

2751

GEOCHEMICAL REPORT

SAM 88 GROUP OF MINERAL CLAIMS

ENDAKO MINES LTD. (N.P.L.)

OMINECA MINING DIVISION

ENDAKO, B. C.

(Latitude 54°, Longitude 125°)

Field work undertaken during period

27 May 1970 - 5 June 1970

G. D. Bysouth

13 November 1970

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2751
MAP

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Summary	1
Mineral Claim Group	1
Topography and Access	1
General Geology	1
Survey Control	2
<u>Soil Geochemical Survey</u>	
Introduction	2
Sampling	2
Assay Method	2
Results	3
Statement of Expenses	3
Conclusion	3
<b>#1 Location Map 1" = 2 Mi</b>	
<u>Appendices</u>	
I Certification	
II Statement of Qualification	
<b>#2</b> III Mineral Claim Map, 1" = 1000'	
<b>#3</b> IV Soil Geochemical Survey Map, 1" = 1000'	
V Declaration for statement of expenses	

## INTRODUCTION

A soil geochemical survey was conducted over the Sam 88 Group of Mineral Claims during the period 27 May to 5 June 1970. The work was undertaken as part of commitments for assessment work on mineral claims which are owned by Endako Mines Ltd. (N.P.L.), and are located approximately ten miles due west 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 Sam 88 Group of Mineral Claims is located approximately ten miles due west 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 Sam 88 Group.

<u>Mineral Claim</u>	<u>Record Number</u>	<u>Recording Date</u>
Sam 88-101 inclusive	82365-78 inclusive	18 November 1969

An appended map (Appendix III) shows spatial location of mineral claims on 1" = 1000' scale.

## TOPOGRAPHY AND ACCESS

Most of the mineral claims are located within the upper reaches of Sam Ross Creek in a narrow steep-sided valley which is occupied by small swamps and a small lake. Part of the claim group extends southwesterly over a low rocky divide to the northern side of Haney Lake. Moderately rugged relief is prevalent throughout the area.

Access to the claim group is provided by a narrow road turning off Highway 16 at a point nine miles west of Endako Village.

## GENERAL GEOLOGY

Most of the mineral claim area appears to be underlain by light-coloured Tertiary volcanic rocks which crop out abundantly along the higher hills and ridges. These rocks apparently overlie medium-grained Topley quartz diorites which are exposed within the Sam Ross creek valley near the northeastern boundary of the claim group. Overburden covers at least 90% of the area.

### 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 entire claim group. Samples were collected at 200-foot intervals along seven north-south lines which were spaced approximately 1,000 feet apart. Samples were also collected at 200-foot intervals along three short north-trending reconnaissance lines near the northeastern part of the claim group.

Soil development was considered poor; parent material in most cases appeared to be glacial till, glacial outwash and talus debris. The permeable nature of this overburden is reflected in the absence of surface water throughout most of the area except in the valley bottom. Depth of overburden in lower parts of the valley is probably in excess of 50 feet but considerably shallower along the higher ridges and hill tops.

Vegetation varies with elevation. Willows, alder and spruce predominate along valley bottom. Jack pine, aspen and spruce are common along lower valley slopes. Jack pine, balsam fir and dwarf juniper predominate along higher parts of the valley. Tree cover on southeast-facing slopes tends to be sparse.

#### 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 95% of the samples assayed -1 to 4 ppm Mo. Only a few isolated samples were considered significantly higher than background, which in this area was considered to be 1-2 ppm Mo. The erratic distribution of values higher than background prevents the outlining of any sizeable anomalous area.

STATEMENT OF EXPENSES

The following expenses were incurred by Endako Mines Ltd. (N.P.L.) for conducting a soil geochemical survey over the Sam 88 Group of Mineral Claims.

