1680

CANEX AERIAL EXPLORATION LTD.
DIVISION OF CANADIAN EXPLORATION LIMITED
700 BURRARD BUILDING VANCOUVER 5, B. C. CANADA

PART 2

GEOPHYSICAL REPORT

INDUCED POLARIZATION AND RESISTIVITY SURVEY

FOR GUNN MINES LTD. (N.P.L.)

GRANITE MOUNTAIN; McLEESE LAKE

52° 30', 122° 14'

CLAIMS H.D. 1-12, H.D. 17-18Fr., H.D. 19-20, F.F.E. 11-19,
F.F.E. 21, Bronc 9-10, F.I. 1-4Fr. APPLIED TO
H.D. 8-12, F.I. 1-4Fr.

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

MAY AND JUNE, 1968

BREAKDOWN OF EXPENDITURES ON GUNN MINES LIMITED

Line cutting 20.4 miles @ $85.00/mile	$1,743.00

Days worked per man.

B. Brown	11 days
R. Anctil	7 days
E. Standon	13 days
J. Knox	19 days
R. Cannon	9 days
J. Thornton	13 days
C. Wilmot	15 days
D. Huston	11 days
B. Stevenson	3 days
	101 man days

Camp Cost $8/day/man = $8 x 101 =	808.00
Administration, Compensation, supervision $5/day/man = $5 x 101 =	505.00
Total Line Cutting Costs	$3,047.00

I. P. Survey

I. P. Equipment rental and 2 operators wages 20 days @ $200/day	$4,000.00

Days worked by operators 20 x 2 = 40 man days.

Days worked by helpers.

R. Anctil	1 day
E. Standon	3 days
B. Stevenson	1 day
D. Huston	10 days
J. Knox	17 days
C. Wilmot	17 days
	49 man days.

Helpers wages @ $25.00/day = 49 x $25.00 =	$1,225.00
Camp Cost for helpers and operators $8/day/man = 89 x $8.00 =	712.00
Compensation, Administration, supervision $5/day/man = 89 x $5.00	445.00
Total I. P. Costs	$6,382.00
Total Costs of I. P. Survey	$9,429.00

...clared before me at the City of Vancouver, in the ...rish Columbia, this 23 September 1968, A.D.

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

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

Sub-mining Recorder

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

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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=300'.

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 precent frequency effect and metal factor values 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 interual 1, 1.5, 2, 3, 5, 7.5, and 10.

REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY McLEESE LAKE AREA, B. C. GUNN MINES LIMITED (N.P.L.)

INTRODUCTION

A program of line cutting and an extensive induced polarization and resistivity survey was carried out on the Gunn Mines property in the McLeese Lake area of British Columbia during the months of May and June, 1968.

The purpose of this survey was to obtain information from areas of the property on and around the previously drilled zone. This survey covered approximately 30 claims along 20.4 miles of cut lines. The lines were cut north-south on 800 foot intervals with stations marked every hundred feet.

The Induced Polarization survey was carried out using McPhar frequency effect equipment employing frequencies of 0.31 and 5.0 cycles per second.

LOCATION AND ACCESS

The property is located northeast of McLeese Lake on and adjacent to Granite Mountain. Access is by means of gravel roads to a lumber mill and then by means of a four-wheel drive road to the camp, a total distance of 8½ miles.

PREVIOUS WORK

Work carried out on the property previous to work by Canex consisted of cat-trenching, road-building and the drilling of 11 diamond drill holes.

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. All lines were run using an electrode spread of 300 feet and dipole separations of N = 1, 2, 3.

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Enclosed with the report is a plan map of the property at a scale of 1" = 1000'. The surface projection of the anomalous zones, interpreted from the location of the transmitter and receiver electrodes when the anomalous values were measured, are shown as solid bars on this plan map.

DISCUSSION OF RESULTS

Fourteen traverses of varying lengths were run in the survey area with the following results:

Line 48 + 00W Length 15S to 30N

A slight anomalous condition was detected on the last dipole pair at the north end of the line (27N to 30N).

Line 40 + 00W Length 15S to 63N

A near-surface anomaly, which is detectable on the first separation, is located between 32N and 47N. The strongest part of the anomaly is between 40N and 45N.

Line 32 + 00W Length 15S to 63N

A near-surface anomalous zone was detected between 34N and 47N with the strongest zone between 37N and 43N.

Line 24 + 00W Length 15S to 63N

The anomalous zone appears to split on this line and is deeper. Anomalies were located at 33N to 37N, 42N to 46N and from 50N to the end of the line.

Line 16 + 00W Length 15S to 63N

Two near-surface anomalous zones were detected, one lying between 6N and 26N and the other between 42N and 47N.

Line 8 + 00W Length 30S to 63N

A large anomalous zone was located between 1S and 44N with decreases in frequency effect from 18N to 24N and 34N to 40N.

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Line 0 + 00 Length 30S to 63N

A near-surface anomalous zone was located between 6N and 29N.

Line 8 + 00E Length 30S to 48N

A near-surface anomalous zone was detected from 10N to the end of the line with the strongest effects coming from the 21N to 24N dipole.

Line 16 + 00E Length 30S to 48N

A near-surface anomaly was picked up between 6N and 25N with the strongest effects centered around 12N. Another smaller anomaly was detected using the northern-most two dipole pairs.

Line 24 + 00E Length 30S to 48N

A moderate near-surface anomaly was detected from 5N to 12N and another anomaly picked up using the dipole pair 45N to 48N.

