

GEOPHYSICAL REPORT

Induced Polarization Survey on the Ultima 1-11;
Good Luck 0-3; Ultima East 1-8; Creek 1-4; and
Creek 1 Fraction Mineral Claims.

Barriere Area: 51°20', 119°50'

82-M/15

OF BARRIERE LAKE MINERALS LTD
Craigmont Mines Limited

R.W.Cannon, B.A.Sc.,
P.Eng.

June 1972.

82M/5W

3716

3716

Department of Mines and Petroleum Resources ASSESSMENT REPORT No. 3716 MAP

GEOPHYSICAL REPORT

Induced Polarization Survey on the Ultima 1-11;
Good Luck 0-3; Ultima East 1-8; Creek 1-4; and
Creek 1 Fraction Mineral Claims.

of Barriere Lake Minerals Ltd.

Barriere Area: 51°20', 119°50'
82 M/5

by
Craigmont Mines Ltd.

R.W. Cannon, B.A.Sc.,
P.Eng.

June 1972.

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ILLUSTRATIONS

#1 - 11	I.P. Sections	At end of Report.
#12	Claim Map showing Grid	In Pocket
	Induced Polarization Results	
#13	Resistivity N = 1.	In Pocket
#14	Resistivity N = 2.	" "
#15	P.F.E. N = 1	" "
#16	P.F.E. N = 2	" "

THE METHOD OF FIELD OPERATION

In the field procedure, measurements on the surface were made in a way that allows the effects of lateral changes in the properties of the ground to be separated from the effects of vertical changes in the properties of the ground. Current was applied to the ground at two points (X) feet apart. The potentials were measured at two other points (X) feet apart, in line with the current electrodes. The distance between the nearest current and potential electrodes was an integer number (N) times the basic distance (X).

The measurements were made along surveyed lines, with a constant distance (NX) between the nearest current and potential electrodes. Measurements were taken with values of $N = 1, 2$ and 3 for $X = 200'$.

In plotting the results, the values of the apparent resistivity, percent frequency effect and the apparent metal factor measured for each set of electrode positions were plotted at the intersection of grid lines, one from the center point of the current electrodes and the other from the center point of the potential electrodes. The resistivity values were plotted above the line and the percent frequency effect and metal factors below. The lateral displacement of a given value is determined by the location along the survey line of the center point between the current and potential electrodes. The distance of the value from the line is determined by the distance (NX) between the current and potential electrodes when the measurement was made. The separation between sender and receiver electrodes is only one factor

which determines the depth to which the ground is being sampled in any particular measurement. The plotted results were contoured using a logarithmic contour interval 1, 1.5, 2, 3, 5, 7.5 and 10.

INDUCED POLARIZATION SURVEY ON THE HARPER CREEK PROPERTY,
BARRIERE AREA, B.C.

INTRODUCTION

An Induced Polarization survey was carried out on the Harper Creek property for Craigmont Mines Ltd. during the first two weeks of June. This survey covered a total of 8.33 miles of flagged line.

The lines were at 400-foot intervals with stations marked every 100 feet.

The I.P. survey was carried out using McPhar frequency effect equipment (Models P-654 and P-660) employing frequencies of 0.31 and 5.0 cycles per second.

LOCATION AND ACCESS

The property is located 20 miles East of Barriere, B.C. and covers an area at the north-west side of North Barriere Lake. One main road cuts diagonally across the property and allows access by means of a four-wheel drive vehicle.

PROPERTY

The property consists of 28 contiguous claims and fractions with the following names:

<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Ultima 1, 3: (H)	10709,10601	July 13, 1972
Ultima 2: (H)	10600	July 14, 1972
Ultima 4-8: (H)	10710, 10602-5	July 15, 1972
Ultima 9-11: (H)	15266-68	July 11, 1972

<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Good Luck 0-3: (H)	13143-46	July 25, 1973
Ultima East 1-8: (K)	37722-29	August 9, 1972
Creek 1-3: (K)	15684-6	August 23, 1972
Creek 4: (K)	38063	August 22, 1972
Creek 1 Fract.: (K)	38064	August 22, 1972.

PREVIOUS WORK

Two known mineralized areas on the property had been previously tested both by geophysics and diamond drilling. The previous geophysics, which consisted of a magnetometer survey and a J.E.M. survey, revealed a weaker anomaly between the two tested zones. The object of the present survey was to test this weaker anomaly.

PRESENTATION OF RESULTS

The Induced Polarization and Resistivity results are shown on the enclosed data plots in the manner described in the notes preceding this report. The eleven lines were run using an electrode spread of 200 feet and dipole separations of $N = 1, 2$ and 3 . The Percent Frequency Effect results shown in parenthesis are noisy readings. Computer plotted plan maps are enclosed in the pocket at the end of the report.

DISCUSSION OF RESULTS

The survey 3 main anomalous zones which are located as follows:-

Zone 1. Line 12+00N 15+00W to 16+00W
Line 16+00N 14+00W to 19+00W.

Zone 2. Line 4+00N 5+00W to 12+00W
Line 8+00N 2+00E to 10+00W
Line 12+00N 7+00E to 0+00
Line 16+00N 6+00E to 4+00E.

Zone 3. Detected on all lines but 4+00N and 44+00N.
This zone trends WNW from 13+00E to 20+00E
on Line 8+00N to 2+00E to 8+00W on Line
40+00N.

Zone 1 is an E.M. anomaly which has already been drilled
as has the Eastern half of Zone 3. Zone 2 is a previously untested
zone which warrants further investigation. All the anomalous zones
are relatively near surface as can be seen by the resistivity and
P.F.E. responses. The western half of Zone 3 gave the strongest
P.F.E.'s and warrants testing by means of diamond drilling. This
western half may represent a zone which is a separate entity and not
connected to the eastern half.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the I.P. survey detected 3 anomalous
zones of which 2 warrant further work. I would recommend that Zone 2
and the western half of Zone 3 be tested by means of diamond drilling.

RWC/mm

R. W. Cannon, P. Eng.
R.W. Cannon, P. Eng.

CANEX AERIAL EXPLORATION LTD.

DIVISION OF CANADIAN EXPLORATION LIMITED

700 BURRARD BUILDING

VANCOUVER 5, B. C. CANADA

BREAKDOWN OF EXPENDITURES ON I.P. SURVEY

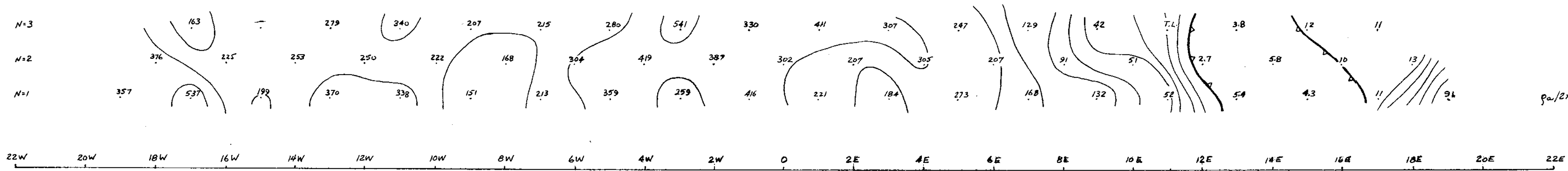
Labour Costs and mandays	I.P.Operator	Labour Cost
R. Cannon	10	
J.Thornton	10	
D.Huston		10 x 40 = \$400.00
R.Faulkner	<u> </u>	<u>10</u> x 30 = <u>300.00</u>
	20 days	20 days \$700.00

I.P. Operator man-days = 20
Labour man-days = 20
40 man-days.

Rental of I.P. Equipment + 2 operators.

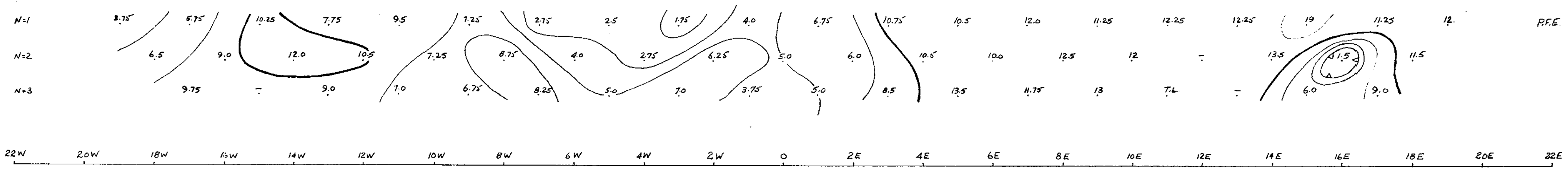
9 operating days @ \$265/day	\$2,385.00
1 travelling day @ \$132.50/day	132.50
Transportation costs \$500/month = 10/30 x \$500	166.66
Room and Board Costs @ \$12/day/man x 40	480.00
Compensation, Administration and Supervision @ \$7/day/man x 40	280.00
Report writing and drafting costs	<u>200.00</u>
Total cost of I.P. Survey	<u>\$4,344.16</u>





