

3514

(1)

4-679

Book "D"

BOOK 3514

FIELD NOTES

OF THE SURVEY OF THE

the East $\frac{1}{2}$ mile of the North boundary, and of a portion of the Subdivision lines of

TOWNSHIP 30 NORTH, RANGE 9 WEST,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Horace M. Muscott, U. S. Transitman

In the capacity of U. S. Surveyor, under Special Instructions dated February 25, 1920, issued by the United States Surveyor General to govern surveys included in Group No. 106, which were approved by the Commissioner of the General Land Office, March 8, 1920, and Assignment Instructions dated June 2, 1920

Survey commenced June 9, 1920

Survey completed July 8, 1920

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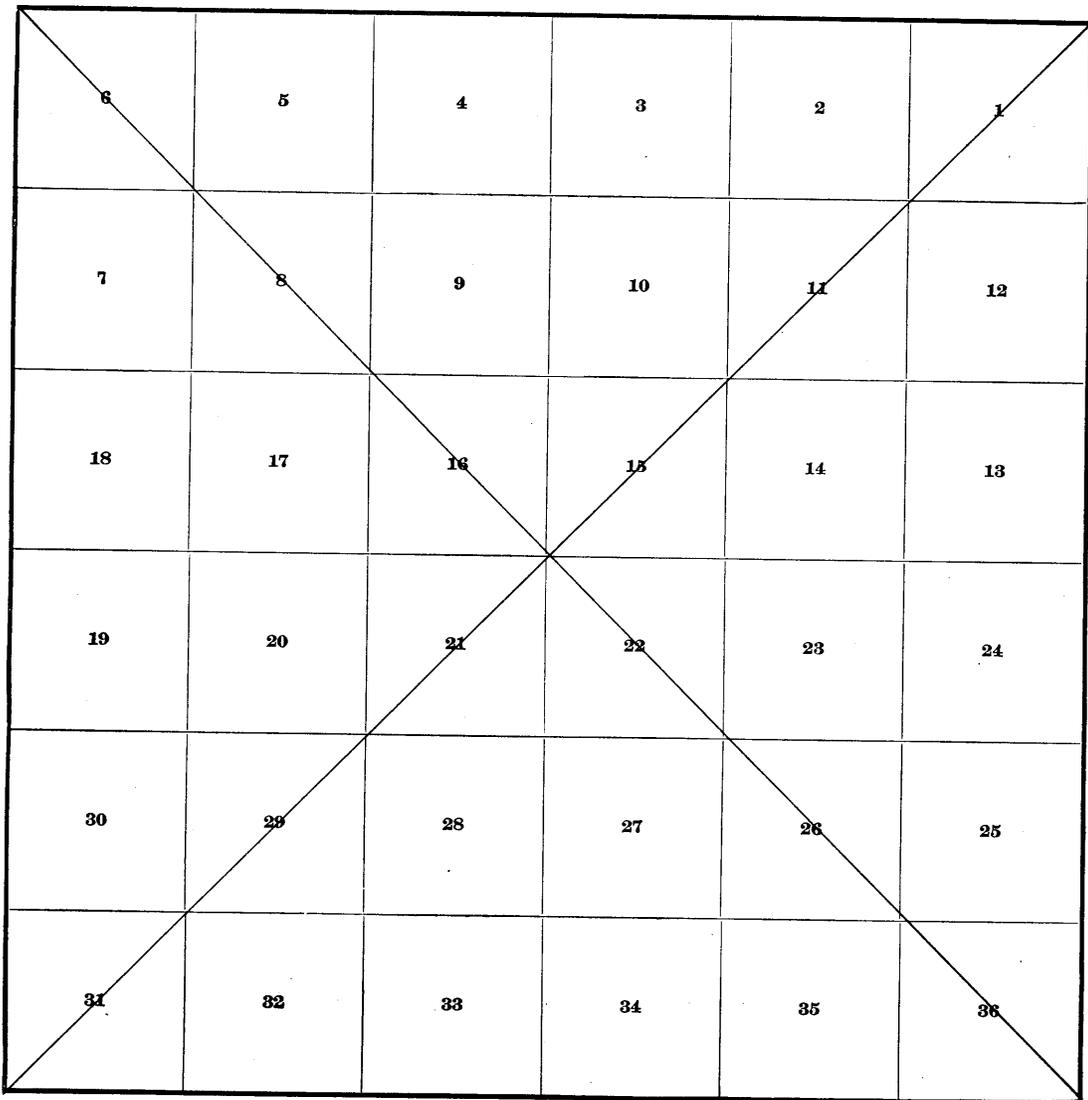
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~~INDEX DIAGRAM.~~

