

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

AUG-2-1917

MAY-2-1918

FIELD NOTES

OF

HOMESTEAD ENTRY SURVEY NO. 451

SITUATED IN THE **SITGREAVES** NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 12 , unsurveyed, Township 12 N., Range 17 E.

In Section 13 , unsurveyed, Township 12 N., Range 17 E.

of the

Gila and Salt River Base & Meridian.

State of

ARIZONA

Applicants for listing **J. A. Farrell and Lewis W. Freeman,**

Residence		Heber, Arizona	
Application No.	210 ✓	, dated	June 18, 1910 and February 15, 1911 ✓
Application No.	411 ✓	, dated	November 11 , 1912 ✓
List No.	3-904 ✓	, dated	December 12 , 1910 ✓
List No.	3-2364 ✓	, dated	March 13 , 1913 ✓

Applicant for survey **Lewis W. Freeman,** ✓

Residence		Heber, Arizona	
H. E. No.	016617 ✓	, dated	February 5 , 1912 ✓
H. E. No.	024129 ✓	, dated	January 13 , 1914 ✓
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 28** , 1916

Survey completed **July 28** , 1916

Under Acts of **June 11, 1906 and June 30, 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. *451*, 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 established, 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 F. Newman, Chairman

Chester A. Lee, Chairman

Subscribed and sworn to before me this *fourteenth* day of

August, 19*16*.

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 instructions 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, No. *3-904*, dated *December 12, 1910*, and
List, No. *3-2364*, dated *March 13, 1913*, for
patent, under the Act of *June 11*, 1906,
the same to be known as Homestead Entry Survey No. *451*,
situated within the *Sitgreaves* National Forest, in
unsurveyed Section 12, Township *12 N*, Range *17 E*, and
unsurveyed Section 13, Township *12 N*, Range *17 E*,

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 *9th* day of

march, 19*17*.

Sylvester L. McLaughlin
Notary Public, D. C.



8-2349

Commission expires
June 20, 1918.

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Applicants for listing, J. A. Farrell and Lewis W. Freeman; Applications No. 210 and 411, dated June 18, 1910, February 15, 1911 and November 11, 1912; List Nos. 3-904 and 3-2364, dated December 12, 1910 and March 13, 1913; H. E. Nos. 016617 and 024129, made in the Phoenix Land Office on February 5, 1912 and January 13, 1914 by Lewis W. Freeman.

Surveyed under special instructions from the Surveyor General for Arizona, dated April 17, 1916 and designated as Homestead Entry Survey No. 451.

Situated in what will probably be, when surveyed, Secs. 12 and 13, T. 12 N., R. 17 E., Gila and Salt River Base and Meridian, within the Sitgreaves National Forest, Arizona.

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

Survey commenced July 28, 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 28, 1916, a.m.

I observe the altitude of the sun for azimuth at cor. No. 4 of this survey, hereinafter described. The reading on the reference object is set at zero and the sun was observed in the lower left and upper right quadrants of the field. My watch is set for local mean time.

Chains Lat. $34^{\circ} 26' 30''$ N., Long. $110^{\circ} 31' W.$, from special instructions from the Surveyor General.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	8h. 21m. 36s.	$87^{\circ} 59' 00''$	$37^{\circ} 46' 00''$
Reversed	8h. 22m. 29s.	$88^{\circ} 29' 30''$	$37^{\circ} 24' 30''$

Bearing of reference object, N. $0^{\circ} 02' 14''$ W.

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 lower left and upper right quadrants of the field.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	8h. 24m. 26s.	$87^{\circ} 33' 00''$	$38^{\circ} 21' 30''$
Reversed	8h. 25m. 20s.	$88^{\circ} 04' 30''$	$37^{\circ} 59' 00''$

Bearing of reference object, N. $0^{\circ} 02' 58''$ W.

The mean of these is N. $0^{\circ} 02' 36''$ W. and to the corresponding meridian all the courses of this survey are referred.

BOUNDARIES OF CLAIM

Beginning at cor. No. 1.

