

2982

4-679

Book "F"  
Subdivisions

BOOK 2982

# FIELD NOTES

OF RETRACEMENT  
AND RESURVEY OF

PART of the

SUBDIVISION LINES OF

TOWNSHIP 10 NORTH, RANGE 18 EAST,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

Sidney E. Blout,

In the capacity of U. S. Surveyor, under instructions dated December 16, 1914,

issued by the United States Surveyor General to govern surveys included in

Group No. 40, which were approved by the Commissioner of the General Land

Office, January 27, 1914.

Retracement and

Re-Survey commenced May 15, 1915

Retracement and

Re-Survey completed May 22, 1915.

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1A

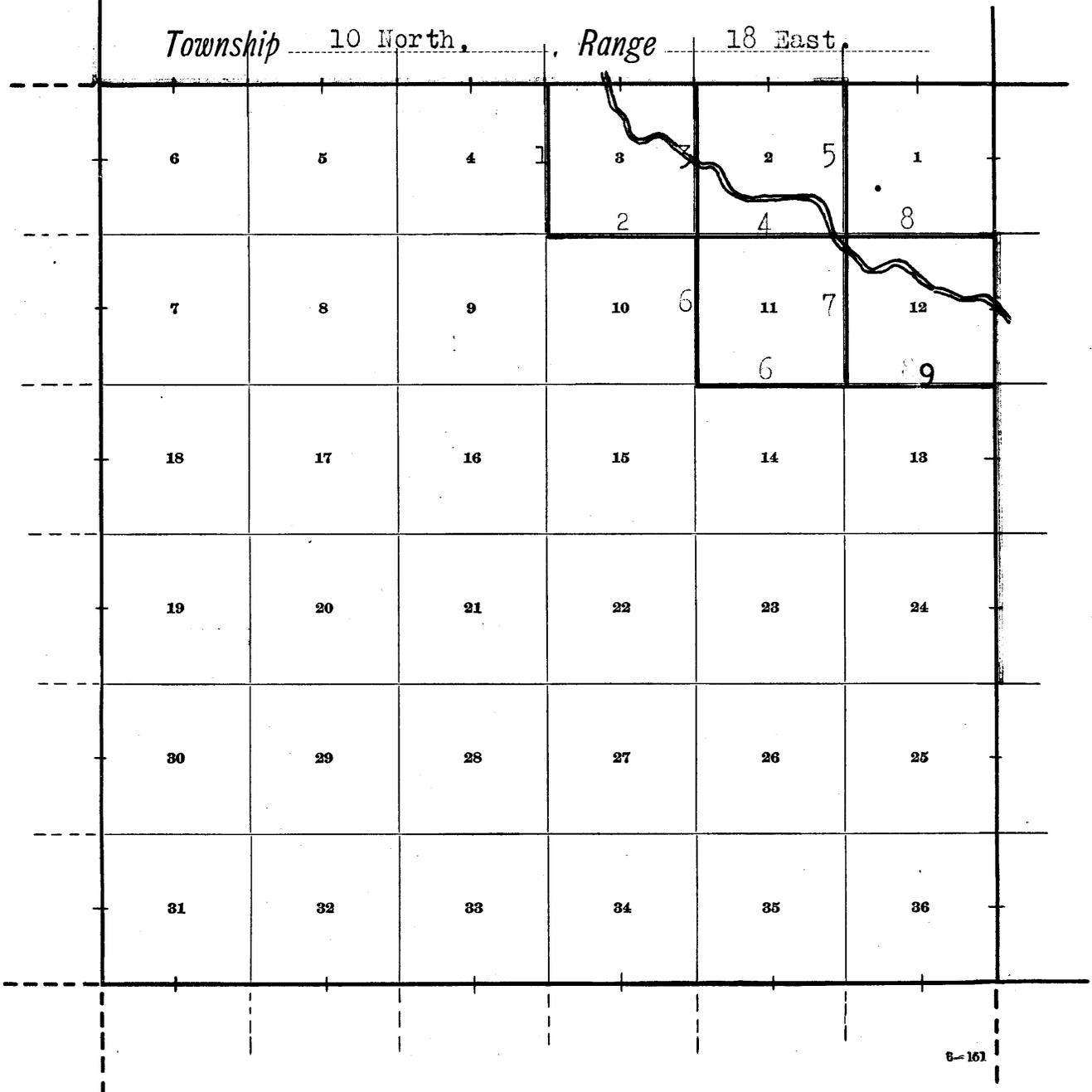
Book "F."

Group 40 - - - Arizona.

BOOK 2982

Book "F"

# INDEX DIAGRAM.



- Subdivision lines retraced or resurveyed.  
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Retracement and Resurvey of part of Subdivision lines of T.10N., R.18E. 16

Chains.

Retracement and resurvey commenced May 15, 1915, and executed with a Young and Sons' light mountain transit No.10, with solar attachment, the horizontal limb being provided with two double verniers, placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

I examine the adjustments of the transit, and find them to be correct, and know from recent tests of the instrument by comparing its indications, resulting from solar observations, made during a.m. and p.m. hours with a meridian established by observations on Polaris, that the instrument is in satisfactory adjustment; for last complete test of instrument, see Book "E."

A 5 chain steel tape and clinometer are the instruments employed in the determination of all distances measured in this survey.

I begin at the cor. of secs. 3, 4, 33 and 34 on N. bdy. of Tp., which I reestablished May 7, 1915, in the resurvey of the south bdy. of T.11 N., R.18 E., as described in Book "A." Latitude, 34° 16 1/2' N.; longitude, 110° 26' W.

