

Accepted May 31 - 1912

FIELD NOTES

OF THE SURVEY OF THE

BOOK 2269

Third Guide Meridian West

through
Sps 13, 14, 15, 16 and 16 1/2 North

2269

2269

Of the *Guide Meridian* Meridian,

In the ^{Terr.} State of *Arizona*

EXECUTED BY

Alfred A. Oliver

In the capacity of U. S. ^{Assistant} Surveyor, under instructions dated *August 25*, 1910, issued by the United States Surveyor General to govern surveys included in Group No. *4*, which were approved by the Commissioner of the General Land Office, *September 9*, 1910, pursuant to authority contained in the Act of Congress dated *June 15*, 1910. *and March 4 1911*

Survey commenced *April 13*, 1911

Survey completed *May 3*, 1911

INDEX DIAGRAM.

Township , *Range*

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

INDEX DIAGRAM.

Township _____, Range _____

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

1A 170

PRELIMINARY OATHS OF ASSISTANTS.

WE, R. A. Combs, W. D. Tanner and Clay Dodson and C. S. Crowen do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the Third Guide Meridian West through Tps. 13, 14, 15, 16 and 16 1/2 N.

R. A. Combs, Chainman.
W. D. Tanner, Chainman.
Clay Dodson
C. S. Crowen
Alfred N. Bliss
U. S. Transitman

Subscribed and sworn to before me this 23rd day of April, 1911



WE, R. L. Bates and do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the Third Guide Meridian West through Tps. 13, 14, 15, 16 and 16 1/2 N.

R. L. Bates, Moundman.
Moundman.

Subscribed and sworn to before me this 23rd day of April, 1911



Alfred N. Bliss
U. S. Transitman

WE, Ed. Brockway and J. P. Ellis do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the Third Guide Meridian West through Tps. 13, 14, 15, 16 and 16 1/2 N.

Ed. Brockway, Axman.
J. P. Ellis, Axman.

Subscribed and sworn to before me this 23rd day of April, 1911



Alfred N. Bliss
U. S. Transitman

I, P. Shimpfessel, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the Third Guide Meridian West through Tps. 13, 14, 15, 16 and 16 1/2 N.

P. Shimpfessel, Flagman.

Subscribed and sworn to before me this 23rd day of April, 1911



Alfred N. Bliss
U. S. Transitman

Index

T17 N. R. 13W.

24 19 19

T16 1/2 R. 13W.

28 18 30

T16 1/2 N. R. 12W.

30 18 31

1 16 6

12 16 7

T16 N. R. 13W.

13 15 18

T16 N. R. 12W.

24 15 19

25 14 30

30 14 31

1 13 6

12 12 7

T15 N. R. 13W.

13 11 18

T15 N. R. 12W.

24 11 19

25 10 30

30 10 31

1 9 6

12 8 7

T14 N. R. 13W.

13 7 18

T14 N. R. 12W.

24 7 19

25 6 30

30 6 31

1 4 6

12 3 7

T13 N. R. 13W.

13 3 18

T13 N. R. 12W.

24 2 19

25 2 30

30 1 31

Third Standard Plat. N.

Third Guide Meridian West through Tps. 13 N.

Chains.

Survey commenced April 23, 1911, and executed with a W. and L. E. Gurley solar compass, not numbered. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined and approved by the supervising surveyor for Arizona

I examine the adjustments of the compass and find them correct; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m., and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows: described in book M

At the Standard cor. of Tps. 13 N. Rgs. 12 and 13 W. \wedge latitude $34^{\circ} 25' 09''$ N.; longitude $113^{\circ} 33' 24''$ W.; I set off $34^{\circ} 25'$ N. on the lat. arc: $12^{\circ} 26\frac{1}{2}'$ N. on the decl. arc; and, at 5h. 00m. p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of my station.

April 23, 1911

April 24: At 5h. 25m. a.m., by my watch which has correct l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of instructions, and mark a point in the line thus determined, on a peg driven in the ground 5 chs. N. of my station.

At 6h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 25'$ to the west, and mark the meridian thus determined by cutting a small groove in the stone set April 23, on which the meridian coincides with the mark determined by the solar.

At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 25'$ N. on the lat. arc; $12^{\circ} 38\frac{1}{2}'$ N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark coincides with the meridian determined by the Polaris observation.

The solar apparatus, by p.m., and a.m., observations defines positions for meridians, which coincide with the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h. 15m. a.m. is N. $14^{\circ} 30'$ W.; the angle thus determined gives the mag. decl. $14^{\circ} 30'$ E.

From the standard cor. of Tps. 13 N. Rgs. 12 and 13 W. I now run

North bet. secs. 31 and 36

Ascending steep rocky ridge.

7.55 Cross drain 10 lks. wide course S. E.

30.00 Ridge bears N. W. and S. E. and along E. slope of mountains.

Difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks. position of middle point

By 1st. set 40.04 chs.

By 2nd. set 39.96 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S36 in W. and S31 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

43.50 Ridge bears E. and W. and along W. slope of ridge.

54.50 Drain 5 lks. wide course S. W.

59.00 Drain 5 lks. wide course S. W.

70.80 Ridge bears E. and W. Descend through granite boulders.

77.00 Cross wash 15 lks. wide course W. and ascend.

Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks.; position of middle point

Third Guide Meridian West, through Tp. 13 N.

