

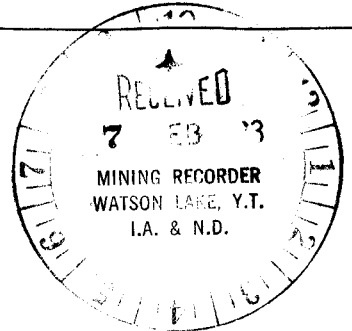
# ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

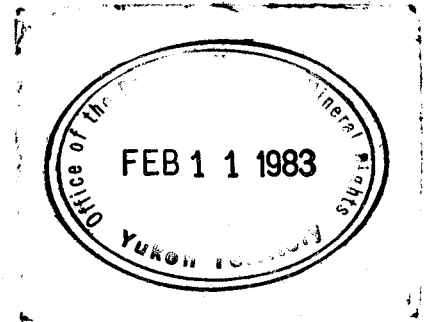
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REPORT ON  
GEOLOGICAL AND GEOCHEMICAL SURVEY  
CONDUCTED JULY 18 - AUGUST 29, 1982

FOR  
QUARTZ LAKE PROJECT



CUZ 1-60 CLAIMS  
(YA67481-YA67536 & YA68994-YA68997)

WATSON LAKE MINING DISTRICT  
YUKON TERRITORY  
CLAIM SHEET 95D/5  
LATITUDE 60°28'N; LONGITUDE 127°52'W

DECEMBER, 1982

A.R. Archer, B.A.Sc., P.Eng.

091427

This report was prepared by  
the [unclear] [unclear] [unclear]  
under [unclear] [unclear] Quartz  
Mining [unclear] [unclear] [unclear]  
representing [unclear] amount  
of \$ 14,100.-

P. Walker

*For* Registrar of Mines and  
Geology, Commissioner  
of Yukon Territory.

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INTRODUCTION

The Cuz 1-56 claims were staked in December, 1981 by Quartz Lake Project (Kidd Creek Mines Ltd.) to cover arsenic stream sediment anomalies known from previous work in the area. The Cuz 57-60 were added in August, 1982 to cover the extension of a gold in soil anomaly outlined from the 1982 work which consisted of mapping, prospecting and collection of 946 stream sediment, soil and rock samples for geochemical analysis. Results are presented on Figures 2 to 10 in pocket.

PROPERTY, LOCATION, ACCESS AND HISTORY

The property consists of 60 Cuz claims in an irregularly-shaped contiguous block. The claims are recorded in the Watson Lake Mining District as follows:

<u>Claim Name</u>	<u>No.</u>	<u>Mining District</u>	<u>Claim Sheet</u>	<u>Grant Numbers</u>	<u>Expiry Date</u>
Cuz 1-56	56	Watson Lake	95D/5	YA67481-YA67536	14 Dec/82
Cuz 57-60	4	Watson Lake	95D/5	YA68994-YA68997	20 Aug/83
Total	- 60				

The property is located 64 km northeast of Watson Lake on claim sheet 95D/5 at latitude 60°28'N and longitude 127°52'W, as illustrated on Figure 1 on the following page. Access in 1982 was by helicopter from the QLP basecamp at Roy Lake, 7 km to the northeast. The northern part of the property was previously staked as the SN claims by Liard River Mining in 1954 and again as part of the Porker claim block in 1973 by Hyland Joint Venture (Marietta Resources Ltd., Mitsubishi Metal Corp. and individuals). Both companies conducted reconnaissance prospecting and Hyland Joint Venture did a little reconnaissance soil and stream sediment sampling.

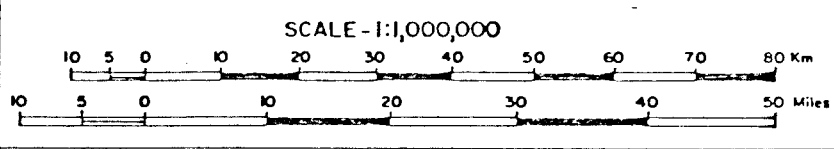
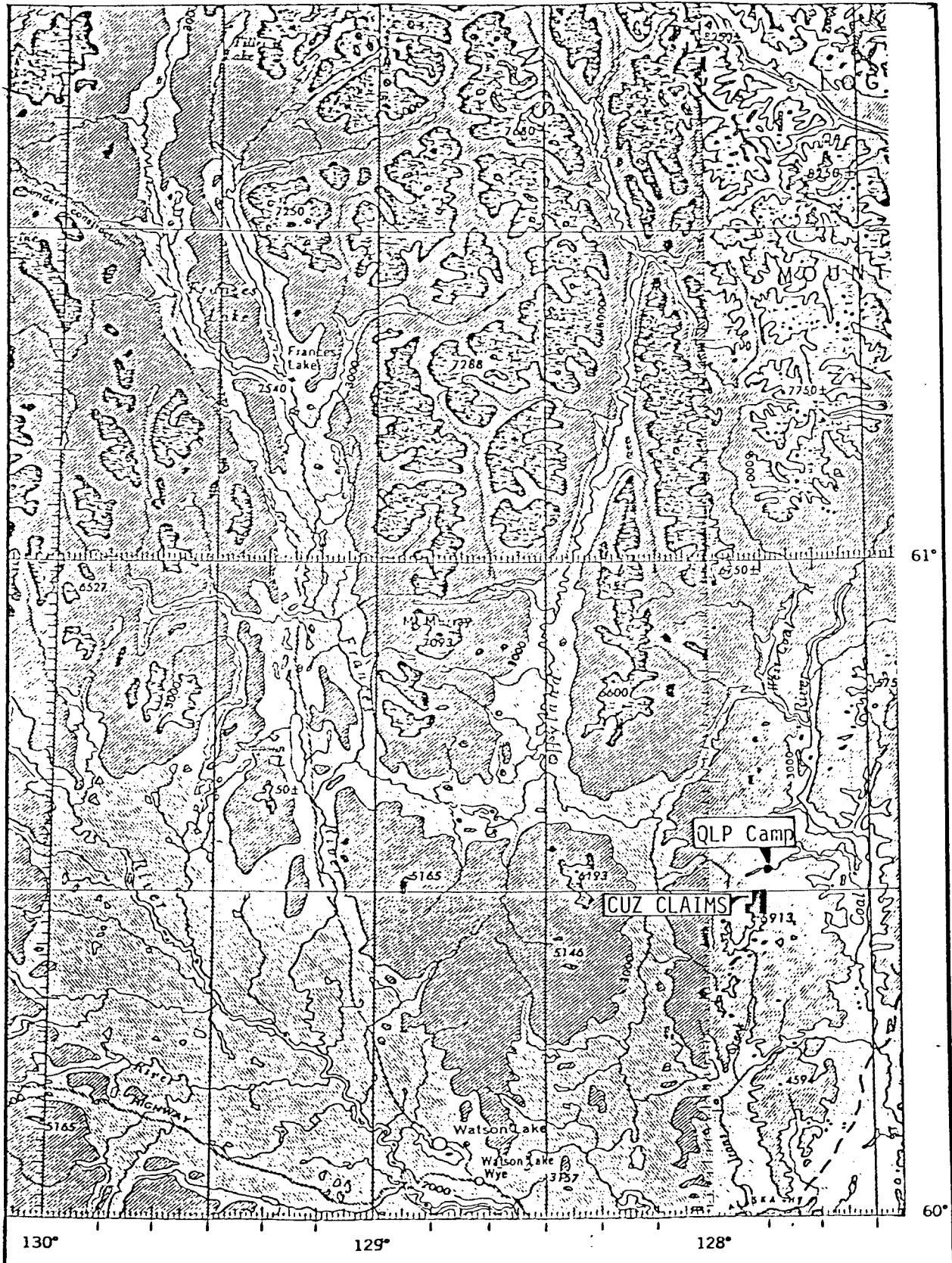


Figure 1  
 Location map -  
 CUZ Claims  
 Quartz Lake Project

## GEOLOGY

The property overlies a north-trending series of ridges dissected by broad, gently sloping, often swampy creeks with gentle gradients. Elevations range from 1065 m (3500') to 1830 m (6000'). Below 1400 m (4600') vegetation consists of a thick mat of alpine spruce and fir which gives way to more open fir and poplar forest with moderate arctic birch and willow (buckbrush) cover at lower elevations. Most of the property lies above timberline at 1400 m (4600').

The area was ice sheet glaciated during the Pleistocene and thin glacial till is common both in valleys and on ridges. There is little evidence of glacial scouring at highest elevations where blocky felsenmeer obscures bedrock exposures.

The property sits within a north-trending belt of Hadrynian sedimentary rocks regionally known as the Grit Unit. The Grit Unit has been subdivided into six lithological units, as illustrated on Figure 6 in pocket, but insufficient geological information has been collected to determine the stratigraphic succession. These subdivisions are based primarily on grain size. The coarsest member of the Grit Unit is a poorly-sorted quartz feldspar pebble conglomerate (cgl). The quartz pebbles are subrounded to sub-angular, grey to white in colour and range in size from 2 mm to 1.5 cm. Feldspar pebbles rarely exceed 10 percent of the rock and are usually altered to clay. The conglomerates grade into finer-grained equivalents which are mapped as grit (gr). Still finer-grained and better sorted, grey-green quartz sandstone (ss) and grey, tan and black calcareous and non-calcareous siltstone (stst) are mapped separately where they are thick enough to be separated from coarser units. Finest-grained rocks include grey, green and black phyllite (phy). The sixth lithologic subdivision is black, platy weathering, silty limestone (ls) crosscut by limonitic quartz and calcite veinlets. The thick limestones at the north end of the property are presently thought to be the youngest rocks on the property.

Numerous small shears and faults with a variety of orientations crosscut the sedimentary rocks and further obscure stratigraphic relationships. Many of these shears are limonitic and silicified. Brecciation of the siliceous and limonitic vein material suggests more than one period of movement on these structures. On Gretchen Peak, coarser-grained rock types are locally strongly sheared and silicified and original textures are occasionally totally destroyed.

### GEOCHEMISTRY

#### General

The 1982 QLP sampling program collected 22 silt, 865 soil and 59 rock samples as shown on Figures 2 to 5 in pocket and listed on Table I following page 4. Silts were taken at 150 m intervals and alternate samples were sent for analysis. On Pongo Creek, the intermediate samples were later submitted for analysis after results for the first half returned anomalous values. In addition, two bulk stream sediment samples were collected for analysis of different mesh fractions, the results of which have already been described in the regional section.

Soil sampling was conducted along grid lines with a sample spacing of 50 m. A north-south baseline was surveyed using chain and compass and picketed at 50 m intervals with 1 m lath pickets. The baseline is a continuation of an old cut line numbered 76E on the Porker claims to the north. Two tie lines were surveyed and picketed for 800 m west of the baseline in the same manner at 10+00 m south and at 20+00 m south. East-west sample lines were surveyed by pace and compass at an average spacing of 300 m and sample sites were marked with half-metre lath pickets on which the grid coordinates and sample bag numbers were written. This initial sampling returned strongly anomalous gold values on lines 14+00S and 16+00S, west of the baseline. The area between 9+00S and 20+00S and west of the baseline was

then sampled on a 50 x 50 m grid by using east-west pace and compass lines between the baseline and a tie line 800 m west of the baseline. These lines were extended an additional 600 m west between 15+50 m south and 18+00 m south.

Soils were obtained from poorly developed B+C horizons by digging through light tundra vegetation using a heavy mattock. Samples were collected in waterproof kraft envelopes and shipped to Chemex Labs Ltd., North Vancouver, B.C. for gold analysis using a neutron activation finish on a minus 35 mesh fraction. Sample splits were later reanalyzed for arsenic, bismuth, lead, tungsten, manganese and copper using ICP-AES and for antimony using standard atomic absorption techniques. (See Appendix II for details of analytical techniques.)

Rock samples representative of most altered or mineralized-looking rock types were collected for geochemical analysis. Results are plotted on the geochem maps and listed on Table I.

### Results and Discussion

Gold, arsenic, antimony and bismuth response on the Cuz claims are plotted on Figures 2 to 5 in pocket. Tungsten values are uniformly at or below detection level (10 ppm) and are not plotted separately. The copper, lead and manganese results are shown on Figures 8 to 10 in pocket. No obvious areas of interest are indicated.

Gold values returned in silt, especially from Pongo Creek, suggested the presence of gold on the Cuz claims. Values in the minus 35 mesh fraction are consistently above 15 ppb and range up to 82 ppb, while one sample for which the minus 80 mesh fraction was analyzed returned a 227 ppb gold value. The soil sampling program outlined a roughly circular area 450 m in diameter on the north slope of Gretchen Peak with gold in soil values in excess of 100 ppb, including one sample with 1940 ppb. Some of the rock samples collected within and peripheral to the main

TABLE I

QLP 1982

## Rock Geochemical Analyses

Sample #	Au(ppb)*	As(ppm)*	Sb(ppm)*	Bi(ppm)**	Pb(ppm)**	Ag(ppm)**	W(ppm)**	Zn(ppm)**	Cu(ppm)**	Te(ppm)*	Hg(ppm)*	Mn(ppm)**	Sample description
CUZ CLAIMS													
M 14773	624	1000/5880**	165.0	96	20	60	9	225	1290	0.1	3800	88	Limonitic breccia
M 14774	14												Ferricrete
M 14775	291	1000/2370**	40.0/54.0	28	9	10	5	70	219	0.1	900	46	30% limonite, 40% clay, quartz
M 15803	31												Pyritic grit
M 5313	144	160/159**	2.0/1.8	16	6	0.5	5	13	7	0.1	30	45	Silicified grit. Minor limonite
M 5314	6	305	2.0										Bleached coarse grit. 10% clay
M 5315	7	330	3.8										Silicified grit
M 5316	2	250	3.4										Bleached, quartz veined, coarse grit
M 5317	6	250	3.0										Quartz veined grit
M 3958	1	43/50**	1.8	5	191		10		29			120	Tan, bleached grit
M 3959	19	1000/390**	44.0	4	274		10		24			700	Limonitic ferricrete
M 3960	40	450/1210**	12.6	2	1090		22		204			2050	Quartz-limonite breccia
M 3961	5	35/45**	3.0	4	29		10		8			1730	Sheared, silicious grit
M 3962	1	11/25**	1.0	3	13		10		1			1570	Silicious grit
M 3963	90	1000/2000**	6.6	10	8		10		12			65	Limonitic, bleached grit. PY casts.
M 3964	69	1000/1100**	30.0	234	100		10		40			460	Quartz limonite vein
M 3965	12	92/105**	2.6	9	5		10		11			35	Quartz veined, silicious grit
M 3966	62	1000/1010**	4.2	10	5		10		9			55	Silicified grit. Sulphide casts
M 3967	7	500/445**	4.2	2	12		10		81			26	Ferricrete. Phyllite & quartz frags
M 3968	5470	1000/8570**	7.0/6.2	156	25	0.5	17	40	83	0.3	40	43	80% limonite; 20% grey, banded QZ
M 3969	22	430/430**	1.0	4	5		10		1			22	Blocky quartz vein. Minor limonite
M 3970	15	880/85**	3.6	2	6		10		12			2550	Brecciated phyllite; QZ-limonite fill
M 3971	79	510/535**	5.2	28	154		10		79			90	Limonitic, brecciated QZ. Sulph casts
M 3972	26	270/280**	5.4/5.6	10	4		10		8			53	Silicified, bleached grit. 5% pyrite
M 3973	7	175/185**	0.6/1.2	5	9		10		2			145	Quartz-limonite stockwork in grit
M 3974	2	23/40**	1.0/1.0	3	3		10		121			530	Limonitic quartz breccia. Trace PY
M 3975	2	12/25**	5.0/5.4	3	14		10		538			550	Limonitic quartz breccia. Chalcopy
M 3976	2	12/30**	4.4	3	19		10		13			750	Bleached grit. Minor pyrite
M 3977	3	7			10,000*	92.0*							Galena-quartz vein in limestone
M 3978	84	1000											QZ-veined, bleached, limonitic grit
M 3979	365	1000/7820**	12.0	92	597	0.5	8	45	41	0.7	50	57	Brecciated, limonitic quartz vein
M 5866	3700	1000/ 15000**	12.4	376	56	0.5	18	20	52	0.3	40	33	Pale green, bleached grit. PY casts
M 5867	299	1000/944**	7.2	24	52	0.5	12	11	7	0.1	30	25	Bleached, fine-grained grit. PY casts
M 5868	1100	940/1020**	5.2	20	32	0.5	5	12	7	0.1	30	40	Bleached conglomerate. Sulphide casts
M 5869	409	1000/1400**	3.8	32	25	0.5	5	12	6	0.1	20	31	Bleached conglomerate. Minor PY
M 5870	57	195											QZ-veined, bleached, coarse grit
M 5871	17	165											Green, altered pebble conglomerate
M 5872	22	77											Bleached, coarse grit. 20% clay
M 5873	17	165											Amber quartz vein in grit
M 5874	340	83/83**	2.6	20	12	0.5	5	11	6	0.1	20	40	Vuggy quartz. Altered grit ?
M 5875	224	90/18**	3.0	24	15	0.5	5	46	569	0.1	20	530	Altered quartz pebble conglomerate
M 14361	7	175/170**	7.0/6.2	8	34		10		6			55	Bleached grit. Sulphide casts
M 14362	41	48/75**	7.8/6.4	7	33		10		1			26	Quartz-veined, bleached grit
M 14363	7	175/160**	4.6/4.2	2	24		10		1			39	White, bleached, silicified grit
M 14364	7	225/200**	3.2/3.0	2	14		10		1			24	Limonite-quartz breccia
M 14365	21	830/955**	3.4/2.8	17	12		10		24			27	Limonite, clay, quartz breccia
M 14366	7	650/615**	4.8/3.8	6	21		10		5			17	Quartz-veined, limonitic grit
M 14367	5	71	3.4										Limonitic, bleached grit
M 14368	5	27	2.6										Quartz-veined, bleached grit
M 14369	13	970	2.4										Quartz-limonite gossan
M 14370	9	210**	2.8	2	22		10		1			20	Bleached, veined coarse grit. Pyritic
M 14371	105	885**	2.2/1.8	24	11	0.5	5	15	7	0.1	30	39	Bleached coarse grit. Trace pyrite
M 14372	6	200**	1.4	3	9		10		19			52	Sheared, limonitic, silicious grit
M 14373	2	85**	1.6	2	21		10		2			810	Bleached grit. Limonitic

TABLE I (cont.)

