2.2520

REPORT No. D78

010

DIGHEM SURVEY

OF

SOUTH PORCUPINE AREA, ONTARIO

FOR

COMINCO LIMITED

BY

DIGHEM LIMITED

TORONTO, ONTARIO
SEPTEMBER 26, 1977

D. C. FRASER
PRESIDENT

S U M M A R Y

A DIGHEM^{II} airborne electromagnetic/resistivity/magnetic survey of 254 line-miles was flown for Cominco Limited in August 1977, in the South Porcupine area of Ontario. A considerable number of conductors were detected, some of which were recognizable only on those channels which have geological noise stripped off. Several discrete targets were identified.

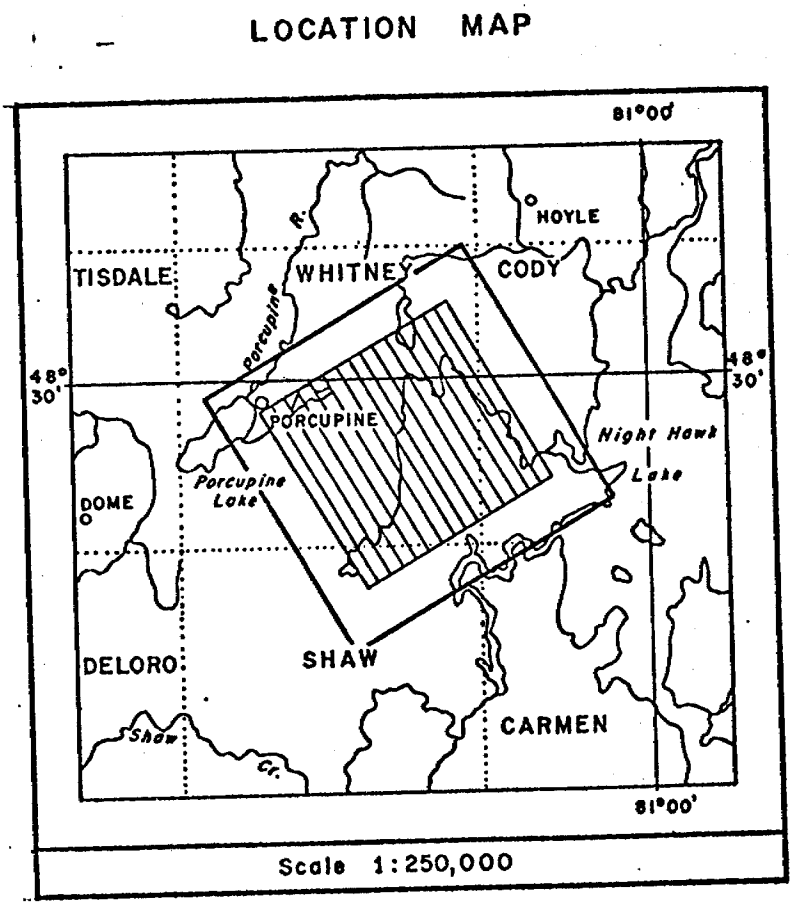


Figure 1. The survey area.

DIGHEM MAGNETIC SURVEY.

A DIGHEM survey of 254 line-miles was flown with a 400-foot line-spacing for Cominco Limited on August 9th, 1977, in the South Porcupine area of Ontario (Figure 1). The Alouette II jet helicopter C-GNQX flew with an average airspeed of 60 mph and EM bird height of 110 feet. Ancillary equipment consisted of a Geometrics 803 magnetometer with its bird at an average height of 160 feet, a Sperry radio altimeter, Geocam sequence camera, 60 hz monitor, Barringer 8-channel hot pen analog recorder, and a Geometrics G-704 digital data acquisition system with a Cipher 70 7-track 200-bpi magnetic tape recorder. The analog equipment recorded six channels of EM data at approximately 900 hz and one of magnetics and radio altitude. The digital equipment recorded the EM data with a sensitivity of 0.2 ppm/bit and the magnetic field to an accuracy of one gamma.

The magnetometer data are digitally recorded in the aircraft to an accuracy of one gamma. The digital tape is processed by computer to yield a standard total field magnetic map contoured at 25 gamma intervals.

47.45 line miles were flown over 61 claims in Whitney Township as outlined on the attached Dighem Magnetics Map.

Two maps accompany this report:

Map #1: Cominco Ltd. - Whitney Twp. Claim Map, 1:25,000
Map #2: Dighem Survey - Magnetics, 1"=1320'

Respectfully submitted,

D.C. Fraser
President

Ministry of Natural Resources
Ontario

Lands Administration Branch

Projects Unit

42A06NE0051 2.2520 WHITNEY

900

Recorded Holder	Rosario Resources (Canada) Limited
Township or Area	Whitney Township

Type of survey and number of Assessment days credit per claim	Mining Claims
Geophysical Electromagnetic _____ days Magnetometer 31 days Radiometric _____ days Induced polarization _____ days Section 86 (18) _____ days Geological _____ days Geochemical _____ days Man days ☐ Airborne ☒ Special provision ☐ Ground ☐	P. 435182 to 91 inclusive 451716 to 18 " 479905 to 08 " 482870 to 80 " 489423 493358 to 65 inclusive 493375 to 82 " 493564 to 71 " 493682 - 83 494153 to 58 inclusive

Notice of Intent to be issued:

☐ Credits have been reduced because of partial coverage of claims.

☐ Credits have been reduced because of corrections to work dates and figures of applicant.

☐ No credits have been allowed for the following mining claims as they were not sufficiently covered by the survey:

_____

_____

_____

_____

_____

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40;

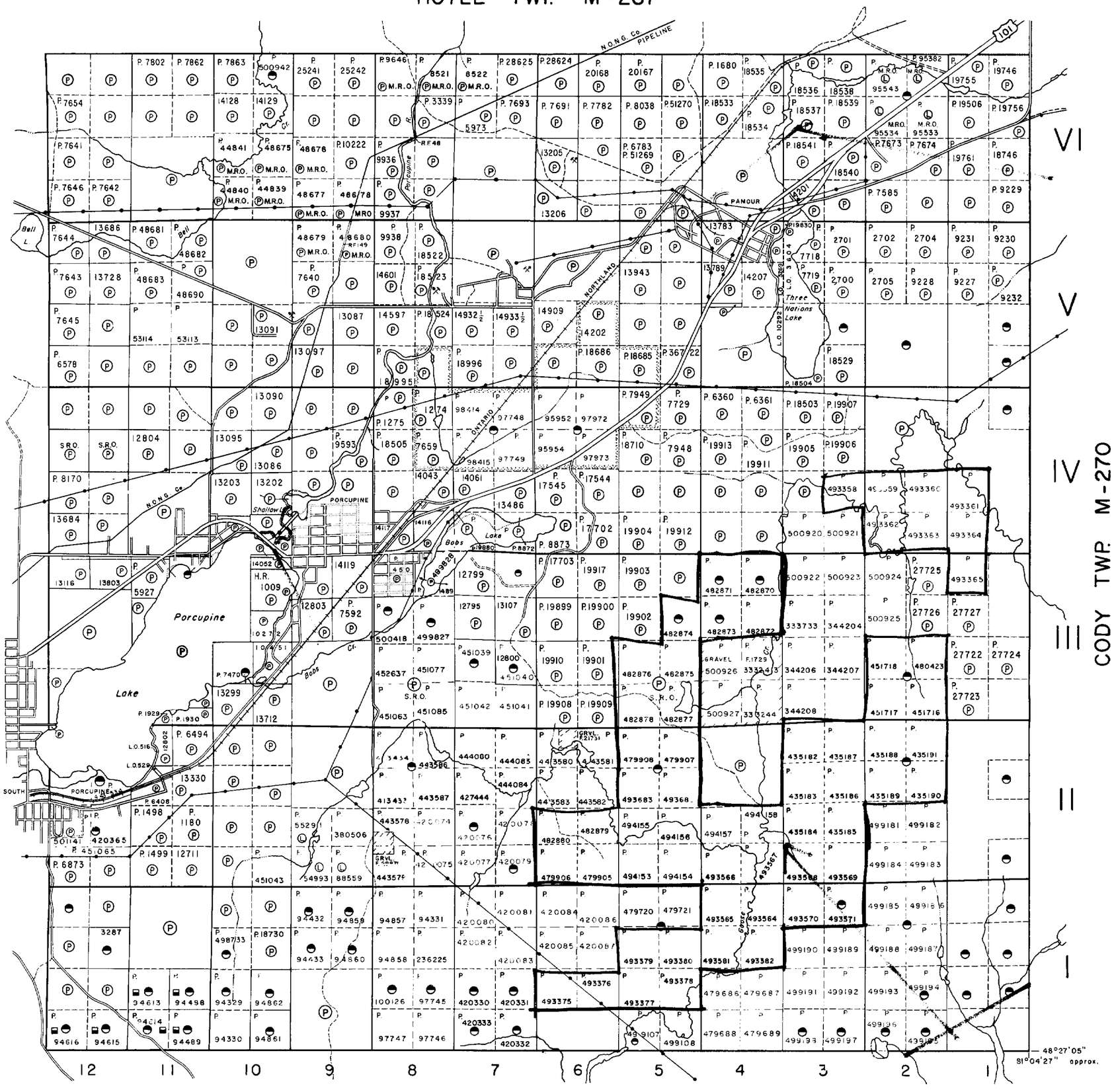
Form LA. 101 (10/74)

HOYLE TWP. M-287

TISDALE TWP. M-315

CODY TWP. M-270

SHAW TWP. M-311



THE TOWNSHIP
OF
2.2520
WHITNEY

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C
S.R.O. PATENTED	

NOTES

400' Surface rights reservation along the shores of all lakes and rivers.

This township lies within the Municipality of CITY of TIMMINS.

No disposition of sand and gravel on lands north of O.N.Ry. from May 8, 1964 until further notice. Form D.O.M. file 550.13

Any restakings within stippled area in Lots 5,6,7,8 Con. 4 and 5 subject to rights and privileges granted to Pamour Porcupine Mines Ltd for tailings disposal.

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Date 10th. JULY 1974 (Rev.)

Whitney Block
Queen's Park, Toronto

M_319

DIGHEM SURVEY

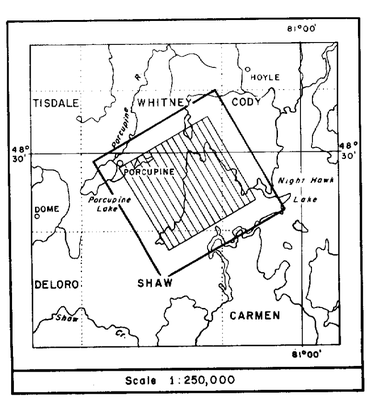
SOUTH PORCUPINE, ONTARIO

MAGNETICS

FOR

COMINCO LIMITED

LOCATION MAP



Flight line

Fiducials and numbers

ISOMAGNETIC LINES

(total field)

- 1000 ..... 1000 gammas
- 200 ..... 200 gammas
- ..... 50 gammas
- ..... 25 gammas
- ..... magnetic depression

0 1/8 1/4 1/2 3/4 1

MILES

Not filed for assessment credit.

REGISTERED PROFESSIONAL ENGINEER D.C. FRASER PROVINCE OF ONTARIO

Sep 26/77

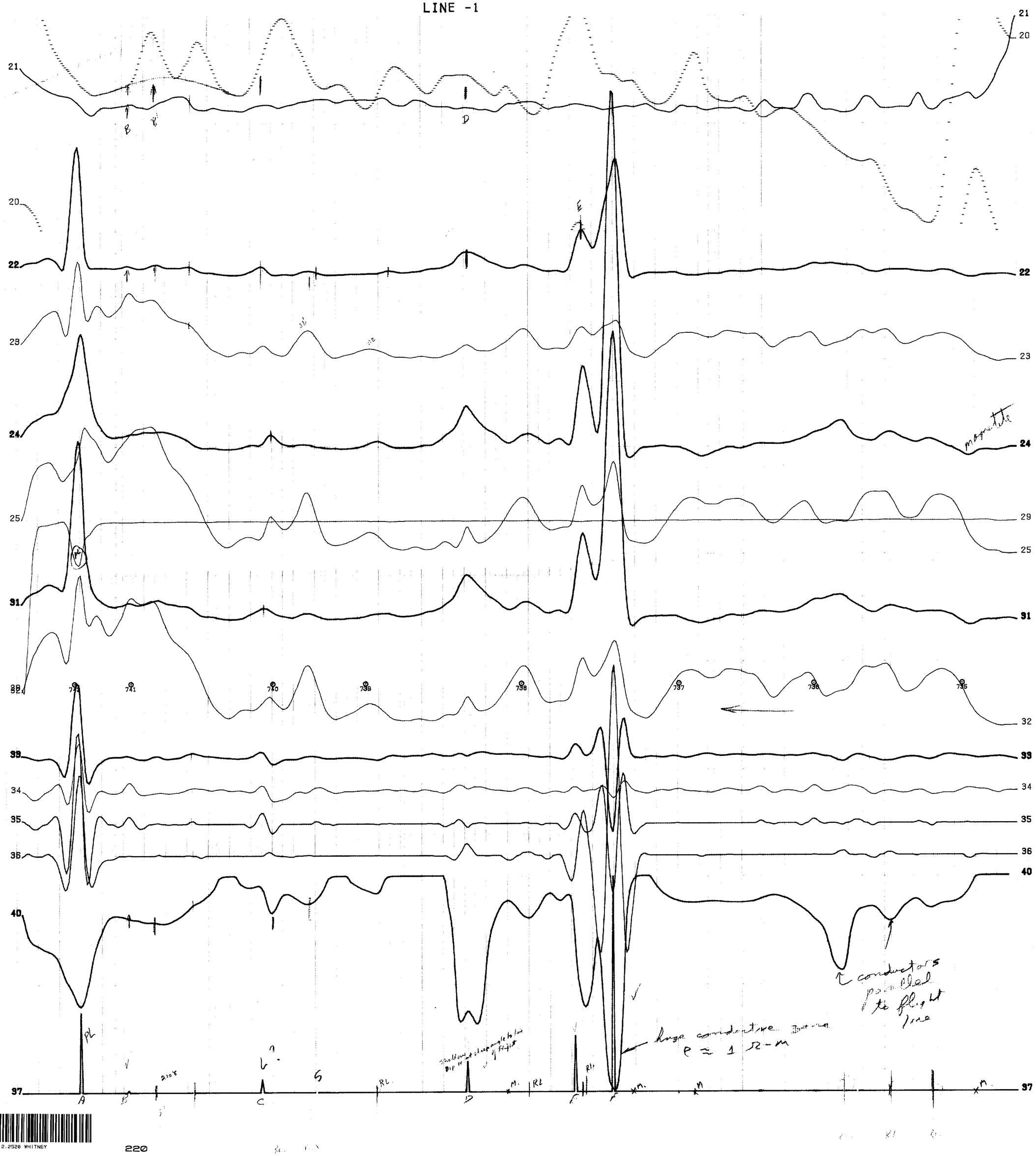
2.2520

Map #2: Dighem Survey - Magnetics, 1"=1320'

210

ACAMO

LINE -1



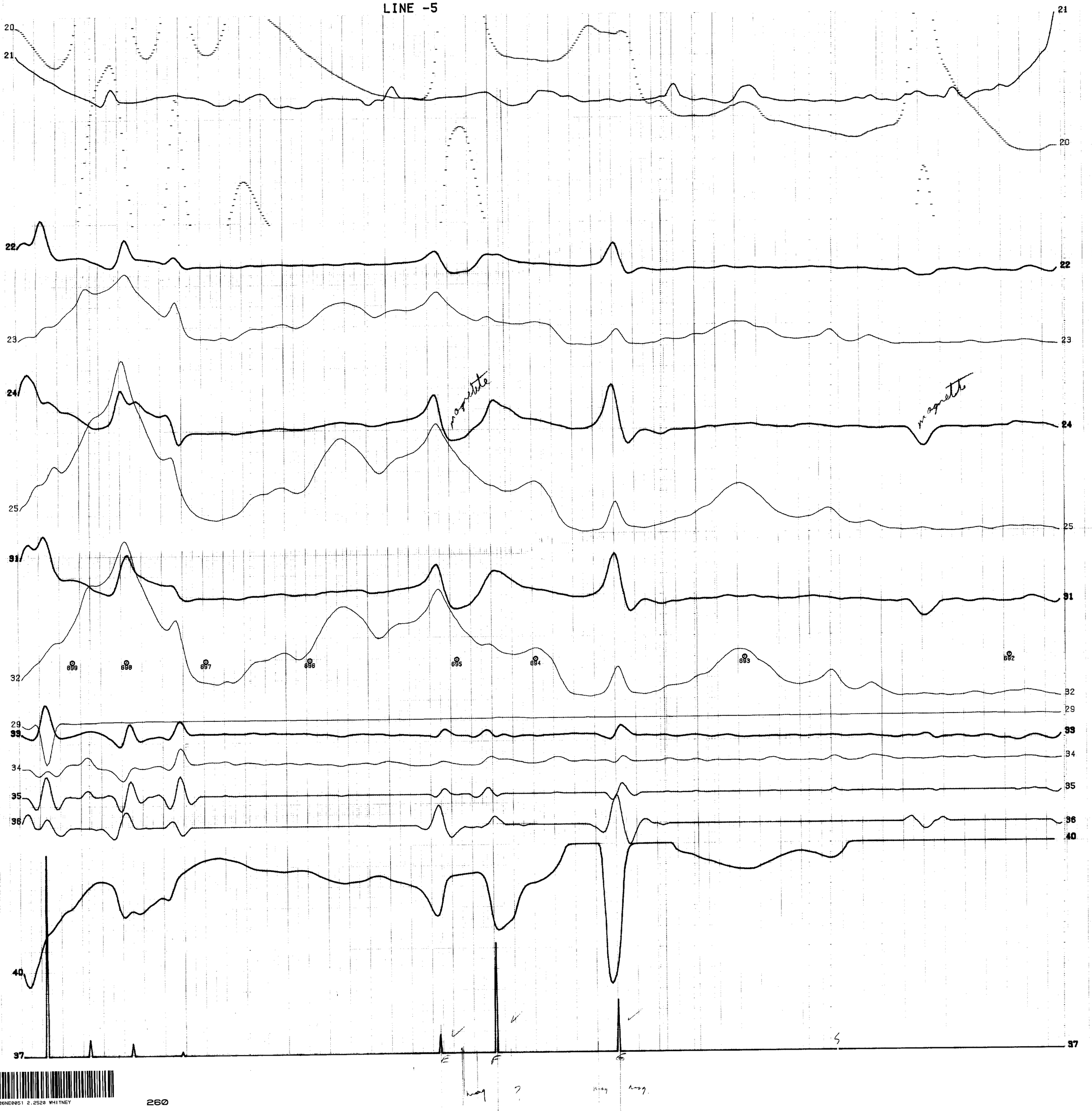
LINE 2

LINE -3

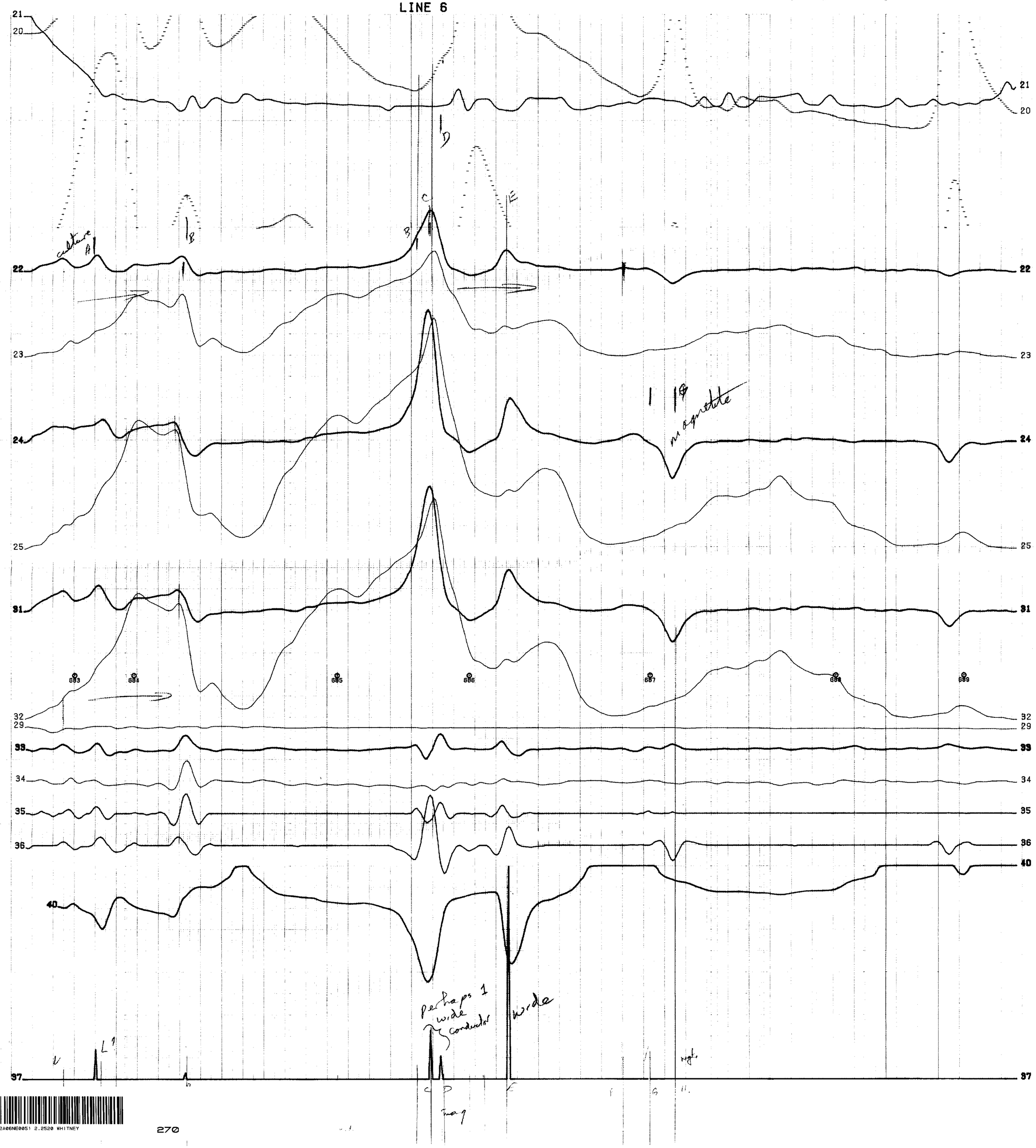
LINE 4

45-67%

LINE -5


20
21
22
23
24
25
31
32
699
698
697
696
695
694
693
692
29
33
34
35
36
40
37
magnetic
magnetic
E
F
G

LINE 6


21
20
22
23
24
25
31
32
29
33
34
35
36
40
37
683
684
685
686
687
688
689
capture
A
B
C
D
E
perhaps 1 wide conductor
wide
L1
mag.

