

2871

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4-679

Book "H."
(Subdivisions)

BOOK 2871

FIELD NOTES

OF THE SURVEY OF PART

of the

SUBDIVISION LINES OF

FRACTIONAL TOWNSHIP 14½ NORTH, RANGE 6 WEST,

(WEST HALF)

Of the Gila and Salt River Base and *Meridian,*

In the State of Arizona.

EXECUTED BY

John F. Hesse,

U. S. Surveyor,

In the capacity of U. S. Surveyor, under instructions dated Sept. 26, 1914, issued by the United States Surveyor General to govern surveys included in Group No. 37, which were approved by the Commissioner of the General Land Office, Oct. 3, 1914.

Survey commenced June 9, 1915.

Survey completed June 21, 1915.

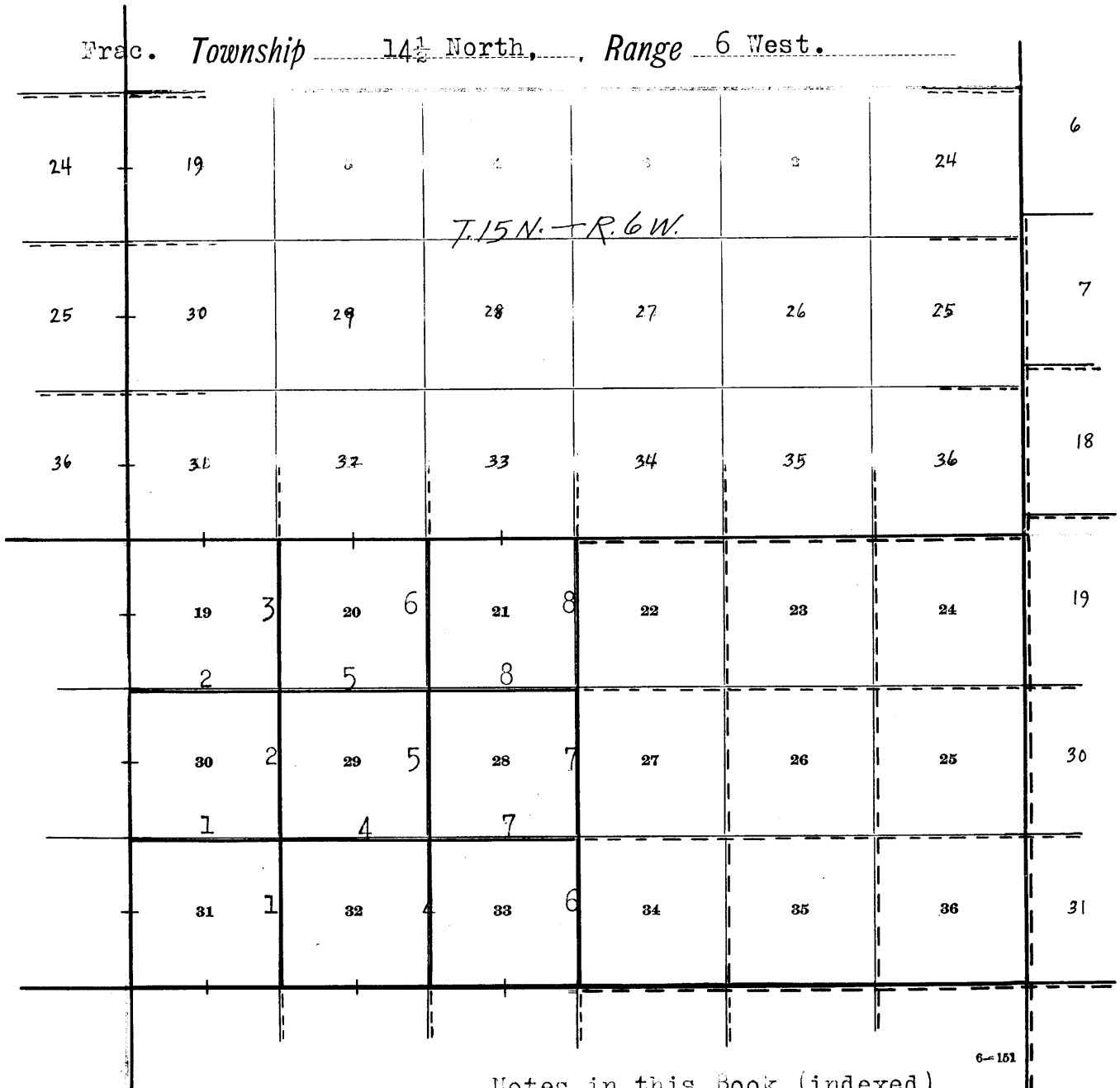
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1A

BOOK 2871

Book "H."

