

3669

Book "E"
4-679

BOOK 3669

FIELD NOTES

OF THE SURVEY OF

Part of the Subdivision Lines of

TOWNSHIP 14 SOUTH, RANGE 6 EAST,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

William H. Thorn, U. S. Cadastral Engineer,

In the capacity of U. S. Surveyor, under Special Instructions dated September 25 1919, issued by the United States Surveyor General to govern surveys included in Group No. 100, Arizona, which were approved by the Commissioner of the General Land Office, October 22, 1919, and Assignment Instructions dated December 1, 1924,

Survey commenced December 13, 1924

Survey completed December 15, 1924

3669

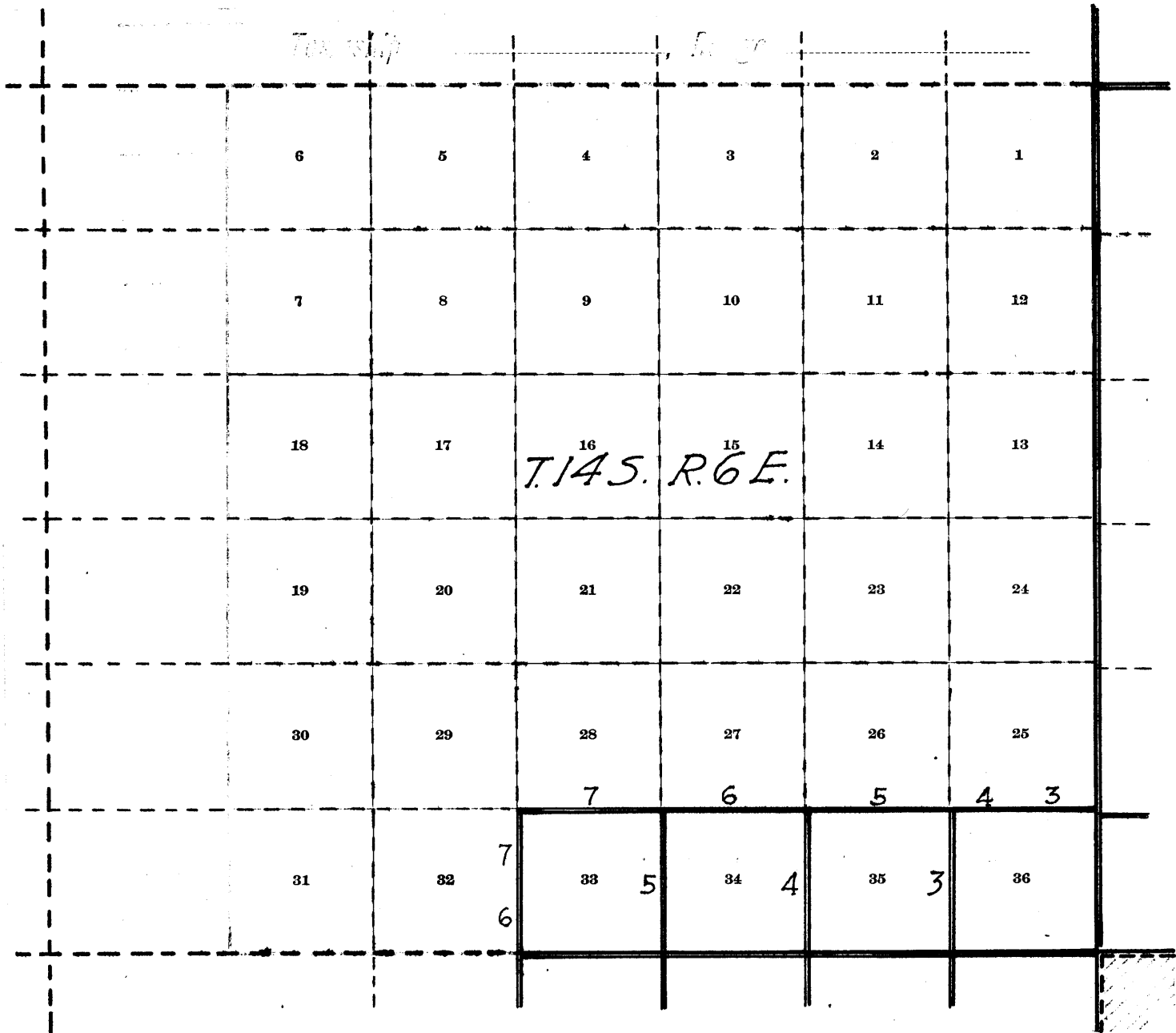
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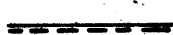
Book "E"
Group 100 - Arizona.

