

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

AUG. 2-1917

FIELD NOTES

OF

MAR. 20. 1918

HOMESTEAD ENTRY SURVEY NO. 481

SITUATED IN THE APACHE NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 34 , unsurveyed, Township 4 $\frac{1}{2}$ N. Range 29 E.
In Section 35 , unsurveyed, Township 4 $\frac{1}{2}$ N., Range 29 E.

of the

Gila and Salt River Base and Meridian.

State of

ARIZONA

Applicant for listing Hiram Thompson, ✓

Residence Alpine, Arizona

Application No. 302 , dated November 28 , 1913

List No. 3-3011 ✓ , dated January 15 , 1914 ✓

*Revised upon appl-
302 dated Nov. 28, 1913
according to list letter.*

Applicant for survey Hiram Thompson, ✓

Residence Alpine, Arizona

H. E. No. 025385 ✓ , dated July 3 , 1914 ✓

Office
Land District Phoenix, Arizona

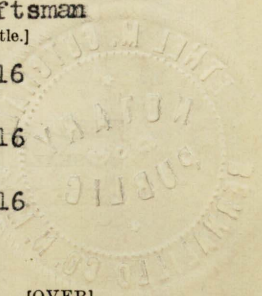
Survey executed by R. P. A. Johnson, Surveyor - Draftsman
[Forest Service Title.]

Under special instructions dated June 21 , 1916

Survey commenced September 5 , 1916

Survey completed September 5 , 1916

Under Acts of June 11, 1906 and August 11, 1916 ✓



OATH OF ASSISTANTS

We hereby certify that we assisted R. P. A. Johnson
Surveyor Draftsman [Forest Service Title.] in surveying all those
 parts or portions of Homestead Entry Survey No. 481, in the State
 of Arizona which are represented in the following 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 estab-
 lished, according to the instructions furnished by the United States
 Surveyor General for Arizona

Note: It would have been very expensive and incon-
 venient to appear before an officer to administer oaths to Assistants; hence, they were taken by the Surveyor.

Chester A. Lee, Chairman
Howard B. Ricketts,
 ----- Chairman

Subscribed and sworn to before me this twenty seventh day of
September, 1916.

R. P. A. Johnson
Surveyor Draftsman

OATH OF SURVEYOR

I, R. P. A. Johnson, Surveyor Draftsman
 [Forest Service Title.] do solemnly swear that, in strict conformity with the special instruc-
 tions of the United States Surveyor General for Arizona, dated
June 21, 1916, and the laws of the United States, I have
 well, faithfully, and truly, in my own proper person, surveyed a tract
 of land embraced in

List patent No. 3-3011, dated January 15, 1914, for
June 11, 1906,
 the same to be known as Homestead Entry Survey No. 481,
 situated within the Sprache National Forest, in
unsurveyed Section 34, Township 4 1/2 N, Range 29 E, and
unsurveyed Section 35, Township 4 1/2 N, Range 29 E,

of the Gila and Salt River meridian, Arizona, and the
 related retracements and resurveys and section subdivisions, which are
 represented in the following field notes as having been surveyed by me;
 and I further solemnly swear that all the corners of said survey have
 been established and perpetuated in strict accordance with the stated
 special instructions, and in the specific manner described in the field
 notes, and that the following are the original field notes of such
 survey.

R. P. A. Johnson
Surveyor Draftsman
 [Forest Service Title.]

Subscribed and sworn to before me this twelfth day of
April, 1917.

Ethel M. Gutchall
Notary Public



My Commission expires Mar. 17 1921

APACHE NATIONAL FOREST

STATE OF ARIZONA

Chains

Applicant for listing, Hiram Thompson; Application No. 302, dated November 28, 1913; List No. 3-3011, dated January 15, 1914; H. E. 025385, made in the Phoenix Land Office on July 3, 1914 by Hiram Thompson.

Surveyed under special instructions from the Surveyor General for Arizona, dated June 21, 1916 and designated as Homestead Entry Survey No. 481.

