

3597

Book "D"
4-679

BOOK 3597

Petrified Forest National Monument.

FIELD NOTES

RE-
OF THE SURVEY OF THE

North boundary, and

Part of the Subdivision lines of

TOWNSHIP 17 NORTH, RANGE 24 EAST,

Reconstruction of certain section cors. in T. 17 N., R. 24 E.,

Reestablishment of the section cors. on the East bdy. of T. 17 N., R. 24 E., &

Certain Subdivisional cors. in T. 17 N., R. 24 E.,

land SURVEY of

Part of the Subdivision lines of

TOWNSHIP 17 NORTH, RANGE 24 EAST,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

Sidney E. Blout,

U.S. Cadastral Engineer.

In the capacity of U. S. Surveyor, under Special Instructions dated June 14, 1921, issued by the United States Surveyor General to govern surveys included in Group No. 118, Arizona, which were approved by the Commissioner of the General Land Office, June 24, 1921, and Assignment Instructions dated July 2, 1921.

Resurvey and Survey commenced August 4, 1921.

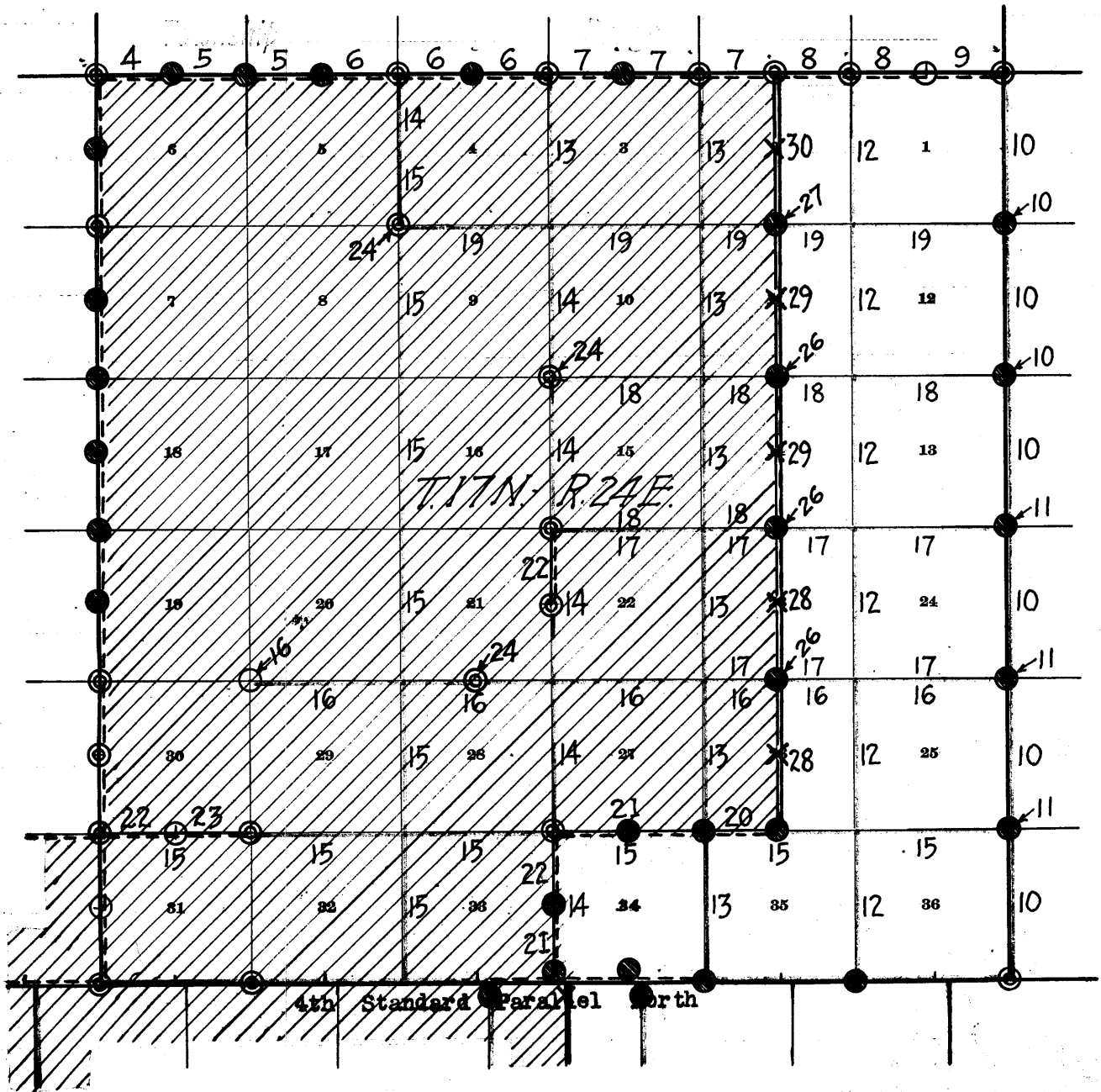
Resurvey and Survey completed Sept. 6, 1921.

3597

3597

- Cors. found.
No change made.
- ⊙ Cors. found.
Reconstructed.
- Cors. missing.
Reestablished by proportion.
- × New corners established.

INDEX DIAGRAM.



———— Lines surveyed under this group.

- - - - Lines resurveyed under this group.

———— Lines retraced in search of old corners.

———— Accepted surveys.



Area embraced within the Petrified Forest National Monument.

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

4 1/2 Std Par. N.

See Book "B" for dates of resurvey of this line.

Book "D"

Group 118.- - Arizona.

DATE DIAGRAM.

Showing dates of execution of surveys, resurveys, retracements in search of cors., reconstruction, reestablishment and establishment of cors., all by Sidney E. Blout, U.S. Cadastral Engineer.

Surveyed non dates shown thereon.

Resurveyed on dates shown thereon.

Retracement in search of cors. on dates shown thereon.

Accepted surveys.

Resurveys and surveys hereinafter described, executed on dates shown on diagram on page 1 hereof by Sidney E. Blout, U.S. Cadastral Engineer, using Buff Rocky Mountain Favorite Solar Transit No. 9984 on all work prior to August 28, 1921, and A. Lietz light mountain transit No. 6166 on all work after that date.

The Buff transit is equipped with U-shaped standards, $4\frac{1}{2}$ inch horizontal circle, 4 inch vertical circle, and the Smith solar attachment.

The Lietz transit is equipped with full vertical circle and the Smith solar attachment.

Unless otherwise specified, all azimuth determinations are accomplished with the solar attachment, except the special observations on Polaris for meridian upon which to test the solar apparatus, as stated in the field notes.

All measurements are made with a Lufkin 5-chain steel tape, compared with a Chesterman standard steel tape, and found correct. The measurements are made on the slope, the vertical angles determined with the clinometer, and the slope measurements properly reduced to true horizontal distances.

TEST OF BUFF SOLAR TRANSIT NO. 9984.

July 31, 1921: I examine the adjustment of the transit, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with the meridian established by Polaris observation July 9, 1921, at camp near cor. of secs. 1, 2, 11 and 12, T. 16 N., R. 23 E., proceed as follows:

At 8h. 00m. a.m., l.m.t., set off $34^{\circ}47\frac{1}{2}'$ N. on the lat. arc; $18^{\circ}19\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar, which agrees with the true meridian.

At apparent noon, with the lat. arc unchanged, observe the sun on the meridian, and obtain a reading of $18^{\circ}16\frac{1}{2}'$ N. on the decl. arc, which agrees with the computed decl. of the sun.

At 4h. 00m. p.m., l.m.t., with the lat. arc unchanged, set off $18^{\circ}14\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar, which agrees with the true meridian.

All of the observations taken during the hours favorable for solar work on this day agree within $1'30''$ of the meridian established by the Polaris observations; therefore, conclude that the instrument is in satisfactory adjustment.

The magnetic bearing of the true meridian at 8h. a.m. is $N. 15^{\circ}50' W.$

TEST OF THE A. LIETZ TRANSIT NO. 6166.

August 28, 1921: At the same station, I examine the adjustment of this transit, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian established by observations on Polaris, proceed as follows:

August 28, 1921: At 9h.00m., a.m., set off $34^{\circ}47\frac{1}{2}'$ N. on the lat. arc; $9^{\circ}46'$ N. on the decl. arc, and determine a meridian with the solar, and mark a point thereon by a tack in a stake already set 5 chains N. of station. This mark falls 01' E. of the meridian established by the Polaris observations.

At apparent noon, with lat. arc unchanged, observe the sun on the meridian, and obtain a reading of $9^{\circ}44'$ N. on the decl. arc, which is about 01' higher than the calculated declination.

At 2h.00m. p.m., apparent time, with the latitude arc unchanged, set off $9^{\circ}42'$ N. on the decl. arc, and determine a meridian with the solar; this meridian agrees with the meridian established by the Polaris observations.

All of the observations taken during the hours favorable for solar work on this day agree within $1'30''$ of the meridian established by the Polaris observations; therefore, conclude that the instrument is in satisfactory adjustment.

The magnetic bearing of the true meridian at 8h. a.m. is $N.15^{\circ}50'W.$

4 Resurvey of North bdy. of Township 17 North, Range 24 East.

Chains.

The North boundary of T.17 N., R.24 E., was surveyed in 1882 by Henry Meyrick, U.S.D.S., and no retracement or resurvey of any part of same is of record.

Retracement for Resurvey.