Deposit a sandstone 5 x 5 x 1 ins. marked with a +, 16 ins. in the ground, over which set a sandstone 26 x 12 x 7 ins., chiseled + for the point and 1 - H E S 451 on SW. face; and raise a mound of stone 3 ft. base, 2 ft. high SW. of cor., whence:

A pinon, 12 ins. dia., bears S. $83^{\circ} 25' E.$, 571 lks. dist., scribed 1 H E S 451 + B T.

No other witnesses available. Pits impracticable.

Cor. to secs. 7, 12, 13 and 18, T. 12 N., Rs.

17 and 18 E., which is a post 4 x 4 x 20 ins.

above ground, in mound of stone, marked and

witnessed as described by the Surveyor General,

SITGREAVES NATIONAL FOREST

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Chains	<p>bears N. 87° 04' 03" E., 22.48 chs. dist., by traverse which appears at the end of these notes.</p> <p>Cor. H.-2 of List 3-2364, which is a limestone 8 x 4 x 6 ins. above ground, marked and wit- nessed as described by the Forest Service, bears N. 11° 00' E., 82 lks. dist. I destroy all trace of this list cor.</p> <p>Lat. 34° 27' N., Long. 110° 30' 27" W., from special instructions from the Surveyor General, and later verified.</p> <p>Mag. decl. at 9:00 a.m., 14° 20' E. Mean mag. decl., 14° 17' E.</p> <p>Thence S. 11° 25' W.</p> <p>Ascend 40 ft. to ridge in open.</p> <p>6.50 Top ascent. Descend 40 ft. in open to draw.</p> <p>16.90 Foot descent. Thence across open level draw, drains NW.</p> <p>21.30 Leave open level draw and ascend 70 ft. in open to point of ridge.</p> <p>38.20 Top ridge bears NW. and SE. Descend 50 ft. in open to arroyo.</p> <p>43.25 Arroyo, 10 lks. wide, 1 ft. deep, course NW. Ascend 60 ft. in open to cor.</p> <p>47.17 To cor. No. 2.</p> <p>Identical with cor. H-3 of List 3-2364, which is a sandstone 10 x 3 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I de- stroy all trace of this list cor. Deposit a sand- stone 6 x 4 x 2 ins. marked with a + 18 ins. in the ground, over which set a sandstone 28 x 12 x 6 ins., chiseled + for the point and 2 - H E S 451 on NW. face; and raise a mound of stone 3 ft. base, 2 ft. high NW. of cor., whence:</p> <p>A juniper, 18 ins. dia., bears S. 28° 48' E.,</p>
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Chains

313 lks. dist., scribed 2 H E S 451 + B T.

A juniper, 18 ins. dia., bears S. 79° 50' W.,

187 lks. dist., scribed 2 H E S 451 + B T.

Thence N. 89° 40' W.

Descend 90 ft. along NW. slope in open to arroyo.

13.70 Arroyo, 10 lks. wide, 1 ft. deep, course NW.

15.40 To cor. No. 3.

At cor. of fence. Fence bears N. 60° W. and S. 35° E.

Identical with cor. H-4 of Lists 3-2364 and 3-904,

which is a limestone 12 x 8 x 10 ins. above ground,

marked and witnessed as described by the Forest Ser-

vice. I destroy all trace of this list cor. Deposit

a sandstone 5 x 5 x 3 ins. marked with a + 10 ins. in

the ground, over which set a sandstone 20 x 16 x 5 ins.

(no larger stone available), chiseled + for the point

and 3 - H E S 451 on N. face; dig pits 24 x 24 x 12

ins. crosswise on claim lines 3 ft. dist.; and raise

a mound of earth 4 ft. base, 2 ft. high, 3-1/2 ft.

dist. N. of cor., whence:

A juniper, 4 ins. dia., bears S. 35° 35' E.,

73 lks. dist., scribed 3 H E S 451 + B T.

A juniper, 6 ins. dia., bears N. 82° 45' W.,

61 lks. dist., scribed 3 H E S 451 + B T.