Township

Range



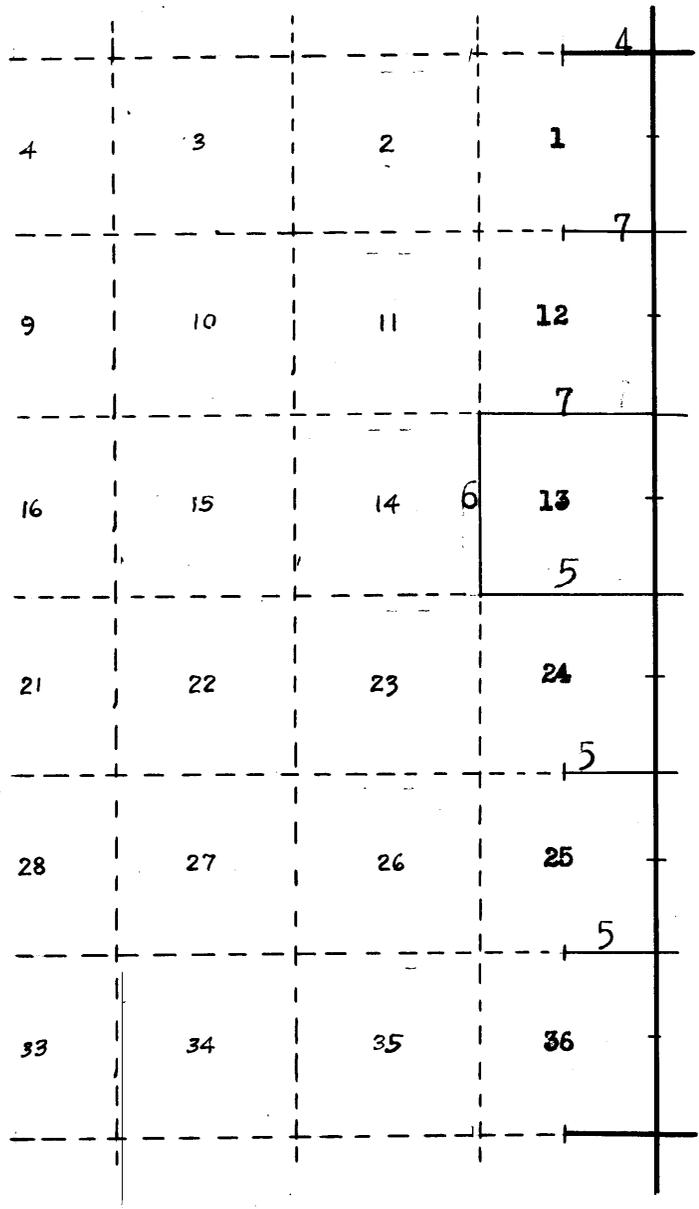
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Book "D"

INDEX DIAGRAM

BOOK 3514

TOWNSHIP 30 NORTH, RANGE 9 WEST.



———— Lines surveyed under this Group

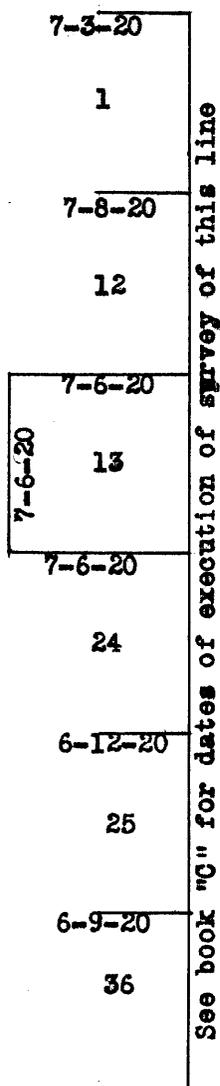
----- Unsurveyed.

