

2216

Book J

BOOK 2216

NOV. 17. 1910

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Accepted Letter E Aug. 10-1911

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FIELD NOTES

OF THE SURVEY OF THE

2216

Subdivision lines of Tp. 25 N. Rg. 10 E.

2216

Of the Gila and Salt River Meridian,

Territory of Arizona.

AS SURVEYED BY

John F. Hesse, United States Deputy Surveyor,

Under his Contract No. 158, dated June 4th. 1909., 19

Survey commenced September 14, 1910, 19

Survey completed September 16, 1910, 19

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INDEX DIAGRAM.

Township _____, Range _____

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30	29	28	27	26	25		
2	2						
31	2	32	/	33	34	35	36

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BOOK 2216

PRELIMINARY OATHS OF ASSISTANTS.

WE, Len Hall and A. E. Lyon
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 subdivision lines of Tp. 25 N. Rg. 10 E.

Len Hall, Chairman.
R. A. Coombs, Chairman.

Subscribed and sworn to before me this 5th day of September, 1910, 19



John P. Hesse
U.S. Deputy Surveyor

WE, I, A. N. Oliver and
do solemnly swear that I will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given ~~us~~ to the best of ~~my~~ skill and ability, in the survey of the subdivision lines of Tp. 25 N. Rg. 10 E.

A. N. Oliver, Moundman.
Moundman.

Subscribed and sworn to before me this 5th day of September, 1910, 19



John P. Hesse
U.S. Deputy Surveyor

WE, _____ and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman.
_____, Axman.

Subscribed and sworn to before me this _____ day of _____, 19



I, A. E. Lyon, 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 subdivision lines of Tp. 25 N. Rg. 10 E.

A. E. Lyon, Flagman.

Subscribed and sworn to before me this 5th day of September 1910, 19



John P. Hesse
U.S. Deputy Surveyor

No notary available without loss of time and great expense.

Subdivision of Tp. 25 N. Rg. 10 E.

Chains.

Survey commenced September 14, 1910 and executed with an A. Lietz Co. light mountain transit No. 5631, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. The instrument was examined, tested on the true meridian at Phoenix, found correct, and was approved by the surveyor general for Arizona.

I examine the adjustments of the transit, and find them correct, 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 determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 32 and 33 on the S. bdy. of the Tp. latitude 35° 30' 34" N.; longitude 111° 19' 49" W.; I set off 35° 30 1/2' N. on the lat. arc; 3° 29' N. on the decl. arc; and, at 5h. 00m. p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At 7h. 59m. p.m. by my watch, which has correct l.m.t. I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

September 14, 1910.

September 15: At 6h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris, 1° 27' to the west, and mark the meridian thus determined, by cutting a small groove in the stone set September 14, on which the meridian coincides with the mark determined by the solar.

At 7h. 00m. a.m., l.m.t., I set off 35° 30 1/2' N. on the lat. arc; 3° 16' N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark coincides with the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, which coincide with the meridian established by the Polaris observations, therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7h. 15m. a.m., is N. 14° 35' W.; the angle thus determined gives the mag. decl. 14° 35' E.

From the standard cor. of secs. 32 and 33 on the S. bdy. of the Tp. previously described, I run

N. 0° 03' W. bet. secs. 32 and 33

Over rolling land.

- 7.00 Cross wash 15 lks. wide course N. E.
 - 22.00 Ridge bears N. E. and S. W. and from this point C. M. Heiser's house bears N. 61° 04' W.
 - 37.90 Cross wash 25 lks. wide course N. E.
 - 40.00 Set a talpais stone 20 x 6 x 6 ins. 15 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable.
 - 54.00 Ridge bears N. W. and S. E. and from this point C. M. Heiser's house bears S. 80° 10' W.
 - 59.10 Cross wash 20 lks. wide course N. W.
 - 20.00 Set a sandstone 20 x 8 x 4 ins. 15 ins. in the ground for cor. of secs. 32, 29, 32 and 33, marked with 1 notch on S. and 4 notches on E. edges; and raise a mound of stone 2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable.
- Land, rollong.
Soil, rocky; 4th. rate.
No timber.

Subdivision of Tp. 26 N. Rg. 10 E.

Chains.

From the standard cor. of secs. 31 and 32 on the S. bdy. of the Tp., previously described I run N. 0° 03' W. bet. secs. 31 and 32 Over rolling land.

