

Accepted May 31 1912

FIELD NOTES

2257

2257

OF THE SURVEY OF THE

South and East Boundaries of T7N. R8W.

South and West Boundaries of T7N. R9W.

2257

2257

Of the *Gila and Salt River* Meridian,

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

EXECUTED BY

John J. Hesse

In the capacity of U. S. ^{Transient} Surveyor, under instructions dated *August 25*, 1910.,

issued by the United States Surveyor General to govern surveys included in Group No. *4*, which were approved by the Commissioner of the General Land

Office, *September 9*, 1910., pursuant to authority contained in the Act of

Congress dated *June 25*, 1910. *and March 4*, 1911.

Survey commenced *February 4*, 1911.

Survey completed *20*, 1911.

2257

2257

1A / / /

BOOK 2257

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BOOK 2257

INDEX DIAGRAM.

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PRELIMINARY OATHS OF ASSISTANTS.

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BOOK 2257
WE,

A. E. Lyon

and

J. N. Bates

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 S. and E. Boundaries of Tp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Tp. 7 N. Rg. 9 W.

A. E. Lyon

Chainman.

J. N. Bates

Chainman.

Subscribed and sworn to before me this *2nd* day of *February*, 1911



John P. Hesse

U. S. Transitman

WE, *J. R. L. Bates*

and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

the S. and E. Boundaries of Tp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Tp. 7 N. Rg. 9 W.

R. L. Bates

Moundman.

Moundman.

Subscribed and sworn to before me this *2nd* day of *February*, 1911



John P. Hesse

U. S. Transitman

WE, *J. Ed. Brockway*

and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

the S. and E. Boundaries of Tp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Tp. 7 N. Rg. 9 W.

Ed. Brockway

Axman.

Axman.

Subscribed and sworn to before me this *2nd* day of *February*, 1911



John P. Hesse

U. S. Transitman

I, *L. C. Harragan*

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 S. and E. Boundaries of Tp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Tp. 7 N. Rg. 9 W.

L. C. Harragan

Flagman.

Subscribed and sworn to before me this *2nd* day of *February*, 1911



John P. Hesse

U. S. Transitman

South boundary of Tp. 7 N. Rg. 9 W.

Chains.

Survey commenced February 8, 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 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 my camp which is located at the $\frac{1}{4}$ sec. cor. bet. secs. 22 and 23, Tp. 7 N. Rg. 9 W.; latitude $33^{\circ} 56' 04''$ N. longitude $113^{\circ} 10' 29''$ W.; I set off $33^{\circ} 56'$ N. on the lat. arc; $15^{\circ} 03\frac{1}{2}'$ S. on the decl. arc; and, at 4h. 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 10h. 12m. p.m. by my watch, which has correct l.m.t. I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

February 8, 1911

February 9: At 7h. 00m. a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ} 24'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set February 8, on which the meridian falls 0.2 ins. west of the mark determined by the solar.

At 8h. 00m. a.m., l.m.t., I set off $33^{\circ} 56'$ N. on the lat. arc; $14^{\circ} 50\frac{1}{2}'$ S. on the decl arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about $0' 11''$ east and west of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8h. 15m. a.m., is N. $14^{\circ} 30'$ W.; the angle thus determined gives the mag. decl. $14^{\circ} 30'$ E.

I begin at the cor. of Tps. 6 and 7 N. Rgs. 8 and 9 W. previously described in Book "A."

Thence I run

West bet. secs. 1 and 36

Over level land, through dense brush.

40.00

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

Ts36 on N. and

S1 on S. half;

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

80.00

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked on brass cap

T7N in N., T6N in S. and R9W in W. half;

S35 in N. W.

S36 in N. E.

S1 in S. E. and

S2 in S. W. quadrants; dig pits 18 x 18 x 12 ins. in

South boundary of Tp. 7 N. Rg. 9 W.

Chains.

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

West bet. secs. 2 and 35

Over level land through dense brush.

32.50 Hole in mountain known as Eagles Eye bears S. 18° W.

32.73 Road bears S. E. and N. W.

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S35 on N. and S2 on S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.

46.07 Eagles Eye bears S. $0^{\circ} 45'$ W.

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 2, 3, 34 and 35, marked on brass cap T7N. in N. T. 6 N. in S. R9W in W. half; S34 in N. W.

