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1

Book "A"

4-679

BOOK 3648

BOOK 364 3

FIELD NOTES

OF THE RETRACEMENT OF

Part of the West boundary,

OF THE RESURVEY OF

Part of the North boundary, and

Part of the Subdivision lines,

AND OF THE SURVEY OF

Part (completion) of the Subdivision lines of

TOWNSHIP 18 SOUTH, RANGE 17 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 December 16 1921. issued by the United States Surveyor General to govern surveys included in Group No. 119, Arizona, which were approved by the Commissioner of the General Land Office, February 2, 1922, and Assignment Instructions dated September 15 1922.

Retracement, Resurvey and Survey commenced September 22, 1922.

Retracement, Resurvey and Survey completed September 27, 1922.

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(1A)

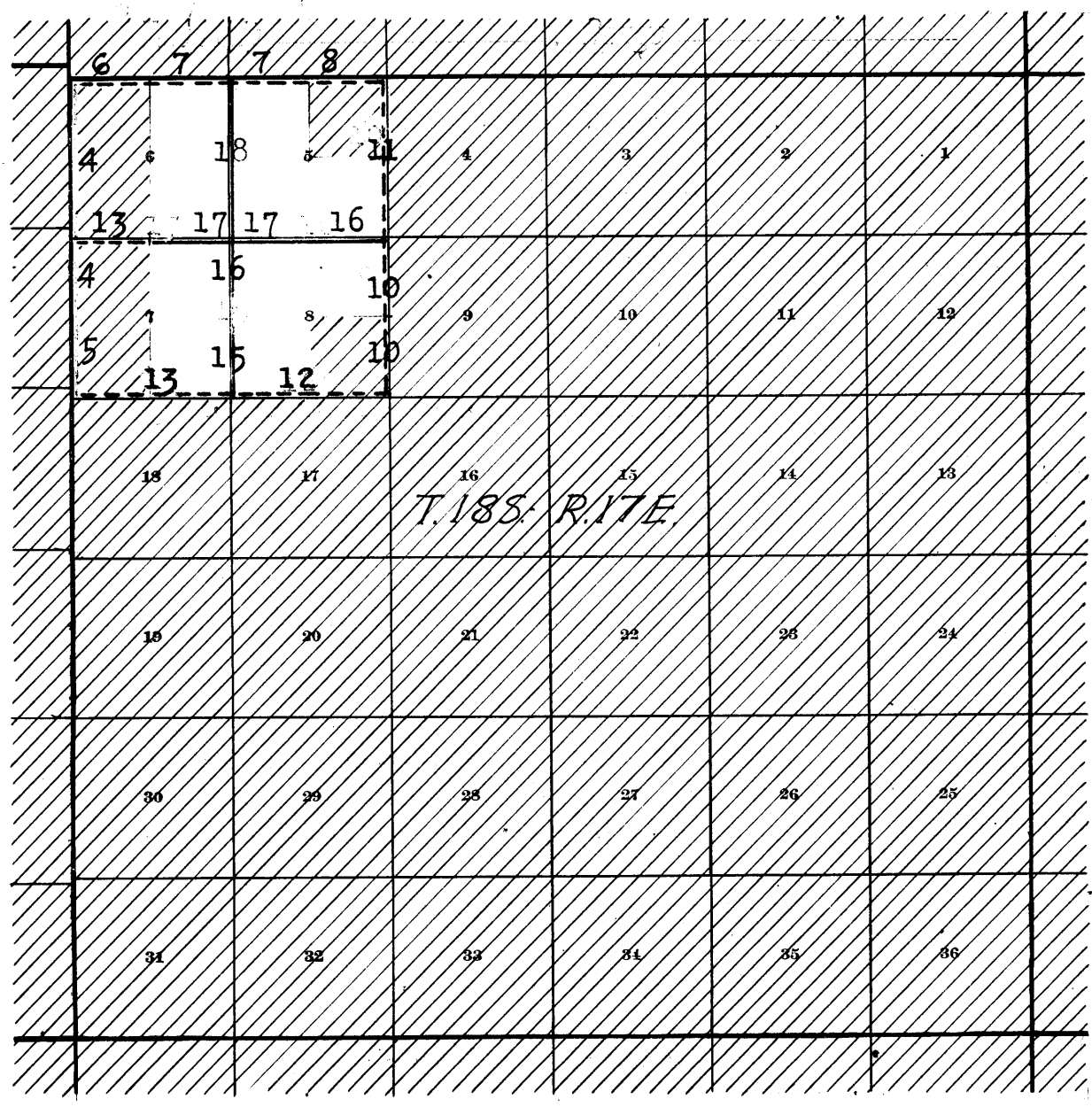
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Book "A"

Group 119 - Arizona.

BOOK 3648

INDEX DIAGRAM.



-  Lines surveyed under this group.
-  Lines resurveyed under this group.
-  Lines retraced under this group.
-  Accepted surveys.
-  Areas surveyed as per accepted plats on file.

BOOK 3648

1B

Book "A"
 Group 119 - - - Arizona.
 Township 18 South, Range 17 East.

DATE DIAGRAM.

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

- Indicates surveys executed by Sidney E. Blout, U.S.C.E. on dates shown thereon.
- - - - - Indicates resurveys executed by Sidney E. Blout, U.S.C.E. on dates shown thereon.
- Indicates retracements executed by Sidney E. Blout, U.S.C.E. on dates shown thereon.
- Indicates accepted surveys.

The retracements, resurveys, and surveys hereinafter described, commenced September 19, 1922, and executed on dates shown on diagram on page 1 hereof by Sidney E Blout, U.S. Cadastral Engineer, using a Buff "Rocky Mountain Favorite" solar transit No. 9984, with U-shaped standard, 4 $\frac{1}{2}$ -inch horizontal circle, 4-inch vertical circle, and improved Smith solar attachment.; All azimuth determinations are accomplished with the solar attachment, except the special observations on the sun and Polaris for meridian, upon which to test the solar apparatus, as stated in the field notes.

The instrument was examined, tested on the meridian at the Federal Building at Phoenix Arizona, found correct, and was approved by the Assistant Supervisor of Surveys for Arizona and California September 15, 1922, conditional upon satisfactory field tests.

TEST OF INSTRUMENT

September 19, 1922; examine the adjustments of the instrument, and correct all 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;

In camp near the $\frac{1}{4}$ sec. cor. bet. secs. 8 and 9, T18S., R17E., Latitude $31^{\circ}52'54''$ N., Longitude, $110^{\circ}37'26''$ W. At 4^h 00^m p.m. app. time Sept. 19.; set off $31^{\circ}53'$ N. on the lat. arc, $1^{\circ}31\frac{1}{2}'$ N. on the decl. arc and determine a meridian with the solar and mark a point thereof by a tack driven in a stake set firmly in the ground 5-chains N. of instrument.

