

Standard
BOOK "J"

BOOK 2516

FIELD NOTES

OF THE SURVEY OF THE

Fifth Guided Meridian East through TownshipsNo. 25, North, between Range No. 20 and21, East.of the Gila and Salt River Basins and Meridian,in the Territory of ArizonaEXECUTED
AS SURVEYED BYSidney E. Blough.Examiner of SurveysUnited States Deputy Surveyor,Special Instructions from the Commissioner of the General Land OfficeUnder his Contract No. , dated Oct 2nd 1907 and May 15th 1908Survey commenced May 4th1910 \$00Survey completed May 6th1910 \$00

(A)

BOOK 2516

NAMES AND DUTIES OF ASSISTANTS.

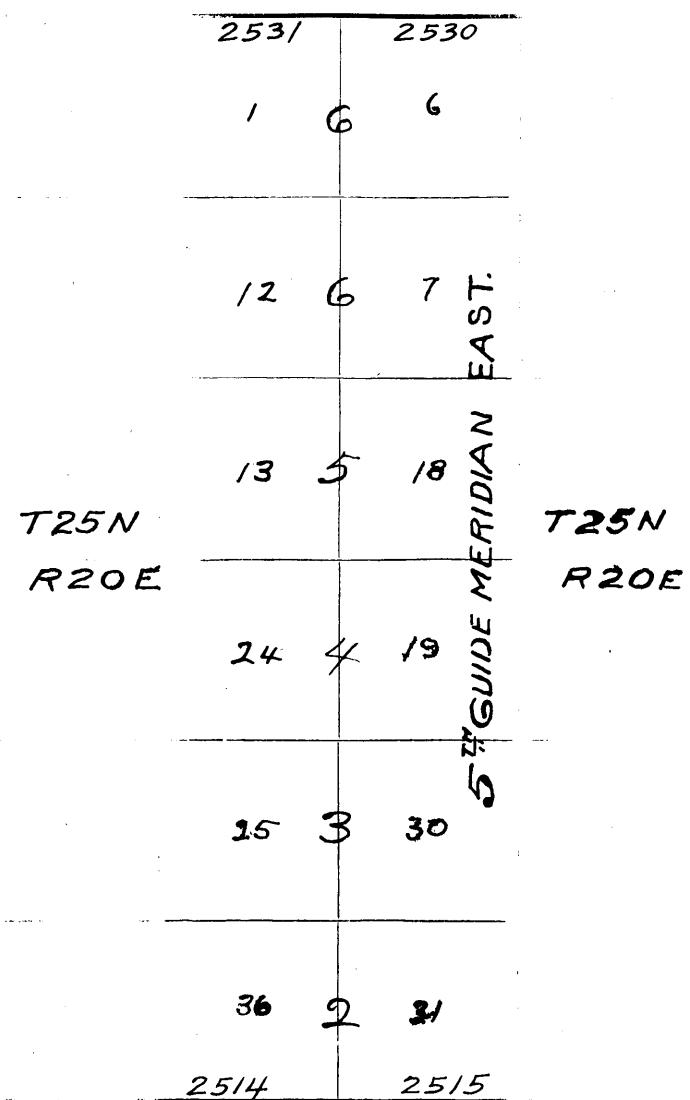
<u>Van L. White</u>	<u>Comptroller</u>
<u>Fred L. Warner</u>	<u>Chairman</u>
<u>P. V. White</u>	<u>Chairman</u>
<u>Charles Shumway</u>	<u>Chairman</u>
<u>Ralph Sampson</u>	<u>Monitorman</u>
<u>Bertram C. Broome</u>	<u>Asst. Chairman</u>
<u>William Pearson</u>	<u>Flagman</u>

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INDEX DIAGRAM.

Township _____, Range _____



Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

Charles A. Dutton

We, Van L. White, Fred C. Warner & P. V. White and Charles L. Shumway
 do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the 5th Guide Meridian E. through Phi 25 North, sec. Rr 20 and 21 E. of the G. & S. R. Base & Meridian, Van L. White and Fred C. Warner, Chainmen.

