



B.R. CLAIM GROUP: SOIL GEOCHEMISTRY  
WHITEHORSE MINING DIVISION

B.R. 1 to 16 (16 Claims)

105F3

61° 01' N 133° 27' W



OWNER/OPERATOR

Amoco Canada Petroleum Company Ltd.

Mining Division

656 - 409 Granville Street,

V6C 1T2

090870

Report Written by:

Paul Brown  
September 10, 1981

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 1,600.<sup>00</sup>.

*for* *R. DeBicki* *Oct 13/81*  
Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

058000

From: Mining Recorder at Whitehorse

File No. \_\_\_\_\_

To: Supervising Mining Recorder at Whitehorse, Y.T.

R ACTION:

\_\_\_\_ New Application for Lease to Prospect: Name \_\_\_\_\_

\_\_\_\_ Renewal Appl'n Lease to Prospect: Name \_\_\_\_\_ No. \_\_\_\_\_

\_\_\_\_ Affidavit of Expenditure on Placer Lease: Name \_\_\_\_\_ No. \_\_\_\_\_

\_\_\_\_ Assignment of Prospecting Lease No. \_\_\_\_\_

From \_\_\_\_\_ To \_\_\_\_\_

\_\_\_\_ Grouping Appl'n under Sec. 52( 2) Placer Mining Act: Owner \_\_\_\_\_

\_\_\_\_ Diamond Drill Logs: \_\_\_\_\_

Owner: \_\_\_\_\_ Claim Sheet No. \_\_\_\_\_

✓ Quartz Assessment Report: Geochemical

Claims: B-R-1-16 Claim Sheet No. 105-F-3

Type of Report: Geochemical

Submitted By: Amoco Canada Petroleum Company Ltd.

Claims work performed on: BR 1-5, 7-9, 11-14, 16

\$ Req. for Renewal application: \$1600.00

Signature M-Martin

Date: 2 Oct. 1981

Reply Action \_\_\_\_\_

Date Ref \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_



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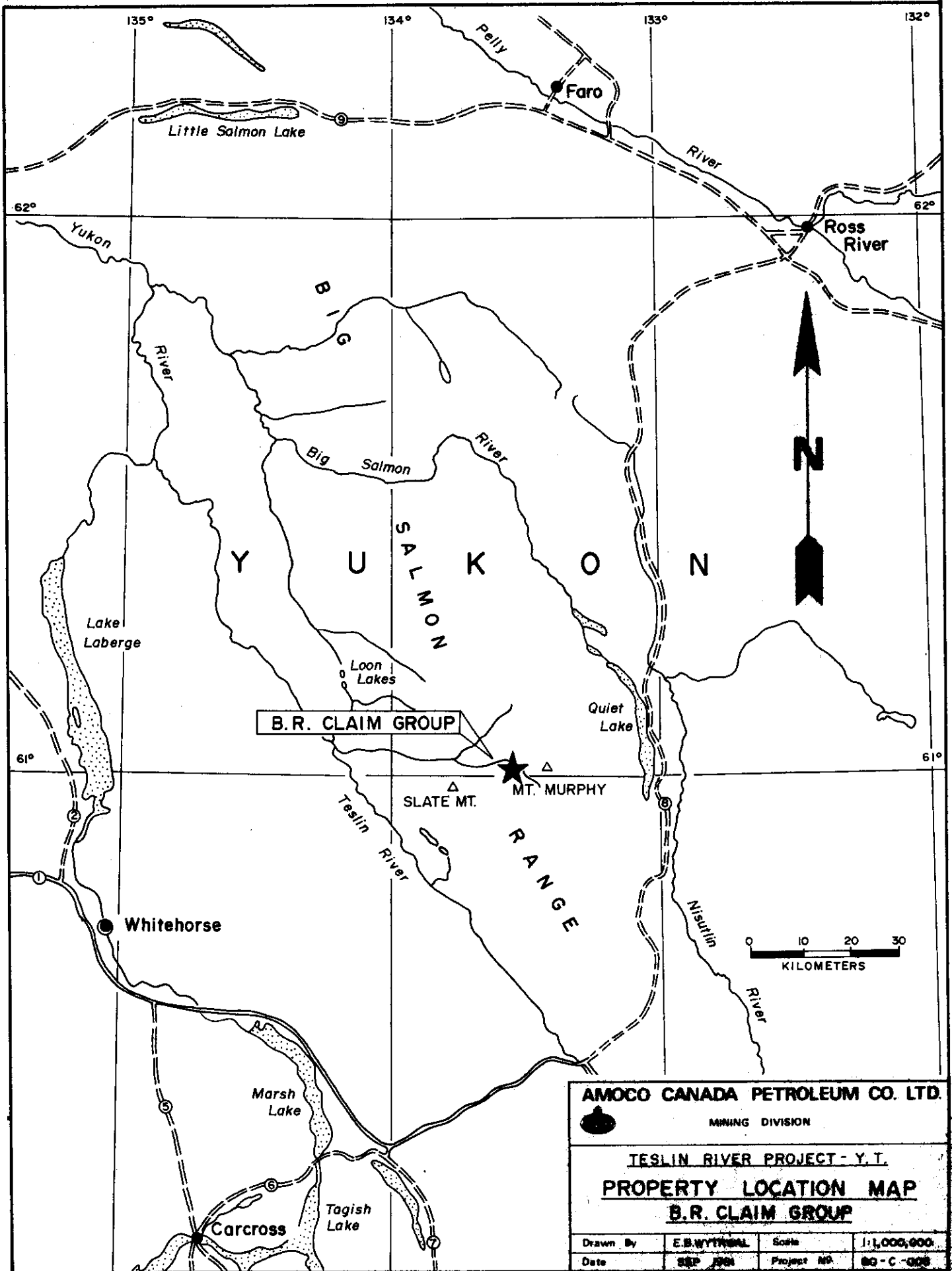
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**B. R. CLAIM GROUP**