INDEX DIAGRAM.

Frac. Township 14 $\frac{1}{2}$ North, Range 6 West.



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Notes in this Book (indexed)

Notes in Book "A."

Notes in Book "I."

Accepted surveys.

Unsurveyed lines.

Partial Subdivision of frac1 Tp. 14 1/2 N. Rg. 6 W.

Chains.

Survey commenced June 9, 1915, and executed with an
 A. Lietz light mountain transit, No. 6166, 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 approved by the Assistant Supervisor
 of Surveys for Arizona and California, conditional upon
 satisfactory field tests, September 28, 1914.
 I examine the adjustments of the transit, and find them
 correct; then, to test the solar apparatus, by comparing
 its indications, resulting from solar observations made
 during a.m. and p.m. hours, with a meridian determined
 by observations on Polaris, I proceed as follows:
 At my camp which is located near the cor. of secs. 19, 20
 29 and 30, Tp. 14 1/2 N. Rg. 6 W.; latitude 34° 37' 00" N.;
 longitude 112° 55' 13" W.; I set off 34° 37' N. on the
 lat. arc; 22° 56' N. on the decl. arc; and at 5h. 00m.
 p.m., l.m.t., determine with the solar a meridian and
 mark a point thereof, on a stone firmly set in the
 ground 5 chs. N. of my station.

June 9, 1915.

June 10, 1915.

From the cor. of secs. 5, 6, 31 and 32 on the
 S. bdy. of the Tp. established by me, as described in
 Book "A" I run,

N. 0° 01' E. bet. secs. 31 and 32.

Ascend S. slope through scattering brush.

6.38
40.00

Spur, 3/4 W. 64 ft. above cor. Descend
 Set an iron post 3 ft. long, 1 in. diam., 10 ins. in the
 ground, in a mound of stone, for 1/4 sec. cor., marked
 on brass cap

1915 on S. rim;
 1/4 S31 in W. and
 S32 in E. half; and raise a mound of stone 2 ft.
 base 1 1/2 ft. high, W. of cor. Pits impracticable.

80.00

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
 ground for cor of secs. 29, 30, 31 and 32, marked on
 brass cap

1915 on S. rim;
 T14 1/2 NR6W in N. half;
 S30 in N. W.
 S29 in N. E.
 S32 in S. E. and
 S31 in S. W. quadrant; and raise a mound of stone

2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable.
 8 1/2 ft. below spur.

Land, mountainous. malpais formation.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, oak, catclaw, mesquite and laurel.

June 10, 1915.

June 11, 1915; At 7h. 00m. a.m., l.m.t., I set off 34°
 36' N. on the lat. arc; 23° 03 1/2' N. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 29, 30, 31 and 32,

Thence I run

West on a random line bet. secs. 30 and 31.

40.00
80.00

Set temp. 1/4 sec. cor.
 Intersect W. bdy. of Tp. 4 lks. S. of the cor. of secs.
 25, 30, 31 and 36, established by me as described in Book
 "A."

