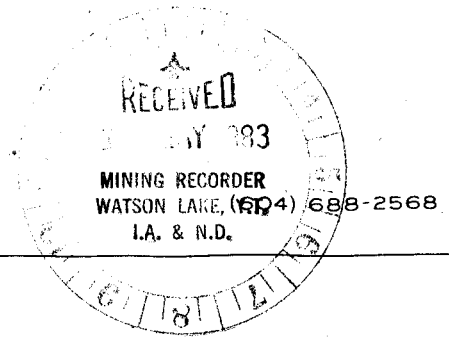


ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS



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

REPORT ON
GEOLOGICAL AND GEOCHEMICAL SURVEYS
CONDUCTED JULY 6 - AUGUST 15, 1982

MARS 1-49 CLAIMS - YA68539-YA68587
WATSON LAKE M.D., YUKON
CLAIM SHEET 95C/13
LATITUDE 60°50'N; LONGITUDE 125°48'W

JANUARY, 1983

R. J. CATHRO, P. Eng.

091458

This report has been examined by
the Geological Survey of Canada
and approved for publication. Quartz
Mining and Exploration as
represented for work to the amount
of \$ 17,675-.

P. Watson

for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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INTRODUCTION

The Mars property was staked by ZX Joint Venture (Chevron Canada Limited, Enterprise Exploration Limited and SMD Mining Co. Ltd.) in June, 1982 over a carbonaceous mudflow associated with a vegetation anomaly. A weakly acidic stream is precipitating secondary gypsum and a trace of barite occurs in the underlying shale sequence. Geological mapping and geochemical sampling was conducted from July 6 to August 15, 1982. The program was managed by R.C. Carne and C.A. Main of Archer, Cathro & Associates (1981) Limited.

PROPERTY, LOCATION AND ACCESS

The property consists of 49 contiguous claims recorded in the name of Archer, Cathro & Associates (1981) Limited at the Watson Lake Mining Record's office, Yukon as follows:

<u>Claim Name</u>	<u>No. Claims</u>	<u>Mining District</u>	<u>Claim Sheet</u>	<u>Grant Numbers</u>	<u>Expiry Date</u>
Mars 1-49	49	Watson Lake	95C/13	YA68539-YA68587	June 28/83

The Mars property is located near the Yukon-NWT boundary at the headwaters of the Whitefish River, at 60°50'N latitude and 125°48'W longitude; 180 km northeast of Watson Lake, Y.T. Access in 1982 was by helicopter from a camp near the Alaska Highway at the Liard River crossing (Km 792), 160 km south of the property.

GEOMORPHOLOGY

The property is in an area of broad hills that rise to a uniform elevation of about 1400 m. Relief is occasionally steep in some narrow stream channels. In general, valleys are wide and drain to the southeast. Most of the area is heavily vegetated with treeline at about 1400 m. Forest fires have burned extensive sections, greatly impeding ground travel.

The distribution of glacial erratics and presence of glacial features such as eskers, terraces, lakes, lacustrine and glaciofluvial deposits indicate that most of the area was glaciated in the Pleistocene.

STRATIGRAPHY

Most of the geological information on the property is based on the results of detailed stratigraphic and structural mapping performed during 1982 by ZXJV geologists, particularly Randy Parrish, within this area of generally poor exposure. The geology of the belt is plotted at a scale of 1:10,000 on Figure 1, in pocket.

The following Table of Formations is representative of the belt.

TABLE 1: MARS PROPERTY, TABLE OF FORMATIONS

Ordovician, Silurian and Devonian

OSD_{RR} The Road River Formation is fairly well exposed west of Spruce Lake and consists of 350 to 600 m of black and, in part, blue-grey weathering, graptolitic shale and cherty shale, laminated, buff to medium brown dolomitic siltstone, black silty limestone and some minor coaly or carbonaceous black beds. This unit generally underlies the more

Ordovician, Silurian and Devonian (cont'd)

OSD_{RR} resistant, laminated siltstone and calcareous rocks that form cliffs along the Beaver River (south of Figure 1). Straight monograptids and a curved, almost circular monograptid are common in the black shales to the point that their absence in a black shale probably indicates that it is not of Road River age.

Silurian and Devonian

SD_V A cream coloured volcanic breccia and a buff to white quartz feldspar porphyry, containing about 5 percent quartz eyes and 5 percent feldspar crystals outcrops on the Whitefish River between Balsam and Spruce Lakes. It occurs within the upper portion of the Road River Formation and hence is probably Silurian-Devonian in age. These igneous rocks could be either dykes or flows.

Devonian and Mississippian - Lower Earn Group

DM_E The Lower Earn Group dominantly consists of "gun-blue" weathering, siliceous to cherty, carbonaceous, jet-black shales. In contrast to other Paleozoic shale units, the Lower Earn Group rarely contains such distinctive lithologies as siltstones, carbonates or brown weathering clastic rocks. Thickness of the unit is variable, reaching a maximum of 650 to 900 m. In the area of the Mars claims, the upper part of the unit contains distinctive orange weathering septarian nodules.

Fossils found in the Lower Earn Group include vascular plant fragments up to 20 cm in length, "Y"-shaped sponge spicules up to 1 cm long and straight, tapered segmented cephalopods up to 10 cm long. None of these are found in the Road River Formation, nor are any graptolites found in the Earn Group and hence the presence of those fossil types is diagnostic of the respective lithologic units.

Devonian and Mississippian - Lower Earn Group

DM_s This is a subdivision of the Lower Earn Group consisting of soft, non-siliceous black shales with a high clay content. Weathering of this member has produced the black mudflow and slumped rivercut in the central Mars claims area (see Plate 1 on the following page).

DM_{ex} This exhalite subdivision of the Lower Earn Group lies stratigraphically below the soft shales of the DM_s member within unit DM_E. Distinctive rusty-orange exposures of DM_{ex} are only found on the Mars claims and their immediate vicinity. The unit consists of siliceous, pyritic shale with thin, whitish-grey laminations of barite. Minor bedded pyrite with barite was seen in the Whitefish River area, southeast of the Mars claims. The presence of anomalously high silica, barium and iron in the member indicates that geothermal exhalative activity was active in the area of the Mars claims during deposition of Lower Earn Group sediments.

Carboniferous and Permian - Mattson Formation

CP_M Overlying the Lower Earn Group is the 200 m thick Mattson Formation. The lower part consists of a distinctive, resistant, buff-white, thick-bedded and massive quartz-arenite and quartzite that is about 30 m thick. This grades upwards into a more heterogenous assemblage of quartz sandstone and grit (with white feldspar fragments), silty shale, soft fissile shale, impure sandstone and siltstone. Bedding in the quartz-arenite unit is often indistinct and is defined by a load-casted surface, which can appear pitted.

The boundary between the Mattson Formation and Lower Earn Group, which is quite distinctive and easily mapped from the air and on the ground, is a very useful marker horizon.

