

Field Book # 41

Douglas County

1916

No 20

FB 41



ENGINEERS'

FIELD BOOK

No. 400

41

**EUGENE DIETZGEN CO.**  
DRAWING MATERIALS, MATHEMATICAL and  
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburgh Toronto

Distances from Center of Roadway for Cross-Sectioning  
Roadway 16 feet wide. Side Slopes 1 on 1.  
For Single Track Embankment.

| H  | 0    | .1   | .2   | .3   | .4   | .5   | .6   | .7   | .8   | .9   | H  |
|----|------|------|------|------|------|------|------|------|------|------|----|
| 0  | 8.0  | 8.1  | 8.2  | 8.3  | 8.4  | 8.5  | 8.6  | 8.7  | 8.8  | 8.9  | 0  |
| 1  | 9.0  | 9.1  | 9.2  | 9.3  | 9.4  | 9.5  | 9.6  | 9.7  | 9.8  | 9.9  | 1  |
| 2  | 10.0 | 10.1 | 10.2 | 10.3 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 | 2  |
| 3  | 11.0 | 11.1 | 11.2 | 11.3 | 11.4 | 11.5 | 11.6 | 11.7 | 11.8 | 11.9 | 3  |
| 4  | 12.0 | 12.1 | 12.2 | 12.3 | 12.4 | 12.5 | 12.6 | 12.7 | 12.8 | 12.9 | 4  |
| 5  | 13.0 | 13.1 | 13.2 | 13.3 | 13.4 | 13.5 | 13.6 | 13.7 | 13.8 | 13.9 | 5  |
| 6  | 14.0 | 14.1 | 14.2 | 14.3 | 14.4 | 14.5 | 14.6 | 14.7 | 14.8 | 14.9 | 6  |
| 7  | 15.0 | 15.1 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 7  |
| 8  | 16.0 | 16.1 | 16.2 | 16.3 | 16.4 | 16.5 | 16.6 | 16.7 | 16.8 | 16.9 | 8  |
| 9  | 17.0 | 17.1 | 17.2 | 17.3 | 17.4 | 17.5 | 17.6 | 17.7 | 17.8 | 17.9 | 9  |
| 10 | 18.0 | 18.1 | 18.2 | 18.3 | 18.4 | 18.5 | 18.6 | 18.7 | 18.8 | 18.9 | 10 |
| 11 | 19.0 | 19.1 | 19.2 | 19.3 | 19.4 | 19.5 | 19.6 | 19.7 | 19.8 | 19.9 | 11 |
| 12 | 20.0 | 20.1 | 20.2 | 20.3 | 20.4 | 20.5 | 20.6 | 20.7 | 20.8 | 20.9 | 12 |
| 13 | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 13 |
| 14 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 | 22.5 | 22.6 | 22.7 | 22.8 | 22.9 | 14 |
| 15 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 15 |
| 16 | 24.0 | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 16 |
| 17 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 | 25.7 | 25.8 | 25.9 | 17 |
| 18 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 18 |
| 19 | 27.0 | 27.1 | 27.2 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 19 |
| 20 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 | 28.9 | 20 |
| 21 | 29.0 | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 21 |
| 22 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 22 |
| 23 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 23 |
| 24 | 32.0 | 32.1 | 32.2 | 32.3 | 32.4 | 32.5 | 32.6 | 32.7 | 32.8 | 32.9 | 24 |
| 25 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 25 |
| 26 | 34.0 | 34.1 | 34.2 | 34.3 | 34.4 | 34.5 | 34.6 | 34.7 | 34.8 | 34.9 | 26 |
| 27 | 35.0 | 35.1 | 35.2 | 35.3 | 35.4 | 35.5 | 35.6 | 35.7 | 35.8 | 35.9 | 27 |
| 28 | 36.0 | 36.1 | 36.2 | 36.3 | 36.4 | 36.5 | 36.6 | 36.7 | 36.8 | 36.9 | 28 |
| 29 | 37.0 | 37.1 | 37.2 | 37.3 | 37.4 | 37.5 | 37.6 | 37.7 | 37.8 | 37.9 | 29 |
| 30 | 38.0 | 38.1 | 38.2 | 38.3 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 30 |
| 31 | 39.0 | 39.1 | 39.2 | 39.3 | 39.4 | 39.5 | 39.6 | 39.7 | 39.8 | 39.9 | 31 |
| 32 | 40.0 | 40.1 | 40.2 | 40.3 | 40.4 | 40.5 | 40.6 | 40.7 | 40.8 | 40.9 | 32 |
| 33 | 41.0 | 41.1 | 41.2 | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.8 | 41.9 | 33 |
| 34 | 42.0 | 42.1 | 42.2 | 42.3 | 42.4 | 42.5 | 42.6 | 42.7 | 42.8 | 42.9 | 34 |
| 35 | 43.0 | 43.1 | 43.2 | 43.3 | 43.4 | 43.5 | 43.6 | 43.7 | 43.8 | 43.9 | 35 |
| 36 | 44.0 | 44.1 | 44.2 | 44.3 | 44.4 | 44.5 | 44.6 | 44.7 | 44.8 | 44.9 | 36 |
| 37 | 45.0 | 45.1 | 45.2 | 45.3 | 45.4 | 45.5 | 45.6 | 45.7 | 45.8 | 45.9 | 37 |
| 38 | 46.0 | 46.1 | 46.2 | 46.3 | 46.4 | 46.5 | 46.6 | 46.7 | 46.8 | 46.9 | 38 |
| 39 | 47.0 | 47.1 | 47.2 | 47.3 | 47.4 | 47.5 | 47.6 | 47.7 | 47.8 | 47.9 | 39 |
| 40 | 48.0 | 48.1 | 48.2 | 48.3 | 48.4 | 48.5 | 48.6 | 48.7 | 48.8 | 48.9 | 40 |