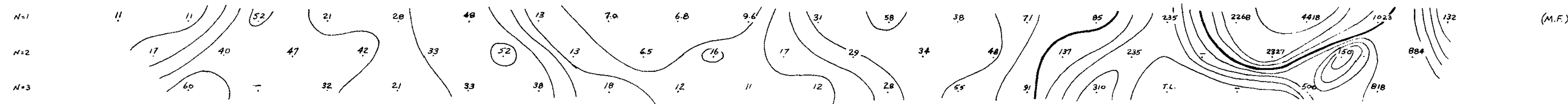
Pa/2x

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Mines and Petroleum Resources
ASSESSMENT REPORT
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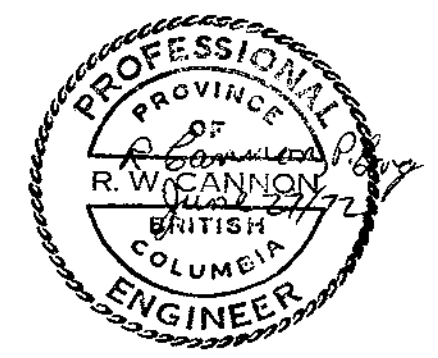


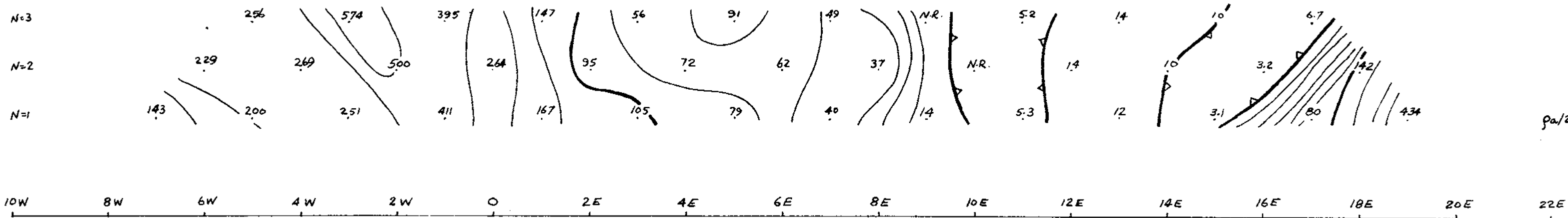
P.F.E.

HARPER CREEK
LINE 28+00 N
DIPOLE-DIPOLE CONFIGURATION
FREQUENCIES: 0.31 + 5.0 cps.
X = 200'
CANEX AERIAL EXPLORATION LTD.
DRAWN BY: J.M. THORNTON
DATE: JUNE 1972



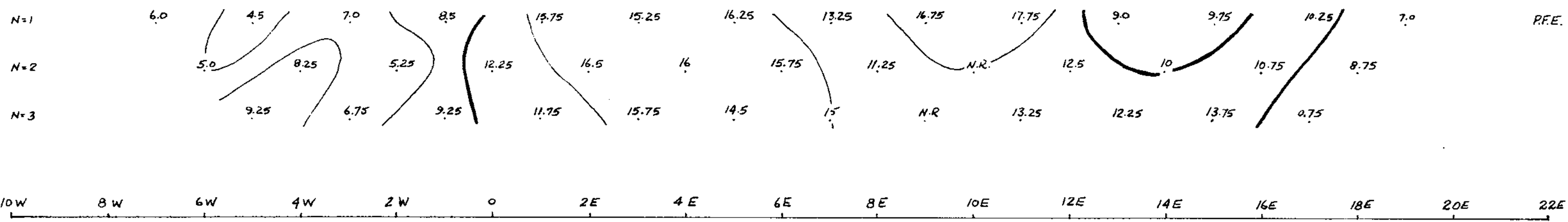
(M.F.)a





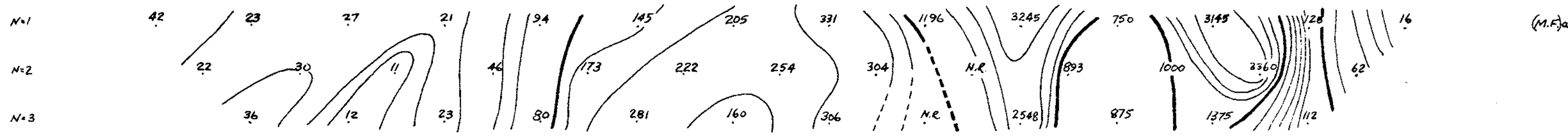
pa/2K

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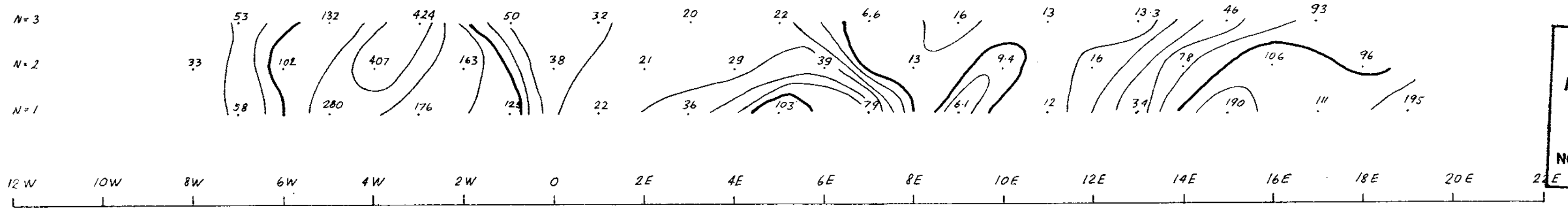
R.F.E.

HARPER CREEK
LINE: 32+00 N
PROPOSED RECONSTRUCTION
FROM N.E.S. 0.31 + 1/4 SECTION
1/200'
CENEX APRIAL EXPLORATION LTD.
DRAWN BY: J.M. THORNTON
DATE: JUNE, 1972

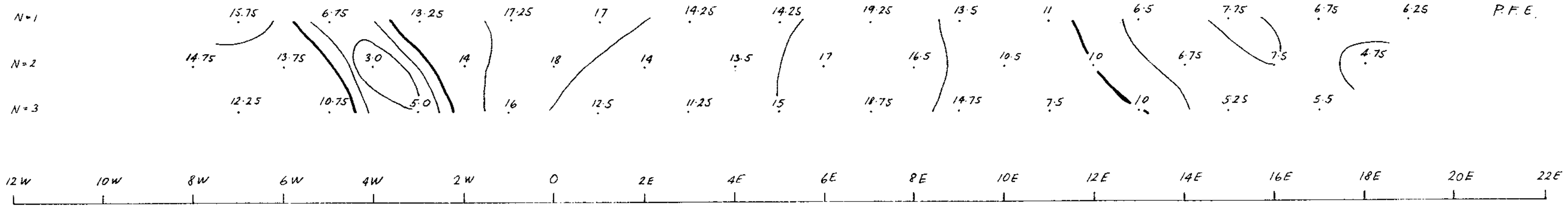


(M.F.)a

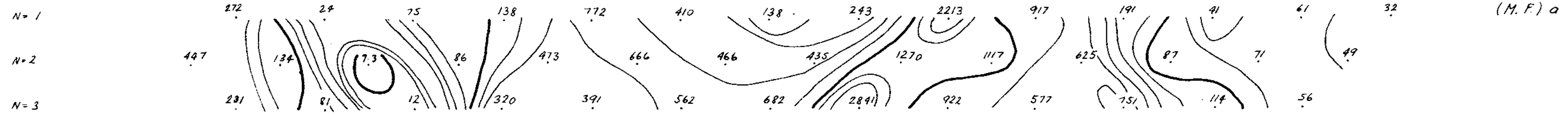




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 pa/27
 ASSESSMENT REPORT
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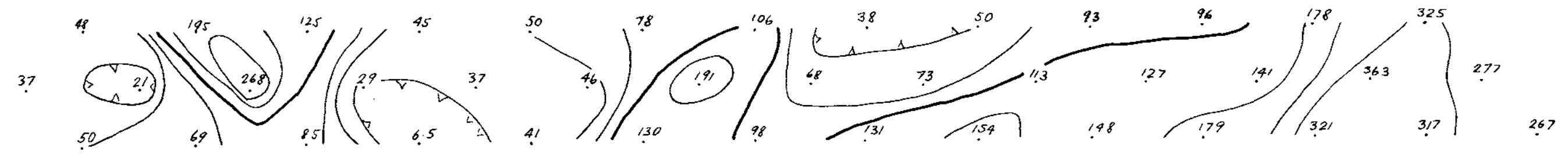


HARPER CREEK
 LINE 36+00N
 DISTRICT OF COLUMBIA
 LOCATION: 031 + 50' 00"
 200'
 CANEX AERIAL EXPLORATION LTD.
 DRAWN BY: D.R.H.
 DATE: JUNE, 1972.

