

2697

orig
①

Book "D,"

BOOK 2697

Resurveys,
FIELD NOTES

re-
OF THE SURVEY OF THE

East boundary of Township 5 South, Range 13 West, and portion of

North boundary of Township 5 South, Range 12 West, and

First Standard Parallel South, through Range 13 West,

(South boundary of Township No. 5 South, Range No. 13 West),

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

W. K. Kierulff,

In the capacity of U. S. ~~Transition~~ ^{man} under instructions dated February 26, 1913,
issued by the United States Surveyor General to govern surveys included in
Group No. 28, which were approved by the Commissioner of the General Land
Office, March 12, 1913, pursuant to authority contained in the Act of
Congress dated Aug. 23, 1912, &
June 23, 1913.

Re- Survey commenced June 2, 1913.

Re- Survey completed Oct. 15, 1913.





BOOK 2697
INDEX DIAGRAM.

Township _____, Range _____

3

6	5	4	3	2	1	3
7	8	9	10	11	12	4
18	17	16	15	14	13	4
<i>T. 5 S. ~ R. 13 W.</i>						
19	20	21	22	23	24	5
30	29	28	27	26	25	5
31	32	33	34	35	36	6
12	11	11	10	9	9	

First Standard Parallel South

-  Book "A"
-  Book "B"
-  Book "C"
-  Book "D" (This book)

Retracement of East Boundary of Township 5 South, Range 13 West.

Chains Retracement commenced May 27, 1913, and executed with a Young and Sons light mountain transit, No. 8485, 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 tested on the true meridian at Phoenix, Arizona, and found correct, May 17, 1913. I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. observations, with a meridian determined by observations on Polaris, I proceed as follows:

At a point near camp, in sec. 16, T. 6 S., R. 12 W., at 3h. 15m. a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark the point in the line thus determined by a tack in a wooden peg driven in the ground 5 chs. north of my station.

At 7h. 0m., a.m., l.m.t., I lay off the azimuth of Polaris 1° 22' to the west, and mark the meridian thus determined by a tack in a wooden peg set in the ground 5 chs. north of my station.

At 8h. 0m., a.m., l.m.t., I set off 32° 54' on the lat. arc; 21° 17' N., on the decl. arc and determine a meridian with the solar. The meridian thus determined falls about 21" east of the meridian established by the Polaris observation.

At 4h. 0m., p.m., l.m.t., I set off 32° 54' N. on the lat. arc; 21° 20' N., on the decl. arc and determine a meridian with the solar. A point on the meridian thus determined falls about 21" west of the meridian established by the Polaris observation; therefore, I conclude that the adjustments of the transit are satisfactory.

May 27, 1913.

May 28, 1913, I commence at the old standard cor. of Ts. 5 S., Rs. 12 & 13 W., which is an ironwood post, firmly set, mkd.
 T 5 S R 12 W S 31 on NE., and
 T 5 S R 13 W S 36 on NW face,
 Old pits N. E. and W. of cor. still visible.

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old post for reestab. std. cor. of Ts. 5 S., Rs. 12 & 13 W. I leave the brass cap unmarked until I make Resurvey of this line.

Thence I run,
 North, on a random line, bet. secs. 31 and 36, on the east bdy. of Twp. 5 S., R. 13 W.

40.00 No trace of original $\frac{1}{4}$ sec. cor. of secs. 31 and 36

80.19 Continue random line north bet. secs. 31 and 36, N $\frac{1}{4}$ mile. Fall 33 lks. E. of old cor. of secs. 25, 30, 31 and 36. Old post decayed. Pits and mound visible. True course and dist., of this mile is therefore S. 0° 14' E., 80.19 chs.

Set over old corner and run North on random line, bet. secs. 25 and 30.

40.00 No trace of old $\frac{1}{4}$ sec. cor., secs. 25 and 30.

80.23 Fall 38 lks. E. of old cor. of secs. 19, 24, 25 and 30. Old post decayed. Pits and mound visible.

Note: At this old corner I set off 21° 28' N. on the decl. arc and at noon I observe the sun on the meridian. The resulting lat. is 32° 59' N. True course and dist. of mile bet. secs. 25 and 30, is therefore, S. 0° 16' E., 80.23 chs.

Retracement of East Boundary of Township 5 South, Range 13 West
and Retracement & Resurvey of Section of North 24th of T⁵ S⁵ R¹³ W.

