49°, 120° N.E.

# Report on a Geochemical Survey on the Brenda Lake Property of KOMO EXPLORATIONS LTD.

Claims: Ian, Wilson and McK Groups

Location:

Brenda Lake Area
Latitude 49° Longitude 120°
Nicola Mining Division, B. C.

Report submitted by: R. Philp, P. Eng.

Survey carried out during the period
October 3 - 21, 1966

92 H / 16 E

864

# Report on a Geochemical Survey on the Brenda Lake Property of KOMO EXPLORATIONS LTD.

ALRAE EXPLORATION LTD.

November 16, 1966

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## INTRODUCTION

The Brenda Lake property of Komo Explorations Ltd. lies approximately 16 miles northwest of Peachland, British Columbia. A program of line cutting, surveying, geological mapping and geochemical soil testing has been carried out on the property with an induced polarization survey currently being conducted.

This report summarizes results of the geochemical survey carried out during the month of October, 1966.

## LOCATION AND ACCESS

The property lies between Pennask and Brenda Lakes, 16 miles northwest of Peachland, British Columbia. Coordinates of the property are 120° 03' west longitude, 49° 55' north latitude.

Access from Peachland is by approximately 25 miles of gravel road, with a number of side roads providing good access throughout the property.

## PHYSIOGRAPHY

The claims lie in an area of low to moderate relief at approximately 5,000 - 5,500 feet elevation. Rock outcrop is confined mainly to the central portion of the claim group, from lines 42N - 60N, with glacial overburden covering most of the rest of the claims. Topographically, the area consists of a number of low, drift covered ridges separating lower swampy areas. Much of the south-central portion of the claims is low, somewhat swampy ground. Jackpine and minor fir occupy all the ridges and higher ground, with spruce predominating in the lower swampy areas. Underbrush is sparse throughout.

## CONTROL GRID

The control grid was established by the firm of Underhill and Underhill, land surveyors, using transit control. A north-south base line was established near the eastern boundary of the Komo Explorations property, with cross-lines at 600 foot spacings, picketed at 100 foot intervals. Approximately 12 line-miles of cross lines were cut.

## SOIL SAMPLING

Sampling was carried out at 200 foot intervals along the grid lines. Samples were taken immediately beneath the surface humus layer at from 8 - 12 inches depth. Soil consists mainly of fine sand and sandy clay in the higher areas and moist clay and sandy loam in the lower areas.

## GEOCHEMICAL TESTING

Geochemical testing was carried out in Vancouver; samples being tested for copper and molybdenum content. Testing for copper was carried out by Alrae Exploration Ltd. using the Rubeanic Acid Method. Testing for molybdenum was carried out by T.S.L. Laboratories Ltd., using hot hydrochloric acid extraction. Molybdenum values are reported in parts per million (ppm). With the Rubeanic Acid Test for copper, the copper content of the soil is proportional to the intensity of a black copper rubeanate spot appearing on a strip of litmus paper. Arbitrary values from 1 - 10 are applied to these rubeanate spots depending on their intensity, for comparison and determination of areas with above average copper content.

## RESULTS OF GEOCHEMICAL SURVEY

### Copper

Geochemical testing of soil samples indicated a number of areas with copper content above background. The largest and

strongest area occurs on lines 48N, 54N, and 60N in an area of abundant outcrop of Nicola Group volcanic and sedimentary rocks. Traces of copper have been noted in these rocks and it is felt the higher copper content of the soils is related principally to a thinning of overburden rather than to particularly high copper values in the bedrock.

Above average copper content in the soils is indicated along line 72N, between 20W and 36W. No outcrop was mapped in this area although mapping of float indicates it is near the Nicola Group intrusive contact.

A third north-south trending area of moderate copper values occurs on lines 24N, 18N, and 12N, and possibly extends through line 6N to line 0N on the Slim group. Again, no outcrop is present in this area, although mapping of float and nearby outcrop indicates intrusive rocks underlie most of the area.

To the west of this area moderate to high values occur between 24W and 34W on line 12N, with scattered above average values to the north and south on lines 18N and 6N. The higher values on line 12N coincide with an area of outcrop and thin overburden.

Molybdenum

Molybdenum values in the soils are very low throughout the area sampled with most values falling below 0.5 ppm. Slightly higher values occur on line 0N (1.5-2 ppm) but are not high enough to be of significance.

## CONCLUSIONS AND RECOMMENDATIONS

Geochemical soil testing for molybdenum failed to locate any anomalous zones in the area sampled.

