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A P P E N D I X "A"

GEOCHEMICAL REPORT

D. R. COCHRANE

GEOCHEMICAL REPORT

on

SOIL SAMPLING ORIENTATION PROGRAM

conducted on behalf of

MOSQUITO CREEK GOLD MINING COMPANY LIMITED

on the

MOSQUITO CREEK PROJECT

Located near

Wells, B.C.

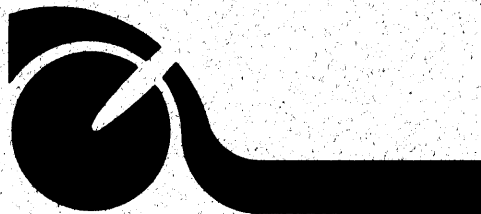
Field Work on September 4 and 5, 1972

Report by:

D. R. Cochrane, P.Eng.,

A. Scott, B.Sc.,

October 25, 1972.



Cochrane Consultants Limited

4882 Delta Street, Delta B.C. (604) 946-9221

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PART A:

A-1 INTRODUCTION:

On September 4 and 5, 1972, a field crew employed by Cochrane Consultants Ltd., excavated and collected soil samples from 4 test pits, and collected soil samples from the upper A, lower A and, in many cases, the upper B soil horizon at 50 foot intervals along a 4200 foot base line on a gold prospect owned by Mosquito Creek Gold Mining Company Ltd. The property is located near Wells, B.C.

The purpose of the work was to:

(a) determine the appropriate soil horizon for sampling purposes, and

(b) to determine the precise pathfinder elements necessary for the geochemical detection of "drift" covered replacement sulphide gold bearing zones.

The terms used in this report are those based on definitions from "The System of Soil Classification For Canada" (1970), Published by the Canadian Department of Agriculture.

Definitions of important terms are listed below:

"A"; topsoil, a primary soil horizon formed at or near the surface and containing decayed or partially decayed organic material.

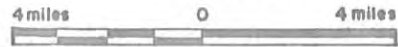
"B"; subsoil, a primary soil horizon characterized by an upper iron and metal rich layer, and a lower (often) mineral depleted horizon (of lighter colour)

Mosquito Creek Gold Mining Company Limited

Mosquito Creek Project
Wells Area, British Columbia
Cariboo Mining Division

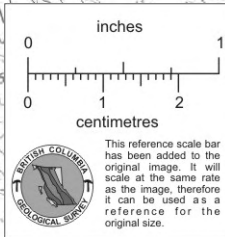
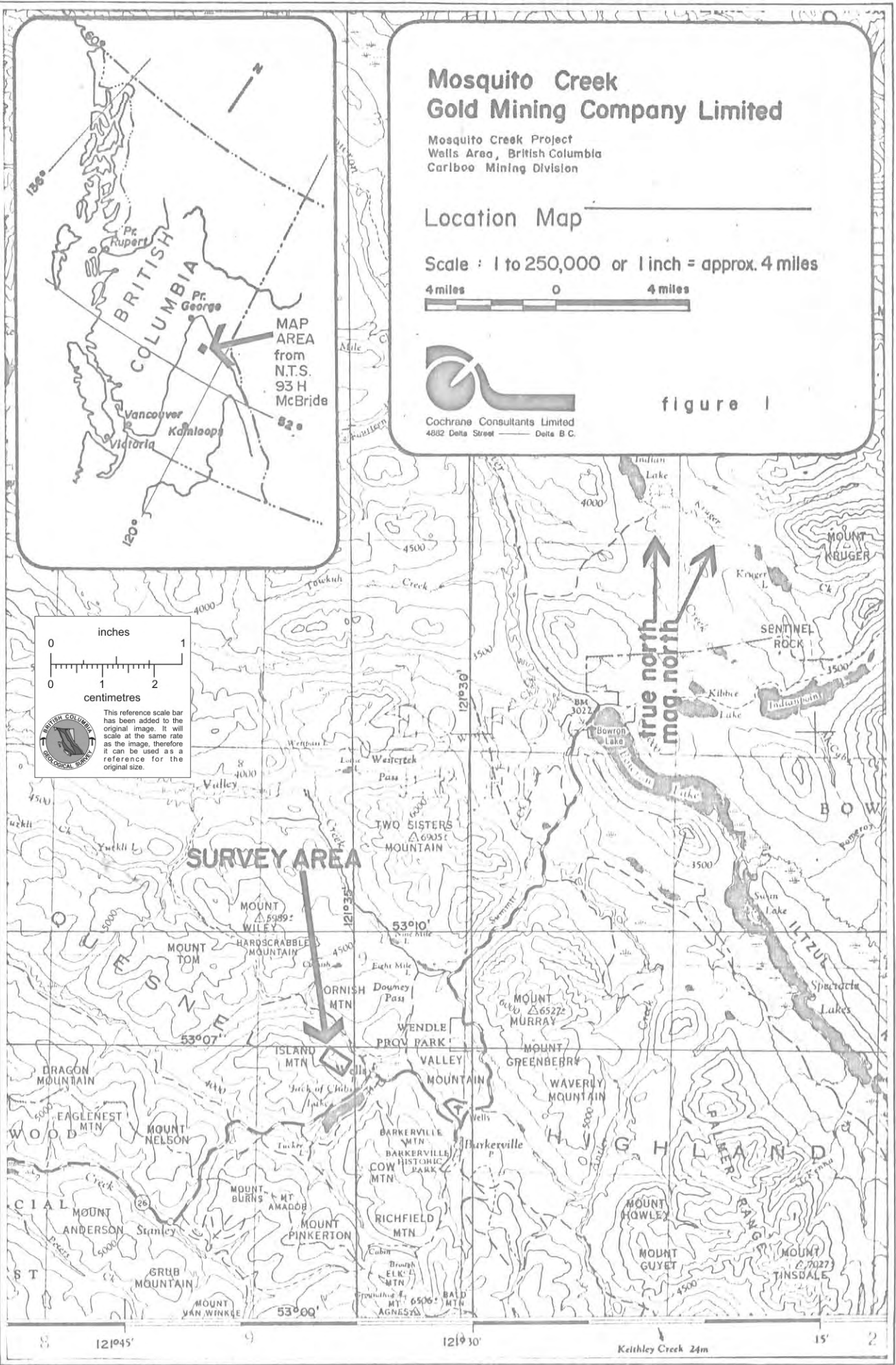
Location Map