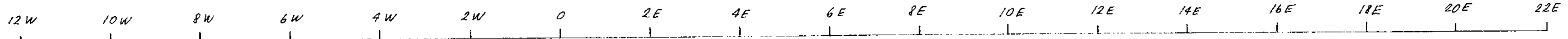
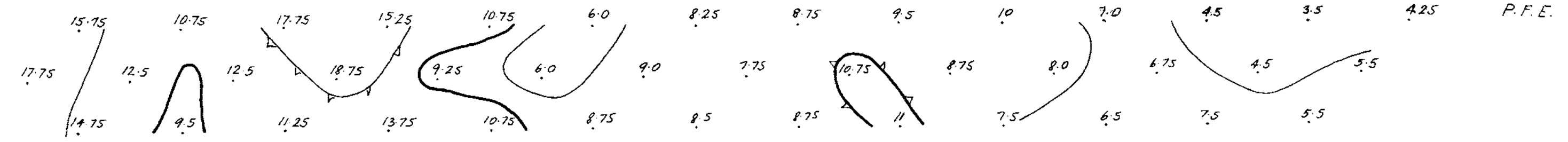


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 ACCESSORY REPORT
 NO. **3716** MAP #10

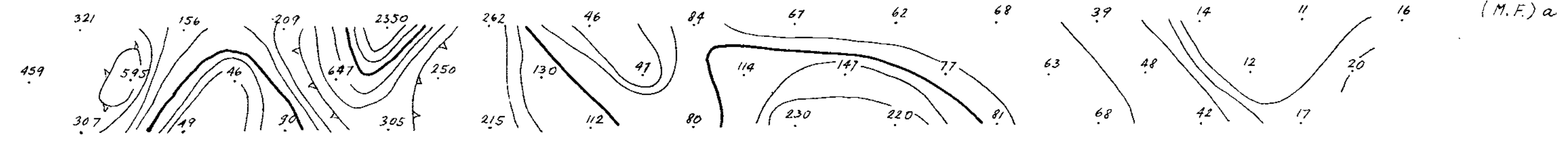
N=3
 N=2
 N=1



N=1
 N=2
 N=3

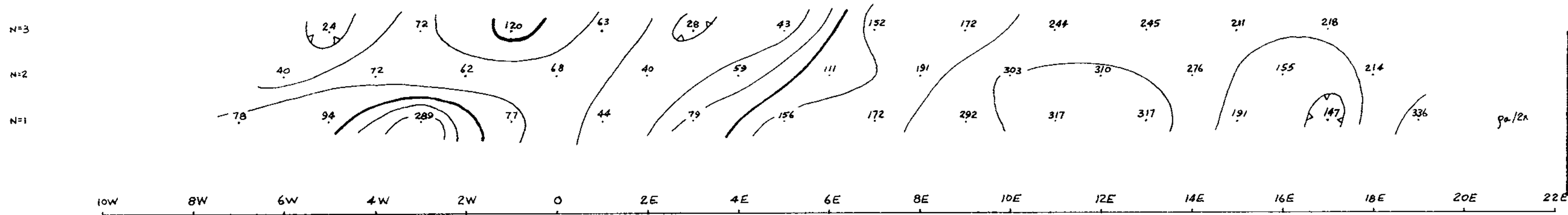


N=1
 N=2
 N=3

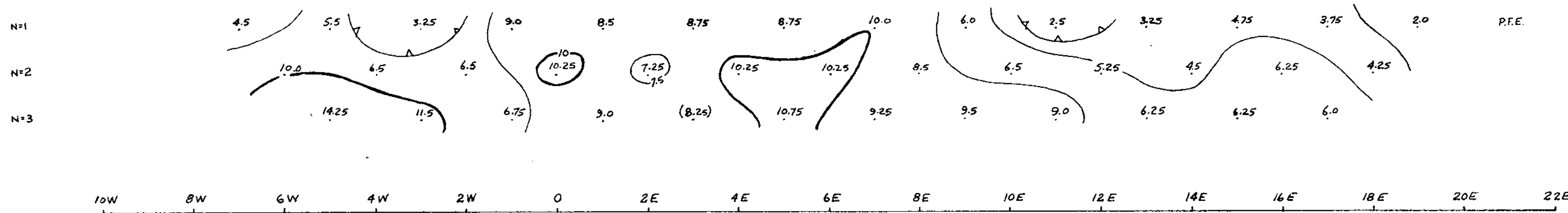


HARPER CREEK
 40x100 N
 1:50,000
 200'
 CANON AERIAL PHOTOGRAPH LTD.
 LEAFLET R.W.C.
 DATE: JUNE, 1972.

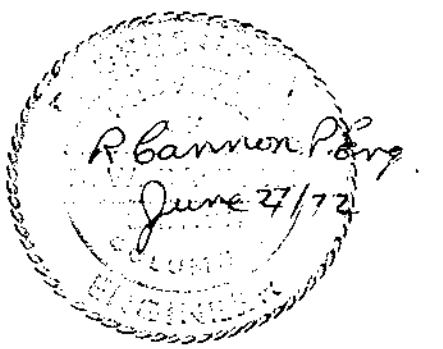
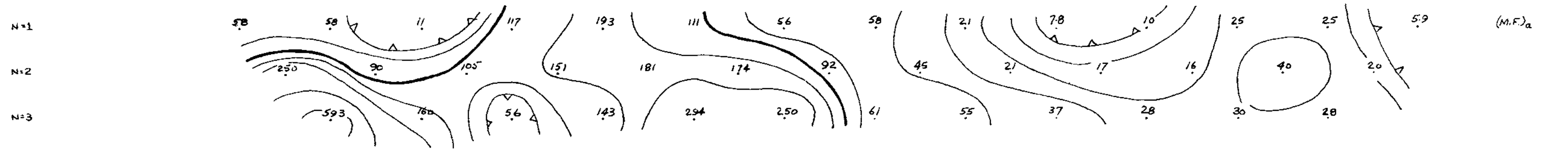


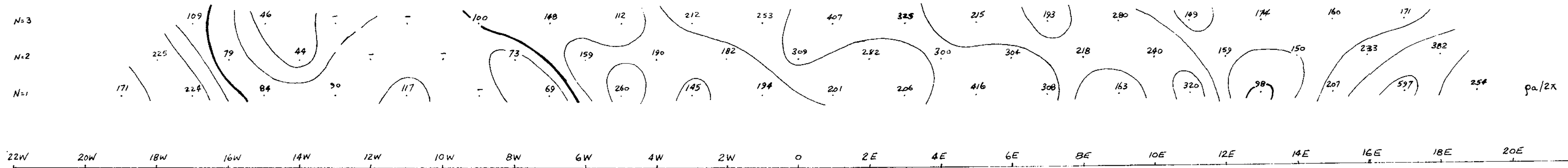


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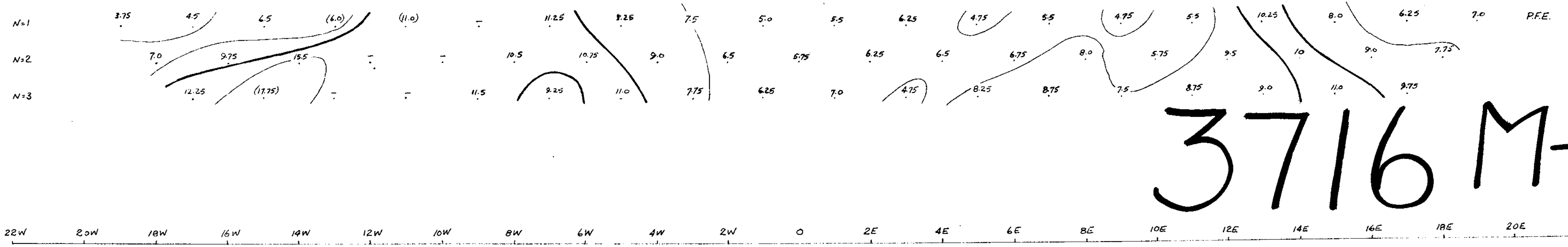


HARPER CREEK
LINE 44+00 N
DIP 1:10
SCALE 1:50,000
7 - 200'
CREEK ASSESSMENT EXPLORATION LTD.
DRAWN BY: R. W. CANNON
DATE: JUNE 1972



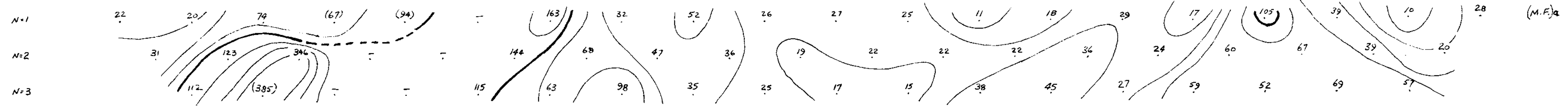


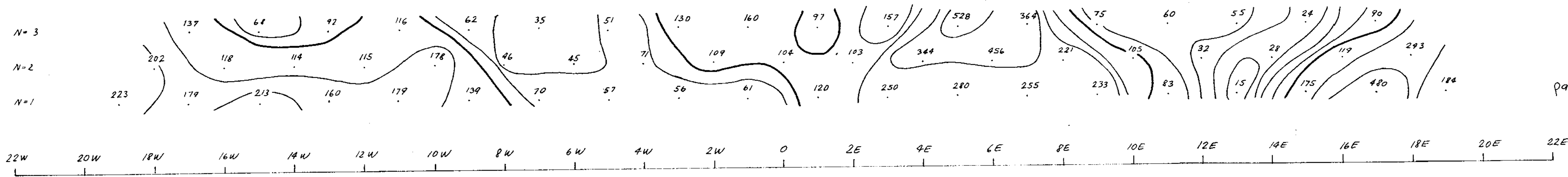
Department of
Mines and Petroleum Resources
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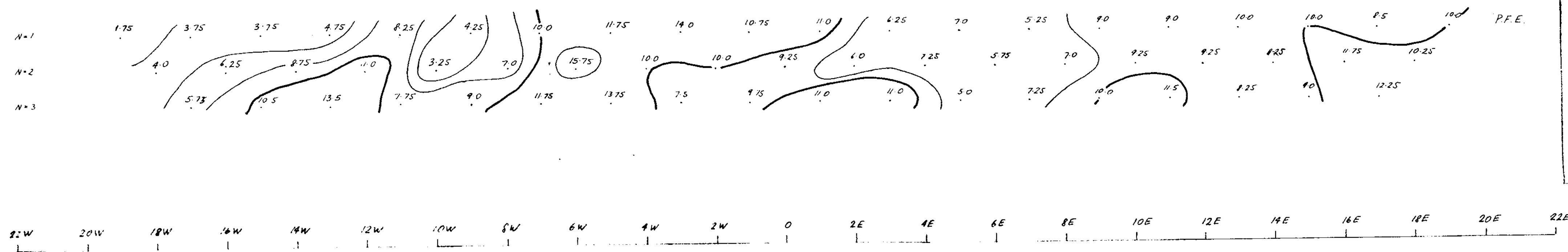
HARPER CREEK
4+00 N
200'
J.M. THORNTON
JUNE 1972

