

FIELD NOTES

2334

Re Accepted G.L.O. letter "E" dated Dec. 17, 1912.
OF THE SURVEY OF THE

Subdivisions of T 21 R 26 E.

Of the T 21 R Meridian,

In the State of Arizona

EXECUTED BY

John J. Hesse
Ssd

Alfred H. Oliver

In the capacity of U. S. ^{Assistant} Surveyor, under instructions dated Aug. 2, 1911,

issued by the United States Surveyor General to govern surveys included in

Group No. 5, which were approved by the Commissioner of the General Land

Office, August 18, 1911, pursuant to authority contained in the Act of

Congress dated March 4, 1911.

Survey commenced September 17, 1911.

Survey completed October 11, 1911.

BOOK 2334

INDEX DIAGRAM.

Township 21 N, Range 26 E

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INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
7	8	9	10	11	12
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BOOK 2334

WE, A. E. Lyon, R. L. Bates, J. H. Bates and H. R. Harvey
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 subdivision lines of P. 21 S. R. 26 E.

A. E. Lyon Chainman.
J. H. Bates
R. L. Bates Chainman.
H. R. Harvey

Subscribed and sworn to before me this 8th
day of September, 1911



John P. Hesse
U. S. Transitman

WE, E. C. Mills, J. L. Gardner and C. Wolfe
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 subdivision lines of P. 21 S. R. 26 E.

C. Wolfe Moundman.
E. C. Mills
J. L. Gardner Moundman.

Subscribed and sworn to before me this 8th
day of September, 1911
By C. Wolfe Sept. 18, 1911



John P. Hesse
U. S. Transitman

WE, J. C. Barnes and
do solemnly swear that ~~we~~ will well and truly perform the duties of ~~axman~~ 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 subdivision lines of P. 21 S. R. 26 E.

J. C. Barnes Axman.
..... Axman.

Subscribed and sworn to before me this 8th
day of September, 1911



John P. Hesse
U. S. Transitman

We, W. L. Ray and A. W. Hendrix, do solemnly swear that ~~we~~ ^{we} will well and truly perform the duties of ~~flagman~~ ^{flagman} according to instructions given ~~us~~ ^{us} to the best of ~~our~~ ^{our} skill and ability, in the survey of the subdivision lines of P. 21 S. R. 26 E.

W. L. Ray Flagman.
A. W. Hendrix

Subscribed and sworn to before me this 8th
day of September, 1911



John P. Hesse
U. S. Transitman

10

Subdivision of Tr. 31 S. R. 36 E.

Chains

Survey commenced September 17, 1911 and executed with an A. Lietz Co. light mountain transit No. 5631, with solar attachment. 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.

I examine the adjustments of the transit 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 camp near the standard cor. of Tps. 30 S. R. 35 and 36 E. latitude $31^{\circ} 38' 34''$ N. longitude $109^{\circ} 45' 39''$ W. I set off $31^{\circ} 38\frac{1}{2}'$ N. on the lat. arc; $2^{\circ} 26'$ 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 7h 49m p.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 7h. 00m. a.m., l.m.t., September 17, 1911

September 18: At 6h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 22'$ to the west and mark the meridian thus determined, by cutting a small groove in the stone set September 17, on which the meridian coincides with the mark determined by the solar.

At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 38\frac{1}{2}'$ N. on the lat. arc; $2^{\circ} 12'$ N. on the decl. arc; and mark a point in the meridian determined by the solar, by a cross on the stone already set 5 chs. N. of my station; this mark coincides with the meridian established by the Polaris observation.

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

The magnetic bearing of the true meridian at 7h. 15m. a.m., l.m.t., is N. $13^{\circ} 15'$ W. the angle thus determined gives the mag. decl $13^{\circ} 15'$ E.

I commence at the cor. of secs. 1, 2, 35 and 36 on the S. bdy. of the township

Thence I run

479.34

North on a random line finding no cors. until at Intersect N. bdy. of Tp. 34 lks. E. of the closing cor. of secs. 1 and 2

September 18: At the cor. of secs. 13, 14, 35 and 36 I set off $2^{\circ} 06'$ N. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 38\frac{1}{2}'$ N.

September 18, 1911

September 27: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 33\frac{1}{2}'$ N. on the lat. arc; $1^{\circ} 18'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36 on the S. bdy. of the Tp.

Thence I run

N. $0^{\circ} 07'$ W. setting temp. cors. at proportional distances on line.

The distance between cors. was derived as follows:

$475.57 : 479.34 :: 80.00 : X$ or 80.63 the length for each of the S. 5 miles of this tier.

$475.57 : 479.34 :: 75.57 : x$ or 76.17 the length for the N. mile of this tier.

Subdivision of Tp. 31 S. Rg. 26 E.

Chains. The position for the $\frac{1}{4}$ sec. cor. bet. 1 and 2 is derived as follows

$$75.57 : 76.17 :: 40.00 : x \text{ or } 40.32$$

$$75.57 : 76.17 :: 35.57 : x \text{ or } 35.85$$

Therefore I set temp. cors. at 80.635 chs. along this line, commencing at the S. bdy. of the Tp.

Sept. 27: At the cor. of secs. 1, 6, 7 and 12 on the E. bdy. of the Tp. I set off $1^{\circ} 24\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 37\frac{1}{2}'$ N.

September 27, 1911.

September 19: At 7h. 00m., a.m., l.m.t., I set off $31^{\circ} 33\frac{1}{2}'$ N. on the lat. arc; $1^{\circ} 48\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on the S. bdy. of the Tp.

Thence I run

479.28 North on a random line finding no cors. until at Intersect N. bdy. of Tp. 108 lks. E. of the closing cor. of secs. 2 and 3

September 19: At the cor. of secs. 14, 15, 22 and 23 I set off $1^{\circ} 43\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 36'$ N.

September 19, 1911.

September 28: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 33\frac{1}{2}'$ N. on the lat. arc; $1^{\circ} 41'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on the S. bdy. of the Tp.

Thence I run

N. Or 08' W. setting temp. cors. at proportional distances on line

The distance between cors. was derived as follows:

$476.20 : 479.28 :: 80.00 : x$ or 80.52 the length for each of the S. 5 miles of this tier.

$476.20 : 479.28 :: 76.20 : x$ or 76.69 the length for the N. mile of this tier.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 2 and 3 is derived as follows:

$$76.20 : 76.69 :: 40.00 : x \text{ or } 40.26$$

$$76.20 : 76.69 :: 36.20 : x \text{ or } 36.43$$

Therefore I set temp. cors. at 80.52 chs. along this line, commencing at the S. bdy. of the Tp.

September:28: At the cor. of secs. 7, 12, 13 and 18 on the E. bdy. of the Tp. I set off $1^{\circ} 47\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 37'$ N.

September 28, 1911.

September 20: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 33\frac{1}{2}'$ N. on the lat. arc; $1^{\circ} 25\frac{1}{2}'$ S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34 on the S. bdy. of the Tp.

Thence I run

479.31 North on a random line finding no cors. until at Intersect N. bdy. of Tp. 57 lks. E. of the closing cor. of secs. 3 and 4

September 20 ; At the cor. of secs. 15, 16, 21 and 22 I set off $1^{\circ} 19\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 36'$ N.

September 20, 1911.

September 29: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 33\frac{1}{2}'$ N. on the lat. arc; $2^{\circ} 04\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor.

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Chains

of secs. 3, 4, 33 and 34 on the S. bdy. of the Tp.

Thence I run

N. 0° 04' W. setting temp. cors. at proportional distances on line

The distance between cors. was derived as follows:

$$477.05 : 479.31 :: 80.00 : x \quad 80.38 \text{ the}$$

length for each of the S. 5 miles of this tier.

$$477.05 : 479.31 :: 77.05 : x \quad 77.42 \text{ the}$$

length for the N. mile of this tier.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 3 and 4 is derived as follows:
$$77.05 : 77.42 :: 40.00 : x \quad 40.19 \checkmark$$

$$77.05 : 77.42 :: 37.05 : x \quad 37.23 \checkmark$$

Therefore I set temp. cors. at 80.38 chs. along this line commencing at the S. bdy. of the Tp.

