

92I/2E

ELC GEOPHYSICAL REPORT
NO. EM-70-116
BUD CLAIMS GROUP
FOR L. OLHEISER
NEAR ASPEN GROVE, B. C.
120° W - 50° N
OCTOBER 4, 1970 to DECEMBER 28, 1970

BY D.L. HINGS, P. ENG.
GEOPHYSICIST

2881

This is Report No. EM-70-116
for L. Olheiser
BUD Claims Group
in the Nicola Mining Division near Aspen Grove, B.C.
October 4, 1970 to December 28, 1970.

92 I / 2E

TABLE OF CONTENTS

	<u>PAGE</u>
Purpose	1
Geological Reference	1
Location]	1
Presentation	2
Instrumentation	2
Geochemical Sampling Method	3
Results	3
Conclusions	5
Summary	5
Statement of Costs	6

PLANS

#1 EM PROFILE

EM-70-116

#2

CERTIFICATE OF ANALYSIS- GEOCHEMICAL (ENCLOSED)

ELC GEOPHYSICS LTD.
250 North Grosvenor Ave.
Burnaby 2, B.C.

298-9619

2881

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 2881 MAP.....
--

elc geophysics ltd.

250 NORTH GROSVENOR, VANCOUVER, CANADA TELEPHONE: (604) 298-9619

ELC GEOPHYSICAL REPORT NO. EM-70-116 COVERING THE BUD CLAIMS GROUP, 120° W 50° N IN THE NICOLA MINING DIVISION AT ASPEN GROVE, B. C. FOR L. OLHEISER OCTOBER 4, 1970 to DECEMBER 28, 1970.

Purpose:

The purpose of the EM survey over the BUD claims group in the Aspen Grove area was to determine the relative anomalous features created from geological formation changes and to periodically take geochemical samples to thereby geologically assess some of the anomalous EM features.

Geological Reference:

Geological Survey of Canada, Department of Mines and Technical Survey Memoir 249, W.E. Cockfield.

Location:

The Bud claims group and the area surveyed is approximately two miles north of Courteney Lake in the vicinity of Aspen Grove and approximately two miles east of No. 5 highway that extends between Aspen Grove

...con't...

and Merritt, B.C. The property extends to the east and south of Mount Nicola. The map reference coordinates are $120^{\circ}36'$ W and $50^{\circ} 03'$ N.

Presentation:

The survey as indicated on the plan EM-70-116 shows a central control line extending north and south with all gridlines crossing east and west. The coordinates begin at the south end at 0+00 and terminate at the north end at 100+00 N. There are 21 east-west gridlines averaging 500 foot spacing and extending in length on the northern portion of the survey.

Station spacing is at 100 foot intervals on both the gridlines and the control line, as well as the grid tie-in north south lines. A total of 18 miles were surveyed.

The survey lines are shown on the plan as the base line for the profile values wherein the two components are plotted in percentages plus and minus of zero value as indicated on the plan.

Instrumentation:

The infinite source electromagnetic instrument was used and is manufactured by Geonex Instruments

...con't...

Ltd. of Toronto. It is a model EM16 and operates on the signals received from the U.S. Navy Station NPG in the State of Washington, U.S.A. on a frequency of 18.6 KHZ. The survey was conducted maintaining an azimuth of approximately 200°.

Geochemical Sampling Method:

A total of 103 samples were taken over the grid as shown in Plan No. EM-70-116.

The samples were taken from the "B" Horizon first by removal of any overlying debris, then digging a hole, using a round-nosed spade, approximately 15 inches below the surface. A sample from the hole was packaged using a standard kraft soil bag obtained from TSL Laboratories Ltd., 325 Howe Street, Vancouver, B.C. The sample determinations were made by TSL Laboratories Ltd.

Results:

The C1 line extending generally north and south to the west of the control line indicates the approximate location of what would appear to be a contact between two formations. The second contact line C2 on the east side of the property also running north

...con't...

and south would appear to be near the eastern limit of the most anomalous zone. Although there is a second anomalous feature indicated by CL5 as a conductive linear anomaly east of C2 contact area. The conductive linear anomaly CL1 east and parallel to the control line in the southern portion passes closely to some of the best geochemical results in that area. The conductive linear anomaly CL2 in the northwest portion of the survey has not yet been confirmed by geochemical analysis. The conductive linear anomaly CL3 in the northeast area also passes closely to the strongest geochemical results for copper. The conductive linear anomaly CL4 has not yet been confirmed by geochemical analysis.

