

5085

92P/16W

REPORT ON GEOCHEMICAL AND MAGNETOMETER SURVEYS - 1973

WAP PROPERTY, CLEARWATER AREA,

KAMLOOPS MINING DIVISION

N.T.S. 92P/16W

Claims: WAP 1-10 (Record Nos 126066-126075)
 WAP 12 (Record No 126077)
 WAP 14-71 (Record Nos 126079-126136)
 WAP 73 (Record No 126138)
 WAP 75-84 (Record Nos 126140-126149)

for: Amoco Canada Petroleum Company Ltd
by: H.E.O. Neugebauer May 1, 1974

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 5085	MAP.....

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FIGURES

#1 LOCATION MAP	1 inch = 100 miles
#2 CLAIM MAP	1 inch = 3,300 feet
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MAPS

#4 GEOCHEMISTRY - Cu (ppm)	1 inch = 400 feet
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#8 MAGNETOMETER SURVEY	1 inch = 400 feet

SUMMARY AND CONCLUSIONS

The WAP #1-84 mineral claims are situated in the Kamloops Mining Division, 220 miles northeast of Vancouver, British Columbia. They are in good standing until June 28, 1974. The claims are part of a larger group of 150 claims owned as to 100 per cent by Amoco Canada Petroleum Company Ltd.

The property was explored by geochemical sampling and a magnetometer survey between July 17 and August 29, 1973 by Amoco Canada Petroleum Company Ltd as operator of the claims.

Geochemistry of soils, silts and rocks outlined a composite molybdenum-copper-silver-zinc anomaly 5,000 feet long and 2,000 feet wide. The ground magnetometer survey could not be interpreted reliably. The government published aeromagnetic survey, however, indicates the presence of a magnetic low over part of the property.

DESCRIPTION OF WAP CLAIMS

The WAP claims are located in the Kamloops Mining Division in central British Columbia. The claims were staked by Amoco personnel as part of the Clearwater Regional Reconnaissance Project during the summer of 1973.

The following 150 WAP claims were recorded and are in good standing:

	<u>Record Nos</u>	<u>Expiry Date</u>
WAP 1-84	126066-126149	June 28, 1974
WAP 85-138	126542-126595	August 6, 1974
WAP 145-156	126596-126607	August 6, 1974

For assessment purposes, the WAP #1-84 claims have been grouped as follows:

<u>NORTH GROUP:</u>	<u>Record Nos</u>
WAP 1-10	126066-126075
WAP 12	126077
WAP 14-42	126079-126107
<u>SOUTH GROUP:</u>	
WAP 43-71	126108-126136
WAP 73	126138
WAP 75-84	126140-126149

LOCATION AND ACCESS

The WAP claims are situated in the Kamloops Mining Division, 80 miles north of Kamloops, B.C. and 220 miles northeast of Vancouver, B.C.

Access is by logging roads which are maintained by Clearwater Timber Products of Clearwater, B.C. Although the logging roads are open to the public, permission by Clearwater Timber Products is necessary. Permission may be obtained at the weigh scale of Camp 2 Sawmill. Camp 2 is located one mile west of Dutch Lake, near the Clearwater airstrip. From Camp 2, Logging Road No. 2 is followed to Mile 23½. At Mile 23½ Logging Road No. 6 is followed for ½ mile to Double Lake, situated on the southeastern side of Logging Road No. 6 and at the northwestern extremity of the claims.

An up-to-date road construction map is available from Clearwater Timber Products.

OWNERSHIP

All 150 WAP claims are 100 per cent owned by Amoco Canada Petroleum Company Ltd.

GEOCHEMISTRY

Geochemical samples of soil, stream sediment and rock outcrop were initially collected along old picket lines and subsequently areas between picket lines were sampled on a grid which was surveyed by chain and compass. A total of 396 samples were collected.

Soil samples were generally taken from the "B₂" horizon at depths between 0.5 and 1.5 feet. Rock chip samples were primarily of biotite-hornblende quartz monzonite.

The samples were analyzed for copper, molybdenum, silver and zinc by Min-En Laboratories Ltd., North Vancouver, employing the following procedures:

After drying the samples at 95°C soil and stream sediment samples were screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples were crushed by jaw crusher and pulverized by ceramic-plated pulverizer. One gram of each sample was then digested for six hours with an HNO₃-HClO₄ mixture. After cooling samples were diluted to standard volume and the solutions analyzed by Atomic Absorption Spectrophotometer.

The largest geochemical anomaly was outlined on the north-west-facing slope just southeast of Double Lake.

The overall anomaly trends northeast for about 5,000 feet and its width is about 2,000 feet.

The main anomalous element is molybdenum. Copper, silver and zinc indicate weak supporting anomalies which are partly superimposed and partially surround the molybdenum anomaly. The molybdenum anomaly consists of two adjacent areas of 2,400 feet by 2,100 feet and 1,700 feet by 800 feet. The former anomaly is the result of fifteen samples and the latter is the result of seven samples. The range of values is 22 to 182 ppm.

Copper anomalies consist of values greater than 19 ppm, ranging up to 156 ppm. The anomaly is partially superimposed on the molybdenum anomaly; a large weak anomaly is also situated to the southwest of the molybdenum anomaly.

Silver anomalies are greater than 1.5 ppm and range up to 3.8 ppm. Most anomalies are isolated but generally are scattered within the area of the molybdenum anomaly.

Zinc anomalies are greater than 85 ppm and are generally associated with the molybdenum anomaly.