May 15, 1915. At 8h. 56.4m. a.m., l.m.t., I set off 34° 16 1/2' N. on the lat. arc; 18° 43 1/2' N. on the decl. arc, and determine a meridian with the solar at this cor.

Thence, S. 0° 8' W. on random line, bet. secs. 3 and 4.

40.13

I make a diligent search for the old 1/4 sec. cor., which I fail to find; therefore, continue line and measurement.

81.98

Fall 56 lks. E. of the old cor. of secs. 3, 4, 9 and 10, which is a sandstone 20x12x8 ins., loosely set, marked and witnessed as described by the surveyor general.

True course and dist. of line bet. secs. 3 and 4 is therefore N. 0° 31' E., 81.98 chs.

This cor. being in a dilapidated condition, I reestablish it in the same place as follows:

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 19, marked on brass cap,

- T 10 N R 18 E in N., and
- 1915 in S. half;
- S 4 in NW.,
- S 3 in NE.,
- S 10 in SE., and
- S 9 in SW. quadrant; from which,

A juniper, 18 ins. in diam., brs. N. 27 3/4° E., 58 lks. dist., marked T 10 N R 18 E S 3 B T.

A pine, 14 ins. in diam., brs. S. 65 3/4° E., 59 lks. dist., marked T 10 N R 18 E S 10 B T.

A pine, 26 ins. in diam., brs. S. 21 1/2° W., 72 lks. dist., marked T 10 N R 18 E S 9 B T.

A pine, 24 ins. in diam., brs. N. 47 1/2° W., 63 lks. dist., marked T 10 N R 18 E S 4 B T.

May 15, 1915.

May 17, 1915. At 3h. 56.4m. p.m., l.m.t., I set off 34° 15 1/2' N. on the lat. arc; 19° 16' N. on the decl. arc, and determine a meridian with the solar at above described cor.

Thence, N. 0° 31' E., on a true line, bet. secs. 3 and 4.

Descend NW slope, over stony, mountainous land, through heavy pine and juniper timber and brush.

2.55

Dry ravine, 6 lks. wide, course S. 10° W., 27 ft. below cor.; ascend 56 ft.

12.00

top of spur, brs. N. 50° E. and S. 40° W.; descend 91 ft.

22.90

Dry ravine, 5 lks. wide, course west; ascend 45 ft.

28.00

Top of spur, brs. E. and W.; descend 125 ft.

39.40

Dry ravine, 10 lks. wide, in bottom of canyon, course S. 10° W.; ascend 159 ft.

40.92

(Proportional dist.) Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for reestablished 1/4 sec. cor., marked on brass cap,

## 2. Retracement &amp; resurvey of part of Subdivision lines of T.10N., R18E.

Chains	<p><math>\frac{1}{4}</math> S 4 in W., S 3 in E., and 1915 in S. half; from which An oak, 8 ins. in diam., brs. N. <math>77\frac{1}{2}^{\circ}</math> E., 26 lks. dist., marked <math>\frac{1}{4}</math> S 3 B T. A pine, 12 ins. in diam., brs. S. <math>50\frac{1}{4}^{\circ}</math> W., 53 lks. dist., marked <math>\frac{1}{4}</math> S 4 B T.</p>
54.45	Top of spur, brs. N. $20^{\circ}$ E. and S. $20^{\circ}$ W.; descend 178 ft.
77.25	Dry ravine, 15 lks. wide in bottom of canyon, course S. $30^{\circ}$ W.; ascend 32 ft.
81.98	Intersect reestablished cor. of secs. 3, 4, 33 and 34 on N. bgy. of Tp., described in Book "A." Land, mountainous, spurs steep, rocky, covered with oak and juniper brush. Soil, poor, dry stony clay loam, underlaid with ledges of sandstone. Timber, oak, juniper, cedar and pine. Good growth grass.
	May 17, 1915.
	-----
	<p>May 15, 1915. At 11h. 11.4m. a.m., l.m.t., I set off <math>34^{\circ}</math> <math>15\frac{1}{2}'</math> N. on the lat. arc; <math>18^{\circ}44\frac{1}{2}'</math> N. on the decl. arc, and determine a meridian with the solar at the reestab- lished cor. of secs. 3, 4, 9 and 10, hereinbefore describ- ed.</p>
39.94	Thence, S $89^{\circ}47'$ E., on a random line, bet. secs. 3 and 10. (Original dist.) I make a diligent search for the old $\frac{1}{4}$ sec. cor., which I fail to find; therefore, continue line and measurement.
79.72	Fall 74 lks. S. of the old cor. of secs. 2, 3, 10 and 11, which is a sandstone in place $4x4x2\frac{1}{2}$ ft. above ground, marked with a cross (x) for exact cor. point, with 2 grooves E. and 5 grooves S. of cross. Find no trace of any of the old bearing trees described in the field notes fur- nished me by the Surveyor General. I mark 4 new trees for bearing trees to this cor. A juniper 12 ins. in diam., brs. N. $45^{\circ}$ E., 88 lks. dist., marked T 10 N R 18 E S 2 B T. A pine, 24 ins. in diam., brs. S $71\frac{1}{4}^{\circ}$ E., 50 lks. dist., marked T 10 N R 18 E S 11 B T. A pine, 28 ins. in diam., brs. S. $38\frac{1}{2}^{\circ}$ W., 138 lks. dist., marked T 10 N R 18 E S 10 B T. A pine, 18 ins. in diam., brs. N. $49\frac{1}{4}^{\circ}$ W., 128 lks. dist., marked T 10 N R 18 E S 3 B T.
	True course and dist. of line bet. secs. 3 and 10 is there- fore S. $89^{\circ}41'$ W., 79.72 chs.
	May 15, 1915.
	<p>May 17, 1915. At 1h. 11.3m. p.m., l.m.t., I set off <math>34^{\circ}</math> <math>15\frac{1}{2}'</math> N. on the lat. arc; <math>19^{\circ}13\frac{1}{2}'</math> N. on the decl. arc, and determine a meridian with the solar at the above de- scribed cor.</p>
	Thence, S. $89^{\circ}41'$ W., on a true line, bet. secs. 3 and 10. Descend NW slope, 13 ft. over stony, mountainous land, through oak, juniper and pine timber and brush.
.30	Center of dry ravine, 10 lks. wide, course S. $40^{\circ}$ W.; ascend SE slope, 97 ft.
20.00	Top of spur, brs. N. $20^{\circ}$ W. and S. $20^{\circ}$ E.; descend 195 ft.
28.90	Dry rocky ravine, in canyon, 15 lks. wide, course south; ascend 73 ft.
31.80	Top of spur, brs. N. $30^{\circ}$ W. and S. $30^{\circ}$ E.; descend 76 ft.
38.50	Dry ravine, 15 lks. wide, course S. $70^{\circ}$ E.; ascend 182 ft.
39.86	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 3 in N., and S 10, 1915 in S. half; from which, A pine, 36 ins. in diam., brs. N. $6\frac{1}{2}^{\circ}$ W., 130 lks. dist., marked $\frac{1}{4}$ S 3 B T. A fir 28 ins. in diam., brs. S. $40\frac{1}{4}^{\circ}$ E., 105 lks. dist., marked $\frac{1}{4}$ S 10 B T.

