

KANE GROUP: SOIL GEOCHEMISTRY

SLOCAN MINING DIVISION

KANE 1, 2, and 3 (55 Units)

82K/3W

50°02'N, 117°17'W

OWNER/OPERATOR

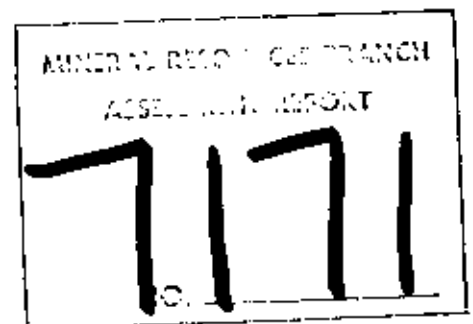
AMOCO CANADA PETROLEUM COMPANY LTD.

MINING DIVISION

#656 - 409 Granville Street

VANCOUVER, B.C.

V6C 1T2



Report written by

Walter Melnyk

January 31, 1979

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(In Folder)

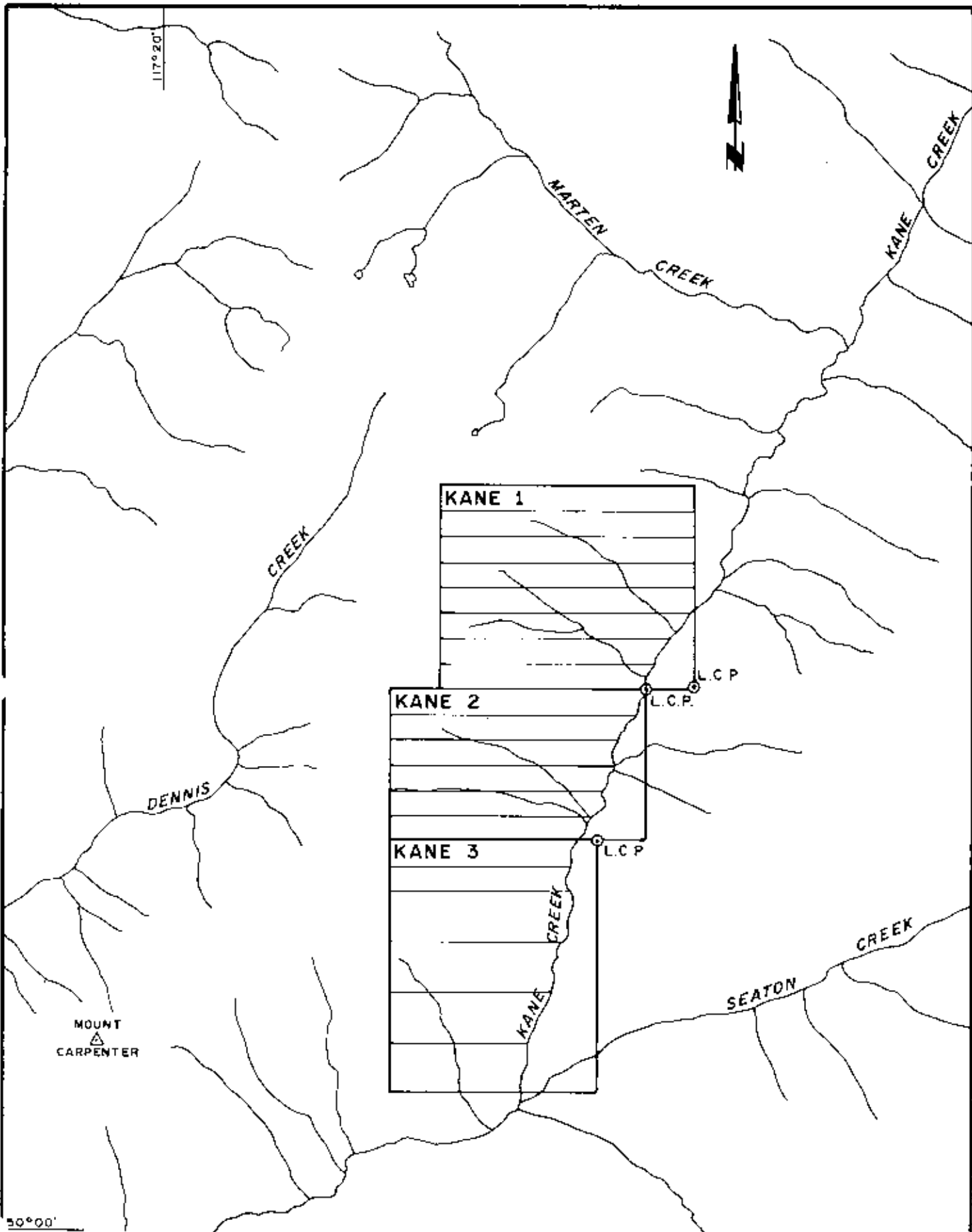
## INTRODUCTION

The KANE 1, 2, and 3 claims consist of 55 contiguous units which are located on the western slope of Kane Creek approximately 8 km northeast of New Denver. The KANE claim group is accessible by a road which parallels Kane Creek for 8 km from Three Forks on the New Denver - Kaslo road. Relief on the claim group is 1200m requiring helicopter support for work on the upper reaches of the property.

Amoco Canada Petroleum Company Ltd., Mining Division, is the owner and operator of the KANE 1, 2, and 3 claims.

The claim group is underlain by argillites and phyllites of the Triassic Slokan Group ( P. B. Read, 1976). The meta-sediments have been cross-cut by felsic sills and dikes presumably related to the Nelson plutonic complex.

Geochemical soil sampling has confirmed the presence of anomalous concentrations of molybdenum particularly in the vicinity of the KANE 1 claim.



— KANE CLAIM GROUP —

0 500 1000 2000 METERS

KANE CLAIM GROUP

	<u>Units</u>	<u>Tag No.</u>	<u>Date Staked</u>	<u>Anniversary Date</u>	<u>Record No.</u>
KANE 1	20	13973	Aug. 14, 1978	Aug. 31, 1979	834
KANE 2	15	13978	Aug. 21, 1978	Aug. 31, 1979	835
KANE 3	20	13979	Aug. 21, 1978	Aug. 31, 1979	836

GEOLOGY

The entire KANE claim group is underlain by metasediments of the Triassic Slocan Group. Rock exposure is restricted to the higher elevations of the property and to several steep, sharp, canyon-like tributaries draining into Kane Creek. The sequence of thinly laminated phyllites and argillites were found to strike in a northerly direction and dip westerly approximately 40°. Several porphyritic leucogranitic dikes and sills transect the metasediments within the boundaries of the claim group. The felsic sills vary in thickness from 50 cm to 3m, and generally contain trace amounts of disseminated pyrite. Economic sulfide minerals were not recognized within the confines of the KANE property.

