

3677

Book "M"  
4-679

BOOK 3677

# FIELD NOTES

OF THE SURVEY OF

Part of the Subdivision lines of

TOWNSHIP 12 SOUTH, RANGE 7 EAST.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

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

and

Charles E. Hunter, U. S. Transitman.

In the capacity of U. S. Surveyors, 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 January 19, 1925.

Survey completed February 18, 1925.

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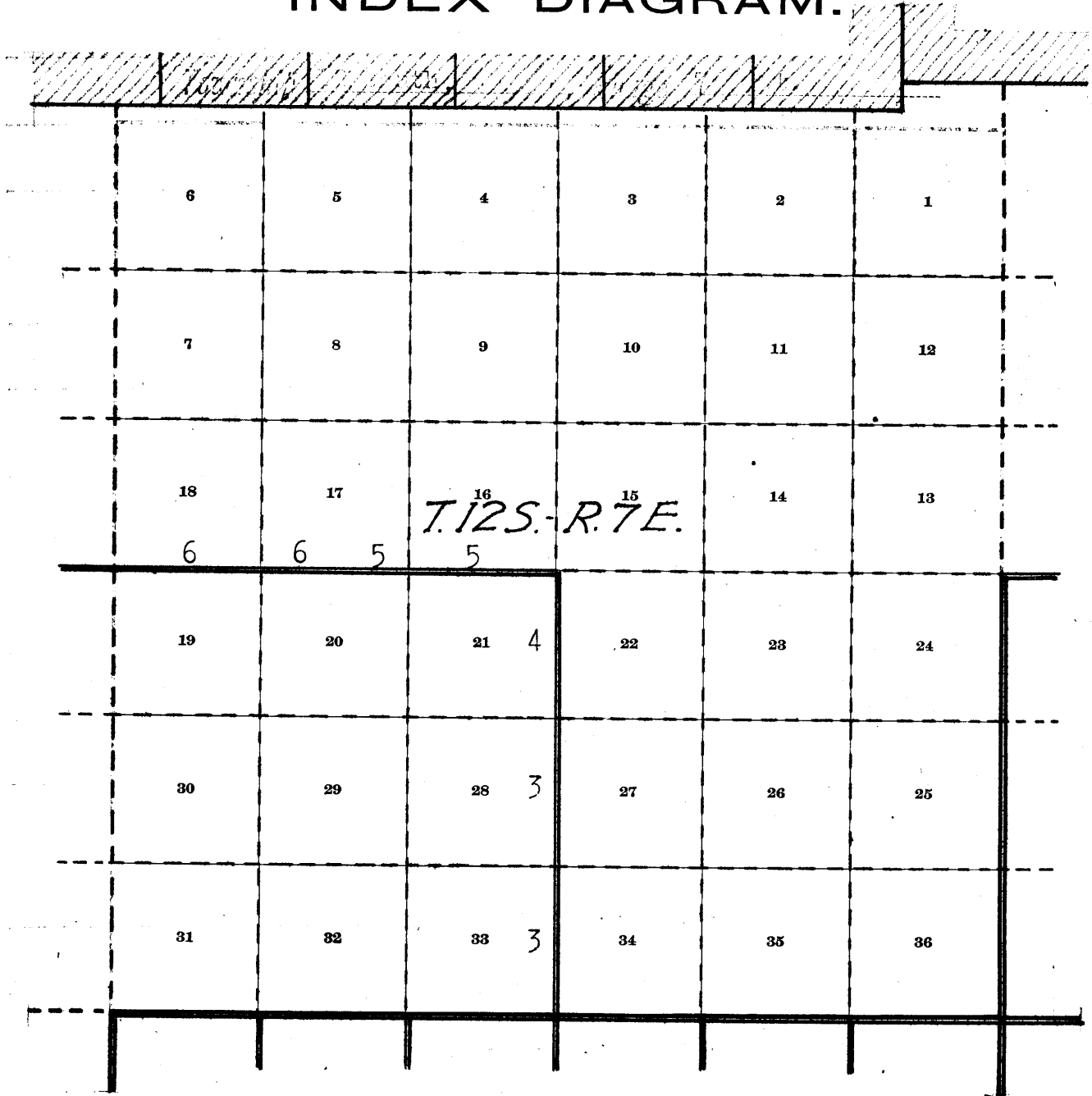
14

Book "M."

