# GEOCHEMICAL REPORT

# PAT 97 GROUP OF MINERAL CLAIMS

# ENDAKO MINES LIMITED

# OMINECA MINING DIVISION

ENDAKO, B. C.

(Latitude 54°, Longitude 125°) 93 K / 3E

Field work undertaken during period 1 - 10 June 1971

E. T. Kimura

28 June 1971

Department of Mines and Petroleum Resources ASSESSMENT REPORT

NO 5/96 MAP

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#### INTRODUCTION

Soil geochemical survey was conducted over Pat 97 Group of Mineral Claims during the period June 1 to 10, 1971. The work was undertaken as part of commitments for assessment work on mineral claims which are owned by Endako Mines Limited, and are located approximately four miles south of Endako Village.

#### SUMMARY

Soil geochemical survey indicated no significant anomalous areas; only a few isolated samples were significantly higher than background.

#### MINERAL CLAIM GROUP

The Pat 97 Group of Mineral Claims is located about four miles south of Endako Village in the Omineca Mining Division. The property is geographically located in the southeast quadrant of quadrilateral, Latitude  $54^\circ$  and Longitude  $125^\circ$ .

The Mineral claims are grouped as the Pat 97 Group.

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Mineral Claim	Record Number	Recording Date
Dolly 3 Fr. and 4 Fr.	46523 and 46524	Nov. 22, 1966
Mist 1-18 inclusive	54756 - 54773 inclusive	Sept. 15, 1967
Pat 97 and 99	15476 and 15478	July 5, <b>1</b> 962
Pat 101 and 103	15480 and 15482	July 5, 1962
Pat 105	15484	July 5, 1962
Pat 107 - 114 inclusive	15486 - 15493 inclusive	July 5, 1962
Pat 116	15495	July 5, 1962

An appended map (Appendix III) shows spatial location of mineral claims on l'' = 1,000' scale.

#### TOPOGRAPHY AND ACCESS

The mineral claims are located on gently-sloping knolls and low-lying swampy terrain in area east of Casey and MacDonald Lakes. Part of mineral claim group is situated on topographic divide between Francois Lake and Endako valley watersheds.

Access to claim group is facilitated by Glenannan Road which turns off Highway 16 approximately one quarter mile east of claim group. Secondary roads extending from Glenannan Road provide fairly good access to most of claims.

# GENERAL GEOLOGY

Rock exposures are plentiful on knolls which occur over northerly half of claim group. Casey alaskite intrudes older Glenaman granite, and underlies approximately southerly two-thirds of claim area.

The contact between two rock types is exposed on one outcrop; general trend as inferred from exposures is approximately east-west. No mineralization has been discovered on claim group.

#### SURVEY CONTROL

Aerial photographs on the scale one inch to 1,200 feet were used for ground location control. Grid lines were established by chain and compass traverses.

## SOIL GEOCHEMICAL SURVEY

## Introduction

A soil geochemical survey was conducted over the entire claim group. Samples were collected at 200-foot intervals along eight north-south lines which were spaced approximately 1,000 feet apart.

Soil development was considered poor although in most cases the B-horizon was well-defined. The soils appeared to be derived largely from sandy brownish-grey glacial till. Swampy ground predominates in the southwest corner of claim group. Depth of overburden has been estimated to be less than 50 feet.

Vegetation over claim area was found to be variable. The most common and widespread tree species are spruce and jack pine. Aspen, willow and alder predominate in low-lying areas and south-facing slopes. Balsam fir was noted in many places but did not appear to have any special pattern of distribution.