## Retracement &amp; Resur. of part of Subdivision lines of T.10N., R.18E. 3

Chains.

- 67.70 Telephone line from the Forest Ranger station at Bear Spring to Fort Apache, Arizona, brs. N. and S.
- 68.00 Top of spurs, brs. N. and S.  $\frac{3}{4}$  descend 90 ft.
- 79.72 Intersect the reestablished cor. of secs. 3, 4, 9 and 10, hereinbefore described.
- Land, mountainous; spurs with steep slopes, covered with oak and juniper brush undergrowth.
- Soil, poor, dry stony clay loam, 8 ins. deep on dry stony clay subsoil.
- Timber, oak, juniper and pine.
- 
- May 17, 1915. At 8h. 26 $\frac{1}{2}$ m. a.m., l.m.t., I set off  $34^{\circ}16'$  N. on the lat. arc;  $19^{\circ}11\frac{1}{2}'$  N. on the decl. arc, and determine a meridian with the solar at the old cor. of secs. 2, 3, 34 and 35 on N. bdy. of Tp., described in Book "A."
- Thence,  
S.  $0^{\circ}06'$  W., on a random line, bet. secs. 2 and 3.
- 40.41 No trace can be found, after diligent search, of the old  $\frac{1}{4}$  sec. cor., described as a pine tree with bearing trees. Therefore, continue line and measurement.
- 81.24 Fall 51 lks. E. of the old cor. of secs. 2, 3, 10 and 11, hereinbefore described.
- True course and dist. of line bet. secs. 2 and 3 is therefore N.  $0^{\circ}28'$  E., 81.24 chs.
- Thence,  
N.  $0^{\circ}28'$  E., on a true line, bet. secs. 2 and 3.
- Descend NW. slope, over stony, mountainous land, through heavy pine and juniper timber and brush.
- .85 Dry ravine, 15 lks. below cor., course S.  $40^{\circ}$  W.; ascend 78 ft.
- 22.75 Top of spur, brs. N.  $30^{\circ}$  E. and S.  $30^{\circ}$  W.; descend 9 ft.
- 34.85 Dry ravine, 6 lks. wide, course S.  $70^{\circ}$  W.; ascend 45 ft.
- 40.41 (Proportional dist.) Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished  $\frac{1}{4}$  sec. cor., marked on brass cap,  
 $\frac{1}{4}$  S 3 in W.,  
 $\frac{1}{4}$  S 2 in E., and  
 1915 in S. half; from which  
 A pine, 10 ins. in diam., brs. N.  $77\frac{1}{2}^{\circ}$  E. 14 lks. dist., marked  $\frac{1}{4}$  S 2 B T.  
 A pine, 12 ins. in diam., brs. N.  $51\frac{1}{2}^{\circ}$  W., 7 lks. dist., marked  $\frac{1}{4}$  S 3 B T.
- From this point, the unaccepted  $\frac{1}{4}$  sec. cor. set by Deputy Charles E. Perkins, under Contract No. 40, brs. N.  $66^{\circ}$  W., 38 lks. dist.,  
 I destroy all trace of this cor., and the marks on the bearing trees to same.
- 42.00 Top of the "Mogollon Rim" brs. NW. and SE.; descend.
- 42.06 Intersect N. bdy. of the Fort Apache Indian Reservation 3.22 chs. S.  $44^{\circ}$  E. of Angle Point 710, which is a juniper 24 ins. in diam., marked as described by the Surveyor General.
- At the point of intersection, set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the reestablished closing cor. of secs. 2 and 3, marked on brass cap,  
 C C N. of center,  
 T 10 N., R 18 E in N., and  
 FAIR, 1915 in S. half;  
 S 2 in NE., and  
 S 3 in SW. sector.
- From this point, the unaccepted closing cor. of secs. 2 and 3 set by Deputy Charles E. Perkins, under Contract No. 40 brs. N.  $44^{\circ}$  W., 50 lks. dist. I destroy all trace of this cor., and the marks on bearing trees to same.
- 42.26 Wire fence along N. bdy. of Indian Reservation brs. N.  $40^{\circ}$  W. and S.  $40^{\circ}$  E.
- 51.25 Dry ravine, 10 ft. below top of rim, course N.  $40^{\circ}$  E.; ascend 18 ft.