<u>Personnel</u>	<u>Period Employed</u>	<u>Time and Rate</u>	<u>Cost</u>
P.E. Brisbin	May 27 - June 5/70	48 Hr. @ \$3.15	\$151.20
M.C. Brown	May 29 - June 5/70	24 Hr. @ \$3.15	\$ 75.60
G.D. Bysouth	May 27 - Nov 13/70	8 Hr. @ \$5.53	\$ 44.24
C.Y. Der	May 28 - June 5/70	48 Hr. @ \$3.15	\$151.20
E.T. Kimura	May 27/70	8 Hr. @ \$8.00	\$ 64.00
H.N. McLeod	May 27 - June 5/70	40 Hr. @ \$3.15	\$126.00
A.J. Peters	May 27 - June 5/70	56 Hr. @ \$3.86	\$216.16
K.J. Taylor	May 28 - June 5/70	48 Hr. @ \$3.15	<u>\$151.20</u>
			\$979.60
Vehicle costs: 8 days @ \$20/day			\$160.00
Geochemical Assaying: 181 determinations @ \$2.00			\$362.00
Map Compilations: A.J. Peters 16 Hr. @ \$3.86			\$ 61.76
Camp operation costs:			
P.E. Brisbin	8 days @ \$7.90	\$63.20	
M.C. Brown	5 days @ \$7.90	\$39.50	
C.Y. Der	8 days @ \$7.90	\$63.20	
H.N. McLeod	7 days @ \$7.90	\$55.30	
A.J. Peters	10 days @ \$7.90	\$79.00	
K.J. Taylor	8 days @ \$7.90	<u>\$63.20</u>	<u>\$363.40</u>
<u>TOTAL GEOCHEMICAL SURVEY EXPENDITURE</u>			<u>\$1,926.76</u>

CONCLUSION

The soil geochemical survey indicated no significant anomalous areas on Sam 88 Group of Mineral Claims.

Submitted by:

*Garry D. Bysouth*

G.D. Bysouth  
Geologist

ENDAKO MINES LTD. (N.P.L.)

GDB:dh

APPENDICES

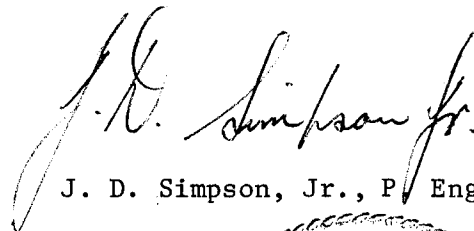
- I Certification
- II Statement of Qualification
- III Mineral claim map of Sam 88 Group of  
Mineral claims on 1" = 1,000' scale (in pocket)
- IV Map showing soil geochemical survey results  
on 1" = 1,000' scale (in pocket)
- V Declaration for statement of expenses

APPENDIX I

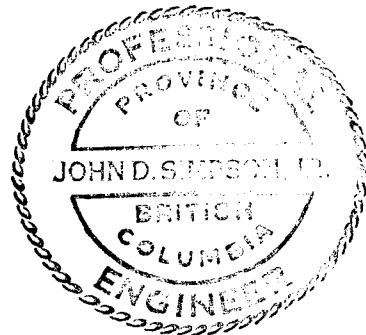
CERTIFICATION

I, J. D. Simpson, Jr. of Endako Mines Ltd. (N.P.L.), Endako, B. C., do hereby certify that:

1. I am a registered Professional Engineer in the Province of British Columbia.
2. I have carefully reviewed the data and examined the report by G. D. Bysouth on exploration work which was undertaken during May-June 1970 on Sam 88 Group of Mineral Claims. The mineral claims belong to Endako Mines Ltd. (N.P.L.) and are located in the Omineca Mining Division near Endako, B. C. (Latitude 54°, Longitude 125°)
3. 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.

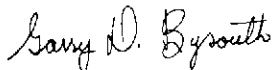


APPENDIX II

STATEMENT OF QUALIFICATION

I, G. D. Bysouth of Endako Mines Ltd. (N.P.L.),  
Endako, B. C. do hereby certify that:

1. I am a geologist.
2. I am a graduate of the University of British  
Columbia with a B.Sc. degree in Geology in 1966.
3. From 1966 until the present I have been engaged  
in mining geology and exploration geology in  
British Columbia.
4. I personally supervised and participated in the  
field work and have reviewed and assessed the  
data resulting from this work.