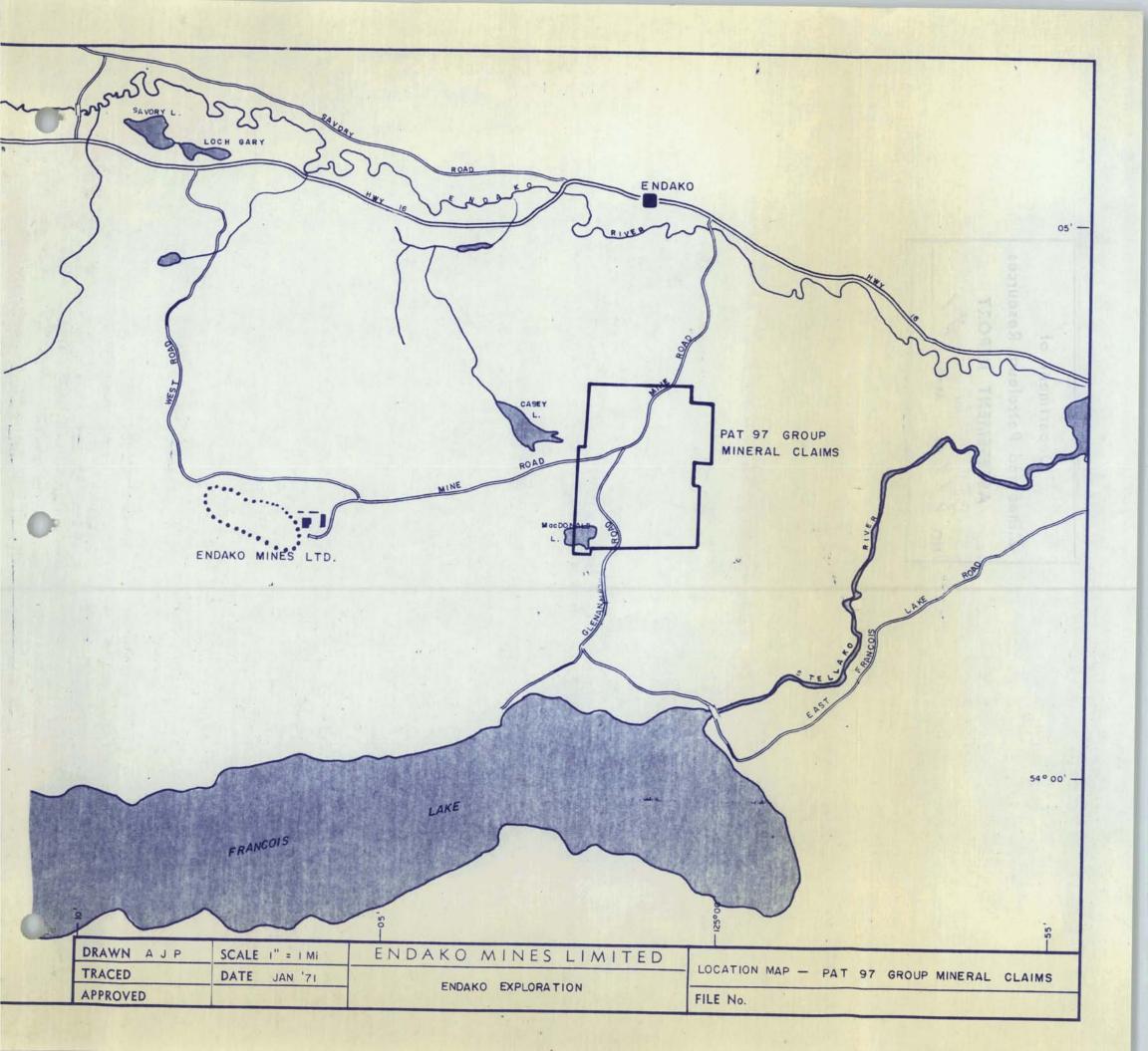
#### Sampling

Soil samples were collected from small holes which were dug to depths of at least four to six inches below the humus. In most cases samples averaging 150 grams were obtained from B-horizon.

## Assay Method

All soil samples were assayed for molybdenum content by Canex Aerial Exploration Laboratory at Vancouver, B. C.

Samples were dried in a hot air dryer, then sifted in -80 mesh nylon sieves. Portions of -80 mesh fractions were weighed with a precision torsion balance. Samples were digested in a hot solution of perchloric acid, and then prepared for analysis by atomic absorption spectrophotometry. A Techtron AA4 instrument was used for analysis of molybdenum content.



## Results

Soil sample analyses indicate no significant anomalous areas. Over 90% of the samples assayed -1 to 7 ppm Mo. Only a few isolated samples were considered significantly higher than background. These samples have an erratic distribution which prevents the outlining of any sizeable anomalous area. There is a narrow east-west trending train of low anomalous values which extends eastward from northeast end of MacDonald Lake. However, these samples are located along low-lying drainage system, and hence, no particular significance is placed on these results.

A map on  $1^{\prime\prime}$  = 1,000 ' scale showing soil geochemical results is appended (Appendix IV).

# STATEMENT OF EXPENSES

The following expenses were incurred by Endako Mines Limited for conducting soil geochemical survey over Pat 97 Group of Mineral Claims.

