

BOOK "N"

BOOK 2640

FIELD NOTES

OF THE SURVEY OF THE

*NORTH, EAST and WEST BOUNDARIES**AND COMPLETION OF**SOUTH BOUNDARY OF**TOWNSHIP No 10 NORTH, RANGE No 14 WEST**Of the Gila and Salt River Base and Meridian,**In the State of ARIZONA*

EXECUTED BY

SIDNEY E. BLOUNT

In the capacity of U. S. Surveyor, under instructions dated May 29, 1912,
issued by the United States Surveyor General to govern surveys included in
Group No. 20, which were approved by the Commissioner of the General Land
Office, June 20, 1912, pursuant to authority contained in the Act of
Congress dated June 23, 1913.

*Survey commenced July 25, 1913**Survey completed August 12, 1913*

1A

BOOK 2640

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Completion of S. bdry. of T. 10 N., R. 14 W.

- Chains. Survey commenced July 25, 1913, and executed with a Young and Sons light mountain transit No. 10 with a Smith Solar attachment. The horizontal limb being 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. I examine the adjustments of the transit and find them to be correct, and from recent tests of the solar apparatus by comparing its indications, resulting from solar observations made during a.m., and p.m. hours, with a meridian established by observation on Polaris, I know that the instrument is in satisfactory adjustment.
- All measurements were made with a 5.00 ch. steel tape, with clinometer for determining the slope angles.
- I begin at the cor. of secs. 2, 3, 34, and 35 on S. bdry. of Tp. which is an iron post, 3 ins. in diam., 12 ins. above ground, marked and witnessed as described by the surveyor general., latitude $34^{\circ}09'34''$ N., longitude $113^{\circ}41'47''$ W.
- The magnetic bearing of the meridian at 8^h 08^m a.m. is $N. 14^{\circ}32' W.$; the angle thus determined gives the mag. decl. $14^{\circ}32' E.$
- July 25, 1913. At 9^h 08^m a.m., l.m.t. I set off $34^{\circ}09\frac{1}{2}'$ N. on the lat. arc, $19^{\circ}43'$ N. on the decl. arc and determine a meridian with the solar at the above described cor.
- Thence I run,
West, bet. secs. 3 and 34, . . .
- Descend NW. slope, over broken, stony, hilly land, through scattering palo verde timber and greasewood brush undergrowth, 3 to 5 ft. high.
- 1.00 Dry rocky ravine, 10 lks. wide, course NE., asc. ridge.
4.10 Top of ridge, bears NE. and SW., desc.
18.90 Dry rocky ravine, 20 lks. wide, 15 ft. deep, course NE., ascend stony ridge.
39.25 Top of ridge, bears NE. and SW., desc.
40.00 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 $\frac{3}{4}$ S 34 in N. half and S 3 in S. half. No trees suitable for bearing trees available. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor., pits impracticable.
- 41.90 Dry ravine, 15 lks. wide, course NE., ascend ridge.
59.80 Top of ridge, bears NE. and SW., desc.
61.30 Dry ravine, 10 lks. wide, course NE., ascend ridge.
70.80 Top of ridge, bears NE. and SW., desc.
79.90 Dry ravine, 15 lks. wide, course NW., asc.
80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34., marked on brass cap T 10 N., in N.T 9 N., in S. and R 14 W. in W. half, S 33 in NW., S 34 in NE., S 3 in SE. and S 4 in SW. quadrant.
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. . . No trees suitable for bearing trees available. Pits impracticable.
- Land, broken and hilly; ridges, light, poor, gravelly loam, 2 to 6 ins. deep, on decomposing, limestone shales. very little vegetation other than greasewood brush. Timber, scattering palo verde.
- Note: at this cor. I set off $19^{\circ}41'$ N. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of $34^{\circ}10'$ N. on the lat. arc, which is a little higher than the calculated latitude of this place.
-
- West, bet. secs. 4 and 33,
Over broken, stony, hilly land, through scattering palo verde timber and greasewood brush undergrowth, 3 to 5 ft. high.
- 5.40 Dry ravine, 30 lks. wide, course NW., ascend ridge.
9.80 Top of ridge, bears NW. and SE., desc.
13.20 Dry ravine, 50 lks. wide, course NE., asc.
23.00 Top of ridge, bears NE., and SW., desc.
27.60 Dry ravine, 15 lks. wide, course NE., ascend ridge.

Completion of South.bdry. T 10 N., R.14 W.

Chains.

- 34.80 Top of ridge, bears NE. and SW., desc.
 40.00 The point for the $\frac{1}{4}$ sec.cor.falls in bottom of dry ravine, course NW., where natural causes would insure the destruction of the cor.; therefore I continue my line west, ascend ridge.
 41.50 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to the $\frac{1}{4}$ sec.cor., marked on brass cap¹⁹¹³ WC $\frac{1}{4}$ in E. half S 33 in NW. and S 4 in SW. quadrant. No trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 51.20 Top of ridge, bears N. and S., desc.
 54.50 Dry sand wash, 75 lks. wide, course north, ascend abruptly.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33., marked on brass cap¹⁹¹³ T 10 N. in N., T 9 N. in S., and R 14 W. in W half. S 32 in NW., S 33 in NE., S 4 in SE., and S 5 in SW. quadrant. No trees suitable for bearing trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 This entire mile broken and hilly; ridges with light poor sandy and gravelly loam, washed on slopes, subsoil clay and decomposed limestone. bottom land along ravines and sand washes poor sandy loam on gravelly subsoil. light growth bunch grass, Timber, palo verde and ironwood. in bottom land along ravines.

July 25, 1913.

July 26¹⁹¹³ At 8^h 35^m a.m., l.m.t. I set off 34°09' N. on the lat. arc, 19930' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 4, 5, 32, and 33, above described,

Thence I run,

West, bet. secs. 5 and 32.

Descend W. slope of ridge, over stony, hilly land, through palo verde, ocotillo, and greasewood brush, undergrowth, 4 to 10 ft. high.