  
G. D. Bysouth



APPENDIX V

DOMINION OF CANADA: }  
 PROVINCE OF BRITISH COLUMBIA. }  
 To Wit: }

**In the Matter of**

Expenditures for Geochemical Survey on Sam 88 Group of Mineral Claims during period 27 May - 5 June 1970.

I, G. D. Bysouth

of ENDAKO MINES LTD. (N.P.L.), ENDAKO, B. C.

in the Province of British Columbia, do solemnly declare that the following expenditures have been incurred by Endako Mines Ltd. (N.P.L.) in carrying out a soil geochemical survey for assessment work purposes on Sam 88 Group of Mineral Claims.

<u>Personnel</u>	<u>Period Employed</u>	<u>Time and Rate</u>	<u>Cost</u>
P.E. Brishin	May 27 - June 5/70	48 Hr. @ \$3.15	\$151.20
M.C. Brown	May 29 - June 5/70	24 Hr. @ \$3.15	\$ 75.60
G.D. Bysouth	May 27 - Nov 13/70	8 Hr. @ \$5.53	\$ 44.24
C.Y. Der	May 28 - June 5/70	48 Hr. @ \$3.15	\$151.20
E.T. Kimura	May 27/70	8 Hr. @ \$8.00	\$ 64.00
H.N. McLeod	May 27 - June 5/70	40 Hr. @ \$3.15	\$126.00
A.J. Peters	May 27 - June 5/70	56 Hr. @ \$3.86	\$216.16
K.J. Taylor	May 28 - June 5/70	48 Hr. @ \$3.15	<u>\$151.20</u>
			\$979.60
Vehicle costs: 8 days @ \$20/day			\$160.00
Geochemical assaying: 181 determinations @ \$2.00			\$362.000
Map Compilations: A.J. Peters 16 Hr. @ \$3.86			\$ 61.76
Camp operation costs:			
P.E. Brisbin	8 days @ \$7.90		\$63.20
M.C. Brown	5 days @ \$7.90		\$39.50
C.Y. Der	8 days @ \$7.90		\$63.20
H.N. McLeod	7 days @ \$7.90		\$55.30
A.J. Peters	10 days @ \$7.90		\$79.00
K.J. Taylor	8 days @ \$7.90		<u>\$63.20</u>
			\$363.40
<b>TOTAL GEOCHEMICAL SURVEY EXPENDITURE</b>			<u><u>\$1,926.76</u></u>

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 VILLAGE  
 of BURNS LAKE, in the  
 Province of British Columbia, this 17th  
 day of NOVEMBER 1970, A.D.