SOIL GEOCHEMISTRY

During the period August 26 to September 7, 20 man-days were spent collecting soil samples along pace and compass lines from the western claim boundaries of KANE 1, 2, and 3, down to Kane Creek. A helicopter, based at Nelson, was used for the deployment of personnel due to the extreme relief of the property. Traverses were conducted at 250m intervals and soil samples were collected at 75m stations.

Soil samples were collected from depths of 15cm to 45cm with a mattock and stored in Kraft paper bags. The B horizon was sampled in most instances, however, several boggy areas necessitated the sampling of organic material.

The minus 80 mesh fraction of all samples was analyzed for Mo, Cu, and W by Min-En Laboratories of North Vancouver.

Geochem results for Cu and W proved to be inconclusive. Isolated high values are randomly distributed throughout the sampled area.

Molybdenum geochemistry defines an anomalous geochemical zone near the western boundary of the KANE 1 claim. Molybdenum values of 20ppm and greater define two subparallel zones extending across KANE 1 in a northerly direction. The combined

zones (referred to as the main anomaly) vary in width from 500 to 750m and extend for 2000m. Two smaller anomalous areas extending through KANE 2 and KANE 3 appear to occur along strike with the main anomaly. A third anomaly occurs 800m east of the main anomaly. This anomaly is 500m long and approximately 50m wide.

Felsic intrusive debris was observed in areas coincident with anomalous molybdenum geochemistry, however, other areas containing similar intrusive material failed to respond geochemically. The source of the anomalous molybdenum geochemistry is unknown.



EVALUATION OF WORK

SOIL SAMPLING - A total of 685 soil samples were collected.

