Office of the Supervising Mining Recorder
JUN 7 1979
WHITEHORSE
Yukon Territory

1978 ASSESSMENT REPORT

Geological Mapping, Geochemical Soil Sampling, Induced Polarization Survey and Drilling

RECEIVED
1 JUN 1979
MINING RECORDER
WATSON LAKE, Y.T.
I.A. & N.D.

TITLE	STQ Property
CLAIMS	STQ #1-118 Inclusive
COMMODITIES	Sn, W
LOCATED	18 km north of Swift River Latitude 60°10'N Longitude 131°14'W Watson Lake Mining District 105 B 3
BY	C.J. Hodgson, P.Eng. (B.C.)
FOR	AMAX Potash Limited
WORK PERIOD	June 19 - October 11, 1978

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INSPECTORS OFFICE
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090472

AMAX VANCOUVER OFFICE

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $ 20,500.00

Ruth Dubicki
acting Resident Geologist or Resident Mining Engineer July 12/19

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

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SUMMARY

This report presents results of 1978 exploration on the STQ Property, acquired by option from Bath Investments Ltd. in March, 1978. The property is located 18 km north of the municipality of Swift River, Y.T., in the Watson Lake Mining District.

Work in 1978 consisted of additional claim staking, picket grid preparation in the main area of interest, detailed geological, soil and magnetometer surveys on the picket grid, reconnaissance mapping and soil sampling elsewhere on the property, a 6 km induced polarization survey on selected picket lines, and diamond drilling at the West zone (1 BQ hole, 247 m).

The property is underlain by Mississippian siltstone, argillite and minor limestone which are intruded to the southwest by alaskites of the Cretaceous Seagull batholith, to the northeast by the Swift River stock and in the north-central part of the property by two small quartz monzonite plugs. The stock and plugs are thought to be off-shoots of the Seagull batholith. Jurassic diorite forms a large sill-like intrusion at the northern margin of the property.

Exploration was directed towards Sn-W-Mo prospects associated with the two quartz monzonite plugs. The most important prospect, the West zone, consists of cassiterite disseminations in a) hydrothermal breccia (pipe?) flanking the West plug; b) in gash veins immediately adjacent to the breccia and c) in quartz-tourmaline veins which occur over an area some 600 m in diameter centred on the West plug. Minor scheelite is found in the West zone in widespaced quartz veins.

The East zone consists of very minor scheelite in widespread quartz and quartz-amphibole veins peripheral to the East plug. A number of Pb-Zn-Ag±Cu skarns, all of minor extent, occur on the property; the more promising have been drilled previously.

Detailed soil sampling in the area encompassing the East and West plugs revealed a prominent circular tin-fluorine anomaly 600 m in diameter coincident with the West zone, a weak molybdenum anomaly downslope from the East zone, and two tungsten anomalies, one in the valley north of the East zone, and one on the hillslope west of the West zone. Both are thought to be produced largely by placering of weak amounts of scheelite from locally derived till and talus.

Reconnaissance sampling outside the grid area revealed the presence of a prominent F(±Sn,Mo,W) soil anomaly near Kyba Peak in the southwest portion of the property. This anomaly is of the same extent and magnitude as the fluorine anomaly at the West zone.

The magnetometer survey failed to distinguish East and West plugs on the basis of their magnetic susceptibility.

The induced polarization survey demonstrated that both East and West plugs are characterized by resistivity lows. Neither plug produces a frequency effect anomaly. The best induced polarization anomaly recorded was a 5% frequency effect anomaly at the west end of the base line which is open to the west. Survey results also suggest the presence of alaskite at shallow depth in the eastern portion of the base line, extending as far west as Line 18E.

A diamond drill hole, drilled in early October to test the extent and tenor of the hydrothermal breccia at the West zone, failed to intersect the breccia. The hole entered a younger (post mineral ?) alaskite phase at depth and was terminated at 247 m.

INTRODUCTION

General Statement

A group of 32 contiguous claims located in the Watson Lake Mining District were acquired by option from Bath Investments Ltd. by AMAX Potash Limited in March, 1978. The property, referred to as the STQ Option, encompasses two acid intrusive stocks with associated tin, tungsten, copper and molybdenum mineralization.

This report presents the results of 1978 exploration on the claims which chronologically comprised the following:
1) Base maps were prepared (1:10,000 and 1:5,000 topographic maps plus orthophoto).
2) Additional claims (STQ 33-118) were staked in June and July to cover W, Mo and F silt geochemical anomalies peripheral to the original STQ claims which were indicated by 1977 silt samples collected by Cordilleran Engineering.
3) Ridge mapping and talus fines sampling was conducted on STQ 33-118.
4) A 46 km picket grid was prepared on STQ 1-32 during the period June 27 to July 7.
5) Geological mapping, soil sampling and a magnetometer survey were carried out on the picket grid in July.
6) An induced polarization survey was conducted in August on the grid base line and on two cross lines over the East and West zones.
7) One diamond drill hole in late September and early October was drilled to a depth of 247 m to test the West zone.

C. Hodgson, who was responsible for the geological and geochemical surveys, was assisted by B. Paul and J. Candy. R. Roussain from the AMAX Timmins office conducted the magnetometer survey; L. LeBel supervised the induced polarization survey conducted by D. Morrison of Gravenhurst, Ontario. B. Kyba supervised the drill program carried out by Arctic Diamond Drilling of Whitehorse.

For an account of previous work conducted on the claims the reader is referred to a December 1977 report by C. Verley of Cordilleran Engineering (AMAX Files).

Location, Access, Topography

The STQ property is located in the Watson Lake Mining District, Y.T. at latitude 60°10'N and longitude 141°14'W (Figure 1). The claim group lies 18 km (11 miles) north of the municipality of Swift River and is accessible in part by four-wheel drive vehicle on an old drill road extending from the Pine Lake airstrip to the Alaska Highway.

Helicopters from the nearby Pine Lake airstrip were used for access during most of the program.

The property, which covers an area of alpine meadows mainly above the treeline at 400 m, is characterized by high ridges and cirques ranging in elevation from 1250 and 1950m. It is bounded on the west by Goddart Creek, which flows north into Munson Lake, and on the east by a broad north-south valley in which both Seagull Creek and Swift River have their source.

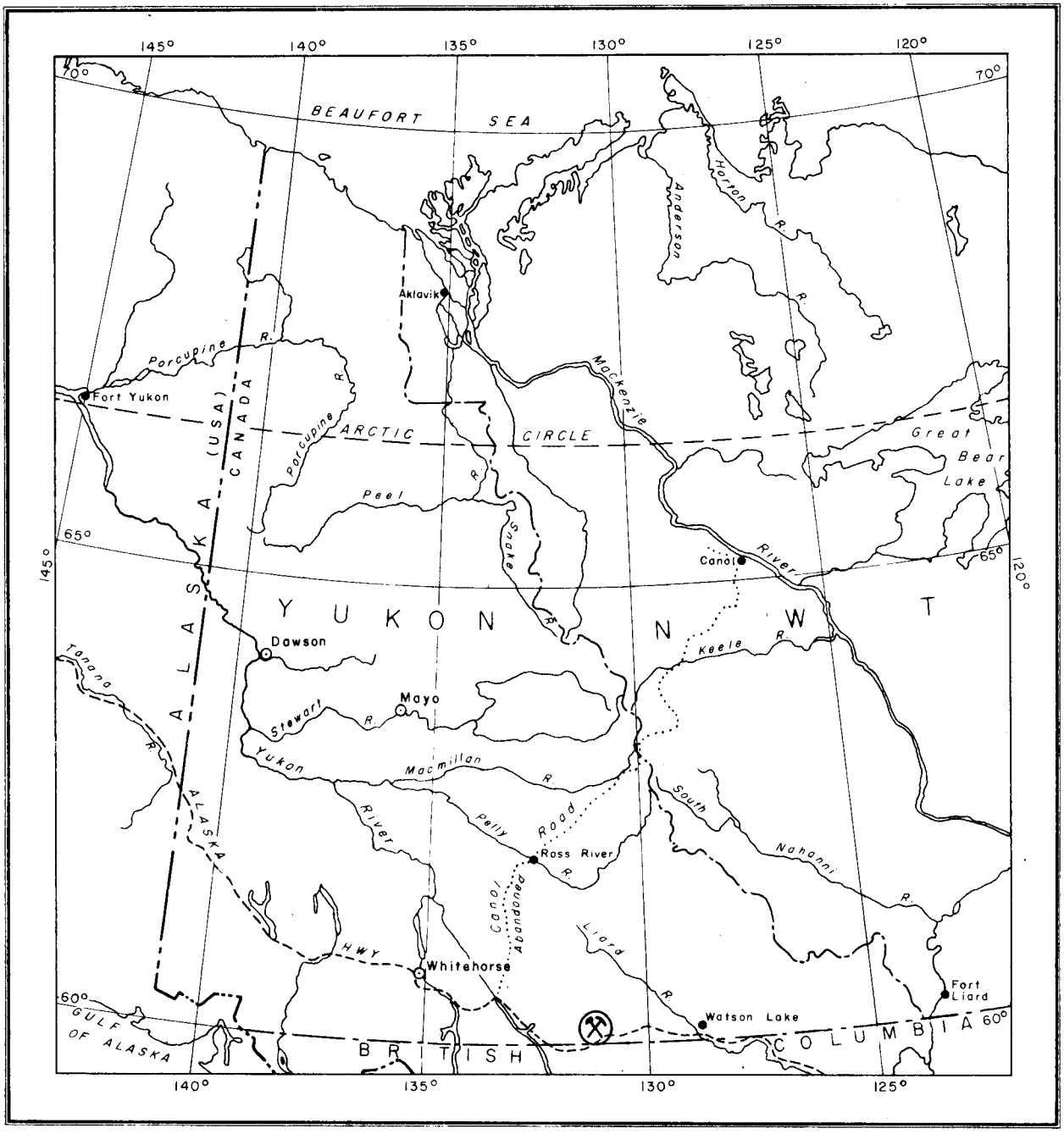
Claims

The original STQ claims (STQ 1-32 inclusive) were staked in July, 1977. An additional 86 claims (STQ 33-118 inclusive) were staked in June and July, 1978 to cover geochemical anomalies west and southwest of the original claims (Figure 2).

In early August the cost of the magnetometer survey, grid preparation and orthophoto base map were submitted to meet assessment requirements on STQ 1-32 (4 years per claim were applied) and on some of the claims acquired in 1978 (1 year per claim was applied). (Roussain and Hodgson, 1978).

LIST OF CLAIMS

CLAIM	GRANT NUMBER	RECORDED	DUE DATE
STQ 1-11	YA21708-YA21718	August 8,1977	August 8,1982
12-19	YA21724-YA21731	August 8,1977	August 8,1982
20-23	YA21719-YA21722	August 8,1977	August 8,1982
24-29	YA21732-YA21737	August 8,1977	August 8,1982
30	YA21723	August 8,1977	August 8,1982
31-32	YA21808-YA21809	August 26,1977	August 26,1982
33-40	YA33192-YA33199	June 20,1978	June 20,1979
41-80	YA33136-YA33175	June 19,1978	June 20,1979
81-88	YA33200-YA33207	June 20,1978	June 20,1979
89-96	YA33176-YA33183	June 19,1978	June 20,1979
97	YA33208	June 21,1978	June 21,1979
98-102	YA33209-YA33213	June 21,1978	June 21,1980
103-104	YA33214-YA33215	June 21,1978	June 21,1979
105-112	YA33184-YA33191	June 19,1978	June 19,1980
113-114	YA34073-YA34074	July 19,1978	July 19,1980
115-116	YA34075-YA34076	July 19,1978	July 19,1979
117-118	YA34077-YA34078	July 19,1978	July 19,1980



N. T. S. Ref. 105 B 3

AMAX POTASH LIMITED

STQ PROPERTY

STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

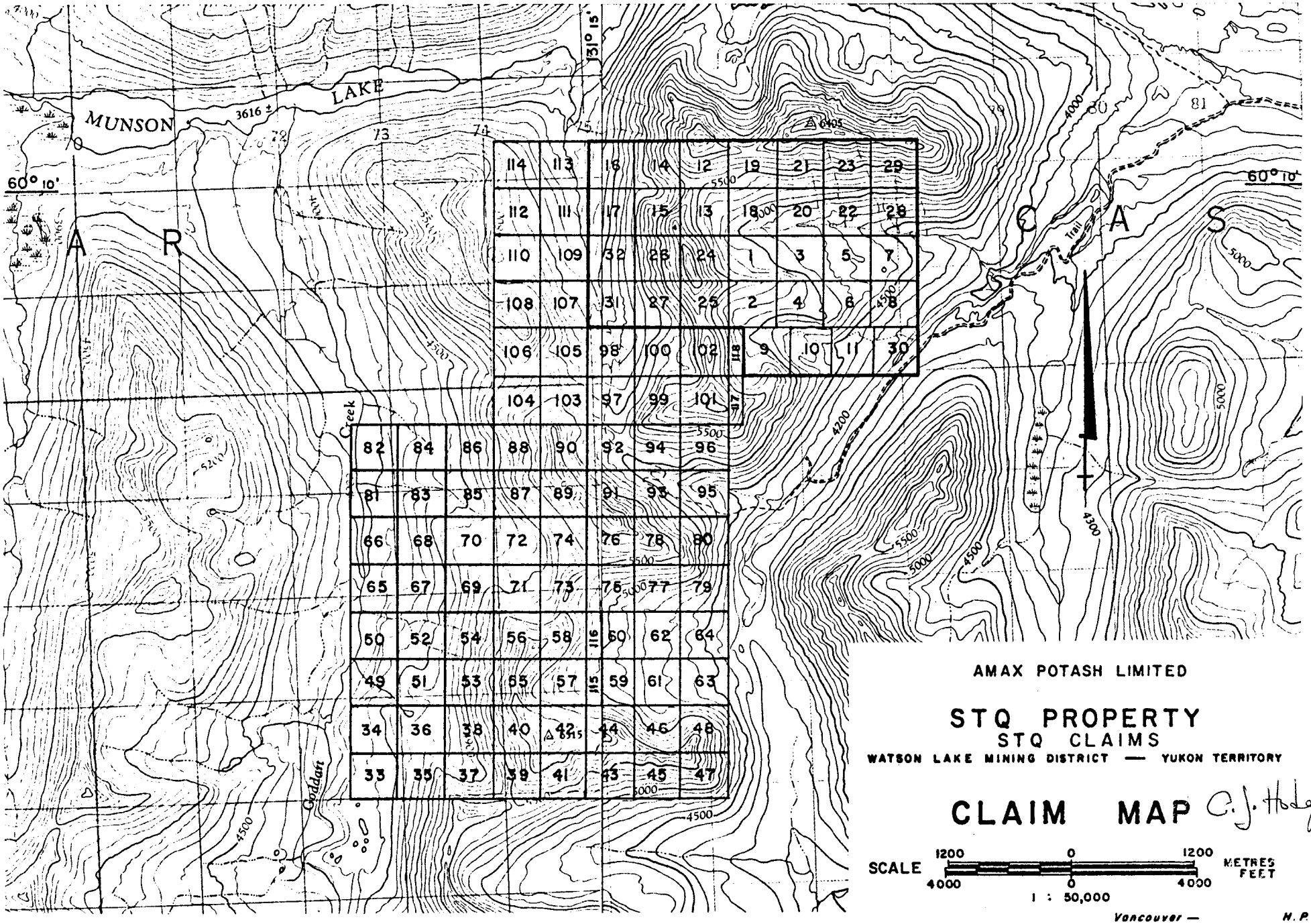
LOCATION MAP

C.J. Hodgson

SCALE 1" = 120 MILES

Vancouver - H.P.

FIG. 1


MUNSON LAKE
3616 ±
60° 10'
131° 15'
Goddart Creek
Trail
AMAX POTASH LIMITED
STQ PROPERTY
STQ CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY
CLAIM MAP
C.J. Hodgson
SCALE
1200 0 1200
METRES
4000 0 4000
FEET
1 : 50,000
Vancouver — N.P.
N. T. S. Ref. 105 B 3
FIG. 2

GEOLOGY

Regional

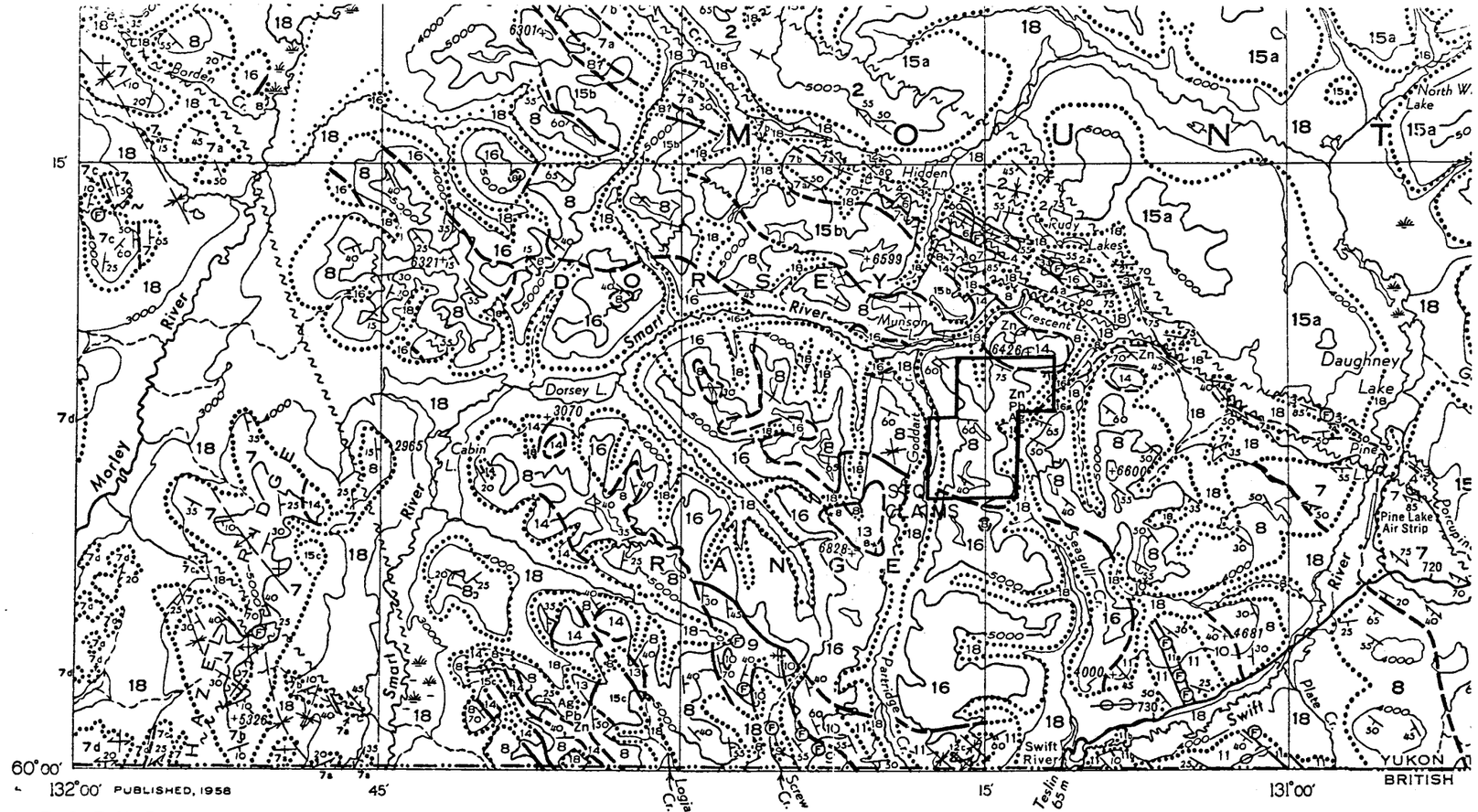
The property lies on the north limb of a regional syncline or synclinorium in Paleozoic strata, the axis of which is occupied by the Seagull Batholith (Figure 3). The batholith, located immediately southwest of the STQ claims, measures 8 km by 40 km and is elongate to the northwest. Although mainly quartz monzonite, it is commonly referred to as alaskite because of its low mafic content (less than 5% biotite) and the presence of smoky quartz.

The regionally extensive Cassiar hornblende quartz monzonite batholith forms the northeastern boundary of the belt of Paleozoic strata some 5 km northeast of the property. Both the Cassiar and Seagull batholiths have been dated as mid-Cretaceous in age, with dates ranging from 92 - 98 m.y. for the Seagull and 98-105 for the Cassiar batholith (Christopher et al, 1972).

A number of small stocks and plugs of alaskite and quartz monzonite satellitic to the Seagull batholith occur at the head of Swift River, at Munson Lake, near Rudy Lakes, and elsewhere around its southwest and northwest margins.

Property

The STQ property is underlain largely by Mississippian clastic strata which dip southwesterly at about -45 degrees at the southern edge of the property, steepening to -80 degrees and are locally overturned near the northern edge. The strata are intruded to the southwest by the Seagull batholith, and to the northeast by an older sill-like diorite intrusion. A stock and two small plugs of alaskite and quartz monzonite intrude the strata on the original STQ claims (Figures 4 and 5). Several faults with easterly and northeasterly strikes and minor left lateral displacement are recognized on the property.



PUBLISHED, 1958

LEGEND

QUATERNARY
- 18 — Glacial till, alluvium

CRETACEOUS
- 16 — Seagull batholith and related stocks
- 15 — 15a Cassiar batholith, biotite quartz monzonite;
  15b Ram stock, granodiorite;
  15c Logjam stocks

JURASSIC
- 14 — Diorite, quartz diorite
- 13 — Ultramafic rocks

MISSISSIPPIAN
- 11 — Chert, slate, argillite; 11a, limestone and dolomite
- 10 — Chert pebble conglomerate
- 9 — Limestone and dolomite
- 8 — Phyllitic siltstone, chert, argillite

DEVONIAN AND MISSISSIPPIAN
- 7 — 7a Greenstone;
  7b Argillite;
  7c Limestone, dolomite

MID DEVONIAN
- 6 — Black fetid dolomite

CAMBRIAN TO SILURIAN
- 4 — Slate

LOWER CAMBRIAN
- 3 — Limestone;
  3a Marble, skarn
- 2 — Quartzite, slate

AMAX POTASH LIMITED

STQ PROPERTY
STQ CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

REGIONAL GEOLOGY

SCALE 4 0 4 MILES
5 0 5 KILOMETRES
1:250,000

N. T. S. Ref. 105 B 3

FIG. 3

The Mississippian strata consist largely of thinly bedded blocky weathering siltstone and phyllitic siltstone (unit 8s). These strata commonly weather grey to weakly rusty, except a kilometre-wide zone located south of a prominent limestone unit on the property which displays intense rusty brown weathering. The rusty weathering may in part be attributable to the presence of disseminated pyrrhotite (as in trenches on STQ 93 and 95) but throughout most of the zone no sulphides are apparent.

Fissile dark grey argillite and cherty argillite (8a) forms several mappable units up to 200 m thick on the property.

Limestone(8l) forms a discontinuous unit up to 60 m thick which may be traced in a southeasterly direction through the centre of the property. It is well exposed on a ridge south of the grid area on Figure 5 where it consists of a lower 30 m of grey massive limestone overlain by 30 m of less resistant buff silty dolomitic limestone. In the valley bottoms to the southeast and northwest this unit is much thinner, and is altered to skarn at the Bom and Munson prospects. Thick limestone units south and west of the property form large pendants within and adjacent to the Seagull batholith. Minor lenses of silty limestone, largely altered to skarn, occur at the Bar prospect east of the property (Figure 4).

Conglomerate (8c) forms a narrow unit exposed on a dip slope on STQ 77.

A distinctive 50 m wide unit mapped as feldspathic tuff (8t) outcrops on STQ 14 and 16 near the West zone. It is strongly foliated and is characterized by 2-4 mm quartz and feldspar augen. It weathers rusty and looks bleached on fresh surfaces.

Skarn (8k) occurs in limestone and siltylimestone at several localities on and adjacent to the property. Characteristic minerals include garnet, diopside, epidote, axinite, magnetite, tourmaline, chalcopyrite, sphalerite, galena and scheelite.

Amphibolite (8a) exposed on STQ 26 may be a skarn or may be an off-shoot of a large diorite intrusion to the north.

Diorite at the north edge of the property forms a 12 km long sill-like intrusion up to 1.7 km wide. It is unfoliated, medium to coarse grained and uniformly textured except near its southern (upper) contact on the grid area where a foliated, heterogeneous hybrid border phase with numerous metasedimentary lenses is present. Diorite pre-dates the alaskite intrusions, as it is truncated by the alaskite stock on Swift River.

Dykes of feldspar porphyry, hornblende lamprophyre and felsite are common in the diorite and occur rarely elsewhere on the property. Since they show close spatial association with the diorite, they are assumed to be genetically associated with it.

The Seagull batholith, where exposed along the southwest corner of the property, consists of coarse grained, equigranular alaskite with 35% smoky quartz and 5% biotite. A fine to medium grained chilled margin is present within several hundred feet of the intrusive contact (not distinguished on Figure 4). Immediately adjacent to the chilled margin, the alaskite displays abundant large vugs (up to 25 cm diameter) and irregular veins and cavities filled with quartz, tourmaline and K-feldspar.

A stock, here named the Swift River stock, of identical composition to the Seagull batholith phase described

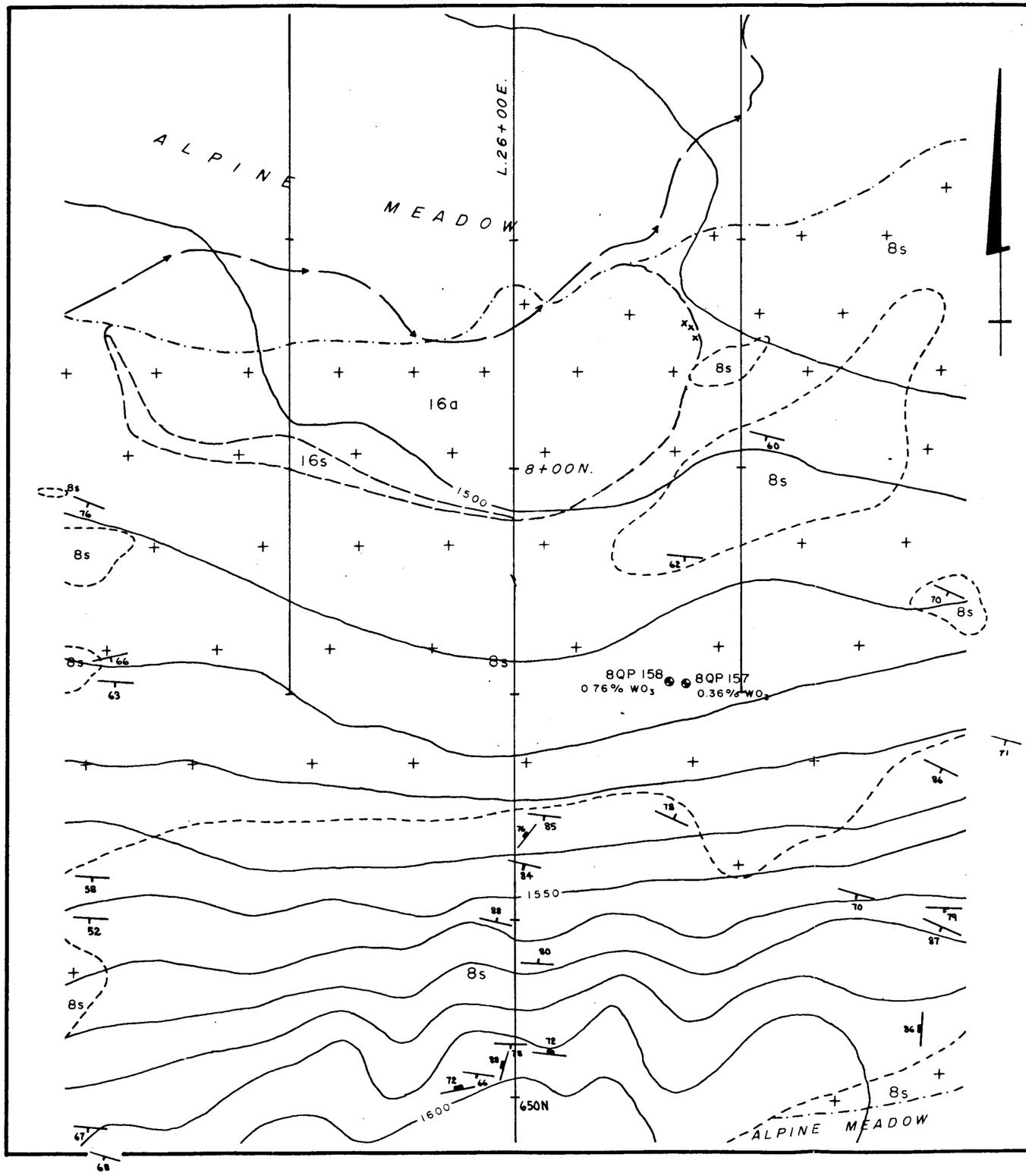
above, underlies 5 sq km on and east of the property near the headwaters of Swift River.