Line 7 not flown

LINE -8

LINE 9

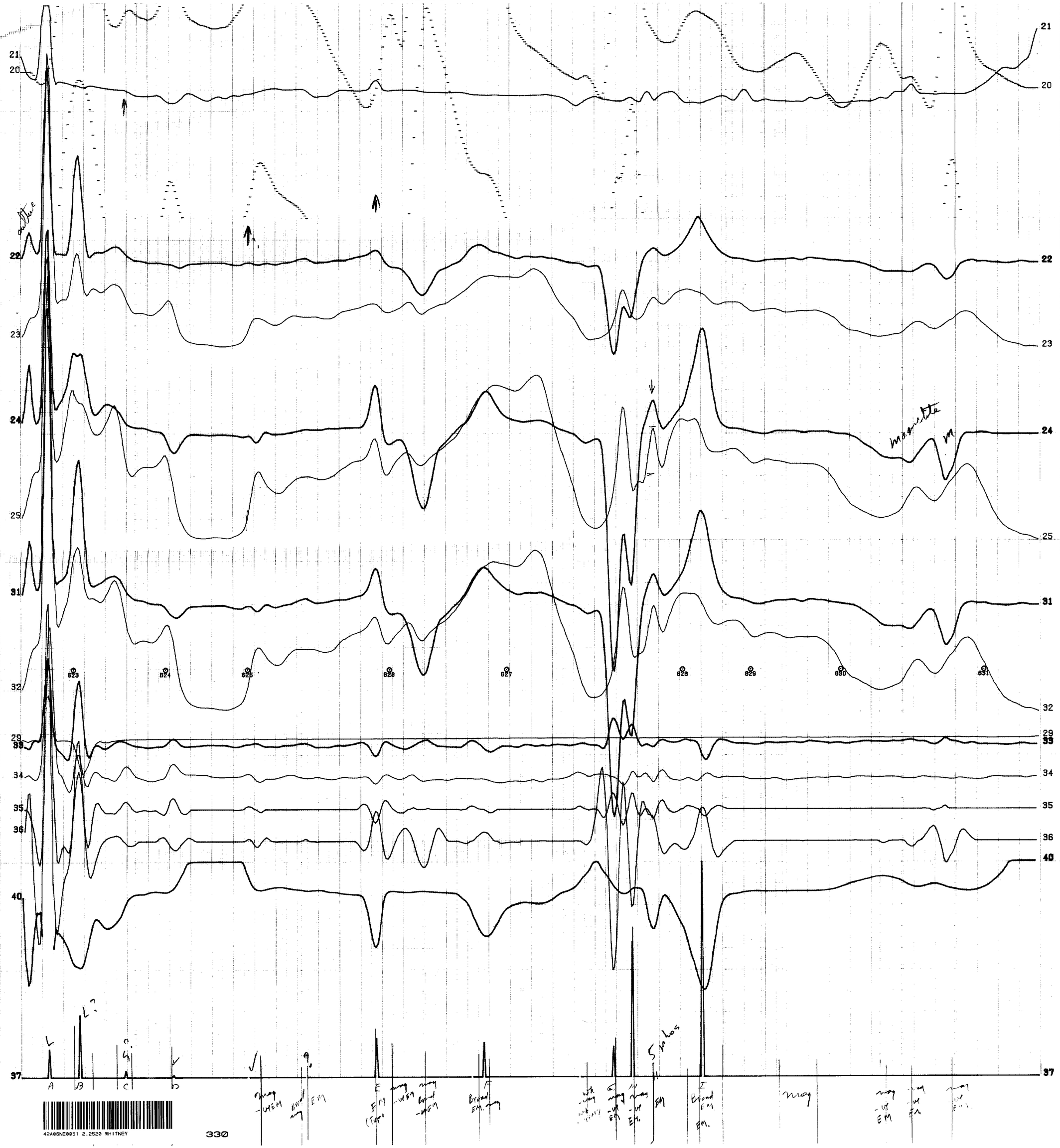
LINE -10

LINE 11

LINE -12


21
20
22
23
24
25
31
29
32
33
34
35
40
36
37
subtle
magnetite
mkg value ≈ 10
A
B
D
E
F