Thence I run

2 Partial Subdivision of fracl. Tp. 14 $\frac{1}{2}$ N. Rg. 6 W.

Chains.	S. 89° 58' E. on a true line bet. secs. 30 and 31. Along rough general N. slope, through scattering brush.
8.38	Wash 15 lks. wide course N. 70 ft. below cor.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S30 in N. and S31 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. This cor. is on top of spur N. W. 240 ft. above Cor. on W. bdy.
80.00	The cor. of secs. 29, 30, 31 and 32. 179 ft. below $\frac{1}{4}$ sec. cor. June 11; At this cor. I set off 23° 03 $\frac{1}{2}$ ' N. on the decl. arc; and observe the sun on the meridian at noon the resulting lat. is 34° 36' N. Land, mountainous. Malpais formation. Soil, rocky; 4th. rate. No timber. Undergrowth, oak, laurel and catclaw. Poor grass.
	N. 0° 01' E., bet. secs. 29 and 30. Descend through scattering brush.
15.13	Sycamore Creek (dry) 50 lks. wide, course W. 100 ft. below corner. Ascend.
18.88	Wire fence bears NW and SE.
36.46	Spur, brs. W. 104 ft. above wash. Descend.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S30 in W. and S29 in E. half; from which A cedar 5 ins. diam., bears S. 7 $\frac{1}{4}$ ° E. 169 lks. dist., marked $\frac{1}{4}$ S29BT. A cedar 6 ins. diam., bears S. 46 $\frac{1}{4}$ ° W. 131 lks. dist., marked $\frac{1}{4}$ S30BT.
57.28	Cottonwood Creek 60 lks. wide, course S.W., 120 ft. below spur, water in holes. Ascend.
60.20	Spur, brs. SE. 159 ft. above creek, and along rough broken E. slope.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 12 ins. in the ground, in a mound of stone, for cor. of secs. 19, 20, 29 and 30, marked on brass cap 1915 on S. rim; T14 $\frac{1}{2}$ NR6W in N. half; S19 in N. W. S20 in N. E. S29 in S. E. and S30 in S. W. quadrant; from which A cedar 10 ins. diam., bears N. 5° W. 29 lks. dist., marked T14 $\frac{1}{2}$ NR6WS19BT. A cedar 8 ins. diam., bears N. 11° E. 34 lks. dist., marked T14 $\frac{1}{2}$ NR6WS20BT. A cedar 8 ins. diam., bears S. 16° E. 47 lks. dist., marked T14 $\frac{1}{2}$ NR6WS29BT. A cedar 8 ins. diam., bears S. 13° W. 147 lks. dist., marked T14 $\frac{1}{2}$ NR6WS30BT. 30 ft. below spur. Land, mountainous. Malpais formation. Soil, rocky; 4th. rate. Timber, a few cedars, and sycamores along creek. Undergrowth, oak, catclaw and laurel.

June 11, 1915.

June 12, 1915; At 2h. 15m. a.m., by my watch which has

Partial Subdivision of frac1. Tp. 14¹/₂ N. Rg. 6 W.

Chains.

correct l.m.t., I observe Polaris at eastern elongation in accordance with Manual of Instructions, at the S. end of the meridian determined at my camp June 9, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 6h. 45m. a.m., l.m.t., I lay off the azimuth of Polaris 1° 24' to the west, and mark the meridian thus determined, by cutting a small groove in the stone set June 9, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7h. 00m. a.m., l.m.t., I set off 34° 37' N. on the lat. arc; 23° 08' N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation.

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

The magnetic bearing of the true meridian at 7h. 15m. a. m. is N. 15° 30' W.; the angle thus determined gives the mag. decl. 15° 30' E.

I commence at the cor. of secs. 19, 20, 29 and 30. Thence I run West on a random line bet. secs. 19 and 30.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect W. bdy. of Tp. at the cor. of secs. 19, 24, 25 and 30, established by me as described in Book "A."

Thence I run East, on a true line, bet. secs. 19 and 30.

3.23 Ascend S. W. slope through scattering brush. Spur, brs. SE. 26 ft. above cor. Descend.

25.29 Loco Creek 25 lks. wide course S. 293 ft. below spur. Clear running water 12 ins. deep. Ascend.

39.99 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
1915 on S. rim;
 $\frac{1}{4}$ S19 in N. and
S30 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

41.00 Spur, brs. S. 241 ft. above creek. Descend.

50.09 Wash 15 lks. wide course S. 154 ft. below spur. Ascend.

66.20 Spur, brs. SE. 303 ft. above wash. Descend.

79.98 The cor. of secs. 19, 20, 29 and 30.
238 ft. below spur.
Land, mountainous. Malpais formation.
Soil, rocky; 4th. rate.
Timber, a few cedars.
Undergrowth, oak, catclaw and laurel.
June 12; At this cor. I set off 23° 08' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 37' N.

40.00 N. 0° 01' E. on a random line bet. secs. 19 and 20. Set temp. $\frac{1}{4}$ sec. cor.

67.97 Intersect N. bdy. of Tp. at the cor. of secs. 19, 20, 31 and 32, established by me as described in Book "A."

Thence I run S. 0° 01' W., on a true line, bet. secs. 19 and 20.