Two previously unmapped plugs with associated tin-tungsten mineralization located on the ridge west of Swift River provided the initial impetus for claims staking by Cordilleran Engineering geologists. The plug, referred to here as the East and West plugs, were the main targets of our 1978 exploration.

The West plug is located at elevation 1600 m in a cirque headwall on STQ 15 claims (Figure 6). It is a simple intrusion which measures roughly 70 m by 250 m and is composed of buff weathering, fine to medium grained, biotite quartz monzonite. Ubiquitous argillic alteration of feldspars accounts for the buff weathering; disseminated sericite is locally abundant. An intrusive breccia of angular fragments of hornfels in quartz monzonite occurs at the eastern margin of the stock. A hydrothermal cassiterite-bearing breccia in the talus nearby is not exposed in outcrop. Along the western margin a 5-10 m wide siliceous zone composed of +95% granular quartz forms a discontinuous rind to the plug and is in turn surrounded by poorly defined hornfels zone some two hundred metres wide. The hornfels takes on a purple hue due to the abundant presence of very fine grained biotite. Pale green diopside is present locally. Quartz, quartz-biotite and fluorite veinlets occur throughout the hornfels zone but were not noted in the plug itself. An asymmetric rusty weathered zone encompasses the stock and hornfels zone. It is most prominent north of the stock, and coincides in part with the tuffaceous unit (8t) referred to above (Figure 5).

The East plug is poorly exposed in felsenmeer at the base of a prominent spur ridge on STQ 3 claim (Figure 7). The plug is apparently about 130 m in diameter, although the northern boundary is not exposed. It consists of massive,

blocky, fine to medium grained biotite quartz monzonite which is unmineralized and unaltered. Rare 1-3 mm quartz veins are present. As with the West plug, a siliceous rind up to 8 m wide composed of granular quartz is present. No peripheral pyrite zone is present, and no hornfels zone was mapped in the intruded strata.



LEGEND

16a	Biotite quartz monzonite
16s	Siliceous border phase.
8s	Siltstone.

SYMBOLS

- Outcrop.
- Boulder crop, limit of boulder crop.
- Geological contact (defined, approximate).
- Jointing attitude.
- Bedding attitude.
- 8QP157 0.75% WO3 — Assay sample, sample number, % WO_3.
- 1500 — Topographic contour, contour interval (10 metres).

AMAX POTASH LIMITED

STQ PROPERTY

STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GEOLOGICAL MAP

EAST ZONE

SCALE 40 0 40 METRES / 100 0 100 FEET

1:1,000

C J Hodgson

Vancouver — G.G.

NTS Ref 105 B 3

FIG. 7

GEOCHEMISTRY

Property

Some 213 soil, talus fine and silt samples were collected at 150 m intervals on irregular traverses at the base of ridges on the property (Figure 8). No systematic sampling was conducted in the alluvium and till-covered valleys.

All samples were analyzed for the standard nine metals (Cu, Mo, Ni, Co, Mn, Fe, Ag, Pb, Zn) plus F, Sn and W at Rossbacher Laboratory, Burnaby.

The soil sampling indicated a number of Sn, W, F and base metal anomalies compiled on Figure 8. Analytical results for individual samples are reproduced in Appendix II.

Three areas of anomalous Sn, W, F Mo are indicated.

1) A prominent Sn, F(±Cu,W) anomaly directly below the West zone is continuous for 900 m along the north-trending hill side.
2) A prominent F(±Mo,W) anomaly occurs in a cirque north of a 2000 m elevation peak, here named Kyba Peak, on STQ 56 and is flanked by scattered Sn, W, Cu(±Mo) anomalies east of Kyba Peak.
3) A Zn, Pb anomaly with scattered Sn and F values coincides with an unnamed skarn in a limestone pendant in the Seagull batholith south of the property.

Several other geochemical features brought out by the sampling deserve mention. Firstly, intense Zn, Pb(±Cu,Ag) anomalies occur in the central part of the property in association with rusty weathering siltstones and argillites. A high background metal content of these strata is indicated. Secondly, soils overlying the Seagull batholith have a higher

fluorine content (500-1000 ppm F) than soils overlying metasediments (200-600 ppm F). Thirdly, tungsten appears to show weak enhancement in soils overlying and adjacent to the Seagull batholith and, in addition, is weakly anomalous in soils over a broad area west of the West zone. This suggests that the Seagull batholith may shallowly underlie this area.

Grid Area

Some 871 soils and talus fine samples were collected every 50 m on picket lines 100 m apart on the grid area. Samples were collected by mattock from a depth of 20 cm. All soil samples are parent till or alluvium on which no recognizable soil horizons are developed.

Samples were shipped to Rossbacher Laboratory, Burnaby, and analyzed for Mo, Cu, Ni, Co, Mn, Fe, Ag, Pb, Zn, Sn, W and F.

Prominent Sn, F, W, Mo and Pb-Zn-Ag anomalies which occur on the grid are outlined and numbered in Figure 9. Analytical results for individual samples are presented in Appendix II.

A circular, coincident, tin-fluorine anomaly (Anomaly 1) some 600 m in diameter is centred on the West zone and displays a "tail" to the west down the main creek draining the cirque. The anomaly boundary on Figure 9 is placed at the 75 ppm Sn contour, although the 1000 ppm F contour, not shown, is very similar.

A smaller fluorine soil anomaly unaccompanied by tin but with an associated weak Mo and W response occurs in the north-east corner of the grid area near the diorite contact (Anomaly 2).

Tungsten produces two prominent (>100 ppm W) soil anomalies on the grid. The first (Anomaly 3) occurs in the valley north of the East plug. This anomaly faithfully follows the main stream bed and dies out at the head of the valley. It is interpreted as a transported anomaly produced by placer concentration of weak amounts of scheelite (10-50 ppm W) present in soils above the valley floor.

The second tungsten anomaly (Anomaly 4) occurs on the hillslope below (west of) the West zone. Some 22 rock chip samples taken over this anomaly to determine its source yielded inconclusive results. Some rock chips (float and outcrop) contain between 40 and 950 ppm W, suggesting that the soil anomaly may in part represent primary W distribution in rocks. However, most rock chips returned 0-20 ppm, suggesting that most of the W in soils is a placer concentration.

Only one soil registered >100 ppm W immediately over the West zone, and four widespaced soils registered >100 ppm peripheral to the East plug.

Weakly anomalous (>10 ppm W) amounts of tungsten in soils over a broad but sharply defined east-west zone centred on the baseline, widening to the east and west may be significant. Widespaced soil samples on the property indicate this low order anomaly extends to the west beyond the grid. The anomaly is interpreted as a peripheral effect of an underlying alaskite stock or batholith.

Molybdenum produces a prominent (>10 ppm Mo) eastward trending linear anomaly (Anomaly 5) which extends from the East plug for a distance of 1 km. It is interpreted as a dispersion train from the East plug derived from a lateral moraine, or caused by present day drainage, or both. Soils and rock chips from the East plug and adjacent strata (Figure 7) have similar molybdenum content (5-15 ppm Mo).

No molybdenum soil anomaly occurs over the West zone, even though minor molybdenite is present on fractures in biotite quartz monzonite in drill core, and in boulders around the drill site. A small Mo soil anomaly occurs at the west end of the grid below the West zone (Anomaly 6).

A broad, low order Mo anomaly (not shown) is associated with the cherty argillite unit along the southern margin of the grid.

Lead, zinc and silver produce a coincident soil anomaly (Anomaly 7) which directly coincides with the cherty argillite unit at the southern margin of the grid. The anomaly boundary on Figure 9 follows the 100 ppm Pb contour, but the 500 ppm Zn and 1.2 ppm Ag contour are very similar.

MAGNETOMETER SURVEY

Introduction

As part of the evaluation of the property a magnetic survey was completed over the picket grid covering both the East and West zones.

The object of the survey was to outline intrusive rocks by their magnetic contrast and thus indicate the presence of additional stocks in till-covered areas of the grid.

Instrument and Survey Procedure

The magnetic survey was completed utilizing a McPhar Geophysics Proton Precession magnetometer Model GP-70 with a 1.0 gamma accuracy. Prior to the commencement of the survey base stations were established at each line intercept along the full length of the base line and were then tied in to each other. This procedure allows a survey to be completed with a common base value and provides close control in the eventuality of instrument "drift".

During the course of the survey readings were taken along the grid lines at 50 m intervals with intermediate readings recorded wherever the magnetic gradient changed abruptly.

Results of the survey were plotted at a scale of 1:5,000 in plan form and contoured at 50 gamma intervals (Figure 10).

A total of 1050 readings were recorded over 46 km of line during the period June 26 - July 16, 1978 by R.Roussain.

The survey was disrupted and hampered by severe magnetic "storms" which occurred daily and contributed to much lost survey time.

Survey Results

The major feature outlined by the magnetic survey is the contact between the diorite intrusive sill on the north edge of the grid and the magnetically less responsive meta-sedimentary rocks. A contrast in magnetic susceptibility of approximately 100 gamma distinguishes the two rock types and forms the assumed contact. The precise contact location is obscured by talus fans of diorite boulders which appear magnetically as south-trending lobes.

An area of high magnetic relief occurs between Lines 12E and 26E, predominantly from 2+50N to 4+00N in an area underlain by cherty argillite which contains pyrrhotite as disseminations and thin streaks in argillite laminae, and as coarse blebs in interbedded amphibolites.

A number of scattered 100 gamma anomalies detected in the northwest portion of the grid are attributed to magnetite and/or pyrrhotite-rich sedimentary horizons. Many of these "highs" were observed close to gossans in exposed outcrops along the base of ravines. However, in the same vicinity small "outliers" or "tongues" of diorite that extend from the main diorite intrusive mass respond magnetically, as at L7E, 14+00N.

Acid plugs do not appear to be distinguishable on the basis of their magnetic susceptibility.

INDUCED POLARIZATION SURVEY

Introduction

Between August 19 and 24, 1978, a 6 km induced polarization survey was conducted on the base line (10N) and on cross lines 11E and 25E by D.R. Morrison Induced Polarization Surveys of Gravenhurst, Ontario.

The survey had two objectives: (1) to characterize the IP and resistivity properties of the East and West plugs and associated alteration and mineralization and (2) to investigate for a blind sulphide deposit beneath either of the two plugs.

Equipment and Procedure

The survey was conducted with a McPhar P-660 frequency domain IP system. Frequency effect (in percent) between frequencies 0.3 and 5.0 hertz was recorded. Transmitted current and receiver voltage were used to calculate apparent resistivities. The dipole-dipole electrode array with an electrode spacing (a) of 100 m expanded to four separations (n = 1,2,3,4) was used. Buried sheets of aluminium foil sprinkled with calcium chloride were used as electrodes.

Results

The results of the survey are presented in the standard pseudosection format in Figures 11a, b, and c. Apparent resistivities are contoured logarithmically at multiples of the intervals 1, 1.5, 2, 3, 5, 7.5, 10 ohm-m. Frequency effects are contoured at 1% intervals. Noisy readings are identified by curved brackets; the notation TN refers to readings too noisy to record. Points with two entries indicate readings repeated with the receiver and transmitter dipoles transposed. Square brackets denote readings to which a terrain correction has been applied[1].

---

(1) Fox, R.C., et al, 1978, Topographic Effects in Resistivity Surveys; Earth Sci. Lab publ., Univ. Utah Research Inst.

Line 11+00E (Figure 11a)

From station 10N to the north end of the line relatively uniform resistivities ranging from 1000-2000 ohm-m were recorded. A minor resistivity low (resistivity less than 1000 ohm-m) occurs between 11N and 12N on the first two separations.

The lowest resistivity recorded (123 ohm-m at 8N, n = 1) is part of a narrow resistivity low which dips to the north and coincides with the West plug. The highest resistivity recorded (3316 ohm-m at 7N, n = 2) forms part of a small resistivity high between 6N and 7N which coincides with a small ridge.

Frequency effects range from 1% to a high of 5.3%. South of the base line (at 10N) essentially non-anomalous frequency effects ranging from 1.0% to 1.8% occur throughout the section whereas north of the base line anomalous frequency effects ranging from 4% to 5% were recorded. The contact between anomalous and non-anomalous frequency effects placed at 11N seems to dip to the north.

There are no clear cut correlations between frequency effect and resistivity.

Line 25+00E (Figure 11b)

Apparent resistivities range from a low of 512 ohm-m to a high of 3884 ohm-m. The north end of the line displays uniform resistivities between 1000 to 2000 ohm-m interrupted by two n = 1 readings less than 1000 ohm-m at 10+50N and 12+50N.

A narrow resistivity low outlined by readings less than 1000 ohm-m occurs between 7N and 8N at the base of a steep ridge. The low is flanked on the south by an incompletely defined region of resistivity greater than 2000 ohm-m situated at the crest of the ridge.

Another resistivity high was detected on the 3rd and 4th separations between 9N and 10N just to the north of the resistivity low.

Frequency effects range from 1% to 4% and show a gradual increase with depth across the entire section, contrary to variations in resistivity. Frequency effects less than 1% recorded between 9N and 12N at n = 1 roughly coincide with a zone of low resistivity.

Base Line 10+00N (Figure 11c)

Variations in resistivity at the west end of the base line show strong correlation with topography. The 1907 ohm-m resistivity recorded at 5E, n = 4 is probably the only resistivity west of 16E not appreciably affected by topography. East of 16E the topographic changes are gentle enough to exert only minimal effect on the resistivity. As a result, the near surface resistivity high (resistivity greater than 5000 ohm-m) recorded between 16E and 18E is probably valid but the zone of low resistivity recorded beneath it may be a lingering effect of the ridge to the west.

Three frequency effect anomalies stand out from background readings which range from 1% to 2%. At the west end of the line, frequency effects up to 5% showing the typical "pant leg" pattern suggest sulphide enrichment west of 6E.

Another anomaly with frequency effects greater than 2% occurs between 10E and 12E coincident with a low resistivity zone. The anomaly is absent on cross line 10E at 10N.

The third anomaly, formed by frequency effects greater than 2% recorded on the 3rd and 4th separations, underlies the entire base line east of 17E. East of 21E the increase in frequency effect with depth follows a similar pattern to the resistivity suggesting that the distribution

of frequency effect and resistivity may be related to a single model. Between 18E and 21E frequency effects increase while the resistivities remain essentially unform with depth suggesting resistivity and frequency effect behaviour are independent.

Discussion of Results

The resistivity low on Line 11+00E between 8N and 9N reflects the West plug. However, the configuration and intrusive resistivity of the plug is not clear because of severe modification by topographic effects. The resistivity low, similarly complicated by topographic effects, is also present on the base line. The lack of an IP anomaly over the West plug on Line 11+00E is consistent with the low sulphide environment and small size of the plug. The IP anomaly on the base line between 10E and 12E is not caused by the West plug but is a lateral effect caused by expansion of the array parallel to the IP anomaly recorded north of 11N on Line 11+00E. The anomaly at the north end of Line 11+00E is not easy to explain but may arise from minor sulphides associated with a volcanic tuff horizon located at 11N to 12N or, alternately, may arise from sulphides introduced along the diorite contact at 14N. The high IP effects at the extreme north end of the line may actually emanate from the diorite although coverage was not extensive enough to determine the intrinsic IP response of the diorite. Although there is no evidence of the continuation of the IP anomaly on Line 11+00E to the west as far as 6E, the IP anomaly at the very west end of the base line may also be caused by lateral effects.

The resistivity low between 7N and 8N on Line 25+00E which coincides with the East plug is also enhanced by topography. The resistivities in square brackets above the field data are corrected resistivities based on the crude topographic model shown with the topographic profile which reduces but does eliminate the low. The high resistivities at the crest

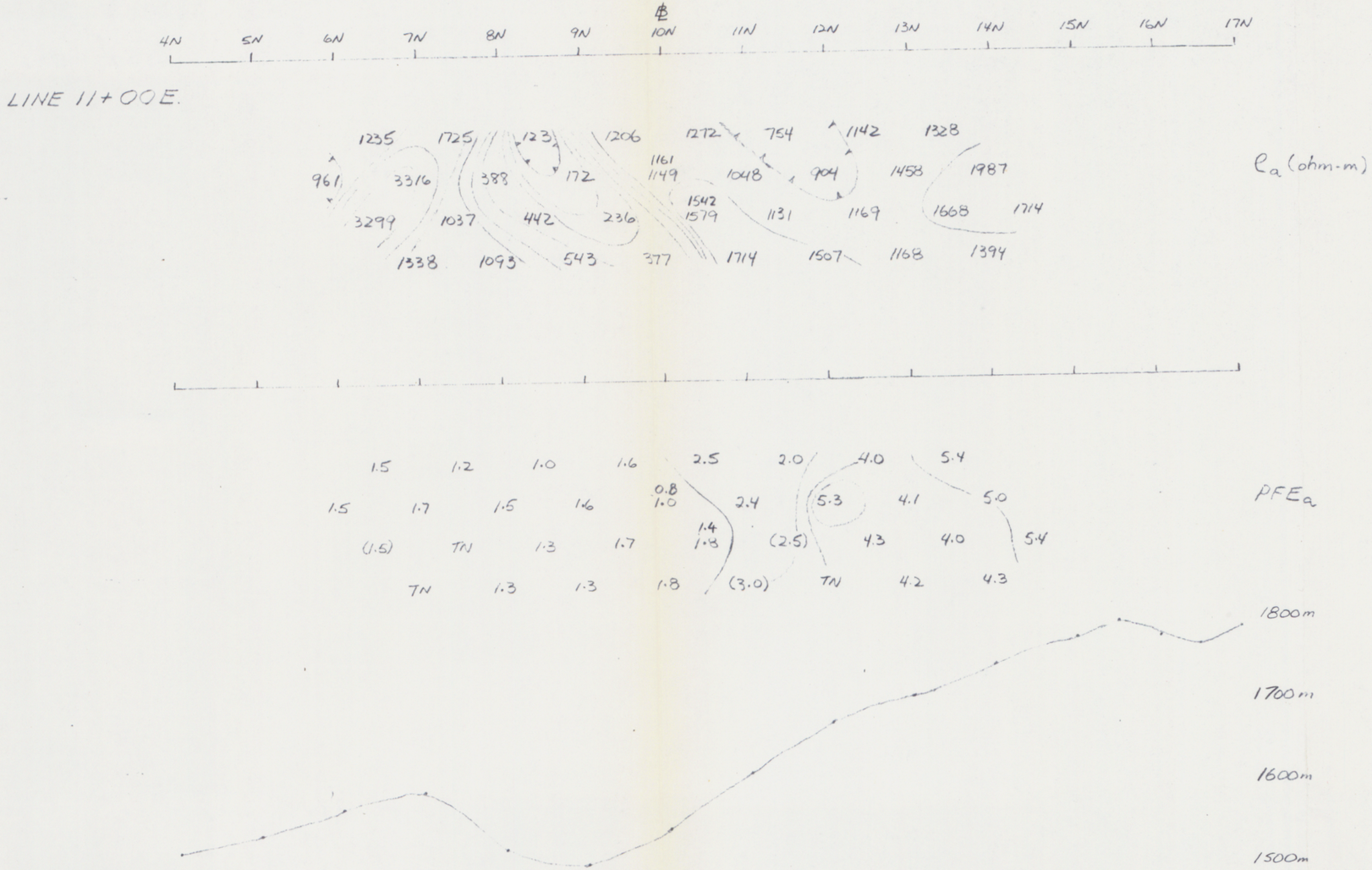
of the ridge have been reduced to a range similar to resistivities accorded metasediments elsewhere on the grid. The East plug has no distinguishable IP response. The frequency effect pattern shows no perceptible change across the stock even though a distinct change in resistivity occurs.

The corrected resistivity section has slightly enlarged the high resistivity zone between 9N and 10N. For reasons which will be discussed later this resistivity high is believed to reflect an underlying spur of the Swift River stock.

The resistivities north of 10N on Line 25+00E are attributed to metasediments. The low resistivities and accompanying low frequency effects at the surface between 9N and 12N are attributed to gravels and tills. The increase in frequency effect with depth unsupported by a similar pattern in the resistivity section is difficult to explain. If metasediments underlie this area, they clearly bear more sulphides or equivalents (up to 1%) than similar rocks at the south end of Line 11+00E where the IP survey indicates low sulphide content. With a simple two-layer model it is estimated that the layer with anomalous frequency effects occurs at 50 to 100 m below the surface. One of two effects or a combination of them may cause the anomalous frequency effects along Line 25+00E. An explanation may be that the sulphides were introduced by the Swift River stock which underlies the property, or they may be related to the diorite or hornfels at the diorite contact.

The sections at the east end of the base line have similar characteristics to parts of Line 25+00E. An increase in resistivity with depth from 24E to 30E is attributed to the presence of a high resistivity layer (5000 ohm-m) at a depth of 100 m interpreted as the Swift River stock. The zone of anomalous frequency effects starting at a depth of 50 to 75 m

places sulphides close to the contact of the Swift River stock within the overlying metasediments. There is no evidence of the stock in the resistivity section west of station 25E on the base line and the reason for continuation of the IP anomaly to 18E is not clear. However, on Line 25E the interpreted underlying stock has the form of a narrow spur which may not be detectable by the survey run parallel to it along the base line.



LEGEND

(3.5)	Noisy reading.
[240]	Terrain correction applied.
TN	Too noisy to record.
1470 1554	Readings repeated, with receiver and transmitter dipoles transposed.

AMAX POTASH LIMITED

STQ PROPERTY

STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

IP SURVEY

L 11+00 E.

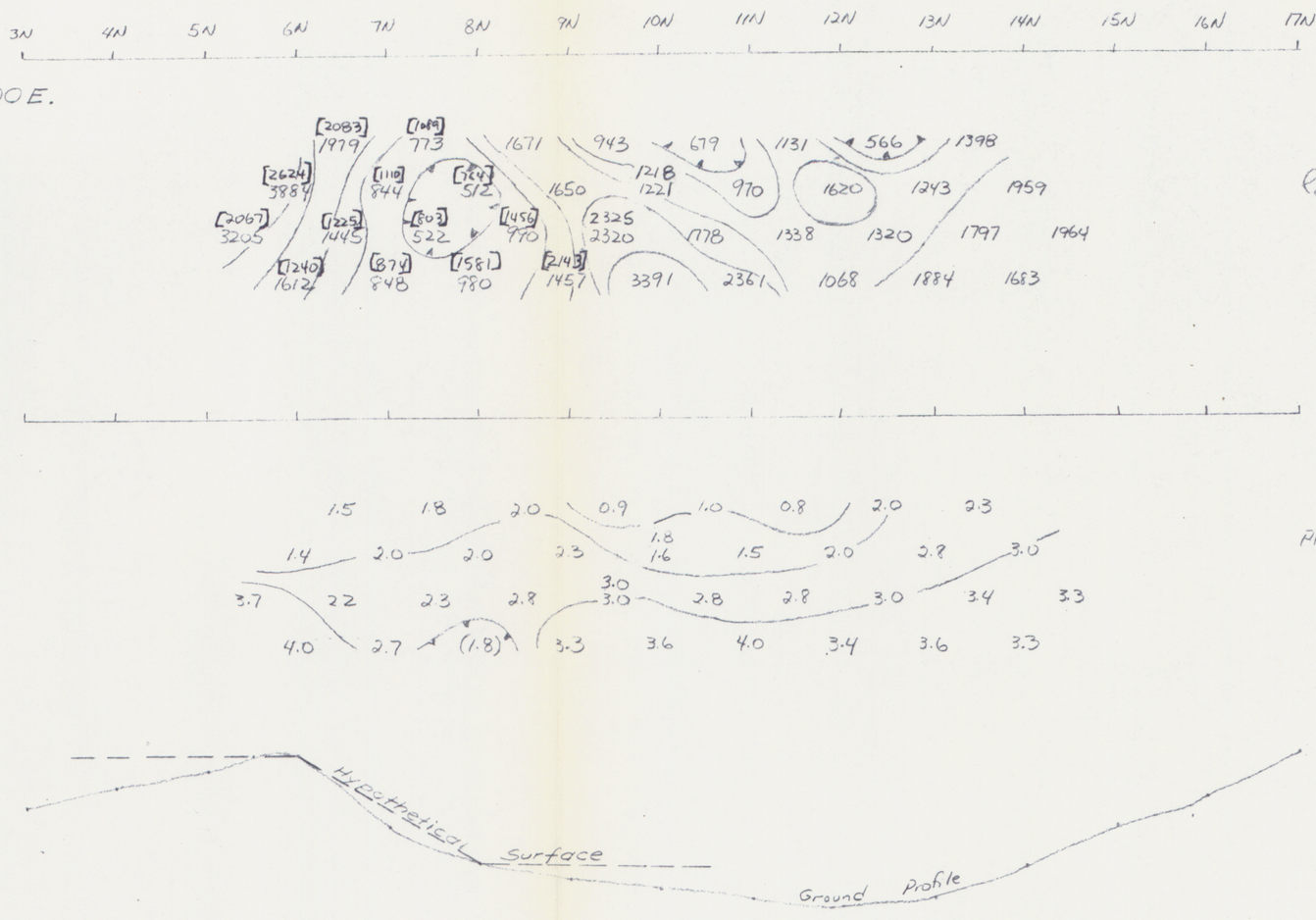
SCALE 1: 5,000

CJ Hodgson

Vancouver— G. G.

N. T. S. Ref. 105 B 3

FIG. 11A



LEGEND

(3.5)	Noisy reading.
[1240]	Terrain correction applied.
TN	Too noisy to record.
1470 1554	Readings repeated, with receiver and transmitter dipoles transposed.

AMAX POTASH LIMITED

STQ PROPERTY

STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

IP SURVEY

L 25+00 E.

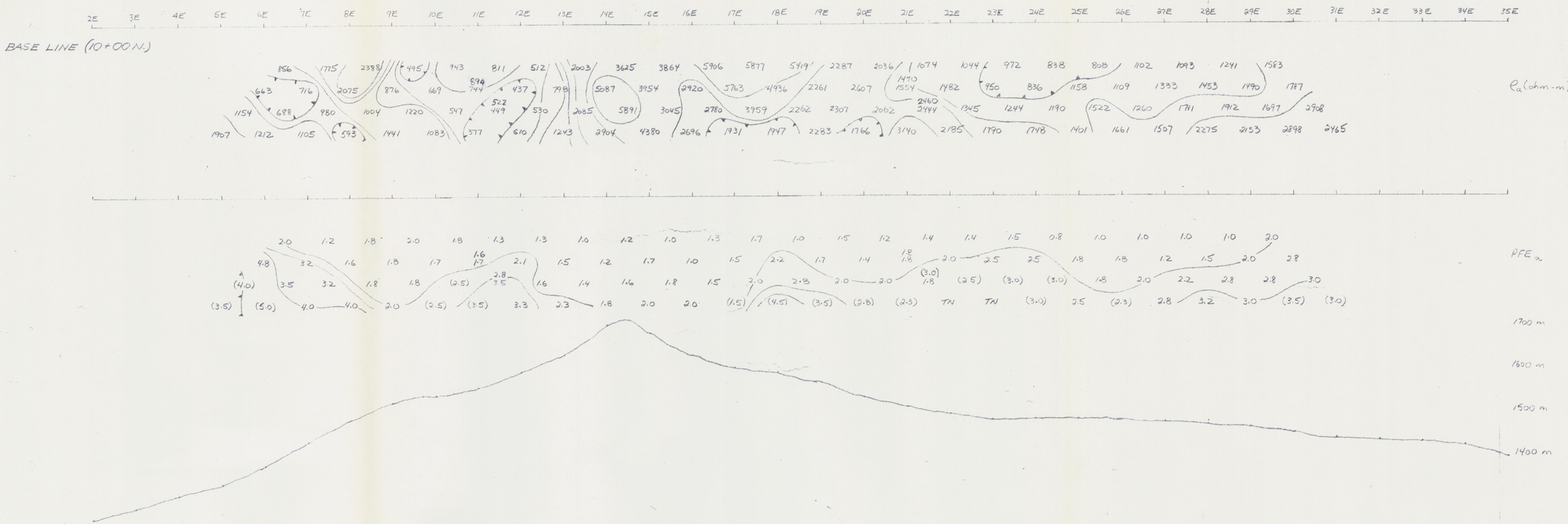
SCALE 1 : 5,000

C J Hodgson

Vancouver— G. G.

