

PETRIFIED FOREST NATIONAL MON.

FIELD NOTES

Re-
OF THE SURVEY OF THE

Fourth Standard Parallel North, thru part of Range 24 East,
Part of the South Boundary, and
Part of the Subdivision lines of

TOWNSHIP 16 NORTH, RANGE 24 EAST,

RECONSTRUCTION OF

Standard cor. of Townships 17 North, Ranges 24 and 25 East,
Standard cor. of secs. 31 and 32, Township 17 North, Range 24 East,
Cor. of secs. 5, 6, 7 and 8, Township 16 North, Range 24 East, and
Cor. of Township 15 and 16 North, Ranges 24 and 25 East,

REESTABLISHMENT OF

Standard cor. of secs. 35 and 36, Township 17 North, Range 24 East, and
Cor. of secs. 3, 4, 33 and 34, on South bdy. of Township 16 North, Range 24 East;

SURVEY OF

Part of the Subdivision lines of

TOWNSHIP 16 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 & Survey commenced July 11, 1921

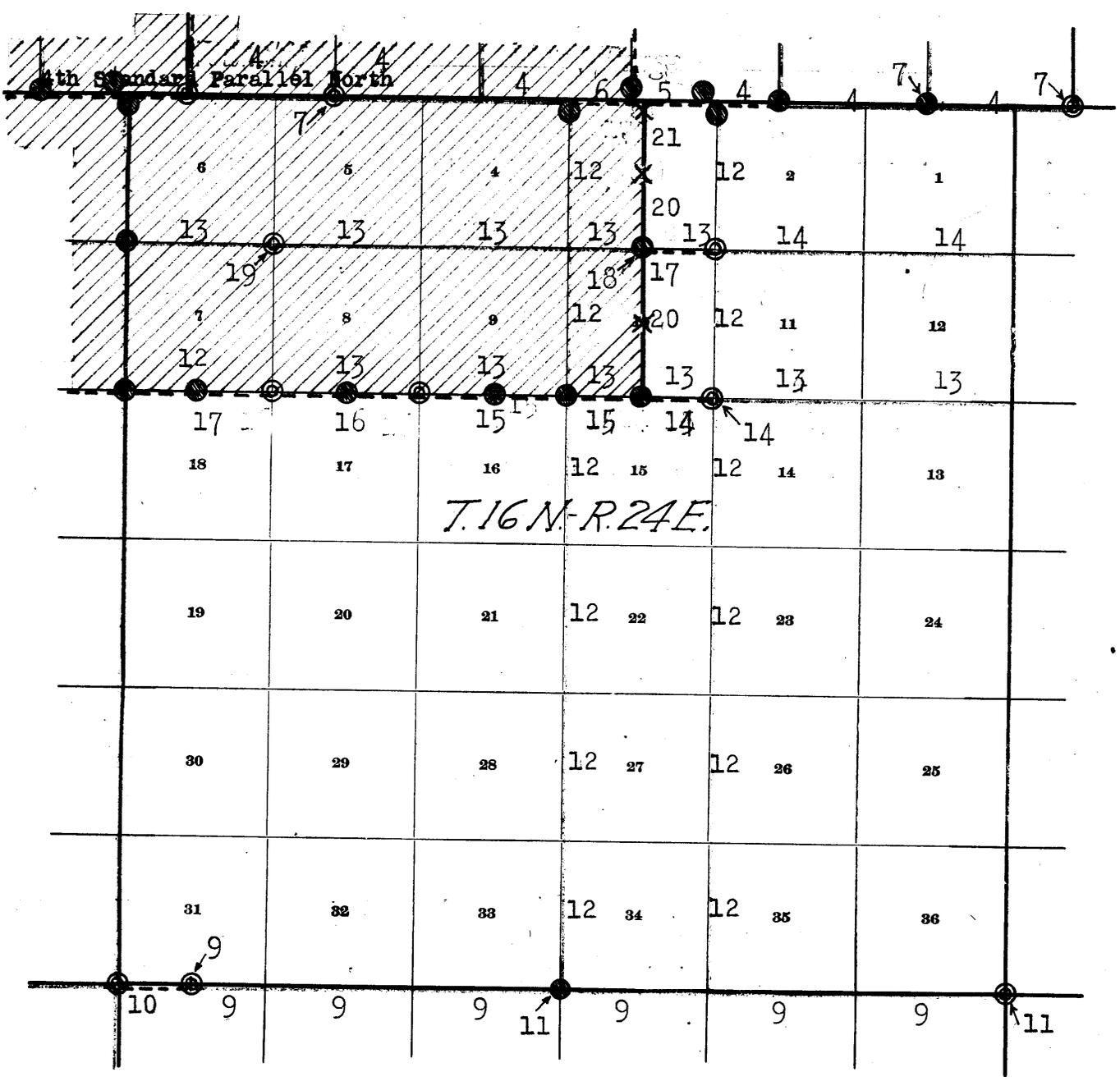
Resurvey & Survey completed August 30, 1921.

