

# FIELD NOTES

Accepted S. L. O. letter "C" dated Dec. 17, 1912  
OF THE SURVEY OF THE

*Proprietary Subdivision of T 70 P R 24 E*

Of the *T 70 P R* Meridian,

In the State of *Arizona*

EXECUTED BY

*Alfred N. Oliver*

In the capacity of U. S. <sup>Transitman</sup> ~~Surveyor~~, under instructions dated *July 28*, 1911, issued by the United States Surveyor General to govern surveys included in Group No. *5*, which were approved by the Commissioner of the General Land Office, *August 5*, 1911, pursuant to authority contained in the Act of Congress dated *March 4*, 1911.

Survey commenced *October 2*, 1911

Survey completed *October 3*, 1911

# INDEX DIAGRAM.

*Township* ..... , *Range* .....

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

700  
1A

BOOK 2336

# INDEX DIAGRAM.

Township 700, Range 24 E.

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 .....

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BCK 2336

PRELIMINARY OATHS OF ASSISTANTS.

WE, N. R. Harvey and R. L. Bates

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 P. 20 S. R. 24 E.

N. R. Harvey, Chainman.

R. L. Bates, Chainman.

Subscribed and sworn to before me this 2<sup>nd</sup> day of October, 1911



John P. Hesse  
U. S. Precursor

WE, J. J. Gardner 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 me to the best of my skill and ability, in the survey of the subdivision lines of P. 20 S. R. 24 E.

J. J. Gardner, Moundman.

Moundman.

Subscribed and sworn to before me this 2<sup>nd</sup> day of October, 1911



John P. Hesse  
U. S. Precursor

WE, J. C. Barnes and

do solemnly swear that I will well and truly perform the duties of axmen 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 subdivision lines of P. 20 S. R. 24 E.

J. C. Barnes, Axman.

Axman.

Subscribed and sworn to before me this 2<sup>nd</sup> day of October, 1911



John P. Hesse  
U. S. Precursor

I, A. W. Hendrix, 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 P. 20 S. R. 24 E.

A. W. Hendrix, Flagman.

Subscribed and sworn to before me this 2<sup>nd</sup> day of October, 1911



John P. Hesse  
U. S. Precursor

Chains.

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Survey commenced October 2, 1911, and executed with a W. and L.E.Gurley solar compass, not numbered. The horizontal limb is provided with two double verniers placed opposite to each other, and reading to single minutes of the arc, which is also the least count of the verniers of the latitude and declination arcs. The instrument was examined and approved by the Supervising Surveyor.

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 camp, near the  $\frac{1}{4}$  sec. cor. bet. secs. 1 and 36 on N. bdy. of T. 20 S., Rg. 24 E., latitude  $31^{\circ}43'47''N.$ ; longitude,  $109^{\circ}52'W.$ , I set off  $31^{\circ}44'N.$  on the lat. arc;  $3^{\circ}24'N.$  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 my station.

At 6h. 50m. p.m., by my watch, which has correct l.m.t., I observe Polaris at eastern elongation, in accordance with the 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.

October 2, 1911.

October 3: At 6h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris,  $1^{\circ}22'$  to the west, and mark the meridian thus determined by cutting a small groove in the stone set October 2, on which the meridian coincides with the mark determined by the solar.

At 7h. 00m. a.m., l.m.t., I set off  $31^{\circ}44'N.$  on the lat. arc;  $3^{\circ}27\frac{1}{2}'S.$  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; this mark coincides with the meridian determined by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians, respectively, 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., l.m.t., is  $N. 13^{\circ}15'W.$ ; the angle thus determined gives the magnetic declination  $13^{\circ}15'E.$

I commence at the cor. of secs. 1, 6, 7 and 12., heretofore described  
Thence I run,

in book "H" page 3.

West, bet. secs. 1 and 12.

Over rolling land, through dense brush.

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 1 in N. and S 12 in S. half; dig pits 18x18x12 ins. E. and W. of cor. 3 ft. dist., and raise a mound of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.00 Set a granite stone 18x12x10 ins., 14 ins. in the ground, for the cor. of secs. 1, 2, 11 and 12, marked with 5 notches on S. and 1 notch on E. faces; raise a mound of stone 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

Land, rolling.