**AMOCO CANADA PETROLEUM CO. LTD.**  
 MINING DIVISION  
 TESLIN RIVER PROJECT - Y.T.  
**PROPERTY LOCATION MAP**  
**B. R. CLAIM GROUP**

Drawn By	E. B. WYTHRAL	Scale	1:1,000,000.
Date	SEP 1964	Project No.	80-C-008

## INTRODUCTION

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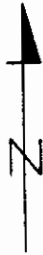
During late June and early July 1980 Amoco Canada Petroleum Company Ltd. (Mining Division) conducted a reconnaissance silt sampling prospecting program over the western portion of the Quiet Lake Batholith and adjacent metasediments, in south central Yukon. The primary objective of the program was to locate porphyry molybdenum deposits. A base camp was established on the southeast shore of North Loon Lake. This camp was serviced by float equipped Otter and Beaver type aircraft out of Whitehorse, approximately 44 air miles to the southwest. Access to the project area from the base camp was by helicopter. Results of regional stream sediment sampling indicated a weak molybdenum anomaly in a small creek flowing into a tributary of the Boswell River, approximately 5km east of Mt. Murphy. Reconnaissance follow-up consisting of soil sampling and prospecting followed. The results outlined a portion of a Molybdenum-Tungsten anomaly approximately 800 metres by 600 metres. The anomaly is underlain by coarse grained monzonites of the Quiet Lake Batholith. A weak gossan was noted in the vicinity of the soil anomaly and disseminated pyrite was found in the monzonite.

The B.R. Claim Group consisting of 16 contiguous claims was staked on September 11th 1980, to cover the soil anomaly and its possible westward extension.

The B.R. Claims are located approximately 5km east of MT. Murphy at 61° 01'N 133° 27' W. Relief on the claim group is approximately 300 metres and access is by helicopter.