The method of testing used does not permit determination of absolute values for copper content, but through comparison, a number of areas of above average copper content are indicated. Scattered individual highs can probably be attributed to glacial boulders, testing errors, etc. Of the four main areas indicated, two are probably due to a thinning of overburden, rather than to abnormally high copper values in the bedrock.

The most favourable area occurs from line 24N to 0N as indicated on the accompanying map, where more detailed sampling should be carried out. Additional sampling should also be carried out in the area of line 72N, from 20W - 36W. In carrying out additional sampling, samples should be taken at 100 foot intervals on intermediate lines as well as on the present grid lines.

Respectfully submitted,

R. H. D. Philp, P. Eng.

Statement of Expenditures

KOMO EXPLORATIONS PROJECT

Line cutting

| | |
|---|---|
| Total Underhill & Underhill billings for September 20-30, 1966 and October 1-28, 1966 | $ 8,033.55 |
| Less charges not applicable (Professional services, drafting and printing, telephone, portion of Sept. field expenses) | 1,130.85 |
| TOTAL | $ 6,902.70 |

It is estimated that 2/3 of the above charge is applicable to line cutting and the remainder to claims location.

| | |
|---|---|
| Total charges for line cutting | $ 4,601.80 |

Distribution of these charges together with a list of personnel appears on the accompanying "Account Consolidation Sheets", of Underhill & Underhill.

Geochemical Survey

| | |
|---|---|
| Personnel - Oct. 3 - 21, 1966 | |
| G. House (geologist) 18 days @ $1,000/mo. | $ 570.00 |
| R. Sutherland (labourer) 18 days @ 500/mo. | 290.00 |
| Room & Board ($5/man/day for 36 man days | 180.00 |
| Transportation (truck rental) | 334.00 |
| Chemicals, etc. for Rubeanic test | 71.55 |
| Molybdenum analysis | 453.85 |
| TOTAL | $ 1,899.40 |
| Total cost line cutting and geochemical survey | $ 6,501.20 |

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."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 12 day of December 1966, A.D.

M L A Mowat

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

E: MUTUAL 3-9161

597 BURRARD STREET
VANCOUVER 1, B.C.

INVOICE No. 332 W

October 28th, 1966

Our File 3778-J

Komo Explorations Ltd.,
c/o M. & P. Industries Ltd.,
303 East 6th Avenue,
Vancouver 10, B. C.

Attention Mr. Mike Mitchell

# UNDERHILL & UNDERHILL

CIVIL ENGINEERS. DOMINION AND PROVINCIAL LAND SURVEYORS

RE: Brenda Lake Properties
PERIOD: October 1st-28th, 1966.

TO: Continuation and completion of IP Grid lay-out on ground at Brenda Lake property; ties along road to make closure of compass work done on IP Grid; compass ties to location posts on property to determine approximately how mineral claims lie in relation to reach other; examination of ground to determine if other prior locations may exist on the ground. Preparation of sketch plan of lay-out; draughting and supplying prints of plan and report of staking on ground. Searches in Mining Recorder's Office for records of mineral claims found located on ground.

| | | |
|---|---|---|
| Professional Services | $ 300.00 | |
| Wages | 3,905.00 | |
| Board and Lodging | 659.65 | |
| Transportation | 620.00 | |
| Field Expenses | 572.35 | |
| Draughting and Printing | 146.15 | |
| Miscellaneous Disbursements | 17.45 | |
| | | $6,220.60 |
| Less credit for camping equipment removed from property | | 150.00 |
| | | $6,070.60 |