Chains	Note: At 1h. Om., p. m., l. m. t., I set off 21° 28' N., on the decl. arc; 32° 58' N. on the lat. arc and determine a meridian with the solar, at the old cor. of secs. 19, 24, 25 and 30, Thence I run, North, on a random line, bet. secs. 19 and 24.
40.12	Fall 6 lks. E. of the old $\frac{1}{4}$ sec. cor. of secs. 19 and 24. Old pits and mound still visible but no evidence of old $\frac{1}{4}$ sec. cor. post. True course and dist. of this $\frac{1}{2}$ mile is therefore S. 0° 5' E., 40.12 chs. Set over old $\frac{1}{4}$ sec. cor., and run North on random line, N $\frac{1}{2}$ mile
40.17	Fall 15 lks. E. of old cor. of secs. 13, 18, 19 and 24, an old post decayed and on ground: marks visible. Part of old post still in ground, from which An ironwood, 10 ins. in diam., brs. S. 80 $\frac{1}{4}$ ° W., 12 lks. dist., mkd. T 5 S R 13 W S 24 B T. An ironwood, 14 ins. in diam., brs. N. 25 $\frac{1}{2}$ ° W., 242 lks. dist., mkd. T 5 S R 13 W S 13 B T. True course and dist. of N $\frac{1}{2}$ mile bet. secs. 19 and 24 is therefore, S. 0° 13' E., 40.17 chs.
40.09	From the above described cor., I run North on a random line, bet. secs. 13 and 18. Fall 7 lks. E. of old $\frac{1}{4}$ sec. cor. of secs. 13 and 18, which is an old decayed post lying on the ground. Old pits are barely visible. An ironwood 11 ins. in diam. brs. S. 32 $\frac{1}{4}$ ° W., 140 lks. dist. mkd. $\frac{1}{4}$ S. 13 B T. An ironwood 9 ins. in diam., brs. N. 53° W., 228 lks. dist., mkd. $\frac{1}{4}$ S 13 B T. True course & dist. of S $\frac{1}{2}$ mile bet. secs. 13 & 18, is therefore S. 0° 6' E., 40.09 chs. Set over old $\frac{1}{4}$ sec. cor. and run North on random line, on N $\frac{1}{2}$ mile.
40.14	Fall 5 lks. W. of old cor. of secs. 7, 12, 13 and 18, which is Part of old post, lying alongside of small mound of stone. True course & dist. of N $\frac{1}{2}$ mile bet. secs. 13 and 18 is therefore, S. 0° 4' W., 40.14 chs. May 28, 1913.
40.10	June 5, 1913: At the old cor. of secs. 7, 12, 13 and 18, above described, at 9h. Om., a. m., l. m. t., I set off 33° 00' N on the lat. arc and 22° 33' W., on the decl. arc and determine a meridian with the solar. Thence I run, North on a random line, bet. secs. 7 and 12. Fall 32 lks. E. of the old $\frac{1}{4}$ sec. cor. of secs. 7 and 12, which is a mound of stone, 2 $\frac{1}{2}$ ft. base, 1 ft. high. True course & dist. of S $\frac{1}{2}$ mile bet. secs. 7 and 12 is, therefore S. 0° 27' E., 40.10 chs. Set over old $\frac{1}{4}$ sec. cor. and run North on random line N $\frac{1}{2}$ mile, bet. secs. 7 and 12.
40.00	No trace of old cor. secs. 1, 6, 7, and 12, set temp. sec. cor.
40:00	From temp. cor. of secs. 1, 6, 7, and 12, I run North on a random line, bet. secs. 1 and 6. No trace of old $\frac{1}{4}$ sec. cor. bet. secs. 1 and 6, set temp. $\frac{1}{4}$ sec. cor.
80.00	No trace of old twp. cor. Set temp. cor. of Ts. 4 and 5 S., Rs. 12 and 13 W. Note: At this temp. cor. I set off 22° 33' N. on the decl. arc and at noon observe the sun on the meridian, The resulting Lat. is 33° 01 $\frac{1}{2}$ ' N.

Retracement & Resurvey of portion of North Bdy., T. 5 S., R. 12 W.

Chains From temp. cor. of Tps. 4 and 5 S., Rs. 12 and 13 W.,
I run N. 89° 50' E., bet. secs. 6 and 31, on N. bdy. of
T. 5 S., R. 12 W., on random line, (Original course of
this line, S. 89° 50' W.)

40.00 No trace of old $\frac{1}{4}$ sec. cor. of secs. 6 and 31, set temp.
 $\frac{1}{4}$ sec. cor. and continue random line N. 89° 50' E.

79.00 Fall 21 lks. S. of the old cor. of secs. 5, 6, 31 and 32,
which is a decayed post, in mound of stone, 3 ft. base,
2 ft. high, from which, one tree only,
An ironwood, 12 ins. in diam., bears N. 15° E.,
219 lks. dist., mkd. T. 4 S., R 12 W S 32 B T.

From above described old cor. of secs. 5, 6, 31 and 32,
I run S. 89° 50' W., on a true line, bet. secs. 6 and
31, as per original course of this line.

40.05 Set a malpais stone, 10 x 12 x 12 ins., 8 ins. in the
ground for reestablished $\frac{1}{4}$ sec. cor. secs. 6 and 31,
marked $\frac{1}{4}$ on the north face and build a mound of stone
3 ft. base, 2 ft. high N. of cor.

79.00 Intersect the E. bdy. of T. 4 S., R. 13 W., 120.21 chs.
N. of the old $\frac{1}{4}$ sec. cor. of secs 7 and 12, Ts. 5 S.,
Rs. 12 and 13 W., or 21 lks. N. of temp. cor. of Ts.
4 and 5 S., Rs. 12 and 13 W. At point of intersection
I set an iron post 3 ft. long, 3 ins. in diam., 24 ins.
in the ground for reestablished cor. of Ts. 4 and 5 S.,
Rs. 12 and 13 W., with brass cap marked.
T 4 S S 36 in NW.,
T 4 S S 31 in NE.,
S 6 R 12 W in SE., and
S 1 R 13 W in SW, quadrants, and
T 5 S 1913 on S. half. Pits impracticable. Build
a mound of stone, 4 ft. base, 3 ft. high, S. of cor.

----- June 5, 1913. -----

Resurvey of the E. Bdy. of T. 5 S., R. 13 W.

Resurvey commenced Oct. 9, 1913: At the cor. of Ts. 4
and 5 S., Rs. 12 and 13 W., reestablished by me June 5,
~~1913~~, when retracing this line and described by me on
page 3 of this book. Thence I run, South on a true
line bet. secs. 1 and 6.

40.07 Over stony ground. Descend S. slope.
Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
the ground, for reestab. $\frac{1}{4}$ sec. cor. of secs. 1 and 6,
with brass cap mkd.,
 $\frac{1}{4}$ S 1 on W.,
S 6 on the E., and
1913 on S. half.

