

# 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



REPORT ON  
GEOCHEMICAL SURVEY  
CONDUCTED AUGUST 11 TO AUGUST 14, 1981  
FOR  
CUB JOINT VENTURE  
HERPES 1-16 CLAIMS  
(YA66805-YA66820)



WATSON LAKE MINING DISTRICT,  
YUKON TERRITORY  
NTS 95D/14

MARCH 11, 1982

Latitude 60°56'N

Longitude 127°25'W

C.A. Main, B.Sc.

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

091021

This report has been examined by  
the Geological Evaluation Unit  
under Section 53(4) of the Quartz  
Mining Act and is allowed as  
representation to value the amount  
of \$ 2400

*P. Walker*

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





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.)



OFFICE DATE STAMP

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

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)

HERPES 1-16; YA 66805-820

situated at MT SKONISENG AREA Claim Sheet No. 95D/14

in the WATSON LAKE Mining District, to the value of at least \$ 2400.00

dollars, since the 10 day of AUGUST 19 81

to represent the following mineral claims under the authority of Grouping Certificate No. 3183  
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

\* HERPES 1-16, YA 66805-820 - 1.5 YRS EACH = 24 CLAIM YEARS

\* TO COMMON DATE 10 FEBRUARY

091021

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.)

TOTAL EXPENDITURES	\$ 2464.80
LESS GROUP	<u>2400.00</u>
BALANCE GROUP	\$ 64.80

SEE REPORT ON GEOCHEMICAL SURVEY FOR CUB JOINT VENTURE HERPES CLAIMS, NTS 95D/14 BY C.A. MAIN AND R.J. CATHED P. ENG, MARCH 1982.

Sworn before me at WHITEHORSE, YUKON

this 27 day of APRIL 1982

*Sharon Decker*  
Notary Public

*M.P. Phillips*  
M.P. PHILLIPS Applicant.

## TABLE OF CONTENTS

	<u>PAGE</u>
Summary and Recommendations -----	1
Introduction -----	1
Property, Location and Access -----	2
Field and Analytical Procedures -----	2
Geomorphology -----	3
Geology -----	3
Mineralization -----	4
Geochemistry and Panning -----	5
Conclusions -----	5

## LIST OF TABLES

<u>NUMBER</u>		<u>FOLLOWING PAGE</u>
1	General Table of Formations - Coal River District	4

## LIST OF ILLUSTRATIONS

<u>FIGURE NO.</u>		<u>FOLLOWING PAGE</u>	<u>IN POCKET</u>
1	General Location Map	1	
2	Claim Location Map	1	
3	Geology - Herpes Property Area		A
4	Tungsten Geochemistry - Herpes Property Area		B

## SUMMARY AND RECOMMENDATIONS

The Herpes claim group is located within the Logan Mountains of eastern Yukon. It was staked by CUB Joint Venture (Brinco Mining Limited, formerly Cassiar Asbestos Corporation Ltd; Highland-Crow Resources Ltd, an affiliate of Teck Corporation Ltd; and Union Carbide Canada Ltd) in 1981 to cover the apparent source of stream sediment samples with anomalous scheelite contents located near the contact of a Cretaceous intrusion and Hadrynian(?) limestones. Several soil samples taken during preliminary grid establishment returned moderately anomalous tungsten geochemical values. A forest fire interrupted further surveys which should be completed at a later date.

## INTRODUCTION

The Herpes property is located on the east side of the Coal River valley, as shown on Figure 1 (on following page). The Rock stock, which is not shown on GSC map 11-1968, was recognized in 1979 during reconnaissance exploration by CUB Joint Venture and was revisited by CUB personnel in 1981. A stream panning sample collected near a contact between the Rock stock and a limestone unit contained 100 grains of scheelite, which is strongly anomalous. Prospecting located the smaller North Rock stock nearby and the area was staked as the Herpes claims. A forest fire prevented grid surveys from being performed before the end of the season. The program was managed by C.A. Main of Archer, Cathro & Associates (1981) Limited.