*Garry D. Bysouth*

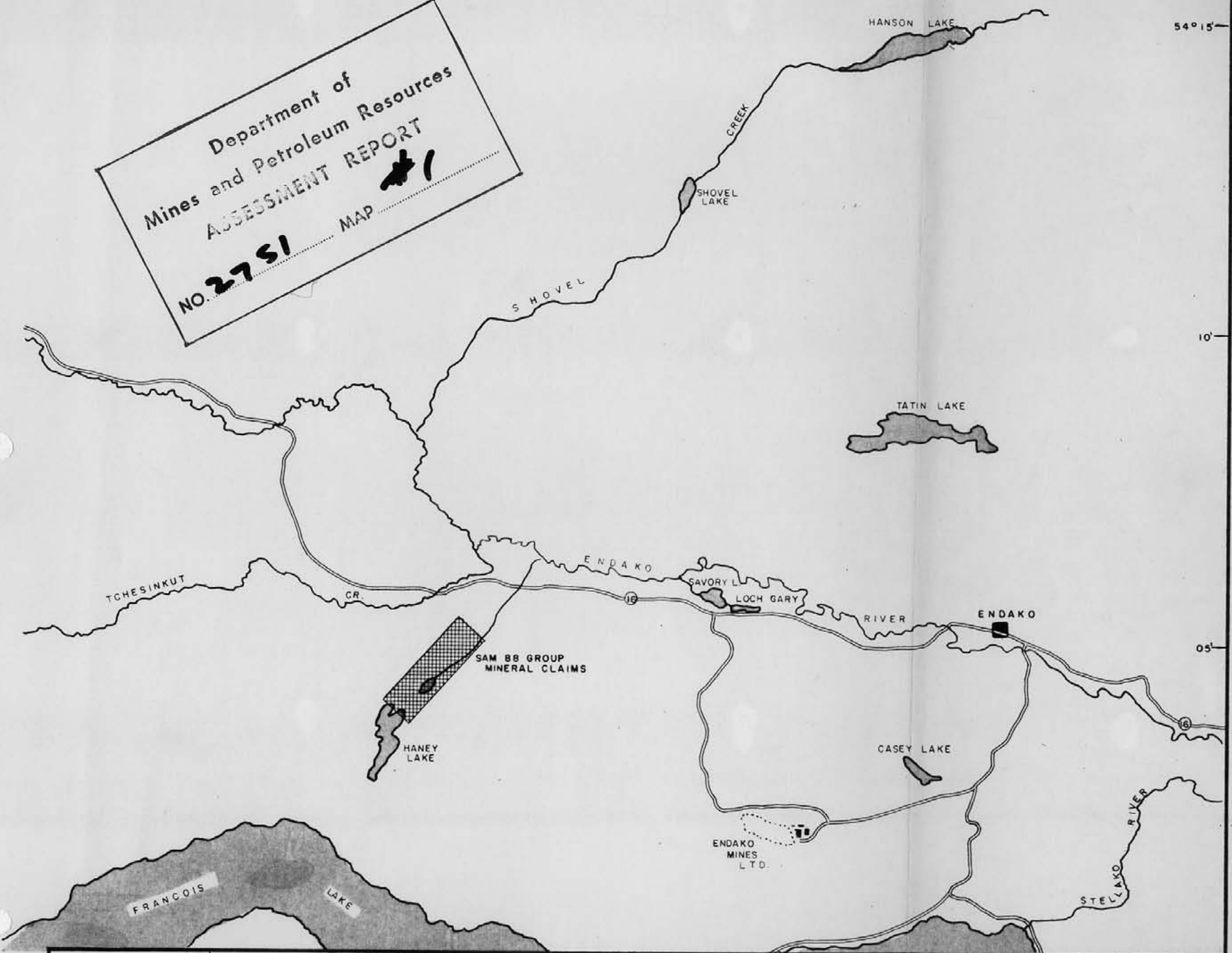
*[Signature]*

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

25' 20' 15' 10' 05' 12500'

54° 15'