Group 100 - Arizona.

BOOK 3677

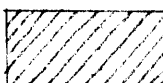
# INDEX DIAGRAM.



———— Lines surveyed under this group.

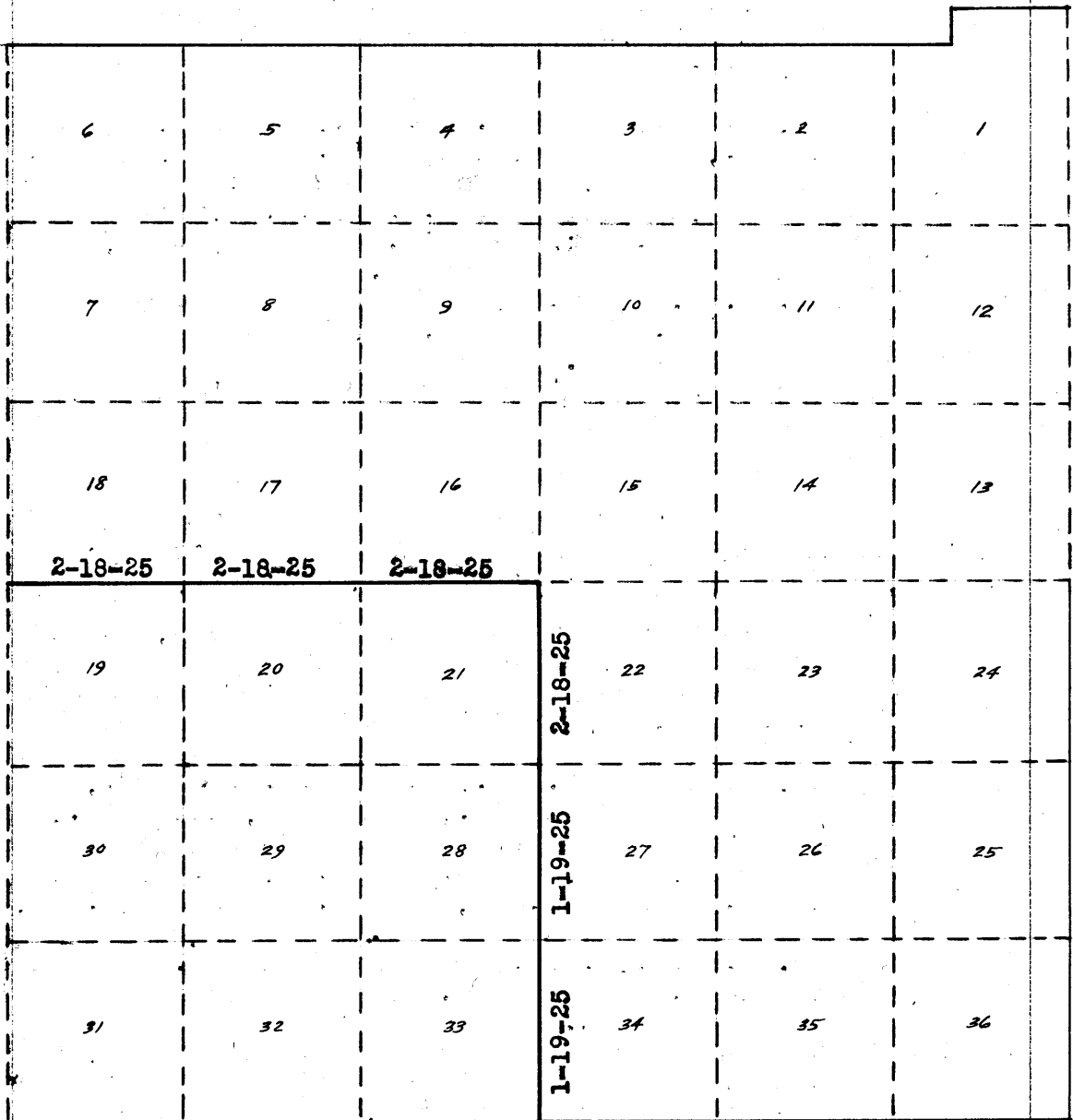
———— Accepted surveys,

- - - - - Unsurveyed.