QLP 1982

## Rock Geochemical Analyses

Sample #	Au(ppb)*	As(ppm)*	Sb(ppm)*	Bi(ppm)**	Pb(ppm)**	Ag(ppm)**	W(ppm)**	Zn(ppm)**	Cu(ppm)**	Te(ppm)*	Hg(ppm)*	Mn(ppm)**	Sample description
H 14374	44	595**	17.0	2	26		10		211			160	Bleached, sheared, limonitic siltst.
H 14375	8	95**	5.0	4	46		10		28			90	Interbedded grit and black phyllite
M 14376	431	8430**	6.4/5.8	128	7	0.5	8	37	24	1.2	30	52	50% limonite. Brecciated QZ vein
H 14377	4190	1000/ 15000**	20.0/24.0	1250	24	1.0	41	29	196	1.1	20	68	Brecciated chalcedonic QZ & limonite
M 14378	389	1480**	8.6/7.6	228	11	0.5	5	21	12	0.1	20	32	Green siltstone. Minor QZ veins

\* Au - Neutron Activation Analysis; Sb, Te, Hg, Pb, Ag - Atomic Absorption

\*\* ICP-AES Analysis except as noted

\*\*\*Spectrographic Analysis, additional elements as follows: B - 5000ppm, Cr - 150ppm, Ti - 700ppm.

anomalous area range up to 5470 ppb gold (.16 oz/ton), an order of magnitude higher than the soil values. However, many rock samples also assayed less than 100 ppb gold.

Arsenic values in silt range from 20 to 290 ppm and show a distinct decline in Pongo Creek going downstream. Soil values which range from less than 10 ppm to 4600 ppm, outlined an anomaly exceeding 100 ppm which is 1000 m across from north to south and open to the east and west. Values greater than 100 ppm extend 1000 m east of the baseline on the widespread sampling lines. The 500 ppm arsenic contour is almost perfectly coincident with the 100 ppb gold anomaly. Rock samples returned up to greater than 15,000 ppm arsenic.

Bismuth values in silt range from less than 2 to 13 ppm for minus 35 mesh and 12 and 17 ppm for two minus 80 mesh fraction samples along Pongo Creek. Soil values range from less than 2 to 345 ppm and outline an irregularly-shaped area with values greater than 10 ppm approximately 750 m across. Within this anomaly, the 40 ppm bismuth contour is nearly coincident with the 100 ppb gold contour. Bismuth values in rocks range up to 1250 ppm.

Antimony values in silt range from 1.0 to 5.6 for the minus 35 mesh fraction and to 6.2 for the minus 80 mesh fraction. Soil values of greater than 5 ppm outline an elongated area across the lower part of the north slope of Gretchen Peak, somewhat downslope and west of the 100 ppb gold contour. Most of the antimony values in excess of 10 ppm sit west of the large gold anomaly, but partially coincident with some of the smaller, greater than 100 ppb, gold anomalous areas. Rock samples range up to 165 ppm antimony.

Gold, arsenic and antimony response from different size fractions in soils was tested for 25 samples from the anomalous part of the Cuz grid. Figure 7

in pocket shows these results graphically. Gold values for the minus 80 mesh fraction are consistently 50 to 200 ppb greater than the coarser fractions. Arsenic and antimony show a similar trend of increasing values with decreasing size fraction.

### MINERALIZATION

Gold mineralization on the Cuz property is of two types. Best gold values (up to 4190 ppb) have been returned from limonitic, siliceous vein float and sub-outcrop within which tiny grains of arsenopyrite(?) are sometimes visible. Grey, chalcedonic and somewhat banded quartz in these veins has been emplaced in at least two stages with accompanying brecciation. Yellow-orange to red-brown limonite comprises from 10 to 50 percent of the vein material. These shear zones, with an average width of 1 to 3 metres, are numerous on the north slope and east and west ridges of Gretchen Peak. Average orientations of 65°, 120° and 145° and steep to vertical dips have been observed to date and in areas of best exposure, the veins are spaced as closely as 10 m apart. Further work could indicate that the veins form a stockwork in the geochemically anomalous areas.

Between the shear zones, the second type of mineralization consists of gold-bearing, sheared, leached, bleached and silicified clastic rocks of the Grit Unit. At first look, these rocks do not differ from the coarse clastic rocks of the Grit Unit regionally. On closer inspection, they are seen to be strongly silicified. One such specimen assayed 1100 ppb (.03 oz) gold. Both of these types of mineralized rocks are nearly ubiquitous in float on the north slope of Gretchen Peak. Although both types of mineralization are vuggy and have boxworks developed, sulphide minerals rarely remain. The rocks may be more deeply weathered and metals more strongly leached than in other areas of the Yukon where ridges have been more strongly scoured in the last glaciation.

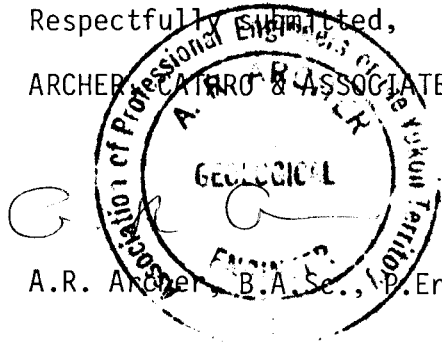
On the westward edge of the claim, minor chalcopyrite and galena occur in limonitic siliceous and brecciated vein material and along the margin of a quartz vein in silty limestone, respectively. Low gold values (2 and 3 ppb) were returned from these rocks but galena-bearing material assayed 92 ppm silver (2.7 oz/ton) and greater than 10,000 ppm lead.

### RECOMMENDATIONS

Further work on the Cuz claims should include mapping, prospecting, fill-in soil geochemistry, rock geochemical sampling, geophysics and exploration drilling. Detailed geological mapping should focus on two aspects, first, the distribution, density and orientation of the veins and second, grit stratigraphy on the claims, with attention to potential underlying carbonate horizons which could form gold traps where cut by the vein systems. Additional soil sampling is needed on the west side of the claims where coincident gold, arsenic, antimony and bismuth anomalies are open, and east of the baseline where there are subdued gold values but extensive arsenic values in excess of 100 ppm.

Rock geochemical sampling across the area of the gold in soil anomaly should focus on outcrop, where available, to assess widths and grades of mineralized surface material. Float trains of vein material should be followed to source where light trenching through scree may expose outcrop. A geophysical program on Gretchen Peak is necessary to assist in determining the distribution and orientation of the mineralized shear zones. After all the above surface work has been completed, there should be sufficient information to position several short drill holes to test sub-surface continuation of mineralized structures and/or favourable stratigraphic horizons.

Respectfully submitted,  
ARCHER CATRO & ASSOCIATES (1981) LIMITED



A.R. Archer, B.A.Sc., P.Eng.

/mc

APPENDIX I - PERSONNEL

APPENDIX I

PERSONNEL - CUZ CLAIMS, 1982

<u>Name</u>	<u>Address</u>	<u>Position</u>
J. Carne	6392 Neville Street, Burnaby, B.C.	Geologist
K. Opsetmoen	1516 Martin Street, Port Coquitlam, B.C.	Student Assistant
D. Billard	1214 Main Street, Saskatoon, Sask.	Geologist
C. Greig	4665 West 16th Avenue, Vancouver, B.C.	Student Assistant
B. McDaniel	4665 West 16th Avenue, Vancouver, B.C.	Student Assistant
B. Halleran	Box 793, Fort St. James, B.C.	Student Assistant

APPENDIX II - ANALYTICAL TECHNIQUES

GEOCHEMICAL PREPARATION  
AND  
ANALYTICAL PROCEDURES

- 1.\*\* Geochemical samples (soils, silts) are dried at 80°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO<sub>4</sub> and concentrated HNO<sub>3</sub>. Digestion time = 2 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit.

Copper	- 1 ppm
Molybdenum	- 1 ppm
Zinc	- 1 ppm
* Silver	- 0.2 ppm
* Lead	- 1 ppm
* Nickel	- 1 ppm
* Chromium	- 5 ppm
* Cobalt	- 1 ppm
Manganese	- 5 ppm
Iron	- 2 ppm
Cadmium	- 0.1 ppm

\* Ag, Pb, Co & Ni are corrected for background absorption.

5. Elements present in concentrations below the detection limits are reported as one half the detection limit, i.e. Ag - 0.1 ppm.

\*\* 1982 Quartz Lake Project samples were dried, sieved through an ASTM 35 mesh screen (0.50) and the minus 35 mesh fraction was pulverized and homogenized in a ring grinder to approx, -100 mesh.

## PPM ANTIMONY

A 2.0 gm sample digested with conc. HCl in hot water bath. The iron is reduced to Fe +2 state and the Sb complexed with I-. The complex is extracted with TOPO-MIBK and analyzed via A.A. Correcting for background absorption 0.2 ppm +/- 0.2

Detection limit - 0.2 PPM.

## PPM ARSENIC

A 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digested is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH<sub>4</sub> and the arsenic content determined using flameless atomic absorption.

Detection limit - 1 PPM

## PPM BISMUTH

A 2.0 gram sample is digested with Conc. HCl and potassium chlorate. The solution cooled. After the addition of KI and the reduction of iron, the solution is extracted with MIBK-aliquot 336 and analyzed via standard AA procedure correcting for background absorption.

Detection limit - 0.2 PPM

## PPM TELLURIUM

A 5.0 gram sample digested with aqua-regia to dryness. The residue taken up in 25% HCl and the solution adjusted with HBr to 3M Br-. After the reduction of iron with ascorbic acid the tellurium bromide complex is extracted into MIBK, washed and analyzed via AA correcting for background absorption.

Detection limit - 0.1 PPM

## GEOCHEMICAL PROCEDURES FOR GOLD AND RELATED ELEMENTS

## PPB GOLD: Chemical extraction - Atomic absorption analysis

A 5 gm sample ashed @800 deg. C for one hour, digested with aqua regia to dryness - taken up in 25% HCl-, the gold then extracted as the bromide complex into MIBK and analyzed via A.A.

Detection limit - 10 PPB.

## GOLD FA-AA COMBO METHOD:

For low grade samples and geochemical materials 10 gram samples are fused with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO<sub>3</sub> and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer. -

Detection Limit - 5 ppb.

## GOLD NAA - NEUTRON ACTIVATION ANALYSES\*\*

A 10 gm sample is fused in litharge, carbonate and silicious flux. The resulting lead button containing any gold in the sample is cupelled in a muffle furnace to produce a precious metals bead.

Sample beads, plus standard and blank beads are irradiated in a thermal neutron flux. The gamma emissions of the irradiated beads are counted utilizing a Ge (Li) detector and quantified for gold.

The detection limit for a 10 gm sample is 1 µg/kg (ppb).

## PPM SILVER

A 1.0 gm portion of sample is digested in conc. perchloric-nitric acid (HClO<sub>4</sub>-HNO<sub>3</sub>) for approx. 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Silver is determined by atomic absorption technique using background correction on analysis.

Detection limit - 0.1 PPM.

\*\* Technique used for all Quartz Lake Project analyses, 1982 and pre 1982.

GEOCHEMICAL PREPARATION AND ANALYTICAL PROCEDURES ICP-AES

Geochemical samples (soils, silts) are dried at 80° C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh. A 0.50 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% perchloric acid and concentrated nitric acid. Digestion time is 2 hours. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures. Detection limits using Yvon-Jobin 48P Inductively Coupled Plasma Atomic Emission Spectrometer.

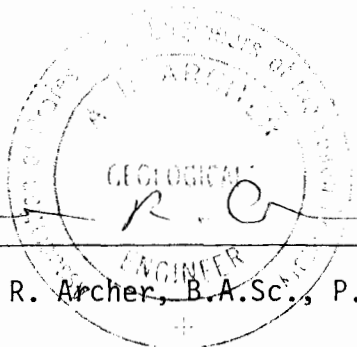
<u>Element</u>	<u>Detection</u>	<u>Element</u>	<u>Detection</u>
Arsenic	10 µg/g	Molybdenum	1 µg/g
Bismuth	2 µg/g	Nickel	1 µg/g
Cadmium	0.5 µg/g	Phosphorus	10 µg/g
Cobalt	1 µg/g	Silver	1 µg/g
Copper	1 µg/g	Tungsten	10 µg/g
Iron	0.001%	Uranium	10 µg/g
Lead	1 µg/g	Vanadium	1 µg/g
Manganese	1 µg/g	Zinc	1 µg/g

Elements which exceed the upper limit for geochemical analyses should be assayed quantitatively.

STATEMENT OF QUALIFICATIONS

I, Alan R. Archer, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in Burnaby, British Columbia, do hereby declare:

1. I am a 1957 graduate of the University of British Columbia in geological engineering.
2. I have been engaged in geological engineering for over twenty years, the past fifteen of which have been as a consultant.
3. I am a registered professional engineer in British Columbia and in Yukon Territory.
4. I have supervised the work described in this report.



A circular professional seal for a Geologist and Engineer. The outer ring contains the text "THE SOCIETY OF PROFESSIONAL ENGINEERS AND GEOLGISTS OF BRITISH COLUMBIA". The inner ring contains "A. R. ARCHER". The center of the seal contains the text "GEOLOGICAL ENGINEER". A handwritten signature "A. R. Archer" is written across the seal.

---

Alan R. Archer, B.A.Sc., P.Eng.

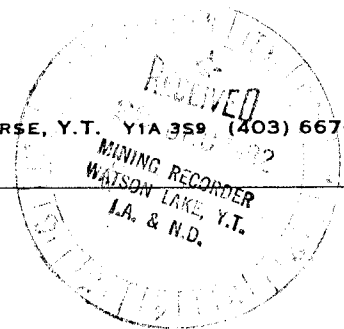
# ARCHER, CATHRO

& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

VANCOUVER, B.C. (604) 688-2568

Box 4127, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415



1016 - 510 WEST HASTINGS STREET  
VANCOUVER, B.C. V6B 1L8

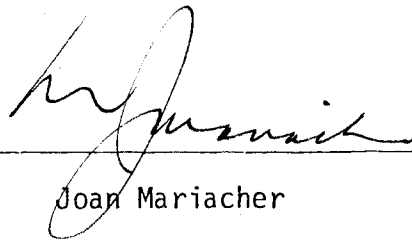
091

091427

## AFFIDAVIT

I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on the Cuz 1-60 mineral claims on Claim Sheet 95D/5 is accurate.

  
Joan Mariacher

Sworn before me at Vancouver, B.C.

this 7th day of

December, 1982



Notary, Yukon Territory

Statement of Expenditures  
Soil Sample Survey  
Cuz 1 - 60 Claims  
December 15, 1982

Labour

J. Carne (geologist) - total 7 days between July 18 and August 29 at \$225/day	\$1,575.00	
K. Opsetmoen - total 7 days between June 9 and August 22 at \$87/day	609.00	
D. Billard - total 9 days between July 28 and August 29 at \$116/day	1,044.00	
C. Greig - total 9 days between July 24 and August 29 at \$99/day	891.00	
B. McDaniel - total 3 days between July 25 and July 28 at \$84/day	252.00	
B. Halleran - total 2 days August 25-26 at \$124/day	<u>248.00</u>	\$ 4,619.00

Expenses

Field room and board - total 37 mandays at \$45/day	1,665.00	
Helicopter, total 14.4 hours Trans North Air Bell 47 between June 9 and August 29 at \$264/hr	3,802.00	
Helicopter fuel - 14.4 hours at 18 gal/hr at \$4/gal delivered to site	1,037.00	
Chemex Labs, geochem analyses -		
(a) 946 samples for Au (NAA)	5,676.00	
(b) 908 samples for Sb and 6 element ICP analysis	<u>6,719.00</u>	<u>18,899.00</u>
Total		<u><u>\$23,518.00</u></u>

In Account With

QUARTZ LAKE PROJECT

Project -

Date --

JUNE 30, 1982

		Total
<b>MANAGEMENT</b>		
JUNE		2250.00
<b>LABOUR</b>		
Supervisory		
Field	<ul style="list-style-type: none"> <li>✓ J. CARNEY - JUNE 1-30 @ \$3000/mo. 3000.00</li> <li>✓ D. WILLARD - JUNE 1-30 @ \$1950/mo 1950.00</li> <li>✓ C. GRZIG - JUNE 1-30 @ \$1650/mo 1650.00</li> <li>✓ R. OPSHORN - JUNE 1-30 @ \$1450/mo 1450.00</li> <li>✓ B. Mc DANIEL - JUNE 1-30 @ \$1400/mo 1400.00</li> <li>✓ K. CARSWELL - JUNE 3-30 @ \$50/day 1400.00</li> </ul>	10,850.00
Casual	C. MAIN - 11 days @ \$265 - FROM 8Y plus % 2915.00	5425.00 2915.00
<b>EXPENSES</b>		
Accounting	JUNE	550.00 C3
Expediting	JUNE 1-30	1400.00 D3
Room & Board in Whse	18 man days @ \$45	810.00 DV
Field equipment from AC stock		2847.50 D1
Xerox copies, 375 copies at 25¢/copy		93.75 C1
Radio rental	5 BX 11 June 1-30	300.00 D1
1/2 Rental AC BLUE truck	JUNE 1-20 at \$40 /mo. day	
	plus (23,965 to 26000) 2115 kms at 25¢/km	664.38 D4
Petty cash	29.85 D1; 15 D3; 13.25 C2; 2 D1; 5120 D3; 420 D1; 9.95 D3	76.95 C1-33, D3-30.14
Blueprinting, 18 sq. ft. Ozalid at 30¢/ft plus 6 sq. ft. Dilar at \$2.50 /ft.		20.40 C1
Drafting, 36 hrs. at \$22 /hr.		792.00 C1
Rental AC BROWN Van June 24-30 @ \$40/day plus 240km @ .25		340.00 D4
Rental AC binocular microscope June 1-30 @ \$50/mo		50.00 D1
M. Phillips expenses, May 30		9.22 C2
Nobius		5.00 D1
Can. Freightway		21.33 D3
Yukon Inland Print		17.81 CV
Receives General, maps.		10.00 CV
B.C. & Yub. Ch.		8.75 D1
Telephone - 10.20 +		10.20 CV
Whitehorse Stations		5.81 CV
Sub-let 1.0 hr 2x JV helicopter @ 493.68/hr net		493.68 CV
btorwoods		3.00 CV
Receives General, maps		2.00 CV
		8481.78
		29,921.78
<b>CREDITS</b>		
C. A. MAIN - 1 day working on CUB TV		265.00
SUBJECTS QLP 41 SERIES TO CUB TV, 12/2h @ 290		3538.00 G1
		(3,803.00)
<b>Total</b>		\$ 26,118.78

