1972 Geological and Geochemical Report
PEACH LAKE COPPER PROPERTY (Coranex Option)
Claims Peach #44,46,48,59-61,62-64,65-68,73-
92P/14W 74,77-80,81-85,86,87,88-90,
211 Fr., 212 Fr. and
Pit #58-59,67,69-71
Located 13 miles NNW of Lac La Hache, 92P14,
Latitude 51°58', Longitude 121°19', Clinton M.D.

By G.M.Leary & T.J.R.Godfrey, P.Eng. (B.C.)
For Amax Exploration, Inc.

Work was carried out during May 23
and August 8,1972

1972 Geological and Geochemical
Report

3815

TITLE	Peach Lake Copper Property (Coranex Option)
AUTHORS	G.M. Leary and T.J.R. Godfrey, P.Eng. (B.C.)
DATE	August 1972
COMMODITY	Cu
LOCATION-Area	Lac La Hache
-Mining Division	Clinton
-Coordinates	Longitude 121°19' Latitude 51°58'
-NTS	92 P 14

AMAX VANCOUVER OFFICE

TABLE OF CONTENTS

ILLUSTRATIONS

SUMMARY

The Peach Lake Copper Property is located within rolling terrain of the Intrusion Plateau, near Lac La Hache, in south-central British Columbia. Coranex hold two separate claim blocks comprising 86 claims (11 of which were recently staked by AMAX for Coranex) in the area. The copper showings on these claims have been subjected to intermittent exploration since 1966. Amax Exploration, Inc. presently has an option on the property. This report covers results of geological mapping and geochemical surveys conducted in 1972 by AMAX on claims (i.e. 79 claims) lying immediately south of Peach Lake.

Regionally the property is situated within a narrow belt of Upper Triassic Nicola Group rocks near the western margin of the Quesnel Trough. Claims occupy part of the southern segment of a large annular magnetic high that largely lies peripheral to a monzonite stock. The magnetic high coincides with areas underlain by Nicola strata and probably related syenodiorite intrusions.

The property is underlain by a moderately to steeply northeasterly dipping sequence of Nicola volcanic and sedimentary rocks intruded by an alkalic intrusive complex. The complex mainly consists of two discontinuous intersecting intrusive zones respectively trending northeasterly and northwesterly. Intrusive zones are composed of syenodiorite dyke-swarms and dyke-like stocks.

The two main copper zones (i.e. Peach 1 and 2 zones) respectively occur adjacent the west and east boundaries of the northeasterly trending syenodiorite intrusive zone - particularly where syenodiorite intrudes a favourable andesitic Nicola horizon. Also, mineralized contact zones are spatially related with strong northeast faulting and shearing (particularly for the Peach 2 copper zone). These mineralized zones are up to 300 - 400 feet wide and 2500 feet long. The only other important mineralized zone is the Peach 5 showing. It occurs adjacent a monzonite

porphyry stock centered at the intersection area of the syeno-diorite intrusive zones. Grade of copper mineralization in above zones is estimated to range from .05 to 0.5% Cu.

The Peach 2 copper zone and Peach 5 showing, along with its probable projection along the contact of the monzonite stock, are reflected in part by low contrast induced polarization anomalies established by surveys conducted by Coranex in 1967 and by Asarco in 1969. The monzonite stock, mentioned above, is indicated to be strongly reflective by a magnetic low superimposed on the regional annular magnetic high. Strong northeast zones of faulting are also indicated as linears on the aeromagnetic maps.

Systematic subsoil geochemical sampling surveys conducted in 1972 over significant showings and in previously unsampled favourable areas led to the following results.

1. Significant copper mineralization is reflected by Cu-Ag$^{\pm}$Mo multi-element soil anomalies such as over the Peach 2 copper zone.

2. The Peach 1 copper zone is only weakly reflective as a small Cu$^{\pm}$Ag soil anomaly.

3. Additional sampling to the northeast of the Peach 2 copper zone depicted a few, relatively small Cu$^{\pm}$Ag soil anomalies. These anomalies probably reflect copper mineralization but are not considered to be of interest on the basis of weak mineralization in nearby outcrops.

4. A low contrast Cu^{+}Ag annular soil anomaly, largely in the BG horizon of gleysol soils derived from till, is partly coincident with the inferred contact of the probable monzonite stock. The anomaly may reflect background enhancement of metal contents in gleysol soils, but on the other hand could be reflecting mineralization otherwise geochemically masked by glacial till.

INTRODUCTION

General Statement

The Peach Lake Copper Property is located within the Interior Plateau of south-central British Columbia near Lac La Hache. Copper showings discovered in the area by Coranex in 1966 were subsequently staked and explored to 1968. Asarco and Amax Exploration, Inc. respectively optioned the property in 1969 and 1972. This report covers the results of geological mapping and geochemical sampling conducted on the West Peach Pit and East Peach Pit claim groups by AMAX in 1972.

Location and Access

The center of the property is approximately 13 air miles north-northwest of Lac La Hache (Figures 1, 2 and 3). It lies on the south side of Peach Lake between Lower Peach Lake in the east and Spout Lake on the west. Several copper showings occur within the claim block, most of which are readily accessible by secondary gravel roads north from Lac La Hache and east from Rail Lake.

Physiography

The property occupies part of the top and much of the north slope of an east-west trending rounded ridge system (Figures 2 and 5). Altitudes range from 3500 feet near Peach Lake to 4900 feet at the highest point on the ridge.

The area has been glaciated by both continental and valley glaciers. The latter is the most evident as attested by a relatively thin (i.e. tens of feet thick) valley fill of till, sands and gravels dominantly below altitudes ranging from 3700 to 4200 feet across the northern portion of the property. Outcrops are moderately abundant above the limits of the valley fill whereas, below these limits, outcrops are normally very scarce.

Drainage is moderately good for most of the area with intermittent streams flowing dominantly north except in the south-west part of the property where the drainage is to the west. Open swamps and timbered marshy ground are relatively common in the

overburden covered lower reaches in the north part of the property.

Much of the property is covered by old stands of mature spurce, fir, jackpine and poplar. Undergrowth, largely consisting of sidehill alder, occurs locally on the upper reaches of the property near drainage depressions, whereas it occurs much more abundantly and often with growths of devils club on the lower portions of the property in overburden covered areas. Thick immature stands of jackpine and spruce commonly occur on the far east-central portion of the property.

1972 AMAX Program

The 1972 exploration program carried out by AMAX included the following work phases:

1. Re-evaluation of all pre-existing data.
2. Re-mapping of previously located outcrops and additional mapping in selected areas.
3. Multi-element geochemical soil surveys over the main copper showings (i.e. Peach 1, 2 and 5) and over previously unsampled favourable areas to the northeast and northwest of the Coranex grids.
4. Limited battery induced polarization over the Peach 1 copper zone and part of the Peach 2 copper zone in order to support previous induced polarization data.
5. Percussion drilling mainly of the Peach 1 and 2 copper zones

This report covers the results of work phases 2 and 3 outlined above.

Property Status

The Peach Lake Property consists of 79 contiguous claims located immediately to the south of Peach Lake and of a separate claim block comprised of seven claims located four miles to the southeast of Peach Lake 2). These claims are presently under option to Amax Exploration, Inc.

For purposes of this report the term "property" refers

only to claims lying immediately south of Peach Lake since assessment work is only being applied to these claims at the present time.

REGIONAL GEOLOGIC AND AEROMAGNETIC SETTING

The Peach Lake Property is regionally situated within a northwest to northsouth trending belt up to ten miles wide of Upper Triassic Nicola Group volcanic and sedimentary rocks located near the western limit of the Quesnel Trough (Figure 3). The belt lies between the Jurassic Takomkane batholith on the east and overlying Miocene plateau basalts to the west. Nicola rocks are locally intruded by diorite to monzonite and locally syenite stocks and dykes. Several such intrusive bodies with associated copper showings are present within the Peach Lake Property.

Aeromagnetically the property occupies part of the southern segment of a regional annular magnetic high that largely lies peripheral to a hornblende monzonite stock. The aeromagnetic high largely coincides with areas underlain by Nicola strata and syenodiorite intrusions (re. Sutherland-Brown, A.;1968 Dept. of Mines Annual Report, pp. 155-159).

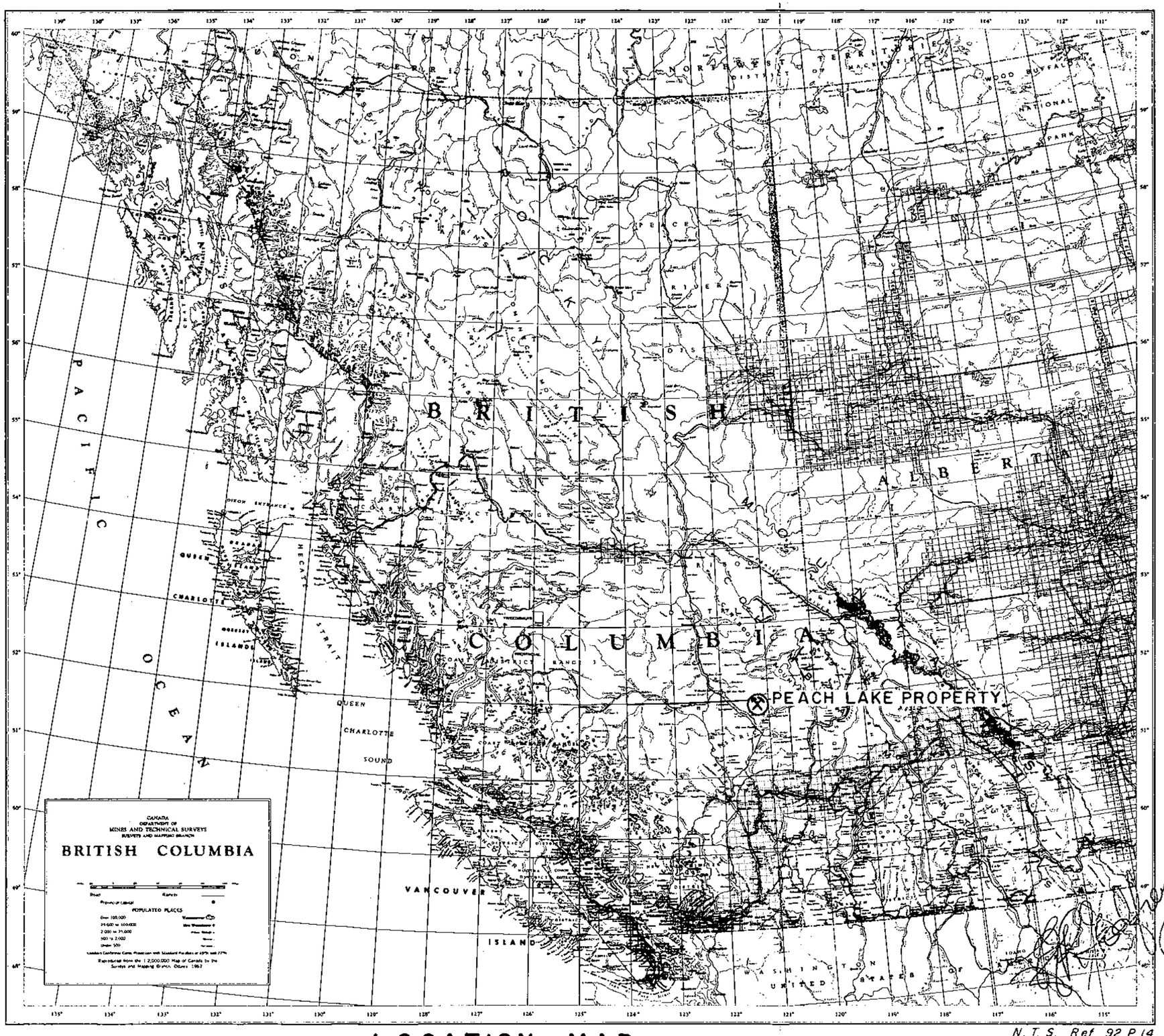
Locally the region of the magnetic high is covered by a thin veneer of Tertiary plateau basalts.

PROPERTY GEOLOGY

Introduction

Geological mapping of all previously located outcrops and in additional selected areas was carried out in 1972 (Figure 4). Outcrops are moderately abundant at higher elevations to the south, whereas to the north, within the glacial sediment covered valley slope, outcrops are very scarce except in local areas. Abundant angular float was occasionally used as evidence of bedrock material where outcrops were scarce. Control for mapping was provided by grids (i.e. Peach Grid East and North and North Slope Grid) constructed by Coranex.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3815 MAP #1



LOCATION MAP

N.T.S. Ref 92 P 14
FIG. 1

AMAX EXPLORATION INC.
(CORANEX OPTION)

SPOUT LAKE

PEACH LAKE ROAD

AMAX POTASH LIMITED

SPOUT LAKE

CORANEX ROAD

WEST PEACHPIT GROUP

PEACH LAKE

LOWER PEACH LAKE

EAST PEACHPIT GROUP

C. GUNN

AMAX POTASH LIMITED

BETHLEHEM COPPER CORP. LTD.