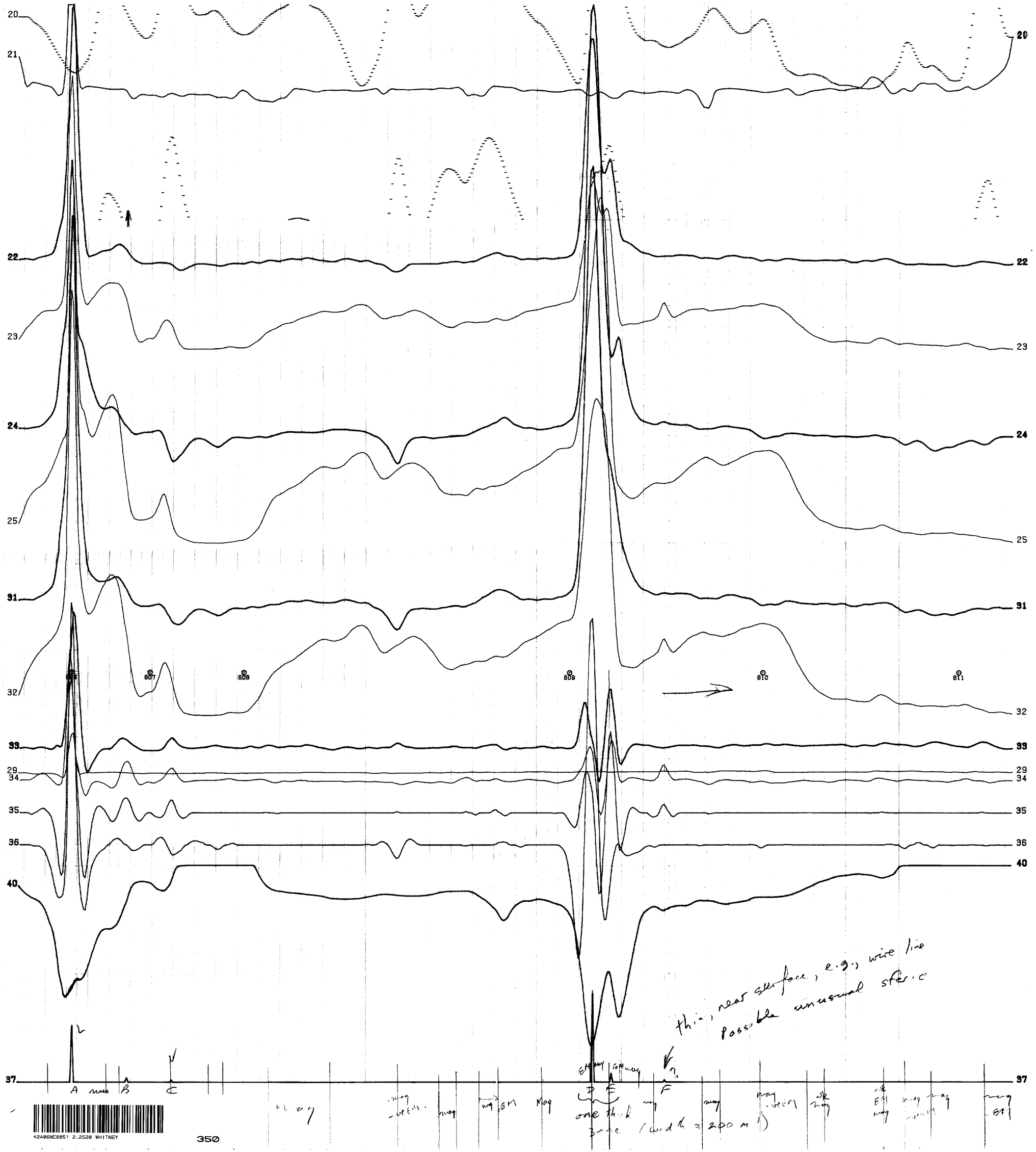
LINE 13


21
20
22
23
24
25
31
32
29
33
34
35
36
40
37
625
626
627
628
629
630
631
A
B
C
E
F
I

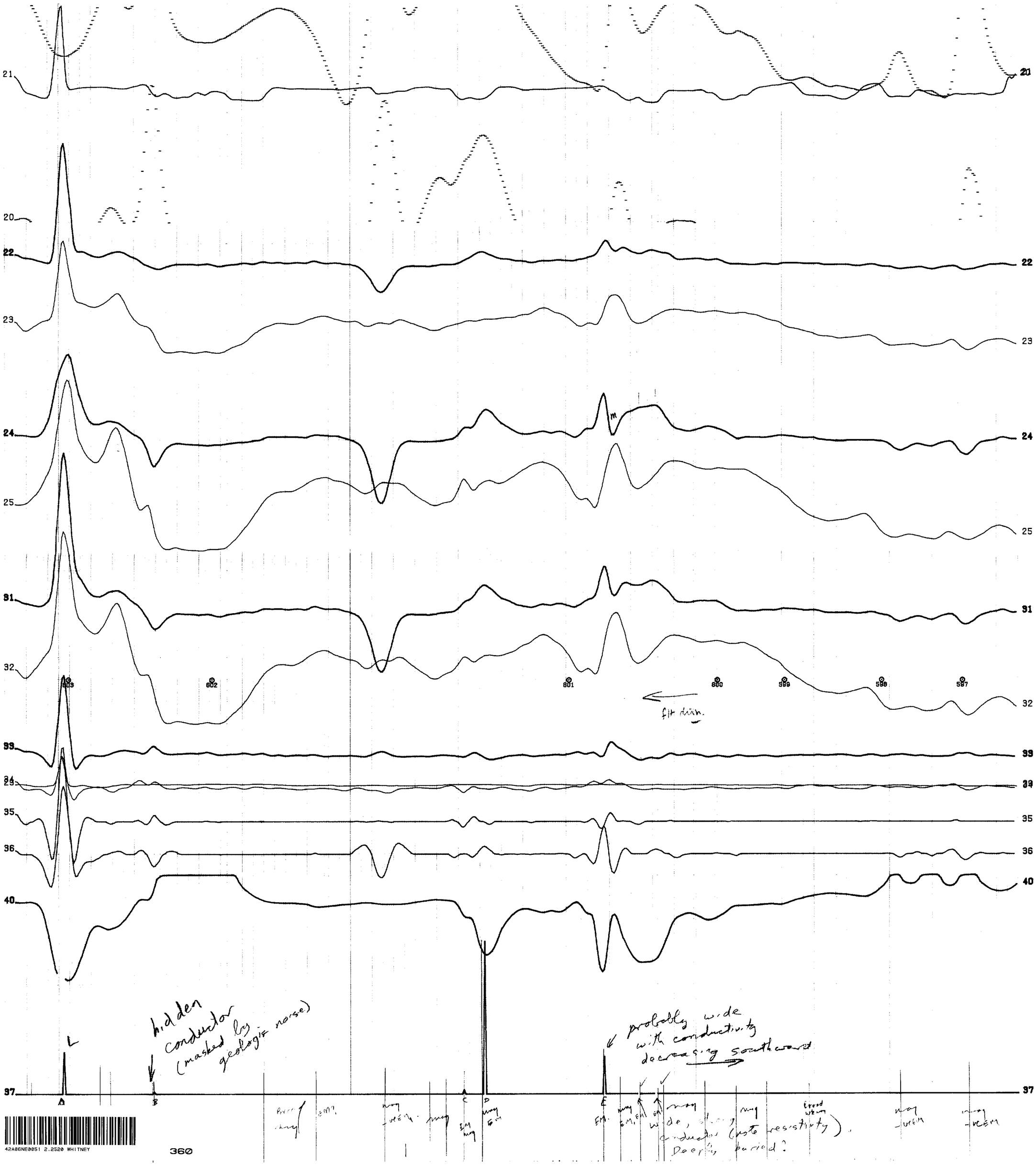
LINE -14

42A06NE0051 2.2520 WHITNEY

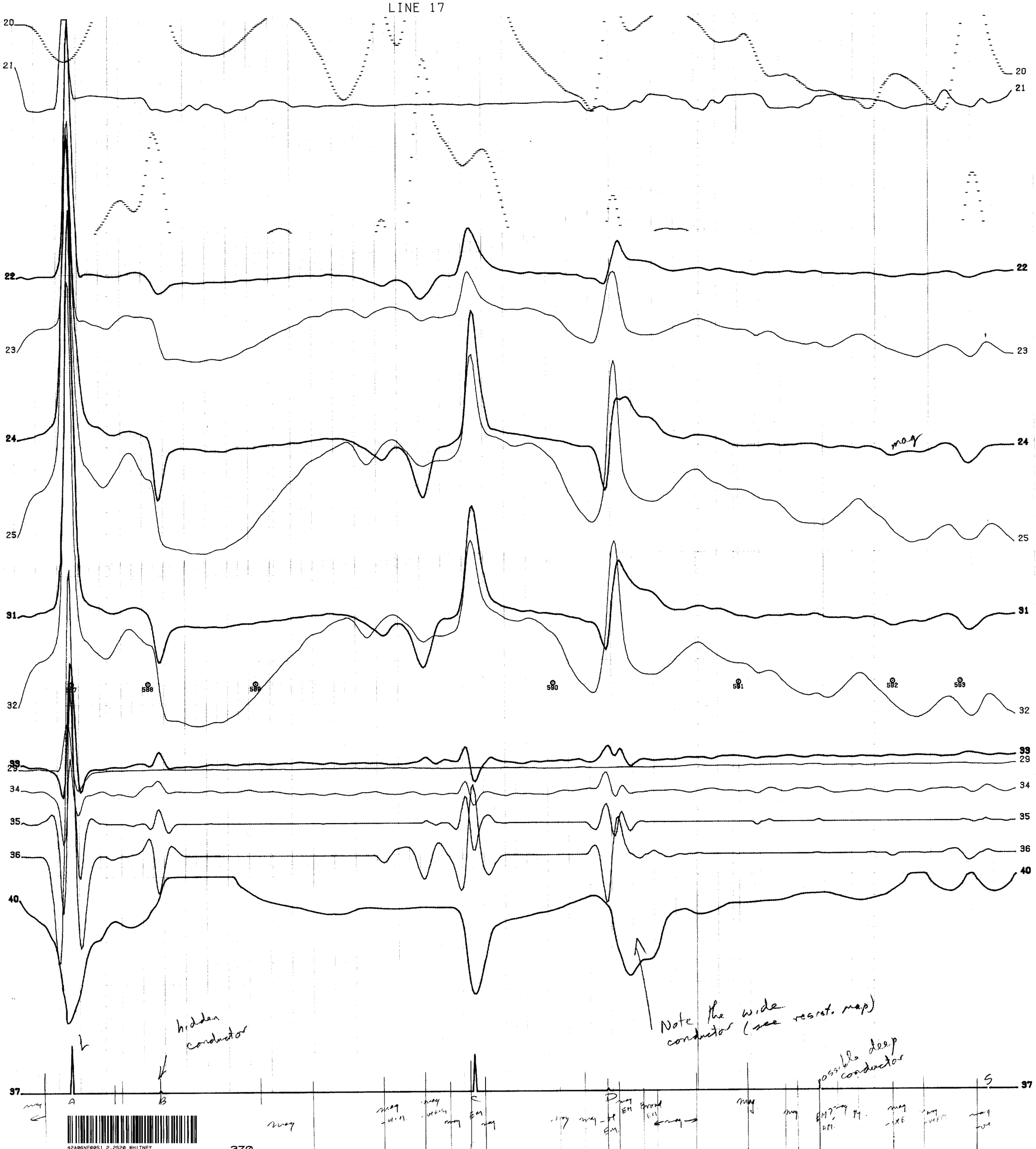
LINE 15



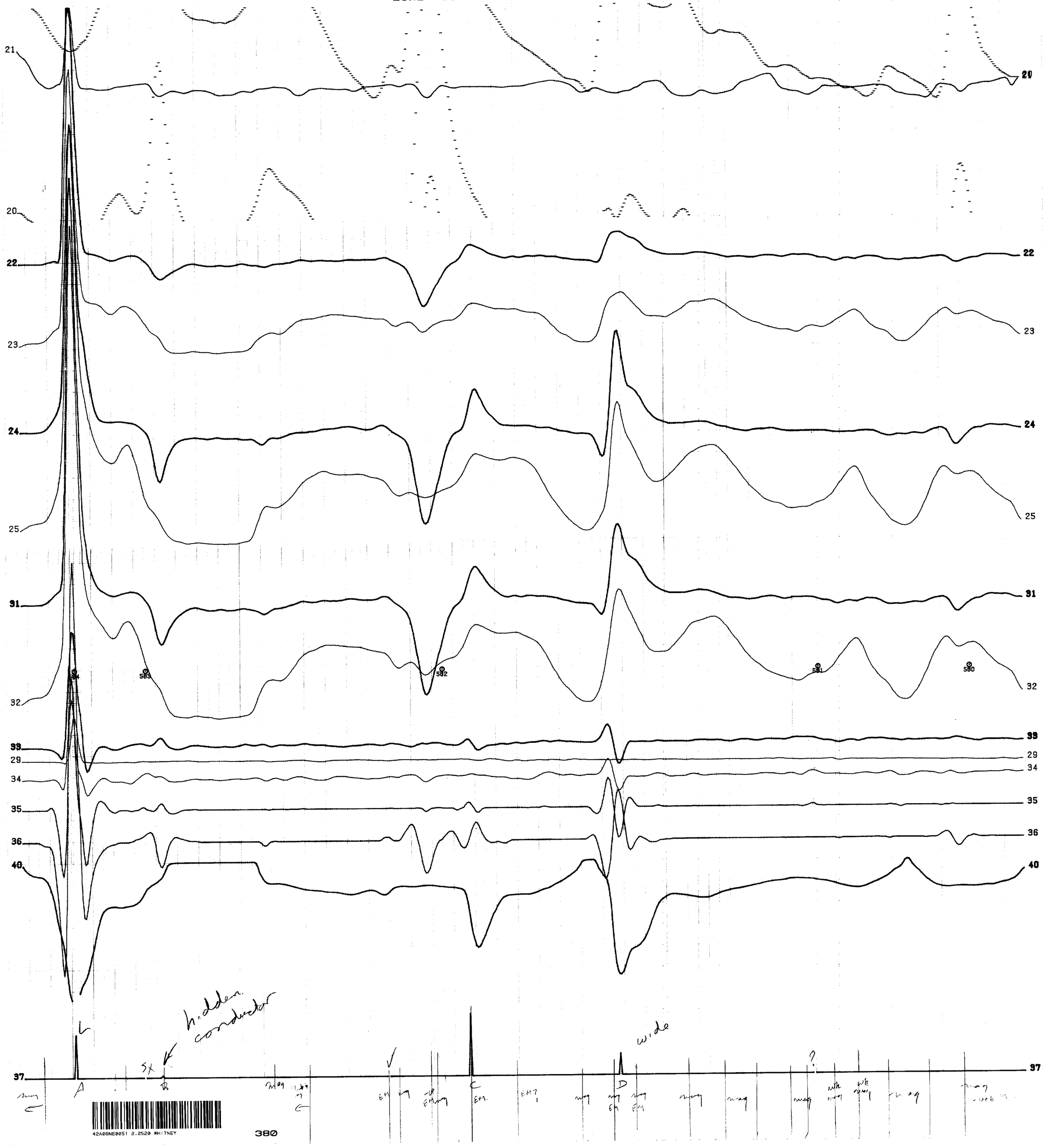
LINE -16



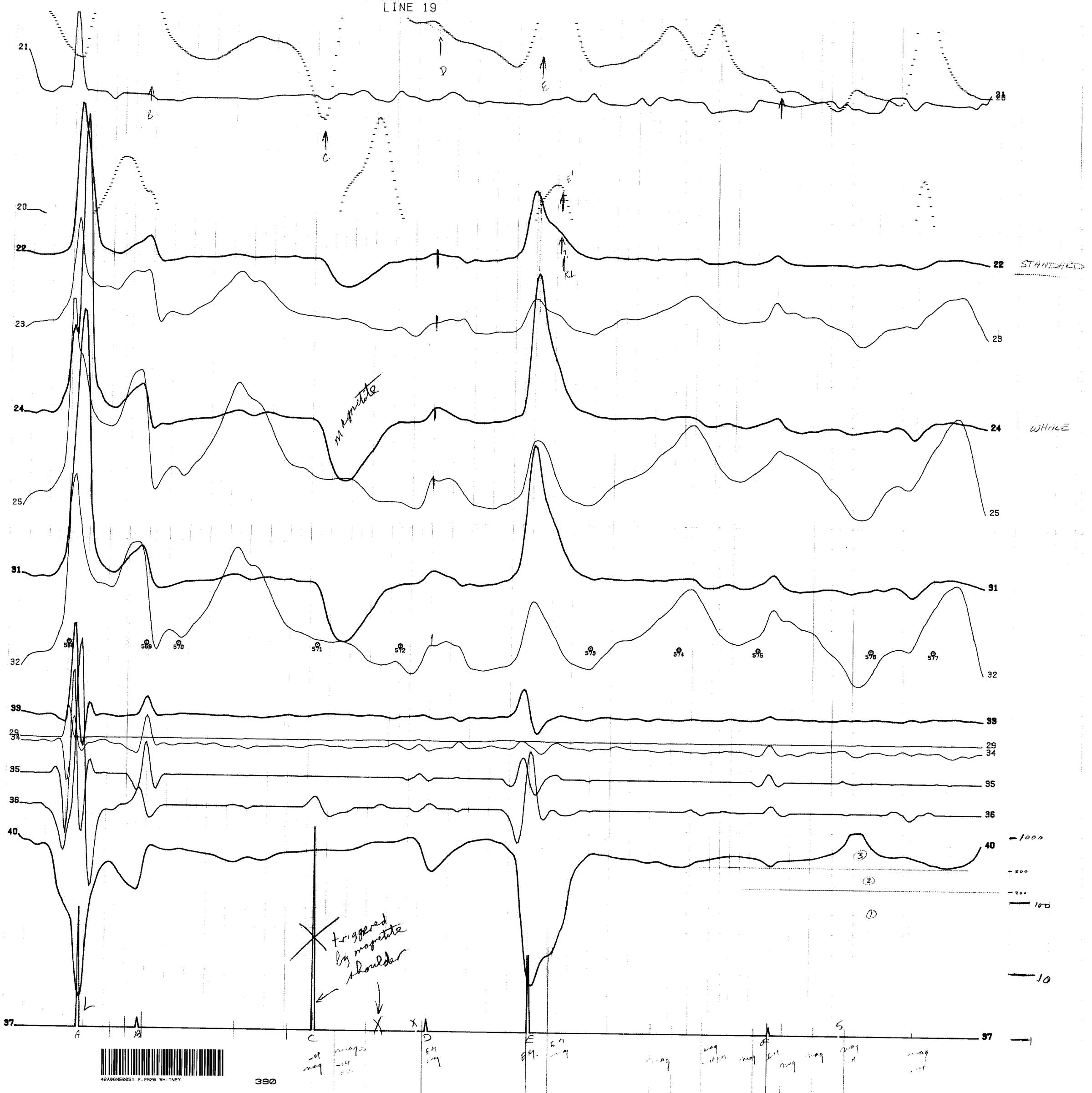
LINE 17



LINE -18

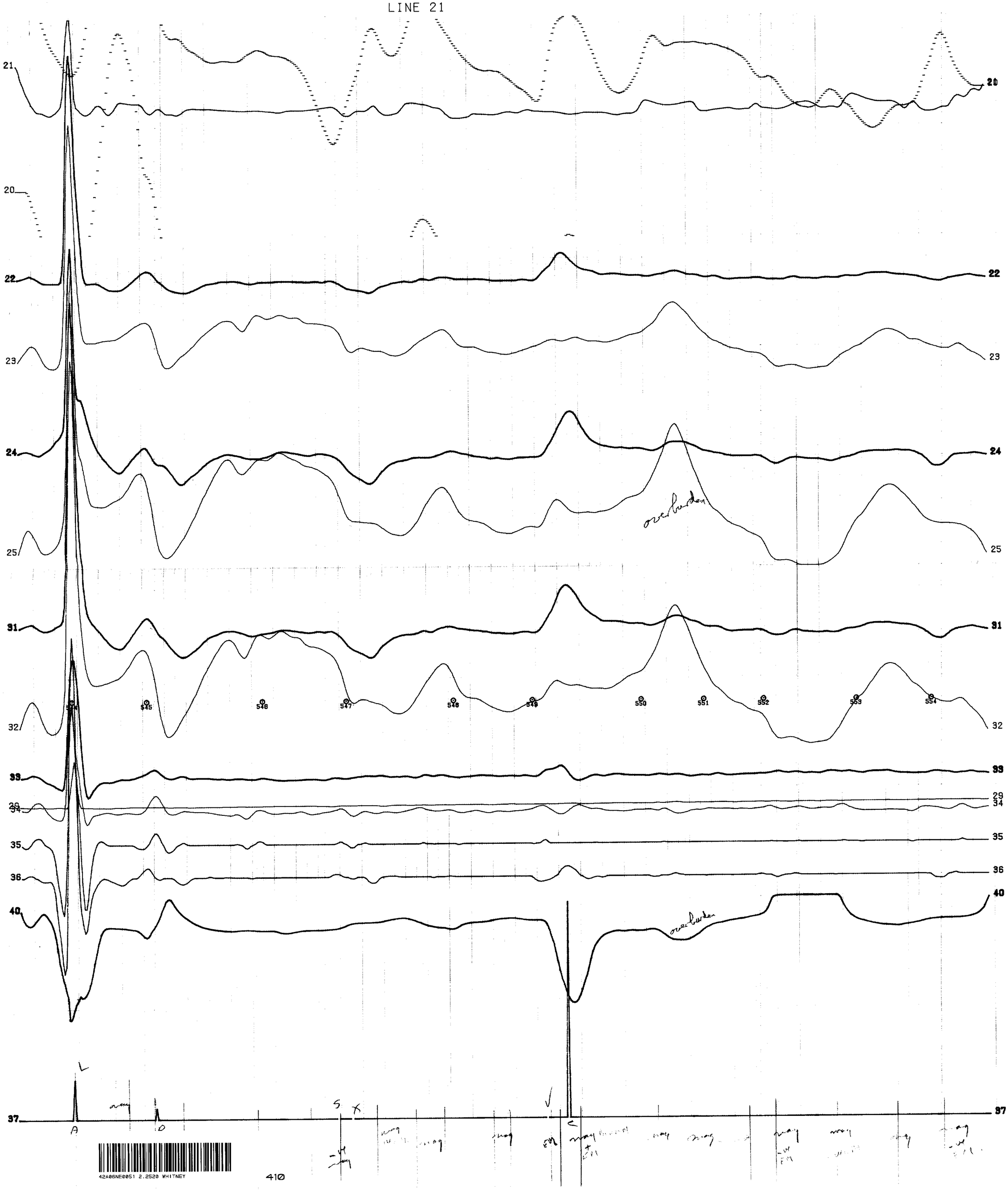

21
20
22
23
24
25
31
32
33
29
34
35
36
40
37
583
582
581
580
hidden conductor
wide
A
B
C
D

LINE 19



LINE -20

LINE 21


21
20
22
23
24
25
31
32
33
29
34
35
36
40
37
overburden
overburden
545
546
547
548
549
550
551
552
553
554
L
A
D
S
X
√
C

LINE -22

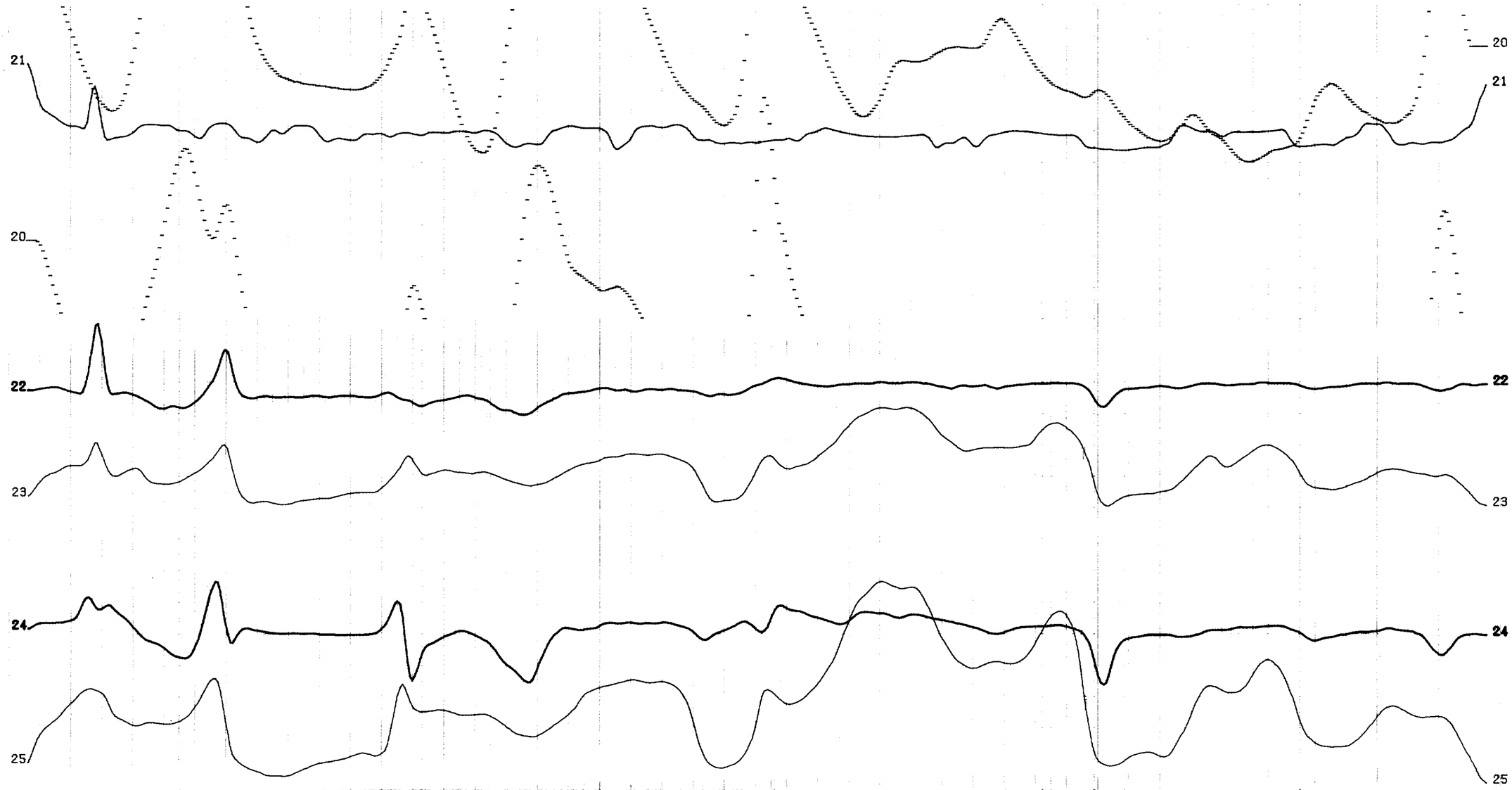
20
21
22
23
24
25
91
32
99
29
34
35
36
40
37

