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Book "C"

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BOOK 3606

FIELD NOTES

OF THE RESURVEY OF

Part of the Subdivision Lines

AND OF THE SURVEY OF

Part (Completion) of the South Boundary of

Township 4 North, Range 2 West

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Ty White, U.S. Transitman

In the capacity of U. S. Surveyor, under ^{Special} instructions dated May 20, 1921, issued by the United States Surveyor General to govern surveys included in Group No 115, Ariz., which were approved by the Commissioner of the General Land Office, November 8, 1921 and Assignment Instructions dated October 23, 1922.

Resurvey & Survey commenced December 1, 1922

Resurvey & Survey completed December 1, 1922

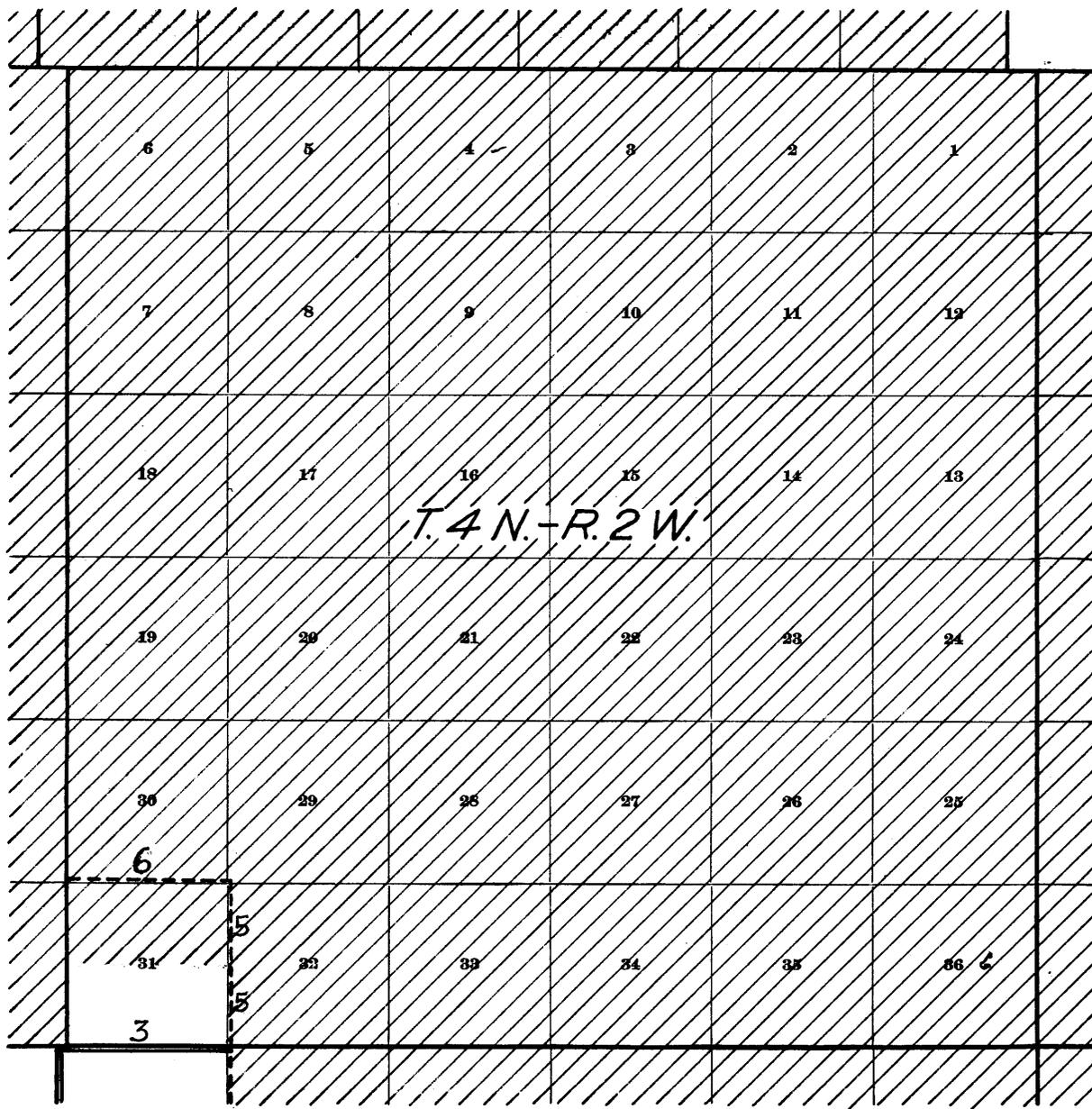
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BOOK 3606

INDEX DIAGRAM.