347 samples were collected on KANE 1

338 samples were collected on KANE 2 & 3

CLAIMS - KANE 1, 2, and 3

WORK CONDUCTED - Grid Soil Sampling

DATES CONDUCTED - August 26, 27, 28, 30, and September 7.

SALARIES - Walter Mo'nyk	4 man days @ \$55.87 =	\$223.48
Gordon MacMahon	5 man days @ \$41.88 =	\$209.40
Murray Rodgers	5 man days @ \$40.97 =	\$204.85
Bruce Campbell	4 man days @ \$37.33 =	\$149.32
Garry Tether	2 man days @ \$30.95 =	\$61.90
Total		<u>\$848.95</u>

MEALS - 20 man-days @ \$10.00/man-day	\$200.00
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TRANSPORTATION - Helicopter

4.7 hrs. @ \$361.89/hr.	\$1700.88
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Truck

5 days @ \$27.72/day	<u>\$138.60</u>
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SUB-TOTAL	\$2888.45
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EVALUATION OF WORK (Cont'd)

ASSAY CHARGES - Soil samples within KANE 1, 2 and 3 claims

685 samples analyzed for Mo, Cu, W @ \$6.05 = \$4144.25

## CREDIT TO KANE 1, 2 and 3 CLAIMS

Work done	\$2888.43
Assay charges	\$4144.25
Cost of Report Preparation	\$ 500.00
	.....
	.
TOTAL	\$7552.68

APPORTIONMENT OF EXPENSES

KANE 1, KANE 2 and 3

TOTAL NO. SAMPLES KANE 1, 2 and 3 = 685

Total No. Samples KANE 1 = 547

Total No. Samples KANE 2 & 3 = 558

APPORTIONMENT OF EXPENSES

KANE 1:  $547/685 \times \$7352.68 = \$5714.51$

KANE 2 and 3:  $558/685 \times \$7352.68 = \$5618.17$

APPENDIX 1     FEE SCHEDULE

Geochemical analyses were done by:

Min-En Laboratories Ltd.

705 West 15th Street

North Vancouver, B.C.

V7M 1T2

Geochemical Analyses

Mo, Cu, W	\$5.65
Sample Preparation	<u>\$ .40</u>
	\$6.05

*MIN-EN Laboratories Ltd.*

*Specialists in Mineral Environments*

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

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES 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>0</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.

## APPENDIX 3

NAMES AND ADDRESSES OF PERSONS CONDUCTING WORK

Walter Melnyk	110-269 West 4th Street North Vancouver, B.C. V7M 1H8
Gordon MacMahon	4323 - 15th Street S.W. Calgary, Alberta
Murray Rodgers	810-22nd Street Brandon, Manitoba
Bruce Campbell	Box 1543 Kindersley, Saskatchewan
Garry Tether	#2 - 209 Bottomly Avenue North Saskatoon, Saskatchewan

APPENDIX 4 COST PER HOUR FOR HELICOPTER, 1978

Bell 206B Casual basis Okanagan Helicopters, Nelson, B.C.

Casual Cost:	\$335.00
Fuel and Oil Cost:	<u>\$ 26.89</u>
TOTAL	\$361.89

Cost Per Day for Truck

1977 Suburban leased from Redhawk 4-Wheel-Drive-Centre,  
Burnaby, B.C.

Contract Cost:	\$ 23.32/day
Fuel Cost:	\$ 4.40/day (40 miles/day, 10 miles/gal - \$1.10/gal.)
TOTAL	27.72

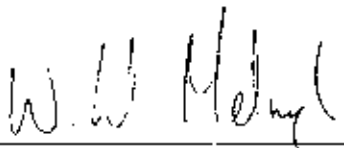
APPENDIX 5

QUALIFICATIONS OF W. D. MELNYK

B.Sc., Geological Engineering, University of Saskatchewan,  
1972.

