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SUMMARY

The Erie Creek property is situated 11 km (7 miles) northwest of Salmo, B.C., along the east slope of Erie Creek; it consists of two claims, JUNE 1 and 2, totalling 12 units.

The property was formerly covered by the DAL and HATTIE claims and explored by McIntyre Porcupine Mines. The area was staked in 1976 by AMAX Potash Limited. Work carried out in 1976 includes 14 km (8.7 miles) of line cutting, and geochemical soil sampling.

Geochemical soil sampling was initiated to outline the area of interest. A total of 209 soil samples and 9 rock samples were analyzed for 10 elements. A prominent molybdenum, copper and tungsten soil geochemistry anomaly about 1060 by 200 metres in dimension was outlined as a result of the program. Geologic mapping and further testing of the anomalous area is warranted.

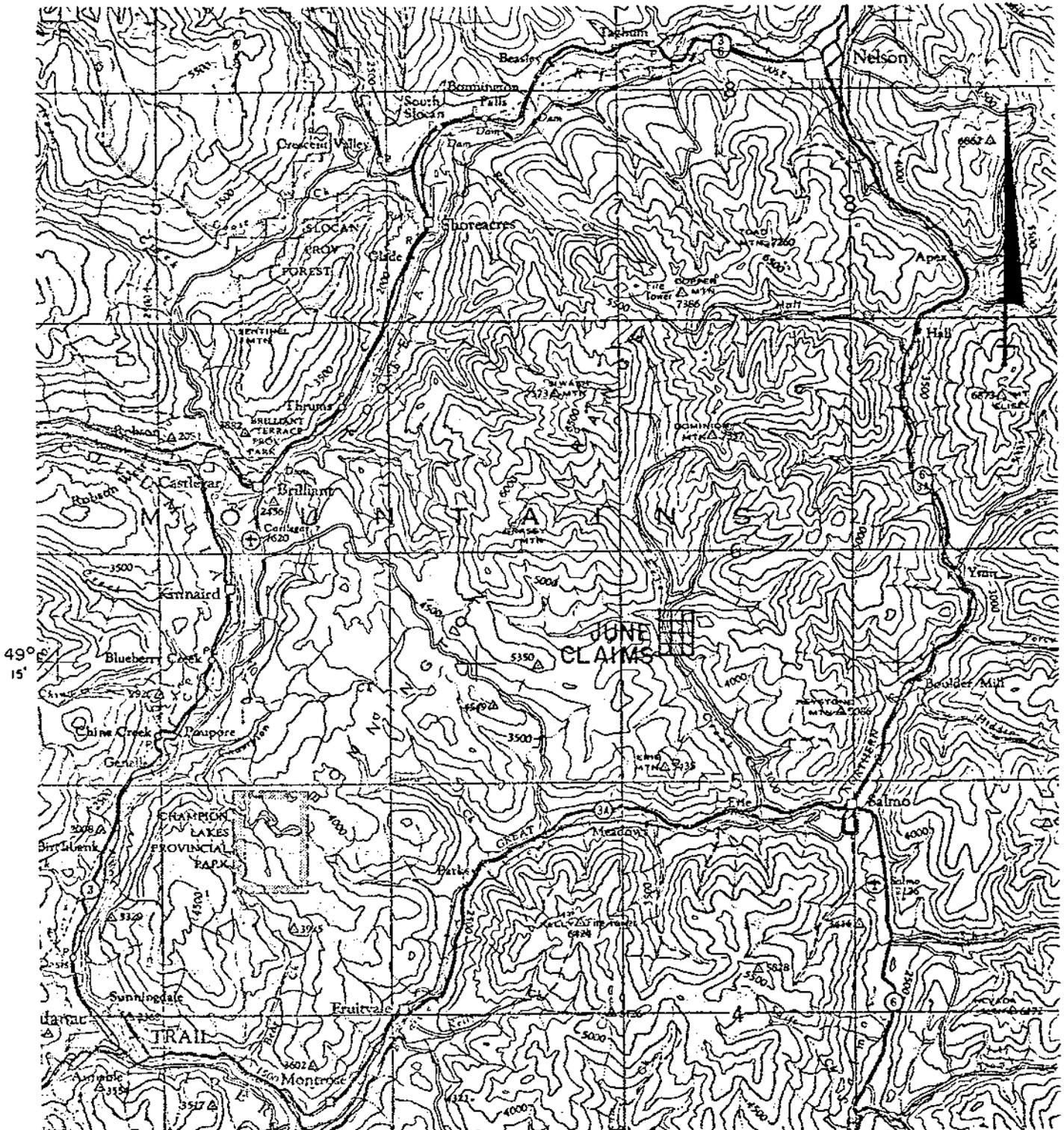
INTRODUCTION

LOCATION AND ACCESS

The Erie Creek property is situated 11 km (7 miles) northwest of Salmo, and 29 km (18 miles) northeast of Trail, near the junction of Grassy Creek with Erie Creek. Access is by logging road from Highway 3, 10 km (6 miles) to the south. (Figure 1)

PROPERTY

The property consists of two claims, JUNE 1 (4 units) and JUNE 2 (8 units) staked for AMAX Potash Limited and recorded on June 21, 1976.



49° 15' E

117° 15' #6307

AMAX POTASH LIMITED

ERIE CREEK PROPERTY
 JUNE CLAIMS
 NELSON M. D. — B. C.

LOCATION MAP

Robert E. Allen



1 : 250,000

HISTORY

Crown Grant Claims along the west side of Erie Creek date back to the early 1900's. Numerous old pits on the property indicate that work was carried out at that time. The ground on the east side of Erie Creek was formerly covered by the DAL and HATTIE claims and explored by McIntyre Porcupine Mines.

PHYSIOGRAPHY

The JUNE claims lie on the east slope of Erie Creek between elevations 915 and 1400 M (3000 and 4700 feet). Topography is steep but not rugged.

There is less than ten percent outcrop on the property. Deposits of well cemented glacial till up to 9 M (30 feet) thick cover the lower slopes of Erie Valley.

Relatively sparse but highly varied stands of Cedar, Douglas Fir, Balsam Fir, Hemlock, Larch, Birch, Poplar and Alder cover the ground.

SCOPE OF EXPLORATION PROGRAM

The purpose of the 1976 Field Program was to provide a preliminary evaluation of the prospect. Line cutting totalling 14 km (8.7 miles), and systematic geochemical soil sampling were carried out. A topographic base map as prepared from air photos by Pacific Survey Corporation (Figure 2).

GEOCHEMISTRY

METHOD

A picketed grid was established consisting of lines 400

feet apart and marked every 100 feet. Soil samples were taken at 200 foot spacings along these lines.

At almost all sites samples were taken at depths of 6 to 24 inches, well below the A horizon. The material sampled was mainly brownish grey glacial till or talus fines. Soil samples were taken and placed in kraft paper bags. A total of 209 soil samples and 9 rock samples were collected and analyzed for ten elements by Rossbacher Laboratory.