Although the copper, silver and zinc anomalies are weak, they do indicate that some hydrothermal activity has taken place in the area. The lack of outcrop in the area of the anomaly leaves enough room to speculate on the presence of a porphyry-type of environment.

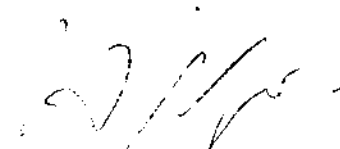
MAGNETOMETER SURVEY

A McPhar Geophysics Ltd., Model M-700 fluxgate magnetometer was used to measure the relative strength of the vertical component of the earth's magnetic field in the vicinity of the geochemical anomaly. The magnetometer survey was carried out on several old picket lines and on selected chain-and-compass traverse lines. The survey was undertaken in the hope of outlining a change in rock type such as a contact between Jurassic metasedimentary rock and intrusive quartz monzonite.

Magnetometer readings were corrected for diurnal variation by reference to field base stations; they ranged in relative strength from 500 to 1100 gammas. As a result of the wide line spacing, a strong northeastern bias has been introduced. The pattern produced when readings are contoured also indicate considerable noise.

No interpretation of the data can be made at this time until the geology is better understood and the spacing of magnetometer stations is considerably closer.

A more reliable magnetic interpretation is suggested by published government aeromagnetic map "Geophysical Map 5230G". The aeromagnetic survey indicates that a pronounced magnetic low in the area partly underlies the molybdenum geochemical anomaly. This low may be a reflection of rock types or of hydrothermal alteration.



H.E.O. Neugbauer

May 1, 1974

MAP OF
BRITISH COLUMBIA

SCALE IN MILES

MAP FOLLOW-UP

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 5085 N.O.

#1

QUEEN

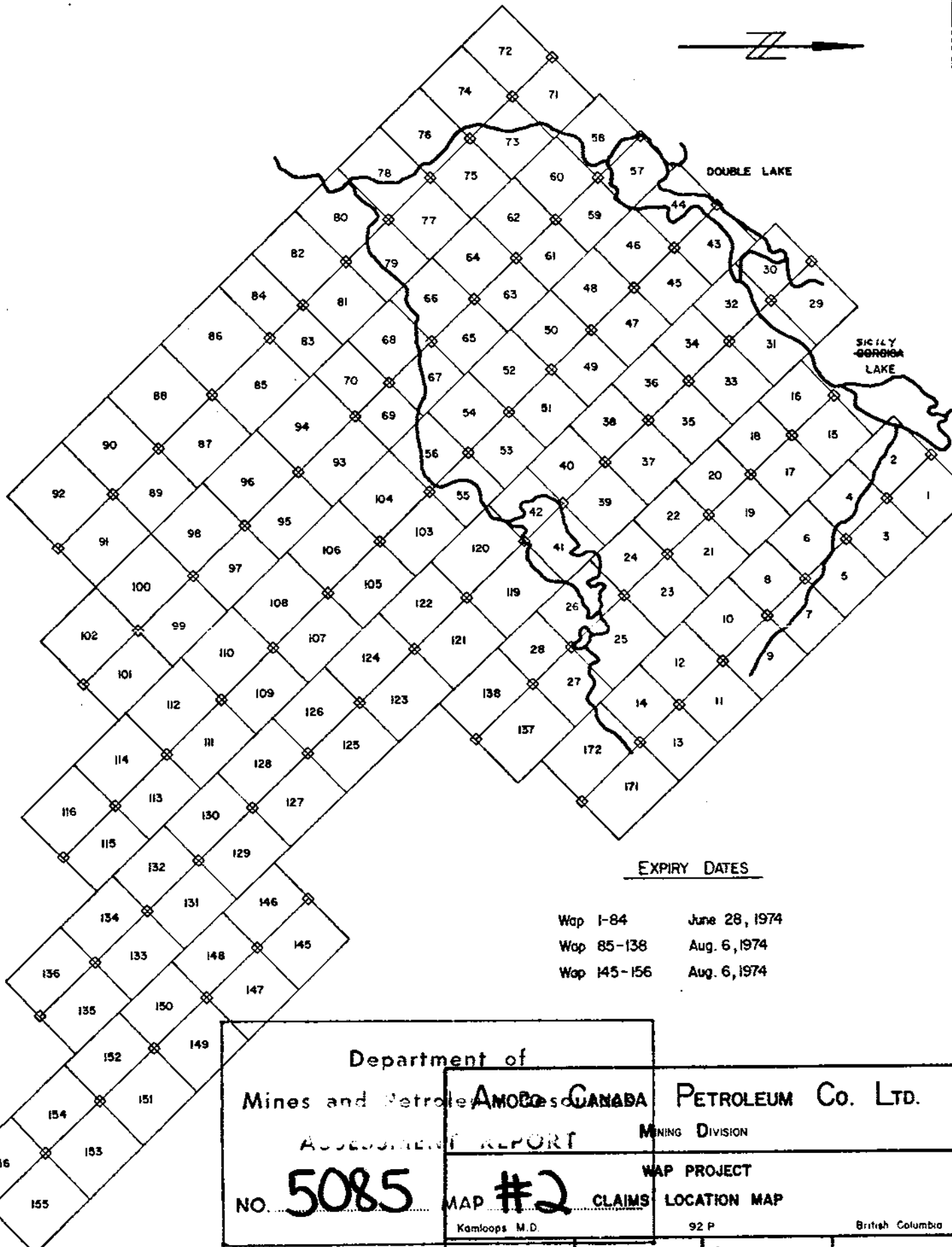
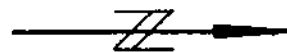
CHARLOTTE

