

Accepted May 31, 1912

FIELD NOTES

BOOK 2268

OF THE SURVEY OF THE

Third Standard Parallel North through
Ranges 7, 8, 9, 10, 11, 12 ^{and from} 6 West

2268

2268

Of the G. & S. R. Meridian,

In the ^{Terr.} State of Arizona

EXECUTED BY

Alfred N. Oliver

In the capacity of U. S. ^{Transient} ~~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 25, 1910 ^{and March 4, 1911.}

Survey commenced April 3, 1911

Survey completed 12, 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

3rd Std. Parallel
I n d e x

31	32	33	34	35	36
3	2	2	1		

R6W

31	32	33	34	35	36
6	6	5	5	4	4

R7W

31	32	33	34	35	36
9	9	8	8	7	7

R8W

31	32	33	34	35	36
13	13	12	12	11	11

R9W

31	32	33	34	35	36
18	17	16	16	15	15

R10W

31	32	33	34	35	36
22	21	20	20	19	19

R11W

31	32	33	34	35	36
25	25	24	24	23	23

R12W

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

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PRELIMINARY OATHS OF ASSISTANTS.

BOOK 2268

WE, R. A. Coombs, A. E. Lyon, Tom. J. Himpfessel and C. J. 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 Standard Parallel North through Rgs 6, 7, 8, 9, 10, 11 and 12 W.

R. A. Coombs, Chainman.

A. E. Lyon, Chainman.

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

Tom. J. Himpfessel "
C. J. Crowen "
Alfred N. Bliss
U.S. Transitman



WE, J. Clay Rodson 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 Standard Parallel North through Rgs. 6, 7, 8, 9, 10, 11 and 12 W.

J. Clay Rodson, Moundman.

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

Alfred N. Bliss
U.S. Transitman



WE, J. J. P. Ellis and _____
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 Standard Parallel North through Rgs. 6, 7, 8, 9, 10, 11 and 12 W.

J. J. P. Ellis, Axman.

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

Alfred N. Bliss
U.S. Transitman



I, L. E. Flanagan, 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 Standard Parallel North through Rgs. 6, 7, 8, 9, 10, 11 and 12 W.

L. E. Flanagan, Flagman.

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

Alfred N. Bliss
U.S. Transitman



Third Standard Parallel North, through Rg. 6 W.

Chains.

Survey commenced April 3, 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 declinations 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:

At my camp which is near the standard cor. of secs. 34 and 35, Tp. 13 N. Rg. 6 W. and which is a stone marked and witnessed as described by the surveyor general, latitude $34^{\circ} 25' 09''$ N. longitude $112^{\circ} 52' 0''$ W.,; I set off $34^{\circ} 25'$ N. on the lat. arc; $5^{\circ} 13\frac{1}{2}'$ 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.

At 6h. 39m. p.m., by my watch which has correct l.m.t. I observe Polaris at western 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.

April 3, 1911.

April 4: At 6h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 25'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set April 3, 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; $5^{\circ} 26\frac{1}{2}'$ 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. 30m. 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 secs. 34 and 35 Tp. 13 N. Rg. 6 W. already described, I run

West on S. bdy. of sec. 34

Over rolling land, through dense brush.

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 Standard $\frac{1}{4}$ sec. cor., marked on brass cap 1934 in N. half; and raise a mound of stone 3 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

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 standard cor. of secs. 33 and 34, marked on brass cap T13NR6W in N. half;

2. Third Standard Parallel North, through Range 6 West.

Chains,

S 33 in NW., and S 34 in NE. quadrant; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of corner. Pits impracticable.

Land rolling.

Soil, adobe and loose malpais rock, 3rd rate.

No timber.

Undergrowth, chico and mesquite.

West on S. bdy. of sec. 33.

Over rolling land, through dense brush.

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 standard $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 33 in N. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of corner. Pits impracticable.

42.43

Cross S.F.P. & P.Ry. bears NE. and SW.

42.98

Cross under telegraph line.

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 standard cor. of secs. 32 and 33, marked on brass cap,

T 13 N R 6 W in N. half,

S 32 in NW, and

S 33 in NE quadrant; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, rolling.

Soil, adobe and loose rocks; 3rd rate.

No timber.

Undergrowth, catclaw and chico.

West on S. bdy. of sec. 32.

Over rolling land, through dense brush.

Difference bet. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 32 in N. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

44.81

Cross under telegraph line.

45.93

Cross S.F.P. & P.Ry. bears NW. and SE.

79.27

Cross S.F.P. & P.Ry., bears NE. and SW.

79.98

Cross under telegraph line, bears NE. and SW.

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 standard cor. of secs. 31 and 32, marked on brass cap,

T 13 N R 6 W in N. half;

S 31 in NW., and

S 32 in NE. quadrant; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, rolling.

Soil, adobe and rocks; 3rd rate.

No timber.

Undergrowth, catclaw and chico.

April 4, 1911.

Third Standard Parallel North, through Rg. 6 W.

Chains.

April 5: At 8h. 00m. a.m., lm.t., I set off $34^{\circ} 25'$ N. on the lat. arc; $5^{\circ} 49\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 31 and 32

Thence I run

West on S. bdy. of sec. 31

Ascending steep rocky mountains through dense brush.

1.80

Cross road bears N. and S.

22.00

Ridge bears N. and S.

34.25

Ridge bears N. and S.

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.

