

NOV 24 1905

4-679. (Book B. 5

1894

BOOK 1894

Resurvey sheet
No. 19107

192

FIELD NOTES

OF THE SURVEY OF THE

Subdivision lines of Tp. 21 S. Rg. 28 E.

and

Resurvey of a portion of the
Fourth Land Par. South

thro.

Range 28 East

1894.

Of the Gila and Salt River Meridian,
Territory of Arizona.

AS SURVEYED BY

John F. Hesse, United States Deputy Surveyor,

Under his Contract No. 135, dated June 16, 1905, 190

Survey commenced August 26, 1905, 190

Survey completed September 5, 1905, 190

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BOOK 1894

NAMES AND DUTIES OF ASSISTANTS.

W. W. Oliver Chairman.

B. M. Hyde Chairman.

Frank Robertson Axman.

H. S. Young Flagman.

INDEX DIAGRAM.

Township 21 S, Range 28 E

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PRELIMINARY OATHS OF ASSISTANTS.

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BOOK 1894

WE, W. W. Oliver and B. M. Hyde
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 **of the subdivision lines of Tp. 21 S. Rg. 28 E.**

W. W. Oliver, Chainman.
B. M. Hyde, Chainman.

Subscribed and sworn to before me this 26th. day
day of August, 1905

John A. Hesse
U. S. Dep. Surveyor



WE, _____ 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 _____

_____, Moundman.
_____, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 190



~~WE~~ I, Frank Robertson ~~do~~
do solemnly swear that ~~we~~ I will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of **The subdivision lines of Tp. 21 S. Rg. 28 E.**

Frank Robertson, Axman.
_____, Axman.

Subscribed and sworn to before me this 26th. }
day of August, 1905.

John A. Hesse
U. S. Dep. Surveyor.



I, H. S. Young, 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 subdivision lines of Tp. 21 S. Rg. 28 E.**

H. S. Young, Flagman.

Subscribed and sworn to before me this 26th. }
day of August, 1905.

John A. Hesse
U. S. Dep. Surveyor.



No notary available without great expense and loss of time

Resurvey of the 4th. Standard Parallel through Rg. 28. E.

chains

August 26, 1905; At 7h. 00m. a. m./l.m.t. I set off 31° 38' N. on the lat. arc; 10° 33 1/2' N. on the dec'l. arc; and determine a meridian with the solar at the Standard cor. of Tps. 20 S. Rgs. 28 and 29 E. which is a stone 20 x 18 x 12ins. marked SC on N.; with 6 grooves on N. E. and W. faces; and the remains of a mound of stone N. of cor. The marks are nearly obliterated and the stone is hardly set in the ground. I remark the same stone with the same marks and set it in a mound of stone; from which
An oak 4 ins. diam., bears N. 42 1/4° E. 61 lks. dist. marked SCT20SR29ES31BT.
An oak 10 ins. diam. bears N. 53° W. 64 lks. dist., marked SCT20SR28ES36BT.
Thence I run

40.00 West on S. bdy. sec. 36. I make diligent search for the 1/4 sec. cor. but am unable to find it

80.00 I make long and careful search for the Standard sec. cor. but without success I therefore continue my line west and at 200 chains I find the remains of the 1/4 sec. cor. on the S. bdy. of sec. 34 a granite stone 10 x 8 x 6 ins. setting on top of the ground with marks still legible and a mound of stone nearly destroyed. I destroy this old cor. and in the same place re-establish it as follows;
Set a granite stone 18 x 8 x 5 ins. 12 ins. in the ground for Standard 1/4 sec. cor. marked S C 1/4 on N. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.

August 26: At this cor. I set off 10° 28' N. on the dec'l arc; and observe the sun on the meridian at noon; the resulting lat. is 31° 38' N.

As there is no agricultural land west of this point I discontinue my resurvey at this point and from this 1/4 sec. cor. I now run

8.70 East on the south boundary of sec. 34.
13.20 Over level land through dense brush.
20.00 Cross wash 25 lks, wide course S.
20.00 Cross road bears N. and S.
20.00 Ascend over rolling foothills, and leave brush.
Set a granite 18 x 12 x 12 ins. 12 ins. in the ground for standard cor. marked SC on N. with 2 grooves on E. and 4 grooves on W. faces; from which
an oak 5 ins. diam. bears N. 86 1/2° E. 136 lks. dist. marked SCT20SR28ES35BT. No other tree available.
And raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.

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

Land, level and mountainous.
Soil, stony; 4th. rate.
No timber.
Undergrowth, cocklebrush.
Mountainous land or land covered with dense undergrowth
40.00 chs.

East on S. bdy. of sec. 35.
Ascending W. slope of mountain.
Difference between measurements of 40.00 chs. by two sets of chainmen is 20 lks.; position of middle point
By 1st. set 39.90 chs.

40.00 By 2nd. set, 40.10 chs.; the mean of which is
Set a granite stone 20 x 6 x 6 ins. in a mound of stone for Standard 1/4 sec. cor. marked SC 1/4 on N. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.

67.00 Descend steep E. slope.
Difference between measurements of 80.00 chs. by two sets of chainmen is 18 lks.; position of middle point
By 1st. set, 80.09 chs.
By 2nd. set, 79.91 chs.; the mean of which is

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Resurvey of the 4th. Standard Parallel through Rg. 28 E.

chains.

80.00

Set a granite stone 20 x 6 x 5 ins. 15 ins. in the ground for Standard cor. of secs. 35 and 36 marked S C on N. with 1 groove on E. and 5 grooves on W. faces; 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.
Mountainous land 80.00 chains.

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East on S. bdy. of sec. 36.

Descending.

- 17.25 Cross fence bears N. E. and S. W.
- 20.50 Cross wash 20 lks. wide course S. W. and ascend.
- 30.00 Top spur bears N. and S. and descend.
- 32.64 From this point the S. W. cor. of W. M. Lutley's house bears N. 38° 15' E.
- 35.00 Cross wash 30 lks. wide course N. W. and ascend.
- 35.34 Cross fence bears N. E. and S. W.
- 37.65 Cross fence bears N. W. and S. E. and descend.
- 38.10 Cross same wash noted last course S. W. and ascend rough S. W. slope.