ISLANDS

VANCOUVER

ISLAND

VANCOUVER

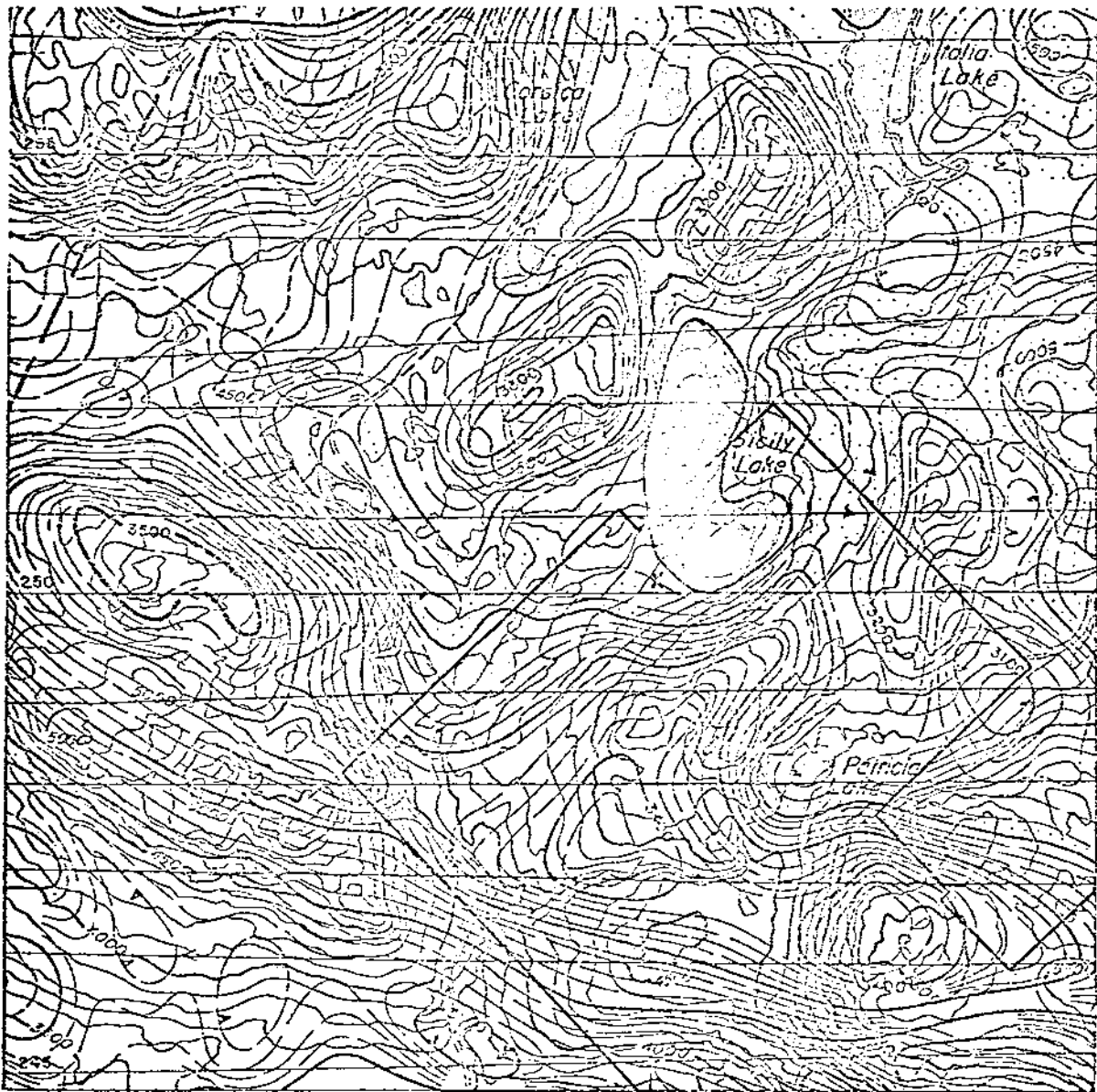


EXPIRY DATES

Wap 1-84 June 28, 1974
 Wap 85-138 Aug. 6, 1974
 Wap 145-156 Aug. 6, 1974

Department of		AMOCO CANADA PETROLEUM Co. LTD.	
Mines and Petroleum Resources		MINING DIVISION	
ASSESSMENT REPORT		WAP PROJECT	
No. 5085		MAP #2 CLAIMS LOCATION MAP	
Kamloops M.D.		92 P	
British Columbia			

DRAWN BY	a.m.b	CHECKED BY	
SCALE	1" = 3300'	APPROVED BY	
DATE	MARCH, 1974	DRAWING No.	



LEGEND



Wap Claims



Magnetic Low

X

Molybdenite Showings

Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. **5085**

AMOCO CANADA PETROLEUM Co. LTD.
M. P. **#3** MINING DIVISION

WAP CLAIMS

Aeromagnetic Map — 5230 G

Kamloops M.D.

92 P/16

British Columbia

DRAWN BY

a.m.b

CHECKED BY

SCALE

1" = 1 mile

APPROVED BY

DATE

MARCH, 1974

DRAWING No.