3595

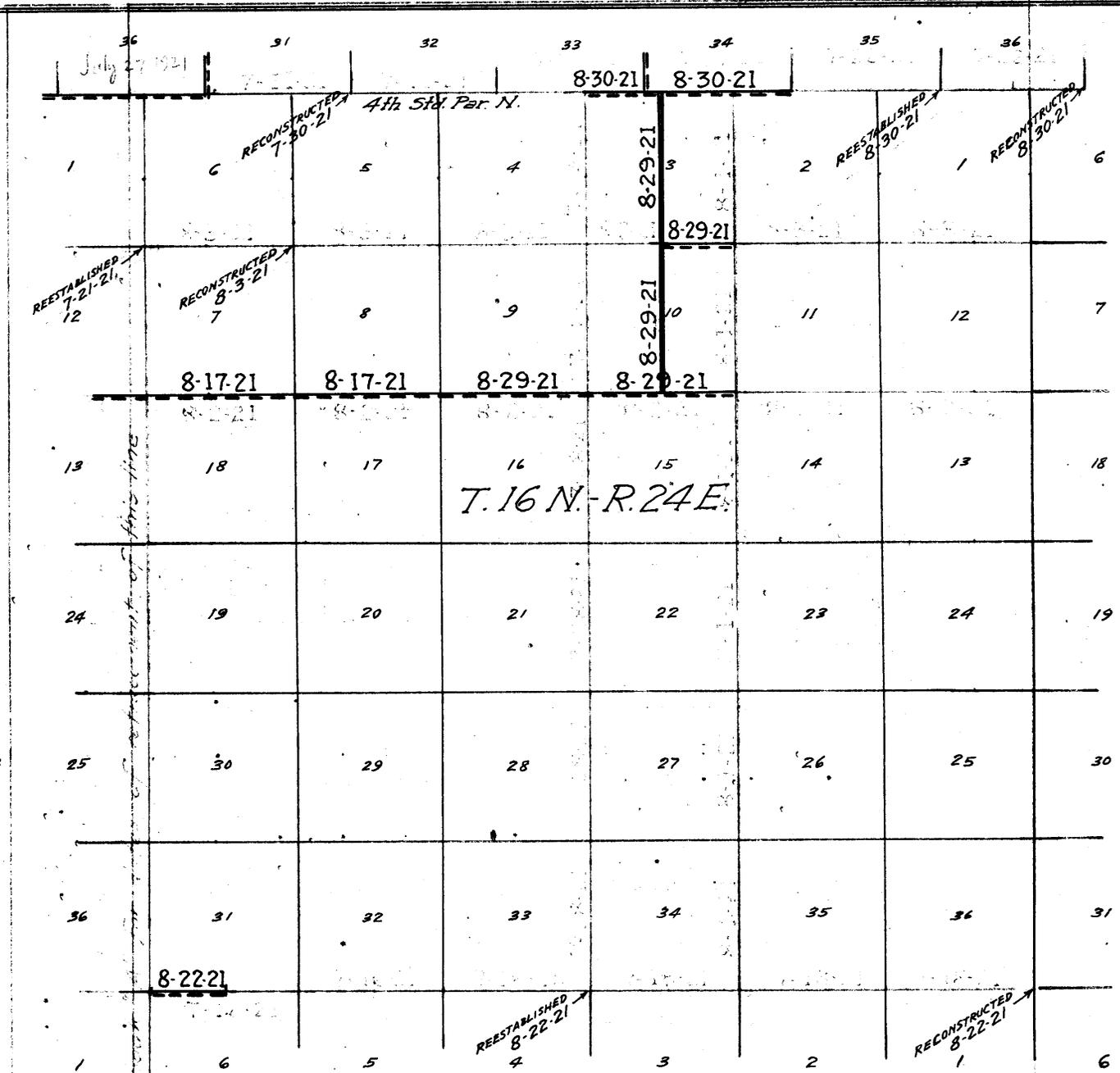
3595

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



Book "B"
 Group 118 - - - Arizona.

DATE DIAGRAM.

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

Surveyed on dates shown thereon.

Resurveyed on dates shown thereon.

Retracement in search of cors. on dates shown thereon.

Accepted surveys.

2
Chains.

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 clinometer, and the slope measurements properly reduced to true horizontal distances.

TEST OF BUFF SOLAR TRANSIT NO. 9984.

July 9, 1921: At camp near the cor. of secs. 1, 2, 11 and 12, T. 16 N., R. 23 E., Gila and Salt River Base and Meridian, Arizona, in approximate latitude $34^{\circ}47'30''$ N., and longitude $109^{\circ}52'19''$ W., at 6h. 50m. p.m. by my watch, which is 05m. fast of local mean time, I make an altitude observation of Polaris near lower culmination, making four observations, two each with the telescope in direct and reversed positions.

Watch fast of local mean time -----05m.
Local mean time of observation-----6h. 45m.
Mean observed vertical angle----- $33^{\circ}42'$
Time elapsed since lower culmination 22m.
Reduced latitude,----- $34^{\circ}47'25.8''$

At the same station at 10h. 25m. p.m. by my watch, I make an hour angle observation upon Polaris east of the meridian, making four observations, two each with the telescope in direct and reversed positions, and mark the mean point in the line thus determined, on a peg driven firmly in the ground 5 chains N.

Watch time of observation, mean of four readings, 10h. 25.2m.

July 10, 1921: I lay off the azimuth of Polaris $1^{\circ}09.8'$ to the west, and mark the meridian thus determined by a nail driven in a stake set firmly in the ground, 5 chains N.

July 10, 1921: At the same station, 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 true meridian established by Polaris observations, proceed as follows:

At 7h. 00m., a.m., apparent time, July 10, set off $34^{\circ}47\frac{1}{2}'$ N. on the lat. arc; $22^{\circ}17'$ N. on the decl. arc, and determine a meridian with the solar, and mark a point thereon by a tack driven in the stake already set 5 chs. N.; this point falls 0.5'E. of the meridian established by the Polaris observation.

July 10: At the same station, I make a meridian observation of the sun for time and latitude, observing

simultaneously the altitude of the sun's lower limb and transit of the sun's west limb, reversing the telescope and observing simultaneously, the altitude of the sun's upper limb and transit of the sun's east limb.

Mean observed altitude - - - - - $77^{\circ}27'13''$
 Reduced latitude - - - - - $34^{\circ}47'31''$
 Mean watch time of observation - 12h.10m.20s.
 Watch fast of local mean time - - 00h.05m.15s.

At 2h.00m.p.m., with the lat. arc unchanged, set off $22^{\circ}14'N.$ on the decl. arc, and determine a meridian with the solar, and mark the meridian thus determined on the stake already set 5 chains N. of station; this mark falls 00.5' W. of the meridian established by the Polaris observation. I continue taking solar observations hourly during the remainder of this day, and from a comparison of the results, find that all of the observations agree within 1' of the meridian established by the Polaris observation; therefore, conclude that the adjustment of the instrument is satisfactory.

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 latitude 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 4th. Std. Parallel N., thru. part of Range 24 East.

Chains.

The 4th. Standard Parallel North, was surveyed thru. Range 24 East by Henry A Coe, U.S.D.S. in 1882, and no retracement or resurvey of the Parallel in this Range is of record.

The closing cors. of the lines surveyed against the parallel from the South were all established by Henry A. Coe, U.S.D.S. in 1882, and there is no record of reestablishment of any of them.

The following notes describe the resurvey of that portion of the line lying between the closing cor. of secs. 3 and 4, T.16 N., R.24 E., and the standard cor. of secs. 34 and 35, T.17 N., R.24 E., and the reconstructions and reestablishment of certain standard cors. on the parallel is hereinafter described, following the resurvey notes.

Retracement.

From the reconstructed std. cor. of Ts. 17 N., Rs. 23 and 24 E., described in Book "A,"

East, on random line, on S. bdy. of sec. 31.