Difference between measurements of 40.00 chs.; by two sets of chainmen is 10 lks.; position of middle point

By 1st. set, 39.95 chs.

By 2nd. set, 40.05 chs.; the mean of which is

- 40.00 Set a granite stone 18 x 10 x 4 ins. 12 ins. in the ground for standard 1/4 sec. cor. marked SC 1/4 on N. face: from which

an oak 8 ins. diam. bears N. 12 1/4° W. 173 lks. dist. marked SC 1/4 S36BT.

From this cor. the S. W. cor. of W. M. Lutleys house bears N. 29° W.

- 80.00 The Standard cor. of Tps. 20 S. Rgs. 28 and 29 E. previously described.

Land mountainous.

Soil, rocky; 4th. rate.

Timber, a few scattering oaks.

Mountainous land 80.00 chains.

August 26, 1905.

Chains.

Survey commenced August 27, 1905, and executed with a Young and Sons light mountain transit, No. 7532 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, tested on the true meridian at Phoenix, found correct, and was approved by the surveyor general for Arizona.

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 the cor. of secs. 35 and 36 on the S. bdy. of the T^p latitude $31^{\circ} 33' 07''$ N. longitude $109^{\circ} 27' 44''$ W.; I set off $31^{\circ} 33'$ N. on the lat. arc; $10^{\circ} 04 \frac{1}{2}'$ N. on the dec'l. arc; and, at 3h. 00m. p.m. l.m.t., determine a meridian with the solar and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At 9h. 07m. 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.

August 27, 1905.

August 28: at 6h. 15m. a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ} 24.5'$ to the west, and mark the meridian thus determined, by cutting a small groove in the stone set August 27, on which the meridian falls on the mark determined by the solar.

At 7h. 00m. a.m. l.m.t., I set off $31^{\circ} 33'$ N. on the lat. arc; $9^{\circ} 51'$ N. on the dec'l. 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 established 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. 08m. a.m. is N. $12^{\circ} 30'$ W.; the angle thus determined gives the mag. dec'l. $12^{\circ} 30'$ E.

I commence at the cor. of secs. 35 and 36 on the S. bdy of the Tp.

Thence I run

N. $0^{\circ} 01'$ W. bet. secs. 35 and 36.

Ascending rough S. slope of mountain.

8.75 Cross wash 8 lks. wide course S. W.

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

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

37.15 Cross wash 8 lks. wide course S. W. and ascent becomes very steep.

40.00 Set a granite stone 24 x 12 x 8 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

70.50 Top of mountain bears E. and W. and descend steep N. slope.

80.00 Set a limestone 18 x 10 x 7 ins. in a mound of stone for cor. of secs. 25, 26, 35 and 36 marked with 1 notch on S. and E. edges; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Mountainous land, 80.00 chs.

East on a random line bet. secs. 25 and 36.

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chains.

40.00
80.30

1.60
17.60
28.60
40.15

41.25
57.20
80.30

Set temp. $\frac{1}{4}$ sec. cor.
Intersect E. bdy. of Tp. 9 lks. S. of the cor. of secs. 25, 30, 31 and 36,
Thence I run
S. $89^{\circ} 56'$ W. on a true line bet. secs. 25 and 36.
Along rough N. slope of mountain.
Cross wash 5 lks. wide course N. W.
Cross wash 15 lks. wide course N. W.
Cross wash 5 lks. wide course N. W.
Set a sandstone 18 x 6 x 4 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
Cross wash 15 lks. wide course N. E.
~~57.20~~ Cross wash 10 lks. wide course N. E.
The cor. of secs. 25, 26, 35 and 36.

Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Mountainous land 80.30 chains.
August 28: At this cor. I set off $9^{\circ} 46'$ N. on the dec'l arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 34'$ N. ✓

5.50
15.00
25.50
32.35
40.00

52.25
71.50
80.00

N. $0^{\circ} 01'$ W. bet. secs. 25 and 26.
Descending rough N. slope of mountain.
Cross wash 5 lks. wide course N. W.
Cross wash 8 lks. wide course N. W.
Cross wash 4 lks. wide course N. W.
Cross wash 10 lks. wide course N. W.
Set a limestone 24 x 14 x 10 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
Cross wash 12 lks. wide course N. W.
Cross wash 10 lks. wide course N. E.
Set a limestone 24 x 14 x 4 ins. 18 ins. in the ground for cor. of secs. 23, 24, 25 and 26 marked with 2 notches on S. and 1 notch on E. edges; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
Land, mountainous.
Soil, stony; 4th. rate.
No timber.
Mountainous land 80.00 chains.

40.00
80.04

12.55
19.15
27.20
40.02

62.50
69.70
80.04

N. $89^{\circ} 56'$ E. on a random line bet. secs. 24 and 25.
Set temp. $\frac{1}{4}$ sec. cor.
Intersect E. bdy. of Tp. 9 lks. N. of the cor. of secs. 19, 24, 25 and 30.
Thence I run
West on a true line bet. secs. 24 and 25.
Over rolling mountainous land.
Cross wash 5 lks. wide course N. W.
Cross dim road bears N. W. and S. E.
Cross wash 5 lks. wide course N. W.
Set a lime stone 18 x 12 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; dig pits 18 x 18 x 12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high N. of cor.
Cross wash 10 lks. wide course N. W.
Cross wash 15 lks. wide course N. W.
The cor. of secs. 23, 24, 25 and 26.
Land, mountainous.
Soil, rocky and sandy; 2nd. and 4th. rate.
No timber.
Mountainous land 80.04 chains.

August 28, 1905.