At same station at 7^h 46.4^m p.m., 1.m.t. by my watch which is set by Western Union Telegraph clock to read correct local mean time.; observe Polaris at eastern elongation, making four observations, two each with 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.

September 20, at 7^h 00^m a.m., lay off the azimuth of Polaris $1^{\circ}18\frac{1}{2}'$ to the west and mark the meridian thus determined by a tally pin driven in the stake already set 5-chains N. on which the meridian falls $00\frac{1}{2}'$ E. of the meridian determined by the solar observation.

At 8^h 00^m a.m. app. time Sept. 20.; set off $31^{\circ}53'$ N. on the lat. arc., $1^{\circ}16'$ N. on the decl. arc and determine a meridian with the solar and mark a point thereof by a tack driven in the stake already set 5-chains N.; This point falls 1' E. of the meridian established by the Polaris observations.

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

The magnetic bearing of the true meridian at 8^h 00^m a.m. is N $13^{\circ}45'$ W.

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

[The table area is mostly blank with faint, illegible markings and noise.]

BOOK 3648

4 Retracement of part of W. bdy. of Township 18 South, Range 17 East.

Chains.

This township bdy. was resurveyed in 1874, by T.F. White, U.S.D.S., establishing all cor. monuments thereon with a common reference to areas both sides of the line. In 1904, P. Contzen, U.S.D.S., in connection with the survey of the subdivision lines of T.18 S., R.16 E., resurveyed this entire township bdy., reconstructing both township corners, and all the sec. and $\frac{1}{4}$ sec. cers., changing the original cor. of Ts.17 and 18 S., Rs.16 and 17 E. to refer to Ts.17 and 18 S., R.17 E. only, and all of the sec. and $\frac{1}{4}$ sec. cers. to refer to areas in T.18 S., R.17 E. only, with the exception of the original cor. of secs. 19, 24, 25 and 30, and establishing closing cers. on the line for areas W. of the line.

No other retracement or resurvey of this bdy. is of record. The following notes describe a retracement of the W. bdrs. of secs. 6 and 7, T.18 S., R.17 E.

From the cor. of Ts.17 and 18 S., R.17 E., hereinafter described,

S.0°6'E., on random line, on W. bdy. of sec. 6 (N. $\frac{1}{2}$).

Over rolling land, thru. scattering undergrowth.

Descend 31 ft., over SW. slope.

2.85 Wash, 20 lks. wide, course NW. Asc. 207 ft., over NE. slope.

15.42 Spur, slopes NW. Desc. 78 ft., over SW. slope.

25.85 Wash, 10 lks. wide, course NW. Asc. 130 ft., over NE. slope.

31.16 Spur, slopes NW. Desc. 71 ft., over SW. slope.

34.49 Wash, 15 lks. wide, course NW.

Ascend 192 ft., over NE. slope, to

39.62 Fall 8 lks. E. of the $\frac{1}{4}$ sec. cor. of sec. 6, which is a quartzite stone, 6x8x6 ins. above ground, firmly set, marked $\frac{1}{4}$ S on E. face, and witnessed by mound of stone, 2 ft. face, $1\frac{1}{2}$ ft. high, E. of cor. No bearing trees.

True course and dist. of N. $\frac{1}{2}$ of W. bdy. of sec. 6 are therefore, N.0°1'E., 39.62 chs.

Thence,

S.0°6'E., on a random line, on W. bdy. of sec. 6 (S. $\frac{1}{2}$).

Over mountainous land, thru. scattering undergrowth.

Ascend 25 ft., over NE. slope.

1.24 Spur, slopes NW.

Descend 232 ft., over SW. slope.

17.62 Wash, 30 lks. wide, course NW.

Ascend 137 ft., over NE. slope.

23.71 Spur, slopes NW.

Descend 127 ft., over SW. slope.

31.48 Wash, 15 lks. wide, course NW.

Ascend 41 ft., over NE. slope, to

36.34 Fall 25 lks. E. of the closing cor. of secs. 1 and 12, T.18 S., R.16 E., which is a quartzite stone 12x8x6 ins. above ground, firmly set, marked CC on W. face, 1 groove on N. face and 5 grooves on S. face; and witnessed by a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

No bearing trees.

Ascend 35 ft., over N. slope, to

39.32 Fall 28 lks. E. of cor. of secs. 6 and 7, T.18 S., R.17 E., which is a quartzite stone 15x15x8 ins. above ground, firmly set, marked with 1 notch on N. edge and 5 notches on S. edge, and witnessed by a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. No bearing trees.

True course and dist. of S. $\frac{1}{2}$ of W. bdy. of sec. 6 are therefore N.0°18'E., 39.32 chs., and the closing cor. of secs. 1 and 12 is on line.

Land, rolling and mountainous.

Soil, gravelly and rocky, 3rd rate.

Timber, none. Undergrowth, greasewood and scrub mesquite.

Good growth of bunch grass.

S.0°5'E., on random line, on W. bdy. of sec. 7 (N. $\frac{1}{2}$).

Over mountainous land, thru. scattering undergrowth.

Ascend 62 ft., over N. slope.

10.50 Spur, slopes NW. Descend 146 ft., over SW. slope.

Retracement of part of W. bdy. of Township 18 South Range 17 East. 5

Chains.

- 17.38 Wash, 20 lks.wide, course NW.
Ascend 30 ft., over NE.slope.
- 19.92 Spür, slopes NW.
Descend 10 ft., over SW.slope.
- 20.18 Wash, 30 lks.wide, course NW.
Ascend 40 ft., over NW.slope.
- 26.08 Ascend slightly over W.slope.
- 31.00 Descend 23 ft., over SW.slope.
- 35.90 Ascend 17 ft., over NW.slope, to
- 39.80 Fall 6 lks.E. of the $\frac{1}{4}$ sec.cor.of sec.7, which is a quartzite stone 8x6x4 ins. above ground, firmly set, marked $\frac{1}{4}$ S on E.face, and witnessed by a mound of stone 2 ft. base, $1\frac{1}{2}$ ft.high, E of cor. No bearing trees.
True course and dist. of N. $\frac{1}{2}$ of W. bdy. of sec.7 are therefore, North, 39.80 chs.
Thence
S.0°10'E., on random line on W. bdy.of sec.7 (S. $\frac{1}{2}$).
Over mountainous land, thru. scattering undergrowth.
Ascend 25 ft., over NW.slope.
- 3.49 Old pack trail, brs. E.and W.
- 8.55 Descend gradually over SW.slope.
- 15.99 Wash, 15 lks.wide, course NW.
Ascend 208 ft., over NE.slope, to
- 22.51 Spür, slopes NW.
Ascend 30 ft., over W.slope, to
- 27.49 Head of wash, course NW.
Ascend 48 ft., over NE.slope.
- 31.18 Spür, slopes NW.
Descend 135 ft., over SW.slope, to
- 36.09 Fall 29 lks.E. of the closing cor. of secs.12 and 13, T.18 S., R.16 E., which is a granite stone 10x8x4 ins.above ground, firmly set, marked CC on W face, 2 notches on N.edge, and 4 notches on S edge, and witnessed by a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high, W.of cor. No bearing trees.
Descend 65 ft., over SW.slope, to
- 39.06 Fall 32 lks.E. of the cor.of secs.7 and 18, T.18 S., R.17-E., which is a granite stone 8x6x4 ins.above ground, firmly set, marked with 2 notches on N.edge, and 4 notches on S edge, and witnessed by a mound of stone; 2 ft.base, $1\frac{1}{2}$ ft. high, E.of cor. No bearing trees.
True course and dist.of S. $\frac{1}{2}$ of W.bdy.of sec.7 are therefore N.0°18'E., 39.06 chs., and the closing cor.of secs. 12 and 13 is on line.