Build a mound of stone 3 ft. base, 2 ft. high W. of cor.
pits impracticable.

45.00 Dry wash 100 lks. wide, course NW.
Ascend gradual increasing N. slope.

80.14 Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in
the ground for reestab. cor. secs. 1, 6, 7 & 12, with
brass cap mkd.
T 5 S on N half,
R 13 W S 1 in NW.,
R 12 W S 6 in NE.,
S 7 in SE., and
S 12 in SW. quadrants, and
1913 in S. half.

Build a mound of stone 4 ft. base 3 ft. high W. of cor.
Pits impracticable. No trees in limit. Land rolling.
Soil stony, 4th rate.

Resurvey of the E. bdy. of T. 5 S., R. 13 W.

Chains South, on a true line. Bet. secs. 7 and 12. Ascend rough N. slope of mountain, covered with malpais boulders.

21.00 Top of rocky hill bears E. and W. 520 ft. above surrounding plain.

Descend steep rocky S. slope of mountain.

39.00 Foot of descent, bears E. and W.

40.07 Intersect old $\frac{1}{4}$ sec. cor. hereinbefore described, which I destroy and in same place set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground, for reestab. $\frac{1}{4}$ sec. cor. secs. 7 and 12, with brass cap mkd.
 $\frac{1}{4}$ S 12 in W.,
S 6 in E., and 1913 on S. half.

Build a mound of stone 3 ft. base 2 ft. high W. of cor. Pits impract.

Thence I run, S. $0^{\circ} 27'$ E., on a true line $\frac{1}{2}$ mile bet. secs. 7 and 12.

23.00 Wash 20 lks. wide course SE.

32.00 Wash, 20 lks. wide, course E.

40.10 Intersect old cor. of secs. 7, 12, 13 and 18, hereinbefore described, which I destroy and in same place set an iron post 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for reestab. cor. of secs. 7, 12, 13, and 18, with brass cap mkd.
T 5 S in N. half.,
R 13 W S 12 in NW.,
R 12 W S 7 in NE.,
S 18 in SE., and
S 13 in SW. quadrants, and
1913 in S. half.

Build a mound of stone, 4 ft. base, 3 ft. high W. of cor. Pits impract.

Land mountainous 40.00 chs., broken, remainder of dist. Soil sandy and gravelly, 3rd and 4th rates.
October 9, 1913.

Oct. 16, 1913. S. $0^{\circ} 04'$ W. on a true line. Bet. secs. 13 and 18. Over nearly level land.

35.00 Dry wash, 50 lks. wide, course SE.

40.14 Intersect old $\frac{1}{4}$ sec. cor. of secs. 13 and 18 hereinbefore described, which I destroy and in same place set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground for reestab. $\frac{1}{4}$ sec. cor. of secs. 13 and 18, with brass cap mkd.
 $\frac{1}{4}$ S 13 in W.,
S 18 in E., and
1913 in S. half,

Dig pits 18 x 18 x 12 ins. N. and S. of cor., 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high W. of cor. No trees within the prescribed limits. Thence I run S $0^{\circ} 6'$ E., on true line on $\frac{1}{2}$ mile bet. secs. 13 and 18.

10.09 Dry wash 50 lks. wide course SE.

25.00 Dry wash 50 lks. wide course SE.

40.09 Intersect old cor. of secs. 13, 18, 19 and 24, hereinbefore described, which I destroy and in same place Set an iron post 3 ft. long, 3 ins. in diam, 24 ins. in the ground for the reestab. cor. of secs. 13, 18, 19 and 24, with brass cap mkd.
T 5 S in N. half,
R 13 W S 13 in NW,
R 12 W S 18 in NE.,
S 19 in SE., and
S 24 in SW. quadrants, and
1913 on S. half.

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. No trees suitable for bearing trees within the prescribed limits.

Land level.

Soil, sandy with gravel, 3rd rate. Timber, scattering palo verde and ironwood. Undergrowth, greasewood.

Resurvey of the E. bdy. of T. 5 S., R. 13 W.

Chains

S. 0° 13' E., on a true line bet. secs. 19 and 24.
Over level land.

32.00

Dry wash 350 lks. wide course SE.

40.17

Intersect old 1/4 sec. cor. of secs. 19 and 24, hereinbefore described, which I destroy, and in the same place, set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for reestab. 1/4 sec. cor. of secs. 19 and 24, with a brass cap mkd.

1/4 S 24 in W.,
S 19 in E., and
1913 in S. half.

No trees suitable for bearing trees within the prescribed limits.

Dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor. Thence I run S. 0° 5' E., on true line on S 1/2 mile bet. secs. 19 and 24. Over level land.

40.12

Intersect old cor. of secs. 19, 24, 25 and 30, hereinbefore described which I destroy and in same place Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestab. cor. of secs. 19, 24, 25 and 30, with brass cap, mkd.

T 5 S in N. half,
R 13 W S 24 in NW.,
R 12 W S 19 in NE.,
S 30 in SE., and
S 25 in SW., quadrants, and
1913 in S. half.

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.

No trees suitable for bearing trees within the prescribed limits. Land level. Soil, sandy, 3rd rate. Undergrowth, greasewood.

S. 0° 16' E., on a true line. Bet. secs. 25 and 30.
Over level land.

40.115

Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground for reestab. 1/4 sec. cor. of secs. 25 and 30 with a brass cap mkd.

1/4 S 25 in W.,
S 30 in E., and
1913 in S. half,

No trees suitable for bearing trees within the prescribed limits.

Dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 2 1/2 ft. high W. of cor.

