

LYLE GROUP : SOIL GEOCHEMISTRY

SLOCAN MINING DIVISION

LYLE GROUP : 24 UNITS

82K 3/E

50° 04' N 117° 06.5' W

OWNER/OPERATOR:

Amoco Canada Petroleum Company Limited
656-409 Granville Street
Vancouver, B.C.
V6C 1T2

Report written by

D. Visagie

November 30, 1980

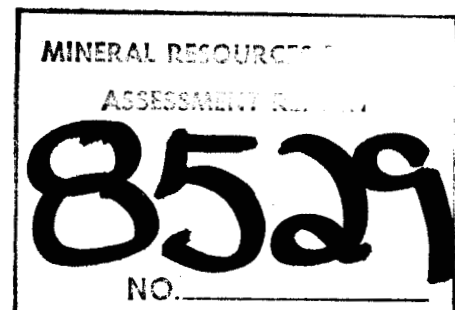


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INTRODUCTION

The Lyle Group consisting of 24 units, the Lyle claim and 6 crown granted mineral claims, straddle the divide between Lyle and Whitewater Creek Basins approximately 4 km north of the old mining town of Retallack, B.C., approximately 22 kilometers northeast of New Denver, B.C.

Access to both basins is provided by a gravel road which departs from Highway 13A at Retallack and extends 0.8 km northward before splitting. The east fork, a logging road, extends 2.7 km in a northeast direction to the centre of the Lyle claim while the west fork extends 1.6 km northward to within 0.5 km of the base of the crown grants located within the Whitewater Creek basin. Access to the southern boundary of the crown grants is by footpath. Relief on the property is 1300 metres and is extremely rugged, necessitating helicopter support.

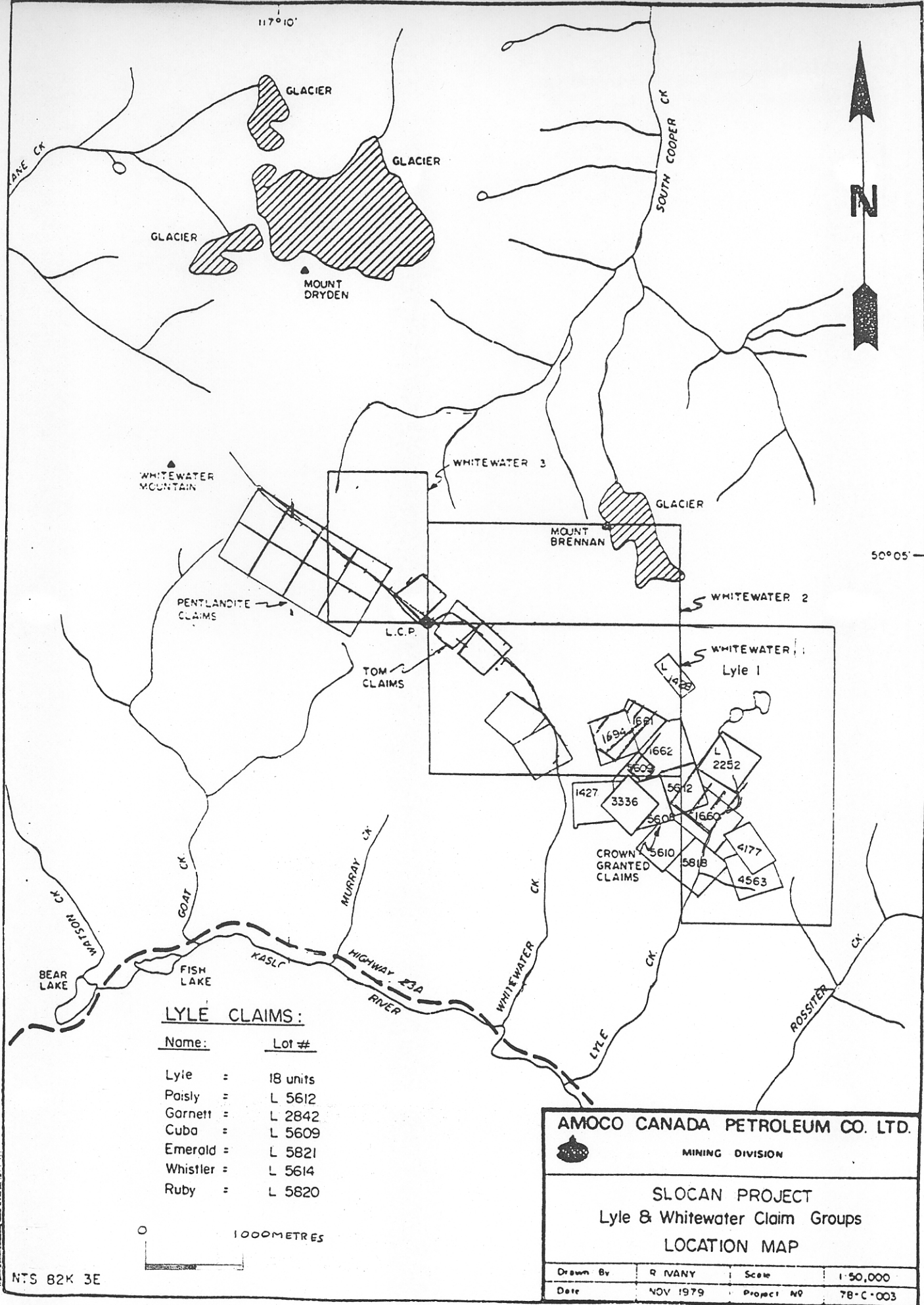
Amoco Canada Petroleum Company Limited, under option agreement with J.D.O. Tyers of Kaslo, B.C., is the owner-operator of the property.

