

FIELD NOTES

OF THE SURVEY OF THE

8th. Standard Parallel North, through R.8 W.

and through Part of R.7 W., and

Part of the Subdivision of T.32 N., R.8 W.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Dupree R. Averill

In the capacity of U. S. Surveyor..., under Special Instructions dated October 12, 1916, issued by the United States Surveyor General to govern surveys included in Group No. 72, Arizona., which were approved by the Commissioner of the General Land Office, October 24, 1916, and Assignment Instructions dated April 3, 1917 and August 11, 1921.

Survey commenced August 13, 1917

Survey completed December 13, 1921

3625

3625

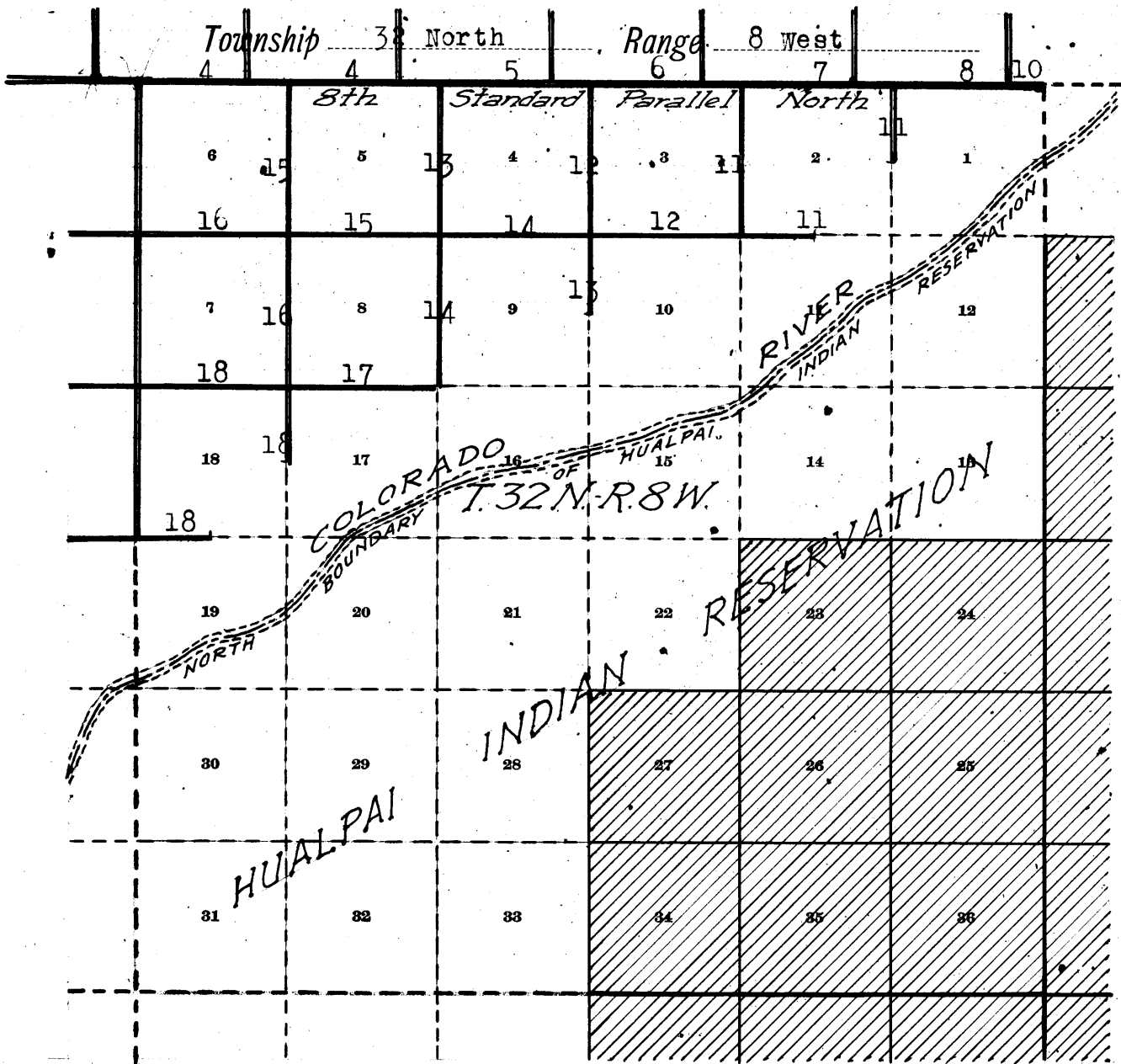
11A

Book "J"

Group 72 - Arizona

BOOK 3625

INDEX DIAGRAM.



— Lines surveyed under this group.

— Accepted surveys.

- - - Unsurveyed.

▨ Areas surveyed as per accepted plats on file.

Book "J"
Group 72 - Arizona
DATE DIAGRAM

Part of T. 32 N., R. 8 W.

8th Standard Parallel North

	8-13-17	8-14-17	8-14-17	8-15-17	8-15-17	8-15-17	8-24-17
	8-14-17	8-29-17	8-28-17	8-24-17	8-29-17	8-17-17	
	6	5	4	3	2	1	
	8-29-17	8-29-17	8-28-17	8-24-17	8-24-17		
	7	8	9	10	11	12	
	12-12-21	12-13-21	12-13-21				
	12-13-21						
	18	17	16	15	14	13	
	12-13-21						
	19	20	21	22	23	24	
	30	29	28	27	26	25	
	31	32	33	34	35	36	

FOR DATES OF EXECUTION OF SURVEY
OF THIS PART OF RANGE LINE SEE BOOK "K"

RIVER

Lines in black surveyed by Dupree R. Averill

Survey commenced August 13, 1917, and executed with Young and Sons light mountain transits Nos. 8480 and 8478, and Buff and Buff light mountain transits Nos. 9208 and 10125; each instrument is equipped with full vertical circle and Smith solar attachment; unless otherwise specified, all azimuth determinations are accomplished with the solar attachment.

