 | - |
| 60 | 282 | 3.0 | 30 | 119A | 100 | - | - |
| 61 | 340 | - | - | 119B | 120 | - | - |
| 62 | 104 | 2.0 | 1380 | 119C | 113 | 0.5 | - |
| 63 | 292 | 2.0 | 170 | 119D | 113 | 0.5 | - |
| 64 | 2160 | - | - | 120A | 292 | 2.5 | - |
| 66 | 1080 | 5.5 | > 5000 | 120B | 282 | 1.5 | - |
| 66 | 273 | 1.0 | 170 | 120C | 304 | 1.0 | - |
| 67 | 327 | 3.5 | 30 | 120D | 368 | 2.0 | - |
| 68 | 700 | 37. | 840 | 121A | 44 | - | - |
| 69 | 434 | 6.5 | - | 121B | 24 | - | - |
| 70 | 194 | 3.0 | - | 121C | 60 | - | - |
| 71 | 48 | - | - | 121D | 78 | - | - |
| 72 | 107 | - | 340 | 122A | 83 | - | - |
| 73 | 79 | 1.0 | - | 122B | 56 | - | - |
| 74 | 30 | 1.0 | - | 122C | 83 | - | - |
| 75 | 17 | - | - | 122D | 96 | - | 30 |
| 76 | 35 | 1.5 | - | 123A | 218 | - | - |
| 77 | 90 | 2.0 | - | 123B | 247 | 1.0 | - |
| 78 | 138 | 4.5 | - | 123C | 230 | 1.5 | 80 |
| 79 | 123 | 3.5 | 30 | 123D | 200 | 1.0 | - |
| 80 | 110 | 6. | - | 124A | 98 | - | - |
| 81 | 110 | 1.5 | - | 124B | 90 | - | - |
| 82 | 114 | 1.5 | - | 124C | 84 | - | - |
| 83 | 118 | - | - | 124D | 84 | - | - |

Values less than 0.5 ppm Ag or less than 30 ppb Au are denoted by "-".


SYMBOLS

| | |
|---|---|
| Placer Deposit, abandon | ⊠P |
| Legal Post, initial | ⊕ |
| final | ⊞ |
| Claims: "Pit" | 163 |
| UTM 10,000m. Grid Coordinates | 6370000m.N |
| Geochemical Sample Locations: | |
| silt | ○ 13-93 |
| soil | △ 14-1, RGS 53 |
| rock | □ RGR106 |
| Rock Sample Locations: | |
| chip | ⊢ 15-28 |
| channel | |
| grab | |

LEGEND

Zn in ppm

230 – 484 .....

485 – 1469 .....

1470+ .....



To Accompany Geochemical Report

by T.C. Scott on

Mac and Lair Groups

Twelve Miles South Southwest of Chukachida Lake, B.C.

Omineca Mining Division

Dated: 26 July, 1972

T.C.S.

SULLIVAN RODGERS

— SUMAC —

PITMAN — 'Pit Group'

(McCLAIR PROPERTY)

Reconnaissance Geochemistry

Grid Location

Claims

ZINC

| | | |
|---|---|---|
| MAP No. 71-4c | | |
| Date: Sept., 1971 | Scale: 1" = 1320' | N.T.S.: 94 E |