Line 32 + 00E Length 30S to 48N

An anomalous zone was picked up on the north end of the line from 40N to the end.

Line 40 + 00E Length 30S to 33N

No anomalies were detected.

Line 48 + 00E Length 30S to 33N

No anomalies were detected.

Baseline Length 48W to 48E

A weak anomalous condition was detected between 12W and 4E with the strongest effects at 8W.

SUMMARY AND CONCLUSIONS

The Induced Polarization survey aided in expanding the mineralized zone previously drilled by Gunn Mines with an additional anomalous zone being detected. This other zone is located on the western boundary of the property

...continued

bordering on Gibralter ground to the immediate east of Granite Lake. A small anomalous zone was also picked up on the north ends of lines 32 + 00E, 24 + 00E and 16 + 00E and appears to be on ground held by Keevil Mining.

It was concluded that only two significant anomalies are located on the claims covered by the Induced Polarization survey.

RECOMMENDATIONS

It was recommended that 10 percussion holes be drilled to test the above significant anomalies. These holes should be drilled at a 45° dip to the North and for a length of 300 feet each. The holes should be located as follows: Line 32 + 00W at 38N and 42N, Line 24 + 00W at 36N and 42N, Line 16 + 00W at 15N, Line 8 + 00W at 9N and 22N, Line 0 + 00 at 15N and 20N, and Line 16 + 00E at 12N.

R. W. Cannon, P. Eng.

R. W. Cannon

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INSTRUMENTATION

The instruments consisted of a McPhar High Power (H.P.) frequency domain unit Model P654. The frequencies used were 0.31 c.p.s. and 5.0 c.p.s. A dipole-dipole electrode array was used. The electrode spacing was 300', 600' and 900'. The method of field operation has been given in the above report.

QUALIFICATIONS OF THE GEOPHYSICAL OPERATOR

I, Richard W. Cannon, am a graduate of the University of B. C. (1966) with a degree in Geological Engineering (Geophysics Option).

I have worked continuously in mining exploration since graduation.

I am currently registered as a professional engineer in the Province of British Columbia.

R. W. Cannon, P. Eng.

R. W. CANNON, P. Eng.

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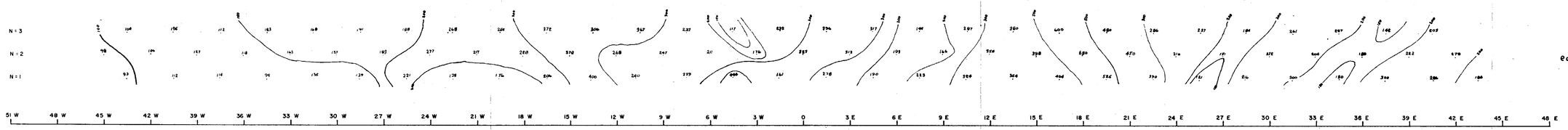

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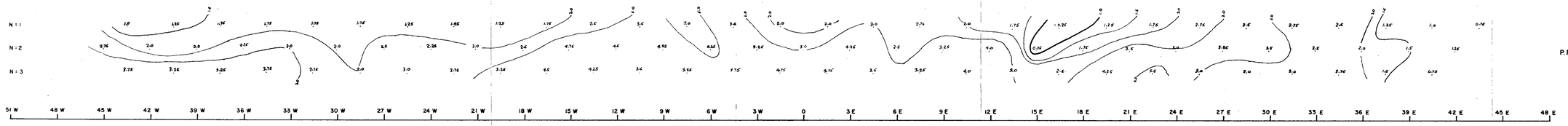

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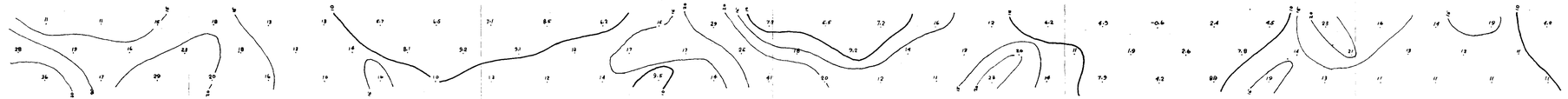

(M.F.)a

GUNN MINES LTD.

BASELINE

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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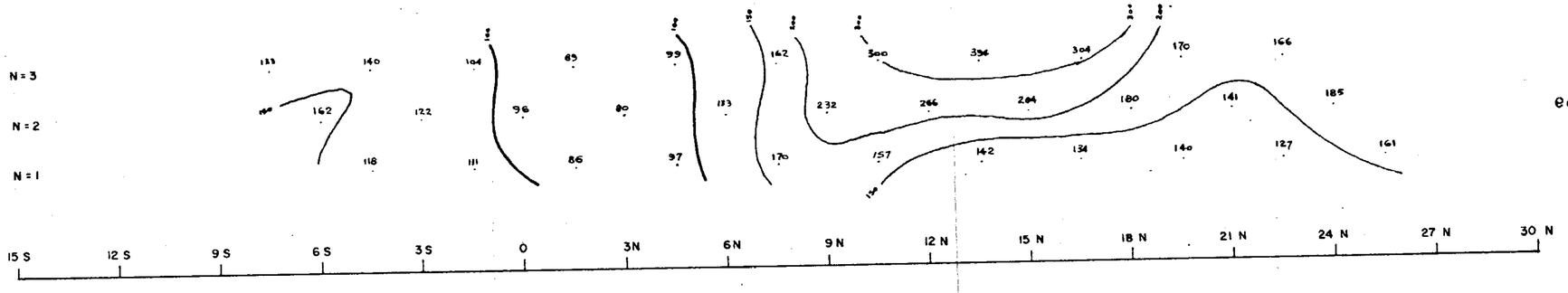