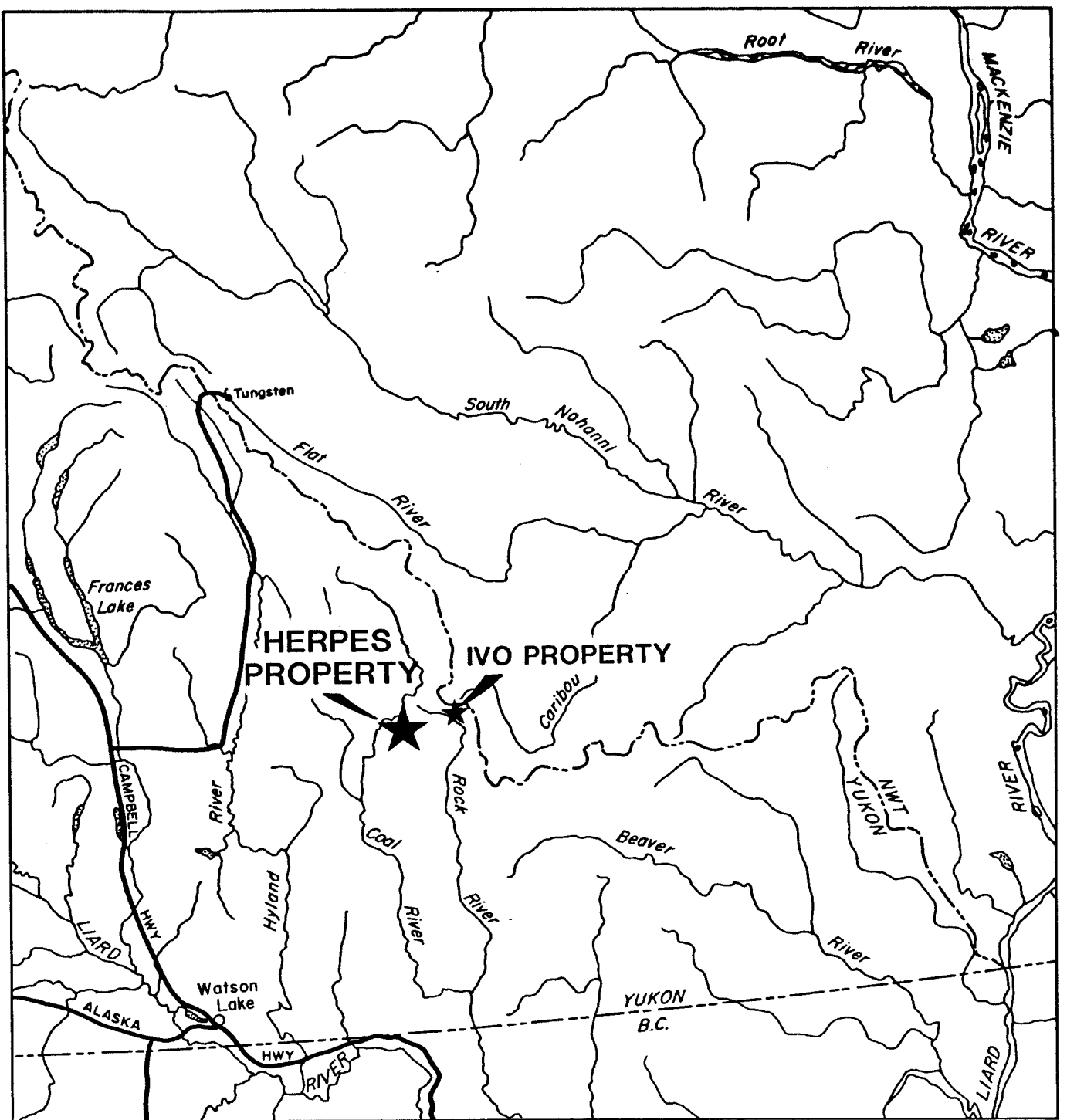
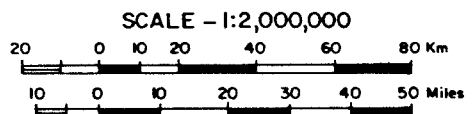
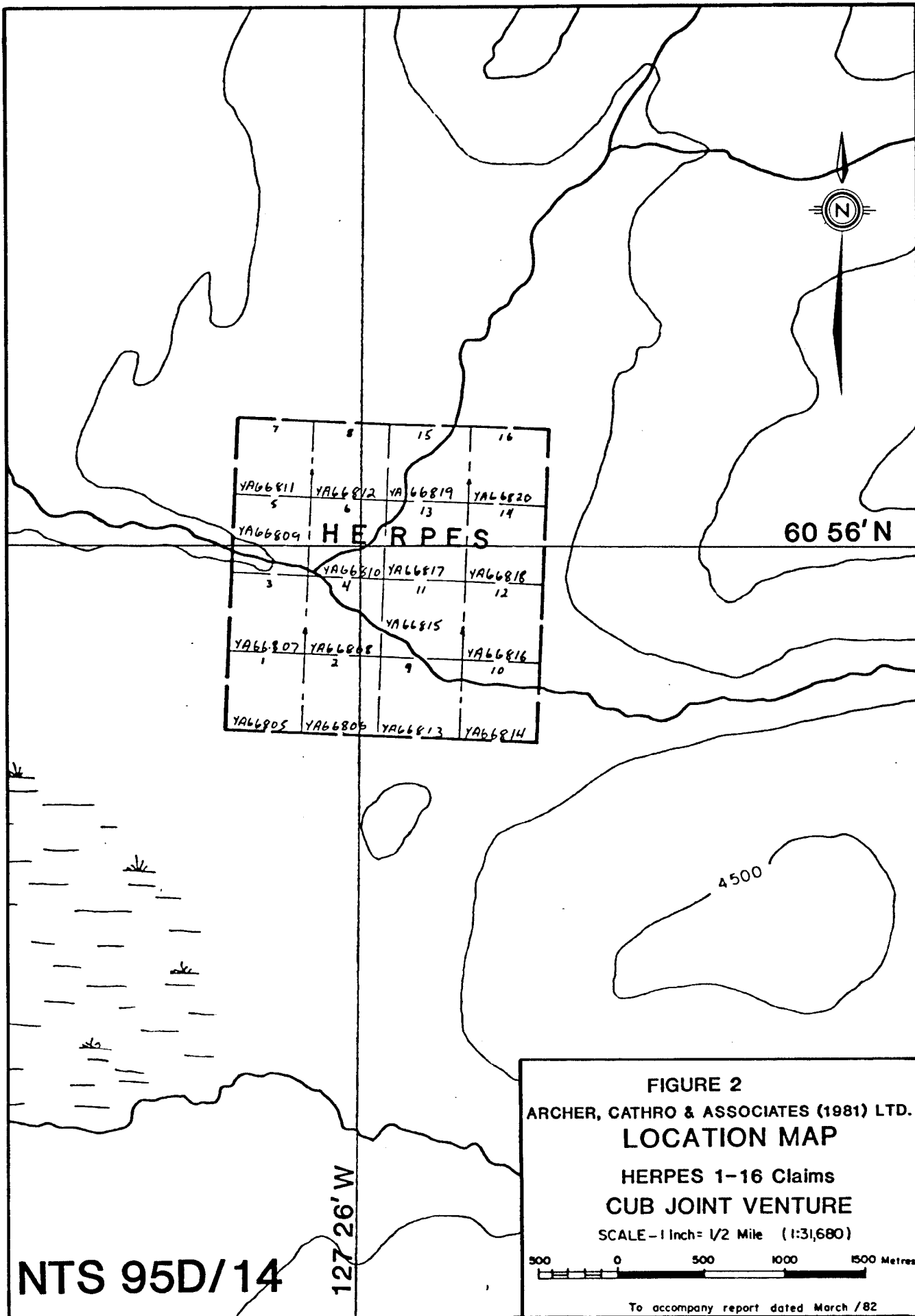