August 29: At 7h. 00m. a.m. l.m.t. I set off $31^{\circ} 35'$ N. on the lat. arc; $9^{\circ} 30'$ N. on the dec'l. arc; and deter-

Subdivision of Tp. 21 S. Rg. 28 E.

Chains.	
	mine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26. Thence I run N. 0° 01' W. bet. secs. 23 and 24. Descending over rolling mountains.
23.25	Cross wash 5 lks. wide course N. W.
34.50	Cross road bears E. and W.
39.00	Cross wash 20 lks. wide course W. and ascend.
40.00	Set a granite 18 x 12 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; from which A willow 4 ins. diam. bears N. 69° W. 46 lks. dist. marked $\frac{1}{4}$ S23BT a willow 4 ins. diam. bears S. 40 $\frac{3}{4}$ ° E. 176 lks. dist. marked $\frac{1}{4}$ S24BT.
67.00	Top of ridge bears E. and W. and descend.
79.90	Cross wash 12 lks. wide course E.
80.00	Point for cor. falls in wash so at
80.25	Set a granite stone 20 x 12 x 6 ins. 15 ins. in the ground for witness cor. of secs. 13, 14, 23 and 24, marked with W C on SE. face; with 3 notches on S. and 1 notch on E. edges; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Land mountainous. Soil, sandy and stony; 2nd. and 4th. rate. No timber. Mountainous land 80.00 chains.
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40.00	East on a random line bet. secs. 13 and 24, from true cor. point. Set temp. $\frac{1}{4}$ sec. cor.
80.12	Intersect E. bdy. of Tp. 10 lks. N. of the cor. of secs. 13, 18, 19 and 24. Thence I run N. 89° 56' W. on a true line bet. secs. 13 and 24. Over rolling land through dense mesquite brush.
40.06	Set a granite stone 18 x 8 x 5 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
62.70	Cross wash 10 lks. wide course S. W.
66.00	Cross same wash course N. W.
73.10	Cross same wash course S.W.
80.12	The true point for cor. of secs. 13, 14, 23 and 24. Land, rolling. Soil, sandy; 2nd. rate. No timber. Undergrowth, mesquite and bear brush. Land covered with dense undergrowth 80.12 chs. At this cor. I set off 9° 24 $\frac{1}{2}$ ' N. on the dec'l. arc; and observe the sun on the meridian at noon, the resulting lat. is 31° 36' N.
	<hr/>
	N. 0° 01' W. bet. secs. 13 and 14, from true point for cor. Ascending S. slope.
28.00	Top ridge bears E. and W. and descend
36.70	Cross wash 5 lks. wide course N. W.
40.00	Set a sandstone 28 x 14 x 3 ins. 21 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
44.75	Cross wash 30 lks. wide course S. W.
47.30	Cross wash 8 lks. wide course S. W.
54.00	Cross road bears N. E. and S. W.
67.85	Cross road bears N. E. and S. W.
80.00	Set a sandstone 18 x 8 x 6 ins. 12 ins. in the ground for cor. of secs. 11, 12, 13 and 14 marked with 4 notches on S. and 1 notch on E. edges; 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 mountainous. Soil, sandy and stony; 1st. and 4th. rate. No timber.

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chains.

Mountainous land, 80.00 chs.

- S. $89^{\circ} 56'$ E. on a random line bet. secs. 12 and 13.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.14 Intersect E. bdy. of Tp. 5 lks. N. of the cor. of secs. 7, 12, 13 and 18.
 Thence I run
 N. $89^{\circ} 54'$ W. on a true line bet. secs. 12 and 13.
 Over rolling mountainous land.
 40.07 Set a granite stone 18 x 12 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 47.15 Cross wash 15 lks. wide course S. W.
 62.40 Cross road bears N. E. and S. W.
 80.14 The cor. of secs. 11, 12, 13 and 14.
 Land, mountainous.
 Soil, sandy; 2nd. rate.
 No timber.
 Mountainous land 80.14 chains.

August 29, 1905.

August 30: At 7h. 00m. a.m. l.m.t., I set off $31^{\circ} 36' \frac{1}{2}$ N. on the lat. arc; $9^{\circ} 09'$ N. on the dec'l. arc; and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14.

- Thence I run
 N $0^{\circ} 01'$ W. bet. secs. 11 and 12.
 Over rolling land through dense brush.
 17.72 Cross wash 15 lks. wide course S. W.
 40.00 Set a granite stone 18 x 12 x 4 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
 80.00 Set a granite stone 18 x 12 x 6 ins. 12 ins. in the ground for cor. of secs. 1, 2, 11 and 12 marked with 5 notches on S. and 1 notch on E. edges; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
 Land rolling.
 Soil, sandy and stony; 2nd and 4th. rate.
 No timber.
 Undergrowth, mesquite and bear brush.
 Land covered with dense undergrowth 80.00 chs.

- S. $89^{\circ} 54'$ E. on a random line bet. secs. 1 and 12.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.10 Intersect E. bdy. of Tp. 5 lks. S. of the cor. of secs. 1, 6, 7 and 12.
 Thence I run
 N. $89^{\circ} 56'$ W. on a true line bet. secs. 1 and 12.
 Over rolling land through dense brush.
 11.10 Cross wash 5 lks. wide course S.
 14.10 Cross wash 5 lks. wide course S.
 22.00 Cross wash 8 lks. wide course S.
 40.05 Set a granite stone 18 x 12 x 4 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; from which an oak 10 ins. diam., bears N. 88° E. 163 lks. dist. marked $\frac{1}{4}$ S1BT.
 an oak 4 ins. diam., bears S. $71 \frac{1}{2}^{\circ}$ W. 112 lks. dist. marked $\frac{1}{4}$ S12BT.
 80.10 The cor. of secs. 1, 2, 11 and 12.
 Land, rolling.
 Soil, sandy and stony; 2nd. and 4th. rate.
 No timber.
 Undergrowth, mesquite.
 Land covered with dense undergrowth 80.10 chains.

August 30: At this cor. I set off $9^{\circ} 03'$ N. on the dec'l arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 37' \frac{1}{2}$ N.

chains.