## 4. Retracement &amp; resurvey of part of Subdivision lines of T 10N R 18E

Chains

- 63.24 Top of spur, brs. N.  $30^{\circ}$  E. and S.  $30^{\circ}$  W.; descend 24 ft.  
 81.24 Intersect old cor. of secs. 2, 3, 34 and 35 on N. bdy. of Tp.,  
 described in Book "A."

Land, mountainous, spurs, steep, rocky, covered with heavy  
 juniper brush.

Soil, poor, stony clay loam, 8 ins. deep on stony clay  
 subsoil.

Timber, oak, juniper and pine.

Clouds obscure the sun at noon today, rendering an obser-  
 vation for latitude impossible.

May 17, 1915.

May 15, 1915. At 1h. 26 $\frac{1}{2}$  m. p.m., 1.m.t., I set off  $34^{\circ}15'$   
 N. on the lat. arc;  $18^{\circ}45'$  N. on the decl. arc, and deter-  
 mine a meridian with the solar at the old cor. of secs.  
 2, 3, 10 and 11, hereinbefore described.

Thence,

- 40.43 N.  $89^{\circ}43'$  E., on a random line, bet. secs. 2 and 11.  
 Fall 8 lks. N. of the old  $\frac{1}{4}$  sec. cor., which is a sandstone  
 10x6x6 ins. above ground, loosely set in a mound of  
 stone, marked  $\frac{1}{4}$  S on N. face, from which

A pine 24 ins. in diam., brs. N.  $51\frac{1}{2}^{\circ}$  E., 45 lks.  
 dist., marked  $\frac{1}{4}$  S B T.

True course and dist. of  $W\frac{1}{2}$  of line bet. secs. 2 and 11  
 is therefore S.  $89^{\circ}50'$  W., 40.43 chs.

From old  $\frac{1}{4}$  sec. cor. above described,

- 40.32 N.  $89^{\circ}43'$  E. on a random line, on E. half of line, bet. secs.  
 2 and 11.

Fall 3 lks. S. of the old cor. of secs. 1, 2, 11 and 12, which  
 is a sandstone 8x8x6 ins., loosely set, marks almost  
 obliterated. No cor. accessories.

True course and dist. of E.  $\frac{1}{2}$  of line bet. secs. 2 and 11,  
 is therefore S.  $89^{\circ}40'$  W., 40.32 chs.

This cor. being in a dilapidated condition, I reestablish  
 it as follows:

I destroy all trace of the old cor., and in the same place  
 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in  
 the ground, for cor. of secs. 1, 2, 11 and 12, marked on  
 brass cap,

T 10 N, R 18 E in N., and

1915 in S. half;

S 2 in NW.,

S 1 in NE.,

S 12 in SE., and

S 11 in SW. quadrant; from which

An oak, 12 ins. in diam., brs. N.  $40\frac{1}{2}^{\circ}$  E., 51 lks.  
 dist., marked T 10 N R 18 E S 1 B T.

An oak, 10 ins. in diam., brs. S.  $53\frac{1}{2}^{\circ}$  E., 51 lks.  
 dist., marked T 10 N R 18 E S 12 B T.

A pine, 10 ins. in diam., brs. S.  $62^{\circ}$  W., 81 lks.  
 dist., marked T 10 N R 18 E S 11 B T.

A pine, 14 ins. in diam., brs. N.  $10\frac{3}{4}^{\circ}$  W., 107  
 lks. dist., marked T 10 N R 18 E S 2 B T.

Thence

S.  $89^{\circ}40'$  W., on a true line, bet. secs. 2 and 11.

Over rolling, stony, mountainous land on top of the  
 "Mogollon Rim" through oak, juniper, and pine timber  
 and brush.

- 6.10 Intersect the N. bdy. of the Fort Apache Indian Reserva-  
 tion, 68 lks. S.  $58^{\circ}20'$  E. of Angle Point No. 698, which  
 is a pine 18 ins. in diam., marked as described by the  
 surveyor general. At the point of intersection,

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

C C E of center,

T 10 N, R 18 E in N., and

FAIR, 1915 in S. half;

S 2 in NE., and

S 11 in SW. sector.

From this point the unaccepted closing cor. of secs. 2 and

Retr. & resur. of part of Subdivision lines of T. 10 N. R. 18 E. 5

Chains.

11 set by Deputy Charles E. Perkins, under Contract No. 40  
brs. N.  $58^{\circ}20'W.$ , 85 lks. dist. I destroy all trace of  
this closing cor., and the marks on the bearing trees  
to same.

6.33 Wire fence along N. bdy. of Indian Reservation, brs. N.  $40^{\circ}$   
W. and S.  $40^{\circ}E.$

9.00 Descend steep rocky SW. slope of rim, 200 ft.

21.90 Dry ravine, at foot of descent in canyon, 10 lks. wide,  
course S.; ascend 10 ft.

25.10 Top of spur, brs. N.  $20^{\circ}W.$  and S.  $20^{\circ}E.$ ; descend 18 ft.

28.30 Dry ravine, 10 lks. wide, course S.  $60^{\circ}E.$ ; ascend 55 ft.

40.32 Intersect the old  $\frac{1}{4}$  sec. cor. hereinbefore described; I  
reestablish this cor., as follows:  
Reset the same stone in its original position, 8 ins. in  
the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S on N. face; from  
which  
Original-bearing tree, a pine, 24 ins. in diam.,  
brs. N.  $51\frac{1}{2}^{\circ}E.$ , 45 lks. dist., marked  $\frac{1}{4}$  S 2 B T.  
A pine, 12 ins. in diam., brs. S.  $4\frac{1}{2}^{\circ}E.$ , 100 lks.  
dist., marked  $\frac{1}{4}$  S 11 B T.  
At this cor. I set off,  $18^{\circ}45\frac{1}{2}'N.$  on the decl. arc, and at  
noon, apparent time, May 15, 1915, observe the sun on  
the meridian and obtain a reading of  $34^{\circ}16'N.$  on the  
lat. arc.  
Thence  
S.  $89^{\circ}50'W.$ , on a true line on W.  $\frac{1}{2}$  of line, bet. secs. 2 and  
11.