3716 M-1

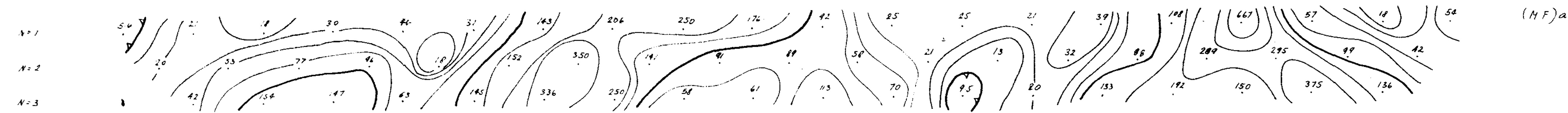


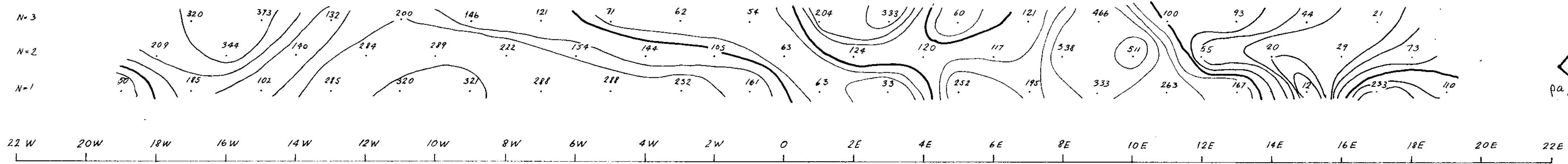


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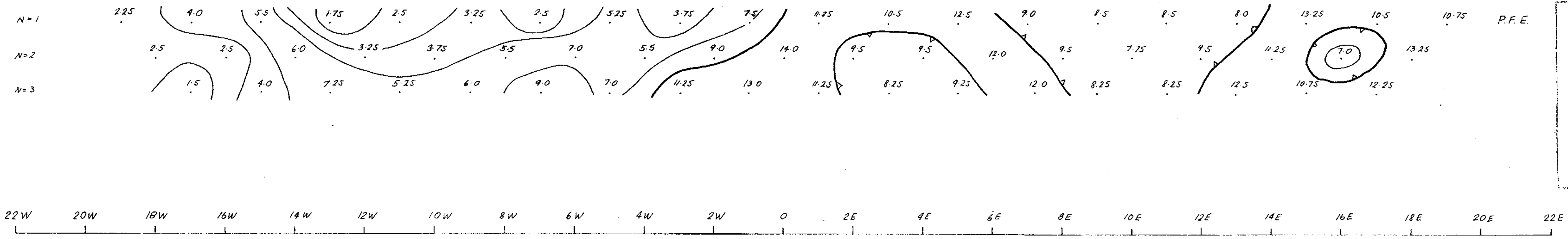


HARPER CREEK
LINE: 8+00N
SCALE: 1:50,000
X - 200
CANEX AERIAL EXPLORATION LTD.
DRAWN BY: D.R.H.
DATE: JUNE, 1972.

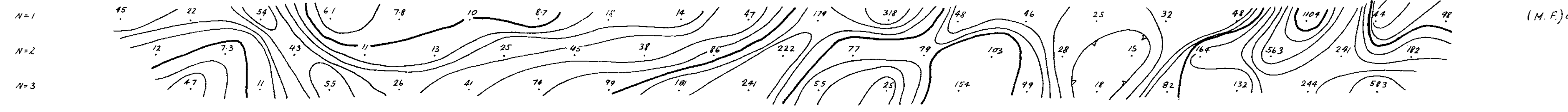




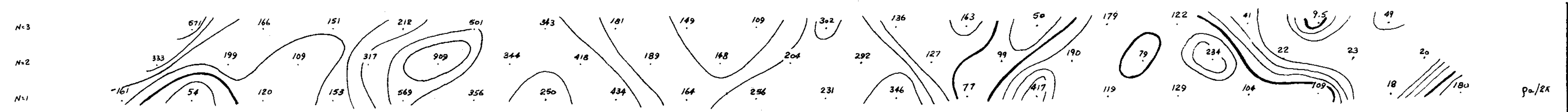
Department of
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ASSESSMENT REPORT
NO. 3716 MAP #3
pa/24



HARPER CREEK
ELEV. 12+00 N
SCALE: 1:50,000
PROJ. 1950 U.S. G.S.
X = 200
CANEX AERIAL EXPLORATION LTD.
DRAWN BY: D.R.H.
DATE: JUNE, 1972.

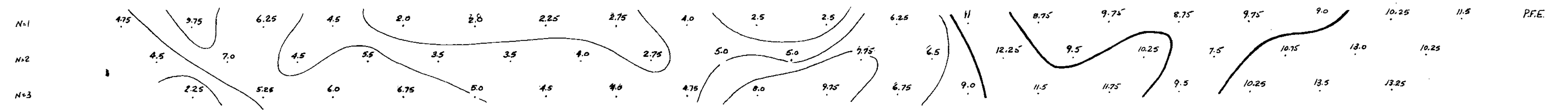


(M.F.)
PROFESSIONAL
ENGINEER
R.W. CANNON
BRITISH COLUMBIA
27772



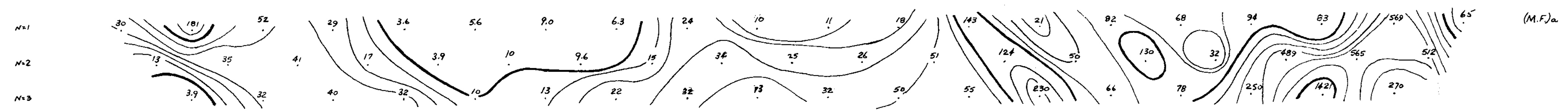
Department of
Mines and Petroleum Resources
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22W 20W 18W 16W 14W 12W 10W 8W 6W 4W 2W 0 2E 4E 6E 8E 10E 12E 14E 16E 18E 20E 22E



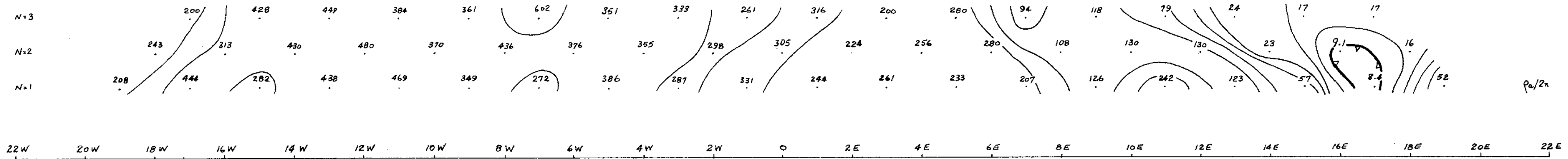
HARPER CREEK
LINE 16+00 N
FIELD ORBIT CONFIGURATION
FIELD SIZE: 0.31 x 0.15 (sq. km)
X 200'
CANEX AERIAL EXPLORATION LTD.
DRAWN BY: J.M. THORNTON
DATE: JUNE, 1971