	N. 0° 01' W. bet. secs. 1 and 2. Over rolling mountainous land.
8.25	Over bottom land through dense mesquite brush.
17.00	Cross wash 25 lks. wide course W.
25.60	Leave bottom land and brush and ascend over rolling mountainous land.
39.55	Cross wash 5 lks. wide course S. W. and ascend S. W. slope of mountain.
40.00	Set a granite stone 18 x 10 x 4 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
81.14	Intersect 4 th. Standard Parallel South 7.26 chains. W. of the standard $\frac{1}{4}$ sec. cor. on the S. bdy. of sec. 35, and set a granite stone 18 x 12 x 6 ins. 12 ins. in the ground for closing cor. of secs. 1 and 2, marked CCon S. with 1 groove on E. and 5 grooves on W. faces; and raise a mound of stone 2 ft. base 1 1/2 ft. high S. of cor. Pits impracticable. Land, mountainous and level. Soil rocky and loamy; 4th. and 1st. rate. No timber. Undergrowth, mesquite. Mountainous land or land covered with dense undergrowth 81.14 chs.
	August 30, 1905.
	August 31: At 7h. 00m. a.m. l.m.t., I set off 31° 33' N. on the lat. arc; 8° 47' 1/2' N. on the dec'l. 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. 0° 01' W. bet. secs. 34 and 35. Over rolling mountainous land through dense brush.
11.00	Cross wash 25 lks. wide course S. W.
40.00	Set a granite stone 28 x 16 x 8 ins. 21 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
53.50	Cross wash 10 lks. wide course E.
64.50	Cross wash 8 lks. wide course S. E.
69.40	Cross wash 12 lks. wide course S. E.
76.85	Cross wash 10 lks. wide course S. E.
80.00	Set a granite stone 24 x 12 x 4 ins. 13 ins. in the ground for cor. of secs. 26, 27, 34 and 35 marked with 1 notch on S. and 2 notches on E. edges; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable. Land, mountainous. Soil, stony, 3rd. rate. No timber. Undergrowth, greasewood. Mountainous land or land covered with dense undergrowth 80.00 chains.
	East on a random line bet. secs. 26 and 35.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.12	Intersect N. and S. line 7 lks. S. of the cor. of secs. 25, 26, 35 and 36. Thence I run S. 89° 57' W. on a true line bet. secs. 26 and 35. Ascending along rough N. slope of mountain.
22.50	Top of ridge bears NW. and S. E. and descend.
40.06	Set a granite stone 24 x 8 x 5 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.
60.50	Cross wash 15 lks. wide course S. W. and over rolling mountainous land.
72.70	Cross wash 8 lks. wide course S. W.
73.90	Cross wash 5 lks. wide course S. W.
77.35	Cross road in bottom of wash 20 lks. wide course S.
80.12	The cor. of secs. 26, 27, 34 and 35.

chains.

Land, mountainous.
Soil, rocky 4th. rate.
No timber.
Mountainous land 80.12 chains.
August 31: at this cor. I set off $8^{\circ} 41 \frac{1}{2}'$ N. on the dec'l. arc; and observe the sun on the meridian at noon the resulting lat. is $31^{\circ} 34'$ N.

N. $0^{\circ} 01'$ W. bet. secs. 26 and 27.
Ascending S. slope of mountain.
1.50 Cross wash 8 lks. wide course S. E.
6.00 Cross wash 10 lks. wide course S. E.
13.85 Cross wash 10 lks. wide course S. E.
22.50 Top main ridge of mountains bears E. and W. and descend.
40.00 Set a granite stone 18 x 8 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
42.50 Cross wash 10 lks. wide course N. E.
44.40 Cross road bears N. W. and S. E.
45.40 Cross same wash course N. W. and ascend.
50.50 Cross wash 5 lks. wide course S. W.
65.00 Top ridge bears N. W. and S. E. and descend steep N. slope.
80.00 Set a granite stone 18 x 12 x 10 ins. 12 ins. in the ground for cor. of secs. 22, 23, 26 and 27 marked with 2 notches on S. and E. edges; from which an oak 14 ins. diam. bears S. 39° E. 322 lks. dist. marked T21SR28ES26BT.
an oak 14 ins. diam bears S. 34° W. 179 lks. dist. marked T21SR28ES27BT.
No other trees in limits.
Raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
Land, rough and mountainous.
Soil, rocky; 4th. rate.
Timber, a few scattering oaks.
Mountainous land, 80.00 chains.

N. $89^{\circ} 56'$ E. on a random line bet. secs. 23 and 26.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.02 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 23, 24, 25 and 26.
Thence I run
S. $89^{\circ} 59'$ W. on a true line bet. secs. 23 and 26
Along N. slope of mountains.
2.40 Cross gully 2 lks. wide course N. W.
16.25 Cross drain 8 lks. wide course N. W. heads 3 chs. S.
22.30 Cross wash 5 lks. wide course N. W.
33.25 Cross wash 15 lks. wide course N. W.
40.02 Set a granite stone 28 x 14 x 8 ins. 21 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
51.60 Cross wash 5 lks. wide course N. W.
52.75 Cross wash 8 lks. wide course N. E.
63.65 Cross wash 10 lks. wide course N. W.
71.75 Cross wash 10 lks. wide course N. W.
80.02 The cor. of secs. 22, 23, 26 and 27.
Land mountainous.
Soil, rocky 4th. rate.
Timber a few scattering oaks.
Mountainous land, 80.02 chains.

August, 31, 1905:

September 1: At 7h. 00m. a.m. l.m.t., I set off $31^{\circ} 35'$ N. on the lat. arc; $8^{\circ} 26 \frac{1}{2}'$ N. on the dec'l. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26 and 27
Thence I run
N. $0^{\circ} 01'$ W. bet. secs. 22 and 23.

Chains.