Charles L. Shumway, V. L. White, and Charles A. Dutton, Chainmen.

Subscribed and sworn to before me this 3rd day of May, 1910,

*Sidney E. Blout*U.S. Examiner of Surveys

I, Ralph C. Simpson

and

do solemnly swear that I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given me to the best of my skill and ability, in the survey of the 5th Guide Meridian E. through Phi 25 North, sec. Rr 20 and 21 E. of the G. & S. R. Base & Meridian, Arizona.

Ralph C. SimpsonMoundmanMoundman

Subscribed and sworn to before me this 3rd day of May, 1910,

*Sidney E. Blout*U.S. Examiner of Surveys

I, Bertram C. Broome

and

do solemnly swear that I will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given me to the best of my skill and ability, in the survey of the 5th Guide Meridian E. through Phi 25 North, sec. Rr 20 and 21 E. of the G. & S. R. Base & Meridian, Arizona.

Bertram C. BroomeAxmanAxman

Subscribed and sworn to before me this 3rd day of May, 1910,

*Sidney E. Blout*U.S. Examiner of Surveys

I, William P. Carson

and

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the 5th Guide Meridian E. through Phi 25 North, sec. Rr 20 and 21 E. of the G. & S. R. Base & Meridian, Arizona.

William P. Carson, Flagman

Subscribed and sworn to before me this 3rd day of May, 1910,

*Sidney E. Blout*U.S. Examiner of Surveys

5th Guide Meridian East through Obs. 25 No, Sec. R.R. 20 and 21 E.
Chains

Survey commenced May 4th 1910 and executed with a W. and
L. E. Gurley engineers transit No. 76, with a Bush solar
attachment. The horizontal limb is provided with one
double vernier reading to single minutes of arc. The
verniers of the latitude and declination arcs. read to
0'30" of arc.

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Determine the adjustments of the transit and correct the
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:

Begin at the ^{old} Standard Cor. of Obs. 25 No. R.R. 20 and 21 E.,
which is situated in the edge of a sand wash, and for
which reason I destroyed same on June 5, 1910 and set a ^{Lat. 35° 30' 35" N.}
longitude 110° 09' 26" W witness corner to same 2.00 chs N 87.5° Was described
in Standard Book "H."

At this cor. set off $35^{\circ} 30 \frac{1}{2}' N.$ on the lat. arc $15^{\circ} 58' N.$ on
the decl. arc. and at 5^h 00^m p.m. ^{l.m.t.} determine a meridian
with the solar and mark a point thereof by a tach
driven in a stake set firmly in the ground 5 chs. north
of the cor.

At 7^h 15^m p.m. l.m.t. by my watch which is correct.
local mean time observe Polaris. in accordance with the
instructions in the Manual and mark the direction thus
determined by a tach driven in a stake set in the ground
5.00 chs N of my station.

Astron local mean time of Obs. May 4th 1910 7^h 10^m

Equivalent to time of May 3rd 31 15

Astron time U.C. Polaris May 1st 1910 22^h 48^m

Reduction to May 3rd Subtract 7.9

Astron time U.C. Polaris May 3rd 22 40.1 Subtract 22 40

Hour angle and time arguments for table VII 8 35

Azimuth of Polaris at Obs. 1° 05 W.

May 4th 1910.

May 5th 1910, At 7^h 00^m a.m. ^{l.m.t.} lay off the azimuth of Polaris
1° 05' to the east. and mark the meridian thus determined
by a tach driven in the stake already set 5.00 chs. N. of the
cor. on which the meridian falls 0.5 ins. east of the point
determined by the solar.

At 7^h 15^m a.m. ^{l.m.t.} set off $35^{\circ} 30 \frac{1}{2}' N.$ on the lat. arc $16^{\circ} 07 \frac{1}{2}'$
N. on the decl. arc and determine a meridian with
the solar and mark a point thereof by a tach driven in

5th mile Meridian East through P.M. 25 No., sec. Rd 20 and 21 E.
Chains

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the stake already set 5.00 chs N. of my instrument, this point falls 0.6 m. east of the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridian respectively about $0^{\circ}26'$ West and $0^{\circ}31'$ East of the meridian established by the Polaris observations therefore I conclude that the instrument is in satisfactory adjustment.