N. T. S. Ref. 105 B 3

FIG. 11B



LEGEND

(3.5)	Noisy reading.
[240]	Terrain correction applied.
TN	Too noisy to record.
1470 / 1554	Readings repeated, with receiver and transmitter dipoles transposed.

AMAX POTASH LIMITED

STQ PROPERTY
STQ CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

IP SURVEY
BASE LINE (10+00N.)

SCALE 1" = 5,000

C.J. Hodgson
Vancouver — G.G.

N.T.S. Ref 105 B 3
FIG. 11C

DRILL PROGRAM

Introduction

In early October, 1978, one BQ drill hole tested the depth potential of the tin-bearing hydrothermal breccia exposed at the West zone.

A drill pad was prepared at elevation 1495 m in the talus slope below the breccia on STQ 14 claim. A longyear 38 drill was moved onto the property on September 30 using a Hughes 500D helicopter from Ross River. Drilling was conducted by Arctic Diamond Drilling of Whitehorse.

The hole was oriented at 165° azimuth and drilled at -45° to a depth of 247 m. An assay etch test at 190 m down the hole showed the plunge to be steady at -45°. Core recovery averaged 97%. The entire core was logged, split for geochemical analysis and logged again. The split core was lamped at night. A representative skeleton sampling of the core was brought to Vancouver, whilst the remaining core was stacked and left on the property.

Split core for analysis was bagged in 2 m intervals and analyzed for Sn, W, F, Mo, Cu, Ni, Co, Pb, Zn, Fe, Ag and Mn at Rossbacher Laboratory, Burnaby. A few samples containing arsenopyrite were analyzed for Au (see Appendix II for results).

Geology

Geology of the drill hole is summarized in Figure 12. The drill log is included as Appendix III.

The drill hole passed through 17 m of talus before entering metasedimentary bedrock. The metasediments are purple, fine grained, biotite hornfels, with minor interbanded quartzite, biotite schist and light green diopsidic hornfels. Veins of quartz, quartz-fluorite, quartz-calcite,

arsenopyrite and coarse grained biotite are common. Quartz-scheelite and quartz molybdenite veins occur rarely. Two prominent fault zones, at 50 m and 94 m, marked by 1 m wide gouge zones post date veining and may represent an assumed east-west fault zone beneath the valley.

At 116 m, hornfels is intruded by biotite quartz monzonite which displays a narrow chilled margin grading abruptly into medium grained quartz monzonite with up to 7% biotite. In the drill log this phase was mapped as either quartz monzonite or granodiorite, depending on biotite contact but it is, in fact, a single phase of biotite quartz monzonite. As on surface, pervasive weak argillic alteration of the feldspars is ubiquitous. Biotite is obliterated locally in chloritized bands up to 1 m wide. Veins of quartz-arsenopyrite, quartz-fluorite, biotite, and molybdenite (rare hairline fractures) occur throughout the granodiorite.

At 220 m, biotite granodiorite is intruded by alaskite which is identical in appearance to that exposed in the Seagull batholith. Below a 12 m wide chilled margin the alaskite is a light grey, subporphyritic leucocratic rock with crystals of smoky quartz and feldspar up to 5 mm diameter set in a medium grained matrix of quartz, K-feldspar, albite and biotite (2-3%). The rock is massive, unveined and unaltered and contains minor pegmatite dykelets near the upper contact.

C.J. Hodgson, P.Eng. (B.C.)

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APPENDIX I - STATEMENT OF COSTS

SUMMARY and PERIOD OF WORK - STQ Property

Geological Mapping and Geochemical Soil Sampling; June 19 to July 22, 1978
Diamond Drilling; September 29 to October 11, 1978

Personnel

C.J. Hodgson, PhD. P.Eng. - 601-535 Thurlow Street Vancouver, B.C.		
June 20-30, July 13,14,17-22	19 days @ $138.43	2,630.17
B.J. Paul, Sr. Assistant - 7-503 Corydon Avenue Winnipeg, Man.		
June 19-July 22	34 days @ $ 53.25	1,810.50
J.R. Candy,Jr. Assistant - 2426 Lawson Avenue West Vancouver, B.C.		
June 19-July 22	34 days @ $ 39.46	1,341.64
Accommodation and Board	87 mandays @ $ 20.00	1,740.00
Helicopter - Northern Mountain Helicopters, Prince George		
Inv. #1781, 9262-9267, 0335, 0337		2,772.00
Geochemical Analysis - Rossbacher Laboratories, Burnaby		
Inv. #8042, 8063, 8083 1084 Samples Cu,Mo,Ni,Co,Mn,Fe,Ag,Pb,Zn,F,Sn and W		11,140.80
Diamond Drilling - Arctic Diamond Drilling Ltd., Whitehorse		
Inv. #2037	Period September 29-October 11,1978	23,543.61
Report Preparation		400.00
	TOTAL	$45,378.72

Work to be applied: STQ 1-32 - 2 years
33-72, 75 - 5 years
73-74 - 4 years
76-118 - 4 years

C J Hodgson

APPENDIX II - ANALYTICAL RESULTS

Kossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8069

TO: AMAX EXPLORATION INC.
535 THURLOW ST. VANC.

INVOICE NO.

PROJECT 821 — STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sb	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	8 QC T34		4	8			100	.9	.4	152	76	0		01
02	35		12	16			80	.8	.2	24	20	0		02
03	36		10	8			60	.6	.4	28	16	0		03
04	37		4	48			50	2.7	.2	56	24	0		04
05	38		2	X1720		0	440	7.0	16.0	324	112	12	1100	05
06	39		8	16			120	.5	40	>2280	>2120	0		06
07	40		2	240		5	1720	5.2	.4	272	24	20		07
08	41		70	118			320	2.7	.6	184	28	15		08
09	42		2	14		0	640	7.0	1.4	56	12	0		09
10	43		6	X1760		0	1600	7.0	1.4	>2280	16	0		10
11	44		110	34			160	1.7	.2	44	12	15		11
12	45		6	6			160	1.2	.2	64	32	10		12
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Rossbacher Laboratory

RECEIVED
AUG 11 1978

2005 S SPRINGER AVE.
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8056

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 821 STQ OPTION

DATE ANALYSED Aug 17

No.	Sample	pH	Mo	Cu			Mn	Fe	As	Zn	Pb	W	Sn	No
01	8 QC T50		10	12			120	1.1	1.0	40	52	0	25	01
02	51		13	836			80	1.0	.4	40	8	5	450	02
03	54		19	22			200	1.2	.2	48	14	0	0	03
04	55		28	12			160	1.4	.4	60	36	0	0	04
05	56		28	124			620	5.1	.4	148	18	0	0	05
06	57		22	232			1640	2.9	.8	400	42	10	2	06
07	58		14	640			900	4.7	1.0	>2200	34	40	15	07
08	60		1	20			2520	5.8	1.4	880	60	0	5	08
09	61		2	8			1400	3.5	.6	420	146	0	0	09
10	G1		7	40			220	3.0	.2	100	26	-		10
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AMAX
AMAX

Rossbacher Laboratory
GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604
VANCOUVER OFFICE

RECEIVED
DEC 12 1978

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086a
INVOICE NO. ~~8113~~ 9013
DATE RECEIVED
DATE ANALYSED Sept, 1978

TO: AMAX MINERALS EXPLORATION
601-535 Thurlow St.
Vancouver, B.C. ASSAYS

ATTN: STU Prop. 881

SAMPLE NO.:	% WO_3	% Cu	% Zn	% Pb	oz/T Ag	ppm Sn
BQPT 52	-	0.03	2.90	-	-	
53	-	4.40	0.51	-	-	
59	-	0.09	19.6	-	-	175
BQPT 157	0.36	-	-	-	-	
158	0.76	-	-	-	-	
159	0.04	-	20.0	1.60	1.30	
166	-	0.03	-	-	-	

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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(1)

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8161

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VAN. B.C.

INVOICE NO.

PROJECT # 881

DATE ANALYSED NOV/78

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	Sn	No.
01	8 SKT 002		8	81	48	32	160	4.7	.6	106	88	60		01
02	003		10	2000	44	38	140	2.5	11.0	280	38	15		02
03	004		8	80	48	32	100	2.9	.8	60	30	300		03
04	005		12	34	52	32	140	2.3	.4	62	28	0		04
05	006		8	30	16	32	160	2.6	.4	54	38	0		05
06	007		6	62	36	20	100	1.8	.4	86	26	20		06
07	008		8	30	56	32	160	3.2	.4	78	28	2		07
08	009		12	24	58	32	340	4.0	.4	162	60	2		08
09	010		6	2300	52	38	8100	>10.0	6.0	17800	8000	0		09
10	011		8	320	72	36	1100	5.8	7.2	2500	1560	0		10
11	012		8	104	60	36	260	2.7	1.0	306	32	2		11
12	013		6	4	32	20	140	0.6	.4	220	20	950		12
13	014		6	56	52	32	300	5.2	1.0	146	34	80		13
14	015		8	140	150	46	220	3.7	1.0	138	96	20		14
15	016		8	34	48	28	140	2.5	.6	50	24	20		15
16	017		10	58	56	32	100	2.8	.8	58	26	20		16
17	018		10	200	36	26	120	4.5	1.0	74	32	45		17
18	019		12	22	40	26	120	2.1	.4	60	32	2		18
19	020		12	26	48	28	200	3.7	.6	94	66	10		19
20	021		10	22	32	26	140	1.8	.4	72	52	2		20
21	022		8	22	46	32	140	2.9	.8	66	68	40		21
22	023		10	26	52	26	100	2.6	.8	70	168	0	0	22
23	024		10	6	48	20	40	0.6	.4	20	96	0		23
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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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TELEPHONE: 299-6910
AREA CODE: 604

(1)

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8153

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VAN. B.C.

INVOICE NO.

PROJECT STQ #881

DATE ANALYSED OCT. 1978

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	Sn	No.
01	8 SKS 26		7	16	24	10	200	3.6	.6	132	26	40	25	01
02	27		16	18	18	4	200	3.0	.4	110	30	20	20	02
03	28		7	8	14	2	120	1.7	.4	72	20	15	60	03
04	29		4	6	4	2	100	0.6	.2	24	14	10	25	04
05	30		5	10	24	12	200	3.5	.4	128	26	35	5	05
06	31		6	20	30	10	200	2.9	1.0	168	26	20	15	06
07	32		6	6	12	6	120	1.3	.4	54	26	50	20	07
08	33		7	14	22	12	160	3.4	.6	98	28	15	2	08
09	34		4	26	24	12	240	2.2	.4	98	30	45	15	09
10	35		9	16	22	10	180	2.5	.6	94	38	50	15	10
11	36		2	40	40	26	360	2.4	.8	200	48	80	5	11
12	37		4	116	60	22	400	3.2	1.0	360	54	15	150	12
13	38		5	32	26	16	2800	2.0	.6	124	24	15	35	13
14	39		2	28	50	20	280	3.2	.6	150	24	0	15	14
15	40		2	16	52	18	240	3.2	.4	130	22	10	90	15
16	41		2	20	40	16	240	3.0	.4	144	26	15	60	16
17	42		4	12	26	10	200	2.6	.8	68	20	5	15	17
18	43		3	42	110	22	400	2.9	.6	150	32	5	2	13
19	44		14	12	20	8	160	2.1	.4	86	30	40	25	19
20	45		7	18	26	14	320	2.2	.4	110	34	60	40	20
21	46		44	38	30	16	260	2.8	.6	330	56	20	15	21
22	47		8	14	22	10	180	2.6	.2	108	32	15	15	22
23	48		5	18	26	12	200	2.9	.6	120	36	20	5	23
24	49		4	14	24	8	160	2.9	.4	120	26	40	15	24
25	50		7	6	12	2	120	1.4	.2	72	26	5	10	25
26	51		9	20	24	14	220	3.0	.6	162	50	10	15	26
27	52		10	14	26	8	180	2.9	.8	140	32	20	15	27
28	53		14	14	26	10	180	2.7	1.0	188	32	70	25	28
29	54		5	16	28	14	220	2.5	.4	136	34	5	10	29
30	55		80	44	40	18	560	3.0	3.4	320	72	20	0	30
31	56		7	24	22	20	220	3.2	.8	240	60	5	5	31
32	57		6	18	22	12	320	3.2	.4	130	32	10	20	32
33	58		5	20	24	16	180	4.0	.8	92	34	20	10	33
34	59		4	20	22	10	200	2.9	.8	104	40	15	5	34
35	T 60		9	18	38	28	240	2.2	.4	60	20	0	0	35
36	S 61		7	70	96	24	540	3.5	.4	300	88	5	2	36
37	62		7	42	40	22	360	2.8	.8	196	46	300	70	37
38														38
39														39

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

DDH STQ 78-1

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8176

INVOICE NO.

DATE ANALYSED NOV 78

TO: Amax Mineral Exploration
535 Thurlow St. Van. B.C.

PROJECT STQ

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	Sn	F⁻
01	60501		18	16	86	64	220	4.0	.8	106	50	200	0	
02	02		26	30	52	40	140	2.7	.8	62	18	900	20	4800
03	03		20	26	56	48	160	3.6	.8	86	22	250	10	
04	04		12	26	40	26	100	2.2	.6	62	48	230	10	6000
05	05		10	22	52	32	140	3.8	.8	86	14	230	0	
06	06		16	36	52	38	140	3.2	.8	78	18	350	0	11,400
07	07		20	54	50	40	140	3.1	.6	74	16	230	10	
08	08		12	70	48	40	160	4.2	.8	94	18	300	10	8,000
09	09		16	62	48	36	100	2.9	.6	74	18	380	0	
10	10		18	44	62	56	140	3.8	.8	70	16	950	0	8,900
11	11		44	70	70	70	160	2.8	.6	78	20	850	0	
12	12		20	38	56	44	120	2.0	.6	62	18	230	0	11,000
13	13		36	36	90	80	200	2.4	.6	60	14	300	0	
14	14		10	28	40	28	100	2.2	.6	122	14	220	0	10,800
15	15		14	46	36	28	100	2.1	.6	274	14	60	0	
16	16		10	38	22	24	120	2.4	.6	400	14	300	0	10,600
17	17		18	30	26	26	100	2.3	1.8	1120	22	400	0	
18	18		16	38	28	32	180	2.8	9.2	760	38	70	20	12,800
19	19		60	28	36	40	200	2.6	1.2	126	22	200	40	
20	20		24	18	32	36	140	2.6	.6	64	10	370	0	7,300
21	21		18	20	38	36	180	3.1	.6	76	32	300	20	
22	22		16	16	40	40	180	3.4	.8	114	20	240	10	7,900
23	23		40	60	38	32	140	2.1	.8	58	16	800	0	
24	24		48	26	32	32	140	1.7	.6	58	16	750	10	11,200
25	25		56	42	32	40	180	4.2	1.8	134	22	850	10	
26	26		76	58	40	48	260	4.3	1.6	180	22	600	30	16,000
27	27		100	38	54	44	300	4.8	1.6	150	24	500	10	
28	28		110	20	48	60	200	3.5	2.0	88	22	820	0	20,100
29	29		30	14	50	64	140	2.3	2.8	60	24	250	0	
30	30		38	10	40	40	180	3.2	.8	82	18	380	0	23,600
31	31		44	56	98	76	280	3.4	1.6	84	20	320	10	
32	32		42	8	36	28	140	2.0	.8	58	12	580	10	11,300
33	33		62	14	38	22	180	2.7	1.2	66	12	20	0	
34	34		78	8	38	36	160	2.8	1.0	70	14	55	0	17,800
35	35		40	4	28	32	160	2.9	1.0	74	18	55	0	
36	36		94	4	44	28	180	2.9	1.0	74	18	100	0	18,900
37	37		146	4	88	22	180	2.4	1.2	74	20	50	10	
38	38		48	2	56	24	200	3.2	.6	90	16	250	10	16,300
39	60539		98	2	48	24	180	3.0	.4	76	18	30	0	

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8176

INVOICE NO.

DATE ANALYSED NOV 78

TO: Amax Mineral Exploration
535 Thurlow St. Van. B.C.

PROJECT STQ

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	Sn	F⁻
01	60543		150	2	60	28	220	4.1	.8	118	24	300	20	11,600
02	41		100	14	72	38	260	4.5	1.0	118	28	900	10	
03	42		84	26	62	22	340	6.0	1.2	182	30	600	10	31,000
04	43		72	32	60	22	300	6.5	1.6	214	38	700	10	
05	44		56	26	60	32	280	5.2	1.0	160	30	280	10	28,000
06	45		156	28	62	40	340	6.8	2.0	226	34	110	10	
07	46		70	14	60	36	200	4.4	1.2	162	32	70	10	34,500
08	47		74	6	56	28	220	3.7	.8	124	24	250	10	
09	48		68	8	60	36	320	5.5	1.0	174	28	280	10	29,000
10	49		74	26	60	36	340	5.8	1.2	220	26	250	10	
11	50		120	16	52	30	360	5.1	1.0	178	26	200	10	26,300
12	51		54	2	34	80	260	2.4	.6	70	12	0	10	
13	52		20	2	28	80	100	1.2	.4	30	8	0	10	3,600
14	53		28	2	24	16	120	1.2	.6	54	18	0	10	
15	54		80	6	20	12	120	1.3	.6	42	16	15	10	3,800
16	55		32	2	32	80	120	1.3	1.0	44	14	0	0	
17	56		26	4	26	20	100	1.2	.8	70	22	0	10	4,100
18	57		110	12	52	24	140	1.6	.6	50	16	20	40	
19	58		68	34	26	20	140	1.7	.6	46	14	20	60	4,100
20	59		42	6	24	20	120	1.8	.4	38	12	20	10	
21	60		32	4	28	24	120	1.2	.4	36	10	40	10	3,200
22	61		78	4	26	80	100	1.1	.4	40	10	0	0	
23	62		120	82	30	20	140	1.5	.6	40	14	40	50	5,100
24	63		52	2	22	16	120	1.2	.4	38	12	100	0	
25	64		32	2	28	22	160	1.2	.4	40	14	20	0	3,400
26	65		80	2	20	14	100	1.1	.4	36	12	20	0	
27	66		74	2	20	16	100	1.2	.4	46	14	25	0	4,000
28	67		26	10	22	14	100	1.0	.6	32	22	0	0	
29	68		24	2	12	12	100	1.2	.4	32	16	0	10	3,800
30	69		80	6	24	18	100	1.1	.4	36	18	10	10	
31	70		32	12	24	20	100	0.9	.4	30	26	0	10	2,700
32	71		114	8	22	18	100	1.0	.4	34	16	60	10	
33	72		66	16	26	18	100	1.3	.4	38	10	0	10	4,000
34	73		186	2	26	20	100	1.0	.4	28	10	0	0	
35	74		92	2	20	14	100	1.1	.4	30	4	0	0	5,000
36	75		18	30	20	14	140	1.6	.6	50	6	5	90	
37	76		24	20	18	12	140	1.6	.4	78	14	100	150	3,800
38	77		50	10	24	20	120	1.3	.4	66	6	5	20	
39	60578		30	2	26	20	140	1.4	.4	56	8	10	0	3,700

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

③

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8176

TO: Amax Mineral Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT STQ

DATE ANALYSED Nov. 1978

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Zn	Pb	W	Sn	F⁻
01	60579		40	2	26	14	80	1.0	.2	26	10	0	0	
02	80		32	4	22	12	100	1.2	.2	32	12	0	0	4,000
03	81		44	4	20	18	100	1.0	.4	32	12	0	0	
04	82		10	12	14	10	160	1.3	.6	44	30	0	60	3,000
05	83		8	8	14	20	100	1.1	.2	36	12	0	0	
06	84		38	20	20	38	120	1.4	.2	62	18	25	0	4,000
07	85		150	4	24	12	120	1.0	.2	32	16	0	10	
08	86		80	6	20	14	80	1.0	.4	32	12	0	0	3,700
09	87		10	4	14	248	100	1.0	.2	36	12	0	0	
10	88		8	12	20	12	100	1.2	.2	36	12	0	10	3,000
11	89		12	48	24	32	600	1.6	.8	92	60	20	50	
12	90		20	32	42	26	120	1.5	6	46	14	20	20	3,500
13	91		80	26	26	24	80	1.7	.4	54	16	25	0	
14	92		30	6	40	20	100	1.0	.2	26	10	0	0	2,700
15	93		14	6	26	16	80	1.0	.2	28	10	15	10	
16	94		8	4	26	18	60	.8	.2	20	8	10	0	2,100
17	95		22	8	22	18	80	.8	.4	20	8	10	0	
18	96		28	6	26	20	100	1.0	.4	28	12	0	0	2,900
19	97		6	2	20	14	120	1.4	.2	40	6	0	10	
20	98		4	2	20	14	100	.9	.2	32	6	0	0	3,300
21	60599		4	2	18	12	100	1.0	.4	32	10	0	10	
22	60600		6	56	36	24	40	1.2	1.0	16	8	0	1500	610
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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8204

TO: AMAX MINERALS EXPLORATION
601-535 THURLOW ST.
VANCOUVER BC.

INVOICE NO.

PROJECT STQ. 881

DATE ANALYSED Dec 7/78

No.	Sample	pH	Mo	Cu		PPB Au								No.
01	60520					80								01
02	60523					120								02
03	60535					180								03
04	60551					100								04
05	60558					120								05
06	60572					20								06
07														07
08														08
09														09
10														10
11														11
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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO.

INVOICE NO.

DATE ANALYSED Aug/78

TO: Amax Exploration Inc.
535 Thurlow St. Vanc.

PROJECT 881 – STQ OPTION

No.	Sample	pH	Mo	Cu	F	Sn	Mn	Fe	As	Zn	Pb	W		No.
01	8QPT 1		16	8	1700	0	820	1.3	.2	72	12	0		01
02	2		4	4	2000	0	60	.7	.2	32	12	0		02
03	3		12	24	3250	5	60	.9	.4	28	8	100		03
04	4		6	2	3650	0	40	.5	.2	72	8	0		04
05	5		10	8	3900	0	160	.8	.2	44	20	0		05
06	6		12	8	2500	300	80	1.0	.4	52	34	0		06
07	7		10	60	643	5	120	2.9	.4	60	24	0		07
08	8		6	180	1050	1	200	3.0	.6	80	20	5		08
09	9		18	52	230	0	160	2.4	.4	60	16	0		09
10	10		12	24	2553	2	200	2.7	.2	40	16	0		10
11	11		13	20	230	0	240	3.4	.2	92	20	0		11
12	12		8	12	361	0	200	2.6	.4	76	20	0		12
13	13		4	8	480	0	200	1.3	.2	104	36	0		13
14	14		2	×480	195	5	3040	9.2	1.0	48	36	0		14
15	15		2	56	190	20	920	10.2	.6	244	20	0		15
16	16		1	180	285	40	940	7.0	1.4	272	32	0		16
17	17		1	208	150	10	360	7.0	.8	120	16	0		17
18	18		2	78	400	0	240	3.6	.4	84	20	0		18
19	19		10	24	×10,000	15	200	1.7	.2	56	24	0		19
20	20		2	92	660	5	240	4.3	.2	72	20	0		20
21	21		1	240	217	0	3320	4.3	1.8	×40000	36	0		21
22	22		12	48	1800	30	280	1.4	.2	×760	20	0		22
23	23		4	40	410	300	1490	4.9	1.4	×1800	176	0		23
24	24		12	12	215	10	90	.8	.2	40	20	0		24
25	85		32	12	200	0	160	1.4	.2	28	20	0		25
26	26		10	16	221	0	100	.7	1.2	244	44	0		26
27	27		18	16	680	5	740	2.1	.8	×1380	108	0		27
28	28		2	10	10,000	0	×5100	1.5	1.0	×3640	×3720	0		28
29	89		4	8	940	0	2520	2.5	.8	×2680	3840	0		29
30	30		2	24	570	0	×5600	.6	2.0	×40000	×8080	0		30
31	31		1	208	×10,000	0	340	2.4	1.6	×4000	760	0		31
32	G 27		24	256	860	0	420	1.2	1.5	×880	348	15		32
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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

(A)

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

INVOICE NO.

DATE ANALYSED

TO: AMAX EXPLORATIONS
535 THURLOW ST. VAN. B.C.

PROJECT 881-STQ OPTION

No.	Sample	pH	Mo	Cu			Mn	Fe	As	Zn	Pb	W	Sn	No.
01	78 QPT 32		6	270			2040	10.0	1.4	104	32	5	5	01
02	33		7	104			120	2.5	.4	16	10	.2	5	02
03	34		2	92			520	4.5	1.4	108	50	45	15	03
04	35		2	288			160	7.0	1.6	80	26	10	15	04
05	36		4	60			440	6.0	1.0	124	26	45	0	05
06	37		4	20			240	3.8	.6	80	20	15	0	06
07	38		7	26			240	2.7	.6	156	36	70	5	07
08	39		5	20			160	2.4	.4	96	14	20	15	08
09	40		28	80			160	2.3	.4	68	12	20	5	09
10	41		12	34			240	2.4	.6	116	26	45	0	10
11	42		14	38			320	3.4	.6	200	36	20	2	11
12	43		8	40			200	3.1	.6	112	28	0	2	12
13	44		22	20			240	3.1	.6	96	20	45	10	13
14	45		118	32			160	2.6	.4	108	18	1600	10	14
15	46		10	50			200	3.7	.6	104	20	150	0	15
16	47		6	80			200	3.5	.6	144	40	90	2	16
17	48		12	10			120	1.4	.2	40	10	0	35	17
18	49		5	24			200	3.0	.8	150	26	0	2	18
19	50		6	50			200	3.0	.6	92	16	0	5	19
20	51		7	32			160	2.7	.4	58	12	0	0	20
21	52		1	216			840	730.0	.8	92	30	5	20	21
22	53		4	68			520	3.8	.6	×480	30	0	10	22
23	54		6	112			280	4.3	.6	104	24	0	2	23
24	55		3	248			200	3.6	1.4	46	28	10	10	24
25	56		5	40			280	2.8	.8	136	28	0	30	25
26	57		10	44			200	2.2	.4	124	10	0	0	26
27	58		2	60			400	5.2	.6	188	24	0	10	27
28	59		6	30			240	2.0	.4	56	10	0	2	28
29	60		6	34			280	1.8	.4	52	10	0	2	29
30	61		8	12			120	1.0	.2	20	4	0	0	30
31	62		16	24			160	1.5	.4	20	10	0	0	31
32	63		12	48			660	1.4	.4	36	10	0	5	32
33	64		10	40			120	1.6	.4	44	20	0	2	33
34	65		5	6			120	1.3	.2	30	16	0	0	34
35	66		3	6			120	1.2	.2	32	14	0	5	35
36	67		4	4			120	1.1	.2	32	24	0	5	36
37	68		1	16			600	4.8	.8	112	34	0	10	37
38	69		5	12			300	4.2	.6	208	60	120	10	38
39	70		4	20			200	3.3	1.0	×600	220	0	0	39
40	G 27		22	260			420	1.4	1.2	440	227	0		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

(B)

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

INVOICE NO.