80.23

Intersect old cor. of secs. 25, 30, 31, and 36, hereinbefore described, which I destroy and in same place

Set an iron post 3 ft. long, 3 ins. in diam, 24 ins. in the ground for reestab. cor. of secs. 25, 30, 31 and 36, with brass cap mkd.

T 5 S in N. half,
R 13 W S 25 in NW.,
R 12 W S 30 in NE.,
S 31 in SE., and
S 36 in SW., quadrants, and
1913 in S. half.

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.

No trees suitable for bearing trees within the prescribed limits.

Land level., Soil, sandy 3rd rate. Timber, scattering palo verde and ironwood. Undergrowth greasewood.

Resurvey of the E. Bdy. of T. 5 S., R. 13 W.

Chains S. 0° 14' E., on a true line, bet. secs. 31 and 36. Over level land.

40.095 Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground for reestab. $\frac{1}{4}$ sec. cor. of secs. 31 and 36, with brass cap mkd.
 $\frac{1}{4}$ S. 36 in W.,
 S 31 in E., and
 1913 in S. half.,
 Dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $2\frac{1}{2}$ ft. high W. of cor.

80.19 No trees within the prescribed limits for bearing trees. Intersect the reestab. Std. Cor. of Ts. 5 S., Rs. 12 and 13 W., set by me May 28, 1913, as hereinbefore described, which I mark on brass cap
 T 5 S., in N. half.,
 R 13 W S 36 in NW, and
 R 12 W S 31 S. C in NE. quadrant, and
 1913 in S. half.
 Dig pits 30 x 24 x 12 ins. crosswise on each line E. and W., 4 ft. dist. and N. of cor. 8 ft. dist., and raise a mound of earth, 5 ft. base $2\frac{1}{2}$ ft. high N. of cor.
 No trees within the prescribed limits for bearing trees.
 Land level.
 Soil, sandy, 3rd rate.
 Undergrowth, greasewood. Oct. 16, 1913.

Retracement of 1st Standard Parallel South
 thru Range 13 West.

May 29, 1913: At 8h. 0m., a.m., l.m.t., I set off 32° ~~54'~~ N., on the lat. arc; $21^{\circ} 36'$ N., on the decl. arc and determine a meridian with the solar, at the old std. cor. of Ts. 5 S., Rs. 12 and 13 W., hereinbefore described.

Thence I retrace the First Std. Parallel South, bet. Tps. 5 and 6 S., thru R. 13 W., as follows:
 West, on a random line, on S. bdy. of Sec. 36, T. 5 S., R. 13 W.

40.17 Fall 9 lks. N. of old standard $\frac{1}{4}$ sec. cor. which is an Old post broken off and lying on the ground; part of old post still in ground. Pits barely visible.
 True course and dist. of E $\frac{1}{2}$ mile of S. bdy. of sec. 36 is therefore S. $89^{\circ} 53'$ W., 40.17 chs., from above described old std. $\frac{1}{4}$ sec. cor. I run west on random line, on W $\frac{1}{2}$ mile.

23.13 Old closing cor. to secs. 1 and 2, T. 6 S., R. 13 W., bears 11 lks. S. which is an old post broken off, with part of it still in the ground. No trace of old pits or mound.

39.77 Continue random line west from old std. $\frac{1}{4}$ sec. cor.
 Fall 3 lks. N. of the old standard cor. of secs. 35 and 36 which is a post rotted off and lying on the ground. No trace of the old pits and mound.
 True course & dist. of W $\frac{1}{2}$ mile of S. bdy. of sec. 36 is therefore, S. $89^{\circ} 57'$ W., 39.77 chs.

Retracement of 1st Standard Parallel South thru Range 13 West.

Chains	Set over old. std. cor. of secs. 35 and 36, and run west on random line on S. bdy. of sec. 35.
40.50	Fall 23 lks. N. of the standard $\frac{1}{4}$ sec. cor. of sec 35 which is an old ironwood post in good state of preservation, mkd. $\frac{1}{4}$ on the W. face. Old pits and mound not visible. True course & dist. of E $\frac{1}{2}$ mile of S. bdy. of sec. 35 is therefore S. 89° 40' W., 40.50 chs. Set over $\frac{1}{4}$ sec. cor. and run west on random line on W $\frac{1}{2}$ mile.
22.59	Old closing corner to secs. 2 and 3, T 6 S R 13 W bears S. 1 lk. dist., which is an old post partly decayed. Marks not distinct; from which, An ironwood 12 ins. in diam. brs. N. 43° E., 170 lks. dist. mkd., T 5 S R 13 W S 35 C C B T.
40.00	Fall 7 lks. N. of old stand. cor. of secs. 34 and 35, which is an old post rotted off and lying on the ground, part of old post still in the ground. Marks not plain. Old pits and mound not visible, from which A palo verde 12 ins. in diam. brs. N. 5° 22' E., 272 lks. dist. mkd. T 5 S R 13 W S 35 C C B T. True course and dist of W $\frac{1}{2}$ mile of S. bdy. of sec. 35 is therefore S. 89° 54' W., 40.00 chs.