- From the reconstructed cor. of Ts. 17 and 18 N., Rs. 23 and 24 E., described in Book "C," East, on random line, searching diligently at record intervals for the original cors. Find no trace of any old cor., until at
- 168.98 Fall 109 lks. N. of the original cor. of secs. 4, 5, 32 and 33 hereinafter described.
 True course and dist. of the Tp. bdy. from the cor. of Ts. 17 and 18 N., Rs. 23 and 24 E. to this cor. are therefore S. 89° 38' E., 168.98 chs., which, to maintain the original proportion between the corner intervals gives 41.84 chs. for the W. $\frac{1}{2}$ bet. secs. 6 and 31, and 42.38 chs. for each of the other three intervals.
- Thence,
 East, on random line, bet. secs. 4 and 33.
 40.00 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
- 78.56 Fall 28 lks. N. of the original cor. of secs. 3, 4, 33 and 34, hereinafter described.
 True course and distance of the Tp. bdy. bet. secs. 4 and 33 are therefore, S. 89° 48' E., 78.56 chs.
- Thence,
 East, on random line, bet. secs. 3 and 34.
 40.00 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
- 80.90 Fall 9 lks. N. of the original cor. of secs. 2, 3, 34 and 35, hereinafter described.
 True course and dist. of the Tp. bdy. bet. secs. 3 and 34 are therefore S. 89° 56' E., 80.90 chs.
- Thence,
 East, on random line, bet. secs. 2 and 35 (W. $\frac{1}{2}$).
 39.94 Fall 3 lks. N. of the original $\frac{1}{4}$ sec. cor., hereinafter described.
 True course and dist. of the Tp. bdy. bet. the W. halves of secs. 2 and 35 are therefore S. 89° 58' E., 39.94 chs.
- Thence,
 East, on random line, bet. secs. 2 and 35 (E. $\frac{1}{2}$).
 40.09 Fall 66 lks. S. of the original cor. of secs. 1, 2, 35 and 36, hereinafter described.
 True course and dist. of the Tp. bdy. bet. the E. halves of secs. 2 and 35 are therefore N. 89° 03' E., 40.10 chs.
- Thence,
 East, on random line, bet. secs. 1 and 36 (W. $\frac{1}{2}$).
 39.84 Fall 66 lks. S. of the original $\frac{1}{4}$ sec. cor., hereinafter described.
 True course and dist. of the Tp. bdy. bet. the W. halves of secs. 1 and 36 are therefore, N. 89° 03' E., 39.85 chs.
- Thence,
 East, on random line, bet. secs. 1 and 36 (E. $\frac{1}{2}$).
 39.92 Fall 16 lks. S. of the original cor. of Ts. 17 and 18 N., Rs. 24 and 25 E., hereinafter described.
 True course and dist. of the Tp. bdy. bet. the E. halves of secs. 1 and 36 are therefore N. 89° 46' E., 39.92 chs.

RESURVEY.

- From the reconstructed cor. of Ts. 17 and 18 N., Rs. 23 and 24 E., and NW. cor. of the Bdy. of the Petrified Forest National Monument, described in Book "C," S. 89° 38' E., on true line, bet. secs. 6 and 31, on bdy. of the Petrified Forest National Monument.
 Over gently rolling land on bench, devoid of timber or undergrowth.
- 3.50 Foot of hill, brs. N. & S. Leave gently rolling and enter mountainous land.

Resurvey of North bdy. of Township 17 North, Range 24 East. 5

Chains.

6.80 Ascend 122 ft., over W. slope, to
 W. rim of flat top of hill, brs. N. and S. Thence across
 same.

12.40 E. rim of top of hill, brs. N. and S. Leave same and de-
 scend 315 ft. over E. slope, to

27.00 Foot of hill, brs. N. and S. Leave mountainous and enter
 rolling land.

34.00 Descend gradually over NE. slope.
 Ascend 35 ft., over NW. slope.

39.50 Ridge, brs. NE. and SW.
 Descend 18 ft., over SE. slope, to

41.84 (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. of secs. 6 and 31, and line monument of the
 Bdy. of the Petrified Forest National Monument, marked
 on brass cap,

$\frac{1}{4}$ S 31
 S 6
 PFNM
 1921

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

44.50 Descend 22 ft., over SE. slope, to
 Foot of ridge, brs. NE. and SW. Leave rolling, and enter
 nearly level land and scattering undergrowth.

60.50 Wash, 45 lks. wide, 4 ft. deep, course NW.

73.50 Wash, 55 lks. wide, 3 ft. deep, course NW.

84.22 (Proportional dist.) Set an iron post, 3 ft. long, 2 ins.
 in diam., 24 ins. in the ground, for reestablished cor.
 of secs. 5, 6, 31 and 32, and line monument of the
 Bdy. of the Petrified Forest National Monument, marked
 on brass cap,

T18N | R24E
 S31 | S32
 S 6 | S 5
 T17N
 PFNM
 1921

Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW.
 of post, 3 ft. dist.

Land, rolling, mountainous and nearly level.

Soil, sandy and rocky adobe, 3rd and 4th rate.

Timber, none.

Undergrowth, scattering sage brush in E. 40 chs.; no
 undergrowth elsewhere.

Fair grass in E. 40 chs.; none elsewhere.

S. 89° 38' E., on true line, bet. secs. 5 and 32, on Bdy.
 of the Petrified Forest National Monument.

Over nearly level land, sloping slightly to the N., thru.
 scattering undergrowth.

11.40 Wash, 45 lks. wide, 4 ft. deep, course NW.

30.50 Old abandoned road, brs. N. and S.

42.38 (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. of secs. 5 and 32, and line monument of the
 Bdy. of the Petrified Forest National Monument, marked
 on brass cap,

$\frac{1}{4}$ S 32
 S 5
 PFNM
 1921

6 Resurvey of North bdy. of Township 17 North, Range 24 East.

Chains.

Dig pits 18x18x12 ins., one each E. and W. of post, 3 ft. dist.

Continue over nearly level land sloping slightly to the NW., thru. scattering undergrowth.

44.90 Wash, 40 lks. wide, 2 ft. deep, course N.20°W.

65.88 Road, brs. N. and S.. Extends northerly to Adamana and westerly to Holbrook.

84.76 Intersect the original cor. of secs. 4, 5, 32 and 33, which is a sandstone, 14x10x6 ins., marked with 4 notches on E. edge, and 2 notches on W. edge set in a mound of stone.

No accessories.

Reconstruct this cor. as follows:

Destroy the mound of stones, in center of its position, reset the old stone cor. monument 10 ins. in the ground, and alongside same, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

T18N	R24E
S32	S33

S 5	S 4
T17N	
PFNM	
1921	

Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, nearly level:

Soil, sandy and rocky, 2nd and 3rd rate.

Timber, none.

Undergrowth, scattering sagebrush.

Fair grass.

S. 89°48'E, in a true line, bet. secs. 4 and 33, on Bdy. of the Petrified Forest National Monument.

Over nearly level land, sloping slightly to the NW., thru. scattering undergrowth.

20.50 A point 117 lks. S. of bend in wash, course NW. from E.

30.50 A point 120 lks. S. of bend in same wash, course W. from SE.

32.00 Cross same wash, 40 lks. wide, 1½ ft. deep, course NW.

39.28 (Proportional dist.) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished ¼ sec. cor. of secs. 4 and 33, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

¼ S 33
S 4
PFNM
1921

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

Continue over nearly level land, sloping slightly to the NW., thru. scattering undergrowth.

47.00 Wash, 20 lks. wide, 4 ft. deep, course NW.

78.56 Intersect the original cor. of secs. 3, 4, 33 and 34, which is a sandstone 20x10x8 ins., marked with 3 notches on each of E. and W. edges, firmly set in mound of stone.

No accessories.

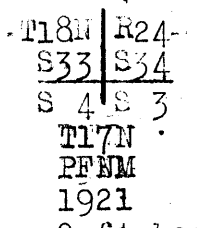
Reconstruct this cor. as follows:

Destroy the old mound of stone, in center of its position, reset the old stone cor. monument, 14 ins. in the ground, with the notches on E. and W. faces, and alongside

Resurvey of North bdy. of Township 17 North, Range 24 East.

Chains.

same, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

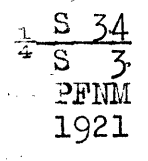


Raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Land, nearly level. Soil, sandy and rocky, 2nd and 3rd rate. Timber, none. Undergrowth, scattering sagebrush. Fair grass.

S. 89° 56' E., on true line, bet. secs. 3 and 34 on bdy. of the Petrified Forest National Monument. Over nearly level land, sloping slightly to the NW., devoid of timber and undergrowth.

27.50
40.45

Center of wash. 5.00 chs. wide, 2 ft. deep, course NW. (Proportional dist.) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished 1/4 sec. cor. of secs. 3 and 34, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,



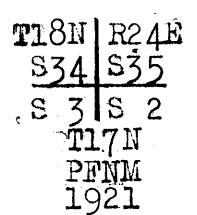
Dig pits, 18x18x12 ins., one each E. and W. of post, 3 ft. dist.

80.90

Continue over nearly level land, sloping slightly to the N., devoid of timber and undergrowth.

Intersect the original cor. of secs. 2, 3, 34 and 35, which is a petrified wood stone, 10x6x5 ins. above ground, firmly set, marked with 2 notches on E. edge, and 4 notches on W. edge. No accessories.

Reconstruct this cor. as follows: Alongside the old stone, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for reestablished cor. of secs. 2, 3, 34 and 35, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,



Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Land, nearly level. Soil, sandy and rocky adobe, 2nd and 3rd rate. Timber, none. Undergrowth, none. Poor grass.

S. 89° 58' E., on true line, bet. secs. 2 and 35 (W. 1/2) on Bdy. of the Petrified Forest National Monument. Over nearly level barren land, sloping slightly to the N.

8 Resurvey of North bdy. of Township 17 North, Range 24 East.

Chains.

- 4.00 Wash, 45 lks. wide, 2 ft. deep, course N.
 24.00 Wash, 75 lks. wide, 5 ft. deep, course NW. Thence over NW slope, ascending very gradually.
 35.00 Old road, brs. N. and S. Leave nearly level, and enter gently rolling land.
 39.94 Intersect the original $\frac{1}{4}$ sec. cor., which is a petrified wood stone, 10x6x5 ins. above ground, marked $\frac{1}{4}$ on N. face, firmly set. No accessories.
 Reconstruct this cor. as follows:
 Alongside the old stone, set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 2 and 35, and NE. cor. of the Bdy. of the Petrified Forest National Monument, marked on brass cap,
- | | | |
|---------------|---|----|
| $\frac{1}{4}$ | S | 35 |
| | S | 2 |
- PFNM
1921
- Dig pits, 18x18x12 ins., one each E. and W. of post, 3 ft. dist.
 From this cor., the Bdy. of the Petrified Forest National Monument extends N. 89° 58' W. and S. 0° 39' W.
 Leave the boundary of the Petrified Forest National Monument.
 Thence,
 N. 89° 03' E., on true line, bet. secs. 2 and 35 (E. $\frac{1}{2}$).
 Over gently rolling, barren land.
 Ascend 30 ft., over W. slope.
 6.16 Spur, slopes N.
 Descend gradually over E. and NE. slopes.
 32.00 Ascend slightly over W. slope.
 38.70 Old road, brs. N. and S.
 40.10 Intersect the original cor. of secs. 1, 2, 35 and 36, which is a sandstone, 8x4x3 ins. above ground, marked with 1 notch on E. edge and 5 notches on W. edge. No accessories.
 Reconstruct this cor. as follows:
 Alongside the old stone, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked on brass cap,
- | | |
|------|------|
| T18N | R24E |
| .S35 | S36 |
| S 2 | S 1 |
- T17N
1921
- Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. This cor. is reconstructed as a basis for the reestablishment of sec. cor. points on the 1st Meridional Sec. Line in T. 17 N., R. 24 E., as hereinafter described.
 Land, nearly level and gently rolling.
 Soil, sandy and rocky adobe, 2nd and 3rd rate.
 Timber, none.
 Undergrowth, none.
 No grass.
-
- N. 89° 03' E., on true line, bet. secs. 1 and 36 (W. $\frac{1}{2}$).
 Over gently rolling barren land.
 Ascend slightly over W. slope, to
 20.00 Ascend 36 ft., over NW. slope.
 28.50 Spur, slopes SW.
 Descend 20 ft., over S. slope.
 34.00 Wash, 10 lks. wide, course S. 80° W.
 Ascend gradually over NW. slope.
 39.85 Intersect the original $\frac{1}{4}$ sec. cor., which is a sandstone, 8x5x4 ins. above ground, marked $\frac{1}{4}$ on N. face, firmly

Resurvey of North bdy. of Township 17 North, Range 24 East. 9

Chains.

set, and witnessed by a mound of stone, 3 ft. base, 1 1/2 ft. high, N. of cor. No bearing trees. Make no change in this cor.