DATE ANALYSED

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VAN. B.C

PROJECT 881 - STQ OPTION

No.	Sample	pH	Mo	Cu			Mn	Fe	As	Zn	Pb	W	Sn	No.
01	78 QPT 71		10	4			560	0.8	14	>11000	>6600	0	0	01
02	72		7	50			160	2.8	1.4	52	40	2	5	02
03	73		1	44			280	4.9	2.0	88	48	2	5	03
04	74		1	4			2440	4.7	4.0	>900	248	2	5	04
05	75		1	8			2840	4.7	2.2	>1360	>3800	0	0	05
06	76		1	48			>11600	2.3	40	>30000	520	2	35	06
07	77		6	132			3640	12.0	14.0	>9000	>480	2	50	07
08	78		5	54			80	1.6	.6	88	20	2	50	08
09	79		6	96			320	3.0	1.8	>1500	36	0	225	09
10	80		5	76			160	3.5	.8	110	24	120	250	10
11	81		6	44			80	2.6	1.0	68	16	2	20	11
12	82		6	80			80	2.3	1.0	48	12	12	10	12
13	83		5	34			120	1.9	1.0	68	16	10	10	13
14	84		7	176			160	4.0	1.2	96	16	120	20	14
15	85		6	32			120	2.0	.6	60	16	40	600	15
16	86		6	52			120	2.1	.8	52	12	0		16
17	87		7	64			160	2.2	.8	44	16	0	450	17
18	88		4	36			160	2.4	.6	28	16	0	70	18
19	89		5	64			160	2.7	.6	50	16	0	80	19
20	90		3	24			120	2.8	.6	148	24	15	400	20
21	91		7	20			120	1.8	.6	52	12	200	100	21
22	92		5	28			80	1.8	.4	56	12	100	5	22
23	93		6	40			60	1.4	.6	46	12	50	5	23
24	94		4	76			80	3.0	.6	60	12	20	175	24
25	95		6	60			80	1.9	.4	80	8	10	15	25
26	96		2	52			160	3.0	.6	72	12	5	20	26
27	97		7	44			80	1.8	.4	48	8	0	20	27
28	98		5	104			80	1.1	1.0	68	8	0	80	28
29	99		6	56			120	1.1	.6	72	8	0	60	29
30	100		4	52			120	1.6	.6	204	16	0	500	30
31	101		8	56			120	1.6	.6	32	12	0	20	31
32	102		5	64			120	3.0	.4	56	8	25	10	32
33	103		9	16			120	1.3	.2	60	8	40	5	33
34	104		5	64			160	2.1	.6	52	12	5	125	34
35														35
36														36
37														37
38														38
39														39
40	G1		6	40			220	2.7	.4	110	24	2		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

AUG 11 1978

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

(A) V

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

INVOICE NO.

DATE ANALYSED Aug/78

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VANC. B.C.

PROJECT 881 STQ OPTION

No.	Sample	pH	Mo	Cu			Mn	Fe	As	Zn	Pb	W	Sn	No.
01	8 QPT 105		10	48			140	3.8	.4	76	20	50	35	01
02	106		10	48			280	5.0	.6	124	30	20	60	02
03	107		12	70			120	2.9	.6	88	20	5	70	03
04	108		14	42			120	2.5	.6	172	20	20	200	04
05	109		14	440			280	4.4	.6	92	20	5	250	05
06	110		12	26			60	1.7	.4	36	12	5	65	06
07	111		14	44			40	2.5	.6	52	16	5	250	07
08	112		8	16			140	3.4	.6	80	22	10	5	08
09	113		16	64			60	1.5	.4	36	16	30	40	09
10	114		10	18			60	1.4	.2	50	12	0	15	10
11	115		12	12			180	2.5	.4	72	20	0	10	11
12	116		10	72			500	4.8	2.0	212	62	0	300	12
13	117		6	216			220	4.0	1.0	140	30	20	80	13
14	118		6	44			160	3.8	.6	74	20	100	250	14
15	119		4	30			160	2.0	.4	56	20	0	1400	15
16	120		8	10			120	1.6	.4	92	24	0	7500	16
17	121		4	32			200	4.1	.4	124	48	5	30	17
18	122		8	76			180	3.7	.6	250	140	30	125	18
19	123		6	52			80	1.5	.4	68	18	20	200	19
20	124		4	328			140	2.5	.4	140	20	25	300	20
21	125		7	20			140	1.2	.2	40	20	20	40	21
22	126		7	68			90	2.2	.6	24	30	10	1500	22
23	127		5	22			160	3.2	.4	92	24	80	20	23
24	128		7	192			120	2.4	.4	52	32	80	500	24
25	129		7	24			160	2.9	.4	106	20	30	25	25
26	130		8	18			140	1.9	.4	44	14	30	200	26
27	131		8	64			640	3.0	.6	140	16	150	450	27
28	132		6	20			220	3.4	.2	210	20	120	45	28
29	133		6	134			240	3.5	.6	88	20	80	30	29
30	134		7	22			80	1.5	.2	50	12	10	15	30
31	135		3	44			460	6.9	.8	144	20	10	40	31
32	136		4	42			200	4.2	.4	68	20	20	50	32
33	137		8	250			120	3.3	1.6	24	16	10	450	33
34	138		4	324			60	.9	.6	12	8	5	125	34
35	139		4	40			200	3.0	.6	84	24	5	20	35
36	140		2	48			160	2.5	.6	232	24	5	10	36
37	141		9	296			80	2.2	1.4	44	40	5	25	37
38	142		6	208			80	1.2	.8	36	20	120	20	38
39	143		8	54			60	2.0	.4	24	18	21	25	39
40	144		16	36			200	2.7	.4	96	22	—		40

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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

RECEIVED
AUG 11 1978

(5) A ✓

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED Aug/78

No.	Sample	pH	Mo	Cu			Ni	Co	As	Zn	Pb	W	Sn	No.
01	8QPT144		4	220			100	2.4	.6	44	16	5	150	01
02	145		11	760			60	1.9	40	32	46	0	1500	02
03	146		6	116			160	1.8	.4	60	18	0	200	03
04	147		6	188			120	3.0	.4	68	12	100	40	04
05	148		4	50			160	1.5	.2	36	12	5	700	05
06	149		8	108			80	1.8	.4	80	12	10	2500	06
07	150		4	56			320	5.1	.4	116	16	0	50	07
08	151		5	224			280	5.2	.4	92	12	0	125	08
09	152		4	48			200	2.7	.4	48	20	0	400	09
10	153		8	216			80	2.0	.6	40	8	0	1800	10
11	154		5	600			160	5.2	8.0	112	20	0	75	11
12	155		7	288			100	2.5	1.0	40	20	0	500	12
13	156		15	16			80	1.7	.4	36	10	30	40	13
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15														15
16														16
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F. Rossbacher

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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 9007

TO: Amax Minerals Exploration
601-535 Thurlow St. Vanc BC

INVOICE NO.

PROJECT STQ

DATE ANALYSED Jan 1/79

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	F	Sn(%)	No.
01	8QPT137		12	54	60	48	440	1.7	3.2	600	276	>5000	2300		01
02	138		18	20	36	28	100	1.4	0.8	160	52	>5000	4500		02
03	139		4	48	60	56	11,600	>10.0	50.0	>40,000	>40,000	120	430		03
04	160		4	1100	36	28	280	3.4	7.6	450	296	50	19,000	0.25	04
05	161		6	1900	34	28	100	2.1	14.0	110	40	50	30,000	0.25	05
06	162		8	190	40	34	160	2.1	2.2	88	40	5	28,000	1.75	06
07	163		14	230	50	40	120	2.2	7.6	72	36	60	31,000	0.3	07
08	164		14	500	48	42	260	2.6	2.6	110	40	10	26,000	1.00	08
09	161		5	1000	60	124	40	3.5	48.0	88	4200	80	1,680	4.0	09
10	8QPT166		10	300	36	34	180	1.7	2.0	80	16	800	4,000		10
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F. Rossbacher

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GEOCHEMICAL ANALYSTS & ASSAYERS

2226 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8059

TO: Amax Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Zn	Pb	W	F-	Sn
01	78QUS 1		7	816	[illegible]	58	580	4.6	.8	>960	80	5	1200	2.0
02	2		9	136	36	26	520	5.8	.6	180	88	5	610	5
03	3		6	116	40	40	1240	4.3	.4	168	64	10	600	0
04	4		8	800	60	32	640	6.2	.4	280	104	10	1140	10
05	5		6	186	56	42	520	3.5	.4	168	32	5	410	5
06	6		4	124	28	26	620	3.9	1.6	192	64	2	440	0
07	7		6	156	64	46	680	4.2	.6	236	184	10	710	5
08	8		2	166	64	60	700	5.4	1.4	>720	120	15	770	5
09	9		2	84	56	32	400	4.1	.4	>520	80	15	620	5
10	10		2	80	68	38	420	4.7	.6	>600	152	10	620	0
11	11		2	76	52	40	520	3.2	.4	136	72	10	570	5
12	12		4	28	12	12	260	2.6	.2	68	28	10	400	5
13	13		6	80	28	20	280	3.5	.4	120	28	15	580	30
14	14		3	14	12	12	180	1.8	.2	56	20	45	370	20
15	15		5	30	28	16	140	3.3	.6	100	76	20	430	2
16	16		4	18	20	16	160	3.2	.2	92	22	25	420	15
17	L17		24	18	16	12	300	1.4	.6	>500	38	30	1060	5
18	S18		8	8	4	6	80	0.7	.2	32	18	15	355	15
19	19		3	6	4	8	120	0.9	.2	46	18	15	260	15
20	20		24	6	4	8	140	1.4	.4	104	136	35	720	5
21	21		1	6	12	12	120	1.6	.4	52	32	10	275	5
22	22		1	8	8	10	140	1.8	.2	60	20	60	325	250
23	23		4	18	24	14	280	2.7	.6	>600	144	10	530	30
24	24		1	16	20	12	300	2.0	.4	>600	128	10	260	25
25	25		1	80	32	16	420	1.0	.8	>940	52	0	>10,000	5
26	26		2	40	40	20	600	3.0	.6	>2000	1060	10	480	5
27	27		1	10	12	10	220	1.8	.4	140	44	10	590	10
28	28		1	8	4	8	220	1.6	.2	128	46	5	170	10
29	29		1	12	12	10	120	1.8	.2	92	36	10	240	2
30	30		1	14	16	12	180	2.5	.2	100	48	5	230	5
31	31		2	6	4	10	360	2.0	.2	220	84	10	600	5
32	32		2	12	8	18	300	3.1	.2	260	84	15	820	2
33	L33		6	24	12	12	220	1.8	.6	>560	316	15	1240	2
34	S34		2	10	4	8	120	1.5	.2	60	24	15	410	5
35	35		2	18	12	10	160	2.0	.2	100	48	10	470	10
36	36		2	8	4	10	120	1.9	.2	60	20	15	470	15
37	37		2	8	4	8	100	1.3	.2	52	12	10	860	35
38	38		2	26	28	14	280	2.9	.4	122	24	50	160	5
39	39		1	34	40	14	320	3.0	.4	108	24	5	205	5

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2226 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8059

TO: Amax Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Zn	Pb	W	F-	Sn
01	78 QUS 40		1	38	36	20	240	2.8	.2	104	24	15	255	0
02	41		1	56	44	86	280	3.5	.2	140	32	15	190	15
03	42		1	38	28	28	520	2.8	.2	160	28	15	340	5
04	43		2	194	68	38	280	5.2	.2	148	38	30	210	5
05	44		1	32	32	24	520	2.8	.4	120	40	15	450	0
06	45		1	72	56	32	160	4.1	.2	172	72	2	180	0
07	46		1	56	40	30	680	3.3	.2	124	36	5	245	0
08	47		1	62	52	40	320	4.4	.4	156	40	2	150	10
09	48		1	92	88	32	200	4.8	.4	196	56	2	180	5
10	49		1	56	40	26	240	4.2	.4	172	48	2	220	10
11	50		1	38	28	80	420	2.6	.2	132	28	0	240	0
12	51		2	50	36	24	720	3.8	.2	170	40	2	235	15
13	52		4	68	44	32	400	4.0	.2	188	40	10	215	10
14	53		2	24	24	16	140	2.9	.8	144	28	5	190	20
15	54		1	20	20	12	120	3.1	.4	118	24	5	360	5
16	L55		6	110	92	26	360	4.2	.4	>920	112	15	170	5
17	S56		2	40	36	20	160	3.5	.4	184	32	2	300	15
18	57		3	84	68	48	400	4.1	.6	340	60	10	330	20
19	58		3	80	44	28	340	4.8	.2	252	62	5	235	10
20	59		1	86	92	56	360	5.4	.4	204	36	10	290	5
21	60		2	60	52	36	360	4.0	.2	296	40	2	265	10
22	61		5	24	16	14	200	3.2	.6	108	28	5	240	10
23	62		4	80	68	40	440	4.8	.6	>600	104	2	215	20
24	63		3	100	64	52	560	6.0	.4	>1120	360	5	240	5
25	64		4	80	64	40	400	5.0	.2	>520	168	10	215	5
26	65		2	110	68	40	280	4.4	.4	>800	380	20	345	10
27	66		7	176	100	72	520	6.5	.6	>980	94	50	380	10
28	67		6	158	64	36	200	6.0	.6	170	40	200	310	5
29	68		16	172	68	40	320	6.5	.4	220	56	200	530	10
30	69		7	140	76	52	480	5.3	.4	252	40	180	520	10
31	70		7	92	44	36	600	4.8	.2	300	40	45	510	15
32	71		4	92	36	30	440	4.2	.2	208	34	60	710	50
33	72		4	78	52	34	280	3.9	.2	156	32	50	610	350
34	73		4	46	36	22	240	3.9	.2	148	36	20	780	40
35	L74		5	108	56	40	360	3.5	.8	>480	132	20	740	5
36	S75		1	42	32	24	320	2.5	.2	140	64	15	265	5
37	76		3	48	44	32	320	3.2	.4	276	76	40	340	10
38	77		4	46	36	26	320	3.6	.2	232	56	5	165	15
39	78		4	52	30	26	440	3.4	.2	252	56	15	145	5

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

3

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8059

TO: Amax Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	F-	Sn
01	78QS79		3	40	28	20	360	3.5	.6	140	48	5	175	0
02	80		2	52	36	24	500	3.8	.6	186	60	15	155	5
03	81		1	20	12	12	260	1.8	.4	68	28	2	190	5
04	82		4	20	14	10	120	2.6	.4	64	28	15	325	10
05	83		1	42	20	14	160	3.7	.6	104	52	10	205	5
06	84		1	48	40	24	360	3.7	.4	180	48	20	320	5
07	85		1	32	32	20	200	2.6	.4	120	44	20	170	5
08	86		2	120	100	58	760	4.3	.8	>1000	152	15	325	10
09	88		2	108	74	54	680	4.6	.4	260	64	2	325	10
10	89		1	100	56	40	740	4.8	.6	>2600	176	5	240	10
11	90		1	74	42	36	760	5.2	1.4	1960	312	10	270	5
12	91		1	114	72	48	600	4.7	.6	600	88	2	310	5
13	92		1	160	54	32	620	4.4	.6	1640	136	2	330	10
14	93		1	88	48	42	780	5.2	1.6	1720	268	2	295	5
15	94		1	88	36	38	1080	5.4	2.2	1410	>660	2	275	15
16	95		1	96	46	48	1300	5.2	1.6	2700	340	2	235	25
17	96		5	94	62	44	1200	5.1	.8	>2280	>460	2	405	5
18	97		6	260	52	58	1600	6.5	4	256	148	5	410	5
19	98		7	98	40	38	1120	6.0	.6	460	144	5	415	0
20	99		8	168	30	50	1300	6.2	1.6	>900	244	2	420	10
21	100		6	196	62	60	2200	6.0	.8	400	98	5	310	5
22	101		6	156	46	52	1160	4.9	2.0	>500	304	15	530	10
23	102		5	250	52	22	440	6.2	.6	140	56	10	890	0
24	103		10	228	106	56	1460	>1	1.4	660	140	0	340	0
25	104		4	98	34	20	760	4.0	.4	190	60	30	410	10
26	105		1	58	40	22	260	3.2	.4	200	32	15	420	20
27	106		1	72	46	26	320	3.8	.4	224	32	60	270	15
28	107		1	60	42	24	320	5.2	.4	210	46	2	300	5
29	108		6	170	80	32	400	5.2	.6	280	52	0	220	5
30	109		1	80	60	36	580	3.8	.4	>1300	56	0	320	5
31	110		1	66	62	32	400	3.4	.4	250	52	10	440	5
32	111		1	52	52	24	400	3.4	.4	760	60	2	385	0
33	112		4	106	100	38	500	4.0	.4	242	42	2	400	5
34	113		1	60	76	36	400	4.2	.6	310	60	2	470	5
35	114		1	88	74	44	580	4.8	.6	440	100	10	490	5
36	115		1	20	44	18	220	2.7	.4	80	20	5	275	0
37	116		1	46	80	32	400	3.1	.4	110	24	5	390	0
38	117		1	64	40	28	420	2.8	.4	100	24	2	275	5
39	118		1	58	60	32	360	3.0	.4	144	28	5	470	5
40	G-7		28	134	230	12	120	10	.4	80	68			

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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

4

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8059

TO: Amax Minerals Exploration
535 Thurlow St Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	78QS119		1	32	88	30	400	3.2	4	112	28	2	230	01
02	120		1	40	36	24	400	3.3	.2	160	24	5	275	02
03	G-6		46	360	260	80	300	1.6	20	328	480	—		03
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BURNABY, B.C.
CANADA
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AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8062

TO: AMAX EXPLORATION INC.
535 THURLOW ST. VANC

INVOICE NO.

PROJECT 881 - STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu			Mn	Fe ~~Ag~~	~~Sb~~ Ag	Zn	Pb	W	F	Sn
01	8QU5121		2	28			480	4.0	.6	128	28	0	315	10
02	122		3	128			1060	5.2	.6	380	36	0	385	45
03	123		1	60			400	3.3	.4	140	24	15	425	80
04	124		1	120			440	3.5	.6	188	36	20	720	150
05	125		1	164			320	4.3	.4	156	20	100	1240	100
06	126		1	72			260	4.7	.4	148	24	25	1160	100
07	127		1	168			260	3.4	.4	140	20	20	3450	45
08	128		2	224			280	3.4	.4	248	28	50	1550	350
09	129		1	68			520	3.6	.8	x800	76	45	1370	150
10	130		1	48			600	2.9	.4	x640	80	0	960	5
11	131		1	52			560	3.7	.6	x880	120	0	430	5
12	132		1	60			720	3.2	.8	372	200	0	470	5
13	133		1	68			600	3.5	.6	300	148	0	470	0
14	134		1	56			520	4.2	.6	148	48	0	460	0
15	135		1	128			1000	5.4	.8	x1720	264	0	385	0
16	136		6	132			680	6.3	.8	x640	116	0	540	0
17	137		2	144			2440	7.2	1.6	x4400	800	0	400	0
18	138		1	40			880	4.5	.8	x1280	288	0	520	0
19	139		1	46			760	4.8	.8	x680	140	0	720	5
20	140		2	128			780	4.5	.6	x840	76	0	550	25
21	141		1	36			440	4.6	.6	388	140	0	720	15
22	142		1	36			360	3.5	.6	340	64	0	580	5
23	143		1	24			260	2.7	.4	164	52	0	460	5
24	144		1	28			480	3.0	.4	x440	72	0	440	0
25	145		1	92			880	4.5	.4	x1800	64	0	580	10
26	146		1	36			480	3.7	.6	164	36	0	460	0
27	147		1	64			400	4.4	.4	172	28	0	490	10
28	148		1	40			600	3.6	.4	236	60	0	630	5
29	149		2	20			720	2.8	.4	172	40	0	480	5
30	150		2	44			360	2.9	1.0	x560	160	2	540	10
31	151		2	40			640	3.2	.4	268	68	0	680	5
32	152		2	40			480	3.2	.4	192	36	2	620	8
33	153		1	48			520	3.1	.4	204	36	0	640	10
34	154		4	132			880	4.1	.6	292	44	0	220	5
35	155		1	48			680	2.6	.2	136	32	2	570	20
36	156		2	56			1120	3.2	.4	248	44	0	600	20
37	157		6	68			2280	3.4	.4	296	48	0	660	5
38	158		4	112			920	3.8	.6	200	36	0	690	5
39	159		2	52			1160	3.4	.4	220	44	0	420	10
40	160		2	32			400	2.6	.4	184	42	0	370	-

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B.C.
CANADA
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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8069

TO: AMAX EXPLORATION INC.
535 THURLOW ST. VANC.

INVOICE NO.

PROJECT 881 - STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu			Mn	Fe	Ag	Zn	Pb	W	F	Sn
01	8QU5161		2	20			920	3.3	.6	152	60	0	410	0
02	162		2	38			480	3.2	.4	148	32	0	420	20
03	163		3	98			460	4.9	1.0	340	52	0	420	0
04	164		2	78			680	4.4	1.8	304	52	0	360	0
05	165		3	82			680	4.7	1.2	x520	100	0	410	0
06	166		3	48			680	3.8	1.2	x560	108	0	400	5
07	167		4	60			480	5.4	.6	264	48	15	360	10
08	168		6	68			380	3.9	.8	216	52	5	520	0
09	169		2	60			720	4.9	6.2	x1080	216	30	550	0
10	170		4	104			340	5.4	.8	216	48	15	460	0
11	171		18	252			440	7.4	1.2	204	36	600	3150	25
12	172		8	48			520	4.0	.6	292	52	10	460	0
13	173		68	48			560	6.8	.6	x420	36	75	2450	10
14	174		16	60			1000	5.5	.6	x920	60	2	2190	0
15	175		6	52			460	3.5	.4	x400	60	2	460	5
16	176		8	28			420	3.1	.4	192	54	10	1100	0
17	177		10	28			520	2.9	.6	136	40	10	1000	30
18	178		3	32			240	3.2	.6	96	32	20	640	0
19	179		5	88			380	4.4	.6	184	40	20	750	0
20	180		4	28			280	2.7	.6	84	28	0	520	0
21	181		4	42			460	4.1	.4	112	28	1	520	0
22	182		4	36			440	3.7	.4	116	32	0	640	0
23	183		4	108			460	5.3	.8	216	88	20	780	0
24	184		5	69			480	4.2	.8	344	76	5	960	0
25	185		4	26			300	4.4	.4	120	36	0	720	0
26	186		3	80			720	4.8	.8	x880	172	20	620	0
27	187		2	124			540	5.6	1.2	x640	124	5	700	0
28	188		2	100			360	4.5	.6	288	64	40	700	0
29	189		4	32			360	2.7	.4	212	60	2	930	10
30	190		4	12			620	2.8	.6	236	116	0	890	0
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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Amax Minerals Exploration
535 Thurlow St. Vanc. B.C.

INVOICE NO.

PROJECT 981

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu			Mn	Fe	Ag	Zn	Pb	W	F	Sn
01	78QC1B191		12	64			560	4.3	1.2	x640	108	2	1060	10
02	5192		6	8			200	2.5	.6	104	40	2	700	5
03	193		4	32			240	5.1	.8	220	20	0	980	0
04	194		4	10			360	2.8	.6	72	40	5	520	25
05	195		2	10			360	2.2	.6	176	86	0	500	0
06	196		4	16			240	2.5	.6	92	40	0	670	5
07	197		4	20			880	3.3	.8	328	154	2	970	5
08	198		2	10			600	1.9	.4	104	46	0	1000	0
09	199		6	46			660	4.4	1.0	x560	64	15	620	0
10	200		4	20			320	2.9	.8	154	40	5	420	2
11	201		4	24			340	2.9	.8	144	34	45	480	0
12	202		4	20			480	1.9	.4	132	18	90	370	0
13	203		1	20			360	2.7	.6	110	20	20	460	0
14	204		1	12			320	1.9	.6	68	18	15	470	0
15	205		2	14			360	1.8	.4	72	20	180	460	5
16	206		2	24			480	2.6	.8	108	22	35	670	0
17	207		2	18			180	2.7	.6	96	22	35	660	0
18	208		2	32			300	2.4	.6	152	28	50	550	25
19	209		2	20			240	2.5	.6	108	20	60	1760	25
20	210		4	20			200	2.4	.6	120	26	45	600	30
21	211		8	20			200	3.1	.6	148	24	35	760	30
22	212		6	18			200	3.1	.8	84	20	35	900	0
23	213		42	40			120	2.9	1.6	x480	100	30	800	0
24	214		18	36			320	2.6	1.0	188	34	20	720	35
25	215		48	12			240	2.0	.4	96	22	10	410	15
26	216		20	50			160	3.6	2.0	280	40	120	1040	0
27	217		2	16			260	2.2	.6	60	18	40	410	0
28	218		2	16			100	2.8	.6	92	20	50	660	15
29	219		2	20			160	2.2	.8	76	20	40	520	0
30	220		2	10			120	1.6	.4	56	20	50	600	25
31	221		2	16			160	2.3	.6	76	18	50	710	0
32	222		2	24			240	2.3	.6	116	22	70	600	15
33	223		6	30			200	2.3	.8	110	28	50	370	10
34	224		8	40			240	3.3	.8	208	36	20	940	NS
35	225		6	12			100	1.2	.4	60	26	20	720	25
36	226		4	12			200	1.8	.4	84	20	50	1460	20
37	227		4	20			300	2.7	.6	144	28	35	1520	40
38	228		2	44			360	3.7	1.0	372	52	30	980	15
39	229		2	28			260	3.5	.6	180	30	30	1320	40
40	G27		24	260			400	1.2	1.5	x760	404			

F. Rossbacher

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Amax Minerals Exploration
535 Thurlow St. Van B.C.

INVOICE NO.

