

DONALD W. SMELLIE, P. ENG.
CONSULTING ENGINEER

1666 WEST BROADWAY
VANCOUVER 9, B.C.
731-6584

3466

GEOPHYSICAL AND GEOCHEMICAL REPORT

ANN GROUP

ENDAKO, OMINACA M.D.
54° 125° S.E.

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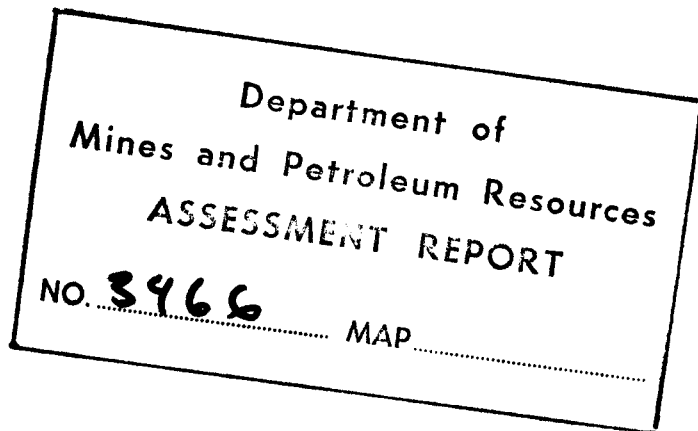
93K / 3E

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FIGURES: PLAN SHOWING GEOCHEMICAL RESULTS AND I.P. LINES

#1 I.P. LINES 8S, 16S, 24S, 32S, 40S, BASE LINE
2 3 4 5 6 7

#8 Index Map



INTRODUCTION

Geochemical soil and Induced Polarization surveys have been carried out on the ANN group. This is located 6 miles west of the town of Endako. It is owned by Canwex Explorations Ltd. (N.P.L.). Geochemical field work was carried out by the author assisted by D. Reinke on October 10, 1970, and by D. Reinke assisted by J. Ray on October 24, 25, 26, 27, 1970, under the supervision of the author. The Induced Polarization survey was carried out on October 2 - 6, 1971, inclusive, by a crew from McPhar Geophysics Limited under the supervision of the author. Work was carried out on claims ANN 1-6 inclusive.

INSTRUMENTATION

For the induced polarization survey, a McPhar variable frequency I.P. unit was used. The Sender supplied a preset constant current that is applied to the ground through two electrodes. The voltage between two potential electrodes is passed into the Receiver. A meter is nulled at one frequency and gives a direct reading of the percent frequency effect at a second frequency. From the applied current and received potential, the apparent resistivity of the medium may be calculated. The metal factor is calculated from the percent frequency effect and apparent resistivity.

FIELD PROCEDURE

Geochemical soil samples of the C horizon were taken at 100 ft. intervals along the Base Line using a spade. They were packaged in wet kraft heavy duty envelopes specially designed for soil samples. They were air dried, and screened in an 80 mesh stainless steel screen. Analyses were carried out by Bondar-Clegg & Company Ltd. For molybdenum, pyrosulphate fusion was followed by a colorimetric determination, for copper, hot acid extraction with atomic absorption determination.

For the geophysical survey, the electrodes were in a collinear array, with the current electrodes separated by a distance "a". The potential electrodes are also separated by a distance "a". The nearest current and potential electrodes are separated by a distance "na" where n= 1, 2 or 3. By varying n, the sender-receiver spacing, one obtains a depth-probing effect, since the effective depth of exploration varies with this spacing. The results are plotted at the intersection between 45 degree diagonal lines drawn from the mid-points of the sender and receiver dipoles. Above the upper reference line are plotted the resistivity values ($\rho_s/2\pi$), below it the metal factor (M.F.). The row of data nearest the reference line corresponds with n= 1 values, the second row n = 2 and the third n = 3. Below the lower reference line are values of Percent Frequency Effect (F.E.).

RESULTS

The geochemical survey showed anomalous molybdenum values at 21S and 41S on the Base Line.