The linear anomaly L1 appears to be the western edge of the anomalous zone Z2 and passes near some of the highest geochemical results. The L2 linear anomaly in the northwest is quite prominent but has not yet been assessed geochemically. The L3 linear anomaly having a northeast southwest strike pattern has not been assessed geochemically but does show conduction in the southwest end and forms the western side of the anomalous zone Z1. The L4 linear

...con't...

anomaly in the south is supported by above average geochemical results and the area to the east as far as L5, shows strong anomalous conductions.

Conclusions:

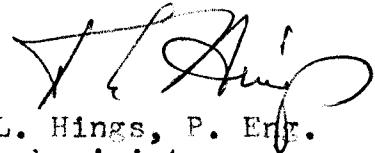
The geochemical samplings in the field were made from selected areas at alternate stations, these included the eastern portion of Z1 and the general area of Z2, with a few gridlines in the south. The anomalies CL1, L4 and CL3 all appear to be valid as they are supported by geochemical analysis. It would appear that the general trend extends from the southwest to the northeast and there is a possibility of the linear anomaly L6 being a cross fault. The anomalous features to the east appear to be more north and south, whereas the linear anomalies to the north and west seem to have a northeast-southwest strike.

Summary:

There is some confirmation of copper mineral-

... con't...

ization which could be greatly enhanced with more geo-
chemical detail over the property.

A handwritten signature in cursive script, appearing to read "D.L. Hings".

D.L. Hings, P. Eng.
Geophysicist

A STATEMENT OF COSTS FOR GEOPHYSICAL AND GEOCHEMICAL
 SURVEY NO. EM-70-116 COVERING THE BUD CLAIMS GROUP,
 NEAR ASPEN GROVE, B.C. BY ELC GEOPHYSICS LTD., OCT. 4,
 1970 to DECEMBER 28, 1970.

Survey Crew

R.L. Reece	14 days @ 60.00	840.00	
W. Mather	19 days @ 40.00	760.00	
G. Olheiser	16 days @ 40.00	<u>640.00</u>	
			2240.00

Transportation

4 x 4 Truck	19 days @ 12.00	228.00	
	750 miles @ 10¢	<u>75.00</u>	
			303.00

Living Costs

Motel	18 days @ 15.00	270.00	
Meals	49 mandays @ 6.00	<u>294.00</u>	
			564.00

Equipment

Ronka	19 days @ 10.00	190.00	
Misc.	19 days @ 5.00	<u>95.00</u>	
			285.00

Data Processing and Drafting

D. A. Cramer	7 days @ 60.00		420.00
--------------	----------------	--	--------

Interpretation and Report

D.L. Hings, P. Eng.	3 days @ 120.00		360.00
---------------------	-----------------	--	--------

Geochemical Analysis

128.75

TOTAL COST

\$ 4300.75

+ +

T
S
L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *ELC Geophysics*

REPORT NO.
V8911-1

SAMPLE(S) OF *Soil*

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	L- 5N 1w	28						
2	3	31						
3	5	25						
4	7	23						
5	9	40						
6	11	42						
7	13	50						
8	L- 5N 15w	46						
9	L- 10N 1w	40						
10	L- 10N 3w	38						
11	L- 10N 5w	27						
2	7	43						
3	9	54						
4	11	68						
5	13	31						
6	L- 10N 15w	10						
7	L- 15N 1w	39						
8	3	32						
9	5	30						
20	L- 15N 7w	39						

DATE

Dec 22/70

SIGNED

R B Ditcher

N.B. Samples discarded after 3 months unless otherwise requested.



T
S
L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *ELC Geophysics*

REPORT NO.
V8911-2

SAMPLE(S) OF *soil*

RESULTS IN PARTS PER MILLION

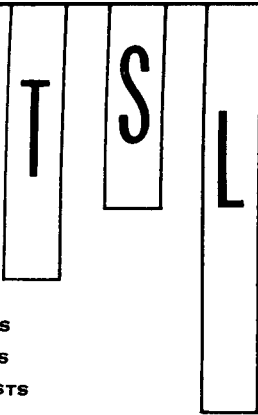
	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
2	L-15N 9W	30						
2	11	32						
3	13	34						
4	L-15N 15W	23						
5	L-20N 1W	47						
6	3	45						
7	5	43						
8	7	18						
9	9	62						
30	L-20N 11W	44						
31	L-20N 13W	33						
2	L-20N 15W	38						
3	L-35N 1+00E	54						
4	3	60						
5	5	83						
6	7	53						
7	9	71						
8	11	58						
9	13	49						
40	L-35N 15+00E	59						

DATE *Dec. 22/70*

SIGNED *R. B. Ditcher*

N.B. Samples discarded after 3 months unless otherwise requested.





Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *ELC Geophysics*

REPORT NO.
V8911-3

SAMPLE(S) OF *Soil*

RESULTS IN PARTS PER MILLION

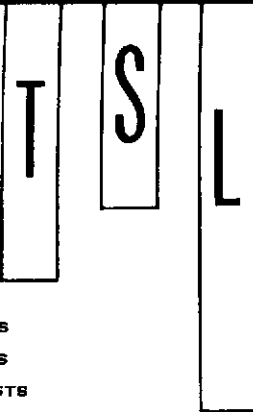
	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
41	L-40N 1+00E	23						
2	3	34						
3	5	217						
4	7	55						
5	9	64						
6	11	49						
7	13	45						
8	L-40N 15+00E	70						
9	L-45N 1+00E	82						
50	L-45N 3+00E	53						
51	L-45N 5+00E	38						
2	7	68						
3	9	61						
4	11	110						
5	13	56						
6	L-45N 15+00E	53						
7	L-50N 1+00E	39						
8	3	95						
9	5	62						
60	L-50N 7+00E	63						

DATE *Dec 22/70*

SIGNED *R B Ditcher*

N.B. Samples discarded after 3 months unless otherwise requested.





Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM ELC Deepfields

REPORT NO.
V8911-4

SAMPLE(S) OF Soil

RESULTS IN PARTS PER MILLION

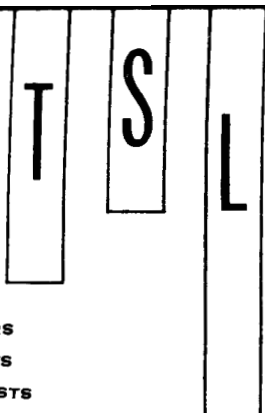
	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
6	L-50N 9E	38						
2	11	32						
3	13	69						
4	L-50N 15	30						
5	L-60N 17	108						
6	19	55						
7	21	62						
8	23	72						
9	25	54						
70	L-60N 27E	95						
71	L-60N 29E	27						
2	31	35						
3	33	48						
4	L-60N 35E	59						
5	L-65N 17E	—						
6	19	43						
7	21	57						
8	23	86						
9	25	70						
80	L-65N 37E	69						

DATE Dec 22/70

SIGNED R B Ditcher

N.B. Samples discarded after 3 months unless otherwise requested.





Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *ELC leophythia*

REPORT NO.
V8911-5

SAMPLE(S) OF *soil*

RESULTS IN PARTS PER MILLION

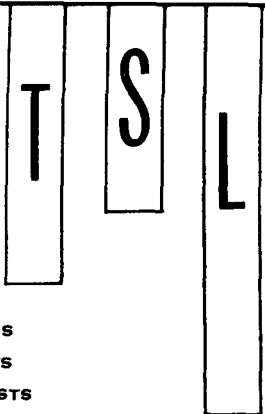
	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
8	L-65N 29E	40						
2	31	56						
3	L-65N 33E	45						
4	L-70N 17E	121						
5	19	150						
6	21	32						
7	23	39						
8	25	43						
9	27	36						
10	L-70N 29E	35						
9	L-70N 31E	33						
2	33	30						
3	L-70N 35E	34						
4	L-75N 17E	52						
5	19	61						
6	21	53						
7	23	48						
8	25	43						
9	27	36						
10	L-75N 29E	45						

DATE *Dec 22/70*

SIGNED *R. D. Ditcher*

N.B. Samples discarded after 3 months unless otherwise requested.





Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEX: 04-50613
CODE NAME: TSL-LABS-VCR.

TELEPHONE 688-3504
AREA CODE 604

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM *ELC Doophysics.*

REPORT NO.
V8911-6

SAMPLE(S) OF *Soil.*

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
<i>10</i>	<i>L-75N 31C</i>	<i>40</i>						
<i>2</i>	<i>33</i>	<i>45</i>						
<i>3</i>	<i>35</i>	<i>46</i>						
<i>10</i>	<i>L-75N 37E</i>	<i>47</i>						
<i>5</i>								
<i>6</i>								
<i>7</i>	<i>Hot aqua regia extraction</i>							
<i>8</i>	<i>- Determined by atomic absorption</i>							
<i>9</i>								
<i>0</i>								
<i>1</i>								
<i>2</i>								
<i>3</i>								
<i>4</i>								
<i>5</i>								
<i>6</i>								
<i>7</i>								
<i>8</i>								
<i>9</i>								
<i>0</i>								

DATE *Dec 22/70*

SIGNED *[Signature]*

N.B. Samples discarded after 3 months unless otherwise requested.