40.00

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

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for standard $\frac{1}{4}$ sec. cor., marked on brass cap T331 in N. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

56.10

Cross wash 10 lks. wide course S.

64.00

Ridge bears N. and S.

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.

80.00

By 2nd. set 79.96 chs.; the mean of which is

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for standard cor. of Tps. 13 N. Rgs. 6 and 7 W. marked on brass cap

T13N in N. half;

R7WS36 in N. W. and

R6WS31 in N. E. quadrants; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, oak, catclaw and chico brush

April 5: At this cor. I set off $5^{\circ} 53'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

Chains.

West on S. bdy. of sec. 36
 Descending W. slope of ridge.
 1.50 Cross wash 20 lks. wide course S.
 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap
 S36 in N. half; and raise a mound of stone 3 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 45.00 Ridge bears N. W. and S. E.
 60.00 Cross wash 10 lks. wide course S. E.
 70.72 Ridge bears N. and S. descend.
 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 standard cor. of secs. 35 and 36, marked
 on brass cap
 T15NR7W in N. half;
 S35 in N. W. and S36 in N. E. quadrant; and raise a mound
 of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits
 impracticable.
 Land, mountainous.
 Soil; rocky; 4th. rate.
 No timber.
 Undergrowth; Oak, catclaw and cactus.

April 5, 1911.

April 6: At 8h. 00m. a.m., l.m.t., I set off $34^{\circ} 25'$ N.
 on the lat. arc; $6^{\circ} 12\frac{1}{2}'$ N. on the decl. arc; and
 determine a meridian with the solar at the cor. of secs.
 35 and 36

Thence I run

West on S. bdy. of sec. 35
 Descending W. slope.
 24.40 Cross wash 60 lks. wide course S.
 37.00 Ridge bears N. W. and S. E.
 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap
 S35 in N. half; and raise a mound of stone 3 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 59.00 Ridge bears N. W. and S. E.
 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 standard cor. of secs. 34 and 35, marked
 on brass cap
 T15NR7W in N. half;
 S34 in N. W. and S35 in N. E. quadrants; and raise a
 mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits
 impracticable.
 Land, Mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, oak, catclaw and cactus.

Third Standard Parallel North, through Rg. 7 W.

Chains	
	West on S. bdy. of sec. 34 Descend.
17.90	Cross wash 40 lks. wide course S. E. 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
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for standard $\frac{1}{4}$ sec. cor., marked on Brass cap S34 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
49.79	Ridge bears N. W. and S. E.
63.00	Cross drain 10 lks. wide course S. E. 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 standard cor. of Secs. 33 and 34, marked on brass cap T13NR7W in N. half; S33 in N. W. and S34 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, oak, catclaw and cactus. April 6: At this cor. I set off $6^{\circ} 15\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

	West on S. bdy. of sec. 33 Ascend.
3.00	Ridge bears N. W. and S. E. descend. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S33 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
57.35	Cross wash 10 lks. wide course N. W.
63.84	Cross fence beras N. and S.
65.40	Cross wash 10 lks. wide course N.
69.71	Cross fence bears N. and S. 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 standard cor. of secs. 32 and 33, marked on brass cap T13NR7W in N. half; S32 in N. W. and S33 in N. E. quadrants; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, oak, catclaw and cactus.

April 6, 1911.

April 8: At 8h. 00m. a.m., l.m.t., I set off $34^{\circ} 25'$ N.

Third Standard Parallel North, through Rg. 7 W.

Chains.

on the lat. arc; 6°57½' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 32 and 33

Thence I run

West on S. bdy. of sec. 32

Ascend steep N. E. slope through dense brush.

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

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 standard cor., marked on brass cap S32 in N. half; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable.

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 standard cor. of secs. 31 and 32, marked on brass cap

T13NR7W in N. half;

S31 in N. W. and S32 in N. E. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, gak, catclaw and cactus.



West on S. bdy. of sec. 31

Descending steep S. W. slope through dense brush.

31.90 Cross wash 20 lks. wide course N. W.

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

35.60 Cross drain 8 lks. wide course N.

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

39.42 Cross drain 10 lks. wide course N. E.

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 standard cor., marked on brass cap S31 in N. half; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable.

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 standard cor. of Tps. 13 N. Rgs. 7 and 8 W. marked on brass cap

T13N in N. half;

S36R8W in N. W. and

R7WS31 in N. E. quadrants; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, oak, paloverde, catclaw and cactus.

April 8: At this cor. I set off 7° 01' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 25' N.



Third Standard Parallel North, through Rg. 8 W.

Chains.

West on S. bdy. of sec. 36.
 Ascending steep rocky granite mountains.
 Ridge bears N. W. and S. E.
 Cross drain 7 lks. wide course N. W.
 Ridge bears N. W. and S. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S36 in N. half; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 53.40 Cross drain 20 lks. wide course N. W.
 65.25 Ridge bears N. W. and S. E.
 78.68 Cross wash 40 lks. wide course N. 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 standard cor. of secs. 35 and 36, marked on brass cap
 T13NR8W. in N. half;
 S35 in N. W. and S36 in N. E. quadrant; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, oak, catclaw and cactus.

March 8, 1911.