From the Standard Cor. described in Std. Bk. "H"

North sec. 31 and 36.

Ascend steep S.E. slope over mountainous land through scattering sage and greasewood bush undergrowth and bunch grass.

15.50 Enter scattering cedar timber bear N. $40^{\circ}E$ and $340^{\circ}W$.

35.00 Top of stony divide bear $1160^{\circ}W$. and $360^{\circ}E$, descend steep N.E. slope.

Difference between measurements of 40.00 chs, by two sets of chainmen is 4 lbs. Position of middle point.

By 1st set 40.02 chs.

By 2nd set 39.98 chs. the mean of which is.

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 $\frac{1}{4} 3360W$ W. half and 331 on E. half, from wh. ch.

A cedar 12 ins. in diam. bears $818\frac{3}{4}^{\circ}E$ 48 lbs. dist. marked $\frac{1}{4} 331$ B.T.

A cedar 30 ins. in diam. bears $810\frac{1}{2}^{\circ}W$ 78 lbs. dist. marked $\frac{1}{4} 336$ B.T.

69.00 Cedar timber bears N.W. and S.E.

Difference between measurements of 80.00 chs, by two sets of chainmen is 6 lbs. position of middle point.

By 1st set 80.03 chs.

By 2nd set 79.97 chs. the mean of which is

80.00 Set an iron post 3 ft. long, 3 ins. in diam 24 ins. in the ground. for cor. of sec. 25, 30, 31 and 36. marked on brass cap T 25 N. in N. half T 20 E 325 in N.W. T 21 E. S 30 in N.E. S 31 in S.E. and S 36 in S.W. quadrants.

Dig pits 18 x 18 x 13 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor. Land mountainous.

Soil sandy and stony $\frac{3}{4}$ and $\frac{4}{5}$ ratio
Timber Cedar

Mountainous land 80.00 chs.

5th Guide Meridian East. through TPs 25 N., Sec. 20 and 21 E.

Chains

- North beh. sec 25 and 30
Descend N.E. slope over mountainous land through scattering sage and greasewood brush undergrowth and bunch grass.
- 22.60 Road from Holbrook Arizona to Keams Canyon Ariz bears N.W. and S.E.
- 23.40 Enter scattering cedar timber here E and W.
Difference between measurements of 40.00 chs. by two sets of chainsmen is 2 lks. position of middle point.
By 1st set 40.01 chs.
By 2nd set 39.99 chs. the mean of which is.
- 40.00 Behav iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked on base cap 1/4 S 25 m W half and 330 m E half, from which.
A pinon pine 2 ins. in diam bears 342° E 77 lks. dist marked 1/4 S 30 B.T.
A cedar 14 ins. in diam. bears N 56 3/4° W. 67 lks. dist marked 1/4 S 25 B.T.
- 64.00 Dry sand wash 20 lks. wide, 2 ft. deep coarse 3.8 accend round rock peak.
- 79.40 Top of rock peak 50 ft. above base. desc. n. slope of peak.
Difference between measurements of 80.00 chs. by two sets of chainsmen is 6 lks. position of middle point
By 1st set 80.03 chs.
By 2nd set 79.97 chs. the mean of which is
- 80.00 Behav iron post 3 ft. long 8 ins. in diam 24 ins. in the ground for cor of sec 19, 24, 25 and 30 marked on base Cap T 25 N. in N. half. R 20 E S 24 in N.W. R 21 E S 19 in N.E. S 30 in S.E. and S 25 in S.W. quadrants, from which.
A cedar 14 ins. in diam. bears N 68° E 143 lks. dist marked T 25 N. R 21 E S 19 B.T.
A cedar 14 ins. in diam bears 377° E 156 lks. dist marked T 25 N. R 21 E S 30 B.T.
- A cedar 6 ins. in diam. bears 342 1/4° W 31 lks. dist marked T 25 N. R 20 E S 25 B.T. and
- A cedar 4 ins. in diam bears N 79 3/4° W 80 lks. dist marked T 25 N. R 20 E S 24 B.T.
- Land mountainous.
Soil sandy and stony 3rd and 4th rate.
Timber Cedar
Mountainous land 80.00 chs.
At this cor. desc off 16° 10 1/2' N. on the decl. are and

5th Guide Meridian East through Twp. 25 N., sec. R. 20 and 21 E.

