

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

FIELD NOTES

OCT-21916

OF

HOMESTEAD ENTRY SURVEY NO. 423

SITUATED IN THE **TONTO** NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 1 , unsurveyed, Township 11 N., Range 10 E.
In Section 2 , unsurveyed, Township 11 N., Range 10 E.
In Section 11 , unsurveyed, Township 11 N., Range 10 E.
In Section 12 , unsurveyed, Township 11 N., Range 10 E.

of the

Gila and Salt River Base and Meridian.

State of

ARIZONA

Applicant for listing **S. Musgrave,**
Residence **Payson, Arizona**
Application No. **245** ✓ , dated **December 19** , 19**10** ✓
List No. **3-1390** , dated **July 12** , 19**11** ✓

Applicant for survey **James W. Powers,** ✓
Residence **Payson, Arizona**
H. E. No. **024555** ✓ , dated **March 9** , 19**14** ✓
Land District **Phoenix, Arizona**

Survey executed by **R. P. A. Johnson,** **Surveyor - Draftsman**
[Forest Service Title.]
Under special instructions dated **September 23** , 19**15** ✓
Survey commenced **December 10** , 19**15**
Survey completed **December 10** , 19**15**
Under Acts of **June 11, 1906 and March 4, 1915** ✓

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. 423, 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.

C. G. Baer Chairman
Douglas E. Maister Chairman

Subscribed and sworn to before me this fifteenth day of December, 1915.

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 September 23, 1915, 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

Trust Patent, No. 3-1390, dated July 12, 1911, for June 11, 1906, the same to be known as Homestead Entry Survey No. 423, situated within the Donato National Forest, in unsurveyed Section 1, Township 11N., Range 10E, and unsurveyed Section 2, Township 11N., Range 10E, unsurveyed Section 11, Township 11N., Range 10E, unsurveyed Section 12, Township 11N., Range 10E 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.

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

Subscribed and sworn to before me this 25th day of March, 1916.

Ulsie C. Myers
Notary Public



TONTONATIONAL FOREST

STATE OF ARIZONA

Chains Applicant for listing, S. Musgrave; Application No. 245, dated December 19, 1910; List No. 3-1390, dated July 12, 1911; H. E. 024555, made in the Phoenix Land Office on March 9, 1914 by James W. Powers.

Surveyed under special instructions from the Surveyor General for Arizona, dated September 23, 1915, and designated as Homestead Entry Survey No. 423.

Situated in unsurveyed T. 11 N., R. 10 E., in what will probably be, when surveyed, secs. 1, 2, 11 and 12, Gila and Salt River Base and Meridian, Tonto National Forest, Arizona.

Surveyed under the Acts of June 11, 1906 and March 4, 1915.

Survey commenced December 10, 1915, and executed with a Buff and Buff transit No. 9700-6.

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

All measurements were made directly on the slope with a 500 link steel tape. The slope angles were determined with a clinometer. Horizontal distances only appear in these notes.

December 10, 1915.

At 10h. 22m. a.m., l.m.t., I observe the altitude of the sun for azimuth at cor. No. 4 of this survey. 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.

Latitude $34^{\circ} 19' 10''$ N., Long. $111^{\circ} 17' 23''$ W., by account from special instructions from Surveyor General.

Chains	Telescope	Time	Horizontal Angle	Vertical Angle
	Direct	10h. 21m. 22s.	21° 58' 30"	29° 37' 00"
	Reversed	10h. 22m. 42s.	22° 14' 00"	29° 12' 00"

Bearing of reference object, N. 0° 18' 03" W.

At 2h. 43.9m. I again observe the altitude of the sun for azimuth at cor. No. 4. The reading on 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. 43m. 31s.	46° 06' 00"	16° 43' 00"
Reversed	2h. 44m. 18s.	45° 41' 30"	17° 10' 00"

Bearing of reference object, N. 0° 17' 30" W.