APPENDIXASSESSMENT DETAILS AND BREAKDOWN OF COSTS

Property: WAP
Mining Division: Kamloops
Province: British Columbia
Location: Clearwater
Owner and Operator: Amoco Canada Petroleum Company Ltd.
Claims:

<u>NORTH GROUP</u>	<u>Record Nos</u>
WAP 1-10	126066-126075
WAP 12	126077
WAP 14-42	126079-126107
<u>SOUTH GROUP</u>	
WAP 43-71	126108-126136
WAP 73	126138
WAP 75-84	126140-126149

A. MAGNETOMETER SURVEY

Operating man-days: 24
Drafting and Report Writing man days: 3
Total man-days: 27
Date Started: July 23, 1973

<u>Date Finished:</u>	August 25, 1973
<u>Miles of Line Surveyed:</u>	12.5 (North Group)
	3.0 (South Group)
	1.5 (Off claims)
	<hr/>
TOTAL	17.0

Salaries (Operating):

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
6	August 18-22, 24-25	B. Nixon	\$611.00	\$183.00
2	August 18-19	R. Durfeld	\$888.00	88.80
4	August 21-22, 24-25	D. Olson	\$555.00	111.00
6	July 23-28	J. Valentinuzzi	\$555.00	166.50
6	July 23-28	D. Miles	\$777.00	233.10
		TOTAL		<hr/> \$782.70

Salaries (Drafting and Report Writing):

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
1.5	Oct 9-10	R. Durfeld	\$888.00	\$ 60.60
1.5	Mar 14-15	H. Neugebauer	\$1,820.00	136.50
		TOTAL		<hr/> \$203.10

Salaries (Data Analysis):

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
1	March 12	H. Neugebauer	\$1,820.00	\$ 91.00

Food and Accommodation in Field:

24 man-days @ \$8.00		\$192.00
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Ground Transportation:

1/3 month of truck rental @ \$577.50	\$192.50	
oil and gas @ \$25/month	8.33	
	<hr/>	
TOTAL		\$200.83

Magnetometer Rental:

1 month @ \$285.00		\$285.00
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NORTH GROUP (pro-rated 12.5/17.0)

Salaries (Operating)	\$575.51	
Salaries (drafting & Report writing)	149.34	
Salaries (Data analysis)	66.91	
Food and Accommodation	141.18	
Ground Transportation	147.67	
Magnetometer Rental	209.59	
	<hr/>	
TOTAL.....		\$1,290.17

SOUTH GROUP (Pro-rated 3.0/17.0)

Salaries (Operating)	\$138.13	
Salaries (drafting and report writing)	35.84	
Salaries (data analysis)	16.06	
Food and Accommodation	33.88	
Ground Transportation	35.44	
Magnetometer rental	50.29	
	<hr/>	
TOTAL.....		\$309.64

B. GEOCHEMICAL SURVEY

Operating man-days:	51
Drafting and Report Writing man-days:	3
Total man-days:	54
Date Started:	July 17, 1974
Date Finished:	September 5, 1974
Number of Samples:	218 (North Group)
	168 (South Group)
	264 (off claims)
	<hr/>
TOTAL	660

Salaries (Operating):

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
3	Sept 2,4-5	R. Durfeld	\$888.00	\$133.20
11	July 17,19,24 Aug 15-16- 19-23,25	B. Hughes	\$722.00	\$397.10
4	July 19 Aug 5-7	J. Morgan	\$800.00	\$160.00
1	July 23	D. Miles	\$777.00	\$ 38.85
16	July 19,23 Aug 5-7,15-16, 19-23,25,27	B. Dewonck	\$555.00	\$444.00
3	Aug 4-6	J. Valentinuzzi	\$555.00	\$ 83.25
5	Aug 4-6,28-29	H. Neugebauer	\$1,820.00	\$455.00
2	July 24, Aug 7	L. McLennan	\$833.00	\$ 83.30

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
1	August 7	D. Olson	\$555.00	\$ 25.75
5	July 17,19, 24 Aug 15-16	B. Nixon	\$611.00	\$152.75
			Total	\$1,975.20

Salaries (Drafting and Report Writing):

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
1.5	Oct 8-9	R. Durfeld	\$888.00	\$ 66.60
1.5	march 13-14	H. Neugebauer	\$1,820.00	\$136.50
				\$203.10

Salaries (Data Analysis):

<u>No of Days</u>	<u>Dates</u>	<u>Name</u>	<u>Rate/Month</u>	<u>Total</u>
1	March 11	H. Neugebauer	\$1,820.00	\$ 91.00

Food and Accommodation in Field:

51 man-days @ \$8.00 \$408.00

Ground Transportation:

2/3 month of truck rental @ \$577.50 \$385.00
oil and gas at \$25/month 16.67 \$401.67

Geochemical Analysis of 660 Samples:

593 soil and silt samples - 4 elements @ \$2.40		
preparation	0.25	
		<u>\$1,571.45</u>
67 rock chip samples - 3 elements @ \$1.90		
1 element	1.50	
preparation	1.00	
		<u>\$294.80</u>
Shipping of samples		16.35
Sample bags - \$33/1000 bags		21.78
Computer plotting of samples: 660 points on 5 maps		575.30
		<u>575.30</u>
	TOTAL	\$2,479.68

NORTH GROUP (pro-rated 218/660)

Salaries (operating)	\$652.41
Salaries (drafting and report writing)	67.08
Salaries (data analysis)	30.06
Food and Accommodation in Field	134.76
Ground Transportation	132.67
Geochemical analysis of 218 samples	856.09
	<u>856.09</u>
	TOTAL.....\$1,873.07

SOUTH GROUP (Pro-rated 168/660)

Salaries (operating)	\$502.78	
Salaries (drafting & report writing)	51.70	
Salaries (data analysis)	23.16	
Food and accommodation in field	103.85	
Ground transportation	102.24	
Geochemical analysis of 168 samples	<u>659.20</u>	\$1,442.93