Figure 1  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**HERPES PROPERTY**  
**COAL RIVER DISTRICT**  
**CUB JOINT VENTURE**



To accompany report dated March, 1982



**FIGURE 2**  
**ARCHER, CATHRO & ASSOCIATES (1981) LTD.**  
**LOCATION MAP**  
**HERPES 1-16 Claims**  
**CUB JOINT VENTURE**  
 SCALE - 1 Inch = 1/2 Mile (1:31,680)

500 0 500 1000 1500 Metres

To accompany report dated March /82

PROPERTY, LOCATION AND ACCESS

The property consists of 16 contiguous claims recorded in the name of Archer, Cathro & Associates (1981) Limited at the Watson Lake Mining Recorder's office as follows:

<u>Claims</u>	<u>No.</u>	<u>Mining District</u>	<u>Claim Sheet</u>	<u>Tag Numbers</u>	<u>Expiry Date</u>
Herpes 1-16	16	Watson Lake	95D/14	YA66805-YA66820	10 August, 1982

The Herpes property is situated at latitude 60°56'N and longitude 127°25'W, 14 km west of the Yukon-NWT border, approximately 140 km northeast of Watson Lake, and 120 km southeast of the Cantung Mine. The nearest roads are the Nahanni Range (Cantung) Road, 70 km to the west, and a winter road from the Alaska Highway to the Mel lead-zinc property, 75 km to the south. Access during 1981 was by helicopter from the Ivo property, 10 km to the northeast.

FIELD AND ANALYTICAL PROCEDURES

Due to the reconnaissance nature of this investigation, sampling lines were roughly located using compass and hip chain. Sample intervals were slope-corrected. Stations were marked with flagging.

Silt and soil panning samples were taken from non-organic clay or sandy material and a fresh sample was retained for geochemical analysis. Enough material to fill a 30 cm gold pan was then panned in the field down to 4-6 cc of heavy mineral concentrate, which was examined by UV lamp under a light-proof cape to determine the number of grains of fluorescing scheelite. The heavy mineral concentrates were retained on filter papers and stored in numbered kraft bags for future reference.

Soil and silt geochemical samples were collected in kraft envelopes and shipped to Chemex Labs Ltd., North Vancouver, B.C. for routine geochemical analysis. These soil and silt samples were pulverized like rock samples, since tungsten disperses in soil mainly as coarse clastic grains of scheelite.

All samples were analyzed for tungsten with a colorimetric determination after fusing with potassium bisulphate, leaching with concentrated HCl, extracting into an amyl acetate solution containing dithiotoluene, and reducing interfering elements with stannous fluoride in a hot water bath. Samples were also analyzed for molybdenum using atomic absorption spectrometry of a nitric-perchloric digestion.

#### GEOMORPHOLOGY

The Herpes property lies at about the 1200 m elevation on the gentle eastern slope of the Coal River valley. The area is entirely overburden covered, with the nearest outcrop located on a 1600 m high ridge three km to the east. Glacial till blankets the floor of the Coal River valley up to about the 1300 m elevation.

#### GEOLOGY

The Herpes property lies on the western side of the Grizzly Anticline, a major north-trending structure, and on the western (shale) side of a lower Cambrian continental facies boundary (see Figure 3, in pocket).

Country rock shown on Table I (on following page) consists of Hadrynian Grit Unit clastics (H) and limestones (Hls), which is possibly faulted against lower Cambrian and older(?) "Phyllite Unit" (EH). Rocks mapped as the "Phyllite Unit" contain numerous thin limestone members that probably belong to the lower Cambrian Backbone Ranges Formation (lEbrl). To the east, carbonates are more common and quartzites are interbedded with the phyllites.

The axis of the Grizzly Anticline, which roughly coincides with the facies boundary, lies 8 km to the east. Most of the lower Cambrian section is represented by phyllites and micaceous quartzites with numerous thin interbeds of limestone. These rocks appear to be faulted away from coarse clastics that include at least one clean, cryptocrystalline limestone unit and have been mapped by the GSC as Hadrynian "Grit Unit".

The Rock stock, which is poorly exposed along a low ridge east of the Herpes property, is of unknown size although it appears to be at least one km in diameter. It is composed of biotite granite that varies in texture from pegmatitic to fine-grained and contains variable quantities of quartz, biotite and tourmaline. Accessory interstitial red garnets are common. The North Rock stock is similar to the Rock stock in texture and composition, and appears to be smaller in size although exposure is so poor that the pluton may actually be a granite dyke swarm rather than a stock.

No outcrop exists between the Rock stock and an adjacent ridge of Hadrynian limestone and it is not known if they are in contact.

#### MINERALIZATION

No mineralization has been found on the Herpes property.

TABLE ONE - GENERAL TABLE OF FORMATIONS

COAL RIVER TUNGSTEN BELT

CRETACEOUS

Kq Quartz monzonite, granodiorite,; minor granite and diorite

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

OSDr ROAD RIVER FORMATION: black, pyritic shale, locally phyllitic; thin-bedded, black argillaceous limestone; pale olive-green, shaly limestone, grey and black chert; calcareous siltstone; black cherty dolomite; locally includes strata of middle Devonian to Carboniferous age

MIDDLE ORDOVICIAN

Os SUNBLOOD FORMATION: dark and light grey dolomite; pink, mottled limestone; platy impure limestone; siltstone; limestone

Osv Vesicular, mafic flow(s)

COr RABBITKETTLE FORMATION: brown weathering, wavy banded, silty limestone; platy impure limestone; siltstone; limestone

CAMBRIAN (?)