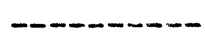
Chains	
80.00	<p>By 1st. set 80.06 chs. By 2nd. set 79.94 chs.; the mean of which is Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap T13N in N. half; S25 in N. W. S30 in N. E. S31 in S. E. and S36 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood, paloverde, mesquite and cactus.</p>
33.00	<p>North bet. secs. 25 and 30 Ascend steep rocky S. W. slope of mountain. Top mountain and descend. Difference between measurements of 40.00 chs. by two sets of chainmen is 10 lks. position of middle point By 1st. set 40.05 chs. By 2nd. set 39.95 chs.; the mean of which is</p>
40.00	<p>Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S25 in W. and S30 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p>
55.60	<p>Wash 30 lks. wide course N. W.</p>
68.70	<p>Cross wash 25 lks. wide course W. and ascend. Difference between measurements of 80.00 chs. by two sets of chainmen is 14 lks. position of middle point By 1st. set 80.07 chs. By 2nd. set 79.93 chs.; the mean of which is</p>
80.00	<p>Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap T13N in N. half; R13WS24 in N. W. R12WS19 in N. E. S30 in S. E. and S25 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, Mountainous. Soil, rocks; 4th. rate. No timber. Undergrowth, greasewood, paloverde and cactus. April 24: At this cor. I set off $12^{\circ} 41\frac{1}{2}'$ N. on the decl arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 27'$ N.</p>
40.00	<p>North bet. secs. 19 and 24 Ascending steep S. E. slope of mountain through dense brush. Difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks. position of middle point By 1st. set 40.04 chs. By 2nd. set 39.96 chs.; the mean of which is Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S24 in W. and S19 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p>
48.70	<p>Ridge bears E. and W. descend.</p>
65.50	<p>Cross wash 25 lks. wide course W. ascend.</p>
75.85	<p>Cross wash 25 lks. wide course S.W. Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks. position of middle point By 1st. set 80.06 chs.</p>

Third Guide Meridian West, through Tp. 13 N.

Chains.	
80.00	<p>By 2nd. set 79.94 chs.; the mean of which is Set an iron post 3 ft. long, 3 ins. diam. 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap T13N in N. half; R13WS13 in N. W. R12WS18 in N. E. S19 in S. E. and S24 in S. W. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, decomposed granite and rocks; 4th. rate. No timber. Undergrowth, greasewood, paloverde and mesquite.</p> <p style="text-align: center;">-----</p>
5.00	North bet. secs. 13 and 18
38.00	Ascending steep rocky S. slope through dense brush. Ridge bears E. and W. descend.
34.50	Cross wash 25 lks. wide course N. W. ascend. Ridge bears E. and W. descend. Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point By 1st. set 40.02 chs. By 2nd. set 39.98 chs.; the mean of which is
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S13 in W. and S18 in E. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
41.00	Cross wash 100 lks. wide course W. ascend.
47.00	Cross drain 7 lks. wide course S. W.
52.00	Ridge bears E. and W. descend along N. W. slope.
56.50	Cross drain 6 lks. wide course N. W.
69.00	Cross wash 50 lks. wide course W. and ascend along S. W. slope Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks. position of middle point By 1st. set 80.03 chs. By 2nd. set 79.97 chs.; the mean of which is
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap T13N in N. half; R13WS12 in N. W. R12WS7 in N. E. S. 18 in S. E. and S13 in S. W. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, decomposed granite and boulders; 4th. rate. No timber. Undergrowth, greasewood, paloverde, mesquite and cactus. <p style="text-align: right;">April 24, 1911.</p> <p style="text-align: center;">-----</p>
	<p>April 25: At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 28\frac{1}{2}'$ N. on the lat. arc; $12^{\circ} 52'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18 Thence I run</p>
6.00	North bet. secs. 7 and 12
21.00	Ascending along S. W. slope
23.50	Ridge bears E. and W. descend along N. W. slope.
26.00	Cross wash 30 lks. wide course W.
35.50	Ridge bears E. and W. Cross wash 60 lks. wide course W. Ridge bears E. and W.

Third Guide Meridian West, through Tp. 13 N.

Chains.
38.00 Cross wash 30 lks. wide course S. W.
Difference between measurements of 40.00 chs. by two sets
of chainmen is 8 lks. position of middle point
By 1st. set 40.04 chs.
By 2nd. set 39.96 chs.; the mean of which is
40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S12 in
W. and S7 in E. half; and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
43.85 Cross wash 30 lks. wide course S. W.
48.00 Ridge bears E. and W.
50.00 Cross wash course S. W.
55.00 Ridge bears E. and W.
57.00 Cross wash 15 lks. wide course S. W.
66.50 Ridge bears E. and W.
73.15 Cross road bears E. and W. from Hillside to Signal.
Difference between measurements of 80.00 chs. by two
sets of chainmen is 10 lks. position of middle point
By 1st. set 80.05 chs.
By 2nd. set 79.95 chs.; the mean of which is
80.00 Point for cor. of secs. 1, 6, 7 and 12 falls in wash 75
lks. wide course S. W. I chain S. 50 lks. and at
79.50 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in
the ground for witness cor. to cor. of secs. 1, 6, 7
and 12 marked on brass cap
WC S. of center;
T13N in N. half;
R13WS1 in N. W.
R12WS6 in N. E.
S7 in S. E. and
S13 in S. W. quadrant; and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, decomposed granite and rocks; 4th. rate.
No timber.
Undergrowth, greasewood, paloverde, mesquite and cactus.



