

1808

FIELD NOTES

and Resurvey
OF THE SURVEY OF THE

Sub-division lines of Pp. 13 N. Rg. 3 W.
necessary to include what is known
as Government Springs

1808

BOOK 1808

Of the *Gila and Salt River* Meridian,

Territory of Arizona

AS SURVEYED BY

John P. Hesse, United States Deputy Surveyor,

Special Instructions
Under his Contract No. _____, dated *December 26, 1903*, 189

Survey commenced *March 10, 1904*, 189

Survey completed *March 12, 1904*, 189

NAMES AND DUTIES OF ASSISTANTS.

BOOK 1808

<i>A. M. Oliver</i>	<i>Chairman</i>
<i>W. W. Oliver</i>	<i>Chairman</i>
<i>S. L. Pinley</i>	<i>Assman</i>
<i>George Cassidy</i>	<i>Playman</i>

1808

BOOK 1808

INDEX DIAGRAM.

Township 13 N., Range 3 W.

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

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, A. N. Oliver and W. W. Oliver
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 the subdivision lines of Pp. 13 N. Rg. 3 W.

A. N. Oliver, Chainman.
W. W. Oliver, Chainman.

Subscribed and sworn to before me this 10th
day of March 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, I. S. Finley 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 ^{me} ~~us~~, to the best of ~~our~~ skill and ability, in the survey of the subdivisions lines of Pp. 13 N. Rg. 3 W.

I. S. Finley, Axman.
_____, Axman.

Subscribed and sworn to before me this 10th
day of March 1904, ~~189~~



John P. Hesse
U. S. Dep. Surveyor

I, George Cassidy, 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 Pp. 13 N. Rg. 3 W.

George Cassidy, Flagman.

Subscribed and sworn to before me this 10th
day of March, 1904, 189



John P. Hesse
U. S. Dep. Surveyor

Chains

Survey commenced March 10, 1904, and executed with a W. and L. E. Gurley light mountain transit 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 latitude and declination arcs. Transit not numbered.

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 my camp which is at the $\frac{1}{4}$ sec. cor. bet. secs. 22 and 23 Twp. 13 N. Rg. 3 W. latitude $34^{\circ}30'28''$ N. longitude $112^{\circ}32'07''$ W. at $8^h 07^m$ p. m. by my watch which has correct l. m. t., I observe Polaris at western 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.

March 10; at the same point at 30 l. c. m. t. I set off $34^{\circ}30\frac{1}{2}'$ on the lat. arc; $3^{\circ}41'$ S. on the decl. arc; and mark the meridian thus established on a peg driven in the ground 5 chs. N. of my station.

March 10, 1904

March 11, at $7^h 45^m$ a. m. l. m. t. I lay off the azimuth of Polaris $1^{\circ}28'$ to the east and mark the meridian thus determined, by cutting a small groove in a stone set firmly in the ground, at $8^h 00^m$ a. m. l. m. t. I set off $34^{\circ}30\frac{1}{2}'$ N on the lat. arc; $3^{\circ}41'$ S. 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;

The instrument was examined, tested on the true meridian at

Phoenix, Arizona, and was approved by the Surveyor General for

Arizona,

(10)

Chains

this mark falls on the meridian established by the Polaris observation.

The solar apparatus by p. m. and a. m. observation, defines positions for meridians, respectively about $0'06''$ east and $0'10''$ west of the meridian established by the Polaris observation; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at $8^h 10^m$ a. m. is $N 13^{\circ} 15' W$; the angle thus determined gives the mag. decl. $13^{\circ} 15' E$.

The cor. of secs. 13, 14, 23 and 24 is described by the surveyor general as a white oak marked for cor. and witnessed by three bearing trees. Fire has swept over this cor. and the bearing trees have been destroyed and the cor. is only the shell of an oak with marks almost obliterated. I destroy this old cor. and set a granite stone $16 \times 8 \times 4$ ins. 11 ins. in the ground in the same place for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on S. and 1 notch on E. edges; from which

- A pine 4 ins. diam. bears $N. 29^{\circ} 34' E. 66$ lks. dist. marked T13NR3WS13BT.
- A pine 8 ins. diam. bears $S. 46^{\circ} E. 128$ lks. dist. marked T13NR3WS24BT.
- A pine 16 ins. diam. bears $S. 26^{\circ} 42' W. 68$ lks. dist. marked T13NR3WS23BT.
- A pine 6 ins. diam. bears $N. 12^{\circ} 34' W. 67$ lks. dist. marked T13NR3WS14BT.