BOOK 3669

INDEX DIAGRAM.



Lines surveyed under this group.



Lines resurveyed under this group.



Accepted surveys.



Unsurveyed.



Areas surveyed as per accepted plats on file.

Book "E"
 Group 100 - Arizona.
 Township 14 South, Range 6 East.

DATE DIAGRAM
 1924

	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
			12-15	12-13	12-13	12-13
	31	32	12-15	33	12-13	34
				35	12-13	36

See Book "F"

See Book "C"

- Indicates lines surveyed by William H. Thorn, U.S.C.E. on dates shown thereon.
- Indicates lines surveyed under this group, dates of survey which are shown in other books.
- - - Indicates unsurveyed lines.

Surveys hereinafter described, executed on dates shown on diagram on page 1 hereof, by W. H. Thorn, U. S. Cadastral Engineer, using Young and Son's light mountain transit No. 8592, equipped with full vertical circle and Smith solar attachment. Unless otherwise specified all azimuth determinations are accomplished with the solar attachment.

Examine the adjustment of the instrument and find no errors, then, to test the solar apparatus by comparing its indications resulting from observations made during a. m. and p. m. hours with a meridian established by Polaris observation, proceed as follows:

Dec. 13, 1924. At a point 20 chs. E. of the cor. of secs. 26, 27, 34 and 35, T. 14 S., R. 6 E., G. & S. R. B. and M., Arizona, in latitude $32^{\circ} 10'$ N., longitude $111^{\circ} 43'$ W., at 8 h. 0 m., a. m., l. m. t., set off $32^{\circ} 10'$ N., on the lat arc., $23^{\circ} 6\frac{1}{2}'$ S., on the decl. arc., determine a meridian with the solar and mark the meridian thus determined by a tack in a peg driven firmly in the ground, 5 chs. N.

At app. noon, with the lat. arc unchanged observe the sun on the meridian, obtaining a reading of $23^{\circ} 9'$ S. on the decl. arc, which agrees with the computed declination of the sun.

At same station, at 2 h. 3 m., p. m., l. m. t., observe Polaris at eastern elongation, 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 wooden peg driven firmly in the ground 5 chs. N.

Azimuth of Polaris at eastern elongation = $1^{\circ} 17' 35''$.

At 2 h. 15 m., p. m., l. m. t., lay off the azimuth of Polaris $1^{\circ} 17\frac{1}{2}'$ to the west and the meridian thus determined coincides with that determined with the solar observation.

At 4 h. 00 m., p. m., l. m. t., with the lat arc unchanged, set off $23^{\circ} 8'$ S., on the decl. arc, and determine a meridian with the solar which agrees with the meridian determined by Polaris observation. As all of the solar observations made during the usual hours of solar work come within $1'$ in arc, of the true meridian conclude that the adjustment of the instrument is satisfactory.

Unless otherwise specified all measurements are made with a Lufkin steel tape 5 chs. in length, compared with a Lufkin standard steel tape and found correct. The measurements are made on the slope, vertical angles determined with clinometer, and the slope measurements properly reduced to true horizontal distances.

Survey of Part of the Subdivision Lines of
Township 14 South, Range 6 East.