The results of the Induced Polarization survey are plotted on the accompanying sectional diagrams. The lines surveyed are shown on the accompanying Plan. The electrode spacing a used was 300 ft., the operating frequencies 5 and 0.3 Hz. Anomalies occurred on the Base Line at 33 - 48S, L40S 9E - 9W, L32S 3E - 3W, L24S 0 - 3W, L16S 0 - 3W. Despite their low amplitude, these anomalies are considered to be significant in this environment.

Respectfully submitted



D.W. Smellie, P. Eng.

DWS:sm

October 12, 1971

DONALD W. SMELLIE, P. ENG.
CONSULTING ENGINEER

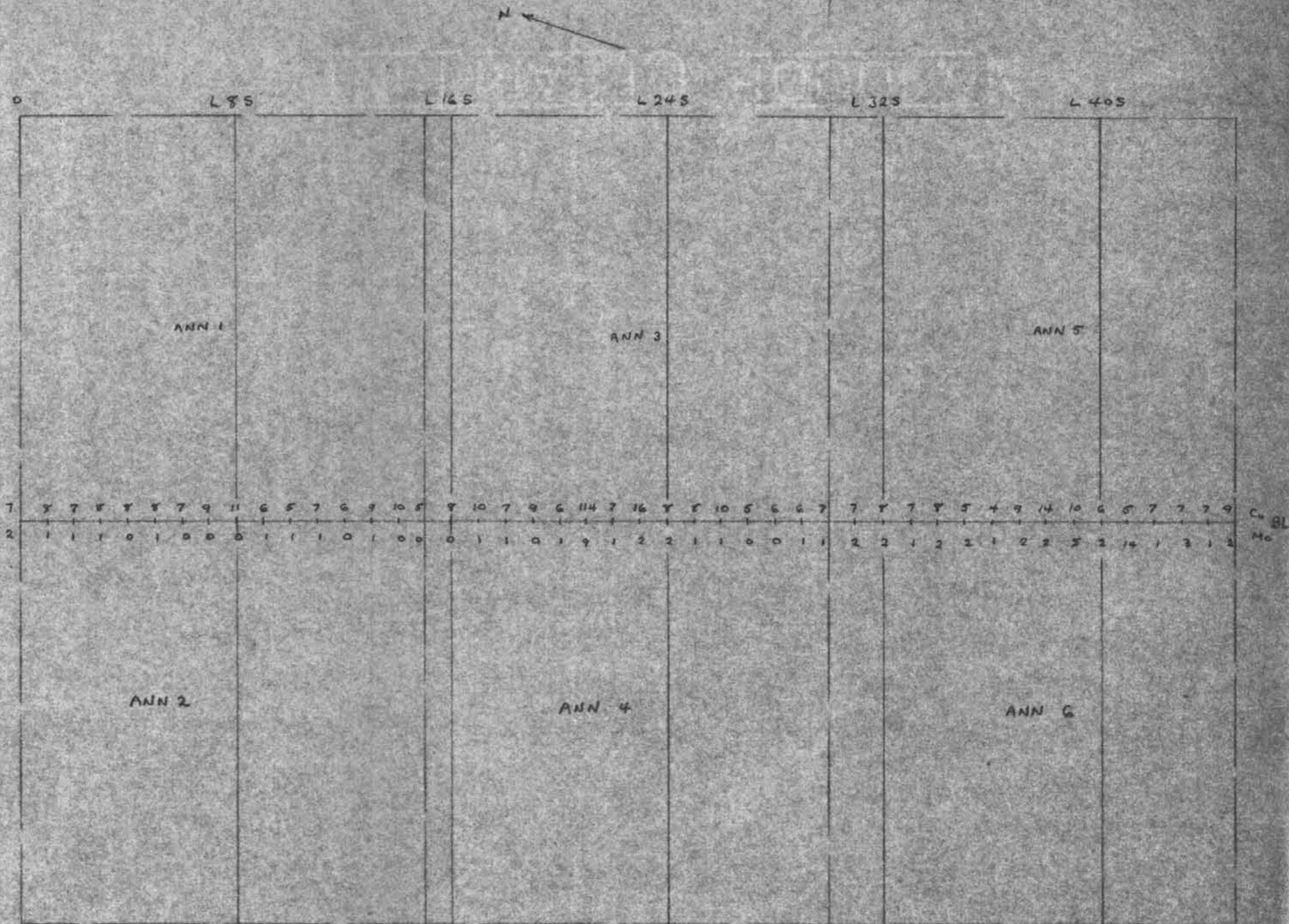
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731-6584