In Account With  
QUARTZ LAKE PROJECT

Project -

Date --

JULY 31, 1982

		Total
<b>MANAGEMENT</b>		
July		2,250.00
<b>LABOUR</b>		
Supervisory		A
Field		
✓ J. CARNE - JULY 1-31 @ 3000		3000.00
✓ D. BILLARD - JULY 1-31 @ 1950		1950.00
✓ C. GRIFF - " " " @ 1650		1650.00
✓ C. OPSITMORN - " " " @ 1450		1450.00
✓ B. Mc DANIEL - " " " @ 1400		1400.00
✓ R. CARSWELL - " " " @ \$50/day		1550.00
		B
		11,000.00
	plus 50 %	5,500.00
Casual		
<b>EXPENSES</b>		
Accounting JULY		500.00 C3
Expediting JULY		1400.00 D3
Room & Board in Whse		
	total days at \$ /day	
Field equipment from AC stock		
Xerox copies, 82 copies at 25¢/copy		20.50 C1
Radio rental 5B x 11 July 1-31		300.00 D1
Rental AC Brown Truck 10 DAYS at \$ 40 /day		
plus ( - to 48439) 129 kms at 25¢/km		444.75 D4
Petty cash 2.72 C2; 4.65 D2; 10 D3		17.97 C2-D2-D3-10
Telephone 11.61		11.61 CV
Blueprinting, - sq. ft. Ozalid at c/ft plus - sq. ft. Dilar at \$ /ft.		
Drafting, hrs. at \$ /hr.		
rental AC driverless messengers, July 1-31		50.00 D1
postage		75.00 CV
Waters Lake Hotel		11.75 DV
Food Fuel		4.46 DV
Warden Materials		9.55 D1
People Drug		28.22 D1
kits Marine		20.78 D1
		2893.69
		21,643.69
<b>Credits</b>		
✓ Sub-let Billard, Greig, Opsitorn & McDaniel to TOV July 5-14 - 10 crew days @ \$431/d		(4310.00) B
✓ Sub-let J. Carne to 2X, July 20		(235.00) B
drum return credit to 2X		(352.00) B3
fuel sold to GOV on July 7 (5 drums)		(704.93) B3
sublet 27.2 hrs GOV to TOV July 4 to 15		(8208.80) B1
sublet 317 hrs to 2X July 20 plus 8 @ \$5.55 fuel		(1201.55) B1 1036 B3, 44
		(15,012.28)
	<b>Total</b>	6631.41

Project -  
Date --

QUARZ LAKE PROJECT  
AUG 31, 1982

		Total
<b>MANAGEMENT</b>		
Aug		2250.00
<b>LABOUR</b>		
<b>Supervisory</b>		
M. P. Phillips - 1 hr review claim data		37.50
<b>Field</b>		
J. CARWE	- Aug 1-31 @ 3000	3000.
D. BILLARD	- Aug 1-31 @ 1950	1950.
K. OPSKROFFEN	- Aug 1-31 @ 1450	1450.
C. GREGG	- Aug 1-31 @ 1650	1650.
B. McDANIEL	- Aug 1-31 @ 1400	1400.
K. CARSWELL	- Aug 1-31 @ 1550/day	1550.
		11,000.00
		5,500.00
<b>Casual</b>	B. HALLMAN - Aug 25 & 27 @ 124/day, plus 50%	372.00
	K. HARKMAN - Aug 30, 31 @ 140/day	280.00
		652.00
<b>EXPENSES</b>		
Accounting	Aug	500.00 C3
Expediting	*	1400.00 D3
Room & Board in Whse	5 MAN DAYS @ 45	225.00 D2
total days at \$ /day		
Field equipment from AC stock		
Xerox copies, 127 copies at 25/copy		31.75 C1
Radio rental 513X 11 for August		300.00 D1
Rental AC Brown truck 22 days in Aug at \$ 40 /mo.		
plus ( 1050, 120 ) + 291 kms at 259 /km		952.75 D4
Petty cash		
Telephone		
Blueprinting, — sq. ft. Ozolid at — c/ft plus — sq. ft. Dilar at \$ — /ft.		
Drafting, — hrs. at \$ — /hr.		
Rental AC Lincoln Van maintenance Aug 1-31		50.00 D1
J. Carwe Exp. acct. - 26.20 D1; 41.50 D2; 34.04		102.20 D1-26.70 D2-41.50 D3 04-34
Change Kits Camera		26.69 D3
Yuba Heart Food		26.26 D1
		5.05 D2
		3619.20
		23,059.20
<b>Credits</b>		
Voucher (fuel 878; Litig 9330)		(10,216.)
Whitcomb Travel		(90.53) D3
sub-let 5.2 km Bell 47 to SP @ 290/km		(1508.) C1
Water Lake Oil		(177.) C3
Sub-let QSV crew to GOV, SP Aug 3-15; 16 crew days at 666/day		(10,656.) C
MARK UP PORTION ON 52.9 HRS 47 SUB-LET TO GOV at (290 - 264) = 26/km		(11,352.) C1
<b>Total</b>		(23,999.53)
		(940.33)



# TRANS NORTH AIR

TRANS. NORTH TURBO AIR LTD.

BOX 4338 • WHITEHORSE • YUKON TERRITORY • Y1A 3T6  
TELEPHONE (403) 668 2177 TELEX 036 8 290

## Archer-Cathro & Assoc Ltd

CHARTERER

# QLP

BILLING ADDRESS

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST. ✓		

ACCOUNT NUMBER	1021
60058	
INVOICE DATE	15   06   82
A/C TYPE	47B2
AIRCRAFT REGISTRATION	FQJY
FLIGHT DATE	09   06   82
PURCHASE ORDER NO.	

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
Roy Lake				
Quo Claims		1.0		Charlie & Brinice
Cue Claims		0.8		- Sandy & Joan - Kris

SUB	S.L.	AMOUNT
144	5020	475 20

1.8	264.	475	20

TERMS NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

X *[Signature]*  
CHARTERER'S SIGNATURE

*[Signature]*  
PILOT'S SIGNATURE

INITIALS S Fletcher  
CO-PILOT'S NAME

ENGINEER'S NAME

FLIGHT ATTENDANT

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

**TOTAL \$ 475 20**

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD.

BOX 434 • WHITEHORSE • YUKON TERRITORY • Y1A 3T6  
TELEPHONE 425-566-2177 TELEEX 036-8-290

## Archibald-Cathro & Assoc Ltd

CHARTERER

### QLP

BILLING ADDRESS

ACCOUNT NUMBER	1021
66177	
INVOICE DATE	21/07/82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	180782
PURCHASE ORDER NO.	
Contract	

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.		
	<input checked="" type="checkbox"/>		

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. - FREIGHT LBS.
Roy Lake				
Regional - East				
Green River		1.1		Charlie - Bernice
CUZ claims		0.5		Joan Kris

SUB	G.L.	AMOUNT
141	STOR	42240

1.6	264 <sup>00</sup>	422	40

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

X *[Signature]*  
 CHARTERER'S SIGNATURE

*[Signature]*  
 PILOT'S SIGNATURE

INITIALS CO-PILOT'S NAME

ENGINEER'S NAME  
 SKF Scott Fletcher

FLIGHT ATTENDANT

TOTAL \$42240

### FLIGHT REPORT INVOICE



**TRANS NORTH AIR**  
TRANS NORTH TURBO AIR LTD.

BOX 4336 • WHITEHORSE • YUKON TERRITORY • VIA 376  
TELEPHONE (413) 668-1111 • TELEX 036-8-290

Archer Cathro & Assoc Ltd

CHARTERER

QLP

BILLING ADDRESS

ACCOUNT NUMBER	1021
66188	
INVOICE DATE	218/07/82
A/C TYPE	47B2
AIRCRAFT REGISTRATION	FQJY
FLIGHT DATE	240782
PURCHASE ORDER NO.	
CONTRACT	

FUEL & OIL-X		TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.			
	✓			

FROM Roy Lake


TO	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. FREIGHT LBS.
Quiver - Gridding		0.2		Kris - Buzzard
Cuz - base line		0.4		Joan - Charlie
Recon. E Coal River		2.2		QLP Consulting

SUB	S.L.	AMOUNT
1/44	51020	739.20

2.8	264.00	739.20
e		
e		
e		

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

WAITING TIME	e	/HR.
FUEL:	e	/GAL.
FUEL:	e	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

  
 CHARTERER'S SIGNATURE  
 KRC  
 INITIALS  
 CO-PILOT'S NAME  
 SEF  
 INITIALS  
 ENGINEER'S NAME  
 Scott Fletcher  
 FLIGHT ATTENDANT

TOTAL \$ 739.20

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD.  
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 TELEPHONE (403) 666-2177 TELEEX 036-8-290

*Procter & Gamble Assoc Ltd*

CHARTERER

*QLP*

BILLING ADDRESS

ACCOUNT NUMBER	1021
66190	
INVOICE DATE	218/017/82
A/C TYPE	4752
AIRCRAFT REGISTRATION C	FD 11
FLIGHT DATE	250787
PURCHASE ORDER NO.	
CONTRACT	

FUEL • OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	<input checked="" type="checkbox"/>		

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. - FREIGHT LBS.
<i>ROY LAKE</i>				
<i>QUIVER gold</i>		<i>0.4</i>		<i>Buzzard + Chris</i>
<i>Cuz base</i>		<i>0.5</i>		<i>Joan + Bernice</i>
<i>base</i>				

SUB	G.L.	AMOUNT
<i>14451020</i>		<i>23760</i>

<i>0.9</i>	<i>264.00</i>	<i>23760</i>

TERMS: NET 30 DAYS  
 2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

*[Signature]*  
 CHARTERER'S SIGNATURE

*KRC* *[Signature]*  
 INITIALS CO-PILOT'S NAME

*SEF* *[Signature]*  
 INITIALS ENGINEER'S NAME

*Scott Fletcher*  
 FLIGHT ATTENDANT

WAITING TIME	@	/HR.	
FUEL:	@	/GAL.	
FUEL:	@	/GAL.	
MEALS & LODGING			
OTHER			
OTHER			

**TOTAL \$ 23760**

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

BOX 4338 • WHITEHORSE • YUKON TERRITORY • Y1A 1T6  
TELEPHONE (403) 568-2177 • TELEX 036-B-290

*Fletcher Brothers & Assoc Ltd*

CHARTERER

*GLP*

BILLING ADDRESS

ACCOUNT NUMBER	1021
66192	
INVOICE DATE	28/07/82
A/C TYPE	4732
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	26/07/82
PURCHASE ORDER NO.	
CONTRACT	

FUEL & OIL - TMTA	OIL - CUST.	TNTA FUEL USED	HRS.-GALS.	FROM
	<input checked="" type="checkbox"/>			

FROM TO	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
<i>Roy Lake</i>				
<i>Cuz - dirt bag</i>		<i>1.0</i>		<i>Repacked tires Charlie</i>
<i>Regional - S. Otter CK Area - Quo N Camp CK - West Coal Area</i>		<i>1.6</i>		<i>Scum</i>

SUB	G.L.	AMOUNT
<i>144</i>	<i>50120</i>	<i>686 40</i>

<i>2.6</i>	<i>264.00</i>	<i>686 40</i>

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

*[Signature]*  
 CHARTERER'S SIGNATURE

*[Signature]*  
 PILOT'S SIGNATURE

INITIALS: *SEF* CO-PILOT'S NAME: \_\_\_\_\_

ENGINEER'S NAME: *Scott Fletcher*

FLIGHT ATTENDANT: \_\_\_\_\_

WAITING TIME: *e* /HR.

FUEL: *e* /GAL. \_\_\_\_\_

FUEL: *e* /GAL. \_\_\_\_\_

MEALS & LODGING: \_\_\_\_\_

OTHER: \_\_\_\_\_

OTHER: \_\_\_\_\_

*PA* TOTAL \$ *686 40*

FLIGHT REPORT INVOICE



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

BOX 4336 • 4th FLOORSE • Y. KEN TERR TORY • VIA 376  
TELEPHONE 432 456-2127 TELE 336 6 290

## Archer Cathrod Assoc Ltd

CHARTERER

### QLP

BILLING ADDRESS

ACCOUNT NUMBER	1021
66195	
INVOICE DATE	1.10.82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	28 07 82
PURCHASE ORDER NO.	
contract	

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.		
	<input checked="" type="checkbox"/>		

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
Roy Lake				
Cuz claims - baggers		1.5		Kris Bernice Buzzard Charlie Joan

SUB	G.L.	AMOUNT
11445020		396 00

1.5 @ 264<sup>00</sup> 396 00

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

X *[Signature]*  
 CHARTERER'S SIGNATURE

KRC *[Signature]*  
 INITIALS CO-PILOTS NAME

SEF *[Signature]*  
 ENGINEER'S NAME  
 Scott Fletcher

FLIGHT ATTENDANT

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

Y1 RA

**TOTAL** \$ 396 00

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

BOX 208 • WILKINSON • YUKON TERRITORY • Y1A 0T6  
TELEPHONE (403) 566-2177 TELEEX 036-6-290

*Archer Cathro & Assoc Ltd*  
CHARTERER

*QLP*

BILLING ADDRESS

FUEL & OIL-X		TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.			
	<input checked="" type="checkbox"/>			

ACCOUNT NUMBER	1021
66199	
INVOICE DATE	15/02/82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	300782
PURCHASE ORDER NO.	
<i>Contract</i>	

FROM TO	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
<i>Roy Lake</i>				
<i>Cuz - sampling with Mr Bear</i>		<i>0.4</i>		<i>Charlie</i>
<i>AUP - bag it</i>		<i>1.3</i>		<i>Kris Bernice &amp; Buzzard</i>

SUB	G.L.	AMOUNT
<i>1144</i>	<i>5020</i>	<i>448 80</i>

*1.7 • 264<sup>c</sup> - 448 80*

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

WAITING TIME	⊙	/HR.
FUEL:	⊙	/GAL.
FUEL:	⊙	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

*[Signature]*  
CHARTERER'S SIGNATURE

*KPC*  
INITIALS

*[Signature]*  
CO-PILOT'S NAME

*SEF*  
INITIALS

*Scott Fletcher*  
ENGINEER'S NAME  
FLIGHT ATTENDANT

**TOTAL** *\$448 80*

**FLIGHT REPORT INVOICE**

*UP*

*PK*



# TRANS NORTH AIR

TRANS. NORTH TURBO AIR LTD.

Box 438 • WILTFURSE • YUKON TERRITORY • Y1A 5Y6  
TELEPHONE 405-668-2177 TELETYPE 036-6-290

## Archer Cathro Assoc Ltd

CHARTERER

ACCOUNT NUMBER	1021
66225	
INVOICE DATE	31/08/82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	200882
PURCHASE ORDER NO. Contract	

BILLING ADDRESS

### QLP

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.		
	✓		

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
ROY LAKE				
TO				
GUZ - sampling claim locations		1.7		Buzzard Kris Joam
grub & gear haul to Watson		1.3		Joam

SUB	G.L.	AMOUNT
144	STO20	79200

3.0 @ 26400 = 79200

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

*[Signature]*  
CHARTERER'S SIGNATURE

*[Signature]*  
PILOT'S SIGNATURE

INITIALS: SEF  
CO-PILOT'S NAME: Scott Fletcher  
ENGINEER'S NAME: Scott Fletcher  
FLIGHT ATTENDANT:

**TOTAL \$ 79200**

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

BOX 438 • WHITEHORSE • YUKON TERRITORY • Y1A 5P2  
TELEPHONE (403) 438 2777 • TELEX 030 5 296

## Archer Cathro & Assoc Ltd

CHARTERER

ACCOUNT NUMBER	1021
66226	
INVOICE DATE	31/08/82
A/C TYPE	4782
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	21/08/82
PURCHASE ORDER NO.	
Contract	

BILLING ADDRESS **QLP**

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	<input checked="" type="checkbox"/>		

FROM <b>ROY LAKE</b>	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. - FREIGHT LBS.
TO				
<b>Cuz claims sampling prospecting baseliner</b>		<b>1.9</b>		<b>Charlie Kris Buzzard</b>

SUB	S.L.	AMOUNT
1144	501.20	501.60

1.9 @ 2640 = 501.60

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

*[Signature]* TUNAR  
CHARTERER'S SIGNATURE

**KRC** *[Signature]*  
INITIALS CO-PILOT'S NAME

**SEF** *[Signature]*  
ENGINEER'S NAME  
FLIGHT ATTENDANT

**TOTAL \$ 501.60**

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS, NORTH TURBO AIR LTD

BOX 4338 • WHITBY, ONT. • YUKON TERRITORY • Y-2A 276  
TELEPHONE (416) 298-1177 • TEL. EX. 536-B-296

## Archer-Cuthro & Assoc Ltd

CHARTERER

### QLP

BILLING ADDRESS

ACCOUNT NUMBER	1021
66227	
INVOICE DATE	31 08 82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	22 08 82
PURCHASE ORDER NO.	
Contract	

FUEL	OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.			
	✓			

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. - FREIGHT LBS.
Roy Lake				
Cuz - sampling baseline		1.1		Charlie - Buzzard Kris
- Watson Lake crew + grub		1.4		Kris

SUB	S.L.	AMOUNT
4445020		66000

2.5	264	66000
@		
@		
@		

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

X *[Signature]*  
CHARTERER'S SIGNATURE

KRC *[Signature]*  
INITIALS CO-PILOT'S NAME

SEF *[Signature]*  
ENGINEER'S NAME

Baggo Basher  
FLIGHT ATTENDANT

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

*[Signature]* TOTAL \$ 66000

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

Box 4336 • WHITENORSE • YUKON TERRITORY • Y1A 3T6  
TELEPHONE (403) 448-2177 • TELEFAX (403) 626-2291

## Archer Cathrod Assoc Ltd

CHARTERER

ACCOUNT NUMBER	1021
66228	
INVOICE DATE	30/08/82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	23/08/82
PURCHASE ORDER NO. Contract	

BILLING ADDRESS

### QLP

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA CUST.			

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
Roy Lake				
Cuz - sampling - mapping		2.2		Charlie Buzzard
to QH for samples at Archer		1.2		Joan

SUB	G.L.	AMOUNT
1144	STOL	897 60

3.4	@	2640	89760
@			
@			
@			

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

*[Signature]*  
CHARTERER'S SIGNATURE

KRC *[Signature]*  
INITIALS CO-PILOT'S NAME

SEF *[Signature]*  
ENGINEER'S NAME

FLIGHT ATTENDANT

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

**TOTAL \$ 897 60**

**FLIGHT REPORT INVOICE**

# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

BOX 216 • WHITEHORSE • YUKON TERRITORY • Y1A 1T6  
TELEPHONE 433-4453 • TELEFAX 336-6190

*Archer-Cathro Assoc Ltd*  
CHARTERER

*QLP*

BILLING ADDRESS

ACCOUNT NUMBER	1021
	66229
INVOICE DATE	21/10/82
A/C TYPE	4782
AIRCRAFT REGISTRATION	FQJY
FLIGHT DATE	24/08/82
PURCHASE ORDER NO.	
<i>Contract</i>	

FUEL	OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.			
	<input checked="" type="checkbox"/>			

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. - FREIGHT LBS.
<i>ROY LAKE</i>				
<i>PUZ Sampling &amp; mapping</i>		<i>1.5</i>		<i>Buzzard-Charlie Scam-A1</i>
<i>QH - Bill Halleran &amp; grub</i>		<i>1.4</i>		

SUB	G.L.	AMOUNT
<i>1144502</i>	<i>20</i>	<i>76560</i>

*2.9 @ 2640 = 76560*

TERMS NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

*[Signature]*  
CHARTERER'S SIGNATURE

*KRC*  
INITIALS  
CO-PILOT'S NAME

*SEF*  
ENGINEER'S NAME  
FLIGHT ATTENDANT

*JK* TOTAL \$ *76560*

FLIGHT REPORT INVOICE



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD.