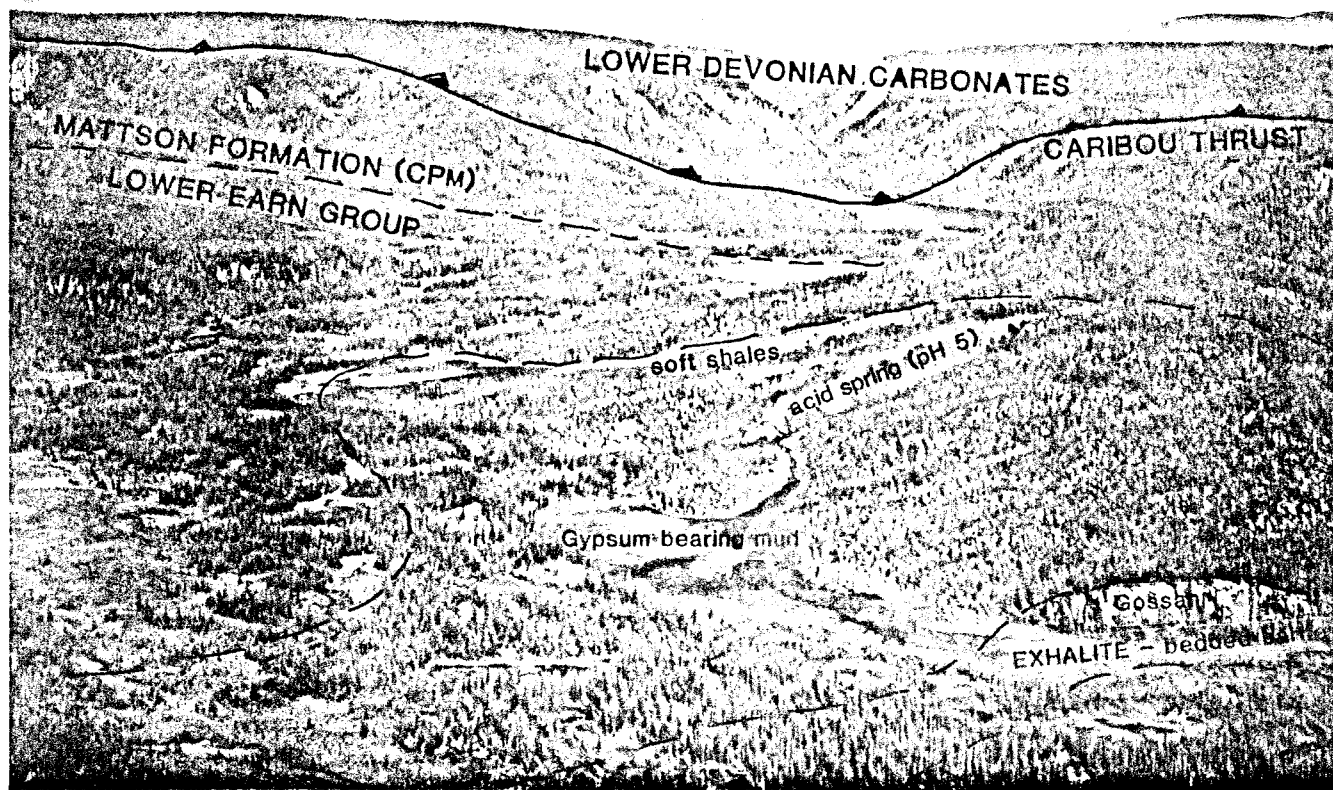


PLATE 1 - LOOKING NORTHEAST TO CENTRAL MARS CLAIMS

STRUCTURE

The Mars claims lie within one of the more westerly panels of a set of linear north-trending thrust panels in a wide zone of moderately folded sediments bounded on the east by the Caribou Thrust. The geology and structure of the Mars claims is shown in plan on Figure 1.

In general, the main thrust panel is folded into a broad antiform with a shallow central axial syncline, called the Spruce Lake Syncline by ZXJV. This has produced two anticlines that bound both sides of the central axial syncline. Similarly, stratigraphy is exposed symmetrically around this syncline which, like almost all synclines in this region, is capped by younger resistant Mattson Formation quartzite.

The eastern flank of the eastern anticline (called the Mars Anticline by ZXJV) is nearly continuously exposed from north of the Mars claims to the south. It has slightly better than average exposure possibly because of its proximity to the east-dipping Caribou Thrust to the east. Near the Mars claims, this thrust has juxtaposed lower Devonian carbonates adjacent to younger Mattson quartzite.

The Mars property is complicated by auxiliary folding, particularly in the vicinity of the Mars claims. At the north end of the Mars claims, at least two additional folds lie between the Mars Anticline and the Caribou Thrust.

MINERALIZATION

No sedex-type lead-zinc mineralization has been found on the Mars property. Preliminary prospecting and mapping has shown the presence of minor barite and pyrite within unit DM_{ex}. These are shown as occurrences A, B and C on Figure 1. Occurrence B is also shown on Plate 1 (following page 4).

The exhalative unit (unit DM_{ex}) weathers a distinctive rusty-orange and consists of a platy, siliceous, slightly gritty black shale. No lead or zinc mineralization was found within this unit at surface. Crystals of gypsum up to 10 cm long were found and are interpreted as secondary in origin.

Occurrence A is located northeast of Spruce Lake. It consists of 2 mm thick laminae of whitish-grey barite 1 to 2 cm apart within a poorly exposed true thickness of approximately 70 m. Strike length is uncertain as it was not observed across the lake. No sampling was performed but the barite content is visually estimated at about 10 percent. Soil samples from the vicinity of the baritic zone show weakly anomalous values in lead (63 ppm) and background zinc.

Occurrence B outcrops in the core of an anticline in the south-central part of the Mars claims. It has approximately the same stratigraphic thickness as occurrence A. It cannot be traced along strike because of heavy vegetation and overburden cover. Although no sulphide minerals were observed, the rusty-orange weathering colour and gossanous soils developed on the zone indicate that the shale is weakly pyritic.

The only sulphides observed occur south of the Mars claims on Whitefish River, at occurrence C. It comprises barite laminae up to 2 mm thick over a thickness of approximately 70 m. Pyrite is interlaminated with barite over a 3 m thickness. Both minerals occur as very fine laminae and each makes up about 10 percent of the rock. Assays for lead, zinc and silver were uniformly low.

GEOCHEMISTRY

Geochemical results for the Mars claims are plotted on Figure 1, in pocket Results were generally disappointing.

The Mars claims were staked on rapidly eroding and leached shales associated with a vegetation kill zone. The stream draining this zone appeared toxic and is precipitating secondary gypsum. However, it had a neutral pH and contains no iron hydroxide precipitates. Preliminary geochemical sampling in 1982 consisted of 140 soil, silt and rock samples. Fourteen water samples were also analysed. Data not plotted on Figure 1 is included in Appendix A (water values).

Lead values were uniformly low. The highest lead value was 63 ppm from a soil sample collected northeast of Spruce Lake. Zinc response was only weakly anomalous at best, with the highest values being 3100 ppm from a sample of ferricrete and 1600 ppm from a rock specimen. Silver values are variable and locally reach 6.6 ppm on the claims.

Water sampling confirmed that streams draining the kill zone are strongly anomalous in iron (up to 116,000 ppb), sulfate (SO_4 - up to 1820 ppm), zinc (up to 1600 ppb), lead (up to 48 ppb) and copper (up to 120 ppb). All streams were neutral except for one with a pH of about 5. The presence of any lead is encouraging since it usually precipitates as insoluble compounds when pH is greater than 5.2.

ICP analysis of rock samples did not disclose any unusual values. The samples contained 8 to 45 ppm arsenic, 5 to 36 ppm molybdenum, 31 to 264 ppm zinc, 480 to 4000 ppm phosphorous, 10 to 44 ppm lead, up to 4 ppm bismuth, 0.5 to 2.0 ppm cadmium, 1 to 30 ppm cobalt, 10 to 76 ppm nickel, 1.19 to 5.36 percent iron, 27 to 531 ppm manganese, 99 to 728 ppm vanadium, 6 to 39 ppm copper and 0.5 to 6.0 ppm silver. Tungsten values were below the detection limits.

CONCLUSIONS AND RECOMMENDATIONS

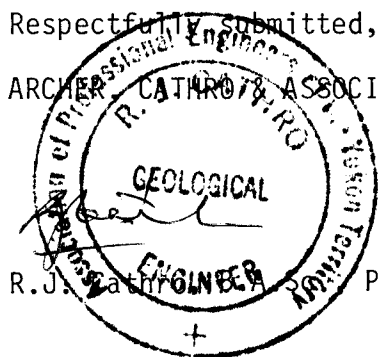
No sedex-type lead-zinc mineralization has been found in the shale units within the Mars claims. The claims lie close to a middle Devonian carbonate/shale facies change. Bedded barite and pyrite within the claims and along strike indicate that exhalative processes were active during deposition of shales assigned to the upper Devonian-Mississippian Lower Earn Group. The structural and stratigraphic setting of this shale unit is distinctly different near the Mars claims than elsewhere in the district, a characteristic shared with known sedex camps in Selwyn Basin.