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

DATE DIAGRAM

Book "C"

Group 115, Arizona.

Township 4 North, Range 2 West

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

Solid Blue lines indicate surveys executed by Ty White, U.S. Transitman, on dates shown thereon.

Black lines indicate accepted surveys.

Broken Blue lines indicate resurveys executed by Ty White, U. S. Transitman, on dates shown thereon.

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Resurveys and surveys herein described, were executed by Ty White, U.S. Transitman, on dates shown on diagram on page 1 hereof, using Young & Sons light mountain transit No. 8540, equipped with full vertical circle, and Smith solar attachment. Unless otherwise specified, all azimuth determinations are accomplished with solar attachment.

November 27, 1922. I examine the adjustments of the transit and correct all errors; then, to test the solar apparatus, by comparing ist indications, resulting from observations made during a.m. and p.m. hours with a meridian established by Polaris observations, I proceed as follows:

At camp in sec. 33, T. 4 N., R. 3 W., G. and S. R. 3. and M., Arizona, lat. $33^{\circ}38\frac{1}{2}'$ N., long. $112^{\circ}34\frac{1}{2}'$ W., with the telescope in the meridian and elevated to the sun's altitude, I observe the sun's transit for time, noting the watch time of transit of each limb:

Mean watch time of apparent noon
11 hrs. 59m. 32.1 sec.
Watch fast of local mean time 12m 0 sec.

At the same station, at 5 hrs. 02 m., p.m.; l.m.t., I make an hour angle observation on 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 chs. N.

Watch time of observation, mean of four readings =
5hrs.14 m.

November 28, 1922. I lay off the azimuth of Polaris, $1^{\circ}10'$ to the west, and mark the meridian thus determined by a tack in a peg driven firmly in the ground, 5 chs. N.

At 9 hrs. 0 m., a.m., l.m.t., I set off $33^{\circ}38\frac{1}{2}'$ N. on the lat. arc; $21^{\circ}13\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar which I find to agree with the true meridian.

At apparent noon, with the lat. arc unchanged, I observe the sun on the meridian; the resulting reading of the decl. arc is $21^{\circ}15\frac{1}{2}'$ S., which agrees with the computed decl. of the sun.

At 3 hrs. 0 m., p.m., l.m.t., with the lat. arc unchanged, I set off $21^{\circ}16'$ S. on the decl. arc and determine a meridian with the solar, which I find to agree with the true meridian.

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

Unless otherwise specified, all measurements are made with a Lufkin steel tape 5 chs. in length, compared with a 1 ch. Lufkin 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.

Survey of part (completion) of the South bdy. of T.4 N., R.2 W.

3

Chains.

The east 5 miles of the South bdy. of T.4 N., R.2 W., were surveyed in 1894, by Albert T. Colton, U.S.D.S. No re-
tracement or resurvey of any part thereof is of record.

From the cor. of secs. 5, 6, 31 and 32, Ts. 3 and 4 N., R.2 W.,

West, on random line, along the S. bdy. of sec. 31.

40.00

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

78.31

Fall 47 lks. S. of the cor. of Ts. 3 and 4 N., Rs. 2 and 3 W., established in 1915 by Hans D. Voigt, U.S.T., which is an iron post, 3 ins. in diam., projecting 20 ins. above ground, firmly set in ground, and mound of stone, properly marked on brass cap, for reference to said townships, and witnessed by a mound of stone, S. of cor. No bearing trees. On Dec. 4, 1922, in connection with his survey of the W. bdy. of T.3 N., R.2 W., as described in Book "D" of this group, W.H. Thorn, U.S.C.E. establishes closing cor. of Ts. 3 N., Rs. 2 and 3 W. at a point 3.16 chs. S. $89^{\circ}48'$ W. herefrom, and changes the markings on the brass cap, of this Tp. cor. for reference to Ts. 4 N., Rs. 2 and 3 W. only, and moves the mound of stone from S. to N. of cor.

Thence,

S. $89^{\circ}39'$ E., on a true line, along the S. bdy. of sec. 31.

Over mountainous land, thru. scattering timber and undergrowth.

14.35

Descend 255 ft., over S. and SE. slopes, to Gulch, 20 lks. wide, course NE.

14.80

Ascend 30 ft.

Point of spur, slopes NE.

27.40

Descend 97 ft., over NE. slope, to

Gulch, 30 lks. wide, course NE.

31.40

Descend 20 ft., over NE. slope, to

Same gulch, course SE.

37.00

Ascend 55 ft., over SW. slope, to

(40.16 chs. easting from closing cor. of Ts. 3 N., Rs. 2 and 3 W.,) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of sec. 6 only, marked on brass cap,

$\frac{1}{4}$ S 6
1922

No bearing trees available. Raise a mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high, S. of cor.