B.R. CLAIM GROUP

CLAIM	TAG NUMBER
BR 1	YA 52223
BR 2	YA 52224
BR 3	YA 52225
BR 4	YA 52226
BR 5	YA 52227
BR 6	YA 52228
BR 7	YA 52229
BR 8	YA 52230
BR 9	YA 51593
BR 10	YA 51594
BR 11	YA 51595
BR 12	YA 51596
BR 13	YA 51597
BR 14	YA 51598
BR 15	YA 51599
BR 16	YA 51600



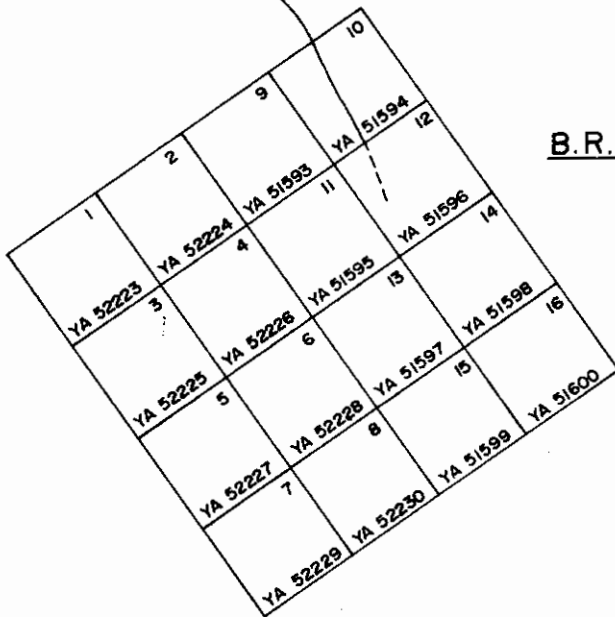
133°27' W

61°02' N

CRATER CREEK

BOSWELL RIVER

B.R. CLAIM GROUP



GRANITE CREEK

**AMOCO CANADA PETROLEUM CO. LTD.**

MINING DIVISION

TESLIN RIVER PROJECT (Y.T.)

B.R. CLAIM GROUP

LOCATION MAP

Drawn by	E. S. WYTRWAL	Scale	1" = 1/4 MILE
Date	SEPT 1981	Project #	80-C-008

The B.R. Claim Group is underlain by coarse grained intrusive rocks within the south central portion of the Quiet Lake Batholith. The batholith located west and north west of Quiet Lake is a north west trending body 40 miles by 20 miles, which intrudes Yukon Group schist and gneiss and has been dated by K-Ar methods at 83.2 million years.

Within the B.R. Claim Group the Batholith is composed of coarse grained dark grey to brown granodiorite to monzonite. These intrusive rocks are moderately well fractured with pyrite noted along fracture planes, and in several locations weak gossans are developed. Scattered narrow 2" to 8" medium grained, light grey alaskite dikes cut the intrusive. On L5 + 00E at 9 + 80N, a 10' wide fine grained dark green mafic dike trending 060° and dipping 75°N is present.

No molybdenum mineralization or quartz stockwork were found associated with the diking. Several specks of molybdenum were found on a fracture plane with pyrite in the monzonite.

Disseminated grains of scheelite were found in most of the monzonite to granodiorite samples studied under the ultraviolet light. No positive source for the molybdenum soil anomaly has been found.

## SOIL GEOCHEMISTRY

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### Introduction:

On August 10th 1981 a total of 5 man days were spent collecting soil samples and prospecting on a grid covering the anomalous and suspected anomalous portions of the B.R. Claim Group.

A chained and flagged baseline at 050° was established with respect to the Number one post of Claim YA 52230. Six pace and compass traverses were conducted from the baseline and a total of 190 soil samples were collected at 50m intervals.

Soil samples were collected at depths of 5cm to 15cm with a matlock and stored in Kraft Paper bags. The "B" Horizon was sampled when present otherwise the soil beneath the zone of humus and vegetation was collected.

The minus 80 mesh fraction of all samples was analyzed for Mo, Cu, Pb, Zn and W. All analyses were done by Min-En Laboratories of North Vancouver, B.C.