Scale : 1 to 250,000 or 1 inch = approx. 4 miles



Cochrane Consultants Limited
4882 Delta Street — Delta B.C.

figure 1



BRITISH COLUMBIA
GEOLOGICAL SURVEY

121°45'

121°30'

15'

Keithley Creek 24m

2

- "C"; the lowermost primary horizon (bedrock) relatively unaffected by pedogenic processes.
- "h"; a soil horizon layer enriched with organic matter.
- "f"; a soil horizon layer enriched with hydrated iron (i.e. upper "B" is equivalent to Bf).
- "g"; a soil horizon layer characterized by grey colours, or mottling indicative of a reducing environment.
- "p"; a layer disturbed by man's activities (cultivation, excavation, etc.).

The above described letters are often used in combination, i.e. BCg, a grey coloured B horizon (subsoil) with fragments of (c) bedrock.

A-2 SUMMARY AND CONCLUSIONS:

1. During parts of September and October, 1971, D. R. Cochrane, P.Eng. conducted an Induced Polarization survey on a gold property located near Wells, B.C. on behalf of Mosquito Creek Gold Mining Company Ltd.

2. In September of this year (1972) a geochemical orientation survey was conducted on a portion of the same grid and on behalf of the same client. The recent program included the following work and results:



3. Four test pits were excavated for geochemical soil sampling orientation purposes on four widely separated sections of the Mosquito Creek Gold property including:

- (a) pit No. 1 near 0 + 00 on the base line, and close to the Gunn and Rip gold zones,
 - (b) pit No. 2 in the north central grid area characterized by low apparent chargeabilities,
 - (c) pit No. 3 on the south central portion of the grid area, characterized by very high apparent chargeabilities and low resistivities,
- and (d) pit No. 4, just south of the base line on line 12 + 00 W on the highest priority IP anomaly.

4. The four orientation pits were excavated to an average depth of 8 feet, and a total of 38 soil samples were collected from the pits at various depth intervals.

5. The 38 soil samples were geochemically analyzed by Crest Laboratories of Vancouver, B.C. for their content in iron (Fe); lead (Pb); Mercury (Hg); Silver (Ag); Gold (Au) and Arsenic (As).

6. The following conclusions may be drawn about the vertical distribution of the six metals.

- (a) soils at Mosquito Creek are in general gold "rich" and there is a slight tendency for gold to accumulate in the Ah (organic horizon),

- (b) the soils are in general enriched in arsenic and there is a tendency for values to progressively increase with depth,
- (c) mercury is well distributed and has a slight tendency to accumulate in the upper soil horizons,
- (d) iron tends to accumulate between 0.5 to 1.5 feet below surface in the upper "B" soil horizon,
- (e) silver is characterized by a narrow range of values and exhibits no horizon preferences,
- (f) lead exhibits a small range of values and there is a tendency for the amount of lead to increase with depth,
- (g) due to the rather large amount of iron on some of the Mosquito Creek soil samples, antimony was extremely difficult to accurately detect.

7. 190 soil samples were also collected at 50 foot intervals along the 4200 foot base line at Mosquito Creek, and after the results discussed in 4 above, it was decided to analyze the 83 "Ah" (upper organic) soil samples for their content in Au, As, Hg, and Pb.

8. The results from the test line A horizon sampling showed that lead, gold, mercury and arsenic values determined in samples from the Ah horizon are excellent pathfinder elements for the detection of drift covered "replacement" zones.



9. The arithmetic mean of the four elements detected in samples from the test line are as follows:

lead	49 p.p.m.
arsenic	39 p.p.m.
gold	0.17 p.p.m.
mercury	68 p.p.b.

and several anomalous areas were located including the Gunn and Rip zones (designated anomaly No. 4), and:

10. Geochemical Anomaly No. 1, centered in and around 21 west on the base line and peak values are as follows:

lead	130 p.p.m.
arsenic	100 p.p.m.
gold	0.49 p.p.m.
mercury	115 p.p.b.

11. Geochemical Anomaly No. 2, centered in and around 11 west on the base line and peak values are as follows:

lead	95 p.p.m.
arsenic	255 p.p.m.
gold	0.33 p.p.m.
mercury	170 p.p.b.

12. Geochemical Anomaly No. 3 is centered in and around 7 west on the base line and peak values in the area are:

lead	74 p.p.m.
arsenic	100 p.p.m.
gold	0.36 p.p.m.
mercury	120 p.p.b.

13. The above described anomalies contain anomalous values in several metals in the same general area, and, in



addition, Geochemical Anomaly No. 2 is coincident with a very high priority chargeability anomaly detected in 1971.

14. It appears that additional sampling is worthwhile, and it also appears that the sampling interval can be increased to 75 feet without risking missing a significant zone.