40.15	Set over old std. cor. of secs. 34 and 35, and run west on random line on S. bdy. of sec. 34. Fall 18 lks. N. of the old standard $\frac{1}{4}$ sec. cor. of sec. 34, which is an old post partly decayed, broken off and lying on the ground. Part of old post still in the ground. Old pits barely visible., from which A decayed palo verde 9 ins. in diam. brs. N. 63° E., 240 lks. dist., mks. not visible. True course & dist of E $\frac{1}{2}$ mile of S. bdy. of sec. 34 is therefore S. 89° 45' W., 40.15 chs. Set over old std. $\frac{1}{4}$ sec. cor. and run west on random line on W $\frac{1}{2}$ mile.
23.45	Intersect old closing cor. to secs. 3 and 4, T. 6 S., R. 13 W., which is an old post decayed, broken off and lying on the ground. Old pits barely visible.
40.09	Continue random line west from old standard $\frac{1}{4}$ sec. cor. Fall 3 lks. N. of the old stand. cor. of secs. 33 and 34, which is an old post decayed, broken off and lying on the ground. Part of old post still in the ground. No marks visible. True course & dist. of W $\frac{1}{2}$ mile of S bdy. of sec. 34 is therefore S. 89° 57' W., 40 .09 chs. Note: At this corner I set off 21° 37' N., on the decl. arc and at 11h. 57m., a.m., l.m.t., observe the sun on the meridian. The resulting lat. is 32° 56 $\frac{1}{2}$ ' N.

40.18	Set over old standard cor. of secs. 33 and 34, and run west on random line on S. bdy. of sec. 33. Fall 7 lks. N. of old stand. $\frac{1}{4}$ sec. cor. of sec 33 Part of old post still in the ground. Pits and mound still visible; from which A palo verde 10 ins. in diam. brs. S. 6 $\frac{1}{2}$ ° W., 200 lks. dist. mks. not visible. A palo verde 8 ins. in diam. brs. N. 63 $\frac{1}{2}$ ° W., 101 lks. dist. mks. not visible. True course and dist. of E $\frac{1}{2}$ mile of S. bdy. of sec. 33 is therefore S. 89° 54' W., 40.18 chs. Set over old standard $\frac{1}{4}$ sec. cor. and run west on random line on W $\frac{1}{2}$ mile
23.59	Fall 8 lks. N. of the old closing cor. of secs. 4 and 5, T. 6 S., R. 13 W., an old post broken off and lying on the ground. Part of old post still in the ground. Marks not visible. Pits and mound still visible; from which A palo verde 6 ins. in diam. brs. S. 22° E., 127 lks. dist. mks. visible but not clear.
40.00	Continue random line west from old standard $\frac{1}{4}$ sec. cor. No trace of old stand. cor. of secs. 32 and 33.

Retracement of the 1st Stan. Parallel S., thru Range 13 West.

Chains	
40.10	<p>Fall 13 lks. N. of true point for old cor. which I established as follows: from a B. T. which is A palo verde 6 ins. in diam., I lay off 275 lks. N. 88° E. This gives me the true point for the old cor. Set stake for temp. cor. here. True course & dist. of W $\frac{1}{2}$ mile of S. bdy. of sec. 33 is therefore S. 89° 49' W., 40.10 chs.</p> <p>-----</p>
40.07	<p>Set over temp. cor. of secs. 32 and 33 and run West on random line on S. bdy. of sec. 32. Fall 17 lks. N. of the old stand. $\frac{1}{4}$ sec. cor. of sec. 32 an old post decayed, broken off and lying on the ground. Part of the old post still in the ground. Find charred stake in old mound, still in good state of preservation. True course and dist. of E $\frac{1}{2}$ mile of S. bdy. of sec. 32 is therefore S. 89° 45' W., 40.07 chs Set over old standard $\frac{1}{4}$ sec. cor. and run west on random line on W $\frac{1}{2}$ mile of sec. 32.</p>
23.60	<p>Fall 5 lks. N. of old closing cor. of secs. 5 and 6, T. 6 S., R. 13 W., which is an old decayed post broken off and lying on the ground. Part of old post still in the ground, from which A palo verde 8 ins. in diam. brs. S. 40° E., 150 lks. dist. mks. not visible.</p>
40.14	<p>Continue random line west from old Std. $\frac{1}{4}$ sec. cor. Fall 8 lks. N. of the old stand. cor. of secs. 31 and 32, which is an old decayed post broken off and lying on the ground. Part of old post still in the ground, from which, A palo verde 6 ins. in diam. brs. N. 71$\frac{1}{2}$° E., 111 lks. dist. mks. not visible. A palo verde 6 ins. in diam. brs. S. 31$\frac{1}{2}$° E., 143 lks. dist. mks. not visible. A palo verde 5 ins. in diam., brs. S. 23° W., 71 lks. dist. mks. not visible. A palo verde 12 ins. in diam. brs. S. $\frac{1}{2}$° W., 73 lks. mks. not visible. True course and dist. of the W $\frac{1}{2}$ mile of S. bdy. of sec. 32 is therefore S. 89° 53' W., 40.14 chs.</p> <p>-----</p>
40.13	<p>Set over old std. cor. of secs. 31 and 32 and run west on random line on S. bdy. of sec. 31. Fall 10 lks. N. of the old stand. $\frac{1}{4}$ sec. cor. of sec. 31, which is an old post decayed, broken off and lying on the ground. Part of old post still in the ground, from which, A palo verde 10 ins. in diam. brs. N. 36$\frac{1}{2}$° E., 110 lks. dist. mks. not plain. A palo verde 8 ins. in dia. brs. S. 15$\frac{1}{2}$° E., 93 lks. dist. mks. not plain. True course and dist. of E $\frac{1}{2}$ mile of S. Bdy. of sec. 31, is therefore S. 89° 51' W., 40.13 chs. Set over old standard $\frac{1}{4}$ sec. cor. and run west on random line on W $\frac{1}{2}$ mile sec. 31.</p>
22.05	<p>Fall 14 lks. N. of the old closing cor. to Tps. 6 S., Rs. 13 and 14 W., which is an old decayed post broken off and lying on the ground. Part of post still in the ground.</p>
40.19	<p>Continue random line west from old std. $\frac{1}{4}$ sec. cor. Fall 14 lks. N. of the old stand. cor. of Tps. 5 S., Rs. 13 and 14 W., which is an old post in ground partly decayed, from which, A palo verde 8 ins. in diam. brs. N. 53° E., 56 lks. dist. mks. not plain. A palo verde 8 ins. in diam. brs. N. 23$\frac{1}{2}$° E., 79 lks. dist. mks. not plain. A palo verde 8 ins. in diam. brs. S. 7$\frac{1}{2}$° E., 89 lks. dist. mks. not plain.</p>

Resurvey of the 1st Stand. Parallel S., thru R. 13 W.