April 9: At 7h. 00m. a.m., l.m.t., I set off 34° 25' N. on the lat. arc; 7° 20' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 35 and 36

Thence I run

West on S. bdy. of sec. 35
 Descending over huge granite boulders.
 2.65 Cross wash 8 lks. wide course N. W.
 4.18 Cross wash 8 lks. wide course N.
 20.25 Ridge bears N. W. and S. E.
 38.00 Cross wash 25 lks. wide course S. E.
 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S35 in N. half; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 43.90 Cross drain 20 lks. wide course S. E.
 54.00 Ridge bears N. W. and S. E.
 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 standard cor. of secs. 34 and 35, marked on brass cap
 T13NR8W in N. half;
 S34 in N. W. and S35 in N. E. quadrant; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, oak, paloverde, catclaw and cactus.

Third Standard Parallel North, through Rg. 8 W.

Chains.

April 9: At this cor. I set off $7^{\circ} 23'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

-
- West on S. bdy. sec. 34
Descending over huge granite boulders through dense brush.
- 6.17 Cross wash 35 lks. wide course S. W.
9.40 Ridge bears N. W. and S. E.
11.47 Cross wash 18 lks. wide course S. W.
14.00 Ridge bears N. W. and S. E.
16.85 Cross wash 100 lks. wide course S. W.
28.00 Ridge bears N. W. and S. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S34 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
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 standard cor. of secs. 33 and 34, marked on brass cap
T13NR8W in N. half;
S33 in N. W. and S34 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Undergrowth; oak, paloverde and catclaw.

April 9, 1911

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- April 10: At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 25'$ N. on the lat. arc; $7^{\circ} 42'$ N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 33 and 34
Thence I run
- West on S. bdy. of sec. 33
Descending over huge granite boulders through dense brush.
- 24.00 Cross wash 8 lks. wide course S.
28.00 Ridge bears N. W. and S. E.
31.17 Cross wash 7 lks. wide course S. W.
33.46 Ridge bears N. W. and S. E.
35.55 Cross wash 7 lks. wide course S. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S33 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 43.00 Cross wash 6 lks. wide course S. W.
47.00 Ridge bears S. W. and N. E.
49.00 Cross wash 5 lks. wide course S. W.
57.25 Cross wash 5 lks. wide course N. W.
58.25 Cross wash 5 lks. wide course S. W.
64.00 Ridge bears N. E. and S. W.

Third Standard Parallel North, through Eg. 8 W.

Chains.		
65.70	Foot of mountains and over rolling land.	
77.90	Cross wash 15 lks. wide course N. 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 standard cor. of secs. 32 and 33, marked on brass cap	
	T13NR8W in N. half;	
	S32 in N. W. and S33 in N. E. quadrant; dig pits 24 x 18 x 12 ins. crosswise on each line E. and W. 3 ft. and N. of post 7 ft. dist., and raise a mound of earth 4 ft. base 3 ft. high, N. of cor.	
	Land, mountainous and rolling.	
	Soil, Rocky, decomposed granite; 4th. rate.	
	No timber.	
	Undergrowth, greasewood, mesquite, paloverde and cactus.	
	April 10: At this cor. I set off 7° 45' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 25' N.	

	West on S. bdy. of sec. 33	
	Over rolling land through dense brush.	
4.15	Cross wash 15 lks. wide course S. W.	
15.15	Cross wash 7 lks. wide course S.	
22.75	Cross wash 5 lks. wide course S. W.	
31.00	Cross wash 10 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap	
	$\frac{1}{4}$ S32 in N. half; from which	
	A mesquite 7 ins. diam., bears N. 79° E. 57 lks. dist., marked S C $\frac{1}{4}$ S 32 B T. NO OTHER TREE AVAILABLE	
40.60	Cross wash 10 lks. wide course N. W.	RAISE A MOUND OF STONE
45.75	Cross wash 10 lks. wide course S.	2 FT. BASE, 1 1/2 FT. HIGH, N. OF COR.
62.75	Cross wash 45 lks. wide course N.	
63.00	Road bears N. and S.	
70.00	Cross wash 12 lks. wide course N. E.	
	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 standard cor. of secs. 31 and 32, marked on brass cap	
	T13NR8W in N. half,	
	S31 in N. W. and S32 in N. E. quadrant; from which	
	A mesquite 8 in. diam., bears N. 147° E. 140 lks. dist., marked SCT13NR8WS32BT.	
	No other tree available. Raise a mound of stone 3 ft. base 1 1/2 ft. high, N. of cor.	
	Land, rolling.	
	Soil, sandy and gravelly; coarse; dry; 2nd. rate.	
	No timber.	
	Undergrowth, mesquite, greasewood, paloverde and cactus.	

April 10, 1911

April 11; At 7h. 00m. a.m., l.m.t., I set off 34° 25' N. on the lat. arc; 8° 04' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 31 and 32

Third Standard Parallel North, through Rg. 8 W.

Chains.

Thence I run
 West on S. bdy. of sec. 31
 Ascend E. slope of mountains through dense brush.

2.25 Cross wash 8 lks. wide course N.
 4.70 Cross wash 8 lks. wide course N. E.
 18.00 Cross wash 80 lks. wide course N. E.
 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 standard $\frac{1}{4}$ sec. cor., marked on brass
 cap T31 in N. half; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

73.00 Ridge bears N. W. and S. E.
 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 standard cor. of Tps. 13 N. Rgs. 8 and
 9 W., marked on brass cap
 T13N in N. half;
 R9WS36 in N. W. and
 R8WS31 in N. E. quadrant; and raise a mound of stone
 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky, 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.

Third Standard Parallel North, through Rg. 9 W.