15. It is estimated that 600 additional Ah horizon samples would cover the most interesting portion of the present grid (i.e., 4200 feet by 1500 feet, or 750 feet on each side of the base line) and should be analyzed for lead, arsenic, gold and mercury.

16. The estimated cost of such a survey (including field work, analytical costs, report and map preparation and interpretation) is \$8,000.00.

Respectfully submitted,



D. R. Cochrane, P.Eng.,

A handwritten signature in black ink that reads "Alan Scott".

A. Scott, B.Sc.,
October 25, 1972.



PART B: PROCEDURES

B-1 SOIL SAMPLING PROCEDURE:

The testing and orientation work conducted on the Mosquito Creek Project consisted of two parts as discussed below:

Part 1 - Orientation Pits

Four orientation pits were excavated. Their location is indicated on Figure 1. Samples were taken from every noticeable change in the soil profile and, if no change was apparent, at 1 foot intervals. Pit depths vary from 5 feet to 9 feet. Rock samples taken from the bottom of pits 1, 3 and 4 are believed to be fragments from bedrock. Bedrock was not reached at pit no. 2. Notes were kept describing the depth the sample was taken from, and the colour, texture, approximate composition, and the soil horizon of each sample. Soil samples were collected with the aid of a small trowel, and placed into a pre-numbered soil sample bag and sealed sheet. The samples were counted and checked in the office of Cochrane Consultants Ltd.

Part 2 - Orientation Test Line

Samples were taken from the Ah, Ag and in many instances, from the Bf soil horizons at 50 foot intervals along the old IP



grid baseline (see Figure 6). A small pit was dug with a shovel at each location so that the soil profile would be clearly visible. Samples were then taken with a small garden trowel from the appropriate horizon. Notes recording the depth, soil horizon and a description of the colour, texture and approximate composition of each sample were taken in standard preprinted forms.

B-2 ANALYTICAL PROCEDURES:

The analysis of the soil samples was carried out by Crest Laboratories (B.C.) Ltd., of 1088 Homer Street, Vancouver 3, B.C. Each sample was dried and screened to -80 mesh. Analysis for lead and silver was by digestion in a hot solution of HClO_4 and HNO_3 . Quantitative analysis was by an atomic absorption procedure using a techtron AA5. Samples analyzed for mercury were digested in cold nitric acid, and those for gold in aqua regia. Arsenic determinations were made by the pyridine colourimetric method using a spectronic 20. Iron determinations were by assay using a dichromate procedure.



PART C:

C-1 DESCRIPTION OF SOILS:

Three primary soil types occur on the property in addition to several hybrid soils developed by various combinations of the three primaries. The primary types are:

1. A virgin brown forest soil composed of glacial debris, mechanical mixtures of bedrock and with poor to moderately well developed upper layers. It has formed under moderately wet conditions under conifer cover.
2. Virgin alluvial deposits found in the valleys of Mosquito and Red Gulch Creeks, and in the Willow River Valley.
3. Man-disturbed soils resulting from the placer working of 1 and 2 above.

The soil profiles are noticeably graded, with progressively coarser gravels and larger rock fragments appearing at depth. Upper layers are mixtures of organic material, sand, clay and pebbles.

Figures No. 2 to No. 5 are a graphic display of the overall soil profile at the four orientation pits.

Soil development as observed along the baseline is characterized by:



- an upper A (humus) layer generally 0.2 feet deep underlain by
- a generally very thin black to black-grown Ah horizon composed of humus and some sand and clay. Thickness of this layer varies from some 0.5 feet at 11.5W to less than 0.1 feet along most of the baseline. This is underlain by
- a layer of varying thickness grey clay tentatively identified as Ag horizon. It varies in thickness from 0.7 feet thick at 14.5W to generally 0.1 feet or so thick, to unidentifiable in some areas. This is underlain by
- a layer of brown sand and clay often containing fine gravels. This zone is identified in the notes as B or in cases the B/C horizon. It is underlain by
- a layer of orange brown to red brown B and B/C soil horizon composed of clay, sand, some gravels, and often rock fragments.

Figure 7 shows the approximate distribution and thicknesses of these horizons as they were recorded in the field notes.

C-2 ANALYTICAL RESULTS IN GENERAL:

The gold-sulphide replacement zones which comprised some of the best ore in the Island Mountain Mine, are difficult surface exploration targets. The ore bodies are pencil or tabular shaped and composed chiefly of massive, fine grained pyrite with

traces of galena, sphalerite, cosalite ($2\text{PbS}\cdot\text{Bi}_2\text{S}_3$), bit-smuthinite, sheelite, pyrrhotite, arsenopyrite and chalcopyrite (reference, A. Sutherland Brown (1957), Geology of the Antler Creek Area, B.C. Department of Mines Bulletin No. 38). The replacement bodies occur in folded and faulted limestone bands and the bodies are often enveloped by ankerite. The limey nature of the orebody environment makes geochemical expression difficult since carbonates prevent upward migration of metals. Some hope was believed to lie in the Ah horizon however, with the theory that the coniferous trees would incorporate metals in the root zone, and metals would be transported to the needles which would subsequently drop and chelate metals in the Ah soil horizon. Good geochemical response in the upper B horizon was also expected in certain areas, and also good response close to bedrock in the B/C horizon.