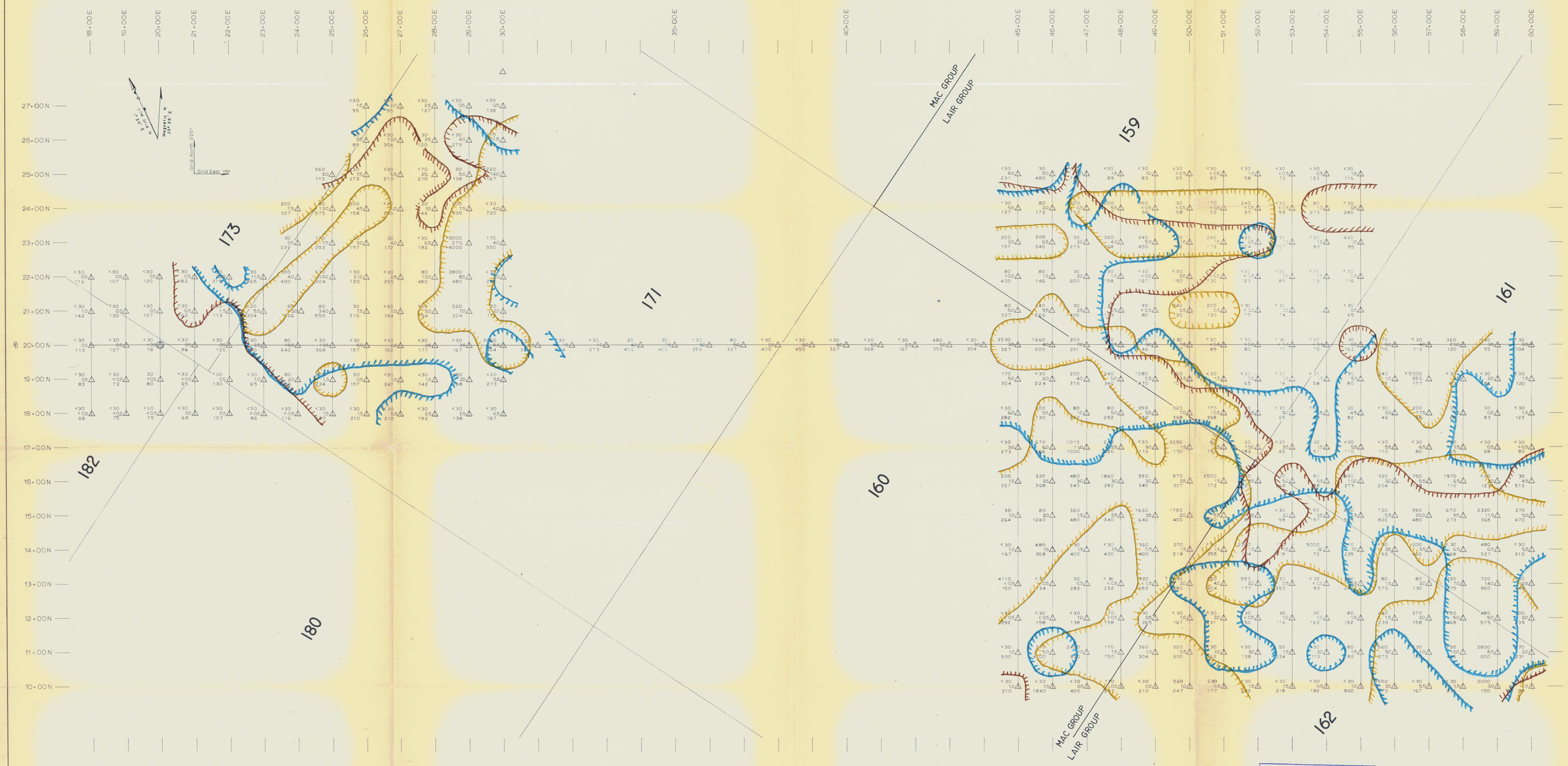
Rock Geochemistry
"RGR" Series

| Sample No | Zn (ppm) | Ag (ppm) | Au (ppb) |
|---|---|---|---|
| RGR 49 | 130 | - | - |
| 50 | 500 | 0.5 | - |
| 51 | 83 | - | - |
| 52 | 78 | - | - |
| 53 | 86 | - | - |
| 54 | 158 | 0.5 | - |
| 55 | 213 | 0.5 | - |
| 56 | 154 | - | - |
| 60 | 63 | - | - |
| 61 | 91 | - | - |
| 62 | 71 | - | - |
| 63 | 44 | - | - |
| 64 | 30 | - | - |
| 65 | 53 | - | - |
| 66 | 1675 | - | - |
| 67 | 86 | - | - |
| 68 | 98 | - | - |
| 69 | 91 | - | - |
| 70 | 46 | - | - |
| 71 | 72 | - | - |
| 72 | 120 | 0.5 | - |
| 73 | 92 | - | - |
| 74 | 78 | - | - |
| 75 | 78 | - | - |
| 76 | 77 | - | - |
| 77 | 70 | - | - |
| 78 | 197 | 1.5 | - |
| 79 | 110 | - | - |
| 80 | 89 | - | - |
| 81 | 110 | 0.5 | - |
| 82 | 162 | 0.5 | - |
| 83 | 109 | - | - |
| 84 | 93 | - | - |
| 85 | 104 | - | - |
| 86 | 1000 | - | - |
| 87 | 400 | - | - |
| 88 | 130 | - | - |
| 89 | 197 | 3.0 | - |
| 90 | 134 | - | - |
| 91 | 100 | - | - |
| 92 | 123 | - | - |
| 93 | 167 | - | - |
| 94 | 194 | 0.5 | - |