40.00 Diligent search in this vicinity fails to reveal any trace of the original standard $\frac{1}{4}$ sec. cor. of sec. 31.

81.82 Fall 3 lks. S. of the original std. cor. of secs. 31 and 32, T.17 N., R.24 E., hereinafter described in connection with description of the reconstruction of same.

The true course and distance of the S. bdy. of sec. 31 are therefore S. 89° 59' W., 81.82 chs.

Thence,

East, on random line, searching diligently at record intervals for the original std. cors. and closing cors., and setting temp. std. cors. at intervals of 40.00 chs.

No trace of any cor. can be found until at

401.49 Fall 232 lks. N. of the remains of the original std. cor. of Ts. 17 N., Rs. 24 and 25 E., hereinafter described in connection with the description of the reconstruction of same.

The true course and distance of the Parallel from this standard Tp. cor. back to the original standard cor. of secs. 31 and 32 are therefore N. 89° 40' W., 401.50 chs., which develops a proportional interval of 40.15 chs. for the reestablishment of the missing standard cors.

Resurvey.

At a point 160.60 chs. N. 89° 40' W. from the original std. cor. of Ts. 17 N., Rs. 24 and 25 E., which is proportional to the original distance, reestablish the standard cor. of secs. 34 and 35 as follows:

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for reestablished standard cor. of secs. 34 and 35, T.17 N., R.24 E., marked on brass cap,

S	C
T17N	R24E
S34	S35

1921

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

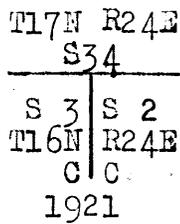
Thence,

N. 89° 40' W., on true line, on S. bdy. of sec. 34
Over gently rolling land, thru. scattering undergrowth.
Descend very gradually over NW. slope.

30.75 Center of draw, 300 lks. wide, course S.

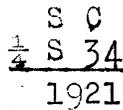
Resurvey of 4th. Std. Parallel North, thru part of Range 24 East. 5
Chains.

32.75 Thence over S. slope, ascending slightly.
(Proportional Dist.) Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for reestablished closing cor. of secs. 2 and 3, T. 16 N., R. 24 E., marked on brass cap,



Dig pits, 18x18x12 ins.; one each E., W. and S. of post, 3 ft. dist.
Continue over gently rolling land, ascending slightly over S. slope.

40.15 (Proportional dist.) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished standard $\frac{1}{4}$ sec. cor. of sec. 34, marked on brass cap,

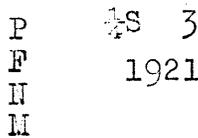


Dig pits, 18x18x12 ins., one each E. and W. of post, 3 ft. dist.

Continue over gently rolling land, thru. scattering undergrowth.

Ascend very gradually over S. slope.

72.72 (Midpoint of N. bdy. of sec. 3, T. 16 N., R. 24 E.) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 3, T. 16 N., R. 24 E., and monument on the bdy. of the Petrified Forest National Monument, marked on brass cap,

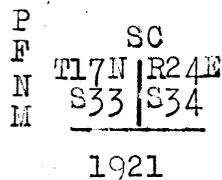


Dig pits 18x18x12 ins., one each E. and W. of post, 3 ft. dist.

From this cor., the Bdy. of the Petrified Forest National Monument extends S. 1° 1' W. and N. 89° 40' W.

Continue line and measurement on the 4th Std. Par. N., identical with Bdy. of the Petrified Forest National Monument.

80.30 (Proportional Dist.) Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for reestablished std. cor. of secs. 33 and 34, T. 17 N. R. 24 E., and monument on the Bdy. of the Petrified Forest National Monument, marked on brass cap,



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

From this cor. the Bdy. of the Petrified Forest National Monument extends N. 1° 18' W. and S. 89° 40' E. to sec. 33, Land, gently rolling, secs. 3 and 10, and the $\frac{1}{4}$ sec. cor. Soil, sandy and rocky, 2nd and 3rd rate. all of which are Timber, none of the $\frac{1}{4}$ sec. cor. of the Petrified Forest

6 Resurvey of 4th Standard Parallel N. thru part of Range 24 East.

Chains

Undergrowth, scattering sage brush.
Fair grass.

32.40

N. 89°40'W., on true line, on part of S. bdy. of sec. 33,
within the Petrified Forest National Monument.
Over gently rolling land, thru. scattering undergrowth.
Ascend slightly over S. slope, to
(Proportional dist.) Set an iron post, 3 ft. long, 2 ins.
in diam., 24 ins. in the ground, for reestablished clos-
ing cor. of secs. 3 and 4, T. 16 N., R. 24 E., marked on
brass cap,

T17N R24E

S33

S 4	S 3
T16N	R24E

C C

1921

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

This closing cor. is reestablished as a basis for the re-
establishment of the cor. of secs. 9, 10, 15 and 16, the
 $\frac{1}{4}$ sec. cor. of secs. 3 and 10, and the $\frac{1}{4}$ sec. cor. of secs.
10 and 15, T. 16 N., R. 24 E., all of which are line
monuments of the Bdy. of the Petrified Forest National
Monument.

Discontinue the resurvey of the 4th Standard Parallel
North at this closing cor.

Land, gently rolling.

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

Timber, none.

Undergrowth, scattering sage brush.

Fair grass.

Reconstruction and Reestablishment of certain Std.cors.on the
Fourth Standard Parallel North, in Range 24 East.

7

Chains.

Reconstruction of the std.cor.of Ts.17 N.,Rs.24 and 25 E.

The remains of the original standard cor. of Ts.17 N.,Rs. 24 and 25 E.,Rs.24 and 25 E.,found in the retracement of the 4th Standard Parallel North,thru.Range 24 East, as hereinbefore described, consist of decayed pieces of the original wood post, lying on the earth mound,in which it was originally set,and faint traces of the pits,N.E.and W. of the mound. No bearing trees.

Reconstruct this cor. as follows:

Destroy the old earth mound,and in center of its position Set an iron post, 3 ft.long, 3 ins. in diam.,24 ins.in the ground, for standard cor.of Ts.17 N.,Rs.24 and 25 E., marked on brass cap,

S	C
T17N	
R24E	R25E
S36	S31
1921	

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

This 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 described in Book "D," and for the reestablishment of standard cors. on the 4th Std.Parallel N. in R.24 E., as herein described.

Reestablishment of Std.cor.of secs.35 & 36,T.17 N.,R.24E.