22W 20W 18W 16W 14W 12W 10W 8W 6W 4W 2W 0 2E 4E 6E 8E 10E 12E 14E 16E 18E 20E 22E

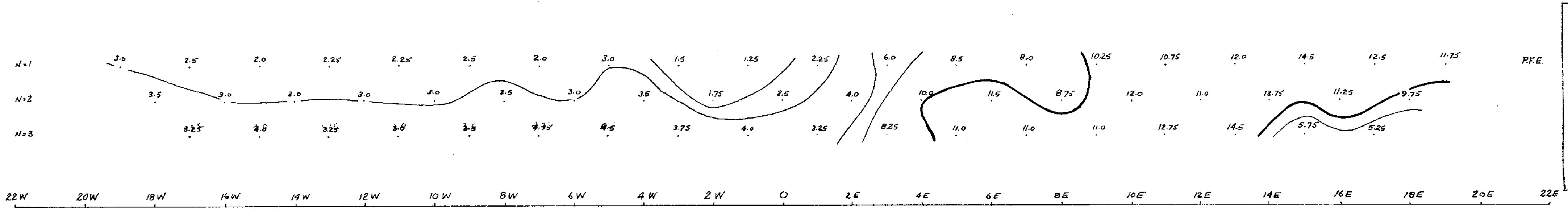


(M.F.)_a

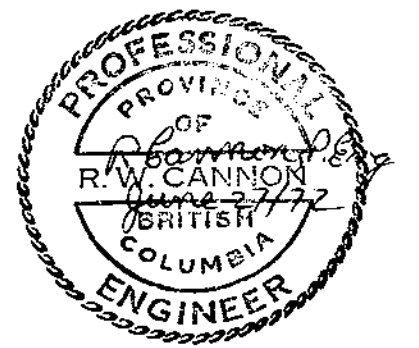
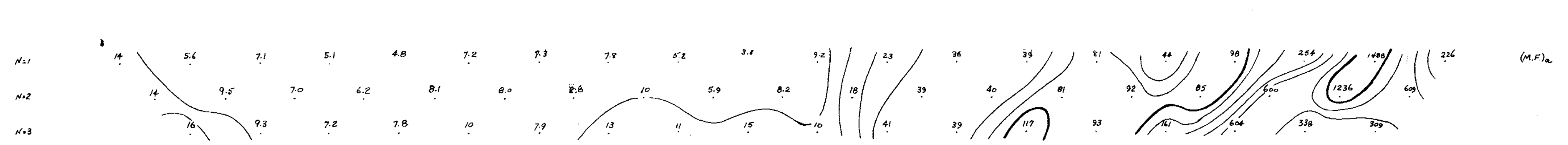


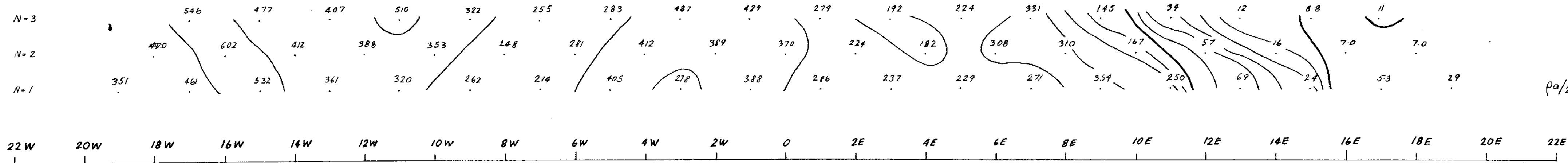


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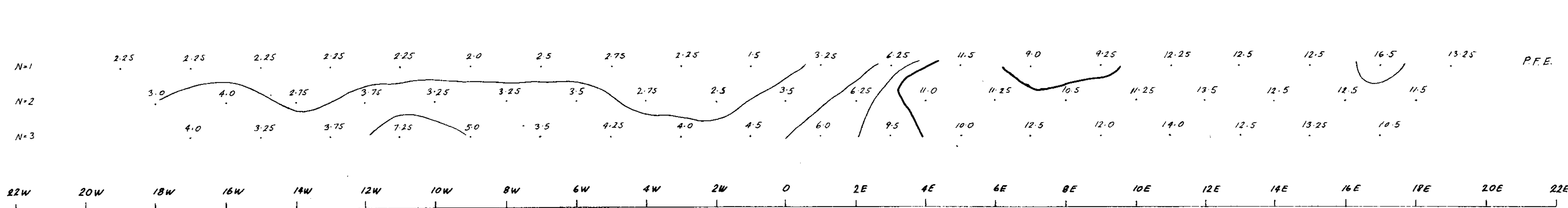


HARPER CREEK
 LINE: 20+00 N
 DIPOLE - INFLECT CONFIGURATION
 FREQUENCIES: 0.31 + 5.0 cps.
 X = 200'
 CANEX AERIAL EXPLORATION LTD.
 DRAWN BY: D. R. HUSTON
 DATE: JUNE 1972

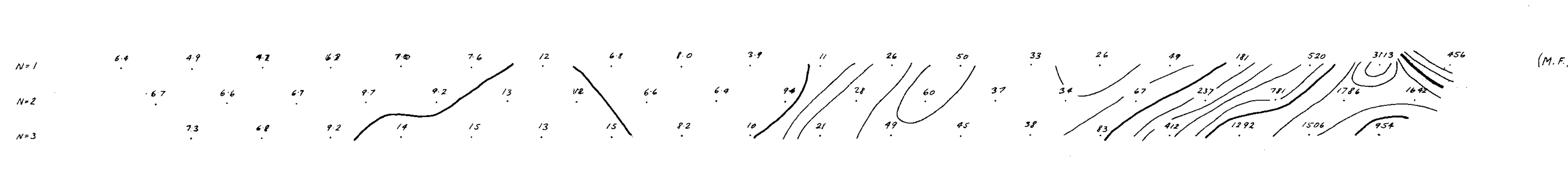




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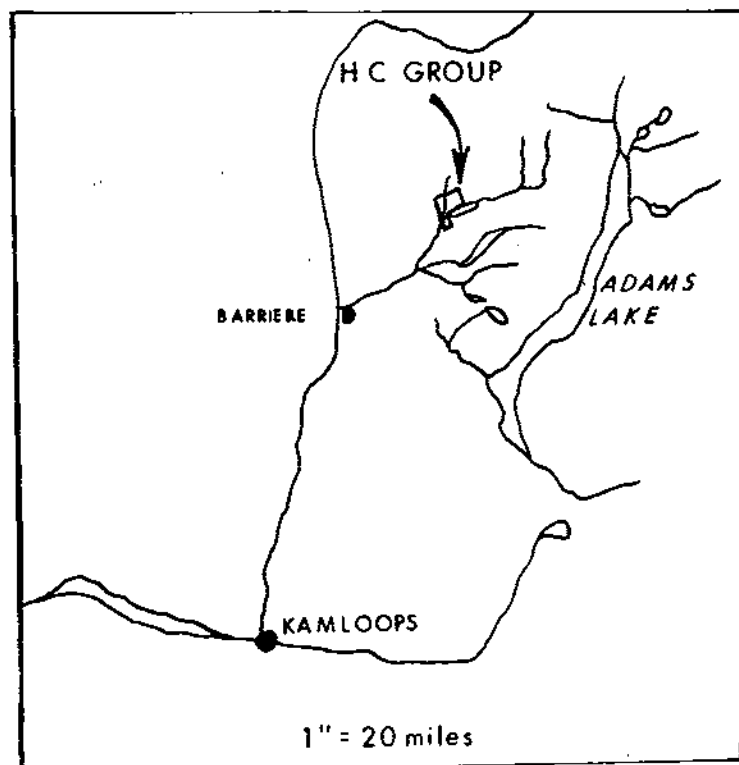


HARPER CREEK
LINE: 24+00N
DIPOLY-DIPOLY CONFIGURATION
ELEVATION RES: 0.31 + 51.0 ft
X: 200
CANEX AERIAL EXPLORATION LTD.
DRAWN BY: D. R. H.
DATE: JUNE, 1972