September 29: At the cor. of secs. 13, 18, 19 and 24 on the east bdy. of the Tp. I set off 2° 11' S on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31° 36' N.

September 29, 1911.

John A. Hesse
 U.S. Transitman

September 18: At 7h. 00m. a.m., l.m.t., I set off 31° 33 $\frac{1}{2}$ ' N on the lat. arc; 2° 12' N on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33 on the S. bdy. of the Tp.

Thence I run

North on a random line finding no $\frac{1}{4}$ sec. cor.

79.88

Fall 19 lks. E. of old cor. of secs. 28, 29, 32, and 33

Thence I run N. from cor. finding no cors.

until at

120.46

Fall 19 lks. E. of old $\frac{1}{4}$ sec. cor. bet. secs. 20 and 21Thence I run N. from $\frac{1}{4}$ sec. cor. finding no

cors. until at

279.73

Intersect N. bdy. of Tp. 34 lks. W. of the closing cor. of secs. 4 and 5

September 18: At the cor. of secs. 16, 17, 20 and 21 I set off 2° 08' N on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31° 36' N.

Alfred N. Oliver
 U.S. Transitman.

September 30: At 7h. 00m. a.m., l.m.t., I set off 31° 33 $\frac{1}{2}$ ' N on the lat. arc; 2° 28' S on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33 on the S. bdy. of the Tp.

Thence I run

N. 0° 08' W. bet. secs. 32 and 33

79.88

The old cor. of secs. 28, 29, 32 and 33 and point for re-establishment of cor.

Thence I run

N. 0° 05' W. setting temp. cor. of secs. 20, 21, 28 and 29 by proportional distance on line

The distance between cors. was derived as follows:

$$120.00 : 120.46 :: 80.00 : x \quad 80.31 \text{ the}$$

length for the mile bet. secs. 28 and 29

$$120.00 : 120.46 :: 40.00 : x \quad 40.15 \text{ the}$$
length of half mile bet. 20 and 21 running N. to the $\frac{1}{4}$ sec. cor. bet. 20 and 21

Thence I run

N. 0° 04' E. setting temp. cors. at proportional distances on line

The distance between cors. was derived as follows:

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Chains

277.95 :: 279.73 :: 30.00 : x 80.51 the length for the miles bet. secs. 8 and 9, 16 and 17, and 40.26 the length of the N. one half mile bet. secs. 20 and 21

277.95 : 279.73 :: 77.95 : x 78.45 the length for the N. mile of this tier. The position for the $\frac{1}{4}$ sec. cor. bet. secs. 4 and 5 is derived as follows :

$$77.95 : 78.45 :: 40.00 : x \quad 40.36$$

$$77.95 : 78.45 :: 37.95 : x \quad 38.19$$

Therefore I set temp. cors. at 40.36 and 80.51 chs. commencing at the $\frac{1}{4}$ sec. cor., bet. secs. 20 and 21 September 30: At the cor. of secs. 5, 6, 31 and 32 on the S. bdy. of the Tp. I set off $2^{\circ} 34\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 33\frac{1}{2}'$ N.

John D. Hesse
U.S. Transitman.

September 16: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 33\frac{1}{2}'$ N. on the lat. arc; $2^{\circ} 59'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32 on the S. bdy. of the Tp.

Thence I run

480.57

North on a random line finding no cors. until at Intersect N. bdy. of Tp. 61 lks. W. of the closing cor. of secs. 5 and 6

September 16: At the cor. of secs. 17, 18, 19 and 20 I set off $2^{\circ} 52'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 36'$ N.

Alfred N. Bliss
U.S. TRANSITMAN

September 30: I commence at the cor. of secs. 5, 6, 31 and 32 on the S. bdy. of the Tp.

Thence I run

N. $0^{\circ} 04'$ E. setting temp. cors. at proportional distances on line

The distance between cors. was derived as follows:

478.70 : 480.57 :: 80.00 : X 80.31 the length for each of the S. 5 miles of this tier.
478.70 : 480.57 :: 78.70 : x 79.01 the length for the N. mile of this tier.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 5 and 6 is derived as follows:

$$78.70 : 79.01 :: 40.00 : x \quad 40.16$$

$$78.70 : 79.01 :: 38.70 : x \quad 38.85$$

Therefore I set temp. cors. at 80.31 chs. along this line, commencing at the S. bdy. of the Tp.

September 30, 1911

September 21: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 37\frac{1}{2}'$ N. on the lat. arc; $1^{\circ} 02\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 6, 7 and 12 on the E. bdy. of the Tp.

Thence I run

482.03

West on a random line finding no cors. until at Intersect W. bdy. of Tp. 296 lks. N. of the cor. of secs 1, 6, 7 and 12

September 21: At the cor. of secs. 3, 4, 9 and 10 I set off $0^{\circ} 36'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 37\frac{1}{2}'$ N.

September 21, 1911.

Subdivision of Tp. 21 S., Rg. 36 E.

Chains

September 27: I commence at the cor. of secs. 1, 6, 7 and 12 on the E. bdy. of the Tp.

Thence I run

S. 89° 39' W. setting temp. cors. at proportional distances on line.

The distance between cors. was derived as follows:

Bet. secs. 1 & 12	479.87:483.03::80.05:x	or 80.41 chs.
Bet. secs. 2 & 11	479.87:483.03::80.00:x	. 80.36 chs.
Bet. secs. 3 & 10	479.87:483.03::79.97:x	. 80.33 chs.
Bet. secs. 4 & 9	479.87:483.03::80.10:x	. 80.46 chs.
Bet. secs. 5 & 8	479.87:483.03::79.85:x	. 80.21 chs.
Bet. secs. 6 & 7	479.87:483.03::79.30:x	. 80.26 chs.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 6 and 7 is derived as follows:

79.90 : 80.26::40.00 : x or 40.13

79.90 : 80.26::39.90 : x . 40.08

Therefore I set temp. cors. at the proper distances along this line commencing at the E. bdy. of the Tp.

September 27, 1911

September 22: At 7h. 00m. a.m., l.m.t., I set off 31° 37' N. on the lat. arc; 0° 39' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18 on the E. bdy. of the Tp.

Thence I run

483.11 West on a random line finding no cors. until at Intersect W. bdy. of Tp. 219 lks. N. of the cor. of secs. 7, 12, 13 and 18.

September 22: At the cor. of secs. 9, 10, 15 and 16, I set off 0° 32½' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31° 37' N.

September 22, 1911.

September 23: I commence at the cor. of secs. 7, 12, 13 and 18 on the E. bdy. of the Tp.

Thence I run

S 89° 45' W. setting temp. cors. at proportional distances on line

The distances between cors. was derived as follows:

Bet. secs. 12 & 13	480.28:483.11::80.10:x	or 80.57 chs.
Bet. secs. 11 & 14	480.28:483.11::79.90:x	. 80.37 chs.
Bet. secs. 10 & 15	480.28:483.11::79.90:x	. 80.37 chs.
Bet. secs. 9 & 16	480.28:483.11::79.98:x	. 80.45 chs.
Bet. secs. 8 & 17	480.28:483.11::80.30:x	. 80.77 chs.
Bet. secs. 7 & 18	480.28:483.11::80.10:x	. 80.57 chs.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 7 and 18 is derived as follows:

80.10:80.57::40.00:x or 40.23 chs.

80.10:80.57::40.10:x . 40.34 chs.

Therefore I set temp. cors. at the proper distances along this line commencing at the E. bdy. of the Tp.

September 23, 1911.

September 23: At 7h. 00m. a.m., l.m.t., I set off 31° 36' N. on the lat. arc; 0° 15½' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 12, 18, 19 and 24 on the E. bdy. of the Tp.

Thence I run

Subdivision of Tp. 21 S. Rg. 26 E.