Chains.	West on S. bdy. of sec. 36 Descending t rough dense brush
15.35	Cross drain 5 lks. wide course S.
18.60	Ridge bears N. W. and S. E.
20.25	Cross drain 40 lks. wide course S. E.
30.00	Ridge bears N. W. and S. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S36 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
41.55	Cross wash 35 lks. wide course S. E.
48.00	Ridge bears N. W. and S. E.
54.75	Cross wash 50 lks. wide course S. E.
57.50	Drain 40 lks. wide course S. E.
70.50	Ridge bears N. W. and S. E. 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 standard cor. of secs. 35 and 36, marked on brass cap T13NR9W in N. half; S35 in N. W. and S36 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil; rocky; 4th. rate. No timber. Undergrowth, paloverde, greasewood and cactus. April 11; At this cor. I set off $8^{\circ} 07\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

	West on S. bdy. of sec. 35 Descending through dense brush.
7.40	Cross wash 50 lks. wide course N. W.
12.50	Ridge bears N. W. and S. E.
26.10	Cross wash 70 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 standard $\frac{1}{4}$ sec. cor. marked on brass cap S35 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high; N. of cor. Pits impracticable.
40.50	Ridge bears N. W. and S. E.
50.00	Cross wash 30 lks. wide course S. W.
59.05	Ridge bears N. E. and S. W.
70.50	Cross Santa Maria River, clear running water 8 ins. deep 60 lks. wide course S. and ascend. 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 standard cor. of secs. 35 and 36, marked on brass cap T13NR9W in N. half; S34 in N. W. and S35 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous.

Third Standard Parallel North, through Rg. 9 W.

Chains.

Soil; rocky; 4th. rate.
No timber.
Undergrowth, greasewood, paloverde and cactus.

April 11, 1911.

April 12: At 7h:00m. a.m., I set off 34° 35' N. on the lat. arc; 8° 26½' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 34 and 35

Thence I run

West on S. bdy. of sec. 34
Ascending through dense brush.

27.00 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.

40.00 By 2nd. set 39.97 chs.; the mean of which is
Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for standard ¼ sec. cor., marked on brass cap S34 in N. half; and raise a mound of stone 3 ft. base 1½ ft. high, N. of cor. Pits impracticable.

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

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

55.15 Cross wash 20 lks. wide course S. W.

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

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

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

78.32 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.

80.00 By 2nd. set 79.96 chs.; the mean of which is
Set an iron post 3 ft. long, 3 in. diam., 24 ins. in the ground for standard cor. of secs. 33 and 34, marked on brass cap

T13NR9W in N. half;
S33 in N. W. and S34 in N. E. quadrant; and raise a mound of stone 3 ft. base 1½ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde and cactus.

At this cor. I set off 8° 30' N. on the decl. arc; and observe the sun on the meridian at noon April 12: the resulting lat. is 34° 35' N.

West on S. bdy. of sec. 33
Descending through dense undergrowth.

5.00 Cross wash 5 lks. wide course S.

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

26.00 Cross wash 60 lks. wide course S. E.

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

34.00 Cross wash 75 lks. wide course S.

36.00 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.

40.00 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 standard ¼ sec. cor., marked on brass cap S33 in N. half; and raise a mound of stone 3 ft. base 1½ ft. high, N. of cor. Pits impracticable.

42.00 Cross wash 40 lks. wide course S.

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

Third Standard Parallel North, through Rg. 9 W.

Chains	
63.00	Cross drain 15 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 standard cor. of secs. 32 and 33, marked on brass cap T13NR9W in N. half; S32 in N. W. and S33 in N. E. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood and paloverde and cactus. April 12, 1911.

	April 13; At 7h. 00m. a.m., l.m.t., I set off 34° 35' N. on the lat. arc; 8° 48½' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 32 and 33 Thence I run
2.50	West on S. bdy. of sec. 32 Cross wash 75 lks. wide course S.
21.00	Cross drain 30 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 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 standard cor. of sec., marked on brass cap S32 in N. half; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable.
42.80	Ridge bears N. W. and S. E.
77.15	Cross wash 30 lks. wide course S. W.
79.00	Ridge bears N. and S. 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 standard cor. of secs. 31 and 32, marked on brass cap T13NR9W in N. half; S31 in N.W. and S32 in N. E. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood, paloverde and cactus. April 13: At this cor. I set off 8° 51½' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 35' N.

	West on S. bdy. of sec. 31 Descending through dense brush.
1.00	Cross wash 15 lks. wide course S.
3.00	Ridge bears N. W. and S. E.
5.00	Cross wash 15 lks. wide course S.
13.25	Ridge bears N. W. and S. E.
20.60	Cross wash 15 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.

Third Standard Parallel North, through Rgs. 9 W.

Chains.

- 40.00 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 standard $\frac{1}{4}$ sec. cor.; marked on brass cap T13N in N. half; from which
A cedar 9 ins. diam., bears N. 7 $\frac{1}{4}$ ° E. 13 lks. dist.
Marked SC $\frac{1}{4}$ S31BT
A cedar 8 ins. diam., bears N. 66 $\frac{1}{4}$ ° W. 76 lks. dist.; marked SC $\frac{1}{4}$ S31BT
- 43.90 Cross wash 12 lks. wide course N. E.
- 47.00 Ridge bears N. E. and S. W.
- 49.00 Cross wash 15 lks. wide course N. E.
- 50.00 Ridge bears N. E. and S. W.
- 52.00 Cross wash 15 lks. wide course N. E.
- 53.00 Ridge bears N. E. and S. W.
- 54.00 Cross wash 15 lks. wide course N. E.
- 56.00 Ridge bears N. W. and S. E.
- 78.00 Cross wash 20 lks. wide course N. E.
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 standard cor. of Tps. 13 N. Rgs. 9 and 10 W., marked on brass cap T13N in N. half;
R10WS36 in N. W. and
R9WS31 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Undergr wth, greasewood, paloverde and cactus.