Land, mountainous.
Soil, gravelly and rocky, 3rd and 4th rate.
Timber, none.
Undergrowth, greasewood, scrub mesquite and cactus.
Good grass.

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6 Resurvey of part of North bdy. of Township 18 South, Range 17 East.

Chains.

This township boundary was surveyed by Theodore F. White, U.S. Deputy Surveyor, in 1874 and no retracement or resurvey of any part thereof is of record. The following notes describe a resurvey of the N. bdrs. of secs. 5 and 6.

Retracement for Resurvey.

From the original cor. of secs. 4, 5, 32 and 33, hereinafter described,

39.83 S. $89^{\circ}52'W.$, on random line, bet. secs. 5 and 32 ($E.\frac{1}{2}$).
Fall 27 lks. N. of the original $\frac{1}{4}$ sec. cor., hereinafter described.

True course and dist. of $E.\frac{1}{2}$ of line, bet. secs. 5 and 32, are therefore, N. $89^{\circ}29'E.$, 39.83 chs.

Thence,
38.82 S. $89^{\circ}52'W.$, on random line, bet. secs. 5 and 32 ($W.\frac{1}{2}$).
Fall 25 lks. S. of the original cor. of secs. 5, 6, 31 and 32, hereinafter described.

True course and dist. of $W.\frac{1}{2}$ of line, bet. secs. 5 and 32, are therefore, S. $89^{\circ}46'E.$, 38.82 chs.

38.85 S. $89^{\circ}52'W.$, on random line, bet. secs. 6 and 31 ($E.\frac{1}{2}$).
Fall 36 lks. N. of the original $\frac{1}{4}$ sec. cor., hereinafter described.

True course and dist. of $E.\frac{1}{2}$ of line, bet. secs. 6 and 31 are therefore, N. $89^{\circ}21'E.$, 38.85 chs.

Thence,
40.00 S. $89^{\circ}52'W.$, on random line, bet. secs. 6 and 31 ($W.\frac{1}{2}$).
Fall 58 lks. S. of the cor. of Ts. 17 and 18 S., R. 17 E., hereinafter described.

True course and dist. of $W.\frac{1}{2}$ of line, bet. secs. 6 and 31 are therefore, S. $89^{\circ}18'E.$, 40.00 chs.

RESURVEY.

The cor. of Ts. 17 and 18 S., R. 17 E. is a sandstone, 8x8x6 ins. above ground, loosely set, marked with 6 notches on each of N., S. and E. edges, and witnessed by a mound of stone, E. of cor. The two bearing trees of record have been chopped down close to the ground. The stumps bear N. $22\frac{1}{2}^{\circ}E.$, 204 lks. dist., and S. $6^{\circ}E.$, 107 lks. dist., which agrees with the record. Reconstruct this cor. monument as follows:

Alongside the old stone, Set an iron post, 3 ft. long, 3 ins. in diam., 27 ins. in the ground, for cor. of Ts. 17 and 18 S., R. 17 E., marked on brass cap,

	T17S
T18S	R17E
S 1	S31
	S 6
R16E	T18S

1923

from which,

A mesquite, 8 ins. in diam., brs. N. $87^{\circ}E.$, 232 lks. dist., marked T17S R17E S31 BT.

A mesquite, 12 ins. in diam., brs. S. $84^{\circ}E.$, 242 lks. dist., marked T18S R17E S6 BT.

Thence,

Resurvey of part of N. bdy. of Township 18 South, Range 17 East. 7

Chains.

- S. 89°18'E., on a true line, bet. secs. 6 and 31 (W. $\frac{1}{2}$)..
- Over rolling land, thru. scattering timber and undergrowth.
- Ascend gradually over SW. slope.
- 4.60 Wire fence, brs. N. and S.
- 5.00 Descend 6 ft., over NE. slope.
- 6.30 Wash, 10 lks. wide, course NW.
- Ascend 12 ft., over W. slope.
- 8.70 Point of low spur, slopes NW.
- Descend 30 ft., over NE. slope, to
- 14.89 Wash, 10 lks. wide, course NW.
- Ascend gradually over NW. slope, to
- 17.69 Wash, 10 lks. wide, course NW. Enter mountainous land.
- Ascend 52 ft., over SW. slope.
- 23.84 Spur, slopes NW.
- Descend 30 ft., over NE. slope.
- 26.91 Wash, 15 lks. wide, course SW.
- Ascend 145 ft., over SW. slope.
- 30.89 Wire fence, brs. N. 85°W., and S. 85°E.
- 37.50 Ridge, brs. NW. and SE.
- Descend 37 ft., over NE. slope, to
- 40.00 Intersect the original $\frac{1}{4}$ sec. cor. of secs. 6 and 31, which is a limestone 10x8x8 ins. above ground, loosely set, marked $\frac{1}{4}$ S on N. face, and witnessed by a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

Reconstruct this cor. as follows: Alongside old stone, Set an iron post, 3 ft. long, 1 in. in diam., 27 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 6 and 31, marked on brass cap,

$\frac{1}{4}$ S 31
S 6
1923

No bearing trees available.

- Thence,
 - N. 89°21'E., on a true line, bet. secs. 6 and 31 (E. $\frac{1}{2}$).
 - Over mountainous land, thru. scattering timber and undergrowth.
 - Descend 55 ft., over NE. slope, to
 - 3.91 Wash, 10 lks. wide, course NE.
 - Descend 51 ft., over NE. slope, to
 - 8.35 Wash, 10 lks. wide, course NE.
 - Ascend 39 ft., over NW. slope.
 - 18.30 Point of spur, slopes NE.
 - Descend 32 ft., over NE. slope.
 - 20.32 Wash, 20 lks. wide, course NW.
 - Ascend 36 ft., over SW. slope.
 - 23.38 Point of spur, slopes SW.
 - Descend 34 ft., over SE. slope.
 - 25.83 Wash, 20 lks. wide, course SW.
 - Ascend 292 ft., over NW. slope, to
 - 38.85 Intersect the original cor. of secs. 5, 6, 31 and 32, which is a granite stone, 8x4x6 ins. above ground, firmly set marked with 4 notches on E. edge, and 2 notches on W. edge, and witnessed by a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor., and one bearing tree.
- An oak, 12 ins. in diam., N. 21 $\frac{1}{2}$ E., 155 lks. dist., marked TXVIIS, RXVIIIE, SXXXII. BT.
- This cor. being in a good state of preservation, properly marked and witnessed, no reconstruction is necessary.
- Land, rolling and mountainous.
Soil, gravelly and rocky, 3rd rate.
Timber, oak and mesquite.
Undergrowth, scrub mesquite and ocotillo.
Good grass.