Field Test of Instruments Nos. 8480, 8478, and 9208.

August 11, 1917. We examine the adjustments of the instruments and correct all errors; then, to test the solar apparatus, by comparing their indications, resulting from observations made during a.m. and p.m. hours with a meridian established by Polaris observations, we proceed as follows:

At our camp in sec. 25, T. 33 N., R. 8 W., G. and S. R. B. and M., Arizona, lat. $36^{\circ}13\frac{1}{2}'$ N., long. $113^{\circ}6\frac{1}{2}'$ W., at 10 hrs. 14 m. p.m., l.m.t., we observe Polaris at eastern elongation, making four observations, two each with the telescope in direct and reversed positions, and marking the mean point in the line thus determined on a peg driven firmly in the ground, 5 chs. N.

Azimuth of Polaris at eastern elongation is $1^{\circ}24\frac{1}{2}'$.

August 12, 1917. At 8 hrs. 0 m., a.m., l.m.t., we lay off the azimuth of Polaris, $1^{\circ}24\frac{1}{2}'$ to the west, and mark the meridian thus determined by a tack driven in a peg set firmly in the ground, 5 chs. N.

At 9 hrs. 0 m., a.m., l.m.t., we set off $36^{\circ}13\frac{1}{2}'$ N. on the lat. arcs; $15^{\circ}2'$ N. on the decl. arcs; and determine a meridian with each solar, which we find to agree with the true meridian.

At apparent noon, with the lat. arcs unchanged, we observe the sun on the meridian with each solar. The resulting readings of the decl. arcs are $14^{\circ}59\frac{1}{2}'$ N., which agree with the computed decl. of the sun.

At 3 hrs. 0 m., p.m., l.m.t., with the lat. arcs unchanged, we set off $14^{\circ}57\frac{1}{2}'$ N. on the decl. arcs and determine a meridian with each solar, which we find to agree with the true meridian.

As all of the solar observations during the usual hours of solar work come within $1'30''$ of the true meridian, we conclude that the adjustments of the instruments are satisfactory.

Unless otherwise specified, all measurements are made with a Lufkin steel tape, 5 chs. in length, compared with a Lufkin standard steel tape and found correct. The measurements are made on the slope, the vertical angles determined, and the slope measurements properly reduced to true horizontal distances.

Field Test of Instrument No. 10125.

December 11, 1921. I examine the adjustments of the instrument and correct all errors; then, to test the solar apparatus, by comparing its indications, resulting from observations made during a.m. and p.m. hours, with a meridian established by Polaris observations, I proceed as follows:

At our camp near the $\frac{1}{4}$ sec. cor. of secs. 15 and 22, T. 32 N., R. 9 W., G. and S. R. B. and M., Arizona, lat. $36^{\circ}10'$ N., long. $113^{\circ}15'$ W., using the meridian determined November 20, 1921, as described in BOOK "L",

At 9h 0m. a.m., l.m.t.,
I set off $36^{\circ}10'N$ on the lat. arc; $22^{\circ}52'S$ on the decl. arc; and determine a meridian with the solar, which I find agrees with the true meridian.

At apparent noon, with the lat. arc unchanged, I observe the sun on the meridian with the solar. The resulting reading of the decl. arc is $22^{\circ}59'S$, which agrees with the computed decl. of the sun.

At 3 hrs. 0 m., p.m., l.m.t., with the lat. arc unchanged, I set off $22^{\circ}59'S$ on the decl. arc; and determine a meridian with the solar, which I find to agree with the true meridian.

As all of the solar observations during the usual hours of solar work come within $1'30''$ of the true meridian, I conclude that the adjustments of the instrument are satisfactory.

Unless otherwise specified, all measurements are made with a Lufkin steel tape, 5 chs. in length, compared with a Lufkin standard steel tape and found correct. The measurements are made on the slope, the vertical angles determined and the slope measurements properly reduced to true horizontal distances.

Survey of the
8th Standard Parallel North Through Range 8 West.

Chains.

From the standard cor. of Ts. 33 N., Rs. 8 and 9 W.,
which is an iron post, described in Book "B",
East on the S. bdy. of sec. 31.
Over mountainous land, through heavy timber and scatter-
ing undergrowth.

Asc. 405 ft.
5.00 Cliff, 50 ft. high, brs. N. and S. Continue ascent.
10.55 Top of ledge, brs. NW. and SE. Thence over level land.
17.91 The closing cor. of Ts. 32 N., Rs. 8 and 9 W., which is
an iron post, described in Book "K".
40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for standard $\frac{1}{4}$ sec. cor., marked on brass cap

SC
 $\frac{1}{4}$ S31

1917

From which

A pinyon, 8 ins. diam., brs. N. E.,
137 lks dist., marked $\frac{1}{4}$ S31 SCBT.
A pinyon, 8 ins. diam., brs. N. W.,
86 lks. dist., marked $\frac{1}{4}$ S31 SCBT.

Desc. 45 ft.
51.00 Head of draw, course NE. Asc. 25 ft.
55.90 Desc. 20 ft.
57.91 (40.00 chs. from the closing cor. of Ts. 32 N., Rs. 8 and
9 W.) Set an iron post, 3 ft. long, 1 in. diam., 26
ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 6, T. 32
N., R. 8 W., marked on brass cap

$\frac{1}{4}$ S 6
1917

From which

A pinyon, 6 ins. diam., brs. S.54 $\frac{1}{2}$ °W.,
128 lks. dist., marked $\frac{1}{4}$ S6 BT.
A cedar, 16 ins. diam., brs. S.40°E.,
17 lks. dist., marked $\frac{1}{4}$ S6 BT.