BOOK 3514

BOOK "D"

DATE DIAGRAM

TOWNSHIP 30 NORTH, RANGE 9 WEST,



See book "B" for dates of execution of survey of this line.

Red lines on above diagram indicate surveys executed by Horace M. Muscott, U. S. Transitman, on dates shown thereon.

Surveys hereinafter described, executed by Horace M. Muscott, U.S. Transitman, on dates shown on a diagram on page 2 hereof, using Young and Sons transit No. 8489. The instrument is equipped with full vertical circle and the Smith solar attachment; unless otherwise specified, all azimuth determinations are accomplished with the solar attachment.

June 2, 1920: I examine the adjustment of the instrument and correct all errors; then, to test the solar apparatus by comparing its indications from observations made during a.m. and p.m. hours with a meridian established by Polaris observation, proceed with the instrument as follows:

At camp, in SW. $\frac{1}{4}$ of sec. 27, T. 30 N., R. 8 W., Gila and Salt River Base and Meridian, Arizona, in latitude $35^{\circ}57\frac{1}{2}'$ N. and in longitude, $113^{\circ}8'$ W., at 8h. 47m. p.m., l.m.t., observe Polaris at lower culmination, making four observations, two each with the telescope in direct and reversed positions, and mark the mean point in the meridian thus determined by a tack in a peg driven firmly in the ground, 5 chs. N.

June 3, 1920: At 9h. 00m., a.m., l.m.t., set off $35^{\circ}57\frac{1}{2}'$ N. on the lat. arc; $22^{\circ}20\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar, which agrees with the true meridian.

At app. noon, with the lat. arc unchanged, observe the sun on the meridian; the resulting reading of the decl. arc is $22^{\circ}21'$ N., which agrees with the computed decl. of the sun.

At 3h. 00m., p.m., l.m.t., with the lat. arc unchanged, set off $22^{\circ}22\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar, which agrees with the true meridian.

As all of the solar observations made with the instrument during the usual hours of the solar work come within $1'30''$ of the true meridian, I 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 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 the true horizontal distances.

Survey of part of North bdy. of Township 30 North Range 9 West.

Chains.

From the cor. of Ts. 30 and 31 N., Rs. 8 and 9 W., described in Book "C,"
 West, on a true line, bet. secs. 1 and 36.
 Over mountainous land, thru. scattering timber and dense undergrowth.
 Descend 116 ft., over NW. slope.
 5.80 Gulch, course N. Ascend 113 ft., over E. slope.
 12.60 Spur, slopes N. 20° E. Desc. 143 ft., over W. slope.
 22.40 Gulch, course NE. Leave mountainous, and enter rolling land. Asc. 150 ft., over SE. slope, to
 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 36
 S 1
 1920

from which,

A cedar, 5 ins. in diam., brs. N. 81 $\frac{3}{4}$ ° W., 48 lks.
 dist., marked $\frac{1}{4}$ S 36 BT.

A cedar, 5 ins. in diam., brs. S. 58 $\frac{1}{4}$ ° W., 29 lks.
 dist., marked $\frac{1}{4}$ S 1 BT.

About 6 chs. west of this cor., the Tp. boundary intersects the left or E. upper rim of the Colorado River Canyon, beyond which survey is impracticable; therefore, discontinue the survey of the Tp. bdy. at this $\frac{1}{4}$ sec. cor.

Land, mountainous and rolling.

Soil, rocky clay, 4th rate.

Timber, dense pine and cedar.

Undergrowth, dense scrub oak, chamisal, manzanita and sage brush.

No grass.

Survey of part of Subdivision lines of T. 30 North, Range 9 West, 5

Chains.