BOX 4336 • WHITEHORSE • YUKON TERRITORY • Y1A 5Y4  
TELEPHONE (465) 468 2177 • TELEX 036 B-290

*Archer Cathro & Assoc Ltd*

CHARTERER

*QLP*

BILLING ADDRESS

ACCOUNT NUMBER	1021
66231	
INVOICE DATE	31   08   82
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	25   08   82
PURCHASE ORDER NO.	
Contract	

FUEL & OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.		
	<input checked="" type="checkbox"/>		

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
<i>Roy Lake</i>				
<i>Cuz - bagging etc</i>		<i>1.6</i>		<i>Bill - Brazard</i>
<i>Regional - west Hyland area</i>		<i>1.3</i>		<i>Al &amp; Joan</i>

SUB	G.L.	AMOUNT
<i>1144</i>	<i>5020</i>	<i>76560</i>

*2.9° 264° 765 60*

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

*[Signature]*  
CHARTERER'S SIGNATURE

*[Signature]*  
CO-PILOT'S SIGNATURE

INITIALS: *SEF* CO-PILOT'S NAME: *Scott Fletcher*

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

ENGINEER'S NAME: *Scott Fletcher*

FLIGHT ATTENDANT

*[Signature]* TOTAL \$ *765.60*

**FLIGHT REPORT INVOICE**

# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD.

BOX 4336 • WHITEHORSE • YUKON TERRITORY • Y 1A 2S6  
TELEPHONE (403) 668-2127 • TELEX 036 8 290

*Archer Cathro & Assoc Ltd*

CHARTERER

*QLP*

BILLING ADDRESS

ACCOUNT NUMBER	1021
66233	
INVOICE DATE	31 10 88
A/C TYPE	47 B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	26 08 82
PURCHASE ORDER NO.	
<i>Contract</i>	

FUEL & OIL-X		TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST			
	<input checked="" type="checkbox"/>			

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS. - FREIGHT LBS.
<i>ROY LAKE</i>				
<i>Cuz - sampling</i>		<i>0.9</i>		<i>Buzzard Bill &amp; Charlie</i>
<i>Al to QH</i>		<i>1.4</i>		
<i>Regional</i>		<i>2.1</i>		<i>Al &amp; Soan</i>

SUB	G.L.	AMOUNT
<i>144</i>	<i>502</i>	<i>1161.60</i>

*4-4 @ 2640 = 1161.60*

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

*[Signature]*  
CHARTERER'S SIGNATURE

*[Signature]*  
PILOT'S SIGNATURE

*KRC* INITIALS  
COPILOT'S NAME

*SEF* INITIALS  
ENGINEER'S NAME *Scott Fletcher*

FLIGHT ATTENDANT

**TOTAL \$ 1161.60**

**FLIGHT REPORT INVOICE**



# TRANS NORTH AIR

TRANS NORTH TURBO AIR LTD

BOX 4038 • WHITEHORSE • YUKON TERRITORY • Y1A 3T6  
TELEPHONE (403) 662-2177 • TELEX 036-8290

## Archer Cathro & Assoc. Ltd

CHARTERER

# QLP

BILLING ADDRESS

FUEL & OIL-X		TNTA FUEL USED	HRS.-GALS.	FROM
TNTA	CUST.			
	✓			

ACCOUNT NUMBER	1021
66235	
INVOICE DATE	31101882
A/C TYPE	47B2
AIRCRAFT REGISTRATION C	FQJY
FLIGHT DATE	270882
PURCHASE ORDER NO.	
Contract	

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
ROY LAKE				
TO				
QH-grub & Joan		0.7		
Bill Halleran in				
Regional North Area		4.5		Joan

SUB	G.L.	AMOUNT
114456	20	1372.80

5.2 @ 2640 = 1372.80

TERMS: NET 30 DAYS  
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.

WAITING TIME	@	/HR.
FUEL:	@	/GAL.
FUEL:	@	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

x *[Signature]*  
 CHARTERER'S SIGNATURE  
*[Signature]*  
 PILOT'S SIGNATURE  
 INITIALS: *[Initials]* CO-PILOT'S NAME:  
 ENGINEER'S NAME: *SEP Scott Fletcher*  
 FLIGHT ATTENDANT:

**TOTAL \$ 1372.80**

**FLIGHT REPORT INVOICE**



# WATSON LAKE OIL DISTRIBUTORS LTD.

BOX 371, WATSON LAKE, YUKON TERR. Y0A 1C0

PHONE 536-7467

## PACIFIC PETROLEUMS LTD.

AGENT FOR:

THIS LOADING NO. \_\_\_\_\_

METER READING FINISH \_\_\_\_\_

PREVIOUS READING NO. \_\_\_\_\_

METER READING START \_\_\_\_\_

SOLD TO \_\_\_\_\_

# ARCHER - CATHRO

PRESENT

# CIP

ORDER NO. \_\_\_\_\_

DATE

4 6 83  
DAY MTH. YR.

TERMS

*Change*

# 13481

NO.	SIZE	DESCRIPTION	QUANTITY	PRICE	AMOUNT
		PREMIUM C <input type="checkbox"/> M <input type="checkbox"/>			
		REGULAR C <input type="checkbox"/> M <input type="checkbox"/>			
		UNLEADED C <input type="checkbox"/> M <input type="checkbox"/>			
		DIESEL C <input type="checkbox"/> M <input type="checkbox"/>			
		DOMESTIC * FURNACE OIL			
		* STOVE OIL			
		<i>180 / 1.30</i>	<i>2050</i>	<i>51.0</i>	<i>1045.50</i>
<i>10/205</i>		DRUMS <i>TEFLON</i>	<i>10</i>	<i>35.00</i>	<i>350.00</i>
		FEDERAL EXCISE TAX			
		GASOLINE TAX		<i>607</i>	<i>14.35</i>
		FUEL OIL TAX <i>Charge</i>	<i>TELL REPORT</i>		<i>60.00</i>
		PROVINCIAL SALES TAX			

TAX LICENCE NUMBER ETC. \_\_\_\_\_

TOTAL

*1469.85*

RECEIVED THE ABOVE GOODS IN GOOD ORDER AND I/WE AGREE TO PAY THE ABOVE AMOUNT

CUSTOMER SIGNATURE

*R. J. Ande BCYAS S-534*

RECEIVED PAYMENT \_\_\_\_\_

INTEREST OF 1 1/2% PER MONTH (18% PER YEAR) MAY BE CHARGED ON OVERDUE ACCOUNTS.

\* UNLAWFUL TO USE FOR OTHER THAN LIGHTING AND HEATING PURPOSES.

### THIS IS YOUR INVOICE



WATSON LAKE OIL DISTRIBUTORS LTD.  
 BOX 371, WATSON LAKE, YUKON TERR. Y0A 1C0  
 PHONE 536-7467

AGENT FOR:  
 THIS LOADING NO. METER READING FINISH

**PACIFIC PETROLEUMS LTD.**

PREVIOUS READING NO.  
 SOLD TO

METER READING START

ARCHER - CATHRO

GATAGA

ORDER NO.

DATE

18 6 82  
 DAY MTH. YR.

TERMS

Charge

13657

NO.	SIZE	DESCRIPTION	QUANTITY	PRICE	AMOUNT
		PREMIUM C <input type="checkbox"/> M <input type="checkbox"/>			
		REGULAR C <input type="checkbox"/> M <input type="checkbox"/>			
		UNLEADED C <input type="checkbox"/> M <input type="checkbox"/>			
		DIESEL C <input type="checkbox"/> M <input type="checkbox"/>			
		DOMESTIC * FURNACE OIL			
		* STOVE OIL			
		100/130	2050	\$1.0	1045.50
		CARTAGE TO W.L. FLYING			40.00
10/205		DRUMS T.F. FLOOR	10	35.00	350.00
		FEDERAL EXCISE TAX			
		GASOLINE TAX	(2050)	0.07	14.35
		FUEL OIL TAX			
		PROVINCIAL SALES TAX			

TAX LICENCE  
 NUMBER ETC.

TOTAL

1449.85

RECEIVED THE ABOVE GOODS IN GOOD ORDER AND I/WE AGREE TO PAY THE ABOVE AMOUNT

CUSTOMER  
 SIGNATURE

R. Close

S-537

RECEIVED  
 PAYMENT

INTEREST OF 1 1/2% PER MONTH (18% PER YEAR) MAY BE CHARGED  
 ON OVERDUE ACCOUNTS.

\* UNLAWFUL TO USE FOR OTHER THAN LIGHTING AND  
 HEATING PURPOSES.

**THIS IS YOUR INVOICE**



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : I8212229

P.O. BOX 4127,  
WHITEHORSE, Y.T.  
Y1A 3S9

Date : 9-AUG-82  
P.O. # : NONE  
Project QLP

Invoice for analytical work reported on certificate(s) A8212229-001 to -005

Quantity	Analysed for code description	unit price	amount
200	101 - Au NAA ppb	6.00	1200.00

Sample preparation and other charges :

200	203 - -35 mesh sieve + ring	1.50	300.00
-----	-----------------------------	------	--------

TOTAL	\$ 1500.00
Discount (20 %)	\$ 300.00

Please pay this amount ----> \$ 1200.00

=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : 18212230

P.O. BOX 4127,  
WHITEHORSE, Y.T.  
Y1A 3S9

Date : 9-AUG-82  
P.O. # : NONE  
Project QLP

Invoice for analytical work reported on certificate(s) A8212230-001 to -004

Quantity	Analysed for code description	unit price	amount
150	101 - Au NAA ppb	6.00	900.00

Sample preparation and other charges :

150	203 - -35 mesh sieve + ring	1.50	225.00
-----	-----------------------------	------	--------

TOTAL	\$ 1125.00
Discount (20 %)	\$ 225.00

Please pay this amount ----> \$ 900.00  
=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : I8212449

P.O. BOX 4127,  
WHITEHORSE, Y.T.  
Y1A 3S9

Date : 17-AUG-82  
P.O. # : NONE  
Project CLP

Invoice for analytical work reported on certificate(s) A8212449-001 to -006

Quantity	Analysed for code description	unit	price	amount
24C	101 - Au NAA	ppb	6.00	1440.00

Sample preparation and other charges :

24C	203 - -35 mesh sieve + ring		1.50	360.00
-----	-----------------------------	--	------	--------

TOTAL \$ 1800.00  
Discount (20 %) \$ 360.00

Please pay this amount ----> \$ 1440.00  
=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : 18212450

P.O. BOX 4127,  
WHITEHORSE, Y.T.  
Y1A 3S9

Date : 17-AUG-82  
P.C. # : NONE  
Project CLP

Invoice for analytical work reported on certificate(s) A8212450-001 to -006

Quantity	Analysed for code description	unit price	amount
24C	101 - Au NAA ppb	6.00	1440.00

Sample preparation and other charges :

24C	203 - -35 mesh sieve + ring	1.50	360.00
-----	-----------------------------	------	--------

TOTAL \$ 1800.00  
Discount (20 %) \$ 360.00

Please pay this amount ----> \$ 1440.00  
=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : 18212997

1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Date : 8-SEP-82  
P.O. # : NONE  
Project CLP

Invoice for analytical work reported on certificate(s) A8212997-001 to -003

Quantity	Analysed for code description	unit price	amount
96	101 - Au NAA ppb	6.00	576.00

Sample preparation and other charges :

92	201 - soil + sediment -80 mesh	0.60	55.20
4	203 - -35 mesh sieve + ring	1.50	6.00

TOTAL \$ 637.20  
Discount ( 20 %) \$ 127.44

Please pay this amount ----> \$ 509.76  
=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : I8213173

1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Date : 20-SEP-82  
P.O. # : NDNE  
Project QLP

Invoice for analytical work reported on certificate(s) A8213173-001 to -007

Quantity	Analysed for code description	unit price	amount
248	101 - Au NAA ppb	6.00	1488.00

Sample preparation and other charges :

236	203 - -35 mesh sieve + ring	1.50	354.00
-----	-----------------------------	------	--------

TOTAL \$ 1842.00  
Discount ( 20 %) \$ 368.40

Please pay this amount ----> \$ 1473.60  
=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: (604) 984-0221  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : I8214273

1016-510 WEST HASTINGS  
 VANCOUVER, B.C.  
 V6B 1L8

Date : 15-NOV-82  
 P.O. # : NONE  
 Project QLP

Invoice for analytical work reported on certificate(s) A8214273-001 to -003

Quantity	Analysed for code description	unit price	amount
118	229 - Partial ICP digestion		
	553 - Arsenic ppm (ICP)		
	556 - Tungsten ppm (ICP)		
	560 - Lead ppm (ICP)		
	561 - Bismuth ppm (ICP)		
	568 - Manganese ppm (ICP)		
	577 - Copper ppm (ICP)	5.50	649.00

Sample preparation and other charges :

118	214 - Bag pulp	0.00	0.00
-----	----------------	------	------

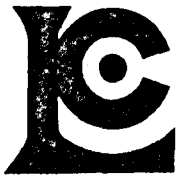
TOTAL	\$	649.00
Discount ( 20 %)	\$	129.80

Please pay this amount ----> \$ 519.20  
 =====

Terms -- net 30 days  
 2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: (604) 984-0221  
 TELEX: 043-52597

- ANALYTICAL CHEMISTS

- GEOCHEMISTS

- REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : I8214274

1016-510 WEST HASTINGS  
 VANCOUVER, B.C.  
 V6B 1L8

Date : 19-NOV-82  
 P.O. # : NONE  
 Project QLP

Invoice for analytical work reported on certificate(s) A8214274-001 to -005

Quantity	Analysed for code description	unit price	amount
185	229 - Partial ICP digestion		
	553 - Arsenic ppm (ICP)		
	556 - Tungsten ppm (ICP)		
	560 - Lead ppm (ICP)		
	561 - Bismuth ppm (ICP)		
	568 - Manganese ppm (ICP)		
	577 - Copper ppm (ICP)	5.50	1017.50

Sample preparation and other charges :

185	214 - Bag pulp	0.00	0.00
-----	----------------	------	------

TOTAL \$ 1017.50  
 Discount ( 20 %) \$ 203.50

Please pay this amount ----> \$ 814.00  
 =====

Terms -- net 30 days  
 2.0 % per month (24 % per annum) charged on overdue accounts



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : I8214275

1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Date : 24-NOV-82  
P.O. # : NONE  
Project QLP

Invoice for analytical work reported on certificate(s) A8214275-001 to -006

Quantity	Analysed for code description	unit price	amount
205	229 - Partial ICP digestion		
	553 - Arsenic ppm (ICP)		
	556 - Tungsten ppm (ICP)		
	560 - Lead ppm (ICP)		
	561 - Bismuth ppm (ICP)		
	568 - Manganese ppm (ICP)		
	577 - Copper ppm (ICP)	5.50	1127.50

Sample preparation and other charges :

205	214 - Bag pulp	0.00	0.00
-----	----------------	------	------

-----

TOTAL	\$ 1127.50
Discount ( 20 %)	\$ 225.50

Please pay this amount ----> \$ 902.00  
=====

Terms -- net 30 days  
2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,  
1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Invoice # : I8214276  
Date : 24-NOV-82  
P.O. # : NONE  
Project QLP

Invoice for analytical work reported on certificate(s) A8214276-001 to -005

Quantity	Analysed for code description	unit price	amount
199	229 - Partial ICP digestion		
	553 - Arsenic ppm (ICP)		
	556 - Tungsten ppm (ICP)		
	560 - Lead ppm (ICP)		
	561 - Bismuth ppm (ICP)		
	568 - Manganese ppm (ICP)		
	577 - Copper ppm (ICP)	5.50	1094.50

Sample preparation and other charges :

199	214 - Bag pulp	0.00	0.00
-----	----------------	------	------

TOTAL	\$ 1094.50
Discount ( 20 % )	\$ 218.90

Please pay this amount ----> \$ 875.60

Terms -- net 30 days  
2.0 % per month (24 % per annum) charged on overdue accounts



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: (604) 984-0221  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATROD & ASSOC. (1981) LTD.,

Invoice # : 18214281

1016-510 WEST HASTINGS  
 VANCOUVER, B.C.  
 V6B 1L8

Date : 29-NOV-82  
 P.O. # : NONE  
 Project QLP

Invoice for analytical work reported on certificate(s) A8214281-001 to -008

Quantity	Analysed for code description	unit price	amount
292	229 - Partial ICP digestion		
	553 - Arsenic ppm (ICP)		
	556 - Tungsten ppm (ICP)		
	560 - Lead ppm (ICP)		
	561 - Bismuth ppm (ICP)		
	568 - Manganese ppm (ICP)		
	577 - Copper ppm (ICP)	5.50	1606.00
Sample preparation and other charges :			
292	214 - Bag pulp	0.00	0.00

TOTAL \$ 1606.00  
 Discount ( 20 %) \$ 321.20

Please pay this amount ----> \$ 1284.80  
 =====

Terms -- net 30 days  
 2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : 18214282

1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Date : 5-NOV-82  
P.O. # : NONE  
Project GLP

Invoice for analytical work reported on certificate(s) A8214282-001 to -008

Quantity	Analysed for code description	unit price	amount
303	022 - Sb ppm	3.75	1136.25

Sample preparation and other charges :

303	214 - Bag pulp	0.00	0.00
-----	----------------	------	------

TOTAL \$ 1136.25  
Discount ( 20 %) \$ 227.25

Please pay this amount ----> \$ 909.00

TERMS -- NET 30 DAYS  
2.0 % per month (24 % per annum) charged on overdue accounts



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ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : 18214285

1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Date : 16-NOV-82  
P.O. # : NONE  
Project CLP

Invoice for analytical work reported on certificate(s) A8214285-001 to -009

Quantity	Analysed for code description	unit price	amount
351	022 - Sb ppm	3.75	1316.25