H. E. O. Neugebauer

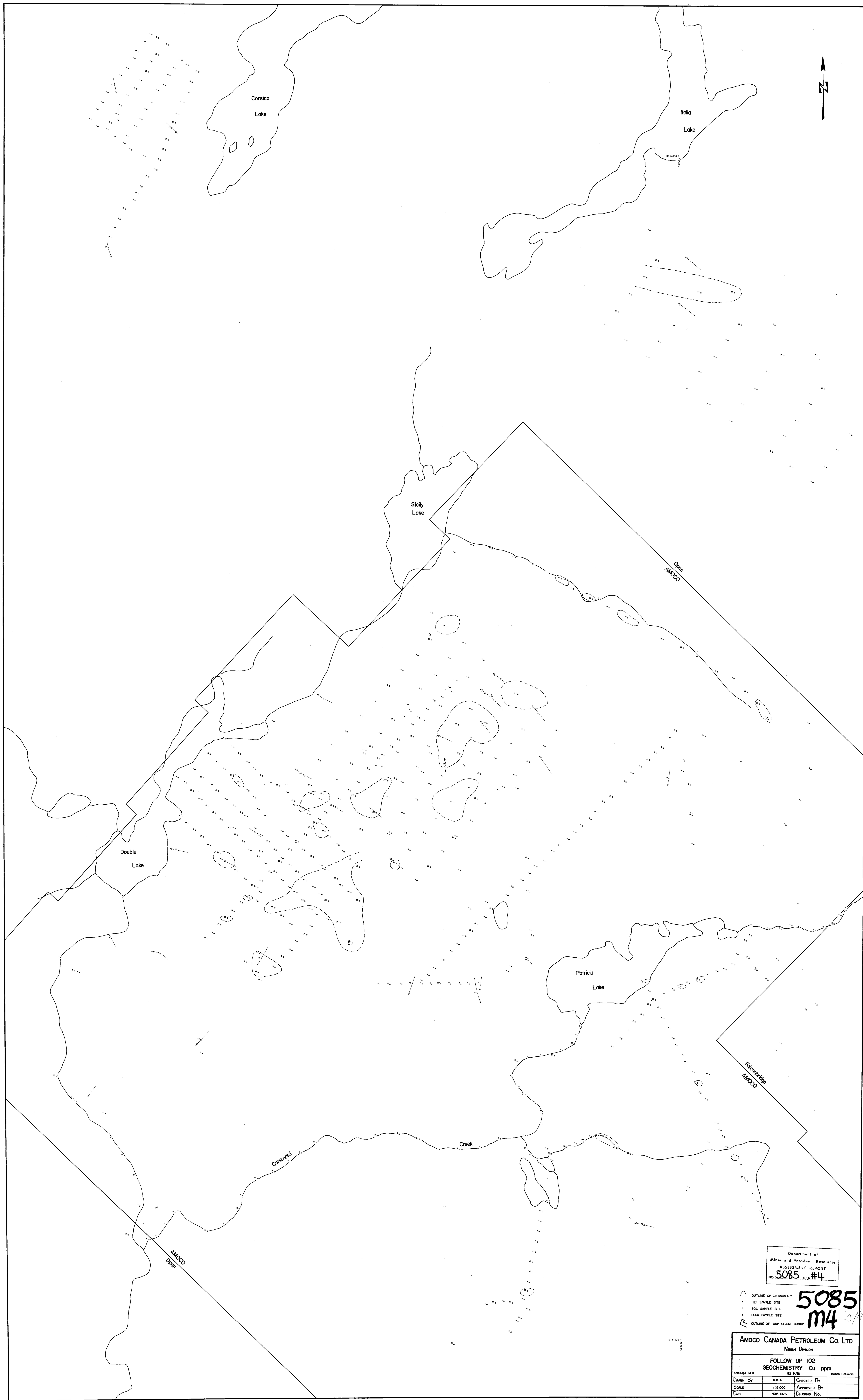
 H.E.O. Neugebauer

May 1, 1974

Declared before me at the *City*
 of *Vancouver*, in the
 Provinc. o. British Columbia, this *6th*
 day of *August* 19*74*, A.D.

J. P. Kelly

 A Commissioner for taking Affidavits within British Columbia
 A Notary Public in and for the Province of British Columbia
 Sub-mining Recorder