12.17 Ascend N. E. slope through scattering brush, and timber. Spur, brs. SE. 108 ft. above cor. Descend.

27.97 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
1915 on S. rim;
 $\frac{1}{4}$ S19 in W. and
S20 in E. half; from which

4 Partial Subdivision of fracl. Tp. 14 $\frac{1}{2}$ N. Rg. 6 W.

Chains.

A cedar 8 ins. diam., bears N. 4° W. 25 lks. dist., marked $\frac{1}{4}$ S19BT.
 A cedar 8 ins. diam., bears S. 60° E. 110 lks. dist., marked $\frac{1}{4}$ S20BT.

36.63 Wash 10 lks. wide course E. 439 ft. below spur. Ascend.
 55.80 Spur bears E. 178 ft. above wash. Descend.
 67.97 The cor. of secs. 19, 20, 29 and 30.
 327 ft. below spur.
 Land, mountainous. Malpais formation.
 Soil, rocky; 4th. rate.
 Timber, cedar.
 Undergrowth, oak, catclaw and laurel.

June 12, 1915.

June 15, 1915; At 8h. 00m. a.m., l.m.t., I set off 34° 35 $\frac{1}{2}$ ' N. on the lat. arc; 23° 18' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33 on the S. bdy. of the Tp., established by me as described in Book "A."

Thence I run

N. 0° 01' E. bet. secs. 32 and 33.

This line runs across Sycamore Canyon very rough and impossible to chain, therefore I triangulate as follows;

Set flag across canyon on line N. 0° 01' E. and lay off a base N. 89° 59' W. 38.00 chs. from which point the angle to flag on N. side of canyon is 64° 32' then 38.00 X tan. 64° 32' (2.09969) = 79.79 chs.

79.79 Point on point of mesa, thence descend cliff 10 ft. high.
 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 28, 29, 32 and 33 marked on brass cap

1915 on S. rim;
 T14 $\frac{1}{2}$ NR6W in N. half;
 S29 in N. W.
 S28 in N. E.
 S33 in S. E. and

S32 in S. W. quadrant; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, E. of cor. on top of cliff 10 ft. high. Impracticable to establish mound W. of cor. From this cor. I run S. to set $\frac{1}{4}$ sec. cor. S. 0° 01' W. bet. secs. 32 and 33.

Ascend.

0.21 Top of point of mesa 10 ft. above cor. descend, very steep rough slope.

40.00 Set an iron post 3 ft. long, 1 in. diam., in a mound of stone for $\frac{1}{4}$ sec. cor., marked on brass cap

1915 on S. rim;
 $\frac{1}{4}$ S32 in W. and
 S33 in E. half; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

46.00 Sycamore Creek 50 lks. wide course W. 1150 ft. below point of mesa. Water in holes. Line south ascends very rough and precipitous slope. Impossible to chain.

Land, mountainous. Malpais formation.

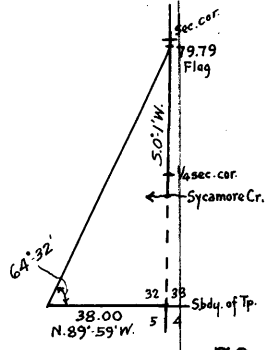
Soil, rocky; 4th. rate.

Timber, a few cedars, and sycamores along creek.

Undergrowth, oak, catclaw and laurel.

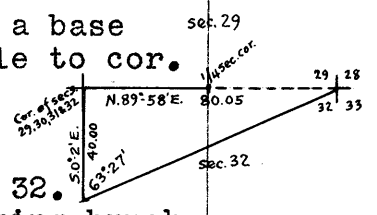
West on a random line bet. secs. 29 and 32.

The line west descends very steep slope over cliffs impossible to chain. Therefore I go to the cor. of secs. 29, 30, 31 and 32 from which the cor. of secs. 28, 29, 32 and 33 is plainly visible and bears N. 89° 58' E.



Chains.

From cor. of secs. 29, 30, 31 and 32 I lay off a base
 S. 0° 02' E. 40.00 chs. from which point angle to cor.
 of secs. 28, 29, 32 and 33 is 63° 27' then
 40.00 X tan. 63° 27' (2.00131) = 80.05 chs.