Chains.

482.52

West on a random line finding no cors. until at
Intersect W. bdy. of Tp. 148 lks. N. of the cor. of secs.
13, 18, 19 and 24
September 23: At the cor. of secs. 15, 16, 21 and 22
I set off $0^{\circ} 09' N.$ on the decl. arc; and observe the
sun on the meridian at noon; the resulting lat. is 31°
 $36' N.$

September 23, 1911.

September 29: I commence at the cor. of secs. 13, 18,
19 and 24 on the E. bdy. of the Tp.

Thence I run

S. $89^{\circ} 49' W.$ setting temp. cors. at proportional dist-
ances on line.

The distances between cors. was derived as follows:

Bet. secs. 13 & 24	480.63:482.52::80.28:x or 80.50 chs.
Bet. secs. 14 & 23	480.63:482.52::80.00:x . 80.31 chs.
Bet. secs. 15 & 22	480.63:482.52::79.95:x . 80.26 chs.
Bet. secs. 16 & 21	480.63:482.52::80.15:x . 80.47 chs.
Bet. secs. 17 & 20	480.63:482.52::79.90:x . 80.31 chs.
Bet. secs. 18 & 19	480.63:482.52::80.35:x . 80.67 chs.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 18 and
19 is derived as follows

$$80.35 : 80.67 :: 40.00 : x \text{ or } 40.16$$

$$80.35 : 80.67 :: 40.35 : x \text{ . } 40.51$$

Therefore I set temp. cors. at the proper distances along
this line commencing at the E. bdy. of the Tp.

September 29, 1911.

September 25: At 7h. 00m. a.m., l.m.t., I set off 31°
 $35' N.$ on the lat. arc; $0^{\circ} 31' S.$ on the decl. arc; and
determine a meridian with the solar at the cor. of secs.
19, 24, 25 and 30 on the E. bdy. of the Tp.

Thence I run

483.23 West on a random line finding no cors. until at
Intersect W. bdy. of Tp. 198 lks. N. of the cor. of secs.
19, 24, 25 and 30.

September 25: At the cor. of secs. 21, 22, 27 and 28
I set off $0^{\circ} 37' S.$ on the decl. arc; and observe
the sun on the meridian at noon; the resulting lat. is
 $31^{\circ} 55' N.$

October 2: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 35' N.$
on the lat. arc; $3^{\circ} 14' S.$ on the decl. arc; and
determine a meridian with the solar at the cor. of secs.
19, 24, 25 and 30

Thence I run

S. $89^{\circ} 46' W.$ setting temp. cors. at proportional dist-
ances on line

The distances between cors. was derived as follows:

Bet. secs. 24 & 25	480.70:483.23::80.15:x or 80.57 chs.
Bet. secs. 23 & 26	480.70:483.23::79.95:x . 80.37 chs.
Bet. secs. 22 & 27	480.70:483.23::80.05:x . 80.47 chs.
Bet. secs. 21 & 28	480.70:483.23::80.05:x . 80.47 chs.
Bet. secs. 20 & 29	480.70:483.23::80.30:x . 80.73 chs.
Bet. secs. 19 & 30	480.70:483.23::80.20:x . 80.63 chs.

The position for the $\frac{1}{4}$ sec. cor. bet. secs. 19 and
30 is derived as follows:

$$80.20 : 80.63 :: 40.00 : x \text{ or } 40.21 \text{ chs.}$$

$$80.20 : 80.63 :: 40.20 : x \text{ . } 40.41 \text{ chs.}$$

Therefore I set temp. cors. at the proper distances along
this line commencing at the E. bdy. of the Tp.

October 2, 1911

Subdivision of Tr. 21 S. R. 26 E.

Chains.

September 26: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 34'$ N. on the lat. arc; $0^{\circ} 54\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36 on the E. bdy. of the Tr.

Thence I run

322.71 West on a random line finding no cors. until at Fall 72 lks. N. of the old cor. of secs. 28, 29, 32 and 33

Thence I run west from old cor. finding no cors. until at

160.95 Intersect W. bdy. of Tr. 3 lks. N. of the cor. of secs. 25, 30, 32 and 36

September 26: At the cor. of secs. 27, 28, 32 and 34 I set off $1^{\circ} 01'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 34'$ N.

September 26, 1911.

October 3: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ} 34'$ N. on the lat. arc; $3^{\circ} 37\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36

Thence I run

S. $89^{\circ} 52'$ W. setting temp. cors. at proportional distances on line to the old cor. of secs. 28, 29, 32 and 33 Th

Thence I run

S. $89^{\circ} 59'$ W. setting temp. cor. of secs. 29, 30, 31 and 32 at proportional distance on line.

The distances between cors. was derived as follows:

Bet. secs. 25 and 36	$320.53:322.71::80.10:x$	80.645 chs.
Bet. secs. 26 and 35	$320.53:322.71::80.10:x$	80.645 chs.
Bet. secs. 27 and 34	$320.53:322.71::80.25:x$	80.795 chs.
Bet. secs. 28 and 33	$320.53:322.71::80.08:x$	80.625 chs.
Bet. secs. 29 and 32	$160.60:160.95::80.20:x$	80.375 chs.
Bet. secs. 30 and 31	$160.60:160.95::80.40:x$	80.375 chs.

The position of the $\frac{1}{4}$ sec. cor., bet. secs. 30 and 31 is derived as follows

$80.40:80.58::40.00:x$ 40.09 chs.

$80.40:80.58::40.40:x$ 40.49 chs.

Therefore I set temp. cors. at the proper distances along this line commencing at the E. bdy. of the Tr.

October 3: At the cor. of secs. 27, 28, 32 and 34 I set off $3^{\circ} 44\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 34'$ N.

From the temp. corners. set on the E. and W. lines I ran N. or S. and from the temp. cors. on the N. and S. lines I ran E. or W. and at the intersection of the two lines set the true point for the cors. of the secs.

Subdivision of Tp. 21 S. Rg. 26 E.

Chains.

October 4; At 7h.00m. a.m. l.m.t. I set off $31\ 33\frac{1}{2}'$ N. on the lat. arc; $4^{\circ}\ 00\frac{1}{2}'$ S on the decl. arc and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36 on the S. bdy. of Tp. 21 S. Rg. 26 E.

Thence I run

N.0 05'E. bet. secs. 35 and 36.

Over level land.

40.31 $\frac{1}{2}$

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 $\frac{1}{4}$ S35 in W. and S36 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

80.63

The point for cor. of secs. 25, 26, 35 and 36, as established by proportional measurement

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 25, 26, 35 and 36, marked on brass cap

T21SR26E in N. half;

S26 in N.W.

S25 in N.E.

S36 in S.E. and

S35 in S.W. quadrant; 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.

Land, level.

Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate;

No timber.

No undergrowth.

S.89 51'E. bet. secs. 25 and 36.

Over level land.

40.32 $\frac{1}{2}$

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 N. and S26 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

80.65

The cor. of secs. 25, 30, 31, and 36. Land, level.

Soil, sandy loam over 2 ft. deep; dry; medium texture 1st rate.

No timber.

No undergrowth.

N.0 09'W. bet. secs. 25 and 26

Over level land.

40.31 $\frac{1}{2}$

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 $\frac{1}{4}$ S26 in W. and S25 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

80.63

The point for cor. of secs. 23, 24, 25 and 26, as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 23, 24, 25 and 26, marked on brass cap

T21SR26E in N. half;

S23 in N.W.

S24 in N.E.

S25 in S.E. and

S26 in S.W. quadrant; 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.

Land, level.

Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.

No timber.

No undergrowth.

October 4; At this cor. I set off $4^{\circ}\ 07\frac{1}{2}'$ S on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is $31\ 35'$ N,

9. Subdivision of Township 21 South, Range 26 East.

Chains	
	S.89°50'E. bet. secs. 24 and 25. Over level land.
0.67	Cross road, bears N. and S.
40.28½	Set an iron post 3 ft long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 24 in N. and S 25 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
80.57	The cor. of secs. 19, 24, 25 and 30. Land, level. Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate. No timber. No undergrowth.