Thence S. 84° 35' W.

Leave List 3-2364 and enter List 3-904. Ascend

10 ft. in brush to low ridge.

1.50 Top ascent. Descend 10 ft. to wash.

5.75 Road, bears NE. and SW.

6.40 Enter Pearce Wash, banks 3 ft. high, course NW.

12.50 Leave Pearce Wash, banks 3 ft. high, course NW.

Ascend 10 ft. in open to cor.

13.00 Telephone line, bears N. and S.

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17.05

To cor. No. 4

Identical with cor. H-3 of List 3-904, which is a sandstone 12 x 7 x 17 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a sandstone 5 x 5 x 2 ins. marked with a + 15 ins. in the ground, over which set a sandstone 25 x 9 x 8 ins., chiseled + for the point and 4 - H E S 451 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 N. 10° 36' E., 130 lks. dist., scribed 4 H E S 451 + B T.

A yellow pine, 18 ins. dia., bears N. 71° 47' E., 202 lks. dist., scribed 4 H E S 451 + B T.

Cor. No. 7 of H. E. S. 465, which is a sandstone boulder in place, showing 5 x 4 x 1 ft. above ground, chiseled + on top and 7 - H E S 465 on SW. face, with mound of stone 3 ft. base, 2 ft. high, SW. of cor., bears S. 71° 09' E., 12.69 chs. dist., by direct measurement.

Thence N. 11° 33' E.

Across open draw.

2.11 Arroyo, 18 lks. wide, 1 ft. deep, course NE.

2.71 Road, bears N. 47° E. and S. 47° W. Ascend 40 ft. in open to ridge.

11.10 Top ridge, bears E. and W. Descend 30 ft. to arroyo.

14.40 Arroyo, 10 lks. wide, 1 ft. deep, course E. Ascend 30 ft. to ridge.

16.60 Ridge, bears E. and W. Descend 70 ft. to wash.

27.70 Road, bears N. 30° W. and S. 30° E.

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29.05 Fence, bears S. 35° E. and N. 35° W. Telephone line
bears S. 14° E. and N. 14° W.

30.00 Pearce Wash, 135 lks. wide, 2 ft. deep, course NW.

31.55 Enter cultivated land, bears NW. and SE.

40.50 Pearce Wash, 130 lks. wide, 2 ft. deep, course E.

53.40 Fence, bears N. 50° E. and S. 50° W.

54.20 Pearce Wash, 100 lks. wide, 3 ft. deep, course NW.

55.45 To cor. No. 5.

Deposit a sandstone 5 x 4 x 2 ins. marked with a +
14 ins. in the ground, over which set a sandstone
24 x 8 x 7 ins., chiseled + for the point and 5 -
H E S 451 on SE. face; and raise a mound of stone 3
ft. base, 2 ft. high SE. of cor., whence:

A yellow pine, 30 ins. dia., bears S. 55° 10' W.
106 lks. dist., scribed 5 H E S 451 + B T.

A yellow pine, 36 ins. dia., bears N. 30° 07' E.
127 lks. dist., scribed 5 H E S 451 + B T.

Cor. H-2 of List 3-904 is not found after
careful search.

Cor. H-1 of Lists 3-904 and 3-2364, which is a
limestone 11 x 7 x 20 ins. above ground, mark-
ed and witnessed as described by the Forest
Service, bears S. 70° 45' E., 16.75 chs. dist.
I destroy all trace of this list cor.

Thence S. 77° 52' E.

Ascend 30 ft. to cor. in open.

0.95 Fence cor., fence bears SSW. and ESE.

27.00 Fence, bears E. and W.

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

AREA

Total Area - - - - - 159.58 acres

IMPROVEMENTS

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

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A frame house, 30 x 20 ft., the long side of which bears N. and S. and the SW. cor. of which bears N. 13° 45' E., 24.00 chs. dist. from cor. No. 4.

Value ----- \$250.00

A frame barn, 40 x 18 ft., the long side of which bears N. and S. and the SW. cor. of which bears N. 22° E., 21.25 chs. dist. from cor. No. 4.