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 30 ft. roadbed distance will be 30.6 + (20 - 16) + 2 or 2 ft. added to

Sta 7

C Closure  
Clos C Closure

Station

4) 25.5 Station

6.4

SC Br B Bruce

742 742 6972

Bruce

Bruce

1.60

66) 250 (38  
198  
520

18.95  
6.50  
12.45

31.45  
33.65  
65.10

98.27  
61.30  
37.00

160  
128  
22

1.5  
3.6  
9.0  
4.5  
3.40

66  
7.00  
46.2  
12  
12.4  
41.58  
47.504

17.00  
16.68  
332.0

1188  
0092  
2376  
10692  
109276

172

1852

Survey for S.C. Bruce  
T 26 S R 3 W.

Begin pt. - Cor. Secs. 19-30. 24-25

Set Cor. (Oak Post and  $\frac{3}{4}$ " Iron Pin)  
from Original Trees

A. B. Oak 30" N 61° W 134 lks.  
" " " 548° E 80 "  
" " " 30" N 78° W 239 "  
" " " 54° W 229 "

Chs. Thence East, on South boundary  
of Sec. 19.

8.10

13.82

13.86

16.00

17.93

20.55

Thence North.

4.30

5.77

Thence West.  
see page 6 for record of Cor.

48

1.60

5.10

contd page 4

Should have been 18.95 Ch.

{ Apr 14, 1916  
cloudy

March 13, 16 0001

J. W. Cole

Witness A. Schloeman.

S. C. Bruce.

Chain. - D. A. Oden.

- Cecil Black.

Var 21° 00' E.

Original Notes. Call for

A. Oak 20" S 10° E 82 lks

A. B. Oak 25" S 54° W 344 lks - gone

A. " " 18" N 61° W 239 } intercha

" " " 23" N 78° E 137 } 1900.

1st line hub set Not numbered

line hub. #1

" " hub #2

1/4 N of Rock for Schloemans. set by Germond.

" " " #3

#4 bottom hill

Cor. #5

1st Angle point 90°

line hub #1.

" " #2.

2nd Angle pt 90°

Search for. NW Cor Noland Cl.