LOCATION MAP
SCALE:- 1 : 50,000
DWG.NO:- 70-116-L

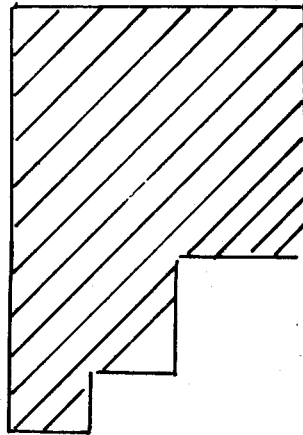
INDIAN
RESERVE
7

MOUNT
▲
NICOLA

BUD
GROUP

CORBETT LAKE

COURTNEY
LAKE

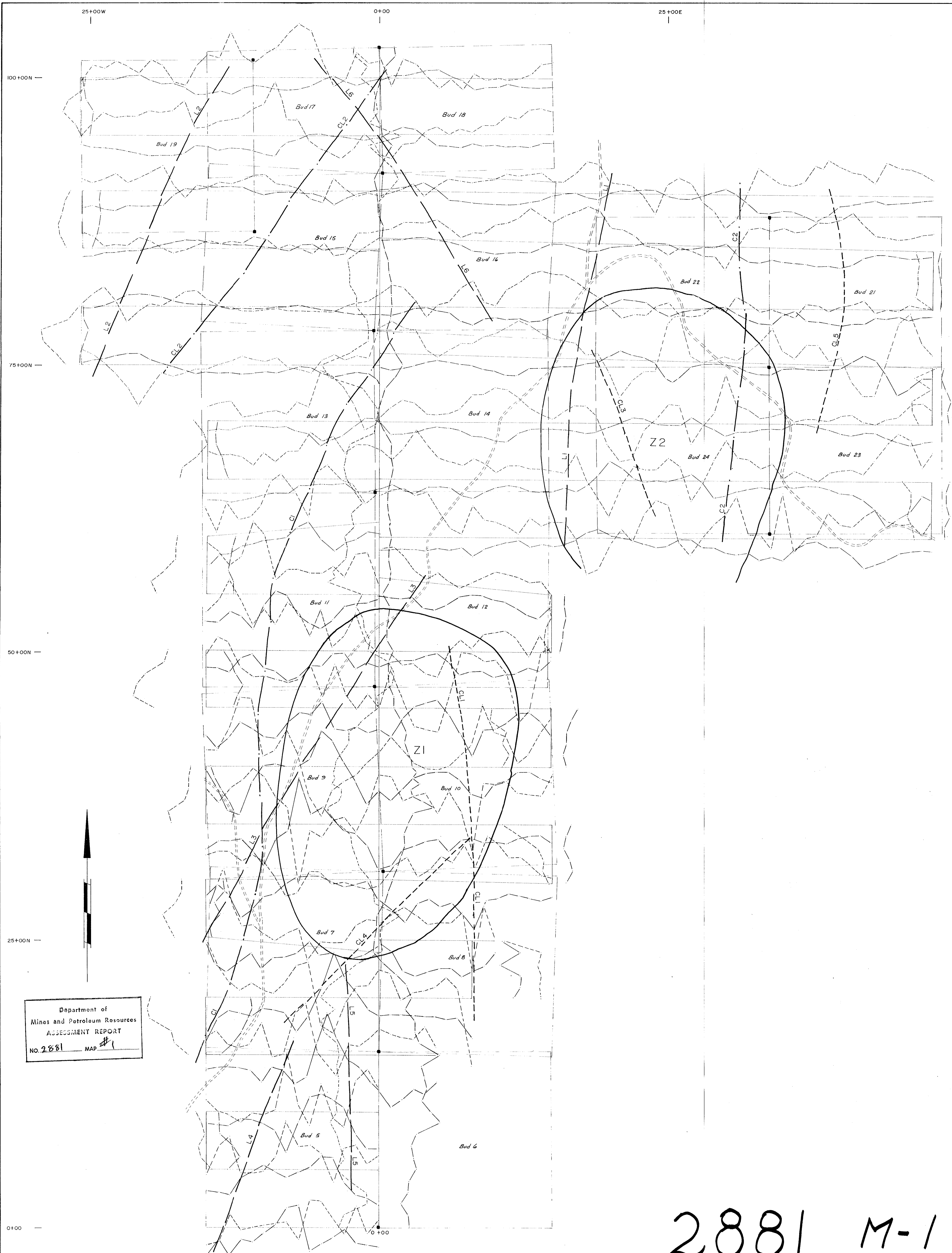


To Merritt
←

To Aspen Grove
↓



H. A. King



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2881 MAP #1

2881 M-1

ELC GEOPHYSICAL SURVEY
BUD GROUP MR. L. OLHEISER ASPEN GROVE, B.C.
DEC. 1970 SCALE: 1"=300' DWG. NO. EM-70-116
EM PROFILES
APPROVED *[Signature]*

- NOTE:-
- SURVEY LINES
 - ZERO LINE
 - - - IN-PHASE (1" = 100%)
 - - - QUADRATURE (1" = 20%)
 - CLAIM POST
 - CLAIM LINE
 - ==== ROAD
 - LINEAR ANOMALY
 - - - CONDUCTIVE LINEAR ANOMALY
 - CONTACT
 - ANOMALOUS ZONE