North bet. secs. 1 and 6
Ascending through dense brush.
4.30 Ridge bears E. and W.
11.50 Cross wash 30 lks. wide course W.
18.00 Ridge bears E. and W. descend.
28.00 Cross drain 5 lks. wide course N. W.
35.15 Cross wash 25 lks. wide course S. W. ascend.
Difference between measurements of 40.00 chs. by two
sets of chainmen is 4 lks. position of middle point
By 1st. set 40.02 chs.
By 2nd. set 39.98 chs.; the mean of which is
40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S1 in W.
and S6 in E. half; and raise a mound of stone 2 ft. base
 $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
43.25 Ridge bears E. and W.
50.00 Cross wash 30 lks. wide course W. and ascend steep rocky
hill.
63.00 Top of hill. Descend.
73.00 Cross wash 15 lks. wide course W.
79.00 Ridge bears E. and W.
Difference between measurements of 80.00 chs. by two
sets of chainmen is 12 lks. position of middle point
By 1st. set 80.06 chs
By 2nd. set 79.94 chs.; the mean of which is
80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in
the ground for cor. of Tps. 13 and 14 N. Rgs. 12 and 13
W. marked on brass cap
T14N in N.
R12W in E.
T13N in S. and

Third Guide Meridian West, through Tp. 13 N.

Chains.

R13W in W. half;

S36 in N. W.

S31 in N. E.

S6 in S. E. and

S1 in S. W. quadrant; and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.

Land, mountainous

Soil, rocks and decomposed gravel; 4th. rate.

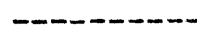
No timber.

Undergrowth, greasewood, paloverde, mesquite and cactus.

April 25: At this cor. I set off $13^{\circ} 01'$ N. on the decl.
arc; and observe the sun on the meridian at noon; the
resulting lat. is $34^{\circ} 30\frac{1}{2}'$ N.

Third Guide Meridian West, through Tp. 14 N.

Chains, North bet. secs. 31 and 36
 Over rough broken land, through dense brush
 1.75 Cross drain 6 lks. wide course W.
 10.50 Ridge bears E. and W.
 13.00 Wash 70 lks. wide course W.
 17.50 Cross wash 40 lks. wide course N. W.
 28.00 Ridge bears E. and W.
 34.00 Cross wash 30 lks. wide course W.
 39.40 Cross drain 5 lks. wide course N. E.
 Difference between measurements of 40.00 chs. by two
 sets of chainmen is 8 lks. position of middle point
 By 1st. set 40.04 chs.
 By 2nd. set 39.96 chs.; the mean of which is
 40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S36
 in W. and S31 in E. half; and raise a mound of stone 2
 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 45.75 Cross old road bears N. E. and S. W.
 48.00 Cross wash 10 lks. wide course W.
 56.00 Ridge bears E. and W.
 57.00 Cross wash 15 lks. wide course W.
 67.00 Ridge bears E. and W.
 73.00 Cross wash 50 lks. wide course W.
 78.50 Ridge bears E. and W.
 Difference between measurements of 80.00 chs. by two
 sets of chainmen is 14 lks. position of middle point
 By 1st. set 80.07 chs.
 By 2nd. set 79.93 chs.; the mean of which is
 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in
 the ground for cor. of secs. 25, 30, 31 and 36, marked
 on brass cap
 T14N in N. half;
 S25 in N. W.
 S30 in N. E.
 S31 in S. E. and
 S36 in S. W. quadrant; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, rough and broken.
 Soil, rocks and decomposed granite, 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde, mesquite and cactus.



North bet. secs. 25 and 30
 Over rough broken land.
 1.90 Cross wash 15 lks. wide course W.
 6.40 Ridge bears E. and W.
 12.50 Cross wash 50 lks. wide course N. W.
 16.00 Ridge bears E. and W.
 18.40 Cross wash 15 lks. wide course W.
 22.50 Ridge bears E. and W.
 25.75 Cross wash 15 lks. wide course N. W.
 28.00 Ridge bears E. and W.
 33.00 Cross wash 50 lks. wide course N. W.
 Difference between measurements of 40.00 chs. by two
 sets of chainmen is 6 lks. position of middle point
 By 1st. set 40.03 chs.
 By 2nd. set 39.97 chs.; the mean of which is
 40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S25 in
 W. and S30 in E. half; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 42.20 Ridge bears N. W. and S. E.
 48.50 Cross wash 20 lks. wide course N. W.
 59.00 Ridge bears N. W. and S. E.
 72.00 Cross wash 15 lks. wide course N. W.
 75.00 Ridge bears S. E. and N. W.
 Difference between measurements of 80.00 chs. by two set
 sets of chainmen is 10 lks. position of middle point
 By 1st. set 80.05 chs.

Third Guide Meridian West, through Tr. 14 N.