April 13, 1911

Third Standard Parallel North, through Rg. 10 W.

Chains	
	April 14: At 7h. 00m. a.m., l.m.t., I set off 34° 25' N. on the lat. arc; 9° 10' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of Tps. 13 N. Rgs. 9 and 10 W.
	Thence I run
	West on S. bdy. of sec. 36.
	Ascending E. slope of mountains, through dense brush.
12.00	Ridge bears N. W. and S. E.
25.10	Cross wash 18 lks. wide course S. W.
33.00	Ridge bears N. and S.
	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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S36 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
45.85	Cross wash 10 lks. wide course S.
47.75	Ridge bears N. W. and S. E.
48.40	Cross wash 8 lks. wide course S.
51.55	Ridge bears N. W. and S. E.
54.35	Cross wash 7 lks. wide course S.
58.45	Ridge bears N. W. and S. E.
61.00	Cross wash 8 lks. wide course S.
68.00	Ridge bears N. W. and S. E.
74.60	Cross wash 50 lks. wide course S. E.
	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 standard cor. of secs. 35 and 36, marked on brass cap T13NR10W in N. half; S35 in N. W. and S36 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	No timber.
	Undergrowth, paloverde, mesquite, greasewood and cactus.
	April 14: At this cor. I set off 9° 13 $\frac{1}{2}$ ' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 25' N.

	West on S. bdy. of sec. 35
	Ascending through dense brush
30.00	Ridge bears N. E. and S. W.
35.75	Cross wash 25 lks. wide course N. E.
	Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks. position of middle point
	By 1st. set 40.02 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 standard $\frac{1}{4}$ sec. cor. marked on brass cap S35 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
68.35	Cross wash 20 lks. wide course N. E.
78.15	Cross same wash course S. E.
	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 standard cor. of secs. 34 and 35, marked on brass cap T13NR10W in N. half;

Third Standard Parallel North, through Rs. 10 W.

Chains.

S34 in N. W. and S35 in N. E. quadrant; and raise a mound of stone 2 ft. base 1 1/2 ft. high, N. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.

April 14, 1911.

April 15: At 7h. 00m. a.m., l.m.t., I set off 34° 25' N. on the lat. arc; 9° 31 1/2' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 34 and 35

Thence I run

West on S. bdy. of sec. 34
 Over rough mountainous. land through dense brush.
 0.70 Cross wash 20 lks. wide course N. E.
 1.30 Cross wash 20 lks. wide course S. E/-
 5.40 Cross wash 20 lks. wide course N. E.
 25.50 Ridge bears N. W. and S. E.
 38.00 Cross wash 15 lks. wide course S.
 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 standard cor. of sec. cor., marked on brass cap S34 in N. half; and raise a mound of stone 2 ft. base 1 1/2 ft. high, N. of cor. Pits impracticable.
 41.00 Ridge bears N. W. and S. E.
 45.00 Cross wash 20 lks. wide course S. E.
 53.00 Ridge bears N. and S.
 60.15 Cross wash 12 lks. wide course N.
 71.00 Ridge bears N. W. and S. E.
 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 standard cor. of secs. 33 and 34, marked on brass cap
 T13NR10W in N. half;
 S33 in N. W. and S34 in N. E. quadrant; and raise a mound of stone 2 ft. base 1 1/2 ft. high, N. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, greasewood, paloverde and cactus.

West on S. bdy. of sec. 33

Over rough mountainous land, through dense brush.
 2.10 Cross wash 12 lks. wide course N. E.
 9.50 Ridge bears N. E. and S. W.
 11.25 Cross wash 25 lks. wide course N. E.
 17.00 Ridge bears N. E. and S. W.
 21.90 Cross wash 15 lks. wide course S.
 27.50 Ridge bears N. and S.
 29.00 Cross wash 20 lks. wide course S.
 33.70 Ridge bears N. and S.
 36.00 Cross wash 20 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

Third Standard Parallel North, through Rg. 10 W.

Chains	
	the ground for standard $\frac{1}{4}$ sec. cor., marked on brass cap S33 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
48.00	Ridge bears N. and S.
54.00	Cross wash 40 lks. wide course N. W.
60.50	Cross same wash course S. W.
68.00	Ridge bears N. W. and S. E.
74.45	Cross wash 5 lks. wide course N. 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 standard cor. of secs. 32 and 33, marked on brass cap T13NR10W in N. half; S32 in N. W. and S33 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	No timber.
	Undergrowth, greasewood, paloverde and cactus.
	April 15: At this cor. I set off $9^{\circ} 35'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

	West on S. bdy. of sec. 32.
	Ascending through dense brush.
3.50	Ridge bears N. E. and S. W.
9.00	Cross wash 15 lks. wide course S. W.
25.75	Ridge bears N. E. and S. W.
39.25	Cross wash 20 lks. wide course S.
	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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S32 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
49.00	Cross wash 80 lks. wide course N.
64.25	Ridge bears N. E. and S. W.
68.00	Cross wash 10 lks. wide course N. W.
71.70	Ridge bears N. W. and S. E.
76.20	Cross wash 8 lks. wide course N. 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 standard cor. of secs. 31 and 32, marked on brass cap T13NR10W in N. half; S31 in N. W. and S32 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, a few scattering cedars.
	Underbrush, greasewood, oak, paloverde and cactus.