S. 89°46'E., on true line, bet. secs. 5 and 32 (W. $\frac{1}{2}$).
Over mountainous land, thru. scattering timber and undergrowth.

8 Resurvey of part of N. hdy. of Township 18 South Range 17 East.

Chains.

- 9.51 Ascend 153 ft., over NW. slope.
Spur, slopes NW.
- 11.29 Descend 24 ft., over NE. slope.
Wash, 10 lks. wide, course NW.
- 24.33 Ascend 270 ft., over SW. slope, to
Spur, slopes NW.
- 27.71 Ascend 27 ft., over N. slope, to
Ridge, brs. NE, and SW.
- 36.82 Descend 228 ft., over SE. slope, to
Wash, 20 lks. wide, course NE.
- 38.82 Descend 21 ft., over NE. slope, to
Intersect the original $\frac{1}{4}$ sec. cor. of secs. 5 and 32, which
is a granite stone 8x6x4 ins. above ground, loosely
set, dimly marked $\frac{1}{4}$ S on N. face, and witnessed by two
bearing trees, as follows:
An oak, 7 ins. in diam., N. 50 $\frac{1}{2}$ ° W., 47 lks. dist.,
marking overgrown.
An oak, 6 ins. in diam., (dead) S. 46° E., 25 lks. dist.,
marked $\frac{1}{4}$ S BT.
These trees were erroneously recorded as mesquites.
Reconstruct this cor. monument as follows:
Alongside, the old stone, set an iron post, 3 ft. long, 1
in. in diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of
secs. 5 and 32, marked on brass cap,

$\frac{1}{4}$ S 32
 S 5
 1923

- Remark the old NW. bearing tree $\frac{1}{4}$ S 32 BT.
No other bearing trees available.
Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
Thence,
N. 89° 29' E., on true line, bet. secs. 5 and 32. (E. $\frac{1}{2}$).
Over mountainous land, thru. scattering timber and under-
growth.
- 21.85 Descend 170 ft., over NE. slope, to
Wash, 20 lks. wide, course NE.
- 28.45 Descend 40 ft., over NE. slope, to
Wash, 20 lks. wide, course NW.
- 39.83 Ascend 274 ft., over NW. slope, to
Intersect the original cor. of secs. 4, 5, 32 and 33, which
is a granite stone, 24x8x5 ins. loosely set, marked
with 4 notches on E. edge, and 2 notches on W. edge,
and witnessed by a mound of stone, S. of cor.
Reconstruct this cor. monument as follows: Reset the
same stone in its original position, 18 ins. in the
ground for cor. of secs. 4, 5, 32 and 33.
Destroy the old mound of stone, and raise a mound of stone,
2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. No bearing trees
available.
Land, mountainous.
Soil, gravelly and rocky, 3rd and 4th rate.
Timber, oak.
Undergrowth, scrub oak and Mexican amole.
Good grass.

Resurvey of part of Subdivision lines of Township 18 S., R.17 E. 9

Chains.

The subdivision lines of this township, with the exception of lines bet. secs. 7 and 8, 5 and 6, 5 and 8, and E. $\frac{1}{2}$ of line bet. secs. 6 and 7, were surveyed by Theodore F. White, U.S. Deputy Surveyor in 1874, and no retracement or resurvey of any part of such lines is of record. The following notes describe a resurvey of the lines between secs. 4 and 5, 8 and 9, 8 and 17, 7 and 18, and W. $\frac{1}{2}$ bet. secs. 6 and 7.

Retracement for Resurvey.

From the cor. of secs. 4, 5, 32 and 33, on N. bdy. of Tp., hereinbefore described,
 S. $0^{\circ}11'E.$, on a random line, bet. secs. 4 and 5.
 40.32 (Record dist.) Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor.
 Set temp. $\frac{1}{4}$ sec. cor., and continue line and measurement.
 77.21 Fall 72 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. $0^{\circ}21'W.$, .77.21 chs.

 South, on random line, bet. secs. 8 and 9 (N. $\frac{1}{2}$).
 38.81 Fall 3 lks. E. of the original $\frac{1}{4}$ sec. cor., hereinafter described.
 True course and dist. of N. $\frac{1}{2}$ of line, bet. secs. 8 and 9, are therefore, N. $0^{\circ}2'E.$, 38.81 chs.

Thence,
 South, on random line, bet. secs. 8 and 9 (S. $\frac{1}{2}$).
 39.16 Fall 8 lks. W. of the original cor. of secs. 8, 9, 16 and 17, hereinafter described.
 True course and dist. of S. $\frac{1}{2}$ of line, bet. secs. 8 and 9, are therefore N. $0^{\circ}7'W.$, .39.16 chs.

 S. $89^{\circ}55'W.$, on a random line, bet. secs. 8 and 17 (E. $\frac{1}{2}$).
 38.53 Fall 32 lks. S. of the original $\frac{1}{4}$ sec. cor., hereinafter described.
 True course and dist. of E. $\frac{1}{2}$ of line, bet. secs. 8 and 17, are therefore, N. $89^{\circ}36'W.$, 38.53 chs.

Thence,
 S. $89^{\circ}55'W.$, on a random line, bet. secs. 8 and 17 (W. $\frac{1}{2}$).
 39.19 Fall 17 lks. N. of the original cor. of secs. 7, 8, 17 and 18, hereinafter described.
 True course and dist. of W. $\frac{1}{2}$ of line, bet. secs. 8 and 17 are therefore, S. $89^{\circ}40'W.$, 39.19 chs.

 S. $89^{\circ}51'W.$, on a random line, bet. secs. 7 and 18.
 40.00 (Record dist.) Diligent search in this vicinity fails to reveal any trace of the original $\frac{1}{4}$ sec. cor. Set temp. $\frac{1}{4}$ sec. cor., and continue line and measurement.
 79.54 Fall 284 lks. N. of the cor. of secs. 7 and 18, on W. bdy. of Tp., hereinbefore described.
 True course and dist. of line, bet. secs. 7 and 18, are therefore, N. $87^{\circ}48'E.$, 79.61 chs.