1Cs SEKWI FORMATION: undivided; massive, light pink and orange dolomite, light grey and brown limestone; 1Cshf: cherty calc-silicate rocks

1Csv Vesicular, green and maroon weathering volcanic rocks

1Cbrq BACKBONE RANGES FORMATION: resistant, thick bedded grey quartzite (1Cbrq), grey phyllite (CH), minor sandy limestone (1Cbrl), and pebble conglomerate

1Cbrd BACKBONE RANGES FORMATION: massive buff or pink weathering dolomite (1Cbrd), grey limestone (1Cbrl); local sandy to pebbly limestone and dolomite

CAMBRIAN AND (?) HADRYNIAN

Hv Vesicular and amygdaloidal, blocky, green, purple, volcanic flows and breccias; minor buff dolomite

CH "Phyllite Unit": phyllite, slate, fine-grained quartzite, siltstone, argillite

HADRYNIAN

H "Grit Unit": dark shale and slate, gritty quartzite, calcarenite, quartz-pebble conglomerate; sandstone; maroon, green and buff shale and slate; minor limestone and phyllite

Hls Massive, cryptocrystalline cream to grey limestone.

### GEOCHEMISTRY AND PANNING

Sampling consists of 58 grid soil samples from the Herpes property and reconnaissance geochemical and panning samples nearby. The tungsten values are plotted on Figure 4 (in pocket). Most of these samples were analyzed for molybdenum but the results were not plotted since no values exceeded 3 ppm. On the Herpes property, anomalous panning values of 100, 27, 42, and 23 grains scheelite were obtained from both Opset Creek and Richards Creek. Weaker values were obtained upstream from the Herpes property on both creeks. Silt sample values are all 1 ppm W with the exception of single values of 23 ppm W on Richards Creek and 12 ppm W on Opset Creek. Soil samples all returned values of 1 ppm with the exception of two spot values of 41 and 44 ppm W. At the head of Pube Creek, 4 panning samples contained between 10 and 35 grains scheelite per pan. One silt sample downstream had a value of 20 ppm W. There is no apparent source for these weak anomalies but they are possibly significant since Pube Creek appears to be a fault lineament.

### CONCLUSIONS

Stream sediment samples at the confluence of Opset and Richards Creeks contain anomalous panning values. Since these samples were collected near the interpreted contact between the Rock stock and a limestone unit, the

area was staked as the Herpes 1-16 claims. Subsequent soil sampling returned two weakly anomalous values but the planned additional geochemical and geophysical surveys were delayed by a forest fire. This program should be completed when possible.

*Charles A. Main*

C.A. Main, B.Sc.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED,

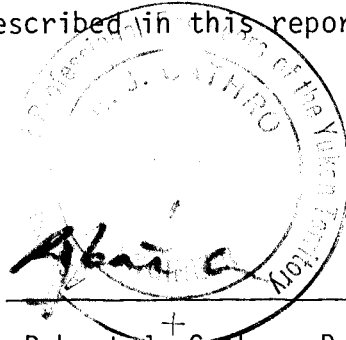


R.J. Cathro, B.A.Sc., P.Eng.

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 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.




---

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

STATEMENT OF QUALIFICATIONS

I, Charles A. Main, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1971 with a B.Sc. majoring in Geological Sciences and Chemistry.
2. I have been actively engaged as a geologist in mineral exploration since 1971 and as a partner of Archer, Cathro & Associates (1981) Limited since June 1, 1981.
3. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



---

Charles A. Main, B.Sc.

# 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 Herpes 1-16 mineral claims on Claim Sheet 95D/14 is accurate.

  
\_\_\_\_\_  
Joan Mariacher

Sworn before me at Vancouver, B.C.

this 16th day of

March, 1982

  
\_\_\_\_\_

Notary, Yukon Territory

091021

Statement of Expenditures  
Herpes 1-16 Claims  
March 12, 1982

Labour

H. McIsaac - Aug. 11, 14 - total 2 days @ \$80/day	\$ 160.00	
C. Shuttle - Aug. 14 - total 1 day @ \$86/day	86.00	
D. Lister - Aug. 14 - total 1 day @ \$86/day	<u>86.00</u>	\$ 332.00

Expenses

Helicopter - 2.8 hours Bell 206C on contract from Shirley Helicopters @ \$367/hour	\$1,027.60	
Helicopter fuel - 2.8 hours @ 22 gal/hour = 61.6 gal @ \$6.50/gal on site	400.40	
Camp Costs - 4 days @ \$45/day - groceries, etc.	180.00	
Geochem Costs - 58 soil samples analyzed for W, Mo @ \$5.60 ea.	324.80	
Management	<u>200.00</u>	<u>2,132.80</u>
Total		\$2,464.80