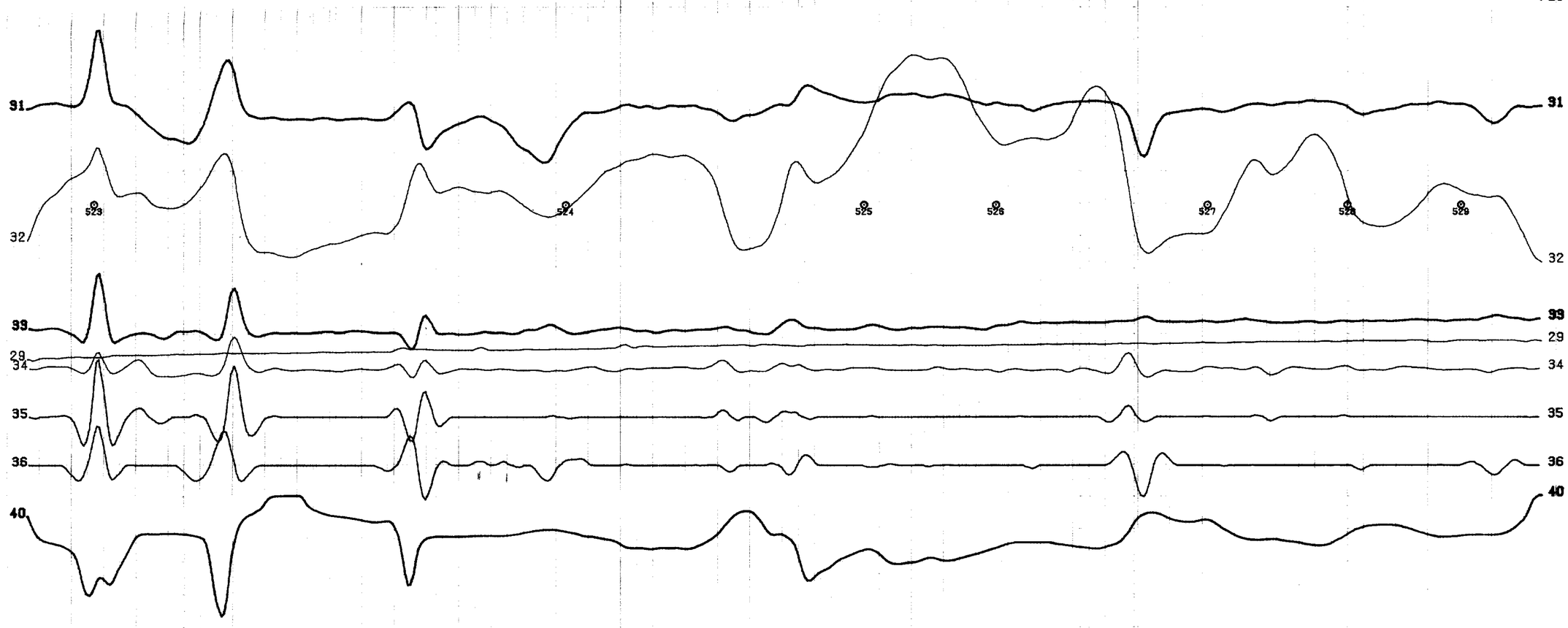
prospecting

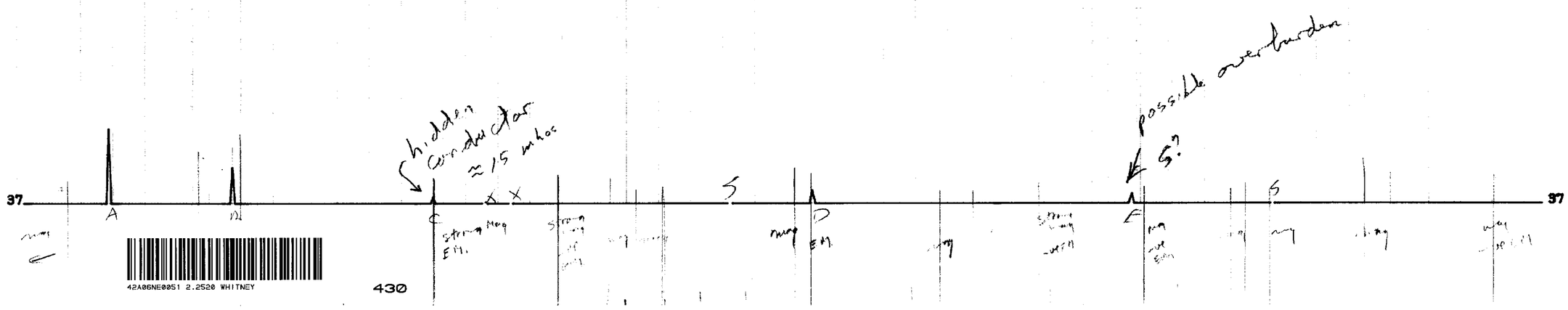
magnetite

possible hidden conductors

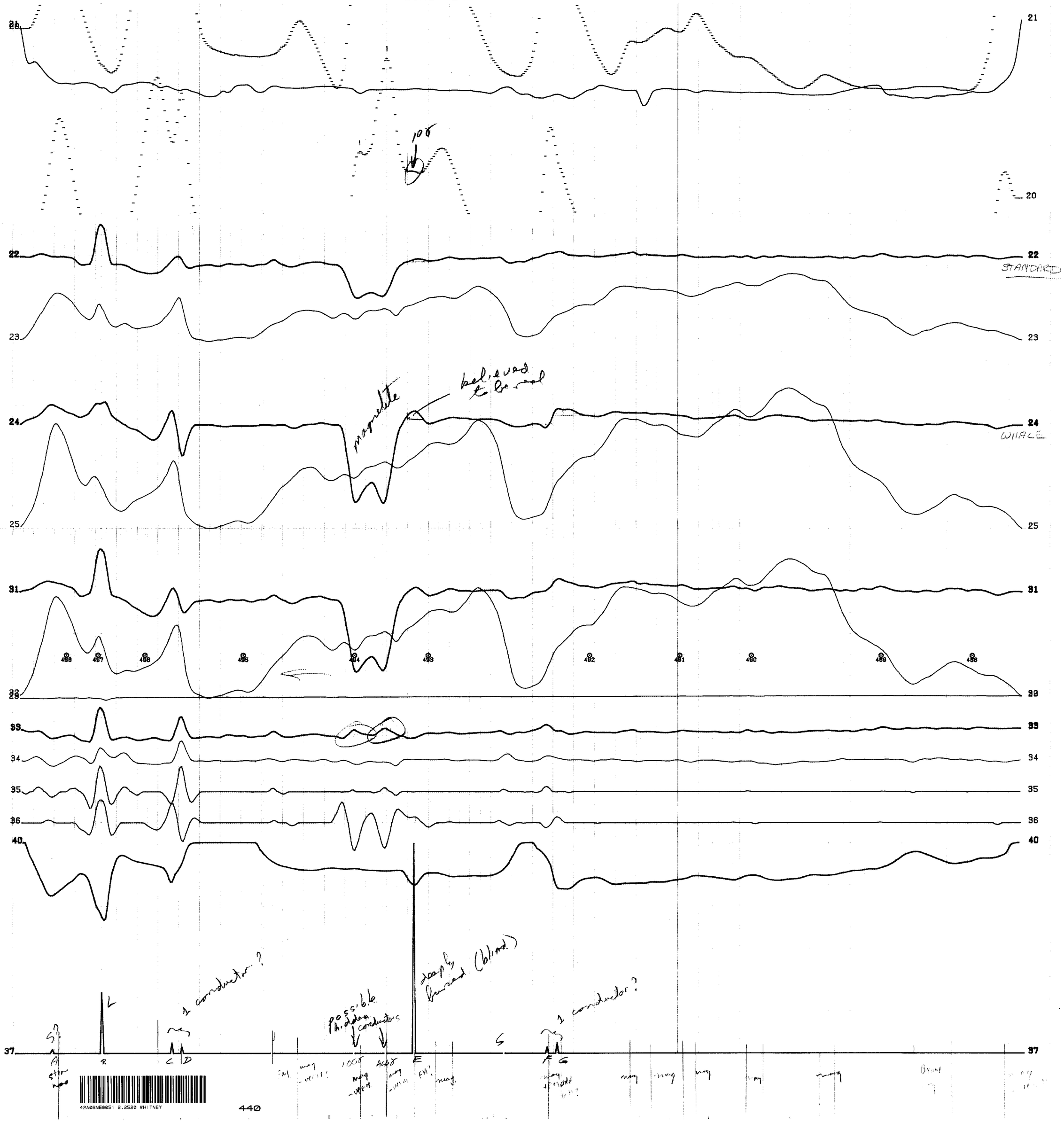
LINE 23







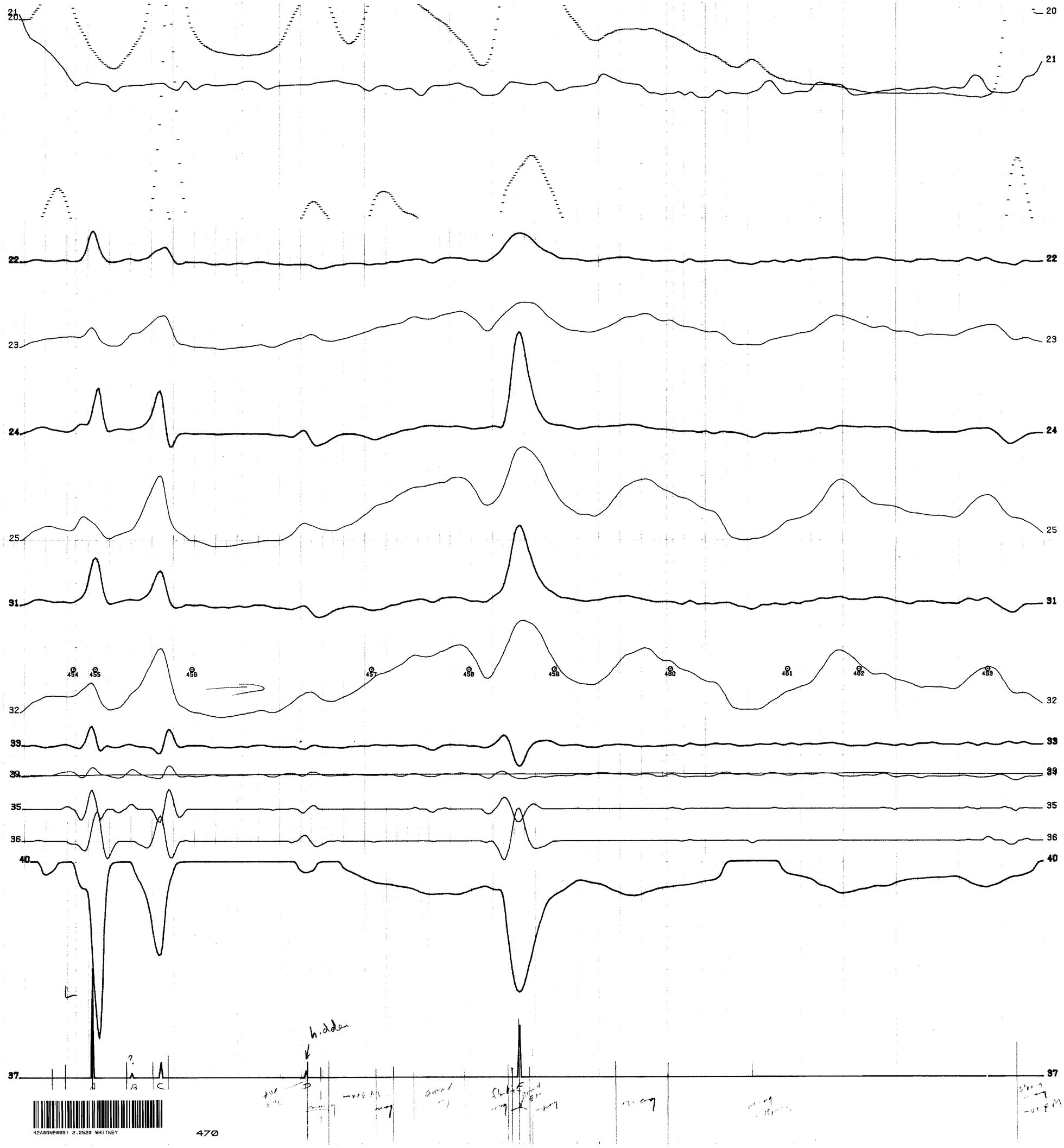
LINE -24



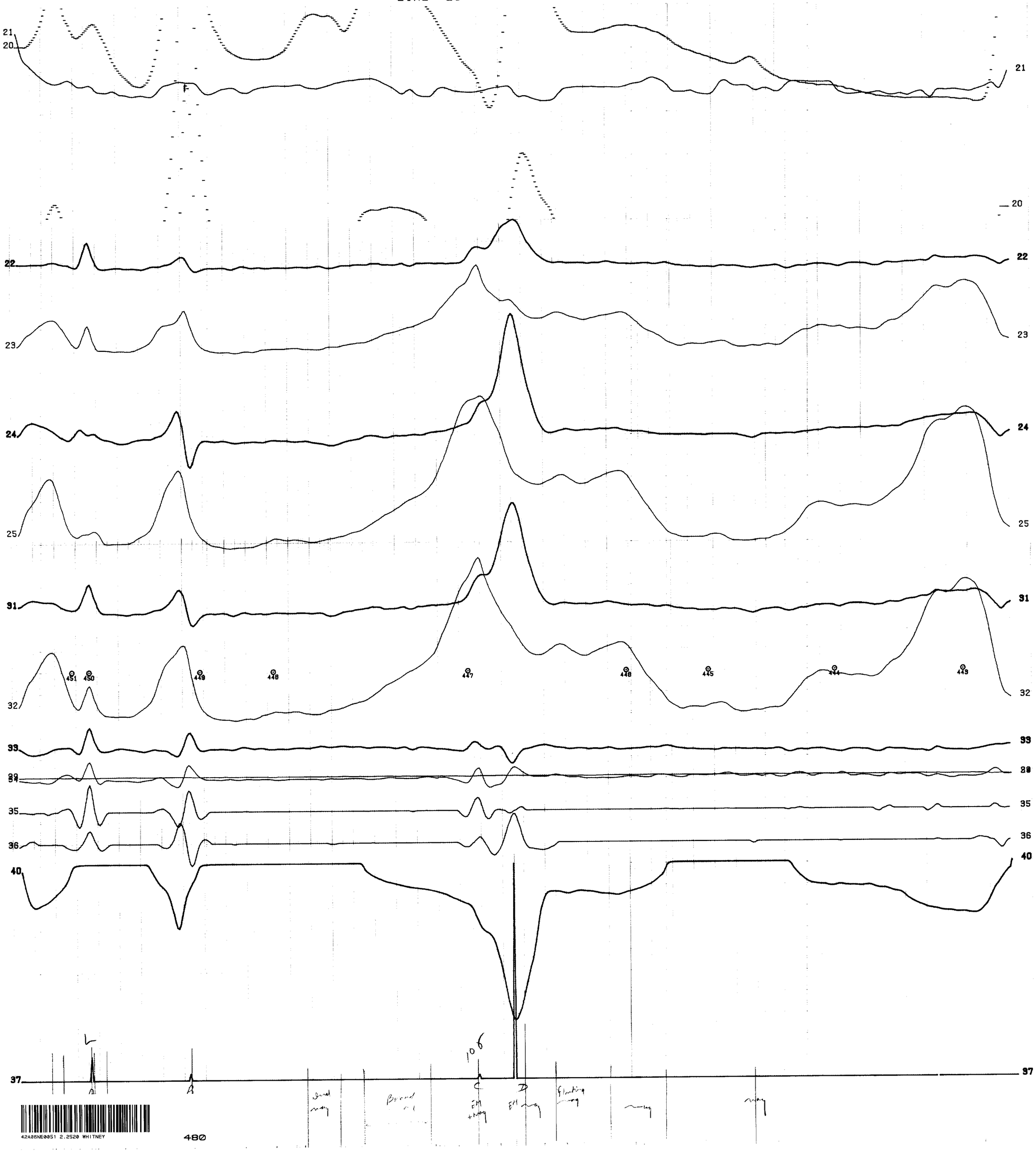
LINE 25

LINE -26

LINE 27

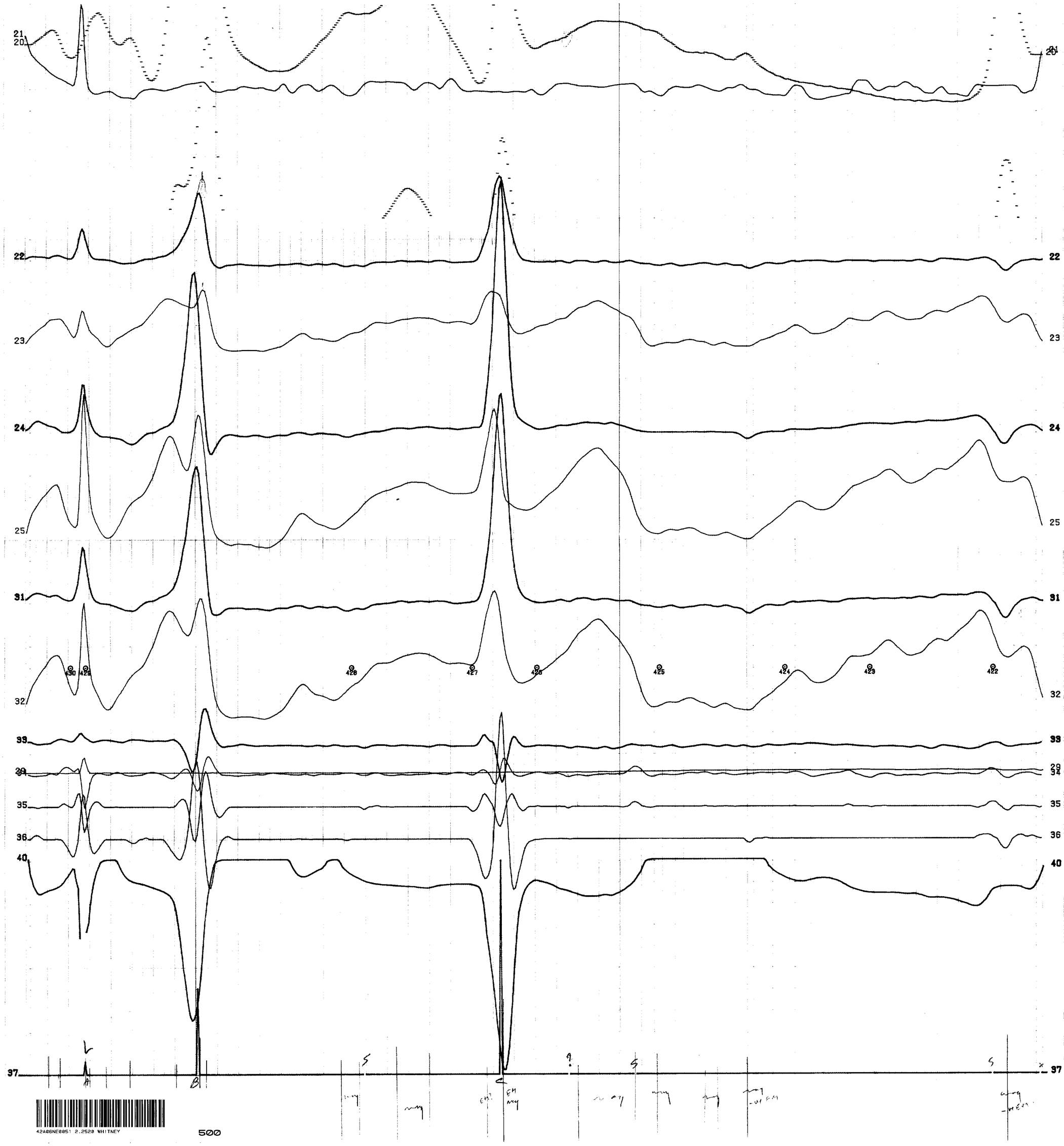


LINE -28


21
20
21
20
22
22
23
23
24
24
25
25
91
91
32
451
450
449
448
447
446
445
444
443
32
93
89
35
36
40
37
L
A
106
C
D
37

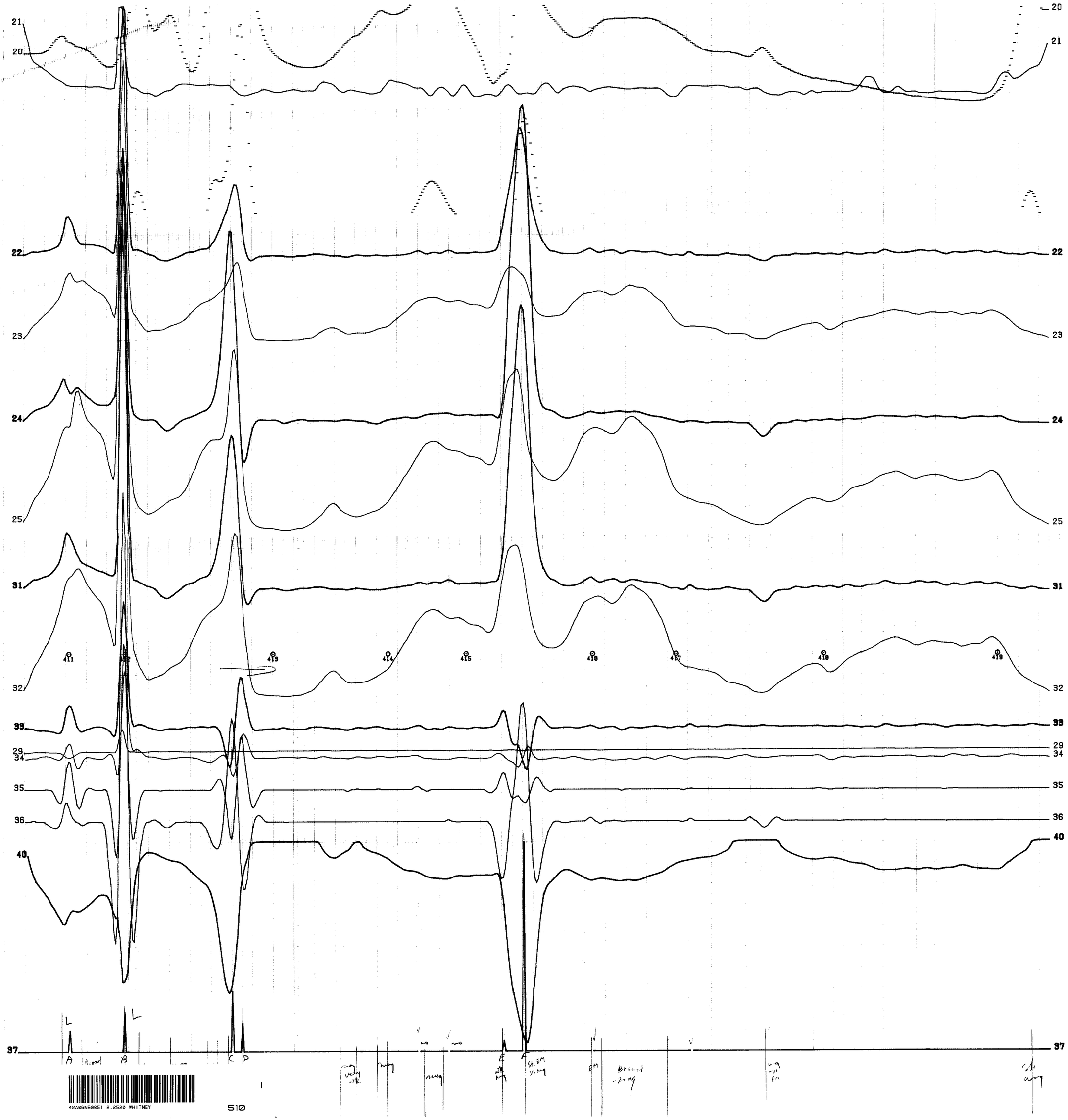
LINE 29

LINE -30

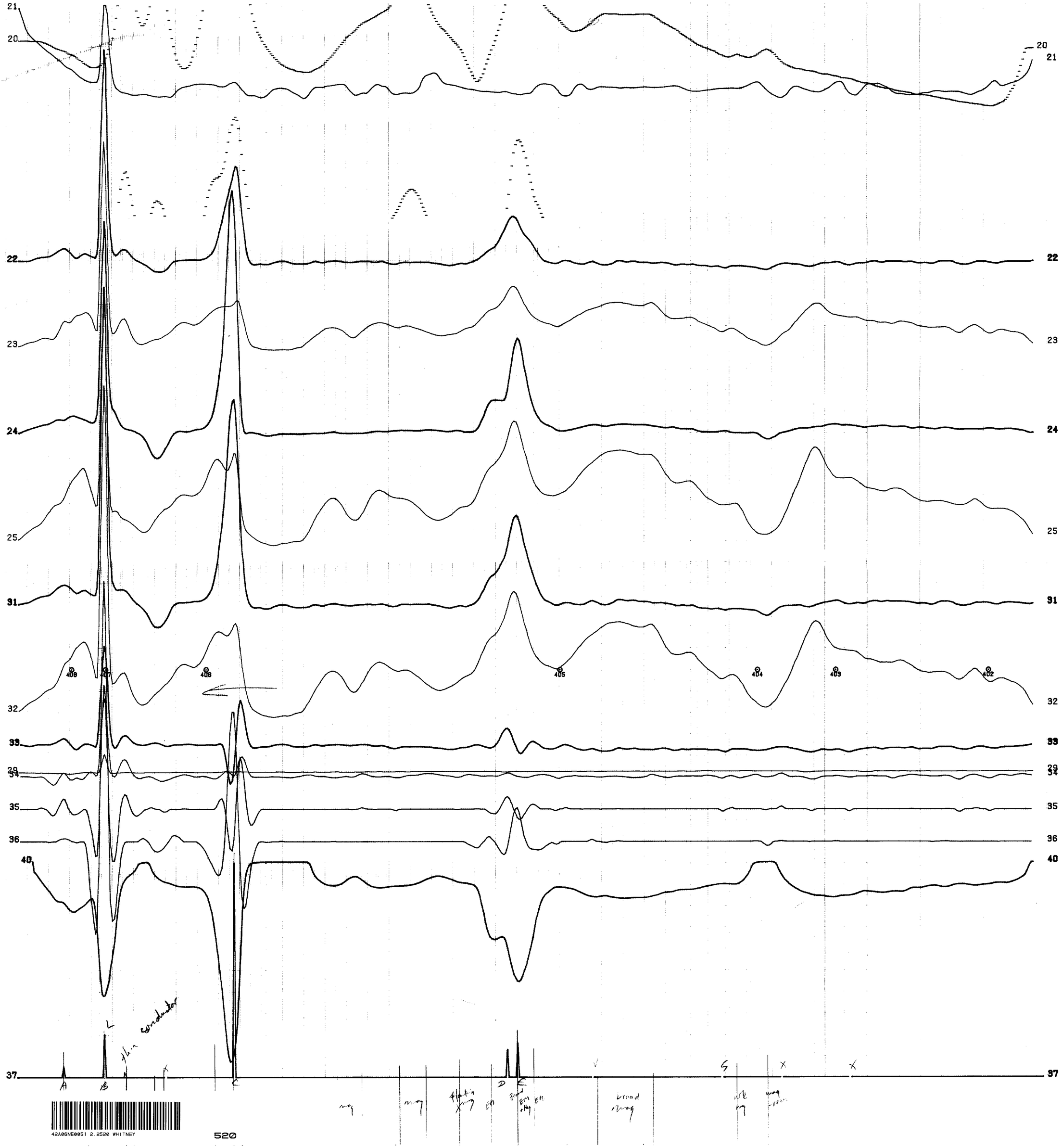


Acton
Ont.

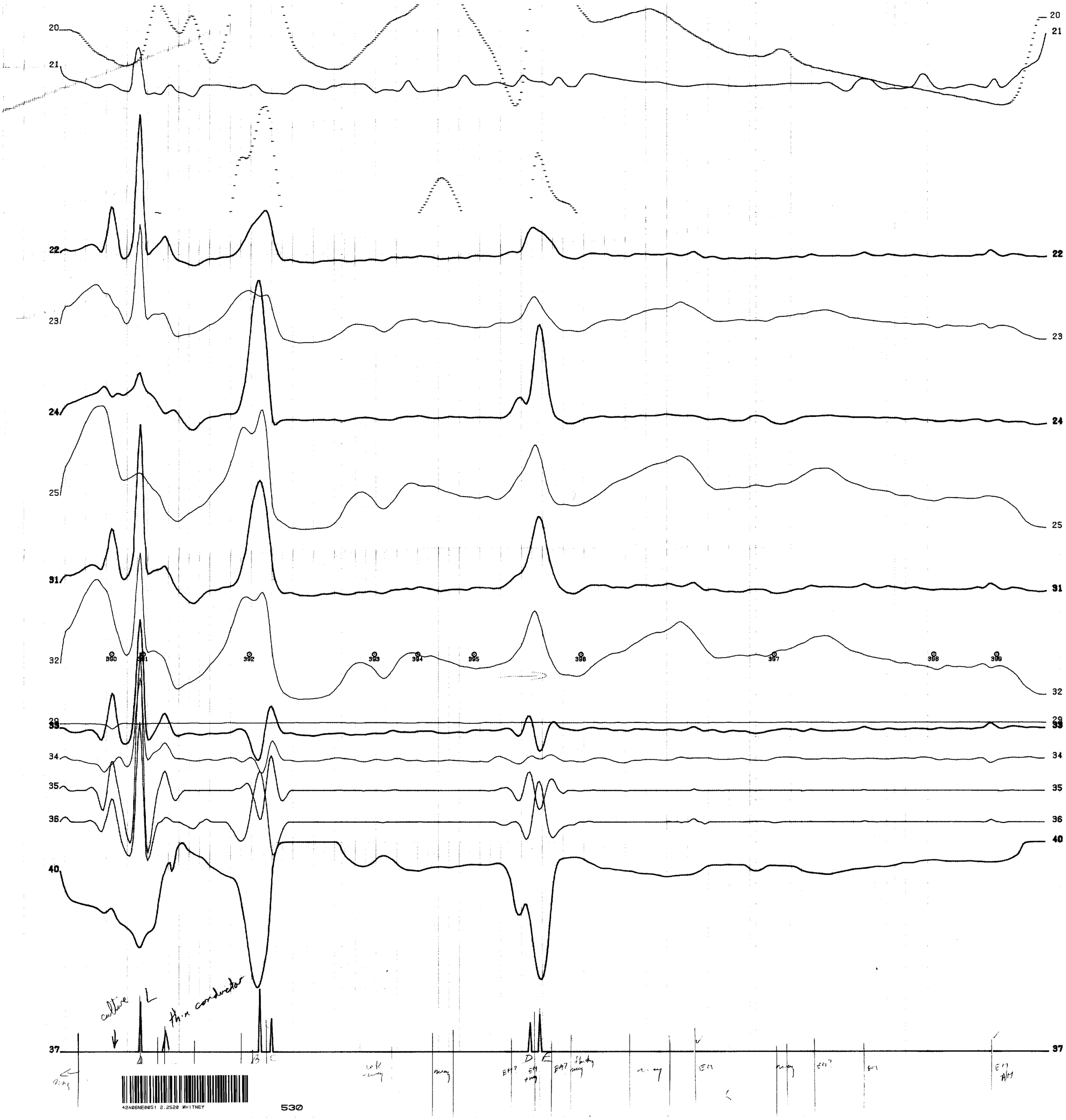
LINE 31



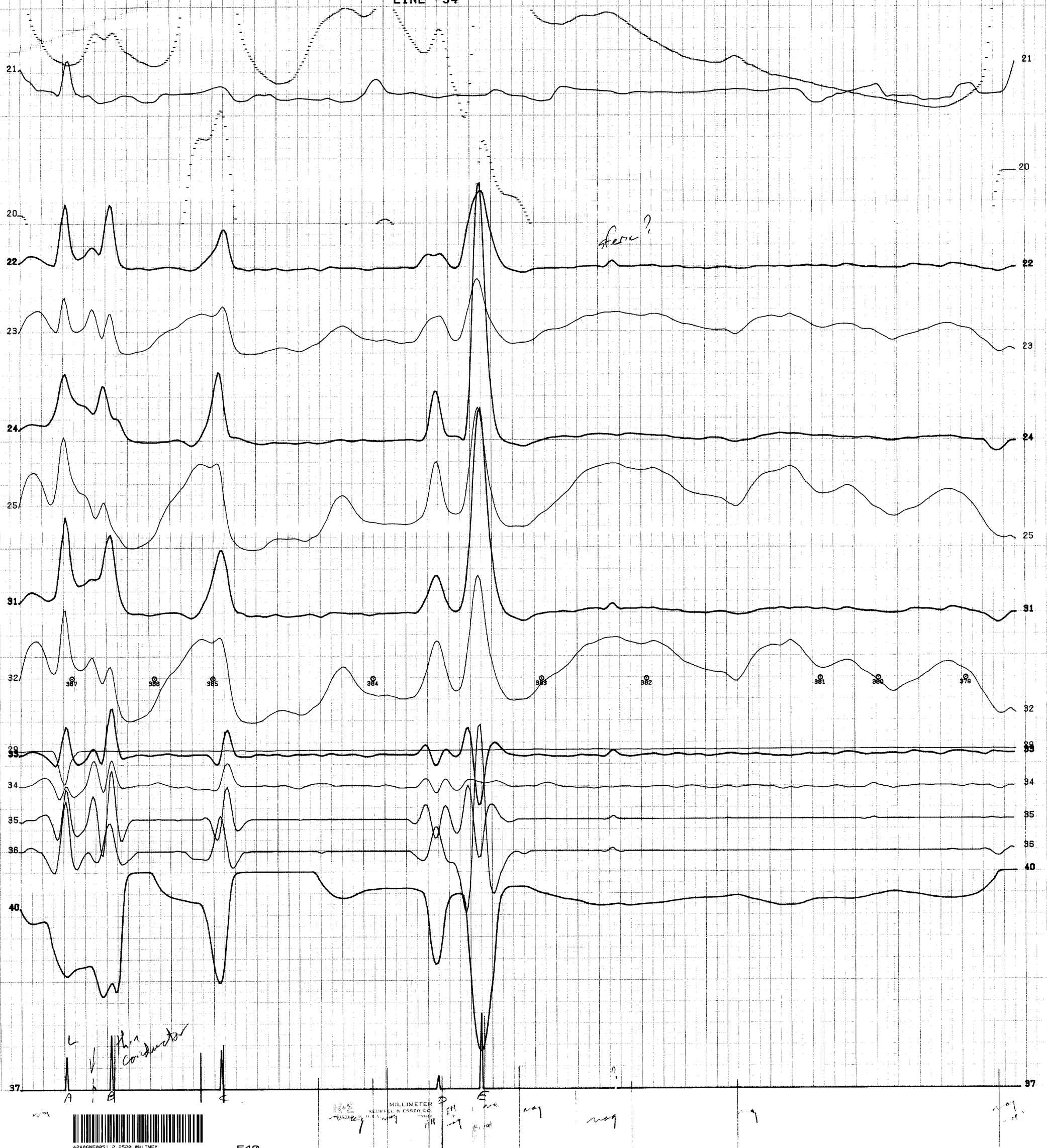
LINE -32


21
20
22
23
24
25
31
32
33
29
34
35
36
40
37
408
407
406
405
404
403
402
L
thin conductor
A
B
C
D
E
broad