Chains The following notes describe the survey of the subdivision lines of secs. 33, 34, 35 and 36, T. 14 S., R. 6 E., which includes all of the land in said township situated outside the Papago Indian Reservation. The remainder of the subdivision lines are unsurveyed. The boundary of said reservation is identical with the south mile of the 4th meridional sec. line and with the east 4 miles of the first latitudinal sec. line.

From the cor. of secs. 1, 2, 35 and 36 on the S. bdy. of the township, described in Book "C" of this group.
N. 0° 1' W., on a true line, bet. secs. 35 and 36.
Over level land, thru scattering timber and undergrowth.
22.30 Wash, 20 lks. wide, course NW.
26.90 Wash, 50 lks. wide, course West.
38.10 Wash, 20 lks. wide, course West.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 35 and 36, with brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 35 \quad | \quad \text{S } 36 \\ 1924 \end{array}$$

From which
Mesquite, 6 ins. in diam., brs. S. 71° E., 139 lks.
dist., marked $\frac{1}{4}$ S 36 B T.
Mesquite, 5 ins. in diam., brs. N. 41° W., 76 lks.
dist., marked $\frac{1}{4}$ S 35 B T.
Continue over level land, thru scattering timber and undergrowth.
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 25, 26, 35 and 36, with brass cap marked

$$\begin{array}{c} \text{T } 14 \text{ S} \quad | \quad \text{R } 6 \text{ E} \\ \text{S } 26 \quad | \quad \text{S } 25 \\ \text{S } 35 \quad | \quad \text{S } 36 \\ 1924 \end{array}$$

From which
Mesquite, 5 ins. in diam., brs. N. 67° E., 88 lks.
dist., marked T 14 S R 6 E S 25 B T.
Mesquite, 6 ins. in diam., brs. S. 30 $\frac{1}{2}$ ° E., 157 lks.
dist., marked T 14 S R 6 E S 36 B T.
Mesquite, 4 ins. in diam., brs. S. 5° W., 40 lks.
dist., marked T 14 S R 6 E S 35 B T.
Mesquite, 5 ins. in diam., brs. N. 16° W., 53 lks.
dist., marked T 14 S R 6 E S 26 B T.

Land; level.
Soil; sandy and gravelly, 2nd rate.
Timber; mesquite and palo verde.
Undergrowth; greasewood and catclaw.

East, on a random line, bet. secs. 25 and 36.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.00 Intersect the cor. of secs. 25 and 36 on the E. bdy. of the T., described in Book "F" of this group
Thence
West, on a true line, bet. secs. 25 and 36.
Over level land, thru scattering timber and undergrowth.
2.70 Drain, course N.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 25 and 36, with brass cap marked

Survey of part of the Subdivision Lines of
Township 14 South, Range 6 East

Chains

$$\frac{1}{4} \frac{S 25}{S 36}$$

1924

From which

Mesquite, 4 ins. in diam., brs. S. 36° W., 268 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

Mesquite, 4 ins. in diam., brs. N. 35° W., 55 lks.
dist., marked $\frac{1}{4}$ S 25 B T.

Continue over level land, thru scattering timber and
undergrowth.

61.60 Wash, 20 lks. wide, course N.

80.00 The cor. of secs. 25, 26, 35 and 36.
Land; level.

Soil; sandy and gravelly, 2nd rate.

Timber; palo verde and mesquite.

Undergrowth; greasewood and catclaw.

From the cor. of secs. 2, 3, 34 and 35, on the S. bdy.
of the township, described in Book "C" of this group
N. 0° 1' W., on a true line, bet. secs. 34 and 35.
Over nearly level land, thru scattering timber and
undergrowth.