S35 in N. E.

S 2 in S. E. and

S3 in S. W. quadrants; 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, 1st. rate; rich sandy loam over 2 ft. deep, dry; medium texture; some grass.

No timber.

Undergrowth, greasewood, mesquite and catclaw.

West bet. secs. 3 and 34

Over level land, through dense brush.

26.31 Road bears N. W. and S. E.

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S34 in N. and S3 in S. half; 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.

60.40 Cross wash 6 lks. wide course N.

64.00 Cross wash 6 lks. wide course N.

73.00 Cross wash 25 lks. wide course N.

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 3, 4, 33 and 34, marked on brass cap

T7N in N., T6N. in S. and R9W in W. half;

S33 in N. W.

S34 in N. E.

S3 in S. E. and

S4 in S. W. quadrants; from which

A mesquite 5 ins. diam., bears N. 19° W. 28 lks. dist., marked T7NR9WS33BT

A paloverde 4 ins. diam., bears S 31° W. 177 lks. dist., marked T6NR9WS4BT.

No other bearings available. Dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.

Land, level.

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

No timber.

Undergrowth, greasewood, mesquite and cactus.

February 9: At this cor. I set off $14^{\circ} 49'$ S. on the

South boundary of Tp. 7 N. Rg. 9 W.

Chains.	decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 33° 54' N.

	West bet. secs. 4 and 33
	Over level land through dense brush
1.00	Ascend steep rocky N. E. slope of mountain ridge
10.00	Ridge bears N. W. and S. E. about 100 ft. high, and descend steep rocky S. W. slope.
18.60	Cross wash 30 lks. wide course N. and over level land.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S33 in N. and S4 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, N. of cor.
40.95	Cross wash 30 lks. wide course N.
60.00	Cross wash 25 lks. wide course N.
65.73	Cross wash 25 lks. wide course N.
74.12	Cross wash 6 lks. wide course N.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 4, 5, 32 and 33, marked on brass cap T7N in N., T6N in S., and R9W in W. half; S32 in N. W. S33 in N. E. S4 in S. E. and S5 in S. W. quadrants; 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, 1st. rate; rich sandy loam, mixed with gravel; over 2 ft. deep; medium texture, dry; excepting 17.60 chs. over mountain ridge which is rocky and worthless. No timber. Undergrowth, greasewood, mesquite, paloverde, catclaw and cactus.

	West bet. secs. 5 and 32
	Over rolling land through dense brush.
10.43	Cross wash 8 lks. wide course N.
17.00	Cross wash 8 lks. wide course N.
35.20	Cross wash 15 lks. wide course N.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S32 in N. and S5 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, N. of cor.
56.80	Cross wash 12 lks. wide course N.
60.00	Cross wash 20 lks. wide course N.
69.16	Cross road bears N. W. and S. E.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 5, 6, 31 and 32, marked on brass cap T7N in N., T6N in S. and R9W in W. half; S31 in N. W. S32 in N. E. S5 in S. E. and S6 in S. W. quadrants; 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, rolling. Soil 3rd. rate; Sandy loam, mixed with gravel and rocks; dry; coarse texture; some grass. No timber. Undergrowth, greasewood, mesquite, paloverde, and cactus.

South boundary of Tp. 7 N. Rg. 9 W.