LINE 33

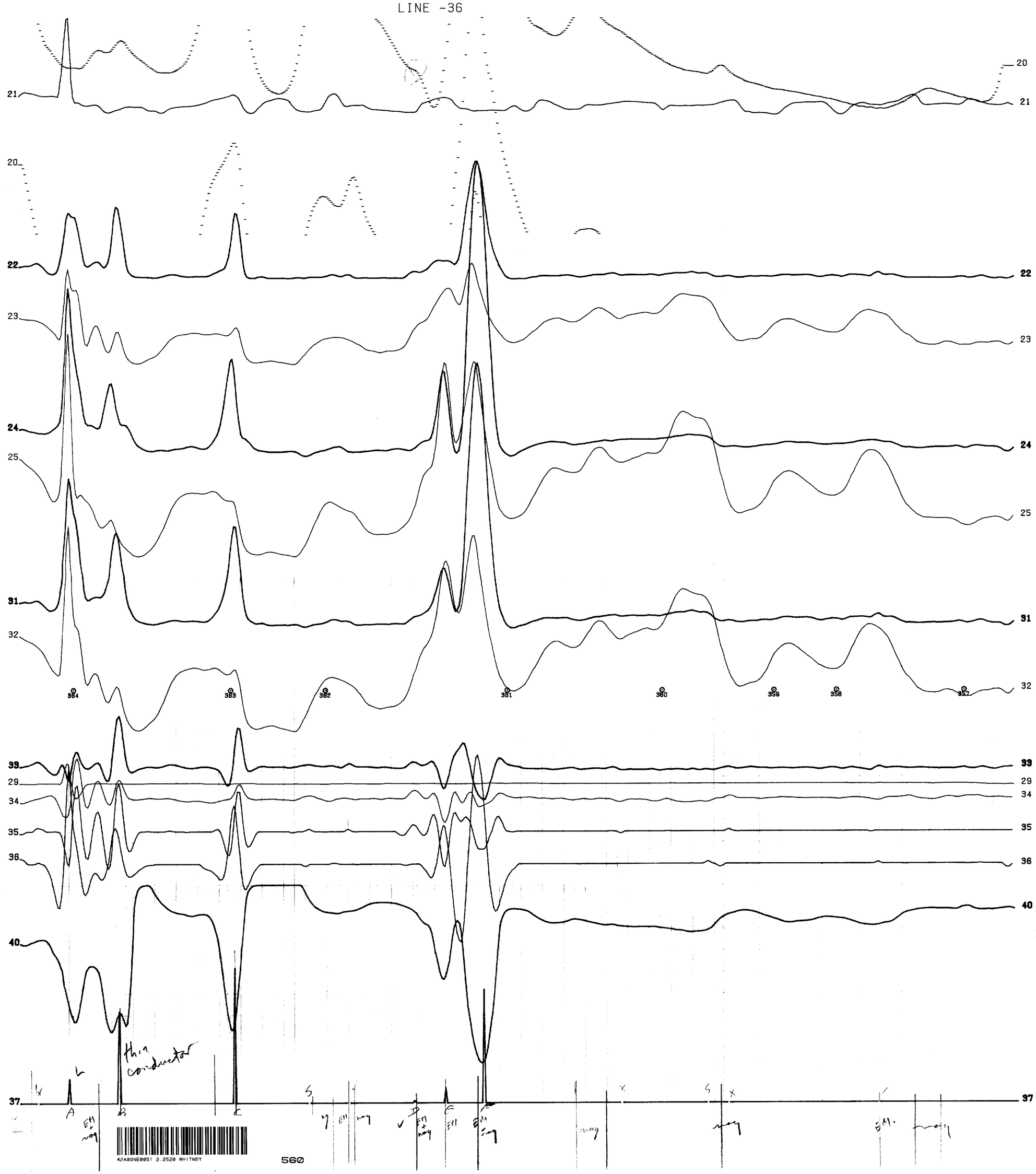


LINE -34

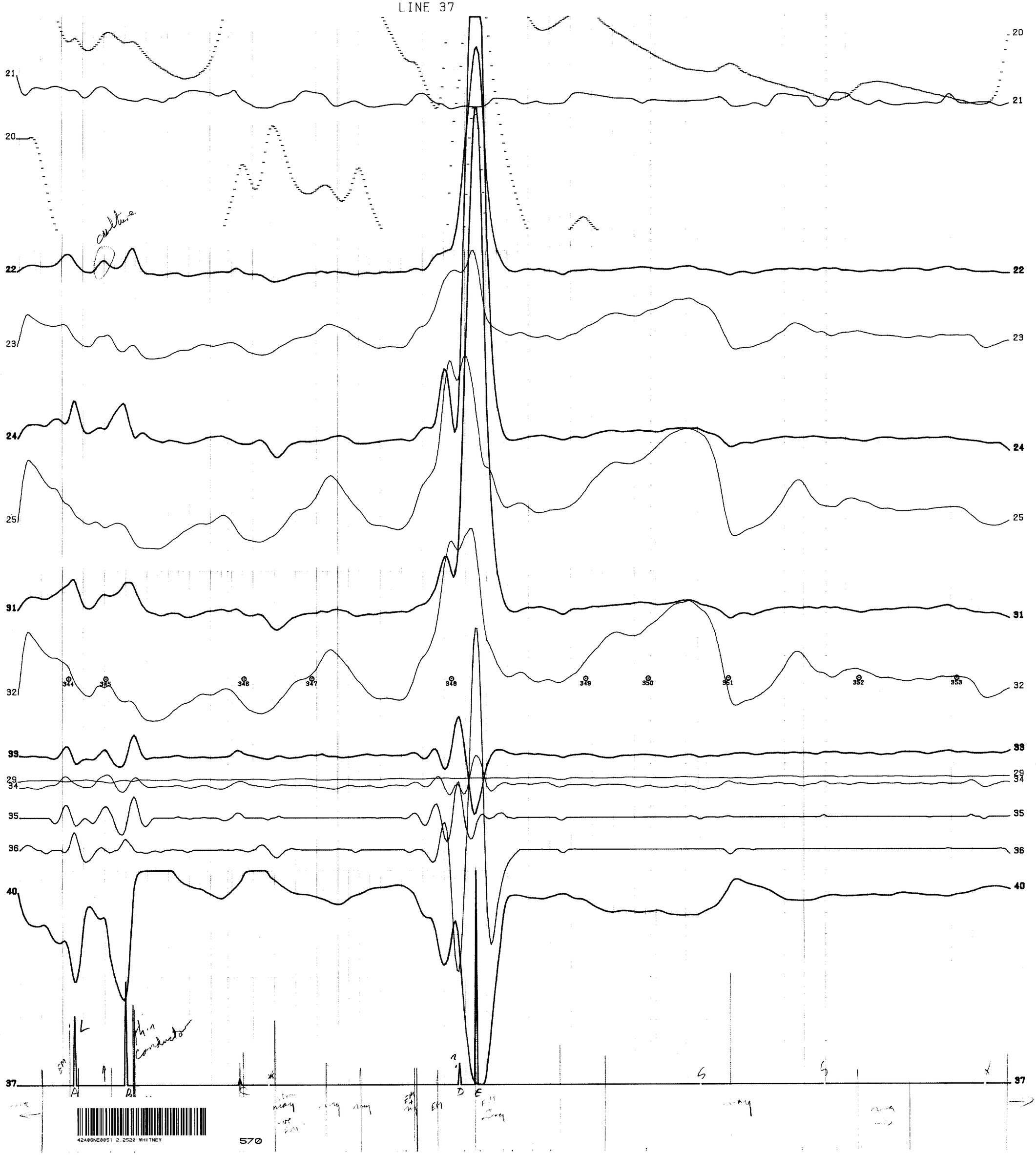


LINE 35

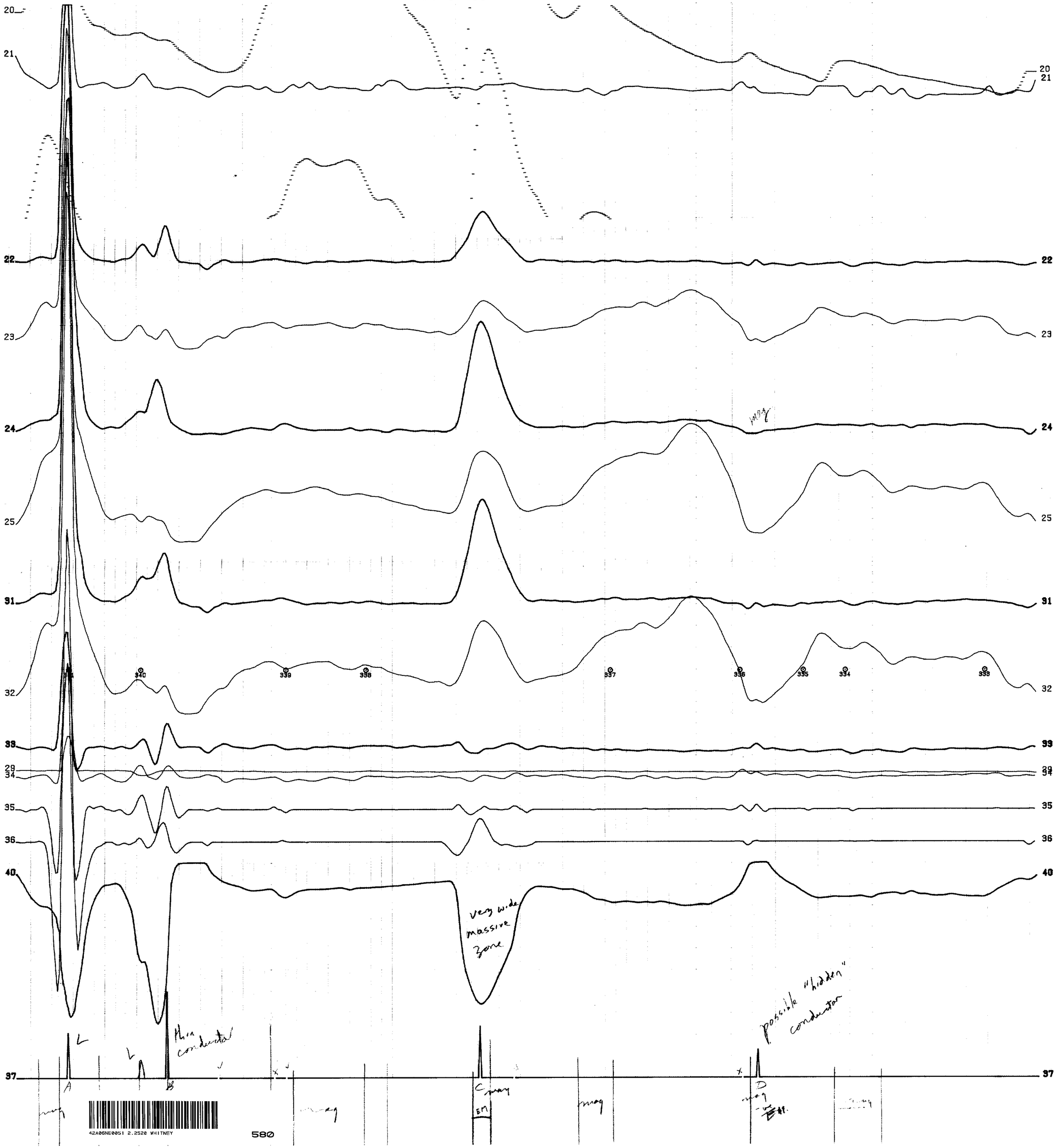
LINE -36



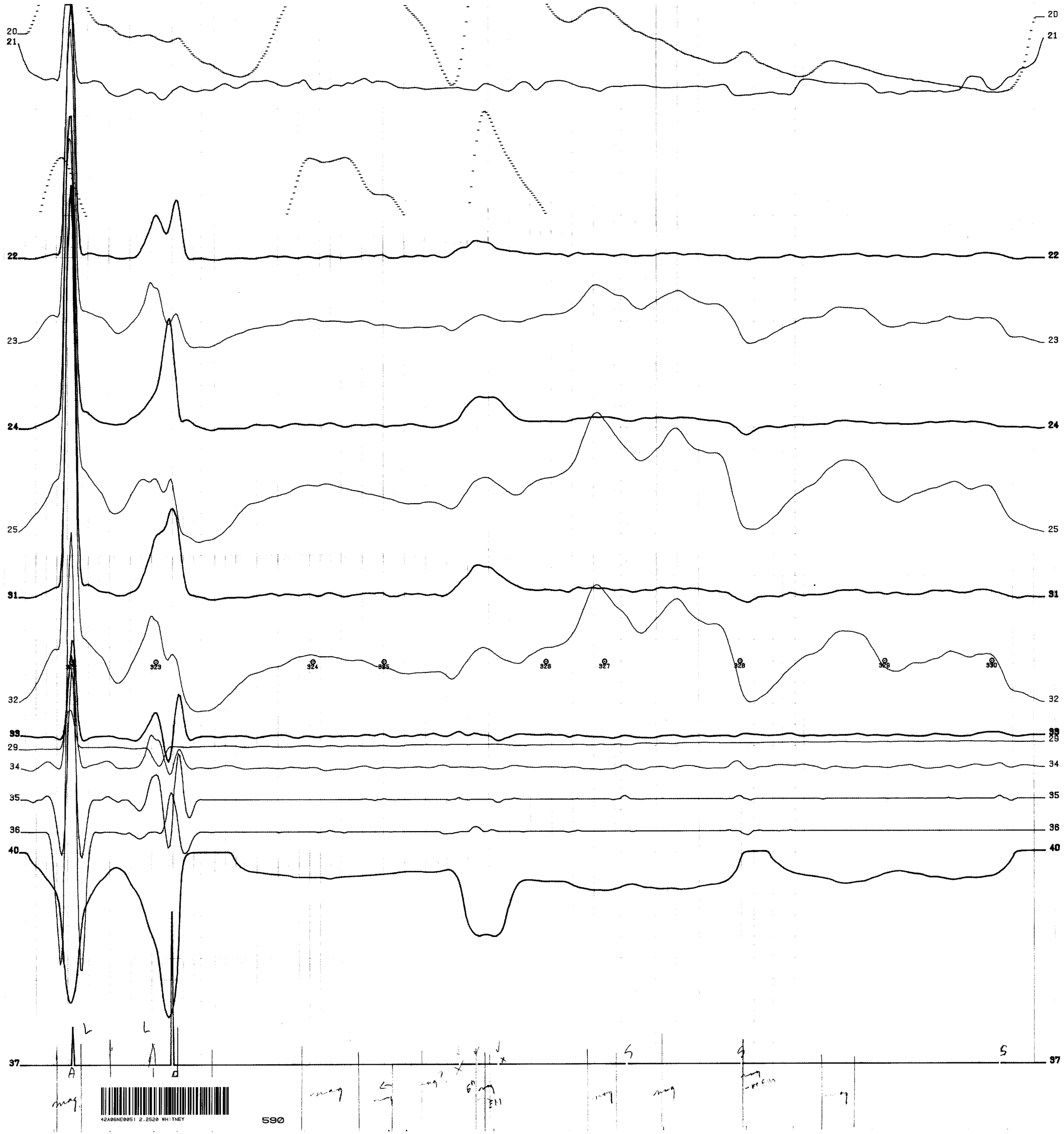
LINE 37


20
21
22
23
24
25
31
32
33
29
34
35
36
40
37
344
345
346
347
348
349
350
351
352
353
A
B
C
D
E

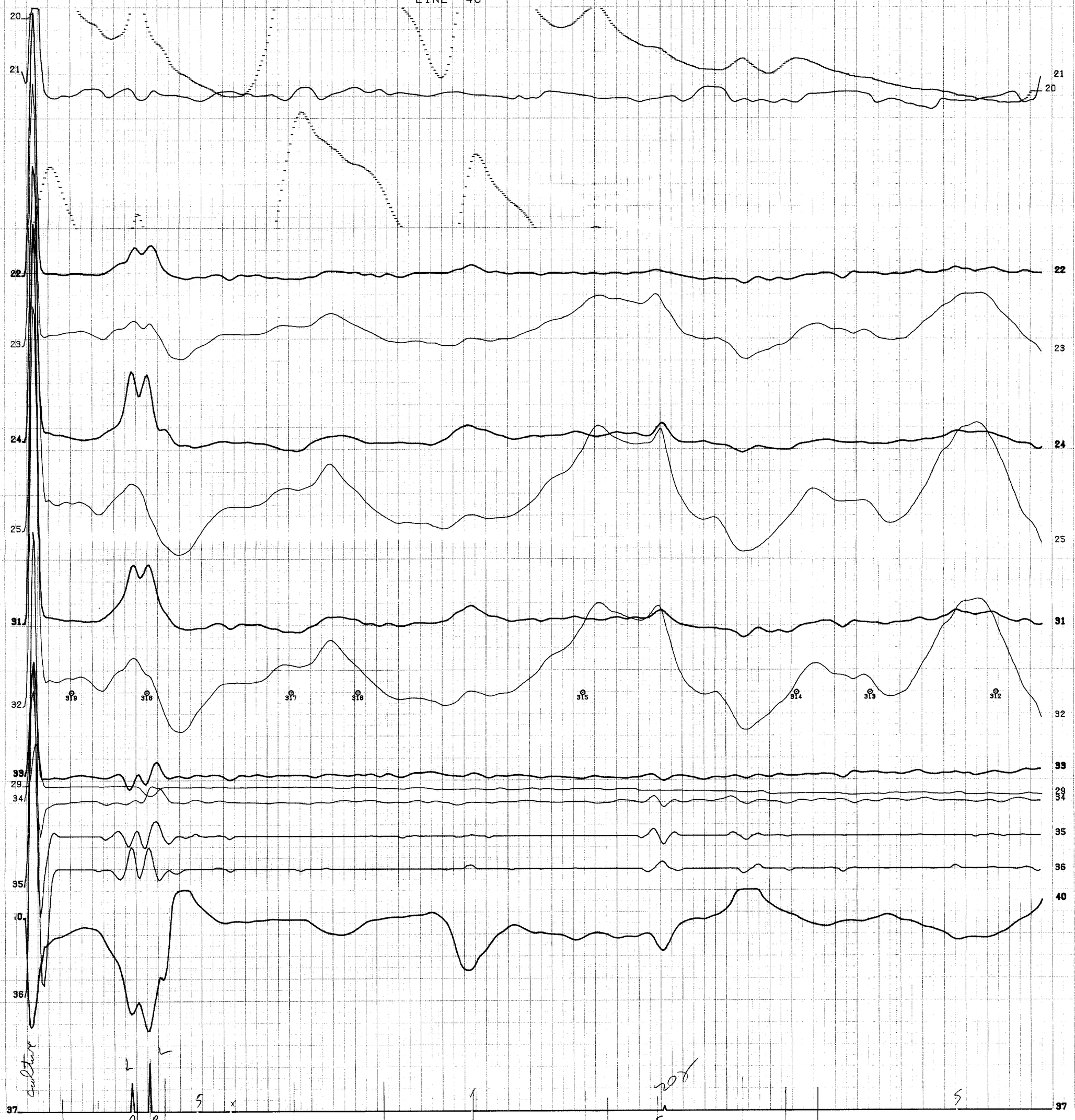
LINE -38



LINE 39



LINE -40



42A6BNE0051 2.2520 WHITNEY

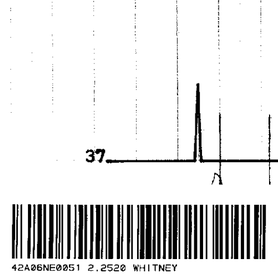
600

MILLIMETER
KEUFFEL & ESSER CO.