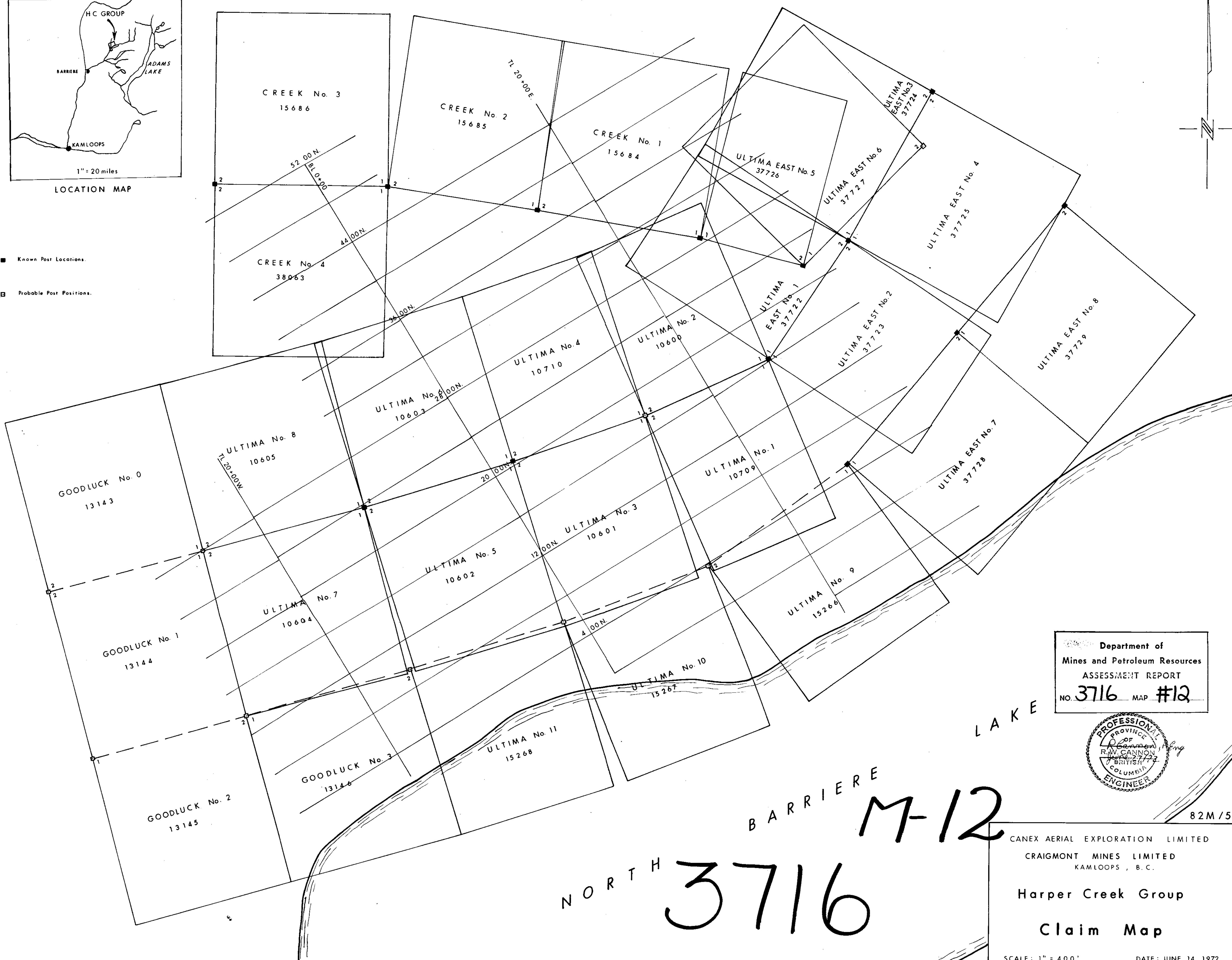
(M.F.) a



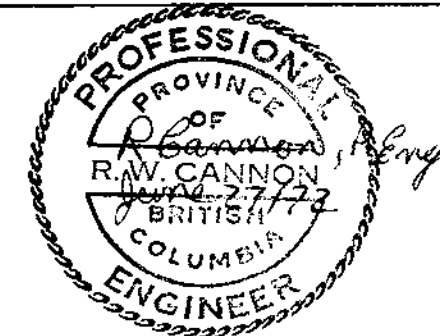


LOCATION MAP

- Known Post Locations.
- Probable Post Positions.



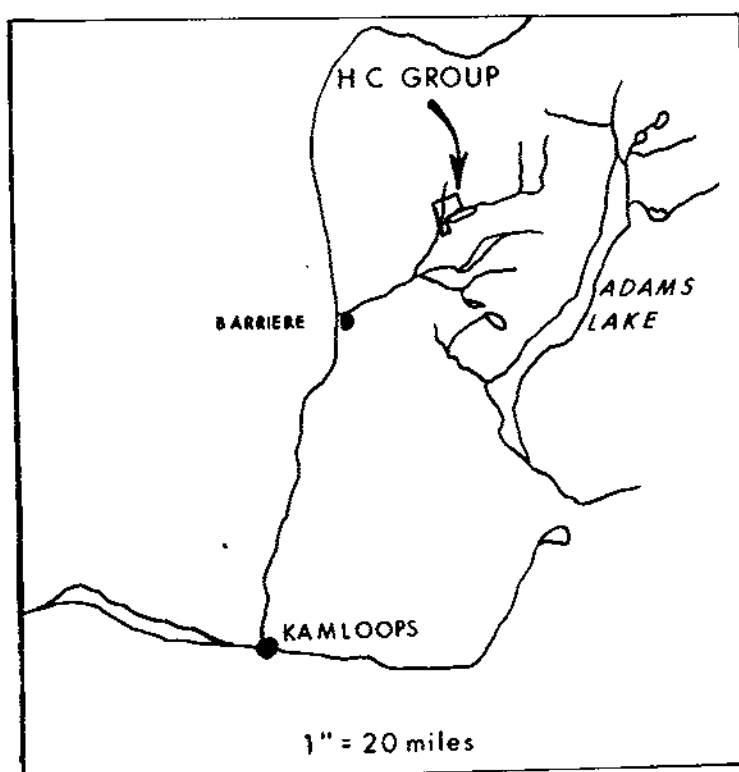
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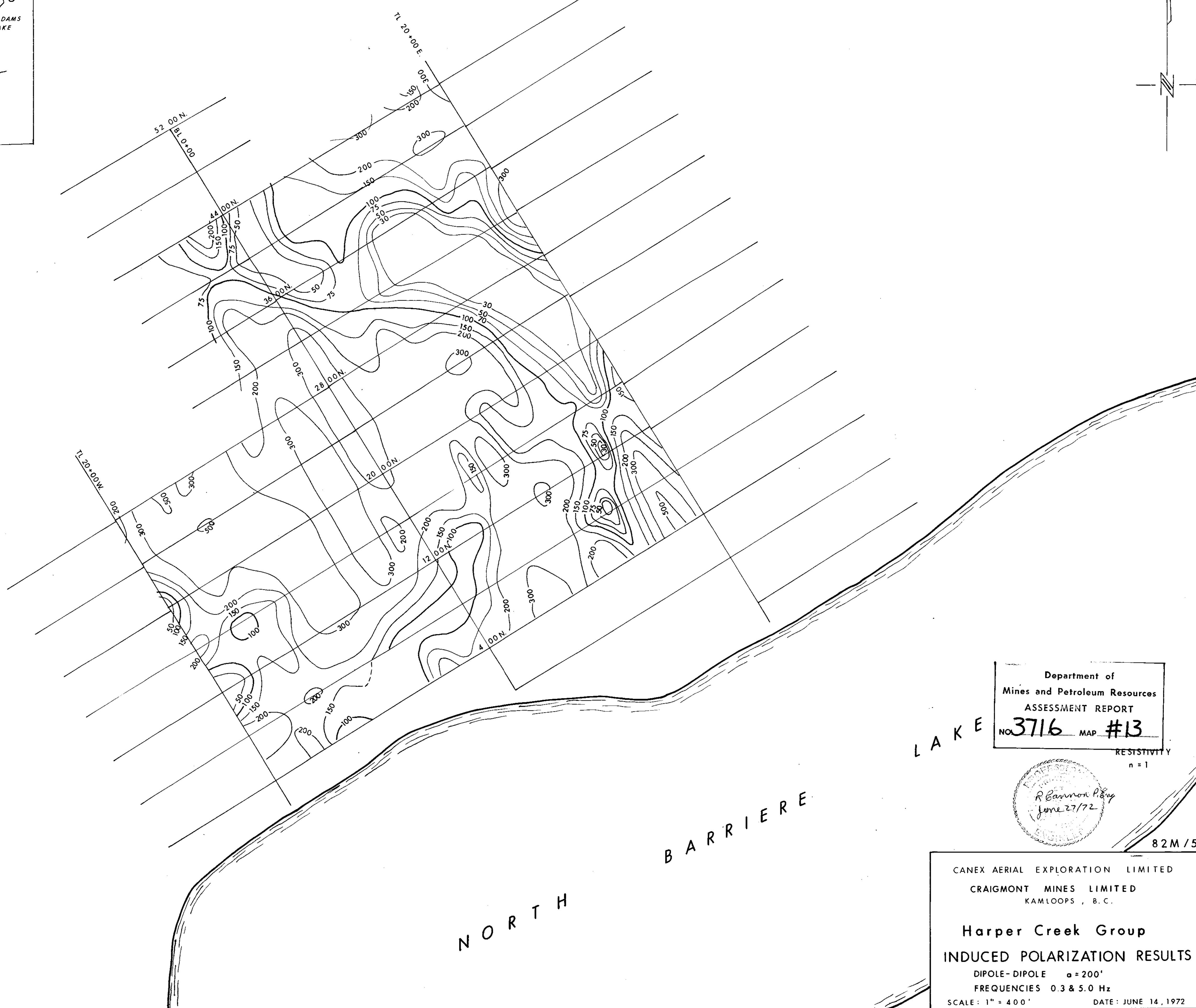
82M/5

NORTH 3716
BARRIER M-12
LAKE

CANEX AERIAL EXPLORATION LIMITED
CRAIGMONT MINES LIMITED
KAMLOOPS, B.C.
Harper Creek Group
Claim Map



LOCATION MAP



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RESISTIVITY
n=1

R. Cannon P. Eng.
June 27/72

82M/5

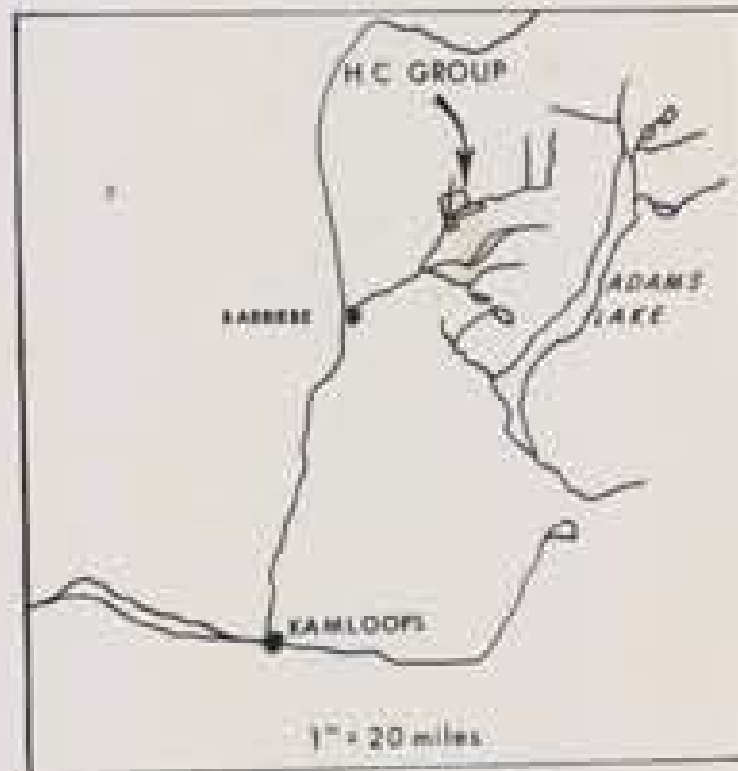
CANEX AERIAL EXPLORATION LIMITED
CRAIGMONT MINES LIMITED
KAMLOOPS, B.C.