Geochemical conditions are unusual on the Mars claims. Spring waters have retained their high metal content and have not precipitated ferricrete gossans. The extremely high sulphate and iron content of the spring waters suggests that they could be draining through an oxidizing sulphide deposit, probably consisting mainly of pyrite although zinc content of the water is also high.

The Mars claims warrant further study, particularly more comparison of their geochemical response with case histories from other sedex deposits.

Respectfully submitted,

ARCHER-CATHRO ASSOCIATES (1981) LIMITED



R. J. Cathro P. Eng.

/mc

APPENDIX A
MARS CLAIMS SPRING WATER ANALYSES

MARS CLAIMS SPRING WATER ANALYSES

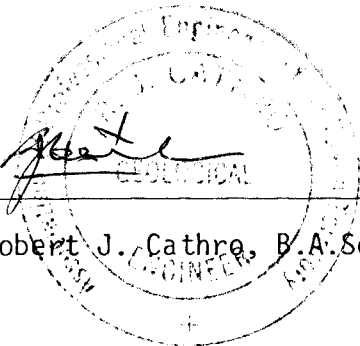
<u>Sample Number</u>	<u>Copper (ppb)</u>	<u>Lead (ppb)</u>	<u>Zinc (ppb)</u>	<u>Iron (ppb)</u>	<u>Sulphate SO₄ (ppm)</u>
WS1	<2	4	56	16	120
WS2	<2	8	68	24	160
WS3	<2	8	250	24	180
WS4	2	12	560	42	200
WS5	6	<4	1200	23000	1350
WS6	16	<4	1260	15600	1820
WS7	20	<10	470	8400	200
WS8	8	<10	290	1500	110
WS9	8	<10	350	300	290
WS10	72	<10	540	106000	300
WS11	52	<10	450	35000	170
WS12	5	<10	80	1300	21
WS13	76	<10	720	116000	150
WS14	120	48	520	110000	50
WS15	16	<10	530	2100	180
WS16	104	<10	1600	33000	760
WS17	96	<10	1400	38000	700

APPENDIX B
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Robert J. Cathro, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in West Vancouver, British Columbia, do hereby declare:

1. I am a 1959 graduate of the University of British Columbia in geological engineering.
2. I have been engaged in geological engineering for over twenty years, the past seventeen 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 geological engineer. The outer ring contains the text "Professional Engineer" at the top and "Geological Engineering" at the bottom. The inner ring contains "B.C. ENGINEERS AND GEOL. ENGINEERS". The center of the seal features a signature, "R. Cathro", written in cursive over a horizontal line.

Robert J. Cathro, B.A.Sc., P.Eng.

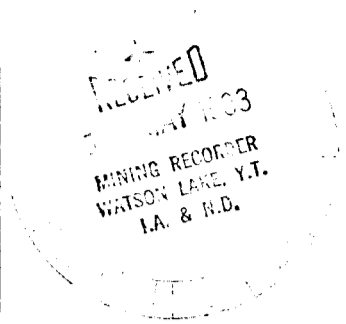


Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



I (Name)	M.P. PHILLIPS	Occupation	GEOLOGIST
(Postal Address)	PO BOX 4127, WHITEHORSE, YUKON		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):

(Here list claims on which work was actually done by number and name)

MARS 12-16 YA 48550-554
27-32 YA 48565-570

situated at SPROUCE LAKE Claim Sheet No. 105C/13

in the WATSON LAKE Mining District, to the value of at least \$ 3025.00

dollars, since the 28 day of JUNE 1982.

to represent the following mineral claims under the authority of Grouping Certificate No. _____

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

GROUP 4 + MARS 12-16 YA 48550-554 } 11 CLAIMS AT 2³/₄ YR EA = 30¹/₄ CL YR
27-32 YA 48565-570 }

COMMON DATE 28 MARCH

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

SEE REPORT ON GEOLOGICAL AND GEOCHEMICAL SURVEYS
MARS 1-10 CLAIMS, WATSON LAKE MD NTS 95C/13
DATED JANUARY, 1983 BY P.J. CATHER, P.ENC

BALANCE GROUP 3 4265
LESS GROUP 4 3025
BALANCE GROUP 1 \$1240

Sworn before me at WHITEHORSE, YUKON

this 5 day of MAY 1983

[Signature]
Notary Public

[Signature]
Applicant.

001178 001450



Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



I (Name)	M.P. PHILLIPS	Occupation	GEOLOGIST
(Postal Address)	P.O. BOX 4127, WHITEHORSE, YUKON		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):

(Here list claims on which work was actually done by number and name)

- MARS 1-2 YA 68539-540
- 9-11 YA 68547-549
- 17-18 YA 68555-556
- 25-26 YA 68563-564

situated at SPRUCE LAKE Claim Sheet No. 95C/13

in the WATSON LAKE Mining District, to the value of at least \$ 4275.00

dollars, since the 28 day of JUNE 19 82

to represent the following mineral claims under the authority of Grouping Certificate No. _____

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

- GROUP 3 * MARS 1-2 YA 68539-540
- 9-11 YA 68547-549
- 17-18 YA 68555-556
- 25-26 YA 68563-564

9 CLAIMS AT 4 3/4 YRS EA = 42 3/4 CLAIM YEARS RS

* COMMON DATED 26 MARCH

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by section 53.)

SEE REPORT ON GEOLOGICAL AND GEOCHEMICAL SURVEYS
MARS 1-49 CLAIMS, WATSON LAKE M.D, NTS 95C/13
DATED JANUARY, 1983 BY R.J. CATHRO, P. ENG

BALANCE GROUP 2	\$ 8,540
LESS GROUP 3	4,275
BALANCE GROUP 3	\$ 4,265

Sworn before me at WHITEHORSE, YUKON
this 9 day of MAY 1983

Silva Kibler
Notary Public

M.P. Phillips
Applicant.

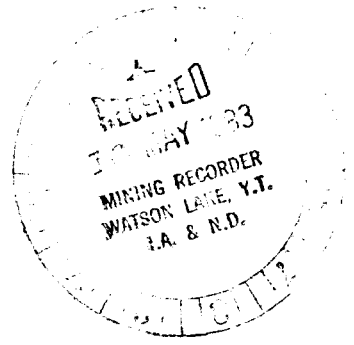


Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



I (Name) M.P. PHILLIPS	Occupation GEOLOGIST
(Postal Address) P.O. BOX 4127, WHITEHORSE, YUKON	

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):

(Here list claims on which work was actually done by number and name)

MARS 3-8 YA 68541-546
 19-24 YA 68557-562
 36 YA 68574

situated at SPRUCE LAKE Claim Sheet No. 95C/13

in the WATSON LAKE Mining District, to the value of at least \$ 5975.00

dollars, since the 28 day of JUNE 19 82

to represent the following mineral claims under the authority of Grouping Certificate No. _____

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

GROUP 2 * MARS 3-8; YA 68541-546 } 12 CLS AT 4³/₄ YR SEA = 57.0
 19-24; YA 68557-562 }
 36 YA 68574 } 1 CL AT 2³/₄ YR EA = 2.75
 TOTAL 59³/₄ CLAIM YRS

* COMMON DATE 28 MARCH

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

SEE REPORT ON GEOLOGICAL & GEOCHEMICAL SURVEYS
 MARS 1-49 CLAIMS, WATSON LAKE HD, NTS 95C/13
 DATED JANUARY, 1983 BY E.J. CATHRO, PENG

BALANCE GROUP 1 . \$ 14,515
 LESS GROUP 2 5,975
 BALANCE GROUP 2 8,540

Sworn before me at WHITEHORSE, YUKON

this 9 day of MAY 1983

Notary Public

Applicant.