In Account With

Project - CUB JOINT VENTURE  
Date - - AUGUST 31, 1981

		Total
<b>MANAGEMENT</b>		
	Aug	A 2,500.00
<b>LABOUR</b>		
Supervisory		
	M. P. Phillips - 1/2 day file cream assess.	B 125.00
Field		
	C.A MAIN - AUG 1-31 AT 3000/mo	3000.00
	L GREYTON - AUG 1-31 AT 2100/mo	2100.00
	W. PENND - AUG 1-31 AT 1700/mo	1700.00
	C SHUTTLE - AUG 1-31 AT 1350/mo	1350.00
	D LISTER - AUG 1-31 AT 1350/mo	915.00
	H MACISAAC - AUG 1-31 AT 1500/mo	1500.00
	L KALBUN - AUG 1-31 AT 1800/mo	1800.00
	K DISETMOEN - AUG 1-31 AT 1500/mo	1500.00
	B JOHNSTON - AUG 1-25 AT 1750/mo	1411.00
	R LARSEN - AUG 14, 29-31 AT 2500/mo	323.00
		15099.00
		B -
		7549.50
	plus 50 %	
	Casual K. HACKMAN AUG 21 & 31 - 2 DAYS AT 120/DAY	240.00
		B 240.00
<b>EXPENSES</b>		
	Accounting Aug	400.00 C3
	Expediting Aug 1-31	900.00 DV
	Room & Board in Whse HACKMAN-2; LISTER-2; MACISAAC-1; JOHNSTON-4; Rebalshu 1, main 1, Opsatman 1, Fireaid 1, Personnel	
	total 14 days at \$ 35 /day	490.00 DV
	Field equipment from AC stock - 50 man-day fly camp Aug 21-31 @ 18/d	900.00 D1
	Xerox copies, 204 copies at 25 /copy	51.00 C1
	Radio rental 5BX 100 Aug + 1 5BX 11 Aug	500.00 D1
	Rental AC truck at \$ /mo.	
	plus ( to ) kms at /km	
	Petty cash C2-225; D1-8.44; D2 60.25	71.39
	Telephone	CV 2.00 D1-8.94 DV-60.25
	Blueprinting, 106 sq.ft. Ozalid at 30 c/ft plus - sq.ft. Dilor at \$ - /ft.	31.80 C1
	Drafting, 6 hrs at \$ 18 /hr.	108.00 C1
	Rental Ac computer terminal for classmate	150.00 D1
	Yuba Wireless, radio repair	5.00 D1
	Wireless Lolo Hindman	8.49 B1
	Tabor	11.65 B1
	Hawsons Office - 16.75 - 3.02	14.77 CV
	Yuba Hotel Food	5.80 D1
	Northern Metallie	10.36 D1
	Fred's Plumbing & Heating	6.00 D1
	Receivable General	1.00 CV
	Chances	29.20 DV
	C.P. Air fuel	13.80 DV
	Yuba Office	15.60 CV
	Postage	100.00 CV
	White Pass	49.60 B3
		3878.40
		D1
	Credit - D1 Refund - AC Petty cash.	(115.00) (115.00)
		B 29,276.96
	<b>Total</b>	



INVOICE

Hangar No. 6A, Municipal Airport  
Edmonton, Alberta T5G 2Z3  
Phone 453 5121

August 31, 1981

TO

Archer Cathro & Associates Ltd.,  
1016 - 510 West Hastings St.,  
Vancouver, B.C.  
V6B 1L8

CUSTOMER'S ORDER NUMBER

HELICOPTERS

PAYABLE AT PAR EDMONTON  
PILOT

C-GBZL

Butcher

DESCRIPTION

CHARGES

August 10, 1981	78998	1.0 hrs. @ \$365. per hr.	\$	365.00
		Plus Oil @ \$2.00 per hr.		2.00
August 11, 1981	78999	1.9 hrs. @ \$365. per hr.		693.50
		Plus Oil @ \$2.00 per hr.		3.80
August 12, 1981	79000	.5 hrs. @ \$365. per hr.		182.50
		Plus Oil @ \$2.00 per hr.		1.00
August 13, 1981	83301	1.1 hrs. @ \$365. per hr.		401.50
		Plus Oil @ \$2.00 per hr.		2.20
August 14, 1981	83302	2.9 hrs. @ \$365. per hr.		1,058.50
		Plus Oil @ \$2.00 per hr.		5.80
August 15, 1981	83303	1.6 hrs. @ \$365. per hr.		584.00
		Plus Oil @ \$2.00 per hr.		3.20
August 16, 1981	83304	1.6 hrs. @ \$365. per hr.		584.00
		Plus Oil @ \$2.00 per hr.		3.20
August 17, 1981	83305	2.8 hrs. @ \$365. per hr.		1,022.00
		Plus Oil @ \$2.00 per hr.		5.60
August 18, 1981	83307	.9 hrs. @ \$365. per hr.		328.50
		Plus Oil @ \$2.00 per hr.		1.80
August 19, 1981	83308	1.5 hrs. @ \$365. per hr.		547.50
		Plus Oil @ \$2.00 per hr.		3.00
				<u>\$5,798.60</u>

B 3789

TERMS NET 30 DAYS — 2% PER MONTH CHARGED ON OVERDUE ACCOUNTS.

I N V O I C E

1981 02 27

Archer, Cathro & Associates Limited  
1016 - 510 West Hastings Street  
Vancouver, B. C. V6B 1L8

Re: Purchase of 100 drums of JP-4.

100 lined drums @ \$50.00 ea. (deposit)	\$ 5,000.00
4,400 gal. JP-4 @ \$1.74	<u>7,656.00</u>
	\$ <u>12,656.00</u>

Please make cheque payable to:

Union Carbide Canada Limited  
#930-800 West Pender St.  
Vancouver, B. C.