Chains.	
80.00	<p>By 2nd. set 79.95 chs.; the mean of which is Point for cor. of secs. 19, 24, 25 and 30 falls in wash 20 lks. wide course N. W. Land, mountainous. Soil, decomposed granite and rocks; 4th. rate. No timber. Undergrowth, greasewood, paloverde, mesquite and cactus.</p>
	<p style="text-align: right;">April 25, 1911.</p>
	<p style="text-align: center;">-----</p>
	<p>April 26: At 7h. 00m., a.m., l.m.t., I set off 34° 32' N. on the lat. arc; 13° 18' N. on the decl. arc; and determine a meridian with the solar at the true point for cor. of secs. 19, 24, 25 and 30</p>
	<p>Thence I run North bet. secs. 19 and 24. Descending along N. W. slope of ridge.</p>
1.50	<p>Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for witness cor. to cor. of secs. 19, 24, 25 and 30, marked on brass cap WC S. of center; T14N in N. half; R13WS24 in N. W. R12WS19 in N. E. S30 in S. E. and S25 in S. W. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.</p>
23.50	<p>Leave hills and over level land.</p>
38.50	<p>Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for witness ¼ sec. cor., marked on brass cap WC¼ in N. half; S19 in S. E. and S24 in S. W. quadrant; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high, W. of cor.</p>
39.00	<p>Left bank of Burro Creek course W. Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks. position of middle point By 1st. set 40.01 chs. By 2nd. set 39.99 chs.; the mean of which is</p>
40.00	<p>Point for ¼ sec. cor., falls in bed of Burro Creek.</p>
53.50	<p>Cross water in bed of creek, 30 lks. wide 2 ins. deep, course W.</p>
64.00	<p>Right bank of Burro Creek. Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks., position of middle point By 1st. set 80.01 chs. By 2nd. set 79.99 chs.; the mean of which is</p>
80.00	<p>Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap T14N in N. half; R13WS13 in N. W. R12WS18 in N. E. S19 in S. E. and S24 in S. W. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous and level. Soil, S. 23.50 chs. rocky; N. 56.50 chs. sand and gravel 4th. rate. NO timber. Undergrowth, greasewood, paloverde, mesquite and cactus.</p>
25.00	<p style="text-align: center;">-----</p> <p>North bet. secs. 13 and 18 Over level land through dense brush. Cross wash 30 lks. wide course SW. and over rolling land.</p>
32.00	<p>Ridge bears N. E. and S. W.</p>

Third Guide Meridian West, through Tr. 14 N.

Chains.

- Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks. position of middle point
 By 1st. set 40.03 chs.
 By 2nd. set 39.97 chs.; the mean of which is
- 40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S13 in W. and S18 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 67.85 Cross wash 20 lks. wide course S. W.
 73.00 Ridge bears N. E. and S. W.
 78.75 Cross wash 15 lks. wide course S. W.
- Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks. position of middle point
 By 1st. set 80.04 chs.
 By 2nd. set 79.96 chs.; the mean of which is
- 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap
 T14N in N. half;
 R13WS12 in N. W.
 R12WS7 in N. E.
 S18 in S. E. and
 S13 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, level and rolling.
 Soil, Sandy and rocky; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde, mesquite and cactus.
 April 26: At this cor. I set off $13^{\circ} 21'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 34'$ N.

North bet. secs. 7 and 12

- Ascending through dense brush.
- 5.75 Cross drain 5 lks. wide course S. W.
 17.20 Ridge bears N. E. and S. W. descend.
 19.15 Cross wash 30 lks. wide course S. W. ascend steeply.
 39.00 Cross drain 5 lks. wide course S. W.
- Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks. position of middle point.
 By 1st. set 40.03 chs.
 By 2nd. set 39.97 chs.; the mean of which is
- 40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S12 in W. and S7 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 46.00 Ridge bears N. E. and S. W. Descend steeply.
 49.25 Cross wash 30 lks. wide course N. W.
 63.50 Cross drain 5 lks. wide course N. W.
 67.75 Ridge bears N. W. and S. E.
 73.85 Cross drain 5 lks. wide course S. W.
- Difference between measurements of 80.00 chs. by two sets of chainmen is 14 lks. position of middle point
 By 1st. set 80.07 chs.
 By 2nd. set 79.93 chs.; the mean of which is
- 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap
 T14N in N. half;
 R13WS1 in N. W.
 R12WS6 in N. E.
 S7 in S. E. and
 S12 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, decomposed granite and rocks; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.

Third Guide Meridian West, through Tp. 14 N.

Chains.	North bet. secs. 1 and 6
	Descending through dense brush.
1.25	Cross wash 30 lks. wide course W. ascend.
17.30	Ridge bears E. and W. descend.
35.00	Cross wash 20 lks. wide course S. W. ascend.
	Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point
	By 1st. set 40.02 chs.
	By 2nd. set 39.98 chs.; the mean of which is
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S1 in W. and S6 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
48.30	Ridge bears N. E. and S. W.
51.00	Cross wash 25 lks. wide course S. W.
67.00	Ridge bears N. E. and S. W.
72.00	Cross wash 15 lks. wide course S. W.
	Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks., position of middle point
	By 1st. set 80.04 chs.
	By 2nd. set 79.96 chs.; the mean of which is
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 14 and 15 N. Rgs. 12 and 13 W. marked on brass cap
	T15N in N.
	R12W in E.
	T14N in S. and
	R13W in W. half;
	S36 in N. W.
	S31 in N. E.
	S6 in S. E. and
	S1 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.
	Land, mountainous.
	Soil, decomposed granite and rocks; 4th. rate.
	No timber.
	Undergrowth, greasewood, paloverde, mesquite and cactus.

April 26, 1911.

Third Guide Meridian West, through Tp. 15 N.

Chains

April 27: At 7h. 00m., a.m., l.m.t., I set off 34° 35½' N. on the lat. arc; 13° 37½' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 14 and 15 N. Rgs. 12 and 13 W.

Thence I run

North bet. secs. 31 and 36

Descending through dense brush.

2.20 Cross drain 5 lks. wide course S. W.

18.00 Ridge bears E. and W.

31.00 Cross wash 15 lks. wide course S. E.

Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks. position of middle point

By 1st. set 39.99 chs.

By 2nd. set 40.01 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S36 in W. and S31 in E. half; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.

41.00 Ridge bears E. and W.

53.00 Cross wash 20 lks. wide course E.

65.00 Ridge bears E. and W.

Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks. position of middle point

By 1st. set 79.97 chs.

By 2nd. set 80.03 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap

T15N in N. half;

S25 in N. W.