Chains A palo verde 7 ins. in diam brs. N. 37° W., 38 lks. dist. mks. not plain.
 True course and dist of the W 1/2 mile of S. bdy. of sec. 31 is therefore S. 89° 48' W., 40.19 chs.
 May 29, 1913.

October 16, 1913.
 S. 89° 53' W., on a true line. Along S. bdy of sec. 36.
 .14 Dry wash, 20 lks. wide, course SE.
 40.17 Intersect old stand. 1/4 sec. cor. of sec. 36 hereinbefore described, which I destroy and in same place
 Set an iron post 3 ft. long, 1 in. in diam 26 ins. in the ground for angle point to std. 1/4 sec. cor. of sec. 36, with brass cap mkd.
 S 36 1/4 in N., and
 A. P. 1913 in S. half,
 Dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high, N. of cor.
 Thence I run
 S. 89° 57' W., on a true line, on W 1/2 mile.
 Along S. bdy. of sec. 36.
 23.13 Old closing cor. of secs. 1 and 2, T. 6 S., R. 13 W., bears S. 9 lks. dist., which I destroy and reestablish in same place as follows:
 Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground, for closing cor. of secs. 1 and 2, with brass cap mkd.
 C C, S of center
 T 5 S R 13 W in N. half,
 S 35 in NW,
 S 36 in NE,
 S 1 in SE, and
 S 2 in SW, quadrant,
 1913 in S. half.
 Dig pits 24 x 18 x 12 ins. crosswise on each line E. and W. of cor. 3 ft. dist., and S. of cor. 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high S. of cor.
 Continue from 1/4 sec. cor. S. 89° 57' W.
 39.77 Intersect old stand. cor. of secs. 35 and 36, hereinbefore described, which I destroy and reestablish in the same place as follows.
 Set an iron post 3 ft. long, 3 ins. in diam, 24 ins. in the ground for angle point of secs. 35 and 36, with brass cap mkd.,
 S C A P on N. half, and
 1913 in S. half.
 Dig pits 24 x 18 x 12 ins. crosswise on each line E. and W. 3 ft. dist., and N. of cor. 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high N. of cor.
 Land level.
 Soil sandy, 3rd rate.
 Undergrowth greasewood.

S. 89° 40' W., on a true line Along the S. bdy. of Sec. 35.
 Over level land.
 40.50 Intersect old stand. 1/4 sec. cor. of sec. 35, hereinbefore described, which I destroy and in the same place,
 Set an iron post, 3 ft. long, 1 in. in diam 26 ins. in the ground for angle point to std. 1/4 sec. cor. of sec. 35, with brass cap mkd.,
 S 35 1/4 in N., and
 A P 1913 in S. half.
 Dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.
 Thence I run S. 89° 54' W., on a true line, on W 1/2 mile.
 Along S. bdy. of sec. 35.
 22.59 Old closing cor. of secs. 2 and 3, T. 6 S., R. 13 W., bears N. 3 lks. dist., which I destroy and in the same place, set an iron post, 3 ft. long, 2 ins. in diam, 24

TSS R13W
CC
S317536
32151
1913

SC AP
1913

S317536
AP
1913

Resurvey of the 1st. Stand. Parallel S., thru Range 13 West.

Chains

ins. in the ground, for reestablished closing cor. of secs. 2 and 3, with brass cap mkd.

C C S of center,
T. 5 S R 13 W in N. half,
S 34 in NW,
S 35 in NE,
S 2 in SE, and
S 3 in SW, quadrant,
1913 in S. half,

T55 R13W
S34/S35
S3/S2
1913

Dig pits 24 x 18 x 12 ins. crosswise on each line, E. and W. of cor. 3 ft. dist., and S. of cor., 7 ft. dist., and raise a mound of earth 4 ft. base 2 ft. high S. of cor.

Continue S. 89° 54' W., on true line from 1/4 sec. cor. Along S. bdy. of sec. 35, on W 1/2 mile.

40.00 Intersect old stand. cor. of secs. 34 and 35, hereinbefore described, which I destroy and reestablish in the same place as follows:

Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for angle point to the std. cor. of secs. 34 and 35, marked on brass cap, S C A P in N., and 1913 in S. half,

Dig pits 24 x 18 x 12 ins. crosswise on each line E. and W. of cor. 3 ft. dist. and N. of cor. 7 ft. dist., and raise a mound of earth 4 ft. base 4 ft. high, N. of cor. Land level. Soil sandy with gravel, 3rd rate. Undergrowth greasewood.

S. 89° 45' W., on a true line Along S. bdy. of sec. 34. Road bears NW. and SE.

1.90
40.15 Intersect old stand. 1/4 sec. cor. of sec. 34, hereinbefore described, which I destroy and in same place

Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for angle point to std. 1/4 sec. cor. of sec. 34, with brass cap mkd., S 34 in N. and A P 1913 in S. half,

Dig pits 18 x 18 x 12 ins., E. and W. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.

Thence I run S. 89° 57' W., on a true line Along S. bdy. of sec. 34, on W 1/2 mile.

