

ORIGINAL

29

U. S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

AUG. 2-1917

MAR-2 1918

NOV 22 1918

FIELD NOTES

OF

HOMESTEAD ENTRY SURVEY NO. 462

SITUATED IN THE SITGREAVES NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

Approximately

In Section 20 , unsurveyed, Township 11 N., Range 16 E.

In Section 21 , unsurveyed, Township 11 N., Range 16 E.

of the

Gila and Salt River Base and Meridian.

State of

ARIZONA

Applicant for listing Wm. W. Beard,

Residence Heber, Arizona

Application No. 489, dated September 10, 1913

List No. 3-3083, dated February 13, 1914

Applicant for survey Wm. W. Beard,

Residence Heber, Arizona

H. E. No. 027773, dated January 27, 1916

Office
Land District Phoenix, Arizona

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

Under special instructions dated April 17, 1916

Survey commenced July 6, 1916

Survey completed July 6, 1916

Under Acts of June 11, 1906 and June 30, 1916

A. B. ... the 6-182 to 1-462
in error.

OATH OF ASSISTANTS

We hereby certify that we assisted R.P.A. Johnson
Surveyor Draftsman in surveying all those
[Forest Service Title.]
 parts or portions of Homestead Entry Survey No. 462, 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 inconvenient to appear before an officer to administer oaths to Assistants; hence, they were taken by the Surveyor.

Nelson A. Newman, Chainman

Chester A. Lee, Chainman

Subscribed and sworn to before me this fourteenth day of
August, 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
April 17, 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. 3-3083, dated February 13, 1914, for
June 11, 1906, under the Act of June 11, 1906,
 the same to be known as Homestead Entry Survey No. 462,
 situated within the Sitgreaves National Forest, in approximately
1/4 surveyed Section 20, Township 11N, Range 16E, and
1/4 surveyed Section 21, Township 11N, Range 16E,

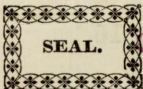
of the Gila and Salt River Basins meridian, Arizona, and the
 related retracements and resurveys and section subdivisions, which are
 represented in the following field notes as having been surveyed by me;
 and I further solemnly swear that all the corners of said survey have
 been established and perpetuated 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.

DISTRICT OF COLUMBIA
 CITY OF WASHINGTON

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

Subscribed and sworn to before me this 27th day of
February, 1917.

Sylvester L. McPherson
 NOTARY PUBLIC, D. C.



Commission expires
 June 20, 1918.
 8-2349

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Applicant for listing, W. W. Beard; Application No. 489, dated September 10, 1913; List No. 3-3083, dated February 13, 1914; H. E. 027773, made in the Phoenix Land Office on January 27, 1916 by Wm. W. Beard.

Surveyed under special instructions from the Surveyor General for Arizona, dated April 17, 1916 and designated as Homestead Entry Survey No. 462.

Situated in unsurveyed T. 11 N., R. 16 E., in what will probably be, when surveyed, Secs. 20 and 21, Gila and Salt River Base and Meridian, Sitgreaves National Forest, Arizona.

Surveyed under the Acts of June 11, 1906 and June 30, 1916.

Survey commenced July 6, 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.

July 6, 1916, p.m.

I observe the altitude of the sun for azimuth at cor. No. 1 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. 34° 20' N., Long. 110° 40' 15" W. from special instructions from the Surveyor General, and Forest Service Base Map.

34° 20' 13"
110° 40' 32" W
at Cor. 1
no. 182

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains.	Telescope	Time	Horizontal Angle	Vertical Angle
	Direct	2h. 37m. 08s.	80° 54' 00"	54° 52' 30"
	Reversed	2h. 37m. 54s.	80° 22' 30"	55° 13' 00"

Bearing of reference object, N. 0° 01' 08" E.

I again observe the altitude of the sun for azimuth at 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.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	2h. 39m. 37s.	81° 24' 00"	52° 22' 30"
Reversed	2h. 40m. 23s.	80° 50' 30"	54° 43' 00"

Bearing of reference object, N. 0° 00' 21" W.

The mean of these is N. 0° 00' 44" E. and to the corresponding meridian, all the courses of this survey are referred.