Chains.	West bet. secs. 6 and 31.
	Over rolling land, through dense brush
6.90	Cross wash 15 lks. wide course N.
18.90	Cross wash 12 lks. wide course N. and over land cut by deep washes
20.88	Cross wash 10 lks. wide course N.
28.40	Cross wash 6 lks. wide course N.
32.70	Cross wash 6 lks. wide course N.
39.45	Cross wash 4 lks. wide course N.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S31 in N. and S6 in S. half; from which
	A paloverde 4 ins. diam., bears S. $68\frac{1}{2}^{\circ}$ W. 143 lks. dist., marked $\frac{1}{4}$ S6BT
	A paloverde 5 ins. diam., bears N. 0° 15' W. 203 lks. dist., marked $\frac{1}{4}$ S31BT.
43.45	Cross wash 25 lks. wide course N.
57.65	Cross wash 5 lks. wide course N.
65.80	Cross wash 12 lks. wide course N.
72.00	Ascend steep rocky N. E. slope of ridge.
78.00	Ridge and descend steep rocky S. W. slope.
79.03	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 6 and 7 N. Rgs. 9 and 10 W. marked on brass cap
	T7N in N.,
	T6N in S.,
	R9W in E. and
	R10W in W. half; and
	S36 in N. W.
	S31 in N. E.
	S6 in S. E. and
	S1 in S. W. quadrants; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.
	Land, rolling, broken and mountainous.
	Soil, 3rd. and 4th. rate. E: 72.00 chs. nearly level land, cut by deep washes, soil sandy loam, mixed with rocks and gravel, dry; some grass: W. 7.03 chs. rough mountain ridge, rocks, no grass.
	No timber.
	Undergrowth, Paloverde, greasewood, mesquite and cactus.

February 9, 1911.

West boundary of Tp. 7 N. Rg. 9 W.

Chains.	February 14.
	North bet. secs. 31 and 36 Ascending along steep rocky S. W. slope through dense brush
2.00	Ridge bears N. W. and S. E. and ascend steep rocky S. slope of mountain.
13.50	Top mountain 250 ft. high, and descend steep rocky N. slope.
29.00	Over nearly level land.
31.00	Cross road bears N. W. and S. E.
31.58	Cross road bears E. and W.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S36 in W. and S31 in E. half of brass cap; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
60.00	Cross wash 10 lks. wide course N. W.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap T7N in N. half; R10WS25 in N. W. R9WS30 in N. E. S31 in S. E. and S36 in S. W. quadrants; 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 and mountainous. Soil, 1st. and 4th. rate; S. 30.00 chs. rough mountain land; soil, rocks; worthless; no grass. N. 50.00 chs. level land; soil, rich sandy loam, over 2 ft. deep; dry; medium texture; some grass. No timber. Undergrowth; greasewood, paloverde, catclaw and cactus.
	North bet. secs. 25 and 30 Over level land through dense brush
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S25 in W. and S30 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
72.08	Cross road bears E. and W.
76.42	Cross Arizona and California R.R. bears N. 75° E. and S. 75° W.
77.05	Cross telegraph line bears N. 75° E. and S. 75° W.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap T7N in N. half; R10WS24 in N. W. R9WS19 in N. E. S30 in S. E. and S25 in S. W. quadrants; 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, 1st. rate; rich sandy loam, mixed with adobe, over 2 ft. deep; dry, medium texture; some grass. No timber. Undergrowth, greasewood, mesquite and cactus.

February 14, 1911.

February 17: At 8h. 00m. a.m., l.m.t., I set off 33° 55 $\frac{1}{2}$ ' N. on the lat. arc; 12° 11' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs.

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West boundary of Tp. 7 N. Rg. 9 W.

Chains.	19, 24, 25 and 30
	Thence I run North bet. secs. 19 and 24 Over level land through dense brush.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S24 in W. and S19 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap T7N in N. half; R10WS13 in N. W. R9WS18 in N. E. S19 in S. E. and S24 in S. W. quadrants; dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 5 ft. base $2\frac{1}{2}$ ft. high, W. of cor. Land, level. Soil, 1st. rate; rich sandy loam, mixed with adobe, over 2 ft. deep, medium texture, dry; some grass. No timber. Undergrowth, greasewood and mesquite.
	North bet. secs. 13 and 18 Over level land through dense brush
10.05	Cross road bears N. E. and S. W.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S13 in W. and S18 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap T7N in N. half; R10WS12 in N. W. R9WS7 in N. E. S18 in S. E. and S13 in S. W. quadrants; 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, 1st. rate; rich sandy loam, mixed with adobe, over 2 ft. deep, medium texture, dry; some grass. No timber. Undergrowth, greasewood and chico.
	North bet. secs. 7 and 12 Over level land, through scattering brush.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S12 in W. and S7 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
63.75	Cross wash 20 lks. wide course S. W.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap T7N in N. half; R10WS1 in N. W. R9WS6 in N. E. S7 in S. E. and S12 in S. W. quadrants; 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.

West boundary of Tp. 7 N. Rg. 9 W.