 Areas surveyed as per accepted plats on file.

Book "M"  
Group 100 - - - Arizona.  
Township 12 South, Range 7 East.

DATE DIAGRAM.



For dates of survey of this line see Book "G"

For dates of survey of this line see Book "L"

- Indicates lines surveyed by William H. Thorn, U.S.C.E., on dates shown thereon.
- Indicates lines surveyed by Charles E. Hunter, U.S.T., on dates shown thereon.
- Lines surveyed under this group, notes in other books.
- Accepted surveyed lines.
- - - - - Unsurveyed lines.

Surveys hereinafter described were executed on dates shown on diagram on page 1 hereof, by William H. Thorn, U.S. Cadastral Engineer, and Charles E. Hunter, U.S. Transitman, using respectively, Young and Sons Transit No. 8592, and Buff and Buff Transit No. 10125.

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FIELD TEST OF YOUNG AND SONS TRANSIT NO. 8592, BY WILLIAM H. THORN, U.S. CADASTRAL ENGINEER.

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 at camp near the center of section 13, T. 14 S., R. 7 E., G. and S.R.B. & M., Arizona, in latitude  $32^{\circ}12\frac{1}{2}'$  N., longitude,  $111^{\circ}35\frac{1}{2}'$  W., as described in Book "F" of this group, proceed as follows:

January 19, 1925, at 8h. 0m. a.m., l.m.t., set off  $32^{\circ}12\frac{1}{2}'$  N. on the lat. arc;  $20^{\circ}18'$  S. on the decl. arc, and determine a meridian with the solar.

At 4h. 0m. p.m., l.m.t., set off  $32^{\circ}12\frac{1}{2}'$  N. on the lat. arc;  $20^{\circ}14'$  S. on the decl. arc, and determine a meridian with the solar.

As the three meridians agree within 1' of arc, conclude that the instrument is in satisfactory adjustment.

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FIELD TEST OF BUFF AND BUFF TRANSIT NO. 10125, BY CHARLES E. HUNTER, U.S. TRANSITMAN.

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 at camp near the center of section 16, T. 13 S., R. 8 E., G. and S.R.B. and M., Arizona, in latitude  $32^{\circ}17\frac{1}{2}'$  N., longitude,  $111^{\circ}32'$  W., as described in Book "L" of this group, proceed as follows:

February 17, 1925, at 8h. 0m. a.m., l.m.t., set off  $32^{\circ}17\frac{1}{2}'$  N. on the lat. arc,  $11^{\circ}58'$  S. on the decl. arc, determine a meridian with the solar.

At 4h. 0m. p.m., l.m.t., set off  $32^{\circ}17\frac{1}{2}'$  N. on the lat. arc;  $11^{\circ}51\frac{1}{2}'$  S. on the decl. arc, and determine a meridian with the solar.

As the three meridians agree within 1' of arc, conclude that the instrument is in satisfactory adjustment.

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 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.  
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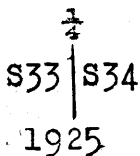
Chains.

The following notes describe the survey of the S. 1/4 of the 3rd meridional section line, and the W. 1/4 of the 3rd. latitudinal section line, which lines form part of the boundary of the Papago Indian Reservation, the said Reservation embracing the entire SW. quarter of the township.

No other subdivision lines in this township are surveyed.

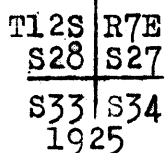
From the cor. of secs. 3, 4, 33 and 34 on the S. bdy. of the Tp., described in Book "G" of this group, N. 0° 2' W., bet. secs. 33 and 34.

20.50 Over level land, thru. scattering timber and undergrowth.  
40.00 Wash, 10 lks. wide, course W.  
Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for 1/4 sec. cor., with brass cap, marked



No bearing trees available. Dig pits 18x18x12 ins., one each N. and S. of post, 3 ft. dist. Continue over level land, thru. scattering timber and undergrowth.