The Lyle Group is underlain by Permian-Triassic aged Kaslo Group metavolcanics.

Geochemical soil sampling has indicated the presence of anomalous concentrations of gold on the Lyle Group.

Tyers Claim Group

<u>Name</u>	<u>Units</u>	<u>Lot No. Tag No.</u>	<u>Date Staked</u>	<u>Anniversary Date</u>	<u>Record No.</u>
Lyle 1	18	51704	Mar.15, 1980	Mar.23, 1981	1847
Paisley	43.03 acres	5612	Jan. 8, 1980	Jan. 8, 1981	1659
Whistler	48.51 "	5614	Jan. 8, 1980	Jan. 8, 1981	1660
Cuba	16.30 "	5609	Jan. 8, 1980	Jan. 8, 1981	1661
Ruby Fr	27.70 "	5820	Jan. 8, 1980	Jan. 8, 1981	1661
Emerald Fr	46.10 "	5821	Jan. 8, 1980	Jan. 8, 1981	1662
Garnett	51.65 "	2842	Jan.17, 1980	Jan.17, 1981	1674



LYLE CLAIMS:

Name:	Lot #
Lyle	= 18 units
Paisly	= L 5612
Garnett	= L 2842
Cuba	= L 5609
Emerald	= L 5821
Whistler	= L 5614
Ruby	= L 5820

AMOCO CANADA PETROLEUM CO. LTD.
 MINING DIVISION

SLOCAN PROJECT
 Lyle & Whitewater Claim Groups
 LOCATION MAP

Drawn By	R IVANY	Scale	1:50,000
Date	NOV 1979	Project No	78-C-003

NTS B2K 3E

FIG. 1

GENERAL GEOLOGY

The Whitewater-Lyle Creek area is predominantly underlain by Kaslo Group metavolcanics of Permian and/or Triassic age. These metavolcanics consist mainly of fine grained, dark green flows and/or tuffs of andesitic composition. Interbedded with these volcanics are lenses of clastic sediments which appear to be similar in composition to the volcanics. These sediments strike east-west and dip steeply south. The principal alteration, chlorite, is found throughout the andesites and metasediments and is strongest adjacent to contacts.

Near the stratigraphic middle of the metavolcanic sequence is a northwest-southeast trending belt of strongly serpentized ultramafics. These ultramafic flows, which are occasionally pillowed, vary in width from 300 metres to 600 metres and have a strike length of approximately 8-1/2 miles.