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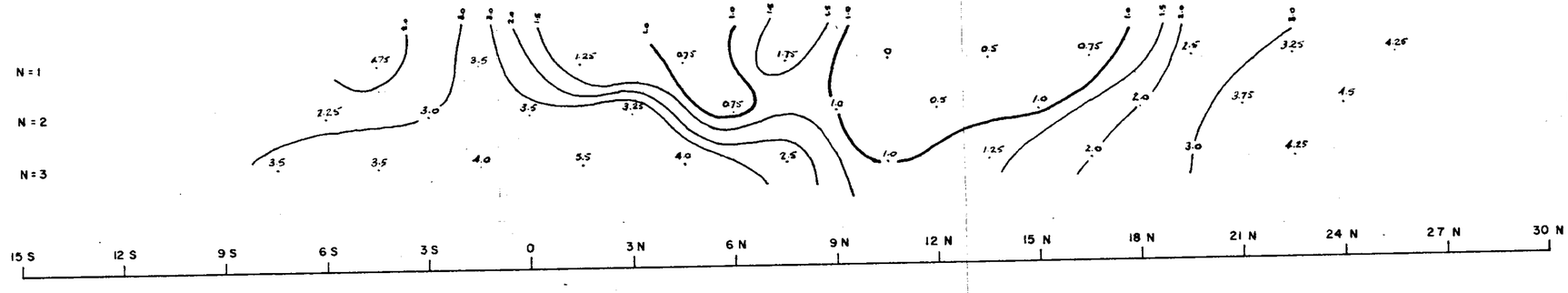

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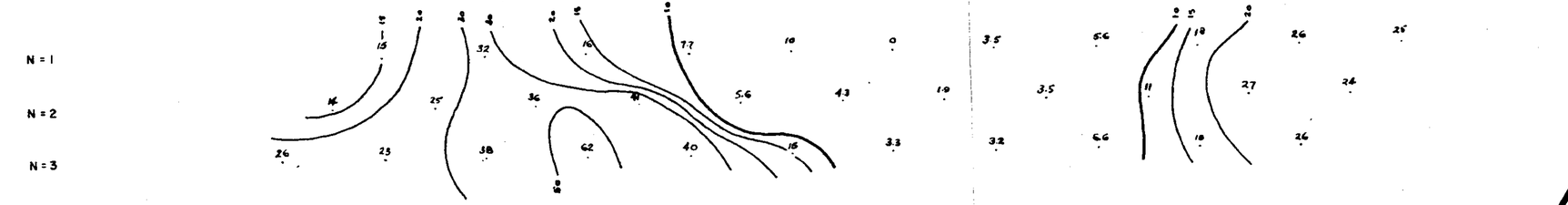

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LINE 48 + 00W

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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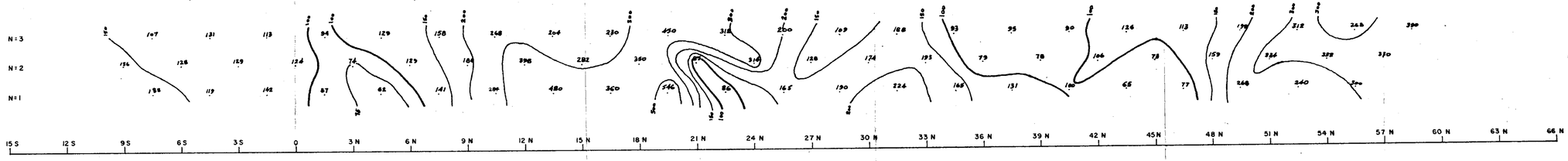

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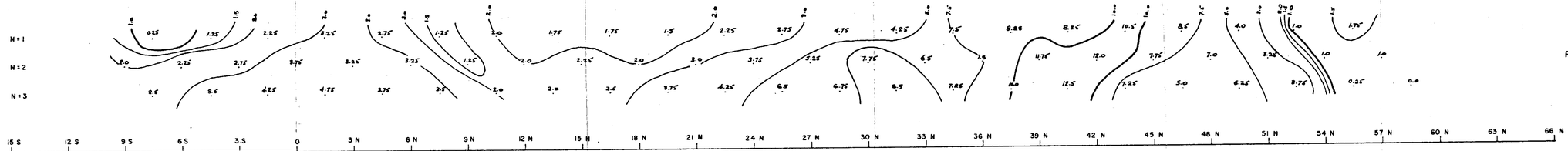

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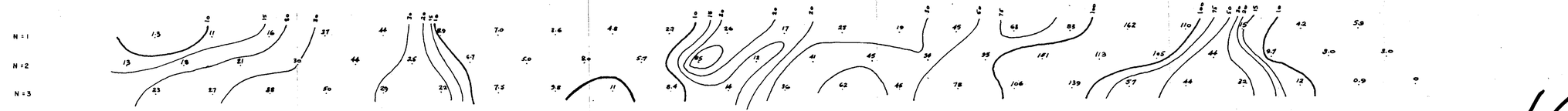

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GUNN MINES LTD.

LINE 40+00 W

DIPOLE — DIPOLE CONFIGURATION
FREQUENCIES 0.31+ 5.0 cps.