- 9.90 Dry ravine, 25 lks. wide, course north., asc.
 38.50 Top of ridge, bears NW. and SE. desc.
 40.00 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 cap¹⁹¹³ $\frac{1}{4}$ S 32 in N. half and S 5 in S. half.
 Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.. No trees suitable for bearing trees within limits.
 40.90 Dry ravine, 8 lks. wide, course NW., ascend ridge.
 45.00 Top of ridge, bears NW. and SE., desc.
 61.35 Dry ravine, 10 lks. wide, course NW., ascend ridge.
 73.40 Top of ridge, bears NW. and SE., desc.
 78.15 Dry ravine, 30 lks. wide, course NW., asc.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31, and 32., marked on brass cap¹⁹¹³ T 10 N., in N., T 9 N., in S., and R 14 W. in W. half. S 31 in NW., S 32 in NE., S 5 in SE. and S 6 in SW. quadrant. No trees suitable for bearing trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, broken and hilly, general slope NW., ridges with light, poor, sandy and gravelly loam, 8 to 12 ins. deep, on stony clay subsoil: light growth bunch grass and weeds. Timber, palo verde and ironwood, along ravines.

Note: At this cor. I set off 19°28' N. on the decl. arc, and at noon observe the sun on the meridian., the resulting latitude being 34°09' N.

West, bet. secs. 6 and 31.

Ascend E. slope of ridge, over stony, hilly land, through scattering palo verde, and ironwood timber and brush.

Completion of South bdry. of T 10 N., R 14 W.

Chains.
 21.70 Top of ridge, bears NW. and SE., desc.
 28.60 Dry ravine, 15 lks. wide, course NW., asc. ridge.
 32.10 Top of ridge, bears NW. and SE., desc.
 37.40 Dry ravine, 75 lks. wide, 3 ft. deep, course NW., ascend gradually
 40.00 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 $\frac{3}{4}$ S 31 in N.
 half and S 6 in S. half.
 Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 No trees suitable for bearing trees available. Pits impract-
 icable.
 69.40 Top of ridge, bears NW. and SE., desc.
 78.30 Dry ravine, 20 lks. wide, course NE., ascend gradually.
 79.51 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the
 ground, for cor. of Tps. 9 and 10 N., Rs. 14 and 15 W.,
 marked on brass cap T 10 N., in N., R 14 W., in E., T 9 N.,
 in S., and R 15 W. in W. half, S 36 in NW., S 31 in NE., S
 6 in SE. and S 1 in SW. quadrant.
 Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
 No trees suitable for bearing trees within limits., Pits
 impracticable.
 This entire mile, broken and hilly; ridges, light, poor, sandy
 and gravelly loam, washed on slopes, bottom land along
 ravines, gravelly clay loam, light, poor, subsoil over
 the greater portion of the mile, clay and limestone
 shale. poor growth bunch grass. Timber, palo verde and
 ironwood.

July 26, 1913.

West boundary of T 10 N., R 14 W.

Chains.

Survey commenced August 2, 1913, and executed with a Young and Sons light mountain transit No. 10 with a Smith 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.

I examine the adjustments of the transit and find them to be correct., and from recent tests of the solar apparatus, by comparing its indications, resulting from solar observations made during a.m., and p.m. hours, with a meridian established by observation on Polaris, I know that the instrument is in satisfactory adjustment.

I begin at the cor. of Tps. 9 and 10 N., Rs. 14 and 15 W., which I established July 26, 1913, ^{AS HEREIN BEFORE DESCRIBED} latitude $34^{\circ}09'34''$ N., longitude $113^{\circ}46'$ W.

The magnetic bearing of the meridian at 8^h06^m a.m. l.m.t. is $N. 14^{\circ}30'$ W.; the angle thus determined gives the mag. decl. $14^{\circ}30'$ E.

All measurements were made with a 5.00 chain steel tape, a clinometer being used to determine the slope angles.

At 8^h06^m a.m., l.m.t. I set off $34^{\circ}09\frac{1}{2}'$ N. on the lat. arc, $17^{\circ}50\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar at the above mentioned cor.,

Thence I run,

North, bet. secs. 31 and 36.

Ascend SE. slope, over stony, hilly land, through scattering ironwood timber and greasewood brush undergrowth, 3 ft. high.

- 3.20 Top of stony ridge, bears NE. and SW., desc.
- 15.06 Dry ravine, 30 lks. wide, course NW., ascend ridge.
- 18.20 Top of ridge, bears NW. and SE., desc.
- 40.00 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, ¹⁹¹³ $\frac{1}{4}$ S 36 in W. half and S 31 in E. half.
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- No trees within limits, Pits impracticable.
- 74.86 Old road, to Swansea, Arizona, bears NW. and SE.
- 77.66 Dry ravine, 25 lks. wide, course NW., ascend gradually.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36., marked on brass cap, ¹⁹¹³ T 10 N., in N. half. R 15 W., S 25 in NW., R 14 W., S 30 in NE., S 31 in SE. and S 36 in SW. quadrant.
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- No trees within limits, ; Pits impracticable.
- S. 20 chs. hilly; ridges, with light, poor, gravelly loam, on clay subsoil, light growth bunch grass. N. 60 chs. rolling prairie, NW. slope; soil, light, poor, sandy loam, with some gravel, subsoil clay, Timber, scattering ironwood and palo verde.

North, bet. secs. 25 and 30,

Ascend SW. slope of ridge, over stony, hilly land, through greasewood brush undergrowth, 4 ft. high.