DISCUSSION OF RESULTS

Results of the soil survey for molybdenum, copper and tungsten are presented on a 400 scale map (Figure 2). They reveal a prominent molybdenum, copper and tungsten anomaly about 1060 metres long by 600 metres wide.

Threshold values for molybdenum are considered to be 8 ppm; peaks range from 30 to 46 ppm. This contrasts with the relatively higher values obtained in rock (up to 220 ppm).

Copper values range up to 2000 ppm with a threshold of about 200 ppm and are roughly comparable to values obtained in rock.

Tungsten values range up to 600 ppm with a threshold of 20 ppm and are also roughly comparable to values obtained in rock.

Except for a number of weakly anomalous lead values (up to 74 ppm) all other elements Ni, Co, Fe, Ag, Zn are near background levels.

One soil profile, 6GA 440-442, taken at a depth of 0.5 to 1.5 metres indicates a moderate enrichment of molybdenum and a slight enrichment of copper with depth.

W. H. Allen

APPENDIX I
STATEMENT OF COSTS

<u>Summary of Work</u>	<u>Period of Work</u>
Topographic Base Map 8.67 miles of Linecutting Geochemical Survey	September 28 - October 2, 1976
 <u>PERSONNEL</u>	
D.G. Allen, P.Eng. - 601-535 Thurlow St., Vancouver	5 days @ \$99.00 = \$ 495.00
B.W. Kyba, Geologist - 1604-1160 Haro St., Vancouver	5 days @ \$43.40 = 217.00
D.G. Baker, Sr. Assist-477 Laurentian Cr., Coquitlam	5 days @ \$36.17 = 180.85
 <u>LINECUTTING</u> - Martinson Linecutting & Staking 8.67 l.miles @ \$170.00	= 1,473.90
6860 Fairmont St. Powell River	
 <u>TOPOGRAPHIC BASE MAP</u> - Pacific Survey Corp. 1409 W. Pender St, Vancouver	= 998.00
 <u>GEOCHEMICAL ANALYSES</u>	
58 soil samples 9 elements - Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb	@ \$ 3.30 = 191.40
151 soil samples 7 elements - Mo, Cu, Mn, Fe, Ag, Zn, Pb,	@ 2.85 = 430.35
218 soil samples - Tungsten	= 436.00
7 rock samples 9 elements - Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb	@ \$ 3.30 = 23.10
 <u>BOARD</u> - 15 man days @ \$20.00/day	= 300.00
 <u>VEHICLE</u> - 1 4 x 4 Truck 5 days @ \$25.00/day	= 125.00
 <u>REPORT PREPARATION & DRAFTING</u>	= 400.00
	<hr/> \$5,270.00

This work to be applied as 4 years on June #2 and 3 years on June #1

APPENDIX II

GEOCHEMICAL ANALYTIC PROCEDURE

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 ml 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

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

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 35% 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.

v

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 HxI_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% HClO₄. 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.

$$1 \text{ ppm} = .0292 \text{ oz/ton}$$

conversion factor

$$\text{oz/ton} = .0292 \times \text{ppm Ag}$$

Zn Geochemical AA Setting

Lamp Zn

Current 8 #3 Slit 20A

Wave length 2133 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, H₂O, HCl, HNO₃, HClO₄, fumed to HClO₄ -
make up to 100 mls H₂O

1000, 100 gamma/ml and 100 ml by dilution in 20 % HClO₄

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% HClO₄ 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, HNO₃, and fumed into
HClO₄, dilute to 1 liter

Pipette

1, 2, 10, 20 mls into 100 ml vol flasks diluted to mark
with 20% HClO₄

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

Pipette

.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% HClO₄. 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 N₂O 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 MoO₃ (acid molybdic) with 20 mls H₂O, 6
lumps NaOH, 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% AlCl₃
and dilute to 100 mls with 20% HClO₄

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 H₂O, HCl, HNO₃,

HClO₄, heat to HClO₄ fumes. Add HClO₄ to 100 mls + 100 mls

H₂O, warm, dilute to 500 mls

Pipette

1, 5, 10, 20, 30, 50, 80 mls 10,000 gamma/ml dilute to 100 mls with 20% HClO₄ 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, HNO₃, HClO₄ to perchloric fumes, dilute to 100 ml H₂O

1000 gamma/ml and 100 gamma/ml Successive 10x dilutions in 20% HClO₄

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 Ni

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, H₂O, HCl, HNO₃ until dissolved, add

HClO₄, fume dilute to 100 mls

1000 gamma/ml 10x dilution above in 20% HClO₄

2000 gamma/ml 20 mls 10,000 gamma/ml - dilute to 100 mls in
20% HClO₄

100 gamma/ml 10x dilution 1000 gamma/ml dilute to 100 mls in
20% HClO₄

200 gamma/ml 10x dilution 2000 gamma/ml dilute to 100 mls in
20% HClO₄

Pipette

1, 2, 3, 5, 8, 10 mls 100 gamma/ml - dilute to 100 mls with
20% HClO₄ 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 $\text{Na}_2\text{WO}_4 \cdot 2\text{H}_2\text{O}$ 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 red 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 ($80^\circ C$)
7. Cool to less than $15^\circ C$
8. Add 1 ml 20% KSCN, mix (if lemon 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 SnCl₂
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 H₂O, 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 H₂O to methanol to match. Seal tightly

SnCl₂ - 15% in .15% HCl

300 gm SnCl₂ . 2H₂O + 300 mls HCl, until SnCl₂ dissolved

dilute to 2 liters

KSCN - 5% in H₂O

Mixed SnCl₂ - KSCN

3 parts SnCl₂ 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 $m\mu$ against a demineralized water blank
4. Read again at 400 $m\mu$ and subtract from sulphate reading
5. Calculate ppm sulphate from the graph

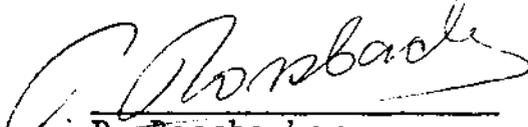
Reagent

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 $[Al(ClO_4)_3 \cdot 3H_2O]$ (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. Roszbacher

APPENDIX III
GEOCHEMICAL ANALYSES

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

TO: *Amrax Exploration Inc.*
 PROJECT: *794/699*

CERTIFICATE NO. *6192/6191*
 INVOICE NO.
 DATE ANALYSED *25/10/76*

No.	Sample	pH	Mo	Cu							W	No.
01	76GB S 15										100	01
02	16										35	02
03	17										100	03
04	18										35	04
05	19										50	05
06	20										35	06
07	21										100	07
08	22										150	08
09	23										300	09
10	24										200	10
11	25										100	11
12	26										35	12
13	27										100	13
14	28										35	14
15	29										5	15
16	30										0	16
17	31										0	17
18	32										0	18
19	33										0	19
20	34										0	20
21	35										2	21
22	36										5	22
23	37										5	23
24	38										10	24
25	39										20	25
26	40										10	26
27	41										5	27
28	42										2	28
29	43										2	29
30	44										150	30
31	45										50	31
32	L 52										0	32
33	53										2	33
34	MTD										5	34
35												35
36												36
37												37
38												38
39												39
40												40

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 6210

TO: *Amax Exploration Inc.*
 PROJECT *794*

INVOICE NO.