AMAX EXPLORATION INC.
NEW TIM GROUP (CORANEX OPTION)

AMAX EXPLORATION INC

PEACH LAKE PROPERTY
CORANEX OPTION

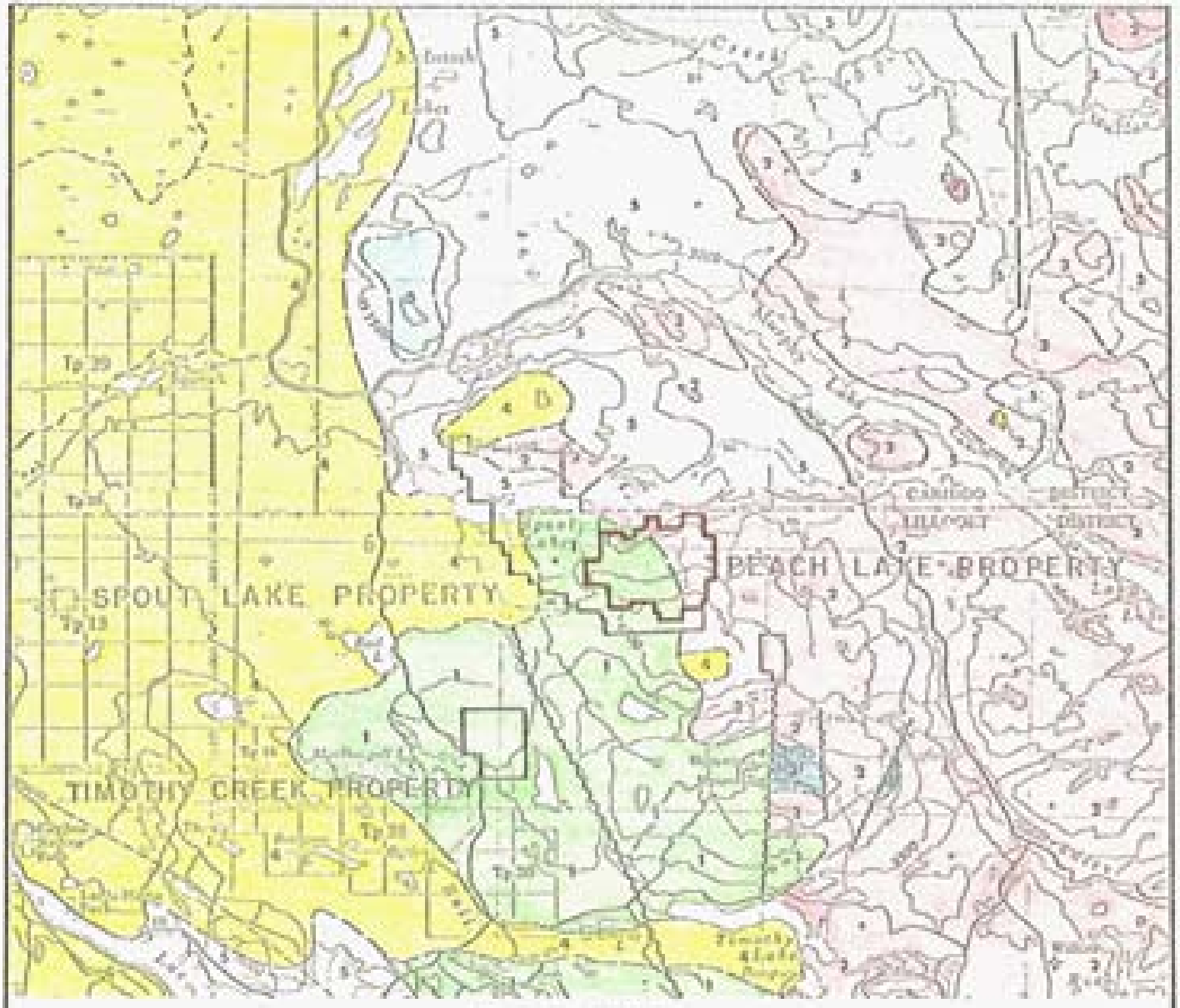
CLINTON MINING DIVISION — BRITISH COLUMBIA

CLAIM MAP

SCALE 1" = ½ MILE

N.T.S. Ref. 92 P 14

FIG. 2



LEGEND

QUATERNARY

5 — Glacial deposits and alluvium.

TERTIARY

4 — Plateau basalts.

3 — KAMLOOPS GROUP - Basic to acid volcanic rocks.

JURASSIC

2 — TAKOMKANE BATHOLITH - Basic to acid granitic rocks.

UPPER TRIASSIC - LOWER JURASSIC

1 — NICOLA GROUP - Volcanic and sedimentary rocks.

AMAX EXPLORATION INC

PEACH LAKE PROPERTY

CORANEX OPTION

CLINTON MINING DIVISION — BRITISH COLUMBIA

REGIONAL GEOLOGICAL MAP

SCALE 1 : 250,000

H.P.

N.T.S. Ref. 92 P/4

FIG. 3

Summary Statement

The property is underlain by a moderately to steeply northeasterly dipping sequence of Nicola Group volcanic and sedimentary strata intruded by an alkalic intrusive complex (i.e. intermediate composition of alkaline character). The complex is mainly comprised of two intersecting zones of intrusions respectively consisting of a northwest and northeast trending swarm of dykes and dyke-like stocks.

Significant copper mineralization occurs in two zones (i.e. Peach 1 and 2 copper zones) each of which is up to 300 - 400 feet wide and 2500 feet long. Another zone occurs at the brecciated and veined contact of a monzonite stock. Visual grades of copper mineralization within these zones is estimated to range from .05 to 0.5% Cu.

The above rock types are locally cut by narrow late acid to basic dykes. Also, Tertiary plateau basalts are locally present.

Description of Rock Units

Nicola Group

The Nicola Group strata dominantly strikes northwesterly across the property and dips moderately to steeply to the northeast. Four distinct conformable stratigraphic units (i.e. Units 1 to 4) are recognized. Also, facies changes are recognized within Units 2 and 4. These are characterized by dominance of volcanic rocks in the eastern and central portions of the property, and mixed sedimentary and volcanic rocks within and outside the northwestern portion of the property.

Unit 1 - is only locally exposed in the southwestern corner of the property. It consists of porphyritic basalt containing medium to coarse grained phenocrysts of augite to the east and of plagioclase to the west. Differential weathering of phenocrysts and groundmass is typical of this rock unit.

Unit 2 - appears to be a relatively thin horizon up to

600 - 700 feet thick. It consists of massive and amygdaloidal, dark green andesite to the east and very dark colored basaltic siltstone and fine to medium grained sandstones to the west. Sedimentary rocks of this unit are generally massive.

Unit 3 - occurs widespread and appears to pinch out gradually to the west. The unit is at least up to several thousand feet thick. It characteristically consists of volcanic breccia with abundant angular rounded fragments of grey to pink-orange syenodiorite. Other common fragments consist of epidotized volcanic material, andesite and augite porphyry basalt. Fragments range in size up to 2 - 3 inches across. The groundmass is dominantly fine grained, medium green andesitic material generally not obviously fragmental in character. One thin interbedded unit of crystal tuff (Unit 3a) was noted on claims WC 164, 165 and 166. It consists of crowded medium to coarse grained crystals of alkali feldspars in a green tuffaceous andesitic groundmass.

Very sparse amounts of disseminated chalcopyrite are commonly present in syenodiorite volcanic breccia (Unit 3) throughout the property. Also, pyrite commonly occurs in sparse amounts particularly disseminated in syenodiorite fragments in breccia over most of the property. Pyrite occurs abundantly (i.e. $\geq \frac{1}{2}\%$ and up to 5% pyrite) in a northwesterly trending zone up to approximately 1000 feet wide that extends across the property (i.e. shown on Figure 4 as the outline of a "pyritic pyroclastic unit").

Unit 4 - mainly occurs as a thick (i.e. up to about 1500 feet thick) discontinuous unit extending across the central portion of the property and interbedded with breccias of Unit 3. The unit lies stratigraphically between Unit 2 and the "pyritic pyroclastic unit" of Unit 3. It shows apparent left lateral off-set of approximately 4000 feet by northeast faulting in a zone including the Peach 2 fault. Unit 4 dominantly consists of an interbedded sequence of massive andesitic volcanic flows, breccias and tuffs

(Units 4a and 4b). Locally, some flows are amygdaloidal (Unit 4d) with amygdule fillings of calcite and epidote, and in one area to the west, flows of amygdaloidal and/or porphyritic augite basalts (Unit 4c), similar to Unit 1, occur interbedded with typical andesitic volcanics of Unit 4. Also, massive basaltic sandstone and siltstone (Unit 4f) horizons locally occur throughout Unit 4. They occur most abundantly to the west and are dominant west of Peach Lake. Here, the base of Unit 4 consists of thinly interbedded argillite, andesite tuffs and lime silicate beds (Unit 4e). This unit contains sparsely disseminated pyrite, pyrrhotite, magnetite and chalcopyrite.

Alkalic Intrusive Complex

The Peach Lake Property is centered over an alkalic intrusive complex intruding Nicola strata. The complex is composed of stocks, dyke-like stocks and dykes ranging in composition from syenodiorite to syenite. Five main intrusive phases of the complex are recognized as described in the following sections.

Medium grained monzonite (Unit 5) is only present in the southeastern portion of the property. Here, it occurs as northwesterly trending dyke-like stocks within minor dyke apophyses. These bodies are probably phases of the main syenodiorite intrusive body to the north and northwest. Monzonitic bodies are relatively mafic-rich with approximately 20% augite, have equigranular texture and contain approximately equal amounts of grey plagioclase and pinkish-red potash feldspar. Sparse amounts of disseminated and fracture controlled chalcopyrite locally occur in the monzonite bodies.

The main intrusive bodies within the property are composed of syenodiorite (Units 6 and 6a). These bodies are widespread; however, their distribution basically defines two discontinuous intersecting intrusive zones, respectively comprised of a northwest and northeast trending swarm of dykes and dyke-like stocks. On the

basis of foliation within syenodiorite bodies, it is inferred that northeasterly trending masses dominantly dip vertical to moderately to the east, whereas, northwest trending masses are indicated to dip vertical to steeply to the south or north. Contacts with Nicola strata are commonly sharp, except locally, where abundant dykelets (1/4" to a few feet wide) of syenodiorite pervade Nicola rocks up to 200 feet (more commonly 50 feet) from the main contact. These contact zones are shown on Figure 4 (i.e. "intrusive breccia zones"). The outer portions of the syenodiorite intrusive complex (Unit 6) dominantly have a distinct trachytic texture and hence commonly exhibits a moderately developed foliation. Sutherland-Brown (re. Sutherland-Brown, A.;1968 B.C. Dept. of Mines Annual Report, pp. 157-159) gives the average modal composition of this phases as follows:

Plagioclase	- 47.5
Potash feldspar	- 23.8
Augite	- 18.1
Biotite	- 6.5
Magnetite	- 3.5
Apatite, sphene and quartz	- accessory

The other phase recognized (i.e. "Biotitic Core Phase", Unit 6a) shows gradational boundaries with above described syenodiorite and broadly occurs as separate concordant cores within syenodiorite masses near the intersection area of the two intrusive zones.

Monzonite porphyry (Unit 7) is a distinct rock type exposed in the trench at the Peach 5 showing. Here, it occurs as a northeast trending dyke-like body intruding syenodiorite. Monzonite porphyry is characterized by approximately 30% medium to coarse grained pink phenocrysts of potash feldspar and 20% fine to medium grained light colored plagioclase laths all set in an aphanitic buff-pink groundmass. The rock contains up to 5% fine grained mafics. Sparse chalcopyrite occurs disseminated in monzonite and syenite masses.

Pink monzonite and syenite dykes (Unit 8) occur widespread over the property though are most abundant within the vicinity of the Peach 2 copper zone. They particularly occur cutting volcanic rocks near syenodiorite intrusions. Locally, they were observed intruding syenodiorite. Dykes commonly range from 1 to 30 feet wide and dominantly strike northeasterly or northwesterly. They are commonly porphyritic with medium to coarse grained pink alkali feldspar phenocrysts in a grey to pink mafic poor groundmass. Often phenocrysts are crowded, especially in dykes near and within the Peach 2 copper zone.

Mafic-rich monzonite (Unit 9) is exposed north and west of Peach Lake where it forms the southern limit of a monzonite stock intruding Nicola strata and centered within the regional annular magnetic high (re. "Regional Geologic Setting"). Monzonite also occurs southeast of Peach Lake as a northwesterly trending dyke-like mass. Here, it intrudes Nicola strata and by virtue of strong foliation of mafic minerals also appears to intrude syenodiorite (Unit 6). Monzonite is a fine to coarse grained mesocratic rock consisting of approximately equal amounts of plagioclase and potash feldspar with 20 to 30% hornblende and biotite.

Late Dykes

Late dykes consist of locally occurring narrow, pink acid porphyry dykes and basic dykes that intrude above rock types. Acid dykes (Unit 10) normally contain phenocrysts of hornblende, biotite, plagioclase and occasionally quartz in an aphanitic pink groundmass.

Basic dykes (Unit 11) consist of porphyritic and/or amygdaloidal or vesicular basalt and andesite.

Tertiary Cover Rocks

Basaltic flows (Unit 12) occur locally capping the above rock types on the ridge to the southeast, on the north slope and possibly on the valley floor to the northwest. Flows are dominantly

coarsely porphyritic with pyroxene and/or plagioclase phenocrysts in a fresh, crystalline fine grained groundmass. Flows are probably equivalent to Late Tertiary flood basalts regionally occurring to the west.

Structure

Structural elements recognized on the property include bedding, intrusive contacts, faults, shears, foliation, lineation, joints, fractures and veinlets. Structure of the Nicola sequence and intrusive bodies has been discussed previously.

Faults and shears dominantly trend northeast and northwest throughout the property. Northwest shears were only recognized locally such as on claims WC 157 and Pit 7. Also, east-west and north-northwest faulting and shearing is indicated in the vicinity of the Peach 2 showing.

Joint systems of similar attitudes occur in Nicola strata and in the alkalic intrusive complex. The most prominent trend is northeasterly, parallel to prominent faults and shears, with a subordinate conjugate pair trending north-northwest and west-northwest. Dips of joint sets are mainly vertical to steep.