9.00 Top of spur, brs. N.  $40^{\circ}W.$  and S.  $40^{\circ}E.$ ; descend 130 ft.

19.60 Dry ravine, 10 lks. wide in canyon, course S.; ascend 31 ft.

24.00 Top of spur, brs. N. and S.; descend 205 ft.

40.43 Intersect the old cor. of secs. 2, 3, 10 and 11, hereinbefore  
described.  
Land, mountainous, spurs steep, washed on slopes, rocky.  
Soil, poor, dry, stony clay loam, 3rd rate.  
Timber, oak, juniper and pine.

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From reestablished cor. of secs. 1, 2, 11 and 12, hereinbefore  
described,  
N.  $0^{\circ}10'E.$ , on a random line, bet. secs. 1 and 2.

40.24 Fall 15 lks. E. of the old  $\frac{1}{4}$  sec. cor., which is a post 3 ins.  
square, 18 ins. above ground, greatly decayed, marks  
almost obliterated, witnessed by two original bearing  
trees, as described in the field notes furnished me by  
the surveyor general.  
True course and dist. of S.  $\frac{1}{2}$  of line, bet. secs. 1 and 2, is  
therefore S.  $0^{\circ}3'E.$ , 40.24 chs.  
From above described  $\frac{1}{4}$  sec. cor.,  
N.  $0^{\circ}10'E.$  on a random line on N.  $\frac{1}{2}$  of line, bet. secs. 1 and  
2.

40.78 Fall 18 lks. E. of old cor. of secs. 1, 2, 35 and 36 on N. bdy.  
of Tp., described in Book "A."  
True course and dist. of N.  $\frac{1}{2}$  of line, bet. secs. 1 and 2 is  
therefore S.  $0^{\circ}5'E.$ , 40.78 chs.  
Thence,  
S.  $0^{\circ}05'E.$ , on a true line on N. half of line, bet. secs. 1  
and 2.  
Ascend NW. slope 10 ft., over stony mountainous land, through  
heavy pine and oak timber.

6.00 Top of spur, brs. N.  $10^{\circ}E.$  and S.  $10^{\circ}W.$ ; descend 55 ft.

19.25 Dry ravine, 15 lks. wide, course N.  $20^{\circ}E.$ ; ascend 79 ft.

37.40 Top of spur, brs. N.  $30^{\circ}E.$  and S.  $30^{\circ}W.$ ; descend 46 ft.

40.78 Intersect the old  $\frac{1}{4}$  sec. cor., hereinbefore described.  
I destroy all trace of this cor., and reestablish it in  
the same place as follows:  
Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in  
the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap,  
 $\frac{1}{4}$  S 2 in W., and  
 $\frac{1}{4}$  S 1 in E., and  
1915 in S. half; from which,  
Original bearing tree, a pine, 22 ins. in diam.,

## 6. Retr. &amp; resur. of part of Subdivision lines of T. 10N., R. 18E.

Chains

brs. S.  $19\frac{1}{4}^{\circ}$  E., 47 lks. dist., marked  $\frac{1}{4}$  S 1 B T.  
Original bearing tree, a pine 20 ins. in diam.,  
brs. N.  $78\frac{1}{2}^{\circ}$  W., 83 lks. dist., marked  $\frac{1}{4}$  S 2 B T.

Thence,  
S.  $0^{\circ}03'$  E., on a true line, on S.  $\frac{1}{2}$  of line, bet. secs. 1 and 2.  
5.90 Dry ravine, 5 lks. wide, course N.  $70^{\circ}$  E.; ascend 35 ft.  
6.30 Top of spur, brs. N.  $40^{\circ}$  E. and S.  $40^{\circ}$  W.; descend 35 ft.  
10.85 Dry ravine, 10 lks. wide, course N.  $30^{\circ}$  E.; ascend 45 ft.  
20.45 Top of spur, brs. N.  $20^{\circ}$  E. and S.  $20^{\circ}$  W.; descend 73 ft.  
31.60 Dry ravine, 6 lks. wide, course N.  $30^{\circ}$  E.; ascend 76 ft.  
40.24 Intersect the reestablished cor. of secs. 1, 2, 11 and 12,  
hereinbefore described.

Land, mountainous, spurs with steep rocky slopes.  
Soil, poor dry, stony clay loam, 3rd rate.  
Timber, oak, juniper and pine.

May 15, 1915.

May 19, 1915: At 7h. 41.4m. a.m., l.m.t., I set off  $34^{\circ}$   
 $15\frac{1}{2}'$  N. on the lat. arc;  $19^{\circ}38\frac{1}{2}'$  N. on the decl. arc, and  
determine a meridian with the solar at the old cor. of  
secs. 2, 3, 10 and 11, hereinbefore described.