At a point 80.30 chs.N.89°40'W.,from Std.cor.of Ts.17 N.,Rs.24 and 25 E., which is proportional to the original distance, reestablish the std.cor. of secs. 35 and 36, as follows:

Set an iron post, 3 ft.long, 2 ins. in diam.,24 ins.in the ground, for reestablished std.cor. of secs.35 and 36, T.17 N.,R.24 E.,marked on brass cap,

S	C
T17N	R24E
S35	S36
1921	

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

This cor.is reestablished as a basis for the reestablishment of the sec.cor. points on the First Meridional sec.line in T.17 N.,R.24 E., as described in Book"D."

Reconstruction of Std.cor.of secs.31 & 32,T.17 N.,R.24 E.

The original standard cor.of secs. 31 and 32,T.17 N.,R. 24 E. found in the retracement of the 4th Std.Par.N., thru.Range 24 East as hereinbefore described,is a soft sandstone 20x10x5 ins.,loosely set in a mound of stone, marked SC on N.face, 5 notches on E.face,and 1 notch on W.face. No accessories.

Reconstruct this cor. as follows:

Destroy old mound of stone, reset old stone in same position,14 ins.in the ground,and alongside same,set an iron post,3 ft.long, 2 ins.in diam., 24 ins.in the ground,for std.cor,of secs.31 and 32,T.17 N.,R. marked on brass cap,

Reconstruction and Reestablishment of certain
8 Standard cōrs. on the 4th. Std. Par. N., in Range 24 East.

Chains.

Reconstruction of std. cor. of secs. 31 & 32, T. 17N. R. 24E. (con td

SC	
T17N	R24E
S31	S32

1921

Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of post,
This cor. is reconstructed as a basis for the reestab-
lishment of the missing standard cōrs. on the 4th. Std.
Parallel North in Range 24 East, as hereinbefore de-
scribed.



Chains.

This township boundary was surveyed by Henry A. Coe, U.S. D.S. in 1882, and no retracement or resurvey of any portion of the line is of record. The following notes describe the resurvey of the line between the west halves of secs. 6 and 31, Ts. 15 and 16 N., Rs. 24 E., and the resurvey notes are followed by descriptions of the reestablishment of the cor. of secs. 3, 4, 33 and 34, and the reconstruction of the cor. of Ts. 15 and 16 N., Rs. 24 and 25 E.

RETRACEMENT.

From the reconstructed cor. of Ts. 15 and 16 N., Rs. 23 and 24 E., described in Book "A," N. 88° 20' E. (record course) on random line, bet. secs. 6 and 31 (W. 1/4).

35.65

Find 190 lks. N. of a granite stone, 14x11x4 ins. above ground, loosely set, marked 1/4 on N. face. No accessories.

This monument disagrees with the record description of the original 1/4 sec. cor. of secs. 6 and 31; therefore, make a diligent search within a wide radius in all directions for a monument conforming to record description, but fail to find any trace of same; therefore accept the position of the stone found, as the original cor. point.

Reconstruct this cor., as hereinafter described. True course and dist. of the Tp. bdy. bet. the W. halves of secs. 6 and 31 are therefore N. 88° 37' W., 35.64 chs.

From the above described cor., N. 88° 20' E. (record course) on random line, bet. Ts. 15 and 16 N., R. 24 E., searching diligently at record intervals for the original corners. Fail to find any trace of any old cor., until at

442.22

Find 579 lks. N. of a white sandstone, 18x12x2 ins. above ground, firmly set and marked with 6 notches on each of N., S. E. and W. edges.

No accessories. This monument disagrees with the record description of the original cor. of Ts. 15 and 16 N., Rs. 24 and 25 E.; therefore, make diligent search within a wide radius in all directions for a monument conforming to the record description, but fail to find any trace of same; therefore, accept the position of the stone found, as the original Tp. cor. point.

Reconstruct this cor., as hereinafter described. True course and dist. of the Tp. bdy. back to the original 1/4 sec. cor. of secs. 6 and 31 are therefore, S. 89° 05' W., 442.09 chs., which gives a proportional dist. of 40.19 chs. for each cor. interval in such portion of the line.

RESURVEY.

Reconstruct the 1/4 sec. cor. of secs. 6 and 31, as follows: Alongside the old granite stone, hereinbefore described, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor. of secs. 6 and 31, Ts. 15 and 16 N., R. 24 E., marked on brass cap,

1/4 S 31
S 6
1921

Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. This cor. is reconstructed as a basis for the reestablishment of the cor. of secs. 3, 4, 33 and 34, Ts. 15 and

10. Resurvey of part of South bdy. of Township 16 S North, Range 24 East.

Chains.

16 N., R. 24 E., as hereinafter described.

Thence,

N. 88° 37' W., on true line, bet. secs. 6 and 31 (W. ½).

Over gently rolling land, thru. scattering undergrowth.

Descend very gradually over SW. slope.

31.38 Wire fence brs. N. 20° E. and S. 20° W. At about 50 lks. NE.,
this fence turns to N.35.64 Intersect the reconstructed cor. of Ts. 15 and 16 N., Rs. 23
and 24 E., described in "Book A."

Land, gently rolling.

Soil, sandy, 3rd rate.

Timber, none.

Undergrowth, scattering sage brush.

Good grass.

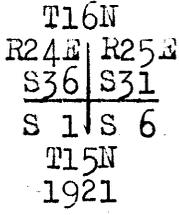
Reconstruction and Reestablishment of certain cors. on South boundary of Township 16 North Range 24 East. 11

Chains.

Reconstruction of cor. of Ts. 15 and 16 N., Rs. 24 and 25 E.

Reconstruct the cor. of Ts. 15 and 16 N. Rs. 24 and 25 E., as follows:

Alongside the old sandstone cor. monument, hereinbefore described, set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of Ts. 15 and 16 N., Rs. 24 and 25 E., marked on brass cap,



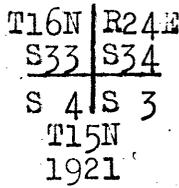
Dig pits, 18x18x12 ins., one each N., S.E. and W. of post, 3 ft. dist.

This cor. is reconstructed as a basis for the reestablishment of the cor. of secs. 3, 4, 33 and 34, Ts. 15 and 16 N., R. 24 E.

Reestablishment of Cor. of secs. 3, 4, 33 and 34, Ts. 15 and 16 N., R. 24 E.