25+00W

0+00

25+00E

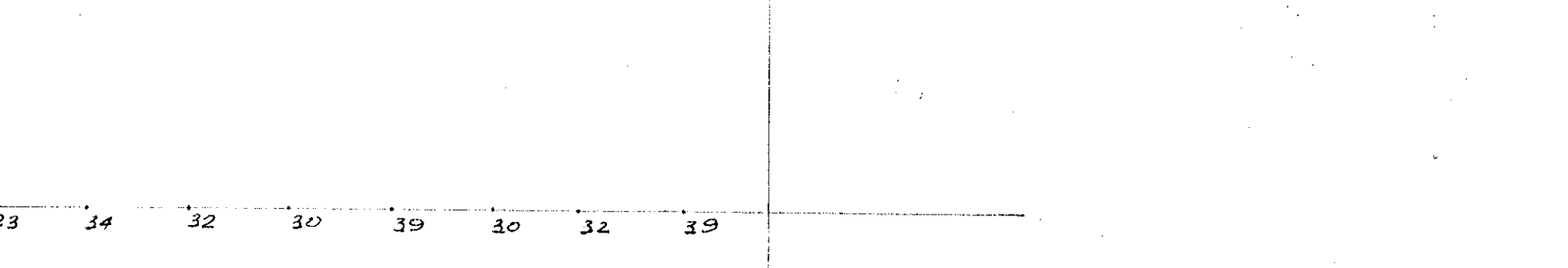
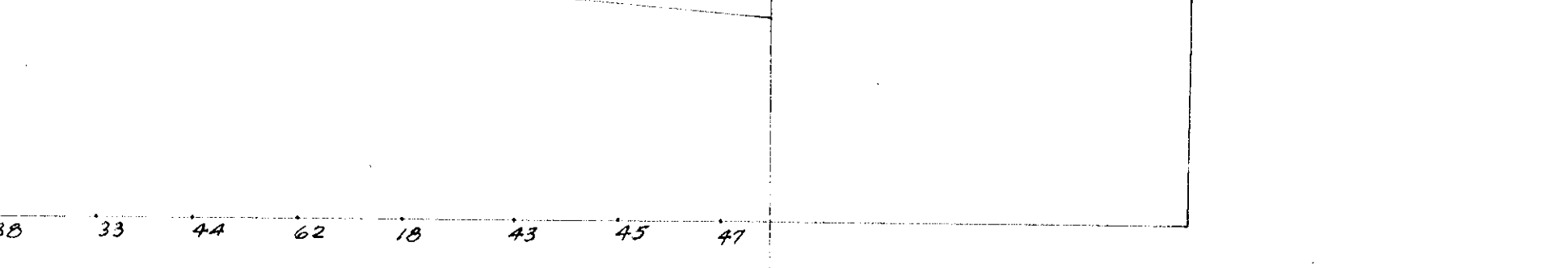
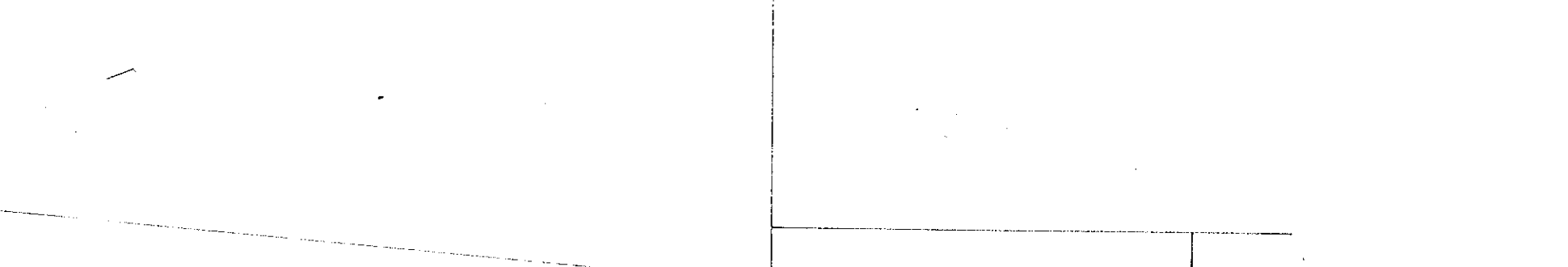
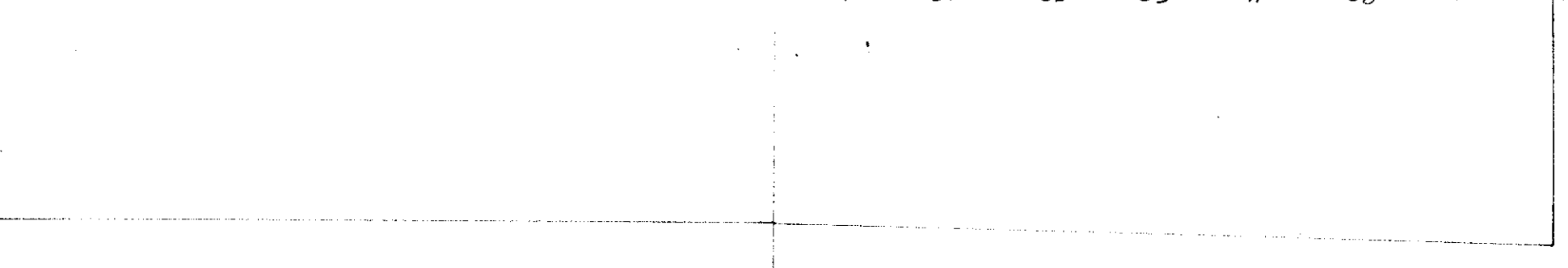