- 4.60 Top of ridge, bears NW. and SE., desc. gradually.
- 30.30 Dry sand wash, 25 lks. wide, course NW., ascend gradually, over rolling land.
- 40.00 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, ¹⁹¹³ $\frac{1}{4}$ S 25 in W. half and S 30 in E. half.
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Pits impracticable.
- 45.90 Road, from mine to Swansea, Arizona, bears NE. and SW.
- 58.10 Dry ravine, 15 lks. wide, 4 ft. deep, course NW., asc.
- 60.60 Road, to Swansea, Arizona, bears NW. and SE.
- 69.80 Top of ridge, bears NW. and SE., desc.
- 73.10 Dry ravine, 10 lks. wide, course SW., asc.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for cor. of secs. 19, 24, 25, and 30, marked on brass cap, ¹⁹¹³ T 10 N., in N. half. R 15 W., S 24 in NW., R 14 W., S 19 in NE., S 30 in SE. and S 25 in SW. quadrant.
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Pits impracticable.

West boundary of T 10 N., R 14 W.

- Chains. Land, rolling and hilly, general slope, NW., ridges, with light, poor, gravelly and stony loam, 4, to 10 ins. deep, on light clay subsoil. rolling land, light, sandy loam, with some gravel, on clay subsoil, very light growth bunch grass. No timber.
-
- North, bet. secs. 19 and 24.
Ascend SW. slope of stony ridge, through greasewood brush undergrowth, 4 ft. high.
- .25 Top of low ridge, bears NW. and SE., desc.
- 36.55 Dry ravine, 15 lks. wide, course NE., Enter mountainous land; bears NE. and SW., ascend steep SE. slope.
- 40.00 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 $\frac{19}{13}$ S 24 in W. half and S 19 in E. half.
Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.; Pits impracticable.
- 41.35 Top of spur, bears NE. and SW., descend abrupt NW. slope.
- 43.86 Dry ravine, 20 lks. wide, course NE., ascend spur.
- 63.05 Top of spur, bears NW. and SE.; desc. abruptly.
- 79.70 Dry ravine, 20 lks. wide, course NE.; ascend abruptly.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19, and 24., marked on brass cap $\frac{19}{13}$ T 10 N. in N. half, R 15 W., S 13 in NW., R 14 W., S 18 in NE., S 19 in SE. and S 24 in SW. quadrant,
Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- S. 36 chs. hilly; ridges, with light, poor, stony soil, from 2 to 6 ins. deep, on shale subsoil; very light growth of bunch grass and greasewood brush. N. 44 chs. mountainous; spurs, with very little soil, no grass, No timber.
- Note: At the $\frac{1}{4}$ sec. cor. bet. secs. 19 and 24, I set off $17^{\circ}47\frac{1}{2}'$ N on the decl. arc, and at noon observe the sun on the meridian, the resulting latitude being $34^{\circ}11\frac{1}{2}'$ N.
-
- North, bet. secs. 13 and 18,
Ascend steep rocky SE. slope of spur, over mountainous land, through scattering palo verde timber and greasewood brush undergrowth, 3 ft. high.
- 1.60 Top of spur, bears NE. and SW., descend abruptly into canyon.
- 5.20 Foot of descent, in canyon, 150 ft. deep, cross dry ravine, 60 lks. wide, course NW., ascend spur
- 25.50 Top of spur, 200 ft. above bottom of canyon, bears NW. and SE., descend abruptly, over NW. slope.
- 40.00 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 $\frac{19}{13}$ S 13 in W. half and S 18 in E. half. No trees suitable for bearing trees within limits.
Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.; Pits impracticable.
- 43.10 Dry ravine, 15 lks. wide, course NE., ascend abruptly.
- 49.00 Top of spur, bears NE. and SW.; desc.
- 80.00 The point for the cor. of secs. 7, 12, 13, and 18. falls in dry ravine, course NE.; therefore I continue my line north and at.
- 80.25 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for witness cor. to the cor. of secs. 7, 12, 13, and 18., marked on brass cap $\frac{23}{13}$ WC. S of center. T 10 N. in N. half, S 13., S 18 in S. half. R 15 W., S 12 in NW., and R 14 W., S 7 in NE. quadrant. No trees suitable for bearing trees within limits.; Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor., Pits impracticable.
- This entire mile, high, mountainous land; spurs, with light, poor, decomposed granite soil, underlaid with ledges of solid granite and slate stone, no grass, considerable greasewood brush undergrowth. Timber, scattering palo verde and ironwood, along edges of ravines.

August 2, 1913.

West boundary of T 10 N., R 14 W.