X = 300'

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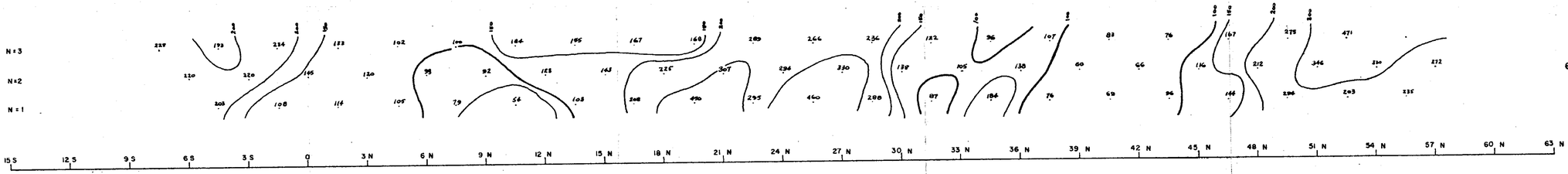

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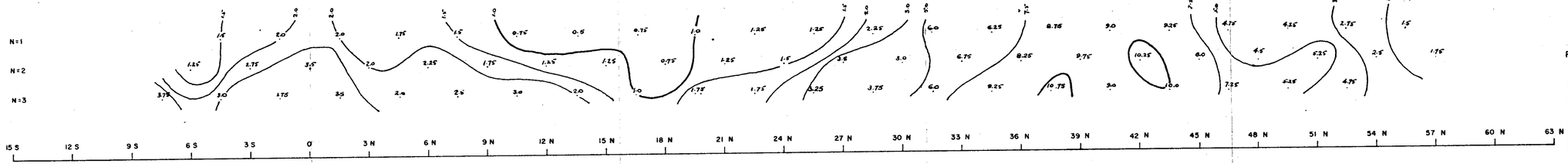

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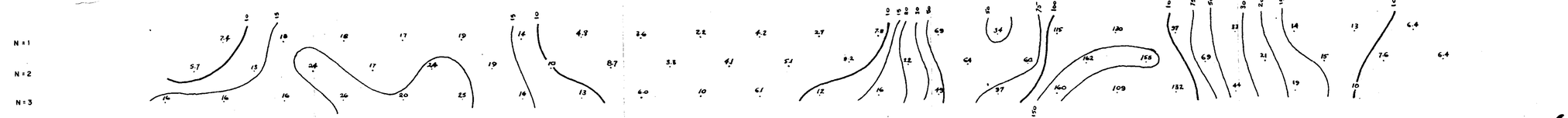

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GUNN MINES LTD.

LINE 32+00 W

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31+5.0 cps.

X = 300'

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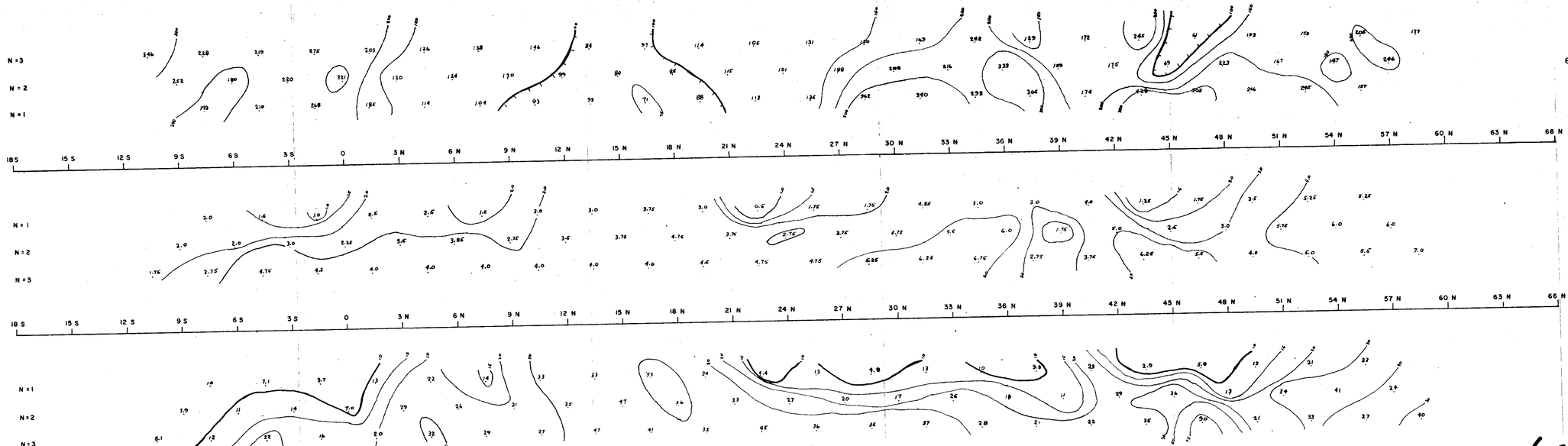