Chains.

Soil, 1st. rate; rich sandy loam, mixed with adobe, over 2 ft. deep, medium texture, dry; good grass.
No timber.
Undergrowth, greasewood and chico.

North bet. secs. 1 and 6

Over level land through scattering brush.
40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S1 in W. and S6 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 7 and 8 N. Rgs. 9 and 10 W. Marked on brass cap
T8N in N.
R9W in E.
T7N in S. and
R10W in W. half; and
S36 in N. W.
S31 in N. E.
S6 in S. E. and
S1 in S. W. quadrants; dig pits 24 x 24 x 12 ins. on each line, N. E. and W. 4 ft., and S. of post 8 ft. dist.; and raise a mound of earth 5 ft. base $2\frac{1}{2}$ ft. high, S. of cor.
Land, level.
Soil, 1st. rate, rich sandy loam mixed with adobe, over 2 ft. deep, medium texture, dry; good grass.
No timber.
Undergrowth, greasewood and chico.
February 17: At this cor. I set off $12^{\circ}09'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $33^{\circ}59'$ N.

South boundary of Tp. 7 N. Rg. 8 W.

Chains.

February 17; At 2h. 00m. p.m., l.m.t., I set off 33° 54' N. on the lat. arc; 12° 07' S. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 6 and 7 N. Rgs. 8 and 9 W.

Thence I run

East bet. secs. 6 and 31

Over level land through dense brush.

39.03

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 on N. and S6 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, N. of cor.

79.03

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 5, 6, 31 and 32, marked on brass cap

T7N in N.; T6N in S.; and R8W in W. half; and

S31 in N. W.

S32 in N. E.

S5 in S. E. and

S6 in S. W. quadrants; and 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, 1st. rate; rich sandy loam, mixed with adobe, over 2 ft. deep; medium texture; dry; good grass.

No timber.

Undergrowth, greasewood and mesquite.

East bet. secs. 5 and 32.

Over level land through dense brush

40.00

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S32 in N. and S5 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, N. of cor.

80.00

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 4, 5, 32 and 33, marked on brass cap

T7N in N.; T6N in S.; and R8W in W. half; and

S32 in N. W.

S33 in N. E.

S4 in S. E. and

S5 in S. W. quadrants; 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, 1st. rate; rich sandy loam, over 2 ft. deep; dry; medium texture; some grass.

No timber.

Undergrowth, greasewood and mesquite.

February 17, 1911.

February 18: At 8h. 00m. a.m., l.m.t., I set off 33° 54' N. on the lat. arc; 11° 50' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33

Thence I run

East bet. secs. 4 and 33

Over level land through dense brush

40.00

Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S33 on N. and S4 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, W. of cor.

80.00

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 3, 4, 33 and 34, marked on

South boundary of Tp. 7 N. Rg. 8 W.

Chains.

brass cap
 T7N in N.; T6N in S.; and R8W in W. half; and
 S33 in N. W.
 S34 in N. E.
 S3 in S. E. and
 S4 in S. W. quadrants; 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, 1st. rate; rich sandy loam, over 2 ft. deep; dry;
 medium texture, some grass.
 No timber.
 Undergrowth, mesquite and greasewood.

40.00 East bet. secs. 3 and 34
 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 †S34 in N.
 and S3 in S. half; dig pits 18 x 18 x 12 ins. E. and W.
 of post 3 ft. dist., and raise a mound of earth 3½ ft.
 base 1½ ft. high, N. of cor.
 80.00 Set an iron post 3 ft., long, 3 ins. diam., 24 ins. in
 the ground for cor. of secs. 2, 3, 34 and 35, marked on
 brass cap
 T7N in N.; T6N in S.; and R8W in W. half;
 S34 in N. W.
 S35 in N. E.
 S2 in S. E. and
 S3 in S. W. quadrants; 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, 1st. rate; rich sandy loam, over 2 ft. deep; dry;
 medium texture; some grass.
 No timber.
 Undergrowth, mesquite and greasewood.