- Chains.
- August 4: At 9^h 06^m a.m., l.m.t. I set off 34°13'N. on the lat. arc, 17°18¹/₂'N. on the decl. arc and determine a meridian with the solar at the witness cor. to the cor. of secs. 7, 12, 13, and 18, above described
- Thence I run,
North, bet. secs. 7 and 12, *from true point for cor. in ravine, course NE.*
Ascend abrupt rocky SW. slope of spur, over mountainous land, through scattering palo verde timber and greasewood brush undergrowth, 2¹/₂ to 4 ft. high.
- 0.25 *WITNESS COR. TO COR. OF SECS. 7, 12, 13 and 18, HEREIN BEFORE DESCRIBED.*
11.54 Top of spur, 100 ft. above cor., bears NW. and SE., descend abruptly.
- 34.00 Dry ravine, 20 lks. wide, course NW., ascend
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¹⁹¹³1/4 sec. cor., marked on brass cap 1/4 S 12 in W. half and S 7 in E. half. No trees within limits.
Raise a mound of stone, 2 ft. base, 1¹/₂ ft. high, W. of cor.; Pits impracticable.
- 48.80 Dry ravine, 50 lks. wide, 20 ft. deep, course NW., ascend spur.
72.00 Top of spur, bears NW. and SE., desc. Leave timber; bears NW. and SE.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12., marked on brass cap ¹⁹¹³1/4 S 7 in NW., R 14 W., S 6 in NE. S 7 in SE. and S 12 in SW. quadrant.
Raise a mound of stone, 2 ft. base, 1¹/₂ ft. high, W. of cor. Pits impracticable.
- This entire mile is high broken mountains; spurs, with light, poor, decomposed granite and shale soil, 4 to 8 ins. deep, underlaid with ledges of granite and slate stone, along a portion of the line in the vicinity of the 1/4 sec. cor. the soil is washed from the spurs and ridges exposing solid ledges of conglomerate sandstone. no grass, light growth of greasewood brush and cactus. Timber, scattering palo verde and ironwood.
-
- North, bet. secs. 1 and 6,
Descend abrupt, rocky, NE. slope of mountain, into canyon, through scattering greasewood brush undergrowth, 3 ft. high.
- 14.50 Foot of abrupt descent, in canyon, leave mountainous land, bears E. and W., Enter level, sandy, bottom land, and cottonwood timber. along the Bill Williams Fork River.
14.75 Old road, bears E. and W.
15.00 Intersect left bank of the Bill Williams Fork River, 3 ft. high, bears E. and W., Leave timber and undergrowth, over sandy river bed, water, clear, 4 ins. deep.
19.20 Intersect right bank of river, 4 ft. high, bears N. 80°E. and S. 80°W. Enter level, sandy, bottom land and scattering cottonwood and willow timber.
24.20 Foot of mountain, Leave level, sandy land and cottonwood and willow timber, bears N. 80°E. and S. 80°W., ascend abrupt S. slope of spur, over mountainous land, covered with loose boulders.
34.00 Summit of spur, 500 ft. above river; bears E. and W., descend N. slope, over loose malpais boulders.
40.00 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 ¹⁹¹³1/4 S. 1 in W. half and S 6 in E. half. No trees within limits.
Raise a mound of stone, 2 ft. base, 1¹/₂ ft. high, W. of cor.; Pits impracticable.
52.40 Dry ravine, 60 lks. wide, at foot of abrupt descent, course SE., ascend spur.
62.90 Top of spur, bears NW. and SE., desc.
65.65 Dry ravine, 15 lks. wide, course SE., ascend abruptly, over cliffs and ledges.
77.60 Top of mountain spur, bears NW. and SE., desc. gradually.
80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for cor. of ~~secs.~~ 10 and 11 N., Rs. 14 and 15 W., marked on brass cap ¹⁹¹³1/4 T 11 N., in N., R 14 W., in E., T 10 N., in S., and R 15 W., in W. half, S 36 in NW., S 31 in NE.,

West boundary of T.10 N., R.14 W.

Chains. S 6 in SE. and S 1 in SW. quadrant ^{Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.}
 Land, level bottom and high, rough mountains; mountain spurs ^{No trees within limits. Pits impracticable.}
 covered with loose, malapais stone and light, poor, sandy
 loam, with loose shale subsoil. light growth of bunch grass
 and greasewood brush undergrowth. Soil of bottom land,
 along the Bill Williams Fork River, rich, sandy loam, 2 to 3
 ft. deep, moist, on gravel subsoil. Timber, palo verde,
 cottonwood, and willow.

Note: at a point 6 chs. S. of the 1/4 sec. cor. bet. secs. 1 and 6,
 on summit of spur, I set off 17916' N. on the decl. arc,
 and at noon observe the sun on the meridian, the re-
 sulting latitude being 34°14' N.

August 4, 1913.

East boundary of T. 10 N., R. 14 W.

- Chains. Survey commenced August 5, 1913, and executed with a Young and Sons light mountain transit No. 10 with a Smith solar attachment, The horizontal limb, being provided with two double verniers placed opposite to each other, reading to single minutes of arc.
- I examine the adjustments of the transit and find them to be correct, and from recent tests of the solar apparatus, by comparing its indications, resulting from solar observations, made during a.m., and p.m. hours with a meridian established by observation on Polaris. I know that the instrument is in satisfactory adjustment.
- I begin at the cor. of Tps. 9 and 10 N., Rs. 13 and 14 W., which is an iron post, 3 ins. in diam., 12 ins. above ground, marked and witnessed as described by the surveyor general, latitude $34^{\circ}09'34''$ N., longitude $113^{\circ}39'39''$ W.
- All measurements were made with a 5.00 chain steel tape, a clinometer being used to determine slope angles.
- The magnetic bearing of the meridian at 9^h a.m. is N $14^{\circ}32'$ W.; the angle thus determined gives the mag. decl. $14^{\circ}32'$ E.
- At 9^h 36^m a.m., l.m.t., I set off $34^{\circ}09\frac{1}{2}'$ N. on the lat. arc, $17^{\circ}02'$ N. on the decl. arc, and determine a meridian with the solar, at the above mentioned cor.
- Thence I run,
North, bet. secs. 31 and 36.
- Descend N. slope of spur, over stony, mountainous land, through scattering palo verde timber and greasewood brush undergrowth, 4 ft. high.
- 2.40 Dry ravine, 10 lks. wide, course SW., ascend spur.
5.00 Top of spur, bears NE. and SW., desc.
12.40 Dry ravine, 15 lks. wide, course SW., ascend spur.
20.00 Top of spur, bears NE. and SW., desc.
25.20 Dry ravine, 20 lks. wide, course NW., ascend spur.
28.00 Point of spur, bears NE. and SW., desc.
40.00 The point for the $\frac{1}{4}$ sec. cor. falls in bottom of dry ravine, course NW, where natural causes would insure the destruction of the cor.; therefore I continue my line north, ascend.
- 41.25 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for witness cor. to the $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ in S, half S $36'$ in NW. and S $31'$ in NE. quadrant.
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
No trees within limits., Pits impracticable.
- 48.50 Top of ridge, bears NW. and SE., desc.
65.75 Dry ravine, 50 lks. wide, course west, asc.
80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, marked on brass cap, T 10 N. in N. half. R 14 W., S 25 in NW., R 13 W., S 30 in NE., S 31 in SE., and S 36 in SW. quadrant.
- No trees suitable for bearing trees within limits.; Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor., Pits impracticable.
- This entire mile is rough, mountainous country; spurs, with light, poor, gravelly loam, very dry, on clay subsoil, slopes of spurs and ridges washed, stony. light growth bunch grass and cactus. Timber, palo verde.
-
- North, bet. secs. 25 and 30,
Ascend S. slope of spur, over stony mountainous land, through scattering palo verde timber and greasewood brush undergrowth.
- 13.00 Top of ridge, bears NW. and SE., desc. steeply.
17.30 Foot of descent, in dry ravine, 15 lks. wide, course NW., Leave mountainous land, bears NW. and SE., enter broken and hilly land.
21.40 Top of ridge, bears NW. and SE., desc.
36.50 Enter dry ravine, course N. 10° W.
40.00 The point for the $\frac{1}{4}$ sec. cor. falls in bed of ravine.; therefore I continue my line, north.
42.30 Leave ravine, ascend SW. slope of ridge.
42.50 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the

BOOK 2640

East boundary of T 10 N., R 14 W.