April 15, 1911.

April 17: At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 25'$ N.

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Third Standard Parallel North, through Rg. 10 W.

Chains.

on the lat. arc; $10^{\circ} 14\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 31 and 32

Thence I run

West on S. bdy. of sec. 31

Over rough mountainous land, through dense brush.

- 1.50 Ridge bears N. W. and S. E.
- 3.80 Cross wash 30 lks. wide course N. W.
- 7.00 Ridge bears N. W. and S. E.
- 8.55 Cross wash 8 lks. wide course N.
- 31.00 Ridge bears N. W. and S. E.
- 32.50 Cross wash 10 lks. wide course N. W.
- 34.00 Ridge bears N. W. and S. E.
- 38.80 Cross wash 12 lks. wide course N.
- 39.75 Ridge bears N. W. and S. E.
- 33.00 Cross wash 30 lks. wide course N. E.
- 37.00 Cross wash 40 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap T31 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

- 40.75 Enter wash 40 lks. wide course N. E. and cross and re-cross same to

- 52.20 Leave wash bears N. W.
- 57.00 Ridge bears N. E. and S. W.
- 58.45 Cross wash 12 lks. wide course N.
- 61.50 Ridge bears N. E. and S. W.
- 63.00 Cross wash 25 lks. wide course N. E.
- 69.00 Ridge bears N. E. and S. W.
- 73.00 Cross wash 30 lks. wide course N. E.

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

By 1st. set 80.06 chd.

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 standard cor. of Tps. 13 N. Rgs. 10 and 11 W. marked on brass cap T13N in N. half; R11WS36 in N. W. and R10WS31 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde and cactus.

April 17: At this cor. I set off $10^{\circ} 17\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

Third Standard Parallel North, through Rg. 11 W.

Chains.	
	West on S. bdy. of sec. 36 Descending through dense brush.
8.35	Cross wash 20 lks. wide course S. E.
12.00	Ridge bears N. E. and S. W.
19.00	Cross wash 20 lks. wide course N. E.
24.00	Ridge bears N. E. and S. W.
33.00	Cross wash 15 lks. wide course N. E.
38.00	Ridge bears N. E. and S. W.
39.10	Cross wash 10 lks. wide course N. E.
39.80	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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S36 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
41.75	Cross wash 15 lks. wide course N. E.
45.50	Ridge bears N. E. and S. W.
56.15	Cross wash 20 lks. wide course N. E.
64.00	Ridge bears N. E. and S. W.
74.00	Cross wash 18 lks. wide course S. E.
	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 th the ground for standard cor. of secs. 35 and 36, marked on brass cap T13NR11W in N. half; S35 in N. W. and S36 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, paloverde, oak and cactus.

April 17, 1911.

April 18: At 7h. 00m. a.m., l.m.t., I set off $54^{\circ} 25'$ N.
on the lat. arc; $10^{\circ} 35\frac{1}{2}'$ N. on the decl. arc; and deter-
mine a meridian with the solar at the standard cor. of
secs. 35 and 36

Thence I run

	West on S. bdy. of sec. 35 Ascend through dense brush.
14.00	Ridge bears N. W. and S. E.
28.00	Cross drain 8 lks. wide course S.
32.60	Ridge bears N. and S.
	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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S35 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
44.80	Cross wash 12 lks. wide course S. W.
51.00	Ridge bears N. E. and S. W.
55.60	Cross wash 15 lks. wide course S. W.
60.00	Ridge bears N. E. and S. W.
64.80	Cross wash 10 lks. wide course S. W.
70.00	Ridge bears N. W. and S. E.
	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.

Third Standard Parallel North, through Rg. 11 W.

Chains.

- 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 standard cor. of secs. 34 and 35, marked
 on brass cap
 T13NR11W in N. half;
 S34 in N. W. and S35 in N. E. quadrant; and raise a
 mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits
 impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, paloverde, oak and cactus.
-
- West on S. bdy. of sec. 34
 Descending through dense brush.
 13.00 Cross drain 15 lks. wide course S. E.
 15.00 Cross same drain, course N. E.
 16.00 Cross same drain 15 lks. wide course S. E.
 28.25 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 standard cor. of secs. 34 and 35, marked on brass cap
 S34 in N. half; and raise a mound of stone 2 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 41.20 Cross wash 12 lks. wide course S. W.
 44.25 Ridge bears N. E. and S. W.
 46.25 Cross wash 10 lks. wide course S. W.
 48.00 Ridge bears N. and S.
 49.00 Cross wash 20 lks. wide course S. E.
 58.25 Ridge bears N. W. and S. E.
 68.00 Cross wash 12 lks. wide course S. W.
 73.30 Ridge bears N. E. and 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 standard cor. of secs. 33 and 34, marked
 on brass cap
 T13NR11W in N. half;
 S33 in N. W. and S34 in N. E. quadrant; and raise a
 mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits
 impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, paloverde, oak, and cactus.
 April 18: At this cor. I set off $10^{\circ} 38\frac{1}{2}'$ N. on the decl
 arc; and observe the sun on the meridian at noon; the
 resulting lat. is $34^{\circ} 25'$ N.
-

- West on S. bdy. of sec. 33
 Descending through dense brush.
 8.80 Cross wash 15 lks. wide course S. W.
 11.50 Ridge bears N. E. and S. W.
 13.40 Cross wash 16 lks. wide course S. W.
 16.85 Cross wash 15 lks. wide course S. W.
 34.00 Ridge bears N. E. and S. W.
 37.00 Cross wash 70 lks. wide course S.
 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

Third Standard Parallel North, through Rg. 11 W.