Member of The Association of Professional Engineers of  
The Province of Ontario

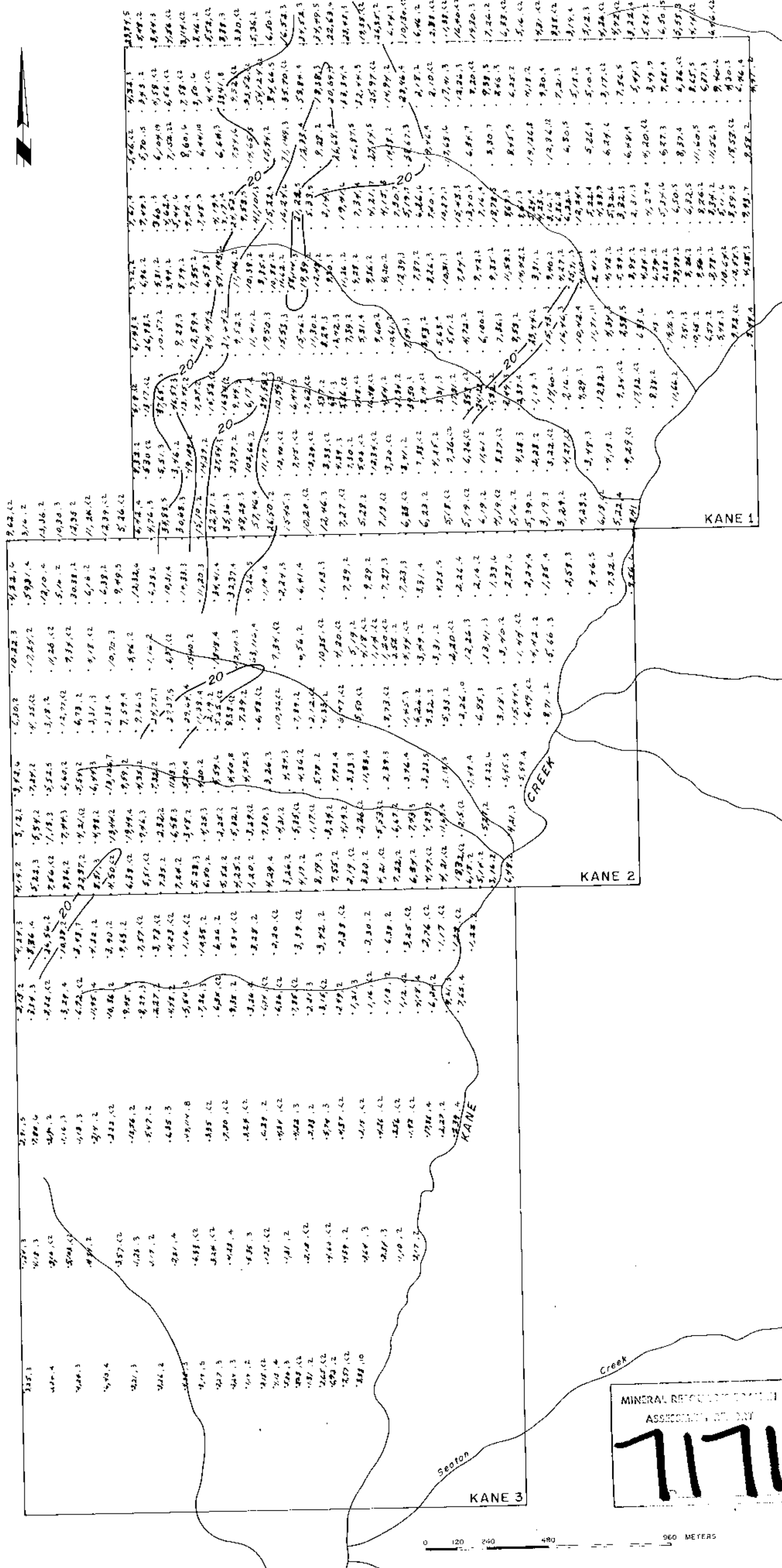
Member of The Association of Professional Engineers of  
The Province of British Columbia.

  
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W. D. Melnyk, P. Eng.

Vancouver, B.C.

January 31, 1979





**AMOCO CANADA PETROLEUM CO. LTD.**  
MINING DIVISION

SLOCAN PROJECT  
KANE CLAIM GROUP  
GEOCHEMISTRY RESULTS  
Mo, Cu, W (p.p.m.)

Drawn By	T. M.	Scale	1cm. = 120m.
Date	DEC. 1978	Project No.	78C-003

FIG. 7