From the cor. of secs. 25, 30, 31 and 36 on E. bdy. of Tp.,
 described in Book "C,"
 West, on a true line, bet. secs. 25 and 36.
 Over mountainous land, thru. dense timber and undergrowth,
 on top of spur, sloping W.
 25.00 Leave top of spur, sloping SW. from E., near end of same.
 Descend 15 ft., over N. and NW. slope, to
 37.64 Gully, course N. from SE. Asc. 34 ft., over NE. slope, to
 40.00 Set an iron post 3 ft. long, 1 in. in diam., in a mound of
 stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,

$\frac{1}{4}$ S 25
 S 36
 1920

from which,
 A pine, 6 ins. in diam., brs. N. $5\frac{1}{2}^{\circ}$ E., 22 lks.
 dist., marked $\frac{1}{4}$ S 25 BT.
 A cedar, 8 ins. in diam., brs. S. 1° E., 66 lks.
 dist., marked $\frac{1}{4}$ S 36 BT.
 About 20 chs. west of this cor., the sec. line intersects
 the left or East upper rim of the Colorado River Can-
 yon, beyond which precipitous descent into the canyon
 renders survey impracticable; therefore, discontinue
 surveys of the line at this cor.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, dense pine and cedar.
 Undergrowth, dense chamisal and scrub oak.
 No grass.

From the cor. of secs. 19, 24, 25 and 30, on E. bdy. of Tp.,
 described in Book "C,"
 West, on a true line, bet. secs. 24 and 25.
 Over mountainous land, thru. dense timber and undergrowth.
 Descend 50 ft., over SW. slope, near foot of same, on N. side
 of ravine, course W.
 38.00 Gulch, course SW. Continue over SW. slope.
 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 24
 S 25
 1920

from which,
 A cedar, 12 ins. in diam., brs. N. 28° E., 175 lks.
 dist., marked $\frac{1}{4}$ S 24 BT.
 A cedar, 4 ins. in diam., brs. South 15 lks.
 dist., marked $\frac{1}{4}$ S 25 BT.
 About 20 chs. west of this cor., the sec. line intersects
 the left or East upper rim of the Colorado River can-
 yon, beyond which precipitous descent into the canyon
 renders survey impracticable; therefore, discontinue
 survey of the line at this cor.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, dense pine and cedar.
 Undergrowth, dense sagebrush, scrub oak and chamisal.
 No grass.

From the cor. of secs. 13, 18, 19 and 24, on E. bdy. of Tp.,
 described in Book "C,"
 West, on a true line, bet. secs. 13 and 24.
 Over mountainous land, thru. dense timber and undergrowth,
 across flat top of ridge, bearing NW. and SE.

6 Part of Subdivision lines of Township 30 North, Range 9 West.

Chains.

1.50 Leave top of ridge, and descend 150 ft., over SW. slope, to
 9.70 Foot of descent; Ascend 80 ft., over S. slope.
 22.50 Descend 60 ft., over SW. slope.
 27.80 Ascend 45 ft., over SE. slope, to
 34.50 Rim of canyon, brs. NW. and SE. Leave timber. Desc. 205
 ft., over broken SW. slope, to
 40.00 Ledge, 20 lks. wide, brs. NW. and SE. Set an iron post,
 3 ft. long, 1 in. in diam., 8 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., marked on brass cap,

$$\frac{1}{4} \text{ S } 13$$

$$\text{S } 24$$

$$1920$$

54.00 Descend 350 ft., over broken SW. slope.
 Bottom of canyon, course S. Asc. 370 ft., over steep
 broken E. slope, to
 62.30 Rim of canyon, brs. N. and S. Leave canyon and mountainous
 land, and enter rolling land.
 Ascend 110 ft., over gradual E. slope, to
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 8 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 sec. 13 only (SW. cor.) marked
 on brass cap,

$$\begin{array}{|l} \text{T30N} \\ \hline \text{R9 W} \\ \hline \text{S13} \end{array}$$

$$1920$$

The left, or E. upper rim of the Colorado River Canyon,
 bearing N. and S. is about 4 chs. W. of this cor., be-
 yond which precipitous descent into the canyon renders
 survey impracticable.