COST OF GEOCHEMICAL AND GEOPHYSICAL SURVEYS - ANN GROUP

OCT. 10, 24 - 27, 1970 OCT. 2 - 6, 1971

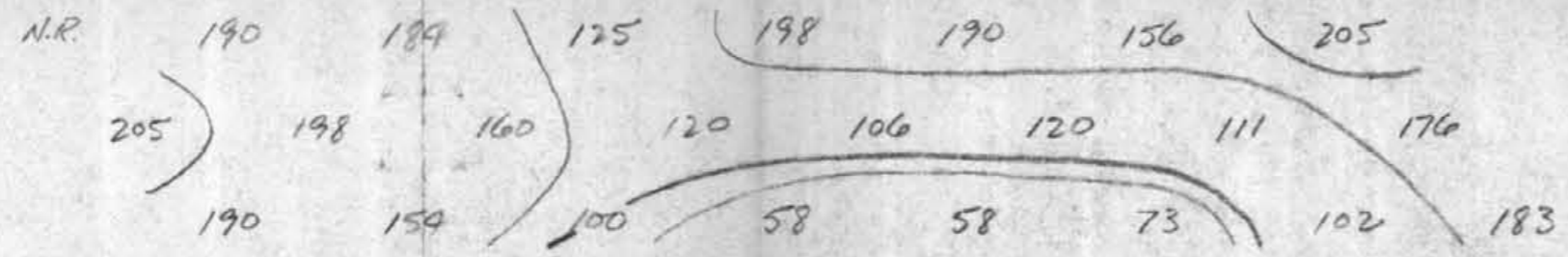
D. Reinke, 5 days	\$	225.00
J. Ray, 4 days		140.00
Field expenses		88.40
Geochemical analyses		134.20
McPhar Geophysical Crew - D. Broswick, D. Adams		
Crew charge		960.00
Field expenses		733.00
D.W. Smellie - Supervision and		
Interpretation - 3 1/2 days		<u>875.00</u>
		<u>\$ 3,055.60</u>

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3466 M-1

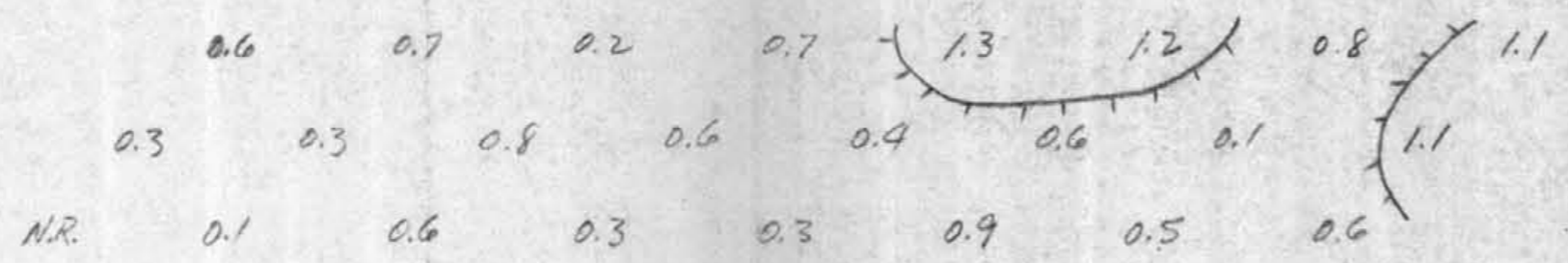
I.P. LINES AND
 GEOCHEMICAL SURVEY
 ANN GROUP, ENDAKO AREA
 'C' HORIZON SOIL - PPM
 OCT. 1976 1" = 400 FT