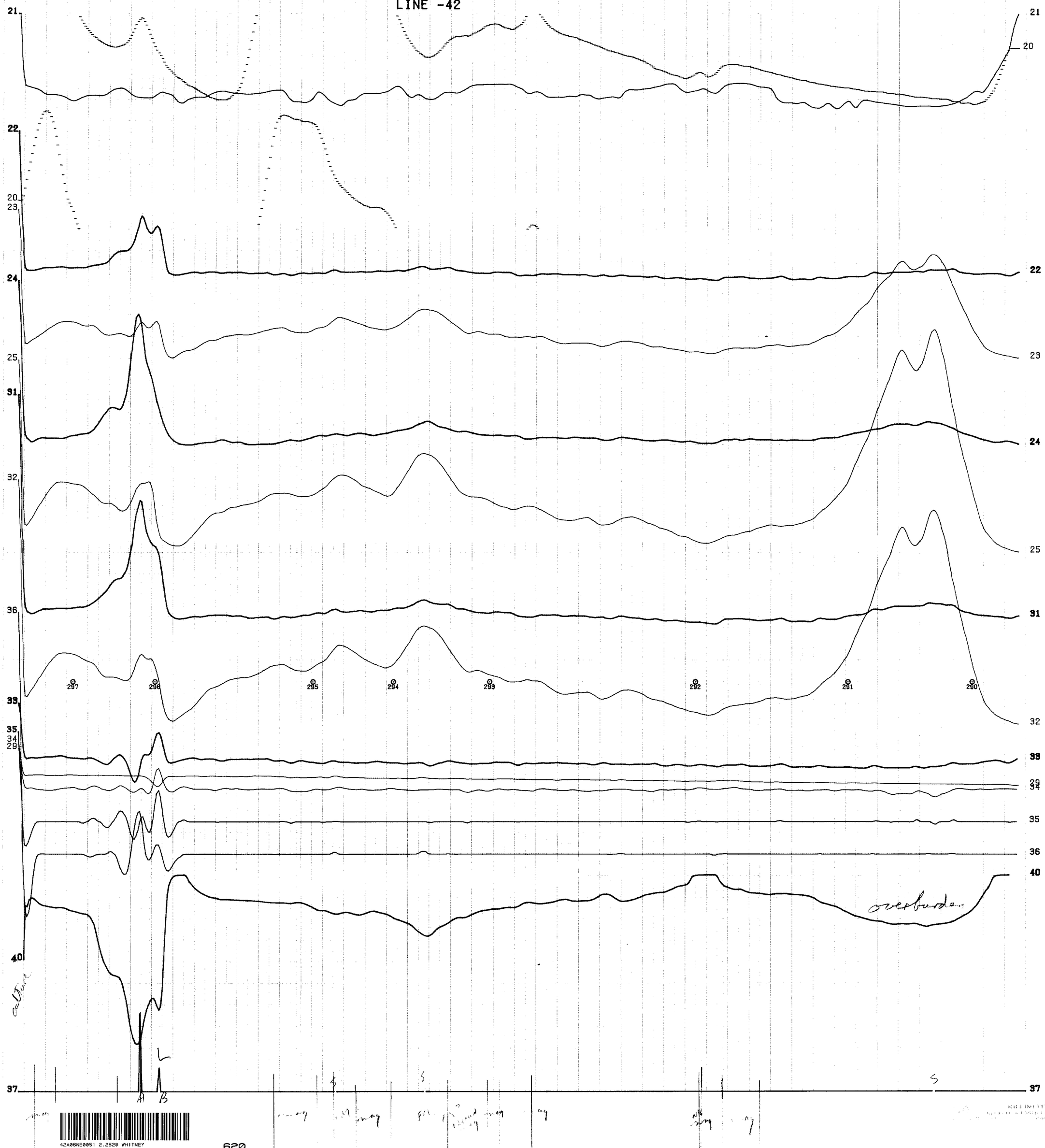
LINE 41

20
21
22
23
24
25
31
32
33
29
34
35
36
40
37

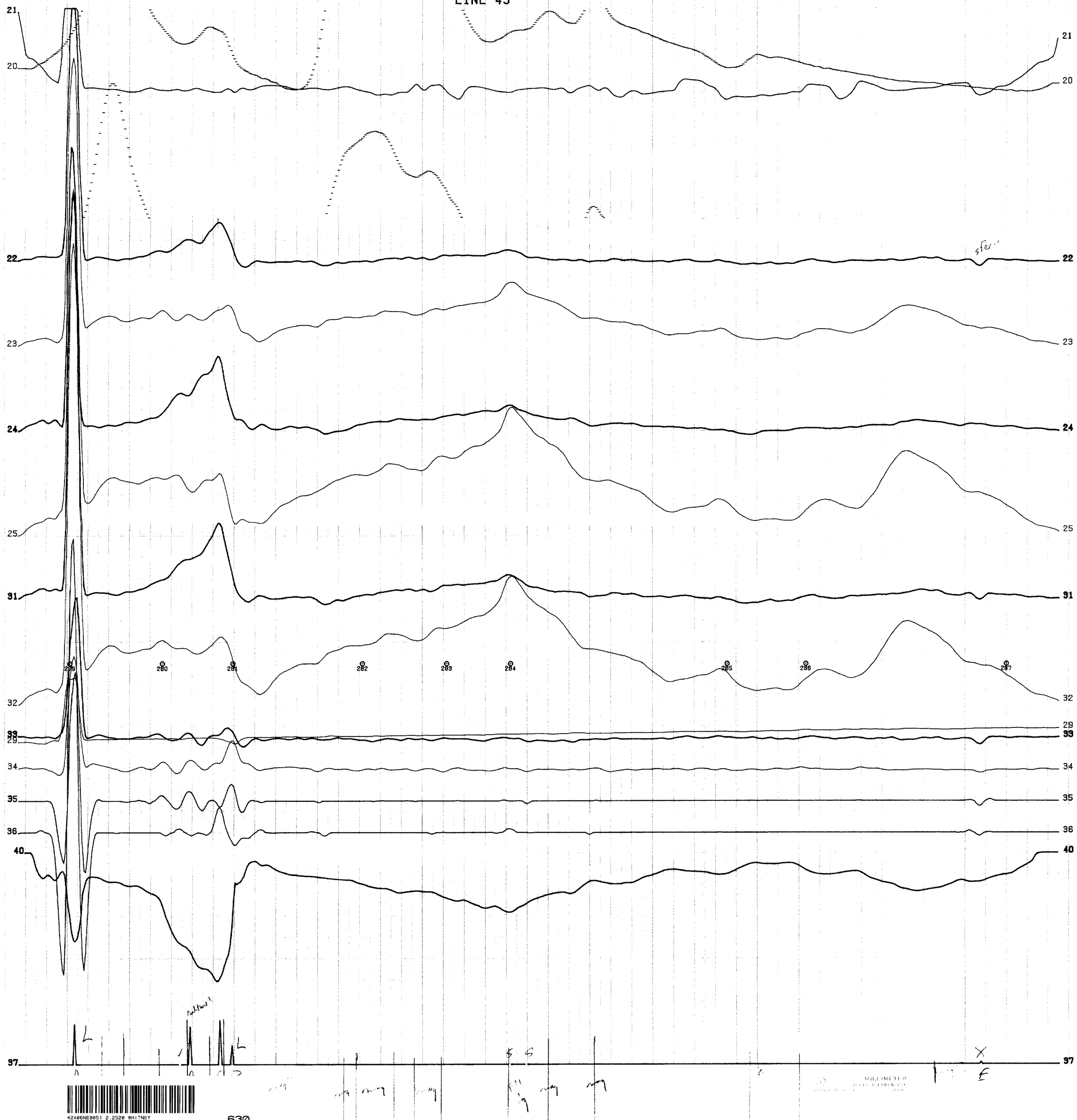
300 301 302 303 304 305 306 307 308 309



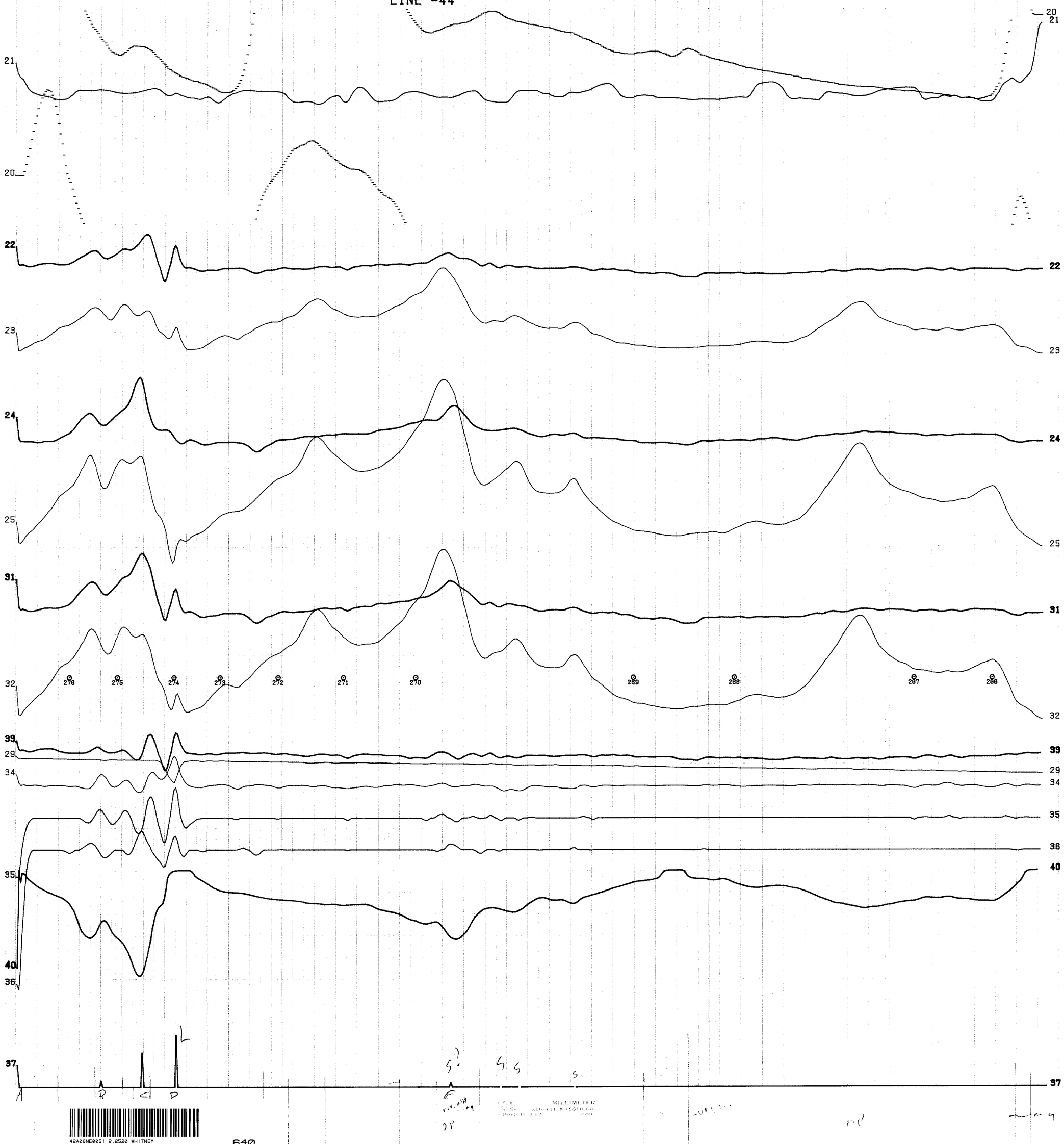
LINE -42



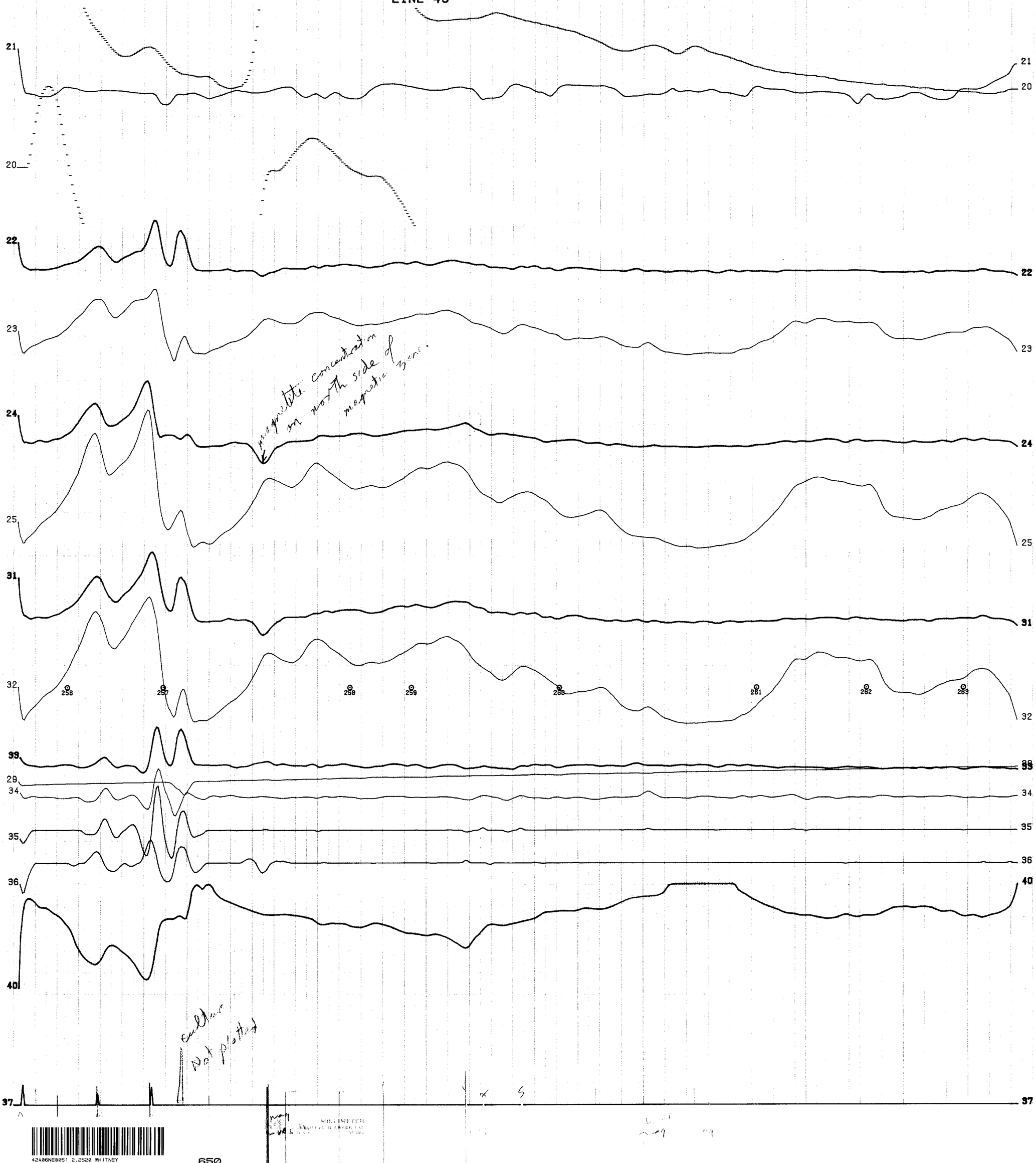
LINE 43



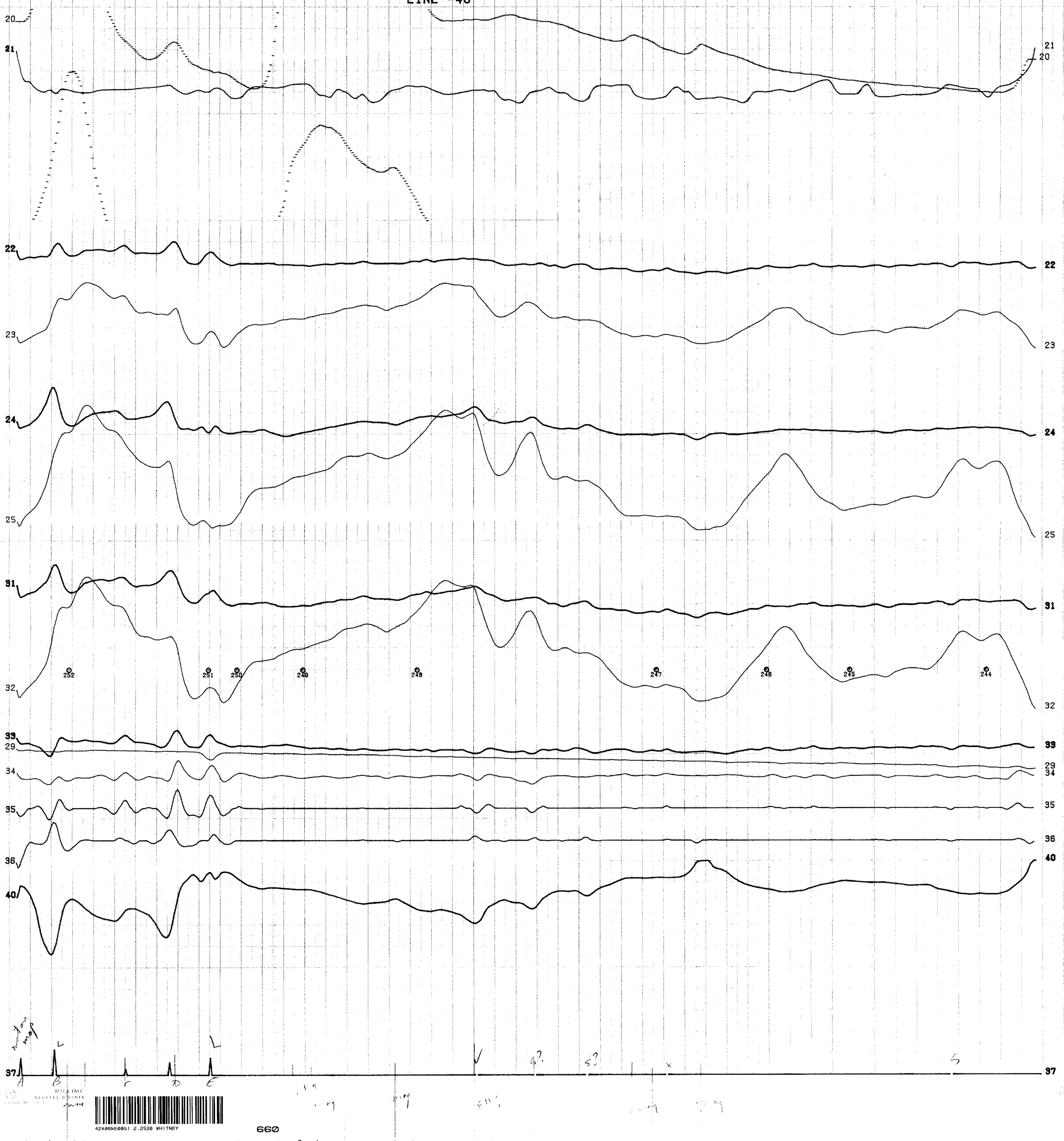
LINE -44



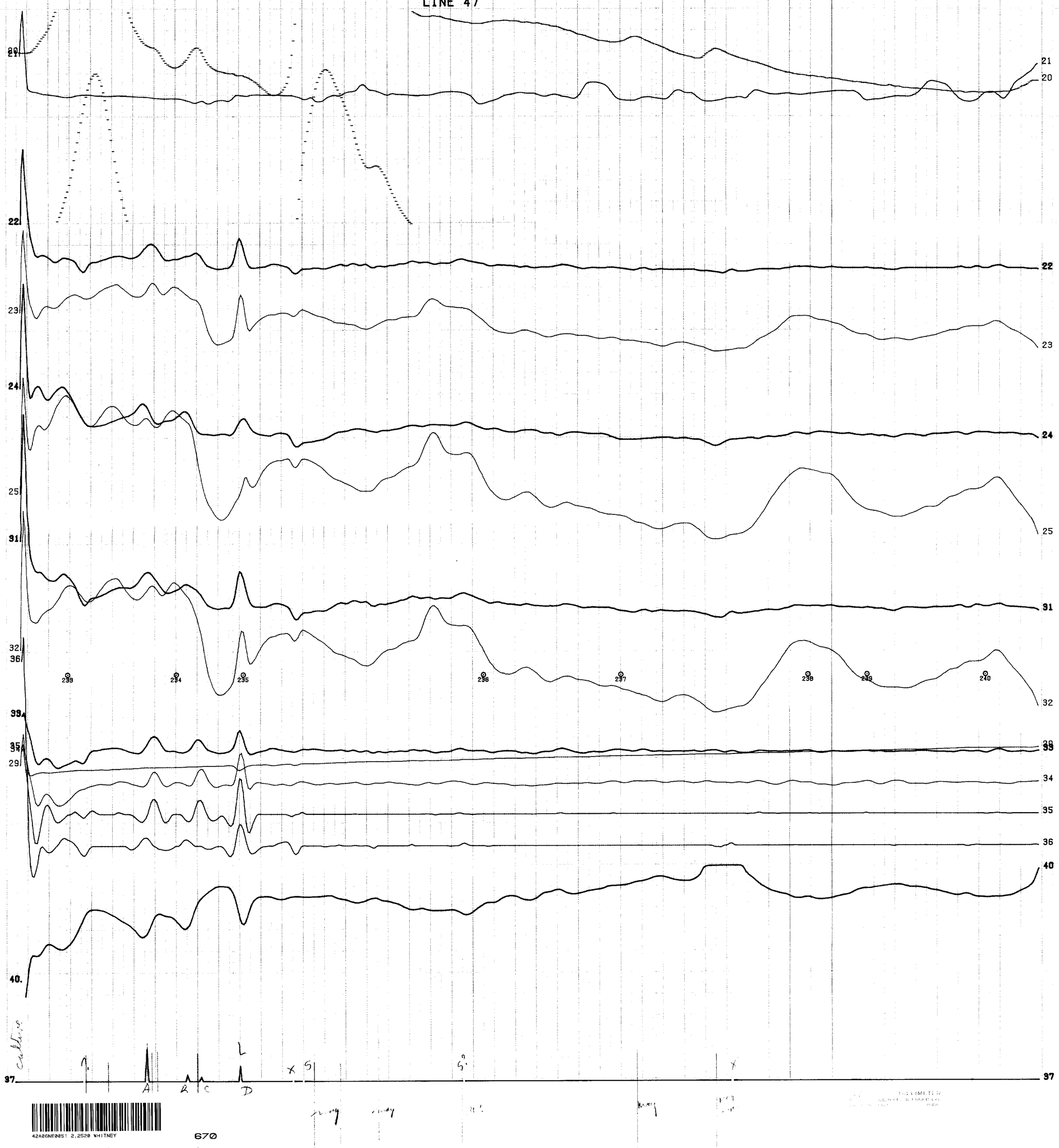
LINE 45



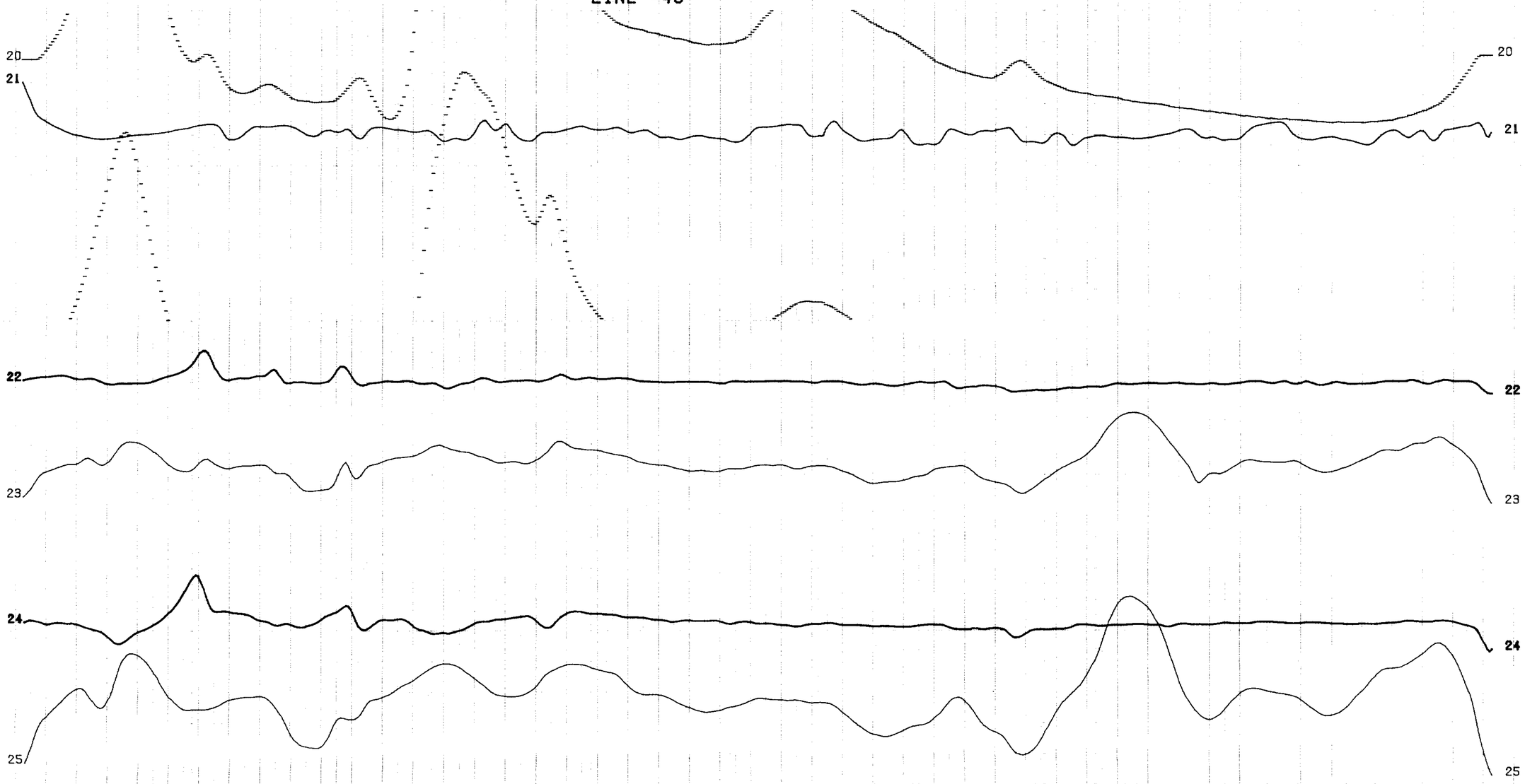