Continue descent, 70 ft.
66.30 Rim, brs. E. and SW. Continue descent.
72.30 Asc. 120 ft.
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 22 ins. in the
ground, in a mound of stone, for standard cor. of
secs. 31 and 32, marked on brass cap

S C
T33N | R8W
S31 | S32

1917

From which

A pinyon, 4 ins. diam., brs. N.76°E.,
41 lks. dist., marked T33N R8W S32 SC BT.
A pinyon, 7 ins. diam., brs. N.54°W.,
126 lks. dist., marked T33N R8W S31 SC BT.

Land, mountainous, rolling and level.
Soil, rocky, 3rd and 4th rates.
Timber, cedar and pinyon.
Undergrowth sagebrush.

East on the S. bdy. of sec. 32.
Over level land, through scattering timber and under-
growth.

13.50 Rim, brs. W. and NE. Desc. 60 ft.
17.91 (80.00 chs. from the closing cor. of Ts. 32 N., Rs. 8 and
9 W.) Set an iron post, 3 ft. long, 2 ins diam., on
ledge rock, in a mound of stone, for closing cor. of

Survey of the
8th Standard Parallel North Through Range 8 West.

Chains.

secs. 5 and 6, T. 32 N., R. 8 W. marked on brass cap

T33N R8W
S32
S 6 | S 5
T32N | R8W
C C
1917

From which

A pinyon, 8 ins. diam., brs. S.4°W.,
233 lks. dist., marked T32N R8W S6 CC BT.

No other trees within limits. Raise a mound of stone,
2 ft. base, 1½ ft. high, at foot of ledge, 10 ft. S.
of cor.

Continue descent, 625 ft.

25.00
40.00

Leave scattering timber, brs. NE. and SW.
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, in a mound of stone, for standard ¼ sec. cor.
marked on brass cap

SC
¼S32
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N.
of cor.

Continue descent, 115 ft.

57.91

(40.00 chs. from the closing cor. of secs. 5 and 6,
T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 1 in.
diam., 24 ins. in the ground, in a mound of stone, for
¼ sec. cor. of sec. 5, T. 32 N., R. 8 W., marked on
brass cap

¼S 5
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high,
S. of cor.

Thence over level land.

67.50
75.00
80.00

Wash, course SE.
Asc. 55 ft.
Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in
the ground, for standard cor. of secs. 32 and 33,
marked on brass cap

S C
T33N | R8W
S32 | S33
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N.
of cor.

Land, mountainous, rolling and level.
Soil, rocky, 4th rate.
Timber, pinyon and cedar.
Undergrowth, sagebrush.

East on the S. bdy. of sec. 33.
Over mountainous land, through scattering undergrowth.
Desc.

3.00
12.50
14.75
17.91

Wash, course SW. Asc. 140 ft.
Wash, course SW. Continue ascent.
Wash, course S. Continue ascent.
(80.00 chs. from the closing cor. of secs. 5 and 6,
T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 2

Survey of the
8th Standard Parallel North Through Range 8 West.

Chains.	
	<p>ins. diam., 27 ins. in the ground, for closing cor. of secs. 4 and 5, T. 32 N., R. 8 W., marked on brass cap</p> <p style="text-align: center;">T33N R8W S33 ----- S 5 S 4 T32N R8W C C 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.</p> <p>Asc. 125 ft.</p> <p>27.00 Spur, slopes S. Desc. 480 ft.</p> <p>40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for standard ¼ sec. cor., marked on brass cap</p> <p style="text-align: center;">S C ----- ¼ S33 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.</p> <p>Continue descent, 110 ft.</p> <p>42.90 Wash, course SE. Continue descent, 35 ft.</p> <p>51.00 Center of wash, 1 ch. wide, 10 ft. deep, course SE. Continue descent, 90 ft.</p> <p>57.91 (40.00 chs. from the closing cor. of secs. 4, and 5, T32N R8W) Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor. of sec. 4, T. 32 N., R. 8 W., marked on brass cap</p> <p style="text-align: center;">----- ¼ S 4 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.</p> <p>Continue descent.</p> <p>62.50 Wash, 20 lks. wide, 10 ft. deep, course S. Continue descent, 110 ft.</p> <p>77.50 Wash, course SE. Continue descent.</p> <p>80.00 Set an iron post, 3 ft. long, 2 ins. diam., 12 ins. in the ground, in a mound of stone, for standard cor. of secs. 33 and 34, marked on brass cap</p> <p style="text-align: center;">S C ----- T33N R8W S33 S34 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.</p> <p>Land, mountainous. Soil, 4th rate. No timber. Undergrowth, sagebrush and Fair bunch grass.</p>
17.91	<p>East on S. bdy. of sec. 34. Over mountainous land, through scattering undergrowth. Desc. 120 ft.</p> <p>(80.00 chs. from the closing cor. of secs. 4 and 5, T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 2 ins. diam., 30 ins. in the ground, for closing cor. of secs. 3 and 4, T. 32 N., R. 8 W., marked on brass cap</p>

Survey of the
8th Standard Parallel North Through Range 8 West.

Chains.

T33N R8W
S34
S 4 | S 3
T32N | R8W
C C
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

Continue descent.

24.00 Wash, course S. Asc. 85 ft.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, in a mound of stone, for standard ¼ sec. cor., marked on brass cap

SC
¼S34
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Asc. 170 ft.

51.60 Wash, course S. Continue ascent.

57.91 (40.00 chs. from the closing cor. of secs. 3 and 4, T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, in a mound of stone, for ¼ sec. cor. of sec. 3, T. 32 N., R. 8 W., marked on brass cap

¼S 3
1917

Dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. of post, 3 ft. dist.