Alteration

Wallrock alteration, mainly of alkaline character (i.e. alkalic type alteration minerals), occurs in the following geologic environments (also shown on Figure 4).

The most intense alteration recognized on the property occurs in syenodiorite volcanic breccia (Unit 3, "Dioritized Zone") and in andesitic tuff-breccia (Unit 4a; "Alkali Feldspar-Biotite-Epidote Metasomatized Zone"), respectively occurring concordantly adjacent monzonite (Unit 5) and syenodiorite (Unit 6). The "Dioritized Zone" is characterized by a weathered surface typical of syenodiorite volcanic breccia with differential weathering of syenodiorite fragments and the groundmass.

The "alkali feldspar-biotite-epidote metasomatised zone"

is characterized by an inhomogeneous textured, fine to medium grained rock composed of andesitic material showing varying degrees of pervasive metasomatism and recrystallization to biotite, alkali feldspar, epidote and magnetite.

Alteration, within intrusive breccia zones at syenodiorite (Unit 6) and monzonite porphyry (Unit 7) contacts, is characterized by varying degrees of pervasive "syenodioritization" of hornfelsed volcanic rocks (i.e. pervasive ghosted replacement of wallrock to a mineral aggregate texturally and mineralogically similar to syenodiorite).

Veining

Veining occurs as stockworks on the property in (1) the marginal phase of syenodiorite intrusions and (2) in and adjacent metasomatized intrusive breccia zones at syenodiorite or monzonite porphyry contacts. Mineral assemblage of veinlets is similar in the two environments though the proportion of mineral phases present varies. Minerals characteristic of veinlets include potash feldspar, epidote, biotite, magnetite, tourmaline, chalcopyrite and pyrite. Veinlets commonly range in width from hairline to 1" (average 1/8 - 1/4").

Vein stockworks developed at the Peach 5 showing are similar to those from Peach 1 and 2 copper zones, however, potash feldspar in veinlets at the former showing is normally grey and commonly with red alteration selvages along veinlets.

MINERALIZATION

Sulphide minerals recognized on the property include pyrite, pyrrhotite, chalcopyrite and bornite. All sulphides occur in veinlets, along fractures or disseminated. Significant chalcopyrite mineralization was always noted to occur in association with magnetite.

Significant copper occurrences include the Peach 1 and 2 copper zones and Peach 5 showing (See Figure 4). The Peach 1 copper zone occurs within a northeasterly trending embayment of

Unit 4 volcanic rocks along the western margin of the northeasterly trending syenodiorite body.

The Peach 2 copper zone is centered about an exposure of copper mineralized and altered intrusive breccia, similar to that of the Peach 1 copper zone, located south of the access road on claim Peach 211 Fractional. This mineralized exposure is part of a series of showings in small outcrops consisting of weak chalcopyrite and malachite mineralization along shears and in veinlets within a northeasterly trending zone along the eastern contact of the syenodiorite mass with Unit 4 volcanic rocks.

The Peach 5 showing is located in a trench exposing the southern part of the monzonite porphyry contact on claim Peach 81. Here, chalcopyrite mainly occurs in veined syenodiorite at the contacts of monzonite porphyry. Also minor disseminated chalcopyrite occurs in monzonite and minor malachite occurs widespread along the trench.

GEOCHEMISTRY

Introduction

Systematic subsoil sampling geochemical surveys were conducted over portions of the property considered favourable to copper mineralization and geochemically untested by earlier Coranex surveys (Figure 5). Also, re-sampling was carried out over the main copper showings (i.e. Peach 1 and 2) since multi-element geochemical analyses were not applied by Coranex. Such analyses were believed necessary in order to fully geochemically signature significant copper mineralization.

Soil samples were taken at 200 foot intervals along grid or pace and compass lines spaced 400 or 800 feet apart. Samples were consistently taken from the B horizon wherever possible. A total of 559 geochemical samples were collected (mainly soil samples) and analyzed by atomic absorption at the

Amax Burnaby Laboratory for "total" Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn and Pb. Details of sample collection and analytical procedures are given in Appendix II. All analytical results are tabulated in Appendix III. Sample locations and analytical results for Mo, Cu and Ag are shown on Figure 5.

Geochemical Environment

Physiography was discussed in an earlier section. It should be noted that the annual precipitation is approximately 25 inches.

Soils developed in the area are mainly brown forest earths comprising forest litter, thin AH horizons and oxidized medium brown subsoils derived from bedrock, till and locally fluvio-glacial sands and gravels. In places, incipient podzolization is observed in till derived soils though this is much more common in areas of free down profile drainage such as in soils derived from sands and gravels or from bedrock on some of the rounded ridge tops. Gleying is evident in waterlogged depressions fringing lakes and intermittent creeks and in open swamps on timbered marshy areas. These environments particularly occur on gently dipping to flat, low lying areas underlain by till in the north-central portion of the property. Locally, thickening of the FH horizon of gleys gives rise to basin peat.

The pH of soils ranges from 5.2 to 6.5 and averages approximately 6.0.

Geochemical Results

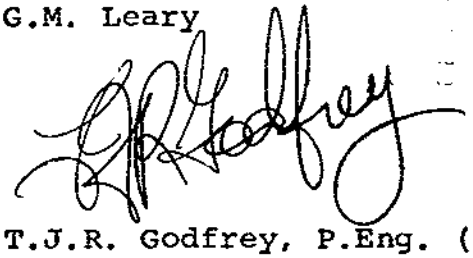
Metal thresholds were determined for copper by means of a cumulative frequency plot. Thresholds for Mo and Ag were estimated by scanning the data and by comparison to other properties. Determination of threshold levels for most of the other elements was not necessary due to absence of significant variation in metal contents in soils and little or no deviation from background levels. However, Fe values exceeding 4.0% are considered

abnormally high. Threshold values in ppm for Mo, Cu and Ag in soil and silt samples are as follows:

	Background	Positive	Anomalous
Mo	$\leq$ 1	2-10	> 10
Cu	0-110	111-225	>225
Ag	$\leq$ .5	>.5	-

Probably and possibly significant multi-element anomalies (i.e. Cu$\pm$Ag$\pm$Mo) that may reflect significant bedrock mineralization are outlined on Figure 5.

G.M. Leary



T.J.R. Godfrey, P.Eng. (B.C.)

APPENDIX I - STATEMENT OF COSTS

Claim Names	Record Numbers	Anniversary Dates
Peach #44	13493	August 8, 1973
46	13495	August 8, 1973
48	13497	August 8, 1973
59-61 incl.	13559-13561 incl.	August 10,1973
62-64 incl.	13562-13564 incl.	August 10,1974
65-68 incl.	13565-13568 incl.	August 10,1978
73-74	13803-13804	August 24,1973
77-80 incl.	13807-13810 incl.	August 24,1973
81-85 incl.	13811-13815 incl.	August 24,1974
86	13816	August 24,1973
87	13817	August 24,1974
88-90 incl.	13818-13820 incl.	August 24,1973
211 Fr. - 212 Fr.	15512-15513	July 31,1972
215	16086	Oct. 16,1973
Pit #58-59	18971-18972	Sept. 19,1973
67	19089	Sept. 30,1973
69-71	19091-19093	Sept. 30,1973

Period of Work - May 23 to August 8, 1972

Summary of Work - Geological mapping - 6 square miles
Geochemical analyses - 559 samples

Personnel and Salaries

G.M. Leary,MSc.Geologist I/C, 601-535 Thurlow St.,Vancouver,B.C.
36 days @ $60.00/day $2,160.00
D.G. MacIntyre,BSc. Geologist, Box 730, Smithers, B.C.
16 days @ $27.00/day 432.00
G.C. Stock, Jr.Assistant, 1725 W 16 Avenue,Vancouver,B.C.
8 days @ $22.00/day 176.00
D.R. Ramage, Jr.Assistant, 1124 Mayor Magrath Dr.,Lethbridge,Alberta
1 day @ $18.00/day 18.00
Nickolas Sworyk, Jr.Assistant, Box 235, Houston, B.C.
2 days @ $28.00/day 56.00
M.J. Meneghetti, Jr.Assistant, 247 W 2nd, North Vancouver, B.C.
2 days @ $16.00/day 32.00
F.J. Ferguson, Geol. Tech., 601-535 Thurlow St.,Vancouver, B.C.
2 days @ $42.00/day 84.00

Room and Board

66 man days @ $10.00/day 666.00

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 31
day of August 1972, A.D.

Elizabeth K Boyd

Joan Turner

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

Sub-Mining Recorder

Geochemical Analyses

559 samples analyzed for Mo, Cu, Pb, Zn, Ag, Fe, Mn, Ni, Co @ $3.00/sample	$1,677.00
Vehicle	
40 days @ $20.00/day	800.00
Report Preparation and Drafting	400.00
	$6,501.00

This work is to be applied for one year on the

Peach #44,46,48,50,59-61,62-64,65,68,211 Frac., 212 Frac., 215 and
Pit #69-71 claims

This work is to be applied for two years on the

Peach #73-74,77-90 and
Pit #58-59, 67 claims.

Elizabeth K. Boyd

Declared before me at the City of Vancouver, in the Province of British Columbia, this 31 day of August 1972, A.D.

Jan Sunes

A Commissioner for taking Affidavits within British Columbia
A Notary Public in and for the Province of British Columbia

Sub-Mining Recorder

APPENDIX II

Procedures for Collection and Processing of Geochemical Samples

Analytical Methods for Ag, Mo, Cu, Pb, Zn, Fe, Mn, Ni, Co and W in sediments and soils; Mo, Cu, Zn, Ni and SO_4^{--} in waters.

Amax Exploration, Inc.
Vancouver Office.

September 1970

R.F. Horsnail

SAMPLE COLLECTION

Soils

B horizon material is sampled and thus organic rich topsoil and leached upper subsoil are avoided. Occasionally organic rich samples have to be taken in swampy depressions.

Samples are taken by hand from a small excavation made with a cast iron mattock. Approximately 200 gms of finer grained material is taken and placed in a numbered, high wet-strength, Kraft paper bag. The bags are closed by folding and do not have metal tabs.

Observations as to the nature of the sample and the environment of the sample site are made in the field.

Drainage Sediments

Active sediments are taken by hand from tributary drainages which are generally of five square miles catchment or less. Composite samples are taken of the finest material available from as near as possible to the centre of the drainage channel thus avoiding collapsed banks. More than one sample is taken if marked mineralogical or textural segregation of the sediments is evident.

Some 200 gm of finer material is collected unless the sediment is unusually coarse in which case the weight is increased to 1 kg. Samples are placed in the same type of Kraft paper bag as are employed in soil sampling. Water samples are taken at all appropriate sites. Approximately 100 mls are sampled and placed in a clean, screw sealed, polythene bottle. Observations are made at each site regarding the environment and nature of the sample.

Rock Chips

Composite rock chip samples generally consist of some ten small fragments broken from unweathered outcrop with a steel hammer. Each fragment weighs some 50 gms. Samples are placed in strong polythene bags and sealed with non-contaminating wire tabs. Samples are restricted to a single rock type and obvious mineralization is avoided.

Soil, sediment and rock samples are packed securely in cardboard boxes or canvas sacks and dispatched by road or air to the AMAX geochemical laboratory in Vancouver.

SAMPLE PREPARATION

Packages of samples are opened as soon as they arrive at the laboratory and the bags placed in numerical sequence in an electrically heated sample drier (maximum temperature 70°C).

After drying soil and sediment samples they are lightly pounded with a wooden block to break up aggregates of fine particles and are then passed through a 35 mesh stainless steel sieve. The coarse material is discarded and the minus 35 mesh fraction replaced in the original bag providing that this is undamaged and not excessively dirty.

Rock samples are exposed to the air until the outside surfaces are dry; only if abnormally wet are rocks placed in the sample drier. Rock samples are processed in such manner that a fully representative ½ g sample can be obtained for analysis. The entire amount of each sample is passed through a jaw crusher and thus reduced to fragments of 2 mm size or less. A minimum of 1 kg is then passed through a pulverized with plates set such that 95% of the product will pass through a 100 mesh

screen. Where samples are appreciably heavier than 2 kg the material is split after jaw crushing by means of a Jones splitter. After pulverizing the sample is mixed by rolling on paper and is then placed in a Kraft paper bag.

SAMPLE DIGESTION

Digestion tubes (100 x 16 mm) are marked at the 5 ml level with a diamond pencil. Tubes are cleaned with hot water and concentrated HCl. 0.5 g samples are weighed accurately, using a Fisher Dial-O-Gram balance, and placed in the appropriate tubes.

To each of the samples thus prepared are added 2 ml of an acid mixture comprising 15% nitric and 85% perchloric acids. Racks of tubes are then placed on an electrical hot plate, brought to a gentle boil ($\frac{1}{2}$ hour) and digested for $4\frac{1}{2}$ hours. Samples unusually rich in organic material are first burned in a porcelain crucible heated by a bunsen burner before the acid mixture is added. Digestion is performed in a stainless steel fume hood.

After digestion tubes are removed from the hot plate and the volume is brought up to 5 ml with deionized water. The tubes are shaken to mix the solution and then centrifuged for one minute. The resulting clear upper layer is used for Cu, Mo, Pb, Zn, Ag, Fe, Mn, Ni and Co determination by a Perkin-Elmer 290B atomic absorption spectrophotometer. Analytical procedures are given on the following pages.

ANALYTICAL PROCEDURES

Silver

1. Scope - This procedure covers a range of silver in the sample from less than .5 to 1000 ppm

2. Summary of Method - The sample is treated with nitric and perchloric acid mixture to oxidize organics and sulphides. The silver then is present as perchlorate in aqueous solution. The concentration is determined by atomic absorption spectrophotometer

3. Interferences - Silver below 1 gamma/ml is not very stable in solution. Maintaining the solution in 20% perchloric prevents silver being absorbed on the glass container. Determination must be completed on the same day as the digestion.