Prior to the orientation survey, Mr. R. Johnson collected a suite of 10 soil samples in the Mosquito Creek Valley, at intervals of 10 feet, and from a soil close to bedrock. They were analyzed for bismuth, arsenic, antimony, and zinc and the results are tabulated below:

<u>Sample</u>	<u>Location</u>	<u>Bi(p.p.m.)</u>	<u>As (p.p.m.)</u>	<u>Sb(p.p.m.)</u>	<u>Zn(p.p.m.)</u>
A		4	2	0	110
B		4	5	0	92
C		6	5	2	90
D	Gunn Zone	6	15	2	90
E		6	20	6	96
F	Rip Zone	6	25	14	94
G		4	30	14	98
H		6	20	6	86
I		2	2	4	112
J		2	20	6	92
Averages		4.6	14.4	5.4	96

The results suggest that antimony and arsenic are possible pathfinder elements, and bismuth is possible. Geochemical analysis of the samples collected by Cochrane Consultants revealed the antimony was in many cases analytically indeterminate because of interference from high iron levels. Bismuth also precipitates with iron and is difficult to determine.

The 29 test pit samples were therefore analyzed for their content in:

1. gold (Au) in p.p.m.
2. mercury (Hg) in p.p.b.
3. lead (Pb) in p.p.m.
4. arsenic (As) in p.p.m.
5. iron (Fe) in percent
6. silver (Ag) in p.p.m.

C-3 RESULTS FROM ORIENTATION PITS:

Figures 2 to 5 show the results, in profile form for the six metal analysis of the test pit samples.



The following table lists pertinent statistics:

Pit No. 1: Location - 0 + 40W: 1 + 15N
 Depth - 6.0 feet
 No. Samples - 9

<u>Metal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>	<u>Standard Deviation</u>
Au	.06	0.11	0.09	0.03
Pb	42	60	52	6
*Hg (ppb)	30	105	58	23
Ag	0.8	1.4	1.1	0.2
*Fe (%)	2.53	6.40	4.9	1.2
As	11	36	20	7

Pit No. 2: Location - 8 + 50W: 4 + 50N
 Depth - 5.0 feet
 No. Samples - 7

<u>Metal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>	<u>Standard Deviation</u>
Au	0.16	0.48	0.26	0.12
Pb	44	82	67	13
*Hg (ppb)	50	90	62.9	14.1
Ag	0.9	2.6	1.6	0.6
*Fe (%)	1.91	5.09	3.4	1.2
As	90	268	182	63

Pit No. 3 Location - 3 + 00W: 12 + 50S
 Depth - 7.5 feet
 No. Samples - 10

<u>Metal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>	<u>Standard Deviation</u>
Au	0.04	0.12	0.09	0.03
Pb	54	108	81	18
*Hg (ppb)	15	180	54.2	59.4
Ag	0.8	2.5	1.6	0.6
*Fe(%)	1.90	5.18	4.26	0.99
As	41	120	95	26



Pit No. 4: Location -12 + 00 W: 2 + 50S
 Depth - 9.0 feet
 No. Samples - 12

<u>Metal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>	<u>Standard Deviation</u>
Au	0.08	0.43	0.18	0.10
Pb	22	118	68	32
*Hg (ppb)	5	110	30.8	28.9
Ag	0.8	2.4	1.3	0.5
*Fe (%)	0.75	6.04	3.94	1.48
As	21	336	183	110

* Note: values in parts per million (ppm) unless otherwise noted.

These results may be compared with values reported by Hawkes and Webb (Geochemistry in Mineral Exploration, and Mason (Principles of Geochemistry).

<u>Metal</u>	<u>Mobility</u>	<u>Average Soils</u>	<u>Range</u>
Au	moderately high	app. 0.005	---
Pb	generally low	10	2 - 200
Hg	high	---	0.03 - 0.3 p.p.m.
Ag	possibly low	0.1	---
Fe (%)	moderate	---	1.4 - 4.0
As	generally low	5	1 - 50
Bi	low	0.2	---
Sb	low	0.2	---

Thus the Mosquito Creek soils may be classified as relatively enriched in gold and arsenic.

The following conclusions may be drawn about the vertical distribution of metals:



- Gold: soils enriched in Au, good range and slight tendency to accumulate in the organic (Ah) horizon
- Arsenic: soils enriched in As: excellent range of values tendency for values to progressively increase with depth
- Mercury: good range, slight tendency for accumulation in upper horizons
- Iron: tendency for enrichment at the 0.5 to 1.5 foot range (Bf horizon)
- Silver: small range, indefinable soil horizon preferences
- Lead: small range, tendency for increase in value with depth
- Antimony: coprecipitates with iron and therefore difficult to detect by atomic absorption methods

C-4 TEST LINE RESULTS:

The upper A horizon (Ah) soil samples were selected for analysis for Pb, As, Au and Hg per the results of the four orientation pits.

The results are presented in profile form in Figure 7.

Pb Results

Lead results along the base line vary from a high of 130 p.p.m. at 21W to a low of 18 p.p.m. at 14.5 W. The arithmetic mean and standard deviation of the 83 samples is 49 p.p.m. and 20 p.p.m. respectively.



Statistically the following categories of lead in soils are herein defined:

less than 50 p.p.m.	below average
50 - 70 p.p.m.	weakly anomalous
70 - 90 p.p.m.	moderately anomalous
greater than 90 p.p.m.	strongly anomalous

Anomalous areas are indicated on the profile.

As Results

Arsenic results vary from a high of 255 p.p.m. at 12W to a low of 2 p.p.m. at 7E. The arithmetic mean of the 83 samples is 39 p.p.m. and the standard deviation is 40 p.p.m. Statistically the following classes of arsenic content are herein defined:

less than 40 p.p.m.	below average
40 - 80 p.p.m.	weakly anomalous
80 - 120 p.p.m.	moderately anomalous
greater than 120 p.p.m.	strongly anomalous

Anomalous results are indicated on the profile.

Au Results

The gold content in soils varies from a high of .49 p.p.m. at 21W to .06 p.p.m. at several stations. The arithmetic mean of the 61 gold values is 0.17 p.p.m. and the standard deviation is 0.09 p.p.m.