Chains.	
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for Standard $\frac{1}{4}$ Sec. cor., marked on brass cap S33 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
42.50	Cross wash 20 lks. wide course S. W.
46.30	Cross wash 30 lks. wide course S. E.
52.00	Ridge bears N. E. and S. W.
57.50	Cross wash 25 lks. wide course S.
64.00	Ridge bears N. E. and 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 standard cor. of secs. 32 and 33, marked on brass cap T13NR11W in N. half; S32 in N. W. and S33 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, paloverde, mesquite and cactus.

April 18, 1911

April 19: At 7h. 00m. a.m., 1.m.t., I set off $34^{\circ} 25'$ N. on the lat. arc; $10^{\circ} 56\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 32 and 33

Thence I run

	West on S. bdy. of sec. 32
	Descending through dense brush.
1.85	Cross wash 20 lks. wide course S. W.
8.00	Ridge bears N. E. and S. W.
27.35	Cross wash 25 lks. wide course S. W.
39.15	Ridge bears N. W. and S. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap S32 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
63.00	Cross wash 18 lks. wide course S. E.
	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 standard cor. of secs. 31 and 32, marked on brass cap T13NR11W in N. half; S31 in N. W. and S32 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, mesquite, paloverde and cactus.
	April 19: At this cor. I set off $11^{\circ} 00'$ N. on the decl arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

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Third Standard Parallel North, through Rg. 11 W.

Chains.	West on E. bdy. of sec. 31. Descending through dense brush.
24.10	Cross wash 10 lks. wide course S. W.
28.00	Ridge bears N. W. and S. E.
34.00	Cross wash 8 lks. wide course S. W. 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 standard $\frac{1}{4}$ sec. cor., marked on brass cap T131 in N. half; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
54.50	Ridge bears N. W. and S. E.
69.00	Cross drain 10 lks. wide course N. W.
74.00	Ridge bears N. W. and S. E. 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 standard cor. of Tps. 13 N. Rgs. 11 and 12 W., marked on brass cap T13N in N. half; R12WS36 in N. W. and R11WS31 in N. E. quadrant; and raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood, paloverde, mesquite and cactus.

April 19, 1911.

Third Standard Parallel North, through Rg. 12 W.

Chains	
	April 20: At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 25' N.$ on the lat. arc; $11^{\circ} 17\frac{1}{2}' N.$ on the decl. arc; and determine a meridian with the solar at the standard cor. of Tps. 13 N. Rgs. 11 and 12 W.
	Thence I run
	West on S. bdy. of sec. 36
	Descending through dense brush
8.00	Cross wash 35 lks. wide course S. W.
10.00	Cross same wash course N. W.
14.00	Cross same wash course S. W.
18.40	Ridge bears N. and S.
24.50	Cross drain 7 lks. wide course S. E.
	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., 36 ins. in the ground for standard $\frac{1}{4}$ sec. cor., marked on brass cap S36 in N. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
44.00	Ridge bears N. and S.
	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 standard cor. of secs. 35 and 36, marked on brass cap
	T13NR12W in N. half;
	S35 in N. W. and S36 in N. E. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	No timber.
	Undergrowth, mesquite, greasewood, paloverde and cactus.
	April 20: At this cor. I set off $11^{\circ} 20\frac{1}{2}' N.$ on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25' N.$

	West on S. bdy. of sec. 35
	Descending through dense brush.
9.60	Cross wash 30 lks. wide course S. W.
24.00	Ridge bears N. E. and S. W.
30.00	Cross wash 20 lks. wide course S. W.
34.15	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., 36 ins. in the ground for standard $\frac{1}{4}$ sec. cor., marked on brass cap S35 in N. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
45.00	Cross wash 25 lks. wide course S. W.
55.35	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 the ground for standard cor. of secs. 34 and 35, marked on brass cap
	T13NR12W in N. half;
	S34 in N. W. and S35 in N. E. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.

Third Standard Parallel North, through Rg. 12 W.

Chains. Soil, rocky; 4th. rate.
No timber.
Undergrowth, greasewood, paloverde and cactus.

April 20, 1911.

April 21: At 7h. 00m. a.m. or 1.m.t., I set off $34^{\circ} 25' N.$ on the lat. arc; $11^{\circ} 38' N.$ on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 34 and 35

Thence I run

West on S. bdy. of sec. 34
Descending through dense brush.
21.65 Cross wash 35 lks. wide course S.
23.00 Ridge bears N. and S.
25.25 Cross wash 70 lks. wide course S.
31.00 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 40.02 chs.
By 2nd. set 39.98 chs.; the mean of which is
40.00 Set an iron post 3 ft. long, 1 ins. diam., 26 ins. in the ground for standard $\frac{1}{4}$ sec. cor.; marked on brass cap $\frac{1}{4}$ S34 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
45.00 Cross wash 10 lks. wide course S. W.
48.00 Ridge bears N. and S.
60.00 Cross wash 15 lks. wide course S. W.
69.00 Ridge bears N. and S.
79.00 Cross wash 100 lks. wide course S.
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 standard cor. of secs. 33 and 34, marked on brass cap
T13NR12W in N. half;
S33 in N. W. and S34 in N. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Undergrowth, greasewood, paloverde, mesquite and cactus.
Clouds obscure the sun at noon.