 From reestablished cor. of secs. 6 and 7, on W. bdy. of Tp., hereinbefore described,
 East, on random line, bet. secs. 6 and 7 (W. $\frac{1}{2}$).
 40.00 (Record dist.) Diligent search in this vicinity fails to reveal any trace of orig. $\frac{1}{4}$ sec. cor. Set temp. $\frac{1}{4}$ sec. cor.
RESURVEY.
 The original cor. of secs. 8, 9, 16 and 17, is a limestone 15x8x8 ins. above ground, loosely set in a mound of

10 Resurvey of part of Subdivision lines of T. 18 S., R. 17 E.

Chains.

stone, marked with 4 notches on each of N. & S. edges. Reconstruct this cor. monument, as follows: Alongside the old stone, set an iron post, 3 ft. long, 2 ins. in diam., 20 ins. in the ground to bed rock, deposit a stone, marked with a cross (x) at base of post, and raise a mound of stone around post, for cor. of secs. 8, 9, 16 and 17, marked on brass cap,

T18S | R17E
S 8 | S 9
S17 | S16
1923

No bearing trees available.

Thence, N. 0° 7' W., on true line, bet. secs. 8 and 9 (S 1/2). Over mountainous land, thru scattering undergrowth.

- 1.43 Wash, 10 lks. wide, course SW.
- 20.04 Ascend 258 ft., over S. slope. Point of spur, slopes SW.
- 30.75 Descend 102 ft., over NW. slope. Wash, 10 lks. wide, course SW.
- 35.79 Ascend 31 ft., over SE. slope. Spur, slopes SW.
- 38.10 Descend 15 ft., over NW. slope. Wash, 10 lks. wide, course SW.
- 39.16 Ascend 11 ft., over SE. slope, to Intersect the original 1/4 sec. cor., which is a limestone, 6x4 ins. above ground, loosely set, marked 1/4 S on W. face. No accessories.

Reconstruct this cor. monument as follows: Set an iron post, 3 ft. long, 1 in. in diam., 18 ins. in the ground to bed rock, deposit a stone, marked with a cross (x) at base of post, and raise a mound of stone, around post, for 1/4 sec. cor. of secs. 8 and 9, marked on brass cap,

1/4
S 8 | S 9
1923

No bearing trees available.

Thence, N. 0° 2' E., on true line, bet. secs. 8 and 9 (N. 1/2). Over rolling land, thru scattering undergrowth. Ascend gradually over SE. slope.

- 1.73 Old mine shaft 20 ft. deep, brs. E. 25 lks. dist.
- 14.44 Enter cultivated field, brs. N. 60° W., 2.50 chs., and S. 60° E., about 10.00 chs. dist.
- 19.28 Leave cultivated field, brs. N. 70° W., about 1.00 ch., and S. 70° E., about 9.00 chs. dist.
- 20.53 Road from Pantano, Arizona, to "49 Mine" brs. NE. and SW. Enter mountainous land. Asc. 79 ft., over SE. slope.
- 29.52 Spur, slopes NE. Descend 36 ft., over N. slope.
- 22.13 Wash, 20 lks. wide, course NE. Ascend 111 ft., over SE. slope, to
- 38.81 Intersect the original cor. of secs. 4, 5, 8 and 9, which is a limestone, 12x10x3 ins. above ground, loosely set, marked with 4 notches on E. edge, and 5 notches on S. edge. No cor. accessories.

Reconstruct this cor. monument as follows: Alongside the old stone, set an iron post, 3 ft. long, 2 ins. in diam., 27 ins. in the ground for cor. of secs. 4, 5, 8 and 9, marked on brass cap,

Resurvey of part of Subdivision lines of T. 18 S., R. 17 E., 11 Chains.

T18S | R17E
S 5 | S 4
S 8 | S 9
1923

No bearing trees available.
Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
Land, mountainous and rolling.
Soil, gravelly and rocky, 2nd and 3rd rate.
Timber, none.
Undergrowth, Mexican amole and cactus.
Good grass.

From the cor. of secs. 4, 5, 32 and 33, on N. bdy. of Tp.,
hereinbefore described,
S. 0° 21' W., on true line, bet. secs. 4 and 5.
Over mountainous land, thru. scattering timber and under-
growth.

- 2.45 Ascend 76 ft., over NW. slope.
- Spur, slopes SW.
- 16.59 Descend 136 ft., over S. slope.
- Wash, 20 lks. wide, course SW.
- Ascend 16 ft., over NW. slope.
- 19.49 Spur, slopes SW.
- Descend 10 ft., over S. slope.
- 22.79 Wash, 20 lks. wide, course SW.
- Ascend 33 ft., over NW. slope.
- 27.18 Spur, slopes SW.
- Descend 20 ft., over SE. slope.
- 30.58 Wash, 20 lks. wide, course SW.
- Ascend 23 ft., over NW. slope, to
- 36.16 Wash, 10 lks. wide, course NW.
- Ascend 150 ft., over NW. slope, to
- 38.76 (Proportional dist.) Set an iron post, 3 ft. long, 1 in.
in diam., 27 ins. in the ground, for reestablished 1/4
sec. cor., of secs. 4 and 5, marked on brass cap,

1/4
S 5 | S 4
1923

from which,
An oak, 12 ins. in diam., brs. S. 59° E., 87 lks.
dist., marked 1/4 S 4 BT.
An oak, 6 ins. in diam., brs. S. 86° W., 38 lks.
dist., marked 1/4 S 5 BT.
Cabin belonging to Louise Hilton, brs. N. 54 1/2° W.,
about 12:00 chs. dist.

- 42.60 Ascend 69 ft., over N. slope.
- Point of spur, slopes NW.
- 43.60 Ascend slightly over W. slope, to
- Wash, 20 lks. wide, course NW.
- Ascend 350 ft., over steep NE. slope.
- 49.98 Pack trail, brs. NW. and SE.
- 53.01 Ridge, brs. NW. and SE.
- Descend 19 ft., over SW. slope.
- 54.48 Wash, 10 lks. wide, course SE. near head.
- Ascend 40 ft., over NE. slope.
- 59.43 Spur, slopes SE.
- Descend 267 ft., over steep SW. slope.
- 66.28 Mine shaft brs. W. 5.00 chs. dist.
- 69+20 Wash, 20 lks. wide, course SE.
- Ascend 124 ft., over NE. and E. slopes, to
- 77.21 The cor. of secs. 4, 5, 8 and 9, hereinbefore described.
- Land, mountainous.
- Soil, gravelly and rocky, 3rd and 4th rate.
- Timber, oak. Undergrowth, scrub oak and cactus. Good grass.

BOOK 3648

12 Resurvey of part of Subdivision lines of T. 18 S., R. 17 E.

Chains.