9.00
23.45 Old road bears NW. and SE. Old closing cor. of secs. 3 and 4, T. 6 S., R. 13 W., bears N. 1 lk. dist., which I destroy and in the same place, set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for reestablished closing cor. of secs. 3 and 4, with brass cap mkd.

C C S of center,
T 5 S R 13 W in N. half,
S 33 in NW,
S 34 in NE,
S 3 in SE, and
S 4 in SW, quadrant
1913 in S. half,

T55 R13W
S33/S34
S3/S2
1913

Dig pits 24 x 18 x 12 ins., crosswise on each line E. and W. of cor. 3 ft. dist., and S. of cor. 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high S. of cor.

Continue S. 89° 57' W., on a true line on W 1/2 mile of S. bdy. of sec. 34, measuring from std. 1/4 sec. cor.

40.09 Intersect old stand. cor. of secs. 33 and 34, hereinbefore described, which I destroy and in the same place

Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for angle point to std. cor. of secs. 33 and 34, with brass cap mkd. S C A P in N., and 1913 in S. half.

Dig pits 24 x 18 x 12 ins. crosswise on each line, E. and W. 3 ft. dist., and N. of cor. 7 ft. dist., and raise a mound of earth 4 ft. base 2 ft. high N. of cor. Land level.

Resurvey of the 1st. Stand. Parallel S., thru Range 13 West.

Chains Soil sandy with gravel, 3rd rate.
Undergrowth, greasewood. October 16, 1913.

40.18 Oct. 15, 1913. S. 89° 54' W., on a true line,
Along S. bdy. of sec. 33. Over level land.
Intersect old stand. ¼ sec. cor. of sec. 33, hereinbefore
described, which I destroy and in the same place
Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in
the ground for angle point to std. ¼ sec. cor. of sec.
33, with brass cap mkd.,
S 33 ¼ in N, and
1913 A P in S., half,
Dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist.,
and raise a mound of earth 3½ ft. base, 1½ ft. high N.
of cor.

23.59 Thence I run S 89° 49' W., on a true line,
Along S. bdy. of sec. 33 on W ¼ mile
Old closing cor. of secs. 4 and 5, T. 6 S., R. 13 W.,
bears S. 1 lk. dist, which I destroy and in the same
place
Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in
the ground, for reestablished closing cor. of secs. 4
and 5, marked on brass cap,
C C S of center,
T 5 S R 13 W in N. half,
S 32 in NW,
S 33 in NE,
S 4 in SE, and
S 5 in SW, quadrants,
1913 in S. half,

TJS R 13 W
S 32 S 33
S 33 S 4
1913

40.10 Dig pits 24 x 18 x 12 ins., crosswise on each line, E.
and W. of cor. 3 ft. dist. and S. of cor. 7 ft. dist.,
and raise a mound of earth 4 ft. base 2 ft. high S. of
cor.,
Continue S. 89° 49' W., on true line, Along S. bdy. of
sec. 33.

Intersect the temp. std. cor. of secs. 32 and 33, herein-
before described, which I remove, and establish perma-
nent cor. in same place as follows:
Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in
the ground, for standard cor. of secs. 32 and 33, with
brass cap mkd.
T 5 S S 32 in NW, and
R 13 W S 33 S C in NE. quadrant,
1913 in S. half.

TJS R 13 W
S 32 S 33 S C
1913

Dig pits 24 x 18 x 12 ins. crosswise on each line E. and
W. of cor. 3 ft. dist. and N. of cor. 7 ft. dist., and
raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land level. Soil sandy, with gravel, 3rd rate.
Undergrowth greasewood.

26.50 S. 89° 45' W., on a true line Along S. bdy. of sec. 32.
Over level land.

40.07 Yuma - Phoenix road bears N. 60° W. and S. 60° E.
Intersect old stand. ¼ sec. cor. of sec. 32, hereinbefore
described, which I destroy and reestablish in the same
place as follows:

Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the
ground, for std. ¼ sec. cor. of sec. 32, with brass
cap mkd.
S 32 ¼ S C in N., and
1913 in S. half.

Dig pits 18 x 18 x 12 ins. E. and W. of cor. 3 ft. dist.
and raise a mound of earth 3½ ft. base, 1½ ft. high N.
of cor.

23.60 Thence I run S. 89° 53' W., on a true line
Along S. bdy. of sec. 32 on W ¼ mile
Old closing cor. of secs. 5 and 6, T. 6 S., R. 13 W., here-
inbefore described bears S. 1 lk. dist., which I destroy

Resurvey of the 1st Stand. Parallel S., thru Range 13 West.

Chains

and in the same place
Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for reestablished closing cor. of secs. 5 and 6 with brass cap mkd.

C C S of center,
T 5 S R 13 W in N. half,
S 31 in NW,
S 32 in NE,
S 5 in SE, and
S 6 in SW. quadrants,
1913 in S. half.

T5S R13W
CC
S31 S32
S5 S6
1913

Dig pits 24 x 18 x 12 ins. crosswise on each line E. and W. of cor. 3 ft. dist., and S. of cor. 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high S. of cor.

Continue line, S. 89° 53' W., Along S. bdy. of sec. 32 on W $\frac{1}{2}$ mile.

40.14 Intersect old stand. cor. of secs. 31 & 32, hereinbefore described, which I destroy and reestablish in the same place as follows:

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

T 5 S S 31 in NW, and
R 13 W S 32 in S C in NE. quadrants,
1913 in S. half.

T5S R13W
S31 S32
S31 S32
1913

Dig pits 24 x 18 x 12 ins. crosswise on each line, E. and W. of cor., 3 ft. dist., and N. 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.