Thence,  
South, on a random line, bet. secs. 10 and 11.  
40.00 I make a diligent search for the old  $\frac{1}{4}$  sec. cor., which I  
fail to find; therefore, continue line and measurement.  
79.90 Fall 42 lks. W. of the old cor. of secs. 10, 11, 14 and 15, which  
is an oak post, greatly decayed, marks almost obliterated.  
No trace can be found of the bearing trees described  
in the field notes furnished me by the surveyor general,  
fire having swept over this country.  
True course and dist. of line bet. secs. 10 and 11 is there-  
fore N.  $0^{\circ}18'$  W., 79.90 chs.

The above described cor. being in a dilapidated condition,  
I destroy all trace of it, and reestablish cor. in the  
same place as follows:

Set a granite stone 14x10x6 ins., 10 ins. in the ground,  
for cor. of secs. 10, 11, 14 and 15, marked with 2 notches  
on E. and 4 notches on S edges, from which

A pine, 24 ins. in diam., brs. N.  $49^{\circ}$  E., 90 lks.  
dist., marked T 10 N R 18 E S 11 B T.  
A pine, 20 ins. in diam., brs. S.  $14\frac{1}{4}^{\circ}$  E., 88 lks.  
dist., marked T 10 N R 18 E S 14 B T.  
An oak, 10 ins. in diam., brs. S.  $35\frac{1}{2}^{\circ}$  W., 76 lks.  
dist., marked T 10 N R 18 E S 15 B T.  
A pine, 10 ins. in diam., brs. N.  $20\frac{1}{2}^{\circ}$  W., 94 lks.  
dist., marked T 10 N R 18 E S 10 B T.

Thence,  
N.  $0^{\circ}18'$  W., on a true line, bet. secs. 10 and 11.  
Descend NW. slope, over stony, mountainous land, through  
scattering pine and juniper timber and brush.  
12.15 Dry ravine 150 ft. below cor. 25 lks. wide, course S.  $60^{\circ}$  W.,  
ascend 110 ft.  
39.95 Set a granite stone 12x10x6 ins., 8 ins. in the ground  
for reestablished  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 10 on W., and  
S 11 on E. face; from which,  
A pine, 6 ins. in diam., brs. S.  $70^{\circ}$  E., 30 lks. dist.,  
marked  $\frac{1}{4}$  S 11 B T.  
A pine, 30 ins. in diam., brs. N.  $32\frac{1}{4}^{\circ}$  W., 37 lks.  
dist., marked  $\frac{1}{4}$  S 10 B T.  
54.90 Top of spur, brs. N.  $40^{\circ}$  E. and S.  $40^{\circ}$  W.; descend 35 ft.  
79.90 Intersect the old cor. of secs. 2, 3, 10 and 11, hereinbefore  
described.

Land, mountainous.  
Soil, poor, dry stony clay loam, 3rd rate.  
Timber, pine, oak and juniper.

From reestablished cor. of secs. 10, 11, 14 and 15, hereinbefore  
described,

Retract & resur. of part of Subdivision lines of T.10M., R.18E. 7

Chains.

S. 89° 56' E., on a random line, bet. secs. 11 and 14.  
 40.105 No trace of the old  $\frac{1}{4}$  sec. cor. can be found after diligent search; therefore, continue line and measurement.  
 80.24 Fall 47 lks. S. of the old cor. of secs. 11, 12, 13 and 14, which is a sandstone 16x10x6 ins., loosely set, marked with 1 notch on E. and 4 notches on S edges, witnessed by four bearing trees.  
 True course and dist. of line bet. secs. 11 and 14 is therefore S. 89° 44' W., 80.24 chs.

Reestablish the above described cor., as follows:

- Reset the same stone in its original position, 12 ins. in the ground for cor. of secs. 11, 12, 13 and 14, marked with 1 notch on E. and 4 notches on S edges; from which
  - A pine, 12 ins. in diam., brs. N. 16 $\frac{1}{2}$ ° E., 50 lks. dist., marked T 10 N R 18 E S 12 B T.
  - A juniper, 10 ins. in diam., brs. S. 55 $\frac{3}{4}$ ° E., 66 lks. dist., marked T 10 N R 18 E S 13 B T.
  - A juniper, 12 ins. in diam., brs. S. 66° W., 30 lks. dist., marked T 10 N R 18 E S 14 B T.
  - A pine, 14 ins. in diam., brs. N. 43° W., 25 lks. dist., marked T 10 N R 18 E S 11 B T.

Thence S. 89° 44' W., on a true line, bet. secs. 11 and 14. Descend SW. slope, 30 ft. over stony, mountainous land, through heavy pine timber.

- .57 Dry ravine, 15 lks. wide, course S. 10° E.; ascend 64 ft.
- 7.67 Top of spur, brs. N. and S.; descend 7 ft.
- 16.62 Dry ravine, 10 lks. wide, course S. 50° E.; ascend 49 ft.
- 38.12 Top of spur, brs. N. and S.; descend gradually about 30 ft.
- 40.12 Set a sandstone 16x12x6 ins., 12 ins. in the ground, for reestablished  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 11 on N., and S 14 on S faces; from which,
  - A pine, 16 ins. in diam., brs. N. 51 $\frac{1}{2}$ ° E., 70 lks. dist., marked  $\frac{1}{4}$  S 11 B T.
  - A juniper, 14 ins. in diam., brs. S. 34° E., 106 lks. dist., marked  $\frac{1}{4}$  S 14 B T.

80.24 Intersect the reestablished cor. of secs. 10, 11, 14 and 15, hereinbefore described.  
 Land, mountainous; spurs steep, washed on slopes rocky. Soil, poor dry stony clay loam, about 8 ins. deep on stony clay subsoil.