	N.0°14'W., bet. secs. 23 and 24. Over level land.
40.31½	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S 23 in W. and S 24 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.
50.05	Cross wash 50 lks. wide, course NW.
78.00	Cross road, brs. NW. and SE.
80.63	The point for cor. of secs. 13, 14, 23 and 24, as established by proportional measurement. Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked on brass cap, T 21 S R 26 E in N. half; S 14 in NW., S 13 in NE., S 24 in SE., and S 23 in SW. quadrant; dig pits 18x18x12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor. Land, level. Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate. No timber. No undergrowth.
	<u>Note:</u> From the cor. of secs. 13, 14, 23 and 24 R.R. depot, at McNeil, bears N.56°10'W. NE. cor. of sec. house and store, bears N.69°20'W. SW. cor. of frame house, bears N.41°15' E.

	S.89°52'E. bet. secs. 13 and 24. Over level land.
40.30	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 13 in N. and S 24 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
80.60	The cor. of secs. 13, 18, 19 and 24. Land, level. Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate. No timber. No undergrowth.
	October 4, 1911.

	October 5: At 7h.00m. a.m., 1.m.t., I set off 31°36'N. on the lat. arc; 4°24'S. on the decl. arc, and determine a meridian at the cor. of secs. 13, 14, 23 and 24. Thence I run, N.0°04'E. bet. secs. 13 and 14. Over level land.
28.85	Cross road, approaches from SW. and runs N., about 1.00 chs. E. of line.
39.00	Cross road, bears NE. and SW.
40.31½	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S 14 in W. and S 13 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.

Chains	
68.75	Cross road, bears N.W. and S.E.
77.50	Cross same road, bears N.E. and S.W.
80.63	The point for cor. of secs. 11, 12, 13 and 14, as established by proportional measurement. Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 11, 12, 13 and 14, marked on brass cap T21SR26E in N. half; S11 in N.W. S12 in N.E. S13 in S.E. and S14 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. No undergrowth.

	S.89 54'E. bet. secs. 12 and 13.
1.14	Over level land
1.14	Cross road, bears N.E. and S.W.
40.28	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S12 in N. and S13 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
80.57	The cor. of secs. 7, 12, 13 and 18. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. No undergrowth.

	N.0 05'W. bet. secs. 11 and 12
	Over level land.
12.00	Enter dense brush
40.31	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S11 in W. and S12 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.
80.63	The point for cor. of secs. 1, 2, 11 and 12, as established by proportional measurement. Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 1, 2, 11 and 12, marked on brass cap T21SR26E in N. half; S2 in N.W. S1 in N.E. S12 in S.E. and S11 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. Undergrowth, mesquite and catclaw. October 5; At this cor. I set off 40° 30½' S on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 31 37½' N.

	S.89 56'E. bet. secs. 1 and 12
	Over level land, through dense brush.
40.20	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S1 in N. and S12 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.

Chains.

48.73 Cross road, bears NE. and SW.
 80.41 The cor. of secs. 1, 6, 7 and 12.
 Land, level.
 Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
 No timber. Undergrowth, mesquite and catsclaw.

N. 0° 21' W., bet. secs. 1 and 2.

Over level land, through dense brush.

40.32 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 2 in W. and S 1 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

76.17 The closing cor. of secs. 1 and 2, previously described.
 Land, level.

Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.

No timber. Undergrowth, mesquite and catsclaw.

October 5, 1911.

October 6: At 7h. 00m. a.m., l.m.t., I set off $31^{\circ}33\frac{1}{2}'$ N. on the lat. arc; $4^{\circ}47'$ S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35. on the S. bdy. of Tp. 21 S. Rg. 26 E.

Thence I run,

N. 0° 03' W., bet. secs. 34 and 35.

Over level land.

40.26 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 34 in W. and S 35 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

80.52 The point for cor. of secs. 26, 27, 34 and 35, as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 26, 27, 34 and 35, marked on brass cap,

T 21 S R 26 E in N. half;

S 27 in NW.,

S 26 in NE.,

S 35 in SE., and

S 34 in SW. quadrant; dig pits 18x18x12 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.

Land, level.

Soil, sandy loam over 2 ft. deep; dry, medium texture, 1st rate.

No timber. No undergrowth.

N. 89° 53' E. bet. secs. 26 and 35.

Over level land.

40.32 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 26 in N. and S 35 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

62.54 Cross road, bears NNW. and SSE.

62.96 Telegraph line, bears NNW. and SSE.

63.54 El Paso and Southwestern R.R., bears NNW. and SSE.

80.64 The cor. of secs. 25, 26, 35 and 36.

Land, level.

Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.

No timber. No undergrowth.

October 6: At this cor. I set off $4^{\circ}54'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ}34'$ N.

Chains.	
	N.0 01'W. bet. secs. 26 and 27. Over level land.
40.26	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 $\frac{1}{4}$ S27 in W. and S26 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.52	The point for cor. of secs. 22, 23, 26 and 27, as established by proportional measurement. Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in ground for cor. of secs. 22, 23, 26 and 27, marked on brass cap T21SR26E in N. half; S22 in N.W. S23 in N.E. S26 in S.E. and S27 in S.W. quadrant; 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. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. No undergrowth.

	N.89 44'E. bet. secs. 23 and 26. Over level land.
40.18 $\frac{1}{2}$	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 $\frac{1}{4}$ S23 in N. and S26 in S. half; dig pits 18 x 18 x 12 ins. E and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
58.17	Telegraph line, bears NNW. and SSE.
58.42	Cross road, bears NNW. and SSE.
59.02	El Paso and Southwestern R.R., bears NNW. and SSE.
80.37	The cor. of secs. 23, 24, 25 and 26. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. No undergrowth.

	October 6, 1911.

	October 7; At 7h.00m. a.m. l.m.t. I set off 31 35'N. on the lat. arc; $5^{\circ} 10' S$ on the decl. arc and determine a meridian with the solar at the cor. of secs. 22, 23, 26 and 27 Thence I run
	N.0 22'W. bet. secs. 22 and 23. Over level land
40.26	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 $\frac{1}{4}$ S22 in W. and S23 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
57.52	Enter dense brush.
80.52	The point for cor. of secs. 14, 15, 22 and 23, as established by proportional measurement. Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 14, 15, 22 and 23, marked on brass cap T21SR26E in N. half; S15 in N.W. S14 in N.E. S23 in S.E. and S22 in S.W. quadrant; 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. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. Undergrowth, mesquite and catclaw,

13. Subdivision of Township 21 South Range 26 East.

Chains.