21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E



21W 12W 0 12E 21E

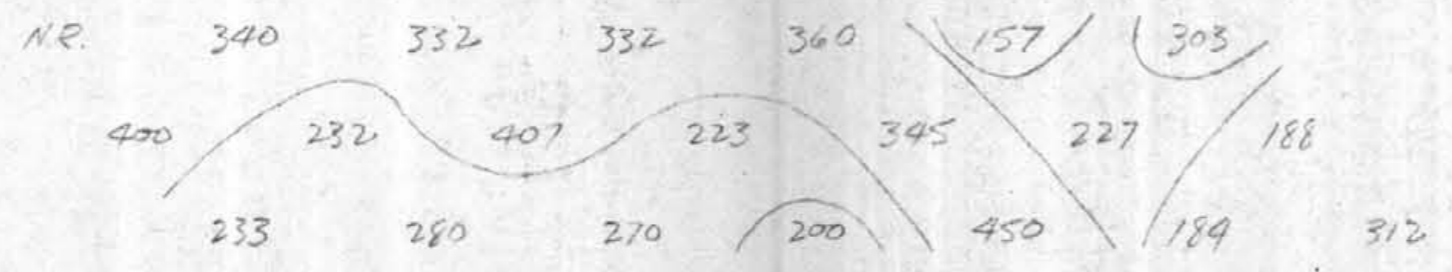


→ 200' DROP →

CANWEX EXPLORATIONS LTD. (N.P.L.)
 ANN CLAIMS
 ENDAKO B.C.
 H.P. - I.P. DIPOLE - DIPOLE
 1 INCH = 300 FEET N:3
 0.3 + 5 HZ.
 OCTOBER 5 1971
LINE 8 SOUTH
 DATA BY BROSWICK

N.R. - NO READING TAKEN

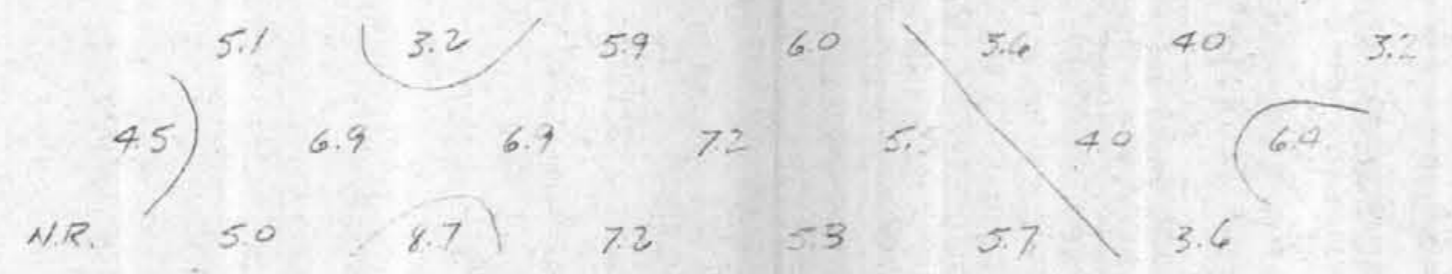
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N=3
N=2 Pa/2T
N=1

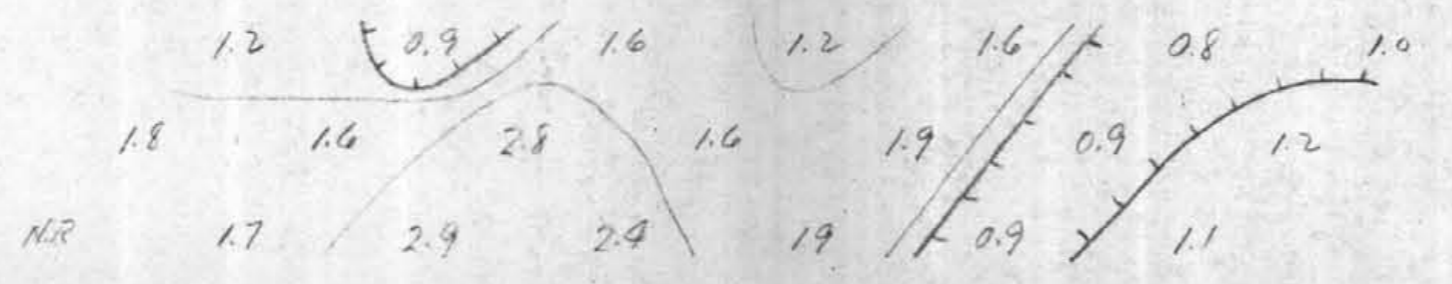
CANWEX EXPLORATIONS LTD. (N.P.L.)
ANN CLAIMS
ENDAKO B.C.
H.P.-I.P. DIPOLE-DIPOLE
1 INCH = 300 FEET N=3
0.3 + 5 HZ
OCTOBER 5 1971
LINE 16 SOUTH
DATA BY BROSWICK
N.R. - NO READINGS TAKEN