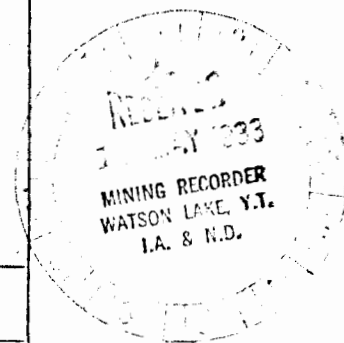


Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



I (Name)	M.P. PHILLIPS	Occupation	GEOLOGIST
(Postal Address)	P.O. BOX 4127, WHITEHORSE, YUKON		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):

(Here list claims on which work was actually done by number and name)

MARS 33-35 YA 68571-573
37-49 YA 68575-587

situated at SPRUCE LAKE Claim Sheet No. 95C/13

in the WATSON LAKE Mining District, to the value of at least \$4400.00

dollars, since the 28 day of JUNE 1982.

to represent the following mineral claims under the authority of Grouping Certificate No. _____

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

GROUP 1 * MARS 33-35 YA 68571-573 } 16 CLAIMS AT 2 3/4 YRS EA = 44 CLAIM YRS
37-49 YA 68575-587 }

* COMMON DATE 28 MARCH

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

SEE REPORT ON GEOLOGICAL & GEOCHEMICAL SURVEYS
MARS 1-49 CLAIMS, WATSON LAKE M.D, NTS 95C/13
DATED JANUARY, 1983 BY RJ CATHCO, P ENG

TOTAL EXPENDITURES	\$ 18,915
LESS GROUP 1	4,400
BALANCE GROUP 1	\$ 14,515

Sworn before me at WHITEHORSE, YUKON

this 9 day of MAY 1983

Walter Fisher

Notary Public

M.P. Phillips

Applicant.

ARCHER, CATHRO

& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

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

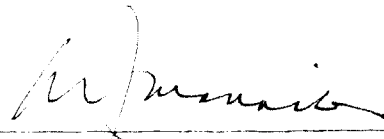
Box 4127, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415

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

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 Mars 1-48 mineral claims on Claim Sheet 95C/13 is accurate.



Joan Mariacher

Sworn before me at Vancouver, B.C.

this 17th day of

January, 1983



Notary, Yukon Territory

001158

091458

Statement of Expenditures
Mars 1 - 48 Mineral Claims
Field Work July 6 - August 15, 1982

Labour

R.C. Carne (geologist) - August 3; 1 day at \$240/day	\$ 240.00	
R. Parrish (geologist) - August 2,5,6,7,8,9,11,13; total 8 days at \$209/day	1,672.00	
Z. Rebic (geologist) - July 20,21,23, August 15; total 4 days at \$185/day	740.00	
W.Halleran (field assistant) - July 6; 1 day at \$119/day	<u>119.00</u>	\$ 2,771.00

Expenses

Highland Bell contract Bell 206B helicopter - 34.4 hours at \$374/hour plus fuel at 22 gal/hr at \$3.50/gal delivered to site	15,514.00	
Camp and field costs - 14 mandays at \$45/day	<u>630.00</u>	
		<u>\$18,915.00</u>

In Account With

ZX JOINT VENTURE

Project -

Date --

JULY 31, 1982

		Total
MANAGEMENT		
	JULY	3000.00
LABOUR		
Supervisory		
Field		
✓	R. CARNE - July 20, 28, 31 @ 3400	548.00
✓	C. MAIN - July 1-31 @ 3400	3400.00
✓	Z. REBIC - July 1-31 @ 2400	2400.00
✓	D. DENNETT - July 1-17 @ 2150	1152.00
✓	B. HALLEMAN - July 1-31 @ 1900	1900.00
✓	W. PENNO - July 14-22 @ 2100	610.00
✓	R. PARNISH - July 27-31 @ 3400	567.00
✓	L. CARNE - July 1-31 @ 1250	1250.00
✓	M. BREKKE - July 1-4, 17-26 @ 1200	334.00
✓	J. DUKE - July 14-31 @ 1250	1016.00
	plus 50%	13,177.00
Casual	J. Carne - July 20, assist ree. Water Lake area	2357.00
	M. LEGASSIKK - July 1-14, 14 days @ 104	1456.00
		1691.00
EXPENSES		
Accounting	JULY	500.00 C3
Expediting	JULY	1400.00 B3
Room & Board in Whse	Seven man/days @ 45	315.00 DV
	total days at \$ /day	
Field equipment from AC stock		
Xerox copies, 339 copies at 25¢/copy		84.75 C1
Radio rental 5 BX 100 July 1-31		400.00 D1
Rental AC BLUE truck July 1-31 at \$40 /day		
plus (27717 to 33465) 5745 kms at 25¢/km		2,626.25 D4
Petty cash 4.60 C2; 4.80 D1; 7.80 D3; 3.95 D1; 3.63 C2; 2.80 D2; 42.90 D3; 32.04		198.72 C1-D4
Telephone 10.00 D1; 10.39 D2; 20.04; 31.65 D3; 10.04; 17.02		68.40 C1
Blueprinting, 228 sq. ft. Ozalid at 30 c/ft plus sq. ft. Dilar at \$ /ft.		924.00 C1
Drafting, 42 hrs. at \$ 22 /hr.		352.00 G3
drum return credits to QLP ^{from} in		
sub-det 3.7 hr Bill 47 from QLP on July 20 at \$290/hr plus 30.6 gal fuel @ \$5.41/gal		1201.55 G3-1036
rental Arco, Cathe small Honda generator July 1-31 @ 3.50/day		108.50 D1
Mortgage		100.00 CV
Telephone		
Rental Ac Brown truck, 2 days @ 40/day plus 350 km @ 25¢		167.50 D4
Western Metals		3.90 D1
Receiving General		14.50 CV
Kits Mauns		27.71 D1
		8542.2
		32,998.7
Credit		
✓ sub-det C. MAIN, 20 days in July @ \$265		(5300.00) B
✓ Halvington sub-det to Nevada (86970 Litrights + 2384.64 fuel)		(11,354.64) G1 G3
		(16,654.64)
		16,344.1
	Total	

Project - ZX JOINT VENTURE
 Date -- AUG 31, 1982

		Total
MANAGEMENT		
	August	A 3000.00
LABOUR		
Supervisory	M.P. Phillips - 1 hr review claim date	37.50
Field	3 R. CARNE - AUG 1-2, 18, 24-31 @ 3400/mo.	1206.
	- C. MAIN - AUG 1-3; 8-31 @ 3400/mo	2962.
	1 Z. REBIC - AUG 1-31 @ 2400/mo	2400.
	- B. HALLERAN - AUG 1-31 @ 1900	1900.
	1 L. CARNE - AUG 1-31 @ 1250	1250.
	- R. PARRISH - AUG 1-27 @ 3400.	2834..
	1 J. DUKE - AUG 1-5 @ 1750	282.
	2 H. OIYE - AUG 1-31 @ 2400	2400.
	- J. DENNETT - AUG 26-31 @ 2100	406.
	- M. LOBLAW - AUG 5 @ 1400	47.
	- M. WONG - AUG 22-24 @ 1550	155.
	3 W. DIEMNU - AUG 12-26 @ 2100	1016.
	plus 50%	16,858.
Casual	1 - A. GRILING - 2 1/4 DAYS CAMP MOBILIZATION AT \$180/DAY	405. 8,429 405
EXPENSES		
Accounting	Aug	500.00 C3
Expediting		1400.00 D3
Room & Board in Whse	12 MAN DAYS @ 45/d.	540.00 D2
	total days at \$ /day	
Field equipment from AC stock		351.20 D1
Xerox copies, 189 copies at 25¢/copy		47.25 C1
Radio rental SBX 100 for August		400.00 D1
Rental AC Blue truck Aug 1-31 at \$40 /mo/day plus (33465 to 37591) 4126 kms at 25¢/km		2271.50 D4
Petty cash 11.40 C2; 8.03; 6.9 D2; 4.01; 8.70 D2		101.10 C2=11.40 D1=4 D2=7.70 D3=8.
Telephone 2.25		2.25 C2
Blueprinting, 7.0 sq. ft. Ozalid at 30¢/ft plus sq. ft. Dilar at \$ /ft.		2.10 C1
Drafting, 12 hrs. at \$ 22 /hr.		264.00 C1
Water Lake Oil (OLP credit derived from bill)		177.00 G3
Rental small AC Honda generator @ 2.50/day		108.00 D1
Rental AC brown van, 4 days @ \$40/day plus 1150 km @ 25¢/km		447.50 D4
Whitcomb travel		146.33 D3
Clones		26.69 D3
kit camera		9.23 D1
		6,478.1
		35,207.6

CREDIT		
SUB-LET H. OIYE 1 DAY (AUG 8) @ 190	(190.)	B
SUB-LET C. MAIN AUG 1-3 (3 DAYS) @ 235	(705.)	B
SUB-LET HALLERAN AUG 25 to 27 @ \$124/day	(372.)	B
Sub-let Blue van to GPU Aug 7	(165.00)	D4
Placer Det; (#228 helped; 858.10 Hurlington)	(1086.10)	
Total	63-24 41-88.00	(2518.10)
		32,689.5

HIGHLAND HELICOPTERS LTD.