| 95 | 95 | - | - |
| 96 | 68 | - | - |
| 97 | 65 | - | - |
| 98 | 69 | 0.5 | - |
| 99 | 134 | - | - |
| 100 | 204 | - | - |
| 101 | 167 | - | - |
| 102 | 4 | - | - |
| 103 | 2 | - | - |
| 104 | 14 | - | - |
| 105 | 107 | - | - |
| 106 | 1 | - | - |
| 107 | 1 | - | - |
| 108 | 1 | - | - |
| 109 | 1 | - | - |
| 110 | 1 | - | - |
| 111 | 1 | - | - |
| 112 | 1 | - | - |
| 113 | 1 | - | - |
| 114 | 1 | - | - |
| 115 | 1 | - | - |
| 116 | 1 | - | - |
| 117 | 1 | - | - |
| 118 | 1 | - | - |
| 119 | 1 | - | - |
| 120 | 1 | - | - |
| 121 | 93 | - | - |
| 122 | 98 | - | - |
| 123 | 167 | - | - |
| 124 | 100 | - | - |
| 125 | 80 | - | - |
| 126 | 100 | - | - |
| 127 | 135 | - | - |
| 128 | 640 | 0.5 | - |
| 129 | 65 | - | - |
| 130 | 282 | 0.5 | - |
| 131 | 110 | 0.5 | - |
| 132 | 140 | - | - |
| 133 | 110 | - | - |
| 134 | 120 | 0.5 | - |
| 135 | 72 | - | - |
| 136 | 42 | - | - |
| 137 | 138 | - | - |
| 138 | 116 | - | - |
| 139 | 92 | - | - |

Values less than 0.5 ppm Ag or less than 30 ppb Au are denoted by " - ".