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 From reestablished cor. of secs. 11, 12, 13 and 14, hereinbefore described,

- North, on a random line, bet. secs. 11 and 12.
- 40.00 I make diligent search for the old  $\frac{1}{4}$  sec. cor., which I fail to find; therefore, continue line and measurement.
- 80.14 Fall 5 lks. W. of the reestablished cor. of secs. 1, 2, 11 and 12, hereinbefore described.  
 True course and dist. of line bet. secs. 11 and 12 is therefore S. 0° 2' W., 80.14 chs.

Thence, S. 0° 02' W., on a true line, bet. secs. 11 and 12. Over nearly level land on top of the "Mogollon Mesa" through oak, juniper and pine timber and brush.

- 3.04 Wire fence along N. bdy. of the Fort Apache Indian Reservation brs. N 70° W. and S 70° E.
- 3.77 Intersect the N. bdy. of Fort Apache Indian Reservation 4.76 chs. S. 58° 33' E. of the 87 $\frac{1}{2}$  mile cor., which is a sandstone 12x8x6 ins., above ground, marked & witnessed as described by the surveyor general. At pt. of intersection Set an iron post 3 ft long, 2 ins. in diam., 24 ins. in the ground for reestablished closing cor. of secs. 11 and 12, marked on brass cap,
  - C C N of center,
  - T 10 N, R 18 E in N. half; and
  - 1915, FAIR in S half;
  - S 12 in NE., and
  - S 11 in SW. sector.

From this point, the unaccepted closing cor. of secs. 11 and 12, set by Deputy Charles E. Perkins, under contract

## 8. Ertr. &amp; resur. of part of S. subdivision lines of T. 10N., R. 18E.

- Chains
- No 40., brs. S.  $58^{\circ}33'E.$ , .09 lks. dist.; I destroy all trace of this closing cor., and the marks on the bearing trees to same.
- This cor. is on the crest of the "Mogollon Rim"; descend SW. slope of rim, 78 ft.
- 40.07 Set a sandstone  $14 \times 12 \times 8$  ins., 10 ins. in the ground, for reestablished  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 11 on W., and S 12 on E. faces; from which,
- A pine, 10 ins. in diam., brs. N.  $71\frac{1}{2}^{\circ}E.$ , 35 lks. dist., marked  $\frac{1}{4}$  S 12 B T.
- A pine, 24 ins. in diam., brs. N.  $74\frac{1}{2}^{\circ}W.$ , 85 lks. dist., marked  $\frac{1}{4}$  S 11 B T.
- 80.14 Intersect the reestablished cor. of secs. 11, 12, 13 and 14, hereinbefore described.
- Land, mountainous, spurs with steep rocky slopes, covered with juniper and oak brush.
- Timber, oak, juniper and pine.
- Good growth grass.
- Clouds obscure the sun at noon today, rendering an observation for latitude impossible with the solar.
- May 19, 1915.
- 
- May 20, 1915. At 7h. 26.6m. a.m., l.m.t., I set off  $34^{\circ}15\frac{1}{2}'$  N. on the lat. arc;  $19^{\circ}51'N.$  on the decl. arc, and determine a meridian with the solar at the reestablished cor. of secs. 1, 2, 11 and 12, hereinbefore described.
- Thence,
- S.  $89^{\circ}53'E.$ , on a random line, bet. secs. 1 and 12.
- 40.075 No trace of the old  $\frac{1}{4}$  sec. cor. can be found after diligent search; therefore, continue line and measurement
- 79.77 Fall 151 lks. S. of the old cor. of secs. 1, 6, 7 and 12, on east bdy. of Tp., which is a sandstone  $12 \times 10 \times 3$  ins. above ground, loosely set, marked with 1 notch on N., and 5 notches on S. edges, and witnessed by one of the original bearing trees, described in the field notes furnished me by the surveyor general.
- True course and dist. of line bet. secs. 1 and 12 is therefore S.  $89^{\circ}02'W.$ , 79.78 chs.
- May 20, 1915.
- May 21, 1915. At 7h. 12.4m. a.m., l.m.t., I set off  $34^{\circ}15\frac{1}{2}'$  N. on the lat. arc;  $20^{\circ}03\frac{1}{2}'$  N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1, 6, 7 and 12, on E. bdy. of Tp. reestablished by me, as described in Book "A."
- Thence,
- S.  $89^{\circ}02'W.$ , on a true line, bet. secs. 1 and 12.
- Descend NW slope, over stony, mountainous land, through heavy pine and juniper timber.
- 10.14 Dry ravine, 10 lks. wide, in bottom of canyon, 146 ft. below cor., course N.  $10^{\circ}E.$ ; ascend SE. slope, 164 ft.
- 22.90 Top of spur, brs. N.  $60^{\circ}E.$  and S.  $60^{\circ}W.$ ; descend NW. slope, 97 ft.
- 39.89 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for reestablished  $\frac{1}{4}$  sec. cor., marked on brass cap,
- $\frac{1}{4}$  S 1 in N., and
- S 12, 1915 in S. half; from which,
- A pine, 16 ins. in diam., brs. N.  $62\frac{1}{4}^{\circ}E.$ , 41 lks. dist., marked  $\frac{1}{4}$  S 1 B T.
- An oak, 12 ins. in diam., brs. S.  $31\frac{1}{2}^{\circ}W.$ , 18 lks. dist., marked  $\frac{1}{4}$  S 12 B T.
- Ascend 15 ft.
- 41.78 Top of spur, brs. N.  $30^{\circ}E.$  and S.  $30^{\circ}W.$ ; descend 16 ft.
- 46.48 Dry ravine, 10 lks. wide, in bottom of canyon, course N.  $40^{\circ}W.$ ; ascend NE. slope, 46 ft.
- 49.80 Top of spur, brs. N. and S.; descend W. slope, 52 ft.
- 56.18 Dry ravine, 10 lks. wide, course N.  $20^{\circ}E.$ ; ascend 97 ft.
- 65.78 Top of spur, brs. N.  $10^{\circ}E.$ , and S.  $10^{\circ}W.$ ; descend 16 ft.