- Chains. ground for witness cor. to the $\frac{1}{4}$ sec. cor., marked on brass cap¹⁹¹³ WC. $\frac{1}{4}$ in S. half., S 25 in NW. and S 30 in NE. quadrant. No trees suitable for bearing trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor., Pits impracticable.
- Note: At this cor. I set off $17^{\circ}00'$ N. on the decl. arc, and at noon observe the sun on the meridian, the resulting latitude being $34^{\circ}11'$ N.
- 44.50 Top of stony ridge, bears NW. and SE., desc.
- 49.60 Dry ravine, 25 lks. wide, course NW., asc.
- 56.40 Top of ridge, bears NW. and SE., desc.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30., marked on brass cap¹⁹¹³ T 10 N. in N. half., R 14 W., S 24 in NW., R 13 W. S 19 in NE., S 30 in SE. and S 25 in SW. quadrant. No trees within limits; Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- S. 17 chs., broken and mountainous; spurs, with light, poor, sandy loam, washed on slopes, stony ravines, very light growth bunch grass. N. 63 chs., broken and hilly; ridges with light poor stony loam, dry on decomposing shales. no grass, light growth greasewood brush. Timber, palo verde

- North, bet. secs. 19 and 24,
Descend NE. slope of ridge, over stony, hilly land, through scattering palo verde timber and brush.
- .75 Old ore road, bears NW. and SE.
- 1.50 Dry ravine, 40 lks. wide, course NW., asc.
- 18.00 Top of ridge, bears NW. and SE., desc.
- 20.00 Bottom of dry ravine, 75 lks. wide, course NW., asc.
- 40.00 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 cap¹⁹¹³ $\frac{1}{4}$ S 24 in W. half., and S 19 in E. half. No trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.; Pits impracticable.

August 5, 1913.

- Aug: 6¹⁹¹³ At 8^h 36^m a.m., l.m.t. I set off $34^{\circ}11\frac{1}{2}'$ N. on the lat. arc, $16^{\circ}46\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar at the ^{ADJUSTED} $\frac{1}{4}$ sec. cor. bet. secs. 19 and 24, Thence I continue my line North, bet. secs. 19 and 24, on $\frac{1}{2}$ mile
- 48.00 Foot of mountain, leave hilly land, bears NW. and SE., enter mountainous land, ascend abrupt SW. slope.
- 54.50 Summit of abrupt ascent, on spur, 250 ft. high bears NW. and SE. desc. abruptly.
- 55.00 Dry ravine, 10 lks. wide, course NE., asc.
- 61.00 Top of rocky spur, bears NE. and SW., desc.
- 73.20 Dry ravine, 20 lks. wide, course NW., asc.
- 76.00 Top of spur, bears NW. and SE., desc. abruptly.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19, and 24., marked on brass cap¹⁹¹³ T 10 N., in N. half., R 14 W., S 13 in NW., R 13 W., S 18 in NE., S 19 in SE. and S 24 in SW. quadrant. No trees within the prescribed limits; Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- S. 48 chs., broken and hilly; ridges, with light, poor, gravelly loam, very dry slopes, washed, exposing stratas of sand stone bed rock at a depth of about 4 ft. vegetation cholla cactus and palo verde and greasewood brush.
- N. 32 chs., high, mountainous country; spurs with with very little poor decomposed granite soil on underlying ledges of same stone, slopes of ridges covered with loose rock. No grass, considerable short greasewood brush and cholla cactus. Timber scattering palo verde.

- North, bet. secs. 13 and 18,
Descend abrupt rocky NE. slope, over broken, stony, mountainous land, through scattering palo verde and greasewood brush

East boundary of T.10 N., R 14 W.

Chains.	
2.50	Bottom of canyon, 40 lks. wide, course NW., ascend SW. slope.
7.00	Top of spur, bears NW. and SE., desc.
10.00	Dry ravine, 15 lks. wide, course west, ascend abruptly.
15.90	Top of spur, bears NE. and SW., desc.
20.60	Dry ravine, 15 lks. wide, course SW., ascend abruptly.
25.00	Summit of rocky spur, bears NW. and SE., descend abruptly, into rocky canyon.
40.00	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 $\frac{193}{1}$ S. 13 in W. and S 18 in E. half. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. No trees suitable for bearing trees available., Pits impracticable.
40.20	Bottom of canyon, course NE., thence in canyon.
42.00	Leave canyon, ascend over SE. slope.
44.00	Top of spur, bears NE. and SW., desc.
48.00	Same canyon, course NW., ascend SW. slope of cliffs.
65.00	A point on face of cliff, 200 ft. above Bill Williams Fork River, descend cliffs into box canyon.
70.85	Foot of perpendicular cliffs, on granite ledge, 20 ft. above river.
71.80	Foot of descent, in box canyon, intersect left bank of the Bill Williams Fork River, bears NE. and SW., thence over sandy, river bed, water, 1 to 3 ins. deep, flows west.
76.00	Intersect right bank of river, bears N. 50° E. and S. 50° W., ascend north wall of canyon, over cliffs.
80.00	The point for the cor. of secs. 7, 12, 13, and 18. falls at a point on wall of canyon where a corner can not be established in a satisfactory manner; therefore I return to the south side of the canyon, on line, and at
70.95	Set an iron post, 3 ft. long, 3 ins. in diam, firmly in a mound of stone, for witness cor. to the cor. of secs. 7, 12, 13, and 18., marked on brass cap $\frac{213}{1}$ W. C. N. of center, T 10 N. in N. half R 14 W., S 12 in NW., R 13 W., S 7 in NE., S 18 in SE., and S 13 in SW. quadrant. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. This entire mile is a high, rugged, mountainous country; the soil consisting of disintegrated granite rock, with very little loam, light growth of greasewood and palo verde brush; No grass and few trees of any size.
	Note: At this cor. I set off 16° 44' N. on the decl. arc, and at noon observe the sun on the meridian, and obtain a reading of 34° 13' N. on the latitude arc.

