

BOOK 1832

-1832-
FIELD NOTES

*Deputy Surveyor
John P. Hesse*

OF THE SURVEY OF THE

West boundary of Twp 10 N. Rg 6 W.

-1832-

1832

Of the *Gila and Salt River* Meridian,
Territory of *Arizona*

AS SURVEYED BY

John P. Hesse, United States Deputy Surveyor,

Under his Contract No. *111*, dated *February 15th 1904*, 189

Survey commenced *April 26th 1904*, 189

Survey completed *April 27th 1904*, 189

NAMES AND DUTIES OF ASSISTANTS.

George Cassidy

Chairman

J. A. Allen

Chairman

S. R. Pinley

Flagman

24
1B

BOOK 1832

INDEX DIAGRAM.

Township 10 N., Range 6 W.

| | | | | | | |
|---|----|----|----|----|----|----|
| | 6 | 5 | 4 | 3 | 2 | 1 |
| | 7 | 8 | 9 | 10 | 11 | 12 |
| | 18 | 17 | 16 | 15 | 14 | 13 |
| 5 | 19 | 20 | 21 | 22 | 23 | 24 |
| 4 | 30 | 29 | 28 | 27 | 26 | 25 |
| 3 | 31 | 32 | 33 | 34 | 35 | 36 |

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, George Cassidy and J. A. Allen
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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 West boundary of Pp. 10 N. Rg. 6 W.

George Cassidy, Chainman.
J. A. Allen, Chainman.

Subscribed and sworn to before me this 26th
day of April 1904, 189



John P. Hesse
U. S. Dep. Surveyor

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

_____, Moundman.
_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 189



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 _____

S. L. Finley, Axman.
_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 189



I, S. L. Finley, 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 West boundary of Pp. 10 N. Rg. 6 W.

S. L. Finley, Flagman.

Subscribed and sworn to before me this 26th
day of April 1904, 189



John P. Hesse
U. S. Dep. Surveyor

Chains

Survey commenced April 26, 1904 and executed with a W. & A. C. Gurley solar compass. Compass not numbered. 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 vernier of the latitude arc; the vernier of the declination arc reads to thirty seconds of arc.

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 compass 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 my camp which is 20 chains east of the $\frac{1}{4}$ sec. cor. bet. secs. 2 and 35 on the S. bdy. of the township; latitude $34^{\circ} 09' 41''$ ^{70.12711} longitude $112^{\circ} 50' 05''$ ^{57.12711} ~~57.12711~~ ^{57.12711} W.; at $5^{\text{h}} 08.56^{\text{m}}$ a. 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.

At $7^{\text{h}} 30^{\text{m}}$ a. m. l. m. t., I lay off the azimuth of Polaris, $1^{\circ} 27.2'$ to the west, and mark the meridian thus determined, by cutting a small groove in a stone set firmly in the ground 5 chs. N. of my station.

Chains

At 8^h 00^m a. m. l. m. t. I set off 34° 09½' N., on the lat arc 13° 31½' 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.

At 3^h 00^m p. m. l. m. t. I set off 34° 09½' N. on the lat. arc; 13° 37' 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 8^h 30^m a. m., is N. 14° 33' W.; the angle thus determined gives the mag. decl. 14° 33' E.

April 26: At my station I set off 13° 34' N., on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 34° 09½' N.

April 26, 1904

April 27: At 7^h 00^m a. m. l. m. t. I set off 34° 09½' N. on the lat. arc; 13° 50½' N.

Chains.

on the decl. arc; and determine a meridian with the solar at the cor. of Pps. 9 and 10 N. Rgs. 6 and 7 W. which is a granite stone 8x6x4 ins. above ground, marked and witnessed as described by the surveyor general

OK

Thence I run

North on a random line bet. secs. 31 and 36. setting temp. 14 and sec. cors. at each 40.00 chns. at 240 chs. the country north on line becomes extremely rough and worthless for agricultural or grazing purposes I therefore discontinue my line at this point and return to the cor. of Pps. 9 and 10 N. Rgs. 6 and 7 W.

Thence I run

North bet. secs. 31 and 36.

Over level land

20.00 Center palo verde and catclaw bush.

40.00 Set a granite stone 18x8x4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 4 on W. face; from which a palo verde 9 ins. diam. bears N. 83° 45' E. 319 lks. dist. marked 4 S 31 BT. No other tree available; dug pits 18x18x12 ins. N. and S. of stone 3 ft. dist.; and raised a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.

65.55 Cross road, bears E. and W.

80.00 Set a granite stone 16x12x4 ins. 11 ins. in the ground for cor. of secs. 25, 30, 31 and 36 marked with 1 notch on S. and 5 notches on N. edges; from which

A palo verde 4 ins. diam. bears N. 53 1/2° E. 220 lks. dist. marked T10NR6WS 30 BT.

A palo verde 4 ins. diam. bears N. 51 3/4° W. 246 lks. dist. marked T10NR7WS 25 BT.

No other trees available; dug pits 18x18x12

chains

12 ins. S. E. and S. W. of stone 5 1/2 ft. dist. and raised a mound of earth 4 ft. base 2 ft. high, W. of cor. Land, level.

Soil, sandy; 4th rate.

Timber, palo verde.

Underbrush, catclaw.

Land covered with dense undergrowth 60.00 chs.