Retr. & resur. of part of Subdivision lines of T.10 N., R.18 E. 9

Chains

73.55 Dry ravine, 8 lks. wide, course N. 10° E.; ascend 90 ft.  
 79.78 Intersect the reestablished cor. of secs. 1, 2, 11 and 12, hereinbefore described.  
 Land, mountainous.  
 Soil, poor dry, stony clay loam on stone and clay subsoil.  
 Timber, oak, juniper and pine.  
 May 21, 1915.

RETRACEMENT.

May 22, 1915. At 10h. 26.5m., a.m., l.m.t., I set off 34° 15' N. on the lat. arc; 20° 16½' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18 on E. bdy. of Tp., reestablished by me, as described in Book "A."

Thence,  
 N. 89° 52' W., on a random line, bet. secs. 12 and 13.  
 39.37 Fall 113 lks. N. of the old ¼ sec. cor., which is a sandstone 12x8x7 ins. above ground, marked and witnessed as described by the surveyor general.  
 True course and dist. of E. ½ of line, bet. secs. 12 and 13 is therefore N. 88° 29' E., 39.38 chs.  
 From above described ¼ sec. cor.,  
 N. 89° 52' W., on a random line, on W. ½ of line, bet. secs. 12 and 13.

40.12 Fall 24 lks. N. of the reestablished cor. of secs. 11, 12, 13 and 14, hereinbefore described.  
 True course and dist. of W. ½ of line, bet. secs. 12 and 13, is therefore N. 89° 47' E., 40.12 chs.

Thence,  
 N. 89° 47' E., on a true line, on W. ½ of line, bet. secs. 12 and 13.  
 Ascend NW. slope 150 ft. over stony, mountainous land, through heavy pine and juniper timber.

8.50 Top of spur, brs. N. 20° E. and S. 20° W.; descend 125 ft. into canyon.

40.12 Intersect the old ¼ sec. cor. hereinbefore described. This cor. is situated on steep E. slope, covered with loose stone.

Thence,  
 N. 88° 29' E. on a true line on E. ½ of line, bet. secs. 12 and 13.

1.94 Dry ravine, 20 lks. wide, at foot of descent in canyon, course S. 20° W.; ascend NW. slope, 200 ft.

39.38 Intersect reestablished cor. of secs. 7, 12, 13 and 18 on E. bdy. of Tp. described in Book "A."  
 Land, mountainous, spurs abrupt, rocky, covered with juniper, oak and manzanita brush.  
 Soil, poor, dry stony clay loam, 3rd and 4th rate.  
 Timber, oak, juniper and pine timber.  
 May 22, 1915.

GENERAL DESCRIPTION.

That portion of this township, resurveyed by me, comprises only those sections through which the north bdy. of the Fort Apache Indian Reservation, which follows the top of the rim of the Mogollon Mesa crosses. The resurveyed sections contain only rough, mountainous land. The soil is all poor stony, clay loam, unsuitable for agricultural purposes. It is covered however, with a good growth of bunch, and other kinds of grasses of inestimable value for grazing purposes. The resurveyed sections are covered with a heavy growth of juniper, cedar, oak, and pine timber, many of the trees being large enough for lumbering purposes. There is no living water in any of the sections, and no settlers residing on the land.

Boundaries of resurveyed portion of T.10 N., R.18E.  
 Latitudes, departures, and closing errors.

Line designated.	Course,	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
East bdy.	N.0°31'E.	39.95	39.95		.36	
	N.0°6'E.	40.20	40.20		.07	
Subdivisional bdy.	S.89°02'W.	79.78		1.34		79.77
	N.0°3'W.	40.24	40.24			.03
	N.0°5'W.	40.78	40.78			.06
North bdy.	N.89°58'W.	40.00	.02			40.00
	N.89°43'W.	40.04	.20			40.04
	N.89°49'W.	40.00	.13			40.00
	N.89°52'W.	39.58	.09			39.58
Subdivisional bdy.	S.0°31'W.	81.98		81.98		.74
	N.89°41'E.	79.72	.44		79.72	
	S.0°18'E.	79.90		79.90	.42	
	N.89°44'E.	80.24	.38		80.24	
	N.89°47'E.	40.12	.15		40.12	
	N.88°29'E.	39.38	1.04		39.37	
Convergency,					.05	
	Totals,		163.62	163.22	240.35	240.22
			163.22		240.22	
	Error in latitude,--		0.40			
	Error in departure,-----				0.13	

FOR LIST OF FIELD ASSISTANTS SEE BOOK "A"

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BOOK 2982 7/2 11

CERTIFICATE  
For ~~FINAL OATH~~ OF UNITED STATES SURVEYOR.  
See Book "D," 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\_\_\_\_

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, Sept. 19\_\_\_\_, 191\_\_\_\_.

The foregoing field notes of the retracement and resurvey of part of

Subdivision Lines of

TOWNSHIP 10 NORTH, RANGE 18 EAST,

of the Gila and Salt River Base and Meridian, in the State of Arizona, executed by Sidney E. Blout, U. S. Surveyor, under his special instructions dated December 16, 1914, for Group 40, 191\_\_\_\_, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements and resurveys they describe, are hereby approved.

*Sidney E. Blout*  
U. S. Surveyor General.

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