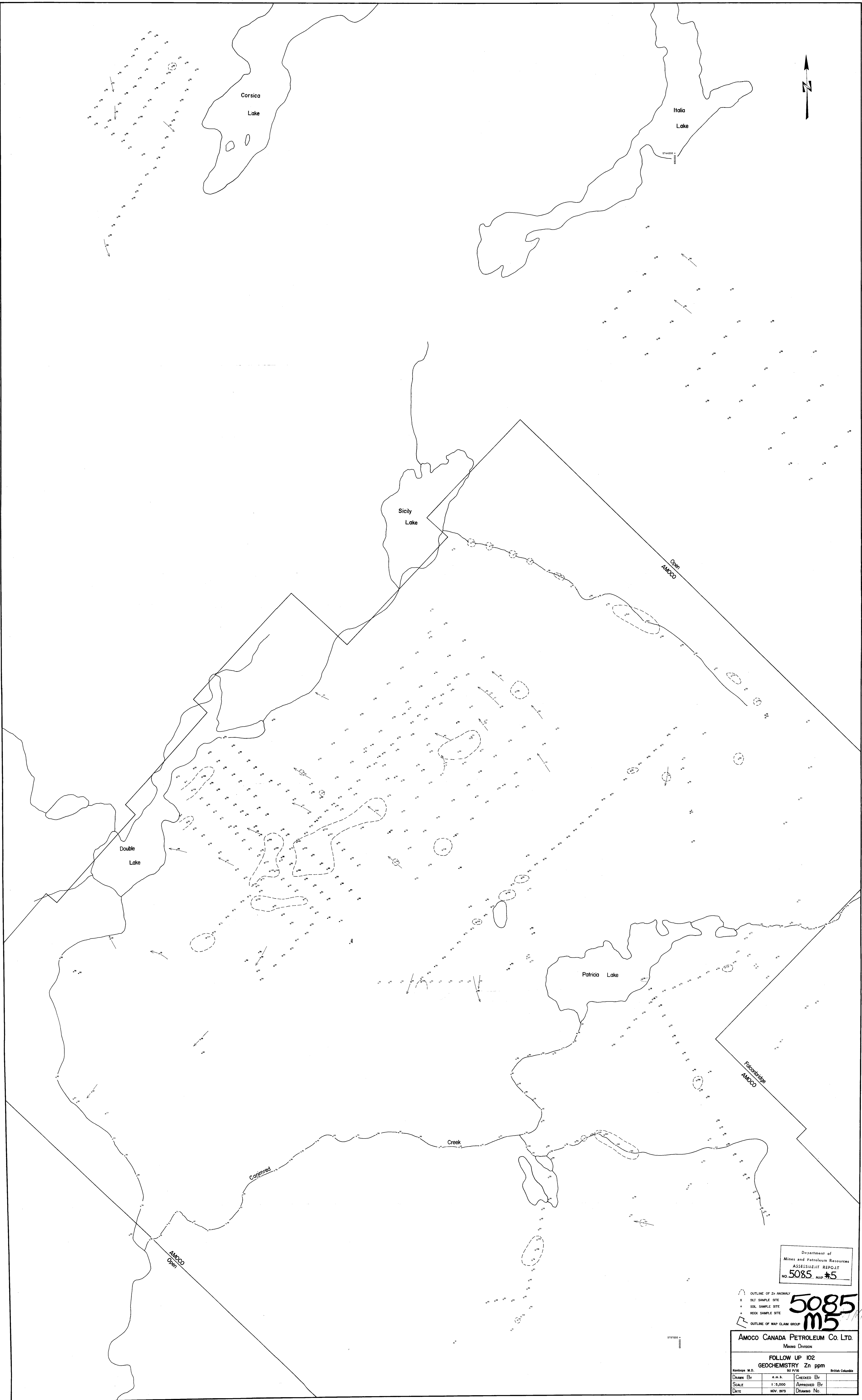


Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5085 ALP #4

OUTLINE OF Cu ANOMALY
X SILT SAMPLE SITE
• SOIL SAMPLE SITE
* ROCK SAMPLE SITE
□ OUTLINE OF MAP CLAIM GROUP

5085
m4

AMOCO CANADA PETROLEUM CO. LTD.			
Mines Division			
FOLLOW UP 102			
GEOCHEMISTRY Cu ppm			
Drawn By	a.m.b.	Checked By	
Scale	1:5,000	Approved By	
Date	NOV. 1973	Drawing No.	



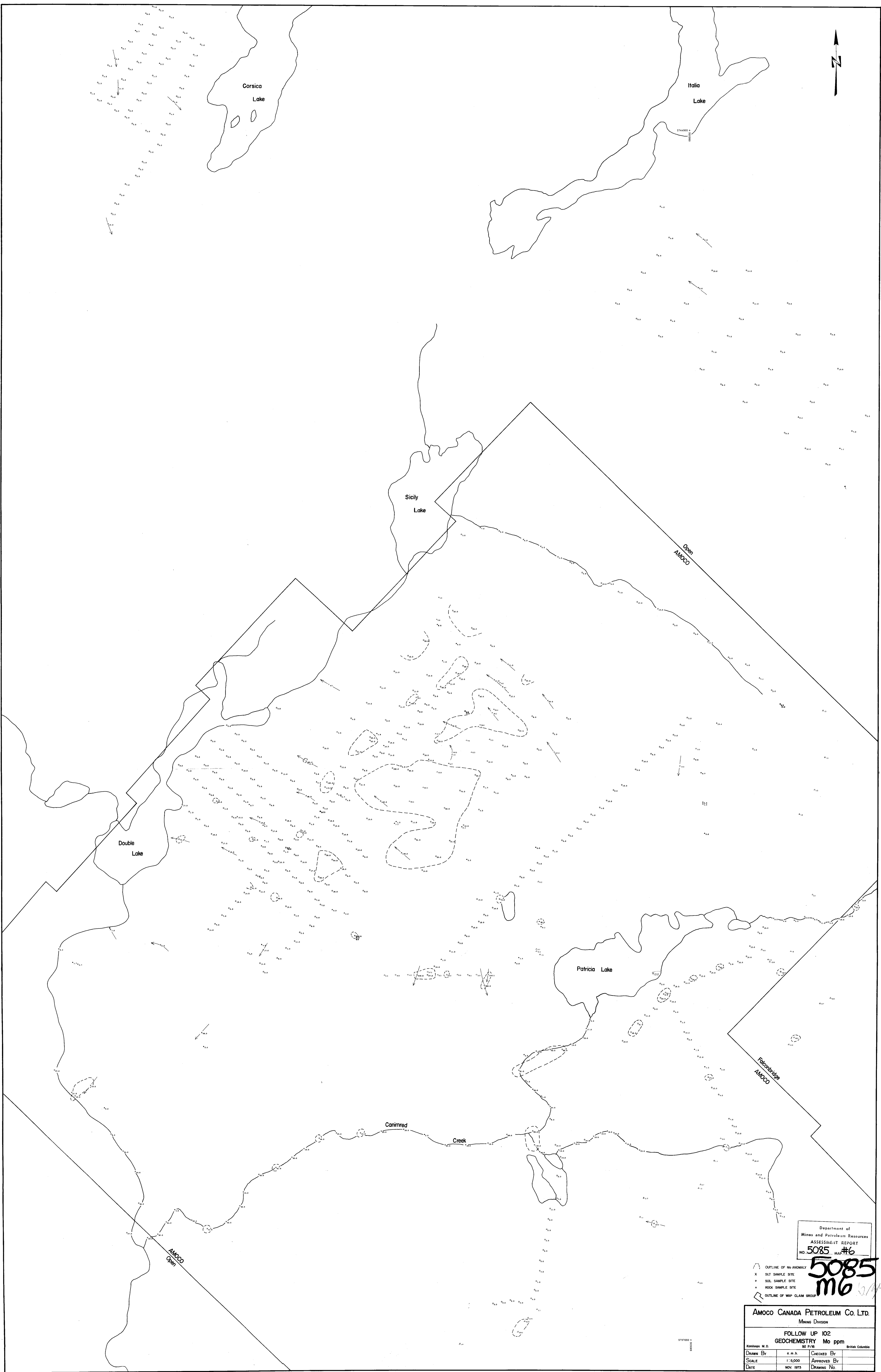
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 5085 MAP #5