Value ----- \$200.00

A frame outhouse, 10 x 10 ft., the SE. cor. of which bears N. 25° 50' E., 22.60 chs. dist. from cor. No. 4.

Value ----- \$ 30.00

There is approximately one mile of wire fence.

Value ----- \$100.00

A shallow well bears N. 16° 10' E., 26.40 chs. dist. from cor. No. 4.

Value ----- \$ 30.00

DESCRIPTION

This claim lies on Pearce Wash at an elevation of 6300 ft. The general slope is to the N. The tract consists of level draw bottom in East half and gradual slopes in West half.

The timber consists of a few scattered juniper and pinon along S. and E. boundaries.

The soil of the bottom land is a sandy loam of good depth and produces good crops. The soil on slopes is shallow and gravelly and has never been used for agricultural purposes.

There is no water for irrigation. Water for domestic use is obtained from a shallow well.

This land is not known to be mineralized.

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CONFLICTS AND ADJOINING CLAIMS

There are no conflicting or adjoining claims. Miles
Ranger Station lies approximately 10.00 chs. North of
claim and H. E. S. No. 465 lies approximately 4.00 chs.
to South.

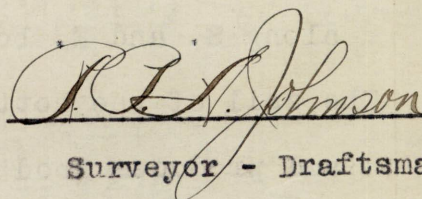
Heber, Arizona, the nearest post office, is 8 miles to
West and Holbrook, Arizona, the nearest railroad point,
is 40 miles NE. Both are reached by good wagon roads.

TRAVERSE

Cor.	Course	Dist.	N	S	E	W	
1-2	S. 11° 25' W.	47.17		46.24 ✓		9.34 ✓	
2-3	N. 89° 40' W.	15.40	0.09 ✓			15.40 ✓	
3-4	S. 84° 35' W.	17.05		1.61 ✓		16.97 ✓	
4-5	N. 11° 33' E.	55.45	54.33 ✓		11.10 ✓		
5-1	S. 77° 52' E.	31.29		6.58 ✓	30.59 ✓		
			166.36 ✓	54.42 ✓	54.43 ✓	41.69 ✓	41.71 ✓
				54.42		41.69	41.69
Error in Lat. and Dep.				.01		.02	

Closing error, 1:7440. ✓

Survey completed July 28, 1916.


Surveyor - Draftsman

Chains

Direct Solar, July 28, 1916, at Cor. No. 4.

Lat. 34° 26' 30" N., Long. 110° 31' W., Elev. 6300 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	8h. 24m. 26s.	87° 33' 00"	38° 21' 30"	♂
Reversed	8h. 25m. 20s.	88° 04' 30"	37° 59' 00"	+°
	8h. 24m. 53s.	87° 48' 45"	38° 10' 15"	
			01' 00"	
			38° 09' 15"	

Decl., 18° 58' 40" N.

$$\text{Cos. } Q. = \frac{\sin. 18^\circ 58' 40''}{\cos. 34^\circ 26' 30'' \times \cos. 38^\circ 09' 15''}$$

$$\tan. 34^\circ 26' 30'' \times \tan. 38^\circ 09' 15''$$

$$\begin{aligned} \log. \sin. 18^\circ 58' 40'' &= 9.512152 \\ \log. \cos. 34^\circ 26' 30'' &= 9.916297 \\ \log. \cos. 38^\circ 09' 15'' &= 9.895616 \\ \hline &9.700239 = \log. \quad .50146 \end{aligned}$$

$$\begin{aligned} \log. \tan. 34^\circ 26' 30'' &= 9.836187 \\ \log. \tan. 38^\circ 09' 15'' &= 9.895217 \\ \hline &9.731404 = \log. \quad .53877 \end{aligned}$$

$$\begin{aligned} \text{Cos. } Q. &= .03731 \\ Q. &= 87^\circ 51' 43'' \end{aligned}$$

Bearing of reference object, N. 0° 02' 58" W.