Situated in what will probably be, when surveyed, secs. 34 and 35, T. 4-1/2 N., R. 29 E., Gila and Salt River Base and Meridian, Apache National Forest, Arizona.

Surveyed under the Acts of June 11, 1906 and August 11, 1916.

Survey commenced September 5, 1916 and executed with a Buff and Buff transit equipped with Smith solar attachment.

I test the adjustments of the transit and make necessary corrections.

All distances are horizontal and were reduced from measurements made directly on the slope with a 500 link steel tape. The slope angles were determined with a clinometer.

September 5, 1916, p.m.

I observe the altitude of the sun for azimuth at cor. No. 3 of this survey, hereinafter described. The reading on the reference object is set at zero and the sun was observed in the upper left and lower right quadrants of the field. My watch is set for local mean time. Lat. $33^{\circ} 44' N.$, Long. $109^{\circ} 19' 45'' W.$, from the special instructions from the Surveyor General, and later verified.

HOMESTEAD ENTRY SURVEY NO. 481

APACHE NATIONAL FOREST

STATE OF ARIZONA

Chains	Telescope	Time	Horizontal Angle	Vertical Angle
	Direct	3h. 17m. 05s.	7° 45' 30"	37° 07' 30"
	Reversed	3h. 18m. 16s.	7° 20' 30"	37° 24' 30"

Bearing of reference object, N. 0° 03' 44" E.

I again observe the altitude of the sun for azimuth at the same station. The reading on the reference object is set at zero and the sun was observed in the upper left and lower right quadrants of the field. My watch is set for local mean time.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	3h. 19m. 12s.	71° 20' 30"	36° 31' 30"
Reversed	3h. 20m. 03s.	70° 53' 00"	36° 52' 00"

Bearing of reference object, N. 0° 03' 07" E.

The mean of these is N. 0° 03' 26" E. and to the corresponding meridian all the courses of this survey are referred.

BOUNDARIES OF CLAIM

Beginning at cor. No. 1.
 Identical with cor. H-2 of the list survey, which is a lava stone 6 x 8 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a lava stone 6 x 5 x 3 ins. marked with a +, 14 ins. in the ground, over which set a lava stone 24 x 9 x 6 ins. chiseled + for the point and 1 - H E S 481 on SE. face; and raise a mound of stone 3 ft. base, 2 ft. high SE. of cor., whence:

A yellow pine, 14 ins. dia., bears N. 34° 54' E., 38 lks. dist., scribed
 1 H E S 481 + B T.

APACHE NATIONAL FOREST

STATE OF ARIZONA

Chains A yellow pine, 26 ins. dia., bears S. 2° 50' E.,
57 lks. dist., scribed 1 H E S 481 + B T.
1/4 cor. bet. secs. 13 and 18, T. 4 N., Rs. 28
and 29 E., which is a lava stone 16 x 8 x 20
ins. above ground, in mound of stone, chis-
eled 1/4 on W. face, and witnessed by a
yellow pine, 20 ins. dia., N. 52° 40' W.,
64 lks., scribed 1/4 S 13 B T, and a yellow
pine, 36 ins. dia., S. 45° E., 23 lks.,
scribed 1/4 S 18 B T, bears N. 85° 42' 49" W.,
69.30 chs. dist., by traverse which appears
at the end of these notes.

Lat. 33° 44' 15" N., Long. 109° 20' 17" W., from special
instructions from the Surveyor General, and later
verified.
Mag. decl. at 8 a.m. 13° 45' E. Mean mag. decl., 13°
42' E.

Thence S. 84° 22' E.

Ascend 20 ft. in timber to spur.

1.35 Top spur, bears NE. and SW. Descend steep rocky slope
120 ft. to creek.

7.70 Fence bears NE. and SW.

8.75 Bottom slope. Enter cultivated land.

10.70 John's Creek, running water 3 lks. wide, 3 ins. deep,
course S. Ascend 20 ft. along edge of timber to
point of hill.