Land, mountainous and rolling.

Soil, slide rock, 4th rate.

Timber, dense scrub pine and cedar in E. $34\frac{1}{2}$ chs. None in
 W. $45\frac{1}{2}$ chs.

Undergrowth, dense scrub oak, sage brush and manzanita.

No grass.

N. $0^{\circ}01' \text{ W.}$, on W. bdy. of sec. 13.
 Over rolling land, thru. scattering timber and dense
 undergrowth. Asc. 160 ft., over rolling E. slope, to
 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 sec. 13 only, marked on
 brass cap,

$$\frac{1}{4} \text{ S } 13$$

$$1920$$

from which,

A pine, 8 ins. in diam., brs. N. $51\frac{3}{4}^{\circ}$ E., 90 lks.
 dist., marked $\frac{1}{4}$ S 13 BT.

A pine, 5 ins. in diam., brs. S. 37° E., 35 lks.
 dist., marked $\frac{1}{4}$ S 13 BT.

Continue over rolling land, descending slightly over
 NE. slope, to
 73.40 Rim of canyon, brs. NW. and SE. Desc. 60 ft., over N. slope.
 77.60 Bottom of canyon, course NW. near head. Asc. 25 ft., over
 W. slope, to
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., over cross
 (x) marked on surface rock, and raise a mound of stone
 around post, for cor. of sec. 13 only (NW. cor.), marked
 on brass cap,

Part of Subdivision lines of Township 30 North Range 9 West 7

Chains.

T30N R9 W

S13
1920

from which,
A pine, 6 ins. in diam., brs. S. 39 1/2° E., 48 lks. dist.,
marked T30N R9W S13 BT.

The left or East upper rim of the Colorado River canyon
is about 15 chs. W. of this cor., beyond which precipi-
tous descent into the canyon renders survey of line,
bet. secs. 11 and 14 impracticable.

Land, rolling.
Soil, gravelly and rocky clay, 3rd rate.
Timber, scattering pine and cedar.
Undergrowth, dense scrub oak, sage brush and manzanita.
No grass.

40.00
79.94

East, on a random line, bet. secs. 12 and 13.
Set temp. 1/4 sec. cor.
Intersect the cor. of secs. 7, 12, 13 and 18, on E. bdy. of Tp.
described in Book "C."

15.00
19.60
25.00
39.97

Thence,
West, on a true line, bet. secs. 12 and 13.
Over rolling land, thru. dense timber and undergrowth.
Ascend 60 ft. over N. and NE. slopes.
Descend 25 ft., over N. slope.
Gully, course NE. Ascend 60 ft., over NE. slope, to
Thence along N. slope, descending 40 ft., to
Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for 1/4 sec. cor., marked on brass cap,

1/4 S 12
S. 13
1920

from which,
A cedar, 8 ins. in diam., brs. N. 74 1/2° W., 26 lks.
dist., marked 1/4 S 12 BT.
A cedar, 4 ins. in diam., brs. S. 44 3/4° E., 18 lks.
dist., marked 1/4 S 13 BT.

78.64
79.94

Ascend 90 ft., over rolling NE. slope, to
Rim of canyon, brs. NW. and SE. Desc. 21 ft., over W. slope
to
The NW. cor. of sec. 13.
Land, rolling.
Soil, gravelly and rocky clay, 3rd rate.
Timber, dense pine and cedar.
Undergrowth, dense scrub oak, sagebrush, locust and man-
zanita.
No grass.

The left, or East upper rim of the Colorado River Canyon
is about 15 chs. N. of the NW. cor. of sec. 13, beyond
which rim precipitous descent over cliffs renders the
survey of the line bet. secs. 11 and 12 impracticable.

40.00

From the cor. of secs. 1, 6, 7 and 12 on E. bdy. of Tp.,
described in Book "C,"
West, on true line, bet. secs. 1 and 12.
Over rolling land, thru. dense timber and undergrowth.
Ascend 100 ft., over gradual E. slope.
Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
the ground, for 1/4 sec. cor., marked on brass cap,

8 Part of the Subdivision lines of T. 30 N., R. 9 W.

Chains.