The following gold content classes are herein defined:

less than 0.17 p.p.m.	below average
0.17 - 0.26 p.p.m.	weakly anomalous
0.26 - 0.35 p.p.m.	moderately anomalous
greater than 0.35	strongly anomalous

Anomalous values are indicated on the profile.

Hg Results

The mercury content in soils varies from a low of 10 p.p.b. at 17.5W to a high of 280 p.p.b. at 6.5E.

The arithmetic mean is 68 p.p.b. and the standard deviation is 40 p.p.b.

The following categories of mercury content in soils are herein defined:

less than 68 p.p.b.	below average
68 - 108 p.p.b.	weakly anomalous
108 - 148 p.p.b.	moderately anomalous
greater than 148 p.p.b.	strongly anomalous

While mercury values tend to be anomalous where other elements are anomalous, the mercury record is quite noisy and overall correlation is very poor (see table on following page).



Discussion

The following table lists the coefficients of correlation for the various elements:

X	Pb	As	Au	Hg
Pb	X	+0.43	+0.40	+0.01
As	+0.43	X	+0.20	+0.12
Au	+0.40	+0.20	X	+0.12
Hg	+0.01	+0.12	+0.12	X

Hence Pb to As and Pb to Au exhibit fairly good correlation while As to Au exhibits only fair correlation and mercury correlation is very poor.

Individual anomalies are discussed below. Those anomalies that show coincident high values of several elements are considered high priority while those that have only one or two elements of anomalous amplitude are considered low priority.

<u>Anomaly No.1</u>	BL: 20 + 50W		
<u>element</u>	<u>degree of anomaly</u>	<u>peak value</u>	<u>moderately anomalous width</u>
Pb	strongly anomalous	130 p.p.m.	170'
As	moderately anomalous	100 p.p.m.	40'
Au	strongly anomalous	.49 p.p.m.	75'
Hg	moderately anomalous	115 p.p.b.	15'



Anomaly No. 2 BL; 11W

<u>element</u>	<u>degree of anomaly</u>	<u>peak value</u>	<u>moderately anomalous width</u>
Pb	strongly anomalous	90 p.p.m.	120'
As	strongly anomalous	255 p.p.m.	160'
Au	moderately anomalous	.33 p.p.m.	100'
Hg	strongly anomalous	170 p.p.b.	60'

This is the highest priority anomaly and it is, in addition, coincident with the highest priority IP anomaly.

Anomaly No. 3 BL; 7W

<u>element</u>	<u>degree of anomaly</u>	<u>peak value</u>	<u>moderately anomalous width</u>
Pb	moderately anomalous	75 p.p.m.	10'
As	moderately anomalous	100 p.p.m.	15'
Au	strongly anomalous	.36 p.p.m.	115'
Hg	moderately anomalous	120 p.p.b.	45'

Anomaly No. 4 BL; 0 + 00

This anomaly is the main showing area. The area has been trenched extensively and it was not possible to get samples on the west side of the anomaly. Strongly anomalous gold was encountered at 0 + 50E. Moderately anomalous Pb is indicated at 0 + 50E and arsenic is increasing at this point. Moderately anomalous mercury content is present at 1 + 50E.

The indication is that geochemical surveying would definitely have delineated this mineralized zone.

Anomaly No. 5 BL; 25W

Has strongly anomalous arsenic (peak value 180 p.p.m.) and the moderately anomalous zone is some 140 feet in width. Gold and lead values are average while mercury is weakly anomalous. This anomaly is low priority.

Anomaly No. 6 BL; 9E

Has two moderately anomalous lead "peaks" some 40 feet in width and peaking at 90 and 85 p.p.m. respectively. Weakly anomalous arsenic "peaks" coincide with the high lead values. There was insufficient sample material for gold analysis at this site. Mercury content has two moderately anomalous peaks that coincide with the lead and arsenic peaks. In addition, a very strongly anomalous value of 280 p.p.b. was detected immediately west of Anomaly No. 6.

PART D:

D-1 DISCUSSION:

The mineral leases controlled by the Mosquito Creek Gold Mining Company Ltd. in Wells, British Columbia adjoin the Island Mountain Mine which, up to 1953 produced in excess of \$12,000,000.00 in gold and silver. The Mosquito Creek property is almost entirely drift covered and therefore "indirect" methods of exploration rather than conventional geological prospecting methods must be employed.

In the fall of 1971 an induced polarization survey was conducted on a portion of the Mosquito Creek property and several anomalies were outlined but the results are complex because of the existence of two distinct chargeability backgrounds. Geochemical soil sampling was suggested as a means to priority rate chargeability anomalies and to further explore an area of interest close to the Baker-Rainbow contact. Subsequently a geochemical orientation survey was conducted and showed the following:

1. The Ah (organic) soil horizon contains abundant mercury and gold and is an "expedient" soil horizon to sample.
2. Analysis of the soil samples for their content of lead, arsenic, gold and mercury provides a good variety of metal

mobilities and would be extremely valuable in locating any buried lead or gold deposit that is characterized by a metal dispersion halo.

2. The soil sample interval could be increased to 75 feet, and restricted to a zone 1500 feet wide and centered along the base line which is 4200 feet wide.

D-2 RECOMMENDATIONS:

- Additional soil sampling is recommended in order to
- (a) priority rate the IP anomalies
 - (b) explore for mineralization that may not be characterized by a significant chargeability response, and
 - (c) further explore, on a systematic basis the economic potential of the Mosquito Creek property.