21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E



N=1
N=2 M.F.
N=3

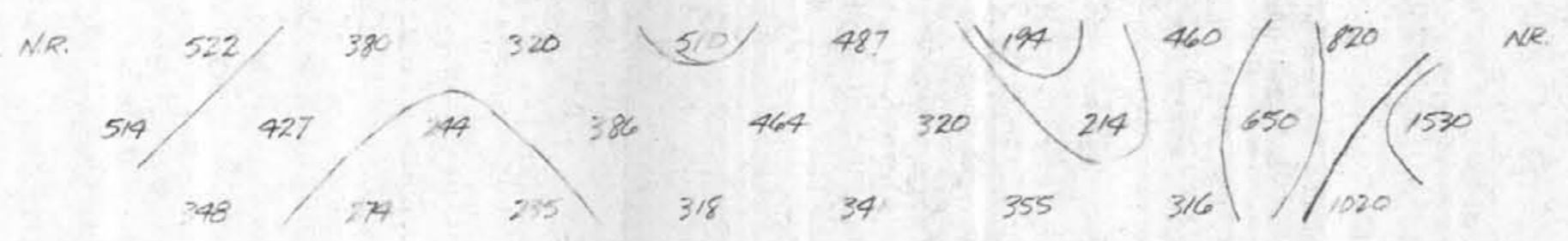
21W 12W 0 12E 21E



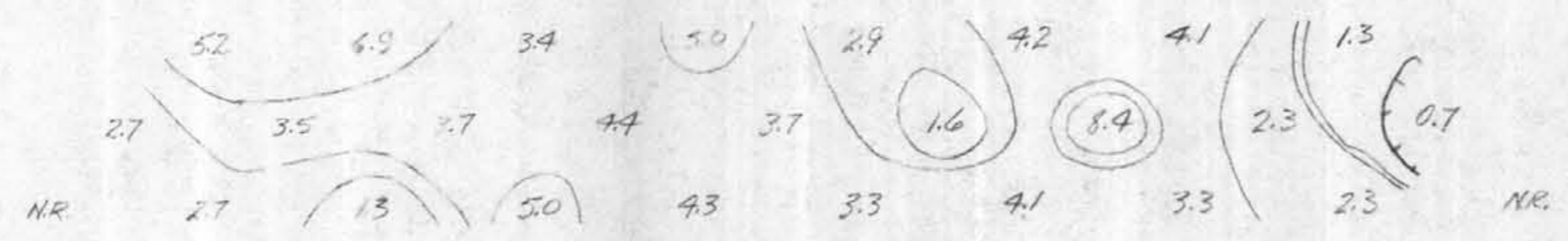
N=1
N=2 F.E.
N=3

100' END OF CUT LINE
150' DROP → CREEK

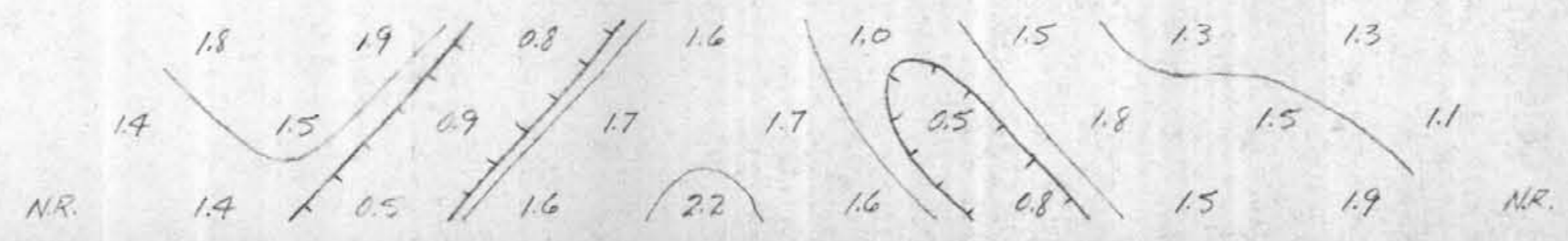
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21W 19W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E