TIE

From cor. No. 1, hereinafter described:

Thence S. 67° 03' 44" W.

By traverse which appears at end of these notes.

18.45 To U. S. L. M. No. 182 H. E. S. which is a limestone

14 x 8 x 12 ins. above ground, marked U S L M No 182

H E S on W. face, with mound of stone 6 ft. base, 4 ft. high alongside cor.

BOUNDARIES OF CLAIM

Beginning at cor. No. 1.

Identical with cor. H-1 of the list survey, which is a sandstone 12 x 4 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a sandstone

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

4 x 3 x 2 ins. marked with a +, 14 ins. in the ground, over which set a limestone 24 x 12 x 8 ins., chiseled + for the point and 1 - H E S 462 on E. face; and raise a mound of stone 3 ft. base, 2 ft. high E. of cor., whence:

A yellow pine, 18 ins. dia., bears N. 7° 52' E., 71 lks. dist., scribed 1 H E S 462 + B T.

A yellow pine, 18 ins. dia., bears S. 49° 19' E., 87 lks. dist., scribed 1 H E S 462 + B T.

Cor. No. 6, H. E. S. 182, which is a limestone 8 x 4 x 10 ins. above ground, bears N. 0° 15' W., 215 lks. dist., by direct measurement.

U. S. L. M. No. 182, heretofore described, bears S. 67° 03' 44" W., 18.45 chs. dist.

Lat. 34° 20' N., Long. 110° 40' 15" W., from special instructions from the Surveyor General, and Forest Service Base Map.

Mag. decl. at 3:00 p.m., 14° 15' E. Mean mag. decl., 14° 17' E.

Thence N. 38° 45' E.

Descend 15 ft. in open to wash.

1.23 Road bears N. 43° W. and S. 43° E.

3.65 Wash, 40 lks. wide, 4 ft. deep, course N. 40° W.

Thence over open level land to cor.

5.69 To cor. No. 2.

Identical with cor. H-5 of the list survey, which is a limestone 20 x 12 x 6 ins. in mound of stone, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Point for cor. falls on a limestone 24 x 16 x 24 ins. above ground. I mark + on top for point and 2 - H E S 462 to South; and raise a mound of stone 3 ft. base, 2 ft. high S. of cor., whence:

A yellow pine, 22 ins. dia., bears S. 47° 56' E., 56 lks. dist., scribed 2 H E S 462 + B T.

Chains	<p>A yellow pine, 22 ins. dia., bears N. 62° 06' E., 61 lks. dist., scribed 2 H E S 462 + B T.</p> <hr/> <p>Thence S. 35° 53' E. In open, over level land.</p> <p>1.10 Fence cor., fence bears SW. and SE. Enter cultivated land.</p> <p>12.50 Leave cultivated land. Enter wash, banks 3 ft. high.</p> <p>16.70 Leave wash, banks 3 ft. high, course NNW.</p> <p>19.00 Enter wash, banks 3 ft. high, course NNW.</p> <p>20.50 Leave wash, banks 3 ft. high, course NNW. Ascend 20 ft. in open to cor.</p> <p>37.20 Fence bears NE. and SW.</p> <p>38.38 To cor. No. 3.</p> <p>Identical with cor. H-4 of the list survey, which is a limestone 16 x 12 x 8 ins. in mound of stone, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Point for cor. falls on top of limestone boulder in place 6 x 6 x 2 ft. above ground. I mark + for point and 3 - H E S 462 to NW.; and raise a mound of stone 3 ft. base, 2 ft. high NW. of cor., whence:</p> <p>A yellow pine, 14 ins. dia., bears S. 71° 55' E., 19 lks. dist., scribed 3 H E S 462 + B T.</p> <p>A yellow pine, 18 ins. dia., bears S. 9° 40' W., 47 lks. dist., scribed 3 H E S 462 + B T.</p> <hr/> <p>Thence S. 68° 37' W. Descend 25 ft. in open to wash.</p> <p>1.50 Fence bears NE. and SW. Enter cultivated land.</p> <p>4.35 Fence bears NW. and SE. Leave cultivated land.</p> <p>7.00 Wash, 30 lks. wide, 2 ft. deep, course N. Ascend 25 ft. to ridge in timber.</p> <p>11.20 Top ridge, bears N. and S. Descend 25 ft. to wash in</p>
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SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains timber.