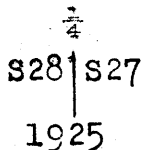
55.40 Wash, 10 lks. wide, course W.  
79.20 Wash, 10 lks. wide, course W.  
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, with brass cap, marked



No bearing trees available. Dig pits, 18x18x12 ins., one each NE., SE., SW. and NW. of post, 3 ft. dist. Land, level. Soil, sandy and gravelly, 3rd rate. Timber, palo verde, and ironwood. Undergrowth, greasewood and ocotillo. Scattering giant cactus.

N. 0° 2' W., bet. secs. 27 and 28. Over nearly level land, thru. scattering timber and undergrowth.

7.10 Road, brs. NE. and SW.  
24.80 Wash, 50 lks. wide, course SW.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for 1/4 sec. cor., with brass cap, marked



from which,

An ironwood, 12 ins. in diam., brs. S. 2 1/2° E., 35 lks. dist., marked 1/4 S 27 BT.  
An ironwood, 6 ins. in diam., brs. N. 54 1/2° W., 79 lks. dist., marked 1/4 S 28 BT.

57.40 Wash, 50 lks. wide, course W.  
78.00 Enter mountainous land.  
Ascend 50 ft., over S. slope, to

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4 Survey of part of the Subdivision lines of T.12 S., R. 7 E.

Chains.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, with brass cap, marked

T12S	R7 E
S21	S22
S28	S27
1925	

No bearing trees available.  
 Raise a mound of stone 3 ft. base, 2 ft. high, W. of cor.  
 From this cor., the top of Santa Rosa Mountain brs. S. 86° 40' W.  
 Land, nearly level and mountainous.  
 Soil, sandy, gravelly, and rocky, 3rd rate.  
 Timber palo verde, ironwood and mesquite.  
 Undergrowth, greasewood, ocotillo, and catclaw.  
 Scattering giant cactus.

N. 0° 2' W., bet. secs. 21 and 22.  
 Over mountainous land, thru. scattering timber and undergrowth.

14.73 Ascend 275 ft., over S. slope.  
 Top of malpais hill.  
 28.00 Descend 175 ft., over N. slope, to  
 Wash, 10 lks. wide, course NW. Enter rolling land.  
 Descend gradually over W. slope, to  
 36.30 Descend 28 ft., over NW. slope, to  
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in the ground to bed rock, supported in a mound of stone, for  $\frac{1}{4}$  sec. cor., with brass cap, marked

$\frac{1}{4}$	
S21	S22
1925	

from which,  
 A palo verde, 4 ins. in diam., brs. S. 80 $\frac{1}{2}$ ° E., 36 lks. dist., marked  $\frac{1}{4}$  S 22 BT.  
 A palo verde, 4 ins. in diam., brs. S. 35 $\frac{1}{4}$ ° W., 18 lks. dist., marked  $\frac{1}{4}$  S 21 BT.

Continue over rolling land, thru. scattering timber and undergrowth.  
 50.00 Descend 57 ft., over NW. slope, to  
 Foot of descent, brs. NE. and SW., thence over nearly level land.

65.40 Wash, 30 lks. wide, course NW.

80.00 Set an iron post 3 ft. long, 2 ins. in diam., 26 ins. in the ground for cor. of secs. 15, 16, 21 and 22, with brass cap, marked

T12S	R7 E
S16	S15
S21	S22
1925	

from which,  
 A mesquite, 5 ins. in diam., brs. N. 78 $\frac{1}{2}$ ° E., 179 lks. dist., marked T12S R7E S15 BT.  
 A mesquite, 6 ins. in diam., brs. S. 87 $\frac{1}{2}$ ° E., 189 lks. dist., marked T12S R7E S22 BT.  
 A palo verde, 6 ins. in diam., brs. S. 20 $\frac{1}{2}$ ° W., 27 lks. dist., marked T12S R7E S21 BT.  
 A mesquite, 8 ins. in diam., brs. N. 85 $\frac{1}{2}$ ° W., 222 lks. dist., marked T12S R7E S16 BT.