At a point, 241.14 chs., S. 89° 05' W. from the cor. of Ts. 15 and 16 N., Rs. 24 and 25 E., which is proportional to the original dist., reestablish the cor. of secs. 3, 4, 33 and 34 as follows:

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for reestablished cor. of secs. 3, 4, 33 and 34, Ts. 15 and 16 N., R. 24 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 cor. of secs. 9, 10, 15 and 16, T. 16 N., R. 24 E., a line monument in the Bdy. of the Petrified Forest National Monument.

12 Resurvey of part of Subdivision lines of T.16 N., R. 24 E.

Chains.

The subdivision lines of T.16 N., R.24 E. were surveyed by Henry A. Coe, U.S.D.S. in 1882, and no retracement or resurvey of any part of same is of record. The following notes describe the resurvey of the lines bet. secs. 10 and 15, 9 and 16, 8 and 17, 7 and 18, and the E. $\frac{1}{2}$ of line bet. secs. 3 and 10.

RETRACEMENT.

Second Meridional Section Line.

- From the reestablished closing cor. of secs. 2 and 3, on the 4th. Standard Parallel North, hereinbefore described, South, on random line, bet. secs. 2 and 3.
- 33.82 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
- 74.44 Fall 117 lks. E. of the original cor. of secs. 2, 3, 10 and 11, hereinafter described.
 True course and dist. of line back to the closing cor. are therefore N. $0^{\circ}54'$ E., 74.45 chs.
- From cor. of secs. 2, 3, 10 and 11, South, on random line, bet. secs. 10 and 11.
- 40.00 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
- 80.34 Fall 91 lks. W. of the original cor. of secs. 10, 11, 14 and 15, hereinafter described.
 True course and dist. of line, bet. secs. 10 and 11, are therefore N. $0^{\circ}39'$ W., 80.34 chs.
 Retrace the S. 4 miles of this meridional sec. line, and make diligent search for original cors., but fail to find trace of any.

Third Meridional Section Line.

- From the reestablished closing cor. of secs. 3 and 4, on the 4th. Std. Parallel North, hereinbefore described, South, on random line, searching diligently at record intervals for the original corners. Find no trace of any corner on this meridional sec. line within the Tp., and at
- 478.90 Fall 28 lks. E. of the reestablished cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., hereinbefore described.
 The true course and dist. of the Third Meridional sec. line thru. the Tp. are therefore N. $0^{\circ}2'$ E., 478.90 chs., which to maintain the original proportions between cor. intervals, gives 40.28 chs. for each of the intervals except the north half of line bet. secs. 3 and 4, which is 35.82 chs.
- From cor. of secs. 3, 4, 33 and 34 on S. bdy. of Tp., N. $0^{\circ}2'$ E., on trial line, on Third Meridional sec. line.
- 322.24 (Proportional dist.) Set temp. cor. of secs. 9, 10, 15 and 16. Thence,
- 80.56 N. $0^{\circ}2'$ E., on trial line, bet. secs. 9 and 10.
 (Proportional dist.) Set temp. cor. of secs. 3, 4, 9 and 10.

Fourth Latitudinal Section Line.

- From the reestablished cor. of secs. 7, 12, 13 and 18 on W. bdy. of Tp., described in Book "A,"
- N. $88^{\circ}11'$ E. (record course) on random line, bet. secs. 7 and 18.
- 42.51 Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.

Chains.	Retracement, (cont'd)
78.59	Fall 71 lks.N.of the original cor.of secs.7,8,17 and 18, hereinafter described. True course and dist.of the line, bet. secs.7 and 18 are therefore S.88°42'W.,78.57 chs. Thence, N.88°10'E. (record course) on random line, bet. secs.8 and 17.
39.85	Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
80.65	Fall 148 lks.N. of the original cor.of secs.8,9,16 and 17, hereinafter described. True course and dist.of the line, bet. secs.8 and 17 are therefore S.89°13'W., 80.62 chs. Thence, N.88°27'E., (record course) on random line, bet. secs.9 and 16.
39.93	Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
79.86	Diligent search in this vicinity fails to reveal any trace of the original cor.of secs.9,10,15 and 16. Thence, N.88°12'E. (record course) on random line, continuing measurement.
119.93	Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
161.85	Fall 238 lks.N.of the original cor.of secs.10,11,14 and 15, hereinafter described. True course and dist. of line back to cor.of secs.8,9,16 and 17 are therefore S.89°10'W.,161.80 chs. Retracement of the East 2 miles of this Latitudinal Sec. line fails to locate any old subdivisional cors. From original cor.of secs.10,11,14 and 15, S.89°10'W., on trial line, on Fourth Latitudinal sec.line.
40.52	(Proportional dist.) Set temp. $\frac{1}{4}$ sec.cor. of secs.10 and 15.
79.83	A point 42 lks.N.of the temp.cor.of secs.9,10,15 and 16, set on trial Meridional sec. line.
81.03	(Proportional dist.) Set temp.cor.of secs. 9,10,15 and 16. Continue line and measurement.
121.415	(Proportional dist.) Set temp. $\frac{1}{4}$ sec.cor.of secs.9 and 16.
161.80	Intersect the original cor.of secs.8,9,16 and 17, hereinafter described.

FIFTH LATITUDINAL SEC. LINE.

	From the reestablished cor.of secs.1,6,7 and 12, on the west bdy. of the Tp., hereinbefore described, N.88°07'E. (record course) on random line, bet. secs.6 and 7.
41.90	Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec.cor.
79.17	Fall 25 lks.S. of the original cor.of secs.5,6,7 and 8, hereinafter described. True course and distance of line between secs.6 and 7 are therefore S.87°56'W., 79.18 chs. From cor.of secs.5,6,7 and 8, Easterly (various courses as per record) on random line, on Fifth Latitudinal sec.line, searching diligently at record intervals for the original cors. Fail to find trace of any old cor.,until at
241.59	Fall 506 lks.N.of the original cor.of secs.2,3,10 and 11, hereinafter described. This corresponds to a falling of 218 lks.S.of same cor.for a random line run due east from the cor.of secs.5,6, 7 and 8. True course and dist.of line back to cor.of secs.5,6,7 and 8 are therefore S.89°29'W.,241.49 chs.

14 Resurvey of part of Subdivision lines of T.16 N. R.24 E.

Chains.