40.00 East bet. secs. 2 and 35
 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, †S35 in N.
 and S2 in S. half; dig pits 18 x 18 x 12 ins. E. and W.
 of post 3 ft. dist., and raise a mound of earth 3½ ft.
 base 1½ ft. high, N. of cor.
 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in
 the ground for cor. of secs. 1, 2, 35 and 36, marked on
 brass cap
 T7N in N.; T6N in S.; and R8W in W. half;
 S35 in N. W.
 S36 in N. E.
 S1 in S. E. and
 S2 in S. W. quadrants; 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, 1st. rate; rich sandy loam, over 2 ft. deep; dry;
 medium texture; some grass.
 No timber.
 Undergrowth, greasewood and mesquite.

40.00 East bet. secs. 1 and 36
 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 †S36 in N.
 and S1 in S. half; dig pits 18 x 18 x 12 ins. E. and W.

South boundary of Tp. 7 N. Rg. 8 W.

Chains.

68.70

80.00

of post 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 road bears N. E. and S. W.

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 6 and 7 N. Rgs. 7 and 8 W. marked on brass cap

T7N in N.

R7W in E.

T6N in S. and

R8W in W. half; and

S36 in N. W.

S31 in N. E.

S6 in S. E. and

S1 in S. W. quadrants; dig pits 24 x 24 x 12 ins. on each line, N. E. and W. of post 4 ft. dist., and S. of post 8 ft. dist.; and raise a mound of earth 5 ft. base $2\frac{1}{2}$ ft. high, S. of cor.

Land, level.

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

No timber.

Undergrowth, greasewood and mesquite.

February 18: At this cor. I set off $11^{\circ} 48'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $33^{\circ} 54'$ N.

East boundary of Tp. 7 N. Rg. 8 W.

Chains.	From cor. of Tps. 6 and 7 N., Rgs. 7 and 8 W., 1 run
	North bet. secs. 31 and 36
6.84	Over level land through dense brush
29.32	Cross road bears N. E. and S. W.
40.00	Cross road bears E. and W.
	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S36 on W. and S31 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap
	T7N in N. half; and
	R8WS25 in N. W.
	R7WS30 in N. E.
	S31 in S. E. and
	S36 in S. W. quadrants; 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, 1st. rate; rich sandy loam, over 2 ft. deep; dry; medium texture; some grass;
	No timber.
	Undergrowth, greasewood and mesquite.
	North bet. secs. 25 and 30
40.00	Over level land through dense brush.
	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S25 in W. and S30 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap
	T7N in N. half;
	R8WS24 in N. W.
	R7WS19 in N. E.
	S30 in S. E. and
	S25 in S. W. quadrants; from which
	A paloverde 5 ins. diam., bears N. $56\frac{1}{2}^{\circ}$ E. 65 lks. dist., marked T7NR7WS19BT.
	No other bearings available. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land, level.
	Soil, 1st. and 3rd. rate; S. 78.00 chs. rich sandy loam, over 2 ft. deep; dry; medium texture; some grass; N. 2.00 chs. sandy mixed with rocks; no grass.
	No timber.
	Undergrowth, greasewood, mesquite and paloverde.
	North bet. secs. 19 and 24
12.50	Over rolling hilly land, through dense brush.
16.70	Cross wash 6 lks. wide course N. W.
40.00	Cross wash 6 lks. wide course N. W.
	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S24 in W. and S19 in E. quadrants; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft base $1\frac{1}{2}$ ft. high W. of cor.
80.00	Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap
	T7N in N. half;
	R8WS13 in N. W.
	R7WS18 in N. E.
	S19 in S. E. and

East boundary of Tp. 7 N. Rg. 8 W.

Chains.

S24 in S. W. quadrants; 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. Pits impracticable.

Land, level and hilly;

Soil; 1st. and 3rd. rate; S. 60.00 chs. sandy mixed with rocks; N. 20.00 chs. rich sandy loam, over 2 ft. deep, dry; medium texture; some grass.

No timber.

Undergrowth, greasewood, mesquite and paloverde.

February 18, 1911.

February 20: At 8h. com. a.m., 1.m.t., I set off $33^{\circ} 56\frac{1}{2}'$ N. on the lat. arc; $11^{\circ} 08'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 13, 18, 19 and 24

Thence I run

North bet. secs. 13 and 18

Over level land through dense brush

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S13 on W. and S18 on E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.

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

T7N in N. half;

R8WS12 in N. W.