LINE -46

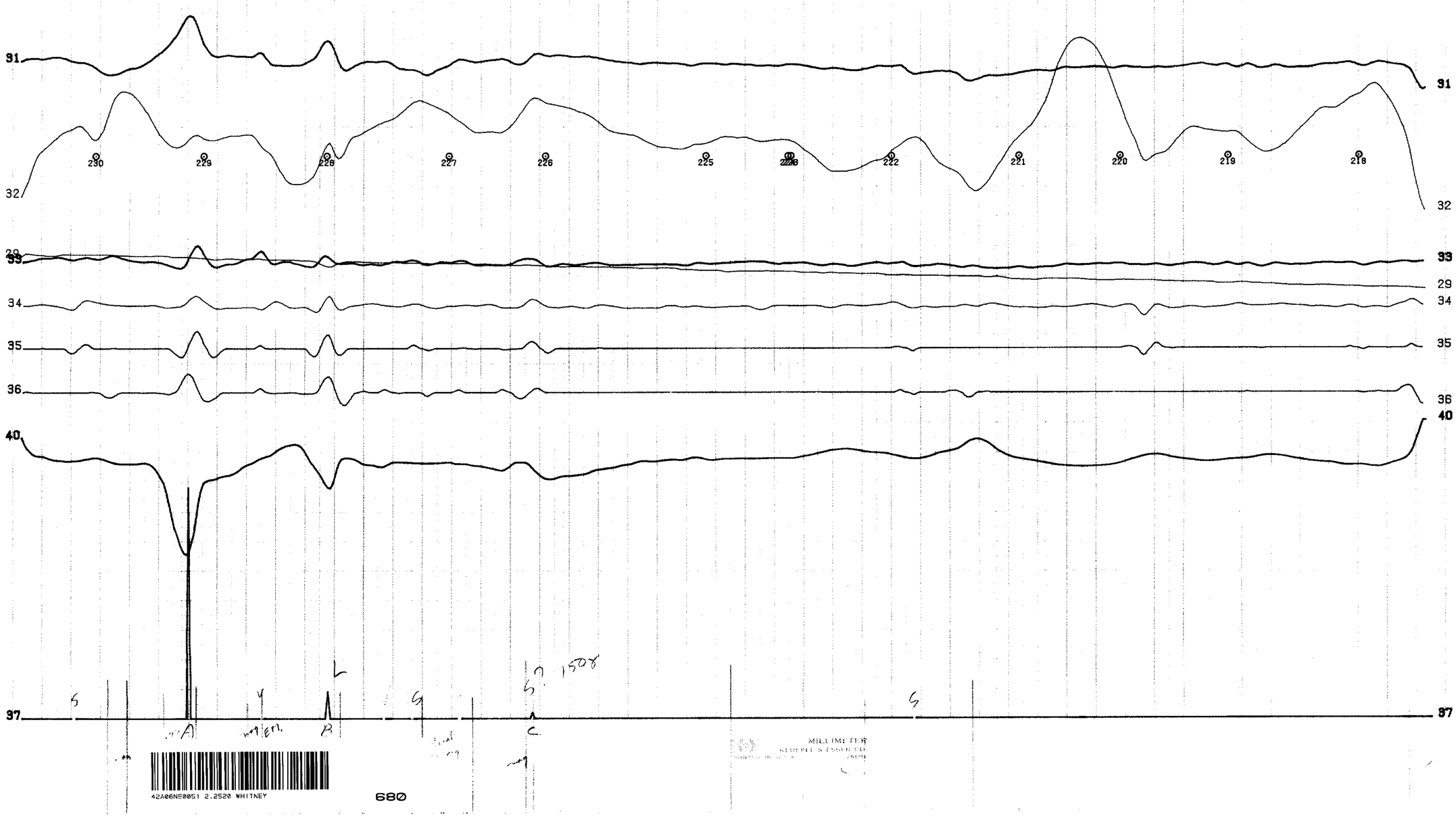


LINE 47



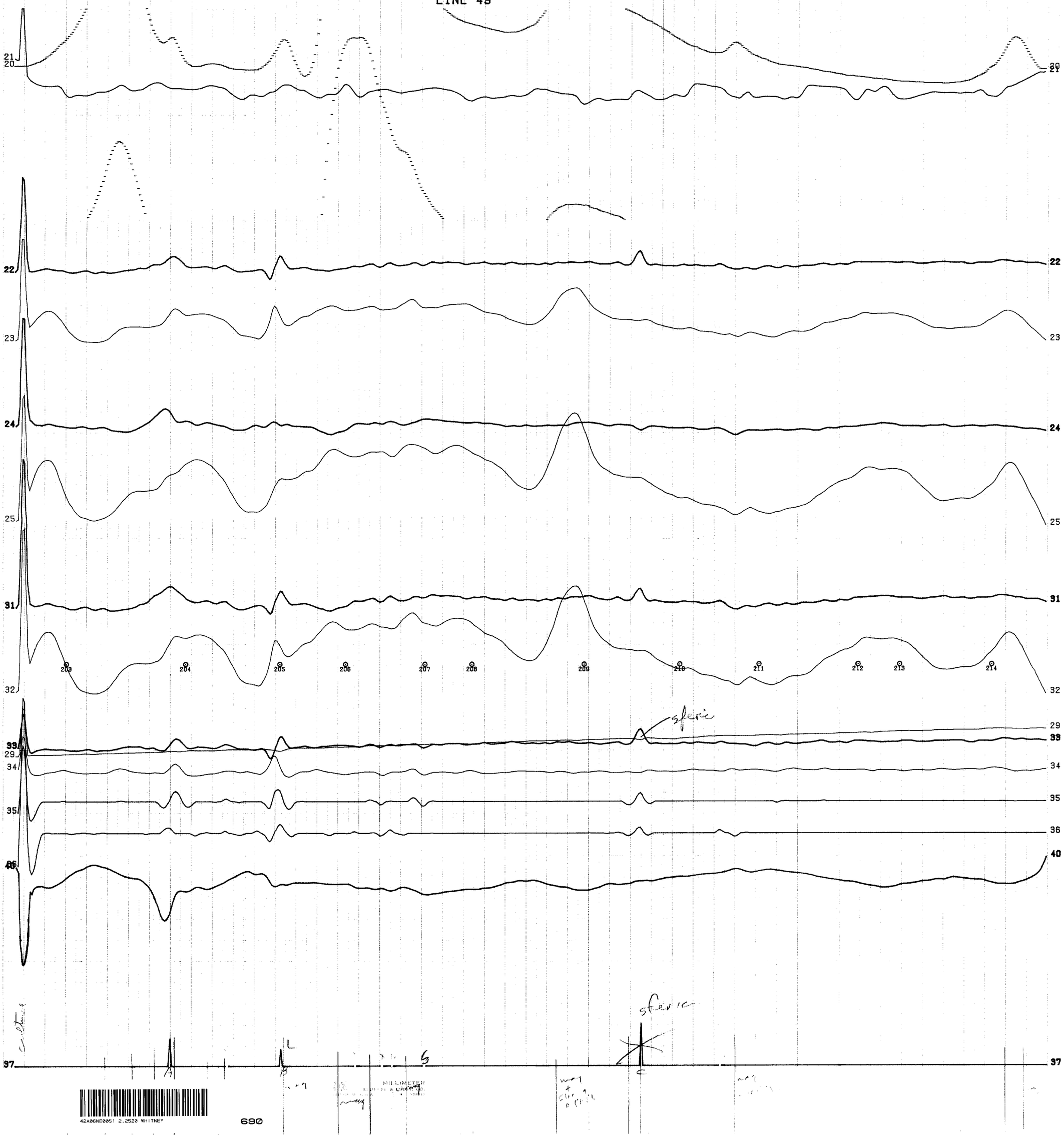
LINE -48



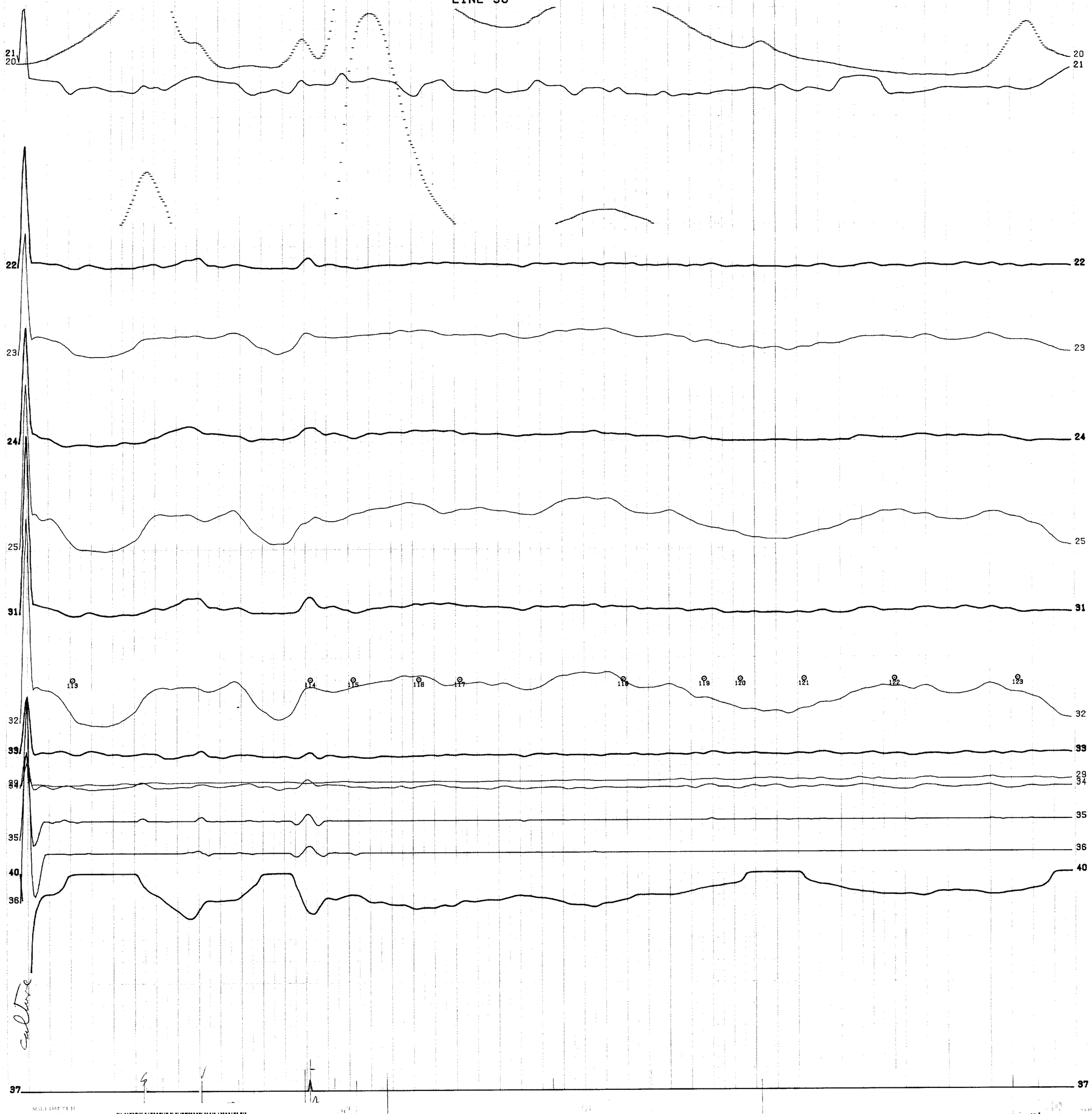


680

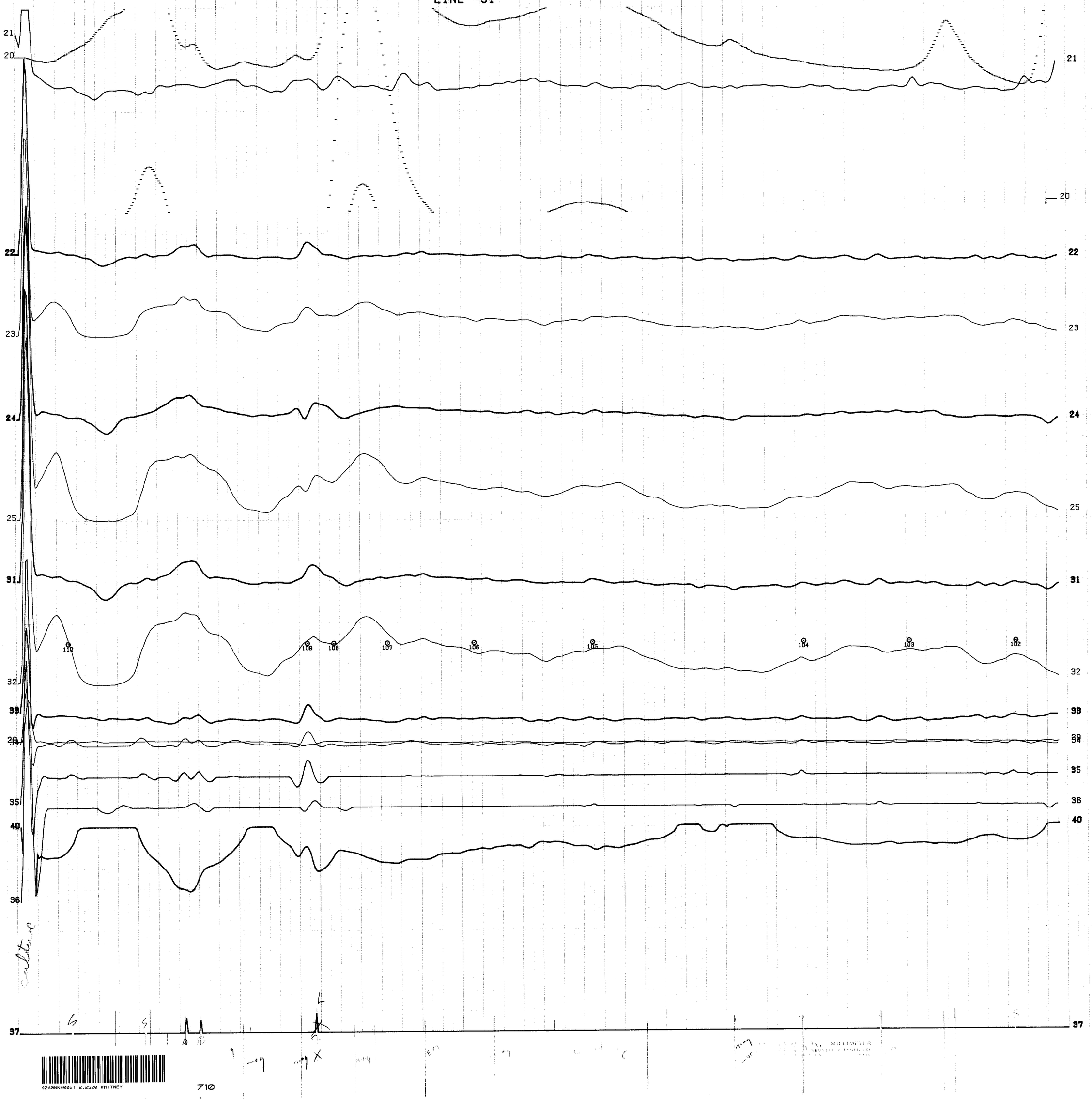
LINE 49



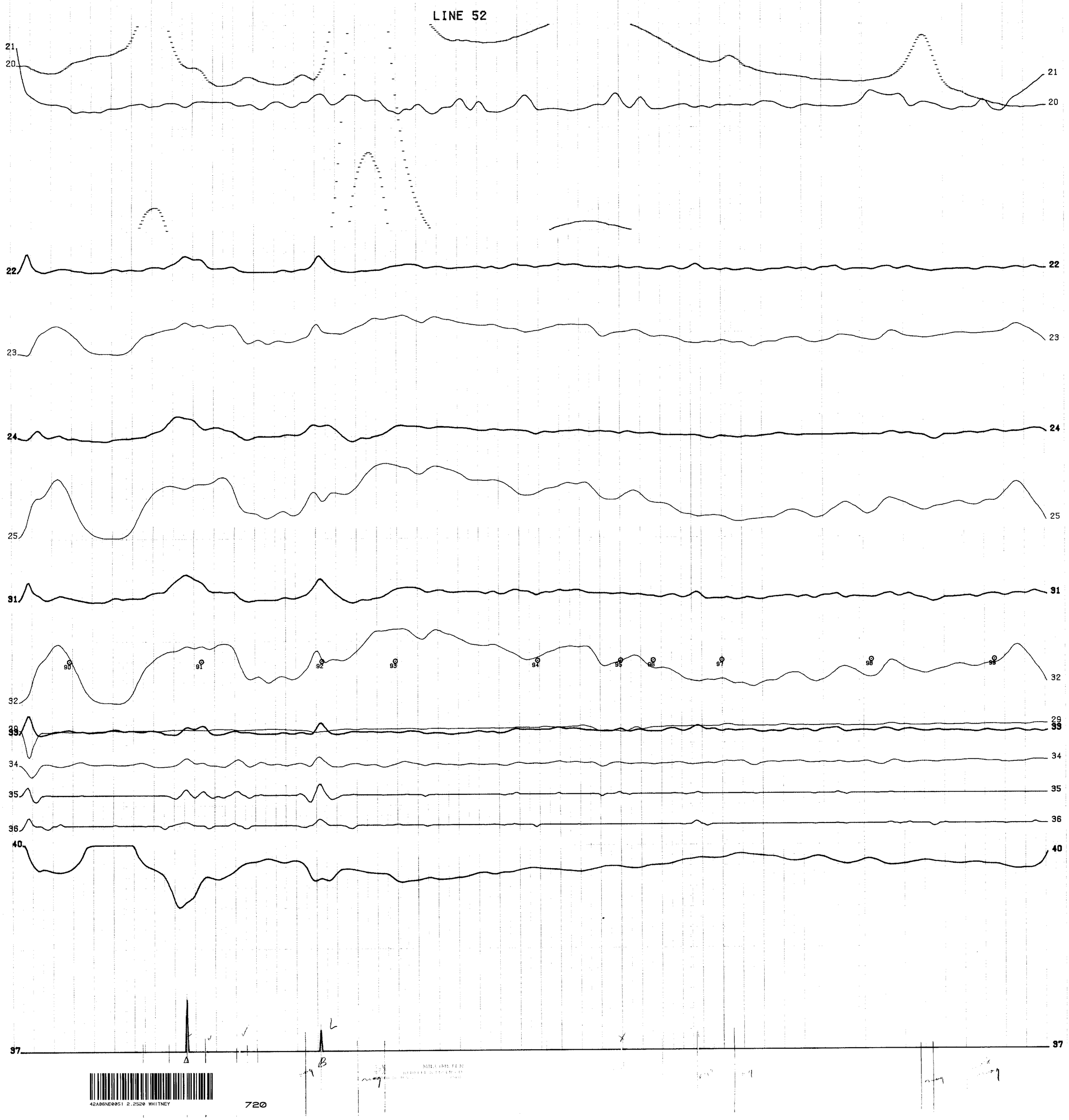
LINE 50



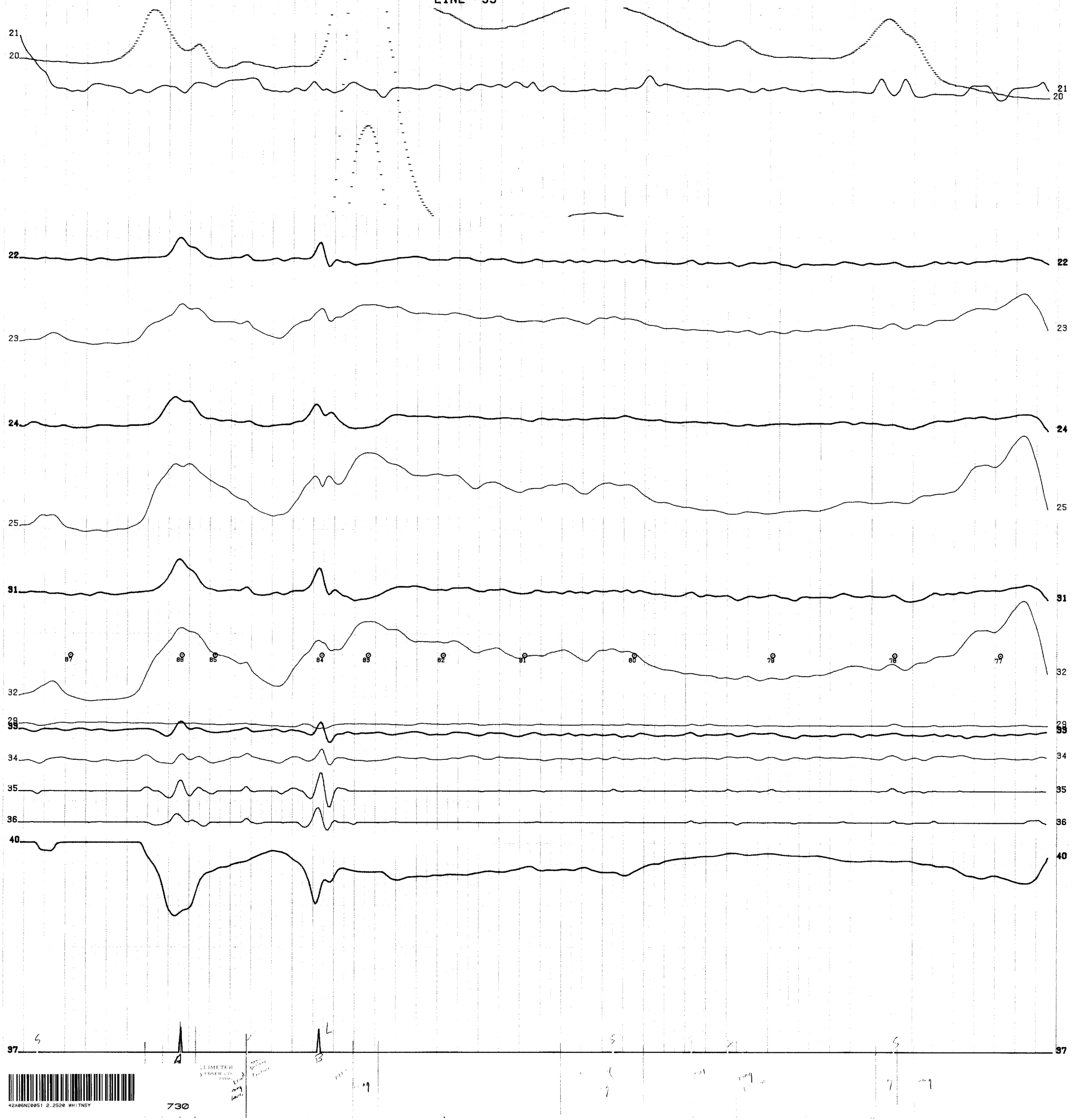
LINE -51



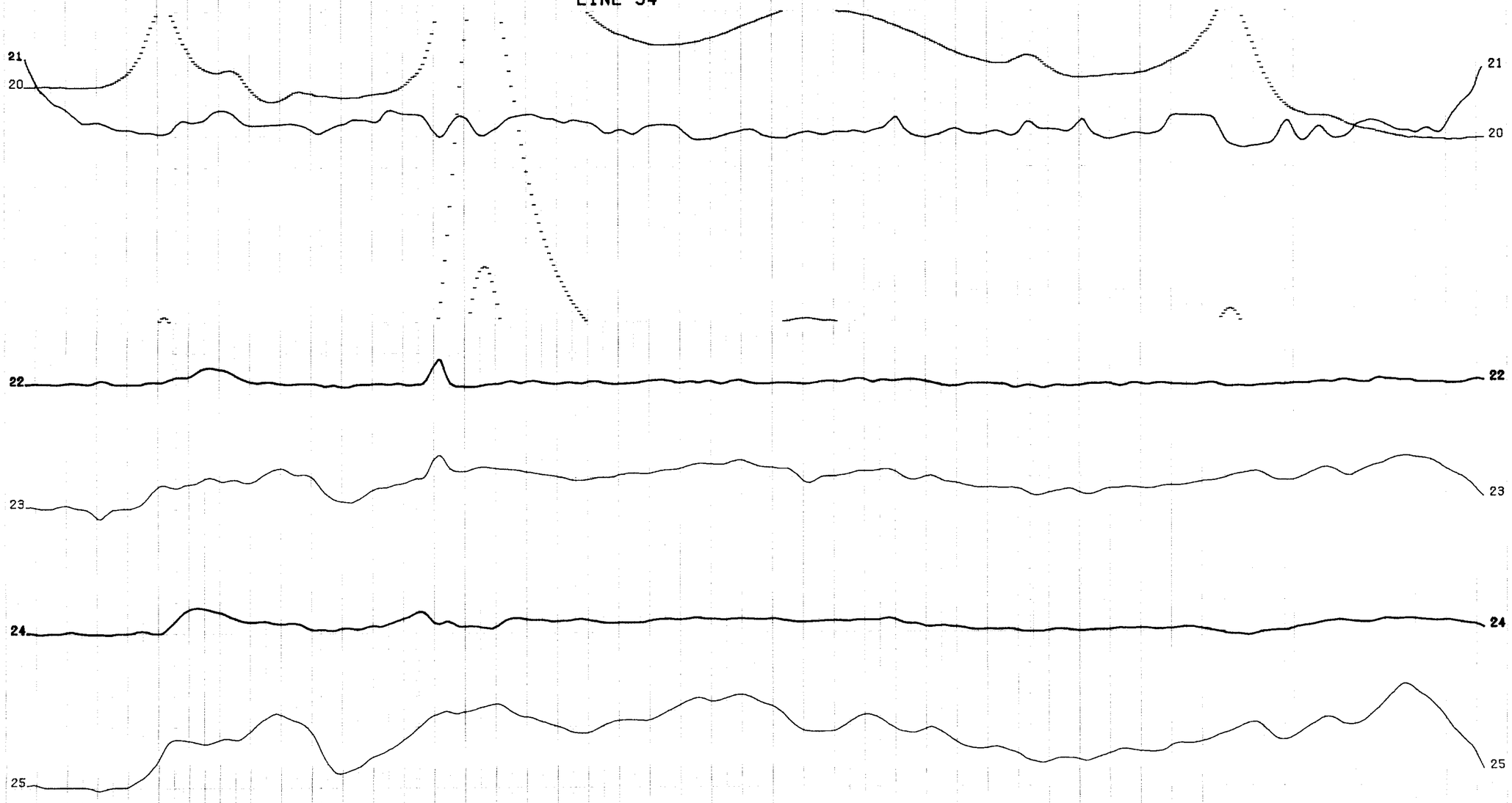
LINE 52

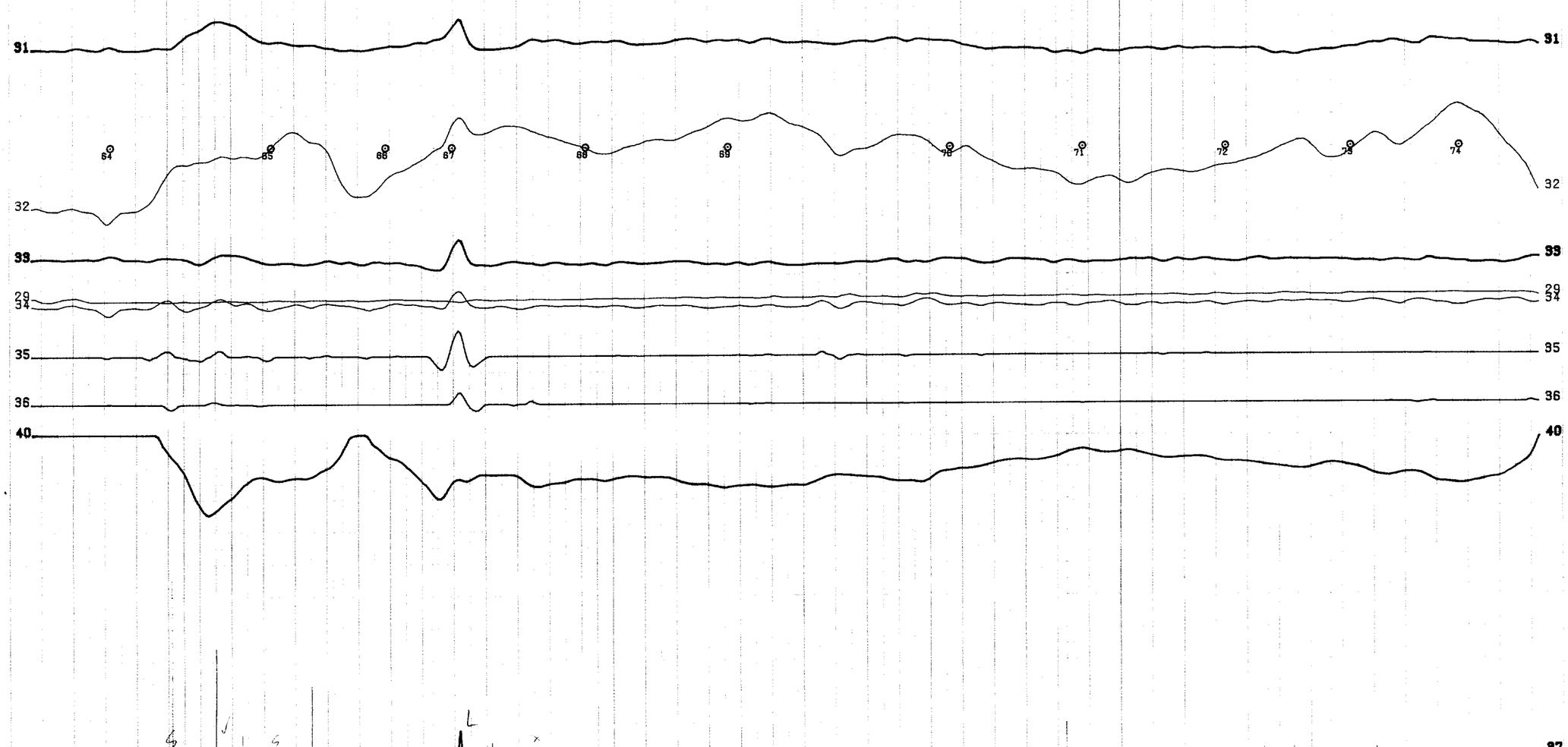