18.70 Wash, 50 lks. wide, 3 ft. deep, course N. 13° E.
Thence over level land in timber to cor.

23.06 To cor. No. 4.
Identical with cor. H-3 of the list survey, which is a sandstone 12 x 7 x 8 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a sandstone 4 x 4 x 1 ins. marked with a +, 14 ins. in the ground, over which set a sandstone 24 x 8 x 6 ins., chiseled + for the point and 4 - H E S 462 on NE. face. No stones available for mound, therefore dig pits 24 x 24 x 12 ins. crosswise on claim lines 8 ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high NE. of cor., whence:
A yellow pine, 12 ins. dia., bears N. 44° 40' W., 14 lks. dist., scribed 4 H E S 462 + B T.
A yellow pine, 24 ins. dia., bears S. 48° 03' W., 20 lks. dist., scribed 4 H E S 462 + B T.

Thence N. 16° 41' E.
Ascend 10 ft. along E. slope and edge of timber.
Fence on line.

18.50 Top ascent. Descend 10 ft. to cor.

21.87 To cor. No. 5.
Identical with cor. H-2 of the list survey, which is a diorite stone 16 x 10 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a sandstone 3 x 2 x 2 ins. marked with a +, 14 ins. in the ground, over which set a limestone 24 x 8 x 4 ins., chiseled + for the point and 5 - H E S 462 on E. face; and raise a mound of stone 3 ft. base, 2 ft. high E. of cor., whence:

Chains

A yellow pine, 40 ins. dia., bears N. 24° E.,
 11 lks. dist., scribed 5 H E S 462 + B T.
 A yellow pine, 16 ins. dia., bears S. 62° 42' W.,
 57 lks. dist., scribed 5 H E S 462 + B T.

Thence N. 37° 35' W.

Ascend 10 ft. along NE. slope in edge of timber to cor.
 Fence on line.

17.84 To cor. No. 1, the place of beginning.

AREA

Total Area - - - - - 34.30 acres

IMPROVEMENTS

All the improvements made upon this claim were destroyed
 by fire shortly before survey was made, with the ex-
 ception of one and one-half miles of wire fence.

Value ----- \$150.00

DESCRIPTION

This claim lies at the junction of East and West Forks
 of Turkey Spring draw, and just above junction of
 Turkey Spring Draw with Black Canyon. The elevation
 is 7000 ft. and general slope is to the NNW.

The soil in bottom is a rich black loam of good depth.
 It is fertile and produces good crops. The soil on
 the slopes is rocky, shallow and of low agricultural
 value.

The timber consists of approximately 4 acres of good
 yellow pine located along South and West boundaries.

There is no water for irrigation or domestic use. Water
 for domestic use can be obtained from Black Canyon,
 1/4 mile distant.

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

This land is not known to contain mineral.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicting or adjoining claims. H. E. S. 182 is a few chains to the NW.

Heber, Arizona, the nearest post office, is approximately 8 miles NNE. and is reached by poor wagon road. Holbrook, Arizona, the nearest railroad and commercial center is 56 miles to the North and is reached by 8 miles of poor and 48 miles of good wagon road.

TRAVERSE

Cor.	Course	Dist.	N	S	E	W
1-2	N. 38° 45' E.	5.69	4.44 [✓]		3.56 [✓]	
2-3	S. 35° 53' E.	38.38		31.10 [✓]	22.50 [✓]	
3-4	S. 68° 37' W.	23.06		8.41 [✓]		21.47 [✓]
4-5	N. 16° 41' E.	21.87	20.95 [✓]		6.28 [✓]	
5-1	N. 37° 35' W.	17.84	14.14			10.88
		106.84	39.53	39.51	32.34	32.35
Error in Lat. and Dep.			39.51			32.34
			.02			.01

Closing error, 1:4770.[✓]

Survey completed July 6, 1916.