23.60 Road, brs. NW. and SE.

32.20 Wash, 50 lks. wide, course E.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins.
in the ground for $\frac{1}{4}$ sec. cor. of secs. 34 and 35,
with brass cap marked

$$\frac{1}{4} \frac{S 34}{S 35}$$

1924

From which

Ironwood, 6 ins. in diam., brs. N. 14 $\frac{1}{2}$ ° E., 18 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

Ironwood, 6 ins. in diam., brs. N. 67 $\frac{1}{2}$ ° W., 59 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

Continue over nearly level land, thru scattering timber
and undergrowth.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins.
in the ground for cor. of secs. 26, 27, 34 and 35,
with brass cap marked

$$\begin{array}{c} T 14 S R 6 E \\ S 27 | S 26 \\ S 34 | S 35 \\ 1924 \end{array}$$

From which

Mesquite, 5 ins. in diam., brs. N. 46° E., 237 lks.
dist., marked T 14 S R 6 E S 26 B T.

Mesquite, 4 ins. in diam., brs. S. 40 $\frac{1}{2}$ ° E., 134 lks.
dist., marked T 14 S R 6 E S 35 B T.

Ironwood, 5 ins. in diam., brs. S. 43 $\frac{1}{2}$ ° W., 103 lks.
dist., marked T 14 S R 6 E S 34 B T.

Mesquite, 5 ins. in diam., brs. N. 2 $\frac{1}{2}$ ° W., 139 lks.
dist., marked T 14 S R 6 E S 27 B T.

Land; nearly level.

Soil; sandy and rocky, 2nd rate.

Timber; palo verde and mesquite and ironwood.

Undergrowth; greasewood and catclaw.

Survey of part of the Subdivision Lines of Township 14 South, Range 6 East.

Chains S. 89° 56' E., on a random line, bet. secs. 26 and 35, toward flag on objective sec. cor. which is visible on such bearing.

40.00 Set temp. 1/4 sec. cor.

80.18 Intersect the cor. of secs. 25, 26, 35 and 36.

Thence
N. 89° 56' W., on a true line, bet. secs. 26 and 35.
Over level land, thru scattering timber and undergrowth.

10.48 Wash, 50 lks. wide, course N.

16.38 Center of wash, 330 lks. wide, course N.

40.09 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for 1/4 sec. cor. of secs. 26 and 35, with brass cap marked

1/4 S 26
S 35
1924

From which
Mesquite, 4 ins. in diam., brs. N. 34 1/2° W., 86 lks. dist., marked 1/4 S 26 B T.
Mesquite, 5 ins. in diam., brs. S. 84° W., 99 lks. dist., marked 1/4 S 35 B T.

51.08 Wash, 40 lks. wide, course N.

73.38 Wash, 20 lks. wide, course NE.

80.18 The cor. of secs. 26, 27, 34 and 35.
Land; level.
Soil; sandy and gravelly, 2nd rate.
Timber; palo verde and mesquite.
Undergrowth; greasewood and catclaw brush.

From the cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Township, described in Book "C" of this group, N. 0° 2' W., on a true line, bet. secs. 33 and 34.
Over level land, thru scattering timber and dense undergrowth.

15.80 Wash, 30 lks. wide, course N. 70° E.

32.10 Wash, 10 lks. wide, course N. 70° E.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for 1/4 sec. cor. of secs. 33 and 34, with brass cap marked

1/4
S 33 | S 34
1924

From which
Ironwood, 5 ins. in diam., brs. S. 65 3/4° E., 124 lks. dist., marked 1/4 S 34 B T.
Mesquite, 8 ins. in diam., brs. S. 7° W., 78 lks. dist., marked 1/4 S 33 B T.

Continue over level land, thru scattering timber and dense undergrowth.

51.70 Wash, 30 lks. wide, course NE.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 27, 28, 33 and 34, with brass cap marked

T 14 S R 6 E
S 28 | S 27
S 33 | S 34
1924

From which
Mesquite, 6 ins. in diam., brs. N. 60° E., 123 lks. dist., marked T 14 S R 6 E S 27 B T.

Survey of part of the Subdivision Lines of
Township 14 South, Range 6 East.