S30 in N. E.

S31 in S. E. and

S36 in S. W. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, decomposed granite and rocks; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde, mesquite and cactus.

North bet. secs. 25 and 30.

Descending through dense brush.

1.75 Cross drain 5 lks. wide course N. E.

19.00 Cross wash 20 lks. wide course W.

35.00 Ridge bears N. E. and S. W.

Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point

By 1st. set 39.98 chs.

By 2nd. set 40.02 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S25 in W. and S30 in E. half; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.

41.00 Cross drain 5 lks. wide course N. W.

62.00 Cross wash 100 lks. wide course W.

67.54 Cross old road bears E. and W.

71.20 Ridge bears E. and W.

79.00 Cross wash 15 lks. wide course S. W.

Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks. position of middle point

By 1st. set 80.01 chs.

By 2nd. set 79.99 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap

T15N in N. half;

R13WS24 in N. W.

R12WS19 in N. E.

S30 in S. E. and

S25 in S. W. quadrant; and raise a mound of stone 2 ft.

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Chains.

base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, decomposed granite and rocks; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde, mesquite and cactus.
 April 27: At this cor. I set off $13^{\circ} 40'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 37\frac{1}{2}'$ N.

North bet. secs. 19 and 24
 Over rolling land through dense brush.

6.00 Ridge bears N. E. and S. W.
 8.90 Cross wash 10 lks. wide course S. W.
 18.15 Cross wash 20 lks. wide course S. W.
 29.70 House bears N. $33^{\circ} 30'$ W.
 31.25 Cross wash 10 lks. wide course S. W.
 Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks. position of middle point
 By 1st. set 40.01 chs.
 By 2nd. set 39.99 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S24 in W. and S19 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft base $1\frac{1}{2}$ ft. high, W. of cor.

41.00 Cross wash 15 lks. wide course S. W.
 58.85 Cross wash 20 lks. wide course S. W.
 62.50 Cross wash 10 lks. wide course S. W.
 76.82 Left bank of Big Sandy River and over dry bed of river.
 Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks. position of middle point
 By 1st. set 80.03 chs.
 By 2nd. set 79.97 chs.; the mean of which is

80.00 Point for cor. of secs. 13, 18, 19 and 24 falls in bed of river. Iron S. 4.00 chs. and at

76.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for witness cor. to cor of secs. 13, 18, 19 and 24, marked on brass cap
 WC S. of center;
 T15N in N. half;
 R13WS13 in N. W.
 R12WS18 in N. E.
 S19 in S. E. and
 S24 in S. W. quadrant; from which
 A mesquite 6 ins. diam., bears S. $71\frac{3}{4}^{\circ}$ W. 124 lks. dist., marked WCT15NR13WS24BT.
 No other trees available. Dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.
 From this cor., house noted above bears N. $77^{\circ} 15'$ W.
 Land, rolling.
 Soil, sandy and gravelly; 3rd. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.

North bet. secs. 13 and 18
 From true point for cor.
 Over dry bed of river.

39.33 Left bank of Big Sandy River course S. E. and over cultivated land.
 Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks. position of middle point
 By 1st. set 39.99 chs.
 By 2nd. set 40.01 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S13 in

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W. and S18 in E. half; from which
 A cottonwood 24 ins. diam., bears N $16\frac{1}{2}^{\circ}$ W. 553
 lks. dist., marked $\frac{1}{4}$ S13BT.
 No other trees available. Dig pits 18 x 18 x 12 ins.
 N. and S. of post 3 ft. dist., and raise a mound of
 earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
 From this cor. Telly Bland house bears N. 11° W.
 47.19 Cross fence bears N. W. and S. E. and ascend.
 54.85 Ridge bears E. and W.
 57.25 Cross wash 10 lks. wide course W.
 59.00 Ridge bears E. and W.
 68.50 Cross wash 25 lks. wide course S. W.
 Difference between measurements of 80.00 chs. by two
 sets of chainmen is 6 lks. Position of middle point
 By 1st. set 80.03 chs.
 By 2nd. set 79.97 chs.; the mean of which is
 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in
 the ground for cor. of secs. 7, 12, 13 and 18, marked
 on brass cap
 T15N in N. half;
 R13WS12 in N. W.
 R12WS7 in N. E.
 S18 in S. E. and
 S13 in S. W. quadrant; from which
 A paloverde 4 ins. diam., bears S. 49° E. 65
 lks. dist., marked T15NR12WS18BT.
 A paloverde 4 ins. diam., bears S. $24\frac{1}{2}^{\circ}$ W. 134
 lks. dist., marked T15NR13WS13BT.
 No other trees available. Raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, level and rolling.
 Soil, S. 39.33 chs. loose sand, worthless; middle 7.86
 chs. rich sandy loam, dry, fine texture, 1st. rate;
 N. 32.81 chs. rocks and gravel; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and mesquite.

April 27, 1911.

April 28: At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 39'$
 N. on the lat. arc; $13^{\circ} 56\frac{1}{2}'$ N. on the decl. arc; and
 determine a meridian with the solar at the cor. of secs.
 7, 12, 13 and 18,

Thence I run
 North bet. secs. 7 and 12
 Over rolling land through dense brush.
 11.00 Cross wash 125 lks. wide course W.
 35.00 Cross wash 35 lks. wide course W.
 Difference between measurements of 40.00 chs. by two
 sets of chainmen is 4 lks. position of middle point
 By 1st. set 40.03 chs.
 By 2nd. set 39.98 chs.; the mean of which is
 40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S12 in
 W. and S7 in E. half; and raise a mound of stone 3 ft.
 base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 56.00 Cross wash 40 lks. wide course S. W.
 68.50 Cross wash 12 lks. wide course S. W.
 Difference between measurements of 80.00 chs. by two
 sets of chainmen is 8 lks. position of middle point
 By 1st. set 80.04 chs.
 By 2nd. set 79.96 chs.; the mean of which is
 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in
 the ground for cor. of secs. 1, 6, 7 and 12, marked
 on brass cap
 T15N in N. half;
 R13WS1 in N. W.
 R12WS6 in N. E.
 S7 in S. E. and

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Chains.

