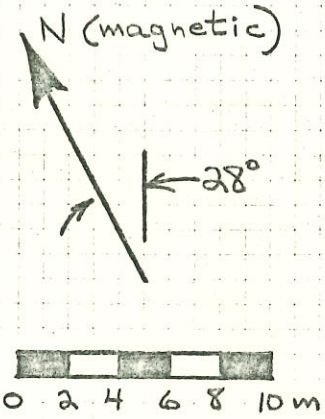
TIC MAP 2 July 1975

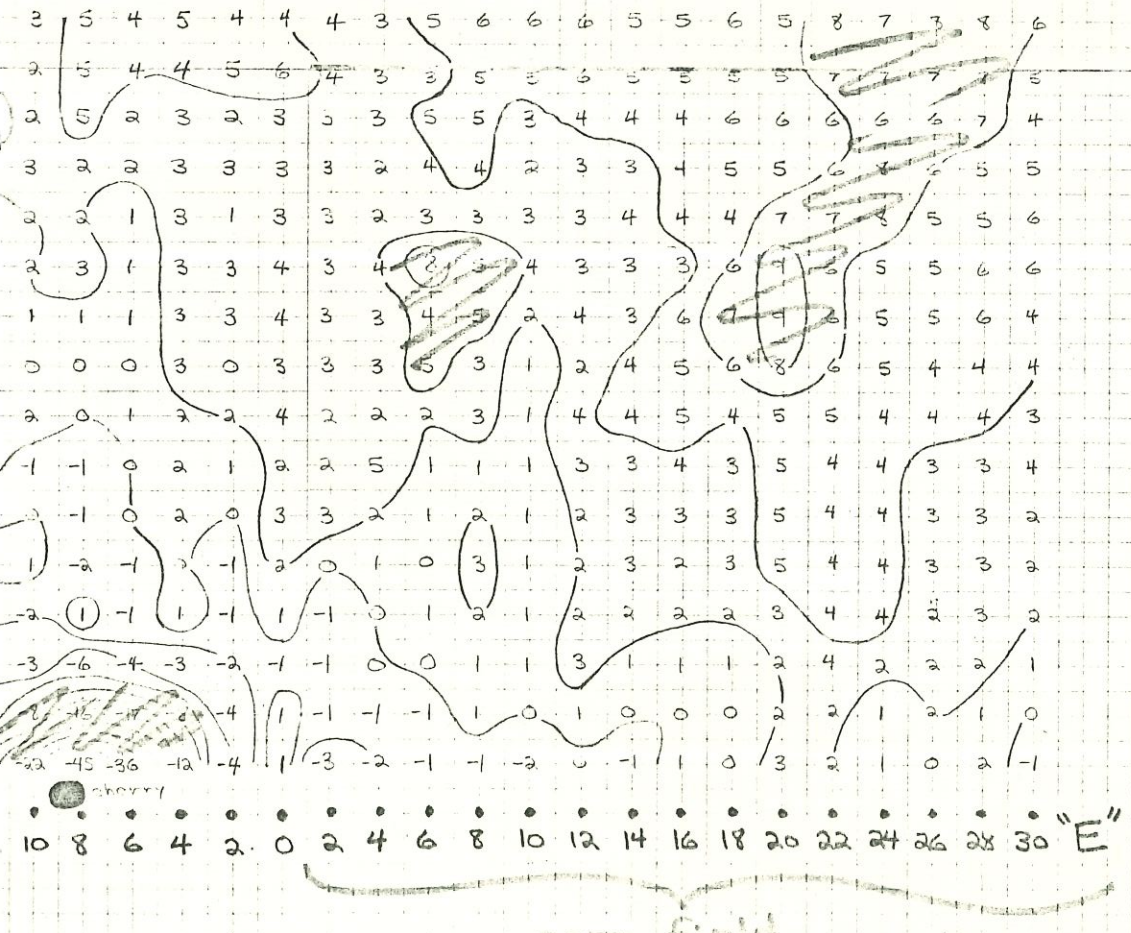
bwer area, Schaefferstown, Pa.