Sample preparation and other charges :

351	214 - Bag pulp	0.00	0.00
-----	----------------	------	------

TOTAL \$ 1316.25  
Discount ( 20 %) \$ 263.25

Please pay this amount ----> \$ 1053.00  
=====

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS      • GEOCHEMISTS      • REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : ARCHER CATHRO & ASSOC. (1981) LTD.,

Invoice # : 18214286

1016-510 WEST HASTINGS  
VANCOUVER, B.C.  
V6B 1L8

Date : 17-NOV-82  
P.O. # : NONE  
Project QLP

Invoice for analytical work reported on certificate(s) A8214286-001 to -008

Quantity	code	description	unit	price	amount
292	022 - Sb	ppm		3.75	1095.00

Sample preparation and other charges :

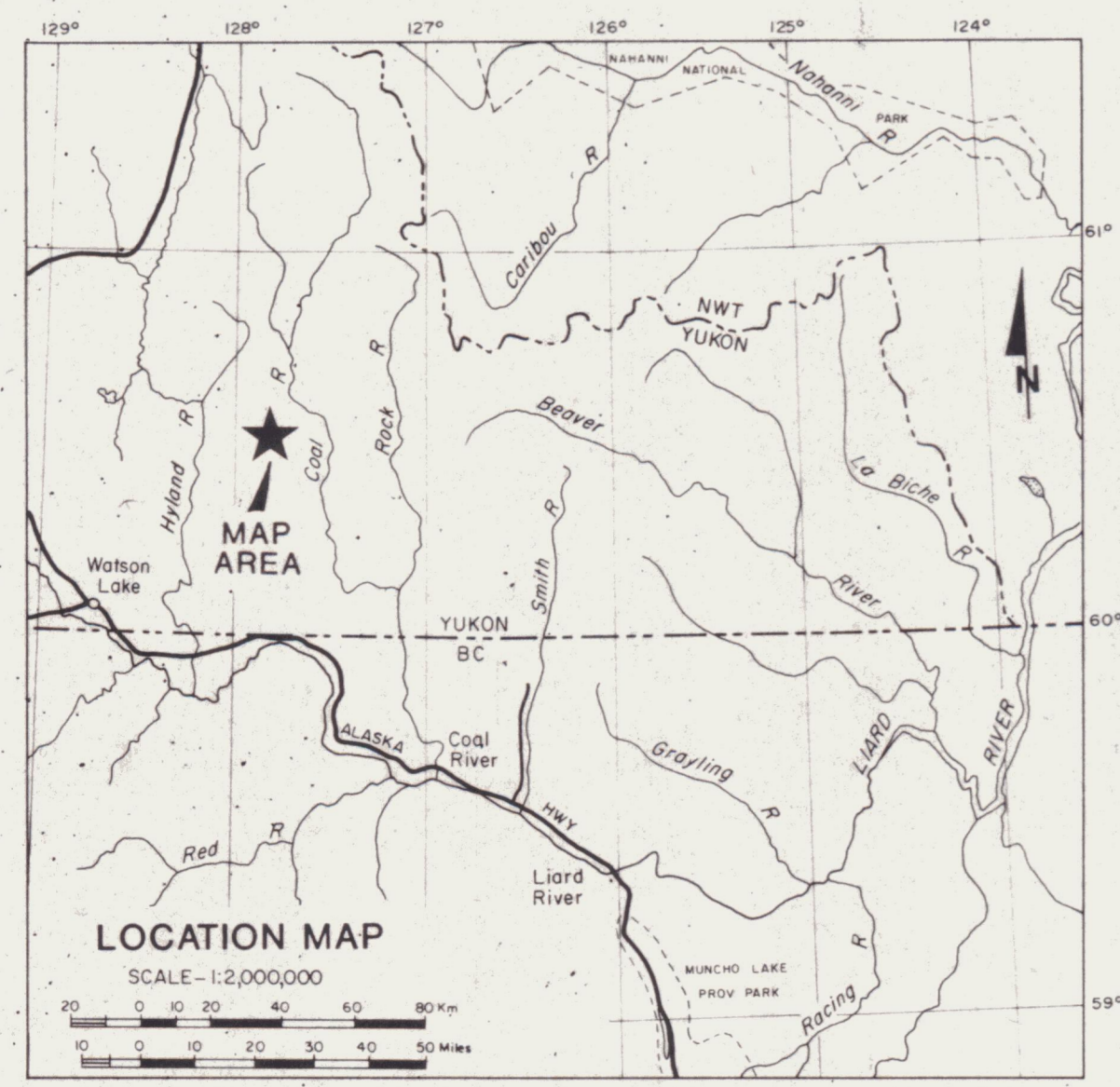
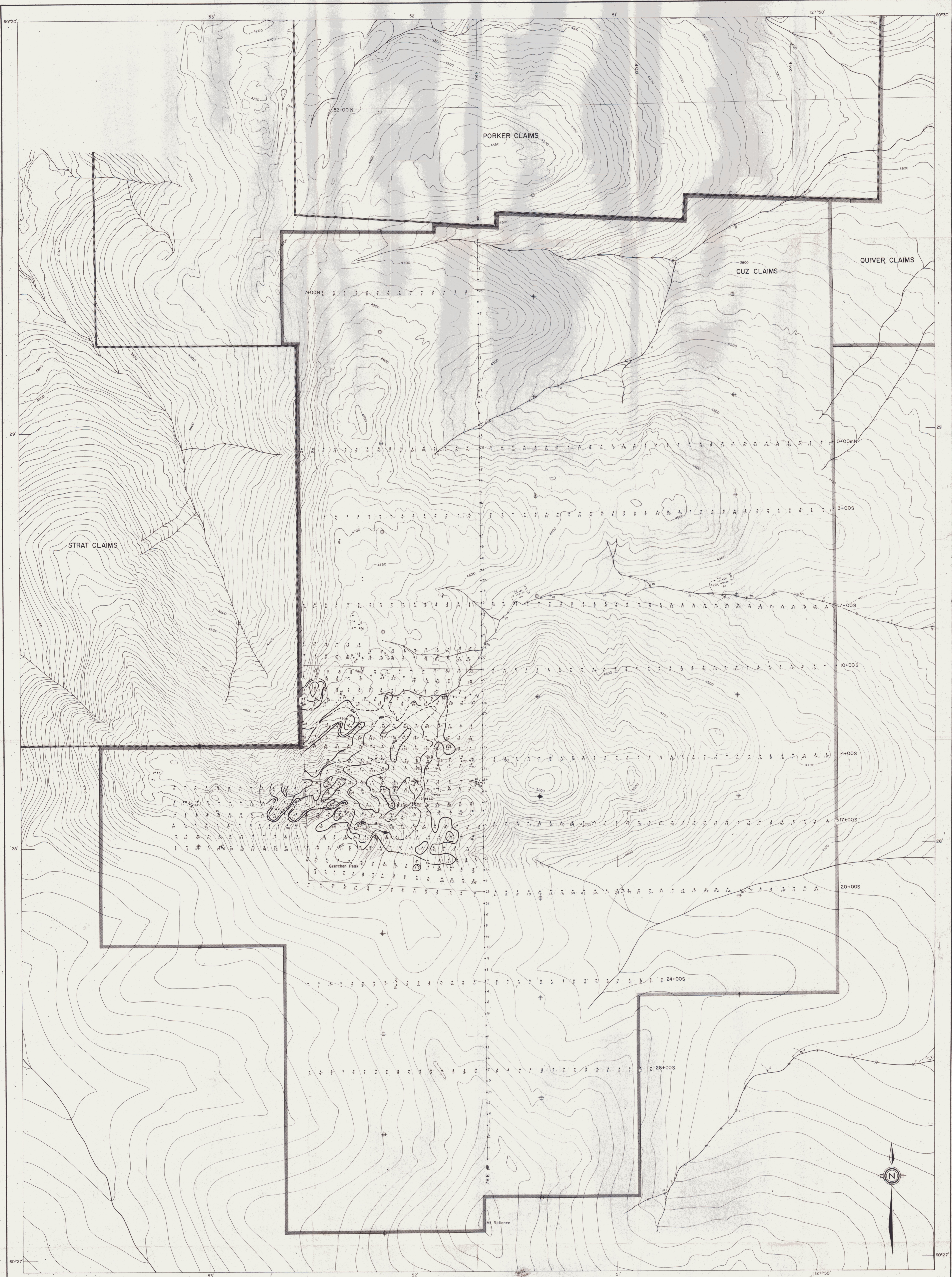
292	214 - Bag pulp			0.00	0.00
-----	----------------	--	--	------	------

-----

TOTAL \$ 1095.00  
Discount ( 20 %) \$ 219.00

Please pay this amount ----> \$ 876.00  
=====

TERMS -- NET 30 DAYS  
2.0 % per month (24 % per annum) charged on overdue accounts



- LEGEND**
- Sample locations (-35 mesh fraction analyzed)
  - soil sample: ppb Au
  - silt sample: ppb Au
  - rock sample: ppb Au
  - Chain and compass surveyed lines
  - Claim post: observed, assumed

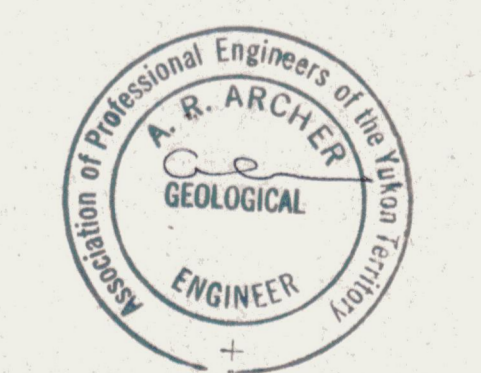
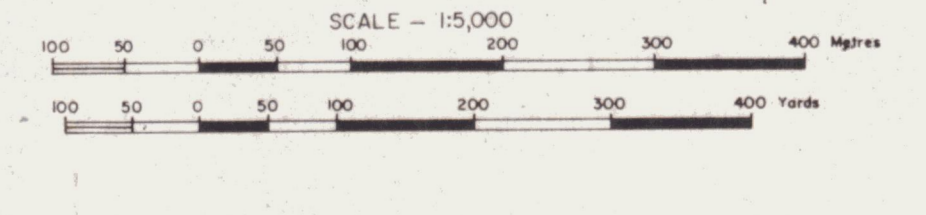
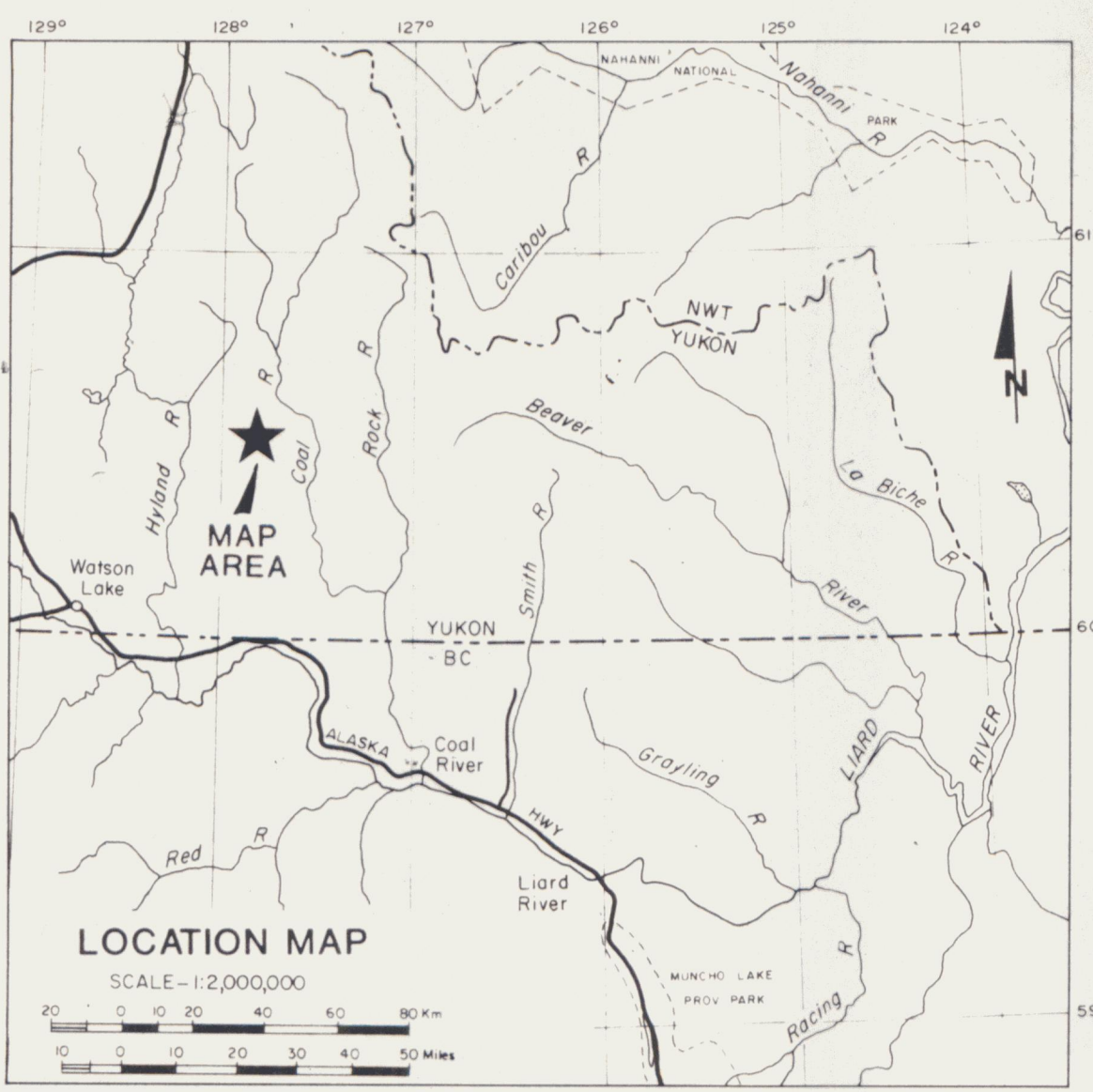
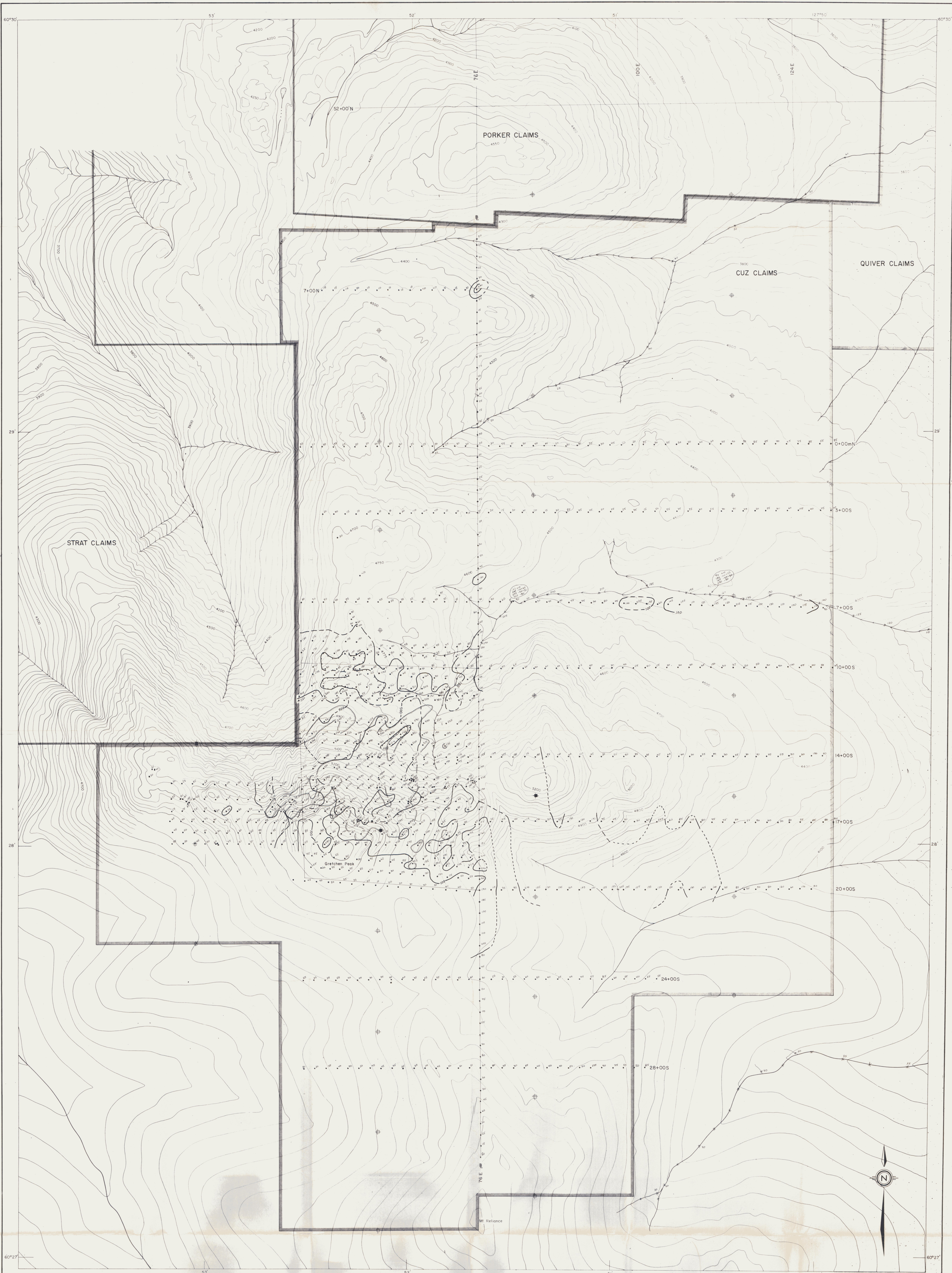


Figure 2  
ARCHER, CATRO & ASSOCIATES (1981) LIMITED

**GOLD GEOCHEMISTRY**  
**CUZ CLAIMS**  
QUARTZ LAKE PROJECT





- LEGEND**
- soil sample: ppm As
  - silt sample: ppm As
  - rock sample: ppm As
  - 100 ppb gold contour
  - Chain and compass surveyed lines
  - ⊕ Claim post: observed, assumed