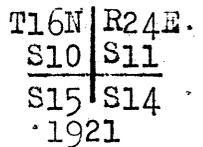
Retracement (cont'd)
line (continued)

- Retracement of the East 2 miles of this latitudinal sec. line reveals no trace of any old subdivisional cors. From original cor. of secs. 2, 3, 10 and 11, S. 89° 29' W., on trial line, on 5th. Latitudinal sec. line, bet. secs. 3 and 10.
- 40.315 (Proportional dist.) Set temp. $\frac{1}{4}$ sec. cor. of secs. 3 and 10.
- 78.99 A point 44 lks. N. of the temp. cor. of secs. 3, 4, 9 and 10, set on the trial Third meridional sec. line.
- 80.63 (Proportional dist.) Set temp. cor. of secs. 3, 4, 9 and 10. The true point for reestablishment of the cor. of secs. 3, 4, 9 and 10, is therefore at 44 lks. S. of this temp. cor., and is 164 lks. W. of the temp. cor. of same secs. set on the trial Third meridional sec. line, and the resulting true course and dist. of the line bet. secs. 3 and 10 are therefore S. 89° 10' W., 80.64 chs.

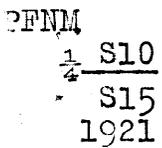
RESURVEY.

The cor. of secs. 10, 11, 14 and 15, found in the retracement hereinbefore described is a sandstone 6x3x3 ins., marked with 2 notches on E. edge and 4 notches on S. edge, set in a mound of stones. No accessories. This description does not agree with the record, but diligent search within a wide radius fails to reveal trace of any other monument; therefore, accept this as the original corner point.

Reconstruct this cor. as follows:
Destroy the mound of stones, reset the old stone monument in same position, 4 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. 10, 11, 14 and 15, marked on brass cap,



- 1.64 Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Thence, S. 88° 53' W., on true line, bet. secs. 10 and 15. Over level land, thru scattering undergrowth, in small valley, chaining SW.
- 10.50 Leave level, and enter gently rolling land. Ascend 30 ft., over E. slope: Spur, slopes S.
- 22.58 Descend 42 ft., over W. slope, to Leave gently rolling land, and enter level land in small valley, draining S.
- 39.84 Wash, 106 lks. wide, 2 ft. deep, course S. Leave level and enter gently rolling land. Ascend slightly over E. slope, to
- 40.52 (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. 10 and 15, and SE. cor. of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

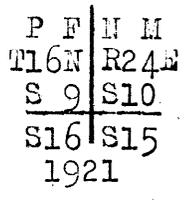


Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. From this cor., the boundary of the Petrified Forest National Monument extends N. 0° 28' W. and S. 88° 53' W.

Resurvey of part of subdivision lines of T.16 N. 2R. 24 E. 15

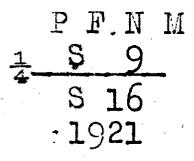
Chains.

Continue over gently rolling, thru scattering undergrowth along sec. line and boundary of the P.F.N.M.
 Ascend about 30 ft., over E. slope.
 52.69 Sand ridge, brs. NW. and SE.
 Descend about 20 ft., over W. slope, to
 62.65 Foot of ridge, brs. NW and SE. Leave gently rolling and enter level land.
 72.50 Leave level, and enter gently rolling land, brs. N. and S.
 Ascend 15 ft., over E. slope.
 77.73 Sand ridge, brs. N. and S.
 Descend 10 ft., over W. slope, to
 81.04 Reestablished point for cor. of secs. 9, 10, 15 and 16, which is 120 lks. W. of the temp. cor. of said secs. set on trial Third meridional sec. line, and 42 lks. S. of the temp. cor. of said secs. set on trial Fourth latitudinal sec. line.
 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for reestablished cor. of secs. 9, 10, 15 and 16, 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, level and gently rolling.
 Soil, sandy and rocky, 2nd and 3rd rate.
 Timber, none.
 Undergrowth, scattering greasewood and sage brush.
 Fair grass.

S. 89° 27' W., on true line, bet. secs. 9 and 16, on Bdy. of the Petrified Forest National Monument.
 Over gently rolling land, thru scattering undergrowth.
 Descend 40 ft., over W. slope.
 9.95 Wash, 45 lks. wide, course S. 30° E.
 Ascend 18 ft., over NE. slope, to
 12.10 Top of bank, brs. NW. and SE. Leave gently rolling, and enter nearly level land.
 39.70 Wash, 30 lks. wide, 2 ft. deep, course S. 20° E.
 Ascend slightly over SE. slope.
 40.38 (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. 9 and 16, 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, N. of cor.
 Continue over nearly level land, thru scattering undergrowth.
 Ascend very gradually, over SE. slope.
 55.00 Leave nearly level, and enter gently rolling land.
 Descend 80 ft., over SW. slope.
 77.50 Thence over S. slope, with slight change in elevation.
 80.76 Intersect the original cor. of secs. 8, 9, 16 and 17, which is a sandstone 14x8x6 ins., marked with 4 notches on each of E. and S. edges, loosely set in a mound of stone.
 No accessories.

16 Resurvey of part of Subdivision lines of T.16 N. R.24 E.

Chains.

Reconstruct this cor. as follows:

Destroy the old mound of stones, and in center of its position, set an iron post, 3 ft. long; 2 ins. in diam., 15 ins. in the ground to bed rock, deposit a stone marked with a cross (x) at base of post, and build a mound of stone, 4 ft. base, $1\frac{1}{2}$ ft. high around post, with old stone cor. monument against the iron post, for cor. of secs. 8, 9, 16 and 17, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M	
T16N	R24E
S 8	S 9
S17	S16
1921	

Land, gently rolling.

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

Timber, none.

Undergrowth, scattering sagebrush.

Good grass.

S. $89^{\circ}13'W.$, on true line, bet. secs. 8 and 17, on Bdy. of the Petrified Forest National Monument.

Over gently rolling land, thru. scattering undergrowth, along S. slope, with slight change in elevation.

18.47 Leave gently rolling, and enter broken and hilly land. Ascend over a series of spurs, sloping SE., devoid of timber and undergrowth.

40.31 (Midpoint) Set an iron post, 3 ft. long, 1 in. in diam., 15 ins. in the ground to bed rock, supported by a mound of stone, for reestablished $\frac{1}{2}$ sec. cor. of secs. 8 and 17, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M	
$\frac{1}{2}$ S 8	S 17
1921	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Continue over broken and hilly land, devoid of timber and undergrowth.