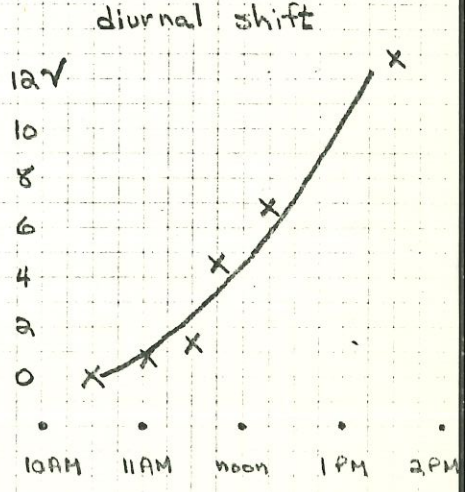


survey crew: Jeff Kline
Burt Webber
Bruce Bevan

Museum Applied Science Center For Archaeology
The University Museum
University of Pennsylvania

magnetic high
magnetic low
● = trees





Anomalies:

dipole near SW corner — probably iron at N3W22

low at S side of grid — probably iron near or S of cherry tree

high at N19E7 — possibly archaeological

high at N18E20 — possibly archaeological

geological trend: increases at ≈ 1/5 γ to E

ISOMAGNETIC MAP

2 July

Baron Stiegel Tower area, Schaefferstown

contour interval = 2γ

base value = 52,250 γ

measurement spacing = 2m

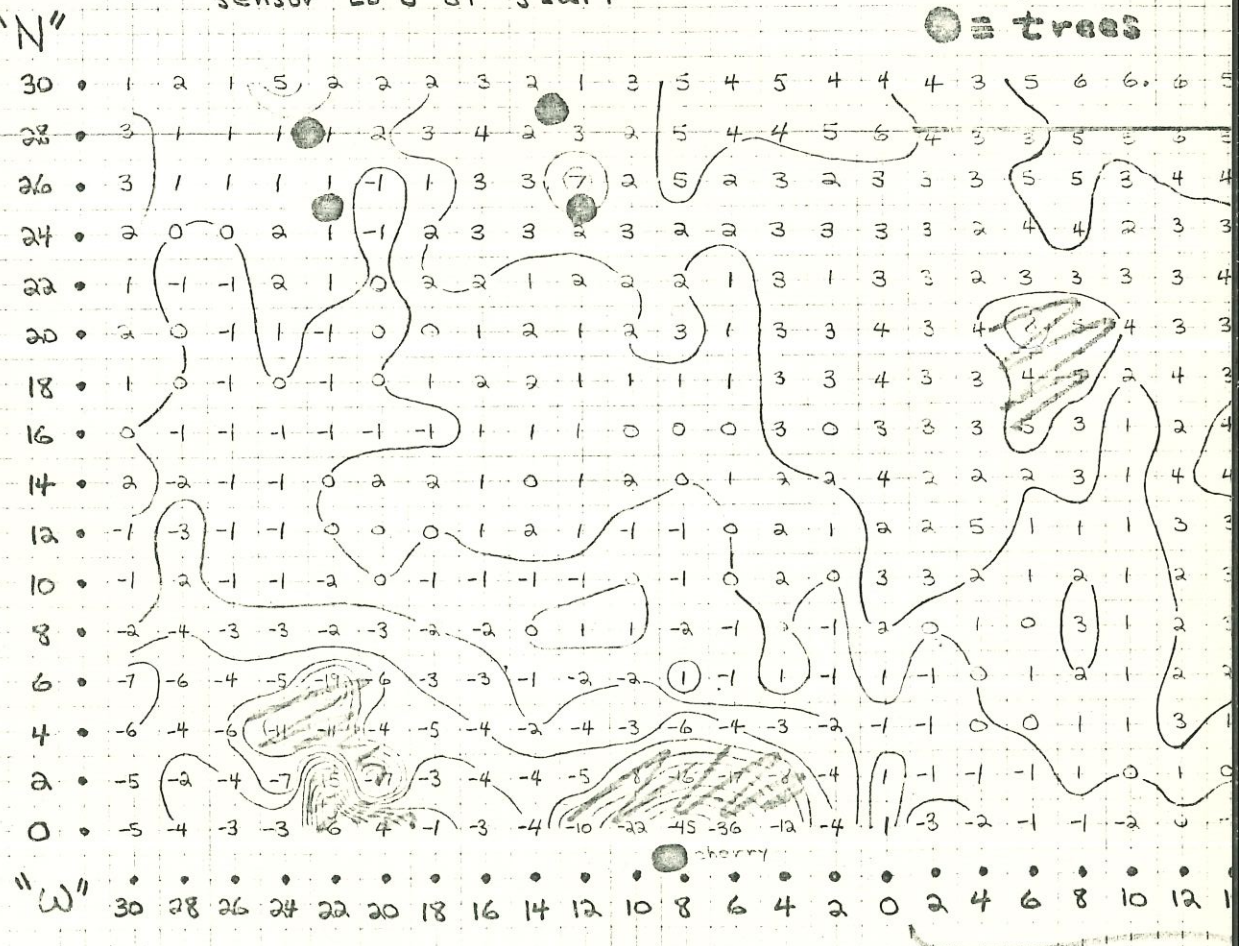
sensor height = 0.75 m

absolute intensity, corrected for diurnal shift

sensor to S of staff

survey crew: Jeff Kl
Burt G
Bruce St

magnetic hi
magnetic lo
● = trees



ow
esistivity
ineament

approximately
may have a
se.

35.6 38.0 20.7 28.8
32.9 25.9 20.0 27.2
32.4 25.0 26.4 30.4
31.5 23.6 28.9 29.2