PROJECT 981

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu			Mn	Fe	Ag	Zn	Pb	W	F	Sn
01	78QC1S230		2	30			340	2.5	.4	104	18	20	2000	10
02	231		2	30			280	2.7	.8	164	44	35	1000	0
03	232		4	16			320	4.5	.8	204	20	5	5300	25
04	233		4	12			180	2.0	.4	80	14	40	1800	10
05	234		14	64			360	3.8	.8	280	64	50	900	5
06	235		10	60			420	3.5	1.0	340	60	IN.	1820	20
07	236		6	16			220	3.0	.6	106	14	20	650	10
08	237		3	40			360	2.8	.6	182	32	IN	650	0
09	238		1	20			160	3.1	.6	78	18	45	480	0
10	239		20	18			440	2.5	.6	120	18	60	770	10
11	240		2	18			200	3.1	.6	80	24	60	710	0
12	241		4	20			200	3.3	.6	96	20	50	900	0
13	242		3	18			180	2.8	.6	80	22	100	880	0
14	243		1	20			200	2.3	.8	80	24	35	580	0
15	244		2	20			240	2.2	.6	120	28	30	640	30
16	245		26	42			320	3.0	.6	300	34	IN	1000	30
17	246		42	36			320	2.4	.8	164	58	20	780	5
18	247		10	24			240	3.6	.6	156	42	25	730	10
19	248		8	36			400	3.4	.8	244	40	50	720	10
20	249		8	28			320	3.7	.6	196	40	40	700	0
21	250		4	40			720	3.3	.6	280	62	20	470	5
22	251		5	32			360	3.2	.8	250	60	50	400	15
23	252		2	44			400	2.8	.6	206	36	80	590	20
24	253		2	40			320	3.1	.6	324	64	40	400	5
25	254		3	20			360	2.2	.8	164	48	IN	345	40
26	255		3	32			280	3.0	.8	228	44	30	310	55
27	256		3	20			400	2.4	.6	124	24	50	NS	NS
28	257		2	28			300	2.5	.6	140	22	40	360	10
29	258		2	28			300	3.5	.6	224	40	2	470	0
30	259		2	36			380	3.1	.8	372	60	0	440	0
31	260		2	14			240	1.7	.4	90	40	0	340	0
32	261		3	36			380	3.5	.6	240	52	0	470	0
33	262		3	52			760	4.2	.8	x740	126	5	480	25
34	263		4	72			760	3.9	.6	x840	154	30	460	160
35	264		4	30			320	2.8	.8	212	40	40	350	0
36	265		4	24			640	2.2	.4	160	36	55	560	NS
37	266		4	36			340	2.9	.8	208	48	IN.	460	NS
38	267		10	40			3080	2.9	.8	200	72	IN.	460	0
39	268		6	76			400	3.0	.8	276	48	40	880	40
40	G21		6	30			240	2.5	.4	100	22	15		

F. Rossbacher

Rossbacher Laboratory
GEOCHEMICAL ANALYSTS & ASSAYERS
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AREA CODE: 604

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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Amax Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July/78

No.	Sample	pH	Mo	Cu	F	Sn	Mn	Fe	As	Zn	Pb	W	Hg	No.
01	78QRS269		4	56	700	10	760	2.8	.8	240	40	55		01
02	270		12	50	780	5	320	3.5	.8	236	44	35		02
03	271		22	40	800	NS	320	3.3	.8	252	52	35		03
04	272		14	22	810	NS	200	2.2	.6	100	20	IN		04
05	273		2	18	650	10	200	3.4	.8	136	29	20		05
06	274		2	22	610	20	240	3.0	.6	120	22	15		06
07	275		2	20	730	15	220	3.5	.6	104	32	40		07
08	276		2	20	660	1	200	2.9	.6	106	24	35		08
09	277		2	12	870	5	180	2.9	.6	80	20	80		09
10	278		2	20	700	1	200	2.5	.6	104	26	60		10
11	279		2	16	590	1	180	2.8	.6	72	24	50		11
12	280		1	16	540	1	200	2.9	.6	76	20	80		12
13	281		1	28	720	5	280	2.5	.6	96	24	45		13
14	282		2	20	410	0	400	3.3	.6	100	22	2		14
15	283		2	20	720	35	300	2.3	.8	90	32	25		15
16	284		2	40	630	1	760	3.0	.8	212	56	40		16
17	285		1	48	1090	NS	440	3.3	.8	304	100	IN		17
18	286		1	22	600	90	280	3.1	.6	148	24	15		18
19	287		2	62	780	0	760	3.2	1.6	344	114	80		19
20	288		2	36	790	5	560	3.0	1.2	332	88	35		20
21	289		2	44	490	5	600	2.8	.8	312	66	15		21
22	290		2	34	490	5	480	3.1	.8	208	52	40		22
23	291		2	42	720	45	500	3.2	.8	148	36	20		23
24	292		1	48	385	10	600	2.8	.8	140	30	20		24
25	293		10	28	340	5	1000	3.0	.8	180	40	70		25
26	294		4	20	410	5	260	2.9	.8	108	20	100		26
27	295		2	26	470	5	260	2.4	.6	96	24	35		27
28	296		4	18	420	5	200	2.5	.6	80	14	35		28
29	297		2	16	440	10	180	2.0	.6	80	16	80		29
30	298		2	20	620	0	220	2.9	.8	118	22	55		30
31	299		8	22	700	5	240	2.2	.8	112	22	40		31
32	300		4	24	120	5	320	2.8	.6	114	24	15		32
33	301		4	16	630	5	200	2.7	.6	100	22	20		33
34	302		3	20	470	0	240	2.2	.8	112	30	15		34
35	303		30	34	670	20	300	3.0	.6	180	36	80		35
36	304		26	20	860	5	200	2.9	.6	148	28	45		36
37	305		26	60	1000	20	260	3.1	1.0	340	52	100		37
38	306		12	48	710	0	340	2.7	.8	260	48	55		38
39	307		5	44	610	0	340	2.5	.6	232	40	100		39

Rossbacher Laboratory
GEOCHEMICAL ANALYSTS & ASSAYERS
2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
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4

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Amax Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July/78

No.	Sample	pH	Mo	Cu	F	Sn	Mn	Fe	As	Zn	Pb	W		No.
01	78QRS308		2	36	680	5	240	2.4	.8	160	36	45		01
02	309		4	76	600	5	840	3.6	1.8	x800	86	60		02
03	310		1	28	540	10	260	2.9	.8	160	30	15		03
04	320		1	24	370	5	320	2.4	.6	136	32	25		04
05	318		1	20	350	5	360	2.7	.8	184	36	20		05
06	312		1	42	440	10	840	4.0	.8	x520	72	15		06
07	314		1	48	490	15	540	4.3	1.2	x1560	340	10		07
08	315		2	48	640	20	800	5.3	.8	x620	100	5		08
09	316		4	36	560	10	560	5.9	1.4	380	112	0		09
10	317		6	58	410	10	300	4.6	.6	112	42	15		10
11	318		2	34	430	15	280	3.2	.6	128	24	15		11
12	319		1	24	295	0	320	2.6	.6	168	32	0		12
13	320		1	28	460	0	320	3.5	1.0	180	38	2		13
14	321		1	26	330	0	340	2.2	1.0	106	40	5		14
15	322		1	26	550	0	280	2.8	.8	126	28	5		15
16	323		1	24	430	0	280	2.8	.8	152	32	10		16
17	324		1	32	490	0	300	2.7	.8	130	30	30		17
18	325		1	32	620	0	320	2.7	.8	170	40	70		18
19	326		6	36	730	0	300	2.6	.8	188	44	50		19
20	327		7	48	960	0	380	3.0	.8	240	40	80		20
21	328		20	24	410	5	160	3.2	.6	100	24	45		21
22	329		6	30	290	20	260	2.8	.8	158	34	15		22
23	330		5	24	240	10	220	2.6	.6	112	32	15		23
24	331		4	24	340	5	180	2.7	1.0	96	26	30		24
25	332		6	16	340	5	160	2.3	.4	80	20	20		25
26	333		4	20	600	5	160	2.3	.8	96	20	100		26
27	334		4	26	780	5	200	3.0	.8	116	32	50		27
28	335		2	34	900	10	240	2.8	1.0	168	58	40		28
29	336		2	24	600	5	160	3.3	.6	84	24	40		29
30	337		1	40	1080	15	200	2.4	.6	108	22	80		30
31	338		2	32	660	15	260	2.8	.8	196	64	15		31
32	339		2	20	460	15	240	2.5	.8	100	24	5		32
33	340		2	36	510	5	340	2.5	.6	132	28	50		33
34	341		1	36	620	10	360	3.1	.6	232	44	20		34
35	342		2	32	600	20	360	4.0	.8	136	28	20		35
36	343		1	40	200	30	360	2.8	.6	104	20	15		36
37	344		1	48	600	30	420	3.0	.8	170	22	120		37
38	345		1	70	440	0	280	2.8	1.0	120	26	5		38
39	346		2	40	670	10	540	2.9	1.4	112	32	20		39
40	G7		30	188			100	1.0	.5	76	61	20		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

5

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Amax Minerals Exploration
535 Thurlow St. Vancouver B.C.

INVOICE NO.

PROJECT 831

DATE ANALYSED Aug 1/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	78QUS 5947		1	34		5	360	2.8	.3	168	62	20	670	01
02	348		1	30		20	1420	3.0	.4	170	120	50	570	02
03	349		1	24		10	400	3.9	.4	190	34	2	335	03
04	350		1	40		10	400	3.0	.4	324	74	20	440	04
05	351		1	16		35	680	2.8	.6	80	20	50	440	05
06	352		1	22		0	220	3.4	.6	96	22	60	510	06
07	353		7	36		NS	590	3.9	.8	230	40	300	1050	07
08	354		6	34		15	300	3.8	.4	212	40	250	980	08
09	355		7	30		5	580	2.8	.6	180	32	60	800	09
10	356		5	14		15	160	2.6	.6	92	26	100	780	10
11	357		1	12		10	140	2.3	.4	80	16	30	480	11
12	358		2	20		0	160	2.1	.8	84	26	15	480	12
13	359		2	24		5	200	2.5	.6	124	32	15	480	13
14	360		3	18		5	140	3.3	1.0	116	24	60	540	14
15	361		20	16		10	140	2.5	.4	96	20	35	865	15
16	326		5	40		5	390	2.5	3.2	188	72	100	900	16
17	363		4	30		5	200	3.0	.6	98	22	20	460	17
18	364		5	36		5	320	2.8	.6	156	36	2	310	18
19	365		6	24		5	720	3.1	.4	132	34	20	410	19
20	366		4	24		5	340	3.1	.6	156	38	0	420	20
21	367		2	30		5	480	3.4	.6	156	38	10	310	21
22	368		2	38		5	400	4.4	.6	180	30	5	360	22
23	369		3	16		5	280	2.2	.4	80	20	2	300	23
24	370		2	28		5	360	2.9	1.0	218	30	0	190	24
25	371		1	32		5	400	3.2	.6	140	32	0	285	25
26	372		1	28		5	300	4.1	.6	126	28	0	310	26
27	373		1	36		5	320	2.8	.6	208	32	0	335	27
28	374		1	18		5	320	2.9	.4	136	28	0	190	28
29	375		1	26		10	440	2.1	.6	340	60	10	780	29
30	376		1	34		5	360	2.9	.4	346	40	15	340	30
31	377		2	108		30	420	4.0	.6	264	40	100	680	31
32	378		2	120		20	460	4.0	.8	336	60	40	800	32
33	379		16	60		5	280	3.3	.6	172	40	45	520	33
34	380		5	26		5	260	3.0	.8	130	44	20	360	34
35	381		2	20		0	180	2.6	.6	90	20	50	980	35
36	382		12	70		10	600	3.9	1.6	288	60	60	620	36
37	383		3	20		0	240	2.9	.6	100	20	40	600	37
38	384		2	18		20	160	2.4	.6	76	20	45	260	38
39	385		1	28		15	180	2.7	.6	76	22	120	680	39

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

6

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Amax Minerals Exploration
535 Thurlow St. Vancouver B.C.

INVOICE NO.

PROJECT 831

DATE ANALYSED July 1/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	78QUS 386		1	56		20	280	2.9	.4	160	28	110	720	01
02	387		1	16		20	200	3.3	.4	72	14	55	480	02
03	388		1	12		40	280	2.8	.4	92	16	20	400	03
04	389		1	20		20	320	2.9	.8	104	18	5	380	04
05	390		1	28		25	360	1.8	.8	172	46	20	380	05
06	391		1	44		20	460	3.4	.6	480	90	15	430	06
07	392		1	44		10	500	3.0	.6	480	122	10	430	07
08	393		1	56		30	600	3.3	.6	760	128	25	520	08
09	394		1	28		25	460	3.2	.6	256	54	20	560	09
10	395		1	20		20	580	3.1	.4	120	24	0	335	10
11	396		2	32		5	520	3.0	.6	124	30	2	335	11
12	397		1	36		10	380	3.0	.4	132	24	0	360	12
13	398		1	26		15	500	2.6	.4	84	36	0	360	13
14	399		1	28		40	380	3.3	.8	116	36	2	400	14
15	400		1	20		15	390	2.8	.6	80	24	5	390	15
16	401		4	26		20	520	3.3	.6	158	36	20	375	16
17	402		2	18		10	200	3.0	.6	76	20	0	420	17
18	403		2	16		20	200	2.9	.4	76	14	60	570	18
19	404		1	12		30	200	4.0	.4	56	16	60	610	19
20	405		3	40		NS.	390	3.2	.6	152	28	50	780	20
21	406		2	28		15	240	1.3	.4	124	20	300	910	21
22	407		24	48		20	3600	2.6	.6	276	56	5350	910	22
23	408		4	14		10	240	2.6	.8	102	22	120	720	23
24	409		2	10		40	260	2.6	.4	60	20	45	600	24
25	410		1	16		2	280	1.7	.6	92	24	70	520	25
26	411		1	20		15	160	1.0	.4	104	16	20	280	26
27	412		6	52		N.S.	680	2.5	.6	272	48	80	560	27
28	413		4	54		10	300	2.4	.4	216	48	80	870	28
29	414		2	52		5	520	3.4	.4	212	48	0	520	29
30	415		2	60		20	520	3.0	.4	212	48	2	390	30
31	416		1	60		25	320	2.3	.4	160	32	10	375	31
32	417		1	60		40	360	2.6	.4	292	30	2	540	32
33	418		1	40		0	360	3.4	.4	148	26	2	310	33
34	419		1	32		5	420	3.2	.6	144	20	0	370	34
35	420		1	32		10	480	3.0	.4	116	24	0	400	35
36	421		1	28		2	300	3.1	.4	124	22	0	370	36
37	422		1	24		2	380	2.5	.4	128	28	0	410	37
38	423		1	38		5	380	4.0	.4	204	36	0	380	38
39	424		1	28		10	680	3.7	.4	172	32	0	400	39

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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. Springer Ave.
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

INVOICE NO.

DATE ANALYSED July 1/78

TO: Amax Minerals Exploration
536 Thurlow St. Vanc. B.C.

PROJECT 881

No.	Sample	pH	Mo	Cu	F	Sn	Mn	Fe	Ag	Zn	Pb	W		No.
01	78QUS 425		2	36	310	10	580	3.9	.6	224	44	0		01
02	426		3	28	310	10	260	3.5	.6	140	22	0		02
03	427		2	60	360	15	360	2.5	.6	204	50	0		03
04	428		1	68	290	20	360	2.7	.4	136	20	5		04
05	429		2	80	500	5	520	3.6	.4	>400	32	0		05
06	430		2	88	530	15	680	4.3	.8	>800	60	0		06
07	431		2	52	510	5	500	3.4	.6	300	42	10		07
08	432		2	30	340	35	280	2.3	.4	132	28	2		08
09	433		3	32	320	10	320	2.8	.4	190	44	5		09
10	434		2	26	340	20	280	2.1	.4	110	32	15		10
11	435		2	24	460	20	280	2.0	.2	114	20	20		11
12	436		1	22	390	30	220	2.2	.4	96	20	15		12
13	437		2	32	810	5	220	2.5	.4	128	32	140		13
14	438		3	16	860	5	180	2.2	.2	88	24	110		14
15	(.029) 439		6	241	480	N.S.	240	1.0	.4	112	16	180		15
16	440		3	22	410	25	180	3.6	.4	92	24	80		16
17	441		3	24	320	20	160	2.8	.4	76	26	0		17
18	442		4	44	360	10	540	3.5	.4	152	34	2		18
19	443		2	16	285	25	240	2.9	.4	76	20	0		19
20	444		2	18	220	10	280	2.9	.4	92	18	0		20
21	445		2	18	220	10	400	2.4	.2	100	14	0		21
22	446		2	40	320	5	400	3.5	.6	136	34	0		22
23	447		2	38	280	5	420	3.0	.4	140	24	0		23
24	448		1	26	225	5	440	2.7	.2	136	24	0		24
25	449		1	34	190	10	440	2.8	.4	120	22	0		25
26	450		1	32	175	10	420	2.8	.4	90	16	0		26
27	451		1	40	120	5	420	2.9	.4	100	20	0		27
28	452		1	48	220	5	500	2.9	.4	110	16	0		28
29	453		1	26	285	10	420	2.7	.2	80	18	0		29
30	454		1	44	300	30	600	3.5	.4	150	34	0		30
31	455		1	32	325	10	440	2.8	.4	150	22	0		31
32	456		1	44	310	10	680	3.6	.4	140	30	0		32
33	457		1	20	315	10	480	3.3	.6	140	22	2		33
34	458		1	12	360	15	360	2.4	.4	88	20	2		34
35	459		1	16	390	35	200	2.4	.4	68	16	2		35
36	460		3	18	320	25	160	3.8	.4	76	26	70		36
37	461		1	26	340	35	160	4.3	.6	92/92	34	120		37
38	462		2	20	090	5	200	3.1	.2	72	20	120		38
39	463		4	96	200	0	280	4.3	.4	250/250	86	210		39
40	6-1		6	34			240	2.7	.4	104	28			40

T. Rossbacher

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

8

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

INVOICE NO.

DATE ANALYSED July 1/78

TO: Amax Minerals Exploration
601. 535 Thurlow St. Vanc. BC

PROJECT 881.

No.	Sample	pH	Mo	Cu	Sn		Mn	Fe	Ag	Zn	Pb	W	F	No.
01	78QUS 464		2	22	10		120	3.1	.6	90	84	140	740	01
02	465		2	32	5		340	2.8	.6	158	32	80	640	02
03	466		1	24	5		180	3.3	.6	136	30	45	1080	03
04	467		3	36	10		200	3.3	.6	164	32	20	620	04
05	468		4	36	15		300	3.5	.4	192	34	25	610	05
06	469		6	60	5		380	3.8	.6	296	80	1	570	06
07	470		8	56	5		340	3.8	.6	212	60	1	650	07
08	471		4	134	5		420	3.8	.6	800	64	1	570	08
09	472		8	48	5		360	3.6	.6	268	48	2	460	09
10	473		1	56	5		480	3.1	.6	360	40	0	400	10
11	474		3	108	5		660	3.4	.6	264	32	2	520	11
12	475		1	124	5		400	3.8	.4	264	32	2	520	12
13	476		3	80	5		380	5.0	.8	220	40	0	520	13
14	477		3	120	5		480	3.8	.8	360	64	45	480	14
15	478		2	46	0		600	3.5	.6	264	40	0	470	15
16	479		1	28	5		480	2.2	.6	114	36	2	460	16
17	480		1	60	5		400	3.5	.6	304	84	0	460	17
18	481		3	72	5		340	3.5	.6	440	88	0	390	18
19	482		8	144	5		460	4.9	1.2	742	132	2	510	19
20	483		4	116	5		380	3.9	.8	430	54	0	620	20
21	484		2	40	5		400	3.1	.6	244	40	0	NS.	21
22	485		1	52	5		400	3.9	.6	440	96	0	290	22
23	486		3	46	5		280	3.5	.8	304	44	0	300	23
24	487		3	40	10		160	2.8	6	116	36	50	340	24
25	488		4	60	5		120	2.5	.6	132	28	700	440	25
26	489		3	48	20		260	3.1	.6	176	46	130	660	26
27	490		1	16	0		160	2.1	.4	62	24	80	370	27
28	491		7	50	20		240	4.2	.6	216	36	150	420	28
29	492		3	32	0		240	2.9	.6	134	24	100	800	29
30	493		2	24	10		120	3.0	.6	62	26	50	—	30
31	494		1	14	20		180	1.5	.4	56	10	20	410	31
32	495		2	16	0		480	3.8	.8	208	28	20	480	32
33	496		3	60	10		200	3.5	.4	166	20	55	490	33
34	497		2	16	5		480	2.7	4	90	16	0	260	34
35	498		3	20	5		320	4.0	6	100	20	2	260	35
36	499		6	28	5		320	5.6	6	140	28	2	330	36
37	500		5	60	10		560	4.6	.8	200	42	0	260	37
38	501		2	44	5		480	3.2	6	120	28	0	310	38
39														39
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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

1

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Homa Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July/78

No.	Sample	pH	Mo	Cu	F	Sn	Mn	Fe	As	Zn	Pb	W		No.
01	78Q4S502		1	36	410	5	480	3.0	.4	88	16	0		01
02	503		1	28	330	2	480	2.9	.4	72	14	2		02
03	504		1	34	500	2	400	3.2	.4	88	18	0		03
04	505		1	36	530	0	560	3.5	.6	104	20	0		04
05	506		1	32	410	2	440	3.1	.4	80	16	0		05
06	507		1	46	450	0	520	3.9	.4	92	28	2		06
07	508		1	52	400	5	480	3.4	.6	88	24	0		07
08	509		1	44	320	0	560	3.4	.6	96	28	0		08
09	510		1	36	370	2	520	3.3	.4	88	28	0		09
10	511		1	40	390	0	440	3.3	.6	100	30	0		10
11	512		1	38	420	0	460	3.0	.6	96	28	0		11
12	513		1	20	280	0	480	3.0	.4	108	27	2		12
13	514		1	36	550	5	520	4.0	.6	156	36	2		13
14	515		3	20	370	2	640	3.9	.6	96	24	2		14
15	516		3	44	430	20	700	3.3	.6	150	32	10		15
16	517		2	48	540	5	600	3.0	.6	126	24	75		16
17	518		1	24	400	15	220	2.8	.6	72	18	20		17
18	519		1	28	510	5	380	2.6	.4	88	24	55		18
19	520		1	32	900	5	220	3.5	.4	122	32	100		19
20	521		1	24	730	15	160	3.9	.4	92	22	55		20
21	522		1	64	1300	15	280	3.7	.4	190	34	900		21
22	523		5	24	810	5	200	3.0	.4	108	38	120		22
23	524		4	40	730	10	280	3.0	.6	252	80	55		23
24	525		6	104	710	5	340	3.0	.8	x440	200	2		24
25	526		6	84	610	10	280	3.3	.6	232	120	25		25
26	527		9	56	490	5	640	4.3	.4	164	114	0		26
27	528		7	128	620	2	680	4.4	.8	x600	284	0		27
28	529		6	120	690	2	680	4.3	.8	x560	264	0		28
29	530		8	100	780	5	700	4.8	1.2	x1320	300	0		29
30	531		6	132	680	2	520	4.3	.8	x4000	330	0		30
31	532		2	44	620	0	400	3.4	.6	156	94	0		31
32	533		4	84	600	0	400	3.6	1.0	352	156	0		32
33	534		10	260	610	2	600	5.1	1.8	x700	TOO.	0	*	33
34	535		8	132	600	0	560	5.2	.8	x420	172	0		34
35	536		4	124	780	0	600	4.0	.6	380	158	0		35
36	537		10	108	710	0	600	3.9	.6	x150	900	0	*	36
37	538		10	144	570	5	400	5.0	.8	272	98	0		37
38	539		8	110	630	5	520	3.5	.8	x940	160	0		38
39	540		9	80	690	5	700	4.1	.8	332	132	0		39
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Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

10

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8070

TO: Homa Minerals Exploration
535 Thurlow St. Van. B.C.

INVOICE NO.

PROJECT 881

DATE ANALYSED July/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	78Q4S541		5	120		10	500	6.0	.8	x~~800~~	10	5	710	01
02	542		6	108		15	560	4.3	1.0	x1060	380	15	1010	02
03	548		4	80		20	350	3.0	1.4	x600	192	40	960	03
04	544		4	52		20	280	3.5	1.0	x660	158	60	820	04
05	545		4	64		30	240	3.2	1.0	340	54	100	1100	05
06	546		2	84		70	400	3.8	1.0	x540	82	45	780	06
07	547		2	92		120	520	3.6	.6	244	46	20	630	07
08	548		2	58		45	200	2.8	.4	120	20	60	640	08
09	549		1	42		20	420	3.4	.8	164	22	55	530	09
10	550		2	50		10	280	3.4	.6	112	16	45	540	10
11														11
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39														39

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

(1)

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	8QU5551		1	44		10	300	3.0	.6	116	30	10	320	01
02	552		2	60		15	440	3.1	.6	104	24	15	280	02
03	553		2	32		10	690	3.7	.8	90	26	0	50	03
04	554		2	20		15	340	3.5	.6	76	20	0	300	04
05	555		1	44		0	480	3.1	.4	112	24	0	390	05
06	556		1	60		5	520	3.6	.8	140	40	0	310	06
07	557		2	44		2	800	3.4	.6	100	24	0	250	07
08	558		1	40		2	460	3.5	.8	84	24	0	300	08
09	559		1	36		2	420	2.8	1.0	98	32	0	330	09
10	560		1	48		0	540	3.5	.8	100	34	0	280	10
11	561		1	64		5	800	3.9	.8	192	30	0	360	11
12	562		1	56		15	620	3.5	.8	132	28	0	300	12
13	563		3	44		10	560	3.6	.8	110	24	0	320	13
14	564		1	32		15	460	3.1	.6	120	20	0	320	14
15	565		1	36		5	440	3.5	.6	108	20	0	250	15
16	566		1	24		10	920	3.3	.6	78	26	0	340	16
17	567		1	32		10	420	3.5	.6	124	24	10	350	17
18	568		1	52		5	560	2.6	.8	100	20	5	300	18
19	569		1	72		10	360	3.9	.8	156	32	20	490	19
20	570		1	72		80	400	3.7	.8	220	26	15	530	20
21	571		1	100		25	300	3.5	.8	130	28	45	650	21
22	572		1	80		100	480	3.7	.6	244	44	15	530	22
23	573		1	56		25	340	3.5	.8	200	34	100	590	23
24	574		1	100		15	640	4.0	1.4	×540	100	20	660	24
25	575		?	72		0.	580	4.5	1.0	×720	112	15	630	25
26	576		1	84		15	580	4.3	1.0	×1890	176	25	700	26
27	577		1	84		15	460	3.5	1.4	×2280	×490	25	520	27
28	578		1	68		10	620	3.9	1.4	×1400	×620	15	700	28
29	579		4	168		5	800	5.6	1.0	×520	210	2	620	29
30	580		7	208		0	740	7.3	1.0	×580	200	0	580	30
31	581		12	×960		10	780	7.2	1.3	×960	×640	0	390	31
32	582		3	132		10	620	6.4	.8	216	100	0	540	32
33	583		6	116		2	480	6.7	.8	268	40	0	630	33
34	584		3	208		2	1080	5.2	2.0	×440	×820	0	150	34
35	585		1	78		0	580	4.9	.8	156	×30	0	420	35
36	586		1	66		2	520	4.2	.6	104	28	0	370	36
37	587		7	108		5	400	4.4	.6	170	68	0	390	37
38	588		4	200		5	620	7.4	1.2	188	48	0	630	38
39	589		7	172		0	600	6.6	1.0	320	36	0	540	39
40	G-1		5	40			240	2.9	.4	100	24			40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

(2)

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX EXPLORATION INC.
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	8QU590		4	164		10	680	5.9	1.2	×440	×420	0	360	01
02	591		2	156		10	720	5.6	.8	330	84	0	390	02
03	592		2	108		10	720	4.7	.8	×1840	232	2	280	03
04	593		1	132		10	680	5.0	1.2	×1900	244	0	410	04
05	594		1	88		200	640	4.7	2.0	×1320	156	45	440	05
06	595		1	70		20	560	4.2	.8	×640	92	10	400	06
07	596		1	120		25	520	4.4	.8	×760	140	10	460	07
08	597		1	108		35	600	4.5	1.0	×800	204	20	370	08
09	598		1	96		35	320	3.4	.8	172	36	10	380	09
10	599		1	62		15	480	3.9	.6	200	44	5	400	10
11	600		1	70		40	620	4.2	.8	180	44	15	220	11
12	601		1	42		10	480	3.0	.6	104	22	10	195	12
13	602		1	58		45	400	3.8	.6	200	30	10	145	13
14	603		1	40		10	480	4.3	.8	116	24	10	195	14
15	604		1	34		10	440	2.8	.6	84	18	2	200	15
16	605		1	38		10	560	4.2	.6	126	28	0	240	16
17	606		1	40		10	520	3.6	.6	112	28	0	250	17
18	607		1	52		5	600	4.2	.8	160	20	0	270	18
19	608		1	56		5	600	4.1	.8	132	26	0	300	19
20	609		1	34		0	440	3.4	.6	72	22	0	220	20
21	610		1	28		15	520	3.8	.6	92	24	10	280	21
22	611		1	98		10	680	5.3	.8	178	24	0	310	22
23	612		1	50		10	640	4.0	.8	136	22	0	260	23
24	613		1	44		15	560	4.2	.8	112	22	0	240	24
25	614		1	34		5	440	3.7	.6	92	18	0	260	25
26	615		1	46		35	560	3.9	.8	106	20	0	250	26
27	616		1	32		25	560	4.3	.8	116	24	0	340	27
28	617		1	60		40	420	4.1	.8	144	28	0	300	28
29	618		1	50		25	400	4.2	1.0	128	30	0	430	29
30	619		1	74		35	520	4.8	.8	360	62	10	470	30
31	620		1	42		35	760	4.6	.6	168	36	20	550	31
32	621		1	106		100	440	4.2	.8	258	56	15	590	32
33	622		1	76		45	840	4.0	.8	228	36	20	570	33
34	623		1	132		150	320	3.9	.8	256	26	35	820	34
35	624		1	36		70	560	4.1	.8	210	36	40	650	35
36	625		1	150		40	720	4.9	1.4	×1040	160	90	660	36
37	626		1	88		35	580	4.6	1.0	×760	130	20	650	37
38	627		1	120		25	700	4.6	1.2	×1100	184	2	660	38
39	628		1	138		10	880	5.1	2.0	×1200	276	10	670	39
40	G-6		46				320	2.3		336	×440	60		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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CANADA
TELEPHONE: 299-6910
AREA CODE: 604