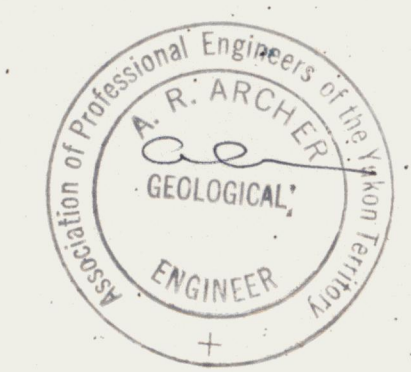
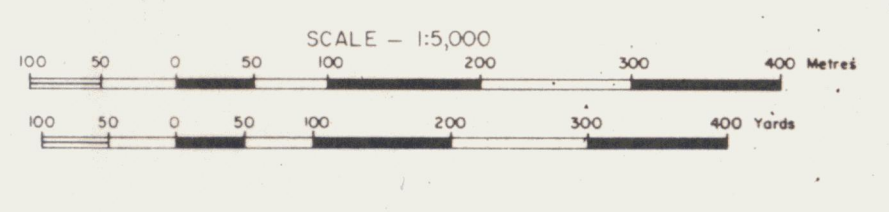
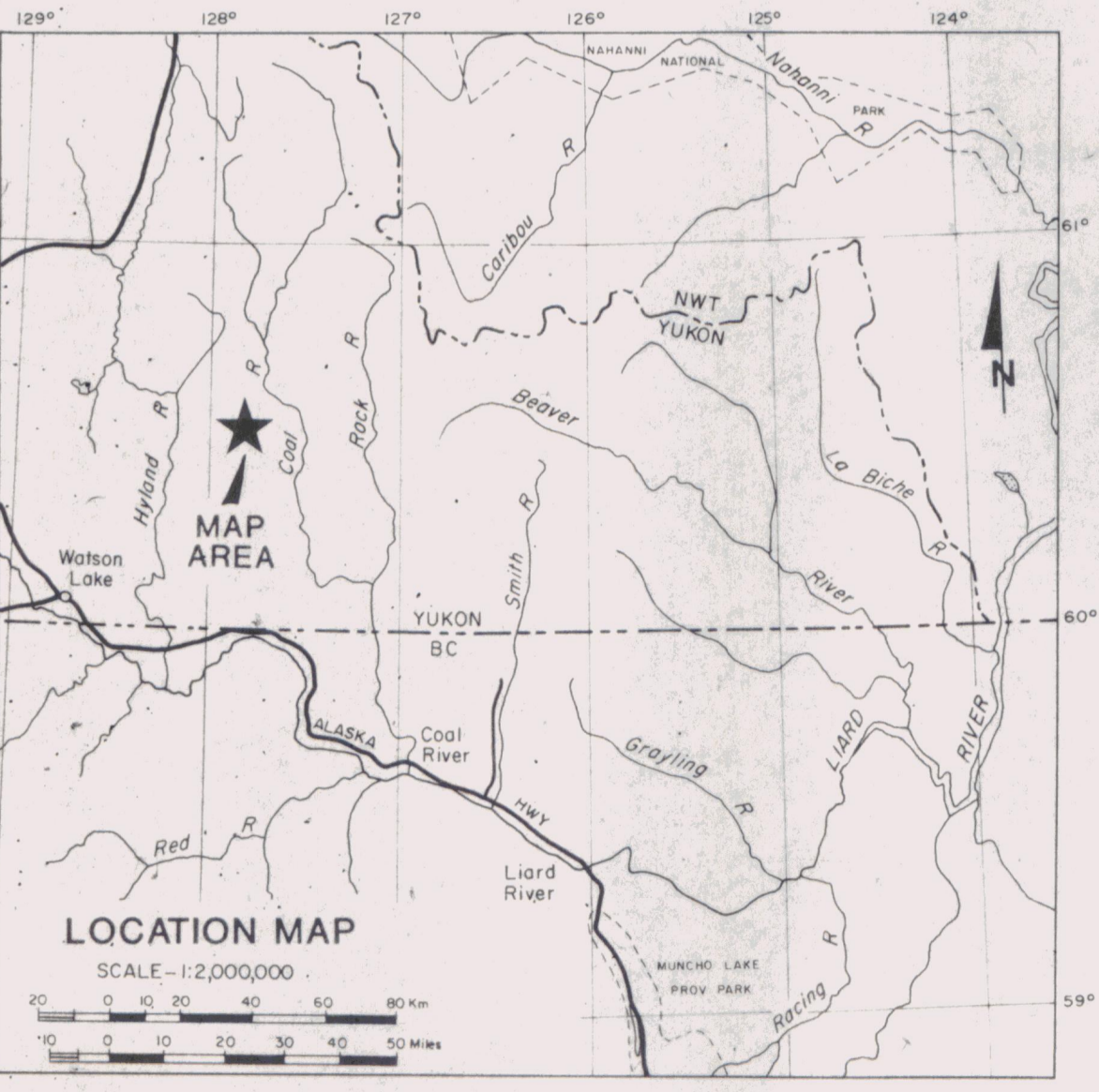
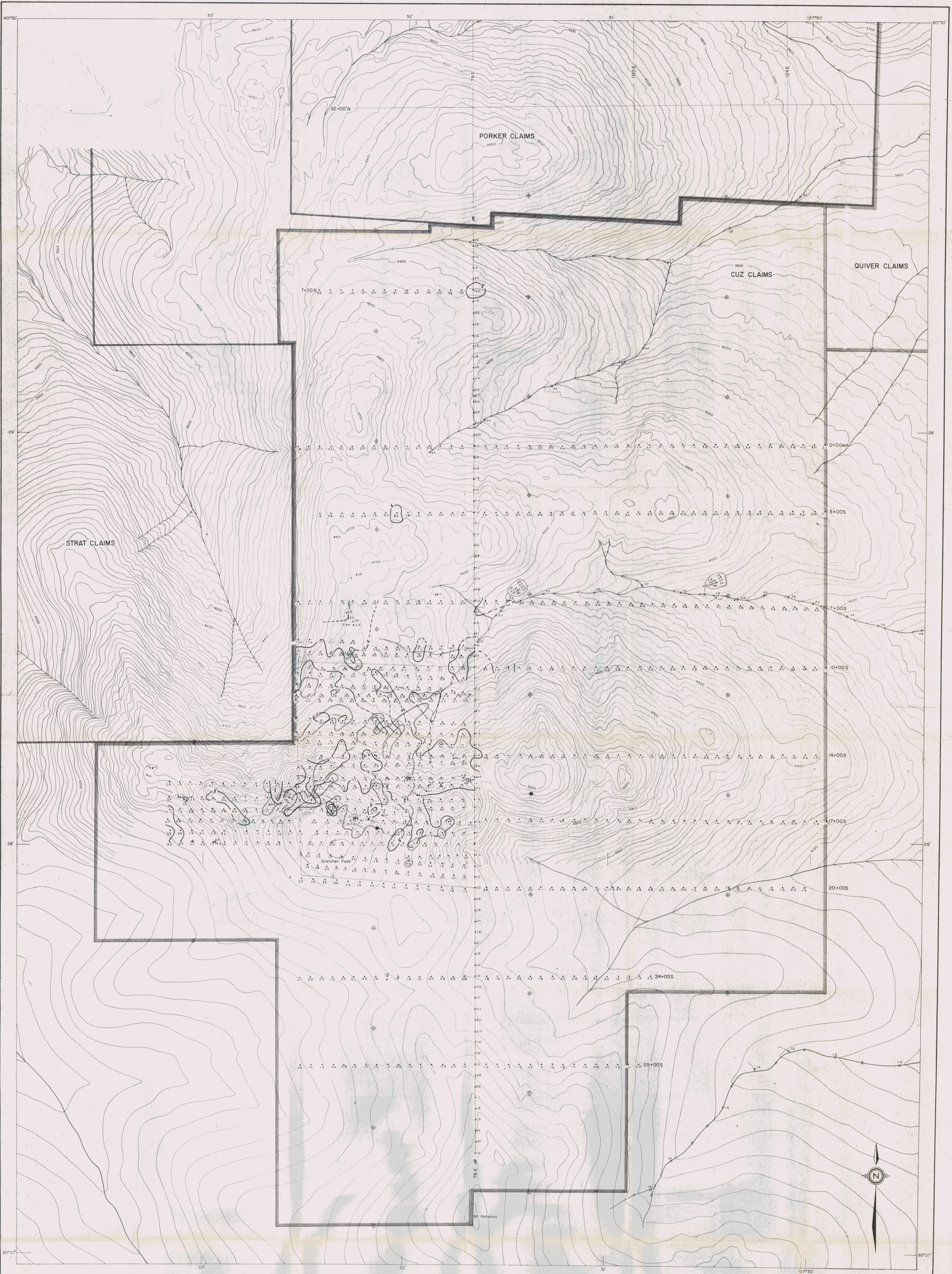


Figure 3  
 ARCHER, CATHRO & ASSOCIATES (1985) LIMITED  
**ARSENIC GEOCHEMISTRY**  
**CUIZ CLAIMS**  
 QUARTZ LAKE PROJECT



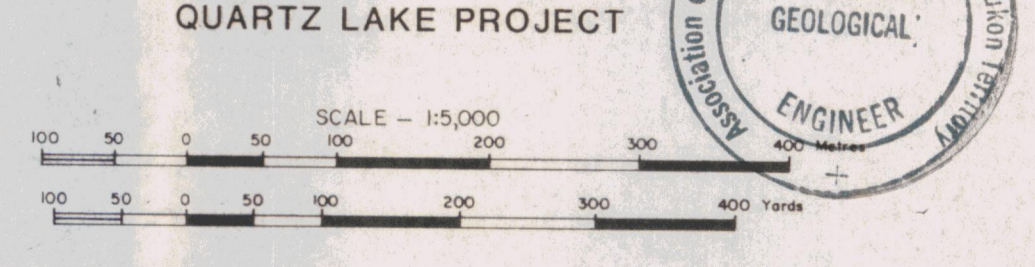


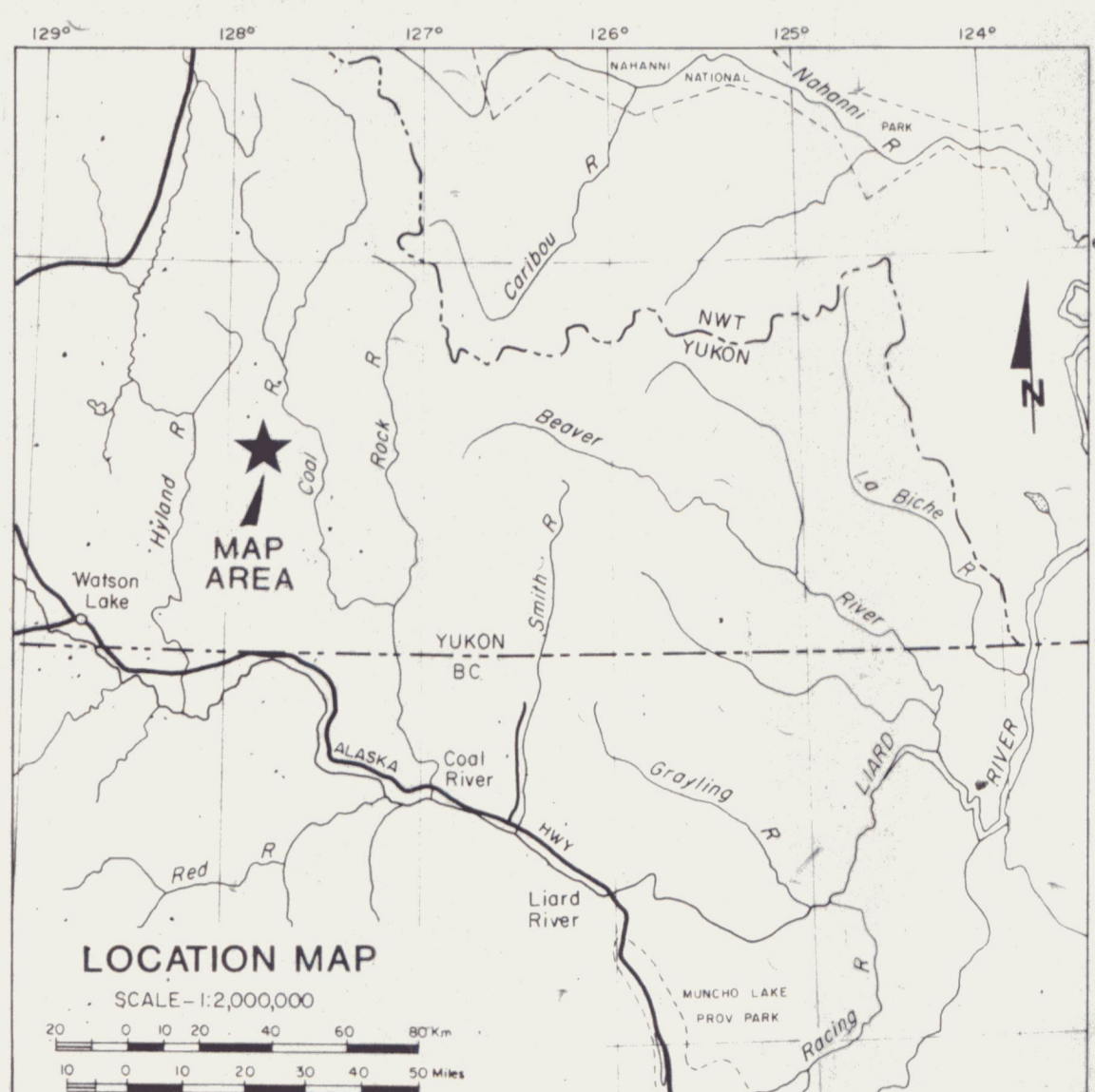
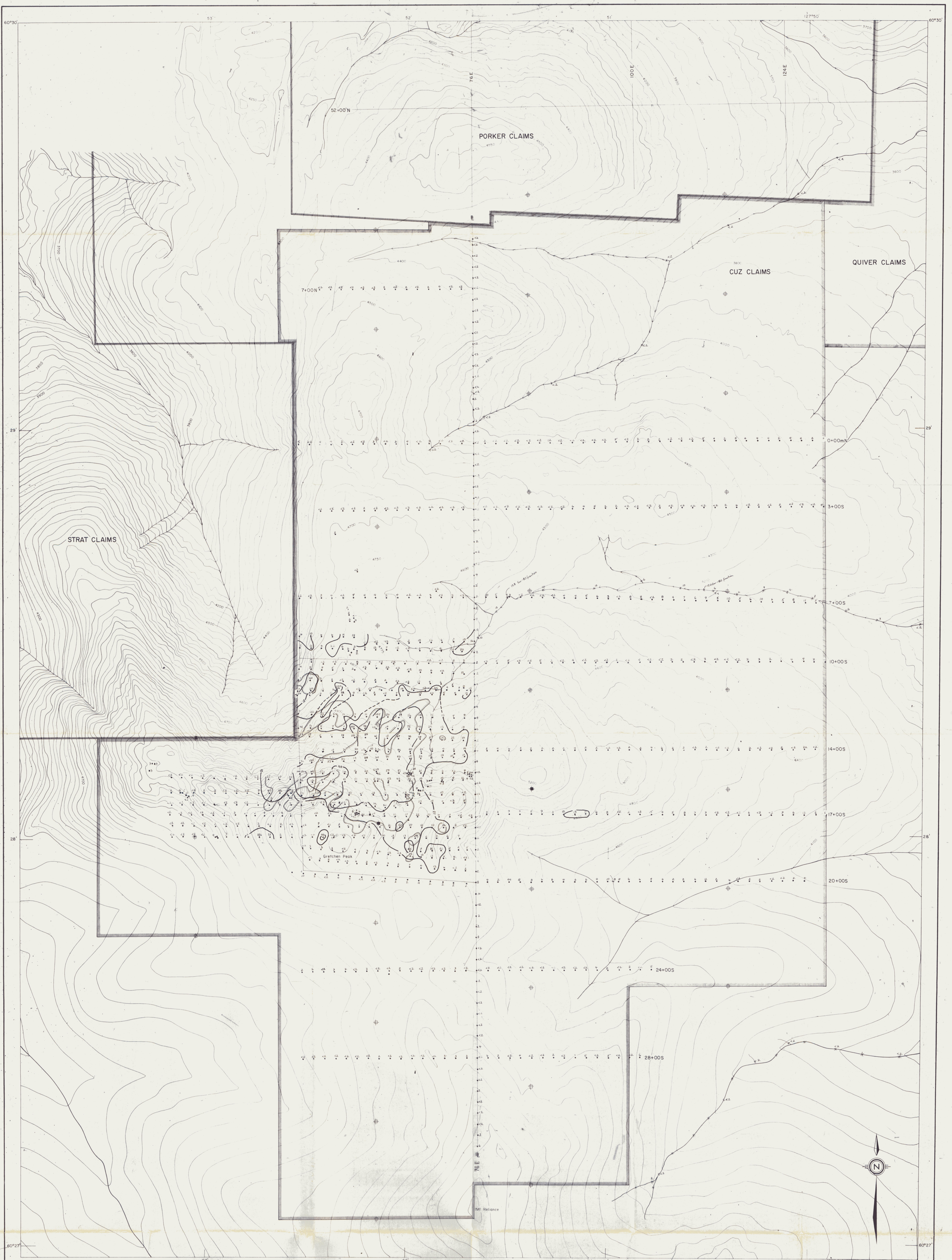
**LEGEND**

- Sample locations (-35 mesh fraction analyzed)
- soil sample: ppm Sb
- silt sample: ppm Sb
- rock sample: ppm Sb
- 100 ppb gold contour
- Chain and compass surveyed lines
- ⊕ Claim post: observed, assumed

Figure 4  
 ARCHER, CATIRO & ASSOCIATES (1983) LIMITED. 091427

**ANTIMONY GEOCHEMISTRY**  
**CUZ CLAIMS**  
**QUARTZ LAKE PROJECT**





**LEGEND**

- Sample locations (- 35 mesh fraction analyzed)
- soil sample: ppm Bi
- silt sample: ppm Bi
- rock sample: ppm Bi
- 100 ppb gold contour
- Chain and compass surveyed lines
- ⊕ Claim post: observed, assumed

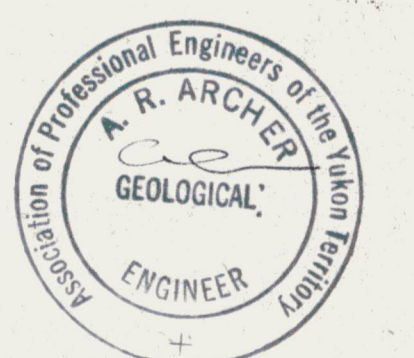


Figure 5

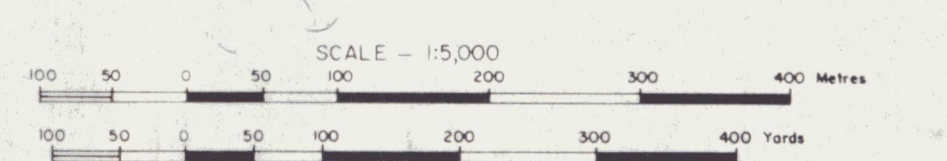
ARCHER, CATHRO & ASSOCIATES (1987) LIMITED