26.7 22.6 33.5 31.1
25.5 23.1 34.1 30.2
25.3 23.8 33.9 31.8
24.7 25.4 36.5 35.2
22.1 25.1 36.4 35.8
23.8 28.3 37.4 36.8
21.0 28.8 34.3 35.0
20.5 28.0 30.8 30.4
18.8 29.0 29.1 27.4
18.3 26.0 26.7 25.2

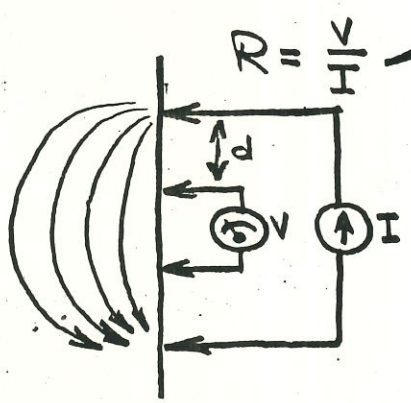
Isoresistivity Map

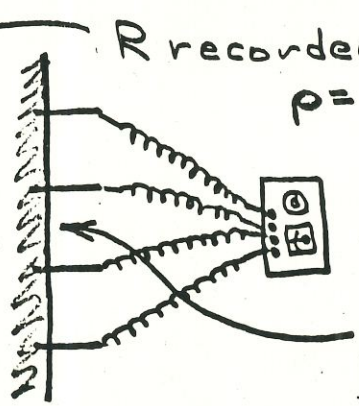
Baron Stiegel Tower Area
Schaefferstown, Pennsylvania

surveyed 25 Oct 75 by Burt Webber & Bruce Bevan

approx. same grid reference as magnetic survey of 2 Jul 75

contour interval = 10 Ω (5 Ω if R < 40)





R recorded on map
$\rho = 2\pi d R$

Gossen Geohm

measurement put here on map

probe spacing = 1 m

21.0	28.8	34.3	35.0
20.5	28.0	30.8	30.4
18.8	29.0	29.1	27.4
18.3	26.0	26.7	25.2
19.5	28.8	27.3	25.8
20.9	26.7	24.6	22.5
21.1	(30.1)	24.7	23.1
24.7	27.2	22.1	24.0
23.1	26.6	21.9	21.8
24.2	24.2	21.3	23.4
20.9	21.0	23.9	21.7
23.0	18.8	23.1	17.2
18.5	20.2	21.2	18.0
19.8	21.0	19.7	18.5
23.9	22.4	16.7	20.0
21.7	21.9	16.0	22.3
23.5	19.5	17.0	24.6
22.2	20.5	24.9	26.0