From this cor. I run West bet. secs. 14 and 23.

Descending over rolling mountains through heavy pine ~~number~~.

chains	
4.95	Cross wash, 10 lks. wide, course N. W.
14.15	Cross wash, 10 lks. wide, course N. W.
20.71	Cross gully, 6 lks. wide, course N. E.
21.70	Cross same gully, course S. E. and ascend.
26.72	Cross dim road bears N. W. and S. E.
32.00	Cross old road bears N. E. and S. W.
33.43	Telephone line bears N. E. and S. W.
35.03	Road, bears N. and S.
36.60	Cross wash 12 lks. wide course N. E.
39.60	A point 9 lks. S. of the $\frac{1}{4}$ sec. cor. between secs 14 and 23 a granite stone set loosely on top of ground with a few stones around it; from which the stump of a pine tree 14 ins. diam. which has been sawed off three feet above ground bears S. $81\frac{1}{4}^{\circ}$ E. 16 lks. dist marked BT.
	A dead oak tree 12 ins. diam. bears N. $7\frac{1}{2}^{\circ}$ W. 30 lks. dist. with the marks SBT still decipherable. I re-establish this cor. as follows after destroying the old cor.; Set a granite stone 18 x 12 x 10 ins. 12 ins. in the ground with a mound of stone around it for $\frac{1}{4}$ sec. cor., in the same place, marked $\frac{1}{4}$ on N. face; from which
	A pine 20 ins. diam. bears N. $52\frac{1}{4}^{\circ}$ E. 48 lks. dist. marked $\frac{1}{4}$ S 14 BT.
	A pine 6 ins. diam. bears S. $37\frac{1}{4}^{\circ}$ W. 80 lks. dist. marked $\frac{1}{4}$ S 23 BT.
	The course of this half mile is N. $89^{\circ}52'$ W. length is 39.60 chs.
	Thence I run from $\frac{1}{4}$ sec. cor. West
9.85	Cross wash course N. 10 lks. wide.
40.20	A point 14 lks. N. of the cor. of secs. 14, 15, 22 and 23 a granite stone with a few stones around it and the marks nearly obliterated. I destroy the old cor. and set new cor. in the same place as follows; Set a granite stone 22 x 10 x 4 ins.

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19 ins. in the ground for cor. of secs. 14, 15, 22 and 23, marked with 3 notches on S. and 2 notches on E. edges; from which

A pine 6 ins. diam. bears N. $61\frac{1}{4}^{\circ}$ E. 35 lks. dist. marked T13NR3WS14BT

A pine 6 ins. diam. bears S. $44\frac{1}{4}^{\circ}$ E. 51 lks. dist. marked T13NR3WS23BT.

A pine 12 ins. diam. bears S. $68\frac{3}{4}^{\circ}$ W. 49 lks. dist. marked T13NR3WS22BT.

A pine 16 ins. diam. bears N. $10\frac{1}{2}^{\circ}$ W. 63 lks. dist. marked T13NR3WS15BT.

The course of this half mile is S $89^{\circ}48'$ W. length is 40.20 chs.

Land, mountainous

Soil, rocky; 4th rate.

Timber pine and some scattering oak.

Mountainous or heavily timbered land 79.80 chs.

Note: I was unable to make an observation for latitude at this cor. on account of the cloudy weather.

From the cor. of secs. 13, 14, 23 and 24 previously described

I run

South bet. secs. 23 and 24

Ascend N. slope of mountain through heavy pine timber

40.20 A point 28 lks. E. of the $\frac{1}{4}$ sec. cor. bet. secs. 23 and 24, a stake nearly rotted away. I re-establish this

cor. as follows; set a porphyry stone 18 x 8 x 4 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; from which:

A pine 14 ins. diam. bears N. $62\frac{1}{2}^{\circ}$ E. 66 lks. dist. marked $\frac{1}{4}$ S24BT.

A pine 6 ins. diam. bears S. 42° W. 60

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Eks. dist. marked $\frac{1}{4}$ S 23 BT.

The course of this half mile is
S. $0^{\circ} 24' W.$ length is 40.20 chs.