(No evidence) (Apr 16 find Cor

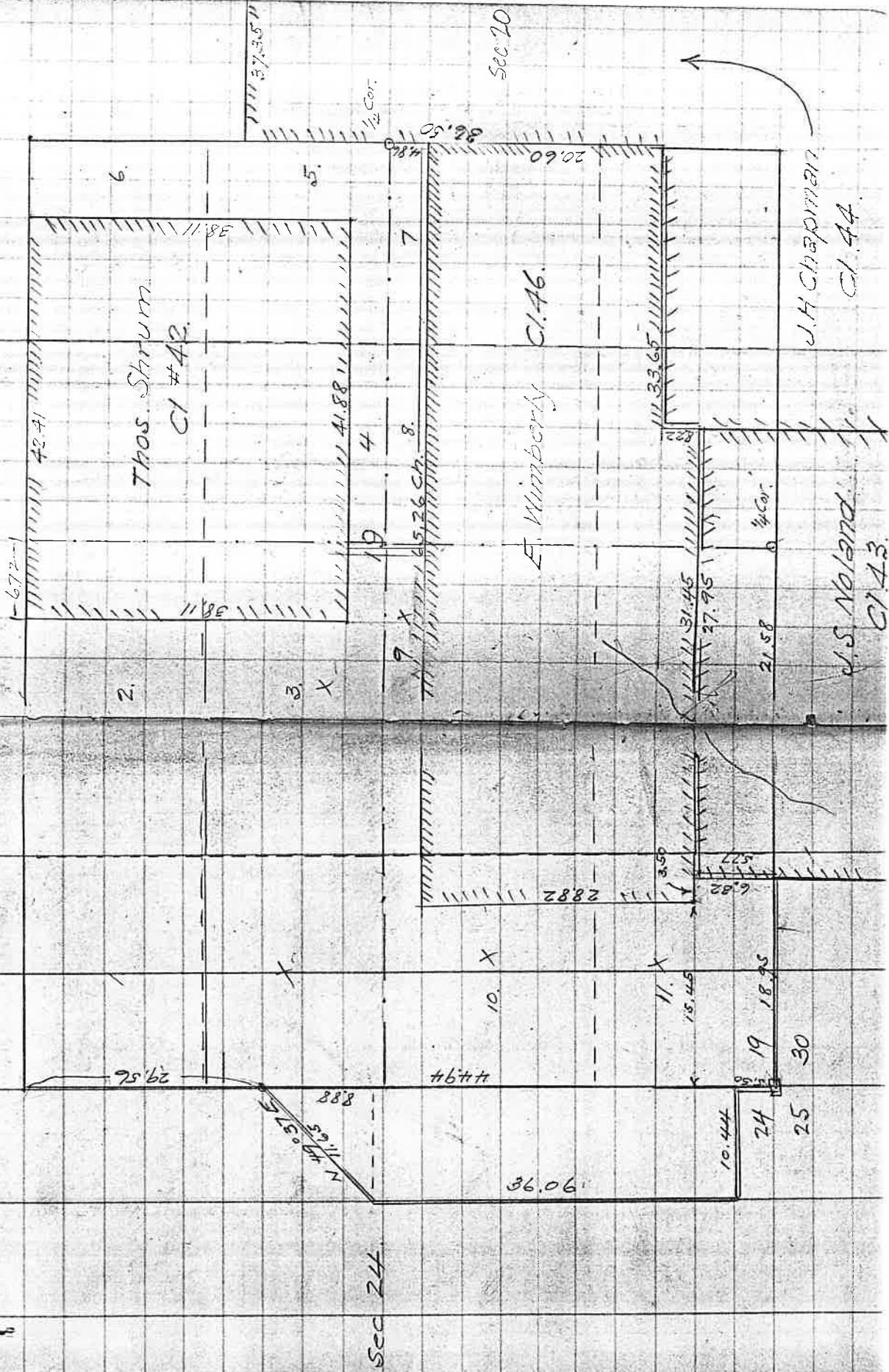
see page 6

" " S.W. " Wimberley "

no evidence

02

S.C. Bruce contd.



Thos. Shrum.  
Cl #42.

E. Wimberly  
Cl. 46.

J.H. Chapman  
Cl. 44.

U.S. Noland.  
Cl. 43.

Sec 24

Sec 20

2

April 14/16. Lat 43°18' 53.99  
Sun's app dec. 6) 269.95  
4' 30"

9° 23' 25.5  
4 30.0  
9° 27' 55.5

9 AM 9° 27' 55.5 + Ref. 53" = 9° 28' 48"

10 " 9° 28' 49.5 + " 45" = 9° 29' 35"  
54

11 " 9° 29' 39.5 + " 42" = 9° 30' 22"  
1 48

1 PM 9° 31' 27.5 + " 42" = 9° 32' 10"  
54

2 PM 9° 32' 21.5 + " 45" = 9° 33' 07"  
54

3 " 9° 33' 15.5 + " 53" = 9° 34' 09"

4 " 9° 34' 09.5 + " 1' 15" = 9° 35' 25"  
54.0

S.C. Bruce

4.