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LINE 24+00 W

DIPOLE — DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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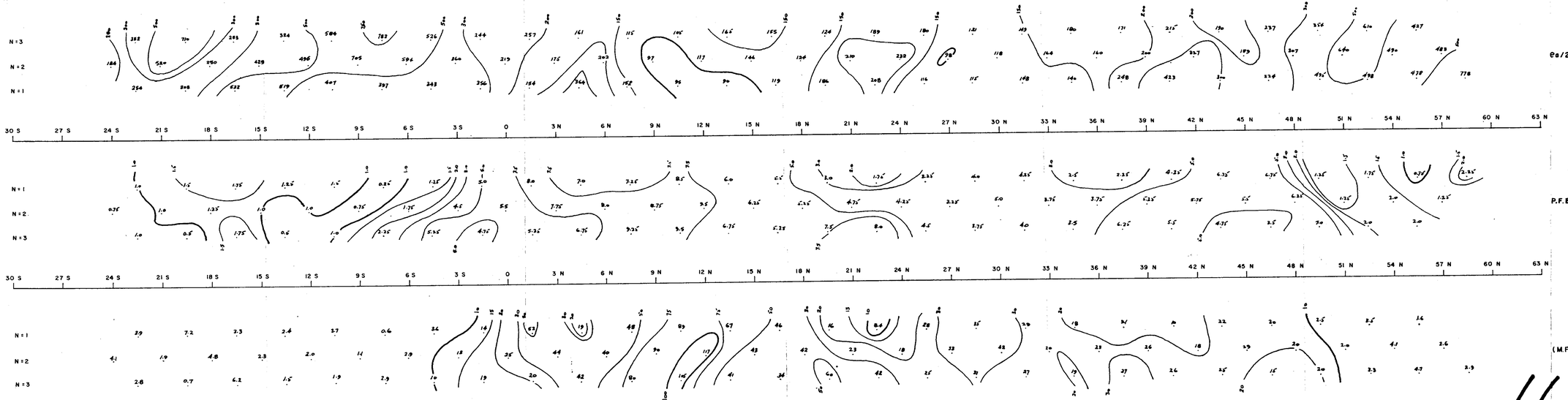

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LINE 8+00 W

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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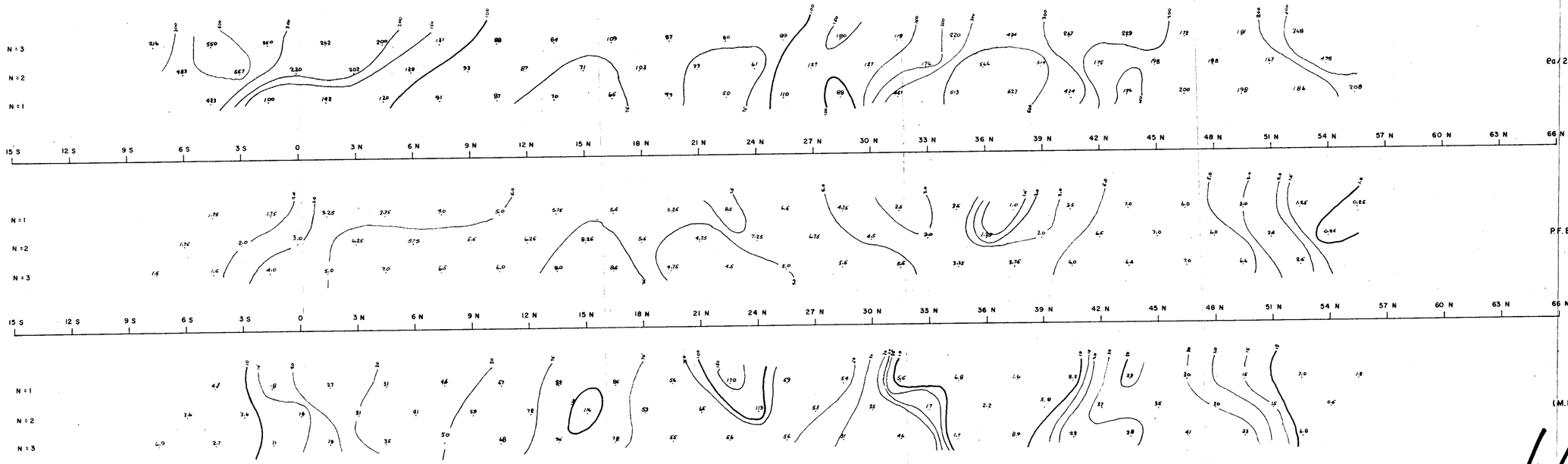

GUNN MINES LTD.

LINE 16+00 W

DIPOLE — DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

x = 300'

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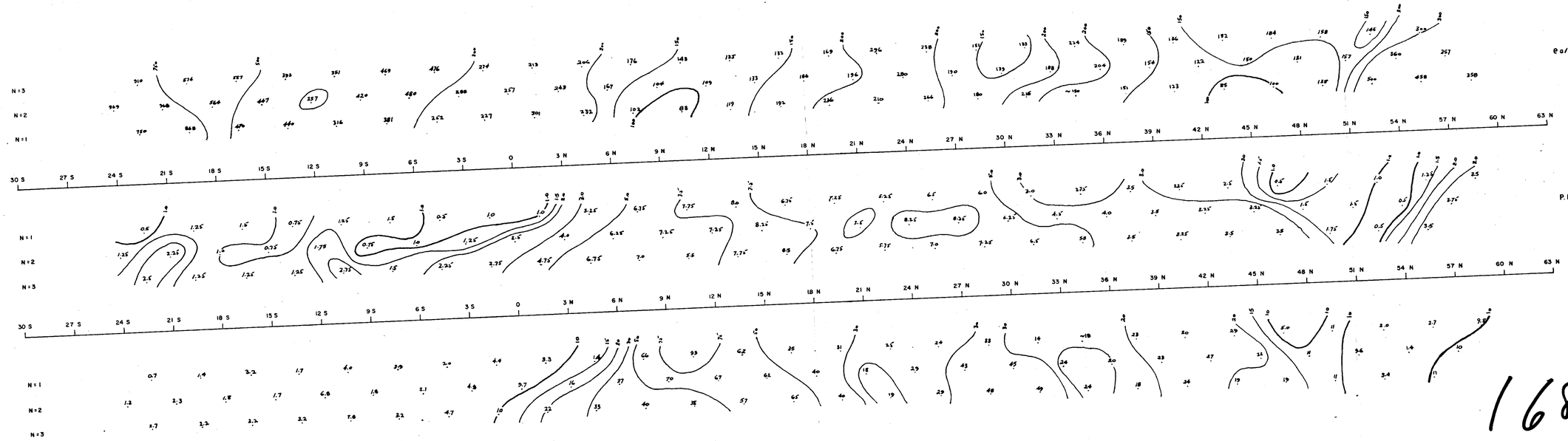

GUNN MINES LTD.