- From the cor. of secs. 8, 9, 16 and 17, hereinbefore described, N. $89^{\circ}36'W.$, on true line, bet. secs. 8 and 17 ($E.\frac{1}{2}$).
Over mountainous land, thru. scattering timber and undergrowth.
- 2.47 Descend 73 ft., over SW. slope.
Wash, 20 lks. wide, course SE.
Ascend 85 ft., over NE. slope.
- 7.09 Point of spur, slopes NE.
Descend 25 ft., over NW. slope.
- 9.05 Wash, 10 lks. wide, course NE.
Ascend 327 ft., over E. slope, to
- 25.03 Spur, slopes SE.
Ascend gradually over S. slope, to
- 30.03 Head of wash, course SE.
Ascend 10 ft., over E. slope.
- 31.42 Spur, slopes SE.
Descend 210 ft., over SW. slope, to
- 38.53 Intersect the original $\frac{1}{4}$ sec. cor., which is a limestone $4x4x3$ ins. above ground, firmly set, marked $\frac{1}{4}$ S on N. face. No accessories. Reconstruct this cor. as follows:
Alongside the old stone, set an iron post, 3 ft. long, 1 in. in diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 8 and 17, marked on brass cap,

$\frac{1}{4}$ S 8
S 17
1923

- No bearing trees available.
Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Thence, S. $89^{\circ}40'W.$, on true line, bet. secs. 8 and 17 ($W.\frac{1}{2}$).
Over mountainous land, thru. scattering timber and undergrowth.
- 2.90 Descend 56 ft., over SW. slope.
Road from Pantano, Arizona, to "49 Mine" brs. N. and S.
- 3.19 Wash, 20 lks. wide, course SE.
Ascend 71 ft., over E. slope.
- 7.73 Spur, slopes SE. Desc. 47 ft., over SW. slope, to
- 13.38 Wash, 10 lks. wide, course SE. Asc. 7 ft., over E. slope.
- 17.69 Descend 11 ft., over SW. slope.
- 19.18 Wash, 10 lks. wide, course SE. Asc. 158 ft., over E. slope.
- 30.26 Spur, slopes SE. Desc. 139 ft., over SW. slope.
- 32.40 Pack trail, brs. NE. and SW.
- 37.22 Wash, 10 lks. wide, course N. $30^{\circ}W.$
Ascend 84 ft., over NE. slope, to
- 39.19 Intersect the original cor. of secs. 7, 8, 17 and 18, which is an oak post, 3 ft. long, 3 ins. sq., greatly decayed, marks nearly obliterated, set loosely in a mound of stone, and witnessed by one bearing tree:
An oak, 20 ins. in diam., S. $52^{\circ}E.$, 246 lks. dist., marked XVII BT.
This tree is dead. No other accessories.
Reconstruct this cor. monument as follows:
Destroy the mound of stone, reset the old post, 18 ins. in the ground, and alongside same set an iron post, 3 ft. long, 2 ins. in diam., 27 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked on brass cap,

T18S R17E
S 7 S 8
S18 S17
1923

from which,

An oak, 12 ins. in diam., brs. N. $82^{\circ}E.$, 243 lks. dist., marked T18S R17E S8 BT.An oak, 15 ins. in diam., brs. S. $58\frac{1}{2}^{\circ}E.$, 243 lks. dist., marked T18S R17E S17 BT.

No other bearing trees available.

Raise a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, mountainous.

Resurvey of part of Subdivision lines of T. 18 S., R. 17 E. 13
Chains.

Soil, gravelly and rocky, 3rd and 4th rate.
Timber, oak and mesquite.
Undergrowth, scrub mesquite and cactus.
Good growth of bunch grass.

From the cor. of secs. 7 and 18, on W. bdy. of Tp., hereinbefore described,

N. 87° 48' E., on true line, bet. secs. 7 and 18.
Over mountainous land, thru. scattering undergrowth.
Ascend 49 ft., over SW. slope.

- 5.78 Spur, slopes NW.
- 28.93 Descend 366 ft., over NE. slope.
- Wash, 20 lks. wide, course NW.
- 39.50 Ascend 293 ft., over NW. slope, to
(Proportional dist.) Set an iron post, 3 ft. long, 1 in. in diam., 15 ins. in the ground to bed rock, deposit a stone, marked with a cross (x) at base of post, and raise a mound of stone around post for reestablished $\frac{1}{4}$ sec. cor. of secs. 7 and 18, marked on brass cap,

$\frac{1}{4}$ S 7
S 18
1923

- 54.41 No bearing trees available.
Ascend 391 ft., over NW. slope, to
Head of wash, course NW.
- 54.66 Ascend slightly over W. slope.
Ridge, brs. NW and SE.
- 61.55 Descend 68 ft., over NE. slope.
Wash, 10 lks. wide, course NW.
- 64.00 Ascend 37 ft., over W. slope.
Spur, slopes NW.
- 67.97 Descend 41 ft., over NE. slope.
Wash, 10 lks. wide, course NW.
- 69.01 Ascend 10 ft., over SW. slope, to
Spur, slopes NW.
- 71.69 Ascend 13 ft., over N. slope, to
Wash, 10 lks. wide, course NW.
- 75.53 Ascend 106 ft., over SW. slope.
Spur, slopes NW.
- 79.61 Descend 68 ft., over NE. slope, to
The cor. of secs. 7, 8, 17 and 18.
Land, mountainous.
Soil, gravelly and rocky, 3rd and 4th rate,
Timber, none.
Undergrowth, greasewood and cactus.
Good grass.

From the cor. of secs. 6 and 7, on W. bdy. of Tp., hereinbefore described,
East (record bearing) on true line, bet. secs. 6 and 7 (W. $\frac{1}{2}$).
Over mountainous land, thru. very scattering timber and scattering undergrowth.

- 9.47 Ascend 133 ft., over N. slope, to
Head of wash, course NW.
- 15.19 Ascend 210 ft., over W. slope.
Spur, slopes NW.
- 24.94 Descend 135 ft., over NE. slope.
Wash, 10 lks. wide, course NW.
- 31.93 Ascend 65 ft., over NW. slope, to
Wash, 20 lks. wide, course NW.
- 35.70 Ascend 103 ft. over SW. slope.
Spur, slopes NW.
Descend 30 ft., over NE. slope, to

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14 Survey of part (completion) of Subdivision lines of T.18 S.R.17E.

Chains.

40.00 (Record dist.) Set an iron post, 3 ft. long, 1 in. in diam., 15 ins. in the ground to bed rock, deposit a stone marked with a cross (x) at base of post, and raise a mound of stone around post, for reestablished $\frac{1}{4}$ sec. cor. of secs. 6 and 7, marked on brass cap,

$$\frac{1}{4} \begin{array}{c} S \\ 6 \\ S \\ 7 \\ 1923 \end{array}$$

No bearing trees available.
Land, mountainous.
Soil, gravelly and rocky, 3rd and 4th rate.
Timber, mesquite and oak.
Undergrowth, greasewood and cactus.
Good grass.

Boundaries of that part of T.18 S., R.17 E., surveyed under this Group (secs. 5, 6, 7 and 8).