9.94 From cor. of secs. 29, 30, 31 and 32 I run
 N. 89° 58' E. on a true line bet. secs. 29 and 32.
 Descend along rough N. E. slope through sacttering brush.
 Sycamore Creek, dry, 50 lks. wide course N. W. 96 ft.
 below cor. Ascend along S. W. slope.

27.74 Spur, Drs. NW. 450 ft. above creek.

33.00 Fence, wire, bears N. W. and S. E.

40.02 1/2 Set an iron post 3 ft. long, 1 in. diam., in a mound of
 stone for 1/4 sec. cor., marked on brass cap
 1915 on S. rim;
 1/4 S29 in N. and
 S32 in S. half; and raise a mound of stone 2 ft.
 base 1 1/2 ft. high, N. of cor. Pits impracticable.

Line from here is too rough to chain.

80.05 Distance determined by triangulation is

The cor. of secs. 28, 29, 32 and 33.

Land, mountainous. Malpais formation.

Soil, rocky; 4th. rate.

Timber, scattering cedars, and sycamores along creek.

Undergrowth, oak, catclaw and laurel.

June 15, 1915.

June 16, 1915; At 8h. 00m. a.m., l.m.t., I set off 34°
 36' N. on the lat. arc; 23° 20 1/2' N. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 28, 29, 32 and 33.

Thence I run

N. 0° 01' E. bet. secs. 28 and 29.

Descend along N, W. slope through scattering brush and
 timber.

13.50 318 ft. below cor. Along general W. slope.

40.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the
 ground for 1/4 sec. cor., marked on brass cap
 1915 on S. rim;
 1/4 S29 in W. and
 S28 in E. half; and raise a mound of stone 2 ft.
 base 1 1/2 ft. high, W. of cor. Pits impracticable.

58.93 Wash 15 lks. wide course N. W. 551 ft. below cor.

80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
 ground for cor. of secs. 20, 21, 28 and 29, marked on
 brass cap

1915 on S. rim;

T14 1/2 NR6W in N. half;

S20 in N. W.

S21 in N. E.

S28 in S. E. and

S29 in S. W. quadrant; and raise a mound of stone
 2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable.

140 ft. below wash.

Land, mountainous. Malpais formation.

Soil, rocky; 4th. rate.

Timber, scattering cedars.

Undergrowth, oak, catclaw and laurel.

June 16, At this cor. I set off 23° 20 1/2' N. on the decl.
 arc; and observe the sun on the meridian at noon; the
 resulting lat. is 34° 37' N.