35.00 Cross wash 10 lks. wide course N. E.

40.00 Set a malpais stone 18 x 8 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

80.00 Set a malpais stone 18 x 6 x 6 ins. 12 ins. in the ground for cor. of secs. 29, 30, 31 and 32, marked with 1 notch on S. and 5 notches on E. edges; dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base 3 ft. high, W. of cor. Pits impracticable.

Land, rolling.
Soil, rocky; 4th. rate.
No timber.

September 15; At thsi cor. I set off 3° 09 $\frac{1}{2}$ ' N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 35° 31 $\frac{1}{2}$ ' N.

East on a random line bet. secs. 29 and 32

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

80.02 Intersect N. and S. line 5 lks. N. of the cor. of secs. 28, 29, 32 and 33

Thence I run N. 89° 58' W. on a true line bet. secs. 29 and 32. Over nearly level land.

4.00 Cross wash 25 lks. wide course N.

9.00 Cross wash 15 lks. wide course N. E.

40.01 Set a malpais stone 18 x 8 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; dig pits 18 x 18 x 12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.

50.00 Cross wash 10 lks. wide course N. E.

78.75 Cross road bears N. W. and S. E.

80.03 The cor. of secs. 29, 30, 31 and 32. Land, level.
Soil, rocky; 4th. rate.
No timber.

September 15, 1910.

September 16: At 7h. oom. a.m., l.m.t., I set off 35° 31 $\frac{1}{2}$ ' N. on the lat. arc; 2° 53' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32

Thence I run West on a random line bet. secs. 30 and 31

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

80.20 Intersect W. bdy. of Tp. 21 lks. N. of the cor. of secs. 25, 30, 31 and 36, mkd. and witnessed as desc. by the Sur. Gen.

Thence I run N. 89° 51' E. on a true line bet. secs. 30 and 31 Over nearly level land through heavy timber.

33.75 Descend E. slope of mesa and leave timber.

40.20 Set a malpais stone 20 x 10 x 4 ins. 15 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone 3 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

50.00 Over nearly level land.

80.20 The cor. of secs. 29, 30, 31 and 32. Land, rolling and level.

Subdivision of Twp. 25 N. Rg. 10 E.

Chains.

Soil, rocky; 4th. rate.
Timber, cedar.

September 16, 1910

GENERAL DESCRIPTION.

This township is rolling and level. There is no timber excepting a narrow strip of cedars along the west boundary. The soil is all volcanic rock and of no value. There is no water excepting a spring in sec. 32. There is one settler in sec. 32. I discontinued the subdivision of this township after surveying these two secs. as they contained the only settler in the township and there is no agricultural or grazing land in the township.

John P. Hesse
U. S. Deputy Surveyor.

LIST OF NAMES.

A list of the names of the individuals employed by John F. Hesse
 _____, 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
subdivision lines of Tp. 25 N. Rg. 10 E.
 showing the respective capacities in which they acted:

- _____ Len Hall _____, *Chainman.*
- _____ R. A. Coombs _____, *Chainman.*
- _____ A. N. Oliver _____, *Moundman.*
- _____ _____, *Moundman.*
- _____ _____, *Arman.*
- _____ _____, *Arman.*
- _____ A. E. Lyon _____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John F. Hesse
 _____, United States Deputy Surveyor, in surveying all
 those parts or portions of the subdivision lines of Tp. 25 N. Rg. 10 E.

 _____ of the Gila and
Salt River 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 surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for Arizona.

- _____ Len Hall _____, *Chainman.*
- _____ R. A. Coombs _____, *Chainman.*
- _____ A. N. Oliver _____, *Moundman.*
- _____ _____, *Moundman.*
- _____ _____, *Arman.*
- _____ _____, *Arman.*
- _____ A. E. Lyon _____, *Flagman.*

Subscribed and sworn to before me this 16th
 day of September, 1910, 19



John F. Hesse
U. S. Deputy Surveyor

No notary available without loss of time and great expense.

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BOOK 2216

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John F. Hesse, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 4th day of June, 1909, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivision lines of Tp. 25 N. Rg. 10 E.

of the Gila and Salt River meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by me, 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 Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

John F. Hesse
United States Deputy Surveyor.

Subscribed by said John F. Hesse, and sworn to before me }
this 17th day of November, 1910

Frank S. Ingalls
U. S. SURVEYOR GENERAL
for Arizona.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. Apr. 18, 1911

The foregoing field notes of the survey of the fragmentary subdivision of Tp. 25 N. Rg. 10 E. Gila and Salt River Base and Meridian, Arizona.

executed by John F. Hesse U.S. Dep. Sur. under his contract No. 158, dated June 4, 1909, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls
United States 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.

United States Surveyor General.