DATE ANALYSED *26/10/76*

No.	Sample	pH	Mo	Cu																	No.	
01	<i>16EBS 87</i>																					01
02	<i>88</i>																					02
03	<i>89</i>																					03
04	<i>90</i>																					04
05	<i>91</i>																					05
06	<i>92</i>																					06
07	<i>93</i>																					07
08	<i>94</i>																					08
09	<i>95</i>																					09
10	<i>96</i>																					10
11	<i>97</i>																					11
12	<i>98</i>																					12
13	<i>99</i>																					13
14	<i>100</i>																					14
15	<i>101</i>																					15
16	<i>102</i>																					16
17	<i>103</i>																					17
18	<i>104</i>																					18
19	<i>105</i>																					19
20	<i>106</i>																					20
21	<i>107</i>																					21
22	<i>108</i>																					22
23	<i>109</i>																					23
24	<i>110</i>																					24
25	<i>111</i>																					25
26	<i>112</i>																					26
27	<i>113</i>																					27
28	<i>114</i>																					28
29	<i>115</i>																					29
30	<i>116</i>																					30
31	<i>117</i>																					31
32	<i>118</i>																					32
33	<i>ATC</i>																					33
34																						34
35																						35
36																						36
37																						37
38																						38
39																						39
40																						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

TO: *Amex Exploration Inc*
 PROJECT *794*

CERTIFICATE NO. *6191/6196*
 INVOICE NO.
 DATE ANALYSED *25/10/76*

No.	Sample	pH	Mo	Cu							W	No.
01	76 GAS 431										20	01
02	432										35	02
03	433										100	03
04	434										100	04
05	435										100	05
06	436										200	06
07	437										100	07
08	438										20	08
09	439										20	09
10	440										150	10
11	441										100	11
12	442										150	12
13	T 443										100	13
14	444										2	14
15	445										300	15
16	446										2	16
17	S 447										50	17
18	448										50	18
19	T 449										20	19
20	S 450										20	20
21	451										20	21
22	T 452										0	22
23	S 453										0	23
24	T 454										200	24
25	S 455										50	25
26	456										150	26
27	457										150	27
28	458										150	28
29	T 460										0	29
30	NTE										0	30
31												31
32												32
33												33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

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

CERTIFICATE OF ANALYSIS

TO: *Amex Exploration Inc.*
 PROJECT: *699, 794*

CERTIFICATE NO. *6210 6192/6196/619*
 INVOICE NO.
 DATE ANALYSED *25/10/76*

No.	Sample	pH	Mo	Cu						W	No.
01	764KS537									50	01
02	538									150	02
03	539									2	03
04	540									2	04
05	541									2	05
06	542									2	06
07	543									100	07
08	544									35	08
09	545									300	09
10	546									300	10
11	547									50	11
12	548									200	12
13	549									300	13
14	550									NS	14
15	551									200	15
16	552									35	16
17	553									50	17
18	554									0	18
19	555									0	19
20	556									0	20
21	557									0	21
22	T558									0	22
23	L559									0	23
24	S560									0	24
25	561									0	25
26	562									0	26
27	563									0	27
28	T564									0	28
29	T565									0	29
30	T566									0	30
31	T567									2	31
32	T568									0	32
33	T569									0	33
34	T570									0	34
35	764BT571									0	35
36	764KT572									0	36
37	T573									0	37
38	T574									0	38
39	S575									100	39
40	G-3									180	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

TO: *Ammax Exploration Inc*
 PROJECT *794*

CERTIFICATE NO. *6210*
 INVOICE NO.
 DATE ANALYSED *26/10/76*

No.	Sample	pH	Mo	Cu							W	No.
01	<i>76 GKS 602</i>										<i>35</i>	01
02	<i>603</i>										<i>70</i>	02
03	<i>604</i>										<i>70</i>	03
04	<i>605</i>										<i>35</i>	04
05	<i>606</i>										<i>50</i>	05
06	<i>607</i>										<i>35</i>	06
07	<i>608</i>										<i>20</i>	07
08	<i>609</i>										<i>20</i>	08
09	<i>610</i>										<i>20</i>	09
10	<i>611</i>										<i>5</i>	10
11	<i>612</i>										<i>0</i>	11
12	<i>613</i>										<i>0</i>	12
13	<i>614</i>										<i>0</i>	13
14	<i>615</i>										<i>5.50</i>	14
15	<i>616</i>										<i>20</i>	15
16	<i>617</i>										<i>20</i>	16
17	<i>618</i>										<i>10</i>	17
18	<i>619</i>										<i>40</i>	18
19	<i>620</i>										<i>10</i>	19
20	<i>621</i>										<i>35</i>	20
21	<i>622</i>										<i>140</i>	21
22	<i>623</i>										<i>20</i>	22
23	<i>624</i>										<i>5</i>	23
24	<i>625</i>										<i>0</i>	24
25	<i>626</i>										<i>0</i>	25
26	<i>627</i>										<i>0</i>	26
27	<i>628</i>										<i>5</i>	27
28	<i>629</i>										<i>0</i>	28
29	<i>630</i>										<i>0</i>	29
30	<i>631</i>										<i>0</i>	30
31	<i>632</i>										<i>0</i>	31
32	<i>633</i>										<i>0</i>	32
33	<i>634</i>										<i>0</i>	33
34	<i>635</i>										<i>2</i>	34
35	<i>636</i>										<i>2</i>	35
36	<i>637</i>										<i>2</i>	36
37	<i>638</i>										<i>2</i>	37
38	<i>639</i>										<i>2</i>	38
39	<i>640</i>										<i>2</i>	39
40	<i>MTD</i>										<i>20</i>	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

TO: *Amex Exploration Inc*
PROJECT *794*

CERTIFICATE NO. *6218*
INVOICE NO.
DATE ANALYSED *26/10/71*

No.	Sample	pH	Mo	Cu									No.
01	<i>76GKS 641</i>										<i>W</i>		01
02	<i>642</i>										<i>5</i>		02
03	<i>643</i>										<i>35</i>		03
04	<i>644</i>										<i>50</i>		04
05	<i>645</i>										<i>100</i>		05
06	<i>646</i>										<i>40</i>		06
07	<i>647</i>										<i>2</i>		07
08	<i>648</i>										<i>2</i>		08
09	<i>649</i>										<i>20</i>		09
10	<i>650</i>										<i>80</i>		10
11	<i>MTD</i>										<i>2400</i>		11
12													12
13													13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
32													32
33													33
34													34
35													35
36													36
37													37
38													38
39													39
40													40

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GEOCHEMICAL ANALYSTS & ASSAYERS

2775 S SPRINGER AVE.,
 BURNABY, B. C.
 CANADA
 TELEPHONE: 299-6910
 AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 6196

TO:

194

INVOICE NO.