LINE 0 + 00

DIPOLE - DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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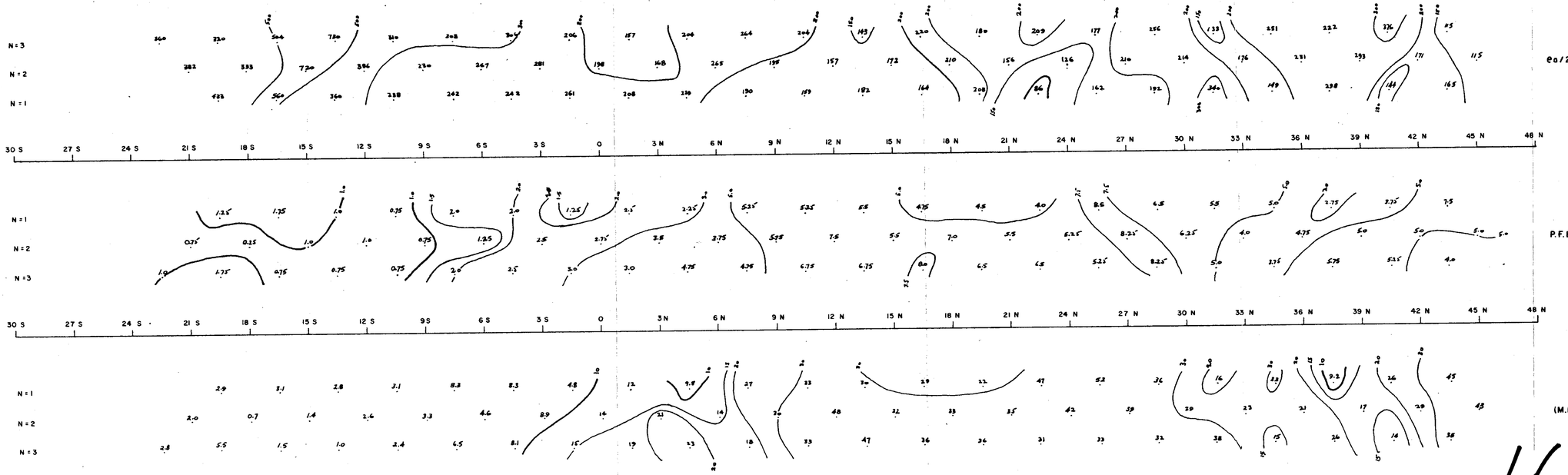

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LINE 8+00 E

DIPOLE — DIPOLE CONFIGURATION
FREQUENCIES 0.31+ 5.0 cps.

X = 300'

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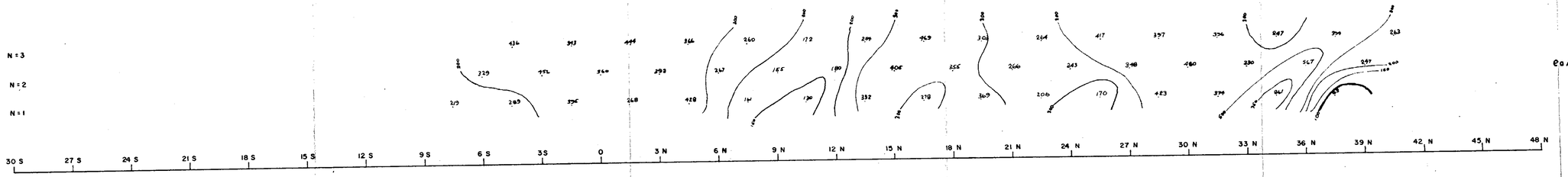
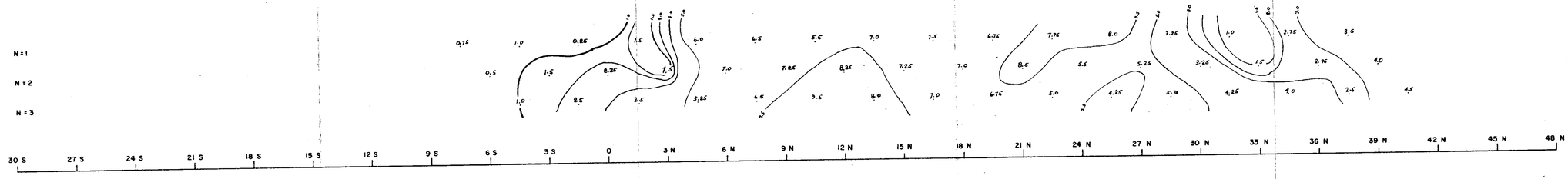
(9)





GUNN MINES LTD.

