

GEOPHYSICAL PROFILES
MANITOU RAPIDS AREA
PROJECT 41

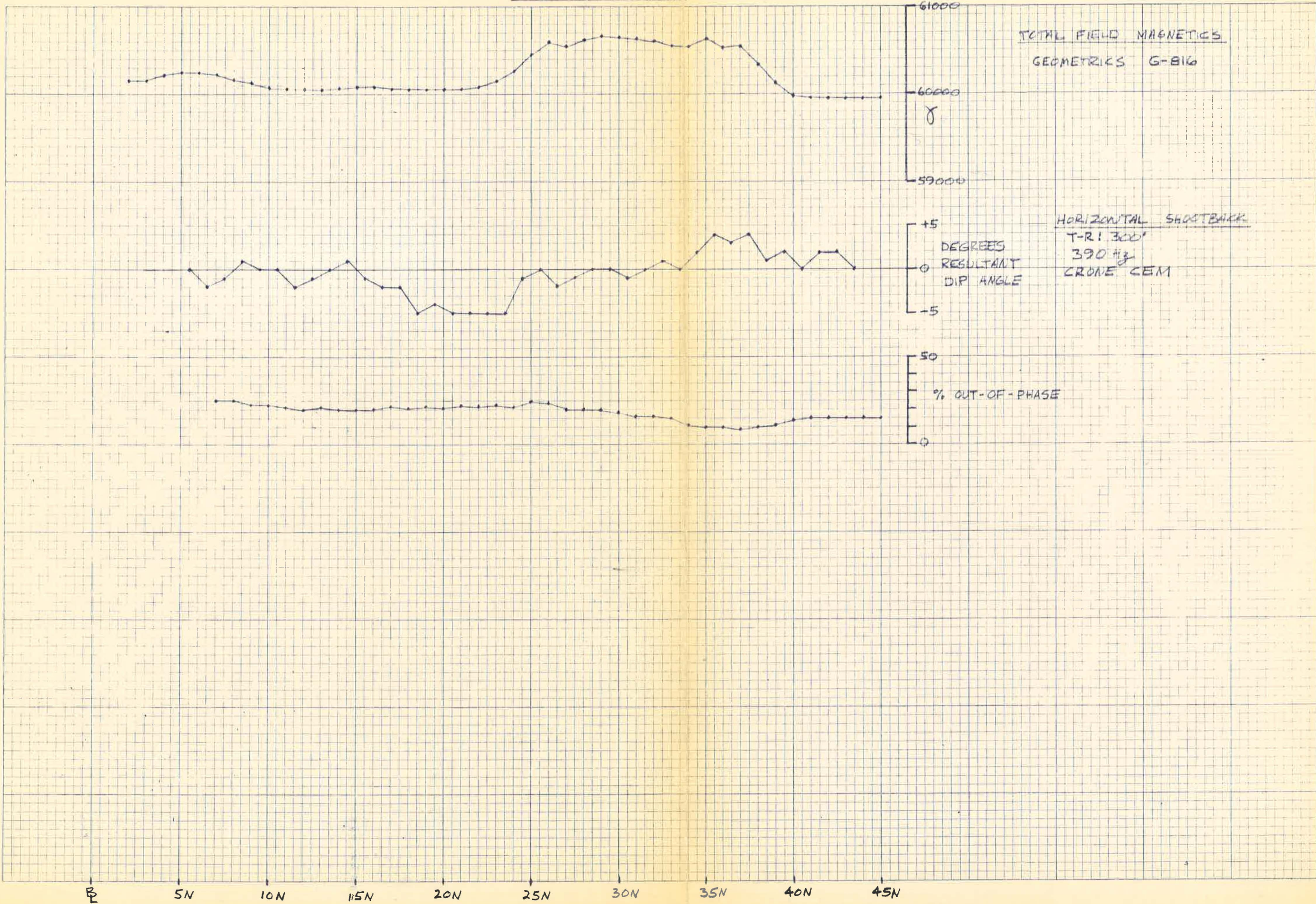
By: D. G. Meineke and M. K. Vadis

D. G. Meineke, Supervisor of Minerals Exploration

The following geophysical profiles represent data collected in the Manitou Rapids area of northwestern Koochiching County.

The total magnetic field intensity was measured with a Geometrics G-816 proton magnetometer. VLF electromagnetic surveys were conducted by use of a Geonics EM-16 using the Culter, Maine (17.8 kHz) transmitting station. A Crone Geophysics Limited CEM electromagnetic system was used for all horizontal shootback, horizontal loop and vertical loop surveys.

Department of Natural Resources
Manitou Rapids, Minnesota
Geophysical Profiles
Project 41
Manitou Rapids Area
Northwestern Koochiching County
D. G. Meineke and M. K. Vadis
Supervisor of Minerals Exploration
Geophysicist



TOTAL FIELD MAGNETICS
GEOMETRICS G-816

61000
60000
59000

+5
DEGREES
RESULTANT
DIP ANGLE
-5

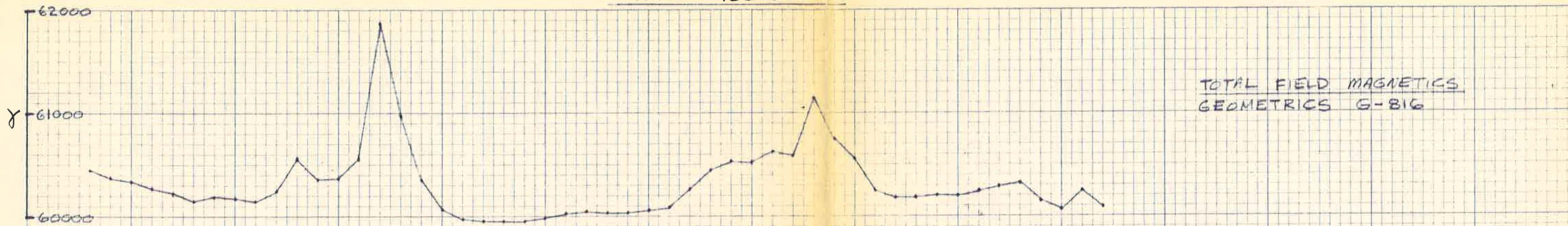
HORIZONTAL SHOOTBACK
T-R: 300'
390 Hz
CRONE CEM

50
% OUT-OF-PHASE
0

5N 10N 15N 20N 25N 30N 35N 40N 45N

47 0702

10 X 10 TO THE INCH • 10 X 15 INCHES
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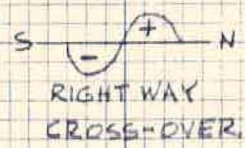
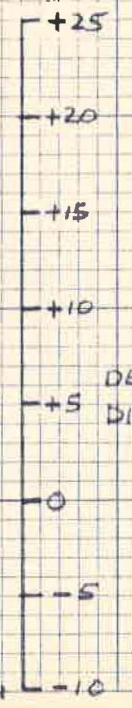
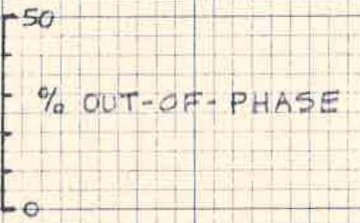
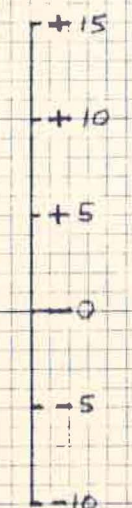


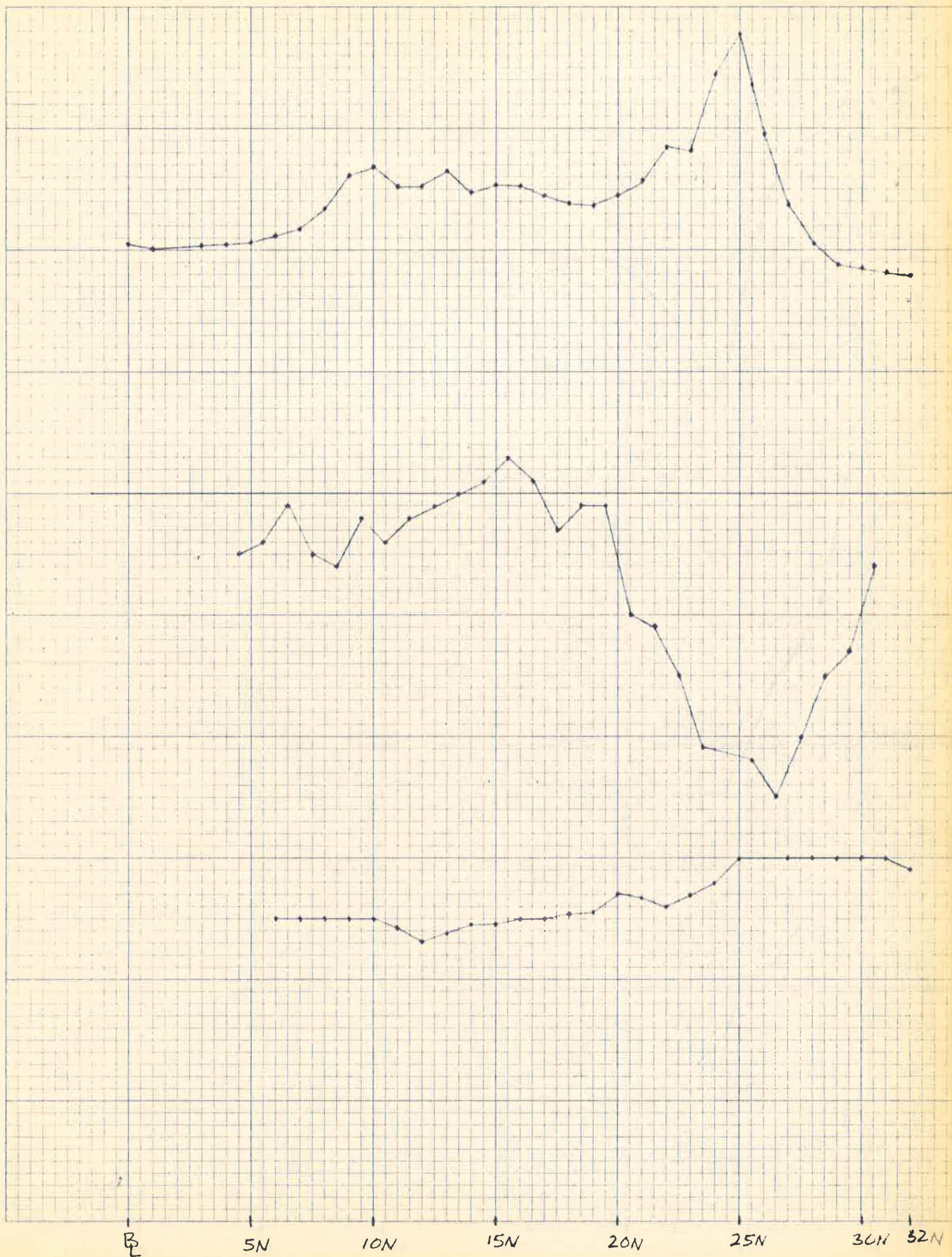
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READINGS NOT OBTAINABLE -
POWER LINE &
PHONE CABLE