PROJECT

DATE ANALYSED

No.	Sample	pH	Mo	Cu	Al ₂ O ₃	Ca	Mg	Ti	Ag	Zn	Pb		No.
01	76 GBS 15		30	306	24	16	400	3.8	1.6	84	74		01
02	16		5	96	18	14	600	3.1	1.2	96	26		02
03	17		12	256	16	12	260	2.0	.6	50	22		03
04	18		12	286	30	14	220	3.6	.8	52	30		04
05	19		6	356	34	20	240	3.8	.8	70	34		05
06	20		5	346	30	28	400	3.6	.8	142	32		06
07	21		12	460	22	16	230	3.8	1.0	66	28		07
08	22		7	226	22	18	560	3.9	1.0	78	30		08
09	23		30	520	28	16	420	5.0	.8	74	22		09
10	24		5	980	26	16	400	5.9	1.4	86	22		10
11	25		2	194	2.8	16	520	4.5	1.0	76	28		11
12	26		2	76	2.6	26	540	3.2	.6	76	22		12
13	27		1	390	46	52	1200	5.8	.8	116	30		13
14	28		1	342	42	32	600	5.3	.8	70	22		14
15	29		1	212	50	50	880	4.9	.8	90	24		15
16	30		2	140	50	44	140	4.9	.6	134	32		16
17	31		1	94	26	30	100	4.0	.8	136	42		17
18	32		3	94	26	28	880	4.2	.8	114	42		18
19	33		2	146	34	32	680	4.6	.8	110	32		19
20	34		2	198	34	30	940	4.5	.8	102	56		20
21	35		2	160	38	28	1000	5.3	.8	80	30		21
22	36		1	222	30	24	1020	4.7	.6	78	36		22
23	37		1	540	34	28	1400	4.5	.8	126	56		23
24	38		3	680	30	20	480	5.1	1.0	82	24		24
25	39		3	840	22	16	400	4.4	1.0	62	22		25
26	40		2	420	28	24	1220	4.5	.8	134	32		26
27	41		2	174	22	20	920	3.9	.6	70	32		27
28	42		2	148	24	16	480	3.5	.6	62	32		28
29	43		1	126	24	16	400	3.8	.6	70	44		29
30	44		6	1000	44	20	600	6.9	.8	94	52		30
31	45		2	290	18	16	760	4.0	.6	74	40		31
32	⊖ 26			24	-	6.0	410	-	.2	32	-		32
33													33
34													34
35													35
36													36
37													37
38													38
39													39
40													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. 6210

TO: *Ammax Exploration Inc*

INVOICE NO.

PROJECT *794*

DATE ANALYSED

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	No.
01	76935 46		1	10	600	1.9	0.6	80	18	01
02	47		1	12	760	2.4	.8	120	22	02
03	48		3	16	240	2.8	.8	80	22	03
04	49		1	12	900	2.5	.4	120	20	04
05	50		2	8	280	2.5	.6	70	18	05
06	51		2	4	220	1.5	.2	40	6	06
07	54		3	100	320	3.9	1.0	60	30	07
08	55		2	50	600	3.5	.8	70	26	08
09	56		3	200	420	4.2	.8	66	34	09
10	57		4	140	400	4.1	1.0	80	26	10
11	58		2	220	480	3.9	.6	80	44	11
12	59		8	120	440	3.4	.6	60	22	12
13	60		8	80	200	2.6	.4	45	22	13
14	61		3	20	1160	3.1	.6	130	26	14
15	62		3	28	480	4.0	.6	64	22	15
16	63		23	260	360	3.5	.6	66	34	16
17	64		11	180	340	3.8	1.0	80	30	17
18	65		28	300	260	3.6	1.0	50	26	18
19	66		3	180	400	4.0	1.0	60	26	19
20	67		1	160	240	3.4	.8	50	26	20
21	68		2	220	560	5.2	1.0	60	22	21
22	69		3	100	400	3.7	.8	70	22	22
23	70		2	100	360	4.2	1.0	60	24	23
24	71		2	100	160	3.2	1.0	40	20	24
25	72		3	200	180	4.3	1.0	50	20	25
26	73		2	100	200	4.2	.8	60	24	26
27	74		3	80	280	3.8	.8	70	22	27
28	75		2	60	480	3.7	.8	80	26	28
29	76		1	170	440	4.7	.8	70	22	29
30	77		1	130	400	5.0	1.0	120	26	30
31	78		1	100	640	4.3	.8	130	22	31
32	79		1	60	680	3.8	.8	120	22	32
33	80		1	120	670	4.9	1.0	140	26	33
34	81		2	50	1800	3.9	1.0	200	40	34
35	82		1	100	400	4.2	.8	150	30	35
36	83		2	40	1400	3.9	.6	140	22	36
37	84		2	60	600	3.7	.8	120	22	37
38	85		3	80	600	4.2	.6	100	22	38
39	86		3	96	320	4.7	.8	100	20	39
40	G 22		1	244	240	2.0	1.0	120	104	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. 6210

TO: *Ammax Exploration Inc*

INVOICE NO.

PROJECT 794

DATE ANALYSED

No.	Sample	pH	Mo [✓]	Cu [✓]	Mn	Fe	Ag	Zn	Pb	No.
01	766135 87		2	120	560	4.8	.8	110	20	01
02	88		1	60	280	4.2	.8	80	18	02
03	89		2	60	200	4.0	.8	60	22	03
04	90		1	44	150	4.2	.8	70	32	04
05	91		1	84	200	4.5	.8	50	22	05
06	92		1	80	440	4.6	.8	60	22	06
07	93		1	60	320	4.1	.8	60	26	07
08	94		2	60	600	4.4	.6	60	26	08
09	95		2	64	120	3.8	.8	40	20	09
10	96		2	146	360	4.5	.8	80	26	10
11	97		1	80	480	4.1	.8	110	28	11
12	98		1	100	1400	5.2	.8	140	32	12
13	99		1	82	640	4.2	1.0	120	30	13
14	100		1	52	320	4.7	1.4	240	176	14
15	101		1	100	940	4.8	1.0	120	28	15
16	102		1	110	1400	4.4	.8	140	42	16
17	103		1	80	1280	4.7	.8	100	36	17
18	104		1	154	1800	5.3	1.0	110	26	18
19	105		2	140	1240	4.6	.8	90	30	19
20	106		1	196	560	4.3	0.8	80	30	20
21	107		1	100	560	3.9	.8	60	24	21
22	108		5	210	1000	5.3	.8	90	36	22
23	109		2	240	280	5.2	1.0	60	22	23
24	110		1	124	400	3.7	.8	50	18	24
25	111		1	120	680	3.0	.6	65	22	25
26	112		1	300	400	3.8	.8	80	46	26
27	113		2	500	410	3.5	.8	110	24	27
28	114		1	260	480	6.3	.8	70	22	28
29	115		4	110	400	3.8	.6	80	24	29
30	116		1	50	640	3.1	.6	66	24	30
31	117		1	40	760	4.0	.8	110	50	31
32	118		1	36	400	2.8	.6	60	26	32
33	426		6	20	410	2.3	.2	40	24	33
34										34
35										35
36										36
37										37
38										38
39										39
40										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. 6196

TO: 194
PROJECT

INVOICE NO.