	From true point for cor. of secs. 7, 12, 13, and 18, I run North, bet. secs. 7 and 12, Ascend cliffs, North side of canyon, over mountainous land.
14.00	Top of ascent, on spur, 550 ft. above the bottom of canyon, bears E. and W., desc. abrupt N. slope.
31.70	Dry ravine, 15 lks. wide, course NE., asc. abruptly.
37.00	Top of spur, bears NE. and SW., desc.
40.00	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 $\frac{233}{1}$ S 12 in W. half and S 7 in E. half. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
40.25	Dry ravine, 8 lks. wide, course SE., asc. spur.
44.00	Top of spur, bears N. and SE., desc.
55.00	Dry ravine, course SE., asc.
61.00	Top of spur, bears NW. and SE., desc.
64.00	Dry ravine, 75 lks. wide, course SE., asc.
77.50	Top of spur, 100 ft. above ravine, bears NW. and SE., desc.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12., marked on brass cap $\frac{253}{1}$ T 10 N., in N. half. R 14 W., S 1 in NW., R 13 W., S 6 in NE. S 7 in SE. and S 12 in SW. quadrant. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

East boundary of T.10 N., R 14 W.

Chains. Pits impracticable.

This entire mile is high, rough, mountainous country; ridges and spurs with light shale rock, slopes covered with loose boulders, with small amount of loam washed from the tops and sides of the spurs. No timber and

August 6 th. 1913.

August 7¹⁹¹³ At 8^h 05^m a.m., l.m.t. I set off 34°14' N. on the lat. arc, 16°30' N. on the decl. arc, and determine a meridian with the solar at the ^{ABOVE DESCRIBED} cor. of secs. 1, 6, 7, and 12,

Thence I run,

North, bet. secs. 1 and 6,

Descend abrupt rocky NE. slope of spur, over mountainous land,

- 3.20 Dry ravine, 30 lks. wide, in bottom of canyon, course SE, asc.
 26.50 Top of spur, bears NW. and SE., desc. abruptly.
 33.80 Dry ravine, 40 lks. wide, course SE., asc.
 39.50 Point of spur, bears NE. and SW., desc. over NW. slope.
 40.00 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 ¹⁹¹³ S 1 in W. half and S 6 in E. half.
 Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
 41.70 Dry ravine, 40 lks. wide, course SW., asc. steep SE. slope, covered with loose shell rock.
 50.50 Top of spur, bears NW. and SE., desc.
 52.70 Dry ravine, 30 lks. wide, course SE., asc.
 63.10 Top of high ridge, bears E. and W., desc. N. slope.
 76.90 Dry ravine, 15 lks. wide, course NE., ascend gradually.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 26 ins. in the ground, for cor. of Tps. 10 and 11 N., Rs. 13 and 14 W., marked on brass cap ¹⁹¹³ T 11 N. in N., R 13 W., in E., T 10 N., in S., and R 14 W., in W. half, S 36 in NW., S 31 in NE., S 6 in SE. and S 1 in SW. quadrant.
 Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, S. of cor.
 Pits impracticable.
 S. 63 chs., high, rough, mountains, soil of spurs, decomposed shale and light, poor, sandy loam, underlaid with ledges of granite and porphyry stone, no grass, considerable greasewood brush undergrowth.; N. 17 chs., rolling mountains, N. slope; soil, gravelly clay loam, on decomposing shale rock. poor growth bunch grass, Timber scattering palo verde in vicinity of line on either side.

August 7, 1913.

. North boundary of T.10 N., R 14 W.

Chains.

August 7: At 10^h 35.^m a.m., l.m.t. I set off 34°15' N. on the lat. arc, 16°28' N. on the decl. arc, and determine a meridian with the solar at the cor. of Tps. 10 and 11 N., Rs. 13 and 14 W., hereinbefore described.

Thence I run,

West, on a random line, along the N. bdry. of T 10 N., R 14 W., setting temp. $\frac{1}{4}$ sec. and sec. cor. at intervals of 40.00 chs.

Note: At the temp. $\frac{1}{4}$ sec. cor. bet. secs. 1 and 36, I set off 16°27' N. on the decl. arc, and at noon observe the sun on the meridian, the resulting latitude being 34°15' N. I discontinue the field work on this day at the temp. pt. for cor. of secs. 2, 3, 34, and 35.

August 7, 1913.

August 8, 1913: At 8^h 35.^m a.m., l.m.t. I set off 34°15' N. on the lat. arc, 16°13' N. on the decl. arc and determine a meridian with the solar at the temp. point for cor. of secs. 2, 3, 34, and 35 which I set last evening.

Thence I continue my line, west, on N. bdry. of Tp.

Note: At the temp. point for cor. of secs. 3, 4, 33, and 34, I set off 16°10' N. on the decl. arc, and at noon observe the sun on the meridian, and obtain a reading of 34°14 $\frac{1}{2}$ ' N. on the lat. arc.

I discontinue the field work on this day at the temp. point for cor. of secs. 5, 6, 31 and 32.

August 8, 1913.