Continue ascent, 170 ft.

68.00 Spur, slopes S. Thence along S. slope.

72.15 Desc. 75 ft.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 30 ins. in the ground, for standard cor. of secs. 34 and 35, marked on brass cap

S C
T33N R8W
S34 | S35
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Land, mountainous.

Soil, rocky, 4th rate.

No timber.

Undergrowth, sagebrush, and Spanish bayonet.

East on S. bdy. of sec. 35.
Over mountainous land, through scattering undergrowth.
Desc.

0.10 Wash, course SW. Asc. 100 ft.

6.65 Spur, slopes S. Cliff, brs. N. and S. Desc. 610 ft.

17.00 Wash, 75 lks. wide, 15 ft. deep, course SE.

17.91 (80.00 chs. from the closing cor. of secs. 3 and 4, T. 32 N., R. 8 W.) The true point for closing cor. of secs. 2 and 3, T. 32 N., R. 8 W., falls in wash, 15 lks. wide, course SE., where it cannot be securely established. Therefore at a point 0.20 chs. S 0° 1. E.

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, in a mound of stone, for witness cor. to closing cor. of secs. 2 and 3, T. 32 N., R. 8 W., marked on

Survey of the
8th Standard Parallel North Through Range 8 West.

Chains.

brass cap

T33N R8W	
S35	
S 3	S 2
T32N	R8W
WC	CC
1917	

And raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

Continue descent, 115 ft.

24.60 Wash, 50 lks. wide, 10 ft. deep, course SE. Continue descent, 55 ft.

28.00 Center of wash, 100 lks. wide, 30 ft. deep, course SE. Continue descent, 130 ft.

33.50 Wash, 30 ft. deep, course SE. Asc. 75 ft.

37.70 Desc. 25 ft.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for standard ¼ sec. cor., marked on brass cap

SC
¼ S35

1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Continue descent, 65 ft.

44.25 Wash, course SE. Asc. 65 ft.

51.00 Spur, slopes S. Desc. 110 ft.

57.91 (40.00 chs. from the true point for closing cor. of secs. 2 and 3, T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground, 14 ins. in a mound of stone, for ¼ sec. cor. of sec. 2, T. 32 N., R. 8 W., marked on brass cap

¼ S 2
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Continue descent, 105 ft.

69.80 Wash, course S. Asc. 45 ft.

74.50 Desc. 25 ft.

76.25 Wash, course S. Asc.

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

S C
T33N R8W
S35 S36

1917

And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Land, mountainous.

Soil, rocky, 4th rate.

No timber.

Undergrowth, black brush and Spanish bayonet.

East on S. bdy. of sec. 36.

Over mountainous land, through scattering undergrowth. Asc. 55 ft.

10.00 Desc.

17.40 Wash, course S. Asc. 75 ft.

17.91 (80.00 chs. from the true point for closing cor. of secs.

Survey of the
8th Standard Parallel North Through Range 8 West.

Chains.

2 and 3, T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, in a mound of stone, for closing cor. of secs. 1 and 2, T. 32 N., R. 8 W., marked on brass cap

T33N R8W
S36
S 2 | S 1
T32N | R8W
C C
1917

And raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.

24.30 Continue ascent, 70 ft.
29.85 Spur, slopes S. Desc. 45 ft.
35.95 Asc. 30 ft.
38.00 Desc. 35 ft.
40.00 Wash, course SW. Asc.

Set an iron post, 3 ft. long, 1 in. diam., 10 ins. in the ground, 16 ins. in a mound of stone, for standard 1/4 sec. cor., marked on brass cap

SC
1/4 S36
1917

And raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

45.20 Continue ascent, 35 ft.
54.80 Spur, slopes S. Desc. 10 ft.
57.91 Wash, course S. Thence over rolling land.

(40.00 chs. from the closing cor. of secs. 1 and 2, T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, in a mound of stone, for 1/4 sec. cor. of sec. 1, T. 32 N., R. 8 W., marked on brass cap

1/4 S 1
1917

And raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.

70.00 Desc. 15 ft.
71.00 Draw, course SW. Asc. 80 ft.
80.00 Spur, slopes S. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, in a mound of stone, for standard cor. of Ts. 33 N., Rs. 7 and 8 W., marked on brass cap

T33N
R 8W | R7W
S36 | S31
1917

And raise a mound of stone, 4 ft. base, 3 ft. high, N. of cor.

Land, mountainous and rolling.
Soil, rocky, 4th rate.
No timber.
Undergrowth, sagebrush and Spanish bayonet.

Survey of the
8th Standard Parallel North Through Part of Range 7 West.

Chains.

From the standard cor. of Ts. 33 N., Rs. 7 and 8 W.,
which is an iron post, hereinbefore described,
East on S. bdy. sec. 31.
Over mountainous land, through scattering undergrowth.
Desc. 65 ft.
3.00 Gulch, course SE. Asc. 30 ft.
6.50 Desc. 40 ft.
8.90 Gulch, course S. Asc. 80 ft.
11.40 Desc. 25 ft.
17.91 (80.00 chs. from the closing cor. of secs. 1 and 2,
T. 32 N., R. 8 W.) Set an iron post, 3 ft. long, 3
ins. diam., 24 ins. in the ground, for closing cor. of
Ts. 32 N., Rs. 7 and 8 W., marked on brass cap

S1	S 6
R8W	R7W
T32N	
C C	

And raise a mound of stone, 2 ft. base, 1½ ft. high, S.
of cor.
At a point 12.25 chs. South of this cor., impassable
rim of Colorado Canyon, brs. E. and W.
Land, mountainous.
Soil, rocky, 4th rate.
No timber.
Undergrowth, sagebrush.

Survey of Part of the
Subdivision of T. 32 N., R. 8 W.