Land, mountainous, rolling and nearly level.  
 Soil, sandy, gravelly and rocky, 3rd and 4th rate.

Chains.

Timber, palo verde and mesquite.  
Undergrowth, greasewood and cactus.

West, on a true line, bet. secs.16 and 21.  
Over nearly level land, thru. scattering timber and under-  
growth.

20.20 Wash, 40 lks. wide, course NW.

40.00 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  $\frac{1}{4}$  sec. cor., with brass cap, marked

$\frac{1}{4}$  S 16

S 21

1925

No bearing trees available.

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

40.90 Wash, 10 lks. wide, course NW.

66.40 Road, brs. NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in  
the ground for cor. of secs. 16, 17, 20 and 21, with brass  
cap, marked

T12S R 7 E

S17 S16

S20 S21

1925

from which,

An ironwood, 20 ins. in diam., brs. N.  $10\frac{3}{4}^{\circ}$  E., 192  
lks. dist., marked T12S R7E S16 BT.

An ironwood, 18 ins. in diam., brs. S.  $68\frac{1}{2}^{\circ}$  E., 286  
lks. dist., marked T12S R7E S21 BT.

An ironwood, 18 ins. in diam., brs. S.  $57\frac{1}{4}^{\circ}$  W., 214  
lks. dist., marked T12S R7E S20 BT.

An ironwood, 5 ins. in diam., brs. N.  $45\frac{1}{4}^{\circ}$  W., 296  
lks. dist., marked T12S R7E S17 BT.

Land, nearly level.

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

Timber, ironwood and palo verde.

Undergrowth, greasewood, ocotillo and cholla cactus.

Scattering giant cactus.

West, on a true line, bet. secs. 17 and 20.

Over nearly level land, thru. scattering timber and under-  
growth.

5.00 Wash, 10 lks. wide, course SW.

14.10 Same wash, course NW.

22.10 Same wash, course SW.

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

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

S 20

1925

from which,

A palo verde, 12 ins. in diam., brs. S.  $50\frac{1}{4}^{\circ}$  W.,  
120 lks. dist., marked  $\frac{1}{4}$  S 20 BT.

An ironwood, 6 ins. in diam., brs. N.  $12\frac{1}{4}^{\circ}$  W., 220  
lks. dist., marked  $\frac{1}{4}$  S 17 BT.

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

## BOOK 3677

## 6 Survey of part of Subdivision lines of T. 12 S., R. 7 E.

Chains.

- 44.50 Same wash, 10 lks. wide, course IW.  
 46.00 Enter same wash, course W. from NE. Thence in wash.  
 51.20 Leave same wash, course NW from E.  
 53.30 Road, brs. NE. and SW.  
 73.10 Same wash, course SW.  
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 17, 18, 19 and 20, with brass cap, marked

T12S	R7 E
S18	S17
S19	S20
1925	

from which,

- An ironwood, 8 ins. in diam., brs. N. 48° E., 101 lks. dist., marked T12S R7E S17 BT.  
 An ironwood, 14 ins. in diam., brs. S. 33 $\frac{1}{4}$ ° E., 273 lks. dist., marked T12S R7E S20 BT.  
 A palo verde, 6 ins. in diam., brs. S. 0 $\frac{3}{4}$ ° W., 274' lks. dist., marked T12S R7E S19 BT.  
 An ironwood, 6 ins. in diam., brs. N. 25 $\frac{1}{2}$ ° W., 83 lks. dist., marked T12S R7E S18 BT.

Land, nearly level.

Soil, sandy and gravelly, 2nd rate.

Timber, ironwood and palo verde.

Undergrowth, greasewood and ocotilla.

Scattering giant cactus.

West, on a true line, bet. secs. 18 and 19.

Over nearly level land, thru. scattering timber and undergrowth.

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

$\frac{1}{4}$ S 18	
S 19	
1925	

from which,

- A mesquite, 8 ins. in diam., brs. N. 80° E., 109 lks. dist., marked  $\frac{1}{4}$  S 18 BT.  
 An ironwood, 10 ins. in diam., brs. S. 42° E., 52 lks. dist., marked  $\frac{1}{4}$  S 19 BT.