TOTAL FIELD MAGNETICS
GEOMETRICS G-816

γ

HORIZONTAL SHOOTBACK

CRONE CEM
T-R: 300'
390 Hz

DEGREES
RESULTANT
DIP ANGLE

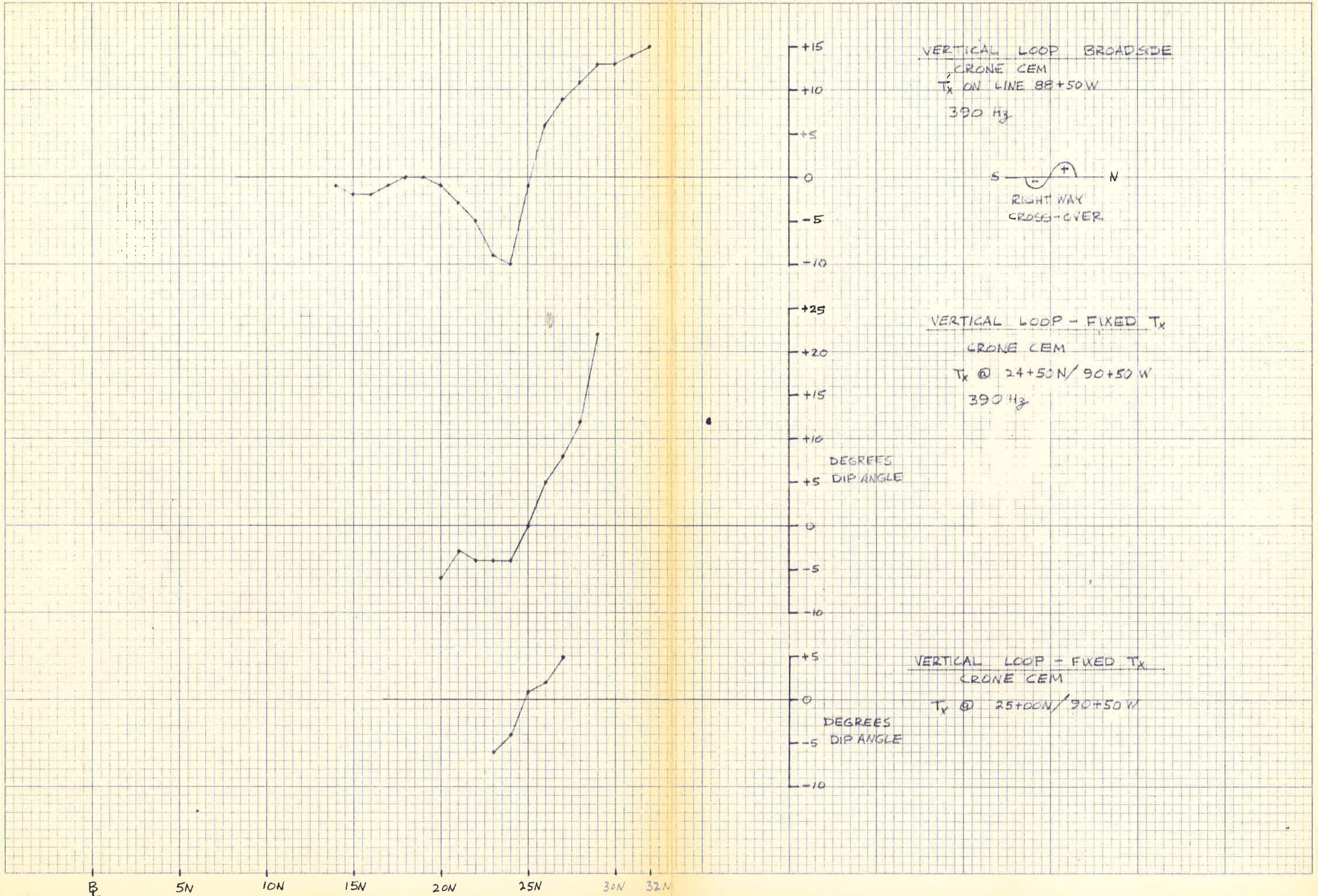
% OUT-OF-PHASE

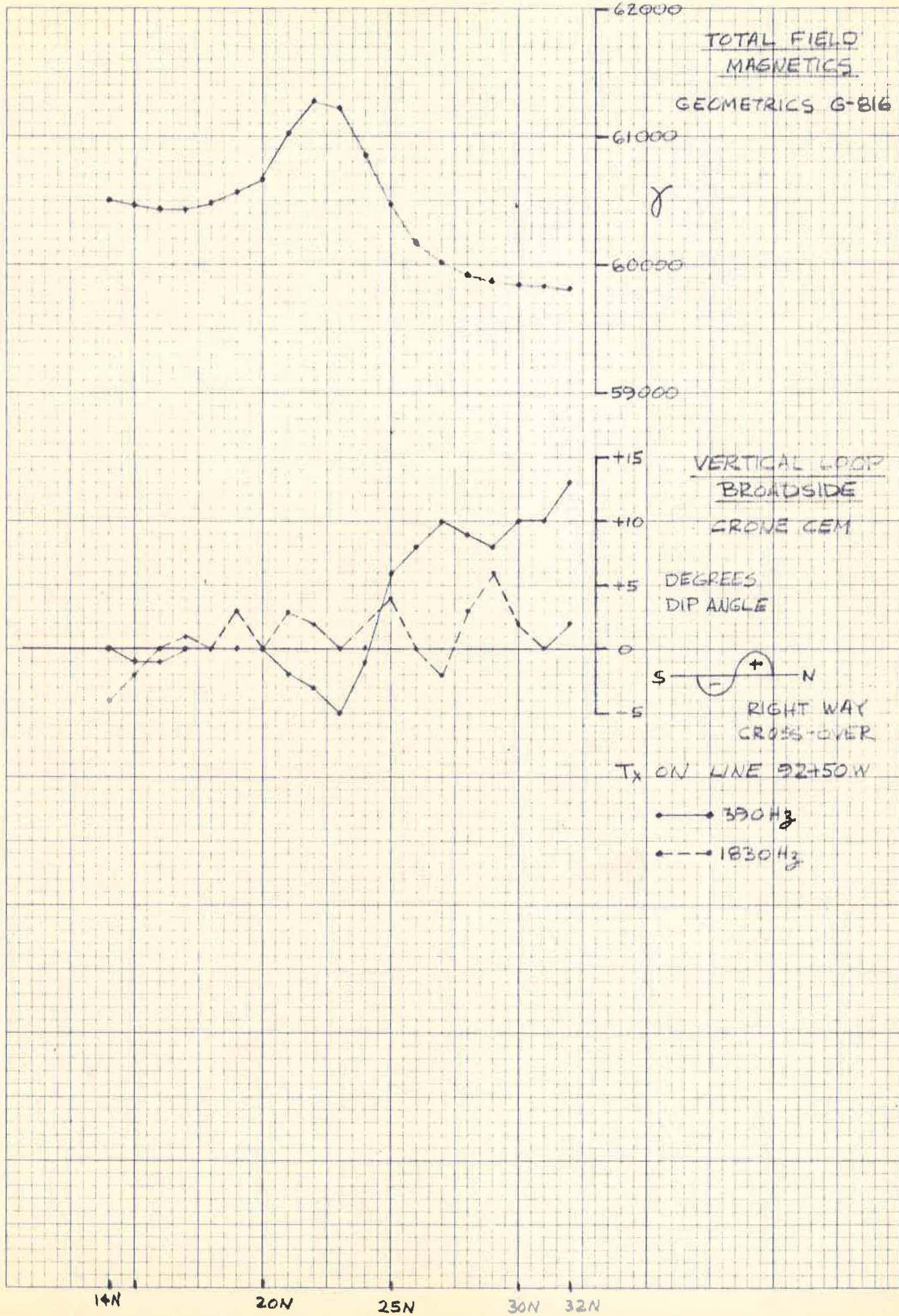
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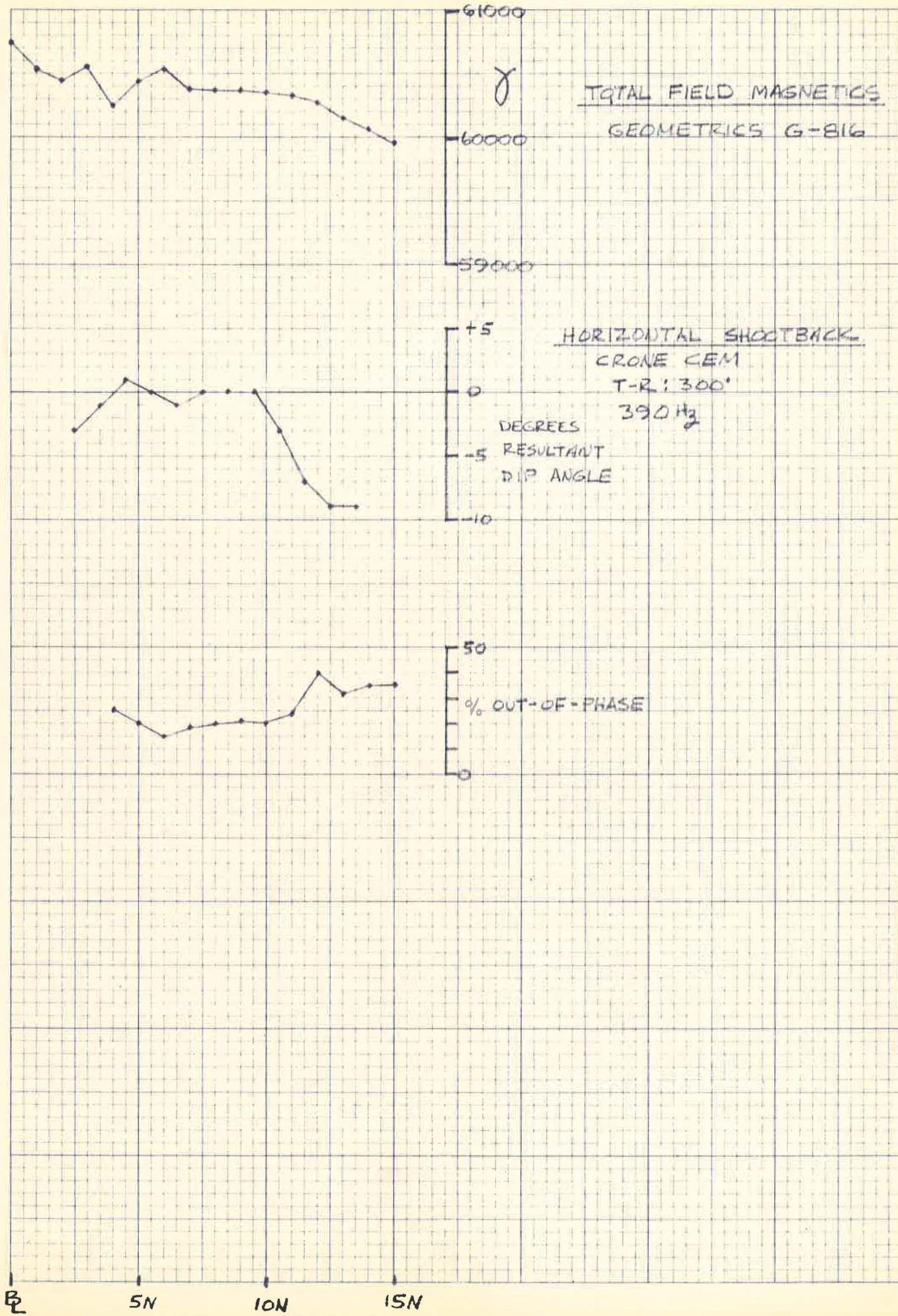
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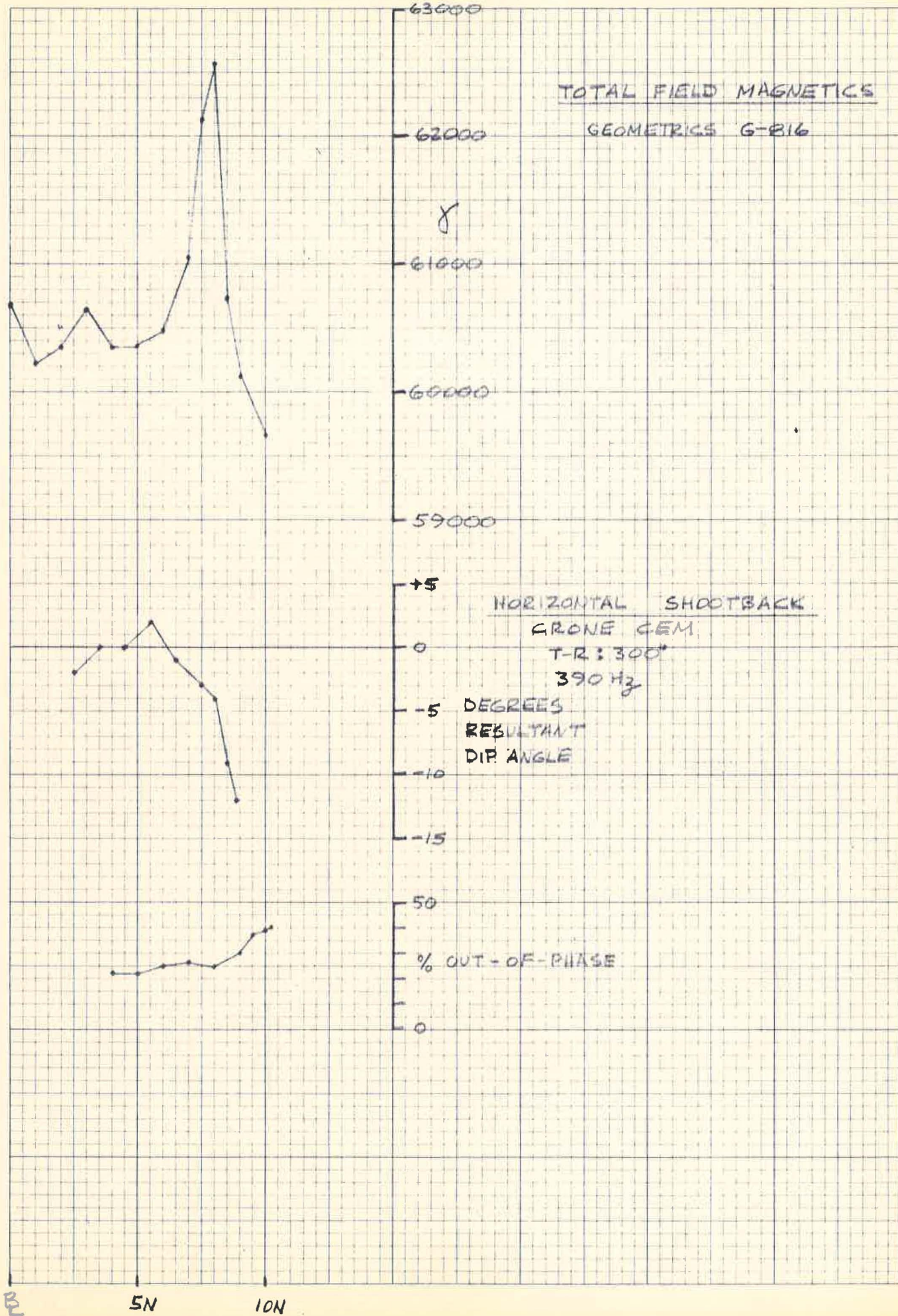