Note: The tie from Cor. 1 of H E S 462 to Cor. 6 of H E S 182 does not agree with the connection bet. the two said corners, as reported in survey No. 182, accepted Nov. 27, 1917. However, as this connection, of record in Survey No. 462, checks with the ties of the two surveys to U.S. L.M.No. 182 H E S, and with the connection bet. Cors. 5 and 2, of Surveys 182 and 462, respectively, as of record in Survey 182, the connection bet. Cors. 1-462 & 6-182 as reported in Sur. 182 is hereby reported in error.

R. L. Johnson

Surveyor - Draftsman

Chains

This land is not known to contain minerals.
There are no conflicting or adjoining claims.
182 is a few chains to the NW.
Haber, Arizona, the nearest post office, is approximately
8 miles WNW, and is reached by poor wagon road.
Brook, Arizona, the nearest railroad and commercial
center is 66 miles to the north and is reached by
miles of poor and 68 miles of good wagon road.

TRAVELER

Cor.	Course	Dist.	N	S	E	W
1-8	N. 38° 45' E.	6.52	4.44			3.30
2-3	S. 36° 33' E.	33.38		31.10		23.50
3-4	S. 68° 37' W.	23.06			3.41	11.47
4-5	N. 16° 41' E.	21.87	20.95			6.23
5-1	E. 37° 35' W.	17.84	14.14			10.88
		106.84	30.33	30.51	33.94	33.34
			30.31			11.34
			30.			11.

Error in lat. and dep.
Closing error, 1:4770.

Survey completed July 6, 1916.
Note: The tie from Cor. 1 to H 8 452 to Cor. 5 of H 8 2
182 does not agree with the connection bet. the two
corners, as reported in survey No. 182, accepted by
1917. However, as this connection, as reported in
No. 452, checks with the ties of the two surveys, 182
and 452, and with the connection bet. Cor. 5
and 8, of Survey 182 and 452, respectively, as reported
in survey 182, the connection bet. Cor. 1-452 & 182
as reported in Sur. 182 is hereby revised in error.

[Signature]
Surveyor - Assistant

HOMESTEAD ENTRY SURVEY NO. 462

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar, July 6, 1916 at cor. No. 1

H. E. S. 462 of W. W. Beard.

Lat. 34° 20' N., Long 110° 40' 15" W. Elevation 7000 ft.

Telescope	Time	Horizontal Angle	Vertical Angle
' Direct	2h. 39m. 37s.	81° 24' 00"	54° 22' 30"
' Reversed	2h. 40m. 23s.	80° 50' 30"	54° 43' 00"
	2h. 40m. 00s.	81° 07' 15"	54° 32' 45"
			32" ✓
			54° 32' 13" ✓

Decl. 22° 40' 03" ✓

$$\text{Cos. } Q. = \frac{\sin. 22^\circ 40' 03''}{\cos. 34^\circ 20' \times \cos. 54^\circ 32' 13''} - \frac{\tan. 34^\circ 20' \times \tan. 54^\circ 32' 13''}{\cos. 54^\circ 32' 13''}$$

$$\begin{aligned} \log. \sin. 22^\circ 40' 03'' &= 9.585892 \checkmark \\ \log. \cos. 34^\circ 20' &= 9.916859 \checkmark \\ \log. \cos. 54^\circ 32' 13'' &= 9.763562 \checkmark \\ &= 9.905471 = \log. .80440 \checkmark \end{aligned}$$

$$\begin{aligned} \log. \tan. 34^\circ 20' &= 9.834425 \checkmark \\ \log. \tan. 54^\circ 32' 13'' &= 10.147325 \checkmark \\ &= 9.981750 = \log. .95885 \checkmark \end{aligned}$$

$$\begin{aligned} \text{Cos. } Q. &= .15445 \checkmark \\ Q. &= 81^\circ 06' 54'' \checkmark \end{aligned}$$

Bearing of reference object, N. 0° 00' 21" W.