LINE -53

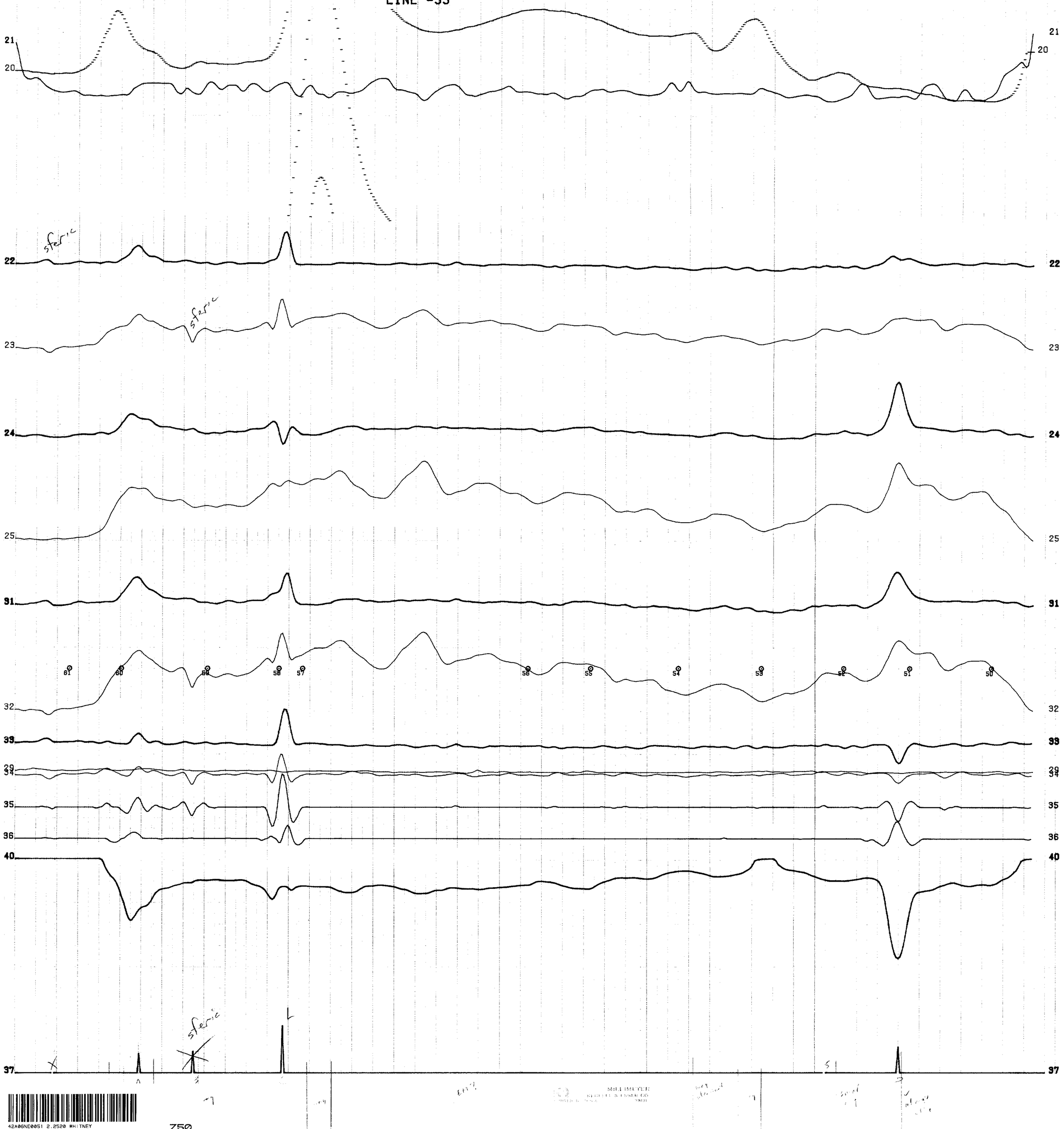

21
20
21
20
22
22
23
23
24
24
25
25
31
31
87
88
85
84
83
82
81
80
78
76
77
32
32
29
33
29
33
34
34
35
35
36
36
40
40
37
37
A
B
730
42A06NE0051 2.2520 WHITNEY

LINE 54

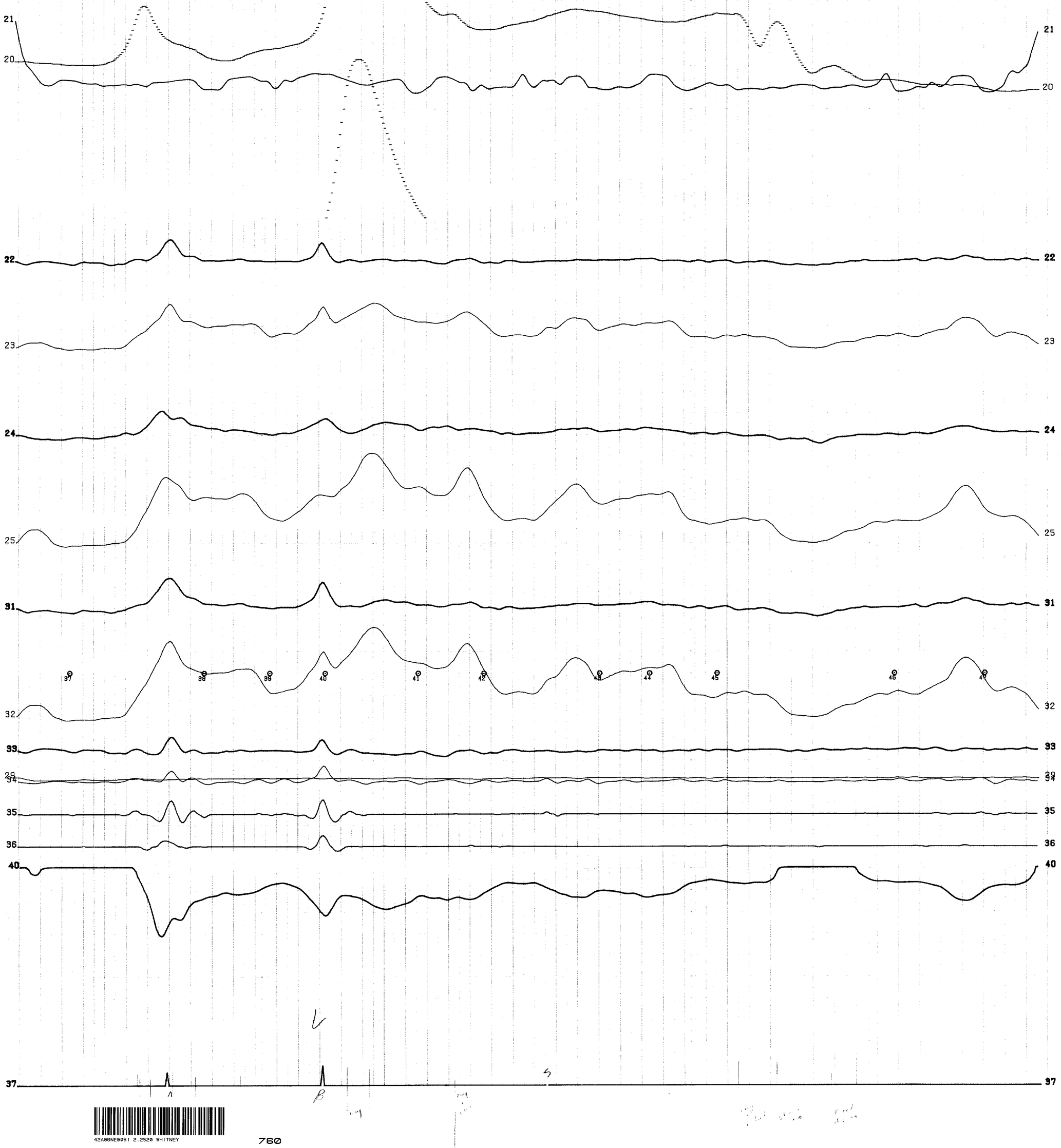




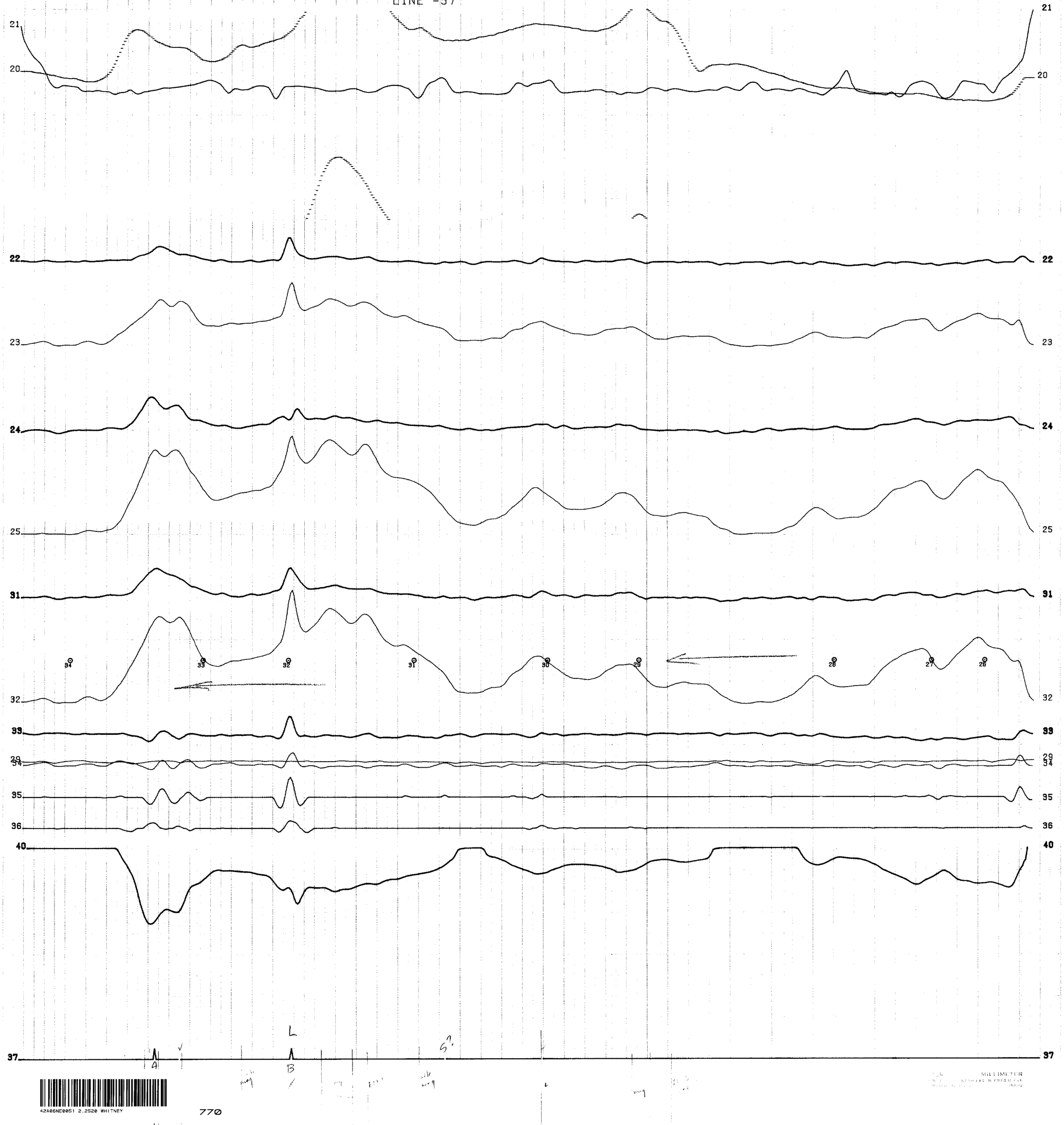
LINE -55

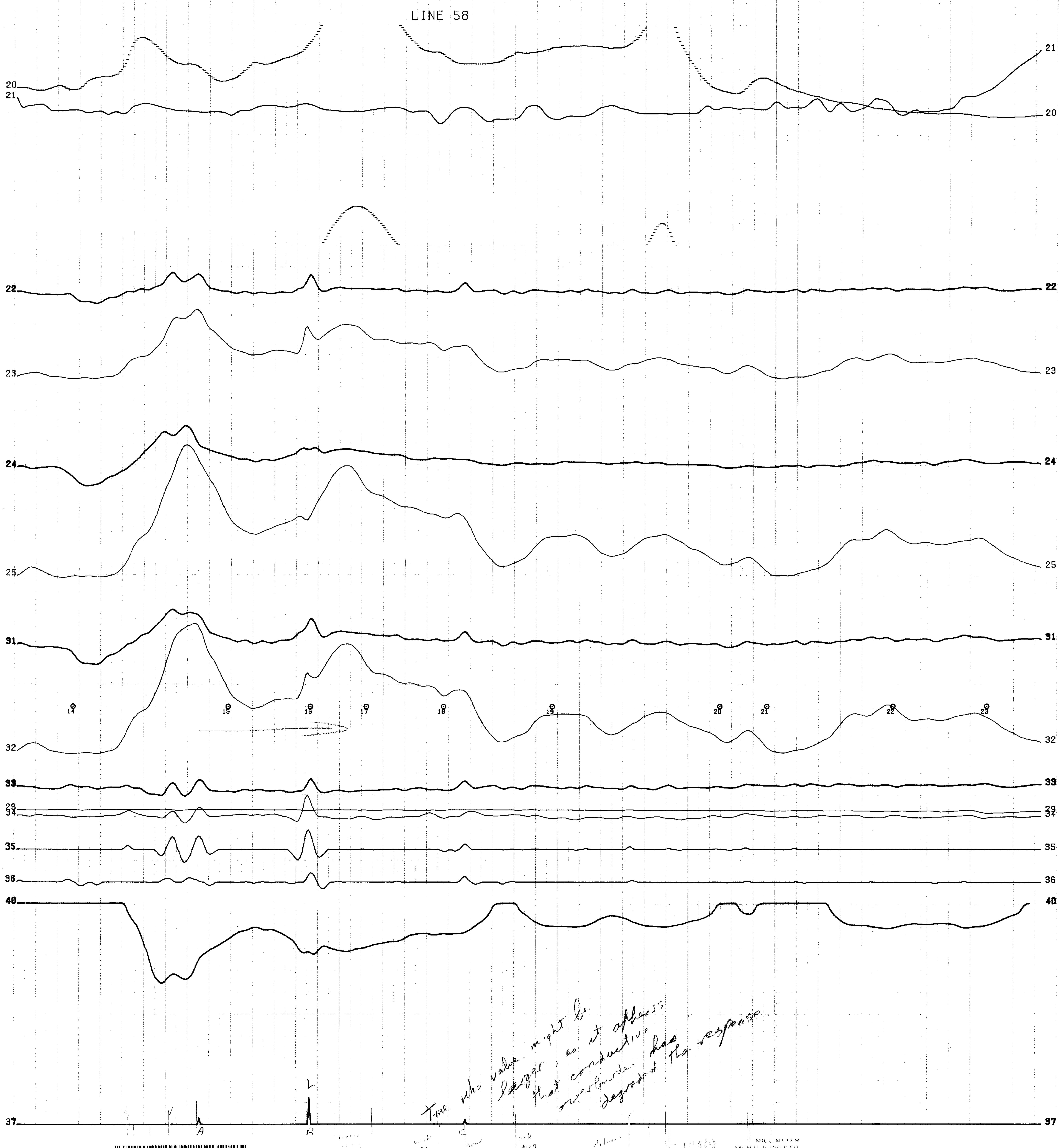


LINE 56



LINE -57





42A06NE0051 2.2520 WHITNEY