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TOTAL FIELD MAGNETICS
GEOMETRICS G-216

γ

HORIZONTAL SHOOTBACK
CRONE GEM
T-R: 300°
390 Hz

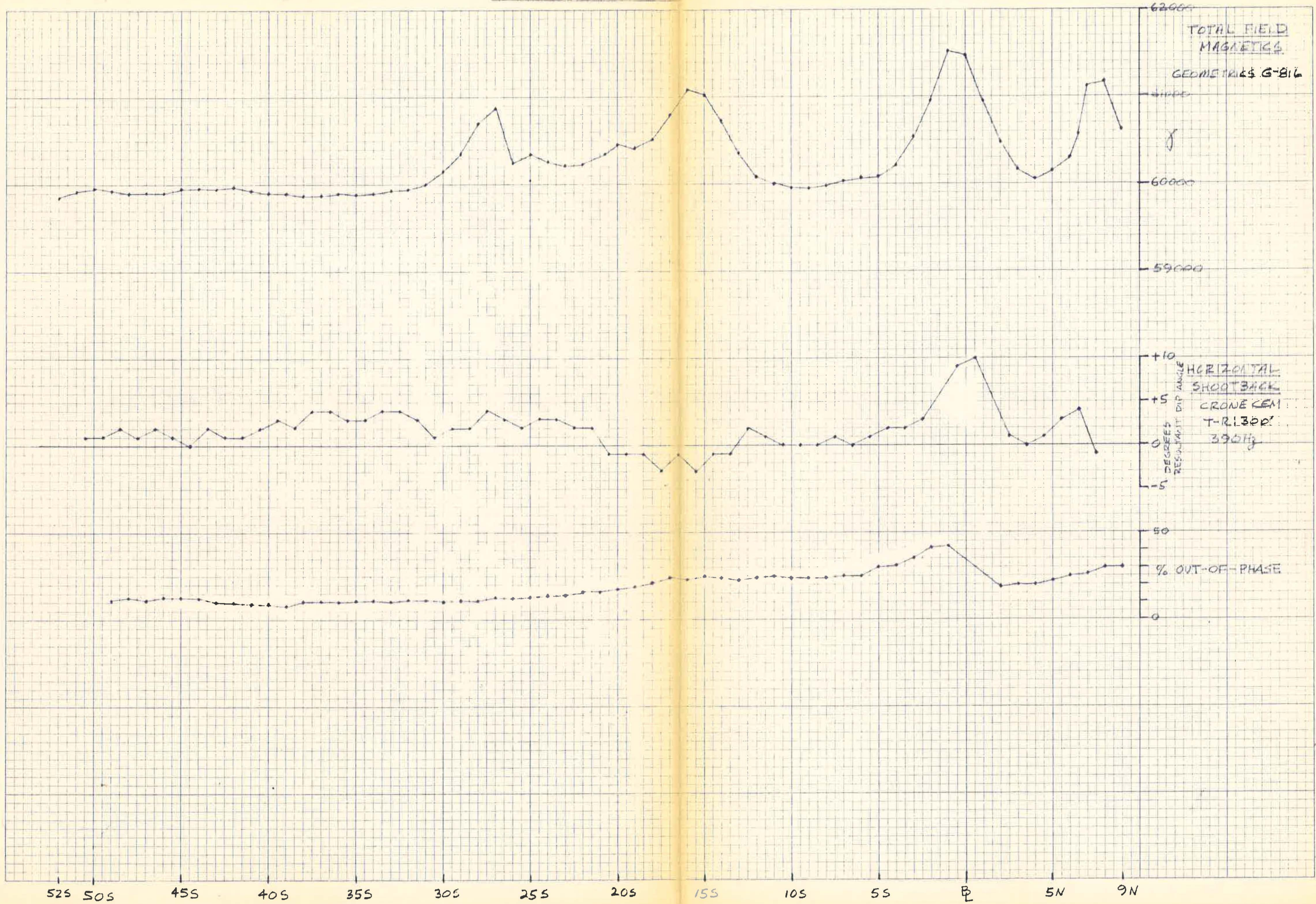
DEGREES
RESULTANT
DIP ANGLE

% OUT-OF-PHASE

5N

5N

10N

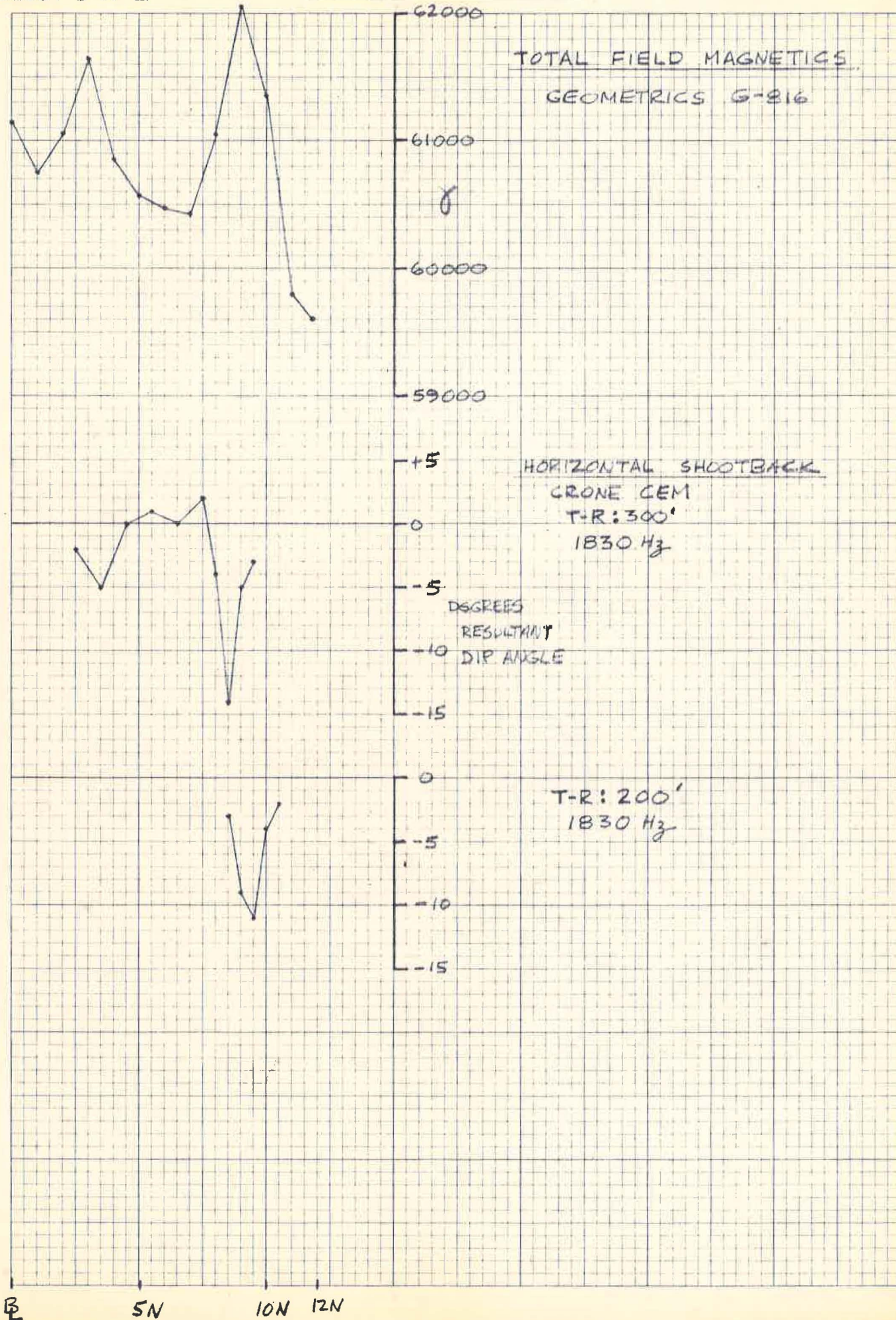


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10 X 10 TO THE INCH 10 X 15 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.