Respectfully submitted,



D. R. Cochrane, P.Eng.,

A handwritten signature in cursive script, appearing to read "Allen Scott".

A. Scott, B.Sc.,
October 25, 1972,
Delta, B.C.



APPENDIX I

Certificates

NAME: COCHRANE, Donald Robert
EDUCATION: B.A.Sc. - U. of T., M.Sc. (Eng.) - Queen's University
PROFESSIONAL P.Eng. of B.C., Ontario, and Saskatchewan. Member
ASSOCIATIONS: of C.I.M.M., G.A.C., M.A.C., - Geological Engineer
EXPERIENCE: Engaged in the profession since 1962 while employed
with Noranda Exploration Co. Ltd., Quebec Cartier
Mines Ltd., and Meridian Exploration Syndicate.

NAME: SCOTT, Alan R.
EDUCATION: B.Sc. - Geophysics, U.B.C.
EXPERIENCE: Two summers - crew member and operator with Geo-X
Surveys Ltd. Employed with Cochrane Consultants Ltd.
for 3 years - Geophysicist.
PROFESSIONAL Member of S.E.G.
ASSOCIATIONS:

NAME: ROSSIER, Jean-Claude
EDUCATION: Secondary and Vocational School - Architectural
Drafting Degree
EXPERIENCE: Since 1965 - General Drafting Experience
Geophysical Drafting, Seigel Associates - 1969 - 1972
Employed with Cochrane Consultants Ltd. since spring
1972.

NAME: COCHRANE, Bruce
EDUCATION: Ontario College of Art Diploma
EXPERIENCE: Two field Seasons - Geo-X Surveys Ltd.
Employed with Cochrane Consultants Ltd. since spring
1972.

NAME: SNEED, Paul
EDUCATION: B.S. - University of California (S.B.)
working towards Ph.D. at U.B.C.
EXPERIENCE: 4 years (field seasons) supervising excavation
of archeological sites

APPENDIX II

Survey Details

PROPERTY: Mosquito Creek MINING DIVISION: Cariboo
SPONSOR: Mosquito Creek Gold Mining Company Ltd.
LOCATION: Wells, B.C.
SURVEY: Geochemical Soil Sampling Orientation
SURVEY MAN DAYS: 2 x 2 = 4
STAND-BY MOBILIZATION MAN DAYS: 2 x 2 = 4
DATA PROCESSING & REPORT PREPARATION MAN DAYS: 5
DRAFTING MAN DAYS: 3½
WORK: 4 Orientation pits (38 samples)
4200 feet sampling at 50 foot intervals
(190 samples, 83 analyzed)
DATA PROCESSING & REPORT BY: D. R. Cochrane
A. Scott
FIELD CREW: A. Scott
P. Sneed
DRAFTING: J. C. Rossier
B. Cochrane

COCHRANE CONSULTANTS LTD.



D. R. Cochrane, President.

APPENDIX III

Details of Cost

Geochemical Orientation Work
Mosquito Creek Project

A. Analysis, Crest Laboratories, Homer Street,
Vancouver

(i) Test Pits, 38 samples,	\$ 276.80
(ii) Test Line, 83 samples,	512.10

B. Field Work, Data Processing, Report
Preparation

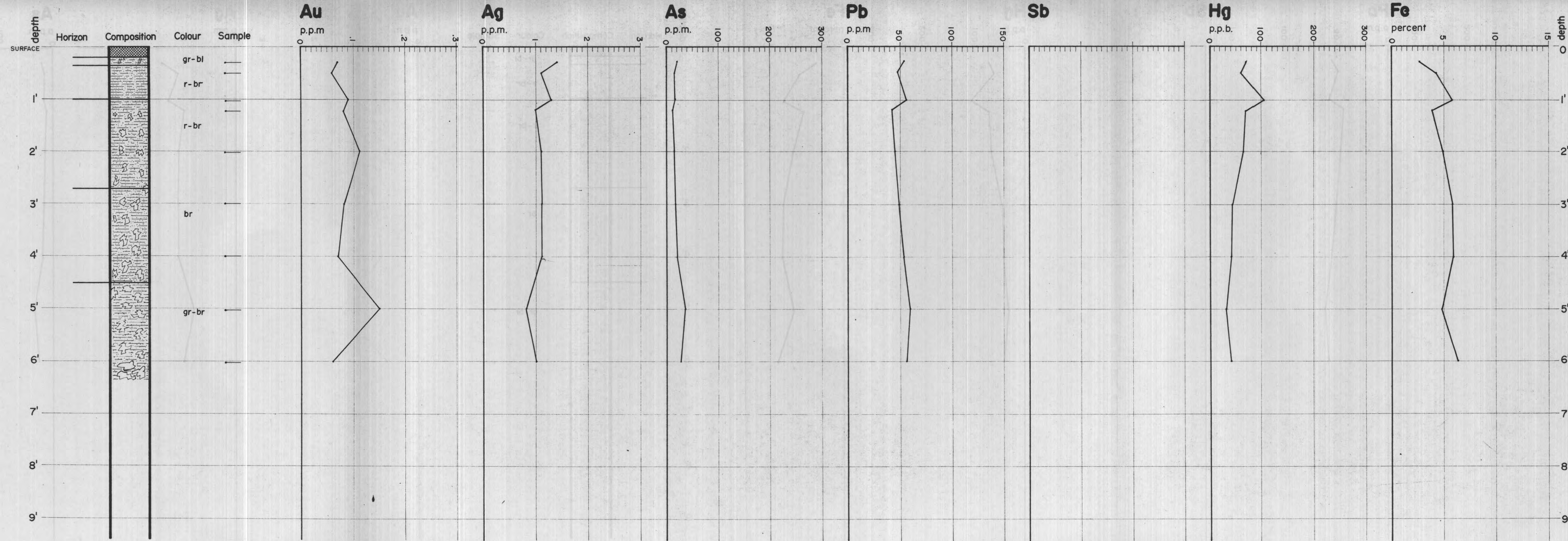
By Contract between Cochrane Consultants
Ltd. and Mosquito Creek Gold Mining
Co. Ltd.