S12 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, rolling.
 Soil, decomposed granite and loose rock; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.

North bet. secs. 1 and 6
 Over rolling land through dense brush.

28.60 Cross wash 70 lks. wide course S. W.
 Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks. position of middle point
 By 1st. set 39.97 chs.
 By 2nd. set 40.03 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap S1 in W. and S6 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

56.45 Cross wash 15 lks. wide course S. W.
 67.00 Cross wash 10 lks. wide course S. W.
 77.00 Cross wash 30 lks. wide course S. W.
 Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks. position of middle point b
 By 1st. set 79.96 chs.
 By 2nd. set 80.04 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 15 and 16 N. Rgs. 12 and 13 W. marked on brass cap
 T16N in N.
 R12W in E.
 T15N in S. and
 R13W in W. half;
 S36 in N. W.
 S31 in N. E.
 S6 in S. E. and
 S1 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.
 Land, rolling
 Soil, gravel and loose rock; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.
 April 28: At this cor. I set off $15^{\circ} 59\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 41'$ N.

At this cor. I set off $15^{\circ} 59\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 41'$ N.

Third Guide Meridian West, through Tp. 16 N.

Chains.

April 29: At 7h. oom. a.m., l.m.t., I set off 34° 41' N. on the lat. arc; 14° 15' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 15 and 16 N. Rgs. 12 and 13 W.

Thence I run

North bet. secs. 31 and 36.
Over rough broken land through dense brush.

9.50
19.00
25.00
37.00

Cross wash 20 lks. wide course S. W.
Ridge bears N. E. and S. W.
Cross wash 25 lks. wide course S. W.
Ridge bears N. E. and S. W.

Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks. position of middle point

By 1st. set 40.03 chs.

By 2nd. set 39.97 chs.; the mean of which is

40.00

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S36 in W. and S31 in E. half; and raise a mound of stone 2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable.

56.60
61.00
65.00

Cross wash 250 lks. wide course W.
Ridge bears N. E. and S. W.
Cross wash 40 lks. wide course S. W.

Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks. position of middle point

By 1st. set 80.06 chs.

By 2nd. set 79.94 chs.; the mean of which is

80.00

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap

T16N in N. half;

R13WS25 in N. W.

R12WS30 in N. E.

S31 in S. E. and

S36 in S. W. quadrant; and raise a mound of stone 2 ft base 1 1/2 ft. high W. of cor. Pits impracticable.

Land, rough and broken.

Soil, gravel and loose rock; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde, mesquite and cactus.

North bet. secs. 25. and 30
Over rolling land through dense brush

10.00
26.85

Ridge bears N. E. and S. W.
Cross road bears N. E. and S. W.

Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point

By 1st. set 39.98 chs.

By 2nd. set 40.02 chs.; the mean of which is

40.00

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S25 in W. and S30 in E. half; from which

A mesquite 6 ins. diam., bears N. 67 1/2° W. 137 lks. dist., marked 1/4 S25BT

A mesquite 5 ins. diam., bears N. 80 1/2° E. 124 lks. dist., marked 1/4 S30BT.

44.80
60.00

Cross wash 700 lks. wide course S. W.
Ridge bears E. and W.

Difference between measurements of of 80.00 chs. by two sets of chainmen is 10 lks. position of middle point

By 1st. set 79.95 chs.

By 2nd. set 80.05 chs.; the mean of which is

80.00

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap

T16N in N. half;

R13WS24 in N. W.

R12WS19 in N. E.

S30 in S. E. and

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Chains.

S25 in S. W. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, rolling.

Soil, gravel and rocks; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde and mesquite.

April, 29: At this cor. I set off $14^{\circ} 18'$ N. on the decl arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 42\frac{1}{2}'$ N.

North bet. secs. 19 and 24.

Over rolling hilly land through dense brush

Difference between measurements of 40.00 chs. by two sets of chainmen is 3 lks. position of middle point

By 1st. set 40.01 chs.

By 2nd. set 39.99 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S24 in W. and S19 in E. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

60.00 Cross wash 12 lks. wide course N. W.

62.00 Ridge bears N. E. and S. W.

68.75 Cross wash 65 lks. wide course S. W.

Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks. position of middle point

By 1st. set 80.03 chs.

By 2nd. set 79.97 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap

T16N in N. half;

R13WS13 in N. W.

R12WS18 in N. E.

S19 in S. E. and

S24 in S. W. quadrant; and raise a mound of stone 3 ft base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, hilly;

Soil, rocks and gravel; 4th. rate.

No timber.

Undergrowth, mesquite, paloverde, greasewood and cactus.

North bet. secs. 13 and 18

Ascending S. E. slope of ridge.

Difference between measurements of 40.00 chs. by two sets of chainmen is 3 lks. position of middle point

By 1st. set 40.04 chs.

By 2nd. set 39.96 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S13 in W. and S18 in E. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

52.00 Ridge bears N. E. and S. W. descend.

76.20 Cross wash 15 lks. wide course S. W.

Difference between measurements of 80.00 chs. by two sets of chainmen is 10 lks. position of middle point

By 1st. set 80.05 chs.