13.00 Top ascent. Descend 20 ft. to creek in edge of timber.

20.50 Creek, running water 2 lks. wide, 2 ins. deep, course
SW. Ascend 120 ft. in timber to spur.

28.10 Top of spur, bears NE. and SW. Descend 150 ft. in
scattered timber to cor.

37.54 To cor. No. 2.

Also cor. No. 1 of H. E. S. 482.
Identical with cor. H-1 of List 3-3011 and cor. H-4
of List 3-2311, which is a lava stone 6 x 6 x 6 ins.

Chains

above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a lava stone 7 x 3 x 2 ins. marked with a +, 14 ins. in the ground, over which set a lava stone 24 x 8 x 8 ins., chiseled + for the point, 2 - H E S 481 on SW. face and 1 - H E S 482 on SE. face; and raise a mound of stone 3 ft. base, 2 ft. high SW. of cor., whence:

A yellow pine, 14 ins. dia., bears N. 17° 49' W., 156 lks. dist., scribed 2 H E S 481 + B T.

A yellow pine, 10 ins. dia., bears S. 70° 10' W., 151 lks. dist., scribed 2 H E S 481 + B T.

A yellow pine, 8 ins. dia., bears N. 69° 02' E., 213 lks. dist., scribed 1 H E S 482 + B T.

A yellow pine, 12 ins. dia., bears N. 37° 15' E., 181 lks. dist., scribed 1 H E S 482 + B T.

Thence S. 9° 32' E.

Along line 1-3 and 4-10 of H. E. S. 482. Descend 20 ft. in open to creek. Fence on line.

2.57 Cor. of cultivated land, bears SW. and along line.

9.75 Cor. No. 3, H. E. S. 482, which is a lava stone 14 x 10 x 10 ins. above ground, marked 3 - H E S 482 on NE. face, with pits 24 x 24 x 12 ins. crosswise on lines N. 9° 32' W. and N. 84° 28' E., 8 ft. dist. and mound of earth 4 ft. base, 2 ft. high NE. of cor.

10.25 Cor. No. 4, H. E. S. 482, which is a lava stone 10 x 8 x 10 ins. above ground, marked 4 - H E S 482 on SE. face, with pits 24 x 24 x 12 ins. crosswise on lines S. 9° 32' E. and N. 84° 28' E., 7 ft. dist. and mound of earth 4 ft. base, 2 ft. high SE. of cor.

Thence along line 4-10 of H. E. S. 482.

16.30 Leave cultivated land, bears WNW. and along line.

16.35 North bank Beaver Creek, 6 ft. high.

16.40 Beaver Creek, running water 15 lks. wide, 1 foot deep,

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STATE OF ARIZONA

Chains course WNW.

16.60 South bank of Beaver Creek, 6 ft. high.

18.35 Road, bears ESE. and WNW.

18.56 Fence cor., fence bears WNW. and along line.

20.20 To cor. No. 3.

Identical with cor. H-4 of the list survey, which is a lava stone 12 x 9 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a lava stone 6 x 4 x 1 ins. marked with a +, 14 ins. in the ground, over which set a lava stone 24 x 14 x 9 ins., chiseled + for the point and 3 - H E S 481 on NW. face; and raise a mound of stone 3 ft. base, 2 ft. high NW. of cor., whence:

A yellow pine, 22 ins. dia., bears S. 10° 24' E.,
133 lks. dist., scribed 3 H E S 481 + B T.

A yellow pine, 6 ins. dia., bears S. 64° 51' W.,
77 lks. dist., scribed 3 H E S 481 + B T.

Cor. No. 10 H. E. S. 482, which is a lava stone
12 x 7 x 10 ins. above ground, marked 10 -
H E S 482 on E. face, bears S. 9° 32' E.,
11.87 chs. dist.

Thence N. 79° 23' W.

Ascend 60 ft. along N. slope to point of ridge in timber.