$\frac{1}{4}$ S 1
S 12
1920

from which,

A pine, 6 ins. in diam., brs. N. $20\frac{1}{2}^\circ$ E., 31 lks.
dist., marked $\frac{1}{4}$ S 1 BT.

A pine, 10 ins. in diam., brs. S. $6\frac{1}{2}^\circ$ E., 50 lks.
dist., marked $\frac{1}{4}$ S 12 BT.

About 23 chs. W. from this cor., the sec. line intersects the left or E. upper rim of the Colorado River Canyon, beyond which precipitous descent into the canyon renders survey impracticable; therefore, discontinue survey of this $\frac{1}{4}$ sec. cor.

Land, rolling.

Soil, rocky, 4th rate.

Timber, dense pine and cedar.

Undergrowth, dense scrub oak, chamisal and sagebrush.

No grass.

The continued satisfactory adjustment of the solar apparatus during the survey of this township is indicated from field test described in Book "E."

Boundaries of sec. 13, Township 30 North, Range 9 West.
Latitudes, departures, and closing errors.

Line designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
South boundary,	West,	80.00				80.00
West boundary,	N. $0^\circ 01' W.$	80.00	80.00			.02
North boundary,	East,	79.94			79.94	
East boundary,	South,	80.00		80.00		
Convergency,					.01	
Totals.			80.00	80.00	79.95	80.02
			80.00			79.95
Error in latitude,			0.00			
Error in departure,					0.07	

GENERAL DESCRIPTION.

The portion of this township surveyed as described in the foregoing field notes includes practically all of the surveyable area lying East of the Colorado River Canyon, the left or East upper rim of which extends N. and S. near the W. edge of the surveyed area. The greater part of the township is situated within the Colorado River Canyon, and is unsurveyable.

The surface in the south half of the surveyed portion is mountainous, and drains westerly into the Colorado River. The surface in the north half is mostly rolling, and drains NE. and E., except in the northern part of sec. 1, where the drainage is to the north.

The soil is mostly a rocky clay, 4th rate.

Part of the Subdivision lines of Township 30 North, Range 9 West. 9

Chains.

The timber consists of cedar and pine, dense in all portions, except parts of sec.13, where the growth is scattering, and where there is no timber.

The undergrowth consists of scrub oak, sage brush, chamisal and manzanita, dense in all parts.

There is no permanent running water in the surveyed portion, and no grass.

There are no settlers, and the only improvements, are two fences, bearing E. and W., one each in secs. 12 and 13.

There is no evidence of valuable mineral.

There are no roads, but there are two trails, one each in secs. 25 and 36.

The surveyed portion is all within the Hualapai Indian Reservation.



4-680

BOOK 3514

FIELD ASSISTANTS.

to Horace M. Muscott, U. S. Transitman

NAMES.	CAPACITY.
Robert R. Parsons,	1st chainman,
C.H. Hunt,	2nd chainman,
Frank Owen,	2nd chainman,
George Way,	cornerman,
Ross Dykes,	cornerman,
William Robertson,	axman,
J.S. Troy,	axman,
Sam Dysart,	flagman,

CERTIFICATE OF UNITED STATES TRANSITMAN

I, Horace M. Muscott, U. S. Transitman, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 106, Arizona, bearing date of the 25th day of February, 1920, 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 North boundary, and Subdivision lines of

Township 30 North, Range 9 West,

of the Gila and Salt River Base and Meridian, in the State of Arizona, which are represented in and by diagram on page 2 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 106, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Place Los Angeles, Calif
Date July 11, 1922

Horace M. Muscott
U. S. Transitman

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz., August 7, 1922.

The foregoing field notes of the survey of the East 1/2 mile of the North boundary, and of a portion of the Subdivision lines of

Township 30 North, Range 9 West,

of the Gila and Salt River Base and Meridian,

in the State of Arizona,

executed by Horace M. Muscott, U. S. Transitman

under his special instructions dated February 25, 1920 for Group 106, Ariz., having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank D. Groth
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.