30.25 Descending N. slope of mountain.
 Cross wash 25 lks. wide course W. and over level land through dense brush.
 40.00 Set a granite stone 24 x 12 x 8 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
 44.80 Cross road bears E. and W.
 50.00 Over rolling mountainous land.
 58.00 Top ridge bears E. and W. *descend*
 67.75 Cross road bears N. W. and S. E.
 69.00 Cross wash 10 lks. wide course W.
 75.00 Cross old road bears N. W. and S. E.
 80.00 Set a granite 18 x 8 x 5 ins. 12 ins. in the ground for cor. of secs. 14, 15, 22 and 23 marked with 3 notches on S. and 2 notches on E. edges; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
 Land mountainous and level.
 Soil, sandy and stony; 4th. and 1st. rate.
 No timber.
 Undergrowth bear brush.
 Mountainous land or land covered with dense undergrowth
 80.00 chs.

40.00 N. 89° 59' E. on a random line bet. secs. 14 and 23.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.10 Intersect N. and S. line 5 lks. N. of the cor. of secs. 13, 14, 23 and 24, the true point for cor.
 Thence I run
 S. 89° 56' W. on a true line bet. secs. 14 and 23.
 Over rolling mountainous land, crossing and recrossing to
 28.00 Leave wash 20 lks. wide, course S. W.
 40.05 ~~Set a granite stone 18 x 12 x 8 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.~~
 41.50 Cross wash 8 lks. wide course S. W.
 80.10 The cor. of secs. 14, 15, 22 and 23.
 Land, mountainous.
 Soil, stony; 3rd. rate.
 No timber.
 Mountainous land 80.10 chs.
 September 1: at this cor. I set off 8° 20' N. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is 31° 35 1/2' N.

N. 0° 01' W. bet. secs. 14 and 15.
 Over rolling land through dense brush.
 19.12 Cross road bears N. E. and S. W.
 22.22 Cross road bears E. and W.
 28.00 Over bottom land
 40.00 Set a granite 18 x 10 x 8 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
 74.00 Leave bottom land.
 80.00 Set a granite stone 18 x 7 x 5 ins. 12 ins. in the ground for cor. of secs. 10, 11, 14 and 15 marked with 4 notches on S. and 2 notches on E. edges; 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 and rolling.
 Soil loamy 1st. rate.
 No timber.
 Undergrowth bear brush.
 Land covered with dense undergrowth 80.00 chains.

40.00 N. 89° 56' E. on a random line bet. secs. 11 and 14.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.08 Intersect N. and S. line 7 lks. S. of the cor. of secs.

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Chains.

11, 12, 13 and 14.
 Thence I run
 S. 89° 53' W. on a true line bet. secs. 11 and 14
 Over level land through dense brush.
 14.50 Cross wash 12 lks, wide course S. W.
 20.50 Cross wash 15 lks. wide course S.
 40.04 Set a granite stone 24 x 12 x 6 ins. 18 ins. in the
 ground for 1/4 sec. cor, marked 1/4 on N. face; dig pits
 18 x 18 x 12 ins. E. and W. of stone 3 ft. dist. and
 raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high
 N. of cor.
 Leave bottom land.
 75.00 The cor. of secs. 10, 11, 14 and 15.
 80.08 Land, level.
 Soil, sandy and loamy; 1st. and 2nd. rate.
 No timber.
 Undergrowth mesquite and bear brush.
 Land covered with dense undergrowth 80.08 chains.
 September 1, 1905.

September 2: At 7h. 00m. a.m. l.m.t., I set off 31°
 36 1/2' N. on the lat. arc; 8° 04' N. on the dec'l. arc;
 and determine a meridian with the solar at the cor. of
 secs. 10, 11, 14 and 15.
 Thence I run
 N. 0° 01' W. bet. secs. 10 and 11.
 Over rolling land through dense brush.
 15.95 Cross road bears N. E. and S. W.
 32.80 Cross fence bears E. and W.
 40.00 Set a granite stone 18 x 10 x 8 ins. 12 ins. in the ground
 for 1/4 sec. cor, marked 1/4 on W. face; dig pits 18 x 18
 x 12 ins. N. and S. of stone 3 ft. dist. and raise a
 mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
 From this 1/4 sec. cor. the N. W. cor. of N. Hunsakers
 house bears N. 57° 45' E.
 Windmill bears N. 46° 18' E.
 79.74 Cross fence bears E. and W.
 80.00 Set a limestone 18 x 10 x 5 ins. 12 ins. in the ground
 for cor. of secs. 2, 3, 10 and 11 marked with 5 notches
 on S. and 2 notches on E. edges; and raise a mound of
 stone 2 ft. base 1 1/2 ft. high W. of cor. Pits im-
 practicable.
 Land, rolling.
 Soil, stony 3rd. rate.
 No timber.
 Undergrowth, greasewood and bear brush.
 Land covered with dense undergrowth 80.00 chains.

N. 89° 53' E. on a random line bet. secs. 2 and 11.
 40.00 Set temp. 1/4 sec. cor.
 80.06 Intersect N. and S. line 12 lks. N. of the cor. of secs.
 1, 2, 11 and 12
 Thence I run
 S. 89° 58' W. on a true line bet. secs, 2 and 11.
 Over rocky rolling mountains.
 40.03 Point for 1/4 sec. cor. falls in wash 30 lks. wide course
 S. W. so at
 41.50 Set a granite stone 18 x 10 x 6 ins. 12 ins. in the
 ground for witness 1/4 sec. cor. marked WC 1/4 on N. face;
 and raise a mound of stone 2 ft. base 1 1/2 ft. high
 N. of cor. Pits impracticable.
 Thence over rolling land through dense brush.
 61.50 Cross road bears N. and S.
 67.20 Cross wash 8 lks. wide course S.
 80.06 The cor. of secs. 2, 3, 10 and 11.
 Land mountainous and rolling.
 Soil, sandy and stony; 3rd; and 4th. rate.
 No timber.
 Undergrowth, greasewood.
 Mountainous land and land covered with dense undergrowth
 80.06 chains.
 September 2: At this cor. I set off 7° 58' N. on the
 dec'l.