4240 Agar Drive, Vancouver Airport South, Richmond, B.C. V7B 1A3

(604) 273-6161

IN ACCOUNT WITH

ARCHER CATHRO & ASSOCIATES
Box 4127
WHITEHORSE, YUKON
Y1A 3S9

DATE July 18/82

INVOICE No. 25144

CUSTOMER P.O. # _____

DATE	TICKET No.	FLIGHT TIME	RATE-HR.	CHARGE
July 9/82	64811	no flying		
July 10/82	64812	5.5 Hrs. <i>2057.</i>		
July 11/82	64814	2.7 Hrs. <i>1009.80</i>		
July 12/82	64815	2.6 Hrs. <i>972.40</i>		
July 13/82	64816	2.7 Hrs. <i>1009.80</i>		
July 14/82	64817	1.6 Hrs. <i>532.40</i>		
July 15/82	64818	3.6 Hrs. <i>1346.40</i>		
July 16/82	64819	3.2 Hrs. <i>1196.80</i>		
July 17/82	64820	2.5 Hrs. <i>930.</i>		
July 18/82	64822	1.2 Hrs. <i>448.80</i>		
		<u>25.6 Hrs.</u>	<u>\$374.00</u>	<u>\$9,574.40</u>

~~Fuel supplied by customer~~

RATE: Class 4 Contract

HR

3.6 FN

202

Terms: Net 30 days from date of invoice. Interest at 1.5% per month will be charged on all overdue accounts.

HIGHLAND

Serving Western Canada since 1959

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

59049

CHARTERER Archer Catter

ADDRESS _____

DATE June 6/82

PILOT SIGNATURE Dave VanDey

(Food Nelson)

REG. HHR TYPE ZCC-B

BASE Contract

FUEL/LITRE CUST. 61.9 HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew haul + recce
ZX JV

6.1

MAXS - 2.5

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>94</u>	<u>8</u>		
START READING	<u>88</u>	<u>7</u>		
TOTAL FLT. TIME	<u>6</u>	<u>1</u>		

INVOICE RATE C 4 7
 CUSTOMER P.O. NO. 8225
 ZONE AND/OR PROVINCE _____

AUTHORIZED BY
CHARTERER REP.

Bleta Rebric

REVENUE HRS.	<u>6</u>	<u>1</u>
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

59053

CHARTERER Archer Catton
 ADDRESS _____

DATE June 10/82

PILOT SIGNATURE Dave Varley BASE Contract

REG. HR TYPE 286B

FUEL/LITRE CUST. 654 HH _____

DATE	HOTEL	MEALS	TRAVEL	TEL-TEL	TAXI	MISC.

EXPLANATION

OPERATION REMARKS

ZX5W -
Loilo - May Creek
Crew to work
Spruce Lake

mes 2.5

6.0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>109</u>	<u>5</u>		
START READING	<u>115</u>	<u>5</u>		
TOTAL FLT. TIME	<u>6</u>	<u>0</u>		

INVOICE RATE C 4 7
 CUSTOMER P.O. NO. 9225
 ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlata Rebric

REVENUE HRS.	<u>6</u>	<u>0</u>
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

59058

CHARTERER Orcher Cathro

ADDRESS #1016 - 510 W. HASTINGS ST.

DATE June 15/87

PILOT SIGNATURE Dave Varley

VNMC. UGB 148 Ford Nelson

REG. HHR TYPE Z-6B

BASE Contract

FUEL/LITRE CUST. 405.2 HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

ZXJV-

Crew noise

Misc 2.5

2.8

TIME CLOCK READING from COLLECTIVE CONTROLS			
	FLIGHT 1	FLIGHT 2	
END READING	<u>133</u>	<u>9</u>	
START READING	<u>131</u>	<u>1</u>	
TOTAL FLT. TIME	<u>28</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE

AUTHORIZED BY CHARTERER REP.

Zlata Zebri

REVENUE HRS. 28

NON-REVENUE

CREW EX'S \$

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

59060

CHARTERER Richard Cathro

DATE June 17/82

ADDRESS _____

REG. HAR TYPE 206B

PILOT SIGNATURE Dave Varley BASE Contract

FUEL/LITRE CUST. 506.4 HH _____

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew haul ZX5V 4.6

Pass 2.5

TIME CLOCK READING from COLLECTIVE CONTROLS			
	FLIGHT 1		FLIGHT 2
END READING	<u>146</u>	<u>5</u>	
START READING	<u>141</u>	<u>9</u>	
TOTAL FLT. TIME	<u>46</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlata Belic

REVENUE HRS.	<u>46</u>
NON-REVENUE	
CREW EX'S \$	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

59061

CHARTERER Archer Cathie

ADDRESS _____

DATE June 18/82

REG. HAR TYPE 286B

PILOT SIGNATURE Dave Varley BASE Contract

FUEL/LITRE CUST. 1079.1 HH

DATE	HOTEL	MEALS	TRAVEL	TEL TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

146.5 - 152.8 ZXJU May 25 6.3

Crew haul
Tour with A. Archer

152.8 - 156.4 3.6

Poranda - moose camp
cut

9.9

TIME CLOCK READING from COLLECTIVE CONTROLS			
	FLIGHT 1	FLIGHT 2	
END READING	156 4		
START READING	146 5		
TOTAL FLT. TIME	9 9		

INVOICE RATE C 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY
CHARTERER REP.

Zlata Rebric

REVENUE HRS. 9 9

NON-REVENUE

CREW EX'S \$

9 9	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

59064

CHARTERER Archer Cathra

ADDRESS _____

DATE June 21/82

REG. HHR TYPE 206B

PILOT SIGNATURE Dave Van Oey BASE Contract/7th Nelson

FUEL/LITRE CUST. 872.0 HH _____

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

2X JV - 170.0 - 175.9 5.9

Crew out - sample gasen

Dept of mines was 2.5

175.9 - 178.0 2.1

3 min hand hedge to Duffield Creek

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>178</u>	<u>0</u>		
START READING	<u>176</u>	<u>0</u>		
TOTAL FLT. TIME	<u>8</u>	<u>0</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8275

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP.

Zlata Rebric

REVENUE HRS.	<u>8</u>	<u>0</u>
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64808

CHARTERER Archer Cathro & Associates (1981) Ltd.

ADDRESS Box 4127

DATE July 6/82

Whitehorse, Y.T. Y1A 3S9

REG. HHR TYPE Bell 206B

PILOT SIGNATURE Pat Rooney BASE ~~Fort St. John~~ Trout R / Fort Nelson

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew to Spruce Lk area
Stream Sample NW La. Biche

May 25

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>244</u>	<u>9</u>		
START READING	<u>236</u>	<u>5</u>		
TOTAL FLT. TIME	<u>8</u>	<u>4</u>		

INVOICE RATE C 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlata Rebic

REVENUE HRS.	<u>8</u>	<u>4</u>
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64824

CHARTERER Archer Cathro

ADDRESS _____

DATE July 20/82

PILOT SIGNATURE Pat Rooney

BASE Trout R / 7000

REG. HHR TYPE _____

FUEL/LITRE CUST. X HH _____

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.