OUTLINE OF Zn ANOMALY
X SIF SAMPLE SITE
• SOIL SAMPLE SITE
+ ROCK SAMPLE SITE
OUTLINE OF MAP CLAIM GROUP

5085
M5

AMOCO CANADA PETROLEUM CO. LTD.
Mining Division

FOLLOW UP 102 GEOCHEMISTRY Zn ppm			
Drawn By	Checked By	Approved By	Drawn No.
DATE	NOV. 1973		



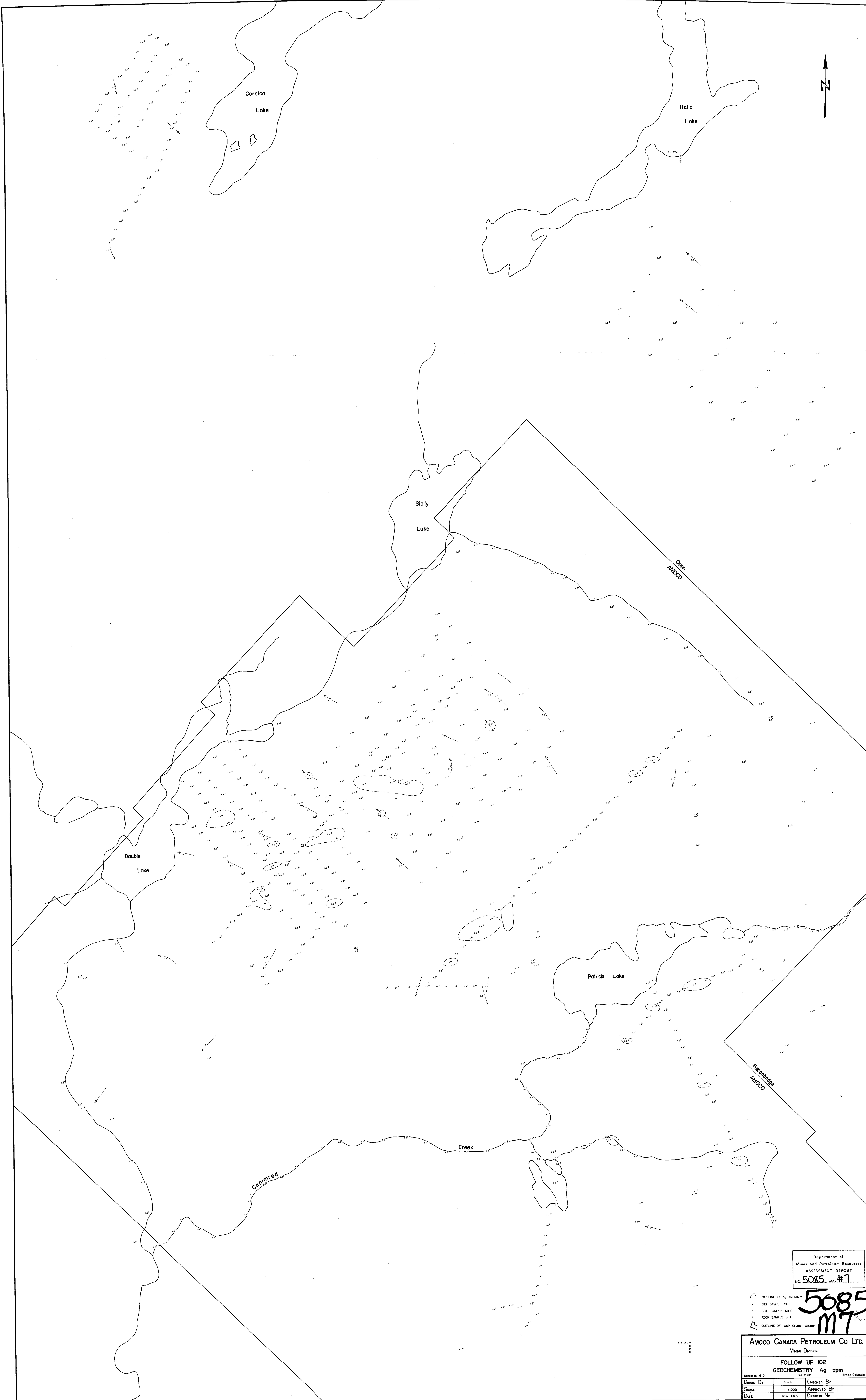
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5085, MAP #6

5085
M6

- OUTLINE OF Mo ANOMALY
- x SILT SAMPLE SITE
- SOL. SAMPLE SITE
- ▲ ROCK SAMPLE SITE
- OUTLINE OF WMP CLAIM GROUP

AMOCO CANADA PETROLEUM CO. LTD.			
Mining Division			
FOLLOW UP 102			
GEOCHEMISTRY Mo ppm			
Drawn By	c.m.b.	Checked By	
Scale	1:5000	Approved By	
Date	NOV. 1973	Drawing No.	