Plan 98-23

GROUND PROBABLY HELD BY
KAY No. 28 M.C.
Loc. Feb. 2/66
Rec. Feb. 14/66

GROUND PROBABLY HELD BY
KAY No. 29 M.C.
Loc. Feb. 2/66
Rec. Feb. 14/66

GROUND PROBABLY HELD BY OTHERS UNKNOWN

KAY No. 30 M.C.
Loc. Feb 2/66
Rec. Feb 14/66

KAY No. 31 M.C.
Loc. Feb. 2/66 Rec. Feb. 14/66

McK No. 17 M.C.
Loc. May 16/66
Rec. May 20/66

McK No. 21 M.C.
Loc. May 16/66
Rec. May 20/66

McK No. 18 M.C.
Loc. May 16/66
Rec. May 20/66

McK No. 12 M.C.
Loc. May 12/66
Rec. May 20/66

McK No. 11 M.C.
Loc. May 12/66
Rec. May 20/66

ORECAN No. 10 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

ORECAN No. 8 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

ORECAN No. 6 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

McK No. 23 M.C.
Loc. May 16/66
Rec. May 20/66

ORECAN No. 7 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

ORECAN No. 5 M.C.
Loc Nov 29/65
Rec Dec 14/65

BOYD No. 8 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

ORECAN No. 9 M.C.
Loc. Nov. 29/65
Rec Dec. 14/65

WILSON No. 10 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

BOYD No. 11 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

BOYD No. 7 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

WILSON No. 1 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

WILSON No. 2 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

BOYD No. 10 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

BOYD No. 9 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

BOYD No. 12 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

IAN No. 5 M.C.
Loc. May 10/66
Rec. May 20/66

IAN No. 6 M.C.
Loc. May 10/66
Rec. May 20/66

WILSON No. 4 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

POSSIBLY
JUDI No. 3,4,5&6
Loc. June 24/66
Rec. July 6/66

BOYD No. 13 M.C.
Loc. Nov. 28/65
Rec. Dec. 14/65

IAN No. 4 M.C.
Loc. May 10/66
Rec. May 20/66

WILSON No. 3 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

IAN No. 3 M.C.
Loc. May 10/66
Rec. May 20/66

WILSON No. 6 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/66

WILSON No. 5 M.C.
Loc. Nov. 29/65
Rec. Dec. 14/65

IAN No. 2 M.C.
Loc. May 10/66
Rec. May 20/66

POSSIBLE APPROXIMATE NORTH BDY. FWP 7

POSSIBLY
FWP No. 40 M.C.
Loc. Nov. 27/65
Rec. Dec. 11/65

POSSIBLY
FWP No. 38 M.C.
Loc. Nov. 27/65
Rec. Dec. 11/65

IAN No. 1 M.C.
Loc. May 10/66
Rec. May 20/66

McK No. 7 M.C.
Loc. May 12/66
Rec. May 20/66

FWP No. 36 M.C.
Loc. Nov. 27/65
Rec. Dec. 11/65

SLIM No. 8 M.C.
Loc. Nov. 11/65
Rec. Nov. 15/65

SLIM No. 10 M.C.
Loc. Nov. 11/65
Rec. Nov. 15/65

SLIM No. 12 M.C.
Loc. Nov. 11/65
Rec. Nov. 15/65

APPROXIMATE WESTERN BDY. OF MARN CLAIMS

Blazed Line
Orecan Loc. Line
Boyd Loc. Line
KAY Loc. Line

No Posts
Post - No Tags

NOTE
This plan is a Location Line Survey only.
The true position and shape of the Mineral Claims shown cannot be guaranteed for official purposes.

Bearings Astronomic and derived from Solar Observations at Hub 6226

Co-ordinates are referred to Hub 6226
20,000 N 20,000 E

W. J. Underhill B.C.L.S.

October 28th, 1966

KOMO EXPLORATIONS LIMITED

PLAN OF MINERAL CLAIMS AND I.P. GRID VICINITY BRENDA LAKE PEACHLAND, B.C.

SCALE: 1 INCH = 300 FEET | DATE: OCT. 28/66 | DRAWN BY: S.R.T.

UNDERHILL & UNDERHILL
PROFESSIONAL ENGINEERS AND B.C. LAND SURVEYORS

DRAWING NUMBER 98-23

869

J-3778 F.B. 605 p 1-95

78N-46W

72N-46W

66N-51W

60N-52W

54N-49W

48N-47W

42N-46W

36N-43W

30N-42W

24N-41W

18N-39W

12N-39W

6N-37W

0N-30W

78N-0W

72N-0W

66N-0W

60N-0W

54N-0W

48N-0W

42N-0W

36N-0W

30N-0W

24N-0W

18N-0W

12N-0W

6N-0W

0N-0W

TO HATHEUME LAKE ROAD

APPROXIMATE LOCATION OF ROAD

APPROXIMATE WESTERN BOUNDARY OF MARN CLAIMS

APPROXIMATE NORTH BOUNDARY FWP CLAIMS

SLIM GROUP

LEGEND

Area of Anomalous Copper Values

Soil Sample 2/.5 (COPPER) (MOLYBDENUM) ppm

KOMO EXPLORATIONS LTD.
GEOCHEMICAL SURVEY

**ALRAE EXPLORATION LTD.**
GEOLOGISTS AND ENGINEERS
VANCOUVER, B. C.

| | |
|---|---|
| DESIGNED R. P. | SCALES HOR: VERT: 1" = 300' |
| DRAWN M.R.L. | |
| CHECKED | DATE NOVEMBER 1966 REV. |
| ALRAE EXP. LTD. DWG. No. | JOB No. |

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