Thence, N. 89° 46' E., on true line, bet. secs. 1 and 36 (E. 1/2). Over gently rolling, barren land. Ascend gradually over NW. slope.

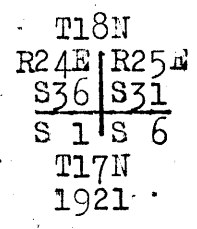
31.00

Spur, slopes SW. Descend gradually over S. slope, to

39.92

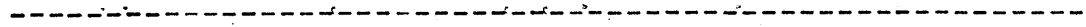
Intersect the original cor. of Ts. 17 and 18 N., Rs. 24 and 25 E., which is a sandstone, 14x8x6 ins. above ground, firmly set, marked with 6 notches on each of N., S., E. and W. edges. No accessories.

Reconstruct this cor. as follows: Alongside the old stone, set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of Ts. 17 and 18 N., Rs. 24 and 25 E., marked on brass cap,



Raise a mound of stone 3 ft. base, 2 ft. high, S. of cor. This Tp. cor. is reconstructed as a basis for the reestablishment of the missing sec. cors. on the E. bdy. of T. 17 N., R. 24 E., as hereinafter described.

Land, gently rolling. Soil, sandy and rocky adobe, 2nd and 3rd rate. Timber, none. Undergrowth, none. No grass.



Reestablishment of the
10 Section cors. on the East bdy. of Township 17 North, Range 24 East.

Chains.

The East bdy. of T.17 N. R. 24 E. was surveyed in 1882 and 1883 by Henry A. Coe, U.S.D.S., and no retracement or resurvey of any part of the line is of record. The following notes describe the reestablishment of all the sec. cors. on the line, each to be used as a basis for the reestablishment of the subdivisional cors. in T.17 N., R.24 E., which define the Bdy. of the Petrified Forest National Monument.

RETRACEMENT.

From the reconstructed cor. of Ts. 17 and 18 N., Rs. 24 and 25 E., hereinbefore described, S.0°10'W., (record course) on random line, searching diligently at record intervals for the original cors. on the Range line.

482.71 Find no trace of any old cor. on the line, and at Fall 253 lks. E. of the reconstructed std. cor. of Ts. 17 N., Rs. 24 and 25 E., on the 4th. Std. Par. N., described in Book "B."

True course and dist. of the E. bdy. of T.17 N., R.24 E. are therefore S.0°28'W., 482.72 chs., which to maintain the original proportion bet. sec. corner interval, gives 80.97 chs. for the reestablished length of the range line, bet. secs. 1 and 6, and 80.35 chs. for each of the other five intervals.

Reestablishment of cor. of secs. 1, 6, 7 & 12.

At a point 80.97 chs., S.0°28'W., from the reconstructed cor. of Ts. 17 and 18 N., Rs. 24 and 25 E., reestablish the cor. of secs. 1, 6, 7 and 12, as follows:

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for reestablished cor. of secs. 1, 6, 7 and 12, Ts. 17 N., Rs. 24 and 25 E., marked on brass cap,

T17N	
R24E	R25E
S 1	S 6
S12	S 7
1921	

Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. This cor. is reestablished as a basis for the reestablishment of the ¼ sec. cor. of secs. 2 and 11, T.17 N., R.24 E., as hereinafter described.

Reestablishment of cor. of secs. 7, 12, 13 & 18.

At a point 80.35 chs., S.0°28'W. from the reestablished cor. of secs. 1, 6, 7 and 12, reestablish the cor. of secs. 7, 12, 13 and 18, as follows:

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for reestablished cor. of secs. 7, 12, 13 and 18, Ts. 17 N. Rs. 24 and 25 E., marked on brass cap,

T17N	
R24E	R25E
S12	S 7
S13	S18
1921	

Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW. of post, 3 ft. dist.

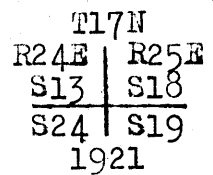
Reestablishment of the Section cors. on the East bdy. of Township 17 North, Range 24 East. 11 Chains.

This cor. is reestablished as a basis for the reestablishment of the 1/4 sec.cor. of secs.11 and 14, T.17 N., R. 24 E., as hereinafter described.

Reestablishment of cor.of secs.13,18,19 and 24.

At a point 80.35 chs.S.0°28'W.from reestablished cor.of secs.7,12,13 and 18, reestablish the cor.of secs.13, 18,19 and 24, as follows:

Set an iron post, 3 ft.long, 2 ins. in diam., 24 ins. in the ground, for reestablished cor. of secs.13,18,19 and 24, Ts.17 N.,Rs.24 and 25 E., marked on brass cap,

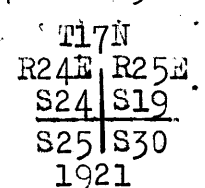


Raise a mound of stone, 2 ft.base, 1 1/2 ft.high, W.of cor. This cor.is reestablished as a basis for the reestablishment of the 1/4 sec.cor. of secs. 14 and 23, T.17 N., R. 24 E., as hereinafter described.

Reestablishment of cor.of secs.19,24,25 and 30.

At a point 80.35 chs.S.0°28'W.from reestablished cor.of secs.13,18,19 and 24, reestablish the cor.of secs.19, 24, 25 and 30, as follows:

Set an iron post, 3 ft.long, 2 ins. in diam., 24 ins.in the ground, for reestablished cor.of secs.19,24,25 and 30, Ts.17 N.,Rs.24 and 25 E., marked on brass cap,

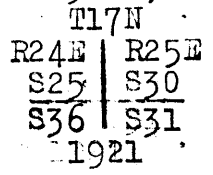


Dig pits, 18x18x12 ins., one each NE., SE.; SW. and NW.of post, 3 ft.dist. This cor.is reestablished as a basis for the reestablishment of the 1/4 sec.cor.of secs.23 and 26; T.17 N., R.24 E., as hereinafter described.

Reestablishment of cor.of secs.25,30,31 and 36.

At a point 80.35 chs.S.0°28'W.from the reestablished cor. of secs.19,24,25 and 30, and 80.35 chs.N.0°28'E.from the reconstructed std.cor.of Ts.17 N.,Rs.24 and 25 E. reestablish the cor.of secs.25,30,31 and 36, as follows:

Set an iron post, 3 ft.long, 2 ins.in diam., 24 ins.in the ground, for reestablished cor.of secs.25,30,31 and 36, Ts.17 N. Rs.24 and 25 E., marked on brass cap,



Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW.of post, 3 ft.dist. This cor.is reestablished as a basis for the reestablishment of the 1/4 sec.cor.of secs.26 and 35, the cor.of secs.26,27,34 and 35, the 1/4 sec.cor.of secs. 27 and 34, the cor.of secs.27,28,33 and 34, and the 1/4 sec.cor.of secs.33 and 34, all of T.17 N., R.24 E., as hereinafter described.

12 Resurvey of part of Subdivision lines of T.17 N. R.24 E.

Chains.

The Subdivision lines of T.17 N., R.24 E., were surveyed in 1883 by Henry A. Coe, U.S.D.S., and no retracement or resurvey of any part of same is of record.

RETRACEMENT.

First Meridional Section Line.

- From the reconstructed cor. of secs. 1, 2, 35 and 36, on the N. bdy. of the Tp., hereinbefore described,
S. 0° 16' W. (record course) on random line, bet. secs. 1 and 2.
- 40.73 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
- Continue line and measurement.
- 80.73 Diligent search in this vicinity fails to reveal any trace of the original cor. of secs. 1, 2, 11 and 12.
- Thence,
S. 0° 10' W. (record course) on random line, continuing measurement, and searching diligently at record intervals for the original cors.
- 481.33 Fail to find trace of any old cor. on this line, and at Fall 280 lks. E. of the reestablished standard cor. of secs. 35 and 36, on the 4th Std. Par. N., described in Book "B." This falling corresponds to a falling of 434 lks. E. of same cor. for a random line run S. thru. the Tp. from the cor. of secs. 1, 2, 35 and 36, on the N. bdy. of the Tp. True course and dist. of line from std. cor. of secs. 35 and 36 on S. bdy. of Tp. to the cor. of secs. 1, 2, 35 and 36 on N. bdy. of Tp., are therefore N. 0° 31' E., 481.34 chs., which, to maintain the original proportion between section cor. intervals, gives 80.10 chs. for each of the S. 5 intervals, and 80.84 chs. for the interval between secs. 1 and 2.
- From reestablished std. cor. of secs. 35 and 36, on S. bdy. of Tp. (4th Std. Par. N.),
N. 0° 31' E., on trial line, on 1st Meridional Sec. Line, bet. secs. 35 and 36.
- 80.10 (Proportional dist.) Set temp. cor. of secs. 25, 26, 35 and 36.
- Thence,
N. 0° 31' E., on trial line, on 1st Meridional Sec. Line, bet. secs. 25 and 26.
- 80.10 (Proportional dist.) Set temp. cor. of secs. 23, 24, 25 and 26.
- Thence,
N. 0° 31' E., on trial line, on 1st Meridional Sec. Line, bet. secs. 23 and 24.
- 80.10 (Proportional dist.) Set temp. cor. of secs. 13, 14, 23 and 24.
- Thence,
N. 0° 31' E., on trial line, on 1st Meridional Sec. Line, bet. secs. 13 and 14.
- 80.10 (Proportional dist.) Set temp. cor. of secs. 11, 12, 13 and 14.
- Thence,
N. 0° 31' E., on trial line, on 1st Meridional Sec. Line, bet. secs. 11 and 12.
- 80.10 (Proportional dist.) Set temp. cor. of secs. 1, 2, 11 and 12.
- Thence,
N. 0° 31' E., on trial line, on 1st Meridional Sec. Line, bet. secs. 1 and 2.
- 40.05 (Proportional dist.) Set temp. $\frac{1}{4}$ sec. cor. of secs. 1 and 2.
- 80.84 Intersect the reconstructed cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp., hereinbefore described.