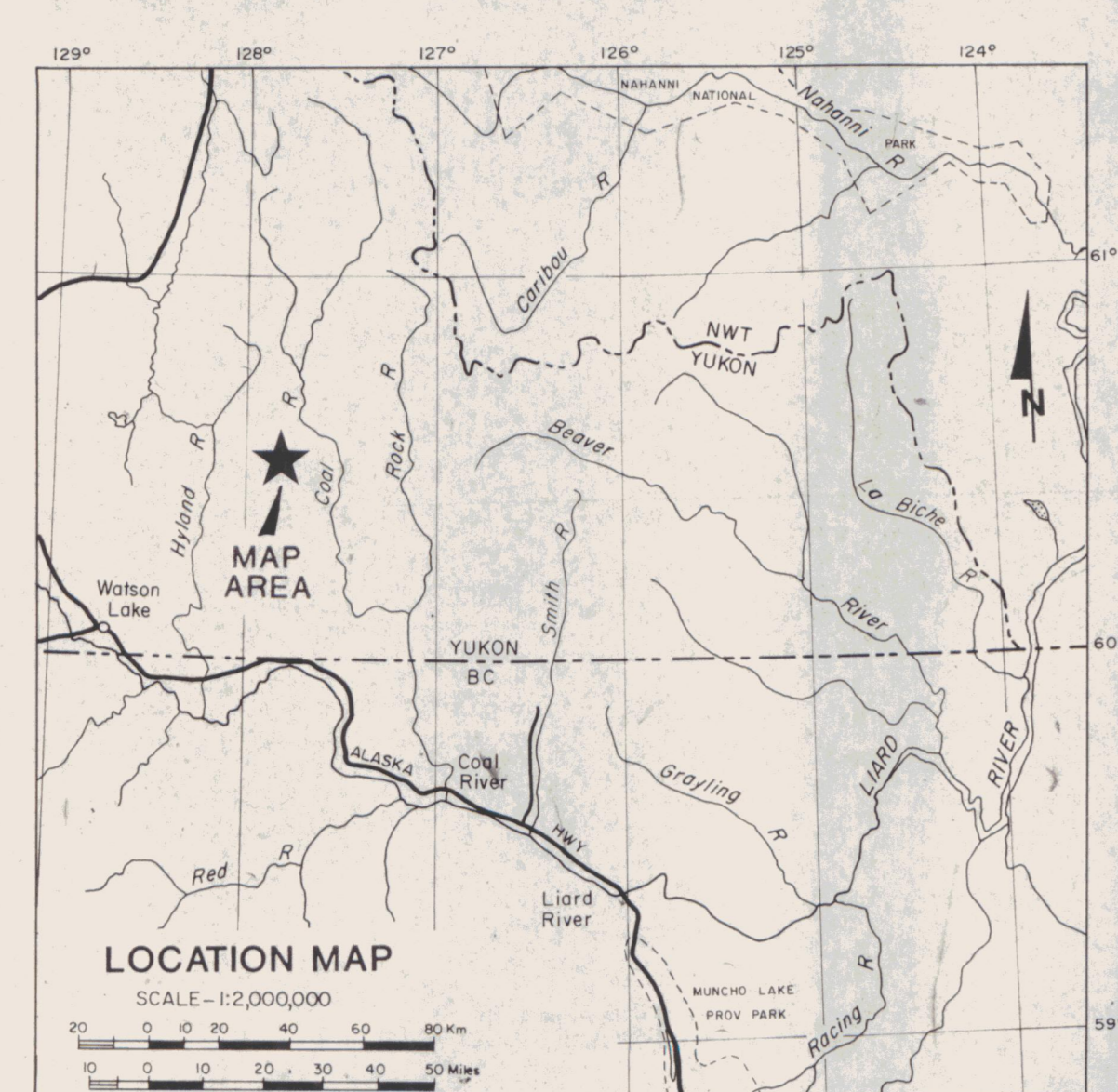
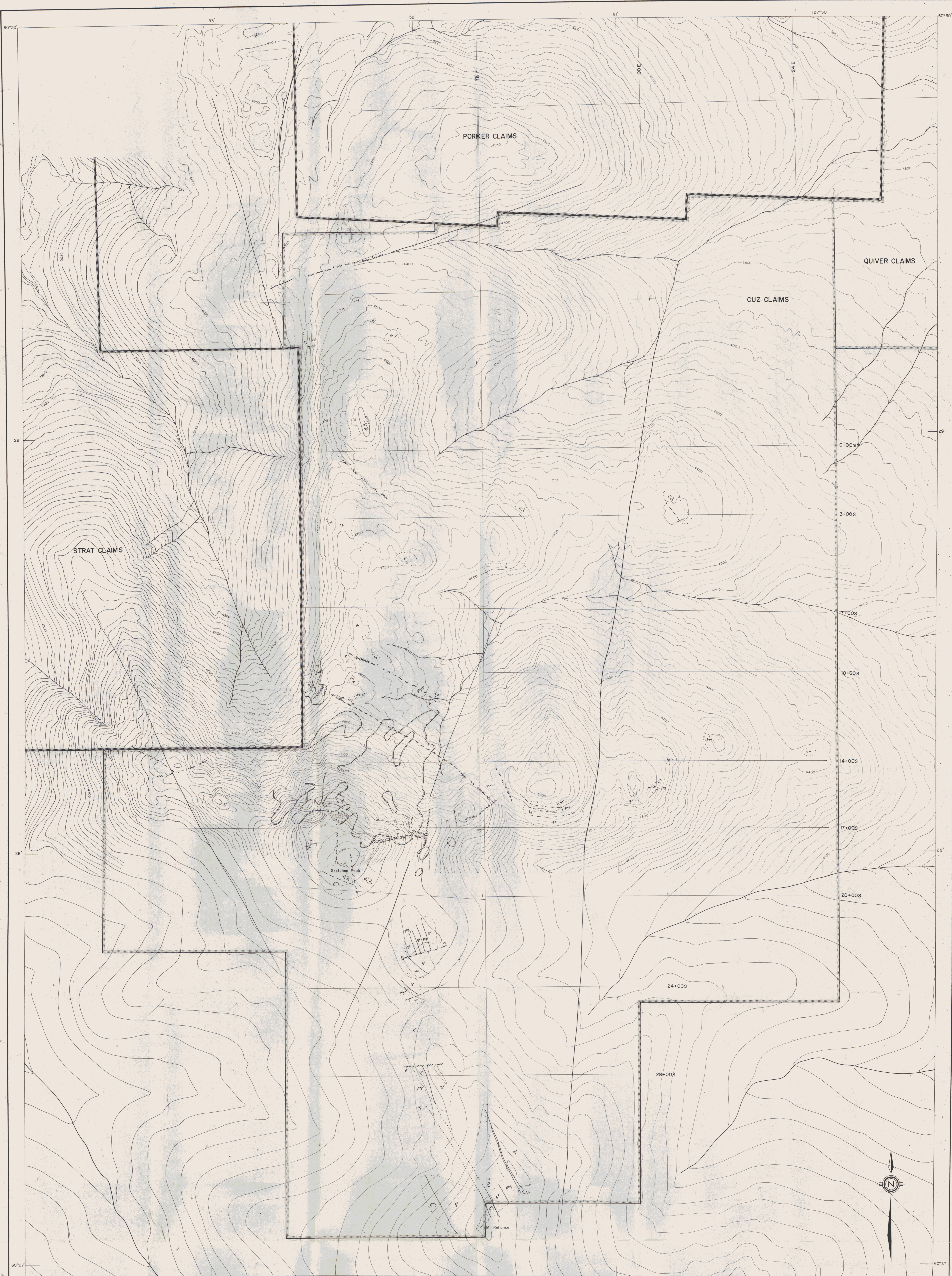
091427

**BISMUTH GEOCHEMISTRY**

**CUZ CLAIMS**

**QUARTZ LAKE PROJECT**





- HADRYNIAN GRIT UNIT**
- ls limestone, silty limestone
  - phy grey, green and black phyllite
  - stst siltstone
  - ss sandstone
  - gr quartz-feldspar grit
  - cgl quartz-feldspar pebble conglomerate
  - silicified zone
- LEGEND**
- Limit of outcrop
  - Lithologic contact: observed, inferred
  - Fault or shear zone: observed, inferred, assumed
  - Mineralized shear zone
  - Bedding strike and dip
  - Cleavage strike and dip
  - Airphoto linear
  - 100 ppb gold contour

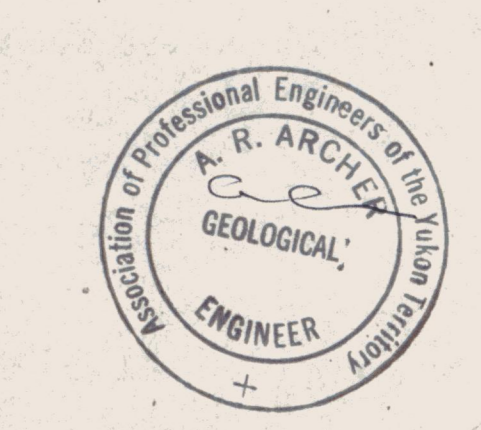


Figure 8  
 ARCHER, CATIRO & ASSOCIATES (1981) LIMITED  
**GEOLOGY**  
**CUZ CLAIMS**  
 QUARTZ LAKE PROJECT 091427

SCALE = 1:50,000  
 0 50 100 150 200 250 300 350 400 METERS  
 0 50 100 150 200 250 300 350 400 FEET

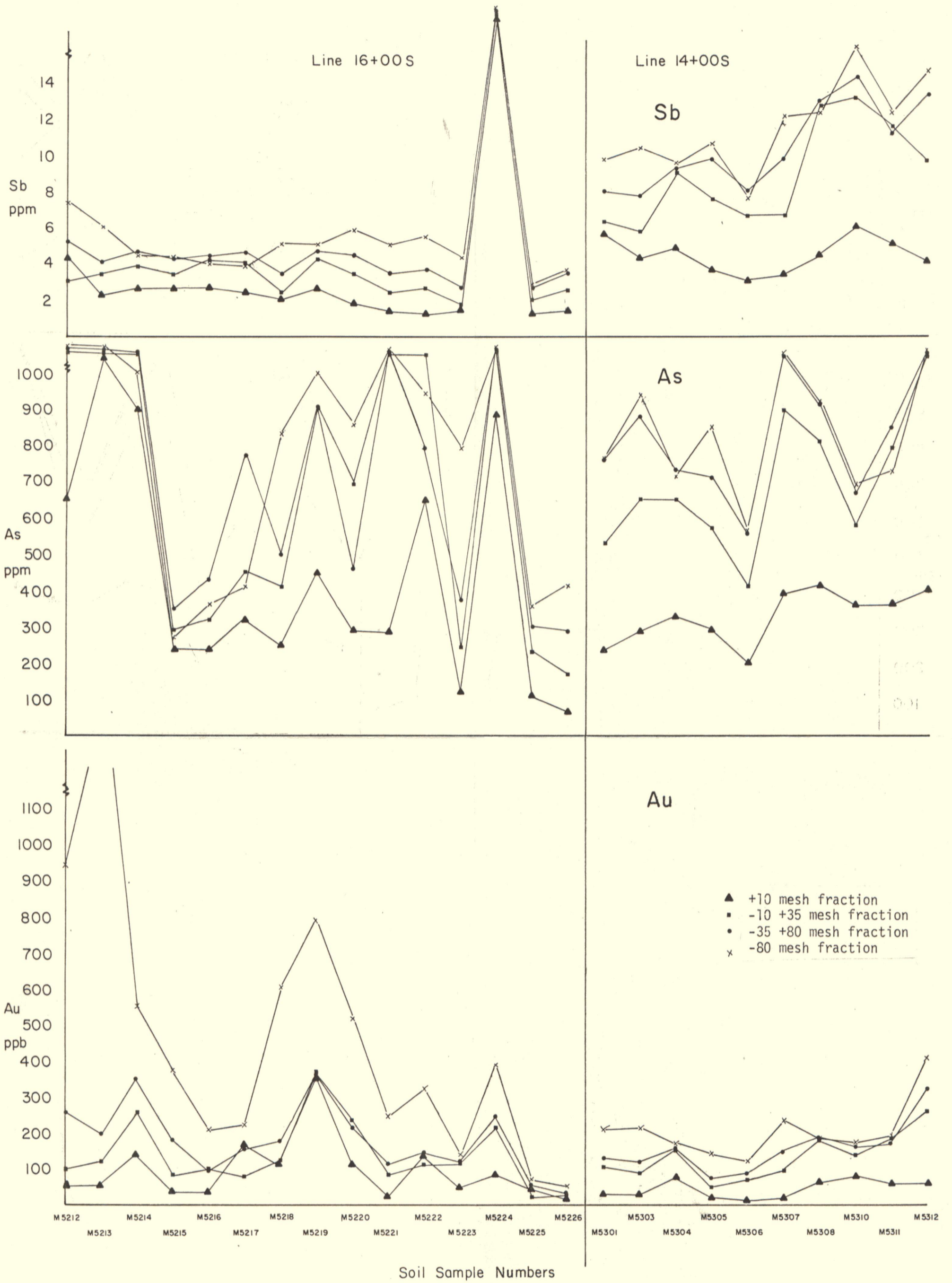
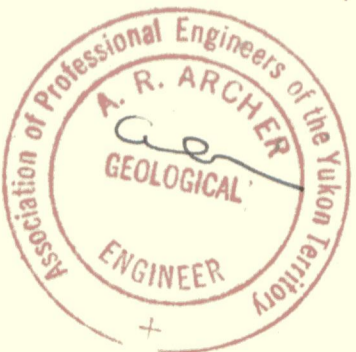
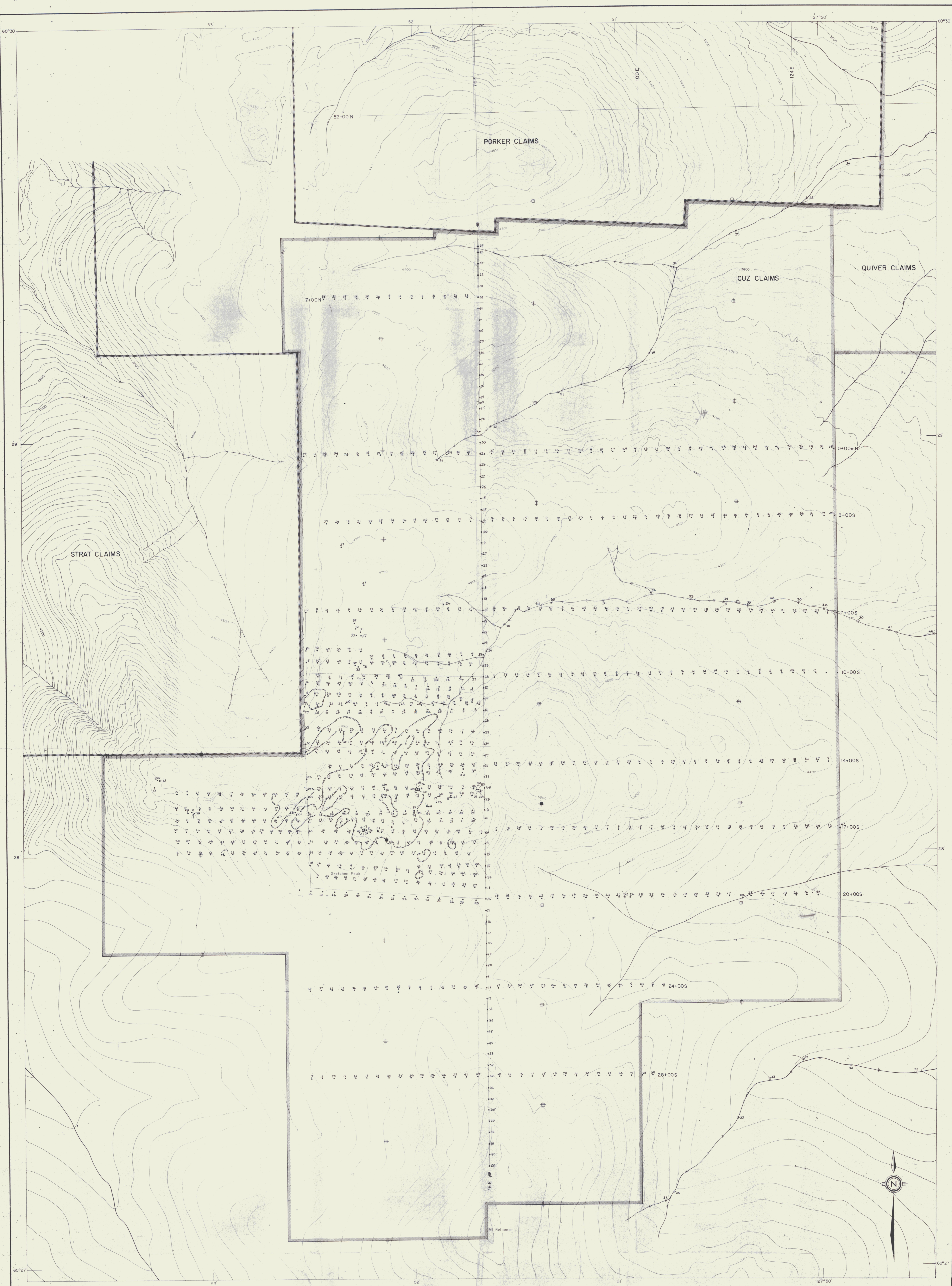


Figure 7 Cuz Claims - Geochemical response from different soil fractions.