Chs. 300 Reset at 2nd Angle pt thence  
 East on Random Sundry Cl 46  
 line hub # 1  
 6.487 " " # 2, bottom of hill  
 7.45 W line Orchard.  
 10.25 Center Crk. 15' k's wide c N-S  
 10.65 line hub # 3  
 18.00 " " # 4 } = 1188 ft broke type  
 18.04 use 100 ft.  
 7.  
 12.536 bank of River also triang pt.  
 1587.9 to opposite point  
 1739.14 look for Cor of Cl 4  
 1819.7 Intersect 20' N of Cor set from  
 } Stump of Original BT. decayed  
 but scribe marks faintly visible.  
 Set 4x4 x 3 1/2 Oak stake from which  
 10" W. Oak mkd Cl 46 BT 556.30 W 44.3 A  
 10" " " " " N 36.30 E 132.7 A.

1825 Intersect old fence

Correct brg S 89° 27' E (18.52 A. 28.05 ch)

04

along old fence line

offset 2 k's North.

Run South 579 Thence East 2.65 Search

for Cor. no evidence

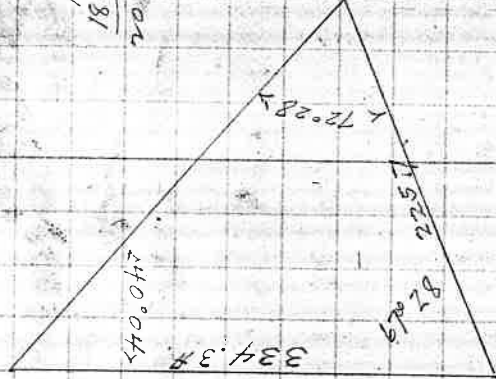
Set Point on opposite side river on  
line Set on Point on East side

turn 90° run N 255.9 Angle at this  
point 49° 55'

1825/18/0097

33.1°

3145 18.00  
 66 510  
 18870 3310  
 18870 13860  
 2075.7 18860  
 1524.60



Lat 43° 18' - 8' ind. on  
 April 15 1916

North on random from 17391  
 of East random 5:00 PM

SUNS dec

9° 44' 57" mly ch. 54  
 5 04

Ref. 45"

60/304  
 5 04

10 AM 9° 50' 01" + 45"

Begin at Cor to Secs 19-30-24-25  
 North on random Var 21°

11" 9° 50' 55" + 42" = 9° 51' 37"

line hub offset 2' South  
 Oak line tree 2' West

12 9° 51' 49" -

43° 10' - 200' of  
 index error

1 PM 9° 53' 37" + 42" = 9° 54' 19"

line hub  
 Bruce Cor. 90° L

2 9° 54' 31" + 45"

Thence West 589° 54' W by  
 Solar.

3 9° 55' 25" + 53"

129 line hub # 1  
 254 " " # 2

4 9° 56' 19" + 1' 15" = 10' 34"

589° + 2' sect offset on previous line  
 Thence North 0° 06' E.

5 10' 39" = 591° Old fence 100' off short of dist in deed

2792 Offset 1' E.

line hub # 2.

" " # 3. on hill

" " # 4 offset 2' E.

" " # 5 large Oak

513.  
 611.5  
 1240.8  
 1465.5

6.

15685 line #6

1838 " "7

19994 " "8

2277 Set point on line. W of 1/4 Cor.

2380. Bruce Cor.

From 2277 on previous line

East.

591. look for corner. find trees

corresponding chop out blazes

and find remains of scribe mks

on 6" tree. Evidence shows scribe

mks had been chopped off

inter sect. 36 S of Cor.

- 1946. - 9182

Sunday April 16

Go to NW Cor of 43 and continue

search for Cor. find 36" B Oak with

old blazes. chop out and find scribe

mks. find rock put more stones

around corner and mkk An Oak

18" in dia 543°E 43.5 f.

Original tree 517°W 9 f.

Stump of same Oak 17 South

Cor. 32 f W of ~~2nd~~ Random line

from South

Original.