③

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	8QUS629		1	120		20	540	4.0	.6	x920	100	10	510	01
02	630		8	212		5	500	5.6	.8	250	56	0	560	02
03	631		6	176		5	540	4.3	.6	260	40	0	570	03
04	632		4	168		5	360	4.9	.8	176	22	0	570	04
05	633		4	130		5	580	5.4	.8	224	30	0	470	05
06	634		2	180		10	1100	4.9	.8	180	24	0	450	06
07	635		3	92		5	600	4.7	1.0	212	40	0	500	07
08	636		3	112		5	720	6.4	1.2	224	70	0	640	08
09	637		2	120		2	580	5.8	1.0	164	100	0	610	09
10	638		1	96		0	660	7.6	1.2	208	40	0	1020	10
11	639		4	208		10	1180	5.7	1.4	x1440	54	0	630	11
12	640		2	120		10	720	4.6	.6	216	32	0	560	12
13	641		1	100		10	320	4.5	.8	120	24	0	590	13
14	642		2	136		5	560	4.4	1.0	256	50	0	680	14
15	643		6	156		2	260	5.2	1.0	124	24	2	1240	15
16	644		1	72		15	520	4.2	.8	x600	210	100	420	16
17	645		1	108		15	620	5.0	1.4	x640	154	10	530	17
18	646		1	96		35	500	4.6	1.0	x620	90	20	570	18
19	647		1	100		40	780	4.7	1.4	x1560	150	40	710	19
20	648		1	76		80	520	4.3	1.0	392	44	25	660	20
21	649		1	116		35	540	4.3	1.0	x520	50	25	860	21
22	650		1	108		120	420	5.0	1.0	x400	50	20	1200	22
23	651		1	108		150	480	4.3	.8	248	36	40	700	23
24	652		1	132		80	480	3.2	.6	128	24	15	590	24
25	653		1	52		175	340	3.5	.8	192	32	40	800	25
26	654		1	140		250	200	4.5	1.0	148	30	20	690	26
27	655		1	88		45	760	5.3	1.0	220	32	0	500	27
28	656		1	72		150	540	4.7	.8	194	26	0	520	28
29	657		1	44		5	520	3.8	.8	88	20	0	385	29
30	658		1	38		5	640	3.8	.6	100	20	0	375	30
31	659		1	56		5	620	4.4	.8	164	24	0	380	31
32	660		1	40		15	500	3.4	.6	80	20	0	395	32
33	661		1	56		15	920	4.8	1.0	284	24	0	500	33
34	662		1	32		2	440	3.3	.8	72	20	0	335	34
35	663		1	100		10	700	4.6	1.0	156	20	0	325	35
36	664		1	64		10	680	4.4	1.0	136	22	0	340	36
37	665		1	32		10	520	4.0	.8	66	20	0	326	37
38	666		1	44		2	600	4.2	.8	92	20	0	275	38
39	667		1	96		5	880	5.0	1.0	216	24	0	430	39
40	627 G6		48	364			340	1.9	1.6	332	x740	15		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

④

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	8QUS668		1	64		45	560	4.2	.8	276	22	2	410	01
02	669		2	52		40	560	3.8	.8	268	24	0	390	02
03	670		2	252		120	800	7.5	1.4	234	62	5	490	03
04	671		1	104		200	480	4.8	1.2	200	32	5	650	04
05	672		1	92		100	280	5.0	1.0	172	34	5	740	05
06	673		1	220		100	520	3.9	1.0	184	50	15	900	06
07	674		1	76		5	1000	4.7	1.0	80	24	0	350	07
08	675		1	62		40	760	5.0	1.0	332	22	0	250	08
09	676		1	88		25	880	5.0	1.2	288	22	0	370	09
10	677		1	104		0	880	5.4	.8	176	20	0	350	10
11	678		1	78		35	520	4.3	.8	360	26	0	370	11
12	679		1	112		150	560	6.1	1.0	324	34	0	440	12
13	680		1	64		100	440	4.4	.8	140	30	0	440	13
14	681		1	116		80	680	4.9	1.0	110	28	0	780	14
15	682		2	76		80	440	3.9	.8	132	26	10	670	15
16	683		1	116		100	320	4.1	1.0	144	30	15	850	16
17	684		1	152		80	280	4.6	1.2	180	34	40	1250	17
18	685		1	148		70	320	4.5	1.6	120	32	40	1920	18
19	686		2	184		250	240	4.5	3.2	252	44	50	5200	19
20	687		2	384		300	560	5.3	6.0	x920	90	40	1800	20
21	688		2	180		200	560	3.7	1.2	x880	176	80	1640	21
22	689		1	92		45	440	4.1	.6	340	42	10	810	22
23	690		2	240		250	360	4.3	1.2	220	38	20	2050	23
24	691		1	132		35	560	4.2	1.0	x960	88	10	810	24
25	692		1	124		30	400	3.3	1.0	x580	52	15	660	25
26	693		1	92		5	640	3.7	1.8	x1800	90	10	910	26
27	694		1	128		15	640	4.1	3.0	x1500	136	5	770	27
28	695		2	108		5	400	4.6	.8	x560	64	10	830	28
29	696		4	120		10	440	5.0	1.8	x920	160	0	660	29
30	697		2	84		0	480	5.2	1.0	260	94	0	670	30
31	698		1	44		10	440	4.5	.8	248	58	0	420	31
32	699		1	68		10	400	6.5	.8	x360	88	2	550	32
33	700		1	72		10	720	4.6	1.8	x240	122	0	750	33
34	701		1	112		40	680	3.9	1.8	x940	184	10	590	34
35	702		1	64		64	840	4.1	3.5	x600	326	15	800	35
36	703		1	68		40	300	3.2	1.4	x1800	52	20	930	36
37	704		1	116		15	300	3.7	2.0	312	44	5	1000	37
38	705		1	68		100	560	3.6	1.4	x760	74	20	610	38
39	706		1	96		100	320	3.2	.8	240	36	0	830	39
40	685A		1	220		250	320	4.0	1.4	192	30	40		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
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CANADA
TELEPHONE: 299-6910
AREA CODE: 604

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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC.
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 581 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	RQUS107		1	118		250	680	55	.6	3280	1440	15	1240	01
02	108		2	184		300	960	5.6	.4	5600	2860	20	1380	02
03	109		2	680		600	440	4.3	1.0	196	58	200	3000	03
04	110		2	172		200	440	4.0	1.6	600	130	40	1280	04
05	111		4	182		70	360	3.4	.8	300	106	160	1650	05
06	112		2	160		25	400	4.3	1.4	156	32	15	980	06
07	113		1	200		50	560	4.5	1.8	210	34	10	800	07
08	114		1	88		120	480	3.7	.8	140	20	0	440	08
09	115		1	76		100	460	3.3	.6	180	16	0	400	09
10	116		2	76		120	640	4.6	.6	440	16	0	500	10
11	117		2	148		50	740	6.1	1.0	216	16	0	530	11
12	118		2	130		60	920	6.5	1.6	304	16	0	650	12
13	119		1	48		5	480	3.4	.8	120	18	0	280	13
14	120		4	134		5	720	5.1	1.0	112	20	0	300	14
15	121		2	66		0	720	4.8	1.2	144	48	0	290	15
16	122		3	114		2	700	4.3	1.0	166	20	0	350	16
17	123		1	66		2	680	3.1	.6	124	18	0	420	17
18	124		1	56		5	720	4.5	1.2	150	28	0	270	18
19	125		1	50		2	580	4.0	1.0	92	18	0	240	19
20	126		1	116		10	1040	6.7	1.2	230	16	0	600	20
21	127		1	104		50	600	4.6	.8	200	20	0	430	21
22	128		2	108		20	720	5.8	1.0	264	20	0	540	22
23	129		2	164		50	960	7.0	1.2	252	24	0	740	23
24	130		1	168		150	480	4.7	1.0	144	22	10	760	24
25	131		1	200		270	440	5.0	1.2	196	32	10	1040	25
26	132		1	96		100	440	4.8	1.0	144	24	10	760	26
27	133		1	216		100	600	4.5	1.6	148	28	40	1120	27
28	134		1	104		60	240	3.7	1.0	88	22	30	1580	28
29	135		1	144		200	440	4.3	1.8	900	200	35	1620	29
30	136		2	320		150	480	2.7	1.0	204	60	30	2100	30
31	137		2	220		150	200	2.6	.8	200	34	25	1800	31
32	138		2	560		100	200	4.8	1.0	136	20	40	8340	32
33	139		1	114		250	280	3.3	1.4	132	26	20	1070	33
34	140		1	224		150	360	44	1.0	248	32	30	1650	34
35	141		1	70		80	360	3.7	1.0	440	70	35	940	35
36	142		1	60		40	360	4.1	1.2	700	44	55	1050	36
37	143		1	58		25	400	3.9	1.8	1080	104	20	910	37
38	144		1	64		10	520	4.0	1.8	920	152	0	1020	38
39	145		1	92		15	560	4.5	1.4	680	92	0	[illegible]	39
40	G 1		6	40			220	3.0	.4	100	24	60		40

Rossbacher Laboratory

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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC.
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 581 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	RQUS146		2	162		35	560	4.8	4.0	1820	236	15	770	01
02	147		2	164		170	360	6.9	1.8	348	208	50	560	02
03	148		2	60		20	460	4.0	1.6	680	72	20	820	03
04	149		1	110		50	600	5.2	1.6	800	124	90	1120	04
05	150		1	98		100	400	4.1	1.4	520	64	40	800	05
06	151		1	134		100	240	3.9	1.4	296	30	55	3200	06
07	152		1	106		125	360	4.1	1.0	200	30	55	4500	07
08	153		1	170		100	420	4.8	1.0	204	26	50	2000	08
09	154		1	132		60	320	4.2	1.0	116	24	80	2120	09
10	155		1	230		50	260	3.9	.8	92	18	55	2600	10
11	156		1	234		125	440	4.0	1.0	260	32	900	2400	11
12	157		1	136		80	440	3.3	.8	172	26	400	1820	12
13	158		1	204		125	600	50	1.4	196	22	10	1380	13
14	159		1	168		125	480	5.2	1.6	208	20	20	1720	14
15	160		1	164		320	660	4.4	1.2	180	22	15	1080	15
16	161		1	120		125	280	4.7	1.0	116	22	15	1180	16
17	162		1	106		275	520	4.6	1.4	112	24	15	1020	17
18	163		1	152		250	880	4.9	1.0	232	16	0	630	18
19	164		1	36		150	460	3.6	.8	160	18	0	480	19
20	165		4	168		0	660	41	.8	324	24	0	430	20
21	166		2	76		20	640	44	.8	210	20	0	450	21
22	167		1	106		15	780	4.6	1.6	318	22	0	450	22
23	168		1	36		10	720	3.5	1.0	128	20	0	265	23
24	169		1	40		10	480	2.8	.8	98	22	0	335	24
25	170		1	52		0	540	3.8	1.0	152	24	0	340	25
26	171		1	98		10	680	4.5	1.6	1060	52	0	470	26
27	172		1	60		5	680	4.3	1.6	240	28	0	460	27
28	173		1	42		5	620	4.5	1.4	126	36	0	500	28
29	174		1	32		5	600	3.9	1.0	156	24	0	380	29
30	175		1	32		0	460	3.9	1.0	152	24	0	360	30
31	176		1	38		10	720	4.2	.8	320	34	10	490	31
32	177		1	42		10	440	3.2	.8	100	22	0	305	32
33	178		1	24		10	700	3.7	.8	[illegible]	20	0	380	33
34	179		1	56		40	740	43	1.0	218	40	0	285	34
35	180		1	116		5	860	5.7	1.0	264	28	0	550	35
36	181		1	72		20	440	4.0	1.0	580	28	0	355	36
37	182		1	66		40	680	5.6	1.0	540	30	0	470	37
38	183		1	120		70	360	5.1	1.6	138	22	0	542	38
39	184		1	126		500	280	3.9	.8	128	30	15	[illegible]	39
40	G 27		24	264			400	1.3	1.6	800	440			40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

RECEIVED AUG 11 1978

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC.
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	RQUST05		2	124		120	800	5.1	1.0	184	28	20	710	01
02	786		2	100		50	240	4.3	.8	164	24	200	1080	02
03	787		1	66		120	280	4.2	.8	164	24	25	750	03
04	788		1	62		100	240	4.2	.6	146	24	110	1440	04
05	789		1	100		60	>10000	3.6	.6	220	38	150	1190	05
06	790		1	144		55	300	3.3	.6	168	32	90	1340	06
07	791		1	184		80	160	3.6	.8	124	24	330	9000	07
08	792		1	204		25	360	4.3	1.2	210	34	110	9900	08
09	793		1	78		75	340	3.7	1.0	168	32	110	1220	09
10	794		1	118		70	200	3.8	1.0	176	28	100	4400	10
11	795		1	96		70	320	3.9	1.4	480	56	110	990	11
12	796		1	44		40	240	3.3	.8	176	48	60	790	12
13	797		1	44		35	400	4.4	1.0	220	82	20	740	13
14	798		4	180		35	800	5.1	2.0	1340	252	8	610	14
15	799		1	36		0	500	3.5	.6	260	40	0	440	15
16	800		4	70		60	680	4.2	1.4	1600	100	80	740	16
17	801		4	12		70	80	1.9	.6	80	24	20	410	17
18	802		1	60		40	360	3.9	1.2	480	60	140	1020	18
19	803		1	96		70	280	4.2	1.4	364	64	80	1120	19
20	804		1	84		25	160	3.9	1.2	428	36	100	7080	20
21	805		1	64		30	520	3.5	.8	152	46	140	1200	21
22	806		1	84		55	360	3.9	.8	400	52	150	1220	22
23	807		1	132		2	240	3.3	1.0	164	26	800	9380	23
24	808		1	88		10	800	4.2	1.0	160	24	160	1320	24
25	809		4	64		25	1280	9.3	1.0	158	30	110	1400	25
26	810		1	70		5	200	4.0	.8	160	24	160	1520	26
27	811		1	68		10	280	3.9	.8	132	22	130	840	27
28	812		1	62		20	360	4.2	.8	108	22	60	1230	28
29	813		1	88		125	240	4.3	.8	112	22	50	830	29
30	814		1	156		250	360	4.2	.8	150	24	20	710	30
31	815		1	128		200	440	4.9	1.0	192	30	80	650	31
32	816		1	68		20	160	2.9	.6	60	16	5	300	32
33	817		1	160		35	640	5.4	1.0	540	58	0	540	33
34	818		1	60		35	360	4.0	.8	172	24	15	450	34
35	819		1	100		100	520	4.3	1.0	280	36	20	460	35
36	820		1	80		25	760	5.4	1.0	340	30	0	450	36
37	821		1	64		70	400	3.9	.8	300	26	0	320	37
38	822		1	44		50	480	3.9	.8	276	20	0	310	38
39	823		1	52		0	440	3.9	.8	136	24	0	400	39
40	G 7		28	192			120	1.0	.4	78	68	20		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

RECEIVED AUG 11 1978

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERAL EXPLORATION INC.
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED Aug 1/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	RQUS824		32	36		120	620	4.2	.6	240	26	0	420	01
02	825		2	64		100	620	4.0	.6	388	32	0	450	02
03	826		2	20		100	500	3.7	.4	122	22	0	480	03
04	827		2	28		40	420	3.5	.6	104	22	0	385	04
05	828		2	20		0	300	3.3	.4	98	22	0	315	05
06	829		2	24		5	530	4.0	.6	104	20	0	390	06
07	830		2	28		10	620	4.1	.4	134	20	0	420	07
08	831		2	34		30	920	3.9	.6	268	42	0	400	08
09	832		2	60		10	540	3.4	.4	250	24	0	470	09
10	833		2	40		10	280	3.8	.6	440	34	0	460	10
11	834		2	70		10	440	4.0	.6	206	28	0	530	11
12	835		2	58		10	520	4.0	.6	400	28	0	570	12
13	836		6	200		40	660	7.1	.8	180	24	0	480	13
14	837		3	100		20	600	3.5	.6	162	20	5	490	14
15	838		2	96		250	360	4.0	.6	160	20	15	600	15
16	839		2	26		20	280	4.0	.4	100	20	15	520	16
17	840		4	80		125	2120	6.0	2.4	583	42	10	1580	17
18	841		4	94		150	300	3.8	.6	130	32	25	980	18
19	842		2	76		90	360	4.1	.8	88	20	20	770	19
20	843		2	74		100	240	3.7	.6	100	20	20	710	20
21	844		2	66		70	200	4.0	.4	92	18	90	1010	21
22	845		1	100		175	200	3.3	.4	140	26	100	1500	22
23	846		2	64		175	120	3.0	.6	86	22	100	1800	23
24	847		2	44		150	200	3.9	.6	80	30	120	900	24
25	848		1	70		30	340	2.8	.6	104	26	70	920	25
26	849		1	30		65	200	3.3	.6	112	22	100	740	26
27	850		1	54		125	300	3.1	.4	236	32	80	820	27
28	851		1	58		35	280	3.9	.6	220	28	70	830	28
29	852		2	56		45	240	3.1	.6	206	32	120	1080	29
30	853		1	68		35	120	2.8	.6	170	36	100	870	30
31	854		1	98		20	1180	2.8	.4	216	50	60	690	31
32	855		4	248		30	920	3.4	2.2	2700	122	20	890	32
33	856		2	126		20	440	3.6	.6	1480	58	15	610	33
34	857		4	152		25	600	3.4	.8	3280	96	45	670	34
35	858		1	70		60	660	2.8	.6	272	44	100	930	35
36	859		6	46		30	280	3.4	.6	210	46	60	1000	36
37	860		4	62		20	320	3.0	.6	372	42	100	880	37
38	861		4	56		60	300	2.8	.4	196	40	120	770	38
39	862		2	28		30	220	2.3	.6	120	30	20		39
40	G 1		6	40			200	2.7	.4	108	24	0		40

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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC.
525 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED Aug/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	8QUS862		1	18		70	200	2.7	.4	90	20	55	570	01
02	863		1	28		125	240	2.8	.2	80	18	55	660	02
03	865		1	110		50	420	3.6	.4	272	44	60	1450	03
04	866		1	26		40	260	3.3	.6	140	26	55	590	04
05	867		1	80		170	300	3.0	.4	140	20	110	1020	05
06	868		1	90		100	440	2.6	.6	80	24	45	620	06
07	869		1	104		75	340	2.5	.4	128	20	30	570	07
08	870		1	36		70	320	5.0	.6	100	22	80	590	08
09	871		1	54		60	240	4.4	.6	88	24	10	420	09
10	872		1	38		120	320	3.2	.8	108	22	20	510	10
11	873		1	104		40	440	4.5	.6	192	28	15	580	11
12	874		1	26		50	260	3.2	.6	78	20	0	390	12
13	875		1	78		15	500	3.8	.4	232	34	5	420	13
14	876		1	72		15	660	4.0	.6	500	32	0	520	14
15	877		1	42		0	520	2.9	.4	806	22	0	330	15
16	878		1	24		15	600	3.8	.4	336	26	0	340	16
17	879		1	54		20	640	3.8	.6	340	24	0	310	17
18	880		1	34		15	560	3.5	.4	300	64	0	300	18
19	881		2	32		10	480	3.4	.4	160	26	0	320	19
20	882		1	24		0	760	3.7	.4	156	24	0	240	20
21	883		1	32		10	560	3.4	.4	112	26	0	280	21
22	884		1	32		10	520	3.3	.4	110	24	0	270	22
23	885		1	28		10	600	4.0	.4	204	28	0	410	23
24	886		1	34		10	520	3.5	.4	208	30	0	320	24
25	887		2	44		2	520	3.7	.4	224	28	0	315	25
26	888		1	60		25	540	3.7	.4	182	30	0	325	26
27	889		1	52		45	480	3.8	.4	192	26	0	450	27
28	890		2	44		15	260	2.6	.8	102	22	15	480	28
29	891		1	52		50	400	3.0	.8	90	18	40	450	29
30	892		1	34		100	280	3.2	.6	90	18	35	680	30
31	893		2	26		70	240	4.2	.6	132	24	55	830	31
32	894		2	128		180	600	4.8	.6	206	26	20	650	32
33	895		1	28		60	220	2.5	.6	76	22	40	500	33
34	896		1	18		40	220	2.6	.4	60	28	20	430	34
35	897		1	136		150	400	3.4	.8	180	42	100	1320	35
36	898		1	52		25	300	3.7	.6	180	44	40	460	36
37	899		1	22		35	300	2.7	.6	140	24	35	490	37
38	900		4	28		25	860	4.0	.8	420	48	20	630	38
39	901		10	24		15	300	4.3	.6	184	38	60	630	39
40	G6		48	372			340	2.0	3.0	340	>400	40	6	40

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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC.
525 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED Aug/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	8QUS902		4	42		15	240	2.6	.6	320	32	20	910	01
02	903		2	56		20	340	2.8	.4	204	30	50	750	02
03	904		4	54		35	260	3.0	.4	188	22	120	1050	03
04	905		2	94		100	300	3.5	.6	384	52	55	1100	04
05	906		2	108		125	260	3.3	.8	420	54	70	950	05
06	907		5	52		35	280	2.4	.4	1820	36	20	530	06
07	908		8	100		30	520	4.5	1.0	580	148	25	640	07
08	909		2	26		10	260	3.3	.6	106	28	0	500	08
09	910		2	24		15	240	3.8	.4	148	22	20	710	09
10	911		2	36		25	440	2.6	.6	212	32	5	410	10
11	912		2	28		15	300	2.4	.4	140	28	2	380	11
12	913		2	30		20	620	2.8	.4	134	30	15	410	12
13	914		4	50		25	560	2.9	.4	200	52	15	460	13
14	915		2	54		30	860	2.7	4	348	66	20	360	14
15	916		16	26		0	480	2.4	.6	336	50	20	2020	15
16	917		20	22		10	240	3.8	.4	76	22	0	370	16
17	918		1	98		170	220	35	.6	166	36	110	1020	17
18	919		1	84		175	200	3.0	.6	152	34	100	1400	18
19	920		1	56		20	580	3.0	.6	540	68	30	790	19
20	921		2	38		35	380	2.9	.4	252	46	20	640	20
21	922		1	30		25	320	3.5	.4	200	28	15	560	21
22	923		1	98		40	440	2.7	.6	104	20	11	410	22
23	924		1	18		125	160	1.5	.2	56	18	40	550	23
24	925		4	20		100	120	1.3	.2	44	16	40	640	24
25	926		2	26		150	200	3.3	.4	78	20	50	720	25
26	927		2	28		70	200	3.2	.2	80	18	55	670	26
27	928		2	104		35	1000	4.9	.6	388	40	0	450	27
28	929		2	84		60	440	3.9	.4	196	22	10	480	28
29	930		1	70		10	660	4.1	.8	304	48	0	550	29
30	931		1	68		0	700	4.2	.6	290	40	5	400	30
31	932		1	30		10	680	3.5	.6	300	26	0	340	31
32	933		1	90		15	560	4.2	.6	270	26	5	440	32
33	934		1	36		10	440	3.0	.6	152	24	5	385	33
34	935		1	40		20	520	3.4	.4	142	22	10	410	34
35	936		1	42		5	480	3.8	.4	192	24	2	400	35
36	937		1	92		100	480	3.2	.4	152	16	5	330	36
37	938		1	18		30	360	3.0	.4	72	22	5	285	37
38	939		2	52		70	420	4.1	.4	156	32	55	280	38
39	940		1	10		75	260	2.5	.4	60	18	20	4:	39
40	G7		26	194			120	1.0	.4	6	66	20		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
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CANADA
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AREA CODE: 604

RECEIVED AUG 11 1978

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION INC.
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 891 STQ OPTION

DATE ANALYSED Aug/78

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01	8QUS940	—	—	—	—	—	—	—	—	—	—	—	—	01
02	941		2	120		30	1100	5.2	.6	400	28	0	420	02
03	942		2	78		40	860	5.0	.6	304	24	0	440	03
04	943		2	82		75	720	3.7	.4	192	18	10	450	04
05	944		2	16		15	240	2.8	.4	66	16	15	440	05
06	945		2	18		100	260	2.8	.4	96	18	20	460	06
07	946		2	106		75	440	3.4	.6	140	16	15	560	07
08	947		3	112		150	580	3.9	.6	236	22	25	740	09
09	948		8	80		15	960	3.6	1.0	860	68	25	1300	09
10	949		2	66		150	780	3.1	.6	192	28	50	1070	10
11	950		2	34		30	300	2.4	.4	160	24	20	560	11
12	951		6	26		60	400	2.6	1.6	240	28	55	1430	12
13	952		3	30		40	720	2.6	.6	369	64	15	500	13
14	953		10	32		40	660	2.3	.2	265	56	25	365	14
15	954		10	24		0	320	2.5	.4	96	32	0	470	15
16	955		1	18		15	240	2.7	.4	92	32	10	430	16
17	956		18	60		10	2640	2.6	.8	328	144	5	560	17
18	957		4	34		25	600	2.8	.4	301	44	10	620	18
19	958		2	18		35	300	1.7	.2	92	20	15	370	19
20	959		2	30		5	1140	2.9	.4	120	40	10	345	20
21	960		3	30		30	340	2.6	.2	132	28	20	320	21
22	961		6	26		25	460	2.1	.2	216	32	15		22
23	962		6	26		40	540	2.0	.2	142	30	30		23
24	963		6	8		25	160	0.8	.2	40	36	20		24
25	964		8	22		0	320	2.1	.4	148	28	0		25
26	965		4	14		35	260	3.6	.2	132	28	20		26
27	966		6	16		15	280	2.7	.4	106	28	15		27
28	967		22	18		35	260	2.6	.2	167	30	20		28
29	968		30	20		40	340	4.0	.2	388	6	5		29
30	969		4	18		0	280	2.1	.2	112	32	0		30
31	970		8	16		15	320	2.1	.2	116	42	10		31
32	971		6	14		40	300	2.7	.4	132	24	30		32
33	972		4	12		25	140	2.0	.2	76	24	25		33
34	973		6	18		45	240	2.4	.6	228	24	25		34
35	974		20	28		0	340	2.5	.4	214	44	20		35
36	975		6	10		25	160	1.8	.2	76	26	140		36
37	976		4	30		45	240	4.2	.4	112	26	120		37
38	977		10	14		10	280	2.5	.2	74	20	110		38
39														39
40	027		22	260			440	1.2	1.4	328	240	15		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

RECEIVED AUG 11 1978

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: Amax Minerals Exploration Inc
535 Thurlow St Vanc BC

INVOICE NO.

PROJECT 891 STQ OPTION

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	Ag	Zn	Pb	W	F	No.
01														01
02	979		42	24		35	260	3.0	.6	112	24	20		02
03	980		23	26		10	240	4.6	.6	150	32	35		03
04	981		4	50		5	600	4.4	.8	400	208	0	195	04
05	982		4	110		0	680	5.9	1.0	340	188	0	270	05
06	983		5	138		10	760	5.7	1.0	700	284	0	340	06
07	984		5	112		10	700	5.2	1.0	880	180	0	450	07
08	985		5	224		5	1300	4.9	1.8	1160	184	0	610	08
09	986		2	160		45	640	5.1	1.4	1960	268	40	420	09
10	987		2	332		0	560	5.4	1.6	600	120	60	500	10
11	988		3	68		10	1800	4.7	1.6	2040	228	0		11
12	989		4	76		15	1720	5.0	1.0	1520	220	0		12
13	990		3	52		5	1380	5.0	1.0	1000	128	0		13
14	991		4	52		20	1240	4.6	.8	800	176	0		14
15	992		4	72		25	1340	5.1	.6	680	140	2		15
16	993		2	52		10	880	4.1	.8	368	68	0		16
17	994		2	52		15	600	4.2	.8	600	120	0		17
18	995		4	88		15	900	5.6	1.6	2600	280	0		18
19	996		3	100		15	2640	5.8	1.0	1600	228	0		19
20	997		2	56		0	560	4.5	.6	480	98	0		20
21	998		2	40		25	1440	3.8	.6	296	120	0		21
22	999		2	76		10	840	4.2	.8	440	140	0		22
23	1000		3	40		35	360	4.6	.6	168	60	0		23
24	1001		3	72		10	980	3.8	.6	320	76	0		24
25	8QUS1002		2	52		0	520	3.8	.6	356	56	0		25
26	8QUS 978		32	28		0	320	3.1	1.0	344	32	20		26
27														27
28														28
29														29
30														30
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38														38
39														39
40														40

Rossbacher Laboratory

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BURNABY, B.C.
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AREA CODE: 604

RECEIVED AUG 11 1978

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VAN B.C

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED Aug/13

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W	F	No.
01	78 QUS 1003		8	4		5	100	.9	.2	26	28	80		01
02	1004		4	16		20	240	3.4	.4	172	32	60		02
03	1005		4	16		35	220	3.6	.4	168	30	65		03
04	1006		5	16		30	280	4.9	.6	148	32	60		04
05	1007		3	8		5	140	1.8	.4	86	22	70		05
06	1008		2	24		35	340	3.2	.4	110	20	40		06
07	1009		5	26		30	560	3.2	.4	140	28	35		07
08	1010		4	24		30	280	2.8	.4	128	28	45		08
09	1011		5	20		40	280	3.8	.4	184	24	40		09
10	1012		4	24		0	600	3.0	.4	156	16	30		10
11	1013		10	26		40	740	2.9	.4	122	24	25		11
12	1014		12	18		40	900	4.2	.4	196	32	20		12
13	1015		8	28		25	380	3.8	.8	296	44	0		13
14	1016		11	24		45	560	3.5	.6	268	64	20		14
15	1017		8	22	X	10	340	3.5	.6	220	46	30		15
16	1018		6	16		25	320	3.0	.4	148	30	50		16
17	1019		6	16		40	360	2.5	.4	140	26	80		17
18	1020		4	28		30	320	4.2	.6	170	36	20		18
19	1021		3	22		20	280	3.4	.6	164	46	55		19
20	1022		3	24		5	260	3.3	.4	152	28	45		20
21	1023		4	24		15	400	4.0	.4	180	32	55		21
22	1024		4	24		30	380	2.5	.4	140	28	60		22
23	1025		2	28		25	340	3.0	.4	172	32	70		23
24	1026		9	16		30	300	3.3	.8	136	50	45		24
25	1027		4	24		10	240	3.3	.6	118	32	50		25
26	1028		10	30		35	400	3.4	.4	220	44	50		26
27	1029		26	30		20	340	3.2	1.0	244	44	65		27
28	1030		22	24		25	480	2.8	.4	180	36	50		28
29	1031		18	42		20	300	3.1	.8	332	48	50		29
30	1032		14	24		15	200	2.5	.6	132	40	60		30
31	1033		6	20		20	220	2.8	.6	128	30	35		31
32	1034		6	18		20	200	2.4	.4	92	20	80		32
33	1035		4	20		20	200	3.1	.6	96	28	120		33
34	1036		4	12		15	120	1.4	.4	48	12	65		34
35	1037		4	30		20	220	2.6	.6	120	38	120		35
36	1038		1	12		30	200	1.8	.4	70	16	90		36
37	1039		6	12		25	240	2.3	.4	96	20	110		37
38	1040		14	28		20	560	3.5	.6	200	36	120		38
39	1041		6	8		15	140	1.7	.4	45	30	100		39
40	G 27		28	260			420	1.5	1.5	720	408	60		40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

RECEIVED AUG 11 1978

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 8086

TO: AMAX MINERALS EXPLORATION
535 THURLOW ST. VANC. B.C.