The mean of these is N. 0° 17' 42" W., and to the corresponding meridian all the courses of this survey are referred.

Beginning at cor. No. 1.

Identical with cor. H-1 of the list survey, which is a limestone 7 x 14 x 8 ins. above ground, marked and witnessed as described by the Forest Service. I de-

stroy all trace of this cor. Deposit a stone 4 x 2 x 2 ins. marked with a +, 14 ins. in the ground, over which set a limestone 24 x 6 x 4 ins. chiseled + for the point and 1 - H E S 423 on NW. face; and raise a mound of stone 3 ft. base, 2 ft. high, NW. of cor., whence:

A juniper, 24 ins. dia., bears N. 65°

52' E., 261 lks. dist., blazed and scribed

1 H E S 423 + B T.

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Chains

A juniper, 28 ins. dia., bears S. 30°
47' E., 195 lks. dist., blazed and scribed
1 H E S 423 + B T.

Cor. for secs. 1, 6, 7 and 12, T. 11 N.,
Rs. 10 and 11 E., which is a granite stone
8 x 6 x 6 ins. above ground, marked as de-
scribed by the Surveyor General, (no wit-
nesses) bears N. 77° 08' 16" E., 79.42 chs.,
by traverse which appears at the end of
these notes.

Lat. 34° 18' 57" N., Long. 111° 17' 22" W., by account
from special instructions from the Surveyor General.
Mag. decl. at 10 a.m., 14° 30' E. Mean mag. decl.,
14° 28' E.

Thence S. 87° 10' W.

Over open land, across flat, along edge of cultivated
land. Fence on line.

- 12.59 Arroyo, 25 lks. wide, 2 ft. deep, course WSW. Culti-
vated land bears NNW. Leave cultivated land.
- 15.95 Arroyo, 40 lks. wide, 8 ft. deep, course S.
- 24.10 Arroyo, 26 lks. wide, 2 ft. deep, course SSW.
- 30.60 Cor. fence; fence bears N. Leave fence.
- 39.60 Arroyo, 50 lks. wide, 2 ft. deep, course SSE.
Ascend 20 ft. along N. slope
- 60.34 To cor. No. 2.

Identical with cor. H-4 of the list survey, which
is a limestone 14 x 2 x 8 ins. above ground, marked
and witnessed as described by the Forest Service. I
destroy all trace of this list cor. Deposit a stone
5 x 4 x 2 ins. marked with a +, 14 ins. in the ground,
over which set a limestone 24 x 14 x 5 ins. chiseled

Chains

+ for the point and 2 - H E S 423 on NE. face; and raise a mound of stone 3 ft. base, 2 ft. high, NE. of cor., whence:

A juniper, 6 ins. dia., bears N. 44° 02' W., 11 lks. dist., blazed and scribed 2 H E S 423 + B T.

A juniper, 10 ins. dia., bears N. 13° 18' E., 9 lks. dist., blazed and scribed 2 H E S 423 + B T.

Thence N. 1° 53' W.

In scattered juniper. Descend 5 ft. to arroyo.

4.10 Arroyo, 10 lks. wide, 1 ft. deep, course East.

Ascend 45 ft. to cor.

17.50 Fence, bears E. and W.

19.97 To cor. No. 3.

Identical with cor. H-3 of the list survey, which is a limestone 8 x 3 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a stone 3 x 2 x 1 ins. marked with a +, 14 ins. in the ground, over which set a granite stone 24 x 8 x 8 ins., chiseled + for the point and 3 - H E S 423 on SE. face; and raise a mound of stone 3 ft. base, 2 ft. high, SE. of cor., whence:

A juniper, 22 ins. dia., bears N. 40° 08' E., 37 lks. dist., blazed and scribed 3 H E S 423 + B T.

A juniper, 8 ins. dia., bears N. 23° 48' W., 53 lks. dist., blazed and scribed 3 H E S 423 + B T.