133°27' W

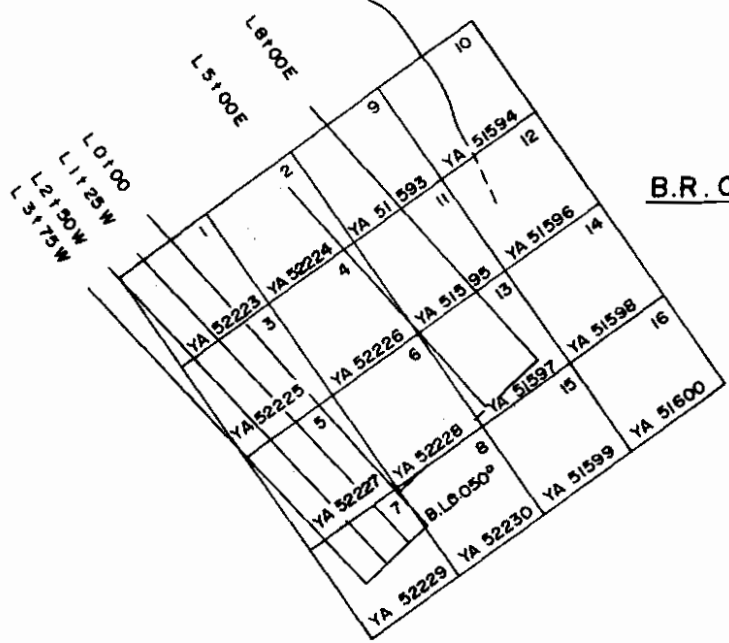
61°02' N

CRATER CREEK

BOSWELL RIVER

B.R. CLAIM GROUP

GRANITE CREEK



<b>AMOCO CANADA PETROLEUM CO. LTD.</b>			
MARKING DIVISION			
TESLIN RIVER PROJECT (Y.T.)			
<u>B.R. CLAIM GROUP</u>			
1981 SOL GRID			
Drawn by	E.S. FRYMAN	Scale	1" = 1/2 MILE
Date	SEPT. 1981	Project No.	80-C-008

## Interpretation:

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A weak to moderate molybdenum anomaly is outlined, with dimensions of 700 x 600 meters for the zone of greater than 35ppm Mo. Background for Mo is about 2ppm. Values reach 129ppm at one sample location.

The anomaly is essentially outlined on two lines, one on either side of a steep ridge with heavy coarse talus cover in the area.

It terminates abruptly along its south-west side but would appear to extend to the north-east, though narrower and weaker.

A smaller tungsten anomaly coincides with the northern portion of the Mo zone, where the molybdenum values are highest. Values in tungsten reach 195ppm, against a background of 2 to 3ppm.

Copper similarly shows a direct relationship to the Mo anomaly, as two weakly anomalous zones with values up to 350 ppm, but averaging closer to 100 ppm, against a background of about 15 ppm.

## Conclusions and Recommendations:

A gossan zone, west of the small lake on claim YA 51595, is associated with the southern part of the Mo anomaly. The rocks of the area are moderately well fractured, with minor pyrite occurring along fracture planes. No quartz stockwork or veining was noted. At this time there is no pattern to which the Mo anomaly can be directly related and adequately explained. Detailed prospecting and rock sampling is required to help determine the source and cause of the anomaly.

SURVEY COST

Assay Charges:

A total of 190 soil samples were collected on the B.R. Claim Group.

Samples were analyzed for Mo, Cu, Pb, Zn, and W. @ \$ 7.60 per sample.

190 samples @ \$ 7.60	=	\$ 1,444.00
		<hr/>
Total Assay Charges	=	\$ 1,444.00
		<hr/>

Salaries:

Keith Thompson	1 man-day @ \$ 62.96	=	\$ 62.96
James Joe	1 man-day @ \$ 57.40	=	57.40
Deno Adams	1 man-day @ \$ 51.66	=	51.66
Robert Tamaki	1 man-day @ \$ 44.44	=	44.44
Brent Rowley	1 man-day @ \$ 44.44	=	<u>44.44</u>
	Total Salaries		<u>\$ 260.90</u>

Meals:	5 man-days @ \$ 15.00 per man-day	=	\$ 75.00
Transportation:	Helicopter 1.1 hrs. @ \$ 430.25/hr	=	\$ 473.27
Cost of Report Preparation:		=	<u>\$ 300.00</u>
	TOTAL		<u>\$ 2,553.17</u>