DATE ANALYSED

No.	Sample	pH	Mo	Cu	Al	Co	Mn	Fe	Ag	Zn	Pb	No.
01	76 GAS 430		10	244	26	16	480	4.0	.8	66	34	01
02	431		4	152	26	18	440	4.0	.8	68	32	02
03	432		10	262	30	16	480	3.9	.6	54	34	03
04	433		18	620	26	14	260	3.8	1.0	50	46	04
05	434		12	362	30	16	520	3.7	1.0	56	34	05
06	435		10	166	22	14	1800	3.2	1.2	128	74	06
07	436		28	274	24	18	360	4.4	1.6	74	28	07
08	477		8	232	26	16	280	4.1	.8	62	30	08
09	438		3	178	30	24	320	4.0	1.0	76	26	09
10	439		3	126	42	22	640	4.2	.8	94	22	10
11	440		24	580	24	12	280	4.0	1.2	54	34	11
12	441		34	720	22	14	200	4.1	.8	40	34	12
13	442		40	780	22	16	240	4.3	.8	42	38	13
14	T 443		26	2240	26	20	120	2.5	1.0	38	10	14
15	⊖ 27		24	264	34	6.6	400	1.2	1.0	790		15
16												16
17												17
18												18
19												19
20												20
21												21
22												22
23												23
24												24
25												25
26												26
27												27
28												28
29												29
30												30
31												31
32												32
33												33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

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GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

TO: *AMAX EXPLORATION INC*
 PROJECT *794 DON ALLEN*

CERTIFICATE NO. *6191*
 INVOICE NO.
 DATE ANALYSED *12/10/76*

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Pb	Zn	Pb		No.
01	<i>76 BAT 444</i>		<i>6</i>	<i>60</i>	<i>18</i>	<i>10</i>	<i>240</i>	<i>1.3</i>	<i>.2</i>	<i>40</i>	<i>22</i>		01
02	<i>T 445</i>		<i>16</i>	<i>800</i>	<i>18</i>	<i>14</i>	<i>140</i>	<i>2.5</i>	<i>.4</i>	<i>20</i>	<i>8</i>		02
03	<i>T 446</i>		<i>4</i>	<i>100</i>	<i>42</i>	<i>12</i>	<i>100</i>	<i>1.2</i>	<i>.2</i>	<i>30</i>	<i>4</i>		03
04	<i>S 447</i>		<i>9</i>	<i>210</i>	<i>24</i>	<i>14</i>	<i>280</i>	<i>3.5</i>	<i>.6</i>	<i>60</i>	<i>20</i>		04
05	<i>448</i>		<i>6</i>	<i>290</i>	<i>26</i>	<i>14</i>	<i>300</i>	<i>3.9</i>	<i>.6</i>	<i>60</i>	<i>30</i>		05
06	<i>T 449</i>		<i>1</i>	<i>160</i>	<i>26</i>	<i>14</i>	<i>160</i>	<i>4.2</i>	<i>.6</i>	<i>30</i>	<i>14</i>		06
07	<i>S 450</i>		<i>2</i>	<i>254</i>	<i>28</i>	<i>14</i>	<i>280</i>	<i>4.3</i>	<i>1.0</i>	<i>60</i>	<i>26</i>		07
08	<i>451</i>		<i>3</i>	<i>300</i>	<i>24</i>	<i>14</i>	<i>500</i>	<i>3.9</i>	<i>.8</i>	<i>80</i>	<i>32</i>		08
09	<i>T 452</i>		<i>2</i>	<i>150</i>	<i>38</i>	<i>26</i>	<i>220</i>	<i>3.5</i>	<i>.6</i>	<i>40</i>	<i>14</i>		09
10	<i>S 453</i>		<i>2</i>	<i>60</i>	<i>28</i>	<i>14</i>	<i>280</i>	<i>3.5</i>	<i>.6</i>	<i>64</i>	<i>20</i>		10
11	<i>T 454</i>		<i>86</i>	<i>110</i>	<i>18</i>	<i>4</i>	<i>100</i>	<i>1.1</i>	<i>.2</i>	<i>20</i>	<i>8</i>		11
12	<i>S 455</i>		<i>20</i>	<i>270</i>	<i>30</i>	<i>14</i>	<i>380</i>	<i>3.0</i>	<i>.6</i>	<i>60</i>	<i>24</i>		12
13	<i>456</i>		<i>32</i>	<i>200</i>	<i>26</i>	<i>14</i>	<i>340</i>	<i>3.7</i>	<i>.6</i>	<i>100</i>	<i>26</i>		13
14	<i>457</i>		<i>20</i>	<i>360</i>	<i>28</i>	<i>18</i>	<i>420</i>	<i>3.9</i>	<i>.8</i>	<i>80</i>	<i>28</i>		14
15	<i>458</i>		<i>12</i>	<i>280</i>	<i>24</i>	<i>14</i>	<i>120</i>	<i>4.5</i>	<i>.8</i>	<i>90</i>	<i>30</i>		15
16	<i>T 460</i>		<i>4</i>	<i>20</i>	<i>14</i>	<i>6</i>	<i>500</i>	<i>1.4</i>	<i>.2</i>	<i>40</i>	<i>8</i>		16
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16/7

Certified by _____

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

TO: *AMAX EXPLORATION INC*

CERTIFICATE NO. *6196*

PROJECT ~~794~~ *# 794*

INVOICE NO.