Second Meridional Section Line.

From the reconstructed cor. of secs. 2, 3, 34 and 35, on the N. bdy. of the Tp., hereinbefore described,

Resurvey of part of Subdivision lines of T.17 N. R.24 E. 13.

Chains. Retracement for resurvey-(cont'd).

- S.0°24'W.(record course) on random line, bet. secs.2 and 3.
- 40.84 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
Continue line and measurement.
- 80.84 Diligent search in this vicinity fails to reveal any trace of the original cor.of secs.2,3,10 and 11.
Thence,
S.0°10'W. (record course) on random line,continuing measurement, and searching diligently at record intervals for the original corners.
Fail to find trace of any old cor. on this line, and at
- 480.30 Fall 317 lks.E.of the reestablished standard cor.of secs.34 and 35, on the 4th Std.Par.N., described in Book"B.". This falling corresponds to a falling of 489 lks.E.of same cor.for a random line run S.thru. the Tp.,from the cor.of secs.2,3,34 and 35, on the N.bdy.of the Tp. True course and dist.of line from std.cor.of secs.34 and 35 on S.bdy.of the Tp. to the cor.of secs.2,3,34 and 35 on the N. bdy.of the Tp. are therefore N.0°35'E., 480.32 chs., which, to maintain the original proportion bet. sec. cor.intervals, gives 79.92 chs. for each of the S. 5 intervals, and 80.76 chs.for the interval bet.secs. 2 and 3.
From reestablished standard cor.of secs.34 and 35, on S. bdy.of Tp. (4th.Std.Par.N.),
N.0°35'E., on trial line, on 2nd Mer. Sec.Line, bet.secs. 34 and 35.
- 79.92 (Proportional dist.) Set temp.cor.of secs.26,27, 34 and 35.
Thence,
N.0°35'E., on trial line, on 2nd Meridional Sec.Line, bet. secs. 26 and 27.
- 79.92 (Proportional dist.) Set temp.cor.of secs.22,23,26 and 27.
Thence,
N.0°35'E., on trial line, on 2nd Meridional Sec. line, bet. Secs.22 and 23.
- 79.92 (Proportional dist.) Set temp.cor.of secs.14,15,22 and 23.
Thence,
N.0°35'E., on trial line, on 2nd Meridional Sec.Line, bet. secs. 14 and 15.
- 79.92 (Proportional dist.) Set temp.cor.of secs.10,11,14 and 15.
Thence,
N.0°35'E., on trial line, on 2nd Meridional Sec.Line, bet. secs.10 and 11.
- 79.92 (Proportional dist.) Set temp.cor.of secs.2,3,10 and 11.
Thence,
N.0°35'E., on trial line, on 2nd Meridional Sec.Line, bet. secs.2 and 3.
- 39.96 (Proportional dist.) Set temp. $\frac{1}{4}$ sec.cor.of secs.2 and 3.
- 80.76 Intersect the reconstructed cor.of secs. 2,3,34 and 35 on the N. bdy.of the Tp., hereinbefore described.

Third Meridional Section Line.

- From the reconstructed cor.of secs. 3,4,33 and 34, on the N. bdy.of the Tp., hereinbefore described,
S.0°12'W. (record course) on random line, bet.secs.3 and 4.
- 40.50 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
Continue line and measurement.
- 80.50 Diligent search in this vicinity fails to reveal any trace of the original cor.of secs 3,4,9 and 10.
Thence,
S.0°10'W.(record course) on random line, bet.secs.9 and 10.

14 Resurvey of part of Subdivision lines of T.17 N. R.24 E.

Chains.	Retracement for Resurvey (cont'd).
	continuing measurement.
120.50	Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
158.74	Fall 52 lks. E. of the original cor. of secs. 9, 10, 15 and 16, hereinafter described. This falling corresponds to a falling of 104 lks. E. of same cor. for a random line run due South, True course and dist. of line back to the cor. of secs. 3, 4, 33 and 34 on the N. bdy. of the Tp. are therefore N. $0^{\circ}22\frac{1}{2}'$ E., 158.74 chs., which, to maintain the original proportion bet. sec. cor. intervals, gives a reestablished interval of 79.12 chs. bet. secs. 9 and 10, and 79.62 chs. bet. secs. 3 and 4.

	From cor. of secs. 9, 10, 15 and 16, S. $0^{\circ}10'$ W. (record course) on random line, bet. secs. 15 and 16.
40.00	Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
79.81	Fall 44 lks. W. of the original cor. of secs. 15, 16, 21 and 22, hereinafter described. True course and dist. of line bet. secs. 15 and 16 are therefore N. $0^{\circ}9'$ W., 79.81 chs.

	From cor. of secs. 15, 16, 21 and 22, S. $0^{\circ}10'$ W. (record course) on random line, bet. secs. 21 and 22 (N. $\frac{1}{2}$).
40.28	Fall 151 lks. W. of the original $\frac{1}{4}$ sec. cor. of secs. 21 and 22, hereinafter described. True course and dist. of line bet. the N. halves of secs. 21 and 22 are therefore, N. $1^{\circ}59'$ W., 40.30 chs. Thence, S. $0^{\circ}10'$ W. (record course) on random line, searching diligently at record intervals for the original cors.
201.53	Fail to find trace of any old cor., and at Fall 252 lks. E. of the reestablished std. cor. of secs. 33 and 34 on the 4th Std. Par. N., described in Book "B." True course and dist. of line back to $\frac{1}{4}$ sec. cor. of secs. 21 and 22 are therefore N. $0^{\circ}53'$ E., 201.55 chs., which gives a proportional dist. of 40.31 chs. for the reestablished cor. intervals.

	From the std. cor. of secs. 33 and 34, N. $0^{\circ}53'$ E., on trial line, on 3rd Meridional Sec. Line, bet. Secs. 33 and 34.
40.31	(Proportional dist.) Set temp. $\frac{1}{4}$ sec. cor.
80.62	(Proportional dist.) Set temp. cor. of secs. 27, 28, 33 and 34.

	From original cor. of secs. 9, 10, 15 and 16, hereinafter described, N. $0^{\circ}22\frac{1}{2}'$ E., on trial line, on 3rd Meridional Sec. Line, bet. secs. 9 and 10.
79.12	(Proportional dist.) Set temp. cor. of secs. 3, 4, 9 and 10.

	<u>Fourth Meridional Sec. Line.</u>
	From the reconstructed cor. of secs. 4, 5, 32 and 33 on the N. bdy. of the Tp., hereinbefore described, S. $0^{\circ}12'$ E., (record course) on random line, bet. secs. 4 and 5.

Chains.

Retracement for Resurvey (continued).

40.35 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
Continue line and measurement.
79.58 Fall 65 lks.E. of the original cor. of secs. 4, 5, 8 and 9, hereinafter described.
True course and dist. of line bet. secs. 4 and 5 are therefore S.0°16'W., 79.58 chs.
Thence,
S.0°10'W. (record course) on random line, searching diligently at record intervals, for the original cors.
Find no trace of any other old subdivisional cor. on this line.

First Latitudinal Sec. Line.

From the reconstructed cor. of secs. 25, 30, 31 and 36, on the W. bdy. of the Tp., described in Book "C,"
N.89°55'E. (record course) on random line, bet. secs. 30 and 31 (W. $\frac{1}{2}$).
39.35 Fall 43 lks.S. of the original $\frac{1}{4}$ sec.cor., hereinafter described.
True course and dist. of line bet. the W. halves of secs. 30 and 31, are therefore N.89°17'E., 39.35 chs.
Thence,
N.89°55'E. (record course) on random line, bet. secs. 30 and 31 (E. $\frac{1}{2}$).
40.63 Fall 67 lks.S. of the original cor. of secs. 29, 30, 31 and 32, hereinafter described.
True course and dist. of line, bet. the E. halves of secs. 30 and 31 are therefore N.88° 58'E., 40.64 chs.
Thence,
Easterly (various courses as per record) on random line, searching diligently at record intervals on such various courses for the original corners.
Fail to find trace of any old cor., and at
404.56 Fall 279 lks.N. of the reestablished cor. of secs. 25, 30, 31 and 36, on the E. bdy. of the Tp., hereinbefore described.
This falling corresponds to a falling of 258 lks.N. of same cor. for a random line run due East.
True course and dist. of line back to the original corner of secs. 29, 30, 31 and 32 are therefore N.89°38'W., 404.57 chs.
From the reestablished cor. of secs. 25, 30, 31 and 36 on the E. bdy. of the Tp.,
N.89°38'W., on trial line, on 1st Latitudinal Sec. Line, bet. secs. 25 and 36.
80.06 A point 28 lks.N. of the temp. cor. of secs. 25, 26, 35 and 36, set on trial 1st Meridional Section Line.
80.74 (Proportional dist.) Set temp. cor. of secs. 25, 26, 35 and 36.
Thence,
N.89°38'W., on trial line, on 1st Latitudinal Sec. Line, bet. secs. 26 and 35.
40.605 (Proportional dist.) Set temp. $\frac{1}{4}$ sec.cor.
79.58 A point 52 lks.N. of the temp. cor. of secs. 26, 27, 34 and 35, set on trial 2nd Meridional Sec. Line.
81.21 (Proportional dist.) Set temp. cor. of secs. 26, 27, 34 and 35.
Thence,
N.89°38'W., on trial line, on 1st Latitudinal Sec. Line, bet. secs. 27 and 34.
40.57 (Proportional dist.) Set temp. $\frac{1}{4}$ sec.cor.
78.07 A point 11 lks.S. of the temp. cor. of secs. 27, 28, 33 and 34, set on trial 3rd Meridional Sec. Line.
81.14 (Proportional dist.) Set temp. cor. of secs. 27, 28, 33 and 34.

16 Resurvey of part of Subdivision lines of T.17 N. R.24 E.
chains.Retracement for Resurvey(continued)

The reestablished point for cor. of secs. 25, 26, 35 and 36 is 68 lks. W. of the temp. cor. of same secs, set on trial 1st Meridional Sec. Line, and 28 lks. S. of the temp. cor. of same secs: set on trial 1st Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

Bet. secs. 35 and 36, N. 0° 2' E., 80.10 chs.
Bet. secs. 25 and 36, N. 89° 50' W., 80.74 chs.