APPORTIONMENT OF EXPENSES

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The total cost of the survey was \$ 2,553.17 and distributed over the sixteen B.R. Claims is indicated below:

<u>CLAIM NAME</u>	<u>GRANT NUMBER</u>	<u>ASSAY COST</u>	<u>COST OTHER THAN ASSAYS</u>	<u>TOTAL COST APPLICABLE</u>
B.R. 1	YA 52223	\$364.80	\$ 69.32	\$ 434.12
B.R. 2	52224	45.60	69.32	114.92
B.R. 3	52225	266.00	69.32	335.32
B.R. 4	52226	7.60	69.32	76.92
B.R. 5	52227	273.60	69.32	342.92
B.R. 6	52228	-----	69.32	69.32
B.R. 7	52229	114.00	69.32	183.32
B.R. 8	52230	30.40	69.32	99.72
B.R. 9	51593	98.80	69.32	168.12
B.R. 10	51594	-----	69.32	69.32
B.R. 11	51595	91.20	69.32	160.52
B.R. 12	51596	22.80	69.32	92.12
B.R. 13	51597	53.20	69.32	122.52
B.R. 14	51598	68.40	69.32	137.72
B.R. 15	51599	-----	69.32	69.32
B.R. 16	51600	7.60	69.32	76.92

APPENDIX I

Fee Schedule

Geochemical Analyses were done by:

Min-En Laboratories Ltd.  
705 West 15th Street  
North Vancouver, B.C.  
V7M 1T2

Geochemical Analyses:

Mo	\$ 0.90
Cu	\$ 0.90
Pb	\$ 0.90
Zn	\$ 0.90
W	<u>\$ 4.00</u>
TOTAL	\$ 7.60

*MIN-EN Laboratories Ltd.**Specialists in Mineral Environments*Corner 15th Street and Bewicke  
705 WEST 15th STREET  
NORTH VANCOUVER, B.C.  
CANADAANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORKPROCEDURES FOR: Cu, Mo, Cd, Pb, Mn, Ni, Ag, Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95<sup>o</sup>C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO<sub>3</sub> and HClO<sub>4</sub> mixture.

After cooling the samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH<sub>2</sub>H<sub>2</sub>-Air Flame combination but the Molybdenum determination is carried out by C<sub>2</sub>H<sub>2</sub>-N<sub>2</sub>O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

Background corrections for Pb, Ag, Cd upon request are completed.

*MIN-EN Laboratories Ltd.*

*Specialists in Mineral Environments*

Corner 15th Street and Bewicke  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C.  
CANADA V7M 1T2

ANALYTICAL PROCEDURE FOR ASSESSMENT WORK

PROCEDURE FOR: TUNGSTEN

0.5 gram of prepared samples are weighed into nickel crucibles and fluxed with 1:4 times with carbonate flux in a temperature controlled furnace.

Samples than are dissolved and suitable aliquots are taken for colorimetric procedures.

The interferring elements are reduced from the solutions by a 10% SnCl<sub>2</sub> solution before the test is carried out by the Zinc Dithol reagent.

The coloured complex is extracted with Kerosene oil to obtain pure and more easily discriminated blue color.

Samples are measured against a suitable suit of standards which are carried through the same manner as the samples.

APPENDIX III

Names and Addresses of Persons Conducting Work

Keith Thompson  
36 New St. S.E.  
Calgary, Alberta  
T2G 3X9

James Joe  
276 Durham St.  
Kincardine, Ontario  
NOG 2G0

Deno Adams  
139 Winchester Cr. S.W.  
Calgary, Alberta  
T3C 2V4

Robert Tamaki  
2150 E. 38th Ave.  
Vancouver, B.C.  
V5P 1G8

Brent Rowley  
3 - 1777 Wallace St.  
Regina, Saskatchewan

APPENDIX IV

Cost per hour for Helicopter, 1981:

Bell 206B, Contract Rate, Shirley Helicopters,  
Whitehorse, Yukon

Contract Rate	\$ 375.00 per hour
Fuel 25 Gal. @ \$ 2.13 per gal.	\$ 53.25 per hour
Oil @ \$2.00 per hour	<u>\$ 2.00 per hour</u>
Total	<u>\$ 430.25 per hour</u>

APPENDIX V

Qualifications of Paul Brown:


B.Sc. Geology, Memorial University of Newfoundland, 1974

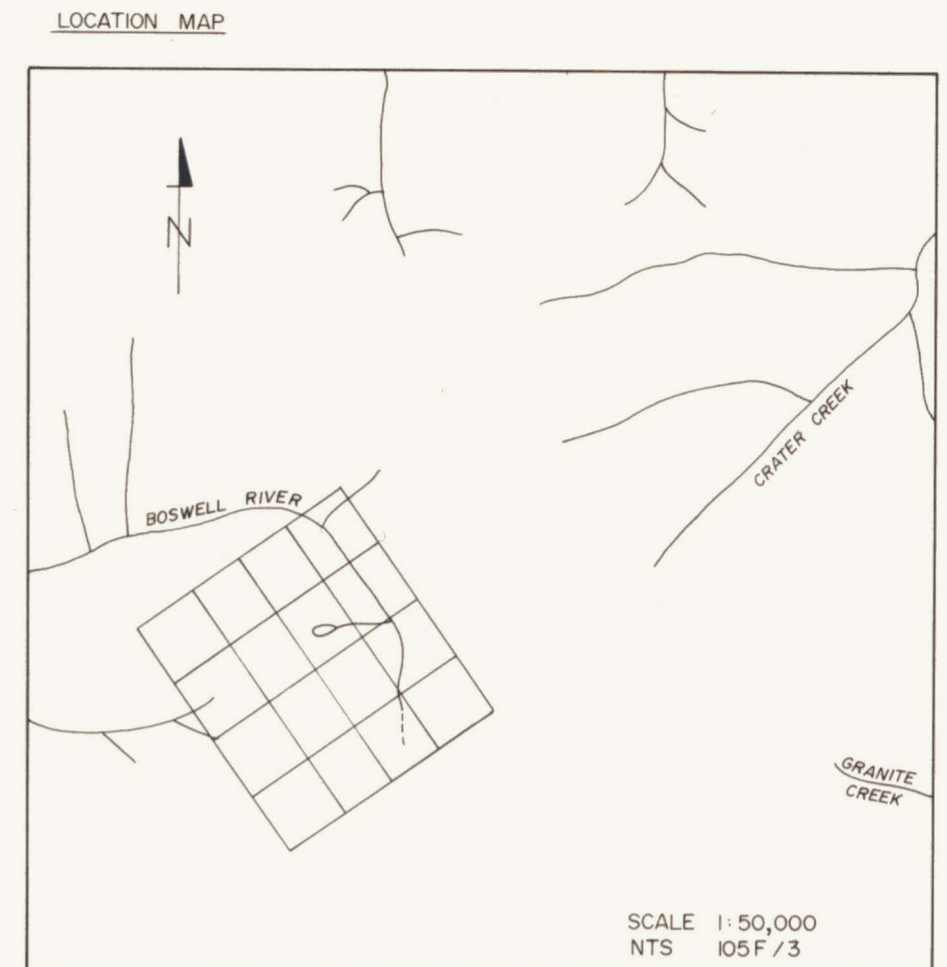
Continuously employed in the mineral exploration industry since graduation and with Amoco Canada Petroleum Company Ltd. since April, 1975.

Member of the Geological Association of Canada and the Canadian Institute of Mining and Metallurgy.

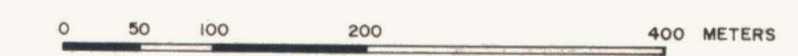
Whitehorse, Yukon

September 10, 1981

  
Paul Brown, B.Sc.