Personnel P. Buckley E. Kimura J. Peters R. Ridgeway D. Smith K. Taylor	Period Employed 1-4 June 1971 1-28 June 1971 8-28 June 1971 8-10 June 1971 1-4 June 1971 1-4 June 1971 4 June 1971	Time and Rate  24 hrs @ \$3.15 \$75.60  8 hrs @ \$8.00 \$64.00  32 hrs @ \$4.25 \$136.00  24 hrs @ \$3.15 \$75.60  24 hrs @ \$3.15 \$75.60  24 hrs @ \$3.75 \$90.00  4 hrs @ \$3.25 \$13.00	<u>Cost</u> \$529.80
S. Wilson	4 June 1971 6½ days @ \$20.00/d		130.00
Venicle costs.	ying: 263 determi	nations @ \$2.10	552.30
Mon commilations	: J. Peters, 12 h	rs @ \$4.25	51.00
Camp operation c			
P. Buckley		\$32.00	
P. Buckley	·, · · ·	\$32.00	
		\$24.00	
R. Ridgeway	\$ <del></del>	-	•
D. Smith	,	\$32.00	
K. Taylor		\$32.00	160.00
S. Wilson	1 day @ \$8.00	\$ 8.00	160.00
Total Geochemica	al Survey Expenditu	ires	\$1,423.10

#### CONCLUSION

Soil geochemical survey indicated no significant anomalous areas on Pat 97 Group of Mineral Claims.

Submitted by:

Senior Geologist Endako Mines Limited

ETK:dh

# APPENDICES

- I Certification
- II Statement of Qualification
- III Mineral claim map of Pat 97 Group of Mineral Claims on I" = 1,000' scale (in pocket).
  - IV Map showing soil geochemical survey results on 1" = 1,000" scale (in pocket).
    - V Declaration for Statement of Expenses

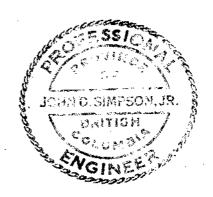
## APPENDIX I

#### CERTIFICATION

I, J. D. Simpson, Jr. of Endako Mines Limited, Endako, B. C., do hereby certify that:

- I am a registered Professional Engineer in the Province of British Columbia.
- 2. I have carefully reviewed the data and examined the report of E. T. Kimura on exploration work which was undertaken during June 1971 on Pat 97 Group of Mineral Claims. The mineral claims belong to Endako Mines Limited and are located in the Omineca Mining Division near Endako, B. C. (Latitude 54°, Longitude 125°)
- To the best of my knowledge the interpretation of data, conclusions and expenditures which are claimed for the performance of work are valid.

J. D. Simpson, Jr. P.Eng.



#### APPENDIX II

# STATEMENT OF QUALIFICATION

I, E. T. Kimura, of Endako Mines Limited, Endako, B. C., do hereby certify that:

- 1. I am a geologist.
- I am a graduate of University of British Columbia with a B.A. degree in Geology and Physics in 1955.
- 3. From 1954 until the present I have been engaged in mining geology, both in underground and open pit operations, and in exploration geology in British Columbia, Saskatchewan and Yukon Territory.
- 4. I personally supervised and participated in the field work and have reviewed and assessed the data resulting from this work.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

To Wit:

In the Matter of expenditures for soil geochemical survey on Pat 97 Group of Mineral Claims during period 1-10 June 1971.

🌓 E. T. Kimura

of ENDAKO MINES LIMITED, ENDAKO, B. C.

in the Province of British Columbia, do solemnly declare that the following expenditures have been incurred by Endako Mines Limited in carrying out soil geochemical survey for assessment work purposes on Pat 97 Group of Mineral Claims.

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Personnel	Period Employed	Time and Rate	Cost
P. Buckley	1-4 June 1971	24 hrs. @ \$3.15 \$75.60	
E. Kimura	1-28 June 1971	8 hrs. @ \$8.00 \$64.00	
J. Peters	8-28 June 1971	32 hrs. @ \$4.25 \$136.00	
R. Ridgeway	8-10 June 1971	24 hrs. @ \$3.15 \$75.60	
D. Smith	1-4 June 1971	24 hrs. @ \$3.15 \$75.60	
K. Taylor	1-4 June 1971	24 hrs. @ \$3.75 \$90.00	•
S. Wilson	4 June 1971	4 hrs. @ \$3.25 \$13.00	\$529.80
V-hd-1- Contor	61. dama 0 000 00/dam		130,00
	6½ days @ \$20.00/day		
Geochemical assaying: 263 determinations @ \$2.10			552.30
	s: J. Peters, 12 hrs		51.00
Camp operation of	costs for following p	personnel:	
P. Buckley	4 days @ \$8.00	\$32.00	
J. Peters	4 days @ \$8.00	\$32.00	
R. Ridgeway	3 days @ \$8.00	\$24.00	
D. Smith	4 days @ \$8.00	\$32.00	• •
K. Taylor	4 days @ \$8.00	\$32.00	
S. Wilson	1 day @ \$8.00	\$ 8.00	160.00
TOTAL GEOCHEMICA	AL SURVEY EXPENDITURE	ZS .	\$1,423.10

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

of , in the

Province of British Columbia, this

day of , A.D.

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