DATE ANALYSED *12/10/76*

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Ti	Ag	Zn	Pb		No.
01	<i>76GR5537</i>		<i>24</i>	<i>340</i>	<i>38</i>	<i>20</i>	<i>420</i>	<i>47</i>	<i>.16</i>	<i>80</i>	<i>26</i>		01
02	<i>538</i>		<i>20</i>	<i>280</i>	<i>18</i>	<i>16</i>	<i>740</i>	<i>710%</i>	<i>1.4</i>	<i>20</i>	<i>10</i>		02
03	<i>539</i>		<i>6</i>	<i>100</i>	<i>46</i>	<i>44</i>	<i>1660</i>	<i>5.0</i>	<i>.6</i>	<i>120</i>	<i>24</i>		03
04	<i>540</i>		<i>6</i>	<i>140</i>	<i>44</i>	<i>36</i>	<i>540</i>	<i>4.8</i>	<i>.6</i>	<i>100</i>	<i>30</i>		04
05	<i>541</i>		<i>5</i>	<i>170(100)</i>	<i>38</i>	<i>36</i>	<i>1220</i>	<i>4.6</i>	<i>.6</i>	<i>100</i>	<i>32</i>		05
06	<i>541</i>		<i>3</i>	<i>130</i>	<i>40</i>	<i>42</i>	<i>860</i>	<i>4.7</i>	<i>.8</i>	<i>120</i>	<i>28</i>		06
07	<i>543</i>		<i>4</i>	<i>300(80)</i>	<i>42</i>	<i>40</i>	<i>1020</i>	<i>5.4</i>	<i>1.2</i>	<i>140</i>	<i>52</i>		07
08	<i>544</i>		<i>5</i>	<i>300</i>	<i>40</i>	<i>46</i>	<i>1200</i>	<i>5.1</i>	<i>1.0</i>	<i>120</i>	<i>60</i>		08
09	<i>545</i>		<i>9</i>	<i>2000</i>	<i>44</i>	<i>40</i>	<i>500</i>	<i>5.5</i>	<i>1.4</i>	<i>80</i>	<i>20</i>		09
10	<i>546</i>		<i>16</i>	<i>1600</i>	<i>28</i>	<i>20</i>	<i>540</i>	<i>5.7</i>	<i>1.6</i>	<i>80</i>	<i>28</i>		10
11	<i>547</i>		<i>5</i>	<i>600</i>	<i>22</i>	<i>16</i>	<i>620</i>	<i>3.4</i>	<i>.6</i>	<i>60</i>	<i>20</i>		11
12	<i>548</i>		<i>10</i>	<i>520</i>	<i>22</i>	<i>16</i>	<i>420</i>	<i>3.5</i>	<i>.8</i>	<i>60</i>	<i>32</i>		12
13	<i>549</i>		<i>20</i>	<i>380</i>	<i>22</i>	<i>16</i>	<i>700</i>	<i>3.9</i>	<i>1.0</i>	<i>74</i>	<i>32</i>		13
14	<i>550</i>		<i>18</i>	<i>500</i>	<i>36</i>	<i>28</i>	<i>780</i>	<i>4.3</i>	<i>.6</i>	<i>100</i>	<i>36</i>		14
15	<i>551</i>		<i>12</i>	<i>600</i>	<i>32</i>	<i>20</i>	<i>380</i>	<i>3.9</i>	<i>1.0</i>	<i>80</i>	<i>38</i>		15
16	<i>552</i>		<i>10</i>	<i>360</i>	<i>24</i>	<i>16</i>	<i>220</i>	<i>3.4</i>	<i>.8</i>	<i>60</i>	<i>26</i>		16
17	<i>553</i>		<i>16</i>	<i>270</i>	<i>22</i>	<i>24</i>	<i>680</i>	<i>3.8</i>	<i>.6</i>	<i>100</i>	<i>32</i>		17
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Certified by _____

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 6191

TO: AMAX EXPLORATION INC

INVOICE NO.

PROJECT 794

DATE ANALYSED 12/10/76

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Pb	Zn	Pb			No.
01	76EKL 554		2	44	10	6	340	1.8	.4	50	14			01
02	555		4	30	12	6	680	1.5	.2	80	18			02
03	556		7	30	16	8	1180	2.1	.2	100	24			03
04	S 557		2	20	10	6	820	1.2	.2	220	18			04
05	L 559		1	34	10	4	160	0.9	.2	40	4			05
06	S 560		1	10	6	4	140	.7	.2	20	6			06
07	561		3	14	14	6	340	1.3	.2	60	16			07
08	562		2	12	6	4	140	1.8	.2	20	10			08
09	563		3	20	14	8	460	1.4	.4	60	20			09
10	575		3	12	12	8	300	1.6	.2	50	14			10
11	576		22	280	22	18	420	3.4	.6	60	28			11
12	577		15	360	14	10	320	4.0	.4	30	28			12
13	578		5	70	22	14	620	2.4	.4	80	22			13
14	579		46	600	22	16	340	3.4	.8	50	28			14
15	580		13	230	30	20	980	3.0	.4	86	24			15
16	581		10	330	22	14	400	3.4	.8	60	34			16
17	582		7	184	28	14	860	2.7	1.2	70	30			17
18	583		7	360	26	14	1020	4.7	.6	60	42			18
19	584		6	580	22	26	220	3.0	.8	50	22			19
20	585		5	240	38	40	540	4.4	.8	100	30			20
21	586		4	340	22	14	260	3.5	.8	60	30			21
22	587		5	320	34	26	320	3.7	.8	64	38			22
23	588		2	110	62	42	900	3.7	.4	160	32			23
24	589		4	500	74	54	580	7.5	1.0	60	38			24
25	590		1	140	90	50	500	4.0	.4	140	22			25
26	591		2	140	66	42	740	4.0	.6	130	24			26
27	592		3	120	50	46	1000	4.5	.6	120	28			27
28	593		1	110	30	30	660	3.7	.6	170	24			28
29	594		3	100	34	26	900	3.8	.6	90	26			29
30	595		2	130	38	34	1340	4.0	.4	110	44			30
31	596		4	200	26	28	480	3.1	.8	100	32			31
32	597		5	180	24	18	620	3.0	.6	100	24			32
33	598		8	220	20	14	320	3.5	.6	60	24			33
34	599		12	240	26	12	260	3.0	.8	60	30			34
35	601		37	800	30	16	300	3.0	1.0	64	36			35
36	602		23	300	22	14	220	3.0	.6	50	20			36
37	GT 22		47	240	34	10	-	-	.8	-	100			37
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Certified by _____

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

TO: *Ammax Exploration Inc*
PROJECT *794*

CERTIFICATE NO. *6210*
INVOICE NO.
DATE ANALYSED

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	No.
01	76 GKS602		12	320	520	4.2	.8	100	38	01
02	603		13	300	280	4.3	1.2	60	28	02
03	604		9	310	320	4.5	1.0	80	34	03
X 04	605		4	800	360	5.7	1.2	80	26	04
X 05	606		5	500	300	4.9	1.0	70	28	05
06	607		1	200	640	4.1	.8	110	32	06
X 07	608		4	110	560	7.1	1.4	80	30	07
08	609		2	110	760	4.0	.6	80	38	08
09	610		4	220	1220	5.0	.8	90	114	09
10	611		2	200	800	5.2	1.0	100	32	10
11	612		4	280	1160	5.5	1.2	340	50	11
12	613		2	160	1280	5.6	.8	130	44	12
13	614		1	120	1160	5.0	.8	120	26	13
14	615		14	270	400	4.0	.8	60	24	14
15	616		7	150	280	3.4	.6	60	24	15
16	617		11	180	680	4.0	.8	80	22	16
17	618		5	110	360	3.5	.6	70	24	17
18	619		16	210	340	4.0	1.0	50	26	18
19	620		11	200	280	3.6	.6	50	22	19
20	621		12	180	880	3.9	.8	60	22	20
X 21	622		29	420	400	4.3	.8	90	30	21
22	623		1	160	640	5.2	.8	90	22	22
23	624		1	200	1000	5.3	.8	80	36	23
24	625		3	170	880	5.7	.8	100	22	24
25	626		2	130	520	5.2	.8	100	42	25
26	627		1	100	800	4.7	.8	120	50	26
27	628		3	100	1600	4.6	.8	130	42	27
28	629		1	95	480	4.4	.8	130	30	28
29	630		1	180	1200	5.5	1.0	140	22	29
30	631		3	130	1080	5.1	.6	190	28	30
31	632		6	150	800	4.6	1.0	90	26	31
32	633		4	120	1000	4.5	.8	100	46	32
33	634		5	220	680	5.2	1.0	90	40	33
34	635		2	320	800	5.0	1.2	140	28	34
35	636		2	140	400	4.4	.8	60	22	35
36	637		3	120	280	4.0	.8	50	26	36
37	638		2	90	320	4.2	.8	60	26	37
38	639		4	110	240	4.0	.8	50	22	38
39	640		1	120	320	4.1	.8	60	44	39
40	G 21		14	-	220	3.5	1.2	180	52	40