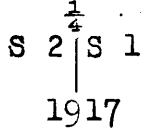
Chains.

From the closing cor. of secs. 1 and 2, on the N. bdy. of Tp., (8th Standard Parallel North), which is an iron post, hereinbefore described, S.0°1'E. bet. secs. 1 and 2.

20.00
40.00

Over broken land, through scattering undergrowth.
Desc. 240 ft.

Rim of canyon of Colorado River, brs. E. and W. Set an iron post, 3 ft. long, 1 in. diam., 6 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap



And raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor.

Impossible to continue line from this cor. I therefore discontinue the survey of this range of sections.

Land, broken and mountainous.
Soil, rocky, 4th rate.
Timber, none.
Undergrowth, sagebrush.

From the true point for closing cor. of secs. 2 and 3, on the N. bdy. of Tp. 32 (8th Standard Parallel North), witnessed at 0:20 chs. S.0°1'E. as hereinbefore described, S.0°1'E. bet. secs. 2 and 3.

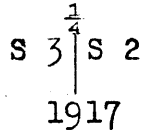
(0.20)
4.00
14.60
40.00

Over mountainous land, through scattering undergrowth.
Asc. 165 ft.

The witness cor. to closing cor. of secs. 2 and 3, hereinbefore described.

Cliff, brs. E. and W. Continue ascent.
Desc. 410 ft.

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

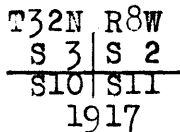


And raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

80.00

Continue descent, 140 ft.

Set an iron post, 3 ft. long, 2 ins. diam., 4 ins. in the ground, in a mound of stone, for cor. of secs. 2, 3, 10 and 11, marked on brass cap



And raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor.

Land, mountainous.
Soil, rocky, 4th rate.
Timber, none.
Undergrowth, sagebrush.
Good grazing.

East on a true line, bet. secs. 2 and 11.
Over mountainous land, through scattering undergrowth.
Desc. 190 ft.

Survey of part of the
Subdivision of T. 32 N., R. 8 W.

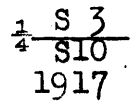
Chains. 40.00	<p>Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap</p> $\begin{array}{c} \frac{1}{4} \text{ S } 2 \\ \text{S } 11 \\ 1917 \end{array}$ <p>And raise amound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.</p>
48.00	<p>Rim of Colorado River Canyon, brs. N. and S. Impossible to project line beyond this point. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, sagebrush.</p>
	<p>The impassable rim of the Colorado River Canyon prevents the establishment of the $\frac{1}{4}$ sec. cor. of secs. 10 and 11 or a witness cor. thereto within 10 chs. of the true point for cor. I therefore discontinue the survey of this range of sections.</p>
40.00	<p>From the closing cor. of secs. 3 and 4, on the N. bdy. of Tp., (8th Standard Parallel North, which is an iron post, hereinbefore described, S. $0^{\circ}2'E.$ bet. secs. 3 and 4. Over rolling land, through scattering undergrowth. Desc. 160 ft.</p> <p>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</p> $\begin{array}{c} \frac{1}{4} \\ \text{S } 4 \text{ } \text{S } 3 \\ 1917 \end{array}$ <p>And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.</p>
80.00	<p>Continued descent, 125 ft.</p> <p>Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked on brass cap</p> $\begin{array}{c} \text{T } 32 \text{ N } \text{ R } 8 \text{ W} \\ \text{S } 4 \text{ } \text{S } 3 \\ \text{S } 9 \text{ } \text{S } 10 \\ 1917 \end{array}$ <p>And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land rolling. Soil, rocky, 4th rate. No timber. Undergrowth, sagebrush.</p>
40.00 80.20 36.00	<p>East on a random line, bet. secs. 3 and 10. Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 9 lks. N. of the cor. of secs. 2, 3, 10 and 11. Thence N. $89^{\circ}56'$ on a true line, bet. secs. 3 and 10. Over rolling land, through scattering undergrowth. Asc. 50 ft. Desc. 65 ft.</p>

Survey of Part of the
Subdivision of T. 32 N., R. 8 W.

Chains.

40.10

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



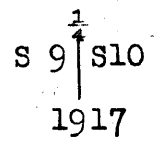
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high. N. of cor.

80.20

Asc. 130 ft.
The cor. of secs. 3, 4, 9 and 10.
Land, rolling.
Soil, rocky, 4th rate.
No timber.
Undergrowth, sagebrush.

7.00
14.80
19.80
21.25
40.00

S.0°2'E. bet. secs. 9 and 10.
Over rolling land, through scattering undergrowth.
Desc. 10 ft,
Asc. 60 ft.
Desc. 35 ft.
Asc. 15 ft.
Desc. 130 ft.
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



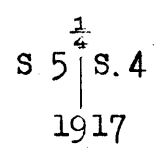
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

50.00

Impassable rim of Colorado River Canyon, brs. E. and W.
As it is impossible to continue line beyond this point I discontinue the survey of this range of sections here.
Land, rolling.
Soil, rocky, 4th rate.
No timber.
Undergrowth, sagebrush.
Fair grazing.

40.00

From the closing cor. of secs. 4 and 5, on the N. bdy. of Tp., (8th Standard Parallel North), which is an iron post, hereinbefore described,
S.0°3'E. bet. secs. 4 and 5.
Over mountainous land, through scattering undergrowth.
Desc. 330 ft.
Set an iron post, 3 ft. long, 1 in. diam., 22 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap



And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

43.60
54.50
69.00
80.00

Continue descent, 160 ft.
Draw, course E.
Draw, course E. Asc. 295 ft.
Ridge, brs. NE. and SW. Desc. 215 ft.
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked on

Survey of Part of the
Subdivision of T. 32 N., R. 8 W.