(2)

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	8h. 21m. 36s.	87° 59' 00"	37° 46' 00"	♂
Reversed	8h. 22m. 29s.	88° 29' 30"	37° 24' 30"	+°
	8h. 22m. 02s.	88° 14' 15"	37° 35' 15"	
			01' 00"	
			37° 34' 15"	

Decl., 18° 58' 40" N.

$$\text{Cos. } Q. = \frac{\sin. 18^\circ 58' 40''}{\cos. 34^\circ 26' 30'' \times \cos. 37^\circ 34' 15''}$$

$$\tan. 34^\circ 26' 30'' \times \tan. 37^\circ 34' 15''$$

$$\begin{aligned} \log. \sin. 18^\circ 58' 40'' &= +9.512152 \\ \log. \cos. 34^\circ 26' 30'' &= -9.916297 \\ \log. \cos. 37^\circ 34' 15'' &= -9.899054 \\ \hline &9.696801 = \log. \quad .49751 \end{aligned}$$

$$\begin{aligned} \log. \tan. 34^\circ 26' 30'' &= +9.836187 \\ \log. \tan. 37^\circ 34' 15'' &= +9.886092 \\ \hline &9.722279 = \log. \quad .52757 \end{aligned}$$

$$\begin{aligned} \text{Cos. } Q. &= .03006 \\ Q. &= 88^\circ 16' 39'' \end{aligned}$$

Bearing of reference object, N. 0° 02' 14" W.

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HOMESTEAD ENTRY SURVEY NO.