- N.89°46'E.bet.secs.14 and 23.
Over level land, through dense brush.
- 40.15½ Set an iron post 3 ft.long 1 in. in diam., 26 ins. in the ground for ¼ sec.cor., marked on brass cap ¼ S 14 in N.and S 23 in S.half; dig pits 18x18x12 ins.E.and W. of cor. 3 ft.dist., and raise a mound of earth 3½ ft. base, 1½ ft. high,N.of cor.
- 53.31 Cross road, bears NNW.and SSE.
54.07 Telegraph line, bears NNW.and SSE.
54.75 El Paso and Southwestern R.R. bears NNW.and SSE.
67.81 Cross road, bears NW.and SE.
Enter open country.
- 80.31 The cor.of.secs. 13,14,23 and 24.
Land,level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber.
Undergrowth, mesquite and catclaw.
- October 7: At the cor.of secs. 14,15,22 and 23, I set off 5°17'S on the decl.arc, and observe the sun on the meridian at noon; the resulting lat.is 31°36'N.
Thence I run,
N.0°05'E. bet. secs.14 and 15.
Over level land, through dense brush.
- 8.99 Cross road, bears E.and W.
- 40.26 Set an iron post 3 ft. long, 1 in. in diam., 26 in. in the ground for ¼ sec.cor., marked on brass cap ¼ S 15 in W. and S 14 in E.half; dig pits 18x18x12 ins. N.and S.of cor. 3 ft. dist., and raise a mound of earth 3½ ft.base, 1½ ft. high,W.of cor.
- 80.52 The point for cor.of secs. 10,11,14 and 15, as established by proportional measurement.
Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor.of secs. 10,11,14 and 15, marked on brass cap,
T 21 S R 26 E in N.half;
S 10 in NW.,
S 11 in NE.,
S 14 in SE., and
S 15 in SW.quadrant; dig pits 18x18x12 ins. in each sec.5½ ft. dist., and raise a mound of earth 4 ft.base, 2 ft. high,W.of cor.
- Land,level.
Soil, sandy loam over 2 ft. deep; dry,medium texture;1st rate.
No timber. Undergrowth, mesquite and catclaw.
- N.89°43'E.bet.secs.11 and 14.
Over level land, through dense brush.
- 40.18½ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec.cor., marked on brass cap ¼ S 11 in N. and S 14 in S.half; dig pits 18x18x12 ins. E.and W.of cor. 3 ft.dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N.of cor.
- 49.30 Telegraph line, bears NNW.and SSE.
49.65 Cross road, brs. NNW.and SSE.
52.00 El Paso and Southwestern R.R., bears NNW.and SSE.
54.00 Enter open country.
- 80.37 The cor.of secs.11,12,13 and 14.
From this cor. R.R. depot at McNeil's bears S.23°56'W.,
NE.cor.of sec. house and store, bears S.20°43'W.
SW.cor.of frame house, bears S.2°05'E.
Land,level.
Soil, sandy loam over 2 ft. deep; dry, medium texture;1st rate.
No timber. Undergrowth,mesquite and catclaw.
- October 7, 1911.
-

Chains

October 9; At 7h.00m. a.m. l.m.t. I set off 31 37'N. on the lat. arc; 5° 56' S on the decl. arc and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15.

Thence I run N.0 05'W. bet. secs. 10 and 11. Over level land, through dense brush.

40.26 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 S10 in W. and S11 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.52 The point for cor. of secs. 2, 3, 10 and 11, as established by proportional measurement. Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 2, 3, 10 and 11, marked on brass cap T21SR26E in N. half; S3 in N.W. S2 in N.E. S11 in S.E. and S10 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor. Land, level.

Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. Undergrowth, mesquite and catclaw.

N.89.42'E. bet. secs. 2 and 11. Over level land, through dense brush

40.18 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 S2 in N. and S11 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

44.64 Cross road, bears NNW. and SSE.
45.36 Telegraph line, bears NNW. and SSE.
46.01 El Paso and Southwestern R.R., bears NNW. and SSE.
80.36 The cor. of secs. 1, 2, 11 and 12.

Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. Undergrowth, mesquite and catclaw.

October 9; At the cor. of secs. 2, 3, 10 and 11 I set off 6° 02 1/2' S on the decl. arc observe the sun on the meridian at noon; the resulting lat. is 31 37 1/2' N.

Thence I run N.0 20'W. bet. secs. 2 and 3. Over level land, through dense brush.

40.26 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 S3 in W. and S2 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

74.64 Cross road, bears E. and W.
76.69 The closing cor. of secs. 2 and 3, previously described. Land, level. Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate. No timber. Undergrowth, mesquite.

October 9, 1911.

October 10; At 7h.oom. a.m. l.m.t. I set off 31 33 1/2' N. on the lat. arc; 6° 18' S on the decl. arc and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34 on the S. bdy. of Tp. 21 S. Rg. 26 E.

15. Subdivision of Township 21 South, Range 26 East.

Chains.

N.0°14' W., bet. secs. 33 and 34.
Over level land.

40.19 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for 1/4 sec.cor., marked on brass cap 1/4 S 33 in W. and S 34 in E.half; dig pits 18x18x12 ins.N. and S.of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high,W.of cor.

70.00 Enter dense brush.

80.38 The point for cor.of secs. 27,28,33 and 34, as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor.of secs.27,28,33 and 34, marked on brass cap,

- T 21 S R 26 E in N.half;
- S 28 in NW.,
- S 27 in NE.,
- S 34 in SE., and
- S 33 in SW. quadrant;

dig pits 18x18x12 ins. in each sec.5 1/2 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high,W.of cor.

Land,level.

Soil, sandy loam, over 2 ft. deep; dry, medium texture; 1st rate.

No timber. Undergrowth, mesquite.

From this cor. an adobe house bears N.6°26'W.

Abel Waisanen's frame house, bears N.25° 07' E.

N.89°43'E. bet. secs.27 and 34.

Over level land, through dense brush.

40.39 1/2 Set an iron post 3 ft.long, 1 in. in diam., 26 ins in the ground for 1/4 sec.cor., marked on brass cap 1/4 S 27 in N. and S 34 in S.half; dig pits 18x18x12 ins.E.and W.of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft.base, 1 1/2 ft. high, N.of cor.

80.79 The cor.of secs.26,27,34 and 35.

Land,level.

Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.

No timber. Undergrowth, mesquite.

N.0°15'E., bet. secs.27 and 28.

Over level land, through dense brush.

40.19 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 S 28 in W. and S 27 in E.half; dig pits 18x18x12 ins.N.and S.of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft.base, 1 1/2 ft. high,W.of cor.

From this cor. an adobe house, bears S.25°20'W.

Abel Waisanen's frame house, bears S.46°15'E.

Windmill, bears N.13°40'W.

House bears N.34° 10'E.

80.38 The point for cor.of secs.21,22,27 and 28, as established by proportional measurement.

Set an iron post 3 ft.long, 2 ins. in diam., 24 ins. in the ground for cor.of secs.21,22,27 and 28, marked on brass cap,

- T 21 S R 26 E in N.half;
- S 21 in NW.,
- S 22 in NE.,
- S 27 in SE., and
- S 28 in SW. quadrant;

dig pits 18x18x12 ins.in each sec.5 1/2 ft. dist., and raise a mound of earth 4 ft. base, 2 ft.high,W.of cor.

From this cor. windmill, bears S.53° 52' W.

House bears S.62° 40'E.

Land,level.

Soil, sandy loam over 2 ft.deep; medium texture;1st rate.

No timber.

Undergrowth, mesquite.

Chains.

October 10; At the cor. of secs. 21, 22, 27 and 28, I set off $6^{\circ} 25\frac{1}{2}' S$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 35' N$.

Thence I run

N.89 40'E. bet. secs. 22 and 27.
Overlevel land, through dense brush.

35.00
40.23½

Enter open country.
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 $\frac{1}{4}$ S22 in N. and S27 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, N. of cor.

80.47

The cor. of secs. 22, 23, 26 and 27.
Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

N.0 11'W. bet. secs. 21 and 22.
Over level land, through dense brush.

40.19

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 $\frac{1}{4}$ S21 in W. and S22 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

79.00

Cross road, bears E. and W.

80.38

The point for cor. of secs. 15, 16, 21 and 22, as established by proportional measurement.
Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 15, 16, 21 and 22, marked on brass cap T21SR26E in N. half;
S16 in N.W.
S15 in N.E.
S22 in S.E. and
S21 in S.W. quadrant; 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.
Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

October 10, 1911.

October 11; At 7h.00m. a.m. l.m.t. I set off $31^{\circ} 36' N$. on the lat. arc; $6^{\circ} 41\frac{1}{2}' S$ on the decl. arc and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.

Thence I run

N.89 37'E. bet secs. 15 and 22.
Over level land, through dense brush.

40.13½

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 $\frac{1}{4}$ S15 in N. and S22 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

44.73

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

80.26

The cor. of secs. 14, 15, 22 and 23.
Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

N.0.10'E. bet. secs. 15 and 16.
Over level land, through dense brush

0.25

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

40.19

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 $\frac{1}{4}$ S16 in W. and S15 in E. half; dig pits 18 x 18 x 12 ins. N. and S.

Chains.