Chains.	
	<p>brass cap</p> <p style="text-align: center;">T32N R8W. S 5 S 4 <u> </u> S 8 S 9 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, mountainous. Soil, rocky, 4th rate. Timber, none. Undergrowth, sagebrush.</p>
40.00 79.90	<p>East on a random line, bet. secs. 4 and 9. Set temp. ¼ sec. cor. Intersect N. and S. line, 19 lks. S. of the cor. of secs. 3, 4, 9 and 10. Thence S. 89° 52' W. on a true line, bet. secs. 4 and 9. Over mountainous land, through scattering undergrowth. Asc. 235 ft.</p>
39.95	<p>Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap</p> <p style="text-align: center;">¼ S 4 <u> </u> S 9 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.</p>
72.40 79.90	<p>Continue ascent, 495 ft. Desc. 30 ft. The cor. of secs. 4, 5, 8 and 9. Land, mountainous. Soil, rocky, 4th rate. Timber, none. Undergrowth, sagebrush.</p>
40.00	<p>S. 0° 3' E. bet. secs. 8 and 9. Over mountainous land, through scattering undergrowth. Desc. 455 ft. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap</p> <p style="text-align: center;">¼ S 8 S 9 <u> </u> 1917</p> <p>And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p>
68.00	<p>Desc. 340 ft. Enter wash, course S., from NW.</p>
69.50	<p>Cliffs, 30 ft. high, brs SE. and SW. Leave wash, course S. 10° W. Continue descent, 60 ft.</p>
70.40	<p>Point of spur, slopes W. Set an iron post, 3 ft. long, 2 ins. diam., 18 ins. in the ground, in a mound of stone, stone, 3 ft. base, with stone marked cross (X) along- side, for witness cor. to cor. of secs. 8, 9, 16 and 17, marked on brass cap</p>

Survey of Part of the
Subdivision of T.32 N., R. 8 W.

BOOK 3625

Chains

T32N R8W
S 8 | S 9
S 17 | S 16
W.C
1921

80.00 And raise a mound of stone, 2 ft. base, 1½ ft. high
W. of cor.
The true point for cor. of secs. 8, 9, 16 and 17 is in-
accessible.
Land; mountainous.
Soil; rocky, 4th. rate.
No timber.
Undergrowth; quinine brush, greasewood, Spanish bayonet,
and cactus.
The impassable rim of the Colorado River Canyon prevents
the survey of any other portion of this range of sections.

20.00 From the closing cor. of secs. 5 and 6 on the N. bdy. of
the Tp., (8th. Standard Parallel North) which is an iron
post hereinbefore described,
S.0°3'E., bet. secs. 5 and 6.
Over mountainous land, through scattering undergrowth,
and timber.
Desc. 430 ft.
33.00 Foot of descent. Over rolling land.
40.00 Desc. 180 ft.
Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
the ground for ¼ sec. cor. marked on brass cap

¼
S 6 | S 5
|
1917

47.50 And raise a mound of stone, 2 ft. base, 1½ ft. high
W. of cor.
Desc. 100 ft.
50.00 Asc. 30 ft.
Spur, slopes E. Desc. 80 ft.
56.00 Asc. 46 ft.
61.00 Spur, slopes E. Desc. 220 ft. over S. slope.
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 25 ins.
in the ground for cor. of secs. 5, 6, 7 and 8, marked
on brass cap

T32N R8W
S 6 | S 5
S 7 | S 8
1917

And raise a mound of stone, 2 ft. base, 1½ ft. high
W. of cor.
Land; mountainous and rolling.
Soil; rocky, 4th. rate.
Timber; pinyon and cedar.
Undergrowth; sagebrush.

40.00 East, on a random line bet. secs. 5 and 8.
79.98 Set temp. ¼ sec. cor.
Intersect N. and S. line 22 lks. N. of the cor. of secs.
4, 5, 8 and 9.
Thence
N.89°51'W., on a true line bet. secs. 5 and 8.

Survey of Part of the
Subdivision of T.32 N., R. 8 W.

Chains Over mountainous land, through scattering undergrowth.
Asc. 50 ft.
3.00 Asc. 145 ft.
12.50 Draw, course S. Asc. 90 ft.
39.99 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

$\frac{1}{4}$ $\frac{S\ 5}{S\ 8}$
1917

And raise amound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N.
of cor.
79.98 Desc. 130 ft.
The cor. of secs. 5, 6, 7 and 8.
Land; mountainous.
Soil; rocky, 4th. rate.
No timber.
Undergrowth; sagebrush.

40.00 West, on a random line bet. secs. 6 and 7.
Set temp. $\frac{1}{4}$ sec. cor.
80.04 Fall 5 lks. S. of the cor. of secs. 1, 6, 7 and 12, on
the west bdy. of the Tp., which is an iron post, de-
scribed in Book "K".

Thence
S. $89^{\circ}58'E.$, on a true line bet. secs. 6 and 7.
Over mountainous land, through scattering undergrowth.
Desc.
1.05 Asc. 35 ft.
6.00 Desc. 155 ft.
28.55 Asc. 55 ft.
35.00 Desc. 10 ft.
40.04 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap

$\frac{1}{4}$ $\frac{S\ 6}{S\ 7}$
1917

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high
N. of cor.
Asc. 25 ft.
50.70 Desc. 40 ft.
55.00 Thence over rolling land.
80.04 The cor. of secs. 5, 6, 7 and 8.
Land; rolling and mountainous.
Soil; rocky, 4th. rate.
Timber; none.
Undergrowth; sagebrush.