The position of this cor. is computed to be due North of the $\frac{1}{4}$ sec. cor. of secs. 6 and 7, T.3 N., R.2 W. by a traverse around the east half of sec. 6.

38.94

Ascend 20 ft. over SW. slope, to

(Same proportion as applied to W. $\frac{1}{2}$ of line, bet. secs. 30

and 31), Set an iron post, 3 ft. long, 1 in. in diam.,

8 ins. in the ground to bed rock, deposit a marked (x)

stone at base of post, and raise a mound of stone

around post, for $\frac{1}{4}$ sec. cor. of sec. 31 only, marked on

brass cap,

$\frac{1}{4}$ S 31
1922

39.20

No bearing trees available.

Ascend 24 ft., over SW. slope.

Spur, slopes SE.

46.40

Descend 190 ft., over E. slope, to

Gulch, course SE.

54.40

Descend 25 ft., over SE. slope, to

Same gulch, course NE. Leave mountainous, and enter rolling land.

78.31

Descend gradually over NE. slope, to

(39.37 chs. S. $89^{\circ}39'$ E. from cor. of Ts. 4 N., Rs. 2 and 3 W.,)

4 Survey of part(completion)of South bdy.of T.4 N.,R.2 W.

Chains.

Intersect the cor. of secs. 5,6,31 and 32, which is a granite stone, 10x8x8 ins. above ground, firmly set, marked with 5 notches on E. edge, and 1 notch on W. edge, and witnessed by a mound of stone, 2 $\frac{1}{2}$ ft. base, 2 ft. high, W. of cor.

No bearing trees.

Land, rolling and mountainous.

Soil, rocky, 3rd and 4th rate.

Timber, palo verde and ironwood.

Undergrowth, greasewood and cactus.

Resurvey of part of Subdivision lines of T.4 N., R.2 W.

5

Chains.

The subdivision lines of this township were surveyed in 1894 by Albert T. Colton, U.S.D.S. and no retracement of any part of same is of record,

Retracement for Resurvey.

From the cor. of secs. 25, 30, 31 and 36 on W. bdy. of Tp., hereinafter described,

East, on retracement, bet. secs. 30 and 31.

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

78.27 Fall 24 lks. N. of the original cor. of secs. 29, 30, 31 and 32, hereinafter described.

The true course and distance of this line are therefore S. 89° 49' E., 78.27 chs.

From the original cor. of secs. 29, 30, 31 and 32, S. 0° 3' E., on retracement, bet. secs. 31 and 32 (N. $\frac{1}{2}$).

39.97 Fall 28 lks. E. of the original $\frac{1}{4}$ sec. cor. of secs. 31 and 32, hereinafter described.

The true course and distance of this half mile are therefore N. 0° 21' E., 39.97 chs.

From the original $\frac{1}{4}$ sec. cor., S. 0° 3' E., on retracement, bet. secs. 31 and 32 (S. $\frac{1}{2}$).

40.24 Fall 2 lks. W. of the cor. of secs. 5, 6, 31 and 32, on the S. bdy. of Tp., hereinbefore described,

The true course and distance of this half mile are therefore N. 0° 5' W., 40.24 chs.

Resurvey.

From the cor. of secs. 5, 6, 31 and 32, on the S. bdy. of Tp., hereinbefore described,

N. 0° 5' W., on a true line, bet. secs. 31 and 32 (S. $\frac{1}{2}$).

Over rolling land, thru. scattering timber and undergrowth.

7.04 Wash, 5 lks. wide, course NE.

17.80 Wash, 5 lks. wide, course NE.

19.00 Old road, brs. NE. and SW.

23.10 Descend 20 ft.

25.95 Wash, 10 lks. wide, course N. 45° E.

Ascend 115 ft.

33.80 Top of hill, brs. E. and W.

Descend 120 ft.

40.24 The original $\frac{1}{4}$ sec. cor. of secs. 31 and 32, which is a granite stone, 15x6x5 ins. above ground, firmly set, marked $\frac{1}{4}$ on top, and witnessed by a mound of stone W. of cor. No bearing trees.

Reconstruct this cor. as follows:

Alongside old stone,

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,

S31 $\frac{1}{4}$ S32

1922

No bearing trees available.

Rebuild the mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high, W. of cor.

Thence,

N. 0° 21' E., on a true line, bet. secs. 31 and 32 (N. $\frac{1}{2}$).

Over rolling land, thru. scattering timber and undergrowth.