Within the sediments and volcanics on the northeast side of the ultramafics are a number of narrow easterly trending and steeply dipping dykes. These dykes range compositionally from alaskite to quartz monzonite. Minor diorite is found in the area.

Occurring within the chloritized metavolcanics adjacent to the contact with the ultramafics are a number of quartz veins. These veins trend northwesterly, are steeply dipping, and are generally barren although occasionally they contain minor amounts of pyrite.

SOIL GEOCHEMISTRY

During the period September 5, 6 and 11, 5 man-days were spent collecting soil samples on a grid basis covering portions of the Lyle claim group. A base line bearing 130° was established intermittently across the property using pace and compass means. Cut-off lines occur every 100 metres from line 5+00E to 9+00E and 200 metres from line 9+00E to line 23+00E. Sample stations were established every 40 metres along the lines.

Soil samples were collected from the B horizon with a mattock and stored in Kraft paper bags. The minus 80 fraction of all samples was analyzed for Au and Cu by Min-En Laboratories of North Vancouver.

The results indicate the presence of several anomalous concentrations of gold with the largest occurring between L17+00E and 23+00E and 0+80S and 1+20N. All values within this zone are greater than 75 ppb with the highest values 3950 ppb and 3900 ppb occurring respectively on L19+00E, 0+80N and BL at 20+20E. This soil anomaly is underlain by chloritized meta-andesites which lie in close proximity to serpentized ultramafics. Quartz veining is observed to be very sparsely distributed throughout the property. Observable veins generally have a strike of 90-130, a vertical dip and are less than 10 centimetres wide. In addition to the major anomaly occur several smaller anomalies which may be related to quartz veins in the chloritized mafic volcanics. The source of the major anomaly remains unexplained.

EVALUATION OF WORK

Soil Sampling: A total of 135 soil samples were taken.

Claims: Lyle Group

Work Conducted: Soil Sampling

Dates Conducted: 5, 6 and 7 September

Salaries:

Dave Visagie	- 3 mandays at \$90.00	= \$	270.00
Bernard MacIsaac	- 2 mandays at \$55.55	=	<u>111.10</u>
Total			381.10

Meals:	7 mandays at \$20.00	=	140.00
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Transportation:

Helicopter 2.0 hrs. at \$328.40/hr.	=	656.40
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Geochem Charges: 135 soil samples analyzed for Cu, Au at \$6.60/sample	=	858.00
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Report Preparation:	=	<u>400.00</u>
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\$2,435.50

CREDIT TO LYLE GROUP - \$2,435.50

FEE SCHEDULE

Geochem Analyses were done by

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

Geochem Analysis:

Cu, Au	\$6.00
Sample preparation	<u>.60</u>
Total per sample	\$6.60

*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°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_3 and HClO_4 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_2H_2 -Air Flame combination but the Molybdenum determination is carried out by C_2H_2 - N_2O 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.
CANADAANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORKPROCEDURE FOR GOLD GEOCHEMICAL ANALYSIS.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°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 and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pre-treated with HNO_3 and HClO_4 mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

At this stage of the procedure copper, silver and zinc can be analysed from suitable aliquote by Atomic Absorption Spectrophotometric procedure.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 5 ppb.

NAMES AND ADDRESSES OF PERSONS CONDUCTING WORK

D. Visagie - 111 - 170 East 4th Street
North Vancouver, B.C.

B. MacIsaac - 112 Sherwood Avenue
Toronto, Ontario

APPENDIX IV

COST PER HOUR FOR HELICOPTER, 1978

Hughes 500C, chartered from
United Helicopters, Vancouver, B.C.

Cost \$300.00/hr.

Fuel/oil 28.20/hr.