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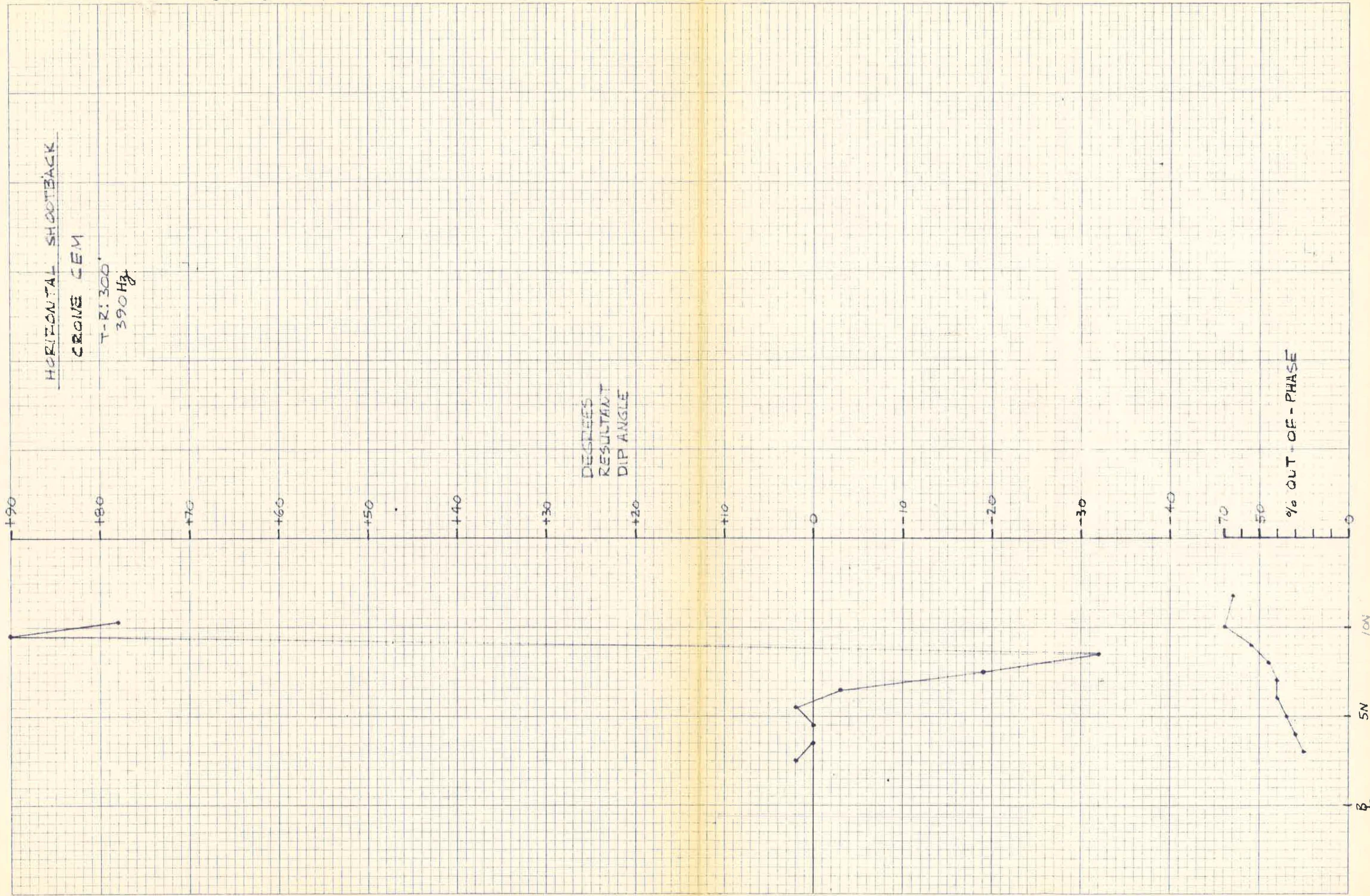


5N 10N 12N

47 0702

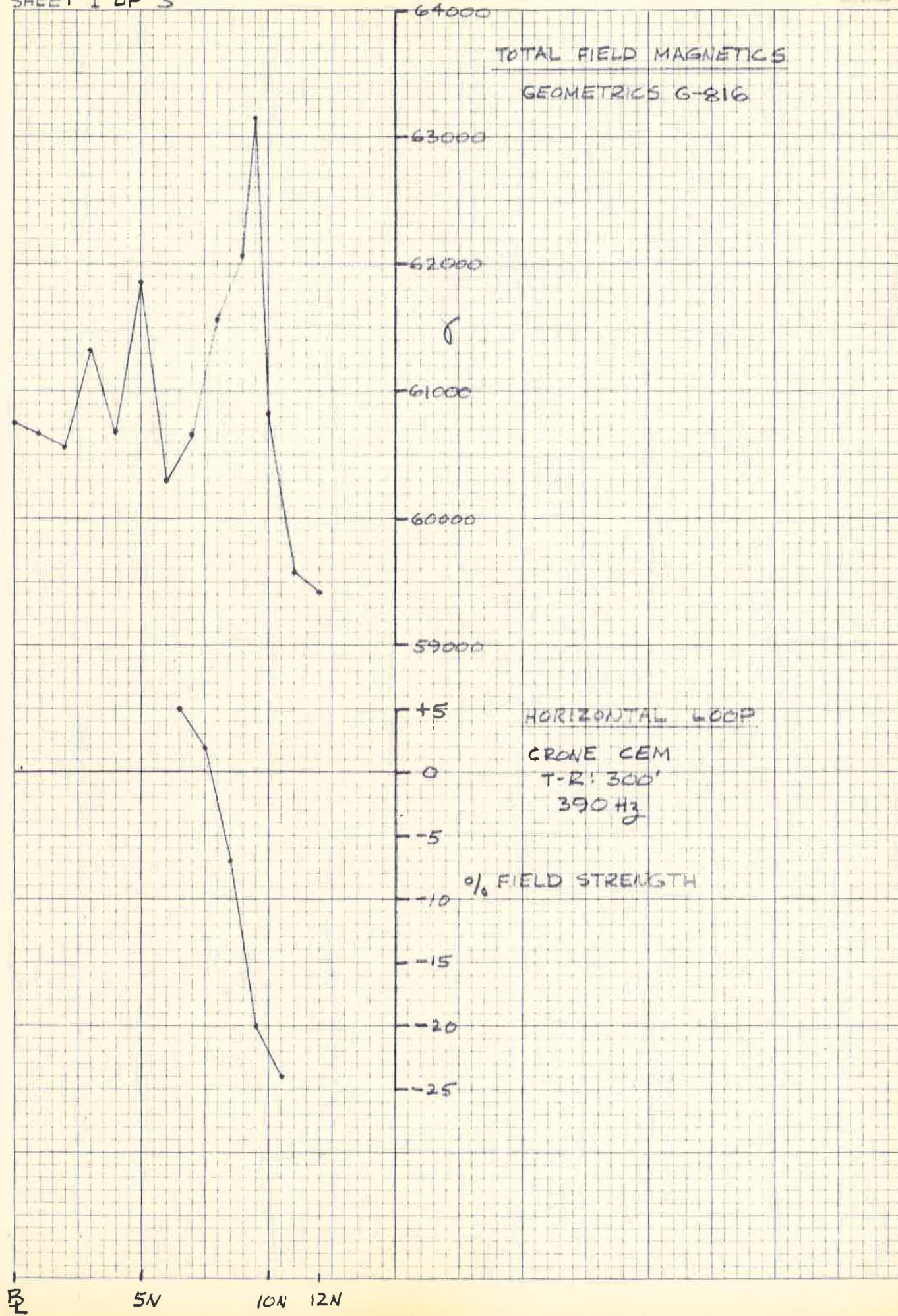
K&E 10 X 10 TO THE INCH • 10 X 15 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.

LINE 14+00E



EUGENE DIETZGEN CO.
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NO. 340-10 DIETZGEN GRAPH PAPER
10 X 10 PER INCH



5N 10N 12N

SHEET 2 OF 3

LINE 22+00E

HORIZONTAL SHOOTBACK

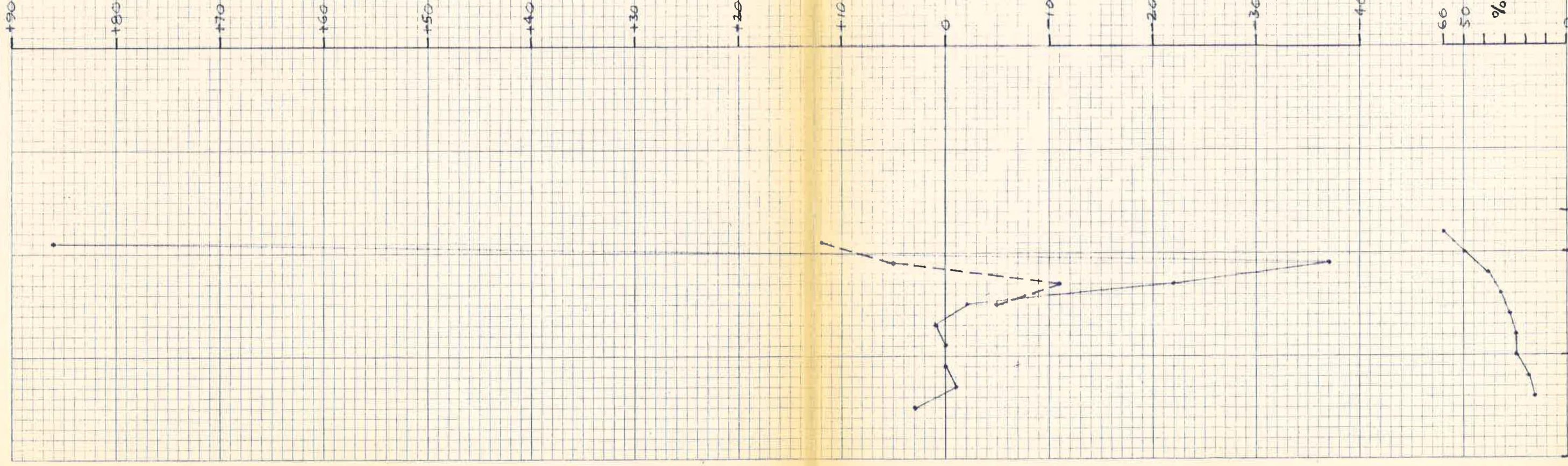
CRONE LEM
T-R: 300'