The reestablished point for cor. of secs. 26, 27, 34 and 35 is 163 lks. W. of the temp. cor. of same secs. set on trial 2nd Meridional Sec. Line, and 52 lks. S. of the temp. cor. of same secs. set on trial 1st Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. line to this point are as follows:

Bet. secs. 34 and 35, N. 0° 35' W., 79.92 chs.
Bet. secs. 26 and 35, N. 89° 48' W., 81.21 chs.

The reestablished point for cor. of secs. 27, 28, 33 and 34 is 307 lks. W. of the temp. cor. of same secs. set on trial 3rd Meridional Sec. Line, and 11 lks. N. of the temp. cor. of same secs. set on trial 1st Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

Bet. secs. 33 and 34, N. 1° 18' W., 80.63 chs.
Bet. secs. 27 and 34, N. 89° 11' W., 81.15 chs.

Second Latitudinal Section Line.

The original cor. of secs. 19, 20, 29 and 30 is a sandstone 16x10x5 ins. above ground, firmly set, marked with 2 notches on S. edge and 5 notches on E. edge. No accessories.

Thence,
N. 89° 53' E., on random line, bet. secs. 20 and 29.

40.06 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.

80.13 Diligent search in this vicinity fails to reveal any trace of the original cor. of secs. 20, 21, 28 & 29. Thence
N. 89° 57' E., on random line, bet. secs. 21 and 28, continuing measurement.

119.32 Fall 35 lks. N. of the original $\frac{1}{4}$ sec. cor. of secs. 21 and 28, hereinafter described.

Thence,
Easterly (various courses as per record) on random line, searching diligently at record intervals on such various courses for the original cors.

279.58 Fail to find trace of any old cor., and at
Fall 166 lks. N. of the reestablished cor. of secs. 19, 24, 25 and 30 on the E. bdy. of the Tp., hereinbefore described.

This falling corresponds to a falling of 153 lks. N. of the same cor. for a random line run due East.

True course and dist. of line back to the original $\frac{1}{4}$ sec. cor. of secs. 21 and 28 are therefore N. 89° 41' W., 279.58 chs.

From the reestablished cor. of secs. 19, 24, 25 and 30, on the E. bdy. of the Tp.,

Resurvey of part of Subdivision lines of T.17 N. R.24 E. 17

Chains.

Retracement for resurvey (continued)

79.76 N.89°41'W., on trial line, on 2nd Latitudinal Sec. line, bet. secs. 24 and 25.
(Proportional dist.) Set temp. cor. of secs. 23, 24, 25 and 26.

0.25 Thence, N.89°41'W., on trial line, on 2nd Latitudinal Sec. Line, bet. secs. 23 and 26.
A point 46 lks. N. of the temp. cor. of secs. 23, 24, 25 and 26, set on 1st Meridional Sec. Line.

39.975 Continue line and measurement.
(Proportional dist.) Set temp. cor. of secs. 23 and 26.

79.95 (Proportional dist.) Set temp. cor. of secs. 22, 23, 26 and 27.
Thence, N.89°41'W., on trial line, on 2nd Latitudinal Sec. Line, bet. secs. 22 and 27.

0.75 A point 81 lks. N. of the temp. cor. of secs. 22, 23, 26 and 27 set on trial 2nd Meridional Sec. Line.

The reestablished point for cor. of secs. 23, 24, 25 and 26 is 25 lks. E. of temp. cor. of same secs. set on trial 1st Meridional Sec. Line, and 46 lks. S. of the temp. cor. of same secs. set on trial 2nd Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

Bet. secs. 25 and 26, N.1°11'E., 80.12 chs.
Bet. secs. 24 and 25, S.89°59'W., 79.76 chs.

The reestablished point for cor. of secs. 22, 23, 26 and 27, is 75 lks. E. of the temp. cor. of same secs. set on trial 2nd Meridional Sec. Line, and 81 lks. S. of temp. cor. of same secs. set on trial 2nd Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

Bet. secs. 26 and 27, N.2°17'E., 79.98 chs.
Bet. secs. 23 and 26, N.89°56'W., 79.95 chs.

Third Latitudinal Section Line.

From the original cor. of secs. 15, 16, 21 and 22, hereinafter described, Easterly (various courses, as per record) on random line, searching diligently at record intervals on such various courses for the original cors.

240.32 Find no trace of any old cor., and at Fall 160 lks. N. of the reestablished cor. of secs. 13, 18, 19 and 24 on the E. bdy. of the Tp., hereinbefore described.

This is also the computed falling of a random line run due east.

True course and dist. of line back to the cor. of secs. 15, 16, 21 and 22 are therefore N.89°37'W., 240.32 chs.

From reestablished cor. of secs. 13, 18, 19 and 24 on E. bdy. of Tp.,

79.87 N.89°37'W., on trial line, on 3rd Latitudinal Sec. Line, bet. secs. 13 and 24.

80.18 A point 81 lks. N. of the temp. cor. of secs. 13, 14, 23 and 24, set on trial 1st Meridional Sec. Line.

(Proportional dist.) Set temp. cor. of secs. 13, 14, 23 and 24.

Thence, N.89°37'W., on trial line, on 3rd Latitudinal Sec. Line, bet. secs. 14 and 23.

40.125 (Proportional dist.) Set temp. cor. of secs. 14 and 23.

18 Resurvey of part of Subdivision lines of T.17 " R.24 E.

Chains.	Retracement for Resurvey (cont'd)
80.17	A point 144 lks. N. of the cor. of secs. 14, 15, 22 and 23, set on trial 2nd Meridional Sec. Line.
80.25	(Proportional dist.) Set temp. cor. of secs. 14, 15, 22 and 23.
	Thence, N. 89° 37' W., on trial line, on 3rd Meridional Sec. Line, bet. secs. 15 and 22.
79.89	Intersect the original cor. of secs. 15, 16, 21 and 22, hereinafter described.
	The reestablished point for cor. of secs. 13, 14, 23 and 24 is 31 lks. W. from temp. cor. of same secs. set on trial 1st Meridional Sec. Line, and 81 lks. S. from the temp. cor. of same secs. set on trial 3rd Latitudinal Sec. Line, and the computed bearings and proportional lengths of the section lines to this point are as follows:
	Bet. secs. 23 and 24, N. 0° 7' E., 80.10 chs.
	Bet. secs. 13 and 24, S. 89° 48' W., 80.18 chs.

	The reestablished point for cor. of secs. 14, 15, 22 and 23 is 8 lks. W. from the temp. cor. of same secs. set on trial 2nd Meridional Sec. Line, and 144 lks. S. from the temp. cor. of same secs. set on trial 3rd Latitudinal Sec. Line, and the computed bearings and proportional lengths of the section lines to this point are as follows:
	Bet. secs. 22 and 23, N. 0° 1' W., 79.92 chs.
	Bet. secs. 14 and 23, S. 89° 56' W., 80.25 chs.
	and the computed bearings and length of line, bet. secs. 15 and 22 are N. 88° 35' W., 79.92 chs.

	<u>Fourth Latitudinal Section Line.</u>
	From the original cor. of secs. 9, 10, 15 and 16, hereinafter described,
	Easterly (various courses as per record) on random line, searching diligently at record intervals on such various courses for the original corners.
	Find no trace of any old cor., and at
240.83	Fall 199 lks. N. of the reestablished cor. of secs. 7, 12, 13 and 18 on E. bdy. of the Tp., hereinbefore described.
	This falling corresponds to a falling of 161 lks. N. of same cor. for a random line run due East.
	True course and dist. of line back to cor. of secs. 9, 10, 15 and 16 are therefore N. 89° 37' W., 240.83 chs.
	From reestablished cor. of secs. 7, 12, 13 and 18 on E. bdy. of Tp.,
	N. 89° 37' W., on trial line, on 4th. Latitudinal Sec. Line, bet. secs. 12 and 13.
79.80	A point 106 lks. N. of the temp. cor. of secs. 11, 12, 13, and 14, set on trial 1st Meridional Sec. Line.
80.19	(Proportional dist.) Set temp. cor. of secs. 11, 12, 13 and 14.
	Thence, N. 89° 37' W., on trial line, on 4th. Latitudinal Sec. Line, bet. secs. 11 and 14.
40.15	(Proportional dist.) Set temp. $\frac{1}{4}$ sec. cor. of secs. 11 and 14.
80.01	A point 187 lks. N. of the temp. cor. of secs. 10, 11, 14 and 15, set on trial 2nd Meridional Sec. Line.
80.30	(Proportional dist.) Set temp. cor. of secs. 10, 11, 14 and 15.
	Thence, N. 89° 37' W., on trial line, on 4th. Latitudinal Sec. Line, bet. secs. 10 and 15.
80.34	Intersect the original cor. of secs. 9, 10, 15 and 16, hereinafter described.

Chains.

Retracement for Resurvey (cont'd)

The reestablished point for cor. of secs. 11, 12, 13 and 14, is 39 lks. W. from temp. cor. of same secs. set on trial 1st Meridional Sec. Line, and 106 lks. S. from temp. cor. of same secs. set on trial 4th Latitudinal Sec. Line, and the computed bearings and proportional lengths of the Sec. lines to this point are as follows:

- Bet. secs. 13 and 14, N. 0° 28' E., 80.10 chs.
- Bet. secs. 12 and 13, S. 89° 37' W., 80.19 chs.

The reestablished point for cor. of secs. 10, 11, 14 and 15 is 29 lks. W. from the temp. cor. of same secs. set on trial 2nd Meridional Sec. Line, and 187 lks. S. from the temp. cor. of same secs. set on trial 4th Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

- Bet. secs. 14 and 15, N. 0° 26' E., 79.92 chs.
 - Bet. secs. 11 and 14, S. 89° 48' W., 80.30 chs.
- and the computed bearing and length of the line bet. secs. 10 and 15 are N. 88° 17' W., 80.38 chs.

Fifth Latitudinal Section Line.

From the original cor. of secs. 4, 5, 8 and 9, hereinafter described, Easterly (various courses as per record) on random line, searching diligently at record intervals on such various courses, for the original corners.