Chains

Mesquite, 6 ins. in diam., brs. S. $7\frac{1}{2}^{\circ}$ E., 80 lks.
dist., marked T 14 S R 6 E S 34 B T.
Mesquite, 6 ins. in diam., brs. S. $34\frac{1}{2}^{\circ}$ W., 109 lks.
dist., marked T 14 S R 6 E S 33 B T.
Mesquite, 6 ins. in diam., brs. N. $46\frac{1}{2}^{\circ}$ W., 76 lks.
dist., marked T 14 S R 6 E S 28 B T.

Land; level.

Soil; sandy and gravelly, 2nd rate.

Timber; ironwood, palo verde and mesquite.

Undergrowth; greasewood, catclaw and cactus.

East, on a random line, bet. secs. 27 and 34.

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

79.88 Fall 6 lks. N. of cor. of secs. 26, 27, 34 and 35.

Thence

N. $89^{\circ} 57'$ W., on a true line, bet. secs. 27 and 34.

Over level land, thru scattering timber and dense undergrowth.

5.08 Wash, 50 lks. wide, course N.

12.18 Wash, 30 lks. wide, course N.

34.38 Wash, 10 lks. wide, course N. 10° E.39.94 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 27 and 34, with brass cap marked
$$\frac{1}{4} \begin{array}{c} S 27 \\ S 34 \\ 1924 \end{array}$$

From which

Palo verde, 6 ins. in diam., brs. N. 18° E., 114 lks.
dist., marked $\frac{1}{4}$ S 27 B T.Mesquite, 4 ins. in diam., brs. S. 25° E., 29 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

Continue over level land, thru scattering timber and dense undergrowth.

50.08 Road, brs. NW. and SE.

68.88 Wash, 50 lks. wide, course N.

71.78 Wash, 30 lks. wide, course N.

79.88 The cor. of secs. 27, 28, 33 and 34.

Land; level.

Soil; 2nd rate.

Timber; ironwood, palo verde and mesquite.

Undergrowth; greasewood and catclaw.

From cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the township, described in Book "C" of this group, N. $0^{\circ} 2'$ W., on a true line, bet. secs. 32 and 33.

Over gently rolling land, thru scattering timber and dense undergrowth.

2.40 Wash, 20 lks. wide, course E.

28.50 Wash, 20 lks. wide, course NE.

37.90 From this point, fence cor. bears East 250 lks. dist., from which wire fence extends NE. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 32 and 33, with brass cap marked
$$S 32 \begin{array}{c} \frac{1}{4} \\ S 33 \\ 1924 \end{array}$$

Survey of part of the Subdivision Lines of
Township 14 South, Range 6 East.

Chains From which
 Palo verde, 4 ins. in diam., brs. N. 63° E., 11 lks.
 dist., marked $\frac{1}{4}$ S 33 B T.
 Ironwood, 5 ins. in diam., brs. S. 10 $\frac{1}{4}$ ° W., 82 lks.
 dist., marked $\frac{1}{4}$ S 32 B T.
 Continue over gently rolling land, thru scattering tim-
 ber and dense undergrowth.
 64.40 Wash, 20 lks. wide, course N. 5° E.
 72.00 Same wash, course N. 5° W.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for cor. of secs. 28, 29, 32 and 33, with
 brass cap marked

T 14 S R 6 E
 S 29 | S 28
 S 32 | S 33
 1924

From which
 Mesquite, 5 ins. in diam., brs. N. 66 $\frac{1}{2}$ ° E., 47 lks.
 dist., marked T 14 S R 6 E S 28 B T.
 Mesquite, 5 ins. in diam., brs. S. 0 $\frac{1}{2}$ ° E., 159 lks.
 dist., marked T 14 S R 6 E S 33 B T.
 No other bearing trees available. Raise a mound of
 stone 3 ft. base, 2 ft. high W. of cor.
 Land; gently rolling.
 Soil; sandy and gravelly, 2nd rate.
 Timber; ironwood, palo verde and mesquite.
 Undergrowth; greasewood, catclaw and cactus.