Soil, rocky and worthless, 4th rate.

No timber. Undergrowth, mesquite and catclaw.

October 3: At this cor. I set off  $3^{\circ}44'S.$  on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is  $31^{\circ}43'N.$

Chains.

N. <sup>0°01'W</sup> bet. secs. 1 and 2.

40.00

Over rolling land, through dense brush.  
Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4}$ S2 in W. and S1 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of cor. 3 ft. dist., and raise a mound of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  high, W. of cor.

54.59

From this cor. James McKinney's house bears N.72 30'E.  
Geo. River's house bears S.89 35'E.  
James McKinney's house bears S.81 E.  
Geo. River's house bears S.74 E.

81.32

Fall 6.98 chs. W. of  $\frac{1}{4}$  sec. cor. on S. bdy. of sec. 36.  
Set a granite stone 18 x 10x 8 ins. 14 ins. in the ground for closing cor. of secs. 1 and 2, marked CC on S., 1 notch on E. and 5 notches on W. faces; dig pits 24 x 18 x 12 ins. crosswise on each line, E. and W. 3 ft. and S. of cor. 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, S. of cor.

Land, rolling.  
Soil, rocky and worthless, 4th rate.  
No timber.  
Undergrowth, mesquite and catclaw.

October 3, 1911.

*Alfred N. Oliver*

U.S. Transitman.

General Description.

This township is rolling and mountainous, and the soil runs from 1st. to 4th. rate. There is no timber or water in the township. This fractional subdivision was made to survey the claims of Geo. Rivers and Balis McKinney who are located in this sec. 1, and who had applied for the survey of T. 20 S. R. 25 E.

*Transitman*  
FINAL OATHS OF ~~DEPUTY~~ SURVEYOR AND HIS ASSISTANTS.

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LIST OF NAMES.

BOOK 2336

A list of the names of the individuals employed by John P. Hesse

....., United States ~~Deputy Surveyor~~, to assist in running, measuring, and  
*Transitman*

marking the lines and corners described in the foregoing field notes of the survey of the

subdivision lines of P. 20 S R. 24 E.

showing the respective capacities in which they acted:

H. R. Harvey....., Chainman.

R. L. Bates....., Chainman.

J. L. Gardner....., Moundman.

....., Moundman.

E. Barnes....., Axman.

....., Axman.

A. W. Hendrix....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfred N. Oliver

....., United States ~~Deputy Surveyor~~, in surveying all  
*Transitman*  
those parts or portions of the subdivision lines of P. 20 S R. 24 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

H. R. Harvey....., Chainman.

R. L. Bates....., Chainman.

J. L. Gardner....., Moundman.

....., Moundman.

E. Barnes....., Axman.

....., Axman.

A. W. Hendrix....., Flagman.

Subscribed and sworn to before me this 3<sup>rd</sup>  
day of October, 1911

John P. Hesse  
U. S. Transitman



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

405  
2336

I, Alfred N. Oliver, United States <sup>Transitman</sup> Deputy Surveyor, do solemnly swear that, in pursuance of <sup>instructions</sup> a contract received from Frank C. Ingalls United States Surveyor General for Arizona, bearing date of the 28<sup>th</sup> day of July 1911, 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 Pp. 20 S. Rg. 24 E.

of the 61<sup>st</sup> 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.

Alfred N. Oliver

United States ~~Deputy Surveyor~~ <sup>Transitman</sup>

Subscribed by said Alfred N. Oliver, and sworn to before me }  
this 7<sup>th</sup> day of August, 1912



Frank C. Ingalls

SURVEYOR-GENERAL OF ARIZONA

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Frank C. Ingalls, Aug 3, 1912

The foregoing field notes of the survey of the fragmentary

Subdivision of Tp. 20 S. Rg. 24 E.

executed by Alfred N. Oliver under ~~his~~ <sup>contract</sup> No. 5, dated Aug 25, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank C. 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.