INVOICE NO.

PROJECT 881 STQ OPTION

DATE ANALYSED Aug/13

No.	Sample	pH	Mo	Cu		Sn	Mn	Fe	As	Zn	Pb	W		No.
01	8 QUS 1012		7	16		30	200	3.0	.4	108	28	100		01
02	1013		7	24		10	200	3.5	.8	148	40	55		02
03	1014		7	16		40	280	3.5	.6	152	32	35		03
04	1015		38	36		20	480	2.3	1.8	200	54	20		04
05	1016		9	16		15	200	3.9	.4	96	26	30		05
06	1017		36	10		30	220	2.9	.4	76	26	30		06
07														07
08														08
09														09
10														10
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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

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.

Rossbacher Laboratory
GEOCHEMICAL ANALYSTS & ASSAYERS

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April 30, 1974

SUMMARY OF SOME ANALYTICAL TECHNIQUES CURRENTLY IN USE AT ROSSBACHER LABORATORY

A ANALYTICAL TECHNIQUES FOR GEOCHEMICAL SAMPLES

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 1/2 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 pulverizer 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 $Hx1O_3$ 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 118

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% HC

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 Acument 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.

ROSSBACHER LABORATORY

P. Rossbacher

APPENDIX III - DRILL LOG

ABBREVIATIONS USED IN STQ DRILLING

Rock Types

afs	argillaceous feldspathic sandstone
qbs	quartz biotite schist
hfls	hornfels
qtzte	quartzite
sk	skarn
di	diorite
gd	granodiorite
sub-pqm	subporphyritic quartz monzonite
peg	pegmatite
gr	granite
bs	biotite schist

Mineralogy

2nd b	secondary biotite
K	potassium feldspar
po	pyrrhotite
cpy	chalcopyrite
aspy	arsenopyrite
sch	scheelite
F	fluorite
py	pyrite
q	quartz
calc	calcite
chl	chlorite

Terminology

ca	core axis
wk	weak
arg	argillic
vns	veins
xtals	crystals
vfg	very fine grained
mg	medium grained
stkwk	stockwork

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78 - 1

DATE OCTOBER 3 1978 — SHEET one of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec.	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
								OVERBURDEN				
60501	18	0		200		100	16.6	afs				argillaceous feldspathic sandstone, bedding (foliation) @ 20°CA; thin biotite schist lenses, trace py along limonite-calcite vn's
02	26	20	4800	900		100						
03	20	10		250		100	20	qbs / afs				
04	12	10	6000	230		100		hfls / qtzte		2	2nd b	bands of dark brown hfls with qtzte lenses
05	10	0		230		98		afs/bs / hfls				
06	16	0	11,400	350		100		bs/qtzte / sk (F)				14 cm wide sk band with phospherescent fluorite (pale green)
07	20	10		230		85		bs/qtzte				
08	12	10	8000	300		100	30	qtzte/bs		3	2nd b	dark green chl clots and bands in bs and qtzte in zone of intense deformation

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78-1
DATE: OCTOBER 4-5 1978 — SHEET two of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
60509	16	0		380		75		bs / sk / qtzte		2	sch	10 cm calcite filled gouge zone, bs bands in qtzte
												dk brown pale green sk cut by fault
10	18	0	8,900	950		100				2	aspy q-calc	sk bands with "q sweats" with dk brown acicular xtals?
												sk bands in qtzte trace MoS_2 paint with aspy vn's
11	44	0		850		100				5	aspy -q	aspy in q vn's and dissem in massive dk brown qtzte, irreg-
												ular bands and lenses of skarn
12	20	0	11,000	230		100		sk		2	q-calc sch	1-3cm q vn, sch as vfg grains in 1mm q-calc vn's
							40					
13	36	0		300		100		qtzte (sk)		1	q-calc aspy	dissem aspy in trace amounts, rare bs bands
14	10	0	10,000	220		83				2	q-calc aspy MoS_2	reduce to BQ, 2 q vn's with trace MoS_2 and 1mm blebs of
												aspy
15	14	0		60		100		bs		3	2nd b q-aspy	weak sk in bs bands in massive qtzte
16	10	0	10,600	300		100		qtzte		1	q-s	
17	18	0		400		100						
							50					
18	16	20	12,800	70		77						1m wide fault zone, limonite stn in bs poor recovery
												in broken bs
19	16	40		200		100				4	MoS_2 cpy aspy	aspy with q-chl vn's 2mm wide in qtzte rare 3cm
												bull q vn's, trace dissem cpy, vfg MoS_2, aspy
20	24	0	7,300	370		100				2	2nd b	1-2mm grains aspy dissem, trace MoS_2 in q-chl vn's
												1mm white q vn's cut 2nd b vn's
21	18	20		300		100				30	q-sch q-aspy	1-3cm q vn in qtzite majority of vn's lessthan 2mm wide
												q vn's with q-s-F vn's in weak stockwork
22	16	10	7,900	240		100		qtzte		10	2nd b q-aspy	1-3cm qvn in qtzite, smaller vn's with clear sericite
							60					and pale green chl, 2nd b vn's cut by q-s vn's
23	40	0		800		100				20	sch MoS_2 aspy	1mm py-cpy-chl-po vn cuts 1mm q vn's
												q-aspy vn's cut 2nd b vn's in med. fractured qtzite
24	48	10	11,200	750		100				27	sch MoS_2	majority of vn's q-chl-calc cut by py-cpy-aspy vn's
												MoS_2 paint on hairline fractures,

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78 - 1
DATE : OCTOBER 5-6 1978 — SHEET three of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
60525	56	10		850		100		qtzte (hfls)		7	2nd b q-MoS_2 aspy	qtzte and hfls cut by q-aspy vn's with vfg MoS_2
26	76	30	16,000	600		100		bs		5	q-sch aspy	sch in 1mm q vn's vfg and parallel to bedding
27	100	10		500		100	70			7	q-aspy	dk brown qtzte, narrow bands of bs and hornfels; rare purple fluorite with q-aspy vn's
28	110	0	20,100	820		100		qtzte		2	2nd b q-aspy	F vn's 1mm wide in qtzte; well fractured chl bs with "q sweats"
29	30	0		250		100		di		4	2nd b q-aspy	10 cm white xtalline q-calc vn's in qtzte
30	38	0	23,600	380		100				10	2nd b q vn's	2 cm diorite dyke parallel to bedding, minor bs
31	44	10		320		100				7	q vn's q-aspy	
32	42	10	11,300	580		90	80			5	2nd b q vn's	small shears and faults along chl bs - qtzte contcts
33	62	0		20		100				2	2nd b q vn	
34	78	0	17,800	55		100				25	2nd b qvn's	trace aspy - q vn's, qvn's 2cm to 1mm in loose stock work
35	40	0		55		100				17	2nd b q-vn aspy	weak chl of 2nd b vn's, bs banding (10 cm) common
36	94	0	18,900	100		100				13	q vn's	3 cm white q vn's cut smaller 1mm q-chl vn's in qtzite
37	146	10		50		100		qtzte (bs)		3	q vn's	trace dissem aspy. 3cm white q vn cuts all vn's 90° CA in dk brown qtzte
38	48	10	16,300	250		100	90			9	q vn's q-aspy	
39	98	0		30		100		F		7		F vn's in bs bands, qtzte cut by q-chl-aspy vn's; large chl bs in fault zone
40	150	20	11,600	300		100		F		6		pale green phosphorescent F vn's in fs with bs bands

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78-1
DATE : OCTOBER 6, 1978 — SHEET four of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
60541	100	10		900		100		afs (qtzte)		20	2nd b aspy-MoS_2	dk brown afs cut by 2nd b and q-calc - MoS_2 vn's
												pale green 1/4" F vn's
42	84	10	31,000	600		100	100			8	q-calc sch-F	2mm wide aspy - sch - F vn's in afs
43	72	10		300		100				10	q-calc	
44	56	10	28,000	280		100				5	q-calc	1 mm aspy-chl vn's cut larger q vn's
45	156	10		110		100			hfls	8	aspy-q q-calc	2nd b clots along q-chl-aspy vn's
46	70	10	34,500	70		100		hfls-bs (afs)	hfls	9	q-calc	vn's parallel to foliation (20-30° CA)
47	74	10		250		100				12	2nd b q-chl	5cm chl b gd dyke (90°CA) not cut by q-calc-aspy vn's
48	68	10	29,000	280		100	110	gd		18	q-calc -chl	vn's sub parallel to foliation in bs
												7cm q-K peg vn's and hairline fractures with fluorescent F
49	74	10		250		100		bs		14	q-calc aspy-q	F in clots phosphorescent pale green
50	120	10	26,300	200		160				28	q-calc -chl	intensely fractured chl bs with narrow gd dykes.
51	54	10		0		90	116.3	fg gd		2	q-calc q-aspy	intrusive contact - brecciated bs by b-hbl gd
												fault gouge over .5m in fg gd - weak pale green fluorescent
52	20	10	3,600	0		100			chl	5	aspy-q	pale green fluorescent (F?) vn's are cut by q-calc vn's
						100	120	fg-mg gd	chl	1		sharp (90° CA) contact between mg lt grey bhbl gd and fg gd
						mislatch rec. 28%				1		"mixed zone" of fg gd grading into mg gd
						100						fg gd to aplite - very hard rock
												fault gouge over .5m

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78 - 1
DATE: OCTOBER 6-7 1978 — SHEET five of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
						100	130	mg gd		2	q-aspy	
60553	28	10		0		100			chl	2	q-aspy	wk chl mafics in gd
54	20	10	3,800	15		100				1	q-aspy	
						100				1	q-aspy	20 cm bands of pink K rich gd - qm
						100				2	q-aspy	
						100			wk chl	1	2nd b -aspy	20 cm band of fg gd in mg wk chl bhbl gd
						100	140					
55	32	0		0		100		gd (qm)		1	q-aspy	qm bands? more common here
												hairline fractures with orange yellow fluorescent pale green F
56	26	10	4,100	0		100			chl	1	aspy-q	
						100		gd	chl	1		chl. locally pervasive in gd trace dissem py
						100				1	q-calc -chl	trace py with q vn's
						100	150			—		chl gd - qm with thin bands of diorite
57	110	40		20		100				5		gd with hairline fractures coated with pale green F and dissem sch
												3 mm q-aspy -py vn (25°CA) with v fg MoS2
58	58	60	4,100	20		100			chl	6	q-F q-aspy	10 cm band of 5% py (vn's and dissem) with aspy
												and F on fractures
59	42	20		10		100				3	q-F q-aspy	pale green F (?) fluoresces orange yellow on hairline fractures
								qm (gd)				
60	32	10	3,200	40		100			wg	1		intense argillization of qm

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78 - 1
DATE : OCTOBER 7 - 8 1978 — SHEET six of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
60561	78	0		0		100	162		arg	6	2nd b q-calc -chl	.5 mm MoS_2 vn's with 2nd b in argillic altered qm
										4	MoS_2 q-py	MoS_2 along hairline fractures as paint
60562	120	50	5,100	40		mislatch - poor rec 28%		qm		1	q	15 cm band of 5% py with SnO_2(?) MoS_2, cpy, aspy, F in qm
63	52	0		100		100				10	q-calc -ch	
64	32	0	3,400	20		100	170		wkchl	9	q-calc -chl	10 mm band of chl-b and aspy
65	80	0		20		100			wkchl	3	2nd b q-MoS_2	v dy MoS_2 with q and on hairline fractures
66	75	0	4,000	25		100		qm (gr)		7	2nd b q-calc -chl	locally over narrow bands qm may be granite composition?
67	26	0		0		100			chl	7	MoS_2 q-chl	1 - 1.5 cm chl-q-aspy vn
68	24	10	3,800	0		100			chl-arg	10	MoS_2 q-F	.5 - 1 mm dy MoS_2 with pale green F vn's wk stk wk
69	20	10		10		100	180		wkchl	9	MoS_2 q-F	MoS_2 and pale green F mainly along hairline dry fractures
70	32	10	2,700	0		100		qm (gd)	chl	4	q-chl -calc	qm altered to blue clay rare vn's
71	114	10		60		100			carg	5	F q-chl	pale green fluorite
72	66	10	4,000	0		100			wkchl	17	2nd b MoS_2 q-aspy	q vn's with aspy cores up to 3mm wide
73	186	0		0		100			wkchl	23	2nd b F MoS_2	loose stk wk of barren q-calc-chl vn's and MoS_2 fractures
74	92	0	5,000	0		100	190			19	2nd b q-F MoS_2	5 cm wide q vn's with small blades MoS_2 - rare peg vn's
75	18	90		5		100		gd (qm)		7	amph. MoS_2 q-	1 - 2 mm amph. vn 20° CA in wk chl gd - amph. vn with Sn?

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78-1
DATE: OCTOBER 8, 1978 — SHEET seven of eight

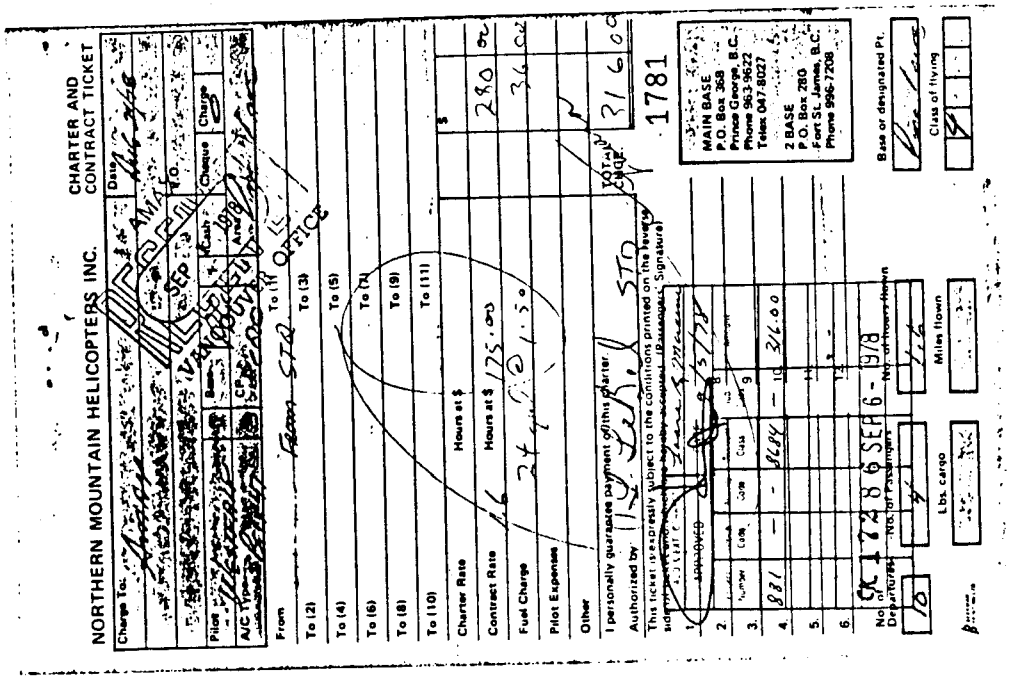
Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	%Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
60576	24	150	3,800	100		100			arg	6	q-F q-chl -calc	
												1·5 cm smokey q vn with vdg MoS_2 selvages
77	50	20		5		100		qm (gd)	wk chl	11	MoS_2 q-calc -chl	smokey q vn with chl-b-aspy
												trace cpy, MoS_2, py on fractures
78	30	0	3,900	10		100				14	q-aspy	hairline fractures with orange yellow fluorescent F
79	40	0		0		100				19	q-F q-calc chl	gradational contacts qm to gd - phases of same rock?
							200					
80	32	0	4,000	0		100				11	qtz-calc chl	majority of vn's are of orange yellow fluorescent F
81	44	0		0		100		qm (gr)		16	MoS_2 q-chl -calc	some peg vn's
												dk green chl aspy v's cut q-k peg vn in qm - locally gr composition
82	10	60	3,000	0		100			arg	4	q-chl -calc	
												1 - 1·5 cm q-serc-aspy-MoS_2 vn broken in large fault zone
83	8	0		0		100		gd (qm)		4	q-chl -calc	
84	38	0	4000	25		100				4	q-aspy	2 hairline fractures coated with orange yellow fluorescent F
							210					
85	150	10		0		100			chl	8	q-aspy q-calc	chl qm with 1·5 cm q-MoS_2-chl vn 50° CA
86	80	0	3,700	0		100				12	2nd b q-calc -chl	vdg MoS_2 in q-chl vn's
												rare peg vn cut by q-chl-MoS_2 vn's
87	10	0		0		100				9	2nd b MoS_2 q-calc	small chl slips cut MoS_2-chl vn's
												orange stn'd q-k peg cut by chl-serc-MoS_2-aspy vn's
88	8	10	3,000	0		100				12	2nd b q-calc -chl	
89	12	50		20		100		gd (qm)		7	2nd b gypsum	cg 2nd b-chl-aspy vn cuts amphibole vein - both vn's cut by gypsum
							220					
90	20	20	3,500	20		100		fg qm		6		contact 10° CA between qm-gd and vdg qm (chill margin?)
91	80	0		25		100				11		rare 5 mm rosettes of MoS_2 in q-k peg vn's

AMAX POTASH LIMITED — STQ PROPERTY — DDH STQ 78 - 1
DATE : OCTOBER 8, 1978 — SHEET eight of eight

Sample Number	Mo (ppm)	Sn (ppm)	F (ppm)	W (ppm)	Au (ppb)	% Rec	Depth (metres)	Graphic Log 1:200	Alt'n	Vein Density	Vein Type	REMARKS
60592	30	0	2,700	0		100				7	2nd b q	fg qm with feldspar (?) rich crinkly bands
												fg qm with "phases" of mg qm
93	14	10		15		100				6	peg q-calc-chl	fg qm to sub porphyritic qm, peg vns
												few hairline fractures with orange yellow fluorescent F coatings
94	8	0	2,100	10		100		fg qm		1	2nd b	
							230					
95	22	0		10		100				1	2nd b peg	
												peg vn's up to 10 cm wide in fg qm
96	28	0	2,900	0		100				0		fg qm contacts massive qK peg lens ?
								mixed zone				"mixed zone" of fg qm, q-K peg and sub porphyritic qm, minor dwlks
97	6	10		0		100				0		
								fg sub pqm				20 cm band of arg altered qm gradational to grey sub pqm
						100				0		fg sub pqm grades into mg sub pqm - massive and fresh
						100				0		
							240					
98	4	0	3,300	0		100		mg-sub-pqm		0		
99	4	10		0		100				0		
						100				0		massive lt. grey sub porphyritic b qm, smokey q phenocrysts
							246.9	EOH				

APPENDIX IV

CONTRACTOR'S INVOICES



NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Charge To: Amax — Date: June 22

P.O.

Pilot: Westphal — Base: PG — Cash — Cheque — Charge: C

A/C Type: Bell 47 — CF: C80 — Area: Fort Love

From — To (1)

To (2) — To (3) AMAX

To (4) — To (5)

To (6) — To (7) JUN 28 1978

To (8) — To (9) RECEIVED

To (10) — To (11) VANCOUVER OFFICE

			$
Charter Rate	Hours at $		
Contract Rate	1.0 Hours at $	175.00	175 00
Fuel Charge	15 gals @	1.50	23 00
Pilot Expenses			
Other			
TOTAL CHGE			198 00

I personally guarantee payment of this charter. Authorized by: C Hoffer 881

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers' Signature)

APPROVED DATE 6/28/78

9263

	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
1.				8.		
2.				9.		
3.				10.		
4.	881	—	—	8689	—	19800
5.				11.		
6.				12.		

CK 16973 JUN 29 1978

MAIN BASE
P.O. Box 368
Prince George, B.C.
Phone 963-9622
Telex 047-8027

2 BASE
P.O. Box 280
Fort St. James, B.C.
Phone 996-7208

No. of Departures	No. of Passengers	No. of hours flown	Base or designated Pt.
5	2	1.0	Fort Love
Lbs. cargo		Miles flown	Class of flying
			H

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Charge To: Amax — Date: June 21/78

P.O.

Pilot: [illegible] — Base: PG — Cash — Cheque — Charge

A/C Type: Bell 47 — CF: C80 — Area: Fort Love

From — To (1)

To (2) — To (3) AMAX

To (4) — To (5)

To (6) — To (7) JUN 28 1978

To (8) — To (9) RECEIVED

To (10) — To (11) VANCOUVER OFFICE

			$
Charter Rate	Hours at $		
Contract Rate	1.1 Hours at $	175.00	193 00
Fuel Charge	17 gals @	1.50	26 00
Pilot Expenses			
Other	Duplex 300.		
TOTAL CHGE			219 00

I personally guarantee payment of this charter. Authorized by: C Hoffer 881

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers' Signature)

APPROVED DATE 6/28/78

9262

	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
1.				8.		
2.				9.		
3.	881	—	—	8689	—	21900
4.				10.		
5.				11.		
6.				12.		

CK 16973 JUN 29 1978

MAIN BASE
P.O. Box 368
Prince George, B.C.
Phone 963-9622
Telex 047-8027

2 BASE
P.O. Box 280
Fort St. James, B.C.
Phone 996-7208

No. of Departures	No. of Passengers	No. of hours flown	Base or designated Pt.
4	6	1.1	Fort Love
Lbs. cargo		Miles flown	Class of flying
			H

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Charge To: Amax

Date June 24

P.O.

Pilot Westfall | Base PR | Cash | Cheque | Charge

A/C Type 65 47 | CF 1.3 | Area Kwanika

From | To (1)

To (2) | To (3)

To (4) | To (5)

To (6) | To (7)

To (8) | To (9)

To (10) | To (11)

AMAX RECEIVED JUL 4 1978 VANCOUVER OFFICE

	Hours at $	$
Charter Rate		
Contract Rate 1.3	Hours at $ 175.00	228 00
Fuel Charge 20 gals @ 1.50		30 00
Pilot Expenses		
Other		
TOTAL CHGE.		258 00

I personally guarantee payment of this charter.

Authorized by: C. Holden 881

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers' Signature)

9265

APPROVED DATE 7/4/78

	Project Number	Group Code	Activity Code	Account Class.	Sub Class	Amount
1.						
2.						
3.	881	—	—	9265	—	258 00
4.				10.		
5.				11.		
6.	CK. 17006 JUL 5 1978					

MAIN BASE
P.O. Box 368
Prince George, B.C.
Phone 963-9622
Telex 047-8027

2 BASE
P.O. Box 280
Fort St. James, B.C.
Phone 996-7208

No. of Departures	No. of Passengers	No. of hours flown	Base or designated Pt.
3	3	1.3	Kwanika

Lbs. cargo | Miles flown | Class of flying: R

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Charge To: Amax

Date June 24

P.O.

Pilot Westfall | Base PR | Cash | Cheque | Charge

A/C Type 65 47 | CF 1.2 | Area Kwanika

From | To (1)

To (2) | To (3)

To (4) | To (5)

To (6) | To (7)

To (8) | To (9)

To (10) | To (11)

AMAX RECEIVED JUL 4 1978 VANCOUVER OFFICE

	Hours at $	$
Charter Rate		
Contract Rate 1.2	Hours at $ 175.00	210 00
Fuel Charge 18 gals @ 1.50		27 00
Pilot Expenses		
Other		
TOTAL CHGE.		237 00

I personally guarantee payment of this charter.

Authorized by: C. Holden 881

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers' Signature)

9264

APPROVED DATE 7/4/78

	Project Number	Group Code	Activity Code	Account Class.	Sub Class	Amount
1.						
2.						
3.	881	—	—	9265	—	237 00
4.				10.		
5.				11.		
6.	CK. 17006 JUL 5 1978					

MAIN BASE
P.O. Box 368
Prince George, B.C.
Phone 963-9622
Telex 047-8027

2 BASE
P.O. Box 280
Fort St. James, B.C.
Phone 996-7208

No. of Departures	No. of Passengers	No. of hours flown	Base or designated Pt.
5	3	1.2	Kwanika

Lbs. cargo | Miles flown | Class of flying: R

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Charge To: Amax — Date: June 25/78

Pilot: Westfall — Base: Vanderhoof — Cash — Cheque — Charge — P.O.

A/C Type: Bell 47 — CF: 850 — 1978 — Prev: Fort Nelson

AMAX MINERALS CORP. VANCOUVER OFFICE

From

To (1)

To (2)

To (3)

To (4)

To (5)

To (6)

To (7)

To (8)

To (9)

To (10)

To (11)

	Hours at $	$
Charter Rate		
Contract Rate	1.6 Hours at $ 175.00	280 00
Fuel Charge	24 gals. @ 1.50	36 00
Pilot Expenses		
Other		
TOTAL CHGE		316 00

I personally guarantee payment of this charter. #881

Authorized by: [signature]

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers' Signature)

7/4/78

9267

	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
1.					7.	
2.					8.	
3.	881	—	—	9684	— 9.	316.00
4.					10.	
5.					11.	
6.					12.	

CK 17006 JUL 5 1978

MAIN BASE
P.O. Box 368
Prince George, B.C.
Phone 963-9622
Telex 047-8027

2 BASE
P.O. Box 280
Fort St. James, B.C.
Phone 996-7208

No. of Departures: 3

No. of Passengers: 3

No. of hours flown: 1.6

Base or designated Pt.: Vanderhoof

Lbs. cargo:

Miles flown:

Class of flying: 4

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Charge To: Amax — Date: June 25/78

Pilot: Westfall — Base: Vanderhoof — Cash — Cheque — Charge — P.O.

A/C Type: Bell 47 — CF: 660 — 1978 — Prev: Fort Nelson

AMAX MINERALS CORP. VANCOUVER OFFICE

From

To (1)

To (2)

To (3)

To (4)

To (5)

To (6)

To (7)

To (8)

To (9)

To (10)

To (11)

	Hours at $	$
Charter Rate		
Contract Rate	3.3 Hours at $ 175.00	578 00
Fuel Charge	50 gals @ 1.50	75 00
Pilot Expenses		
Other		
TOTAL CHGE		653 00

I personally guarantee payment of this charter. #880.