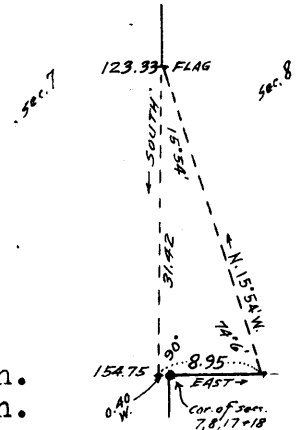
Latitudes, departures, and closing errors.

Lines designated.	True course.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
Subdivisional Boundary,	N.89°36'W. S.89°40'W. S.87°48'W.	38.53 39.19 79.61	.27	.23 3.05		.38.53 39.19 79.54
West boundary,	N.0°18'E. North, N.0°18'E. N.0°01'E.	39.06 39.80 39.32 39.62	39.06 39.80 39.32 39.62		.21 .21 .01	
North boundary,	S.89°18'E. N.89°21'E. S.89°46'E. N.89°29'E.	40.00 38.85 38.82 39.83	.44 .36	.49 .16	40.00 38.85 38.82 39.83	
Subdivisional Boundary	S.0°21'W., S.0°02'W. S.0°07'E.	77.21 38.81 39.16		77.21 38.81 39.16		.47 .02
Convergency,					.05	
Totals.			158.87	159.11 158.87	158.07 157.75	157.75
Error in latitude,				0.24		
Error in departure,					0.32	

Survey of part (completion) of Subdivision lines of T.18 S. R.17 E. 15

Chains.

From cor. of secs. 5, 6, 31 and 32, on N. bdy, of Tp., herein-
before described,
South, on random line, bet. secs. 5 and 6, and 7 and 8,
setting temp. cors. at intervals of 40.00 chs.
123.33 Beyond this point, precipitous slopes and cliffs in a
gulch, prevent chaining; therefore, triangulate as fol-
lows:
Set a flag at this point.
From a point 40 lks. W. of the cor.
of secs. 7, 8, 17 and 18, measure
a Base East, 8.95 chs.
From East end of Base, the flag
brs. N. 15° 54' W.
From W. end of Base, the vertical
angle to flag is + 11°, and to
point on random line in bottom
of gulch is - 18°.



Dist. on random line = 123.33 chs. South.
Dist. triangulated = 31.42 chs. South.
Total dist. = 154.75 chs. South.

154.75 Fall 40 lks. W. of the cor. of secs. 7, 8, 17 and 18, herein-
before described.
Thence,
N. 0° 9' W., on true line, on W. bdy. of sec. 8.
Over mountainous land, thru. scattering timber and under-
growth.
Measurement of 31.42 chs. by triangulation as hereinbefore
described.

7.00 Descend about 150 ft., over precipitous NE. slope.
(Approx.) Wash, 20 lks. wide, course NW. in bottom of gulch.
Ascend about 550 ft., over cliffs, facing SW.
31.42 Triangulation point on top of spur, sloping SW. Continue
line and measurement by chaining.

Ascend 38 ft., over W. slope, to
34.36 Descend 77 ft., over NW. slope, to
37.78 (Midpoint of E. bdy. of sec. 7) Set an iron post 3 ft.
long, 1 in. in diam., 6 ins. in the ground to bedrock,
deposit a stone, marked with a cross (x) at base of
post, and raise a mound of stone around post, for 1/4
sec. cor. of sec. 7 only, marked on brass cap,

1/4 S 7
1923

No bearing trees available.
Descend 30 ft., over steep NW. slope.
38.49 Wash, 10 lks. wide, course S. 40° W. in gulch, near head.
Ascend 43 ft., over steep S. slope, to
40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
the ground, for 1/4 sec. cor. of sec. 8 only,
marked on brass cap,

1/4 S 8
1923

No bearing trees available.
Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
Ascend 29 ft., over S. slope, to
41.43 Spur, slopes SW.
Ascend 107 ft., over steep W. slope, to
46.16 Head of wash in gulch, course SW.
Ascend 21 ft., over SW. slope.
46.90 Main ridge of the Empire mountains, brs. N. 35° W. and S. 40°
E.
Descend 21 ft., over NE. slope, to
52.85 Head of wash, course NE.
Descend 124 ft., over steep E. slope, to
57.49 Spur, slopes NE.
Descend 60 ft., over N. slope, to

Survey of part (completion) of Subdivision lines of T.18 S., R.17 E.17

Chains.

- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
- $\frac{1}{4}$ S 5
 S 8
 1923
- from which,
 An oak, 8 ins. in diam., brs. N. $1\frac{1}{4}^{\circ}$ W., 80 lks. dist., marked $\frac{1}{4}$ S 5 BT.
 An oak, 10 ins. in diam., brs. S. 29° W., 90 lks. dist., marked $\frac{1}{4}$ S 8 BT.
 House belonging to Louise D. Hilton, brs. S. $18\frac{1}{4}^{\circ}$ W., about 24.50 chs. dist.
 Barn brs. S. $22^{\circ}10'$ W., about 24 chs. dist.
- 45.45 Ascend 46 ft., over NE. slope, to Wash, 10 lks. wide, course NE.
- 54.60 Ascend 235 ft., over SE. slope, to Spur, slopes NE.
- 59.28 Ascend 70 ft., over N. slope, to Head of wash, course NE.
- 62.37 Ascend 23 ft., over SE. slope. Main ridge of the Empire Mountains, brs. NE. and SW.
- 69.78 Descend 134 ft., over NW. slope, to Head of wash, course NW.
- 73.39 Descend 49 ft., over N. slope, to Spur, slopes NW.
- 76.66 Descend 66 ft., over SW. slope. Wash, 10 lks. wide, course NW.
- 77.77 Ascend slightly over NE. slope, to Intersect the meridional sec. line at 77.74 chs. N. $0^{\circ}9'$ W. from cor. of secs. 7, 8, 17 and 18. At this point of intersection, establish the cor. of secs. 5 and 8, as hereinbefore described.
- Land, mountainous.
 Soil, gravelly and rocky, 3rd and 4th rate.
 Timber, oak and mesquite.
 Undergrowth, scrub oak and cactus.
 Good grass.
-
- From reestablished $\frac{1}{4}$ sec. cor. of secs. 6 and 7, hereinbefore described,
 East, on true line, bet. secs. 6 and 7 (E. $\frac{1}{2}$).
 Over mountainous land, thru. very scattering timber and scattering undergrowth.
- 0.10 Descend slightly over NE. slope. Wash, 30 lks. wide, course NW.
- 12.16 Ascend 383 ft., over EW. slope, to Point of spur, slopes SW.
- 14.46 Ascend 35 ft., over S. slope, to Head of wash, course SW.
- 21.27 Ascend 180 ft., over SW. slope. Ridge, brs. NW. and SE.
- 27.00 Descend 41 ft., over NE. slope. Wash, 10 lks. wide, course NW.
- 29.46 Ascend 23 ft., over W. slope. Spur, slopes NW.
- 35.86 Descend 108 ft., over NE. slope. Wash, 8 lks. wide, course NW.
- 38.32 Ascend 56 ft., over SW. slope. Spur, slopes NW.
- 39.32 Descend 5 ft., over NE. slope, to Intersect the W. bdy. of sec. 8 at 75.56 chs. N. $0^{\circ}9'$ W. from cor. of secs. 7, 8, 17 and 18. Establish cor. of secs. 6 and 7 at this point of intersection, as hereinbefore described.
- Land, mountainous.
 Soil, gravelly and rocky, 3rd and 4th rate.
 Timber, oak and mesquite.
 Undergrowth, greasewood and cactus.
 Good grass.
-