   Samples high in dissolved solids, especially calcium, cause high background absorbance. This background absorbance must be corrected using an adjacent Ag line.

Silver AA Settings P.E. 290

Lamp - Ag

Current 4 ma position 3

Slit 7 A

Wavelength 3281A Dial 287.4

Fuel - acetylene - flow - 14

Oxidant - air - flow - 14

Burner - techtron AB_51 in line

Maximum Conc. 3 to 4x

Calibration

1. Set 1 gamma/ml to read 40 equivalent to 20 gamma/gm

   Factor $\frac{1}{2}$ x meter reading

   Check standards

   4, 10, 20, 40 ppm Ag in sample

2. Set 15 gamma/ml to 100 equivalent to 100 ppm

   Check standards

   40, 100 ppm

   Factor directly in ppm Ag

3. Rotate burner to maximum angle

   Set 10.0 gamma/ml Ag to read 100

   Check standards

   100, 200, 400, 1000 ppm Ag

   Factor 10x scale reading

4. Samples higher than 1000 ppm should be re-analyzed by assay procedure

5. Background correction for sample reading between 1 to 5 ppm

   Calibrate AA in step 1

   Dial wavelength to 300 (peak)

   Read the samples again

   Subtract the background reading from the first reading

Standards

1. 1000 gamma/ml Ag - 0.720 gm Ag_2SO_4 dissolved in 20 mls $Hxl0_3$ and dilute to 500 mls

2. 100 gamma/ml Ag - 10 mls of above + 20 mls $HClO_4$, dilute to 100 mls

3. Recovery spiked standard

5 gamma/ml Ag - 5 mls 100 gamma/ml dilute to 100 mls with "mixed" acid

Working AA Standards

Pipette .2, .5, 1, 2, 5, 10 mls of 100 gamma/ml and 2, 5 mls 1.000 gamma/ml dilute to 100 mls with 20% $HClO_4$. This equivalent to 4, 10, 20, 40, 100, 200, 400, and 1000 ppm Ag in the sample .50 gm diluted to 10 mls.

Recovery Standard

Pipette 2 mls of 5 gamma/ml Ag in mix acids into a sample and carry through the digestion. This should give a reading of 20 ppm Ag + original sample content.

Follow the general geochemical procedure for sample preparation and digestion.

For low assay Ag, the same procedure is used. Ag is then calculated in oz/ton.

1 ppm = .0292 oz/ton

conversion factor

oz/ton = .0292 x ppm Ag

Zn Geochemical AA Setting

Lamp Zn

Current 8 #3 Slit 20A

Wave length 2138 Dial 84.9

Fuel - Acetylene Flow 14

Oxidant - Air Flow 14

Burner - P.E. short path 90°

Range

0 - 20 gamma/ml Factor 4x - 0 to 400 ppm

0 - 50 gamma/ml Factor 10x -0 to 1000 ppm

For Waters - Burner AB- 51 in line 1 gamma/ml read 100 to give 0 to 1000 ppb

High Zn Burner Boling in line. Wavelength 3075. Dial 250 Slit 7A

Fuel 14 Air 14.5

0 to 1000 gamma/ml read 0 to 20 Factor 400 x

Pure Standard 10,000 gamma/ml

1 gm Zn dissolved, H_2O, HCl, HNO_3, $HClO_4$, fumed to $HClO_4$ - make up to 100 mls H_2O

1000, 100 gamma/ml and 100 ml by dilution in 20 % $HClO_4$

0 to 200 gamma/ml Zn use combined Cu, Ni, Co, Pb, Zn standards

Pipette

1, 2, 3, 5, 8, 10 mls of 10,000 gamma/ml - dilute to 100 mls with 20% $HClO_4$ to give

100, 200, 300, 500, 800, 1000 gamma/ml Zn for high standards

Co Geochemical AA Setting

Lamp - 5 multi element

Current 10 #4 Slit 2A

Wavelength 2407 Dial 133.1

Fuel - Acetylene Flow 14

Oxidant - Air Flow 14

Burner - AB 51 in line

Range

0 - 10 gamma/ml read 100 Factor 2 x reading to 200 ppm

0 - 20 gamma ml read 100 Factor 4 x reading to 400 ppm

Burner at maximum angle

0 - 100 gamma/ml read 100 Factor 20 x reading to 2000 ppm

0 - 200 gamma/ml read 100 Factor 40 x reading to 4000 ppm

Standards - 1000 gamma/ml

1.000 gm cobalt metal dissolved in HCl, HNO, and fumed into $HClO_4$, dilute to 1 liter

Pipette

1, 2, 10, 20 mls into 100 ml vol flasks diluted to mark with 20% $HClO_4$

This gives

10, 20, 100, 200 gamma/ml Co

Mixed - combination standards of Cu, Ni, Co, Pb, Zn

of

1, 2, 5, 10, 20, 30, 50, 80, 100, 150, 200 gamma/ml are used for calibration

Mn Geochemical AA Setting

Lamp Multi element Ca, Ni, Co, Mn Cr

Current 10 #4 Slit 7A

Wave length 4030.8 Dial 425.2

Fuel - Acetylene Flow 14.0

Oxidant - Air Flow 14.0

Burner - P.E. short path (or AB 50)

Range

0 - 100 gamma/ml Factor 20x - 0 to 2000 ppm

0 - 200 gamma/ml Factor 40x - 0 to 4000 ppm

Burner 90°

0 - 1000 gamma/ml Factor 200x - 0 to 20,000 ppm

0 - 2000 gamma/ml Factor 400x - 0 to 40,000 ppm

EDTA Extraction - use AB 51 in line

0 - 20 gamma/ml Factor 4x - 0 to 400 ppm

Standards

Fisher 10,000 gamma/ml (ml)

10x Dilution 1000 gamma/ml

Pippette

.5, 1, 2, 3, 5, 8, 10, ml of 1000 gamma/ml

2, 3, 5, 8, 10, 15, 20 ml of 10,000 gamma/ml dilute to 100 mls with 20% $HClO_4$. This gives

5, 10, 20, 30, 50, 80, 100, 200, 300, 500, 800, 1000, 1500, 2000 gamma/ml

Mo Geochemical AA Setting

Lamp ASL H/C Mo

Current 5 #5 Slit 7A

Wavelength 3133 Dial 260.2

Fuel - Acetylene Flow 12.0 to give 1" red feather

Oxidant - Nitrous oxide Flow 14.0

Burner - AB 50 in line

Caution read the operation using N_2O and acetylene flame at end of general AA procedure

Range

0 - 10 gamma/ml Factor 2x - 0 to 200 ppm

Rotate burner to max. angle

0 - 50 gamma/ml Factor 10 x 0 to 1000 ppm

0 - 100 gamma/ml Factor 20 x 0 to 2000 ppm

Standards 1000 gamma/ml

Dissolve .750 gms MoO_3 (acid molybdic) with 20 mls H_2O, 6 lumps NaCH, when all dissolved, add 20 mls HCl, dilute to 500 mls

100 gamma/ml - 10 x dilution

Pipette

.2, .5, 1, 2, 3, 5, 8, 10 mls of 100 gamma/ml

2, 3, 5, 8, 10 mls of 1000 gamma/ml add 5 mls 10% $AlCl_3$ and dilute to 100 mls with 20% $HClO_4$

This gives

.2, .5, 1, 2, 3, 5, 8, 10, 20, 30, 50, 80, 100 gamma/ml Mo

Fe Geochemical AA Setting

Lamp - Fe

- Do not use multi element Fe

Current 10 #4 Slit 2A

Wavelength 3440.6 Dial 317.5

Fuel - Acetylene Flow 14.0

Oxidant - Air Flow 14.0

Burner - PE Short Path 90°

Range

0 - 5000 gamma/ml 0.1 x % - 0 to 10.0%

0 - 10,000 gamma/ml 0.2 x % - 0 to 20.0%

Higher Fe - 10 x dilution

Standards 10,000 gamma/ml

Weigh 5.000 gms iron wires, into beaker, add H_2O, HCl, HNO_3, $HClO_4$, heat to $HClO_4$ fumes. Add $HClO_4$ to 100 mls + 100 mls H_2O, warm, dilute to 500 mls

Pipette

1, 5, 10, 20, 30, 50, 80 mls 10,000 gamma/ml dilute to 100 mls with 20% $HClO_4$ to give

100, 500, 1000, 2000, 3000, 5000, 8000 gamma/ml to be equivalent to .2, 1.0, 2.0, 4.0, 6.0, 10.0%, 16.0% Fe in geochem sample

Ni Geochemical AA Setting

Lamp P.E. H/C. Ni or multi element Cu, Ni, Co, Mn, Cr

Current 10 #4, Slit 2A

Wave length 3415 Dial 312.5

Fule - Acetylene Flow 14.0

Oxidant - Air Flow 14.0

Burner AB 51 in line

Range

0 - 20 gamma/ml Factor 4x - 0 - 400 ppm

0 - 100 gamma/ml Factor 20x - 0 - 2000 gamma

45° 0 - 200 gamma/ml Factor 40x - 0 - 4000 ppm

0 - 500 gamma/ml Factor 100x - 0 - 10,000 ppm

Ni in waters and very low ranges

Wave length 2320 Dial 113

Range 0 - 5 gamma/ml Factor 1x - 0 - 100 ppm

Standards 10,000 gamma/ml

1.000 gm pure Ni metal dissolved in HCl, HNO_3, $HClO_4$ to perchloric fumes, dilute to 100 ml H_2O

1000 gamma/ml and 100 gamma/ml Successive 10x dilutions in 20% HCl

1, 2, 5, 8, 10 mls of 100 gamma/ml

2, 5, 8, 10 mls 1000 gamma/ml

2, 5, 8, 10 mls 10,000 gamma/ml - dilute to 100 mls in 20% HClO4. This gives

1, 2, 5, 8, 10, 20, 50, 80, 100, 200, 500, 800, 1000 gamma/ml

Combined Standards - Cu, Ni, Co, Pb, Zn is used as a working standard

Cu Geochemical AA Setting

Lamp Single Cu or

5 multi element

Current 10 for multi element #4 Slit 7A

4 for single #3 Slit 7A

Wavelength 3247 Dial 280

Burner Techtron AB 51 (For Cu in natural waters)

P.E. Short Path (For geochem)

Fuel Acetylene Flow 14

Oxidant Air Flow 14

Range

0 - 5 gamma/ml Factor 1x to 100 ppm (for low Cu)

0 - 20 gamma/ml Factor 4x to 400 ppm

Burner 90°

0 - 200 gamma/ml Factor 40x to 4000 ppm

Wavelength 2492 Dial 147

Burner in line

Range

0 - 1000 gamma/ml Factor 200x to 20,000 ppm

0 - 2000 gamma/ml Factor 400x to 40,000 ppm

Higher range than 40,000 ppm requires 10x dilution

Standards

10,000 gamma/ml

1.000 gm metal powder, H_2O, HCl, HNO_3 until dissolved, add $HClO_4$, fume dilute to 100 mls

1000 gamma/ml 10x dilution above in 20% $HClO_4$

2000 gamma/ml 20 mls 10,000 gamma/ml - dilute to 100 mls in 20% $HClO_4$

100 gamma/ml 10x dilution 1000 gamma/ml dilute to 100 mls in 20% $HClO_4$

200 gamma/ml 10x dilution 2000 gamma/ml dilute to 100 mls in 20% $HClO_4$

Pipette

1, 2, 3, 5, 8, 10 mls 100 gamma/ml - dilute to 100 mls with 20% $HClO_4$ to give 1, 2, 3, 5, 8, 10 gamma/ml

Combined standards Cu, Ni, Co, Pb, Zn

1, 2, 5, 10, 20, 30, 50, 80, 100, 150, 200 gamma/ml

Pb Geochemical AA Setting

Lamp ASL H/c Pb

Current 5 ma Slit 7A

Wave length 2833 Dial 208

Fuel - acetylene Flow 14

Oxidant - air Flow 14

Burner AB 51 in line

Range

0 - 20 gamma/ml to read 0 to 80. Factor 5x 0 to 500 ppm

0 - 200 gamma/ml to read 0 to 80. Factor 50x 0 to 5000 ppm

Standards - 10,000 gamma/ml

1.000 pure metal, dissolved in HNO_3, fumed to $HClO_4$ make up to 100 mls in 20% $HClO_4$

1000 gamma/ml and 100 gamma/ml Successive 10x dilutions in 20% $HClO_4$

Pipette

1, 2, 5, 8, 10 mls 100 gamma/ml

2, 5, 8, 10, 20 mls 1000 gamma/ml dilute to 100 mls in 20% $HClO_4$ this gives

1, 2, 5, 8, 10, 20, 50, 80, 100, 200 gamma/ml

Combined Standards Cu, Ni, Co, Pb, Zn, are used as working standards

W in Soils and Silts

Reagents and apparatus

Test tubes - pyrex disposable

Test tubes - screw cap

Bunsen Burner

Flux - 5 parts Na_2CO_3

4 parts NaCl

1 part KNO_3 pulverized to -80 mesh

7% $SnCl_2$ in 70% HCl

20% KSCN in H_2O

Extractant - 1 part tri-n-butyl phosphate

9 parts carbon tetrachloride

Standards

1000 gamma/ml W

.18 gms Na_2WO_4 $2H_2O$ dissolved in H_2O, make up to 100 mls

100 gamma/ml, 10 gamma/ml by dilution

Standardization

Pipette .5, 1, 2, 3, 5, 8, 10 ml of 10 gamma/ml

and 1.5, 2 mls of 100 gamma/ml - dilute to 10 mls

continue from step #4

Artificial colors - Nabob pure Lemon Extract, dilute with 1:1 ethanol and water to match. Tightly seal these for permanent standards

Procedure

1. Weigh 1.0 gram sample, add 2 gm flux, mix

2. Sinter in rotary for 2 to 3 minutes (Flux dull read for one minute)
3. Cool, add 10 mls H_2O, heat in sand bath to boiling, cool, let sit overnight
4. Stir, crush, and mix. Let settle
5. Take 2 ml aliquot into screw cap test tube
6. Add 7 mls $SnCl_2$, heat in hot water bath for 5 minutes (80°C)
7. Cool to less than 15°C
8. Add 1 ml 20% KSCN, mix (if lemmon yellow; compare color standard 10x)
9. Add $\frac{1}{2}$ ml extractant, cap, shake vigorously 1 minute
10. Compare color

Molybdenum in Water Samples

1. Transfer 50 mls to 125 separatory funnel
2. Add 5 ml .2% ferric chloride in conc HCl
3. Add 5 mls of mixed KSCN and $SnCl_2$
4. Add 1.2 mls isopropyl ether, shake for 1 minute, and allow phases to separate
5. Drain off water
6. Compare the color of extractant

Standardization

Pipette 0, .2, .5, 1, 2, 3, 4, 5, mls of 1 gamma/ml and 1, 1.5, 2, mls of 10 gamma/ml dilute to 50 mls with demineralized H_2O, and continue step #2.