40.00 West on a random line bet. secs. 20 and 29.
 Set temp. 1/4 sec. cor.

80.05 Intersect N. and S. line at the cor. of secs. 19, 20, 29

6 Partial Subdivision of Tp. 14 $\frac{1}{2}$ N. Rg. 6 W.

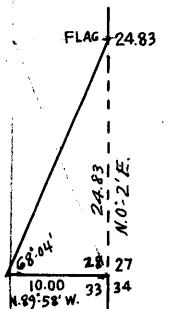
Chains.	and 30. Thence I run East on a true line bet. secs. 20 and 29. Descend steep rough E. slope through scattering brush and timber.
24.02	Cottonwood Creek, 20 lks. wide course S. W. 202 ft. below cor. clear running water 10 ins. deep. Ascend.
40.02 $\frac{1}{2}$	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S20 in N. and S29 in S. half; from which A cedar 10 ins. diam., bears N. 7 $\frac{1}{4}$ ° E. 22 lks. dist., marked $\frac{1}{4}$ S20BT. A cedar 10 ins. diam., bears S. 46 $\frac{1}{4}$ ° W. 42 lks. dist., marked $\frac{1}{4}$ S29BT.
40.91	Wash 15 lks. wide course N. W.
62.13	Wash 25 lks. wide course N. W.
80.05	The cor. of secs. 20, 21, 28 and 29. 615 ft. above creek. Land, mountainous. Malpais formation. Soil, rocky; 4th. rate. Timber, cedar, and sycamores along creek. Undergrowth, oak, catclaw and laurel.
	June 16, 1915.
	June 17, 1915: At 8h. 00m. a.m., l.m.t., I set off 34° 37' N. on the lat. arc; 23° 22 $\frac{1}{2}$ ' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29. Thence I run N. 0° 01' E. on a random line bet. secs. 20 and 21.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
67.97	Intersect N. bdy. of Tp. 2 lks. W. of the cor. of secs. 20, 21, 32 and 33, established by me as described in Book "A"
	Thence I run S. 0° 02' W. on a true line bet. secs. 20 and 21. Descend S. slope through scattering brush and timber.
8.85	Cottonwood Creek 40 lks. wide course W. 145 ft. below cor. clear running water 10 ins. deep. Ascend.
27.97	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 1915 on S. rim; $\frac{1}{4}$ S20 in W. and S21 in E. half; from which A cedar 14 ins. diam., bears N. 79 $\frac{1}{4}$ ° W. 56 lks. dist., marked $\frac{1}{4}$ S20BT. A cedar 12 ins. diam., bears S. 34 $\frac{3}{4}$ ° E. 85 lks. dist., marked $\frac{1}{4}$ S21BT.
41.67	Ridge bears E. and W. descend. 486 ft. above creek.
67.62	Wash 10 lks. wide course S. W. 112 ft. below ridge.
67.97	The cor. of secs. 20, 21, 28 and 29. 4 ft. above wash. Land, mountainous. Malpais formation. Soil, rocky; 4th. rate. Timber, cedar, and sycamores along creek. Undergrowth, oak and laurel.
	June 17, 1915.
	June 18, 1915. From corner of secs. 3, 4, 33 and 34 on S. bdy. of Tp., as described in Book "A," I run, N. 0° 02' E. bet. secs. 33 and 34. Ascend S. slope through scattering brush and timber.
31.21	Ridge bears E. and W. 71 ft. above cor. Descend.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the

Chains. ground, for 1/4 sec. cor., marked on brass cap
 1915 on S. rim;
 1/4 S33 in W. and
 S34 in E. half; and raise a mound of stone 2 ft.
 base 1 1/2 ft. high, W. of cor. Pits impracticable.
 67.90 Sycamore Creek 50 lks. wide course S. W. 165 ft. below
 ridge, clear running water 10 lks. wide 10 ins. deep.
 Ascend.
 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
 ground for cor. of secs. 27, 28, 33 and 34, marked on
 brass cap
 1915 on S. rim;
 T14 1/2 NR6W in N. half;
 S28 in N. W.
 S27 in N. E.
 S34 in S. E. and
 S33 in S. W. quadrant; and raise a mound of stone
 2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable.
 Land, mountainous. Malpais formation.
 Soil, rocky; 4th. rate.
 Timber, cedar, and sycamores along creek.
 Undergrowth, oak and laurel.

June 18, 1915.

June 19, 1915; At 7h. 00m. a.m., l.m.t., I set off 34°
 36' N. on the lat. arc; 23° 26 1/2' N. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 27, 28, 33 and 34.
 Thence I run
 West on a random line bet. secs. 28 and 33.
 40.00 Set temp. 1/4 sec. cor.
 80.02 Intersect N. and S. line 4 lks. N. of the cor. of secs.
 28, 29, 32 and 33.
 Thence I run
 N. 89° 58' E. on a true line bet. secs. 28 and 33.
 Ascend cliff
 0.20 Top of point of mesa, descend along S. E. slope. 10 ft.
 above cor. Through scattering brush and timber.
 5.00 20 ft. below point of mesa. Ascend along S. W. slope.
 16.80 Top of mesa, 118 ft. above 5.00 ch. point. and over roll-
 ing top of mesa.
 29.30 Descend S. E. slope of mesa.
 40.01 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the
 ground for 1/4 sec. cor., marked on brass cap
 1915 on S. rim;
 1/4 S28 in N. and
 S33 in S. half; and raise a mound of stone 2 ft.
 base 1 1/2 ft. high, N. of cor. Pits impracticable.
 80.02 The cor. of secs. 27, 28, 33 and 34.
 877 ft. below mesa.
 June 19; At this cor. I set off 23° 26' N. on the decl.
 arc; and observe the sun on the meridian at noon; the
 resulting lat. is 34° 37' N.
 Land, mountainous. Malpais formation.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, oak and laurel.