40.00 S. $0^{\circ}3'E.$, bet. secs. 7 and 8.
Over rolling land, through scattering undergrowth.
Desc. 260 ft. over gradual S. slope.
Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap

$\frac{1}{4}$
S 7 | S 8
1917

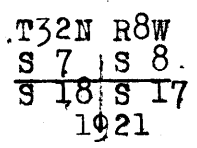
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high
W. of cor.

Survey of Part of the
Subdivision of T. 32 N., R. 8 W.

BOOK 3625

Chains
77.70
80.00

Head of wash, course SE.
Set an iron post, 3 ft. long, 2 ins. in diam., 3 ins. in the ground to bed rock, supported in a mound of stone 5 ft. base, 2½ ft. high, with stone marked cross (X) at base of post, for cor. of secs. 7, 8, 17 and 18, marked on brass cap.



Land; rolling.
Soil; rocky, 4th. rate.
Timber; none.
Undergrowth; greasewood, sagebrush, cactus, and Spanish bayonet.

24.92 S.89°51'E., on a random line bet. secs. 8 and 17.
Impossible to continue chaining on line from this point.
Run traverse as follows:

- N.40°E. 5.00 chs.
- S.53°E. 3.30 "
- S.47°E. 2.70 "
- South .02 " to a point on random line, 32.74 chs. S.89°51'E., of the cor. of secs. 7, 8, 17 and 18.

32.74 Thence S.89°51'E., on a random line, bet. secs. 8 and 17, continuing measurement.

40.00 Set temp. ¼ sec. cor.

61.33 Impossible to continue on random line from this point, Offset N.0°3'W., 10.00 chs., and continue S.89°51'E., on offset to random line, in sec. 8.

80.06 Intersect N. and S. line, 12 lks. N. of the witness cor. to cor. of secs. 8, 9, 16 and 17.
The true course and distance of the line between secs. 8 and 17 are therefore S.89°57'W., 80.06 chs.

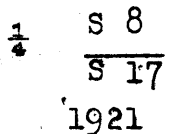
From the true point for cor. of secs. 8, 9, 16 and 17, (inaccessible)
S.89°57'W. on a true line, bet. secs. 8 and 17, distance by offset as hereinbefore described.

18.05 Over mountainous land, through scattering undergrowth.
18.73 Rim of canyon, 1000 ft. high, bears NE. and SW.

26.75 Traverse point. Thence by chaining as hereinbefore described. Asc. 95 ft.

40.03 Thence along S. slope.

Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground to bed rock, supported in a mound of stone, 5 ft. base, 2½ ft. high, with stone marked cross (X) at foot of post, for ¼ sec. cor., marked on brass cap



47.32 Thence by traverse along rim.
The approximate topography on line is as follows:

47.55 Rim of cliffs, 300 ft. high, bears SE. and NW.

54.95 Rim of cliffs, 300 ft. high, bears NE. and SW.

55.14 Traverse point. Thence by chaining along S. slope about 2 chs. N. of canyon rim.

76.85 Wash, 30 lks. wide, 20 ft. deep, course SE. Asc. 45 ft.
80.06 The cor. of secs. 7, 8, 17 and 18.

Land; rolling and mountainous.
Soil; rocky, 4th. rate.
No timber.
Undergrowth; quinine brush, greasewood, Spanish bayonet, cactus and sagebrush,

Survey of Part of the
Subdivision of T. 32 N., R. 8 W.

Chains N. 89° 58' W., on a random line bet. secs. 7 and 18.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.21 Fall 7 lks. N. of the cor. of secs. 7, 12, 13 and 18; on
 the W. bdy. of Tp., which is an iron post, described
 in Book "K".
 Thence
 N. 89° 59' E., on a true line bet. secs. 7 and 18.
 Over broken lava flow, through scattering undergrowth.
 11.20 Draw, 20 lks. wide, 8 ft. deep, course S.
 37.50 Draw, 10 lks. wide, 5 ft. deep, course S.
 40.21 Set an iron post, 3 ft. long, 1 in. in diam., 4 ins. in
 the ground to bed rock, supported in a mound of stone,
 5 ft. base, 2½ ft. high, with stone marked cross (X)
 at foot of post, for $\frac{1}{4}$ sec. cor. marked on brass cap

$\frac{1}{4}$ S 7
 S 18
 1921

And raise a mound of stone, 4 ft. base, 3 ft. high N.
 of cor.

55.00 Leave lava flow, bears NE. and S. Enter sandstone.
 57.50 Wash, 10 lks. wide, 5 ft. deep, course SW.
 72.00 Spur, slopes S. Desc. 40 ft.
 80.21 The cor. of secs. 7, 8, 17 and 18.

Land; rolling.
 Soil; rocky, 4th. rate.
 Timber; none.
 Undergrowth; greasewood, sagebrush, Spanish bayonet, and
 cactus.

S. 0° 3' E., bet. secs. 17 and 18.
 Over rolling land, through scattering timber and under-
 growth.
 Asc. 50 ft.
 20.00 Desc. 30 ft.
 28.00 Head of wash, 20 lks. wide, course E. Asc. 100 ft.
 40.00 Mark a cross (X) on surface rock, and over same set an
 iron post, 3 ft. long, 1 in. in diam., supported in a
 mound of stone, 6 ft. base, 3 ft. high, for $\frac{1}{4}$ sec. cor.
 marked on brass cap

$\frac{1}{4}$
 S 18 | S 17
 1921

From which
 A pinyon, 8 ins. in diam., bears N. 11½° E.,
 202 lks. dist., marked $\frac{1}{4}$ S 17 B T
 A cedar, 14 ins. in diam., bears N. 45° W.,
 172 lks. dist., marked $\frac{1}{4}$ S 18 B T

Desc.
 50.00 Wash, 10 lks. wide, course E.
 62.20 Rim rock, 200 ft. high, bears N. 10° E., and S. 35° W. Im-
 practicable to continue survey beyond this point.
 Land; rolling.
 Soil; rocky, 4th. rate.
 Timber; cedar and pinyon.
 Undergrowth; dogwood, greasewood, quinine brush, mescal,
 Spanish bayonet, cactus, and sagebrush

Since the cor. of secs. 17, 18, 19 and 20 can not be es-
 tablished at the true point for cor., or a witness cor.
 thereto within the allowable distance of 10.00 chs.,
 I survey the west portion of the line bet. secs. 18 and

Survey of Part of the
Subdivision of T. 32 N., R. 8 W.