Original notes call for

B Oak 8" S40°E 44.1ks.

" " 6 S25°W 35"

→ mkk. 30" Oak N30°W 12"

{ 2676 } 51000 L19  
= 12m 1005

and Wagon hub.

Set Stake for S.E. Cor Lot 11

from which B.O. 20" N16°W 35k f.

20.07 E of Cor. Sec. 19-30-24-25

Description for Deed.  
Bruce to Schoeman  
Beginning at st point on Sbdry  
of E Wimberly C1 446 - 700 Ch.  
East of NW Cor. Noland C1 43.  
Running thence N  $61^{\circ}30'E$ . 646.9 ft.  
to the W line of County Road.  
Thence along County Road S  $32^{\circ}E$  370.4 ft.  
to the Sbdry of C1 46. Thence  
N  $89^{\circ}37'W$  732.6 ft. to place  
of Bsq. Cont. 3.12 A.

Survey for J. K. Falbe

Begin at Cor. 4-5-8-9 T. 29 S. R. 7 W.

From stump of Oak designated as remains of B.T., by Fred Byron

run. S 4° W 600 kts. set Stake and steel rifle barrel. From which

Red fir 14" dia brs N 10° E 2.97 ch

B. Oak 24" " " N 20 1/4° W 6.50 "

Set over peg sight East and pick line tree on ridge Go. 1 mile (approx)

and Search for Cor to Secs. 3-4-9-10

Find Original trees to wit

A. B. Oak 10" in dia S 52° E 55 kts.

Laurel 16" " " N 65° E 38 "

Red fir 30" " " N 53° W 24 kts.

" " 24 " " S 26° W 18 "

Mark new tree. A fir 12" S 55° W 44 kts.

A " 5" S 43° E 157.

Remark Old trees

Thence S 0° 06' W by Solar

chs.

30.00 Set temp 1/16 Cor

40.00 " " 1/4 " no evidence of Orig.

Thence East.

40.00

Thence North.

20.00

June 14, 1916

0.8

Var. 21° 15' 30 22.5' E.

J. W. Cole

J. Bailey

J. Falbe.

- Lat 43° 05'

Suns dec. June 14 1916.

23° 16' 10.5"

l' 14.5"

hrly diff 7.49

60 | 374.5

9 AM 23° 22' 2.50 + 38" = 23° 23' 03" 6' 14.5"

10 AM. 7 49

23° 30' 14"

23° 16' 10.5"

23° 17' 37" + 38" 23° 18' 12"

749

711

747

8259

726

Oak dead marks visible

Laurel standing marks not visible

30" Fir standing no marks visible

24 " down decayed

distances measured on slope

and check approximately

Directions check closely.

Survey for Fred Byron.

Begin at S.E. Cor. of C140.

established cor. by setting

oak post from which the orig.

BT bears N 50° W 40 1/2 S. 110

New Tree.

Thence West along C140

to approximate S.W. Cor.

J. W. Colvig  
F. Byron  
J. Ware

T. 29. S. R. 7 W.

Var 21° 25' E.

Lat 43° 05'

Suns Dec. June 15 1916

23° 18' 58.1

259

8:00 - 23° 19' 24.0"

25

9:00 - 23° 19' 30.5"

25

+ 53" = 23° 20' 17"

+ 38" = 23° 20' 08"

6.47  
2588

hrly diff

June 16 1916

Suns. opp. Dec.

23° 21' 21"

27

10:00 - 23° 21' 48"

5

11:00 - 23° 21' 53.4"

11

1 P.M. 23° 22' 04"

+ 28" = 23° 22' 32"

5.44  
27.20  
5.44  
10.88

**Field Book No. 41**

**Pages 10 - 78 Blank**

2795 27,000 197  
25,155  
18450  
16865

160  
48  
112

1.22  
1.12  
1.10

6.217

5.217  
29  
46953  
10434  
151293

60 15129  
2

43° 13

45 31  
2 31  
43 00

43° 13  
8  
43° 05

52  
1.5  
260  
32  
780

45° 31  
2 25  
43 06

517  
28  
4136  
1034  
6 14476  
20 25

1188  
1097  
8316  
10692  
115236

312

1065  
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9585  
97980

43560 271355 624  
26136  
9995

11041  
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66221  
66221  
728611 66 1006

7286

7326 10  
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