- of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 76.65 Cross road, bears NE. and SW.
- 80.38 The point for cor. of secs. 9, 10, 15 and 16, as established by proportional measurement.
Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 9, 10, 15 and 16, marked on brass cap,
T 21 S R 26 E in N. half;
S 9 in NW.,
S 10 in NE.,
S 15 in SE., and
S 16 in SW. quadrant; dig pits 18x18x12 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. an adobe house, bears S. $34^{\circ}38'E$.
Land, level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber. Undergrowth, mesquite.
October 11: At this cor. I set off $6^{\circ}48\frac{1}{2}'S$ on the decl. arc, and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ}37'N$. ✓
-
- N. $89^{\circ}34'E$, bet. secs. 10 and 15.
Over level land, through dense brush.
- 0.35 Cross road, bears N. and S.
- 40.18 $\frac{1}{2}$ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 10 in N. and S 15 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.37 The cor. of secs. 10, 11, 14 and 15.
Land, level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber. Undergrowth, mesquite.
-
- N. $0^{\circ}19'W$, bet. secs. 9 and 10.
Over level land, through dense brush.
- 40.19 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 9 in W. and S 10 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 80.38 The point for cor. of secs. 3, 4, 9 and 10, as established by proportional measurement.
Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 3, 4, 9 and 10, marked on brass cap,
T 21 S R 26 E in N. half;
S 4 in NW.,
S 3 in NE.,
S 10 in SE., and
S 9 in SW. quadrant; dig pits 18x18x12 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. an adobe house bears S. $7^{\circ}24'E$.
Land, level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber. Undergrowth, mesquite.
October 11, 1911.
-
- October 9:
N. $89^{\circ}20'E$, bet. secs. 3 and 10.
Over level land, through dense brush.
- 0.76 Cross road, brs. N. and S.
- 40.16 $\frac{1}{2}$ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the

Chains.

- ground for $\frac{1}{4}$ sec.cor., marked on brass cap $\frac{1}{4}$ S 3 in N., and S 10 in S.half; dig pits 18x18x12 ins.E.and W.of cor.3 ft.dist.,and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft. high,N.of cor.
- 80.33 The cor.of secs.2,3,10 and 11.
Land,level.
Soil, sandy loam over 2 ft.deep;dry,medium texture;1st rate.
No timber. Undergrowth, mesquite.
-
- N.0°05'W., bet. secs.3 and 4.
Over level land, through dense brush.
- 1.38 Cross road, bears NE.and SW.
- 40.19 Set an iron post 3 ft. long, 1 in.in diam.,26 ins. in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap $\frac{1}{4}$ S 4 in W., and S 3 in E.half; dig pits 18x18x12 ins.N.and S.of cor.3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,W.of cor.
- 49.15 Cross road, brs. NW.and SE.
- 75.82 Cross road, brs. E.and W.
- 77.42 The closing cor.of secs.3 and 4,previously described.
Land,level.
Soil, sandy loam over 2 ft. deep; dry,medium texture;1st rate.
No timber. Undergrowth, mesquite.

October 9, 1911.

John F. Hesse
U. S. Transitman.

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- October 7: At 7h.00m.a.m.,1.m.t., I set off $31^{\circ}33\frac{1}{2}'$ N.on the lat.arc; $5^{\circ}10'$ S.on the decl.arc, and determine a meridian with the solar at the cor.of secs.4,5,32 & 33, on the S.bdy.of Tp.21 S.,Rg.26 E.
- Thence I run,
N.0°08'W., bet. secs. 32 and 33.
Over level land, through dense brush.
- 39.94 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec.cor., marked on brass cap $\frac{1}{4}$ S 32 in W. and S 33 in E.half; dig pits 18x18x12 ins.N. and S.of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,W.of cor.
- 79.88 The old cor.of secs.28,29,32 and 33. I destroy all traces of old cor.,and reestablish it in the same place as follows:
Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor.of secs. 28,29,32 and 33,marked on brass cap,
T 21 S R 26 E in N.half;
S 29 in NW.,
S 28 in NE.,
S 33 in SE., and
S 32 in SW. quadrant; dig pits 18x18x12 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.William Caldwell's adobe house bears S.40° 51'E.
F.J.Randall's frame house bears S.9°48'W.
J.J.Sullivan's frame house bears N.45°15'W.
Land,level.
Soil sandy loam over 2 ft.deep;dry,medium texture;1st rate.
No timber. Undergrowth, mesquite.
- Note: William Caldwell's adobe house brs.N.14°52'E.
F.J.Randall's frame house brs.N.15°39'W.
J.J.Sullivan's frame house brs.N.6°06'W.

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- N.89°44'E.,bet.secs.28 and 33.
Over level land, through dense brush.
- 40.31 $\frac{1}{2}$ Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 28 in N.

Chains.

and S33 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

79.95 Cross road, bears N. and S.

80.63 The cor. of secs. 27, 28, 33 and 34.

Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

October 7; At the cor. of secs. 28, 29, 32 and 33 I set off 5° 17' 5" on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 31 34' N

Thence I run

N.0 26'E. bet. secs. 28 and 29

Over level land, through dense brush.

40.15 1/2 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 S29 in W. and S28 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.31 The point for cor. of secs. 20, 21, 28 and 29 as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 20, 21, 28 and 29, marked on brass cap

T21SR26E in N. half;

S20 in N.W.

S21 in N.E.

S28 in S.E. and

S29 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.

Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

October 7, 1911.

October 9; At 7h. 00m. a.m. I set off 31 35' N. on the lat. arc; 5° 26' 5" on the decl. arc and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.

Thence I run,

N.89 39'E. bet. secs. 21 and 28.

Over level land, through dense brush.

40.23 1/2 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 S21 in N. and S28 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

79.15 Cross road, bears N. and S.

80.47 The cor. of secs. 21, 22, 27 and 28.

Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

N.1 08'W. bet. secs. 20 and 21

Over level land, through dense brush.

40.15 The old 1/4 sec. cor. I destroy all traces of the old cor. and re-establish it in the same place as follows;

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 S20 in W. and S21 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

Thence N.0 43'E. from 1/4 sec. cor.

Chains.

80.41

The point for cor. of secs. 16, 17, 20 and 21 as established by proportional measurement.
Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 16, 17, 20 and 21, marked on brass cap
T21SR26E in N. half;
S17 in N.W.
S16 in N.E.
S21 in S.E. and
S20 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.
Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture.
1st rate,
No timber.
Undergrowth, mesquite.
October 9; At this cor. I set off $6^{\circ} 02' \frac{1}{2} S$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 31 36'N.

40.23½

N.89 39'E. bet. secs. 16 and 21.
Over level land, through dense brush.
Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S16 in N. and S21 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.

79.04

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

80.14

Cross road, bears N. and S.

80.47

The cor. of secs. 15, 16, 21 and 22.

Land, level.
Soil, sandy loam over 2 ft. deep; dry; medium texture;
1st rate.
No timber.
Undergrowth, mesquite.

October 9, 1911.

October 10; At 7h.00m. a.m. l.m.t. I set off 31 36'N. on the lat. arc; $6^{\circ} 18' S$ on the decl. arc and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.

Thence I run

N.0 20'E. bet. secs. 16 and 17.

Over level land, through dense brush.

40.25½

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S17 in W. and S16 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.

80.51

The point for cor. of secs. 8, 9, 16 and 17 as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked on brass cap

T21SR26E in N. half;

S8 in N.W.

S9 in N.E.

S16 in S.E. and

S17 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.

Land, level.

Soil, sandy loam over 2 ft. deep; dry; medium texture;
1st rate.

No timber.

Undergrowth, mesquite.

October 10; At this cor. I set off $6^{\circ} 25' \frac{1}{2} S$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 31 37'N.

21. Subdivision of Township 21 South Range 26 East.

Chains.

- N.89°37'E. bet. secs. 9 and 16.
Over level land, through scattering brush.
- 40.22½ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S 9 in N., and S.16 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
- 40.33 Cross road, bears NW. and SE.
- 80.45 The cor. of secs. 9, 10, 15 and 16.
Land, level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber. Undergrowth, mesquite.