Soil Geochemistry
"RGR" Series

| Sample No | Zn (ppm) | Ag (ppm) | Au (ppb) |
|---|---|---|---|
| RGR 82 | 64 | 3.0 | - |
| 83 | 69 | 1.0 | - |
| 84 | 120 | - | - |
| 85 | 196 | - | - |
| 86 | 368 | 0.5 | - |
| 87 | 72 | - | - |
| 88 | 84 | - | - |
| 89 | 384 | 1.0 | 30 |
| 90 | 44 | 0.5 | - |
| 91 | 100 | - | - |
| 92 | 656 | 2.0 | - |
| 93 | 154 | 1.0 | - |
| 94 | 89 | - | 30 |
| 95 | 123 | - | - |
| 96 | 197 | 0.5 | - |
| 97 | 98 | 13.0 | - |
| 98 | 13 | 8720 | 840 |
| 99 | 71 | - | - |
| 100 | 336 | 2.0 | 780 |
| 101 | 29 | 17.0 | 1170 |
| 102 | 733 | 1.5 | - |
| 103 | 8 | 14.0 | 480 |
| 104 | 424 | 1.5 | - |
| 105 | 177 | 1.0 | - |
| 105A | 72 | 0.5 | - |
| 106 | 127 | 1.0 | - |
| 107 | 100 | - | - |
| 108 | 1649 | 2.0 | 3600 |
| 109 | 138 | - | - |
| 110 | 19 | - | - |
| 111 | 120 | - | - |
| 112 | 21 | 6.0 | - |
| 113 | 72 | - | - |
| 114 | 68 | 0.5 | - |
| 115 | 73 | - | - |
| 115A | 73 | - | - |
| 115B | 89 | 0.5 | - |
| 115C | 98 | - | - |
| 115D | 78 | - | - |
| 116A | 100 | - | - |
| 116B | 120 | - | - |
| 116C | 113 | 0.5 | - |
| 116D | 282 | 3.0 | 30 |
| 117A | 100 | - | - |
| 117B | 120 | - | - |
| 117C | 113 | 0.5 | - |
| 117D | 282 | 2.0 | 170 |
| 118A | 2160 | - | - |
| 118B | 1080 | 5.5 | 5000 |
| 118C | 273 | 1.0 | 170 |
| 118D | 397 | 3. | 30 |
| 119A | 700 | 27. | 940 |
| 119B | 434 | 4. | - |
| 119C | 104 | 0.5 | - |
| 119D | 95 | - | - |
| 120A | 72 | - | - |
| 120B | 68 | 0.5 | - |
| 120C | 72 | - | - |
| 120D | 68 | 0.5 | - |
| 121A | 68 | - | - |
| 121B | 89 | 0.5 | - |
| 121C | 98 | - | - |
| 121D | 78 | - | - |
| 122A | 100 | - | - |
| 122B | 120 | - | - |
| 122C | 113 | 0.5 | - |
| 122D | 282 | 2.0 | 170 |
| 123A | 2160 | - | - |
| 123B | 1080 | 5.5 | 5000 |
| 123C | 273 | 1.0 | 170 |
| 123D | 397 | 3. | 30 |
| 124A | 700 | 27. | 940 |
| 124B | 434 | 4. | - |
| 124C | 104 | 0.5 | - |
| 124D | 95 | - | - |
| 125A | 72 | - | - |
| 125B | 68 | 0.5 | - |
| 125C | 72 | - | - |
| 125D | 68 | 0.5 | - |
| 126A | 68 | - | - |
| 126B | 89 | 0.5 | - |
| 126C | 98 | - | - |
| 126D | 78 | - | - |
| 127A | 100 | - | - |
| 127B | 120 | - | - |
| 127C | 113 | 0.5 | - |
| 127D | 282 | 2.0 | 170 |
| 128A | 2160 | - | - |
| 128B | 1080 | 5.5 | 5000 |
| 128C | 273 | 1.0 | 170 |
| 128D | 397 | 3. | 30 |
| 129A | 700 | 27. | 940 |
| 129B | 434 | 4. | - |
| 129C | 104 | 0.5 | - |
| 129D | 95 | - | - |
| 130A | 72 | - | - |
| 130B | 68 | 0.5 | - |
| 130C | 72 | - | - |
| 130D | 68 | 0.5 | - |
| 131A | 68 | - | - |
| 131B | 89 | 0.5 | - |
| 131C | 98 | - | - |
| 131D | 78 | - | - |
| 132A | 100 | - | - |
| 132B | 120 | - | - |
| 132C | 113 | 0.5 | - |
| 132D | 282 | 2.0 | 170 |
| 133A | 2160 | - | - |
| 133B | 1080 | 5.5 | 5000 |
| 133C | 273 | 1.0 | 170 |
| 133D | 397 | 3. | 30 |
| 134A | 700 | 27. | 940 |
| 134B | 434 | 4. | - |
| 134C | 104 | 0.5 | - |
| 134D | 95 | - | - |
| 135A | 72 | - | - |
| 135B | 68 | 0.5 | - |
| 135C | 72 | - | - |
| 135D | 68 | 0.5 | - |
| 136A | 68 | - | - |
| 136B | 89 | 0.5 | - |
| 136C | 98 | - | - |
| 136D | 78 | - | - |
| 137A | 100 | - | - |
| 137B | 120 | - | - |
| 137C | 113 | 0.5 | - |
| 137D | 282 | 2.0 | 170 |
| 138A | 2160 | - | - |
| 138B | 1080 | 5.5 | 5000 |
| 138C | 273 | 1.0 | 170 |
| 138D | 397 | 3. | 30 |
| 139A | 700 | 27. | 940 |
| 139B | 434 | 4. | - |
| 139C | 104 | 0.5 | - |
| 139D | 95 | - | - |




SYMBOLS

Grid Reference Numbers: 20+00N-20+00E
Base Line
Base Station
Sample Site
Sample Values (Au in ppb, Ag in ppm, Zn in ppm)
Anomalous Au
" Ag
" Zn
Claim Number 160
Pit Claim

LEGEND

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO 3831 MAP #9

To Accompany Geochemical Report
by T.C. Scott on
Mac and Lair Groups
Twelve Miles South Southwest of Chukachida Lake, B.C.
Omineca Mining Division
Dated: 26 July, 1972

SULLIVAN RODGERS
**– SUMAC –**
PITMAN — 'Pit Group'
Geochemistry — Soil
MGS Grid

Date: Oct. 1971 | Scale: 1" = 100' | N.T.S. 94 E/6