LINE 16+00E

DIPOLE — DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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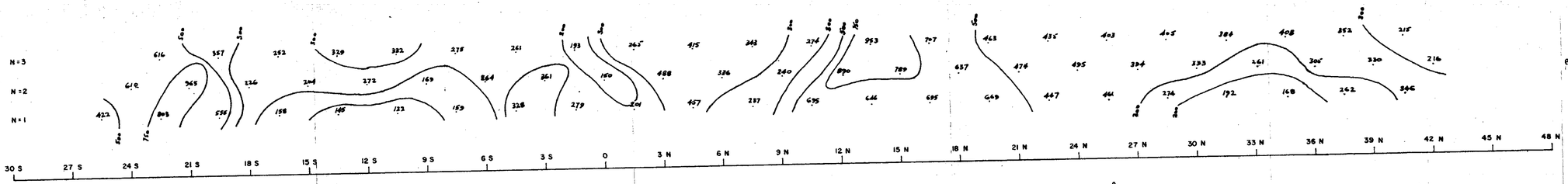

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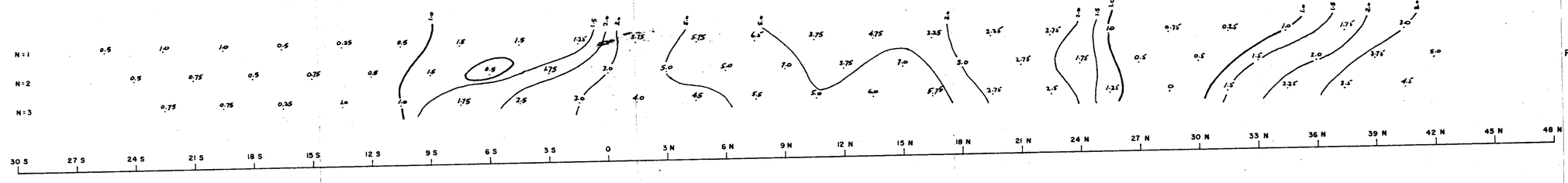

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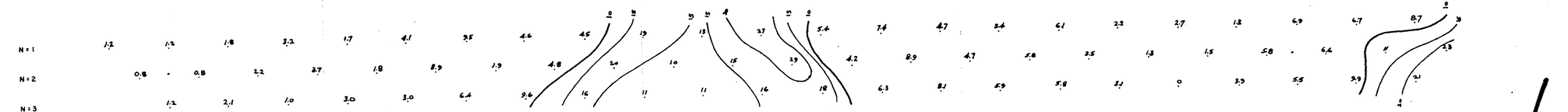

(M.F.)a

GUNN MINES LTD.

LINE 24+00 E

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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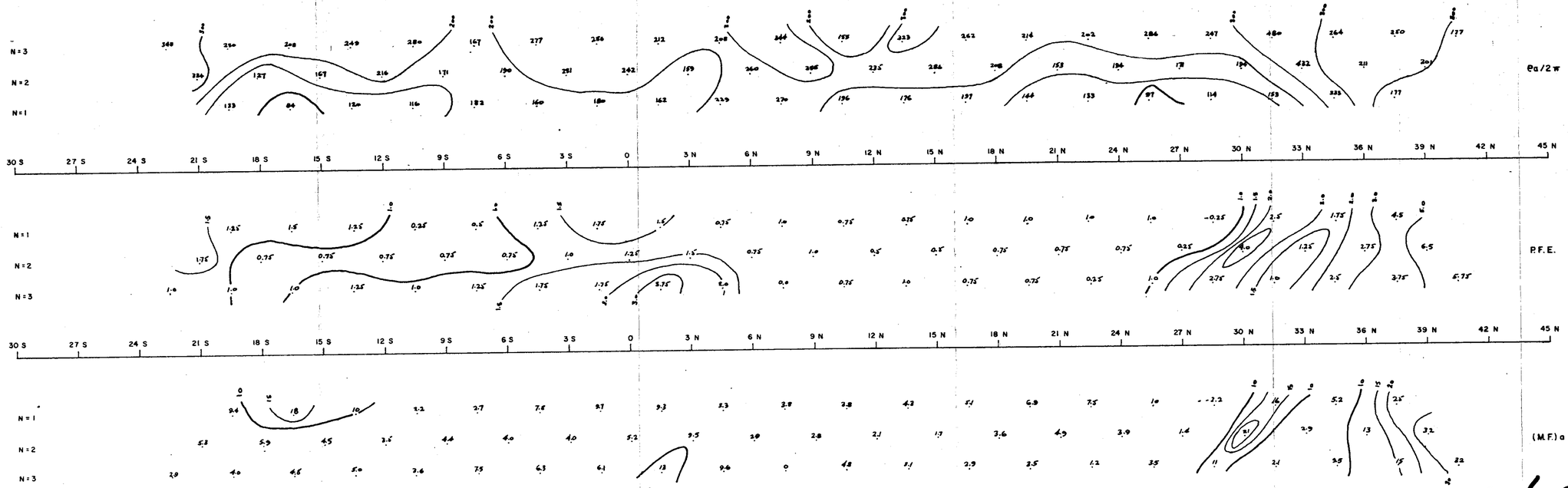

GUNN MINES LTD.