Harper Creek Group
INDUCED POLARIZATION RESULTS
DIPOLE-DIPOLE $a = 200'$
FREQUENCIES 0.3 & 5.0 Hz
SCALE: 1" = 400' DATE: JUNE 14, 1972

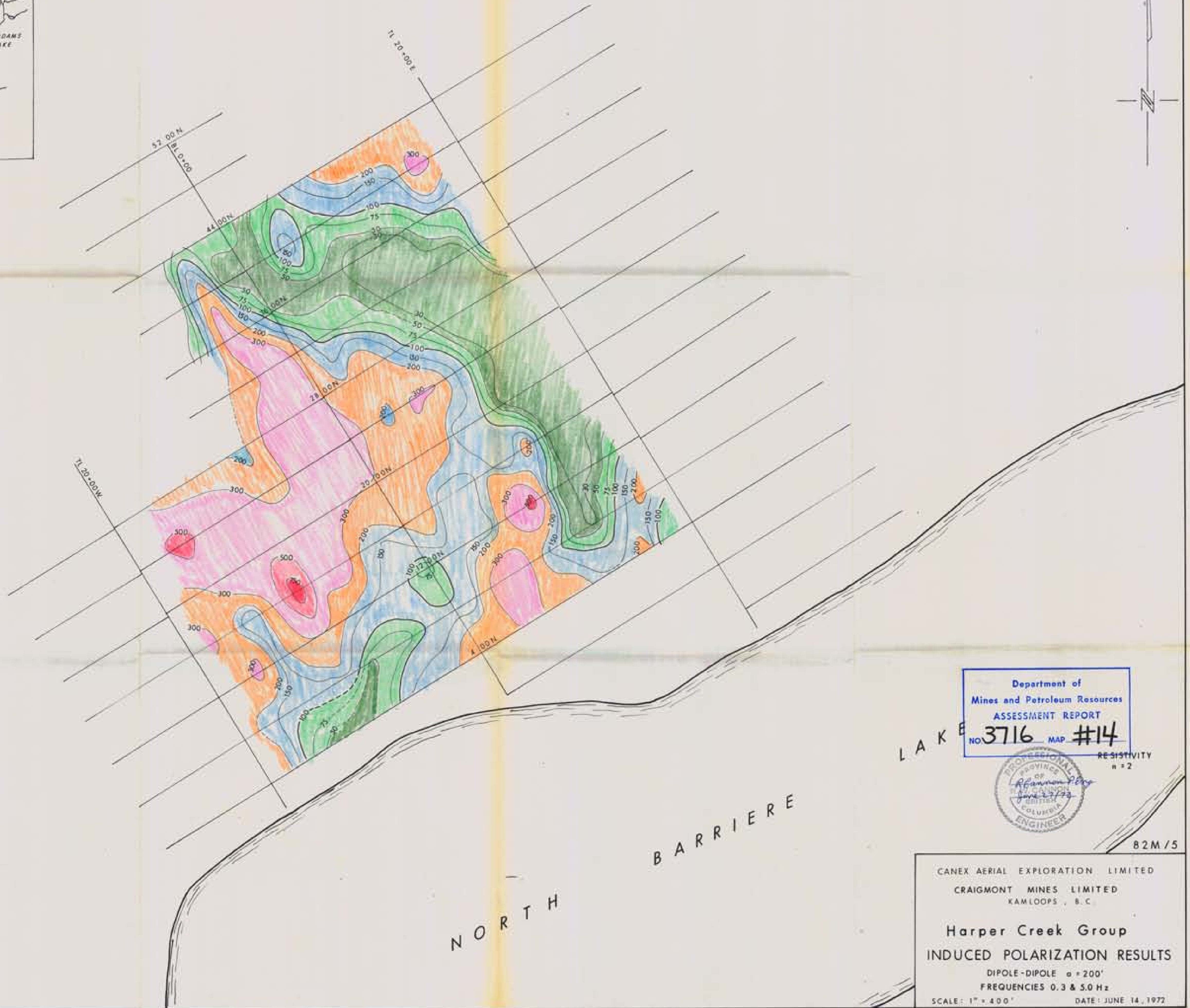
L A K E

B A R R I E R E

N O R T H



LOCATION MAP



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RESISTIVITY
n = 2

82M/5

CANEX AERIAL EXPLORATION LIMITED
CRAIGMONT MINES LIMITED
KAMLOOPS, B.C.

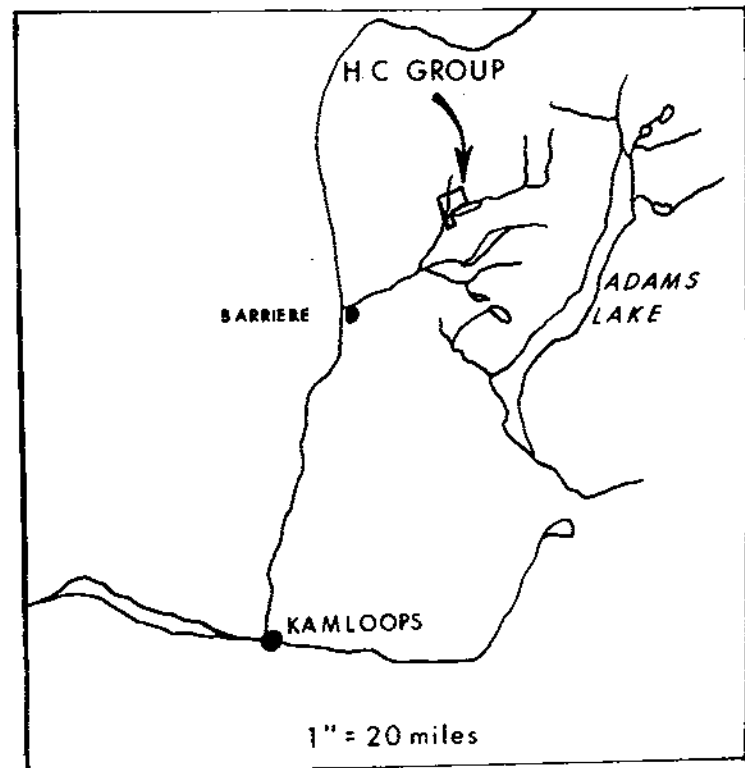
Harper Creek Group
INDUCED POLARIZATION RESULTS