By 2nd. set 79.95 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap

T16N in N. half;

R13WS12 in N. W.

R12WS7 in N. E.

S18 in S. E. and

S13 in S. W. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

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Chains.

Land, mountainous.
Soil, gravel and loose rocks; 4th. rate.
No timber.
Undergrowth, greasewood, paloverde, mesquite and cactus.

April 29, 1911.

May 1: At 7h. 00m. a.m., l.m.t., I set off 34° 44' N. on the lat. arc; 14° 52½' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18

Thence I run

North bet. secs. 7 and 12.

Over high nearly level land sloping S. W. through dense brush.

13.00 Cross wash 10 lks. wide course S. W.

35.25 Cross wash 10 lks. wide course S. W.

Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks. position of middle point

By 1st. set 40.01 chs.

By 2nd. set 39.99 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ½S12 in W. and S7 in E. half; and raise a mound of stone 3 ft. base 1½ ft. high, W. of cor. Pits impracticable.

52.00 Over rolling land.

56.20 Cross wash 175 lks. wide course W.

62.00 Ridge bears N. E. and S. W.

72.00 Cross wash 50 lks. wide course S. W.

Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks. position of middle point

By 1st. set 79.96 chs.

By 2nd. set 80.04 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap

T16N in N. half;

R13WS1 in N. W.

R12WS6 in N. E.

S7 in S. E. and

S12 in S. W. quadrant; and raise a mound of stone 3 ft. base 1½ ft. high, W. of cor. Pits impracticable.

Land, level and rolling.

Soil, loose rock and gravel; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde, mesquite and cactus.

May 1: At this cor. I set off 14° 55½' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 45' N.

North bet. secs. 1 and 6

Over rolling land through dense brush.

2.00 Ridge bears N. E. and S. W.

5.45 Cross wash 8 lks. wide course W.

9.00 Ridge bears N. E. and S. W.

20.00 Cross wash 400 lks. wide course S. W.

30.00 Ridge bears N. E. and S. W.

Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks. position of middle point

By 1st. set 40.03 chs.

By 2nd. set 39.97 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ½S1 in W. and S6 in E. half; and raise a mound of stone 3 ft. base 1½ ft. high, W. of cor. Pits impracticable.

43.00 Cross wash 15 lks. wide course S. W.

Third Guide Meridian West, through Tp. 16 N.

Chains.	
52.00	Ridge bears N. E. and S. W.
57.15	Cross wash 10 lks. wide course S. W.
68.00	Ridge bears N. E. and S. W.
72.30	Cross wash 25 lks. wide course S. W.
	Difference between measurements of 80.00 chs. by two sets of chainmen is 10 lks. position of middle point
	By 1st. set 80.05 chs.
	By 2nd. set 79.95 chs.; the mean of which is
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 16 and 16 $\frac{1}{2}$ N. Rgs. 12 and 13 W. marked on brass cap
	T16 $\frac{1}{2}$ N in N.
	R12W in E.
	T16N in S.
	R13W in W. half;
	S36 in N. W.
	S31 in N. E.
	S6 in S. E. and
	S1 in S. W. quadrant; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.
	Land, rolling.
	Soil, loose rocks and gravel; 4th. rate.
	No timber.
	Undergrowth, greasewood, paloverde, mesquite, and cactus.

May 1, 1911

Third Guide Meridian West, through Tp. 16 N.

Chains

May 3: At 7h. 00m., a.m., 1.m.t., I set off 34° 46' N. on the lat. arc; 15° 28½' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 16 and 16½ N. Rgs. 13 and 13 W.

Thence I run

North bet. secs. 31 and 36
Over rolling land, through dense brush.

5.00 Ridge bears N. E. and S. W.
25.70 Cross wash 40 lks. wide course S. W.
Difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks. position of middle point
By 1st. set 40.04 chs.
By 2nd. set 39.96 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S36 in W. and S31 in E. half; and raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable.

41.50 Ridge bears N. E. and S. W.
52.50 Cross wash 25 lks. wide course S. W.
69.80 Ridge bears N. E. and S. W.
75.50 Cross wash 18 lks. wide course S. W.
79.85 Ridge bears N. E. and S. W.
Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks. position of middle point
By 1st. set 80.06 chs.
By 2nd. set 79.94 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap
T16½N in N. half;
S25 in N. W.
S30 in N. E.
S31 in S. E. and
S36 in S. W. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.
Land, hilly.
Soil, gravel and loose rock; 4th. rate.
No timber.
Undergrowth, greasewood, paloverde and cactus.

North bet. secs. 25 and 30
Over rough hilly land through dense brush.

11.00 Cross wash 200 lks. wide course S. W.
19.00 Ridge bears N. E. and S. W.
23.00 Cross wash 35 lks. wide course S. W.
28.00 Ridge bears N. E. and S. W.
33.00 Cross wash 15 lks. wide course S. W.
36.00 Ridge bears N. E. and S. W.
Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point
By 1st. set 39.98 lks.
By 2nd. set 40.02 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S25 in W. and S30 in E. half; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.

41.00 Cross wash 70 lks. wide course S. W.
50.90 Ridge bears N. E. and S. W.
55.25 Cross wash 10 lks. wide course S. W.
58.00 Ridge bears N. E. and S. W.
59.80 Cross wash 12 lks. wide course S. W.
64.30 Ridge bears N. E. and S. W.
66.15 Cross wash 15 lks. wide course S. W.
69.75 Ridge bears N. E. and S. W.
Difference between measurements of 80.00 chs. by two sets of chainmen is 14 lks. position of middle point
By 1st. set 80.07 chs.
By 2nd. set 79.93 chs.; the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in

Third Guide Meridian West, through Tp. 16 $\frac{1}{2}$ N.