10.00 Thence I run from $\frac{1}{4}$ sec. cor. South
Top of mountain and descend S.
slope.

39.70 The cor. of secs. 23, 24, 25 and 26 a
granite stone, with marks nearly
effaced, in a small mound of stone.
I destroy old cor. and re-establish
it in the same place as follows;
set a granite stone $18 \times 10 \times 4$ ins. 12
ins. in the ground for cor. of secs.
23, 24, 25 and 26, marked with 2
notches on S. and 1 notch on E. edges,
from which:

A pine 30 ins. diam bears N. $87^{\circ} E.$ 70
Eks. dist. marked T13NR3WS24BT.

An oak 5 ins. diam. bears S. $29\frac{1}{2}^{\circ} E.$ 15
Eks. dist. marked T13NR3WS25BT.

An oak 4 ins. diam. bears S. $79\frac{3}{4}^{\circ} W.$ 67
Eks. dist. marked T13NR3WS26BT.

A juniper 20 ins. diam. bears N. $52\frac{1}{2}^{\circ} W.$ 31
Eks. dist. marked T13NR3WS23BT.

Land, mountainous.

Soil, rocky; $4\frac{1}{2}\%$ rate.

Timber, pine and some oak.

Mountainous or heavily timbered
land

March 11, 1904

March 12; At $8^{\text{h}} 00^{\text{m}}$ a. m. l. m. t.,
I set off $34^{\circ} 31' N$ on the lat. arc; $3^{\circ} 18'$
S. on the decl. arc; and determine
a meridian with the solar at the
cor. of secs. 14, 15, 22 and 23 previously
described

Thence I run
S. $0^{\circ} 01' E.$ bet. secs. 22 and 23.
Over rolling top of mountains
through heavy pine and oak timber

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chains

- 1.00 Descend rough S. slope mountain
4.35 Cross wash, course S.W.
33.49 Cross road, bears N.E. and S.W.
35.77 Cross road, bears N.W. and S.E.
36.25 Cross wire fence, bears N.W. and S.E.
37.19 A point from which
Government spring bears N. $46^{\circ}30'$ E.
61 lks. dist.
N.W. cor. of Mrs. A.J. Peat's house,
18 x 24 ft., bears N. $83^{\circ}15'$ E. 127 lks.
dist.
A spring bears N. 86° E. 120 lks.
dist.
40.00 The point for cor. falls on a rock in
place 3 x 3 x 2 ft. above ground, I
mark a cross (+) for exact cor.
point and $\frac{1}{4}$ W. of cross for $\frac{1}{4}$
sec. cor.; from which
An oak 12 ins. diam. bears S. $43\frac{3}{4}^{\circ}$ E.
10 $\frac{1}{2}$ lks. dist. marked $\frac{1}{4}$ S 23 BT.
An oak 14 ins. diam. bears N. $87\frac{1}{2}^{\circ}$ W.
25 $\frac{1}{2}$ lks. dist. marked $\frac{1}{4}$ S 22 BT.
And raise a mound of stone 2 ft. base
1 $\frac{1}{2}$ ft. high, W. of cor.
41.88 Cross wire fence, bears E. and W.
42.57 Cross wash, 30 lks. wide, course S.W.
42.94 Cross road, bears N.E. and S.W.
51.05 Cross wash, 15 lks. wide, course S.E.
52.00 Cross same wash, course S.W.
52.73 Telephone line, bears N.E. and S.W.
59.18 Cross wash 20 lks. wide, course W.
67.00 Leave timber and through oak and
manzanita brush descending steep
S. slope.
74.15 Cross wash 20 lks. wide, course W.
and ascend steep N. slope.
80.00 Set a granite stone 20 x 8 x 4 ins. 15 ins.
in the ground for cor. of sec. 22, 23, 26,
and 27, marked with 2 notches on S.
and E. edges; from which
A pine 6 ins. diam. bears N. $67\frac{1}{2}^{\circ}$ E. 152 lks.
dist. marked T13NR3WS23BT.

chains

A pine 14 ins. diam. bears S. 28° E. 105 lks.
dist. marked T13NR3WS26BT.

A pine 12 ins. diam. bears S. 41 $\frac{3}{4}$ ° W. 156 lks.
dist. marked T13NR3WS27BT.

No other bearing tree available.