chains.

dec'l. arc; and observe the sun on the meridian at noon, the resulting lat. is $31^{\circ} 37' 1/2''$ N. ✓

- N. $0^{\circ} 01'$ W. bet. secs. 2 and 3.
Over rolling land through dense brush.
- 3.89 Point whence N. Hunsaker's house bears, S. $35^{\circ} 10'$ E.
Windmill bears S. $25^{\circ} 24'$ E.
- 27.70 Cross wash 5 lks. wide course E. and over rolling mountainous land.
- 39.85 Cross road bears N. W. and S. E.
- 40.00 Set a granite stone $24 \times 12 \times 4$ ins. 18 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- 81.09 Intersect 4th. Standard Parallel South 7.20 chs. W. of the standard $\frac{1}{4}$ sec. cor. on the S. bdy. of sec. 34 and set a granite stone $18 \times 12 \times 4$ ins. 12 ins. in the ground for closing cor. of secs. 2 and 3 marked CC on S. with 2 grooves on E. and 4 grooves on W. faces; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. base high S. of cor. Pits impracticable.
Land, rolling and mountainous.
Soil, sandy and stony; 2nd. and 4th. rate.
No timber.
Undergrowth, catclaw and bear brush.
Mountainous land and land covered with dense undergrowth
81.09 chains.

September 2, 1905.

September 3: At 7h. 00m. a.m. l.m.t., I set off $31^{\circ} 35' N.$ on the lat. arc; $7^{\circ} 42' N.$ on the dec'l. 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

- N. $0^{\circ} 02'$ W. bet. secs. 33 and 34.
Over rolling mountains.
- 1.00 Top ridge bears N. E. and S. W.
- 4.00 Cross wash 12 lks. wide course S. W. and ascend S. slope of mountain.
- 40.00 Set a limestone $18 \times 12 \times 5$ ins. in a mound of stone for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- 53.00 Top of ridge bears N. W. and S. E. and descend.
- 64.00 Cross wash 10 lks. wide course S. E. and ascend.
- 76.00 Top of ridge bears E. and W. and descend.
- 80.00 Set a limestone $18 \times 6 \times 6$ ins. 12 ins. in the ground for cor. of secs. 27, 28, 33 and 34 marked with 1 notch on S. and 3 notches on E. edges; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. high W. of cor. Pits impracticable.
Land mountainous.
Soil, rocky; 4th. rate.
No timber.
Mountainous land 80.00 chains.

- 40.00 East on a random line bet. secs. 27 and 34.
Set temp. $\frac{1}{4}$ sec. cor.
- 80.04 Intersect N. and S. line 5 lks. S. of the cor. of secs. 26, 27, 34 and 35.
Thence I run
S. $89^{\circ} 58'$ W. on a true line bet. secs. 27 and 34.
Over rolling mountains.
- 14.60 Cross wash 8 lks. wide course N. E.
- 26.65 Cross wash 15 lks. wide course N. E.
- 40.02 Point for $\frac{1}{4}$ sec. cor. falls on a granite rock in place $2 \times 2 \times 1 \frac{1}{2}$ ft. above ground, I mark a cross(x) for exact point for $\frac{1}{4}$ sec. cor. and $\frac{1}{4}$ N. of cross; and raise a mound of stone 2 ft. base $1 \frac{1}{2}$ ft. high N. of cor. Pits impracticable.
- 40.60 Cross wash 10 lks. wide course N. E.
- 80.04 The cor. of secs. 27, 28, 33 and 34.

chains

Land, mountainous.
Soil, rocky; 4th. rate
No timber.
Mountainous land 80.04 chains.
At this cor. I set off 7° 36' N. on the dec'l. arc;
and observe the sun on the meridian at noon, the
resulting lat. is 31° 34' N.

N. 0° 02' W. bet. secs. 27 and 28
Over rough mountains.
0.10 Cross wash 10 lks. wide course S. E. and ascend.
6.00 Top of ridge bears E. and W. and descend.
8.25 Bottom and ascend.
13.00 Top ridge bears N. W. and S. E. and descend.
40.00 Set a granite stone 18 x 8 x 6 ins. 12 ins. in the
ground for 1/4 sec. cor. marked 1/4 on W. face; and raise
a mound of stone 2 ft. base 1 1/2 ft. high W. of cor.
Pits impracticable.
46.50 Cross wash 15 lks. wide course N. W. and ascend.
72.00 Top of ridge bears N. W. and S. E. and descend.
80.00 Set a limestone 24 x 8 x 6 ins. in a mound of stone
for cor. of secs. 21, 22, 27 and 28 marked with 2 notches
on S. and 3 notches on E. edges; and raise a mound of
stone 2 ft. base 1 1/2 ft. high W. of cor. Pits
impracticable.
Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Mountainous land 80.00 chains.

N. 89° 58' E. on a random line bet. secs. 22 and 27.
40.00 Set temp. 1/4 sec. cor.
80.16 Intersect N. and S. line 3 lks. N. of the cor. of secs.
22, 23, 26 and 27.
Thence I run
S. 89° 59' W. on a true line bet. secs. 22 and 27.
Along rough N. slope of mountain.
11.60 Cross wash 5 lks. wide course N. W.
14.60 Cross wash 5 lks. wide course N. W.
35.35 Cross wash 12 lks. wide course N. Road in bottom of wash.
40.08 Set a sandstone 24 x 8 x 4 ins. 18 ins. in the ground
for 1/4 sec. cor. marked 1/4 on N. face; and raise a mound
of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits
impracticable.
68.50 Cross wash 8 lks. wide course N. W.
80.16 The cor. of secs. 21, 22, 27 and 28.
Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Mountainous land 80.16 chains.

September 3, 1905.