EXPLANATION

OPERATION REMARKS

Crew to Martin Creek
Sample/Map Whitefish R.
ZXN

Hours 3.6

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>287</u>	<u>0</u>		
START READING	<u>282</u>	<u>8</u>		
TOTAL FLT. TIME	<u>4</u>	<u>2</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY
CHARTERER REP.

Zlate Rebr

REVENUE HRS.	<u>4</u>	<u>2</u>
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64825

CHARTERER Archer Cathro

ADDRESS _____

DATE July 21/82

REG. HR TYPE _____

PILOT SIGNATURE Pat Rooney BASE Fort R / Fort Nelson

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew to Martin Creek
Sample / Map South of Spruce Lake
EX JV

max 3.0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>291</u>	<u>8</u>		
START READING	<u>287</u>	<u>0</u>		
TOTAL FLT. TIME	<u>4</u>	<u>8</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlata Rebric

REVENUE HRS.	<u>4</u>	<u>8</u>
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64828

CHARTERER Archer Cathro & Associates (1981) Ltd

ADDRESS Box 4127

Whitehorse P.T.

DATE July 23/82

REG. HR TYPE _____

PILOT SIGNATURE Pat Rooney BASE Trent R / Fort Nelson

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.

EXPLANATION

OPERATION REMARKS

Crews to Whitefish R. / Spruce Lk area
ZXJV

Meals 2.9

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>295</u>	<u>5</u>		
START READING	<u>292</u>	<u>6</u>		
TOTAL FLT. TIME	<u>29</u>			

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP.

Zlata Belvic

REVENUE HRS.	<u>29</u>
NON-REVENUE	<u> </u>
CREW EX'S \$	<u> </u>

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64838

CHARTERER Archer Cathro

ADDRESS Box 4127

DATE Aug 2/82

WHITE HORSE, YUKON Y1A 359

REG. AHR TYPE

PILOT SIGNATURE Pat Rooney

BASE Trout R / Fort Reliance FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crews to Mud Claims, Spruce Lk
ZXJV

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	306	3		
START READING	304	0		
TOTAL FLT. TIME	2	3		

INVOICE RATE C 4 7
 CUSTOMER P.O. NO. 8225
 ZONE AND/OR PROVINCE

AUTHORIZED BY CHARTERER REP. Zlata Rebric
 REVENUE HRS. 23
 NON-REVENUE
 CREW EX'S \$

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64839

CHARTERER Archer Cathro

ADDRESS _____

DATE Aug 3/82

PILOT SIGNATURE Pat Rooney BASE Trout R/7^{air} Station REG. HR TYPE _____ FUEL/LITRE CUST. HH _____

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew to Vizer Cr / Cambria Range
Tranz, Mars, Rush and K(?) Sy
ZXJV

Mars 3:0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>310</u>	<u>5</u>		
START READING	<u>306</u>	<u>3</u>		
TOTAL FLT. TIME	<u>4</u>	<u>2</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlata Rebric

REVENUE HRS.	<u>42</u>
NON-REVENUE	
CREW EX'S \$	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64843

CHARTERER Archer Cathra

ADDRESS _____

DATE Aug 7/82

PILOT SIGNATURE Pat Rooney

BASE Trout R / Ft Nelson

REG. HR TYPE _____

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.

EXPLANATION

OPERATION REMARKS

Crew to Transchems / NE Main
Recon NE Coal R
ZXJV
Was 3:05

TIME CLOCK READING from COLLECTIVE CONTROLS			
	FLIGHT 1	FLIGHT 2	
END READING	3300		
START READING	3226		
TOTAL FLT. TIME	74		

INVOICE RATE 4 7
 CUSTOMER P.O. NO. 8225
 ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlate Rebin

REVENUE HRS.	74
NON-REVENUE	
CREW EX'S \$	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64844

CHARTERER Archer Cathra

ADDRESS _____

DATE Aug 8/82

REG. HR TYPE _____

PILOT SIGNATURE Pat Rooney BASE Trout R/71.8000

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.

EXPLANATION

OPERATION REMARKS

Crew to Cariboo R/NE Coal R
Tranz claims

ZXJV

May 3.0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	334	7		
START READING	330	0		
TOTAL FLT. TIME	4	7		

INVOICE RATE C 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlato Rebic

REVENUE HRS.	47
NON-REVENUE	
CREW EX'S \$	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64847

CHARTERER Archer Cathro

ADDRESS _____

DATE Aug 9/82

REG. HKR TYPE _____

PILOT SIGNATURE Pat Rooney BASE Trout R/7th Nelson FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew to 95c/14, Trans claimy
 stream sample Beaver River
 ZX-TV
 mes 2.5
 trans 1.5

TIME CLOCK READING from COLLECTIVE CONTROLS			
	FLIGHT 1	FLIGHT 2	
END READING	339	4	
START READING	335	4	
TOTAL FLT. TIME	40		

INVOICE RATE C <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 7 <input type="checkbox"/>	AUTHORIZED BY CHARTERER REP.	REVENUE HRS.	40
CUSTOMER P.O. NO. <u>8225</u>	<u>Zlata Felic</u>	NON-REVENUE	
ZONE AND/OR PROVINCE _____		CREW EX'S \$	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64850

CHARTERER Archer Guthro

ADDRESS _____

DATE Aug 11/82

REG. HHR TYPE _____

PILOT SIGNATURE Pat Rooney BASE Tract R/H. Nelson FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew to Varley Creek
and Meilleur River
ZXJV

man d 3.0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	<u>345</u>	<u>5</u>		
START READING	<u>341</u>	<u>7</u>		
TOTAL FLT. TIME	<u>3</u>	<u>8</u>		

INVOICE RATE 4 7

CUSTOMER P.O. NO. 8225

ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlate Rebric

REVENUE HRS.	<u>38</u>
NON-REVENUE	<u>—</u>
CREW EX'S \$	

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64852

CHARTERER Archer Cathro

ADDRESS Box 4127

DATE Aug 13/82

WHITEHORSE, YUKON VIA 359

REG. HR TYPE

PILOT SIGNATURE Pat Rooney BASE Trout R / ^{Tout} ~~Trout~~

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS

Crew to Grayling R / Beaver R
/ Varley Cr.
Z X JV

was 3.0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	351	0		
START READING	346	7		
TOTAL FLT. TIME	4	3		

INVOICE RATE C 4 7

CUSTOMER P.O. NO. 8725

ZONE AND/OR PROVINCE

AUTHORIZED BY CHARTERER REP.

Blata Rebric

REVENUE HRS.	4	3
NON-REVENUE		
CREW EX'S \$		

FLIGHT REPORT HIGHLAND HELICOPTERS LTD. VANCOUVER, B.C.

64855

CHARTERER Archer Cathco

ADDRESS _____

DATE Aug 15/82

REG. HR TYPE _____

PILOT SIGNATURE Pat Rooney BASE Troust R / 7000 Nelson

FUEL/LITRE CUST. HH

DATE	HOTEL	MEALS	TRAVEL	TEL - TEL	TAXI	MISC.	EXPLANATION

OPERATION REMARKS
Crew to Meilleur R / Mars / Spruce Lk
EXV
Time 3.0

TIME CLOCK READING from COLLECTIVE CONTROLS				
	FLIGHT 1		FLIGHT 2	
END READING	361	5		
START READING	357	6		
TOTAL FLT. TIME	3	9		

INVOICE RATE 4 7 _____
 CUSTOMER P.O. NO. 8225
 ZONE AND/OR PROVINCE _____

AUTHORIZED BY CHARTERER REP. Zlate Relvic
 REVENUE HRS. 3 9
 NON-REVENUE —
 CREW EX'S \$ _____



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



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

AGENT FOR **PACIFIC PETROLEUMS LTD.**
 THIS LOADING NO. _____ METER READING FINISH _____

AGENT FOR **PACIFIC PETROLEUMS LTD.**
 THIS LOADING NO. _____ METER READING FINISH _____

PREVIOUS READING NO. _____ METER READING START _____
 SOLD TO _____

PREVIOUS READING NO. _____ METER READING START _____
 SOLD TO _____

ARCHER CATHRO

ARCHER - CATHRO

ZX 5 V
 ORDER NO. _____
 DATE _____
22 6 82
 DAY MTH. YR.