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at noon observe the sun on the meridian and obtain
on the lat. arc. a reading of $35^{\circ} 32 \frac{1}{2}'$ N.

- North beh. sec. 19 and 24.
Descend steep N. slope over stony mountainous land
through scattering cedar timber and sage brush under-
growth
- 10.00 Pts. of descent in depression bears N.E. and S.W. around
S.E. slope
- 37.00 Tops of high divide bear E and W. desc. N. slope
Difference between measurements of 40.00 chs by two sets
of chainmen is 4 lbs. position of middle point,
By 1st Beh. 40.02 chs.
By 2nd Beh 39.98 chs, the mean of which is.
- 40.00 Set an iron post 3 ft. long 1 in. in diam 26 ins. in the
ground for 4 sec. cor. marked on brass cap $\frac{1}{4}$ S 24 on W half.
and S 19 on E half. from which.
A cedar 7 ins. in diam bears $378^{\circ} 81$ lbs. dist. marked to S
19 B.T.
A cedar 5 ins. in diam. bears $331\frac{1}{4}^{\circ}$ W 23 lbs. dist. marked $\frac{1}{4}$ S 24 B.T.
Difference between measurements of 80.00 chs by two sets
of chainmen is 02 lbs. position of middle point.
By 1st Beh. 80.01 chs.
By 2nd Beh 79.99 chs. the mean of which is.
- 80.00 Set an iron post 3 ft. long 3 ins. in diam. 24 ins. in the
ground for cor. of sec. 13, 18, 19 and 24, marked on brass cap
T 25 N. in N. half. T 20 E 3/13 in N.W., T 21 E 3/18 in N.E.
S 19 in S.E. and S 24 in S.W. quadrants, from which.
A cedar 12 ins. in diam. bears $N 19\frac{1}{2}^{\circ}$ E 154 lbs. dist. marked
T 25 N, R 21 E 3/18 B.T.
A cedar 8 ins. in diam. bears $888\frac{3}{4}^{\circ}$ W 409 lbs. dist. marked
T 25 N, R 20 E 3/13 B.T. and
- A cedar 10 ins. in diam bears $148\frac{1}{4}^{\circ}$ W 254 lbs. dist. marked
T 25 N, R 20 E 3/13 B.T. No other tree available.
Dig pit 36x36x12 ins. S.E. of post. 5 $\frac{1}{2}$ ft. dist. and raise
a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land mountainous.
Soil sandy and stony 3rd and 4th rate.
Timber cedar
mountainous land 80.00 chs

5th Guide Meridian East. through P.M. 25 No. Feb. P.M. 20 and 21 E
Chambers

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- North sec. recs. 13 and 18.
- Descend N. slope over mountainous land through scattering cedar timber and sage brush undergrowth.
- 3.00 Dry ravine 20 lks wide course N.W.
- 5.00 The same ravine N.E.
- Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point
By 1st Sept. 39.98 chs.
- By 2nd Sept 40.02 chs. the mean of which is
- 40.00 The fourth for the 4 sec. cor. falls in the bottom of dry ravine course N.E. where natural causes would insure the destruction of the cor. therefore continue my line and ab.
- 40.50 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for witness cor. to the 4 sec. cor. marked.
on base cap T 25 N. R 20 E 313 on W. half. T 25 N. R 21 E 318 on E. half. and W.C. in S. half. from which.
A pinion pine 13 ins. in diam. bearing $368\frac{3}{4}^{\circ}$ E 112 lks. dist.
marked W.C. 4 S 18 B.T.
- A cedar 16 ins. in diam. bearing 349° W. 84 lks. dist. marked
W.C. 4 S 13 B.T.
- Ascend steep S.E. slope.
- 43.50 Top of sand stone ledge 10 ft. high bears N.E. and S.W.
- 46.00 Top of stony spur bears N.E. and S.W. extends 200 lks N.E. of line. desc gradually over N.W. slope.
- 55.16 Begin abrupt descent from N. slope of mesa.
- 70.00 Cedar timber bears N.W. and S.E.,
- Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks. position of middle point
By 1st Sept. 79.97 chs.
- By 2nd Sept 80.03 chs. the mean of which is.
- 80.00 Set an iron post. 3 ft. long 3 ins. in diam. 24 ins in the ground for cor. of secs 7, 12, 13 and 18, marked on base cap T 25 N. in N. half. T 20 E 312 in N.W. T 21 E 37 in N.E. 318 in S.E. and 319 in S.W. quadrants.
Dig pits 18x18x12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.
Land mountainous.
Soil sandy and stony 3rd and 4th rate.
Number cedar.