September 4: At 7h. 00m. a.m. l.m.t., I set off 31° 35'
N. on the lat. arc; 7° 20' N. on the dec'l arc; and
determine a meridian with the solar at the cor. of secs.
21, 22, 27 and 28.
Thence I run
N. 0° 02' W. bet. secs. 21 and 22.
Descending rough N. slope of mountain.
15.35 Cross wash 10 lks. wide course N. W.
24.75 Cross wash 5 lks. wide course N. W.
36.00 Cor. of fence bears 4 chs. W.
37.00 Bottom of mountain and over level land through dense
brush.
40.00 Set a flint stone 18 x 8 x 8 ins. 12 ins. in the ground
for 1/4 sec. cor. marked 1/4 on W. face; from which
a willow 5 ins. diam. bears N. 64 1/4° W. 58 lks. dist.
marked 1/4 S21BT.
a willow 4 ins. diam. bears S. 77 3/4° E. 192 lks. dist.
marked 1/4 S22BT.
45.00 Cross wash 8 lks. wide course S. W. water in holes.

chains.

56.84	56.84 Cross main road bears E. and W.
56.88	Cor of fence bears W. 40 lks. dist.
63.00	Cross wash 12 lks. wide course S. E.
72.40	Cross same wash course S. W.
80.00	Set a flint stone 20 x 10 x 8 ins. 15 ins. in the ground for cor. of secs. 15, 16, 21 and 22 marked 2ls, on N. E. face; 28 E. on S. E. face; with 3 notches on S. and E. edges; and raise a mound of stone 2 ft. base 1 1/2 ft high W. of cor. Pits impracticable. Land, mountainous and level. Soil, sandy and rocky; 2nd. and 4th. rate. No timber. Undergrowth, greasewood. Mountainous and brushy land 80.00 chains.
40.00	N. 89° 59' E. on a random line bet. secs. 15 and 22. Set temp. 1/4 sec. cor.
80.02	Intersect N. and S. line at the cor. of secs. 14, 15 22 and 23. Thence I run S. 89° 59' W. on a true line bet. secs. 15 and 22. Over nearly level land through dense brush.
3.50	Cross road bears N. W. and S. E.
21.00	A point from which N. W. cor. of J. N. Hunsakers house bears S. 24° 25' W. Windmill bears S. 35° 33' W.
23.25	Cross draw 60 lks. wide course S. W.
23.50	Cross road bears N. E. and S. W.
31.04	Cross fence bears N. E. and S. W.
40.01	Set a granite stone 18 x 8 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. E. and W. of stone 3 ft. dist and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.
44.00	Cross wash 15 ks. wide course S. W.
47.37	Cross fence bears N. E. and S. W.
48.40	Cross road bears N. E. and S. W.
52.79	Cross fence bears N. 48° W. and S. 48° E.
52.86	A point whence J. N. Hunsaker's house bears S. 25° 25' E. Windmill bears S. 40° 48' E'.
77.75	Cross wash 8 lks. wide course S.
80.02	The cor. of secs. 15, 16, 21 and 22. Land, level. Soil, loamy and stony; 1st. and 4th. rate. No timber. Undergrowth, bear brush. Land covered with dense undergrowth 80.02 chains. September 4: At this cor. I set off 7° 14' N. on the dec'l. arc, and observe the sun on the meridian at noon the resulting lat. is 31° 35 1/2' N. ✓
8.20	N. 0° 02' W. bet. secs. 15 and 16. Over rolling mountainous land ascending.
10.15	Cross wash 10 lks. wide course S. E.
14.95	Cross same wash course S. W.
17.10	Cross same wash course S. E.
24.31	Cross same wash course S. W.
25.50	Cross fence bears N. W. and S. E.
27.50	Cross same wash course S. E.
40.00	Cross same wash course S. W. Set a granite stone 18 x 12 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
53.60	Cross wash 5 lks. wide course S. W.
63.90	Cross wash 3 lks. wide course S. W.
80.00	Set a granite stone 20 x 12 x 5 ins. 15 ins. in the ground for cor. of secs. 9, 10, 15 and 16 marked with 4 notches on S. and 3 notches on E. edges; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.

chains.

Land, mountainous.
 Soil, rocky, 4th. rate.
 No timber.
 Mountainous land 80.00 chs.

N. 89° 59' E. on a random line bet. secs. 10 and 15.
 40.00 Set temp. 1/4 sec. cor.
 80.08 Intersect N. and S. line 2 lks. S. of the cor. of secs. 10, 11, 14 and 15.
 Thence I run
 S. 89° 58' W. on a true line bet. secs. 10 and 15.
 Over level land through dense brush.
 3.65 Cross road bears N. E. and S. W.
 9.75 Cross main road bears N. E. and S. W.
 40.04 Set a granite stone 18 x 7 x 4 ins. 12 ins. in the ground for, 1/4 sec. cor. marked 1/4 on N. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.
 Thence a scend over rolling mountainous land.
 80.08 The cor. of secs. 9, 10, 15 and 16.
 Land level and mountainous.
 Soil, rocky and sandy; 1st. and 4th. rate.
 No timber.
 Undergrowth, mesquite and bear brush.
 Mountainous land and land covered with dense undergrowth
 80.08 chains.

September 4, 1905.

September 5: At 7h. 00m. a.m. l.m.t. I set off 31° 36' 1/2' N. on the lat. arc; 6° 58' N. on the dec'l. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16.
 Thence I run
 N. 0° 02' W. bet. secs. 9 and 10.
 Along rolling E. slope of Swisshelm mountains.
 10.25 Cross wash 5 lks. wide course S. E.
 10.90 Cross old road bears N. W. and S. E.
 40.00 Set a granite stone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
 40.30 Cross wash 8 lks. wide course E.
 68.25 Cross wash 20 lks. wide course E.
 80.00 Set a granite stone 18 x 8 x 6 ins. 12 ins. in the ground for cor. of secs. 3, 4, 9 and 10 marked with 5 notches on S. and 3 notches on E. edges; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
 Land, Mountainous.
 Soil, stony; 4th. rate..
 No timber.
 Mountainous land 80.00 chains.