N. 0° 02' E. bet. secs. 27 and 28.
 Line ascends steep slope broken with cliffs. Impossible
 to chain.
 I set flag on line N. 0° 02' E. on rim of mesa and lay
 off a base N. 89° 58' W. 10.00 chs. from which point
 angle to flag on rim is 68° 04', then, 10.00 X tan.
 68° 04' (2.4834)=24.83 chs.



8 Partial Subdivision of frac¹/₂ Tp. 14¹/₂ N. Rg. 6 W.

Chains.	
24.83	point on rim of mesa, 900 ft. above cor. and over rolling top of mesa.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S28 in W. and S27 in E. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 21, 22, 27 and 28, marked on brass cap 1915 on S. rim; T14 ¹ / ₂ NR6W in N. half; S21 in N. W. S22 in N. E. S27 in S. E. and S28 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. S. slope and rolling top of mesa. malpais formation. Soil, rocky; 4th. rate. Timber, scattering cedars. Undergrowth, oak and laurel.
	June 19, 1915.
	June 21, 1915: At 7h. 00m. a.m., l.m.t., I set off 34° 37' N. on the lat. arc; 23° 28' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28. Thence I run S. 89° 58' W. on a random line bet. secs. 21 and 28.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.94	Intersect N. and S. line 7 lks. S. of the cor. of secs. 20, 21, 28 and 29. Thence I run S. 89° 59' E. on a true line bet. secs. 21 and 28. Ascend, through scattering brush and timber.
4.87	Wash 15 lks. wide course N. W.
6.24	Wire fence bears N. W. and S. E.
16.05	Wash 10 lks. wide course S. W.
30.00	Slope becomes very steep and rough.
39.97	Set an iron post 3 ft. long, 1 in. diam., 20 ins. in the ground, in a mound of stone for $\frac{1}{4}$ sec. cor. marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S21 in N. and S28 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
63.65	Rim of mesa, 670 ft. above cor, and over rolling top of mesa.
79.94	The cor. of secs. 21, 22, 27 and 28. Land, mountainous. Malpais formation. Soil, rocky; 4th. rate. Timber, cedar. Undergrowth, oak and laurel.
	N. 0° 02' E. on a random line bet. secs. 21 and 22.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
67.90	Intersect N. bdy. of Tp. 2 lks. W. of the cor. of secs. 21, 22, 33 and 34, established by me as described in Book "A. H. Thence I run, S. 0° 03' W. on a true line bet. secs. 21 and 22. Ascend, through scattering brush and timber.
27.90	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the

Chains. ground for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 $\frac{1}{4}$ S21 in W. and
 S22 in E. half; from which
 A cedar 10 ins. diam., bears N. 67 $\frac{1}{2}$ ° W. 188
 lks. dist., marked $\frac{1}{4}$ S21BT.
 A cedar 6 ins. diam., bears S. 25 $\frac{1}{2}$ ° E. 194
 lks. dist., marked $\frac{1}{4}$ S22BT.

55.10 Rim of mesa, 315 ft. above cor., and over rolling top of
 mesa.

67.90 The cor. of secs. 21, 22, 27 and 28.
 Land, mountainous. Malpais formation.
 Soil, rocky; 4th. rate.
 Timber, cedar.
 Undergrowth, oak and laurel.

June 21, 1915.

GENERAL DESCRIPTION.

This fracl. township is extremely rough and mountainous, and the soil is generally rocky and worthless for agriculture. There is a scattering growth of cedar on the slopes and sycamore grows along the creeks. Sycamore, Cottonwood and Smith Canon Creeks flow through the township but are dry in summer. There is a fair growth of grass in the township. The formation is volcanic. There is one settler in sec. 30.

John P. Hesse
 U. S. Surveyor.

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BOOK 2871

For **FINAL OATH OF UNITED STATES SURVEYOR.**
See Book "B" of this Group.

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, FEB 18, 1916.

The foregoing field notes of the survey of the _____
Subdivision Lines of _____

Fractional Township 14 1/2 North, Range 6 West (West half)

of the Gila and Salt River Base and Meridian, in the State of Arizona,

executed by _____ John W. Hesse, U. S. Surveyor,
under his special instructions dated September 26, 1915, for Group 37, ~~104~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

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.~~