Chains.

the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap
 T16 $\frac{1}{2}$ N in N. half;
 R13WS24 in N. W.
 R12WS19 in N. E.
 S30 in S. E. and
 S25 in S. W. quadrant; from which

A cedar 6 ins. diam., bears S. 15° E. 76 lks. dist., marked T16 $\frac{1}{2}$ NR12WS30BT.

A cedar 4 ins. diam., bears S. 9 $\frac{1}{4}$ ° W. 80 lks. dist., marked T16 $\frac{1}{2}$ NR13WS25BT.

No other trees available. Raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, hilly.

Soil, rocks and gravel; 4th. rate.

Timber, a few scattering cedars.

Undergrowth, paloverde, mesquite and greasewood.

May 3; At this cor. I set off 15° 31 $\frac{1}{2}$ ' N. on the decl. a arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 48' N.

North bet. secs. 19 and 24

Over rough broken land through dense brush

6.50 Cross wash 100 lks. wide course N. W.

13.63 Ridge bears N. E. and S. W.

22.00 Cross wash 35 lks. wide course S. W.

28.50 Ridge bears N. E. and S. W.

Difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks. position of middle point

By 1st. set 40.04 chs.

By 2nd. set 39.96 chs.; the mean of which is

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S24 in W. and S19 in E. half; from which

A cedar 4 ins. diam., bears S. 24° W. 74 lks. dist., marked $\frac{1}{4}$ S24BT

A cedar 4 ins. diam., bears S. 6 $\frac{1}{4}$ ° E. 75 lks. dist., marked $\frac{1}{4}$ S19BT.

40.65 Cross wash 12 lks. wide course S. W.

50.00 Ridge bears N. E. and S. W.

56.40 Cross wash 10 lks. wide course W.

59.25 Ridge bears N. E. and S. W.

68.40 Cross wash 15 lks. wide course S. W.

Difference between measurements of 69.40 chs. by two sets of chainmen is 10 lks. position of middle point

By 1st. set 69.45 chs.

By 2nd. set 69.35 chs.; the mean of which is

69.40 Intersect 4th. Standard Parallel North 2 miles 00chs. 91 lks. E. of the cor. of Tps. 17 N. Rgs. 12 and 13 W. and set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for closing cor. of Tps. 16 $\frac{1}{2}$ N. Rgs. 12 and 13 W. marked on brass cap

CC S. of center;

T17 N R12 W S 32 S 33 in N. half;

T16 $\frac{1}{2}$ N in S. half;

S19R12W in S. E. and

S24R13W in S. W. quadrant; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.

Land, mountainous.

Soil, loose rocks and gravel; 4th. rate.

No timber.

Undegrowth, greasewood, paloverde, mesquite and cactus.

May 3, 1911.

GENERAL DESCRIPTION.

Third Guide Meridian West, through Tp. 16 $\frac{1}{2}$ N.

Chains.

Through Tps. 13 to 16 $\frac{1}{2}$ N. this line runs along the west slope of rough mountains. The land east of the line is rough and mountainous, while to the west is the valley of the Big Sandy River. There is no timber.

Alfred N. Bliss

U.S. Transitman.

LIST OF NAMES.

A list of the names of the individuals employed by Alfred N. Oliver
Transitman, United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of the Third
Guide Meridian West through Tps 13, 14, 15, 16 and 16 1/2 N.

showing the respective capacities in which they acted:

R. A. Coulter Clay Dodson, Chairman.

W. D. Panner, C. S. Crowen, Chairman.

R. L. Bates, Moundman.

Ed Brockway, Axman.

J. P. Ellis, Axman.

D. Shimpfessel, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfred N. Oliver
Transitman, United States Deputy Surveyor, in surveying all
those parts or portions of the Third Guide Meridian West through Tps.
13, 14, 15, 16 and 16 1/2 N.

of the Gila and
Salt River meridian, Territory of Arizona, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for Arizona

C. S. Crowen R. A. Coulter, Chairman.

Clay Dodson W. D. Panner, Chairman.

R. L. Bates, Moundman.

Ed Brockway, Moundman.

J. P. Ellis, Axman.

D. Shimpfessel, Axman.

D. Shimpfessel, Flagman.

Subscribed and sworn to before me this 3rd
day of May, 1911



Alfred N. Oliver
U.S. Transitman

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

BOOK 2269

I, Alfred N. Oliver, United States ^{Transitman} Deputy Surveyor, do solemnly swear that, in pursuance of ^{instructions} contract received from Frank D. Ingalls, United States Surveyor General for Arizona, bearing date of the 25th day of August, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Third Guide Meridian West through Tps. 13, 14, 15, 16 and 16 1/2 T10.

of the Gila and Salt River meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Alfred N. Oliver
United States Deputy Surveyor.
Transitman

Subscribed by said Alfred N. Oliver, and sworn to before me }
this 9th day of January, 1912 }



Frank D. Ingalls
U.S. Surveyor General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Thomas C. Ingalls, January 9th, 1912

The foregoing field notes of the survey of the Third Guide Meridian

West through Tps. 13, 14, 15, 16, 16 1/2 North, S. & S.R., Meridian, Arizona

executed by Alfred N. Oliver, U.S. Transitman under his contract No. 4, dated August 25, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.