N. 89° 58' E. on a random line bet. secs. 3 and 10.
 40.00 Set temp. 1/4 sec. cor.
 80.16 Intersect N. and S. line 3 lks. S. of the cor. of secs. 2, 3, 10 and 11.
 Thence I run
 S. 89° 57' W. on a true line bet. secs. 3 and 10.
 Over rolling land through dense brush
 0.70 Cross fence bears N. W. and S. E.
 15.00 Cross wash 5 lks. wide course S. E.
 40.08 Set a granite stone 18 x 8 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; from which a willow 5 ins. diam. bears S. 35 1/2° E. 272 lks. dist. marked SLOBT.
 No other tree available.
 Raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.
 42.55 Cross wash 12 lks. wide course S. E.
 54.78 Cross fence bears N. W. and S. E.
 75.00 Ascend E. slope of mountains.

chains.

80.16

The cor. of secs. 3, 4, 9 and 10.
 Land, rolling and mountainous.
 Soil, Stony; 3rd. and 4th. rate.
 No timber.
 Undergrowth, gresaeewood.
 Mountainous land and land covered with dense undergrowth
 80.16 chains
 September 5: At this cor. I set off 6° 52' N. on the
 dec'l. arc; and observe the sun on the meridian at noon
 the resulting lat. is 31° 37 1/2' N.
 Note; As there is no agricultural land N. of this
 point I discontinue my line here.

There is no more agricultural land in this Tp. excepting
 the N. half of sec. 21, and as the S. half of this sec.
 is extremely rough and mountainous and of no value for
 agricultural purposes I survey the north half of this
 sec. as follows;

I commence at the cor. of secs. 15, 16 21 and 22, pre-
 viously described.
 Thence I run

1.90

West bet. secs. 16 and 21.

12.64

Ascending over rolling mountains.

32.60

Cross wash 5 lks. wide course S.

40.00

A point whence W. R. Hollands house bears S. 59° 20' W.

Cross wash 5 lks. wide course S.

Set a granite stone 18 x 10 x 4 ins. 12 ins. in the
 ground for 1/4 sec. cor. marked 1/4 on N. face; and raise a
 mound of stone 2 ft. base 1 1/2 ft. high N. of cor.
 Pits impracticable.

46.65

Cross wash 5 lks. wide course S. E.

59.50

Cross wash 8 lks. wide course S. and ascend steep E.
 slope of mountain.

80.00

Set a granite stone 18 x 8 x 5 ins. 12 ins. in the ground
 for cor. of secs. 16, 17 20 and 21 marked with 3 notches
 on S. and 4 notches on E. edges; and raise a mound of
 stone 2 ft. base 1 1/2 ft. high W. of cor. Pits im-
 practicable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Mountainous land 80.00 chains.

9.60

S. 0° 03' E. bet. secs. 20 and 21.

28.50

Along rough E. slope of mountain.

A point whence W. R. Holland's house bears S. 63° 15' E.
 Cross road bears N. E. and S. W. in bottom of creek 25
 lks. wide course S. W., running water, and ascend along
 slope of mountain.

40.00

Set a granite stone 20 x 12 x 6 ins. set in a mound of st
 stone for 1/4 sec. cor. marked 1/4 on W. face; from which
 A walnut 10 ins. diam. bears S. 65° 30' W. 115
 lks. dist. marked 1/4 S20BT.

No other tree available.

Raise a mound of stone 2 ft. base 1 1/2 ft. high W. of
 cor. Pits impracticable.

Land mountainous.

Soil, rocky 4th. rate.

No timber.

Mountainous land 40.00 chains.

September 5, 1905.

As this includes all the land of value for agricultural
 purposes in the Tp. I discontinue the survey of the Tp.

This township is rough and mountainous in the southern and
 western parts and rolling in the central parts.
 There is no timber in the township. A creek, unnamed
 runs through a narrow gorge in the S.W. part of the
 township.

Chains.

There is one settler each in secs. 11, 22, and 21.

John D. Kesse
U. S. Deputy Surveyor.

BOOK 1894

W

LIST OF NAMES.

BOOK 1894

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

....., 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 Tp. 21 S. Rg. 28 E. & resurvey of portion of the Fourth Stand. Par. South thro. Range 28, E. showing the respective capacities in which they acted

W. W. Oliver Chainman.

B. M. Hyde Chainman.

..... Moundman.

..... Moundman.

Frank Robertson Axman.

..... Axman.

H. S. Young Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John F. Hesse

....., United States Deputy Surveyor, in surveying all those parts or portions of the the subdivisional lines of Tp. 21 S. Rg. 28 E. & resurvey of portion of the Fourth Stand. Par. South thro. Range 28, 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

W. W. Oliver ✓ Chainman.

B. M. Hyde ✓ Chainman.

..... Moundman.

..... Moundman.

Frank Robertson ✓ Axman.

..... Axman.

H. S. Young ✓ Flagman.

Subscribed and sworn to before me this 5th. day of September, 1905.



John F. Hesse

U. S. Dep. Surveyor.

6-151
No notary available without great expense and loss of time

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BOOK 1894

I, John F. Hesse, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 16th. day of June, 1905, 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 subdivision lines of tp. 21s. Rg. 28 E. & resurvey of portion of the Fourth Stand. Par. South thro. Range 28, E.

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.

John F. Hesse
United States Deputy Surveyor.

Subscribed by said John F. Hesse, and sworn to before me }
this 24th day of November, 1905

Frank S. Ingalls
U.S. Surveyor General for Arizona



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ar. Sept. 22nd, 1906

The foregoing field notes of the survey of the subdivisions of T. 21 S. R. 28 E. of the Gila and Salt River Base and Meridian, in the Territory of Arizona & resurvey of portion of the Fourth Stand Par. South thro. Range 28, East

executed by John F. Hesse, U.S. deputy surveyor under his contract No. 135, dated June 16th, 1905, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls
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.