This equivalent to -

1, 4, 10, 20, 40, 60, 80, 100, 200, 300, 400 ppb Mo

Artificial color - Nabob orange extract dilute with 1:1 H_2O to methanol to match. Seal tightly

$SnCl_2$ - 15% in 15% HCl

300 gm $SnCl_2 \cdot 2H_2O$ + 300 mls HCl, until $SnCl_2$ dissolved dilute to 2 liters

KSCN - 5% in H_2O

Mixed $SnCl_2$ - KSCN

3 parts $SnCl_2$ to 2 parts KSCN

Water Samples Run for AA

1. Cu - 2 gamma/ml reads 80 scale therefore 1 unit = 25 ppb

2. Zn - 1 gamma/ml reads full scale therefore 1 unit = 10 ppb

3. Ni - 2.5 gamma/ml reads 50 scale therefore 1 unit = 50 ppb

Burner: long slot techtron burner in line

Sulphate in Natural Waters

1. Pipette 0.5 ml sulphate reagent mix into a colorimetric tube
2. Add 5 ml water sample and mix
3. Read at 343 mμ against a demineralized water blank
4. Read again at 400 mμ and subtract from sulphate reading
5. Calculate ppm sulphate from the graph

Reagent

Dissolve 54 grams red mercuric oxide (J.T. Baker 2620- Can Lab) in 185 ml 70% perchloric acid and 20 ml H_2O, shake for one hour. Add 46.3 grams ferric perchlorate [$Fe(ClO_4)_3 \cdot 6H_2O$] (GFS 39) and 47 grams aluminum perchlorate [$Al(ClO_4)_3 \cdot 8H_2O$] (GFS 2) Add 400 ml water to dissolve, let settle overnight, decant into bottle and make to 1 liter

pH MEASUREMENTS

Soil and drainage sediment samples are dampened with water in a glass beaker to a pasty consistency. Demineralized water is used for this purpose as it has a low buffer capacity and thus does not influence the pH of the sample. Measurement is made with a Fisher Acumet pH meter. Electrodes are stored in buffer overnight. A 30 minute warm up time is allowed for the instrument each morning. A 10 ml aliquot is taken from water samples for pH measurement.

APPENDIX III - Geochemical Analytical Results

23

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION SPOUT LAKE

REQUESTED BY G.M. LEARY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	%Fe	Ag	Zn	Pb	Cu	No.
01	72 HSS 132		1	80	12	12	200	2.5	.1	40	T	36	01
02	133		1	30	16	16	320	3.1	.1	34	10	64	02
03	134		1	32	8	18	280	3.2	.1	46	10	100	03
04	135		1	80	32	42	620	4.8	1.0	116	34	270	04
05	136		1	46	28	28	420	5.6	1.0	76	20	826	05
06	137		1	200	12	24	400	2.4	.1	98	12	32	06
07	138		1	170	8	16	320	2.9	.1	40	8	56	07
08	139		1	184	16	16	260	3.1	.1	40	8	68	08
09	140		1	86	56	26	680	4.2	2.0	66	16	>1320	09
10	141		1	52	20	20	540	3.0	.1	56	16	400	10
11	142		1		16	20	500	3.0	.1	48	10	284	11
12	143		1		24	18	1040	2.9	1.0	50	10	>440	12
13	144					N.S.							13
14	145		1		8	10	200	2.0	.1	26	4	40	14
15	146		1		8	8	220	1.3	1.0	28	4	32	15
16	147		1		40	20	1160	3.4	.1	42	12	248	16
17	148		1		12	12	320	2.5	.1	42	10	44	17
18	149		1		16	12	320	2.4	.1	40	8	48	18
19	150		1		12	14	280	2.4	.1	36	6	44	19
20	151		1		16	14	400	2.6	.1	34	8	80	20
21	152		1		12	8	220	1.7	.1	24	8	34	21
22	153		1		20	16	200	2.7	.1	40	10	24	22
23	154		1		12	12	200	2.0	.1	32	10	30	23
24	155		1		16	14	200	2.4	0.5	32	10	28	24
25	156		1		12	8	240	1.8	0.5	28	8	158	25
26	157		1		12	8	300	2.1	0.1	30	8	50	26
27	158		1		16	14	440	2.5	.1	34	8	896	27
28	159		1		16	12	440	2.4	.1	36	10	304	28
29	160		1		38	24	960	4.0	1.0	58	16	>850	29
30	161		1		16	14	520	2.7	.1	46	10	148	30
31	162		1		52	24	920	4.6	.1	80	20	>630	31
32	163		1		18	10	360	2.1	.1	36	8	108	32
33	164		1		16	12	320	2.2	.1	36	8	54	33
34	165		1		32	20	720	3.6	1.0	56	14	172	34
35	166		1		28	20	780	3.8	1.0	56	14	264	35
36	167		1		14	10	340	1.9	.1	32	8	32	36
37	72 HSS 168		1		20	16	500	3.9	.1	40	12	110	37
38	~~169~~												38
39	720												39
40	GT		2.7		208	10	120	0.9	.1	72	6.0	>800	40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

2

24

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION SKUT LAKE

REQUESTED BY G.M. LEARY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo%	Cu	Ni	Co	Mn	%Fe	Ag	Zn	Pb			No.
01	72 HSS 169		1	80	24	14	320	2.3	.1	44	12			01
02	170		1	28	16	12	240	1.8	.1	40	12			02
03	171		1	32	14	8	160	1.9	.1	30	8			03
04	172		1	28	12	8	200	1.5	.1	28	8			04
05	173		1	40	14	12	220	2.3	.1	36	8			05
06	174		1	196	32	12	560	3.6	1.0	52	16			06
07	175		1	160	28	14	400	2.7	.1	44	10			07
08	176		1	180	28	16	480	3.0	.1	46	10			08
09	177		1	80	20	16	460	2.7	.1	38	10			09
10	178		1	50	16	14	400	2.3	.1	32	8			10
11	179		1	34	8	12	240	1.8	.1	32	8			11
12	180		1	36	8	12	280	2.1	.1	32	190			12
13	181		1	88	20	16	440	2.7	.1	40	12			13
14	182		1	112	24	16	480	2.6	.1	42	12			14
15	183		1	52	18	14	200	2.8	.1	56	8			15
16	184		1	90	20	18	480	2.6	.1	40	12			16
17	185		1	42	12	10	320	1.8	.1	22	6			17
18	186		1	>440	20	20	700	3.3	1.0	56	16			18
19	187		1	>610	20	20	220	3.5	1.0	64	16			19
20	188		1	332	16	24	400	3.3	.1	64	16			20
21	189		1	370	12	22	560	3.0	.1	52	14			21
22	190		1	110	12	14	200	2.5	.1	48	12			22
23	191		1	96	18	16	260	2.8	.1	68	14			23
24	192		1	150	14	20	360	3.8	.1	66	14			24
25	193		1	94	12	18	840	3.5	.1	76	12			25
26	194		1	36	8	18	1360	3.1	.1	92	12			26
27	195		1	256	20	18	380	3.9	1.0	100	18			27
28	196		1	50	12	16	340	2.5	.1	108	12			28
29	197		1	44	14	12	220	1.9	.1	58	10			29
30	198		1	120	24	16	280	2.7	.1	72	10			30
31	199		1	88	16	12	200	2.2	.1	34	8			31
32	200		1	84	8	12	320	1.8	.1	52	8			32
33	201		1	68	24	16	200	2.8	.1	48	14			33
34	202		1	28	10	12	240	1.9	.1	32	8			34
35	203		1	40	14	16	440	2.3	.1	38	8			35
36	204		1	38	12	12	240	2.2	.1	36	8			36
37	205		1	50	8	8	200	1.7	.1	30	8			37
38	206		1	84	18	16	240	3.2	.1	82	12			38
39	72 HSS 207		1	80	16	18	480	2.7	.1	66	10			39
40	G-2		3	36	8	10	160	2.0	.1	76	14			40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

25

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION STOUT LAKE

REQUESTED BY G. M. LEARY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo ✓	Cu ✓	Ni ✓	Co	Mn	%Fe	Ag	Zn	Pb			No.
01	72 HSS 208		1	12	8	12	360	1.5	.1	96	12			01
02	209		1	388	32	16	180	2.5	.1	48	16			02
03	210		1	24	16	12	280	2.3	.1	74	12			03
04	211		1	46	18	14	360	2.7	.1	58	12			04
05	212		1	40	20	20	260	3.5	.1	112	16			05
06	213		1	34	18	12	360	3.2	.1	120	14			06
07	214		1	140	20	16	200	2.5	.1	120	12			07
08	215		1	22	14	12	200	2.1	.1	130	12			08
09	216		1	370	36	16	360	2.5	1.0	44	18			09
10	217		1	16	12	14	200	2.4	.1	54	10			10
11	218		1	24	8	10	200	1.5	.1	28	8			11
12	219		1	40	14	14	180	2.3	.1	44	10			12
13	220		1	20	12	8	200	1.8	.1	44	8			13
14	221		1	26	16	16	240	2.7	.1	58	12			14
15	222		1	14	8	12	240	1.9	1.0	56	10			15
16	223		1	84	16	16	320	2.7	.1	56	10			16
17	224		1	30	12	16	280	2.6	1.0	58	12			17
18	225		1	60	12	16	340	3.0	.1	86	12			18
19	226		1	50	16	18	240	3.5	.1	48	12			19
20	227		1	64	12	14	260	2.3	.1	40	8			20
21	228		1	160	28	16	220	2.4	.1	36	8			21
22	229		1	72	20	12	160	2.3	.1	38	8			22
23	230		1	74	16	10	160	2.0	.1	30	8			23
24	231		1	212	20	16	360	2.4	.1	36	8			24
25	232		1	40	16	16	240	2.8	.1	42	10			25
26	233		1	32	10	14	200	2.5	.1	38	8			26
27	234		1	180	16	16	460	2.4	.1	36	8			27
28	235		1	90	8	16	300	2.2	.1	32	8			28
29	236		1	26	8	6	160	1.3	.1	20	6			29
30	237		1	130	16	8	320	2.0	.1	30	10			30
31	238		1	34	8	4	140	1.4	.1	22	8			31
32	239		1	120	20	14	520	2.6	3.0	44	10			32
33	240		1	164	24	12	400	2.4	1.0	38	10			33
34	241		1	112	16	12	360	2.5	1.0	40	12			34
35	242		1	112	14	8	320	2.1	1.0	28	8			35
36	243		1	124	16	12	400	2.6	1.0	48	8			36
37	244		1	50	18	14	480	2.5	.1	40	8			37
38	245		1	58	16	14	520	2.4	.1	40	8			38
39	72 HSS 246		1	52	18	12	480	2.2	.1	38	6			39
40	G9		15	236	16	6	120	0.8	.1	>400	35.1			40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION SPOUT LAKE

REQUESTED BY G.M. LEAKY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	%Fe	As	Zn	Pb			No.
01	72 HES 1		1	80	20	20	420	3.6	.1	48	14			01
02	2		1	14	16	12	640	2.5	.1	74	12			02
03	3		1	190	26	26	800	4.5	.1	80	16			03
04	4		1	208	20	20	1360	3.6	1.0	78	16			04
05	5		1	150	24	28	1160	5.0	.5	84	16			05
06	6		1	60	32	16	300	3.2	.1	38	14			06
07	7		1	276	40	24	380	3.5	1.0	56	14			07
08	8		1	48	28	18	360	3.1	.5	44	10			08
09	9		4	40	18	14	360	3.0	.1	56	12			09
10	10		1	86	16	22	1000	4.1	.1	84	14			10
11	11		1	56	16	14	320	2.5	.1	36	8			11
12	12		1	56	20	16	360	2.7	.1	44	10			12
13	13		1	48	20	18	340	3.2	.1	60	12			13
14	14		1	62	28	18	380	3.4	.1	84	12			14
15	15		1	94	18	14	360	2.2	.1	46	8			15
16	16		1	44	20	12	320	1.8	.1	44	14			16
17	17		1	30	24	12	280	2.5	.1	40	14			17
18	18		1	36	20	12	280	2.6	1.0	36	16			18
19	19		1	96	20	12	300	2.4	1.0	38	16			19
20	20		1	20	18	14	340	2.8	.1	48	16			20
21	21		1	58	24	20	540	3.3	.5	88	12			21
22	22		1	36	18	18	520	3.0	.1	92	12			22
23	23		1	36	24	14	280	2.5	.1	44	10			23
24	24		1	24	24	14	300	2.4	.1	60	8			24
25	25		1	28	20	12	280	2.4	.1	40	8			25
26	26		1	20	16	10	240	2.4	.1	84	12			26
27	27		1	28	20	16	380	3.3	.1	122	12			27
28	28		1	46	24	12	240	2.3	0.5	42	8			28
29	29		1	100	20	12	320	2.4	1.0	40	8			29
30	30		1	92	22	16	360	2.7	.1	46	10			30
31	31		1	30	20	14	380	2.6	.1	46	8			31
32	32		1	24	16	10	240	1.9	.1	40	8			32
33	33		1	16	16	12	240	2.0	.1	54	8			33
34	34		1	150	28	34	760	5.0	.5	96	16			34
35	35		1	52	20	16	420	2.6	.1	72	14			35
36	36		1	100	28	18	360	2.9	.1	52	12			36
37	37		1	54	16	16	680	2.6	.1	58	8			37
38	38		1	42	16	14	320	2.5	.1	44	10			38
39	72 HES 39		1	44	16	16	320	2.6	.1	46	10			39
40	G10		12	24000	16	14	340	2.1	.5	50	16			40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug. 16/72 — TYPE SAMPLES Soil