→ 590 Hz

→ 1830 Hz

DEGREES
RESULTANT
DIP ANGLE

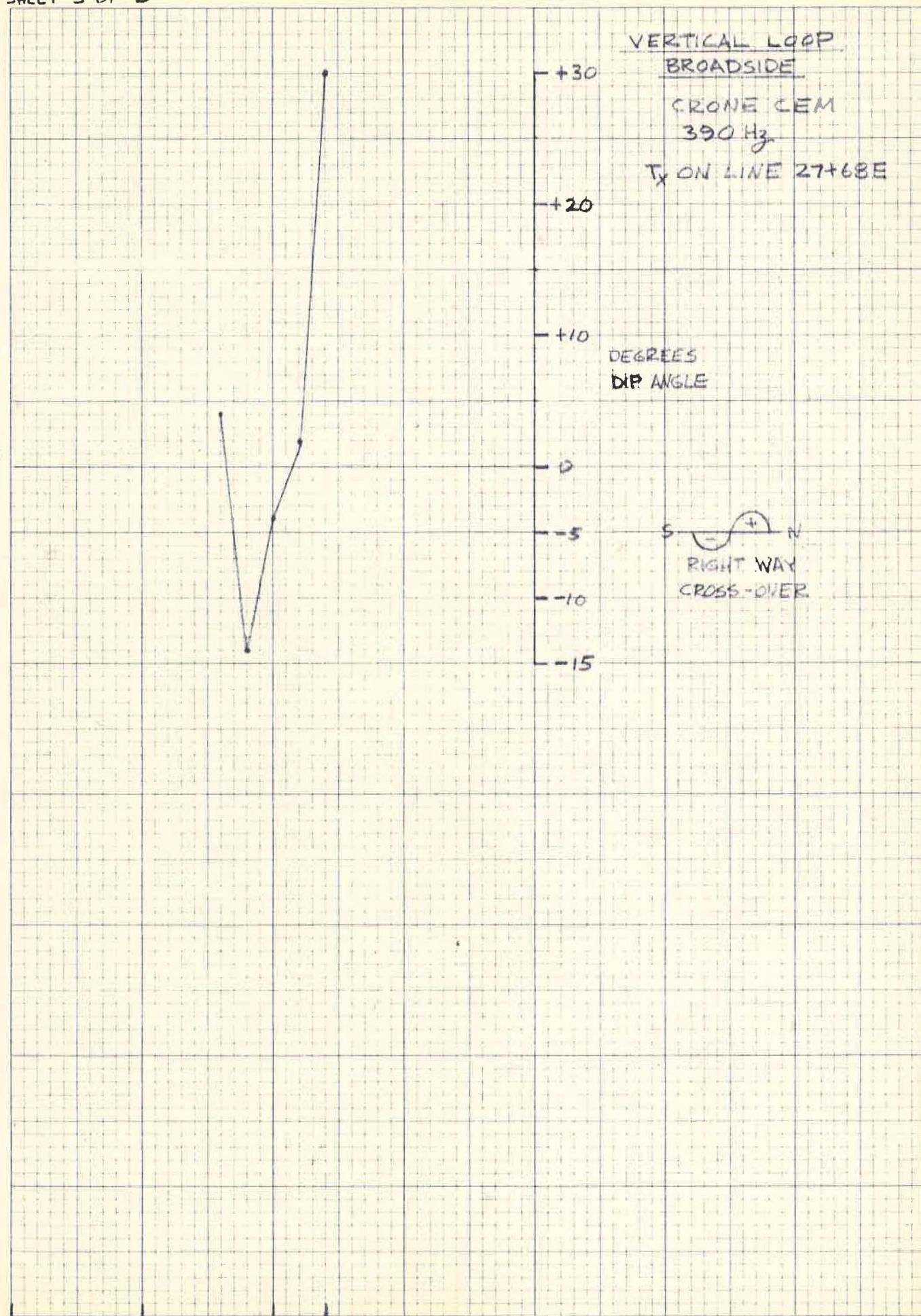
% OUT-OF-PHASE (390 Hz)



0 5N 10N 12N

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NO. 340-10 DIETZGEN GRAPH PAPER
10 X 10 PER INCH



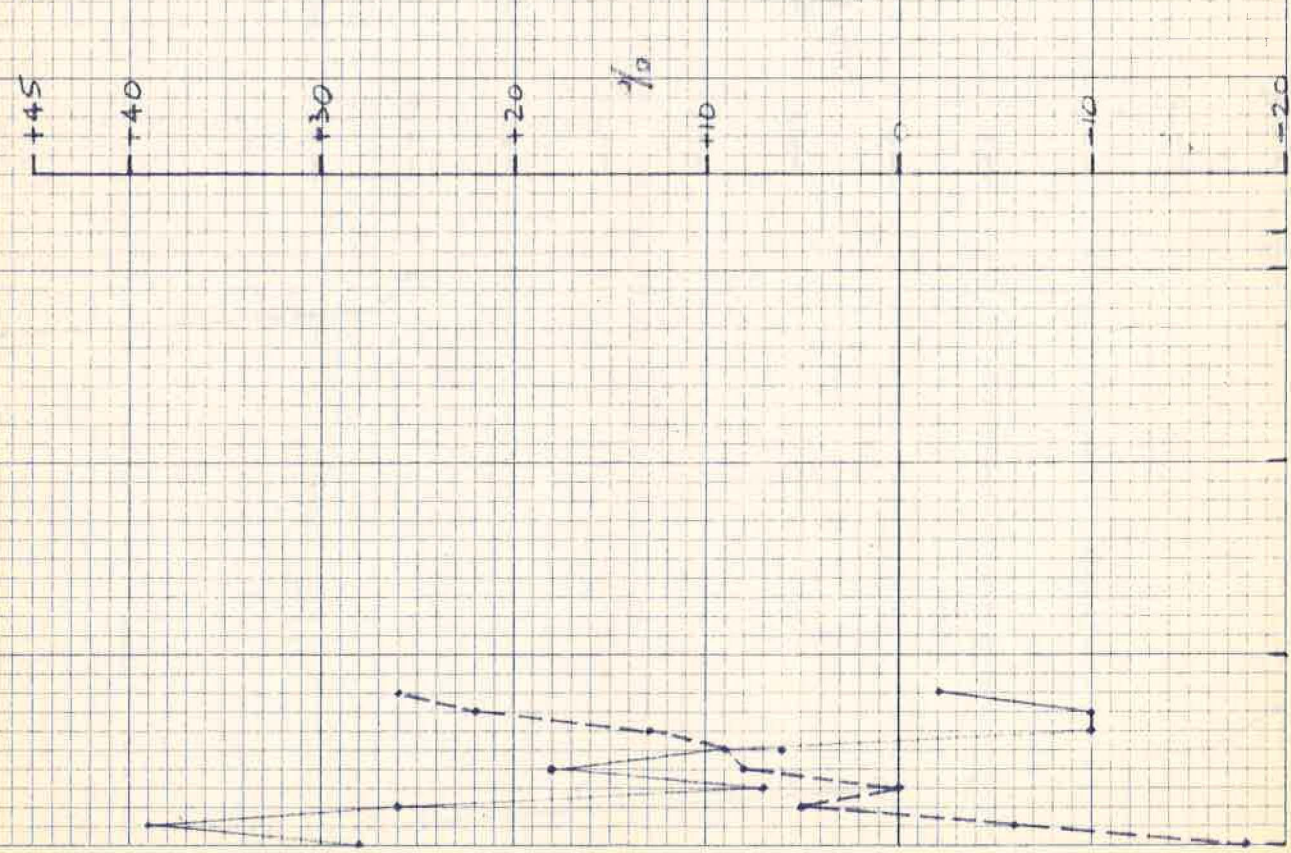
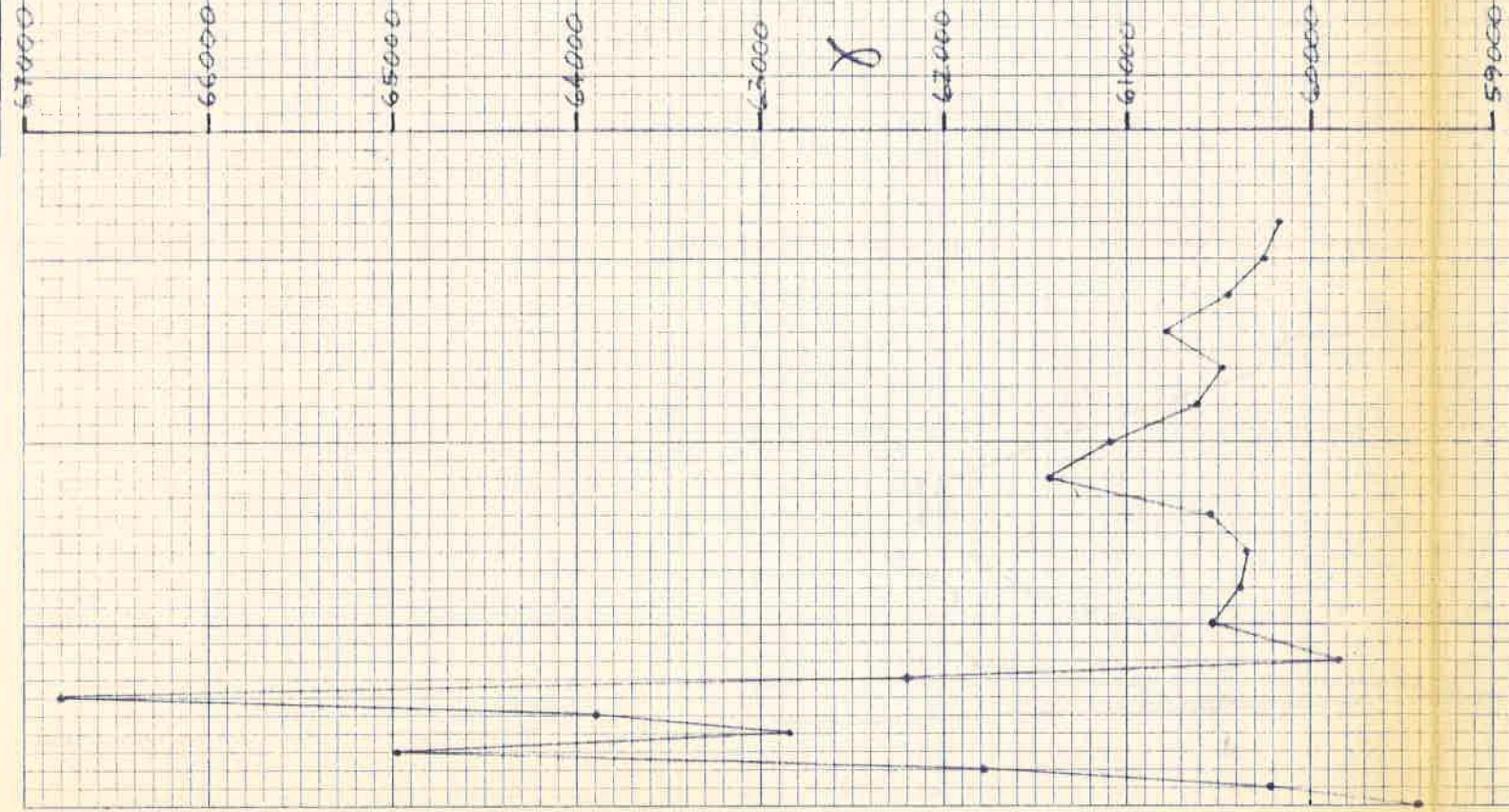
5N 10N 12N