18 Survey of part (completion) of Subdivision lines of T.18S. R.17E.

Chains.	
	From cor. of secs. 5, 6, 31 and 32, on N. bdy. of Tp., herein- before described, S.0°9'E., on true line, on W. bdy. of sec. 5. Over mountainous land, thru, very scattering timber and undergrowth. Ascend 45 ft., over NW. slope.
4.66	Wire fence, brs. E. and W.
6.53	Wash, 30 lks. wide, course NW. Ascend 165 ft., over NE. slope.
12.76	Spur, slopes NW. Ascend 25 ft., over W. slope, to
17.56	Head of wash, course NW. Ascend 75 ft., over NE. slope, to
22.47	Spur, slopes NW. Descend slightly, over SW. slope.
24.19	Wash, 15 lks. wide, course S.70°W. Ascend 36 ft., over NW. slope.
26.33	Spur, slopes SW. Descend 151 ft., over S. slope, to
35.75	Ascend 60 ft., over NW. slope, to
38.50	(Midpoint of W. bdy. of sec. 5) Set an iron post, 3 ft. long, 1 in. in diam., 16 ins. in the ground to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of sec. 5 only, marked on brass cap, <div style="text-align: center;"> $\frac{1}{4}$S 5 1923 </div>
	from which, An oak, 8 ins. in diam., brs. S.45°E., 122 lks. dist., marked $\frac{1}{4}$ S 5 BT. An oak, 12 ins. in diam., brs. S.35°E., 164 lks. dist., marked $\frac{1}{4}$ S 5 BT.
39.59	Ascend 35 ft., over NW. slope, to (Midpoint of E. bdy. of sec. 6) Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor., of sec. 6, only, marked on brass cap, <div style="text-align: center;"> $\frac{1}{4}$S 6 1923 </div>
	from which, An oak, 15 ins. in diam., brs. N.71 $\frac{1}{2}$ °W., 24 lks. dist., marked $\frac{1}{4}$ S 6 BT. An oak, 15 ins. in diam., brs. S.72 $\frac{1}{2}$ °W., 109 lks. dist., marked $\frac{1}{4}$ S 6 BT.
55.64	Ascend 244 ft., over NW. slope, to Head of wash, course NW.
62.15	Ascend 114 ft., over NW. slope, to Wash, 10 lks. wide, course NW. near head.
66.14	Ascend 37 ft., over N. slope. Spur, slopes W.
67.18	Descend 93 ft., over S. slope. Wash, 10 lks. wide, course SW., near head.
68.12	Ascend 72 ft., over NW. slope. Point of spur, slopes W.
71.40	Descend 115 ft., over SW. slope. Wash, 12 lks. wide, course NW.
77.01	Ascend 87 ft., over NE. slope, to The cor. of secs. 5 and 8. Land, mountainous. Soil, gravelly and rocky, 3rd and 4th rate. Timber, oak and mesquite. Undergrowth, scrub oak and cactus. Good growth of bunch grass.

Survey of part (completion) of Subdivision lines of T.18 S., R.17 E., 19

The continued satisfactory adjustment of the solar apparatus of the instrument used in the execution of the surveys described in the foregoing notes is indicated from field tests described in Book "B."

GENERAL DESCRIPTION.

The part of Tp.18 S., R.17 E. surveyed under this group is all rough, mountainous land, and the soil ranges from 2nd to 4th rate. The soil of the bottom land along the large sand wash in the northeastern part of sec.4 is of a sandy loam in character, and would produce crops with the aid of irrigation. The soil of the remaining portion of the land in secs. 4, 5, 7 and 8 surveyed by me is a stony clay loam, only a few inches in depth, and can nearly all be classed as 3rd rate, and is unsuitable for agricultural purposes.

The general slope of the land in these sections is to the northwest and to the southeast from the summit of the Empire Mountain range, which crosses thru. them in a northeasterly direction at an elevation of about 5300 ft.

The drainage is to the northwest and southeast from the summit of the mountain range thru. a number of large ravines, which flow in a northwesterly and southeasterly direction.

This part of the township is poorly timbered with a scattering growth of oak and mesquite, and poorly watered by two springs in sec.8.

The Empire mountain range is highly mineralized, and two mines are being operated at the present time. Copper and lead ore is found in secs. 7 and 8.

Secs.5,6,7 and 8 are covered with a fair growth of bunch grass and undergrowth, consisting of oak and other varieties of mountain brush, which affords excellent forage for goats.

There is one settler in sec.8, who is engaged in the goat raising business.

4-680

FIELD ASSISTANTS. to
Sidney E. Blout, U.S. Cadastral Engineer.

NAMES.	CAPACITY.
Merle Brock	1st. Chainman
B.G. Towler	2nd. Chainman
Dana H Ice	Flagman
Dana H Ice	Axman
Clifton Gump	Axman
Clifton Gump	Cornerman
Raymond Towler	Flagman
Raymond Towler	Cornerman

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 119, Arizona,

bearing date of the 16th day of December, 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, retraced all those parts or portions of the West boundary; resurveyed all those parts or portions of the North boundary, and Subdivision lines; and surveyed all those parts or portions of Subdivision lines of

TOWNSHIP 18 SOUTH, RANGE 17 EAST.

of the Gila and Salt

River Base and Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me, and under my direction; and that all the corners of said retracement, resurvey and 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 119, Arizona,

and in the specific manner described in the field notes, and that the foregoing are the original field notes of such retracement, resurvey and survey.

Place... Phoenix, Arizona
Date... May 11, 1925

(Signature) Sidney E. Blout
U. S. Cadastral Engineer.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, May 14, 1925.

The foregoing field notes of the retracement of

Part of the West boundary, of the Resurvey of

Part of the North boundary, and Part of the Subdivision lines;

and of the Survey of

Part(completion) of the Subdivision lines of

TOWNSHIP 18 SOUTH, RANGE 17 EAST.

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

executed by Sidney E. Blout, U.S. Cadastral Engineer,

under his special instructions dated December 16, 1921 for Group 119, Arizona, 1921, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements, resurveys and surveys they describe, are hereby approved.

(Signature) Charles M. Donohoe
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above described surveys in

has been correctly copied from the original notes on file in this office.