West on S. bdy. of sec. 33
Ascend through dense brush.
4.00 Ridge bears N. E. and S. W.
8.50 Cross wash 20 lks. wide course S. W.
20.00 Ridge bears N. E. and S. W.
38.00 Rim of canyon descend.
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 standard $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S33 in N. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
43.00 Cross wash 40 lks. wide course S.
46.70 W. rim of canyon.
Difference between measurements of 80.00 chs. by two sets of chainmen is 13 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

Third Standard Parallel North, through Rg. 12 W.

Chains.

the ground for standard cor. of secs. 32 and 33, marked on brass cap
T13NR12W in N. half;
S32 in N. W. and S33 in N. E. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde, mesquite and cactus.

April 21, 1911.

April 22: At 7h. 00m. a.m., l.m.t., I set off $34^{\circ} 25'$ N. on the lat. arc; $11^{\circ} 58\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the scale at the standard cor. of secs. 32 and 33

Thence I run

West on S. bdy. of sec. 32

Over mesa land, through dense brush.

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

22.30 Cross wash 20 lks. wide course S. E.

26.35 Cross wash 10 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 40.01 chs.

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

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for standard $\frac{1}{4}$ sec. cor., marked on brass cap S32 in N. half; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

51.20 Rim mesa and descend steep rocky 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.

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

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for standard cor. of secs. 31 and 32, marked on brass cap

T13NR12W in N. half;

S31 in N. W. and S32 in N. E. quadrant; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, greasewood, mesquite, paloverde and cactus.

April 22: At this cor. I set off $12^{\circ} 01\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 25'$ N.

West on S. bdy. of sec. 31

Descending S. W. slope through dense brush.

4.20 Cross wash 25 lks. wide course S. W.

13.50 Ridge bears N. and S.

17.70 Cross wash 25 lks. wide course N. W.

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

38.45 Enter wash bears S. E. 25 lks. wide and along in wash

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.

40.00 By 2nd. set 39.98 chs.; the mean of which is

Point for standard $\frac{1}{4}$ sec. cor. falls in wash so at

43.50 Leave wash course S. W.

44.00 Set an iron post 3 ft. long, 1 in. diam., 24 ins. in the ground for standard witness $\frac{1}{4}$ sec. cor., marked on brass

Third Standard Parallel North, through Rg. 12 W.

Chains.

cap WC $\frac{1}{4}$ in W. half; and S31 in N. E. quadrant; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

52.35 Cross wash 75 lks. wide course S. and ascend steep ridge

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

63.00 Cross drain 7 lks. wide course S. E.

71.30 Ridge bears N. and S.

79.00 Cross drain 7 lks. wide course S.

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 standard cor. of Tps. 13 N. Rgs. 12 and 13 W. marked on brass cap
 T13N in N. half;
 R13WS36 in N. W. and
 R12WS31 in N. E. quadrant; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, greasewood and paloverde and cactus.

April 22, 1911.

General Description.

This line runs over nearly level land through Rg. 6 W. and the land is level and rolling N. and S. of the line. Through Rgs. 7 to 12W. the line runs over a rough mountainous country crossing the Santa Maria River in Rg. 9 W. where the river runs through a box canyon. The land N. and S. of the line is mountainous and broken.

Alfred H. Bliss
 U. S. Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

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BOOK 2268

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
Standard Parallel North through Rgs. 6, 7, 8, 9, 10, 11 and 12 W.
showing the respective capacities in which they acted:

R. A. Coombs, A. E. Lyon, Chairman.

Tom Shimpfessel C. S. Crowen, Chairman.

Clay Dodson, Moundman.

Moundman.

J. P. Ellis, Axman.

Axman.

L. E. Flanagan, 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 Standard Parallel North
through Rgs. 6, 7, 8, 9, 10, 11 and 12 W.

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

R. A. Coombs, A. E. Lyon, Chairman.

C. S. Crowen Tom Shimpfessel, Chairman.

Clay Dodson, Moundman.

Moundman.

J. P. Ellis, Axman.

Axman.

L. E. Flanagan, Flagman.

Subscribed and sworn to before me this 22nd

day of April, 1911



Alfred N. Oliver
U. S. Transitman

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

BOOK 2268

I, Alfred N. Oliver, United States ^{Transitman} ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of ^{instructions} ~~a contract~~ received from Frank S. 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 Standard Parallel North through Rgs. 6, 7, 8, 9, 10, 11 and 12 W

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 2nd day of January, 1912



Frank S. Ingalls
N. C. Tubey General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz. January 25, 1912
The foregoing field notes of the survey of the Third Standard Parallel North through Ranges 7, 8, 9, 10, 11, 12 and from 6 West of the G. & S. R. Meridian Arizona

executed by Alfred N. Oliver N. C. Tubey ^{Transitman} ~~Deputy~~ Surveyor under his ^{group} ~~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.