LINE 27+68E

NOTE: LINE INTERSECTS BASELINE
AT 11+785 & 27+68E
WITH N 2° W BEARING

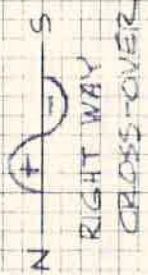
TOTAL FIELD MAGNETICS

GEOMETRICS G-BIG



VLF
GEONICS EM-16
17.8 KHz (COUTLER, MAINE)

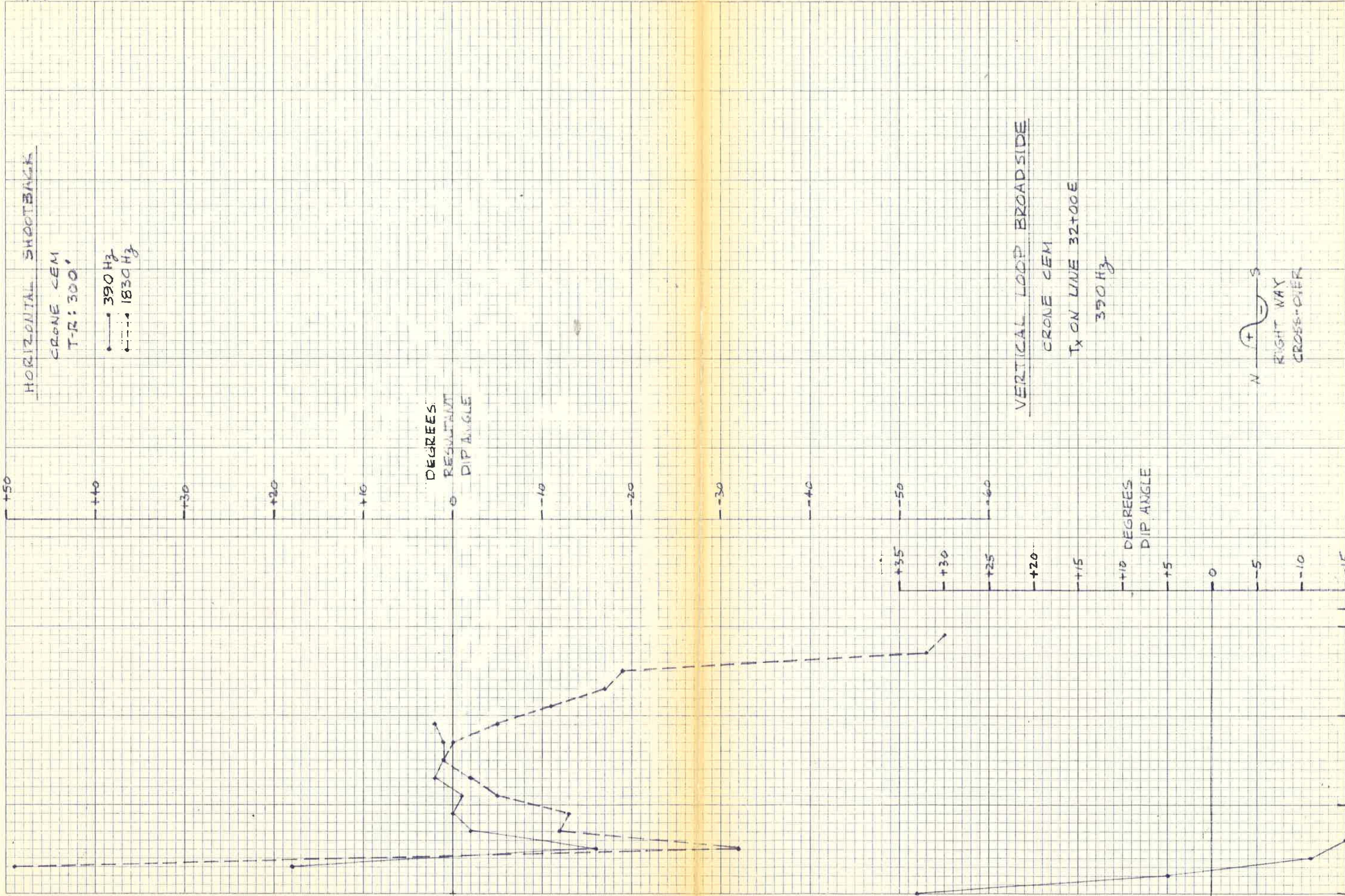
IN-PHASE
OUT-OF-PHASE



00+00 55 105 155

LINE 27+68E

LINE 27+68E



LINE 27+68E

HORIZONTAL SHOOTBACK

CRONE CEM

T-R: 400'

→ 1830 Hz

COAXIAL SHOOTBACK

CRONE CEM

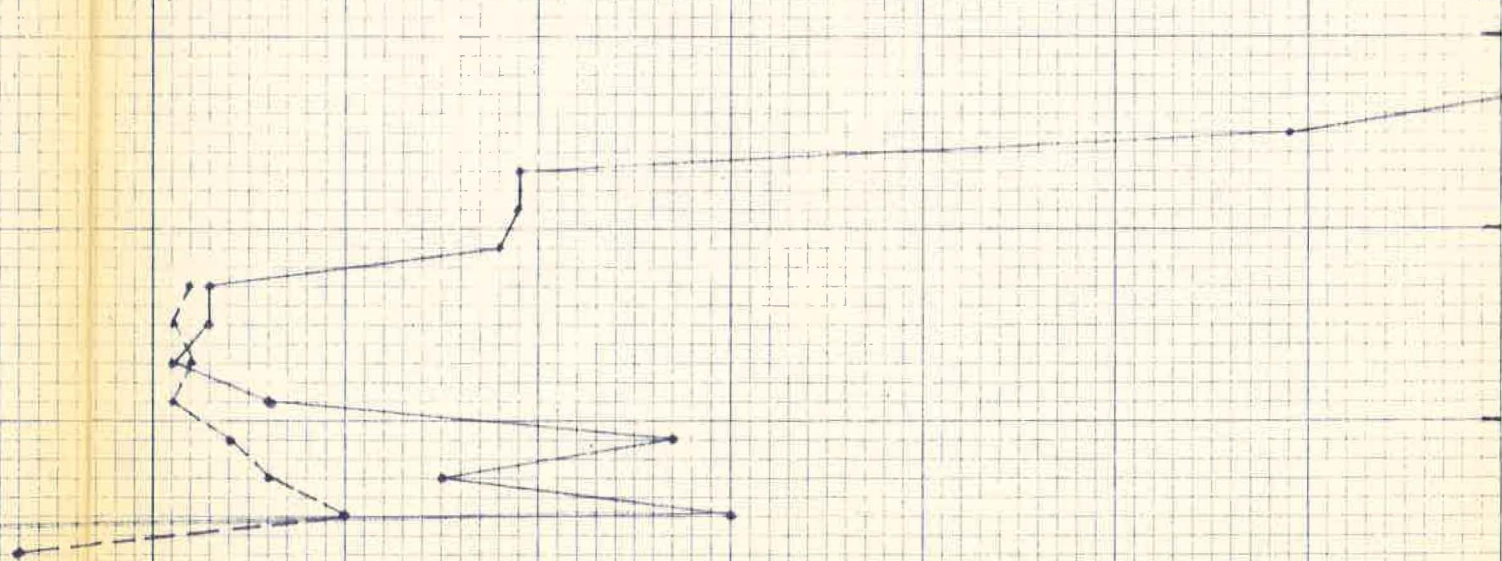
T-R: 300'

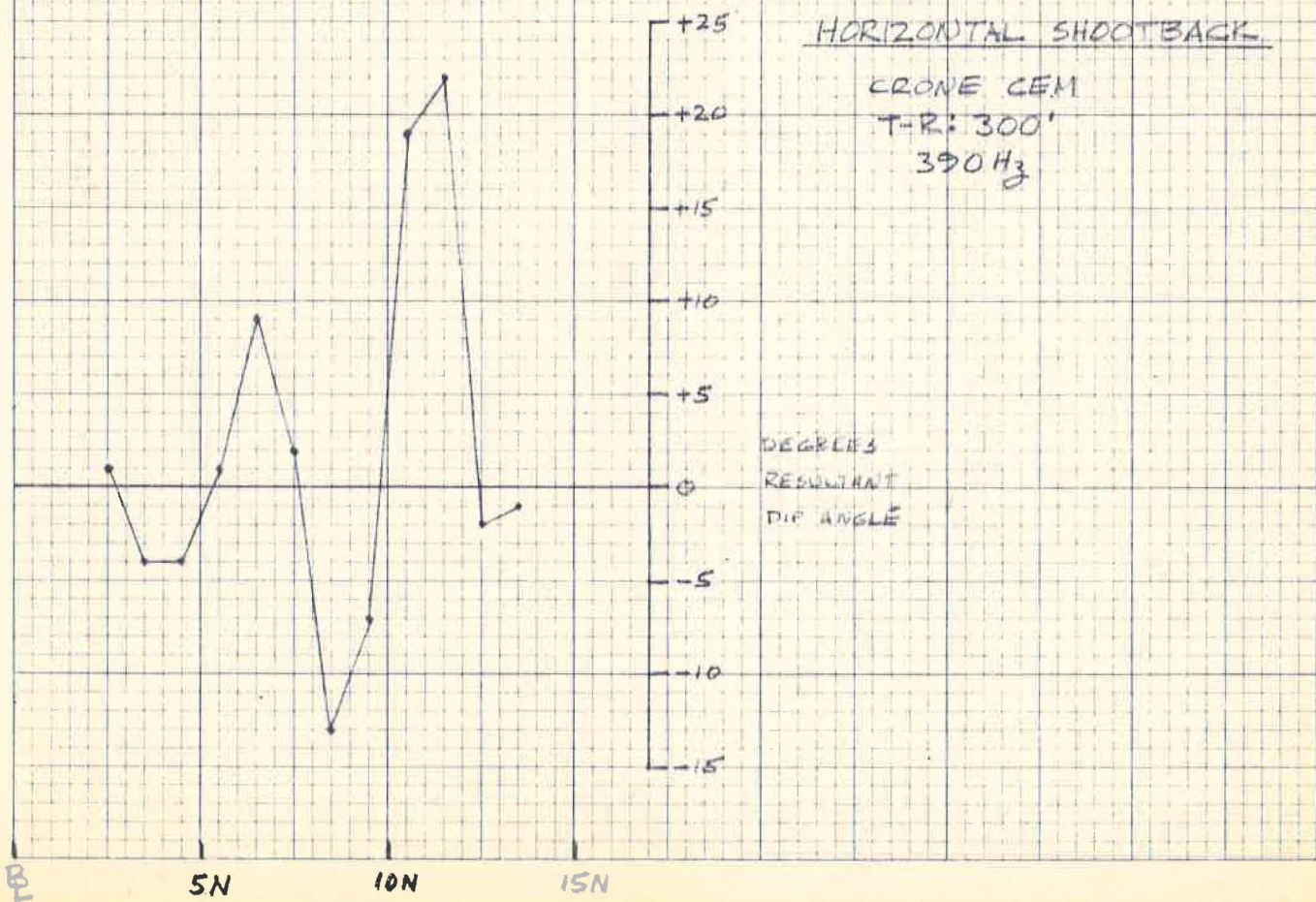
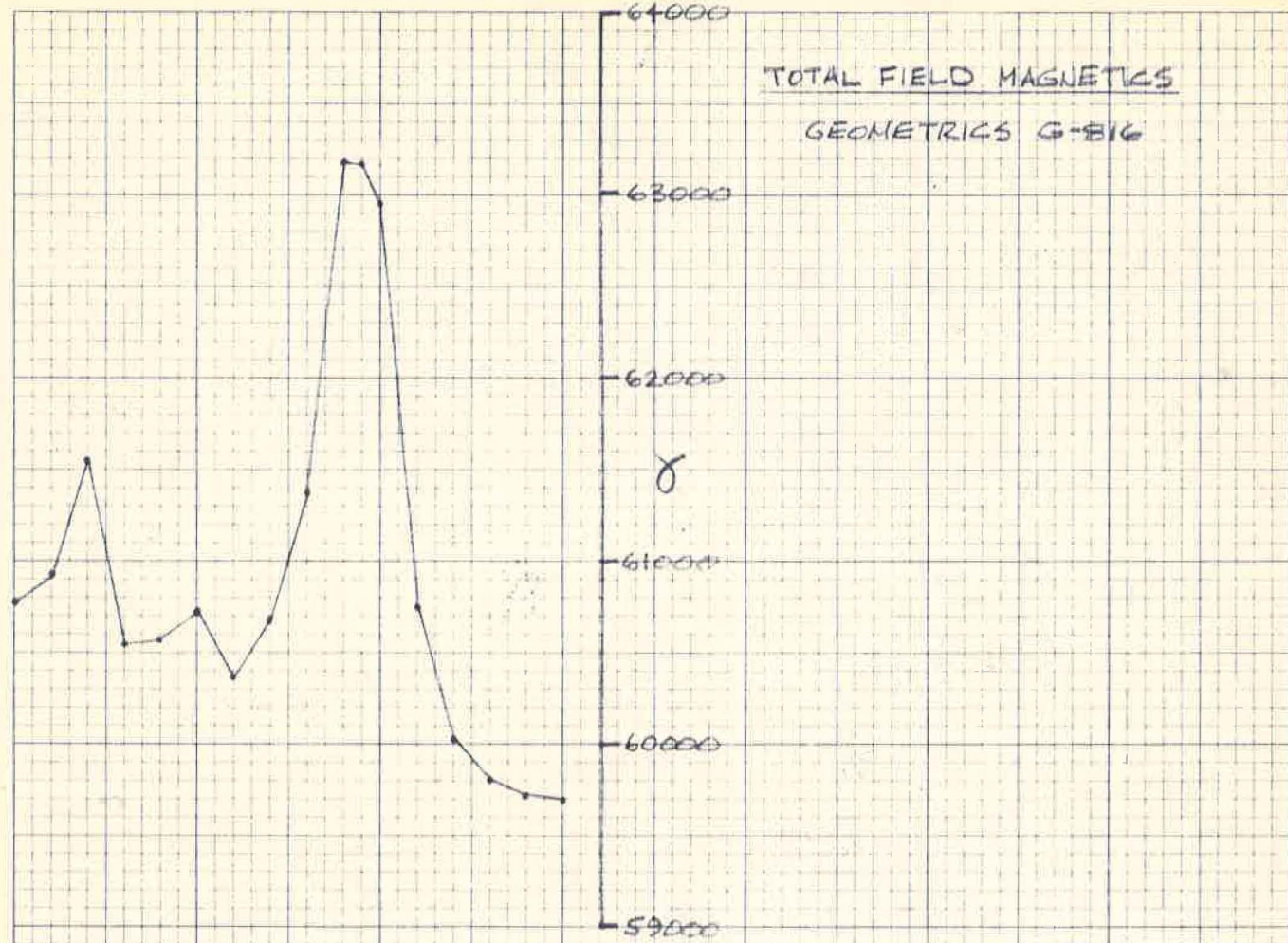
--- 390 Hz