1100.00

TOTAL \$1888.90



D. R. Cochrane, P.Eng.



Legend

- vegetation (moss, needles, etc.)
- humus
- clay
- sand
- gravel
- rock fragments

Colour

- bl = black
- br = brown
- r = red
- o = orange
- gr = grey
- y = yellow

grid coordinates : RIP-GUNN area.

Mosquito Creek
Gold Mining
Company Limited

Mosquito Creek Project
Geochemical
Orientation Pit
Profile

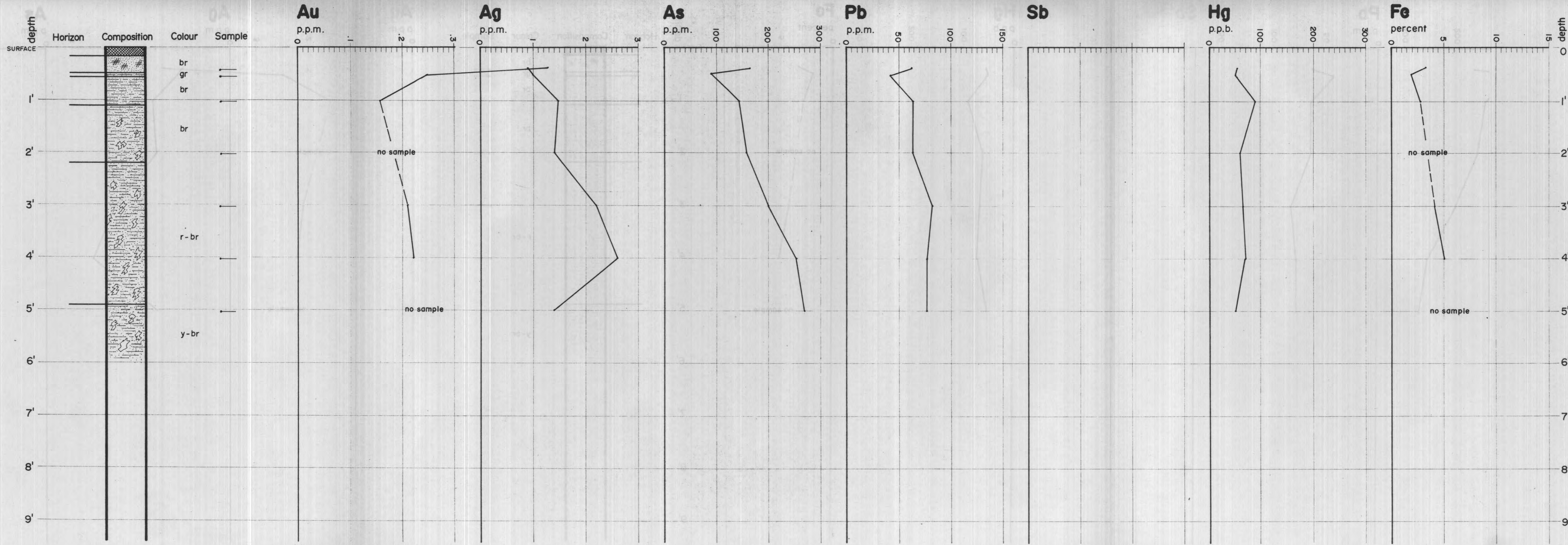


PIT No.
1



to accompany
a report by
A. Scott B. Sc.
and
D. R. Cochrane P. Eng.
dated
October 25, 1972

figure 2



Legend

- vegetation (moss, needles, etc.)
- humus
- clay
- sand
- gravel
- rock fragments