Authorized by: [signature]

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers' Signature)

ADD & EXT CORRECT — APPROVED — DATE 7/4/78

9266

	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
1.					7.	
2.					8.	
3.					9.	
4.	880	—	—	9684	— 10.	653.00
5.					11.	
6.					12.	

CK 17006 JUL 5 1978

MAIN BASE
P.O. Box 368
Prince George, B.C.
Phone 963-9622
Telex 047-8027

2 BASE
P.O. Box 280
Fort St. James, B.C.
Phone 996-7208

No. of Departures: 15

No. of Passengers: 5

No. of hours flown: 3.3

Base or designated Pt.: Fort Nelson

Lbs. cargo:

Miles flown:

Class of flying: 4

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

[redacted]

To (2) To (3)

To (4) To (5)

To (6) To (7)

To (8) To (9)

To (10) To (11)

	Hours at $	$
Charter Rate		
Contract Rate	Hours at $ 175.00	193 00
Fuel Charge	11 Mgal @ 1.50	26 00
Pilot Expenses		
Other		

I personally guarantee payment of this charter.

Authorized by: C. J. Hodgson

TOTAL CHGE. 219 00

0337

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted. (Passengers' Signature)

ADD & EXT. CORRECT

APPROVED

DATE 8/9/78

	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
1.						
2.						
3.						
4.	881	—	—	8484	TO.	219.00
5.					11.	
6.					12.	

K 17162 AUG 9 - 1978

No. of Departures

No. of Passengers

No. of hours flown

Base or designated Pt.

Lbs. cargo

Miles flown

Class of flying

NORTHERN MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

[redacted]

From Bozeman Apt To (1)

To (2) To (3)

To (4) To (5)

To (6) To (7)

To (8) To (9)

To (10) To (11)

	Hours at $	$
Charter Rate		
Contract Rate 1.8	Hours at $ 175.00	315 00
Fuel Charge	27 gals @ 1.50	41 00
Pilot Expenses		
Other		

I personally guarantee payment of this charter.

Authorized by: C. J. Hodgson

TOTAL CHGE. 356 00

0335

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted. (Passengers' Signature)

ADD & EXT. CORRECT

APPROVED

DATE 8/9/78

	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
1.						
2.						
3.						
4.	881	—	—	8484	10.	356.00
5.					11.	
6.					12.	

K 17162 AUG 9 - 1978

No. of Departures

No. of Passengers

No. of hours flown

Base or designated Pt.

Lbs. cargo

Miles flown

Class of flying

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

RECEIVED
JUN 15 1978

AMAX MINERALS EXPLORATION
601-535 Thurlow St.
Vancouver, B.C.
Project 881, ST prop, order # 2517

DATE June 13, 1978
INVOICE NO. 8042
CERTIFICATE NO. 8024

ITEM	DESCRIPTION		SUB-TOTAL	TOTAL
112	Geochem analysis for 9 el ents	@ $ 3.50	$ 392.00	
110	Geochem analysis for W	2.00	220.00	
112	Geochem analysis for F	3.00	336.00	
110	Geochem analysis for Sn	2.00	220.00	
	1 Staining Kit		85.00	
				$ 1,253.00

ADD & EXT. CORRECT — Diana S. McLaurin
APPROVED — DATE 6/15/78

Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
881	—	-	8691	-	125300

CK 16916 JUN 15 '78

TERMS – NET 30 DAYS

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

RECEIVED AUG 11 1978

AMAX MINERALS EXPLORATION
601-535 Thurlow Street
Vancouver, B.C.
project 881, STQ prep. Order # 2556

DATE Aug. 11, 1978.
INVOICE NO. 8083
CERTIFICATE NO. 8070/86.

ITEM	DESCRIPTION		SUB-TOTAL	TOTAL
1106	Geoch. analysis, 7 elements	@ $ 3.00	$ 3318.00	
1098	" " for W	2.00	2196.00	
580	" " for Sn	2.00	1160.00	
590	" " for F	2.75	1622.50	
929	" sample prep	0.20	185.80	
177	" rock prep	1.00	177.00	
	Freight as per enclosed receipts		550.20 ✓	
				$ 9209.50

APPROVED Laura B. Mcrae DATE 8/16/78

Project Number	Group Code				Amount
881	-	-	8691	-	9,209.50

CK. 17192 AUG 16 1978

TERMS – NET 30 DAYS

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

AMAX RECEIVED JUL 19 1978 VANCOUVER OFFICE

AMAX MINERALS EXPLORATION
601-535 Thurlow St.
Vancouver, B.C.
Project 881, order #

DATE July 19,1978
INVOICE NO. 8063
CERTIFICATE NO. 8059

ITEM	DESCRIPTION		SUB-TOTAL	TOTAL
119 ✓	Geochem analysis, 9 elements	@ $ 3.50	$ 416.50 ✓	
119 ✓	Geochem analysis for W	2.00	238.00 ✓	
119 ✓	Geochem prep	0.20	23.80 ✓	
				$ 678.30 ✓

APPROVED Laura B. Mcrae DATE 7/19/78

Project Number	Group Code				Amount
881			8691		678.30

CK. 17071 JUL 19 1978

TERMS – NET 30 DAYS

ARCTIC DIAMOND DRILLING LTD.

184 Industrial Road, Whitehorse, Yukon Y1A 2V1 (403) 667-6434

INVOICE #2037
October 12, 1978.

IN ACCOUNT WITH:

Amax Potash Ltd.,
601 - 535 Thurlow Street,
Vancouver, B.C.
V6E 3L6

Drilling charges for the period September 29 - October 11, 1978

Mobilization:			
Re: clause 16 of contract - 1/2 x $2,500 =		$1,250.00	
Moving in to first setup			
144 man hours @ $17.45 per hour =		2,512.80	$3,762.80
Hole: #78-1 x 45° x NQ x BQ			
Overburden x NQ			
0 - 33 = 33 feet @ $19.40 per foot =		$ 640.20	
Core Drilling x NQ			
33 - 140 = 107 ft. @ $19.40 per foot =		2,075.80	
Reaming Through Cave x NQ			
4 man hours @ $17.45 per hour =	$69.80		
2 machine hours @ $9.50 per hour =	19.00	88.80	
Reducing to BQ			
4 man hours @ $17.45 per hour =	$69.80		
2 machine hours @ $9.50 per hour =	19.00	88.80	
Core Drilling x BQ			
140 - 500 = 360 ft. @ $17.90 per ft. = $6,444.00			
500 - 810 = 310 ft. @ $18.90 per ft. =	5,859.00	12,303.00	
Materials Left in Hole			
9 only 10 ft. lengths BW casing @ $63.00 = $567.00			
1 only BW casing shoe =	180.80		
	$747.80		
Plus 10%	74.78	822.58	
Materials Left at Site			
8 only 16' x 8 x 8 @ $16.00 =	$128.00		
16 only 16' x 2 x 8 @ $9.07 =	145.12		
	$273.12		
Plus 10%	27.31	300.43	$16,319.61

Amount Total 20,082.41

...../2

Invoice #2037 - Amax Potash Ltd., - Cont'd

Brought Forward		$20,082.41
Core Boxes		
34 BQ and NQ core boxes @ $6.00 each =		$ 204.00
Use of Camp Facilities		
9 man days @ $17.50 per day =		$ 157.50
Demobilization		
Re: clause 18 of contract - 1/2 x $2,500. =	$1,250.00	
Moving out from last setup		
106 man hours @ $17.45 per hour =	1,849.70	$3,099.70
TOTAL INVOICE		$23,543.61

Zaunkyba.
#881

ACCOUNT CORRECT
APPROVED
Jean S Moraru
DATE 11/1/78

Project Number	Ground Code	Equipment Code	Budget Class	Sub Code	Amount
881	-	-	8681	-	23,386.11
881	-	-	8693	-	157.50
					23,543.61

CK 17492 NOV 2 1978

APPENDIX V

STATEMENT OF QUALIFICATIONS

NAME	J.R. Candy
ADDRESS	2426 Lawson Avenue West Vancouver, B.C.
EDUCATION	1st & 2nd year Science leading for a biology major, completed in May 1977 Capilano College
EXPERIENCE	1977 J.C. Stephens Exploration - prospector/expeditor 1977 AMAX Potash Limited - core splitter 1976 D.C. Syndicate - geologist assistant

STATEMENT OF QUALIFICATIONS

NAME	B.J. Paul
ADDRESS	7 - 503 Corydon Avenue Winnipeg, Manitoba
EDUCATION	BSc. Geology 1976 - University of Western Ontario MSc. Candidate in Geology - University of Manitoba - expected date of completion May 1979
EXPERIENCE	1977 University of Manitoba - Graduate Assistant 1976 University of Manitoba - Graduate Assistant 1975 Union Carbide - Geologist 1974 Ontario Division of Mines - Junior Assistant 1973 Ontario Division of Mines - Junior Assistant

ATOM PROSPECT

BAR PROSPECT

MUNSON PROSPECT

BOM PROSPECT

AMAX CAMP

1945 CAMP

OLD CAMP

SOUTH OF THIS LINE TOPOGRAPHIC CONTOURS IN FEET

GAGGART CREEK

SEAGULL CREEK

SYMBOLS

- Outcrop.
- Geological contact (defined, approximate, assumed).
- Fault (defined, approximate).
- Bedding (inclined, vertical).
- Quartz vein (inclined, vertical).
- Mineralized boulders.
- Boundary of rusty oxidized zone.
- Diamond drill hole.
- Trench.
- Claim post, claim location line.
- Claim boundary.
- Stream.
- Topographic contour, contour interval (20 metres and 100 feet).
- Road.

LEGEND

CRETACEOUS

- 16 — Alaskite: Seagull Creek Batholith, Swift River Stock.
- 16a — Biotite quartz monzonite: East and West plugs.
- 16s — Siliceous border phase of East and West plugs.

JURASSIC ?

- 14 — Diorite, quartz diorite. Dykes 14a Porphyritic andesite dykes, sills 14f Feldspar porphyry dykes 14h Hybrid gneissic diorite 14r Rhyolite 14l Hornblende lamprophyre.

MISSISSIPPIAN

- 8s — Siltstone.
- 8a — Argillite, cherty argillite.
- 8l — Limestone.
- 8c — Conglomerate.
- 8t — Bleached feldspathic tuff.
- 8k — Skarn.
- 8m — Amphibolite (may be correlative with 14h).
- 8ch — Chert.

AMAX POTASH LIMITED

STQ PROPERTY
STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GEOLOGICAL MAP

SCALE 400 0 400 METRES / 1200 0 1200 FEET

1 : 10,000

To accompany 1978 Final Report by: C.J. Hodgson, B.W. Kyba, J.L. LeBel, and B.J. Paul.

Vancouver — 6.6

N.T.S. Ref. 105 B 3

FIG. 4

LEGEND

CRETACEOUS

- 16 — Alaskite: Seagull Creek Batholith, Swift River Stock.
- 16a — Biotite quartz monzonite: East and West plugs.
- 16s — Siliceous border phase of East and West plugs.

JURASSIC ?

- 14 — Diorite, quartz diorite. Dykes 14a Porphyritic andesite dykes, sills 14f Feldspar porphyry dykes 14h Hybrid gneissic diorite 14r Rhyolite 14l Hornblende lamprophyre.

MISSISSIPPIAN

- 8s — Siltstone.
- 8a — Argillite, cherty argillite.
- 8l — Limestone.
- 8c — Conglomerate.
- 8t — Bleached feldspathic tuff.
- 8k — Skarn.
- 8m — Amphibolite (may be correlative with 14h).
- 8ch — Chert.

SYMBOLS

- Outcrop, limit of mapping.
- Geological contact (defined, approximate, assumed).
- Limit of talus and felsenmeer.
- Fault (defined, assumed).
- Bedding (inclined, vertical).
- Foliation (inclined, vertical).
- Jointing (inclined).
- Quartz vein.
- Boundary of rusty oxidized zone.
- Boundary of tourmaline veins.
- Mineralized boulders.
- Grid picket line.
- Claim post, claim location line.
- Claim boundary.
- Stream.
- Topographic contour, contour interval (10 metres).
- Road.

AMAX POTASH LIMITED

STQ PROPERTY
STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GRID AREA
GEOLOGICAL MAP

SCALE 200 0 200 METRES / 600 0 600 FEET

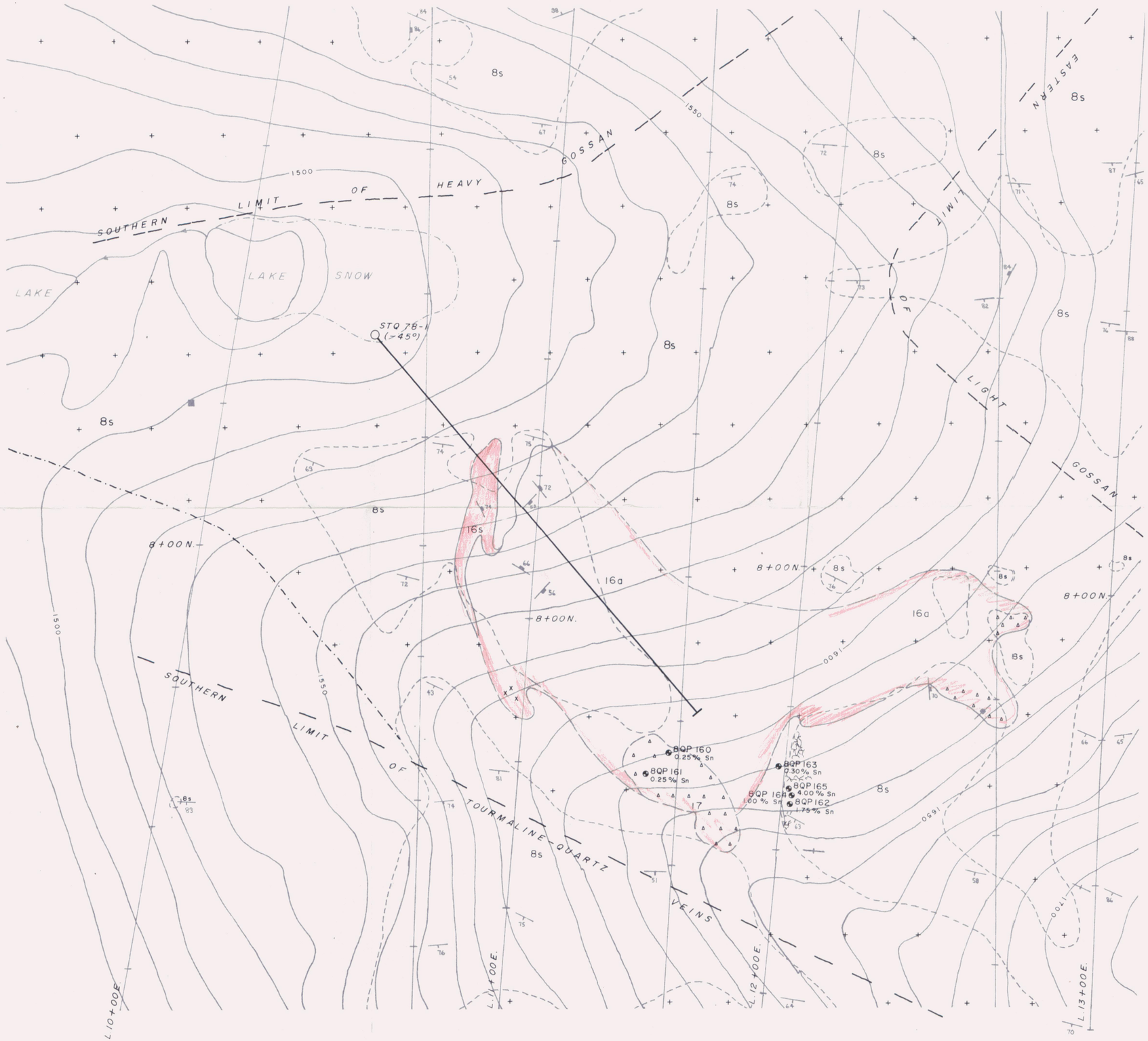
1 : 5,000

To accompany 1978 Final Report by: C. J. Hodgson, B.W. Kyba, J.L. LeBel, and B.J. Paul.

Vancouver — G.G.

N.T.S. Ref. 105 B 3

FIG. 5



LEGEND

- 17 — Hydrothermal tin-bearing breccia.
- 16a — Biotite quartz monzonite. Contact breccia.
- 16s — Siliceous border phase.
- 8s — Siltstone (hornfelsed in part).

SYMBOLS

- Outcrop, suboutcrop and/or boulder.
- Boulder crop, limit of boulder crop.
- Geological contact (defined, approximate).
- Jointing attitude (vertical, inclined).
- Bedding attitude (vertical, inclined).
- Area of quartz-cassiterite gash veins.
- 8QP 160 0.25% Sn — Assay sample; sample number; % Sn.
- Drill hole location and horizontal projection.
- Topographic contour; contour interval (10 metres).

AMAX POTASH LIMITED

STQ PROPERTY
STQ CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GEOLOGICAL MAP
WEST ZONE

C J Hodgson

SCALE 40 0 40 METRES
100 0 100 FEET
1:1,000

To accompany 1978 Final Report by: C. J. Hodgson, B. W. Kyba, J. L. LeBel, B. J. Paul.

Vancouver — G.G.

N. T. S. Ref. 105 B 3
FIG. 6

ATOM PROSPECT

MUNSON PROSPECT

BDM PROSPECT

1945 CAMP

OLD CAMP

AMAX CAMP

KYBA PEAK

BAR PROSPECT

SOUTH OF THIS LINE TOPOGRAPHIC CONTOURS IN FEET

Godbout Creek

Seagull Creek

SYMBOLS

- Soil — BQU 170
- Silt — BQU 86 — Sample site, sample number, (for analytical results see APPENDIX II).
- Rock chip — BQC 96
- Diamond drill hole — DDH #808N 400W DDH
- Trench
- Claim post, claim location line
- Claim boundary
- Stream
- Topographic contour, contour interval (20 metres and 100 feet) — 1500
- Road

LEGEND

Metal Distribution in Soil.

- Sn ≥ 75 p.p.m.
- Mo ≥ 10 p.p.m.
- F ≥ 1000 p.p.m.
- W ≥ 10 p.p.m.
- W ≥ 50 p.p.m.
- Pb ≥ 100 p.p.m.

AMAX POTASH LIMITED

C J Hodgson

STQ PROPERTY
STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GEOCHEMICAL MAP

SCALE 400 0 400 METRES / 1200 0 1200 FEET

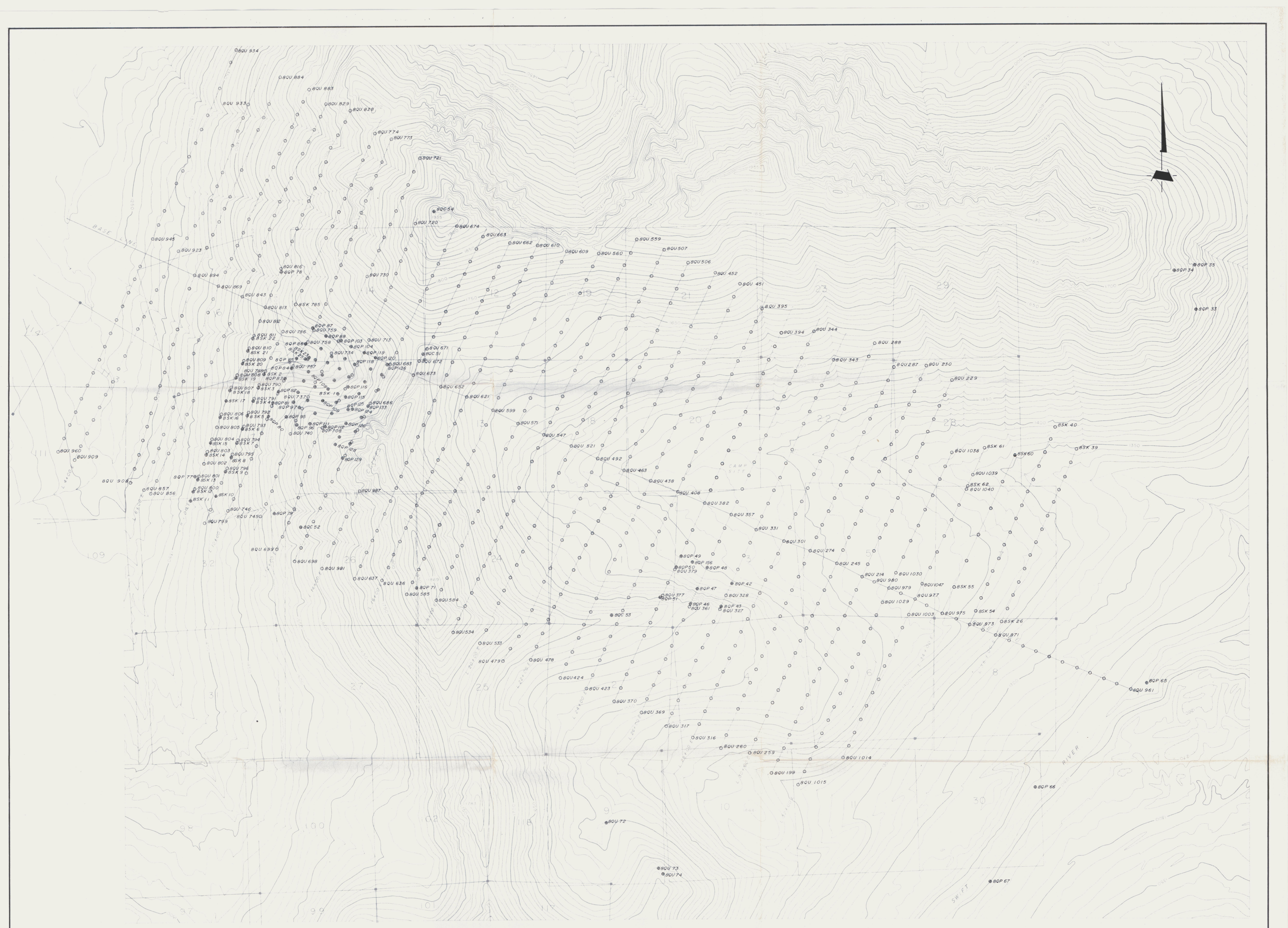
1:10,000

To accompany 1978 Final Report by : C. J. Hodgson, B.W. Kyba, J. L. LeBel, and B.J. Paul.

Vancouver — G.G.

N.T.S. Ref. 105 B 3

FIG. 8



SYMBOLS

- Road.
- Topographic contour, contour interval (10 metres).
- Stream.
- Claim post, claim location line.
- Claim boundary.
- Grid picket line.
- ⊙8QU 801 — Soil sample, sample number. } For geochemical results see Appendix II.
- ⊕8SK 1 — Rock chip sample, sample number. } For geochemical results see Appendix II.

AMAX POTASH LIMITED

STQ PROPERTY
STQ CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GRID AREA
GEOCHEMICAL MAP

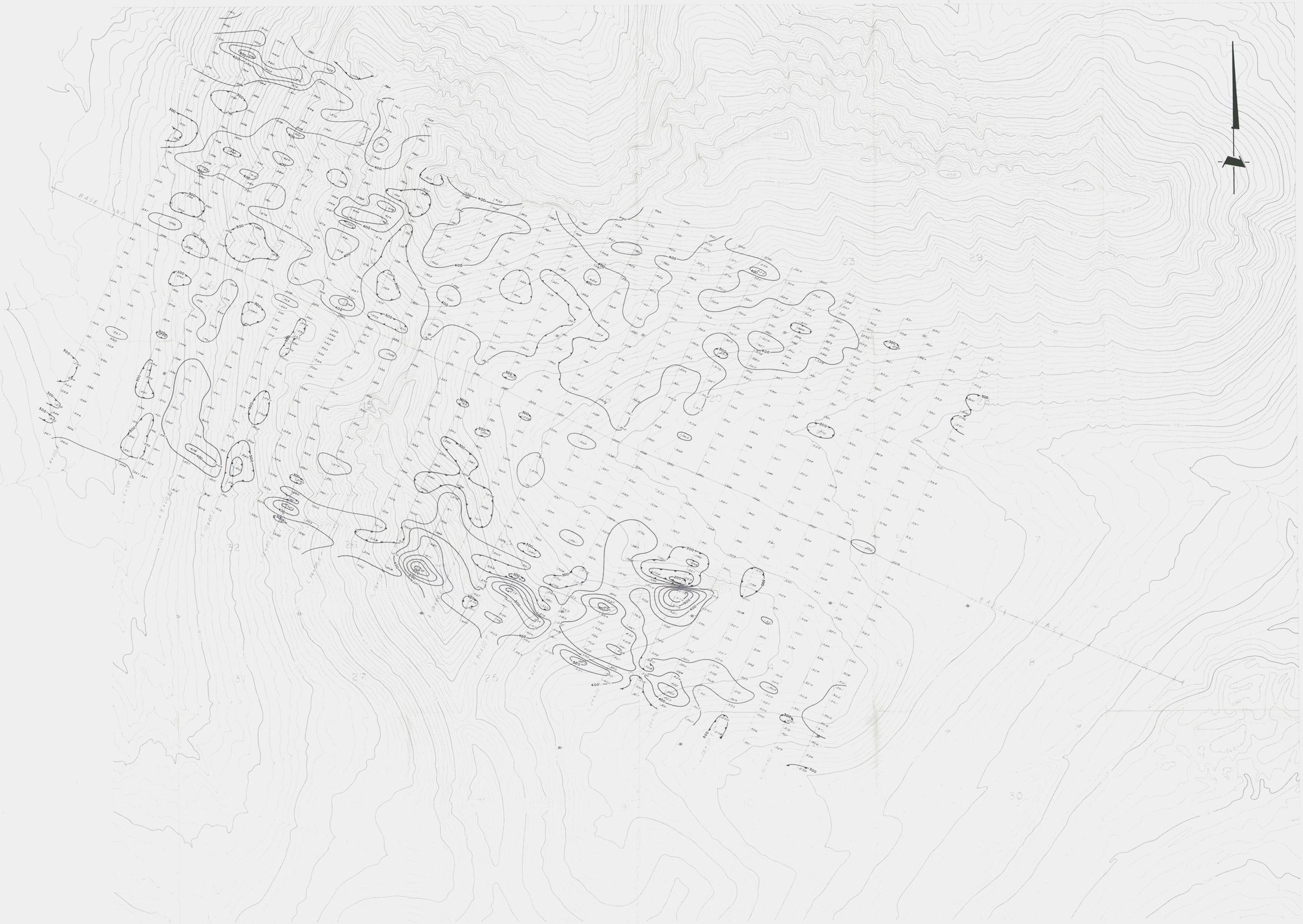
SCALE 800 0 800 FEET
200 0 200 METRES
1:5,000

C J Hodgson

To accompany 1978 Final Report by: C.J. Hodgson, B.W. Kyba, J.L. Legel, and B.J. Paul.

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N.T.S. Ref. 105 B 3
FIG. 9


BASE LINE
TIE LINE
L 10+00E
L 8+00E
L 6+00E
L 4+00E
L 2+00E
L 0+00E
L 2+00W
L 4+00W
L 6+00W
L 8+00W
L 10+00W
L 12+00W
L 14+00W
L 16+00W
L 18+00W
L 20+00W
L 22+00W
L 24+00W
L 26+00W
L 28+00W
L 30+00W
L 32+00W
L 34+00W
L 36+00W
L 38+00W
L 40+00W
L

LOOKING NORTHEAST

Elev. 1,600 m.

1,500

1,400

1,300

1,200

17 ?

8s

16s

16a

8s

8s

16

p.p.m W 500 1,000

p.p.m Sn 0 100 200

p.p.m. F (log scale) 2,000 10,000 20,000 30,000 35,000

LEGEND

- Talus.
- 17 — Hydrothermal tin-bearing breccia.
- 16a — Biotite quartz monzonite.
- 16s — Siliceous border phase.
- 16 — Alaskite.
- 8s — Siltstone.

AMAX POTASH LIMITED

STQ PROPERTY

STQ CLAIMS

WATSON LAKE MINING DISTRICT — YUKON TERRITORY

DRILL HOLE CROSS-SECTION

STQ 78-1

SCALE 40 0 40 METRES / 100 0 100 FEET

1 : 1,000

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FIG. 12