April 27: at this cor. I set off 13° 53 1/2' N. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is 34° 10 1/2' N.

North bet. secs. 25 and 30

Over level land through palo verde and catclaw brush.

29.84 Cross road, bears N.W. and S.E.

40.00 Deposit a charred stake 12 ins. in the ground for 1/4 sec. cor.; dug pits 18x18x12 ins. N. and S. of cor. 4 ft. dist; and raised a mound of earth 3 1/2 ft. base 1 1/2 ft. high over deposit. In S. pit drive a palo verde stake 2 ft. long 2 ins. sq. 12 ins. in the ground marked

OK

1/4 S 25 on W. face and 30 on E. face.

74.75 Cross road, bears N.W. and S.E.

80.00 Deposits a charred stake 12 ins. in the ground for cor. of secs. 19, 24, 25 and 30; dug pits 18x18x12 ins. in each sec. 4 ft. dist; and raise a mound of earth 4 ft. base 2 ft. high, over deposit.

OK

In S.E. pit drive a palo verde stake 2 ft. long, 2 ins. sq. 12 ins. in the ground, marked

T10 N S 19 on N.E.

R6 W S 30 on S.E.

S 25 on S.W. and

R7 W S 24 on N.W. faces; with 2

chains

notches on S. and 4 notches on N. edges.

Land, level.

Soil, sandy; 4th rate.

Timber, palo verde.

Underbrush, catclaw and palo verde.

Land covered with dense undergrowth 80.00 chs.

North bet. secs. 19 and 24

Over level land through palo verde and catclaw brush.

40.00

(JK)

Set a granite stone 18x10x3 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dug pits 18x18x12 ins. N. and S. of stone 3 ft. dist. and raised a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.

Fence along rough rocky E. slope of mountain, ascending.

80.00

(JK)

Set a granite stone 30x24x16 ins. 22 $\frac{1}{2}$ ins. in the ground for cor. of secs. 13, 18, 19 and 24 marked with 3 notches on N. and S. edges, and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, level and mountainous.

Soil, sandy and rocky 3rd and 4th rate.

Timber, paloverde.

Underbrush, catclaw and palo verde.

Mountainous land or land covered with dense undergrowth 80.00 chs.

April 27, 1904.

Latitudes, departures and closing errors.

| Line designated | True bearing | Distance | Latitudes | | Departures | |
|----------------------------|------------------------|------------------|---------------|---------------|------------------|--------|
| | | | N. | S. | E. | W. |
| N. bdy T10NR6W. | North | 160.00 | 160.00 | | | |
| Ret. sec. 19+30 | S. 89° 50' E | 79.30 | | .23 | 79.30 | |
| Ret. sec. 20+29. | N 89° 53' E | 79.95 | 16 | | 79.95 | |
| Ret. sec. 21+28. | East | 80.04 | | | 80.04 | |
| Ret. sec. 22+27 | N 89° 49' E | 80.12 | 23 | | 80.12 | |
| Ret. sec. 22+27 | N 89° 50' E | 80.00 | 30 | | 80.16 | |
| Ret. sec. 23+26 | N 89° 56' E | 80.16 | 24 | | 80.16 | |
| Ret. sec. 24+25 | N 89° 55' E | 80.15 | 12 | | 80.15 | |
| | N 89° 50' E | 80.00 | 00 | | 80.00 | |
| E. bdy T10NR6W. | South | 240.00 | | 240.00 | | |
| S. bdy T10NR6W | West | 479.44 | | 160.00 | | 479.44 |
| Convergence | | | 24.00 | 40.23 | .16 | |
| Totals | | | 160.00 | 160.00 | 479.89 | 479.44 |
| Error in lat. | | | 40 | Error in Dep. | 40 | 40 |
| | | | 39 | | 39 | 39 |

General Description

This township is extremely rough and mountainous in the northern part and level in the southern part. There is no water in the township and no timber. The Kate Creek mountains in the northern part of the township are barren and absolutely devoid of verdure.

John P. Hesse
U. S. Dep. Surveyor

April 27, 1904.

LIST OF NAMES.

A list of the names of the individuals employed by John P. 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 West boundary of Tp. 10 N. Rg. 6 W. showing the respective capacities in which they acted:

George Cassidy ✓, Chainman.

J. A. Allen ✓, Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

V. H. Finley ✓, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John P. Hesse

....., United States Deputy Surveyor, in surveying all those parts or portions of the West boundary of Tp. 10 N. Rg. 6 W.

..... of the Gila 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

George Cassidy ✓, Chainman.

J. A. Allen ✓, Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

V. H. Finley ✓, Flagman.

Subscribed and sworn to before me this 27th day of April 1904, 189

John P. Hesse
U. S. Dep. Surveyor



BOOK 1832 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 15th day of February 1904, ~~189~~, 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 West boundary of T. 10 N. R. 6 W.

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; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John F. Hesse
United States Deputy Surveyor.

Subscribed by said John F. Hesse, and sworn to before me }
this 4th day of June 1904, ~~189~~

Frank S. Ingalls
U. S. Surveyor General
for Arizona.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, May 4, 1905.

The foregoing field notes of the survey of The West Boundary of T. 10, N. 6. W. of the Gila and Salt River Base and Meridians, in the Territory of Arizona

executed by John F. Hesse, U. S. Deputy Surveyor under his contract No. 111, dated Feb. 15th 1904, ~~189~~, 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.