R7WS7 in N. E.

S18 in S. E. and

S13 in S. W. quadrants; 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, 1st. rate; rich sandy loam, over 2 ft. deep; dry; medium texture; some grass.

No timber.

Undergrowth, greasewood and mesquite.

North bet. secs. 7 and 12

Over level land through dense brush

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S12 on W. and S7 on E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.

74.45 Cross road bears E. and W.

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

T7N in N. half;

R8WS1 in N. W.

R7WS6 in N. E.

S7 in S. E. and

S12 in S. W. quadrants; 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, 1st. rate; rich sandy loam, mixed with adobe; over 2 ft. deep; dry; medium texture; some grass.

No timber.

Undergrowth, greasewood and mesquite.

East boundary of Tp. 7 N. Rg. 8 W.

Chains.

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

6.56 Cross road bears E. and W.
8.72 Cross Arizona and California R.R. bears N. 75° E. and S. 75° W.
9.35 Cross telegraph line bears N. 75° E. and S. 75° W.
40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S1 on W. and S6 on E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high N. of cor.

61.70 Cross old road bears E. and W.
80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of Tps. 7 and 8 N. Rgs. 7 and 8 W. marked on brass cap
T8N in N.
R7W in E.
T7N in S. and
R8W in W. half; and
S36 in N. W.
S31 in N. E.
S6 in S. E. and
S1 in S. W. quadrants; dig pits 24 x 24 x 12 ins. on each line, N. E. and W. 4 ft. and S. of post 8 ft. dist. and raise a mound of earth 5 ft. base 2 $\frac{1}{2}$ ft. high, S. of cor.
Land, level.
Soil, 1st. rate; rich sandy loam, mixed with adobe, over 2 ft. deep; dry; medium texture; some grass.
No timber.
Undergrowth, greasewood and mesquite.
February 20: At this cor. I set off 11° 05' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 33° 59' N.

General Description.

The boundaries of Tps. 7 N., Rs. 8 & 9 W. run over level land, covered with dense brush. There is no water or timber, or indications of mineral. The soil is generally sandy loam, capable of producing abundant crops with irrigation.

John F. Hesse
U. S. Transitman

LIST OF NAMES.

BOOK 2257

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 S. and E. Boundaries of Tp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Tp. 7 N. Rg. 9 W.*

showing the respective capacities in which they acted:

A. E. Lyon

, Chainman.

J. H. Bates

, Chainman.

R. L. Bates

, Moundman.

, Moundman.

Ed. Brockway

, Axman.

, Axman.

L. C. Flanagan

, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

John P. Hesse

Transitman

, United States Deputy Surveyor, in surveying all

those parts or portions of the *S. and E. Boundaries of Tp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Tp. 7 N. Rg. 9 W.*

of the *Gila and*

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

General for *Arizona*

A. E. Lyon

, Chainman.

J. H. Bates

, Chainman.

R. L. Bates

, Moundman.

, Moundman.

Ed. Brockway

, Axman.

, Axman.

L. C. Flanagan

, Flagman.

Subscribed and sworn to before me this *1st*

day of *March*, 1911

John P. Hesse

U. S. Transitman



FINAL OATH OF UNITED STATES ~~DEPUTY~~ SURVEYOR.

BOOK 2257

I, John P. Hesse, ^{Transitman} United States ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of a ~~contract~~ ^{instructions} received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 15th day of August, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the S. and E. Boundaries of Twp. 7 N. Rg. 8 W. and the S. and W. Boundaries of Twp. 7 N. Rg. 9 W.

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

John P. Hesse
United States ~~Deputy~~ Surveyor.
^{Transitman}

Subscribed by said John P. Hesse, and sworn to before me }
this 7th day of January, 1912

Frank S. Ingalls
N.D. Surveyor General



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Phoenix, Ariz. January 4th, 1912

The foregoing field notes of the survey of the South and East Boundaries of Twp. 7 N. Rg. 8 W. and the South and West Boundaries of Twp. 7 N. Rg. 9 W. G. and P. R. Meridian, Arizona

executed by John P. Hesse ^{N.D. Transitman}
under his ~~contract~~ No. 4, dated August 25, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General.

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

United States Surveyor General.