*V*  
*am*

60 mi

20  
125



UNION CARBIDE CANADA LIMITED

PLEASE QUOTE WHEN REMITTING	
Unacode No.	
Invoice Date	March 17, 1981
Invoice No.	2176

DUNS 20-177-4676

- Archer, Cathro & Associates Limited  
1016 - 510 West Hastings Street
- Vancouver, B.C. V6B 1L8
- 

Date Shipped	Shipped Via	F.O.B.	Order No.	Federal Tax	Provincial Tax
Charges re attached Invoice					12,656.00
REMIT TO: 123 EGLINTON AVENUE EAST, TORONTO M4P 1J3					
TERMS: Net 15th of month following invoice date. Overdue accounts subject to service charge of 1½% per month, (18% per annum on Principal Balance)				PLEASE PAY THIS AMOUNT	12,656.00

*John G. Smith 4/17/81 #177*



# 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 & ASSOCIATES (1981) LTD.  
1016 - 510 W. HASTINGS ST.,  
VANCOUVER, B.C.  
V6B 1L8

Invoice # : 18113481  
Date : 10-SEP-81  
P.O. # : NONE  
Project CUB

Invoice for analytical work reported on certificate(s) A8113481-001 to -002

Quantity	Analysed for code	description	unit price	amount
70	003 - Mo	ppm		
	018 - W	ppm	5.50	385.00

Sample preparation and other charges :

70	203 -	-35 mesh sieve + ring	1.50	105.00
----	-------	-----------------------	------	--------

TOTAL \$ 490.00

Discount (20 %) \$ 98.00

Please pay this amount ----> \$ 392.00

=====

TERMS -- NET 30 DAYS

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

*J. D. Smith*  
#109V



MEMBER  
CANADIAN TESTING  
ASSOCIATION



SPORK-IVO PROPERTY  
MAP SEE FIGURE 8,10,11

**GEOLOGICAL LEGEND**

**CRETACEOUS (possibly TERTIARY ?)**  
 [Kqm ?] Quartz monzonite; granodiorite; minor granite and diorite

**ORDOVICIAN, SILURIAN AND LOWER DEVONIAN**  
 [EOr] RABBITKITTLE FORMATION: brown weathering, wavy banded silty limestone; platy impure limestone; siltstones; limestone

**LOWER CAMBRIAN**  
 [ICs] SEMI FORMATION: undivided; massive, light pink and orange dolomite, light grey and brown limestone; [ICshf]; cherty calc-silicate rocks  
 [ICbrl] BACKBONE RANGES FORMATION: massive buff or pink weathering dolomite, grey limestone; local sandy to pebbly limestone and dolomite

**CAMBRIAN AND (?) HADRYNIAN**  
 [EH] "Phyllite Unit": phyllite, slate, fine-grained quartzite, siltstone, argillite

**HADRYNIAN**  
 [H ?] "Grit Unit": dark shale and slate, gritty quartzite, calcarenite, quartz-pebble conglomerate; sandstones; maroon, green and buff shale and slate; minor limestone and phyllite  
 [Hls] Massive grey limestone