- Find no trace of any old cor., and at
- 319.44 Fall 51 lks. N. of the reestablished cor. of secs. 1, 6, 7 and 12, on the E. bdy. of the Tp., hereinbefore described. This falling corresponds to a falling of 55 lks. N. of same cor. for a random line run due East. True course and dist. of line back to the cor. of secs. 4, 5, 8 and 9 are therefore N. 89° 54' W., 319.44 chs.
- From reestablished cor. of secs. 1, 6, 7 and 12, on E. bdy. of Tp.,
- 79.98 N. 89° 54' W., on trial line, on 5th Latitudinal Sec. Line, bet. secs. 1 and 12.
- 80.14 A point 91 lks. N. of the temp. cor. of secs. 1, 2, 11 and 12, set on 1st Meridional Sec. Line. (Proportional dist.) Set temp. cor. of secs. 1, 2, 11 and 12. Thence,
- 39.995 N. 89° 54' W., on trial line, on 5th Latitudinal Sec. Line, bet. secs. 2 and 11. (Proportional dist.) Set temp. cor. of secs. 2 and 11.
- 79.70 A point 150 lks. N. of the temp. cor. of secs. 2, 3, 10 and 11 set on trial 2nd Meridional Sec. Line. (Proportional dist.) Set temp. cor. of secs. 2, 3, 10 and 11. Thence,
- 79.99 N. 89° 54' W., on trial line, on 5th. Latitudinal Sec. Line, bet. secs. 3 and 10.
- 79.54 (Proportional dist.) Set temp. cor. of secs. 3, 4, 9 and 10. Thence,
- 1.09 N. 89° 54' W., on trial line on 5th Latitudinal Sec. Line, bet. secs. 4 and 9. A point 3 lks. N. of the temp. cor. of secs. 3, 4, 9 and 10, set on trial 3rd Meridional Sec. Line. Continue line and measurement.
- 79.77 Intersect the original cor. of secs. 4, 5, 8 and 9, hereinafter described.

The reestablished point for cor. of secs. 1, 2, 11 and 12, is 16 lks. W. from the temp. cor. of same secs. set on trial 1st Meridional Sec. Line, and 91 lks. S. from the

20 Resurvey of part of Subdivision lines of T.17 N. R.24 E.

Chains.

temp. cor. of same secs. set on trial 5th Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. line to this point are as follows:

Bet. secs. 11 and 12, N. 0° 41' E., 80.10 chs.
 Bet. secs. 1 and 12, S. 89° 27' W., 80.14 chs.
 Bet. secs. 1 and 2, S. 0° 36' W., 80.84 chs.

The reestablished point for cor. of secs. 2, 3, 10 and 11 is 29 lks. W. from the temp. cor. of same secs. set on trial 2nd Meridional Sec. Line, and 150 lks. S. from the temp. cor. of same secs. set on trial 5th Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

Bet. secs. 10 and 11, N. 0° 35' E., 79.92 chs.
 Bet. secs. 2 and 11, S. 89° 41' W., 79.99 chs.
 Bet. secs. 2 and 3, S. 0° 48' W., 80.76 chs.

The reestablished point for cor. of secs. 3, 4, 9 and 10, is 109 lks. from the temp. cor. of same secs. set on trial 3rd Meridional Sec. Line, and 3 lks. S. from the temp. cor. of same secs. set on trial 5th Latitudinal Sec. Line, and the computed bearings and proportional lengths of the sec. lines to this point are as follows:

Bet. secs. 9 and 10, N. 1° 10' E., 79.14 chs.
 Bet. secs. 3 and 10, N. 88° 50' W., 79.56 chs.
 Bet. secs. 3 and 4, S. 0° 25' E., 79.62 chs.

and the computed bearing and proportional length of the line bet. secs. 4 and 9 are N. 89° 53' W., 79.77 chs.

RESURVEY.

At a point 40 lks. S. of the temp. $\frac{1}{4}$ sec. cor., or 40.60 chs. N. 89° 48' W. from the reestablished point for the cor. of secs. 25, 30, 31 and 36, reestablish the $\frac{1}{4}$ sec. cor. of secs. 26 and 35, as follows:

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor. of secs. 26 and 35, T.17 N., R.24 E., and cor. monument of the bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M

 $\frac{1}{4}$ S26

S 35

1921

Dig pits, 18x18x12 ins., one each E. and W. of post, 3 ft. dist. Thence,

N. 89° 48' W., on true line, bet. secs. 26 and 35 (W. $\frac{1}{4}$) on Bdy. of the Petrified Forest National Monument.

Over nearly level land, thru scattering undergrowth.

40.61

(Proportional dist.) Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for reestablished cor. of secs. 26, 27, 34 and 35, and line Monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M

T17N | R24E.

S27 | S26

S34 | S35

1921

Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW. of post, 3 ft. dist.

Land, nearly level.

Soil, sandy and gravelly, 2nd and 3rd rate.

Timber, none.

Undergrowth, scattering sage brush.

Good grass.

Chains.

40.57 N.89°11'W., on true line, bet. secs. 27 and 34 on bdy. of the Petrified Forest National Monument.
Over gently rolling land, thru. scattering undergrowth. Ascend gradually over S. and SE. slopes.
(Proportional dist.) A point 20 lks. S. of temp. $\frac{1}{4}$ sec. cor. Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor. of secs. 27 and 34 and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M
 $\frac{1}{4}$ S 27
 $\frac{1}{4}$ S 34
1921

44.50 Continue over gently rolling land, thru. scattering undergrowth. Ascend slightly over SE. slope:
Low ridge, brs. NE. and SW.
Descend gradually over NW. slope.
81.15 (Proportional dist.) Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for reestablished cor. of secs. 27, 28, 33 and 34, and corner monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M
T17N | R24E
S28 | S27
S33 | S34
1921

Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW. of post, 3 ft. dist.
From this cor. the Bdy. of the Petrified Forest National Monument extends S. 89°11'E. and S. 1°18'E.
Land, gently rolling.
Soil, sandy and gravelly, 2nd and 3rd rate.
Timber, none.
Undergrowth, scattering sage brush.
Good grass.

41.31 From the reestablished standard cor. of secs. 33 and 34, on the S. bdy. of Tp. (4th. Std. Par. N.) described in Book "B,"
N. 1°18'W., on true line, bet. secs. 33 and 34, on Bdy. of the Petrified Forest National Monument.
Over gently rolling land, thru. scattering undergrowth. Ascend gradually over S. and SE. slopes.
(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. of secs. 33 and 34, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P
F
N
M
 $\frac{1}{4}$
S33 | S34
1921

69.60 Dig pits, 18x18x12 ins., one each, N. and S. of post, 3 ft. dist.
Continue over gently rolling land, thru. scattering undergrowth.
Ascend gradually over SE. slope.
Low ridge, brs. NE. and SW. Descend gradually over NW. slope.

BOOK 3597

22 Resurvey of Subdivision lines of T.17 N., R.24 E.

Chains.

80.63

Intersect the reestablished cor. of secs. 27, 28, 33 and 34, hereinbefore described.

Land, gently rolling.

Soil, sandy and rocky, 2nd and 3rd rate.

Timber, none.

Undergrowth, scattering sage brush.

Good grass.

The original $\frac{1}{4}$ sec. cor. of secs. 21 and 22 is a petrified wood stone, 16x12x6 ins., marked $\frac{1}{4}$ on W. face, firmly set in a mound of stones.

No accessories.

Reconstruct this cor. as follows:

Destroy old mound of stones in center of its position, reset the old stone corner monument 10 ins. in the ground, and alongside same, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 21 and 22, marked on brass cap,

011 S21 $\frac{1}{4}$ S22
 1921

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

This cor. is reconstructed as a basis for the reestablishment of the cor. of secs. 27, 28, 33 and 34, and the $\frac{1}{4}$ sec. cor. of secs. 33 and 34.

Thence,

N. 1° 59' W., on true line, bet. secs. 21 and 22 (N. $\frac{1}{2}$).

Over rolling land, thru. scattering undergrowth.

Descend gradually over NW. slope.

25.00 A point about 10 chs. E. from top of hill, bearing NW. and SE., known as "The Battleship."

40.30 Intersect the original cor. of secs. 15, 16, 21 and 22, which is a petrified wood stone, 16x14x8 ins., marked with 3 notches on each of E. and S. edges, firmly set in a mound of stone. No accessories.

Reconstruct this cor. as follows:

Destroy the old mound of stones, in center of its position reset the old stone corner monument, 10 ins. in the ground, and alongside same, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, T. 17 N., R. 24 E., marked on brass cap,

T17N | R24E
 S16 | S15
 S21 | S22
 1921

Raise a mound of stones, 2 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

A camp house in the group of petrified trees known as the "Second Forest" hrs. N. 86 $\frac{1}{2}$ ° E., 13.00 chs. dist. from this corner. This cor. is reconstructed as a basis for the reestablishment of the $\frac{1}{4}$ sec. cor. of secs. 14 and 23, a line monument in the Bdy. of the P.F.N.M. as herein-after described.

From the reconstructed cor. of secs. 25, 30, 31 and 36 on the W. bdy. of the Tp., described in Book "C,"

N. 89° 17' E., on true line, bet. secs. 30 and 31 (W. $\frac{1}{2}$).

Over broken and hilly land, devoid of timber and undergrowth.

Descend 15 ft., over E. slope, to

0.80 Wash, 20 lks. wide, course S.

Ascend 50 ft., over W. slope.

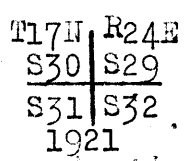
Resurvey of part of Subdivision lines of T. 17 N., R. 24 E.

BOOK 23 3597

Chains.

- 3.40 West rim of flat topped hill, bearing N. and S. Thence across same.
- 16.00 East rim of top of same hill, brs. N. and S. Leave top of hill.
Descend 45 ft., over E. slope.
- 27.00 Leave broken and hilly land, and enter mountainous land. Ascend 83 ft., over SW. slope.
- 32.20 Rim of mesa, brs. NW. and SE. Leave mountainous, and enter gently rolling land on mesa.
- 39.35 Intersect the original $\frac{1}{4}$ sec. cor. of secs. 30 and 31, which is a sandstone, 12x6x5 ins., marked $\frac{1}{4}$ on N. face, firmly set in a mound of stone.
No accessories.
Make no change in this cor. monument.
Thence,
N. 88° 58' E., on true line, bet. secs. 30 and 31 (E. $\frac{1}{2}$).
Over gently rolling land, on mesa, devoid of timber and undergrowth.
- 2.90 Rim of mesa, brs. NE. and SW. Leave mesa and gently rolling land, and enter broken and mountainous land.
Descend 70 ft., over SE. slope.
- 11.65 Thence over broken S. slope.
- 39.90 Ascend 40 ft., over SW. slope, to
- 40.64 Intersect the original cor. of secs. 29, 30, 31 and 32, which is a sandstone, 18x7x3 ins., marked with 1 notch on S. edge and 5 notches on E. edge, firmly set in a mound of stone.