May 5th 1910.

5th Guide Meridian East. through Twp 25 N., between Rds 20 and 21 E.

Chains

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May 6th 1910 At 8th 00 m a.m. ^{lmt} set off $35^{\circ}34'$ now the lat. are
16° 25' N. over the decl. are. and determine a meridian with
the solar at the cor. of sec. 7, 12, 13 and 18, ^{above described} Then I run
North sec. sec. 7 and 12.

Descend N. slope of mesa over mountainous land through
scattering sage and greasewood brush undergrowth and
lunch grass.

18.40 Post of descent in depression bears N.E. and S.W. chains to
the N.E., bears mountainous land bears $N 70^{\circ}E$ and $S 70^{\circ}W$.

Enter hilly sandy land bears $N 70^{\circ}E$ and $S 70^{\circ}W$. acc. S.E. slope
Post of. low sand ridge bears E and W. des.

Difference between measurements of 40.00 chs.
by two sets of chainsmen is 02 lks. position of middle
point

By 1st set. 40.01 chs.

By 2nd set 39.99 chs. the mean of which is.

40.00 Behav 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 12 on W
half and S 7 on E. half. from which.

A lone cedar 10 ins. in diam. bears $N 34 \frac{3}{4}^{\circ}E$ 412 lks.

dir. marked $\frac{1}{4}$ S 7 B.T. No other trees available

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

Pits impracticable

Difference between measurements of 80.00 chs. by two
sets of chainsmen is 02 lks. position of middle point

By 1st set. 80.01 chs.

By 2nd set 79.99 chs. the mean of which is

80.00 Behav iron post 3 ft. long 3 ins. in diam. 24 ins. in the
ground for cor. of sec. 1, 6, 7 and 12. marked on brass
Cap T 25 N. in N. half. T 20 E S 1 in N.W. T 21 E S 6 in N.E.
S 7 in S.E. and S 12 in S.W. quadrants.

Dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. deep. and raise
a mound of earth 4 ft. base, 2 ft. high. W. of cor.
Land rolling and mountainous.

Soil sandy 3rd rate.

Plenty scattering Cedars near 4 sec. cor.

Mountainous land 18.40 chs.

North sec. sec. 1 and 6.

Descend N.E. slope over rolling sandy land through
scattering sage and greasewood brush undergrowth

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5th Guide Meridian East, through Twp 25 N., Sec. R.R. 20 and 21 E.
Chains