61.90 Ascend over a series of spurs, sloping SE. Ridge, brs. N. and S.

73.48 Descend 45 ft. over NW. slope, to Leave broken and hilly land, and enter gently rolling land and scattering undergrowth.

80.62 Descend slightly over SW. slope, to Intersect the original cor. of secs. 7, 8, 17 and 18, which is a disintegrated sandstone, 8x6x4 ins. above ground, marks nearly obliterated. No accessories.

Reconstruct this cor. as follows:

Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M	
T16N	R24E
S 7	S 8
S18	S17
1921	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, gently rolling, broken and hilly.

Resurvey of part of Subdivision lines of T.16 N. R.24 East. 17

Chains.

Soil, sandy and rocky adobe, 3rd and 4th rate.
 Timber, none.
 Undergrowth, scattering sage brush in E. 18 $\frac{1}{2}$ chs. and W. 7 chs.
 No undergrowth elsewhere.
 Fair grass.

S. 88° 42' W., on true line, bet. secs. 7 and 18, on Bdy. of the Petrified Forest National Monument.

Over gently rolling land, thru. scattering undergrowth. Descend very gradually over SW. slope.

20.35 Wash, 30 lks. wide, 2 ft. deep, course SW. Thence over S. slope, with slight change in elevation.

32.30 Ditch, 10 lks. wide, course S. 20° E.

Ascend very gradually, over SE. slope, to
 38.09 (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. 7 and 18, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P F N M
 $\frac{1}{4}$ S 7
 S 18
 1921

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

Continue over gently rolling land, thru. scattering undergrowth.

Ascend very gradually over SE. slope.

46.00 Draw, 100 lks. wide, course SE.

Ascend gradually over SE. slope.

49.69 National Old Trails road, brs. NW. and SE.

65.33 Ridge, brs. NE. and SW.

Descend 40 ft., over NW. slope, to

69.50 Change to W. slope, and descend gradually to

78.57 Intersect the reestablished cor. of secs. 7, 12, 13 and 18 on the W. bdy. of the Tp., described in Book "A."

Land, gently rolling.

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

Timber, none.

Undergrowth, scattering sagebrush.

Good grass.

The original cor. of secs. 2, 3, 10 and 11 is a sandstone, 36x14x10 ins., marked with 5 notches on one edge, and 2 notches on another, lying on top of a mound of earth.

No accessories.

Reconstruct this cor. as follows:

Destroy the old mound of earth, and in center of its position, reset the old stone, 24 ins. in the ground, with the 2 notches on E. edge, and 5 notches on S. edge; and dig pits, 18x18x12 ins., one each NE., SE., SW. and NW. of cor. 3 ft. dist.

Thence,

S. 89° 10' W., on true line, bet. secs. 3 and 10 (E. $\frac{1}{2}$).

Over gently rolling land, thru. scattering undergrowth.

Descend very gradually over SW. slope.

13.66 Draw, course S.

Ascend gradually over E. slope.

23.15 Spur, slopes S.

Descend gradually over W. slope.

38.50 Leave gently rolling, and enter nearly level land, sloping slightly to the S.

40.32 (Proportional dist.) Set an iron post, 3 ft. long, 1 in.

18 Resurvey of part of Subdivision lines of T.16 N. R.24 E.

Chains.

in diam., 26 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor. of secs. 3 and 10, and line monument of the Bdy. of the Petrified Forest National Monument, marked on brass cap,

P		S	3
F	$\frac{1}{4}$		
N		S	10
M			1921

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. From this cor., the Bdy. of the Petrified Forest National Monument, extends N. $1^{\circ}51'$ E. & S. $0^{\circ}28'$ E.

Land, gently rolling and nearly level.

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

Timber, none.

Undergrowth, scattering sage brush.

Good grass.

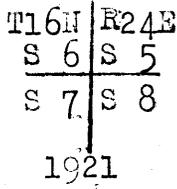
Reconstruction of the Corner of Secs. 5, 6, 7 and 8
Township 16 North, Range 24 East.

Chains.

The original cor. of secs. 5, 6, 7 and 8, T. 16 N., R. 24 E. is a petrified wood stone, 18x8x6 ins., marked with 5 notches on each and E. and S. edges, firmly set in a mound of stone. No accessories.

Reconstruct this cor. as follows:

Destroy the old mound of stones, and in center of its position, reset the old stone monument, 12 ins. in the ground, with notches to the east and south, and alongside same, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, T. 16 N., R. 24 E., marked on brass cap,



Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is reconstructed as a basis for the reestablishment of the 1/4 sec. cor. of secs. 3 and 10, T. 16 N., R. 24 E., a line monument of the E. dy. of the Petrified Forest National Monument.



20 Survey of part of Subdivision lines of T.16 N. R.24 E.

Chains.

Meridional $\frac{1}{4}$ Sec. line of Sec. 10.

- From the reestablished $\frac{1}{4}$ sec.cor.of secs.3 and 10,hereinbefore described,
South on random line,on Meridional $\frac{1}{4}$ sec.line of sec.10.
- 80.44 Fall 66 lks.W.of the reestablished $\frac{1}{4}$ sec.cor.of secs.10 and 15, and SE.cor. of the Bdy.of the Petrified Forest National Monument, hereinbefore described.
- Thence,
N.0°28'W., on true line.on Meridional $\frac{1}{4}$ sec.line of sec.10, and Bdy.of Petrified Forest National Monument.
- Over gently rolling land, thru.scattering undergrowth.
Ascend slightly over E.slope,to
- 5.45 Wash,75 lks.wide, 2 ft. deep, course S.10°E.from N.
- Thence along bottom of this wash, ascending slightly to
- 24.50 Leave same wash, 50 lks.wide, course S. from NE.
- Ascend slightly over SE.slope,to
- 32.50 Same wash; 40 lks.wide, course SE.
- Ascend very gradually over S.slope.
- 40.22 (Midpoint) Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in the ground, for center cor.of sec.10, and line monument of the Bdy.of the Petrified Forest National Monument, marked on brass cap,
- P
F C $\frac{1}{4}$ S10
N
M
1921
- Dig pits, 18x18x12 ins.,one each N.and S.of post, 3 ft. dist.
- Continue over gently rolling land, thru. scattering undergrowth.
Ascend very gradually over S.slope.
- 71.50 Leave gently rolling,and enter nearly level land,sloping slightly to the S.
- 80.44 Intersect the reestablished $\frac{1}{4}$ sec.cor.of secs.3 and 10,and line monument of the Bdy.of the P.F.N.M.,hereinbefore described.
- Land,gently rolling and nearly level.
Soil,sandy,3rd rate.
Timber, none.
Undergrowth, scattering sage brush.
Good grass.