Certified by _____

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 6210

TO: *Ammax Exploration Inc*

INVOICE NO.

PROJECT *794*

DATE ANALYSED

No.	Sample	pH	Mo	Cu		Mn	Fe	Ag	Zn	Pb		No.
01	766K5641		2	170		520	3.8	.80	180	50		01
* 02	642		3	640		300	4.5	12.0	90	26		02
* 03	643		4	700		800	6.8	.8	70	22		03
* 04	644		6	1200		320	7.4	1.6	60	42		04
* 05	645		4	500		280	6.0	1.2	80	28		05
06	646		1	60		400	3.3	.6	100	30		06
07	647		1	120		920	4.0	.6	110	46		07
08	T648		1	190		80	1.5	.4	20	14		08
09	T649		33	280		60	1.7	.2	30	12		09
* 10	T650		97	2200		40	1.3	1.6	26	6		10
* 11	G 21		7	1000		220	3.5	1.4	180	52		11
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Certified by _____

APPENDIX IV
LIST OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

Douglas George Baker

477 Laurentian Crescent,
Coquitlam, B.C.

Education: Trinity College - Major in Science - 1973
B.Sc. Degree, Major in Geology from the
University of British Columbia 1976

Experience: 1975 INCO - Senior Assistant
1974 Citird Service Mineral Corp - Junior Assistant

STATEMENT OF QUALIFICATIONS

Barry William Kyba

1604-1160 Haro Street
Vancouver, B.C.

Education: - 1973 - B.Sc in Geology from the University of Alberta

Experience: 1973 - Kintla Explorations Ltd., Alberta - Geologist
1974 - Granduc Operating Company, - Underground Geologist
1974 - Brascan Resources, Vancouver - Geologist
1975 - Pechiney Development, Vancouver - Geologist
1976 - Jan.-Apr. - Geological Survey of Canada - Compilation
of Cenozoic Vulcanism

APPENDIX V

CONTRACTOR INVOICES

INVOICE

**MARTINSON
LINECUTTING AND STAKING LTD.**

6860 Fairmont Street :: POWELL RIVER, B.C.

Telephone 485-2198

AMAX
OCT 26 1976
VANCOUVER OFFICE

Date OCT. 25 1976

IN ACCOUNT WITH

AMAX EXPLORATION INC.
#601-535 THURLOW ST.
VANCOUVER, B.C. V6E 3L6

Picket Line Miles 8.67 @ 170.00 per mile \$ 1,473.90
 Base Line Miles @ per mile _____
 Transit Base Line Miles @ per mile _____
 Mining Claims @ per claim _____
 Claim Blocks @ per block _____

Geophysics _____

Expenses _____

Rentals _____

Other: _____

ADD. & EXT. CORRECT		<i>Harold B. Mcnamara</i>			
APPROVED		DATE <u>10/27/76</u>			
Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
<u>794</u>	<u>-</u>	<u>-</u>	<u>8683</u>	<u>-</u>	<u>1,473.90</u>

15204 OCT 27 '76

D. S. Allen
Proj 794

TOTAL \$ 1,473.90

Less _____

AMOUNT OWING \$ 1,473.90

N^o 145

LINECUTTING:
ERIE CREEK PROP.

Don Martinson

INVOICE

PACIFIC SURVEY CORPORATION

1409 WEST PENDER STREET VANCOUVER, B.C., CANADA V6G 2S4 TELEPHONE: 683-6501

AUG 9 1976

SE
 Amax Exploration Inc.,
 #601 - 535 Thurlow Street,
 Vancouver, B.C. V6E 2L6

Attn: Mr. Hernano Pires.

INVOICE NO. 9478
 DATE 30 July 1976
 YOUR ORDER NO.
 JOB NO. 76-132
 PACKING SLIP No.
 SHIPPED VIA

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL																																																						
TO:																																																									
Completion:																																																									
	<p>Topographic mapping in pencil manuscript form at a scale of 1-inch equals 400 feet with 25 foot contours, Erie Creek (South of Salmo, B.C.) as per packing slip 8981:</p> <p style="text-align: center;">Lump sum</p>																																																								
			<u>3998.00</u>																																																						
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="6" style="text-align: center;">ADD & EXT CORRECT</td> </tr> <tr> <td colspan="5" style="text-align: center;">APPROVED</td> <td style="text-align: center;">DATE</td> </tr> <tr> <td colspan="5" style="text-align: center;"><i>Luana B. McLean</i></td> <td style="text-align: center;"><i>8/11/76</i></td> </tr> <tr> <th>Project Number</th> <th>Group Code</th> <th>Activity Code</th> <th>Account Class</th> <th>Sub Class</th> <th>Amount</th> </tr> <tr> <td style="text-align: center;"><i>699</i></td> <td style="text-align: center;"><i>-</i></td> <td style="text-align: center;"><i>-</i></td> <td style="text-align: center;"><i>8626</i></td> <td style="text-align: center;"><i>-</i></td> <td style="text-align: center;"><i>998.00</i></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td colspan="6" style="text-align: center;">EX 14905 AUG 13 76</td> </tr> </table>	ADD & EXT CORRECT						APPROVED					DATE	<i>Luana B. McLean</i>					<i>8/11/76</i>	Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount	<i>699</i>	<i>-</i>	<i>-</i>	<i>8626</i>	<i>-</i>	<i>998.00</i>																			EX 14905 AUG 13 76							
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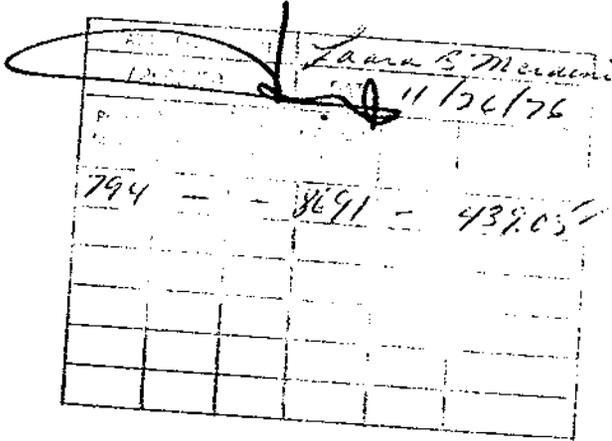
Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

AMAX MINERALS EXPLORATION
601-535 Thurlow St.
Vancouver, B.C.
 794
Project 796

DATE Nov 25, 1976
 INVOICE NO. 6205
 CERTIFICATE NO. 6191/92/96

ITEM	DESCRIPTION	SUB-TOTAL	TOTAL
65	Geochem analysis, 9 elements @ \$ 3.20	\$ 208.00	
58	Soil prep 0.10	5.80	
7	Rock prep 0.75	5.25	
110	Tungsten geochem 2.00	220.00	
			
			\$ 439.05

TERMS - NET 30 DAYS

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

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

AMAX MINERALS EXPLOITATION

601-535 Thurlow St.