measurement put here on map

probe spacing = 1 m

traverse direction = N ↔ S

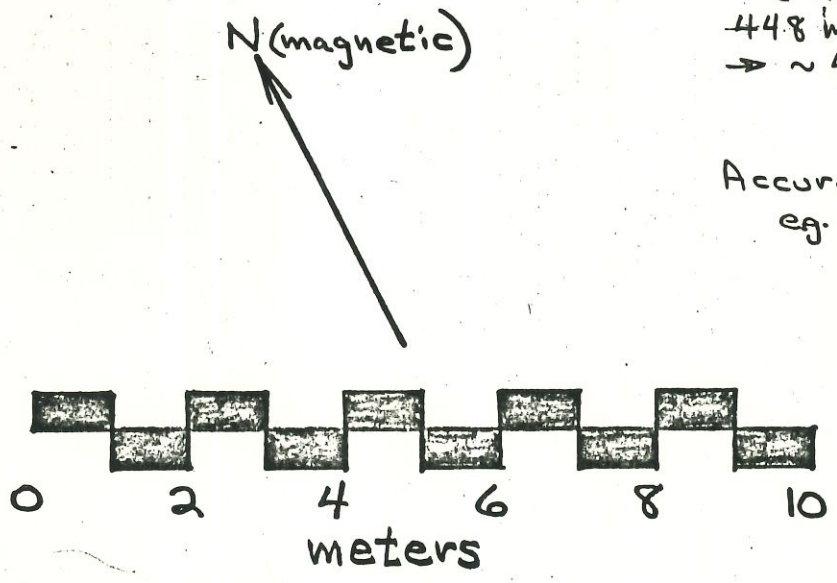
4-point probe in Wenner configuration

general reference: Interpretation of Resistivity Data

by R.G. Van Nostrand & K.L. Cook
Geological Survey Professional Paper 499
USGPO, 1966

~5 hours to survey grid
448 measurements
→ ~40 sec/measurement

Accuracy ~ ± 3 in right hand digit
eg. 28.8 ± 0.3 or 68 ± 3



University Museum, MASCA, Univ. of Pennsylvania
Webber Explorations, Inc., Annville, Pa.

wheat

6 8 10 12 "E"

magnetic anomalies on S side of magnetic grid of 2 Jul 75 found to be coils of fence wire hidden in brush

~30 Ω discontinuity along edge of cultivated field

low resistiv
lineamen

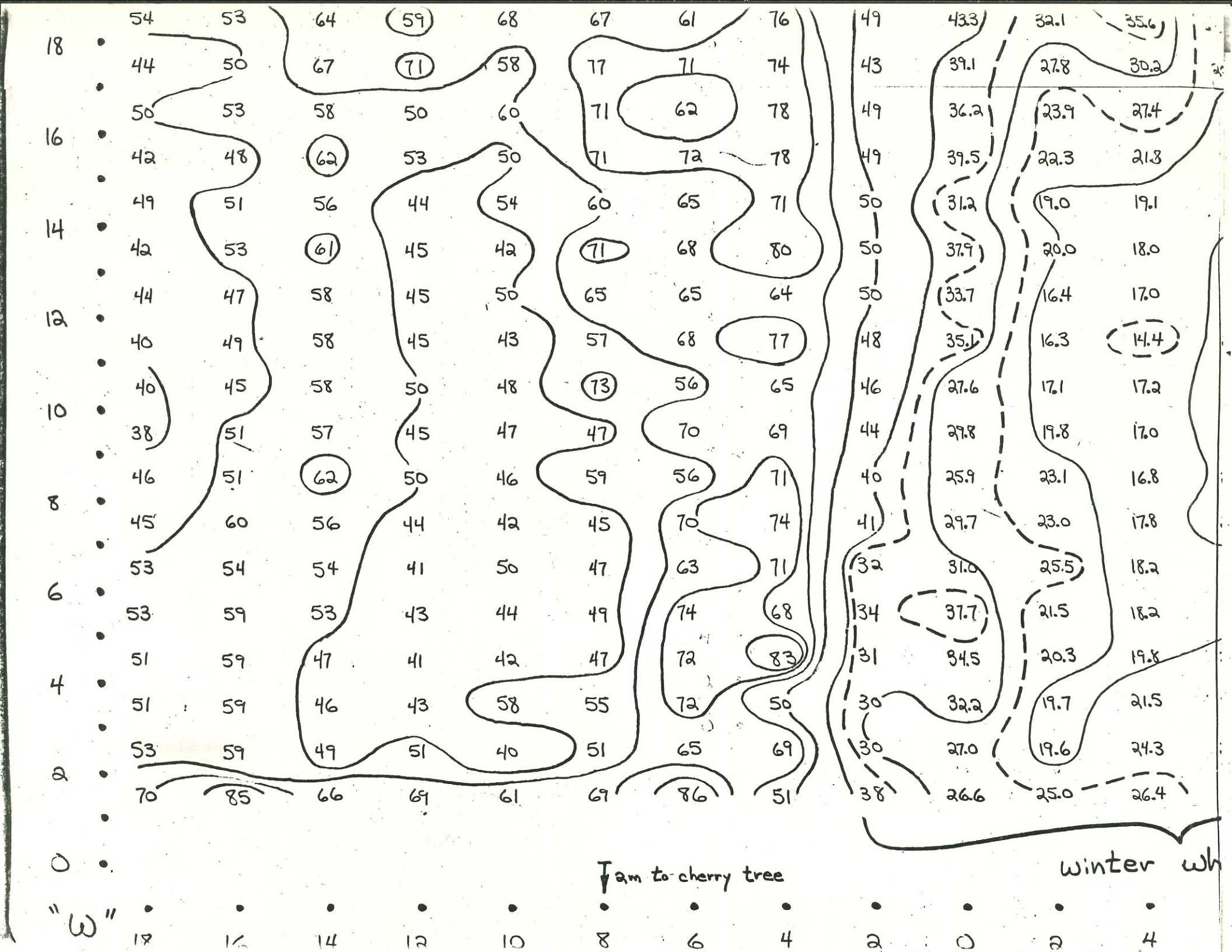
these are approxi
parallel and may h
related cause.