October 10, 1911.

October 11: At 7h.00m. a.m., 1.m.t., I set off 31°37'N. on the lat. arc; 6°41'S on the decl. arc, and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17.

- Thence I run,
N.0°24'W. bet. secs. 8 and 9.
Over level land, through scattering brush.
- 10.51 Cross road, brs. E. and W.
- 40.25½ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S 8 in W. and S 9 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.
- 50.01 Cross road, brs. NW. and SE.
- 80.51 The point for cor. of secs. 4, 5, 8 and 9, as established by proportional measurement.
Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 4, 5, 8 and 9, marked on brass cap,
T 21 S R 26 E in N. half;
S 5 in NW.,
S 4 in NE.,
S 9 in SE., and
S 8 in SW. quadrant; dig pits 18x18x12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base. 2 ft. high, W. of cor.
Land, level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber.
Undergrowth, mesquite.

- N.89°36'E., bet. secs. 4 and 9.
Over level land, through scattering brush.
- 40.23 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 4 in N. and S 9 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
- 78.59 Cross road, bears NE. and SW.
- 80.46 The cor. of secs. 3, 4, 9 and 10.
Land, level.
Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.
No timber. Undergrowth, mesquite.

October 11: At this cor. I set off 6°48½'S. on the decl. arc, and observe the sun on the meridian at noon; the resulting lat. is 31°37½'N.

- N.0°03'W., bet. secs. 4 and 5.
Over level land, through scattering brush.
- 40.26 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 5 in W. and S 4 in E. half; dig pits 18x18x12 ins. N. and S.

chains.

of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 71.83 Cross road, bears E, and W.
 78.45 The closing cor. of secs. 4 and 5.
 Land, level.
 Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.
 No timber.
 Undergrowth, mesquite.

October 11, 1911.

 October 4; At 7h.00m. a.m. l.m.t. I set off 31 $33\frac{1}{2}'$ N. on the lat. arc; $4^{\circ} 00\frac{1}{2}'$ S on the decl. arc and determine a meridian with the solar at the cor. of secs. 31 and 32 on the S. bdy. of Tp. 21 S. Rg. 26 E.

Thence I run

North bet. secs. 31 and 32.

Over level land, through dense brush.

18.21 Cross road, bears N.W. and S.E.

40.15 $\frac{1}{2}$ 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 $\frac{1}{4}$ S31 in W. and S32 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

80.31 The point for cor. of secs. 29, 30, 31 and 32 as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 29, 30, 31 and 32, marked on brass cap

T21SR26E in N. half;

S30 in N.W.

S29 in N.E.

S32 in S.E. and

S31 in S.W. quadrant; 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.

Land, level

Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.

No timber.

Undergrowth, mesquite.

October 4, 1911.

 October 7; S.89' 50'E. bet. secs. 29 and 32.

Over level land, through dense brush.

40.18 $\frac{1}{2}$ 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 $\frac{1}{4}$ S29 in N. and S32 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

49.70 Cross White River, 60 lks. wide, course S.

80.37 The cor. of secs. 28, 29, 32 and 33.

Land, level.

Soil, adobe impregnated with alkali, 4th rate.

No timber.

Undergrowth, mesquite.

October 7, 1911.

 October 4; S.89' 49' W. bet. secs. 30 and 31.

Over level land, through dense brush.

0.62 Cross road, bears N. and S.

40.09 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 $\frac{1}{4}$ S30 in N. and S31 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

80.58 The cor. of secs. 25, 30, 31 and 36.

Land, level.

Soil, sandy loam over 2 ft. deep; dry; medium texture; 1st rate.

No timber.

Undergrowth mesquite.

Chains.

October 4: At the cor. of secs. 29, 30, 31 and 32, I set off 4°07½'S on the decl. arc, and observe the sun on the meridian at noon; the resulting lat. is 31°34'N.

Thence I run, N. 0°12'E., bet. secs. 29 and 30.

Over level land, through dense brush.

40.15½ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 30 in W. and S 29 in E. half; dig pits 18x18x12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.

61.26 Cross road, brs. NE.

80.31 The point for cor. of secs. 19, 20, 29 and 30, as established by proportional measurement.

Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 19, 20, 29 and 30, marked on brass cap,

T 21 S R 26 E in N. half;

S 19 in NW.,

S 20 in NE.,

S 29 in SE., and

S 30 in SW. quadrant; dig pits 18x18x12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

Land, level.

Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.

No timber. Undergrowth, mesquite.

A 2 in. post was left at this cor. temporarily, and could not be found; therefore a 1 in. post was set, as I had no more 2 in. ones.

October 4, 1911.

October 9: S. 89°44'E. bet. secs. 20 and 29. Over level land, through scattering brush.

15.17 Cross road, bears NE. and SW.

16.72 Leave scattering brush, enter open country.

40.36 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 20 in N. and S 29 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.

49.00 Cross White River, 8000 lks. wide, course S.

80.72 The cor. of secs. 20, 21, 28 and 29.

Land, level.

Soil adobe, impregnated with alkali, 4th rate.

No timber. Undergrowth, mesquite.

October 9, 1911.

October 4; S. 89°38'W., bet. secs. 19 and 30. Over level land, through dense brush.

0.30 Cross road, brs. N. and S.

40.21 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 19 in N. and S 30 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

80.62 The cor. of secs. 19, 24, 25 and 30.

Land, level.

Soil, sandy loam over 2 ft. deep; dry, medium texture; 1st rate.

No timber. Undergrowth, mesquite.

October 4, 1911.

October 5: At 7h.00m. a.m., l.m.t. I set off 31°35'N. on the lat. arc; 4°24'S on the decl. arc, and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30.

Thence I run,

Subdivision of Tp. 21 S. Rg. 26 E.

Chains.	
	N.O 13'E. bet. secs. 19 and 20.
	Over level land, through dense brush.
40.15½	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S19 in W. and S20 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.
80.31	The point for cor. of secs. 17, 18, 19 and 20 as established by proportional measurement.
	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 17, 18, 19 and 20, marked on brass cap
	T21SR26E in N. half;
	S18 in N.W.
	S17 in N.E.
	S20 in S.E. and
	S19 in S.W. quadrant; dig pits 18 x 18 x 12 ins. in each
	sec. 5½ ft. dist., and raise a mound of earth 4 ft. base
	2 ft. high, W. of cor.
	Land, level.
	Soil, sandy loam over 2 ft. deep; dry; medium texture.
	1st rate.
	No timber.
	Undergrowth, mesquite.
	October 5, 1911.

	October 10; S.89 45'E. bet. secs. 17 and 20
	Over level land, through scattering brush
5.21	Leave brush, enter open country.
40.10½	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S17 in N. and S20 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
48.71	Cross White River; 5000 lks. wide, course S.
80.21	The cor. of secs. 16, 17, 20 and 21.
	Land, level.
	Soil, adobe, impregnated with alkali, 4th rate.
	No timber.
	Undergrowth, mesquite.
	October 10, 1911.

	October 5; S.89 36'W. bet. secs. 18 and 19.
	Over level land, through dense brush.
.0445	Cross road, bears N. and S.
40.16	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S18 in N. and S19 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
80.67	The cor. of secs. 13, 18, 19 and 24.
	Land, level.
	Soil, sandy loam over 2 ft. deep; dry; medium texture;
	1st rate.
	No timber.
	Undergrowth, mesquite.

	October 5; At the cor. of secs. 17, 18, 19 and 20 I set off 40° 30' S on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 31° 36' N.
	Thence I run
	N.O 06'E. bet. secs. 17 and 18. ✓
	Over level land, through scattering brush.
44.15	Leave brush, enter open country.
40.15½	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼S18 in W. and S17 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.
80.31	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 7, 8, 17 and 18, marked on

25. Subdivision of Township 21 South, Range 26 East.

Chains.

brass cap,
T 21 S R 26 E in N.half;
S 7 in NW.,
S 8 in NE.,
S 17 in SE., and
S 18 in SW. quadrant; dig pits 18x18x12 ins.in each
sec.5½ ft. dist., and raise a mound of earth 4 ft.
base, 2 ft. high,W.of cor.

