Geochemical Soil Survey
KOKANEE MOLY MINES LTD. (N.P.L.)
Ben Derby 1 - 8 Claims
and

UNF 1-4, 26-38, 43-48, 68, 69 Claims
Located between Gray and McFarlane Creek
on the East Side of Kootenay Lake
49°, 116° N.W.

by Rae G. Jury, P. Eng.

Field Work from Aug. 23rd to Sept. 14th, 1967

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KOKANEE MOLY MINES LTD. (N.P.L.)
Geochemical Soil Sampling
Kootenay Lake Property, B. C.

ALRAE EXPLORATION LTD.

October 4, 1967

TO PROTECT OUR CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS AND EXTRACTS FROM OUR REPORTS MUST RECEIVE OUR WRITTEN APPROVAL.

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REPORT ON INDUCED POLARIZATION SURVEY IN THE CRANBROOK AREA, B.C. FOR PLACID OIL COMPANY

I. INTRODUCTION

From June 20 till August 23, 1967 and from September 15 till November 13, 1967, Canadian Aero Mineral Surveys Limited conducted an induced polarization survey over the Jim, Jim South, Carol and Cat claim groups in the Cranbrook area B.C., on behalf of Placid Oil Company. Aime Brazeau, P.Eng., was in charge of field operations. This report pertains to both the first and the second phase of the survey programme, but will occasionally refer back to the Preliminary Report, covering phase I, dated September 28, 1967.

Survey data is presented as combined apparent resistivity and apparent chargeability profiles on a scale of 1" = 200 feet. Both apparent resistivity and apparent chargeability readings obtained with the 400 feet spacing are also presented on contour maps at a scale of 1" = 1/8 mile. The indicated North Arrow on these maps has been used as reference for drill hole directions.

II. EQUIPMENT AND PERSONNEL

The equipment used was a high sensitivity D.C. pulsetype induced polarization unit, MK-VA, built by Sharpe Instruments Limited. The power unit employed was capable of generating 2.5 kw.

INTRODUCTION

During the latter part of August and September 1967, Mr. Iain Gregg, of Alrae Exploration Ltd., under the general supervision of the writer, conducted a reconnaissance geochemical soil sampling survey over the Kokanee Moly Mines Ltd. claims, Kootenay Lake, B.C.

Four men were employed on this survey from August 23rd to September 14th, 1967. During this time, approximately 650 samples were collected, base line control established, and approximately 25 miles of survey lines were run by chain and compass methods.

Samples were analysed in Vancouver at the Technical Services Ltd. Laboratories, using the hot hydrochloric acid extraction method. Determinations were made for Mo content.

LOCATION AND ACCESS

The claims are located on the east side of Kootenay Lake, approximately ten miles south of Kootenay Bay and between Gray and McFarlane Creeks. The Nelson to Creston highway crosses the western extremity of the claim group, and logging roads provide ready access to the northeast and southeast sectors of the claims.

CLAIMS

There are 33 claims in the group covered by the reconnaissance soil survey. These are as follows:

	Derby Derby				7245 10000		
UNF		1	-	4	8981	-	8984
UNF		26	3444	38	9006	del Pa	9018
UNF		43		48	9023	-	9028
UNF		68	&	69	9048	&	9049

All 33 claims are within the Nelson Mining Division.

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GEOLOGY

The claim group is underlain by a leucocratic granodiorite in contact with metamorphosed quartzite and schist. The quartzite and schist have been intruded by quartz veins occurring along fractures, planes of schistosity, and through the granodiorite.

Molybdenite has been noted to occur associated with pyritesericite zones in the schists, and in quartz veins through both granodiorite and schists.

GEOCHEMICAL SURVEY

As may be seen on the accompanying map sheet, base lines were established at the northwest and southeastern extremities of the claim group and provided ground control for the soil survey. Samples were collected each 200 feet along chained and flagged compass lines 400 feet apart.

Samples were taken using shovels to dig holes from six to 12 inches in depth through the humus layer to the underlying sand and clay. Each sample was placed in a numbered paper bag provided for the purpose, and sent to Vancouver for laboratory analysis.

The Mo content of the soils was determined by Technical Services Laboratory in Vancouver by using a hot hydrochloric acid digestion of the seived sample material. The Mo content was determined by the zinc-dithiol method. As may be seen on the accompanying map sheet, Mo content of samples ranged from less than .5 ppm to 25 ppm.

The granodiorite-schist contact is known to pass through the area of bulldozer trenching indicated on the map sheet as lying on Ben Derby #2 and #3 claims. The generally high Mo contents in samples is in this area.

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CONCLUSIONS AND RECOMMENDATIONS

Reconnaissance soil sampling of the Ben Derby and UNF claims has indicated a general zone of anomalous Mo content in the soils, in the vicinity of the bulldozer trenches on Ben Derby #2 and #3 claims and coincident with the granodiorite schist contact. Occasional erratic high values are noted to occur in areas underlain by the schist formation.

Detailed examination of the presently existing bulldozer trenches may explain the source of this high Mo content in the region trenched.

Respectfully submitted:

Rae G. Jury, P. Eng.

SOIL SAMPLING COSTS Ben Derby and UNF Claims

Personnel	Occupation		Da	ates	Total		
Mr. Iain Gregg	Field Supervisor	Aug.	23	_	Sept.	14/67	1,008.57
Mr. Daniel Roberts	Sampler	Aug.	24	-	Sept.	13/67	797.39
Mr. M. McNeice	Sampler	Aug.	24	π.	Sept.	12/67	659.80
Mr. T. Gannon	Assistant	Aug.	24	-	Sept.	12/67	721.80
Mr. R. Jury	Supervision						100.00
M. Lee	Draftsman						45.00
Transportation							354.51
Soil Sampling Suppl	ies						194.22
Sample Analysis							780.00
	TOTAL C	OST OF	F SC	II		LING RVEY \$	4,661.29

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

of Vencourer, in the Province of British Columbia, this 16TH day of October, 1967, A.D.

Kar & Jury

A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia.