21W 12W 0 12E 21E

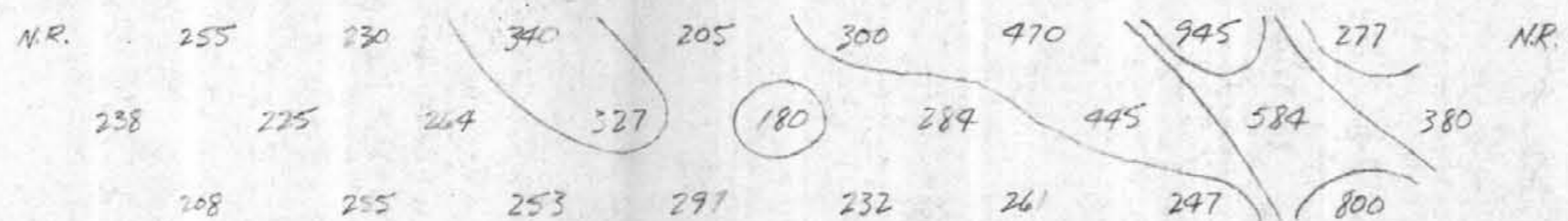


CREEK
← →

CAHWEX EXPLORATIONS LTD. (N.P.L.)
 ANN CLAIMS
 ENDAKO B.C.
 4.P - 1.R DIPOLE - DIPOLE
 1 INCH = 300 FEET N = 3
 0.3 + 5 HZ
 OCTOBER 4 1971
 LINE 24 SOUTH
 DATA BY BROSWICK

N.R. - NO READINGS TAKEN

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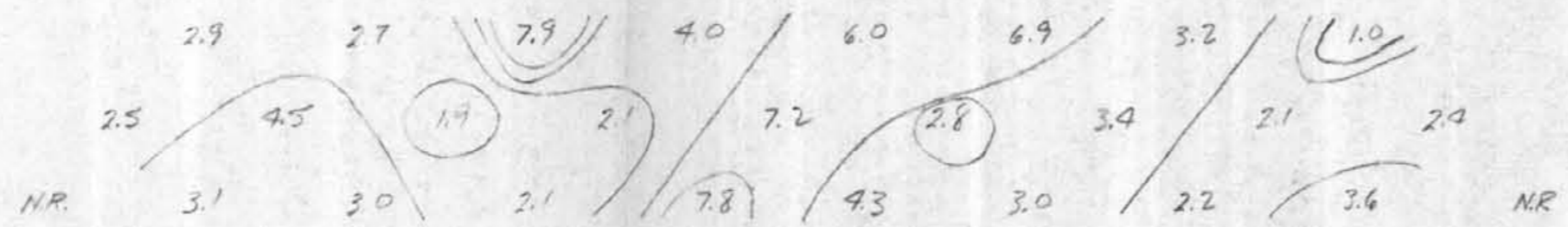


N#3
N#2 Pa/27
N#1

CANWEX EXPLORATIONS LTD. (N.P.L.)
ANN CLAIMS
ENDAKO B.C.
H.P.-I.P. DIPOLE-DIPOLE
2 INCH = 300 FEET N-3
0.3-5 HZ.
OCTOBER 4 1971
LINE 32 SOUTH
DATA BY BROSWICK