Meridional $\frac{1}{4}$ sec.line of Sec. 3.

- From the N. $\frac{1}{4}$ sec.cor.of sec.3,on the 4th Std.Parallel N., hereinbefore described,
South, on random line,on Meridional $\frac{1}{4}$ sec. line of sec.3.
- 75.26 Fall 142 lks.E. of the reestablished $\frac{1}{4}$ sec.cor.of secs.3 and 10,and line monument of the Bdy.of the P.F.N.M., hereinbefore described.
- Thence,
N.1°5'E., on true line,on Meridional $\frac{1}{4}$ sec.line of sec.3, and Bdy.of the Petrified Forest National Monument.
- Over nearly level land, thru. scattering undergrowth.
Ascend slightly over S.slope, to
- 35.20 Leave nearly level,and enter broken and hilly land.
- Ascend 25 ft.,over S.slope,to
- 40.31 (Proportional dist.) Set an iron post, 3 ft.long,1 in. in diam.,26 ins.in the ground, for center cor.of sec.3 and line monument of the Bdy.of the Petrified Forest National Monument, marked on brass cap,

Survey of part of Subdivision lines of T.16 N., R.24 E.

Chains.

Meridional $\frac{1}{4}$ sec. line of sec. 3 (continued).

P
F
N $Q\frac{1}{4}$ S 3
M 1921

- 55.25 Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Continue over broken and hilly land, thru. scattering undergrowth. Ascend 60 ft., over broken S. slope, to Rim of mesa, brs. E. and W. Leave broken and hilly land, and enter nearly level land, sloping slightly to the south.
- 75.27 Intersect the N. $\frac{1}{4}$ sec. cor. of sec. 3 on the 4th. Standard Parallel North, hereinbefore described. Land, S. 25 chs. and N. 20 chs. nearly level; remainder, broken and hilly. Soil, sandy and rocky adobe, 3rd and 4th rate. Timber, none. Undergrowth, scattering sage brush. Fair grass.

The continued satisfactory adjustment of the solar apparatus during the execution of the resurvey and survey hereinbefore described is indicated from field tests, as described in Book "D."

Boundaries of that portion of T.16 N., R.24 E. situated within the Petrified Forest National Monument.

Latitudes, departures, and closing errors.

Lines designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
Boundary of P.F.N.M.	S. $1^{\circ} 5' W.$	75.27		75.26		1.42
	S. $0^{\circ} 28' E.$	80.44		80.44	.65	
	S. $88^{\circ} 53' W.$	40.52		.79		40.51
	S. $89^{\circ} 27' W.$	80.76		.77		80.76
	S. $89^{\circ} 13' W.$	80.62		1.10		80.61
	S. $88^{\circ} 42' W.$	78.57		1.78		78.55
West Boundary,	N. $0^{\circ} 38' W.$	161.05	161.05			.78
North Boundary, (4th. Std. Par. N.)	N. $89^{\circ} 59' E.$	114.95	.03		114.95	
	S. $89^{\circ} 40' E.$	168.18		.98	168.18	
Convergency,					.10	
<u>Totals.</u>			161.08	161.12	283.88	283.63
				161.08	283.63	
<u>Errors in latitude,</u>			0.04			
<u>Error in departure,</u>					0.25	

GENERAL DESCRIPTION.

The Petrified Forest National Monument embraces all of secs. 4, 5, 6, 7, 8 and 9, and the West halves of secs. 3 and 10 of T. 16 N., R. 24 E.

The surface in this part of the township is gently rolling, nearly level and broken and hilly, and the soil is sandy and rocky, 2nd, 3rd and 4th rate.

There is no timber, but a scattering undergrowth of sage brush is prevalent in all parts, and a good growth of grass.

There is no permanent running water, the water courses being dry washes and draws, with a general southerly course.

There are no settlers, and no indications of valuable mineral deposits.

The National Old Trails Road bearing NW. and SE. thru. sec. 7, extending Northwesterly to Holbrook and Southeasterly to St. Johns and Springerville, is the only improvement in this part of the township.

The group of petrified trees, known as the "Third Forest" is situated in secs. 6 and 7.

BOOK 3595

CERTIFICATE OF UNITED STATES CADASTRAL ENGINEER.

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 No. 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 Fourth Standard Parallel North, in Range 23 East, the South, Bdy., and the Subdivision lines of T. 16 N., R. 24 E., Reconstructed the Std. cor. of Ts. 17 N., Rs. 24 and 25 E., the Std. cor. of secs. 31 and 32, T. 17 N., R. 24 E., the Cor. of secs. 5, 6, 7 and 8, T. 16 N., R. 24 E., and Cor. of Ts. 15 and 16 N., Rs. 24 and 25 E.; Reestablished the Std. cor. of secs. 35 and 36, T. 17 N., R. 24 E., and Cor. of secs. 3, 4, 33 and 34, on S. bdy. of T. 16 N., R. 24 E.; and surveyed all those parts or portion of the Subdivision lines of T. 16 N., R. 24 E. of the Gila and Salt River Base and Meridian, in the State of Arizona, which are represented in and by diagram on page 1 hereof the foregoing field notes as having been executed by me, and under my direction; and that all the corners of resurvey and 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 survey. and survey.

Place: Continental Arizona Date: July 5, 1923

Sidney E. Blout U.S. Cadastral Engineer.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, July 9, 1923.

The foregoing field notes of the resurvey of the 4th. Std. Par. North, thru part of Range 24 East, Part of S. bdy. and part of the Subdivision lines of TOWNSHIP 16 NORTH, RANGE 24 EAST; RECONSTRUCTION of Std. cor. of Ts. 17 N., Rs. 24 and 25 E.; Std. cor. of secs. 31 and 32, T. 17 N., R. 24 E.; cor. of secs. 45, 6, 7 and 8, T. 16 N., R. 24 E., and cor. of Td. 15 and 16 N., Rs. 24 and 25 E. REESTABLISHMENT of Std. cor. of secs. 35 and 36, T. 17 N., R. 24 E., and cor. of secs. 3, 4, 33 and 34 on S. bdy. of T. 16 N., R. 24 E. SURVEY of Part of Sibdivision lines of TOWNSHIP 16 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 Group 118, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, resurveys & surveys they describe, are hereby approved.

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.