Land level.

Soil sandy with gravel.

Undergrowth greasewood.

S. 89° 51' W., on a true line on S. bdy. of sec. 31.
Over level land.

40.13 Intersect the old stand. $\frac{1}{4}$ sec. cor. of sec. 31, hereinbefore described, which I destroy and reestablish in same place, as follows:

Set iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for std. $\frac{1}{4}$ sec. cor. of sec. 31, with brass cap mkd.

S 31 $\frac{1}{4}$ S C in N., and
1913 in S. half.

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

Thence I run S. 89° 48' W., on a true line
Along S. bdy. S. 31, on W $\frac{1}{2}$ mile. Over level land.

22.05 Old closing cor. of Tps. 6 S., Rs. 13 and 14 W., hereinbefore described, bears S. 7 lks. dist., which I destroy, and in the same place

Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in the ground, for reestablished closing cor. of Tps. 6 S., Rs. 13 and 14 W., with brass cap mkd.

C C N of center,
T 5 S in N. half,
R 14 W S 36 in NW.,
R 13 W S 31 in NE.,
S 6 R 13 W in SE, and
S 1 R 14 W. in SW. quadrants,
1913 in S. half.

T5S
R14W
S36 S31
S6 S1
R13W
1913

Dig pits 30 x 24 x 18 ins. crosswise on each line E. and W. of cor. 4 ft. and S. of cor. 8 ft. dist., and raise a mound of earth 5 ft. base, 2 $\frac{1}{2}$ ft. high S. of cor.

Continue S. 89° 48' W., on a true line.

Along S. bdy of Sec. 31, on W $\frac{1}{2}$ mile.

40.19 Intersect old stand. cor. of Tps. 5 S., Rs. 13 and 14 W., hereinbefore described, which I destroy and in the same place

Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in the ground, for reestablished std. cor. of Tps. 5 S., Rs. 13 and 14 W., with brass cap mkd.

Resurvey of the 1st Stand, Parallel S., thru Range 13 West.

T 5 S in N. half;
 R 14 W S 36 in NW.,
 R 13 W S 31 in NE quadrants,
 1913 in S. half.,
 Dig pits 30 x 24 x 18 ins. crosswise on each line E. and
 W. 4 ft. dist., and 8 ft. N. of cor., and build a mound
 of earth 5 ft. base 2½ ft. high N. of cor.
 Land level.
 Soil, sandy with gravel, 3rd rate.
 Undergrowth, greasewood. October 15, 1913.

A. K. Simulff.
 U. S. Transf. man.

4019
 22.25
 28.14

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,

W. K. Kierulff, ^{Transitman} U. S. ~~Surveyor~~, during the periods and in the capacities

stated opposite our several signatures, in ^{RESURVEYING} surveying all those parts or portions of *the*
NORTH boundary of Tp. 5 South, Range 12 West
East boundary of Tp. 5 South Range 13 West.

and the First Standard Parallel South, through Range 13 West.

(being the South boundary of Tp. 5 S. R. 13 W.)

of the *Gila & Salt River base & Meridian*, in the State of *Arizona*,

which are represented in the foregoing field notes as having been executed by him, and under his direc-

tion; and that said ^{re} survey has been, in all respects, to the best of our knowledge and belief, well and

faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
<i>W. J. Taverner</i>	<i>June, 2, 1913</i>	<i>Oct. 15, 1913</i>	<i>1st. Chainman.</i>
<i>J. W. Frison</i>	<i>June, 2, 1913</i>	<i>Oct. 15, 1913</i>	<i>2nd. Chainman.</i>
<i>Roy Hansen</i>	<i>June, 28, 1913</i>	<i>Oct. 15, 1913</i>	<i>Flagman.</i>
<i>Julius Frison</i>	<i>June, 2, 1913</i>	<i>Oct. 15, 1913</i>	<i>Moundman.</i>

Subscribed and certified to before me on the dates of the final service as shown above.

W. K. Kierulff
U. S. ~~Surveyor~~
Transitman.

TRANSITMAN
FINAL OATH OF UNITED STATES SURVEYOR

I, W. K. Kierulff, ^{Transitman} ~~Surveyor~~, U. S. ~~Surveyor~~, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona, For Group 28 bearing date of the 26th day of February, 1913, 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, ^{re} surveyed all those parts or portions of the
North boundary of Township 5 South, Range 12 West
East boundary of Township 5 South, Range 13 West.
and the First Standard Parallel South, through Range 13 West.
(being also the South boundary of Tp. 5 South, Rg. 13 West)
of the Gila & Salt
River Base & Meridian, in the State of Arizona, 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 ^{re} survey have been ^{re} established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for Arizona For Group 28 and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ^{re} survey.

W. K. Kierulff
U. S. ~~Surveyor~~
Transitman.

Subscribed by said W. K. Kierulff, and sworn to before me }
this 7th day of March, 1914.



Frank S. Ingalls
SURVEYOR-GENERAL OF ARIZONA

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona **DECEMBER 1, 1914**

The foregoing field notes of the ^{RESURVEY OF} ~~survey of~~

part of the North boundary of Tp. 5 S., R. 12 W.
the East boundary of Tp. 5 S., R. 13 W.
and the 1st Standard Parallel S. thru. R. 13 W. (being the South bdy. of T. 5 S., R. 13 W.)
of the Gila and Salt River Base and Meridian in the State of Arizona.

executed by W. K. KIERULFF, U.S. Transitman
under ~~his~~ special instructions dated February 26, 1913 for Group 28, ~~1913~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ^{re} surveys they describe, are hereby approved.

Frank S. Ingalls
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.~~