NATIONAL FOREST

STATE OF

Chains

Chains	Telescope	Time	Horizontal	Vertical	Angle	Angle
Direct	62.21m	33.5	87.0	90.0	90.0	90.0
Reversed	62.21m	33.5	88.0	90.0	90.0	90.0
<hr/>						
Direct	18.0	40.0	18.0	40.0	18.0	40.0
<hr/>						
Loc. 1	18.0	40.0	18.0	40.0	18.0	40.0
Loc. 2	34.0	30.0	34.0	30.0	34.0	30.0
Loc. 3	38.0	18.0	38.0	18.0	38.0	18.0
Loc. 4	42.0	18.0	42.0	18.0	42.0	18.0
Loc. 5	46.0	18.0	46.0	18.0	46.0	18.0
Loc. 6	50.0	18.0	50.0	18.0	50.0	18.0
Loc. 7	54.0	18.0	54.0	18.0	54.0	18.0
Loc. 8	58.0	18.0	58.0	18.0	58.0	18.0
Loc. 9	62.0	18.0	62.0	18.0	62.0	18.0
Loc. 10	66.0	18.0	66.0	18.0	66.0	18.0
Loc. 11	70.0	18.0	70.0	18.0	70.0	18.0
Loc. 12	74.0	18.0	74.0	18.0	74.0	18.0
Loc. 13	78.0	18.0	78.0	18.0	78.0	18.0
Loc. 14	82.0	18.0	82.0	18.0	82.0	18.0
Loc. 15	86.0	18.0	86.0	18.0	86.0	18.0
Loc. 16	90.0	18.0	90.0	18.0	90.0	18.0
Loc. 17	94.0	18.0	94.0	18.0	94.0	18.0
Loc. 18	98.0	18.0	98.0	18.0	98.0	18.0
Loc. 19	102.0	18.0	102.0	18.0	102.0	18.0
Loc. 20	106.0	18.0	106.0	18.0	106.0	18.0
Loc. 21	110.0	18.0	110.0	18.0	110.0	18.0
Loc. 22	114.0	18.0	114.0	18.0	114.0	18.0
Loc. 23	118.0	18.0	118.0	18.0	118.0	18.0
Loc. 24	122.0	18.0	122.0	18.0	122.0	18.0
Loc. 25	126.0	18.0	126.0	18.0	126.0	18.0
Loc. 26	130.0	18.0	130.0	18.0	130.0	18.0
Loc. 27	134.0	18.0	134.0	18.0	134.0	18.0
Loc. 28	138.0	18.0	138.0	18.0	138.0	18.0
Loc. 29	142.0	18.0	142.0	18.0	142.0	18.0
Loc. 30	146.0	18.0	146.0	18.0	146.0	18.0
Loc. 31	150.0	18.0	150.0	18.0	150.0	18.0
Loc. 32	154.0	18.0	154.0	18.0	154.0	18.0
Loc. 33	158.0	18.0	158.0	18.0	158.0	18.0
Loc. 34	162.0	18.0	162.0	18.0	162.0	18.0
Loc. 35	166.0	18.0	166.0	18.0	166.0	18.0
Loc. 36	170.0	18.0	170.0	18.0	170.0	18.0
Loc. 37	174.0	18.0	174.0	18.0	174.0	18.0
Loc. 38	178.0	18.0	178.0	18.0	178.0	18.0
Loc. 39	182.0	18.0	182.0	18.0	182.0	18.0
Loc. 40	186.0	18.0	186.0	18.0	186.0	18.0
Loc. 41	190.0	18.0	190.0	18.0	190.0	18.0
Loc. 42	194.0	18.0	194.0	18.0	194.0	18.0
Loc. 43	198.0	18.0	198.0	18.0	198.0	18.0
Loc. 44	202.0	18.0	202.0	18.0	202.0	18.0
Loc. 45	206.0	18.0	206.0	18.0	206.0	18.0
Loc. 46	210.0	18.0	210.0	18.0	210.0	18.0
Loc. 47	214.0	18.0	214.0	18.0	214.0	18.0
Loc. 48	218.0	18.0	218.0	18.0	218.0	18.0
Loc. 49	222.0	18.0	222.0	18.0	222.0	18.0
Loc. 50	226.0	18.0	226.0	18.0	226.0	18.0
Loc. 51	230.0	18.0	230.0	18.0	230.0	18.0
Loc. 52	234.0	18.0	234.0	18.0	234.0	18.0
Loc. 53	238.0	18.0	238.0	18.0	238.0	18.0
Loc. 54	242.0	18.0	242.0	18.0	242.0	18.0
Loc. 55	246.0	18.0	246.0	18.0	246.0	18.0
Loc. 56	250.0	18.0	250.0	18.0	250.0	18.0
Loc. 57	254.0	18.0	254.0	18.0	254.0	18.0
Loc. 58	258.0	18.0	258.0	18.0	258.0	18.0
Loc. 59	262.0	18.0	262.0	18.0	262.0	18.0
Loc. 60	266.0	18.0	266.0	18.0	266.0	18.0
Loc. 61	270.0	18.0	270.0	18.0	270.0	18.0
Loc. 62	274.0	18.0	274.0	18.0	274.0	18.0
Loc. 63	278.0	18.0	278.0	18.0	278.0	18.0
Loc. 64	282.0	18.0	282.0	18.0	282.0	18.0
Loc. 65	286.0	18.0	286.0	18.0	286.0	18.0
Loc. 66	290.0	18.0	290.0	18.0	290.0	18.0
Loc. 67	294.0	18.0	294.0	18.0	294.0	18.0
Loc. 68	298.0	18.0	298.0	18.0	298.0	18.0
Loc. 69	302.0	18.0	302.0	18.0	302.0	18.0
Loc. 70	306.0	18.0	306.0	18.0	306.0	18.0
Loc. 71	310.0	18.0	310.0	18.0	310.0	18.0
Loc. 72	314.0	18.0	314.0	18.0	314.0	18.0
Loc. 73	318.0	18.0	318.0	18.0	318.0	18.0
Loc. 74	322.0	18.0	322.0	18.0	322.0	18.0
Loc. 75	326.0	18.0	326.0	18.0	326.0	18.0
Loc. 76	330.0	18.0	330.0	18.0	330.0	18.0
Loc. 77	334.0	18.0	334.0	18.0	334.0	18.0
Loc. 78	338.0	18.0	338.0	18.0	338.0	18.0
Loc. 79	342.0	18.0	342.0	18.0	342.0	18.0
Loc. 80	346.0	18.0	346.0	18.0	346.0	18.0
Loc. 81	350.0	18.0	350.0	18.0	350.0	18.0
Loc. 82	354.0	18.0	354.0	18.0	354.0	18.0
Loc. 83	358.0	18.0	358.0	18.0	358.0	18.0
Loc. 84	362.0	18.0	362.0	18.0	362.0	18.0
Loc. 85	366.0	18.0	366.0	18.0	366.0	18.0
Loc. 86	370.0	18.0	370.0	18.0	370.0	18.0
Loc. 87	374.0	18.0	374.0	18.0	374.0	18.0
Loc. 88	378.0	18.0	378.0	18.0	378.0	18.0
Loc. 89	382.0	18.0	382.0	18.0	382.0	18.0
Loc. 90	386.0	18.0	386.0	18.0	386.0	18.0
Loc. 91	390.0	18.0	390.0	18.0	390.0	18.0
Loc. 92	394.0	18.0	394.0	18.0	394.0	18.0
Loc. 93	398.0	18.0	398.0	18.0	398.0	18.0
Loc. 94	402.0	18.0	402.0	18.0	402.0	18.0
Loc. 95	406.0	18.0	406.0	18.0	406.0	18.0
Loc. 96	410.0	18.0	410.0	18.0	410.0	18.0
Loc. 97	414.0	18.0	414.0	18.0	414.0	18.0
Loc. 98	418.0	18.0	418.0	18.0	418.0	18.0
Loc. 99	422.0	18.0	422.0	18.0	422.0	18.0
Loc. 100	426.0	18.0	426.0	18.0	426.0	18.0