PROJECT 516 — LOCATION SPOUT LAKE

REQUESTED BY G.M. LEARY — DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	%Fe	As	Zn	Pb			No.
01	72 HES 40		1	112	28	20	400	2.9	.1	66	16			01
02	41		1	350	28	22	380	3.7	1.0	52	14			02
03	42		1	68	24	16	420	3.0	.1	48	12			03
04	43		1	100	20	14	320	3.2	1.0	52	12			04
05	44		1	328	20	16	540	3.3	1.0	98	20			05
06	45		1	54	24	16	360	2.8	.1	36	8			06
07	46		1	90	20	16	280	2.9	.1	44	10			07
08	47		1	152	20	16	320	3.1	.1	58	10			08
09	48		1	950	28	22	560	3.1	1.0	60	12			09
10	49		1	790	24	22	360	4.3	1.0	56	14			10
11	50		2	44	16	12	400	2.1	.1	40	8			11
12	51		1	116	108	26	320	3.6	1.0	88	10			12
13	52		1	40	48	16	280	2.5	.1	36	8			13
14	53		1	62	32	18	300	3.3	.1	46	10			14
15	54		1	72	92	24	280	3.8	.1	64	10			15
16	55		1	60	80	22	320	3.6	.1	56	12			16
17	56		1	22	8	12	240	2.5	.1	40	8			17
18	57		1	28	16	14	240	2.4	.1	38	10			18
19	58		1	26	8	12	200	2.4	.1	30	8			19
20	59		1	24	8	12	200	2.6	.1	38	12			20
21	60		1	84	14	18	360	3.2	.1	36	12			21
22	61		1	46	6	12	320	1.9	.1	38	10			22
23	62		1	40	12	12	320	2.2	.1	32	8			23
24	63		1	42	16	14	320	3.1	.1	44	10			24
25	64		1	92	20	16	380	3.8	.1	40	10			25
26	65		1	36	8	14	300	2.9	.1	52	12			26
27	66		1	24	8	14	320	3.6	.1	78	12			27
28	67		1	32	12	16	340	3.7	.1	52	10			28
29	68		1	44	8	12	220	2.5	.1	46	6			29
30	69		1	42	10	12	240	2.6	.1	96	10			30
31	70		1	20	12	14	800	2.6	.1	68	12			31
32	71		1	32	8	14	320	2.7	.1	52	12			32
33	72		1	60	16	16	480	3.0	.1	72	10			33
34	73		1	22	12	12	500	2.1	.1	60	10			34
35	74		1	72	16	20	360	3.2	.1	50	10			35
36	72 HES 75		1	60	18	16	600	3.1	.1	56	10			36
37	67-6		5	368	260	22	320	1.8	3.0	510	7400			37
38														38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

10

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION SPOUT LAKE

REQUESTED BY G.M. LEARY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	%Fe	Ag	Zn	Pb			No.
01	72 HLS 1		1	116	32	24	640	3.9	1.6	100	18			01
02	2		1	810	28	28	680	4.4	1.5	108	20			02
03	3		1	44	20	18	440	3.4	.5	84	16			03
04	4		1	72	24	24	440	3.9	1.0	160	16			04
05	5		1	260	26	26	480	4.1	1.0	72	20			05
06	6		1	86	24	22	480	3.8	1.0	160	18			06
07	7		1	158	24	28	840	5.0	2.0	298	60			07
08	8		1	66	22	18	360	3.1	1.0	124	16			08
09	9		1	96	28	20	380	3.6	1.0	208	16			09
10	10		1	52	22	12	200	2.4	.5	128	8			10
11	11		1	76	28	22	440	4.0	.5	102	28			11
12	12		1	84	30	20	280	3.7	.5	104	24			12
13	13		1	28	16	12	240	2.8	.5	72	24			13
14	14		1	80	24	24	460	4.0	.5	196	28			14
15	15		1	68	20	16	400	3.2	.5	76	20			15
16	16		1	36	20	16	240	4.0	.5	82	16			16
17	17		1	38	32	18	260	3.0	.5	74	14			17
18	18		1	36	16	12	240	2.3	.5	36	12			18
19	19		1	88	20	16	600	3.3	.5	40	14			19
20	20		1	66	28	14	260	3.0	.5	44	12			20
21	21		1	22	16	8	200	2.0	.5	32	8			21
22	22		1	16	12	8	200	1.5	.5	30	8			22
23	23		1	22	18	8	240	1.8	.5	38	10			23
24	24		1	36	22	14	260	2.9	.5	46	10			24
25	25		1	20	22	10	280	2.5	.5	48	12			25
26	26		1	20	18	10	260	2.2	.5	38	8			26
27	27		1	18	20	12	280	2.4	.5	36	8			27
28	28		1	108	32	14	480	2.8	1.0	44	14			28
29	29		1	80	28	12	280	2.5	.5	42	10			29
30	30		1	28	16	8	280	1.6	.5	36	8			30
31	31		1	22	28	14	360	2.6	.5	74	12			31
32	32		1	36	20	10	500	2.0	.5	56	12			32
33	33		1	32	24	10	320	2.4	.5	36	8			33
34	34		1	22	16	6	240	1.4	.5	82	8			34
35	35		1	24	24	10	340	2.3	.5	44	8			35
36	36		1	88	24	10	280	2.4	.5	34	8			36
37	37		1	36	20	12	320	3.0	.5	44	10			37
38	38		1	22	12	8	260	2.0	.5	34	8			38
39	72 HLS 39		1	32	20	16	320	2.5	.5	68	8			39
40	G10		12	>400	12	14	360	2.4	.5	76	20			40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION SPOUT LAKE

REQUESTED BY G. M. LEARY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	% Fe	Ag	Zn	Pb		Cu	No.
01	72 HLS 40		3	64	28	24	280	5.1	.1	72	16		84	01
02	41		1	22	24	16	260	2.6	.1	48	10		22	02
03	42		1	22	26	12	240	2.4	.1	42	10		22	03
04	43		1	16	20	12	240	2.5	1.0	36	8		16	04
05	44		1	32	24	20	440	5.0	1.0	52	12		32	05
06	45		1	12	8	8	220	1.8	.1	30	8		12	06
07	46		1	44	16	22	640	3.3	.1	120	12		44	07
08	47		1	58	16	20	380	3.6	.1	112	14		58	08
09	48		1	54	20	24	520	3.9	.1	148	12		54	09
10	49		1	64	12	12	320	2.7	.1	82	12		40	10
11	50		1	28	22	22	600	3.0	1.0	160	14		64	11
12	51		1	36	16	14	340	2.5	.1	74	12		28	12
13	52		1	64	18	14	320	2.9	.1	42	10		36	13
14	53		1	36	16	16	320	3.2	.1	56	12		64	14
15	54		1	58	20	30	880	4.5	1.0	108	16		36	15
16	55		1	344	32	36	840	5.2	2.0	160	24		288	16
17	56		1	116	32	28	640	4.2	2.0	130	22		344	17
18	57		1	48	24	26	620	3.8	1.0	140	18		116	18
19	58		1	40	20	12	320	2.3	.1	44	8		48	19
20	59		1	64	22	14	280	2.7	.1	44	8		40	20
21	60		1	338	20	12	280	2.2	.1	36	8		64	21
22	61		1	36	28	16	520	2.9	.1	36	10		338	22
23	62		1	46	18	8	280	1.7	.1	32	8		36	23
24	63		1	34	16	12	400	2.3	.1	38	8		46	24
25	64		1	96	20	12	280	2.8	.1	42	8		34	25
26	65		1	52	20	16	460	2.8	.1	40	12		96	26
27	66		1	68	24	16	440	2.9	.1	54	12		52	27
28	67		1	20	24	18	920	4.0	.1	44	14		68	28
29	68		1	38	18	8	200	2.1	.1	38	10		20	29
30	69		1		16	16	320	2.8	.1	40	10		28	30
31	70		1	96	26	20	300	3.5	.1	68	16		96	31
32	71		1	48	20	12	200	2.5	.1	44	10		48	32
33	72		1	24	12	12	220	2.3	.1	32	8		24	33
34	73		1	60	20	16	280	3.0	.1	58	10		60	34
35	74		1	120	18	12	320	2.5	.1	32	6		120	35
36	75		1		12	8	280	2.1	.1	26	6		20	36
37	76		1		20	12	360	2.6	.1	38	10		68	37
38	77		1		16	10	300	2.1	.1	32	8		24	38
39	78 HLS		1		20	12	480	2.5	.1	34	8		116	39
40	GSO		50		260	22	320	1.7	3.0	312	400		356	40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

20

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION STUART LAKE

REQUESTED BY G.M. LEAKY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	%Fe	Ag	Zn	Pb			No.
01	72 HLS 79		1	96	8	6	240	1.6	.1	22	6			01
02	80		1	48	28	18	320	4.3	.1	38	12			02
03	81		1	30	20	16	360	4.0	.1	44	12			03
04	82		1	22	14	10	240	1.8	.1	34	8			04
05	83		1	40	22	16	240	2.6	.1	34	8			05
06	84		1	32	18	16	300	3.2	.1	40	8			06
07	85		1	116	24	18	280	3.7	1.0	68	14			07
08	86		1	32	20	20	320	3.9	.1	84	18			08
09	87		1	30	22	18	280	3.8	.1	68	16			09
10	88		1	130	24	16	400	2.8	1.0	36	12			10
11	89		1	106	28	20	680	3.3	1.0	46	12			11
12	90		3	X358	48	20	1480	3.1	.1	44	16			12
13	91		1	176	24	16	800	3.6	1.0	46	14			13
14	92		1	52	16	8	320	2.1	.1	26	8			14
15	93		1	32	16	12	260	2.2	.1	32	8			15
16	94		1	84	20	20	420	3.9	.1	56	16			16
17	95		1	148	32	28	840	6.5	1.0	76	26			17
18	96		1	52	24	20	520	3.5	.1	84	18			18
19	97		1	102	28	20	420	3.9	.1	84	20			19
20	98		1	82	22	28	460	4.8	.1	84	18			20
21	99		1	160	24	24	600	4.5	1.1	332	46			21
22	100		1	X700	60	44	1040	5.3	1.1	230	26			22
23	101		1	112	20	56	440	5.2	1.0	238	20			23
24	102		1	68	18	22	280	3.3	.1	92	16			24
25	103		1	44	16	14	280	2.6	.1	114	10			25
26	104		1	102	28	16	360	3.4	1.0	44	10			26
27	105		1	104	24	16	400	3.5	.1	48	10			27
28	106		1	X610	44	26	540	3.7	1.0	104	16			28
29	107		1	16	24	12	260	3.1	.1	44	8			29
30	108		1	28	24	16	480	2.9	.1	58	8			30
31	109		1	20	20	10	160	2.4	.1	24	8			31
32	110		1	46	28	8	360	2.0	.1	26	10			32
33	111		1	100	20	12	300	2.7	.1	40	12			33
34	112		1	20	16	8	220	1.9	.1	30	10			34
35	113		1	20	14	8	280	1.8	.1	30	8			35
36	114		1	24	18	8	260	1.8	.1	36	12			36
37	72 HLS 115		1	20	20	10	280	2.0	.1	32	8			37
38	G7		26	184	224	10	120	0.9	.1	72	62			38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

2b

DATE Aug 10/72 TYPE SAMPLES Soil

PROJECT 516 LOCATION SPAUT LAKE

REQUESTED BY C.M. LEARY DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	%Fe	As	Zn	Pb			No.
01	72 HSS 247		1	50	14	10	320	1.9	.1	30	8			01
02	248		1	96	16	14	320	2.3	.1	52	10			02
03	249		1	128	16	12	400	2.1	.1	36	8			03
04	250		1	216	24	16	600	2.8	.1	44	10			04
05	251		1	52	16	8	320	1.7	.1	28	4			05
06	252		1	64	16	8	240	2.0	.1	28	8			06
07	253		1	152	18	12	320	2.1	.1	32	8			07
08	254		1	288	24	16	520	2.6	1.0	38	8			08
09	255		1	70	16	10	200	1.9	.1	26	8			09
10	256		1	136	20	16	440	2.9	.1	46	12			10
11	257		1	50	12	12	240	2.2	.1	42	8			11
12	258		1	40	8	12	200	2.4	.1	40	8			12
13	259		1	84	18	18	280	3.9	.1	46	12			13
14	260		1	132	20	20	320	3.5	1.0	52	14			14
15	261		1	112	28	22	280	4.2	1.0	64	14			15
16	262		1	124	16	20	360	4.2	.1	86	16			16
17	263		1	56	12	14	200	3.2	.1	50	12			17
18	264		1	110	16	20	360	3.7	.1	84	12			18
19	72 HSS 265		1	136	16	16	480	3.0	.1	54	12			19
20	G-10		11	*/	12	14	320	2.4	1	72	20			20
21														21
22														22
23														23
24														24
25														25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36
37														37
38														38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