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar, July 6, 1916 at cor. No. 1

H. E. S. 462 of W. W. Beard.

Lat. 34° 20' N., Long. 110° 40' 15" W. Elevation 7000 ft.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	2h. 37m. 08s.	80° 54' 00"	54° 52' 30"
Reversed	2h. 37m. 54s.	80° 22' 30"	55° 13' 00"
	2h. 37m. 31s.	80° 38' 15"	55° 02' 45" 32" ✓
			55° 02' 13" ✓

Decl. 22° 40' 04" ✓

$$\text{Cos. } Q = \frac{\sin. 22^\circ 40' 04''}{\cos. 34^\circ 20' \times \cos. 55^\circ 02' 12''} - \frac{\tan. 34^\circ 20' \times \tan. 55^\circ 02' 13''}{\cos. 55^\circ 02' 12''}$$

$$\begin{aligned} \log. \sin. 22^\circ 40' 04'' &= +9.585897 \checkmark \\ \log. \cos. 34^\circ 20' &= -9.916859 \checkmark \\ \log. \cos. 55^\circ 02' 12'' &= -9.758194 \checkmark \\ \hline &= 9.910844 = \log. .81441 \checkmark \end{aligned}$$

$$\begin{aligned} \log. \tan. 34^\circ 20' &= 9.834425 \checkmark \\ \log. \tan. 55^\circ 02' 12'' &= 10.155365 \checkmark \\ \hline &= 9.989790 = \log. .97676 \checkmark \\ \text{Cos. } Q &= .16235 \checkmark \\ Q &= 80^\circ 39' 23'' \checkmark \end{aligned}$$

Bearing of reference object, N. 0° 01' 08" E.

DIRECTIONS.—1. Carry out calculations to two decimals only.
 2. In balancing Latitudes and Departures do not obliterate or change the original figures. Do not change the footing of the original figures, but put below them the corrected footing in red ink. 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. The corrections for balancing fallings should be proportional to the lengths of the lines.
 3. In calculations of fallings take result to nearest link. 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. 462, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
1-2	N. 38°-45' E.	5.69	4 44		3 56		3 56	15 81 [✓]	
2-3	S. 35° 53' E.	38.38		31 10	22 50		29 63	921 79 [✓]	
3-4	S. 68° 37' W.	23.06		8 41			30 67	258 24 [✓]	
4-5	N. 16° 41' E.	21.87	20 95		6 28		15 48	324 31 [✓]	
5-1	N. 37° 35' W.	17.84	14 14				10 88	153 84 [✓]	
		106.84	39 53	39 51	32 34		493 96	1180 03 [✓]	
	Closing error 1:4770		39 53	39 53	32 35			493 96 [✓]	
							686 07 [✓]	686 07 [✓]	
								34 30 [✓] Acres.	
Cor. 1 - Tp. 1	N. 55° 28' W.	6.11	3 46 [✓]						
Tp. 1 - Tp. 2	S. 74° 43' W.	4.19		1 10 [✓]					
Tp. 2 - Tp. 3	S. 52° 52' W.	9.09		5 49 [✓]			log. 16.99	1.230193 [✓]	
Tp. 3- U.S.L.M.	S. 9° 22' W.	4.11		4 06 [✓]			log. 7.19	10.856729 [✓]	
			3 46 [✓]	10 65 [✓]	0 00		log. tan. 67° 04'	10.373464	
				3 46				67° 03' 44" [✓]	
				7 19				1.230193 [✓]	16.99
								9.964240 [✓]	log. sin. 67° 04'
								1.265953	18.45 [✓]
								Resultant Course S. 67° 03' 44" W., 18.45 chs.	

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EMH

APPROVAL

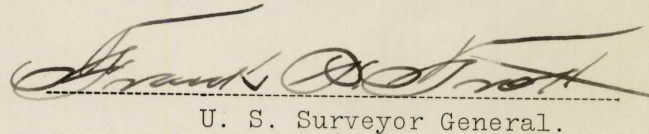
Office of the United States Surveyor General,

Phoenix, Arizona, May 22, 1918

The foregoing field notes of Homestead Entry Survey No.

462

executed by R. P. A. Johnson, Surveyor Draftsman
[Forest Service Title.]
under his special instructions, dated April 17, 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.