11.35 Top of ridge, bears N. and S. Descend 30 ft. to draw.

16.50 Foot descent. Enter small draw, drains NNE.

19.00 Arroyo, 15 lks. wide, 1 ft. deep, course NNE.

22.00 Leave draw and ascend 30 ft. to point.

26.50 Top ridge, bears N. and S. Descend 70 ft. in timber to bottom.

37.85 Foot of descent. Leave timber, thence over open level land to cor.

41.34 To cor. No. 4.

Chains

Identical with cor. H-3 of the list survey, which is a lava stone 8 x 6 x 5 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a lava stone 6 x 4 x 1 ins. marked with a +, 14 ins. in the ground, over which set a lava stone 24 x 14 x 9 ins., chiseled + for the point and 4 - H E S 481 on NE. face; and raise a mound of stone 3 ft. base, 2 ft. high NE. of cor., whence:

A yellow pine, 22 ins. dia., bears S. 10° 42' E., 133 lks. dist., scribed 4 H E S 481 + B T.

A yellow pine, 6 ins. dia., bears S. 64° 51' W., 77 lks. dist., scribed 4 H E S 481 + B T.

Thence N. 0° 22' W.

Descend 10 ft. in open to creek.

- 1.11 Fence, bears E. and W. Enter cultivated land.
- 8.18 Road bears NE. and SW. Leave cultivated land.
- 8.30 South bank of Beaver Creek, 7 ft. high.
- 8.55 Beaver Creek, running water 20 lks. wide, 1 ft. deep, course W. Ascend 120 ft. to spur in scattered timber.
- 9.00 North bank Beaver Creek, 7 ft. high.
- 10.70 Fence bears NE. and SW.
- 14.45 Spur bears NE. and SW.
- 15.97 To cor. No. 1, the place of beginning.

AREA

Total Area - - - - - 69.00 acres

IMPROVEMENTS

The improvements made upon this claim and belonging to the claimant, consist of the following:

A log house, 20 x 15 ft., the long side of which bears E. and W. and the SW. cor. of which bears S. 83° 30' E.,

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STATE OF ARIZONA

Chains

16.18 chs. dist. from cor. No. 1.

Value ----- \$150.00

A barn, 35 x 22 ft., the long side of which bears N. and S. and the SE. cor. of which bears N. 60° 16' E.,
22.60 chs. dist. from cor. No. 4.

Value ----- \$200.00

There is approximately 1-1/2 mile of wire fence.

Value ----- \$175.00

DESCRIPTION

This claim lies on Beaver Creek bottom, extending on to the steep rough slope to N. and S. The general slope is to the West and the elevation is approximately 7600 ft.

The timber is a fair stand of yellow pine on the N. and S. slopes. The bottom land is open.

The soil on bottom is a clayey loam, of good depth, fertile and produces good crops. The soil on the slopes is rocky, shallow and non-tillable.

Beaver and John's Creeks furnish sufficient water for irrigation and domestic use.

There are approximately 30 acres in cultivation.

I saw no indication of mineral upon the claim.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicts. H. E. S. No. 482 of Martin Sulzberger adjoins this claim on the E.

Alpine, Arizona, the nearest post office, is 20 miles distant by poor road. Springerville, Arizona, the nearest commercial center, is 50 miles distant, and Holbrook, Arizona, the nearest railroad point, is 150 miles distant.

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STATE OF ARIZONA

Chains		TRAVERSE				
Cor.	Course	Dist.	N	S	E	W
1-2	S. 84° 22' E.	37.54		3.69	37.36	
2-3	S. 9° 32' E.	20.20		19.92	3.35	
3-4	N. 79° 23' W.	41.34	7.62			40.63
4-1	N. 0° 22' W.	15.97	15.97			0.10
		115.05	23.59	23.61	40.71	40.73
Error in Lat. and Dep.				23.59		40.71
				.02		.02

Closing error, 1:4066.

Survey completed September 5, 1916.