**LEGEND:**  
 + 104166 - SOIL SAMPLE LOCATION  
 2,7,5,16,52 - SOIL SAMPLE RESULTS Mo,Cu,Pb,Zn,W (ppm)  
 ■ CLAIM POST



**AMOCO CANADA PETROLEUM CO. LTD.**

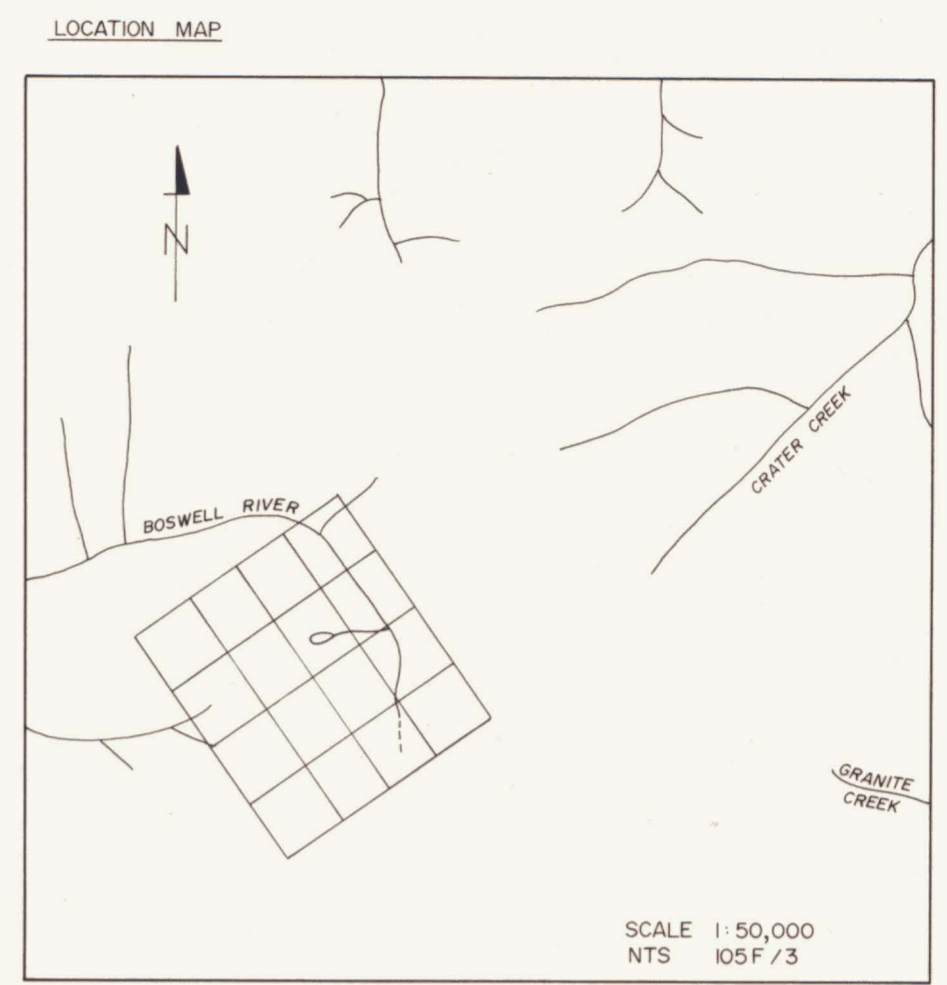


MINING DIVISION

TESLIN RIVER PROJECT (Y.T.)

**1981 SOIL SAMPLE RESULTS**  
**Mo,Cu,Pb,Zn,W (ppm)**

Drawn By	E. B. WYTRWAL	Scale	1:5,000
Date	SEP 1981	Project No.	80-C-008



**LEGEND:**  
 + 104166 - SOIL SAMPLE LOCATION  
 2,7,5,16,4,2 - SOIL SAMPLE RESULTS Mo,Cu,Pb,Zn,W (ppm)  
 ■ CLAIM POST



**AMOCO CANADA PETROLEUM CO. LTD.**



MINING DIVISION

TESLIN RIVER PROJECT (Y.T.)

**1981 SOIL SAMPLE RESULTS**  
 Mo,Cu,Pb,Zn,W (ppm)

Drawn By	E. B. WYTRWAL	Scale	1:5,000
Date	SEP 1981	Project No.	80-C-008