091427



STRAT CLAIMS

PORKER CLAIMS

CUZ CLAIMS

QUIVER CLAIMS

7+00N

0+00mN

3+00S

7+00S

10+00S

14+00S

17+00S

20+00S

24+00S

28+00S

Mt. Reliance

Gretchen Peak



LEGEND

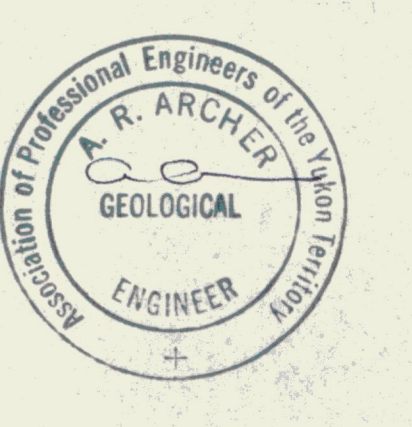
- Sample locations (~35 mesh fraction analyzed)
- soil sample: ppm Cu
- ▲ silt sample: ppm Cu
- rock sample: ppm Cu
- 100 ppb gold contour
- Chain and compass surveyed lines
- ⊕ Claim post: observed, assumed

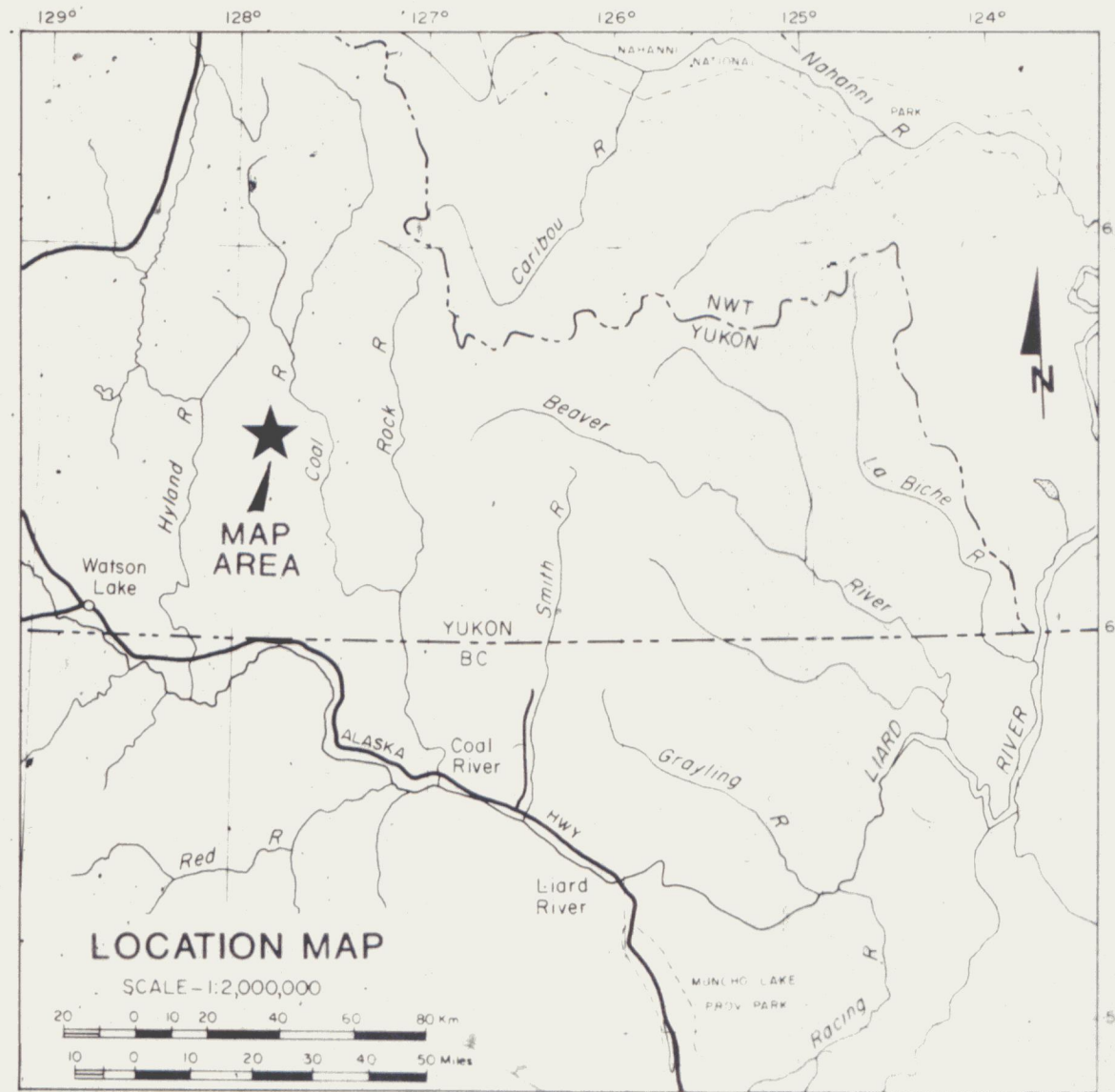
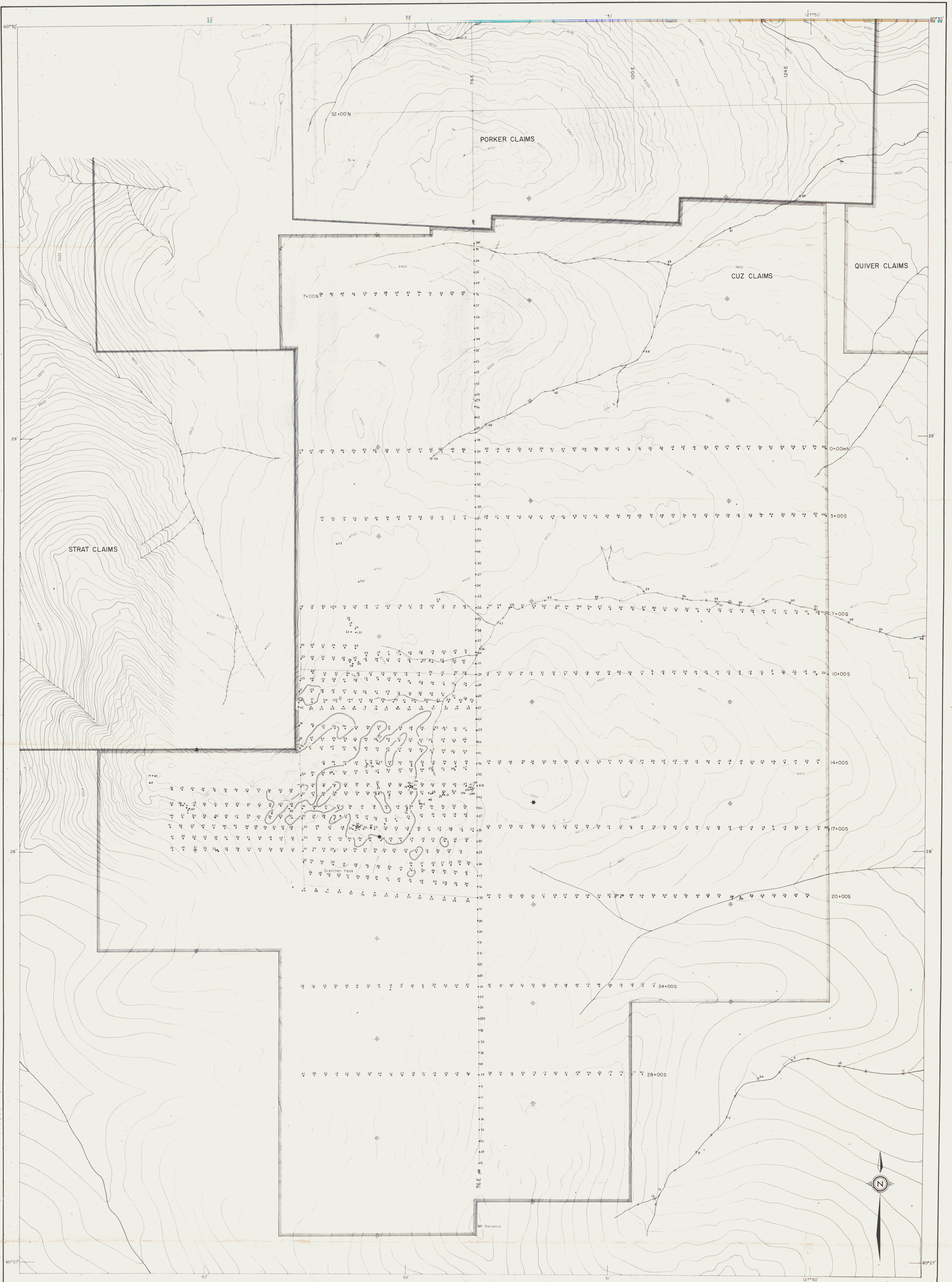
Figure 8  
 ARCHER, CATIRO & ASSOCIATES (1981) LIMITED

**COPPER GEOCHEMISTRY**

CUZ CLAIMS  
 QUARTZ LAKE PROJECT

SCALE = 1:5,000





LEGEND

Sample locations (-35 mesh fraction analyzed)

●<sup>1</sup> soil sample: ppm Pb

●<sup>2</sup> silt sample: ppm Pb

●<sup>3</sup> rock sample: ppm Pb

○ 100 ppb gold contour

— Chain and compass surveyed lines

●⊕ Claim post: observed, assumed

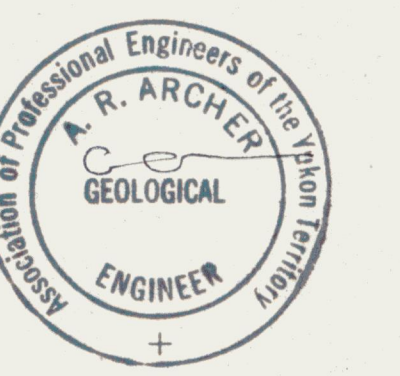


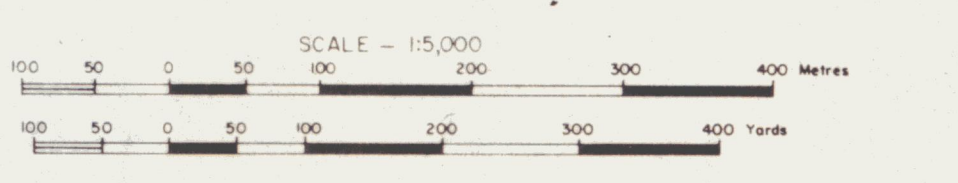
Figure 9

ARCHER, CATRO & ASSOCIATES (1981) LIMITED

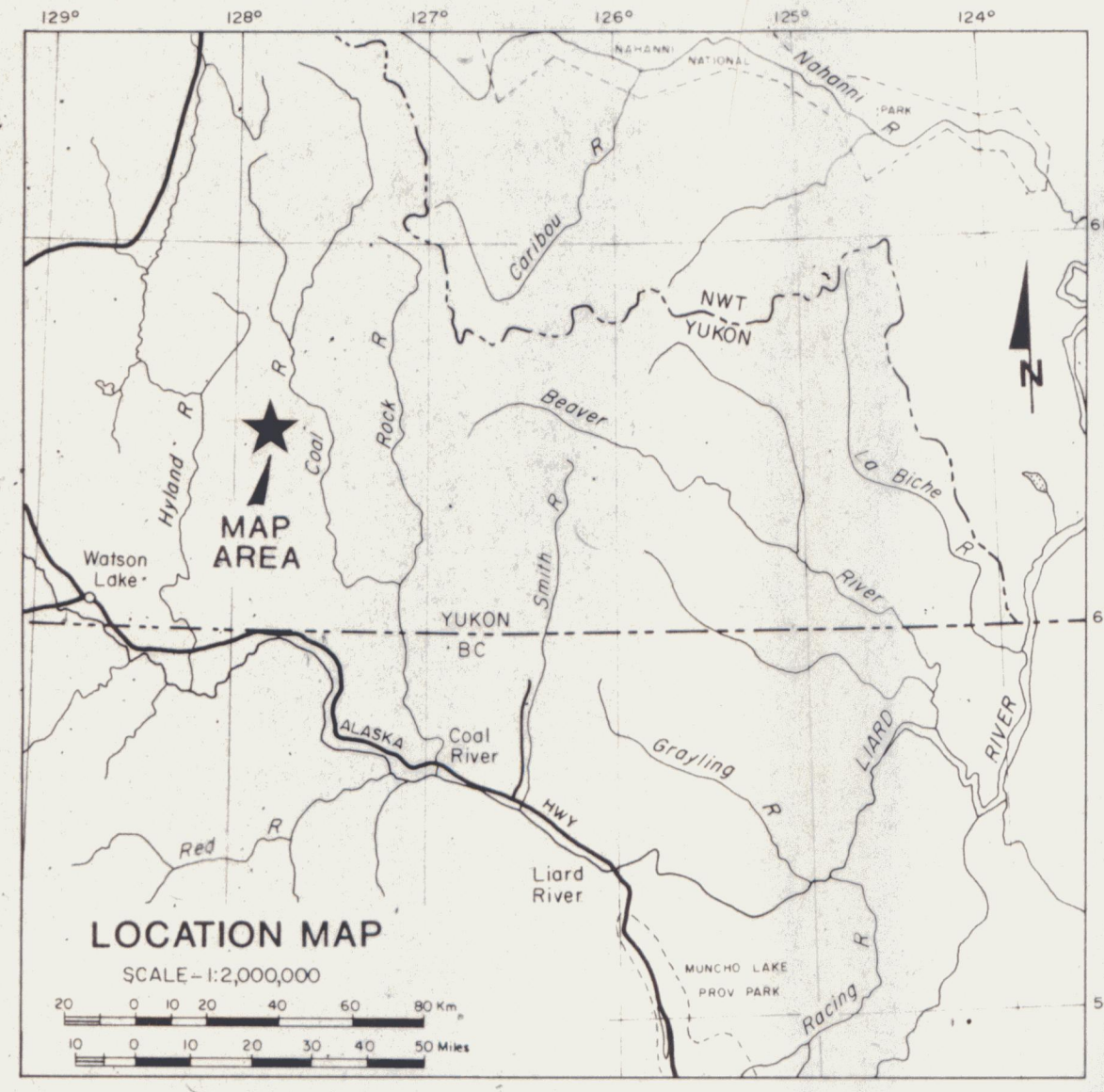
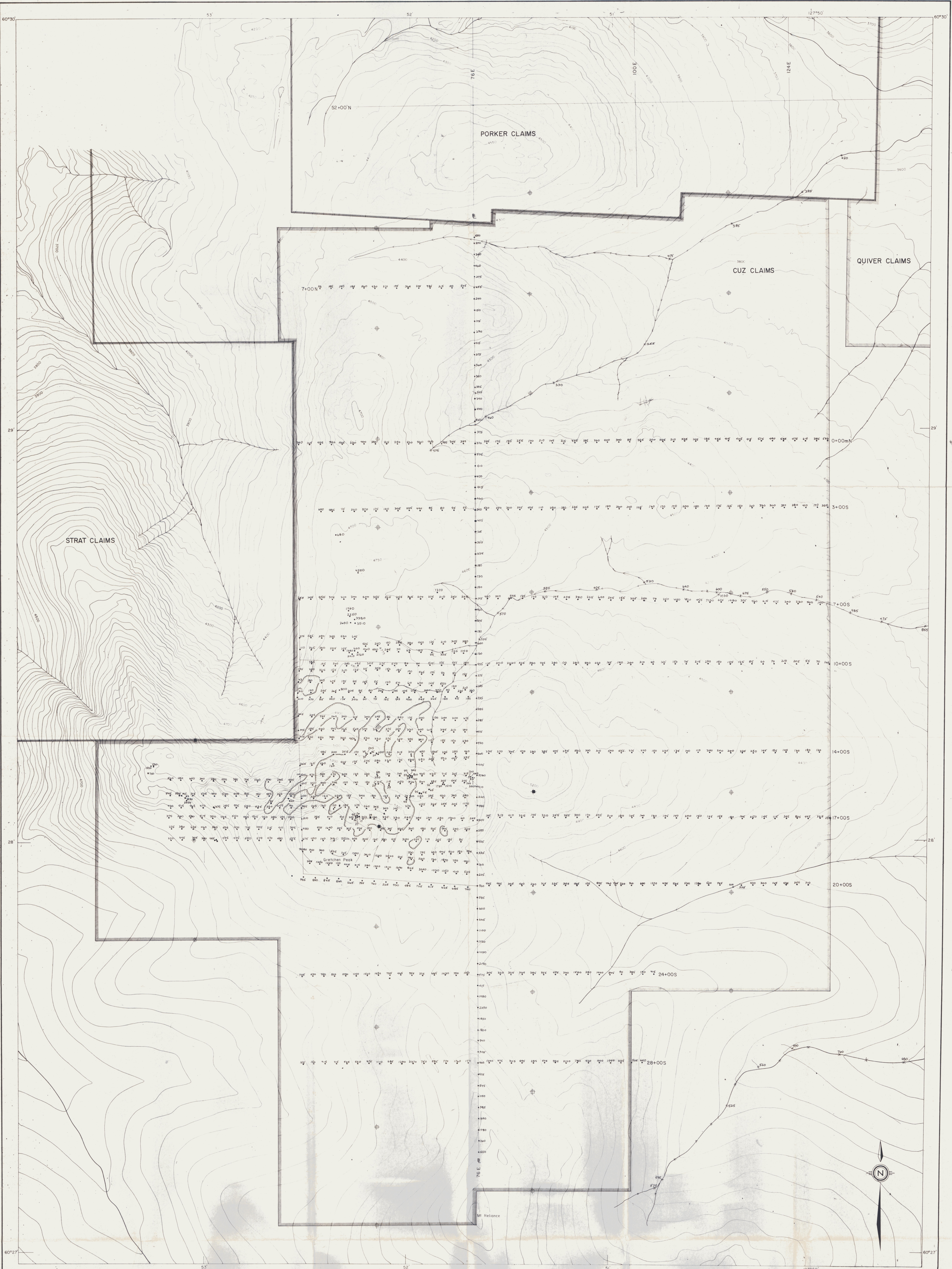
LEAD GEOCHEMISTRY

CUZ CLAIMS

QUARTZ LAKE PROJECT



091427



**LEGEND**

- Sample locations (-35 mesh fraction analyzed)
  - soil sample: ppm Mn
  - ⊕ silt sample: ppm Mn
  - rock sample: ppm Mn
- 100 ppb gold contour
- Chain and compass surveyed lines
- ⊕ Claim post: observed, assumed

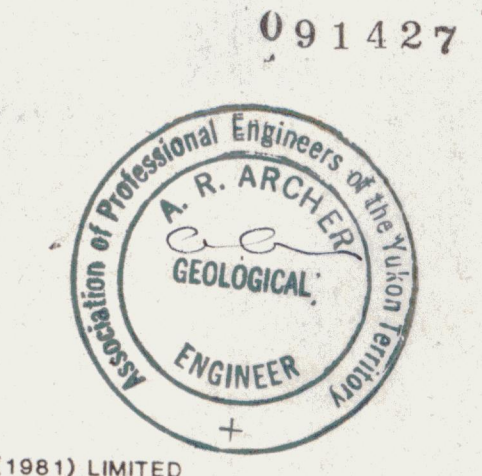


Figure 10

ARCHER, CATIRO & ASSOCIATES (1981) LIMITED

**MANGANESE GEOCHEMISTRY**  
**CUZ CLAIMS**  
 QUARTZ LAKE PROJECT