No accessories.
Reconstruct this cor. as follows:
Destroy the old mound of stone, in center of its position
reset the old stone corner monument, 12 ins. in the
ground, and alongside same, set an iron post, 3 ft.
long, 2 ins. in diam., 24 ins. in the ground, for cor.
of secs. 29, 30, 31 and 32, T. 17 N., R. 24 E., marked on
brass cap,



Raise a mound of stone, 2 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
Land, broken, hilly, gently rolling and mountainous.
Soil, sandy and rocky, 3rd and 4th rate.
Timber, none.
Undergrowth, none.
Fair grass,

Reconstruction of certain
24 Subdivisional corners in Township 17 North Range 24 East.

Chains.

Corner of secs. 9, 10, 15 and 16.

The original cor. of secs. 9, 10, 15 and 16, is a sandstone, 12x7x5 ins., marked with 3 notches on one edge, and 4 notches on the adjacent edge, lying on the ground at a point equidistant from faint traces of four pits, one each NE., SE., SW. and NW. of stone, 5½ ft. dist.

Reconstruct this cor. as follows:

Reset the old stone corner monument at same point, 8 ins. in the ground, with the 3 notches E. and 4 notches S., and alongside same, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, T. 17 N., R. 24 E., marked on brass cap,

T17N	R24E
S 9	S10
S16	S15
1921	

Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW. of post, 3 ft. dist., and to fill in the old pits.

This cor. is reconstructed as a basis for the reestablishment of the ¼ sec. cor. of secs. 11 and 14, a line monument in the Bdy. of the P.F.N.M. as hereinafter described.

¼ sec. cor. of secs. 21 and 28.

The original ¼ sec. cor. of secs. 21 & 28 is petrified wood stone 14x12x8 ins., marked ¼ on N. face, firmly set in a mound of stones.

No accessories.

Reconstruct this cor. as follows:

Destroy the old mound of stones, in center of its position reset the old stone corner monument, 9 ins. in the ground and alongside same, set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for ¼ sec. cor. of secs. 21 and 28, T. 17 N., R. 24 E., marked on brass cap,

¼	S 21
	S 28
1921	

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

This cor. is reconstructed as a basis for the reestablishment of the ¼ sec. cor. of secs. 23 and 26, a line monument on the Bdy. of the P.F.N.M., as hereinafter described.

Cor. of secs. 4, 5, 8 and 9.

The original cor. of secs. 4, 5, 8 and 9, is a petrified wood stone 15x12x10 ins., marked with 4 notches on E. edge, and 5 notches on S. edge, firmly set in a mound of stone. No accessories.

Reconstruct this cor. as follows:

Destroy the old mound of stones, in center of its position reset the old stone corner monument, 10 ins. in the ground, and alongside same, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 4, 5, 8 and 9, T. 17 N., R. 24 E., marked on brass cap,

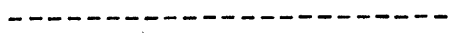
Reconstruction of certain
Subdivisional corners in Township 17 North, Range 24 East. 25

Chains.

T17N	R24E
S 5	S 4
S 8	S 9

1921

Raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
 This cor. is reconstructed as a basis for the reestablish-
 ment of the $\frac{1}{4}$ sec. cor. of secs. 2 and 11, a line monu-
 ment in the Bdy. of the P.F.H.M., as hereinafter de-
 scribed.



26 Reestablishment of certain Subdivisional cors.in T.17 N. R.24 E

Chains.

 $\frac{1}{4}$ sec.cor. of Sections 23 and 26.

At a point 63 lks.S. of temp. $\frac{1}{4}$ sec.cor., or 39.97 chs.N.89°56'W. from the reestablished point for cor.of secs.23, 24, 25 and 26, reestablish the $\frac{1}{4}$ sec.cor.of secs. 23 and 26, as follows:

Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in the ground, for reestablished $\frac{1}{4}$ sec.cor.of secs.23 and 26, T.17 N.,R.24 E., and line monument of the Bdy.of the P.F.N.M., marked on brass cap,

P	$\frac{1}{4}$	S 23
F	$\frac{1}{4}$	S 26
N		1921
M		

Dig pits, 18x18x12 ins., one each E.and W.of post, 3 ft. dist.

From this cor., the Bdy.of the P.F.N.M. extends northerly and southerly, identical with the meridional $\frac{1}{4}$ sec. lines of secs.23 and 26.

 $\frac{1}{4}$ sec.cor. of Sections 14 and 23.

At a point, 112 lks.S.of the temp. $\frac{1}{4}$ sec.cor. or 40.12 chs. S.89°56'W.from the reestablished point for cor.of secs. 13,14, 23 and 24, reestablish the $\frac{1}{4}$ sec.cor.of secs. 14 and 23 as follows:

Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in the ground, for reestablished $\frac{1}{4}$ sec.cor. of secs.14 and 23, T.17 N.,R.24 E., and line monument of the Bdy. of the P.F.N.M., marked on brass cap,

P	$\frac{1}{4}$	S 14
F	$\frac{1}{4}$	S 23
N		1921
M		

Dig pits, 18x18x12 ins., one each E. and W.of post, 3 ft. dist.

From this cor., the Bdy.of the P.F.N.M. extends northerly and southerly identical with the meridional $\frac{1}{4}$ sec. lines of secs.14 and 23.

 $\frac{1}{4}$ sec. cor.of sectiona 11 and 14.

At a point 146 lks.S. of the temp. $\frac{1}{4}$ sec.cor. or 40.15 chs. S.89°48'W. from the reestablished point for cor.of secs. 11,12,13 and 14, reestablish the $\frac{1}{4}$ sec.cor.of secs. 11 and 14, as follows:

Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in the ground, for reestablished $\frac{1}{4}$ sec.cor.of secs.11 and 14, T.17 N.,R.24 E., and line monument of the Bdy.of the P.F.N.M., marked on brass cap,

P	$\frac{1}{4}$	S 11
F	$\frac{1}{4}$	S 14
N		1921
M		

Raise a mound of stone, 3 ft.base, 2 ft.high,N.of cor. From this cor., the Bdy.of the P.F.N.M. extends northerly and southerly, identical with the meridional $\frac{1}{4}$ sec. lines of secs.11 and 14.

Reestablishment of certain Subdivisional cors. in T.17 N. R.24 E.27

chains.

1/4 sec.cor. of sections 2 and 11.

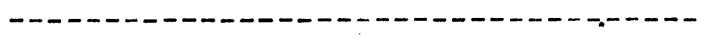
At a point 120 lks.S: of the temp. 1/4 sec.cor., or 39.99 chs.; S.89°41'W., from the reestablished point for cor. of secs.1,2,11 and 12, reestablish the 1/4 sec.cor. of secs.2 and 11, as follows:

Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in the ground, for reestablished 1/4 sec.cor. of secs.2 and 11, and line monument of the Bdy. of the P.F.N.M., marked on brass cap,

P	
F	1/4 S 2
N	S 11
M	1921

Dig pits 18x18x12 ins., one each E. and W. of post, 3 ft. dist.

From this cor., the Bdy. of the P.F.N.M. extends northerly and southerly, identical with the meridional 1/4 sec. lines of secs. 2 and 11.



28 Survey of part of Subdivision lines of T.17 N., R. 24 W.

Chains.

Meridional $\frac{1}{4}$ sec. line of sec.26.

80.00 From the reestablished $\frac{1}{4}$ sec.cor.of secs.23 and 26,
South, on random line, on meridional $\frac{1}{4}$ sec.line of sec.26.
Fall 242 lks.E.of the reestablished $\frac{1}{4}$ sec.cor.of secs.26
and 35, and cor.of the Bdy.of the P.F.N.M., hereinbe-
fore described.

Thence,
N.1°44'E., on true line, on meridional $\frac{1}{4}$ sec.line of sec.
26, and Bdy. of the P.F.N.M.

Over nearly level land, thru. scattering undergrowth.
Ascend slightly over S.slope.

40.02 (Midpoint) Set an iron post, 3 ft. long, 1 in. in diam.,
26 ins.in the ground for C. $\frac{1}{4}$ sec.cor. of sec.26, and
line monument of the Bdy. of the P.F.N.M., marked on
brass cap,

P
F C $\frac{1}{4}$ S 26
N
M
1921

Dig pits 18x18x12 ins., one each N.and S. of post, 3 ft.
dist.

Continue over nearly level land, thru.scattering under-
growth.

Ascend slightly over S.slope.

54.10 Descend slightly over N.slope.

80.04 Intersect the reestablished $\frac{1}{4}$ sec.cor. of secs.23 and 26,
hereinbefore described.

Land, nearly level.

Soil, sandy and gravelly, 2nd and 3rd rate.

Timber, none.

Undergrowth, scattering sagebrush.

Good grass.

Meridional $\frac{1}{4}$ sec.line of sec.23.

80.02 From the reestablished $\frac{1}{4}$ sec.cor. of secs.14 and 23,
South, on random line, on meridional $\frac{1}{4}$ sec.line of sec.23.
Fall 7 lks.E.of the reestablished $\frac{1}{4}$ sec.cor.of secs.23
and 26, and line monument of the Bdy.of the P.F.N.M.,
hereinbefore described.

Thence,
N.0°3'E., on true line, on meridional $\frac{1}{4}$ sec.line of secs.
23, and Bdy. of the P.F.N.M.

Over nearly level land, thru. scattering undergrowth.

Descend slightly over N.slope.

40.01 (Midpoint) Set an iron post, 3 ft.long, 1 in.in diam.,
26 ins.in the ground, for C. $\frac{1}{4}$ sec.cor. of sec..23, and
line monument of the Bdy.of the P.F.N.M., marked on
brass cap,

P
F N C $\frac{1}{4}$ S 23
M
1921

Dig pits, 18x18x12 ins., one each N.and S.of post, 3 ft.
dist.

Continue over nearly level land, thru. scattering under-
growth.

Descend slightly over N.slope.

80.02 Intersect the reestablished $\frac{1}{4}$ sec.cor.of secs.14 and
23, and line monument of the Bdy.of the P.F.N.M., here-
inbefore described.

Land, nearly level.

Soil, sandy and gravelly, 2nd and 3rd rate.

Part of Subdivision lines of Township 17 North, Range 24 East. 29

Chains.

Timber, none.
Undergrowth, scattering sage brush.
Good grass.

Meridional 1/4 sec. line of Sec. 14.