East, on a random line bet. secs. 28 and 33.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect cor. of secs. 27, 28, 33 and 34.
 Thence
 West, on a true line, bet. secs. 28 and 33.
 Over gently rolling land, thru scattering timber and
 dense undergrowth.
 17.00 Wash, 50 lks. wide, course N.
 19.20 Wire fence, four-wire, brs. NE. and SW.
 30.00 Wash, 30 lks. wide, course N.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins.
 in the ground for $\frac{1}{4}$ sec. cor. of secs. 28 and 33,
 with brass cap marked

$\frac{1}{4}$ S 28
 S 33
 1924

From which
 Mesquite, 4 ins. in diam., brs. N. 40 $\frac{1}{2}$ ° E., 35 lks.
 dist., marked $\frac{1}{4}$ S 28 B T.
 Mesquite, 5 ins. in diam., brs. S. 81° E., 119 lks.
 dist., marked $\frac{1}{4}$ S 33 B T.
 Continue over gently rolling land, thru scattering timber
 and dense undergrowth.
 46.20 Wash, 20 lks. wide, course N.
 62.00 Wash, 20 lks. wide, course N.
 80.00 The cor. of secs. 28, 29, 32 and 33.
 Land; gently rolling.
 Soil; sandy and gravelly, 2nd rate.
 Timber; ironwood, palo verde and mesquite.
 Undergrowth; greasewood, catclaw and cactus.

Note: 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 "F" of this group.

Boundaries of that part of T. 14 S., R. 6 E., situated outside the Papago Indian Reservation. Latitudes, departures and closing errors.

Line designated	True course	Dist- ance	Latitudes		Departures	
			N.	S.	E.	W.
South Boundary	West	320.00				320.00
Subdivisional Boundary	N. 0° 2' W.	80.00	80.00			.05
	East	80.00			80.00	
	S. 89° 57' E.	79.88		.07	79.88	
	S. 89° 56' E.	80.18		.09	80.18	
East Boundary	South	80.00		80.00		
Convergency					.05	
Totals			80.00	80.16	320.11	320.05
				80.00	320.05	
Error in latitude			0.16			
Error in departure					0.06	

GENERAL DESCRIPTION.

Sections 33, 34, 35 and 36, of T. 14 S., R. 6 E., are level and gently rolling. Soil sandy and gravelly loam, 2nd rate. Timber, scattering mesquite, palo verde and ironwood. Undergrowth, greasewood, catclaw and cactus. No grass at this time, but during rainy seasons a fair growth appears and furnishes temporary grazing. There are no settlers and the only improvement is a wire fence extending N. and NE. thru sec. 33. There is no permanent water and no indication of valuable mineral deposits. A road passes NW. and SE. thru secs. 34 and 35.

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FIELD ASSISTANTS.

to
William H. Thorn, U.S. Cadastral Engineer.

NAMES.	CAPACITY.
Frank T. Burgess,	1st chainman,
Albert L. Bailey,	2nd chainman,
Homer Pepper,	moundman,
George M. Tucker,	flagman,
James S. Hayward,	axman.

CERTIFICATE OF UNITED STATES CADASTRAL ENGINEER.

I, William H. Thorn, U.S. Cadastral Engineer, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group No. 100, Arizona, bearing date of the 25th day of September, 1919, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivision lines of

TOWNSHIP 14 SOUTH, RANGE 6 EAST.

of the Gila and Salt River Base and Meridian, in the State of Arizona, 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 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 No. 100, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Place Phoenix Ariz Date: Oct 16 1925

William H. Thorn U. S. Cadastral Engineer.

APPROVAL.

OFFICE OF UNITED STATES SUPERVISOR OF SURVEYS,

Denver, Colorado, November 25, 1925

The foregoing field notes of the survey of part of the

Subdivision lines of

TOWNSHIP 14 SOUTH, RANGE 6 EAST.

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

executed by William H. Thorn, U. S. Cadastral Engineer,

under his special instructions dated September 25th, 1919, for Group 100, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. Supervisor of Surveys.

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.