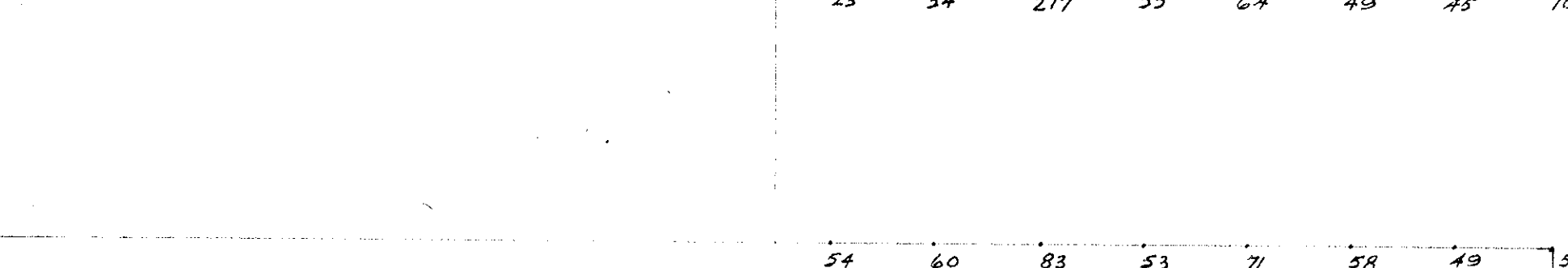
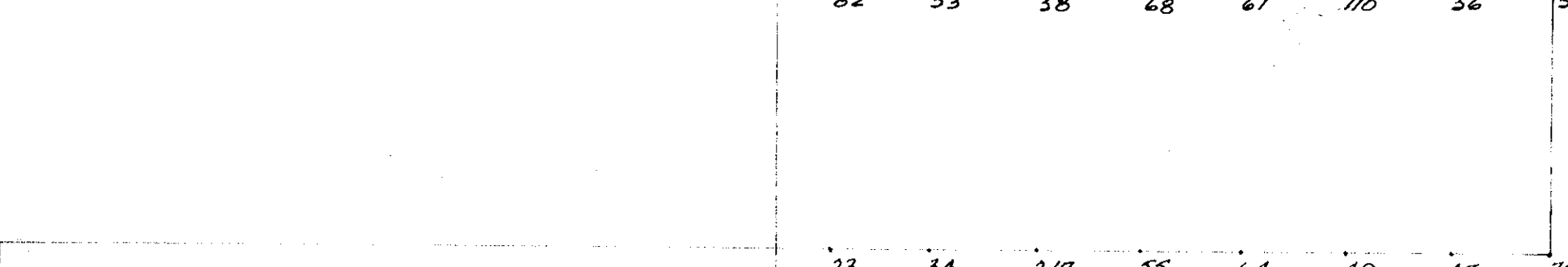
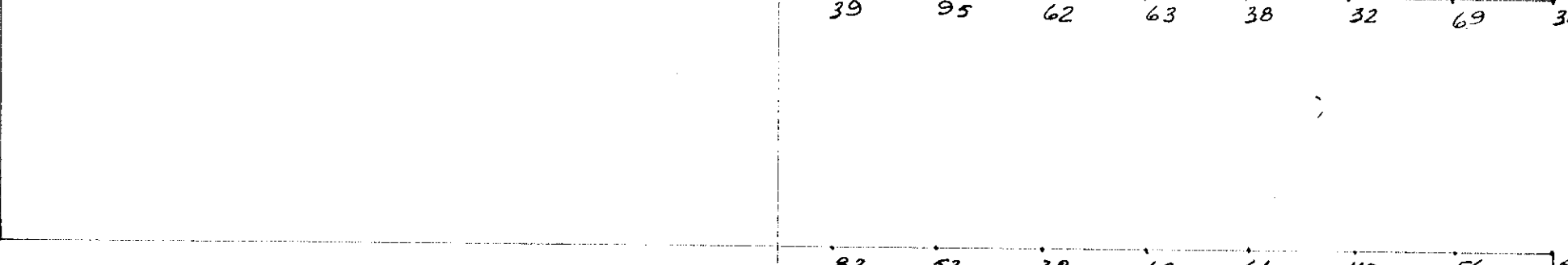
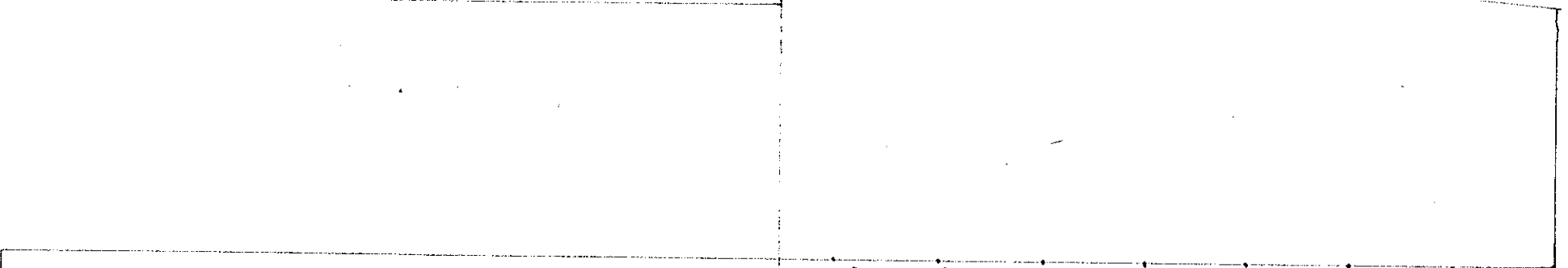
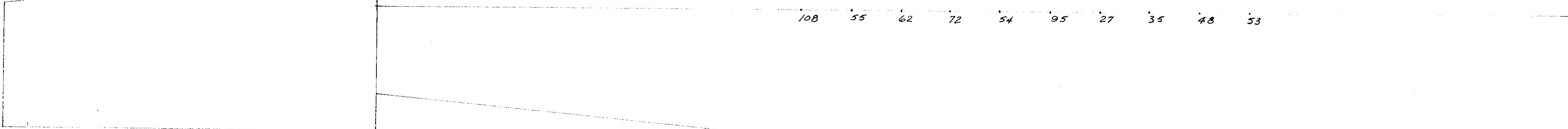