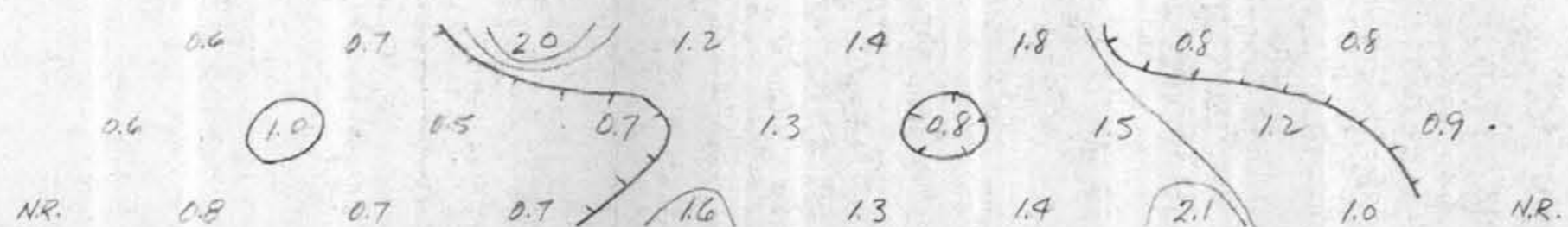
N.R. - NO READING TAKEN

21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E



N#1
N#2 M.F.
N#3

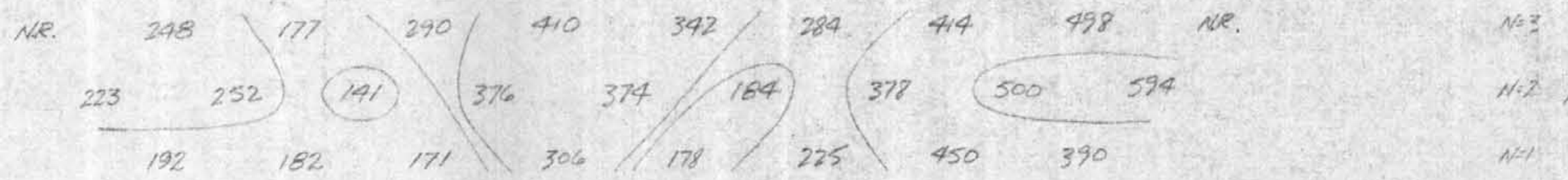
21W 12W 0 12E 21E



N#1
N#2 F.E.
N#3

CREEK
CANYON 50' DEEP

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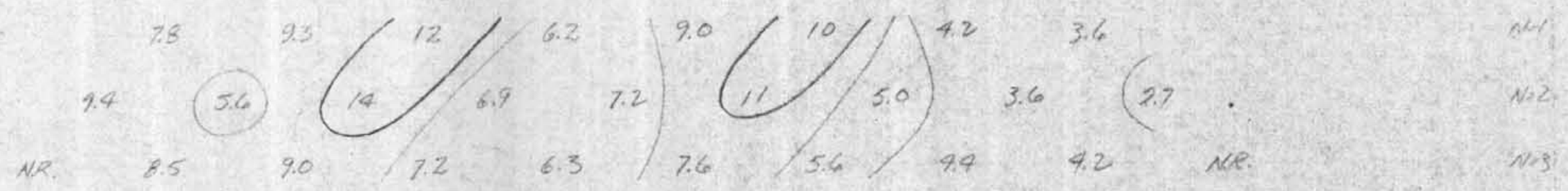


N-3
N-2 Pa/277
N-1

CANWEX EXPLORATIONS LTD. (M.P.L.)
ANN CLAIMS
ENDAKO B.C.
H.P. - 1A DIPPOLE-DIPOLE
1 INCH = 300 FEET N-3
2.3 + 5 HZ.
OCTOBER 3 1971
LINE 40 SOUTH
DATA BY BROSWICK