- | | |
|-------|---|
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| 29.87 | and bunch grass
Road from Holbrook Arizona to Keam's Canyon
Ariz bears $71^{\circ}30'W.$ and $83^{\circ}E.$
Difference beh. measurements of 40.00 chs. by two sets.
of Chaining is 04 lks. position of middle point.
By 1 st Sept. 40.02 chs.
By 2 nd Sept. 39.98 chs. the mean of which is. |
| 40.00 | Beh an iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for 4 sec. cor. marked on base
Cor $\frac{1}{4}$ S 10 W, half and 36 on E. half.
Dig pits 18x18x12 ins. round S. of post 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
high W. of cor. |
| 78.50 | Outer scattering Cedar timber bears $760^{\circ}W$ and
$860^{\circ}E.$
Difference beh. measurements of 80.00 chs by two
sets of Chaining is 06 lks. position of middle
point.
By 1 st Sept. 80.03 chs.
By 2 nd Sept 79.97 chs; the mean of which is. |
| 80.00 | Beh an iron post 3 ft. long 3 ins. in diam. 24
ins. in the ground for Cor. of Twp. 25 and 26 N.
R.R. 20 and 21 E. from which.
A cedar 10 ins. in diam. bears $720\frac{3}{4}^{\circ}E$, 131 lks
dist. marked T 26 N. R 21 E S 31 B.T.
A cedar 4 ins. in diam. bears $819^{\circ}E$, 101 lks. dist.
marked T 25 N. R 21 E S 6 B.T.
A cedar 4 ins. in diam. bears $868\frac{1}{2}^{\circ}W$ 78 lks.
dist. marked T 25 N. R 20 E S 1 B.T. and
A cedar 8 ins. in diam. bears $724\frac{1}{2}^{\circ}W$ 153 lks.
dist. marked T 26 N. R 20 E S 36 B.T.
Land rolling.
Soil sandy 3 rd rate.
Timber Cedar. |

May 16th 1910

- Sidney E Blout -
U. S. Examiner of Surveys

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U.S. EXAMINER OF SURVEYS
FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

BOOK

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LIST OF NAMES.

A list of the names of the individuals employed by Sidney E. Blouk

Examiner of Surveys

, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the 5th Guide Meridian Co. through Twp. 25 North, Between Rds 20 and 21 E. of the Gila and Salt River Basins and Meridian, Arizona, showing the respective capacities in which they acted:

Van L. White and Fred L. Warner, Chainman.
D. V. White, Chas L. Shumway and Chas A. Dutton, Chainman.
Ralph Sampson, Moundman.
Bertram C. Brown, Axman.
William P. Carson, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Sidney E. Blouk

Examiner of Surveys

, United States Deputy Surveyor, in surveying all those parts or portions of the the Fifth Guide Meridian Co. through Township No. 25, North, between Range No. 20 and 21 East, of the Gila and Salt River Basins and Meridian, Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully executed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for the General Land Office.

Fred L. Warner and T. V. White, Chainman.
Chas L. Shumway and Charles A. Dutton, Chainman.
Van L. White, Moundman.
Ralph C. Sampson, Moundman.
Bertram C. Brown, Axman.
William P. Carson, Flagman.

Subscribed and sworn to before me this 16th

day of May, 1910, 190



Sidney E. Blouk

U.S. Examiner of Surveys

FINAL OATH OF UNITED STATES/DEPUTY SURVEYOR.EXAMINER OF SURVEYSSidney E. BloutExaminer of Surveys

solemnly swear that, in pursuance of Special Instructions from the Commissioner of the United States Surveyor General for General Land Office, bearing dates of the 2nd day of October, 1907 and the 15th day of May, 1908, I have well, faithfully, and truly, in my own proper person, in strict conformity with the instructions furnished by the United States Surveyor General for the General Land Office, the Manual of Surveying Instructions, and the laws of the United States, surveyed those parts or portions of The 5th Guide Meridian East through Tps. 25 N., bet. Rs. 20 and 21 East.

Plan
River Base and meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed above, and under my direction; and I do further solemnly swear 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 United States Surveyor General for the General Land Office and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.
Examiner of Surveys.

Subscribed by said _____, and sworn to before me }
 this _____ day of _____, 1908 }

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona APR 25 1908The foregoing field notes of the survey of the

5th Guide Meridian East, through Tps. 25 N. bet. Rs. 20 and 21 E. of the
Gila and Salt River Base and Meridian, Arizona.

executed by Sidney E. Blout, U.S. Examiner of Surveys
Special Instructions from the Commissioner of the General Land Office, dated October 2, 1907 and May 15, 1908, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank J. Ingalls

United States Surveyor General
SURVEYOR-GENERAL OF ARIZONA

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.

United States Surveyor General