N

probably all anomalies here are a result of tree roots and animal burrows

30
28
26
24
22
20
18
16

55 69 70 85 44 59 62 73 43 35.3 36.5 37.8 35.6
60 62 83 63 52 58 54 54 43 33.6 38.8 44.1 32.9
64 61 80 62 tree 54 60 64 74 45 29.1 32.7 34.4 32.4
53 72 88 79 60 67 50 58 50 35.9 31.0 43.0 31.5
69 62 93 94 71 65 59 65 50 36.1 32.9 39.1 26.7
54 61 89 59 tree 76 63 49 55 50 45.2 31.1 39.3 25.5
64 63 78 102 68 73 58 66 51 40.9 35.9 37.8 25.3
58 60 84 64 72 58 48 55 43 44.7 33.9 37.2 24.7
58 56 72 70 66 67 62 72 49 41.2 36.9 37.6 22.1
51 61 78 80 66 70 61 61 44 40.0 35.4 38.2 23.8
54 53 64 59 68 67 61 76 49 43.3 32.1 35.6 21.0
44 50 67 71 58 77 71 74 43 39.1 27.8 30.2 20.5
50 53 58 50 60 71 62 78 49 36.2 23.9 27.4 18.8
42 48 62 53 59 71 78 78 49 39.5 22.3 21.3 18.3


54 53 64 59 68 67 61 76
44 50 67 71 58 77 71 74
50 53 58 50 60 71 62 78
42 48 62 53 50 71 72 78
49 51 56 44 54 60 65 71
42 53 61 45 42 71 68 80
44 47 58 45 50 65 65 64
40 49 58 45 43 57 68 77
40 45 58 50 48 73 56 65
38 51 57 45 47 47 70 69
46 51 62 50 46 59 56 71
45 60 56 44 42 45 70 74
53 54 54 41 50 47 63 71
53 59 53 43 44 49 74 68
51 59 47 41 42 47 72 83
51 59 46 43 58 55 72 50
53 59 49 51 40 51 65 69
70 85 66 69 61 69 86 51
49 43.3 32.1 35.6
43 39.1 27.8 30.2
49 36.2 23.9 27.4
49 39.5 22.3 21.8
50 31.2 19.0 19.1
50 37.9 20.0 18.0
50 33.7 16.4 17.0
48 35.1 16.3 14.4
46 27.6 17.1 17.2
44 29.8 19.8 17.0
40 25.9 23.1 16.8
41 29.7 23.0 17.8
32 31.0 25.5 18.2
34 37.7 21.5 18.2
31 34.5 20.3 19.8
30 32.2 19.7 21.5
30 27.0 19.6 24.3
38 26.6 25.0 26.4
18 16 14 12 10 8 6 4 2 0 2 4
"W"
Tam to cherry tree
winter wh