80.02 From reestablished 1/4 sec. cor. of secs. 11 and 14, South, on random line, on meridional 1/4 sec. line of sec. 14. Fall 63 lks. E. of the reestablished 1/4 sec. cor. of secs. 14 and 23, and line monument of the Bdy. of the P.F.N.M., hereinbefore described.

Thence, N. 0° 27' E., on true line, on meridional 1/4 sec. line of sec. 14, and bdy. of the P.F.N.M.
Over nearly level, barren land.

40.01 Descend slightly over NE. slope.
(Midpoint) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for C 1/4 sec. cor. of sec. 14, and line monument of the Bdy. of the P.F.N.M., marked on brass cap,

P
F
N. C 1/4 S 14
M
1921

Dig pits, 18x18x12 ins., one each N. and S. of post, 3 ft. dist.

47.00 Continue over nearly level, barren land.
Descend slightly over NE. slope.
Leave nearly level, and enter gently rolling land.
Ascend gradually over S. slope.

68.00 Low ridge, brs. E. and W.
Descend gradually over N. slope.

80.02 Intersect the reestablished 1/4 sec. cor. of secs. 11 and 14, and line monument of the Bdy. of the P.F.N.M., hereinbefore described.

Land, nearly level and gently rolling.
Soil, sandy and gravelly, 2nd and 3rd rate.
Timber, none.
Undergrowth, none.
Good grass.

Meridional 1/4 sec. line of Sec. 11.

80.00 From the reestablished 1/4 sec. cor. of secs. 2 and 11. South, on random line, on meridional 1/4 sec. line of sec. 11. Fall 88 lks. E. of the reestablished 1/4 sec. cor. of secs. 11 and 14, and line monument of the P.F.N.M., hereinbefore described.

Thence, N. 0° 38' E., on true line, on meridional 1/4 sec. line of sec. 11, and Bdy. of the P.F.N.M.
Over nearly level, barren land.
Descend slightly over N. slope.

40.00 (Midpoint) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for C 1/4 sec. cor. of sec. 11, and line monument of the Bdy. of the P.F.N.M., marked on brass cap,

P
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1921

Dig pits, 18x18x12 ins., one each N. and S. of post, 3 ft. dist.
Continue over nearly level, barren land. Desc. slightly over N. slope. nearly level, barren land.

70.20 Road, brs. NW. and SE.

80.00 Intersect the reestablished 1/4 sec. cor. of secs. 2 and 11,

30 Part of Subdivision lines of Township 17 North, Range 24 East.

Chains.

and line monument of the Bdy. of the P.F.N.M., hereinbefore described.
Land, nearly level.
Soil, sandy and gravelly, 2nd and 3rd rate.
Timber, none.
Undergrowth, none.
Good grass.

Meridional 1/4 sec. line of Sec. 2.

80.00 From the reestablished point for 1/4 sec. cor. of secs. 1 and 2, which is 8 lks. W. from the temp. 1/4 sec. cor., set on trial 1st Meridional Sec. Line,
West, on random line, on Latitudinal 1/4 sec. line of sec. 2,
Fall 51 lks. N. of the reestablished point for 1/4 sec. cor. of secs. 2 and 3, which is 15 lks. W. from the temp. 1/4 sec. cor. set on trial 2nd Meridional Sec. Line.

40.00 Thence,
N. 89°38' E., on true line, on Latitudinal 1/4 sec. line of sec. 2.

40.00 Set temp. center cor. of sec. 2.

80.00 Intersect the reestablished point for 1/4 sec. cor. of secs. 1 and 2.

From the reestablished 1/4 sec. cor. of secs. 2 and 11, and line monument of the Bdy. of the P.F.N.M., hereinbefore described,

40.01 North, on random line, on meridional 1/4 sec. line of sec. 2. Intersect the true latitudinal 1/4 sec. line of sec. 2 at a point 47 lks. S. 89°38' W. from the temp. center cor. thereon.

80.48 Fall 91 lks. W. of the reconstructed 1/4 sec. cor. of secs. 2 and 35, on the N. bdy. of the Tp., which is also the NE. cor. of the Bdy. of the Petrified Forest National Monument, hereinbefore described.

Thence,
S. 0°39' W., on true line, on meridional 1/4 sec. line of sec. 2, and bdy. of the P.F.N.M.

Over gently rolling barren land.
Ascend slightly over W. slope.

40.47 Intersect the Latitudinal 1/4 sec. line of sec. 2, at a point 2 lks. S. 89°38' W. from the temp. center cor. thereon.

At point of intersection, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for center cor. of sec. 2 and line monument of the Bdy. of the P.F.N.M., marked on brass cap,

P
F C 1/4 S 2
N
M. 1921

Dig pits, 18x18x12 ins., one each N. and S. of post, 3 ft. dist.

Continue over gently rolling, barren land.
Ascend slightly over W. slope.

50.00 Wash, 30 lks. wide, course N. 30° W.

Thence over nearly level, barren land.

Ascend slightly over N. slope.

80.48 Intersect the reestablished 1/4 sec. cor. of secs. 2 and 11, and line monument of the Bdy. of the P.F.N.M., hereinbefore described.

Land, gently rolling, and nearly level.

Soil, sandy clay, 2nd rate.

Timber, none.

Undergrowth, none.

Good grass.

Part of Subdivision lines of Township 17 North Range 24 East 31
Chains.

FINAL FIELD TEST OF INSTRUMENTS.

Sept. 6, 1921.

I examine the adjustment of the transits, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with the meridian established by Polaris observation, July 9, 1921, at camp near cor. of secs. 1, 2, 11 and 12, T. 16 N., R. 23 E., proceed with each instrument as follows.

At 4h. 00m. p.m., l.m.t., set off $34^{\circ}47\frac{1}{2}'$ N. on the lat. arc; $6^{\circ}23\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar, which agrees within 1' with the true meridian.

Sept. 7, 1921.

At 7h. 30m. a.m., l.m.t., with the lat. arc unchanged, set off $6^{\circ}9'$ N. on the decl. arc, and determine a meridian with the solar, which agrees within 1' with the true meridian.

From the results of the above described test, I conclude that both instruments used have been in satisfactory adjustment throughout the execution of the resurveys and surveys described in the foregoing field notes.

GENERAL DESCRIPTION.

The Petrified Forest National Monument embraces all of secs. 3, 10, 15, 22 and 27, the West half of the Tp., and the West halves of secs. 2, 11, 14, 23 and 26.

The surface in this part of the Tp. is mostly gently rolling or nearly level. In the southwestern and western parts is some broken, hilly and mountainous surface.

The soil is sandy and gravelly, 2nd and 3rd rate over the gently rolling and nearly level surface, and sandy and rocky adobe, 3rd and 4th rate, over the broken, hilly and mountainous surface.

The greater part of the surface is devoid of timber and undergrowth. A scattering undergrowth of sagebrush is prevalent in some parts, and a good growth of grass in nearly all parts.

There is no permanent running water, the water courses being dry washes. The general course of the drainage is North. There are no settlers, and no indications of valuable mineral deposits.

A road, bearing N. and S. passes thru. the western part, extending westerly to Holbrook and northerly to Adamana. This road, and a vacant cabin in sec. 15 constitute the only improvements.

The natural curiosities consist of the "Natural Bridge" in sec. 9, two groups of petrified trees, one in secs. 8 and 9, known as the "First Forest," and another group in secs. 15, 16, 21 and 22, known as the "Second Forest;" and a group of rocks in sec. 15 bearing inscriptions of ancient origin, and known as the "Hieroglyphic Rocks."

Boundaries of that portion of T.17 N., R.24 E. situated
within the Petrified Forest National Mon.

Latitudes, departures, and closing errors.

Lines Designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
South Boundary, (4th. Std. Par. N)	N. 89° 40' W.	160.60	.47			160.60
	S. 89° 59' W.	81.82		.03		81.82
West Boundary,	N. 0° 4' E.	40.11	40.11		.05	
	N. 1° 5' W.	40.33	40.32			.76
	N. 0° 28' W.	40.08	40.08			.32
	N. 0° 30' W.	39.94	39.94			.35
	N. 0° 2' E.	320.88	320.88		.19	
North Boundary,	S. 89° 38' E.	168.98		1.09	168.98	
	S. 89° 48' E.	78.56		.28	78.56	
	S. 89° 56' E.	80.90		.09	80.90	
	S. 89° 58' E.	39.94		.03	39.94	
Subdivisional Boundary, (P.F.N.M. Bdy.)	S. 0° 39' W.	80.48		80.48		.91
	S. 0° 38' W.	80.00		80.00		.88
	S. 0° 27' W.	80.02		80.02		.63
	S. 0° 3' W.	80.02		80.02		.07
	S. 1° 44' W.	80.04		80.00		2.42
	N. 89° 48' W.	40.61	.14			40.61
	N. 89° 11' W.	81.15	1.15			81.14
Convergency,					.36	
	Totals,		483.09	482.65	370.81	370.51
			482.65		370.51	
	Error in latitude,		0.44			
	Error in departure,				0.30	

CERTIFICATE OF UNITED STATES CADASTRAL
ENGINEER.

I, Sidney E. Blout, U.S. Cadastral Engineer, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 118, Arizona, bearing date of the 14th day of June, 1921, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, ^{re-} surveyed all those parts or portions of the North bdy. and Subdivision lines of T. 17 N., R. 24 E., Reconstructed, certain sec. cons. in T. 17 N., R. 24 E.; Reestablished the sec. cons. on East bdy., and certain Subdivisional cors. in T. 17 N., R. 24 E., and surveyed all those parts or portions of the Subdivision lines of Township 17 North, Range 24 East, of the Gila and Salt River Base and Meridian, in the State of Arizona, which are represented in the foregoing field notes ^{and by diagram on page 1 hereof} 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 118, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ^{re-} survey and survey.

Place : Continental Arizona

Sidney E. Blout
U.S. Cadastral Engineer. U.S. Surveyor.

Date: July 5, 1923

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, July 9, 1923.

The foregoing field notes of the ^{re-} survey of the North bdy. and part of the Subdivision lines of T. 17 N., R. 24 E.; Reconstruction of certain sec. cons. in T. 17 N., R. 24 E.; Reestablishment of the sec. cons. on East bdy. of T. 17 N., R. 24 E., and Certain Subdivisional cors. in T. 17 N., R. 24 E.; and Survey of part of Subdivision lines of TOWNSHIP 17 NORTH, RANGE 24 EAST, of the Gila and Salt River Base and Meridian, in the State of Arizona, executed by Sidney E. Blout, U.S. Cadastral Engineer, under his special instructions dated June 14, 1921, for Grp. 118, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ^{re-} surveys & they describe, are hereby approved.

Frank O. Frost
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.