Land,level.

Soil, adobe, impregnated with alkali, 4th rate.

No timber. Undergrowth, mesquite.

October 5, 1911.

October 10: S.89°53'E. bet. secs.8 and 17.

Over level land,

19.50, Cross White River Wash 80 lks.wide, course SW.

40.38½ Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
the ground for ¼ sec.cor., marked on brass cap ¼ S 8
in N. and S 17 in S.half; dig pits 18x18x12 ins.E.and
W.of cor. 3 ft. dist., and raise a mound of earth 3½
ft.base, 1½ ft. high, N.of cor.

75.24 Enter dense brush.

80.77 The cor.of secs.8,9,16 and 17.

Land, level.

Soil, adobe impregnated with alkali, 4th rate.

No timber. Undergrowth, mesquite.

October 10,1911.

October 5: S.89°18'W .,bet.secs.7 and 18..

Over level land.

17.00 Enter dense brush.

40:17 Cross road, bears NW. and SE.

40.23 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
the ground for ¼ sec.cor., marked on brass cap, ¼ S 7
in N. and S 18 in S.half; dig pits 18x18x12 ins.E.and
W.of cor. 3 ft. dist., and raise a mound of earth 3½
ft.base, 1½ ft. high,N.of cor.

80.57 The cor.of secs.7,12,13 and 18.

Land,level.

Soil, sandy loam over 2 ft.deep; dry, medium texture;1st
rate, except 17.00 chs., which is adobe impregnated
with alkali, 4th rate.

No timber. Undergrowth, mesquite.

October 5, 1911.

October 6: At 7h. 00m.a.m.,1.m.t., I set off 31°37'N.on
the lat.arc; 4°47'S.on the decl.arc, and determine a
meridian with the solar at the cor.of secs.7,8,17 and
18.

Thence I run,

N.0°05'E., bet. secs. 7 and 8.

Over level land.

19.31 Cross wash,50 lks.wide, course SE.

40.15½ Set an iron post 3 ft. long,1 in. in diam., 26 ins. in
the ground for ¼ sec.cor., marked on brass cap ¼ S 7
in W. and S 8 in E.half; dig pits 18x18x12 ins.N.and
S.of cor. 3 ft dist., and raise a mound of earth 3½
ft.base, 1½ ft. high,W.of cor.

41.91 Cross wash,30 lks.wide, course SE.

48.81 Cross road, bears E.and W.

80.31 The point for cor.of secs.5,6,7 and 8, as established
by proportional measurement.

Set an iron post 3 ft. long, 2 ins. in diam., 24 ins.in
the ground for cor.of secs.5,6,7 and 8,marked on brass
cap,

T 21 S R 26 E in N.half;

S 6 in NW

S 5 in NE.,

S 8 in SE., and

Subdivision of Tp. 21 S. Rg. 26 T.

Chains.

S7 in S.W. quadrant; 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.
Land, level.
Soil, adobe impregnated with alkali, 4th rate.
No timber.
No undergrowth.

October 6, 1911.

October 11; N.89 54'E. bet. secs. 5 and 8.
Over level land.

30.31 Cross road, bears N.E. and S.W.
40.10 $\frac{1}{2}$ 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 $\frac{1}{4}$ S5 in N. and S8 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
43.71 Cross White River wash 25 lks. wide, course S.
52.01 Cross road, bears N.W. and S.E.
80.21 The cor. of secs. 4, 5, 8 and 9.
Land, level
Soil, adobe impregnated with alkali, 4th rate.
No timber
No undergrowth.

October 11, 1911.

October 6; S.89 17'W. bet. secs. 6 and 7.
Over level land.

40.18 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 $\frac{1}{4}$ S6 in N. and S7 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
55.63 Cross road, bears N.W. and S.E.
62.00 Enter dense mesquite.
80.26 The cor. of secs. 1, 6, 7 and 12.
Land, level.
Soil, adobe impregnated with alkali, 4th rate, except 18.00 chs. which is sandy loam over 2 ft. deep; dry; medium texture, 1st rate.
No timber.
Undergrowth, mesquite.

October 6; At the cor. of secs. 5, 6, 7 and 8 I set off
 $4^{\circ} 54' 5''$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 37\frac{1}{2}' N$.

Thence I run

N.0 10'W. bet. secs. 5 and 6.

Over level land.

40.16 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 $\frac{1}{4}$ S6 in W. and S5 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
58.56 Cross road, bears N.W. and S.E.
79.01 The closing cor. of secs. 5 and 6.
Land, level.
Soil, adobe impregnated with alkali, 4th rate.
No timber.
No undergrowth.

October 6, 1911

Alfred N. Plummer

U.S. Transitman.

Chains

General Description.

This township is level and the soil generally is a rich sandy loam very fertile. Along ~~White River~~, which flows through the western half of the township the soil is adobe impregnated with alkali and of no value. The El Paso and Southwestern Ry. runs through the eastern half of the township and McNeil station is located in sec. 14.

On account of the level surface of the township it was possible to see a flag on sec. cors. from the cor. run from and therefore the lines were run direct to the cor. without a random.

Alfred W. Bliss

John A. Hesse
U. S. Transitman

The courses of all lines in the township, as finally, established, were determined by direct sights with a solar transit.

John A. Hesse
U. S. Transitman

LIST OF NAMES.

BOOK 2334

28

A list of the names of the individuals employed by John P. Hesse

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
subdivision lines of P21 S. Rg. 26 E.

showing the respective capacities in which they acted:

A. E. Lyon J. H. Bates, Chairman.

R. L. Bates H. R. Harvey, Chairman.

C. Wolfe, E. E. Mills J. L. Gardner, Moundman.

..... Moundman.

E. Barnes, Axman.

..... Axman.

W. L. Ray A. W. Hendrix, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John P. Hesse & A. H. Olson

....., United States ~~Deputy~~ Surveyor, in surveying all
Transitman
those parts or portions of the subdivision lines of P21 S R. 26 E.

..... 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

A. E. Lyon J. H. Bates, Chairman.

R. L. Bates, H. R. Harvey, Chairman.

E. E. Mills, Moundman.

C. Wolfe, J. L. Gardner, Moundman.

E. Barnes, Axman.

..... Axman.

W. L. Ray A. W. Hendrix, Flagman.

Subscribed and sworn to before me this 11th

day of October, 1911

By E. E. Mills Sept 16, 1911



John P. Hesse
U. S. Transitman

91 (27)
BOOK 283A


FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

Transitman
We, *John F. Hesse and Alfred N. Oliver*, United States Deputy Surveyor, do solemnly swear that, in pursuance of ~~a contract~~ ^{instructions} received from *Frank D. Magall* ^{Transitman} United States Surveyor General for *Arizona*, bearing date of the *2nd* day of *August*, 191*2*, I have well, faithfully, and truly, in my ^{own} proper person~~s~~ 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 subdivision lines of* *Sp. 21 S. Rg. 26 E.*

of the *1/4 and* *Salt River* meridian, in the *Territory* of *Arizona*, which are represented in the foregoing field notes as having been surveyed by ^{me} *and* ^{our} *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.

John F. Hesse
Alfred N. Oliver
United States ~~Deputy Surveyors~~
Transitmen

Subscribed by said *John F. Hesse*, and sworn to before me }
this *18* day of *July*, 191*2* and

by said *Alfred N. Oliver* *Aug 2 1912*
 *Frank D. Magall*
SURVEYOR-GENERAL OF ARIZONA

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz Aug 3, 1912

The foregoing field notes of the survey of *the Subdivision lines*
of S 21 S. R 26 E.

executed by *John F. Hesse and Alfred N. Oliver*
under ~~his~~ contract No. *5*, dated *Aug 25*, 191*0*, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank D. Magall
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.