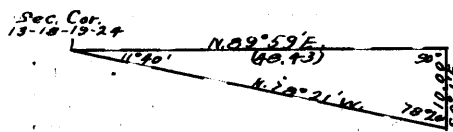
Chains

19 as follows:

From the cor. of secs. 13, 18, 19 and 24, on the W. bdy. of Tp., which is an iron post, described in Book "K", N.89°59'E., on a true line bet. secs. 18 and 19. Over mountainous land, through scattering timber and undergrowth.

On account of precipitous cliffs, it is impossible to chain. Therefore proceed to point on line in advance from which I measure a base S.0°1'E., 10.00 chs. dist. From the south end of base, a flag on the cor. of secs. 13, 18, 19 and 24, bears N.78°21'W.

The three angles of the triangle are therefore 78°20', 11°40' and 90°, the sum of which is 180°



The distance triangulated =
tan, 78°20' X 10.00 = 4.84300
X 10.00 = 48.43 chs.
Distance by return measure = .28 chs.
48.43 - .28 = 48.15 chs.

The approximate topography is as follows:

- 3.00 Cliff, 200 ft. high, bears N. and S.
- 15.00 Wash, course S.
- 35.00 Cliff, 200 ft. high, bears N. and S.
- 40.28 The true point for 1/4 sec. cor. is inaccessible.
- 47.78 Rim of cliff, bears N. and S.
- 48.15 Set an iron post, 3 ft. long, 1 in. in diam., on ledge rock, in a mound of stone, 5 ft. base, 3 ft. high, with cross (X) marked on abutting ledge, near base, for witness cor. to the 1/4 sec. cor., marked on brass cap

W C 1/4 S 18
S 19
1921

- 48.43 Thence N.89°59'E., on a true line, distance by chaining. Triangulation point. Asc. 230 ft.
- 54.20 Rim rock, 20 ft. high, bears N. and S. Continue ascent.
- 65.20 Rim rock, 200 ft. high, bears N.35°E., and S. Impossible to continue line farther, because of cliffs, 1500 ft. high.

Land; mountainous.
Soil; rocky, 4th. rate.
Timber; cedar.
Undergrowth; quinine brush, cactus, Spanish bayonet.

Boundaries of That Part of T. 32 N., R. 8 W.,
Surveyed under Group 72.

Latitudes, departures and closing errors.

Line designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N. chs.	S. chs.	E. chs.	W. chs.
Subdivisional Boundary.	S.0°1'E.	80.00		80.00	.02	
	N.89°56'W.	80.20	.09			80.20
	S.89°52'W.	79.90		.19		79.90
	S.0°3'E.	80.00		80.00	.07	
	S.89°57'W.	80.06		.07		80.06
	S.89°59'W.	80.21		.02		80.21
West Boundary	North	160.00	160.00			
North Boundary (8th. Std. Par.)	East	320.00			320.00	
Convergency					.09	
Totals			160.09	160.28	320.18	320.37
				160.09		320.18
Error in latitude -----				0.19		
Error in departure -----						0.19

The continued satisfactory adjustment of the solar transits during the survey of this township is indicated from field tests as described in Books "D" and "M".

GENERAL DESCRIPTION.

The portion of this township surveyed at this time consists of mountainous land, draining southward into the Colorado River. The soil, of rocky 4th rate quality, supports a scattering growth of sagebrush, greasewood, Spanish bayonet and cactus undergrowth, with occasional cedar or pinyon tree. There are no settlers, nor are there any roads in the township. The nearly perpendicular rim of the Colorado River Canyon prevents the survey of this township in its entirety. No trace of mineral was noted.

BOOK 3625

4-680

FIELD ASSISTANTS. to
Dupree R. Averill, U.S. Surveyor

NAMES.	CAPACITY.
Clifton Hildebrand	First Chainman.
Rexford Perkins	Second Chainman.
Edgar Biebe	Flagman.
Alma E. Flanigan	Cornerman.
Joseph Hastings	Axman.
Walter Thomas	First Chainman.
Hale Pierce	Second Chainman.
George M. Tucker	Flagman.
Lowell McAllister	Cornerman.

BOOK 3625

CERTIFICATE OF UNITED STATES SURVEYOR.

I, Dupree R. Averill, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 72, Arizona bearing date of the 12 th. day of October, 1916, 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

The 8th. Standard Parallel North, in Range 7 West

and in Range 8 West 7 W. and the

Subdivision lines of T. 32 N., R. 8 W.

Township 32 North, Range 8 West

of the Gila and Salt River

Base and Meridian, in the State of Arizona, which are represented in

and by diagram on page 1 hereof

the foregoing field notes as having been executed by me, and under my direction; and 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 Group 72, Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Phoenix Arizona
January 3, 1924

Dupree R. Averill
U. S. Surveyor.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, May 15, 1924.

The foregoing field notes of the survey of

The 8th. Standard Parallel North, through R. 8 W., and

through Part of R. 7 W., and

Part of the Subdivision of T. 32 N., R. 8 W. of the

Gila and Salt River Base and Meridian in the

State of Arizona

executed by Dupree R. Averill, U.S. Surveyor

under his special instructions dated October 12, 1916 for Group 72 Arizona, 19, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Charles W. Donohoe
U. S. 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.