--- Claim Boundary  
 - - - Geological Contact (defined, approximate)  
 = Fault

UP  
DOWN

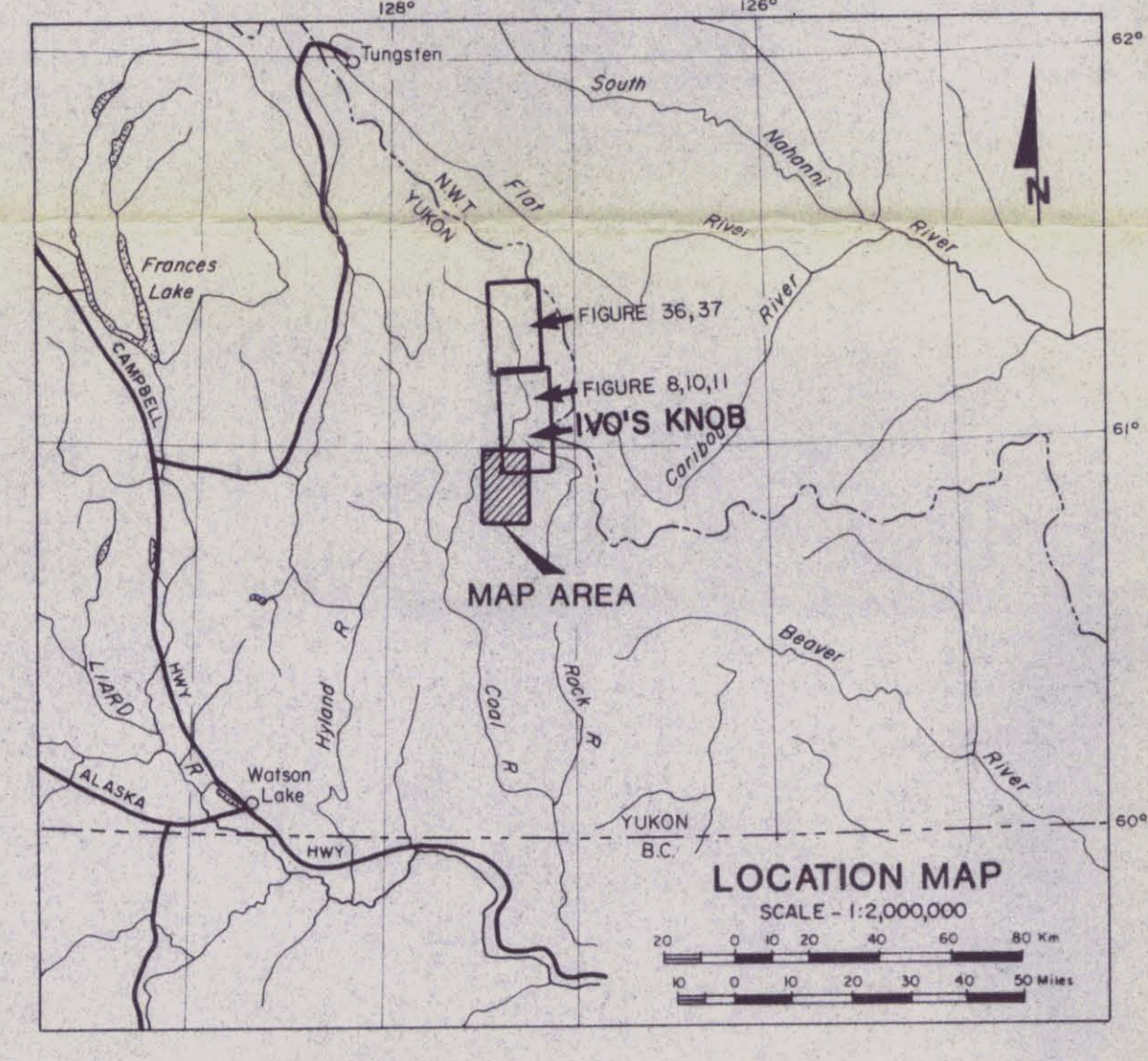


FIGURE 3  
 ARCHER, CATRO & ASSOCIATES (1981) LTD.  
 091021

**REGIONAL GEOLOGY**  
 HERPES AREA  
 CUB JOINT VENTURE

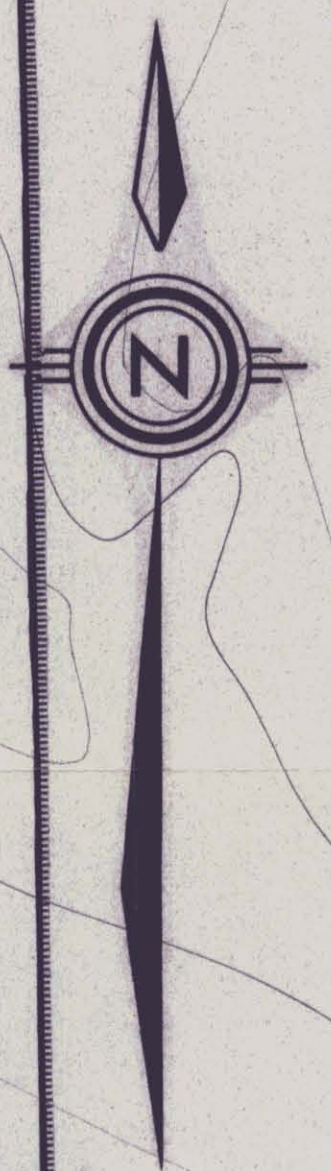
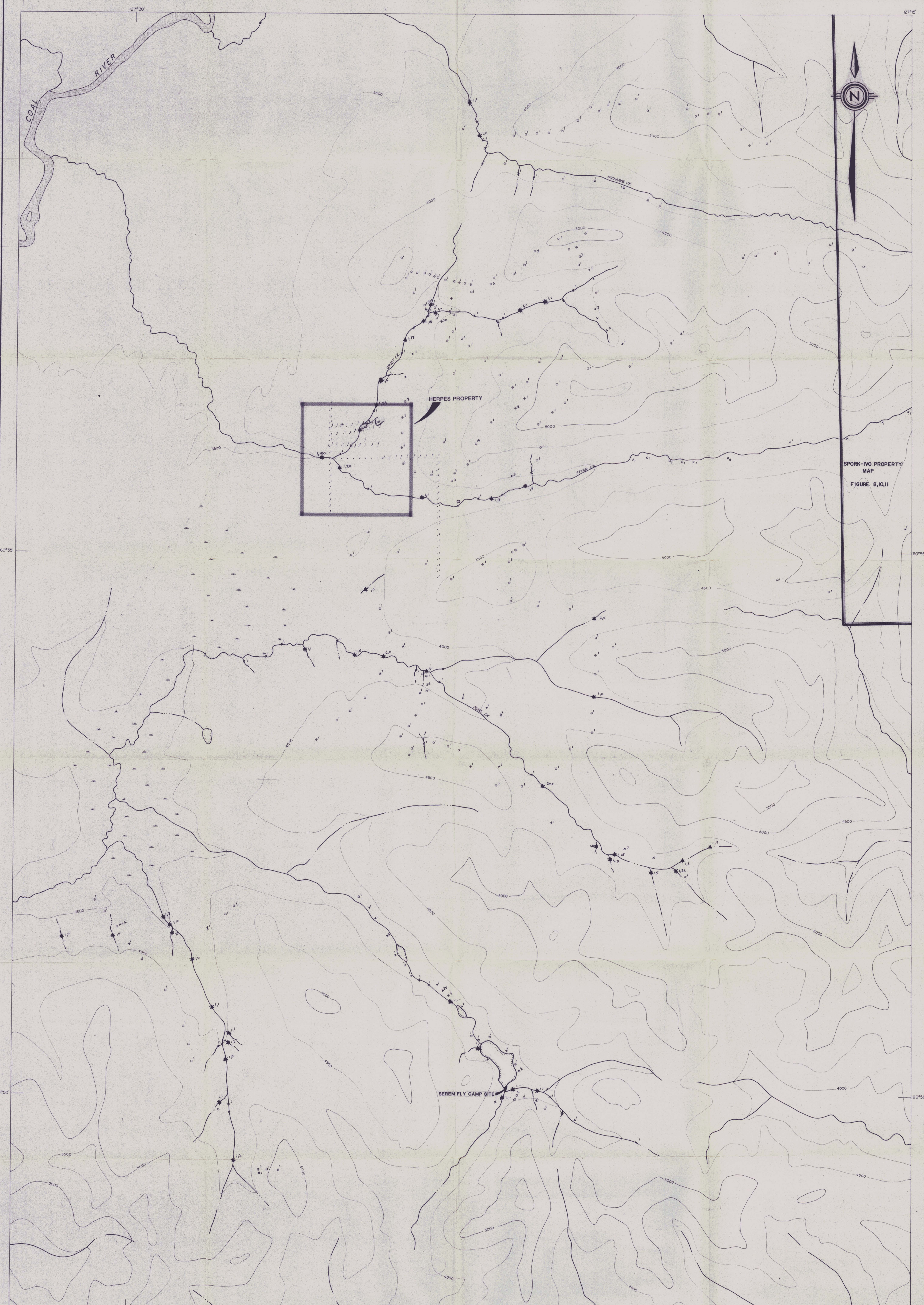
SCALE - 1:20,000