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. 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. 451, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.			DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.				
1-2	S. 11° 25' W.	47.17		46 24		9 33 9 54	74 07		3425 00 ✓	
2-3	N. 89° 40' W.	15.40	09			15 40	49 54	4 44 ✓		
3-4	S. 84° 35' W.	17.05	34 54 33	1 61		16 27	16 27		27 32 ✓	
4-5	N. 11° 33' E.	55.45			11 10		11 11	603 72 ✓		
5-1	S. 77° 52' E.	31.29		6 58	30 59		52 81		347 49 ✓	
		166.36	54 42	54 43	41 69	41 71		608 16 ✓	3799 81 ✓	
			54 43	54 43	41 70	41 70			608 16	
									20/3191 65	
									159 582 ✓ ACRES.	
	Closing error 1:7440				Tie					
		Cor. No. 1 to Cor. of secs. 7, 18, 12 and 13, T. 12 N., R. 17 and 18 E.								
1-TP	N. 71° 02' E.	7.16	2 33 ✓		6 77 ✓		LOG. 22.45	= 1.351216 ✓		
TP-TP	S. 75° 52' E.	4.99			4 84 ✓		LOG. 1.15	= 10.060698 ✓		
TP-Sec. Cor	N. 89° 46' E.	10.84	04 ✓	1 22 ✓	10 84		LOG. tan. 87° 04' 03" =	11.290518 ✓		
			2 37 ✓	1 22	22 45 ✓		LOG. 22.45	= 1.351216 ✓		
			1 22				LOG. sin. 87° 04' 03" =	9.999431 ✓		
			1 15 ✓				LOG. 22.48	= 1.351785 ✓		

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EMH

APPROVAL

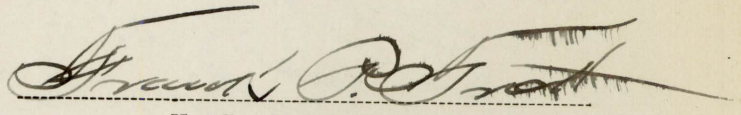
Office of the United States Surveyor General,

Phoenix, Arizona, May 22, 1918

The foregoing field notes of Homestead Entry Survey No.

451

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.