DEGREES
RESULTANT
DIP ANGLE

+80 +70 +60 +50 +40 +30 +20 +10 0 -10 -20 -30 -40 -50 -60 -70

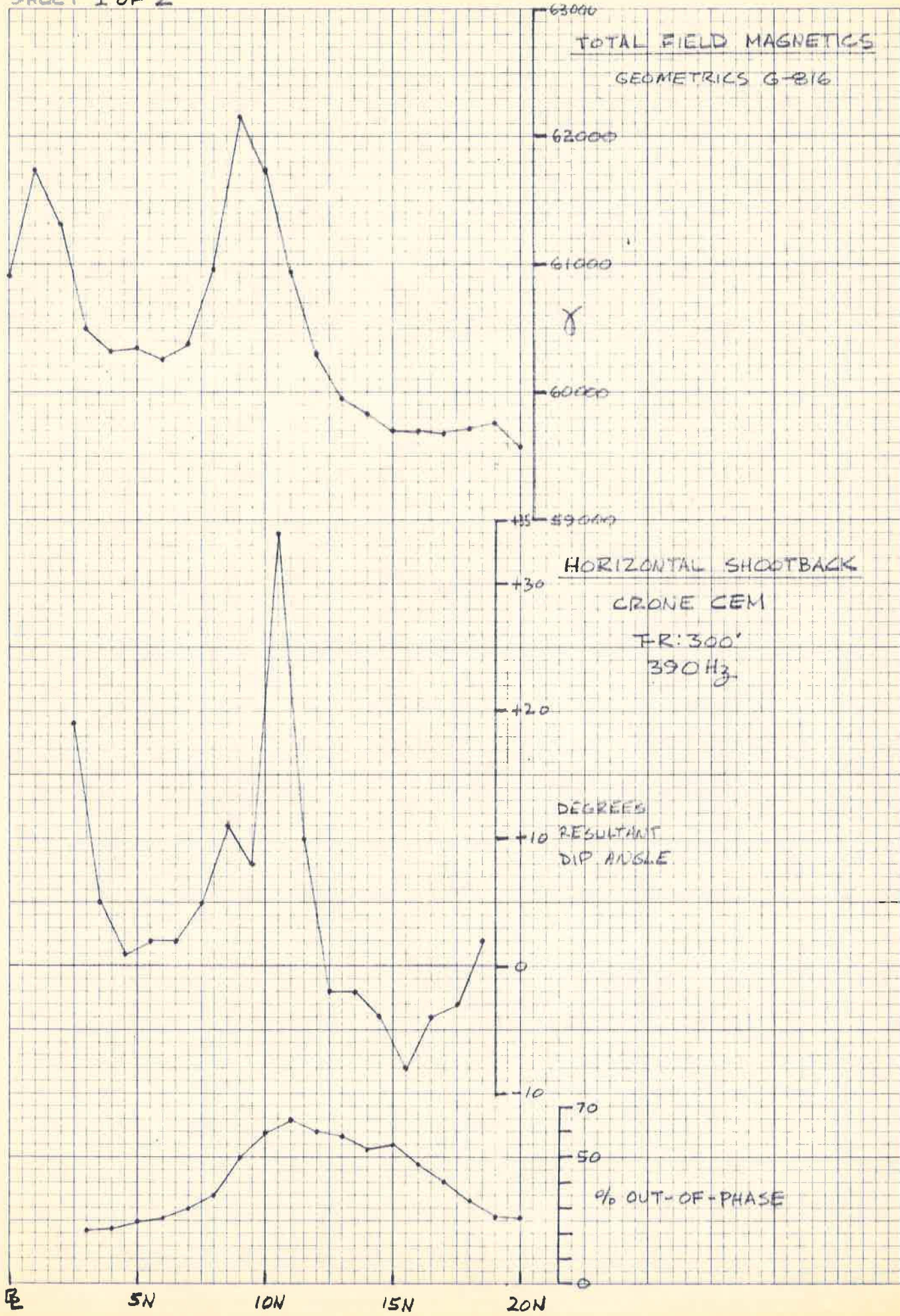
00400 55 105 155





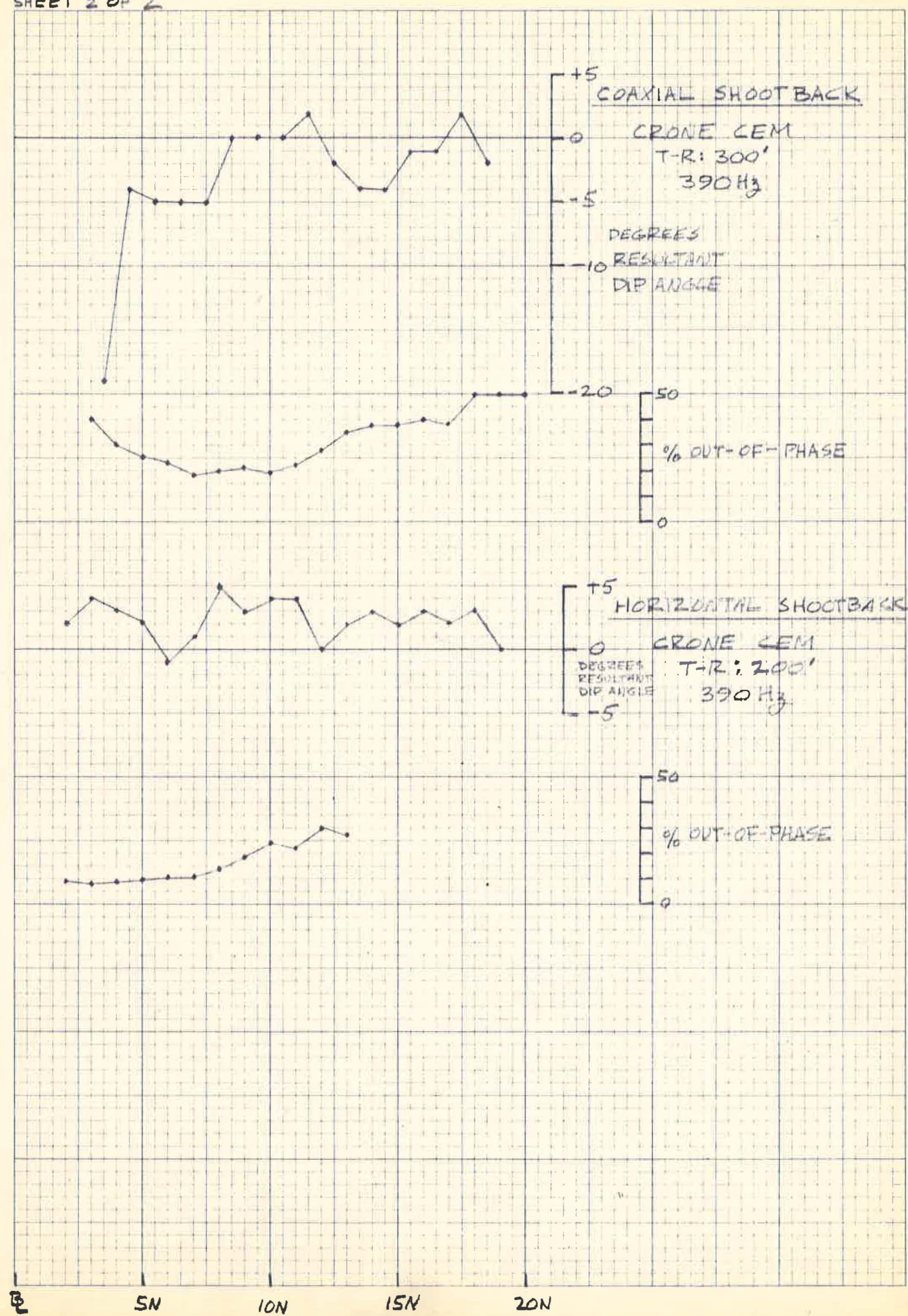
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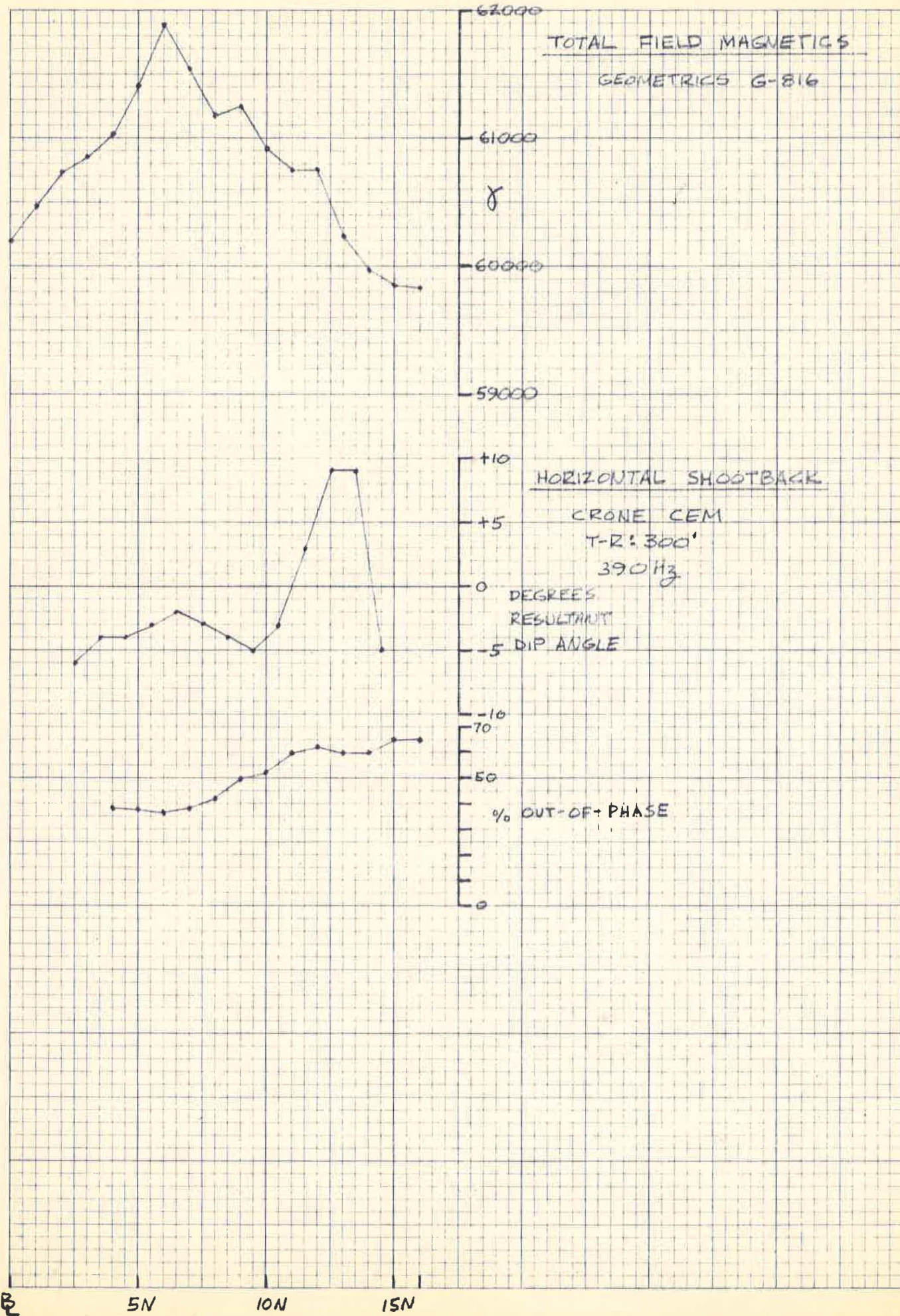