0 200 400 600 800 METERS  
 0 1/4 1/2 3/4 1 MILE

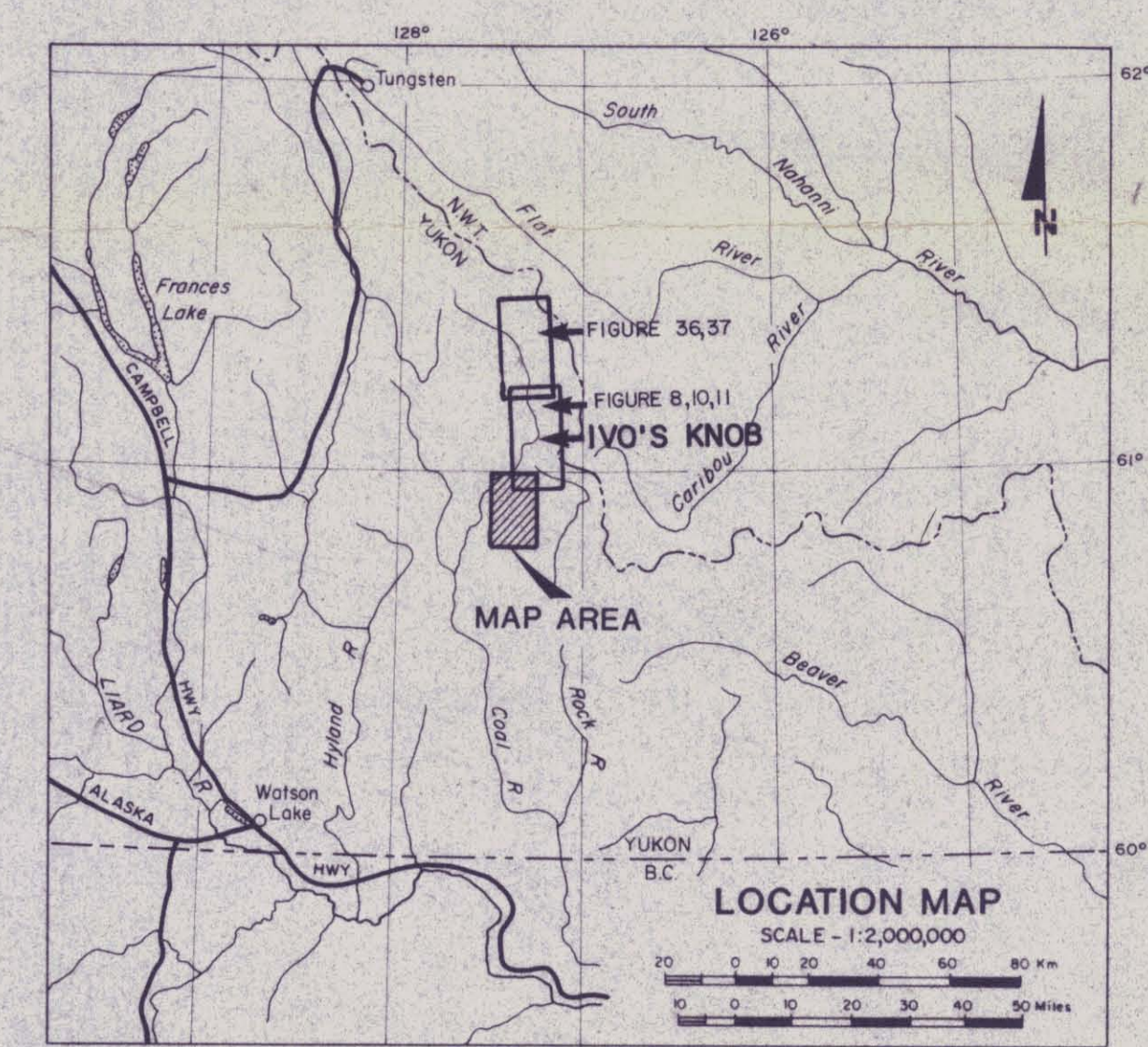
MAP#95-D/14 Dec #091021

Professional Engineer  
 J. J. CATRO  
 ARCHER, CATRO & ASSOCIATES LTD.  
 ENGINEER

1:3  
 To accompany report dated March, 1982



SPORK-IVO PROPERTY MAP  
FIGURE 8,10,11



**LEGEND**

- , ●, ■ Soil, Silt, Rock sample location
- ★ Silt/Pan sample location
- ▲ Pan sample location

[Shaded Area]	>250 ppm W <sub>6</sub>
[Shaded Area]	100-249 ppm W <sub>6</sub>
[Shaded Area]	50-99 ppm W <sub>6</sub>
[Shaded Area]	25-49 ppm W <sub>6</sub>
[Shaded Area]	10-25 ppm W <sub>6</sub>
[Shaded Area]	<10 ppm W <sub>6</sub>

--- Claim Boundary

FIGURE 4  
ARCHER, CATIRO & ASSOCIATES (1981) LTD.  
**TUNGSTEN  
GEOCHEMISTRY**  
HERPES AREA  
CUB JOINT VENTURE