Vancouver, B.C.

Project 794

DATE Nov 25, 1976

INVOICE NO. 6207

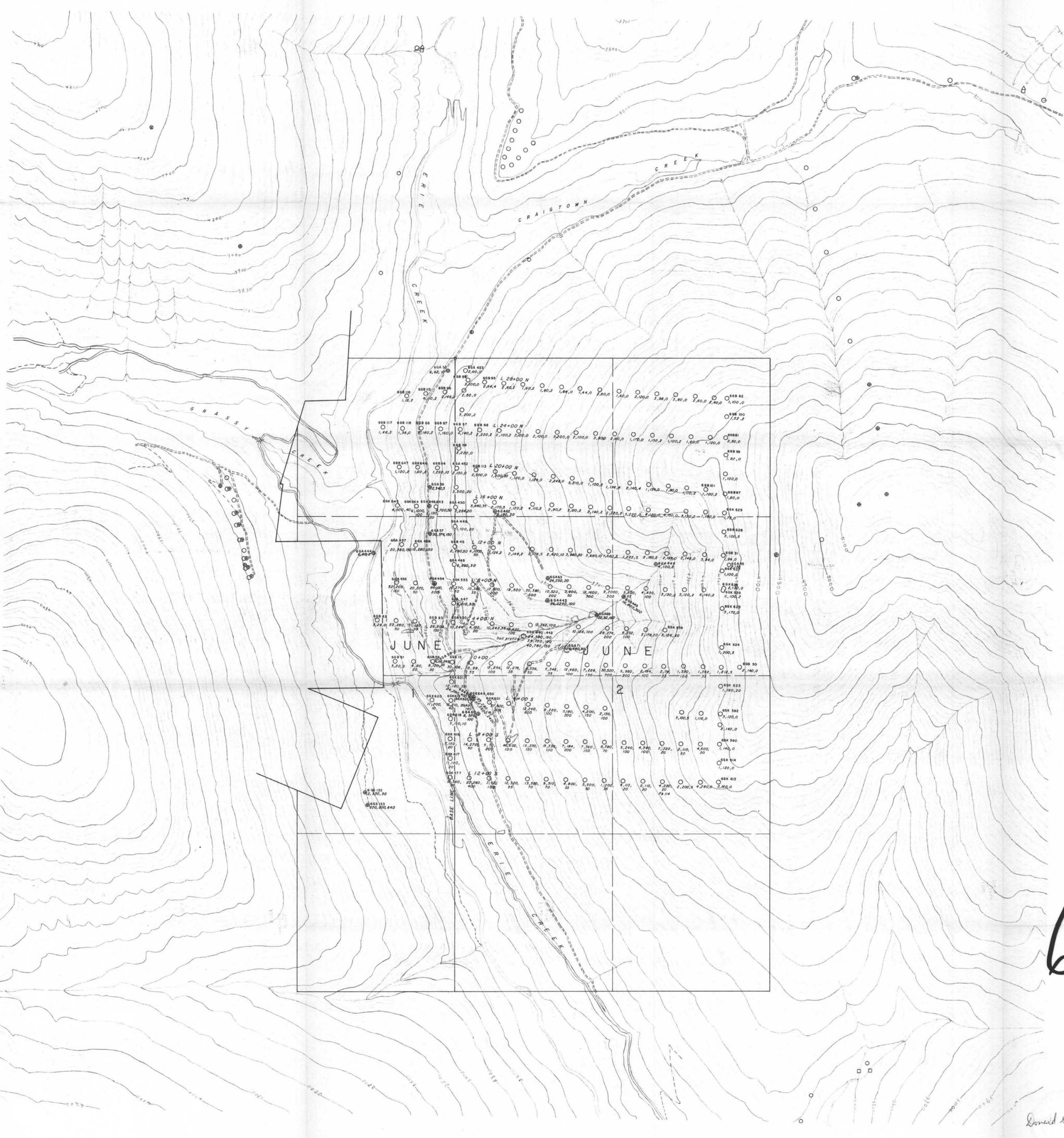
CERTIFICATE NO. 6207/10

ITEM	DESCRIPTION		SUB-TOTAL	TOTAL
160	Geochem analysis, 7 elements	@ \$ 2.75	\$ 440.00	
153	Soil prep.	0.10	15.30	
7	Rock prep	0.75	5.25	
159	Tungsten geochem	2.00	318.00	
28	pH analysis	0.75	21.00	
28	Water analysis, 2 elements	2.00	56.00	
				\$ 855.55

Lucia B. Merzini
 11/26/76

794	-	-	8891	-	855.55

TERMS - NET 30 DAYS



METAL CONTENT CLASSIFICATION
ROCK CHIP AND SOIL

	Mo	Cu	W	
□	< 8	< 200	< 20	Background.
□	8 - 15	200 - 499	20 - 99	Positive
□	> 15	500 - 1,000	> 99	Anomalous.
□		> 1,000		Highly anomalous

- S Y M B O L S**
- 65K 623
1,800,20 Soil sample site; sample number; p.p.m. Mo, Cu, W.
 - ⊕ 65K 626
2,342,5 Rock chip sample site; sample number; p.p.m. Mo, Cu, W.
 - ⊕ Legal corner post, claim boundary.
 - Claim unit boundary.
 - Boundary of crown grant claims.
 - == Road
 - - - Trail.
 - ~ Stream.
 - 4100 Topographic contour (contour interval 25').

6301 M-1

NOTE - Base map prepared as a pencil manuscript from existing air photos by Pacific Survey Corporation for AMAX.

AMAX POTASH LIMITED
ERIE CREEK PROPERTY
JUNE CLAIMS
 NELSON MINING DIVISION - BRITISH COLUMBIA
GEOCHEMICAL MAP

SCALE 0 200 400 FEET
 0 200 400 METRES

DATE: _____ Drawn by: _____
 REVISED: _____ Date: _____
 PRINTED: _____ N.T.S. File: _____

To accompany "GEOCHEMICAL ASSESSMENT REPORT" by: D.G. Allen

FIG. 2

Donald S. Allen