August 9, 1913: At 8^h 05.^m a.m., l.m.t. I set off 34°15' N. on the lat. arc, 15°56 $\frac{1}{2}$ ' N. on the decl. arc, and determine a meridian with the solar at the temp. point for cor. of secs. 5, 6, 31, and 32. which I set last evening.

Thence I continue my line, west, on N. bdry. of Tp. and at 479.00 chs. intersect W. bdry. of Tp. 42 lks. S. of the cor. of Tps. 10 and 11 N., Rs. 14 and 15 W., which I established August 4, 1913, as hereinbefore described.

The falling answers to a correction of 0°05', or 7 lks. N. per mile counting from the NE. cor. of Tp.; therefore

I run,

S. 89°57' E., bet. secs. 6 and 31, marking and blazing true line. Descend E. slope of spur, over mountainous land.

- 3.50 Dry ravine, 10 lks. wide, course south, ascend abruptly, over loose malpais boulders.
- 11.50 Summit of mountain ridge, bears N. and S., desc. abrupt E. slope.
- 34.15 Dry ravine, 30 lks. wide, 500 ft. below top of ridge, course SE., asc.
- 39.00 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 31 in N. half and S 6 in S. half.
- Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 46.40 Top of stony spur, bears N. and S., desc.
- 54.00 Dry ravine, 40 lks. wide, course south, asc.
- 69.00 Top of rocky spur, bears N. and S., desc.
- 70.75 Dry ravine, 50 lks. wide, course SE., asc.
- 77.50 Top of spur, bears NW. and SE., desc. over NE. slope.
- 79.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31, and 32., marked on brass cap T 14 N. in N., T 10 N. in S., and R 14 W. in W. half. S 31 in NW., S 32 in NE., S 5 in SE. and S 6 in SW. quadrant; Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

This entire mile is rough, mountainous land; spurs, covered with loose malpais stone, with very little, poor, light, sandy and gravelly loam; light growth of bunch grass, No timber.

North boundary of T, 10 N., R 14 W.

Chains.	S. 89°57'E., bet. secs. 5 and 32, Descend E. slope of spur, over stony, mountainous land, through scattering palo verde and ironwood timber and greasewood brush undergrowth, 3½ ft. high.
6.90	Dry ravine, 15 lks. wide, course south, asc.
12.90	Top of ascent, on point of red sandstone bluff, bears N. and S., desc. abruptly.
26.00	Enter dry sand wash, course south.
32.00	Leave sand wash, ascend ridge.
34.00	Top of ridge, bears N. and S., desc.
40.00	Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¹⁹¹³ ¼ S 32 in N. half and S 5 in S. half. No trees suitable for bearing trees within limits.; Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
45.00	Dry sand wash, 60 lks. wide, course south, asc.
48.70	Top of ridge, bears N. and S., desc.
64.40	Foot of descent, in W. edge of flat, leave broken, hilly, and mountainous land, bears NE. and SW., enter level, sandy land.
78.00	East edge of flat, leave level land, bears NW. and SE., enter hilly land, ascend W. slope of ridge.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33., marked on brass cap ¹⁹¹³ T 11 N., in N., T 10 N., in S., and R 14 W., in W. half. S 32 in NW., S 33 in NE., S 4 in SE., and S 5 in SW. quadrant. No trees suitable for bearing trees within limits.; Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
W. 64 chs.	broken and mountainous; ridges and spurs with light poor stony and gravelly loam 2 to 8 ins. deep on clay and sand stone subsoil. no grass, E. 16 chs. level and hilly; soil of level land light poor sandy loam, dry and fine on gravel subsoil.; ridges clay loam washed on slopes, stony. No grass. Timber, palo verde and ironwood.
	August 9, 1913.
Note:	This is the day of Aug. At the ¼ sec. cor. of secs. 6 and 31, I set off 15°53' N. on the decl. arc, and at noon observe the sun on the meridian and obtain a reading of 34°15' N. on the lat. arc.
	August 9, 1913.
August 11 ¹⁹¹³	At 9 ^h 05 ^m a.m., 1.m.t. I set off 34°15' N. on the lat. arc, 15°20½' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 4, 5, 32, and 33, above described,
	Thence I run, S. 89°57'E., bet. secs. 4 and 33, Ascend W. slope of ridge, over broken and hilly land.
.05	Top of ridge, bears N. and S., desc. over ridges and ravines.
23.00	Top of ridge, bears NE. and SW., desc.
29.85	Dry ravine, 12 lks. wide, course SW., asc.
34.00	Top of ridge, bears NE. and SW., desc.
40.00	The point for the ¼ sec. cor., falls in bottom of dry ravine, course SW., where natural causes would insure the destruction of the cor.; therefore I continue my line S. 89°57'E., ascend ridge.
40.75	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for witness cor. to the ¼ sec. cor., marked on brass cap ¹⁹¹³ WC ¼ in W. half, S 33 in NE. and S 4 in SE. quadrant. Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
50.00	Top of ascent, on W. edge of stony mesa, leave hilly land, bears N. and S., enter rolling, mesa land.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam. 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34., marked on brass

North boundary of T.10 N., R.14 W.

Chains. Cap¹⁹¹³ T.11 N. in N., T.10 N. in S., and R.14 W. in W. half, S 33 in NW., S 34 in NE., S 3 in SE. and S 4 in SW. quadrant. Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

W. 50 chs., broken and hilly; ridges with light poor sandy and clayey loam on clay and decomposed ~~shale~~ no grass.

E. 30 chs., rolling mesa land, W. slope. soil stony and sandy loam 10 ins. deep on clay and loose shale rock subsoil. no grass. Scattering palo verde timber in bottom of ravines.

Note: At this cor. I set off 15°18'N. on the decl. arc, and at noon observe the sun on the meridian and obtain a reading of 34°15'N. on the lat. arc.

S. 89°57'E., bet. secs. 3 and 34.
Over rolling stony mesa land, through scattering palo verde, and ironwood timber and greasewood brush undergrowth, 4 ft. high.