R. B. Johnson

Surveyor - Draftsman

HOMESTEAD ENTRY SURVEY NO. 481

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar September 5, 1916, at Cor. No. 3, H.E.S. 481.

Lat. 33° 44' N., Long. 109° 19' 45" W., Elevation, 7600 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	3h. 17m. 05s.	70° 45' 30"	37° 07' 30"	+
Reversed	3h. 18m. 16s.	70° 20' 30"	37° 24' 30"	-
	3h. 17m. 40s.	70° 33' 00"	37° 16' 00"	
			01' 00"	
			37° 15' 00"	

Decl. 6° 41' N.

$$\text{Cos. Q.} = \frac{\sin. 6^\circ 41'}{\cos. 33^\circ 44' \times \cos. 37^\circ 15'}$$

$$\frac{\tan. 33^\circ 44' \times \tan. 37^\circ 15'}{\tan. 33^\circ 44' \times \tan. 37^\circ 15'}$$

log. sin. 6° 41' 00" = 9.065885 ✓
 log. cos. 33° 44' 00" = 9.919931 ✓
 log. cos. 37° 15' 00" = 9.900914 ✓
9.245040 = log. .17581 ✓

log. tan. 33° 44' 00" = 9.824619 ✓
 log. tan. 37° 15' 00" = 9.881052 ✓
9.705671 = log. .50777 ✓

Cos. Q. = .33196 ✓
 Q. = 70° 36' 44" ✓

Bearing of reference object, N. 0° 03' 44" E. ✓

(2)

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	3h. 19m. 12s.	71° 20' 30"	36° 31' 30"	+
Reversed	3h. 20m. 03s.	70° 53' 00"	36° 52' 00"	-
	3h. 19m. 37s.	71° 06' 45"	36° 41' 45"	
			01' 00"	
			36° 40' 45"	

Decl. 6° 41'

log. sin. 6° 41' 00" = 9.065885 ✓
 log. cos. 33° 44' 00" = 9.919931 ✓
 log. cos. 36° 40' 45" = 9.904170 ✓
9.241784 = log. .17449 ✓

log. tan. 33° 44' 00" = 9.824619 ✓
 log. tan. 36° 40' 45" = 9.872046 ✓
9.696665 = log. .49735 ✓

Cos. Q. = .32286 ✓
 Q. = 71° 09' 52" ✓

Bearing of reference object, N. 0° 03' 07" E. ✓

HOMESTEAD ENTRY SURVEY NO. 1000

STATE OF ALABAMA NATIONAL FOREST

STATE OF ALABAMA

Chains

Telescope	Time	Horizontal Angle	Vertical Angle	Sum
Direct 31. 12m. 03s.		70° 43' 30"	27° 01' 30"	
Reversed 31. 12m. 13s.		70° 30' 30"	27° 24' 30"	
<hr/>				
31. 12m. 03s.		70° 35' 00"	27° 13' 00"	
<hr/>				
Decl. 8° 41' W.				

$\cos. 8^\circ = \frac{\text{adj.}}{\text{hyp.}}$
 $\cos. 33^\circ 44' \times \cos. 37^\circ 15' = \text{adj.}$
 $\cos. 33^\circ 44' \times \tan. 37^\circ 15' = \text{opp.}$
 $\log. \sin. 8^\circ 41' 00'' = 9.058885$
 $\log. \cos. 33^\circ 44' 00'' = 9.919921$
 $\log. \cos. 37^\circ 15' 00'' = 9.900314$
 $\log. \text{adj.} = 9.919921 - 9.900314 = 9.919607$
 $\log. \text{tan. } 33^\circ 44' 00'' = 9.846419$
 $\log. \text{tan. } 37^\circ 15' 00'' = 9.881038$
 $\log. \text{opp.} = 9.919607 - 9.881038 = 9.919607 - 9.881038 = 9.919607$
 $\cos. 8^\circ = \frac{\text{opp.}}{\text{hyp.}}$
 $\cos. 8^\circ = \frac{9.919607}{\text{hyp.}}$
 $\text{hyp.} = \frac{9.919607}{\cos. 8^\circ} = 9.919607 \times 1.000154 = 9.919607$

Bearing of reference object, N. 0° 03' 44" E.