LINE 32+00 E

DIPOLE — DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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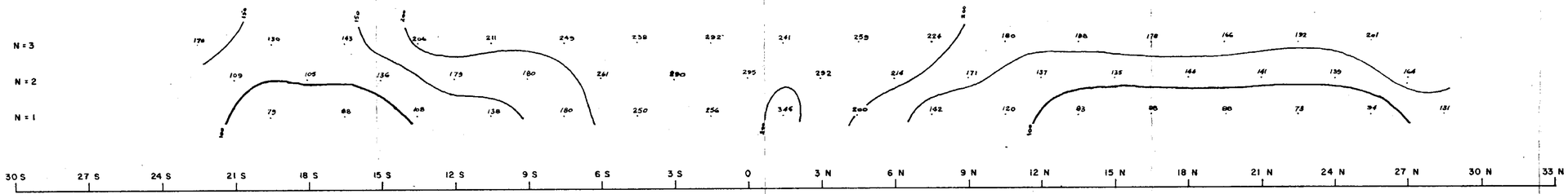

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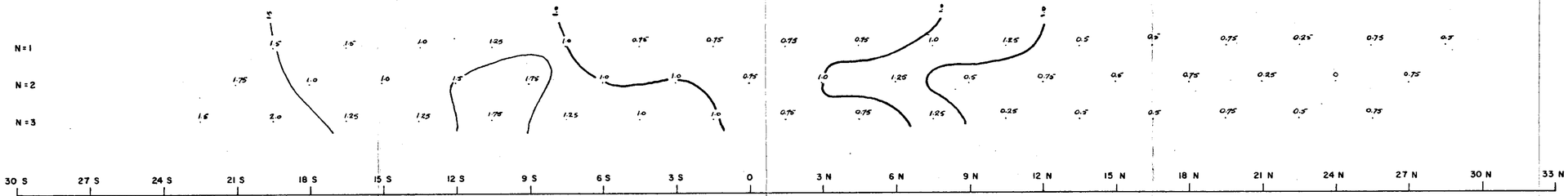

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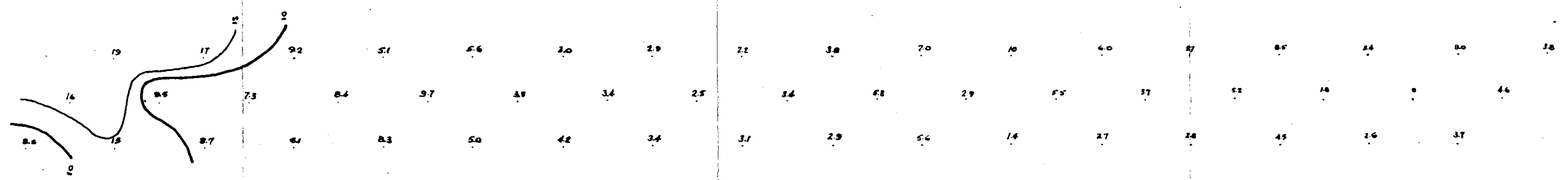

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GUNN MINES LTD.

LINE 40+00E

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31 + 5.0 cps.

X = 300'

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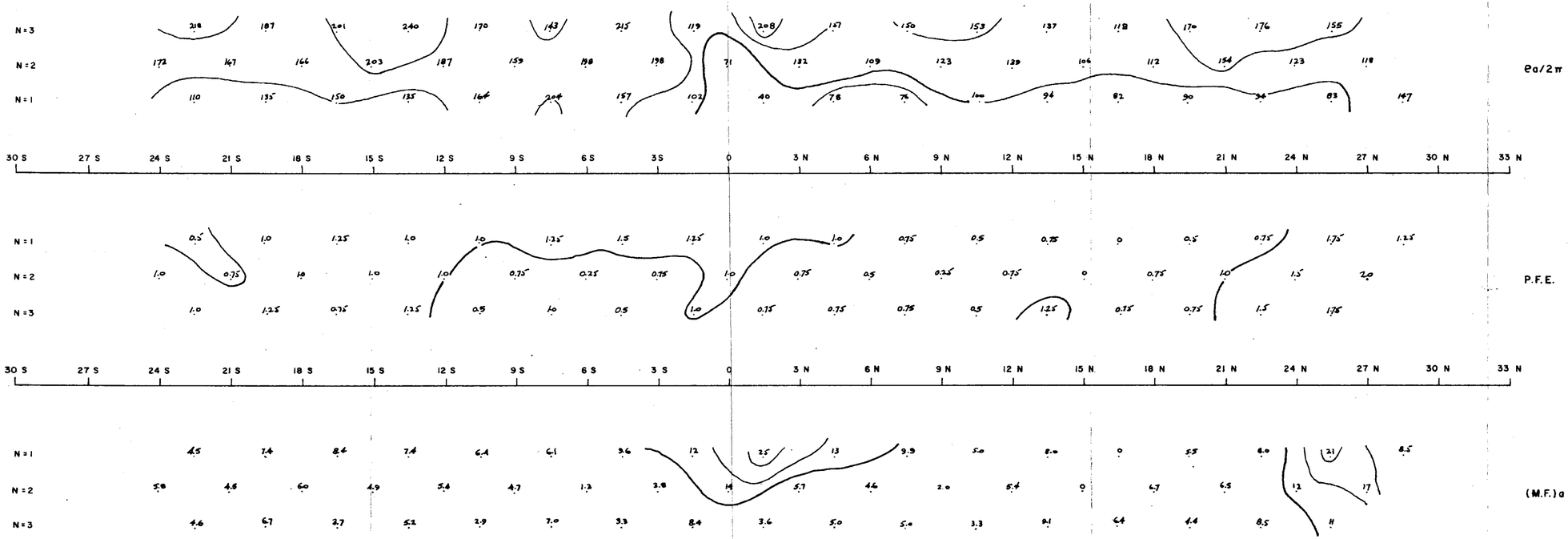

GUNN MINES LTD.

LINE 48+00 E

DIPOLE – DIPOLE CONFIGURATION
FREQUENCIES 0.31+ 5.0 cps.

X = 300'

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(14)