DIPOLE-DIPOLE $a = 200'$
FREQUENCIES 0.3 & 5.0 Hz

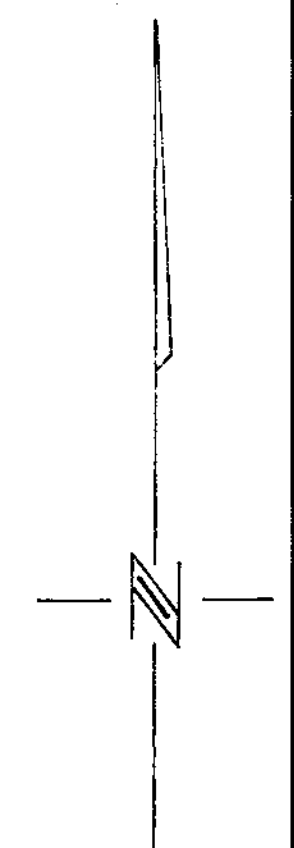
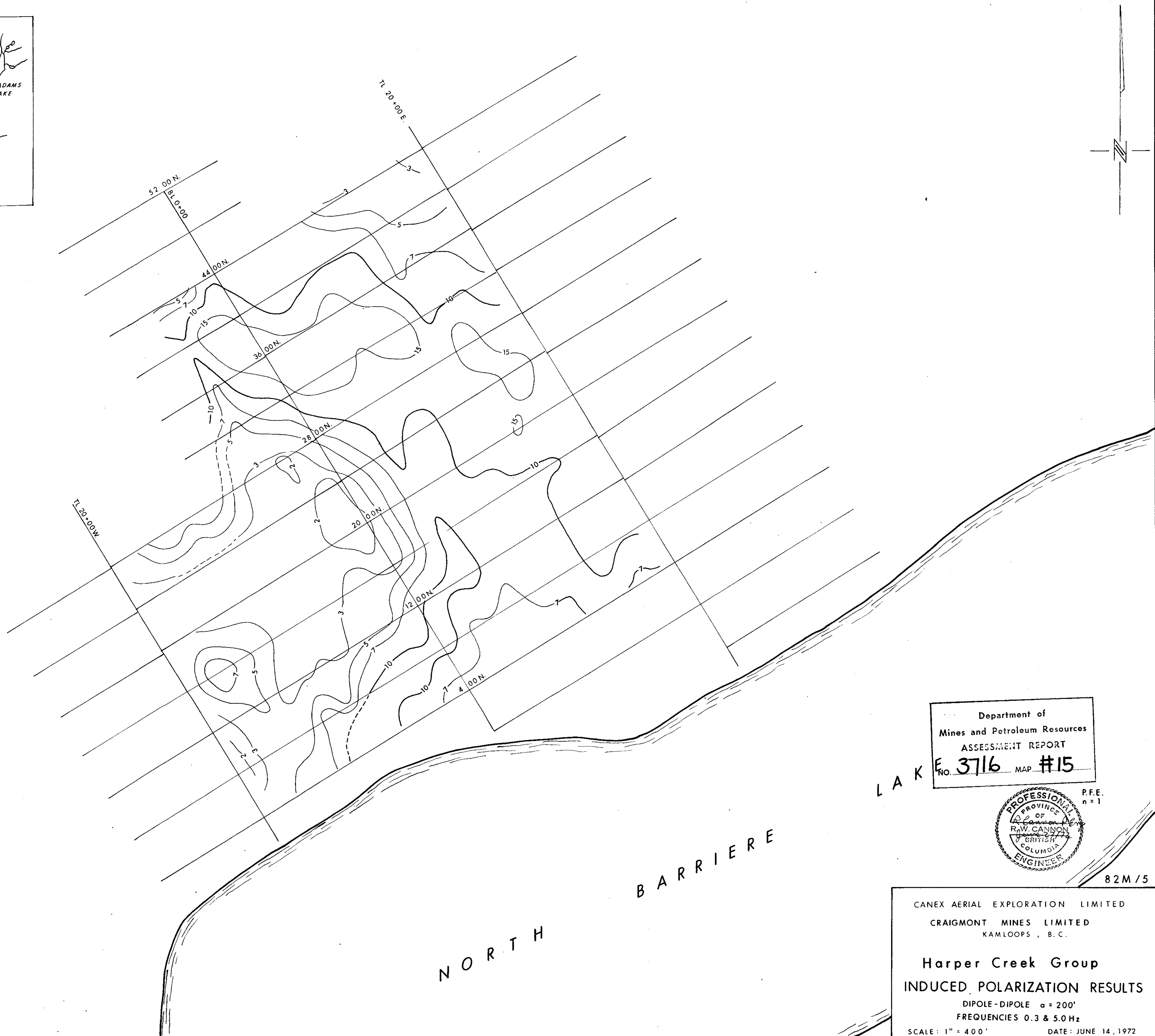
SCALE: 1" = 400' DATE: JUNE 14, 1972

NORTH

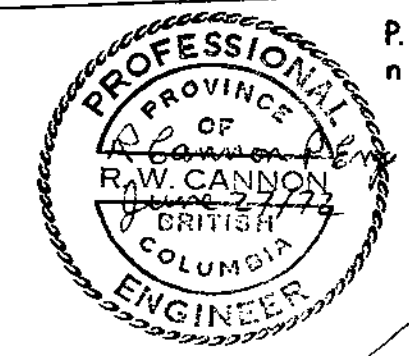
LAKES BARRIERE



LOCATION MAP

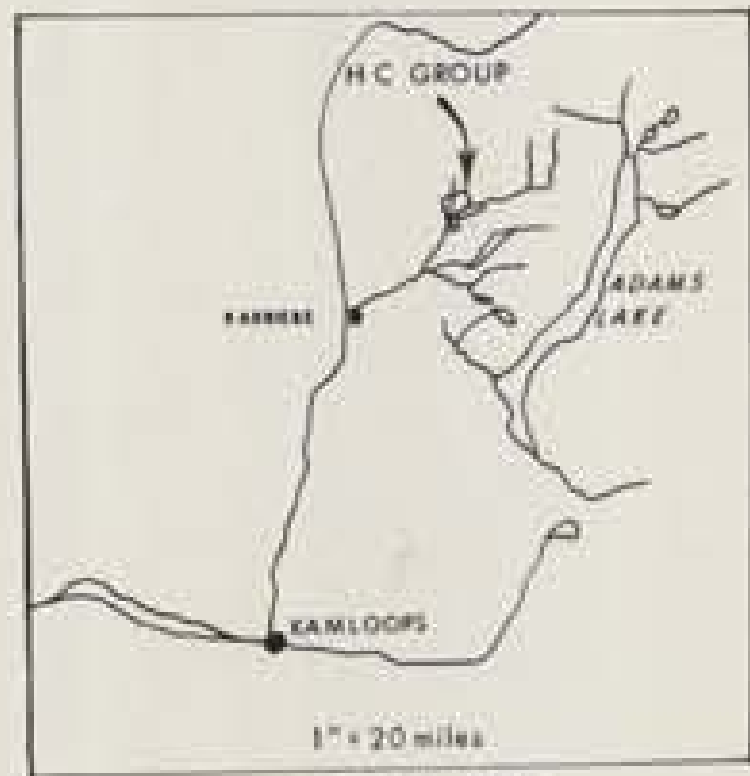


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P.F.E.
n=1

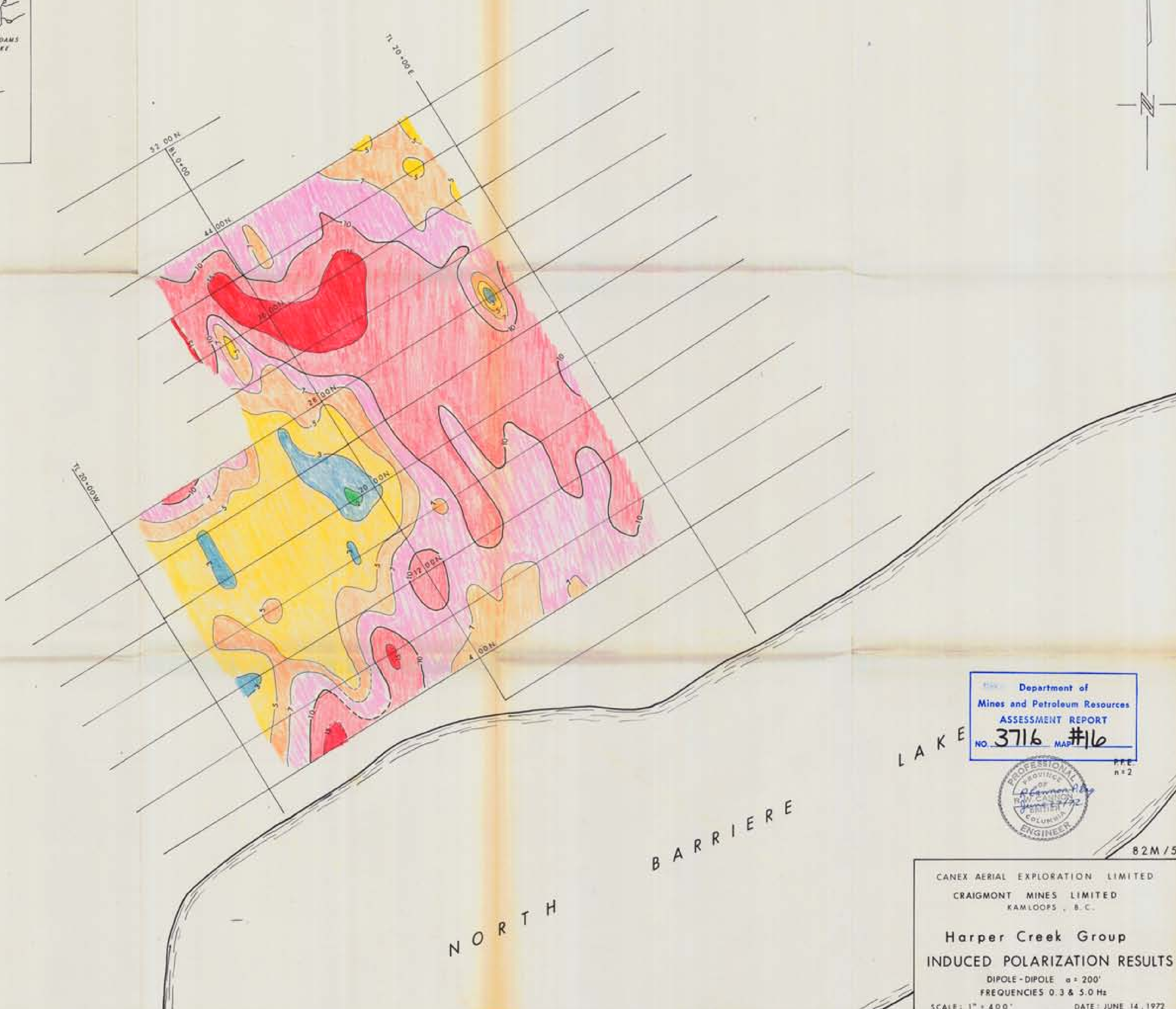


82M/5

CANEX AERIAL EXPLORATION LIMITED
CRAIGMONT MINES LIMITED
KAMLOOPS, B.C.
Harper Creek Group
INDUCED POLARIZATION RESULTS
DIPOLE-DIPOLE $a = 200'$
FREQUENCIES 0.3 & 5.0 Hz
SCALE: 1" = 400' DATE: JUNE 14, 1972



LOCATION MAP



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3716 MAP #16



PFE
#12

82M/5

CANEX AERIAL EXPLORATION LIMITED
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