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2751 MAP *41*

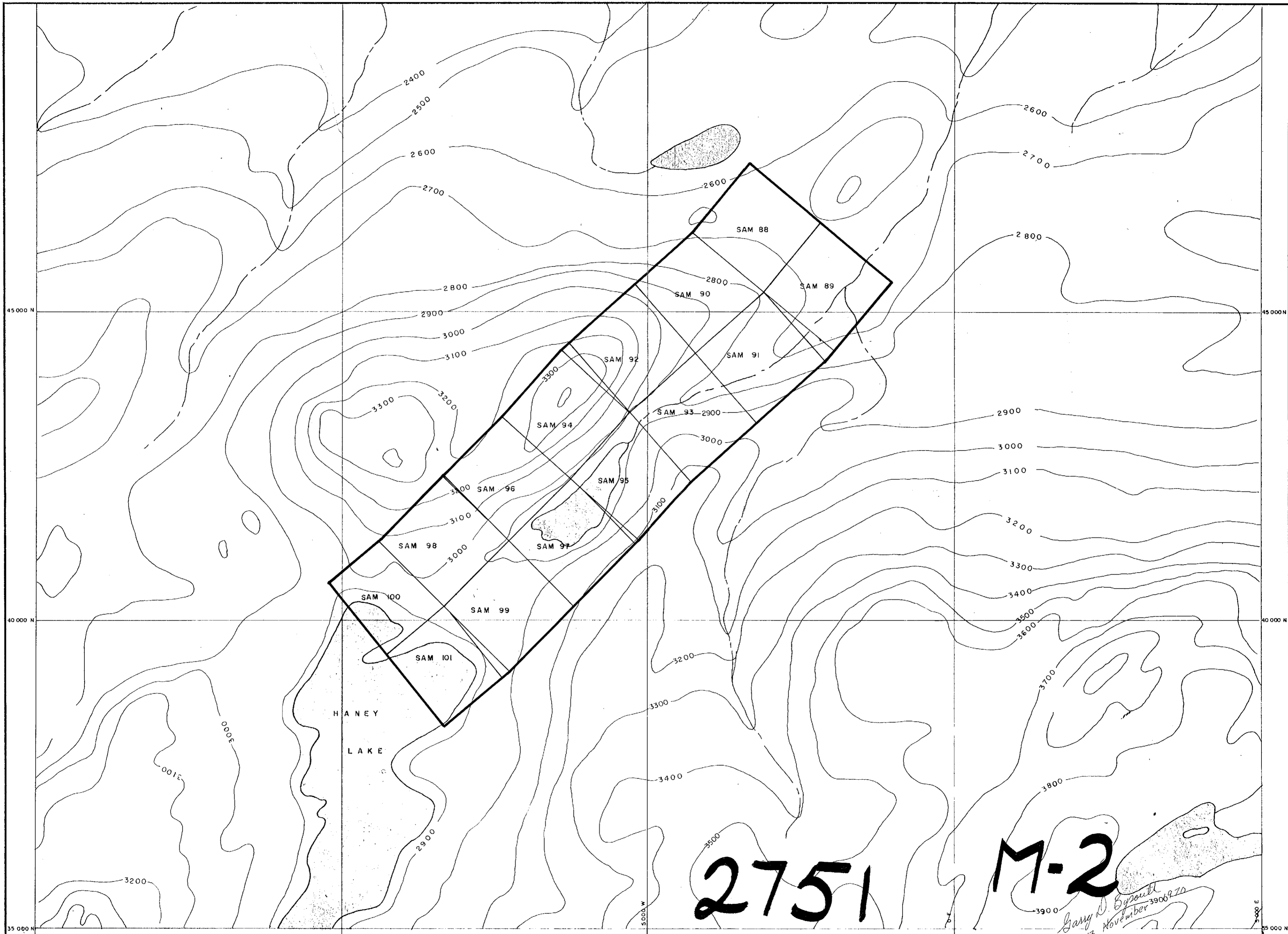


DRAWN A J P  
TRACED  
APPROVED

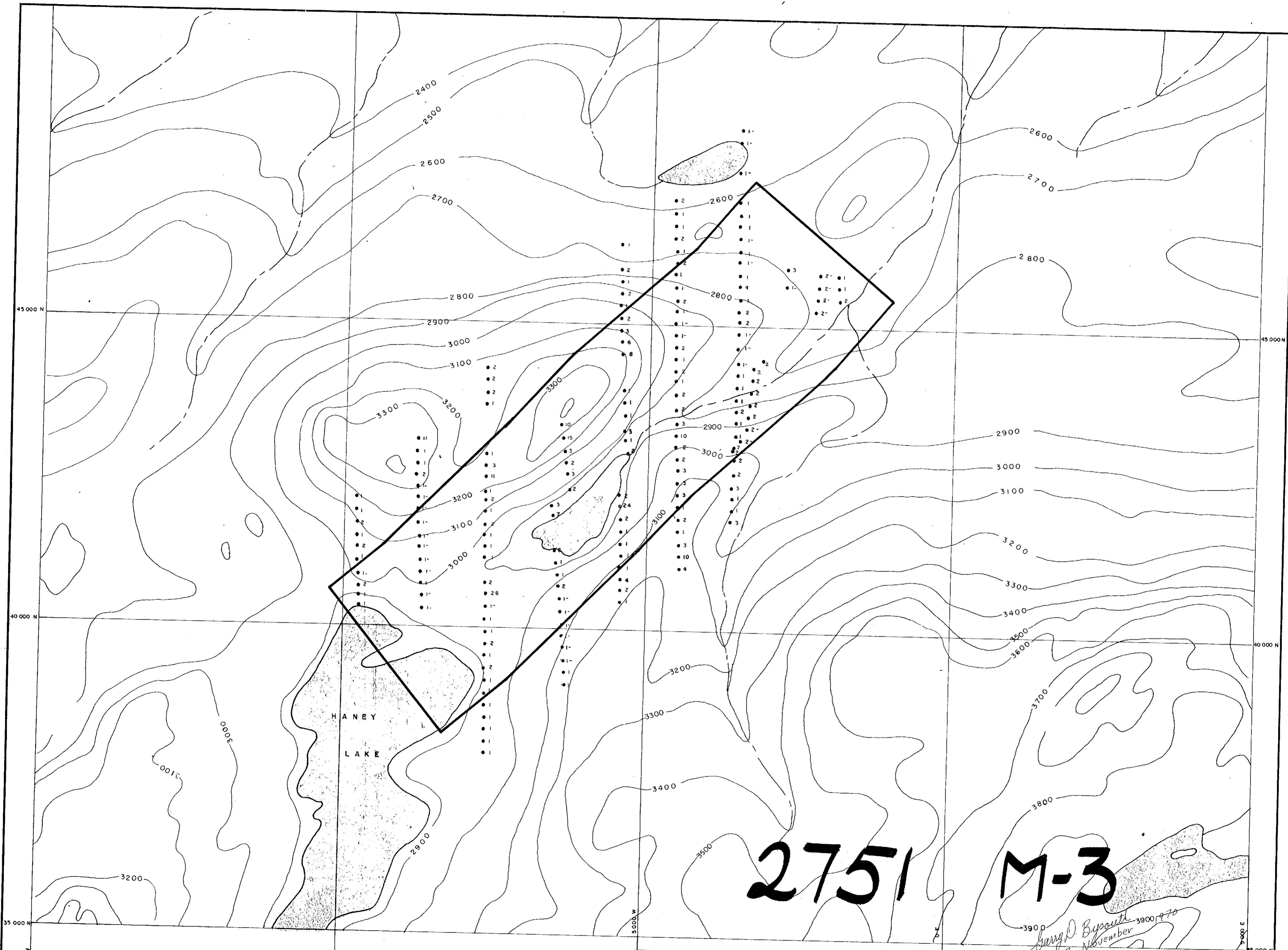
SCALE 1" = 2 MI.  
DATE NOV '70

ENDAKO MINES LIMITED  
ENDAKO EXPLORATION

LOCATION MAP SAM 88 GROUP  
FILE No.



DRAWN A J P	SCALE 1" = 1000'	ENDAKO MINES LIMITED	LOCATION MAP SAM 88 GROUP CLAIMS TO ACCOMPANY GEOCHEMICAL REPORT
TRACED	DATE NOV '70	ENDAKO EXPLORATION	FILE No. APPENDIX III
APPROVED			



2751 M-3

Gary D. Bysouth  
November 13 1970

2 ● SAMPLE LOCATION, ppm Mo

DRAWN A J P	SCALE 1" = 1000'	ENDAKO MINES LIMITED	SOIL GEOCHEMICAL SURVEY
TRACED	DATE NOV '70	ENDAKO EXPLORATION	TO ACCOMPANY GEOCHEMICAL REPORT
APPROVED			FILE No. APPENDIX IV