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

- 83.32 (Theoretical point of intersection with the range line between T. 12 S., R. 6 and 7 E.)

Set an iron post 3 ft. long, 2 ins. in diam., 20 ins. in the ground to bed rock, supported in a small mound of stone for cor. of secs. 13, 18, 19 and 24, with brass cap, marked

T12S	
R6E	R7E
S13	S18
S24	S19
1925	

from which,

- A palo verde, 4 ins. in diam., brs. N. 72° E., 215 lks. dist., marked T12S R7E S18 BT.  
 An ironwood, 5 ins. in diam., brs. S. 47° E., 316 lks. dist., marked T12S R7E S19 BT.  
 A palo verde, 5 ins. in diam., brs. S. 52° W., 352 lks. dist., marked T12S R6E S 24 BT.  
 An ironwood, 14 ins. in diam., brs. N. 47 $\frac{1}{2}$ ° W., 259 lks. dist., marked T12S R6E S13 BT.



Survey of part of Subdivision lines of Township 12 South, Range 7 East 7  
Chains.

Land, nearly level.  
Soil, sandy and gravelly, 2nd rate.  
Timber, ironwood and palo verde.  
Undergrowth, greasewood, ocotilla and cactus.

The continued satisfactory adjustment of the solar apparatus of Buff and Buff Transit No. 10125 used by Charles E. Hunter, U. S. Transitman, in the execution of surveys described in the foregoing notes is indicated from field tests described in Book "N" of this group.

The continued satisfactory adjustment of the solar apparatus of Young and Sons Transit No. 8592 used by W. H. Thorn, U. S. C. Engineer, in the execution of surveys described in the foregoing notes is indicated from field tests described in Book "K" of this group.

#### GENERAL DESCRIPTION.

There are no surveyed areas in this township. The south boundary and the S. half of the East boundary were surveyed under this group. The north boundary is an accepted survey executed in 1916. The West boundary and N. half of East boundary are unsurveyed. The section lines surveyed as described in the foregoing notes are the only surveyed subdivision lines, with the exception of about 100 acres around a malpais hill on line bet. secs. 21 and 22, which is mountainous, with a rocky, 4th rate soil, the surface of this township is level or nearly level, and the soil is sandy and gravelly, 2nd and 3rd rate.

There is a scattering growth of palo verde, ironwood and mesquite timber, and a dense undergrowth of greasewood, catclaw and cactus over the whole township.

There are no springs and no permanent running streams of water.

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

A periodical growth of grass in rainy seasons only, furnishes fair grazing at such times.

Several roads traverse the township, none of which are well travelled.

The entire SW. quarter of the township is within the Papago Indian Reservation.

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**FIELD ASSISTANTS.**  
to  
**Charles E. Hunter, U.S. Transitman.**

NAMES.	CAPACITY.
Leroy R.Hansen,	1st chainman,
Charles F.Elerick,	2nd chainman,
Charles Knight,	cornerman,
Oswald E.Recroft,	flagman,
Gordon F.Jackson,	axman.

CERTIFICATE OF UNITED STATES TRANSITMAN.

I, Charles E. Hunter, U. S. Transitman, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 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 12 SOUTH, RANGE 7 EAST.

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 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 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, Arizona

Charles E. Hunter

U. S. Transitman.

Date: October 28, 1925

~~APPROVAL.~~

~~OFFICE OF THE UNITED STATES SURVEYOR GENERAL,~~

, 19

~~The foregoing field notes of the survey of~~

~~executed by~~

~~under his special instructions dated~~, 19, ~~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. 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.~~

~~U. S. Surveyor General.~~



CERTIFICATE OF UNITED STATES CADASTRAL ENGINEER.

12

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 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 12 SOUTH, RANGE 7 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 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 12 SOUTH, RANGE 7 EAST.

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

executed by William H. Thorn, U.S. Cadastral Engineer, and Charles M. Hunter, U.S. Transitman, under his special instructions dated Sept. 25, 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.

United States 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.