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10 X 10 PER INCH



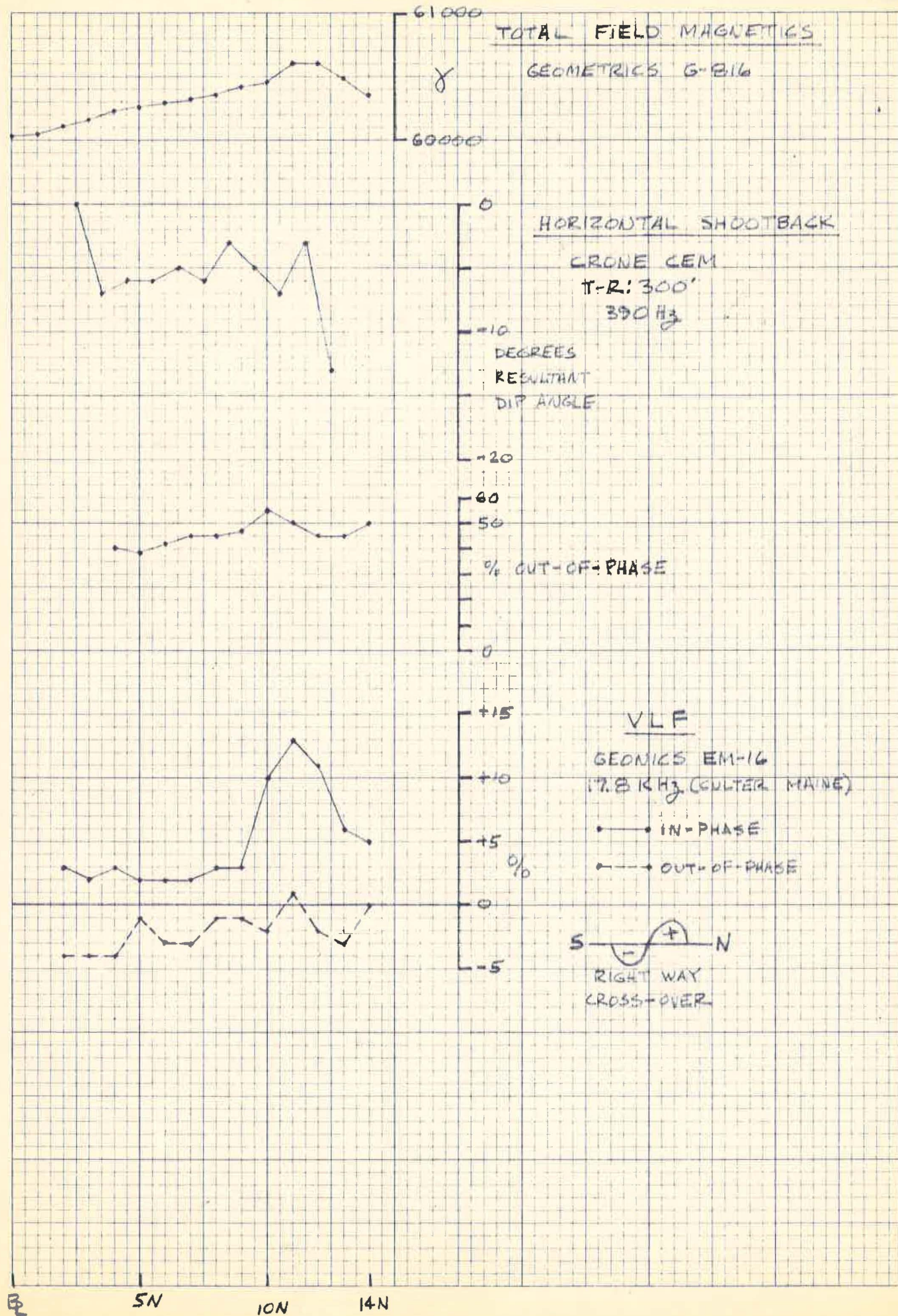
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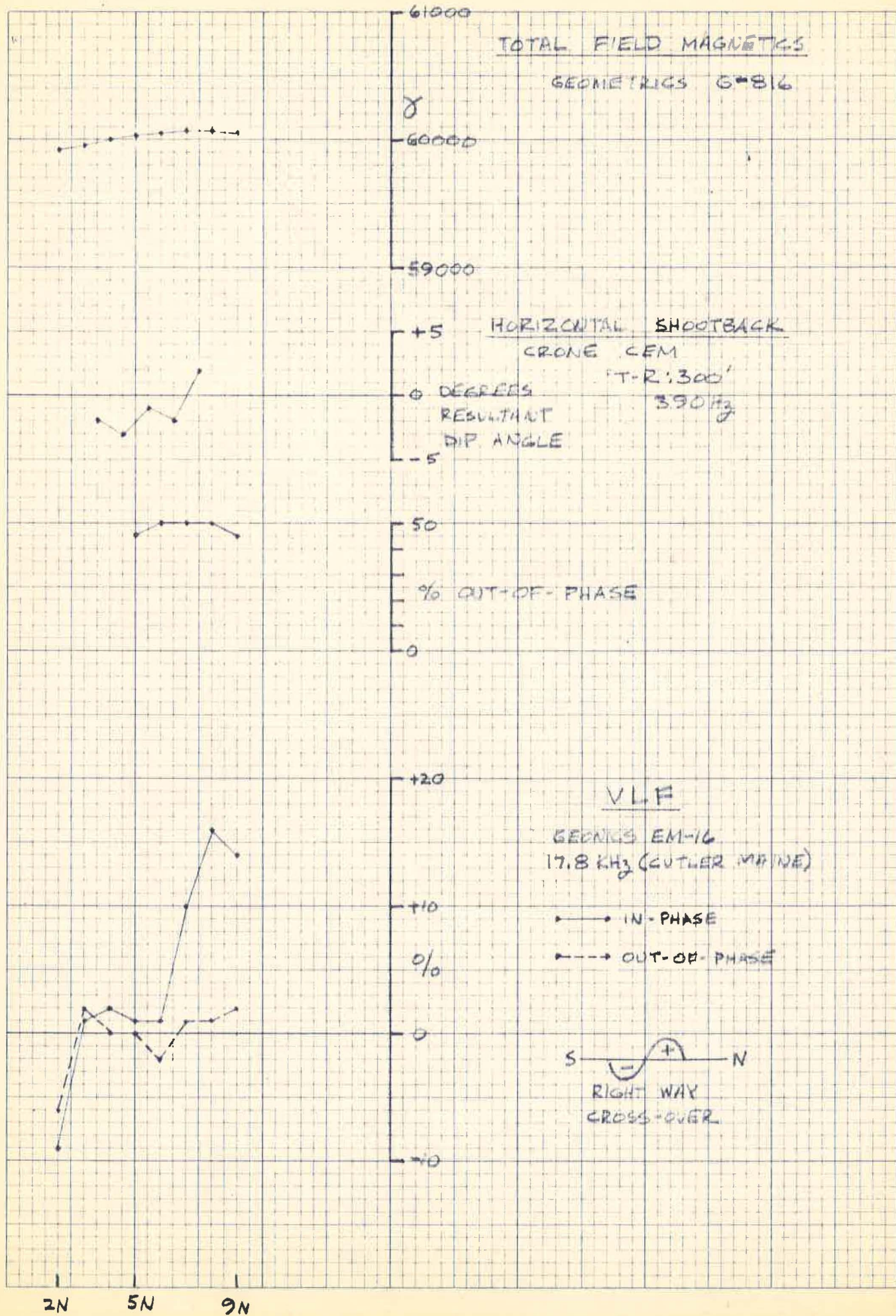
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