PROJECT-ZX
 ORDER NO. _____
 DATE _____
23 06 82
 DAY MTH. YR.

TERMS *Charge* **13714**

TERMS *CHARGE* **13728**

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>5/205</i>	<i>JP4</i>		<i>1025</i>	<i>47.0</i>	<i>481.75</i>
		<i>CARTAGE TO AIRPORT BC YUKON</i>		<i>40.00</i>	
<i>5/205</i>	<i>DRUMS TEFLOX</i>		<i>5</i>	<i>35.00</i>	<i>175.00</i>
		FEDERAL EXCISE TAX			
		GASOLINE TAX		<i>0.07</i>	<i>7.18</i>
		FUEL OIL TAX			
		PROVINCIAL SALES TAX			

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>JP4</i>	<i>7971</i>	<i>47.0</i>	<i>3746.37</i>
		<i>CARTAGE TO ZX ONE WAY</i>			
		<i>DRUMS 145 MILES @</i>	<i>140</i>		<i>203.00</i>
		FEDERAL EXCISE TAX			
		GASOLINE TAX		<i>0.07</i>	<i>55.80</i>
		FUEL OIL TAX			
		PROVINCIAL SALES TAX			

TAX LICENCE NUMBER ETC. _____ **TOTAL** *703.93*

TAX LICENCE NUMBER ETC. _____ **TOTAL** *4005.17*

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

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

CUSTOMER SIGNATURE *Rubande BCYAS. 5-538*

CUSTOMER SIGNATURE *S-539*

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

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.

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

THIS IS YOUR INVOICE

THIS IS YOUR INVOICE



WATSON LAKE OIL DISTRIBUTORS LTD.

BOX 371, WATSON LAKE, YUKON Y0A 1C0

PHONE 536-7467

THIS LOADING NO.

METER READING FINISH

PREVIOUS READING NO.
SOLD TO

METER READING START

L
I
T
R
E
S

archer - clithro

Z X

ORDER NO.

DATE

53 7 29
YR MTH DAY

TERMS

charge

1083729

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 REGULAR C <input type="checkbox"/> M <input type="checkbox"/>			
		DIESEL C <input type="checkbox"/> M <input type="checkbox"/>			
		DOMESTIC * FURNACE OIL			
		* STOVE OIL			
		<i>5 P4 (BULK)</i>	<i>8275</i>	<i>47.0</i>	<i>3884.25</i>
		<i>DRUMS cartage & HAND</i>			<i>420.50</i>
		FEDERAL EXCISE TAX			
		GASOLINE TAX		<i>007</i>	<i>57.93</i>
		FUEL OIL TAX			
		PROVINCIAL SALES TAX			

TAX LICENCE
NUMBER ETC.