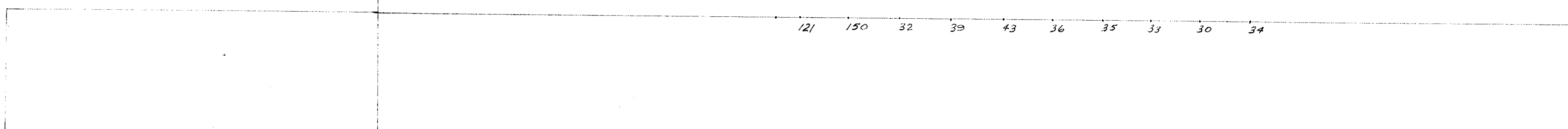
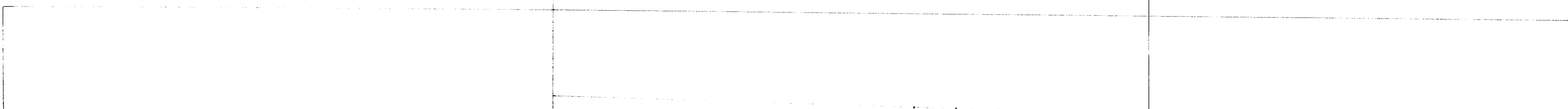
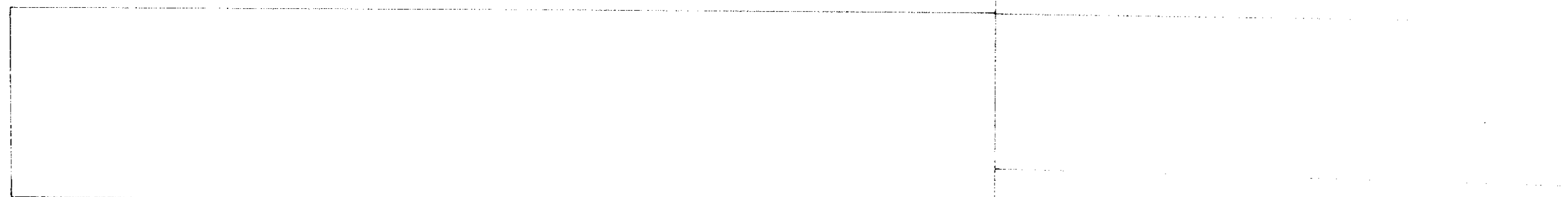
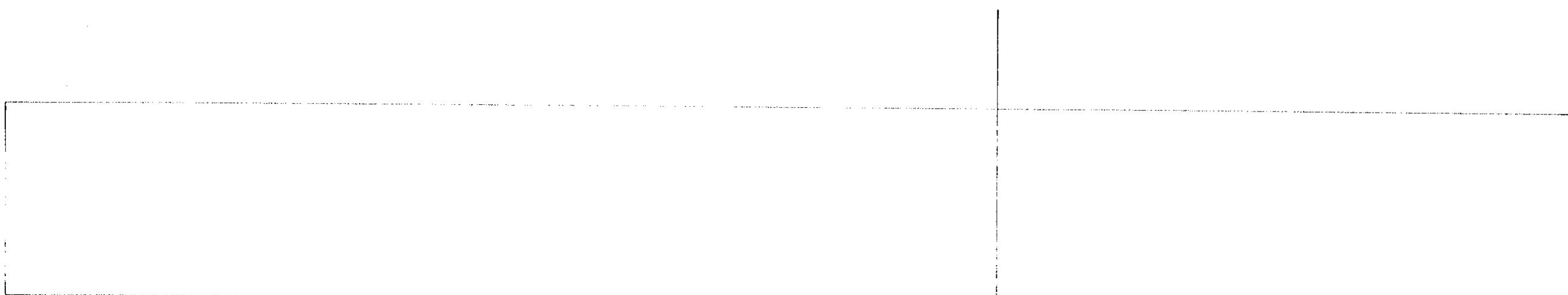
100+00N

75+00N

50+00N

25+00N

0+00



ELC GEOCHEMICAL SURVEY
 BUD GROUP MR. L. OLHEISER ASPEN GROVE, B.C.
 MAR 1971 SCALE: 1"=300' DWG. NO. EM-70-116-G
 GEOCHEM ANALYSIS
 APPROVED *[Signature]*

NOTE:-
 SURVEY LINES
 50 70 PARTS PER MILLION CU

2881 M-2