Dug pit 18 x 18 x 12 ins. in N.W. sec.
5 $\frac{1}{2}$ ft. dist. and raised a mound
of earth 4 ft. base 2 ft. high W. of
cor.

Land, mountainous.

Soil, rocky; 4 $\frac{1}{2}$ rate.

Timber, pine and oak.

Mountainous or heavily timbered
land 80.00 chs.

East on a random line bet. secs. 23
and 26

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

79.80 Intersect N. and S. line 14 lks. S.
of the cor. of secs. 23, 24, 25 and 26
Thence I run

S. 89° 54' W on a true line bet. secs. 23
and 26

Descend W. slope through heavy
pine timber.

5.00 Cross wash 30 lks. wide and ascend. course S.

23.50 Top of ridge bears N. and S. and descend.

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

34.00 Cross wash, 30 lks. wide, course S. and
along on rough S. slope.

39.90 Set a granite stone 20 x 12 x 10 ins. 15
ins. in the ground for $\frac{1}{4}$ sec. cor.
marked $\frac{1}{4}$ on N. face; from which
An oak 4 ins. diam. bears S. 66° E. 15 lks.
dist. marked $\frac{1}{4}$ S 26 BT.

An oak 6 ins. diam. bears N. 42° W. 65 lks.
dist. marked $\frac{1}{4}$ S 23 BT.

Leave timber and through dense
manzanita and oak brush.

65.00 Enter slump of pine timber.

66.70 Cross wash 10 lks. wide course N.W.

Chains

73.00 and change to N. slope.
 Leave timber.
 79.80 The cor. of secs. 22, 23, 26 and 27.
 Land, mountainous.
 Soil, rocky; 4th rate.
 Timber, pine and oak.
 Underbrush, oak and manzanita.
 Mountainous, heavily timbered land
 or land covered with dense
 undergrowth 79.80 chs.
 March 12: at this cor. I set off 3°14' S. on the decl. arc,
 and observe the sun on the meridian; the resulting lat. is
 34°30' N at 11 h. 50 m. A.M. March 12, 1904.

This sec. is rough and mountainous and, with the exception of a small strip on the W. half of the south boundary, covered with a growth of pine timber and some oak.

The soil is rocky and unfit for cultivation except in small patches along some of the washes. There is good grazing land in all parts of the section.

Government spring in the west part of the sec. furnishes pure clear water.

There is one settler in the section Mrs. Oda Jane Peat, whose claim of 160 acres is entirely included in this section.

Line designated	True bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
N.bdy. Sec. 23.	N89°52'W	39.60	.09			39.60
	S89°48'W	40.20		.14		40.20
N.bdy. Sec. 23.	S0°01'E	80.00		80.00	.02	
S.bdy. Sec. 23.	N89°54'E	79.80			79.80	
E.bdy. Sec. 23.	North	39.70	39.70			
	N0°24'E	40.20	40.20		.28	
Totals			30.13	80.14	80.10	79.80
			80.14			80.10
Error in lat.			.01	Error in dep.		.30

John A. Kesse
 U.S. Dep. Surveyor

March 12, 1904

LIST OF NAMES.

BOOK 1808

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 subdivision lines in Tp 13 N. Rg. 3 W. showing the respective capacities in which they acted:

A. N. Oliver Chainman.

W. W. Oliver Chainman.

..... Moundman.

..... Moundman.

S. R. Finley Axman.

..... Axman.

George Cassidy 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 subdivision lines of Tp 13 N. Rg. 3 W. &

..... 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

A. N. Oliver Chainman.

W. W. Oliver Chainman.

..... Moundman.

..... Moundman.

S. R. Finley Axman.

..... Axman.

George Cassidy Flagman.

Subscribed and sworn to before me this 12th day of March 1904, 189

John P. Hesse
U. S. Dep. Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John P. 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 26th day of December 1903, ~~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 subdivision lines of T. 13 N. R. 3 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 P. Hesse
United States Deputy Surveyor.

Subscribed by said John F. Hesse, and sworn to before me }
this 21 day of March, 1904

J. M. Watts
Clerk Dist Court



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

April 2nd 1904, 189

The foregoing field notes of the survey of and resurvey of the subdivisional lines of T. 13 N, R. 3 W of the Gila & Salt River Base and Meridian, Territory of Arizona

executed by John F. Hesse, U.S. Dep. Surveyor under his contract No., dated December 26, 1903, 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.
for 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.