TOTAL

4367.68

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

CUSTOMER
SIGNATURE

SSS6

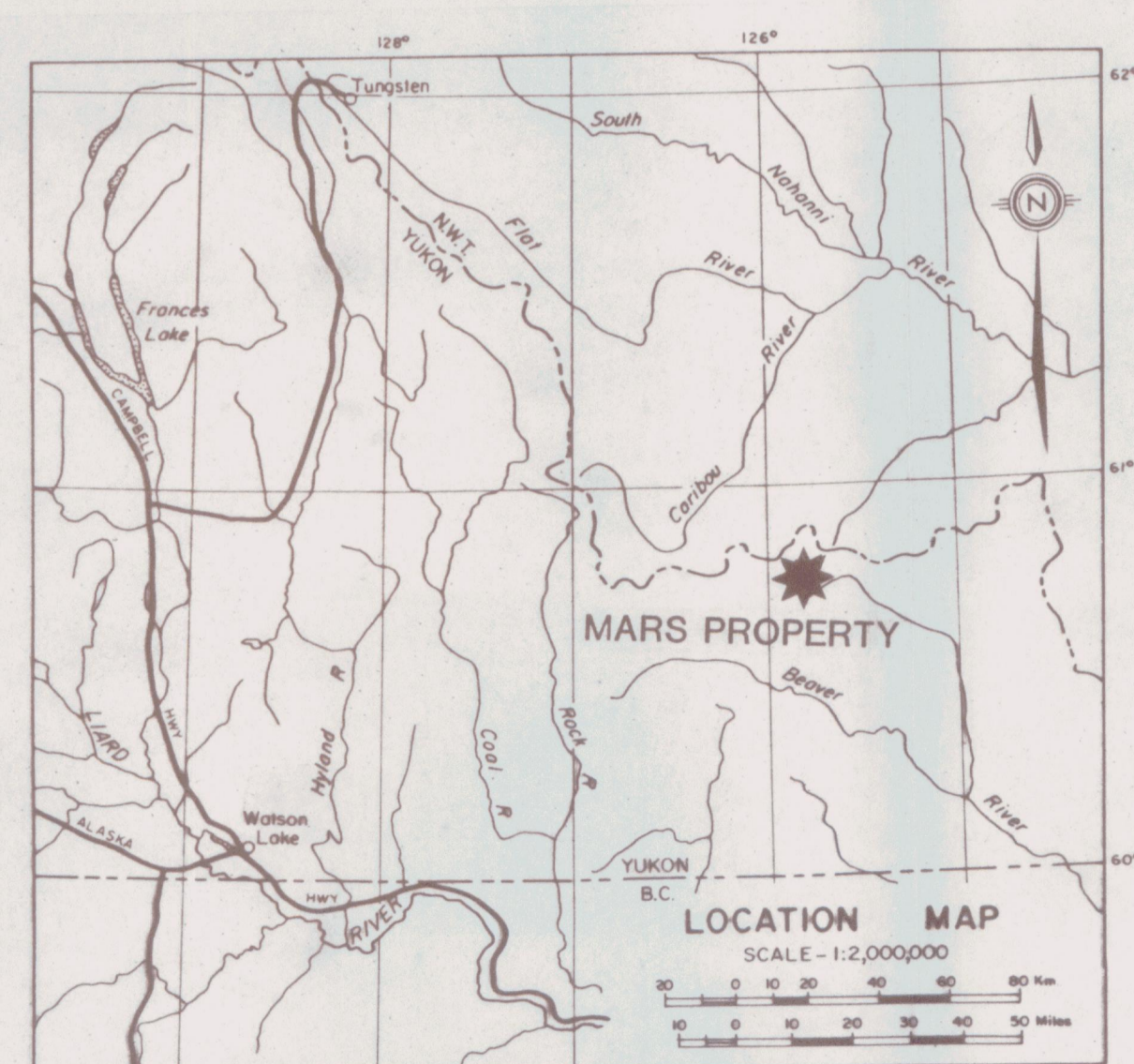
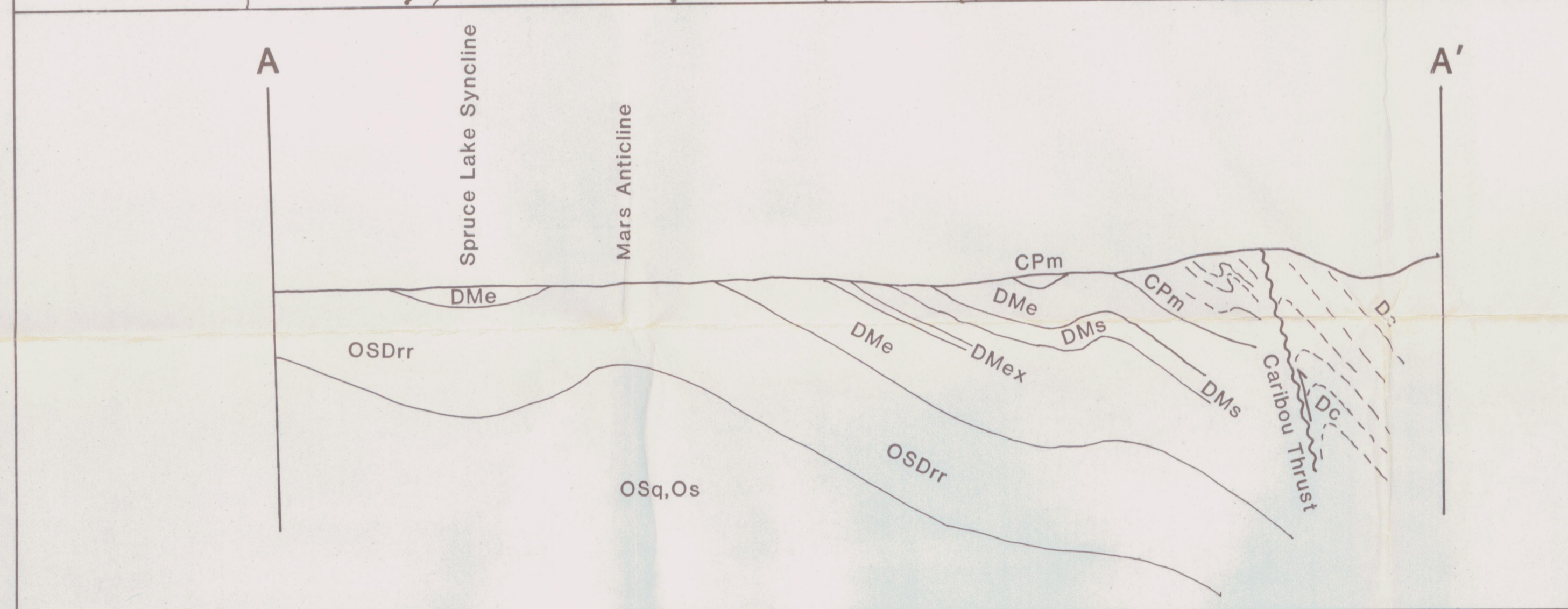
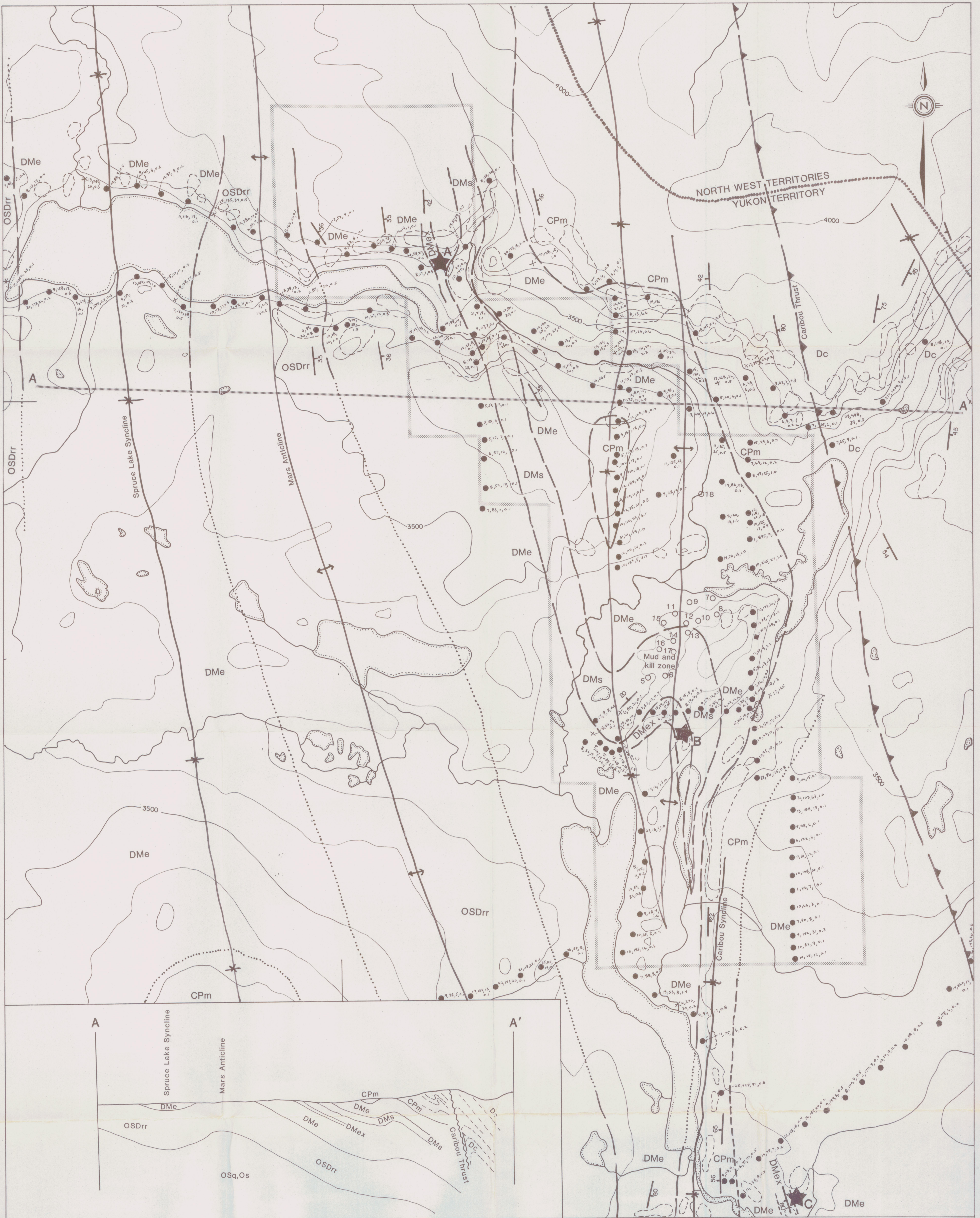
RECEIVED
PAYMENT

INTEREST OF 1.75% PER MONTH (21% PER YEAR) MAY BE CHARGED
ON OVERDUE ACCOUNTS.

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

CUSTOMER INVOICE

6101 8007



- LEGEND - Includes units found off 1014-999
- TERTIARY (T)
 - Plasticine quarry benches.
 - Fluvial conglomerate with minor black shales.
 - CARBONIFEROUS TO PERMIAN
 - WATSON FORMATION - Thick-bedded, massive quartz-sandstone, sandstone, siltstone.
 - MIDDLE DEVONIAN
 - Cristofal carbonaceous.
 - MISSISSIPPIAN TO DEVONIAN
 - LOWER EARLY GROUP - siliceous, carbonaceous shales.
 - includes:
 - SP₁ - soft non-siliceous shales.
 - SP₂ - exhalite - siliceous, pyritic shale with barite.
 - SILURIAN TO DEVONIAN
 - Nubianic breccia and felsic quartz porphyry.
 - PROTEROZOIC TO DEVONIAN
 - ROAD RIVER FORMATION - blue-grey granitic shale, dolomitic siltstone, silty limestone.
 - ONDOVIAN TO SILURIAN
 - Gritty quartz sandstone and quartz pebble grit.
 - ONDOVIAN
 - SUNGLASS FORMATION - buff weathering limestone.
 - Other symbols:
 - - water sample site, see appendix A
 - - geochemical sample site, values in ppm Lead, Zinc, Copper, Silver
 - ★ - Mineral Occurrences

Figure 1
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
**GEOLOGY AND
 Pb, Zn, Cu AND Ag GEOCHEMISTRY**
 MARS CLAIMS
 ZX JOINT VENTURE
 091458
 SCALE - 1:10,000
 0 100 200 300 400 500 600 Metres
 0 100 200 300 400 500 600 Yards