Telescope	Time	Horizontal Angle	Vertical Angle	Sum
Direct 31. 12m. 13s.		71° 30' 30"	26° 31' 30"	
Reversed 31. 12m. 03s.		70° 53' 00"	26° 33' 00"	
<hr/>				
31. 12m. 03s.		71° 08' 45"	26° 41' 15"	
<hr/>				
Decl. 8° 41' W.				

$\log. \sin. 8^\circ 41' 00'' = 9.058885$
 $\log. \cos. 33^\circ 44' 00'' = 9.919921$
 $\log. \cos. 37^\circ 40' 48'' = 9.900314$
 $\log. \text{adj.} = 9.919921 - 9.900314 = 9.919607$
 $\log. \text{tan. } 33^\circ 44' 00'' = 9.846419$
 $\log. \text{tan. } 37^\circ 40' 48'' = 9.873066$
 $\log. \text{opp.} = 9.919607 - 9.873066 = 9.919607 - 9.873066 = 9.919607$
 $\cos. 8^\circ = \frac{\text{opp.}}{\text{hyp.}}$
 $\cos. 8^\circ = \frac{9.919607}{\text{hyp.}}$
 $\text{hyp.} = \frac{9.919607}{\cos. 8^\circ} = 9.919607 \times 1.000154 = 9.919607$

Bearing of reference object, N. 0° 03' 07" E.

- DIRECTIONS.—1. Carry out calculations to two decimals only.
2. In balancing Latitudes and Departures do not obliterate or change the original figures. Put the corrected figure or figures above in red ink. Do not change the footing of the original figures, but put below them the corrected footing in red ink.
3. In calculations for balancing fallings should be proportional to the lengths of the lines. In calculations of N. and S. areas drop all after second decimal. Surveyors are required to use the Standard Field Tables issued by the G. L. O.
4. Only three copies of this tabulation are necessary, for the District Office, the Surveyor General, and the Commissioner.

TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 481, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
		Tie from cor.	No. 1 to 1/4 sec. cor. bet. secs. 13 and 18.						
	S. 84° 22' E.	37.54	3 69	37 36					
	S. 9° 32' E.	32.07	31 63	5 31					
	S. 55° 30' E.	25.81	14 62	21 27					
	S. 28° 25' W.	27.85	24 49		13 25				
	N. 57° 22' W.	35.51	19 15		29 90	log.	69.11	1.839541	
	S. 14° 40' W.	17.00	16 45		4 30	log.	5.18	10.714330	
	S. 87° 50' W.	86.06	3 25		86 00	log. tan.	85° 42' 49"	11.125211	
	N. 0° 17' E.	80.16	80 16	0 40					
			99 31	64 34	133 45				
			94 13		64 34				
			5 18		69 11	log. sin.	69.11	1.839541	
						log. sin.	85° 42' 49"	1.998784	
							69.30	1.840757	

15

E. 9. 17

APPROVAL

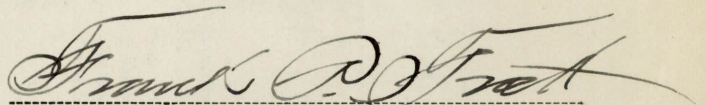
Office of the United States Surveyor General,

Phoenix, Arizona, June 29, 1918

The foregoing field notes of Homestead Entry Survey No.

481

executed by R. P. A. Johnson, Surveyor Draftsman [Forest Service Title.]
under his special instructions, dated June 21, 1916, having
been critically examined, and the necessary corrections and explanations
made, the said field notes, and the surveys they describe, are hereby
approved.



U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the
above-described survey in the State of Arizona, has been
correctly copied from the original notes on file in this office.

FRANK P. TROTT

U. S. Surveyor General.