10.00 Leave rolling, mesa land, bears NE. and SW. Enter broken, stony, hilly land, descend SE. slope.

14.80 Dry ravine, 10 lks. wide, course SW., ascend.

25.50 Top of ridge, bears NE. and SW., desc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap¹⁹¹³ ¼ S 34 in N. half, and S 3 in S. half. No trees within limits.; Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

45.60 Dry sand wash, 50 lks. wide, course SW., asc.

56.00 Top of ridge, bears NW. and SE., desc.

57.10 Dry ravine, 50 lks. wide, course NW., asc.

59.80 Top of ridge, bears NW. and SE., desc.

61.10 Dry sand wash, 75 lks. wide, course SW., ascend abrupt NW. slope, over mountainous land.

65.75 Top of spur, bears NW. and SE., desc.

71.80 The same sand wash, 80 lks. wide, course NW., asc. W. slope of spur.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35., marked on brass cap¹⁹¹³ T.11 N., in N. T.10 N., in S., and R.14 W. in W. half, S 34 in NW., S 35 in NE., S 2 in SE. and S 3 in SW. quadrant. No trees suitable for bearing trees within limits.; Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

W. 10 chs., rolling mesa land, W. slope; soil sandy loam with some havel on clay and sand stone subsoil. No grass.

E. 70 chs., broken, hilly, and mountainous. soil ranging from light poor sandy loam to barren sandstone rock. very little vegetation, Timber, scattering palo verde and ironwood, along ravines and sand washes.

August 11, 1913.

August 12¹⁹¹³ At 8^h 35^m a.m., l.m.t. I set off 34°15'N. on the lat. arc, 15°03'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 2, 3, 34, and 35, above described, Thence I run,

S. 89°57'E., bet. secs. 2 and 35,
Ascend W. slope of spur, over stony, mountainous land.

3.30 Top of rocky spur, bears NE. and SW., desc. abruptly.

10.80 Dry sand wash, 75 lks. wide, course SW., ascend abrupt, rocky, SW. slope of mountain spur.

34.00 Top of ascent, on S. face of mountain peak, descend along SE. slope.

36.30 Dry ravine, 15 lks. wide, course SW., ascend.

40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap¹⁹¹³ ¼ S 35 in N. half and S 2 in S. half.
Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

North boundary of T.10 N., R 14 W.

Chains

- Pits impracticable.
- 44.30 Top of spur, bears N. and S., desc. abruptly.
- 51.00 Dry ravine, 50 lks. wide, course NW., asc.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35, and 36., marked on brass cap T 11 N., in N., T 10 N., in S., and R 14 W., in W. half, S 35 in NW., S 36 in NE., S 1 in SE. and S 2 in SW. quadrant.

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

Pits impracticable.

This mile is high, rough, mountainous country, with very little, poor, light, sandy loam, on underlying ledges of shale rock. No grass, light growth of greasewood brush and cactus. Timber, scattering palo verde and ironwood, along bottoms of the ravines.

S. 89°57'E., bet. secs. 1 and 36,

Ascend SW. slope of rocky spur, over mountainous land, through scattering greasewood brush, 3 to 4 ft. high.

- .10 Top of spur, bears NW. and SE., descend rocky NE. slope, into canyon.
- 6.50 Foot of descent, in canyon, 150 ft. below cor., cross dry ravine, 20 lks. wide, course NW., ascend abruptly.
- 18.30 Top of spur, 200 ft. above bottom of canyon, bears NW. and SE., descend SE. slope.
- 35.60 Dry ravine, 25 lks. wide, course NE., asc.
- 40.00 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 36 in N. half and S 1 in S. half.
- Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.; Pits impracticable..
- 40.50 Point of spur, bears NW. and SE.; desc.
- 42.60 Dry ravine, 10 lks. wide, course NW., ascend abruptly.
- 49.00 Top of spur, 50 ft. above ravine, bears NW. and SE., desc. steep E. slope.
- 58.20 Dry ravine, 15 lks. wide, course NW., ascend abruptly.
- 71.50 Top of spur, bears NW. and SE., desc.
- 80.00 The cor. of Tps. 10 and 11 N., Rs. 13 and 14 W., hereinbefore described.

This mile is rough mountainous land: spurs with very little light poor stony soil, slopes, barren rock ledges. vegetation principally greasewood brush and cactus. Timber scattering palo verde near the line.

August 12, 1913.

NOTE: At the 1/4 sec. cor. bet. secs. 1 and 36. I set off 15°00' N. on the decl. arc, and at noon observe the sun on the meridian, and obtain a reading of 34°15' N. on the latitude arc.

August 12 - 1913.

BOUNDARIES OF T. 10 NORTH, RANGE 14 WEST.
Latitudes Departures and Closing Errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
South boundary	41° West	479.51				479.51
West boundary	41° North	480.00	480.00			
North boundary	14° S 89°57'E	479.00		.42	479.00	
East boundary	14° South	480.00		480.00		
Convergence					.49	
			480.00	480.42	479.49	479.51
				480.00		479.49
			Error in Lat.	.42	Error in Dep.	.02

North boundary of T 10 N., R 14 W.

General Description.

This township is mountainous in the northeastern, northern, central, and western parts and level and rolling in the eastern part in the Bill Williams Fork River valley and near the southwestern corner.

The township is poorly watered and poorly timbered with palo verde and mesquite in the mountainous portions.

During the greater part of the year there is no water flowing in The Bill Williams Fork River at this place.

Sidney E. Stout
U.S. Surveyor.

For FINAL OATH OF UNITED STATES SURVEYOR.
see Book "C" Group 20

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed 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 U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, July 27 _____, 1914

The foregoing field notes of the survey of the North East and West Boundaries
and Completion of the
South boundary of Township No.10 North, Range No.14 West
of the Gila and Salt River Base and Meridian, Arizona

executed by Sidney E. Blout U.S. Surveyor
under his special instructions dated May 29 1912, 191____, 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. Lyall
U. S. Surveyor General.
of Arizona

~~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.~~