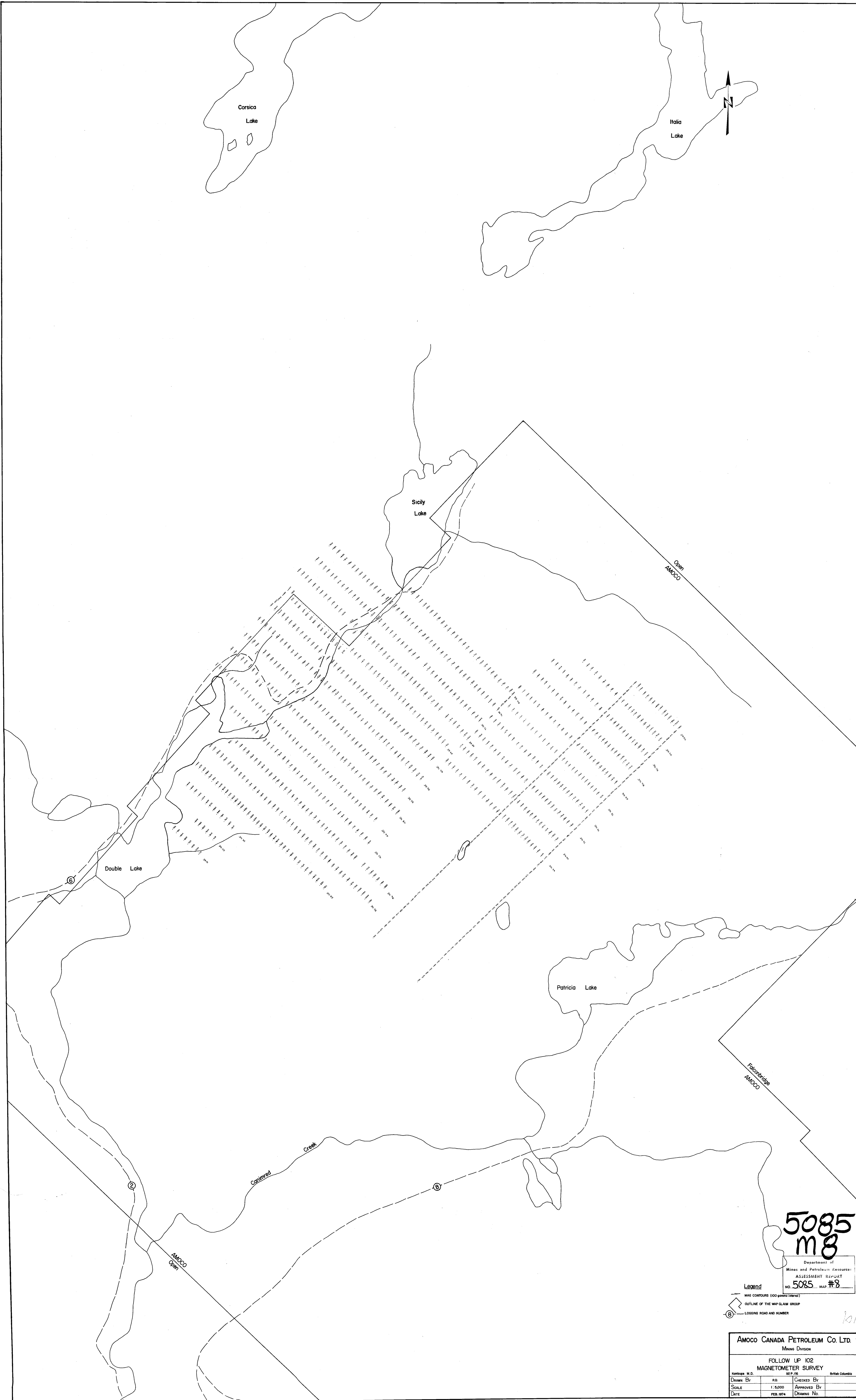
5137000
6100000



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5085 MAP #7

5085
M7

AMOCO CANADA PETROLEUM CO. LTD. Mining Division			
FOLLOW UP 102 GEOCHEMISTRY Ag ppm			
Drawn By	e.m.b.	Checked By	
Scale	1:5,000	Approved By	
Date	NOV. 1973	Drawing No.	



**5085
m 8**

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5085 MAP #8

- Legend**
- MAG CONTOURS (100 metres interval)
 - OUTLINE OF THE MAP CLAIM GROUP
 - ⑥ — LOGGING ROAD AND NUMBER

AMOCO CANADA PETROLEUM Co. LTD.			
Mines Division			
FOLLOW UP 102			
MAGNETOMETER SURVEY			
Drawn By	RD	Checked By	British Columbia
SCALE	1:5,000	Approved By	
DATE	FEB. 1974	Drawn No.	