10

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 6/72 TYPE SAMPLES Soil

PROJECT 516/517 LOCATION Sprout/Peach Lk

REQUESTED BY S. Leary DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Zn	Pb			No.
01	72HSS 001	6.3	1	74	16	16	320	2.8	1.5	40	12			01
02	2		1	48	20	12	280	3.4	.5	52	14			02
03	3		1	340	20	24	560	3.4	.5	46	14			03
04	4	6.0	1	72	12	18	540	3.2	.5	36	14			04
05	5		1	x260	32	22	420	3.7	1.0	56	16			05
06	6		1	76	20	20	240	3.7	.5	54	16			06
07	7		1	136	28	32	400	4.9	.5	52	20			07
08	8	6.0	1	64	24	24	280	3.4	.5	48	14			08
09	9		1	28	16	16	260	3.2	.5	58	16			09
10	10		1	120	26	24	400	3.7	.5	64	18			10
11	11		1	68	14	18	200	3.2	.5	40	12			11
12	13	6.2	1	268	36	32	360	4.6	1.0	76	24			12
13	14		1	90	22	26	340	3.6	.5	70	18			13
14	15		1	242	24	26	380	3.8	.5	46	20			14
15	16		1	124	20	20	320	3.2	.5	36	14			15
16	17	5.4	1	172	28	24	380	3.1	.5	68	20			16
17	18		1	184	14	10	260	0.9	.5	28	16			17
18	19		1	112	16	20	640	3.4	.5	40	16			18
19	20		1	x540	44	28	1320	4.6	1.5	72	28			19
20	21	6.4	1	208	32	24	520	3.9	1.0	60	22			20
21	21				NS									21
22	22		1	x520	36	24	1000	3.5	1.5	64	24			22
23	23		1	56	20	20	340	4.0	.5	96	20			23
24	24	5.8	1	x600	36	40	240	5.6	1.0	124	28			24
25	25		1	300	22	24	420	4.7	1.0	76	24			25
26	26		1	152	32	28	420	4.6	1.5	144	22			26
27	27		1	x640	32	32	1360	4.5	1.5	96	24			27
28	28	5.9	1	170	24	20	840	2.8	1.0	52	14			28
29	29		1	26	12	12	400	2.5	.5	76	12			29
30	30		1	64	16	16	400	3.5	.5	68	14			30
31	31		1	214	40	24	1040	3.8	1.5	62	22			31
32	32	5.9	1	112	22	20	360	3.7	.5	64	20			32
33	33		1	42	20	16	440	2.8	.5	42	18			33
34	34		1	52	20	20	420	3.7	.5	44	16			34
35	35		1	24	28	24	400	4.9	.5	66	20			35
36	36	6.0	1	66	28	20	260	3.9	.5	54	16			36
37	37		1	150	32	20	225	3.9	.5	72	16			37
38	38		1	236	28	22	540	3.4	.5	60	16			38
39	39		1	64	24	20	240	4.1	.5	64	16			39
40	G 8			60	12	12	160		.5					40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

11

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 6/72 TYPE SAMPLES Soil

PROJECT 5-66/72 LOCATION Squaw Lk / Beach Lk.

REQUESTED BY S. Leary DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Zn	Pb			No.
01	72HSS 40	5.8	4	*520	24	40	660	6.7	1.0	84	52			01
02	41		1	68	24	26	240	4.0	.5	84	16			02
03	42		1	84	16	20	200	3.0	.5	60	14			03
04	43	6.3	1	228	32	20	340	2.4	1.5	48	16			04
05	44		4	204	30	24	1120	3.6	.5	48	20			05
06	45		3	108	20	20	280	4.3	1.0	192	18			06
07	46		1	102	16	20	240	4.3	.5	62	16			07
08	47	5.9	1	78	28	22	320	4.2	.5	68	18			08
09	48		1	74	24	20	320	3.8	.5	50	16			09
10	49		1	112	24	22	320	4.1	.5	60	16			10
11	50		1	152	22	20	320	3.2	.5	40	12			11
12	51	5.8	1	44	20	18	280	3.4	.5	56	12			12
13	52		1	92	16	12	160	1.4	.5	20	10			13
14	53		1	240	32	20	940	2.5	.5	40	14			14
15	54		10	262	28	20	2640	2.7	.5	20	16			15
16	55	6.3	1	132	26	18	660	2.5	.5	32	10			16
17	56		1	240	30	16	280	1.4	.5	22	12			17
18	57		1	70	20	20	440	2.8	.5	36	10			18
19	58		1	40	20	12	320	2.5	.5	36	12			19
20	59	6.6	18	*600	50	36	*9600	6.6	.5	34	16			20
21	60		1	20	20	14	200	2.5	.5	40	14			21
22	61		1	32	20	16	280	2.8	.5	30	14			22
23	62		1	320	24	20	560	2.3	.5	40	12			23
24	63	6.2	1	*600	40	28	720	4.0	1.0	60	20			24
25	64		2	*1120	38	26	660	3.8	1.0	62	24			25
26	65		1	*760	36	26	760	4.0	1.0	60	22			26
27	66		1	*2760	48	24	520	4.3	1.5	50	26			27
28	67	6.5	1	*500	28	16	340	2.8	.5	38	16			28
29	68		1	28	20	16	240	3.7	.5	68	16			29
30	69		LOST											30
31	70		1	92	34	24	260	3.9	.5	56	18			31
32	71	5.6	1	32	18	16	200	2.9	.5	40	16			32
33	72		1	66	28	20	240	3.5	.5	50	16			33
34	69			246	14	8	120	1.1	.5					34
35														35
36														36
37														37
38														38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

28

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 14/72 TYPE SAMPLES Soil

PROJECT 517 LOCATION Sprout Lake

REQUESTED BY G.M. Peary DISPOSITION OF REJECTS discard.

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag	Zn	Pb			No.
01	72HSS-73		4	*720	36	22	1040	4.2	1.0	70	16			01
02	74		2	*560	24	36	640	5.1	1.0	90	20			02
03	75		0	*420	22	32	660	4.3	1.0	72	12			03
04	76	5.8	2	60	16	24	320	3.4	.5	48	12			04
05	77		0	70	24	20	560	3.4	.5	44	16			05
06	78		0	220	32	24	640	2.2	.5	60	10			06
07	79		0	112	36	26	360	4.3		100	16			07
08	80	5.8	0	104	36	20	240	4.5		70	12			08
09	81		0	68	36	20	320	4.6		66	12			09
10	82		0	160	44	24	340	4.5		60	12			10
11	83		2	112	24	24	400	5.1		94	16			11
12	84	5.5	0	92	32	20	320	4.4		66	14			12
13	85		0	*620	64	32	680	5.0		84	12			13
14	86		0	*600	52	28	540	4.5		60	12			14
15	87		0	320	40	20	460	3.2		56	10			15
16	88	6.2	0	324	44	16	340	2.4		36	12			16
17	89		0	82	32	28	720	4.3		86	16			17
18	90		0	64	24	20	320	3.9		60	16			18
19	91		0	*620	44	22	620	3.5	1.0	60	18			19
20	92	6.1	0	30	16	16	200	3.0	1.5	54	12			20
21	93		0	296	44	42	840	6.1	.5	116	26			21
22	94		0	56	22	20	320	4.2	.5	88	12			22
23	95		2	*440	30	26	620	4.5	1.5	64	16			23
24	96	6.0	2	*220	56	30	720	5.0	1.5	80	18			24
25	97		16	*960	20	44	*2200	7.4	1.0	60	28			25
26	98		0	376	52	24	600	4.5	1.5	76	20			26
27	99		0	64	20	16	260	2.4	.5	44	10			27
28	100	6.0	0	156	40	24	200	3.5	.5	56	14			28
29	101		0	124	40	24	400	4.2	.5	54	16			29
30	102		0	336	32	24	400	3.5	.5	50	16			30
31	103		0	96	22	20	440	3.7	.5	70	16			31
32	104	6.0	2	*1160	40	32	1040	4.3	.5	62	114			32
33	105		0	24	24	22	300	4.5	.5	68	18			33
34	106		0	162	20	20	320	3.3	.5	52	12			34
35	107		0	264	22	24	560	4.5	.5	54	10			35
36	108	6.0	2	*200	52	32	240	4.2	2.0	96	24			36
37	109		2	*220	24	40	1080	5.7	.5	100	20			37
38	110		2	400	32	34	220	4.2	1.0	74	16			38
39	72HSS-111		2	*540	60	32	960	5.0	2.0	82	20			39
40	69		16	242	14	~~2~~ 10	120	1.0	.1	~~50~~ *400	360			40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

29;1

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 14/72 — TYPE SAMPLES soil

PROJECT 517 — LOCATION Spout Lake.

REQUESTED BY G.M. Leary — DISPOSITION OF REJECTS discard.

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag	Zn	Pb			No.
01	T2HSS-112	6.0	2	*280	52	22	1000	4.5	3.0	74	16			01
02	113		0	240	40	30	1320	5.0	1.0	90	16			02
03	114		0	84	28	20	320	3.9	.5	68	12			03
04	115		0	88	22	20	340	4.0	.1	60	14			04
05	116	5.8	0	100	24	20	360	3.5	.1	54	8			05
06	117		0	104	24	20	320	4.2	.1	60	16			06
07	118		0	52	20	12	340	3.0	.1	50	8			07
08	119		0	140	28	20	440	3.2	.1	50	12			08
09	120	5.6	2	216	22	18	380	3.2	.1	44	14			09
10	121		0	42	20	12	320	3.0	.1	44	12			10
11	122		0	44	16	16	200	2.4	.1	34	8			11
12	123		0	68	20	20	360	2.2	.1	50	8			12
13	124	6.2	0	48	12	12	240	2.5	.1	40	10			13
14	125		0	100	16	16	300	3.0	.1	48	10			14
15	126		0	76	16	20	320	3.5	.1	36	16			15
16	127		0	222	24	20	440	3.2	.1	120	14			16
17	128	5.3	0	56	16	16	440	3.4	.1	76	12			17
18	129		0	24	20	18	520	3.1	.1	80	16			18
19	130		0	140	20	12	260	3.2	.1	46	18			19
20	T2HSS-131		0	68	22	20	320	3.2	.1	58	16			20
21	Cy 10		14	* ~~220~~ 260	14	16	320	2.7	.1	84	20			21
22														22
23														23
24														24
25														25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36
37														37
38														38
39														39
														40

'ENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

5

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 4, 1972 — TYPE SAMPLES SOIL

PROJECT 5164 517 — LOCATION SPOUT LAKE

REQUESTED BY G.M. LEARY — DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb			No.
01	HRS 0001	5.3	1	20	10	10	160	2.3	.5	32	10			01
02	2		1	1720	34	20	320	3.1	1.5	38	18			02
03	3		1	126	16	18	400	3.7	.5	52	16			03
04	4	6.0	1	172	22	18	320	3.5	.5	56	16			04
05	5		1	148	28	20	300	3.2	.5	64	16			05
06	6		1	124	22	16	280	3.1	.5	52	12			06
07	7		1	150	24	20	320	3.6	.5	58	14			07
08	8	6.1	1	70	32	18	240	3.8	.5	88	18			08
09	9		1	70	20	24	360	4.0	.5	92	16			09
10	10		1	84	12	20	320	4.2	.5	100	20			10
11	11		1	34	20	18	220	3.9	.5	40	16			11
12	12	6.1	1	128	28	20	460	3.5	.5	50	16			12
13	13		2	88	18	8	300	0.5	.5	16	8			13
14	14		1	364	28	14	280	2.3	1.0	28	12			14
15	15		1	104	20	20	500	3.5	.5	42	12			15
16	16	6.1	3	336	24	16	520	2.6	.1	36	14			16
17	18		1	340	30	24	700	4.3	.5	52	12			17
18	19		1	x860	36	24	720	3.8	1.0	56	16			18
19	20		1	x2120	36	26	960	3.7	1.0	76	18			19
20	G8		3	40	12	12	160	2.2	.5	20	20			20
21														21
22														22
23														23
24														24
25														25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36
37														37
38														38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 4/72 TYPE SAMPLES Water

PROJECT 516 & 517 LOCATION Spout & Peak Lake

REQUESTED BY G M Leary DISPOSITION OF REJECTS Discard

No.	Sample	pH	Mo ✓	Cu ✓	Ni									No.
01	72 HRW-17	7.7	0	10										01
02														02
03														03
04														04
05														05
06														06
07														07
08														08
09														09
10														10
11														11
12														12
13														13
14														14
15														15
16														16
17														17
18														18
19														19
20														20
21														21
22														22
23														23
24														24
25														25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36
37														37
38														38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 4, 1972 TYPE SAMPLES SOIL