1.26 Wash, 3 lks. wide, course E.

8.06 Wash, 4 lks. wide, course E.

9.96 Road, brs. N. 70° W. and S. 70° E.

23.36 Road, brs. NE. and SW.

37.56 Road, brs. NW and SE.

6 Resurvey of part of Subdivision lines of T.4 N., R. 2 W.

Chains.

39.97

Intersect the original cor. of secs. 29, 30, 31 and 32, which is a granite stone, 12x8x6 ins. above ground, firmly set, marked with 5 notches on E. edge, and 1 notch on S. edge, and witnessed by four pits, one each NE., SE., SW. and NW. of post, and a mound of earth W. of cor. No bearing trees.

Reconstruct this cor. as follows:

Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, marked on brass cap,

T4N R2W
S30 S29
S31 S32
1922

No bearing trees available.

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

Land, rolling and mountainous.

Soil, sandy and gravelly loam, 2nd rate.

Timber, ironwood and palo verde.

Undergrowth, greasewood and cactus.

The original cor. of secs. 25, 30, 31 and 36 on W. bdy. of Tp., established by A. T. Colton, U.S.D.S. in 1894, is a mesquite post, 4 ins. square, projecting 3 ft. above ground, firmly set, properly marked and witnessed by four pits, one each NE., SE., SW. and NW. of post, and a mound of earth W. No bearing trees.

Reconstruct this cor. as follows: Alongside old post, set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked on brass cap,

T4N
R3W R2W
S25 S30
S36 S31
1922

No bearing trees available.

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

Thence,

S. 89° 49' E., on a true line, bet. secs. 30 and 31.

Over rolling land, thru. scattering timber and undergrowth.

Wash, 7 lks. wide, course NE.

(Proportional distance) Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished 1/4 sec. cor. of secs. 30 and 31, marked on brass cap,

1/4 S 30
S 31
1922

from which,

A mesquite, 4 ins. in diam., brs. N. 43 3/4° W., 345 lks. dist., marked BT.

An ironwood, 18 ins. in diam., brs. S. 46 1/2° W., 348 lks. dist., marked 1/4 S 31 BT.

41.60

Wash, 4 lks. wide, course NE.

48.20

Wash, 5 lks. wide, course NE.

76.00

Road, brs. NW. and SE.

78.27

Intersect the cor. of secs. 29, 30, 31 and 32.

Land, rolling.

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

Timber, palo verde and ironwood.

Resurvey of part of Subdivision lines of T.4 N., R.2 W. 7

Chains.

Undergrowth, greasewood and cactus.

Boundaries of that part of Township 4 North, Range 2 West, surveyed under this Group. (sec. 31).

Latitudes, departures and closing errors.

Lines designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
South boundary,	N. 89° 39' W.	78.31	.47			78.31
West boundary,	North, N. 0° 2' E.	40.00 39.90	40.00 39.90		.02	
Subdivisional boundary,	S. 89° 49' E.	78.27		.24	78.27	
	S. 0° 21' W.	39.97		39.97		.25
	S. 0° 5' E.	40.24		40.24	.06	
Convergency,					.01	
<u>Totals.</u>			80.37	80.45	78.36	78.56
				80.37		78.36
<u>Error in latitude.</u>			0.08			
<u>Error in departure.</u>					0.20	

The continued satisfactory adjustment of the solar during the survey of this township is indicated from field tests as described in Book "D."

GENERAL DESCRIPTION.

The portion of T.4 N., R.2 W., surveyed under this Group, lies in the N. end of the White Tank Mountains, and is covered with a scattering growth of palo verde and ironwood timber and greasewood and cactus undergrowth. The soil on the mountains is rocky, 3rd and 4th rate; on the slopes, it is gravelly and sandy loam, 2nd rate. There are no settlers in this portion of the township. No traces of mineral were observed.

CERTIFICATE OF UNITED STATES TRANSITMAN

I, Ty White, U.S. Transitman, U.S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for group 115, Arizona bearing date of the 20th day of May, 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, surveyed all these parts or portions of resurveyed all those parts or portions of the Subdivision Lines and surveyed all those parts or portions of the South Boundary of Township 4 North, Range 2 West

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

Place Long Beach Calif
Date April 17 1924

Ty White
U.S. Surveyor.
U.S. Transitman.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, April 22, 1924.

The foregoing field notes of the survey of resurvey of Part of the Subdivision Lines and survey of Part of the South Boundary (Completion) of Township 4 North, Range 2 West of the Gila and Salt River Base and Meridian in the State of Arizona

executed by Ty White, U.S. Transitman

under his special instructions dated May 20, 1921 for Group 115, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys and surveys they describe, are hereby approved.

Charles M. Doulos
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.