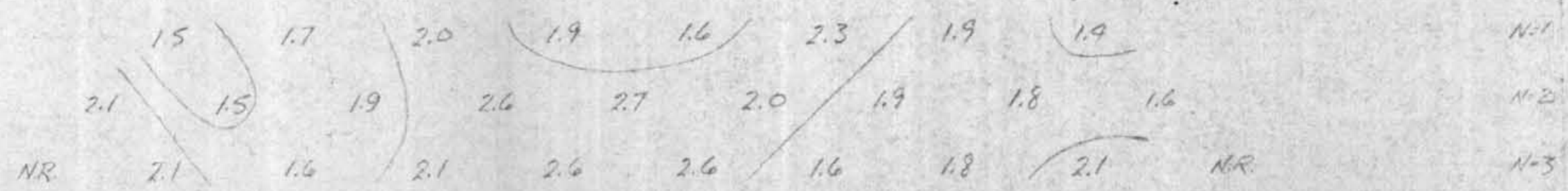
NR - NO READING TAKEN

21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E



N-1
N-2 M.F.
N-3

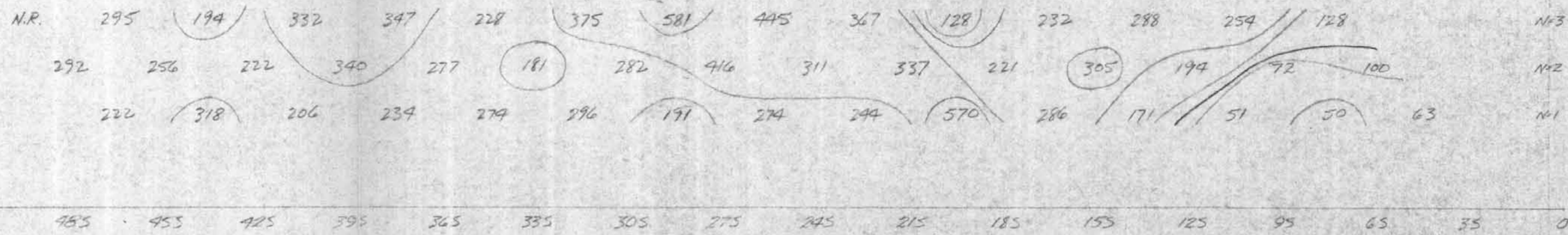
21W 12W 0 12E 21E



N-1
N-2 F.E.
N-3

ALONG CREEK

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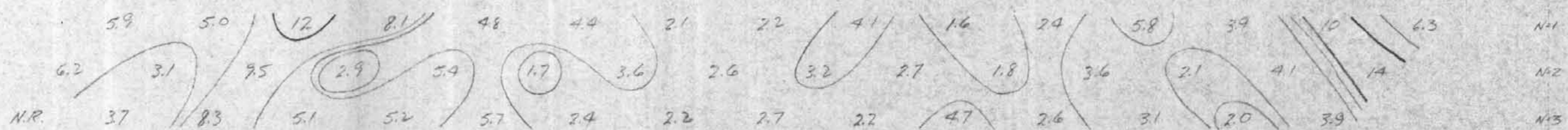
N3
N2
N1

Pal/2T1

CANWEX EXPLORATIONS LTD. (N.P.L.)
 ANN CLAIMS
 ENDAKO B.C.
 H.P.-I.R. DIPOLE-DIPOLE
 1 INCH - 300 FEET N-S
 0.3 + 5 HZ
 OCTOBER 3 1971
 BASE LINE
 DATA BY BROSWICK

NR. - NO READING TAKEN

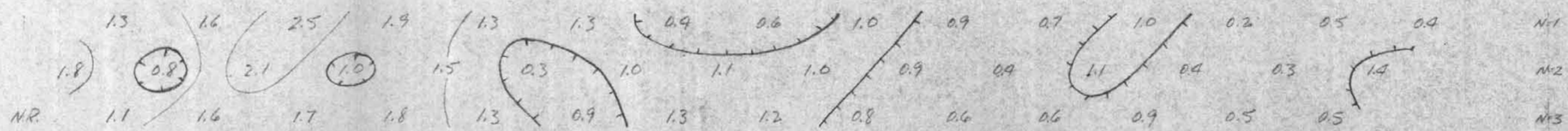
575 545 515 485 455 425 395 365 335 305 275 245 215 185 155 125 95 65 35 0



N1
N2
N3

M.F.

575 545 515 485 455 425 395 365 335 305 275 245 215 185 155 125 95 65 35 0



N1
N2
N3

F.E.

← SWAMP →

TRENCH

CREEK

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CANWEX EXPLORATIONS LTD. (N.P.L.)



2	1	ANN GROUP
4	3	
6	5	

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