Colour

- bl = black
- br = brown
- r = red
- o = orange
- gr = grey
- y = yellow

grid coordinates : 8.5W, 4.5N

Mosquito Creek Gold Mining Company Limited

Mosquito Creek Project

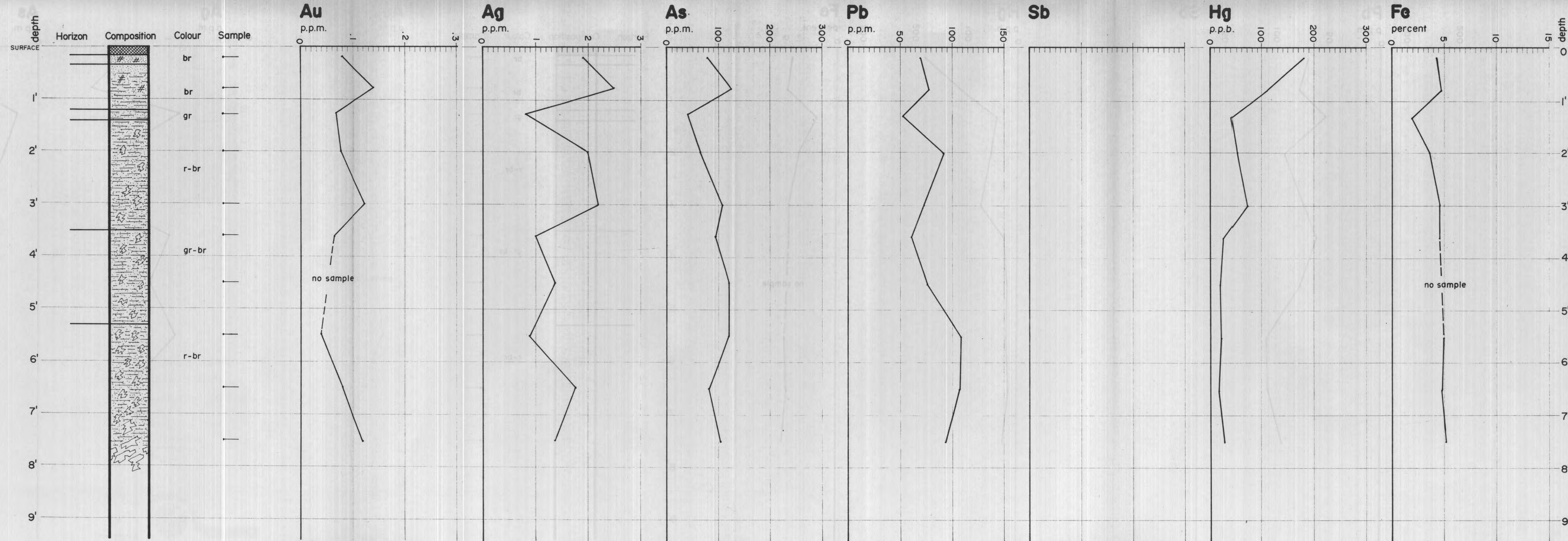
Geochemical Orientation Pit Profile

PIT No. 2

Cochrane Consultants Limited
4882 Delta Street Delta B.C.

to accompany a report by
A. Scott B.Sc.
and
D. R. Cochrane P. Eng.
dated
October 25, 1972

figure 3



Legend

- vegetation (moss, needles, etc.)
- humus
- clay
- sand
- gravel
- rock fragments

Colour

- bl = black
- br = brown
- r = red
- o = orange
- gr = grey
- y = yellow

grid coordinates : 3W, 12.5S

Mosquito Creek
Gold Mining
Company Limited

Mosquito Creek Project
Geochemical
Orientation Pit
Profile

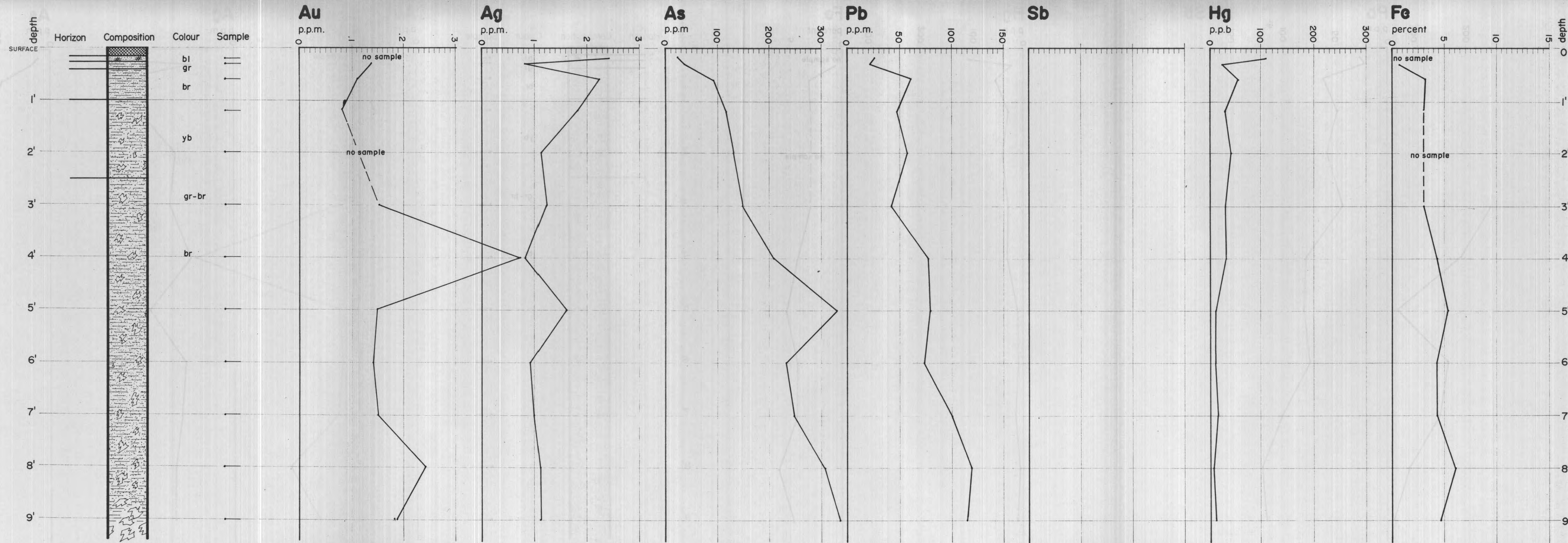


PIT No.
3



to accompany
a report by
A. Scott B. Sc.
and
D. R. Cochrane P. Eng.
dated
October 25, 1972

figure 4



Legend

- vegetation (moss, needles, etc.)
- humus
- clay
- sand
- gravel
- rock fragments

Colour

- bl = black
- br = brown
- r = red
- o = orange
- gr = grey
- y = yellow

grid coordinates : 12W, 2.5S

Mosquito Creek
Gold Mining
Company Limited

Mosquito Creek Project

Geochemical
Orientation Pit
Profile

PIT No.
4

Cochrane Consultants Limited
4882 Delta Street — Delta B.C.

to accompany
a report by
A. Scott B.Sc.
and
D. R. Cochrane P. Eng.
dated
October 25, 1972

figure 5