Total \$328.20/hr. x 2 hrs. = \$656.40

QUALIFICATIONS OF D.A. VISAGIE

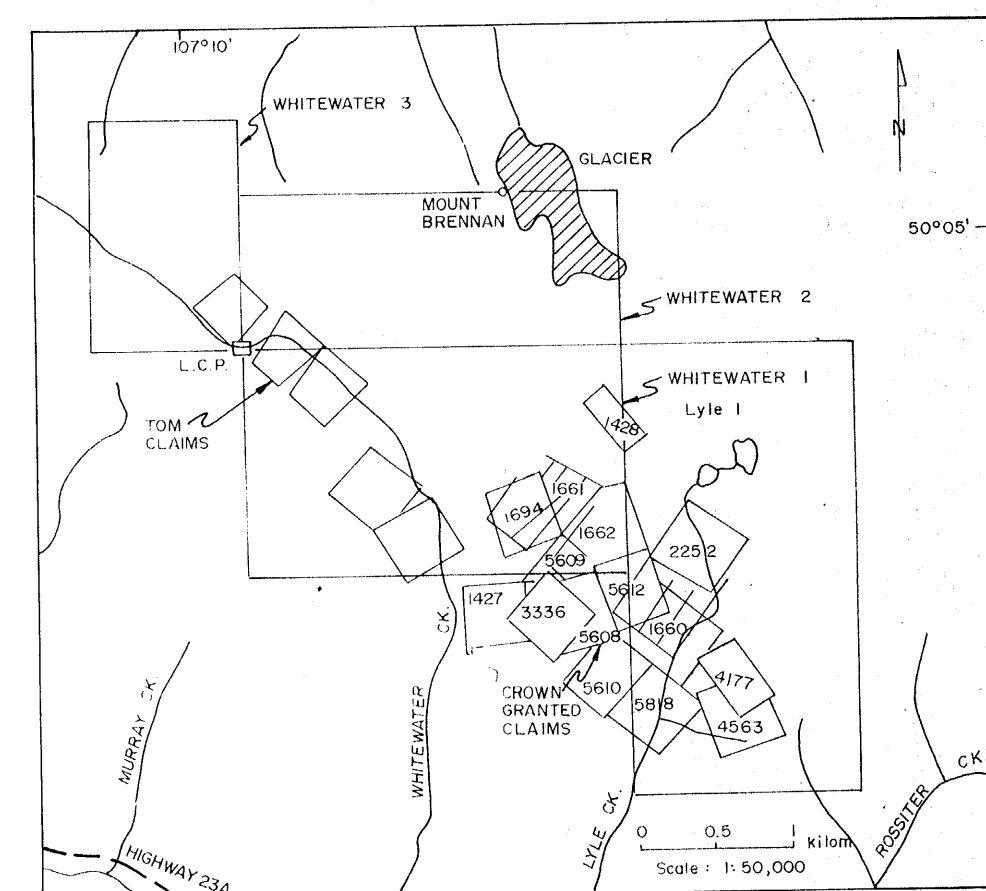
B.Sc., University of British Columbia, 1976, Geology Major.

Continuously employed by Amoco Canada Petroleum Company Limited since 1976.

A handwritten signature in black ink, appearing to read "D. A. Visagie". The signature is written in a cursive style with a long horizontal stroke at the end.

D. A. Visagie

Nov. 17, 1980



LEGEND

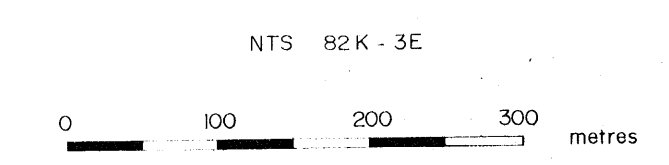
90,795 - SOIL SAMPLE RESULTS Cu (ppm), Au (ppb).

CONTOUR INTERVAL:

- 75 ppb Au
- 200 ppb Au
- 500 ppb Au
- 1000 ppb Au

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8529
NO.

NOTE:
ALL LOCATION DETERMINED BY PACE AND COMPASS METHODS.



AMOCO CANADA PETROLEUM CO. LTD.			
MINING DIVISION			
WHITWATER - LYLE			
SOIL GEOCHEMISTRY RESULTS			
Cu - Au			
Drawn By	E.B. WYTRWAL	Scale	1cm = 50m
Date	NOV. 1980	Project No.	78 - C - 003