PROJECT 5164 517 LOCATION SPOUT LAKE

REQUESTED BY GM. LEARY DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag	Zn	Pb			No.
01	72 HNS 1	5.8	1	268	36	56	840	6.4	2.0	100	28			01
02	2		1	56	22	16	280	2.2	.5	38	12			02
03	3		1	48	20	22	300	5.0	.5	68	16			03
04	4	6.4	1	72	26	20	620	3.2	.5	44	12			04
05	5		1	172	20	20	560	3.1	.5	44	12			05
06	6		1	48	40	20	220	2.7	.5	40	8			06
07	7		1	48	22	16	240	2.4	.5	36	8			07
08	8	5.5	1	76	28	20	220	3.5	.5	40	10			08
09	9		1	224	36	24	760	3.2	.5	52	16			09
10	10		1	72	22	24	1120	4.1	.5	44	16			10
11	11		1	388	54	28	1600	3.7	1.5	68	20			11
12	12	5.9	1	104	32	36	600	4.5	1.0	88	20			12
13	13		1	32	16	14	240	3.7	1.0	74	16			13
14	14		1	228	32	26	440	5.0	1.5	84	20			14
15	15		1	232	32	22	480	4.2	1.5	72	18			15
16	16	5.2	1	192	24	20	260	4.5	1.0	84	20			16
17	17		1	110	26	24	360	4.4	.5	68	20			17
18	18		1	x880	46	26	1000	3.8	2.0	24	22			18
19	19		1	86	22	16	680	3.4	.5	52	16			19
20	20	5.2	1	x800	24	34	560	5.2	.5	96	20			20
21	21		1	400	20	28	660	4.7	.5	128	16			21
22	22		1	116	24	12	320	3.6	.5	52	16			22
23	23		1	132	22	20	380	3.6	.5	64	20			23
24	24	5.6	1	56	24	12	240	3.4	.5	60	16			24
25	25		1	72	24	20	440	3.4	.5	42	12			25
26	26		1	240	36	22	220	4.0	.5	76	20			26
27	27		1	52	26	20	220	4.2	.5	60	20			27
28	28	5.8	1	236	24	22	420	3.8	.5	52	20			28
29	29		1	x1320	42	24	720	4.2	1.5	56	18			29
30	30		1	x560	34	22	360	4.1	1.5	48	16			30
31	31		1	320	30	32	640	5.2	1.0	62	24			31
32	32	5.9	1	228	28	22	600	3.4	.5	56	16			32
33	33		2	x1320	26	28	720	3.3	2.5	36	16			33
34	34		1	100	24	24	400	4.1	.5	68	18			34
35	35		1	88	12	20	960	3.4	.5	56	16			35
36	36	5.1	1	344	32	30	460	4.5	.5	60	20			36
37	37		1	80	22	20	360	4.1	1.0	70	20			37
38	38		1	x760	60	30	1080	4.6	2.5	80	28			38
39	39		1	180	38	36	500	5.2	1.0	94	22			39
40	[illegible]		2	[illegible]	276	26	360	1.9	4.0					40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

4

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE July 4, 1972 TYPE SAMPLES SOIL

PROJECT 516 & 517 LOCATION SPOUT LAKE

REQUESTED BY G.M. LEARY DISPOSITION OF REJECTS

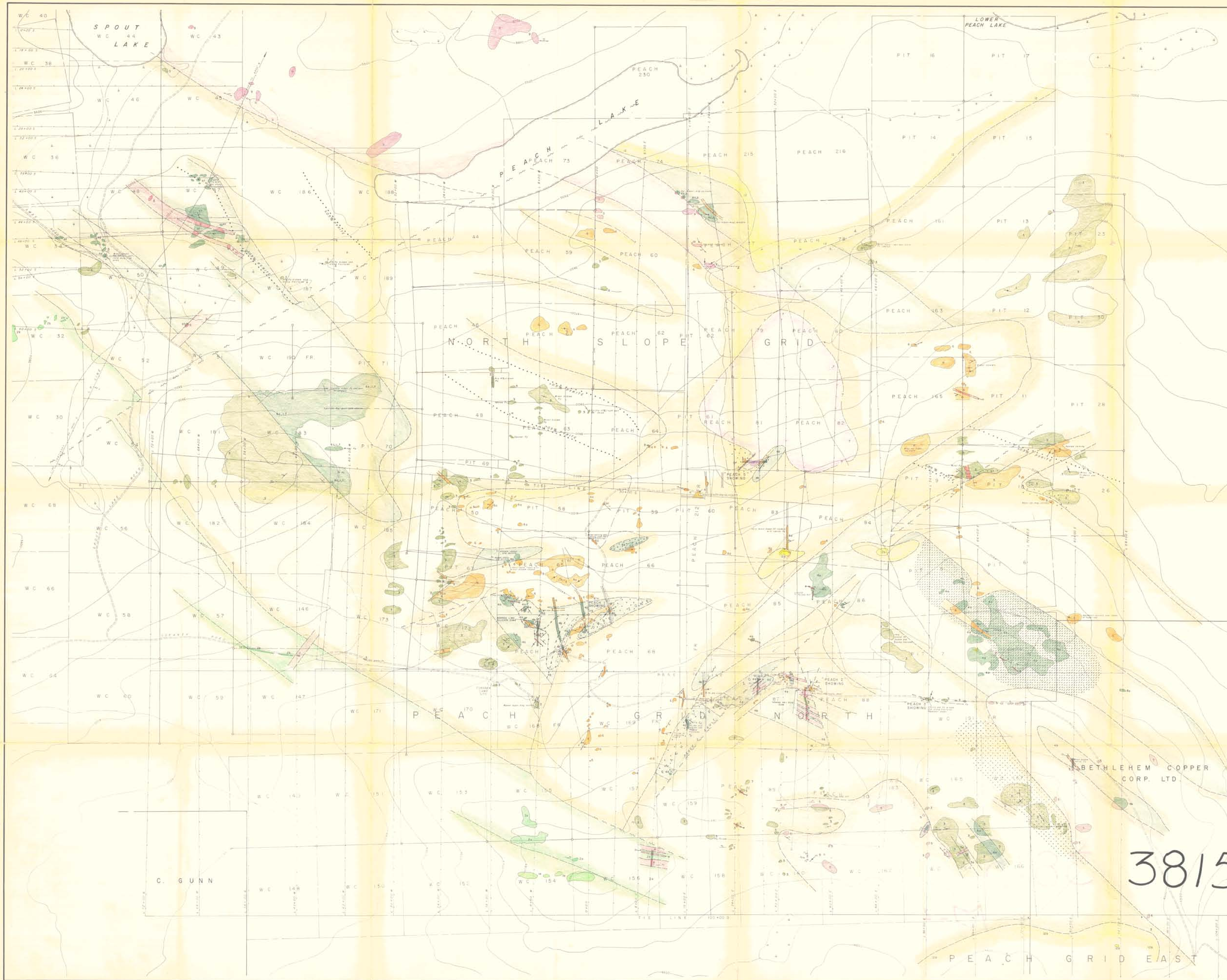
No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb			No.
01	DHNS 40	6.4	1	122	28	20	760	4.1	.5	72	20			01
02	41		2	>500	46	16	340	3.7	1.5	58	24			02
03	42		3	>520	56	22	1240	5.0	2.0	74	28			03
04	43	4.3	2	236	32	18	800	3.7	.5	50	20			04
05	44		3	352	48	32	1160	5.1	1.0	72	28			05
06	45		1	184	24	26	920	3.8	.5	52	16			06
07	46		1	88	20	20	320	3.1	.5	36	16			07
08	47	5.8	1	38	18	14	240	3.0	.5	34	12			08
09	48		1	44	12	16	320	2.2	.5	40	10			09
10	49		1	54	24	16	320	2.7	.5	40	12			10
11	50		1	116	28	24	460	2.9	.5	52	16			11
12	51	5.5	1	96	24	20	320	3.4	.5	36	16			12
13	52		1	260	26	26	440	5.0	.5	48	20			13
14	53		1	60	10	24	340	5.4	.5	64	16			14
15	54		1	88	24	22	1200	3.9	.5	116	20			15
16	55	5.2	1	52	16	12	320	3.2	.5	52	14			16
17	56		1	250	30	24	520	4.1	.5	48	20			17
18	57		1	160	20	20	480	3.6	.5	36	16			18
19	58		1	72	16	16	560	2.7	.5	40	12			19
20	59	6.3	1	120	20	12	260	3.2	.5	50	14			20
21	60		1	172	26	20	320	3.9	.5	52	16			21
22	61		1	68	20	18	360	3.6	.5	68	14			22
23	62		1	188	26	22	400	4.9	.5	80	20			23
24	63	5.9	1	88	12	12	360	3.0	.5	40	16			24
25	64		1	170	36	24	720	2.7	1.0	56	16			25
26	65		1	48	12	14	340	2.6	.5	32	12			26
27	66		1	32	12	12	180	2.3	.5	32	10			27
28	G7		28	182	200	12	120	1.0	.5	20	72			28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36
37														37
38														38
39														39
40														40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST



LEGEND

TERTIARY

- 13 Fine grained sandstone.
- 12 12a Augite porphyry basalt flows. 12b Plagioclase porphyry basalt flows. 12 Region of probable flood basalt cover.
- 11 Basic dykes.
- 10 Pink acid porphyry dykes.

ALKALIC INTRUSIVE COMPLEX

UPPER TRIASSIC TO JURASSIC

- 9 Mafic rich monzonite.
- 8 Pink monzonite and syenite dykes.
- 7 Monzonite porphyry stock.
- 6 6 Trachytic micro-syenodiorite. 6a Biotitic core phase of trachytic micro-syenodiorite.
- 5 Medium grained monzonite.

NICOLA GROUP

UPPER TRIASSIC

- 4 4a Andesite tuff-breccia. 4b Massive basaltic andesite flows and tuffs. 4c Amygdaloidal and/or porphyritic augite basalt flows. 4d Amygdaloidal andesite.
  4e Thinly bedded argillite, andesite tuffs and lime silicate beds. 4f Massive basaltic sandstone and siltstone.
- 3 3 Syenodiorite volcanic breccia. 3a Syenodiorite crystal tuff.
- 2 2a Massive andesite, amygdaloidal andesite. 2b Basaltic sandstone and siltstone.
- 1 1a Augite porphyry basalt flows. 1b Plagioclase porphyry basalt flows.

SYMBOLS

- Outcrop
- Geological contact (defined, approximate, gradational)
- Fault and shear zone (defined, inferred)
- Vein set (inclined, vertical)
- Jointing (inclined, vertical)
- Foliation (inclined, vertical)
- Bedding (inclined, vertical)
- Lineation (showing direction of plunge)
- Limit of pyritic pyroclastic unit
- Dioritized zone (barren)
- Biotite-alkali feldspar-epidote metasomatized zone (commonly contains sparse chalcopyrite).
- Metasomatized and veined intrusive breccia (commonly mineralized with chalcopyrite)
- Limit of secondary biotite alteration at the Peach I Copper Zone (unit 4b)
- Limit of intense K-feldspar veining at the Peach I Copper Zone (unit 4b)
- Angular float

- Claim post, claim location line
- Claim boundary
- Topographic contour (contour interval 100')
- Road
- Stream
- Swamp, swamp boundary
- Trench

ABBREVIATIONS

py	Pyrite	Kspar	Potash feldspar
pyrr	Pyrrhotite	bi	Biotite
cpy	Chalcopyrite	tour	Tourmaline
mal	Malachite	mag	Magnetite
Tr	Trace	ep	Epidote
dissem	Disseminated		

3815

M-4

AMAX EXPLORATION INC.

PEACH LAKE PROPERTY

CORANEX OPTION

CLINTON MINING DIVISION — BRITISH COLUMBIA

GEOLOGICAL MAP

SCALE 1" = 400'

DATE REVISED		DATE PRINTED		Drawn by: H.C.P. Date: 25/8/72 N.T.S. File 92 P 14	FIG. 4

To accompany "GEOLOGICAL AND GEOCHEMICAL REPORT ON THE PEACH LAKE PROPERTY – CORANEX OPTION" by G. McLeary, and T.J.R. Godfrey.


SPOUT LAKE
PEACH LAKE
LOWER PEACH LAKE
NORTH SLOPE GRID
SOILS DEVELOPED MAINLY OVER TILL AND FLUVIO-GLACIAL MATERIAL
LARGELY RESIDUAL SOILS OVER OUTCROP AREA
TIE LINE
PEACH GRID NORTH
PEACH GRID EAST
BETHLEHEM COPPER CORP. LTD.
C. GUNN
Cu-Ag
Cu ± Ag
Cu-Ag ± Mo
LEGEND
Soil sample site, sample number, p.p.m. Mo, Cu, Ag
Silt sample site, sample number, p.p.m. Mo, Cu, Ag
Water sample site, sample number, p.p.b. Mo, Cu
Humus enrichment
METAL DISTRIBUTION IN SOIL AND SILT SAMPLES
Mo Cu Ag
Background ≤1 0 - 110 ≤0.5
Positive 2 - 10 111 - 225 > 0.5
Anomalous > 10 > 225 —
Boundary of valley glacial sediment cover
Outline of probably significant soil anomaly (≥225 p.p.m. Cu)
Outline of possibly significant soil anomaly (≥110 p.p.m. Cu)
Claim post, claim location line
Claim boundary
Topographic contour (contour interval 100')
Road
Stream
Swamp, swamp boundary
Trench
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3815 MAP #5
NOTE — Complete sample number prefix 72HSS for soils, 72HRL for silts and 72HRW for waters (year, project code letter, sampler initial, sample type)
SAMPLERS —
F F. J. Ferguson
L G. M. Leary
R D. Ramage
S G. Stock
N N. Swarys
AMAX EXPLORATION INC.
PEACH LAKE PROPERTY
CORANEX OPTION
CLINTON MINING DIVISION — BRITISH COLUMBIA
GEOCHEMICAL MAP
SCALE 1" = 400'
Drawn by H.C.P.
Date 25/8/72
N.T.S. File 92 P 14
FIG. 5
To accompany "GEOLOGICAL AND GEOCHEMICAL REPORT ON THE PEACH LAKE PROPERTY - CORANEX OPTION" by G.M.Leary and T.J.R.Godfrey