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Chains	<p>Thence N. 87° 08' E.</p> <p>In open, descending 50 ft. to arroyo.</p> <p>4.60 Fence, bears N. and S.</p> <p>15.63 Arroyo, 20 lks. wide, 4 ft. deep, course SSE. Along gradual South slope.</p> <p>29.85 Cor. fence, fence bears S. and along line.</p> <p>39.05 Cor. cultivated land, bears S. Continue along edge cultivated land.</p> <p>42.50 Arroyo, 10 lks. wide, 1 ft. deep, course SSW. Ascend 15 ft. to top ridge.</p> <p>47.00 Top ascent. Descend 15 ft. to arroyo.</p> <p>52.85 Arroyo, 30 lks. wide, 4 ft. deep, course SSW. Ascend 10 ft. to cor.</p> <p>57.25 Cor. cultivated land, bears S. Leave cultivated land.</p> <p>60.03 To cor. No. 4.</p>
	<p>Identical with cor. H-2 of the list survey, which is a limestone 10 x 12 x 4 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a stone 4 x 3 x 2 ins. marked with a +, 14 ins. in the ground, over which set a limestone 24 x 14 x 8 ins. chiseled + for the point and 4 - H E S 423 on SW. face; and raise a mound of stone 3 ft. base, 2 ft. high, SW. of cor., whence:</p> <p>An oak, 18 ins. dia., bears N. 56° 18' W., 221 lks. dist., blazed and scribed 4 H E S 423 + BT.</p> <p>A juniper, 18 ins. dia., bears S. 30° 48' E., 123 lks. dist., blazed and scribed 4 H E S 423 + B T.</p>

Chains	Thence S. 2° 45' E.
	Ascend 10 ft. to ridge. Fence on line.
2.35	Top ridge. Descend 25 ft. to arroyo.
9.00	Arroyo, 15 lks. wide, 2 ft. deep, course WSW. Ascend. 20 ft. to ridge.
12.75	Top ridge. Descend 20 ft. to arroyo.
16.50	Cor. cultivated land, bears W. Continue along edge cultivated land.
16.70	Arroyo, 23 lks. wide, 2-1/2 ft. deep, course SW.
18.50	Arroyo, 40 lks. wide, 1 ft. deep, course W.
19.99	Cor. No. 1, the place of beginning.

AREA

Total Area - - - - - 120.25 acres.

IMPROVEMENTS

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

A frame dwelling, 14 x 20 ft., the long side of which bears E. and W., and the NE. cor. of which bears S. 63° 02' W., 2.36 chs. dist. from cor. No. 4.

Value ----- \$250.00

A frame barn, 40 x 26 ft., the long side of which bears E. and W. and the NE. cor. of which bears S. 63° 42' W., 4.30 chs. dist. from cor. No. 4.

Value ----- \$600.00

There is approximately 1-1/4 miles of Page and 10 string wire fence.

Value ----- \$250.00

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STATE OF ARIZONA

Chains

DESCRIPTION

This tract is situated in Sunflower Flat, one and a half miles from East Verde River, and lies at an elevation of approximately 5000 ft.

The claim is gently rolling mesa land, with a gradual general slope to South, and low ridges on all sides.

The soil is good and consists of a sandy loam, of fair depth, which is the weathering product of sand and limestone mixed with alluvial deposits. It produces good crops of corn and sorghum. The entire area is tillable with exception of about 10 acres on ridges at NW. and E.

The timber consists of scattered juniper and oak on West end of claim. There is no merchantable timber.

Water for domestic and stock use is obtained from East Verde River, 1-1/2 miles dist. There is no water for irrigation.

There is approximately 25 acres in cultivation.

I saw no indication of mineral upon this claim.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicting or adjoining claims.

Globe, the nearest railroad point, is 105 miles dist.

and Payson, the nearest post office, is 8 miles dist., both being reached by good wagon roads.

Chains	TRAVERSE					
Cor.	Course	Dist.	N	S	E	W
1-2	S. 87° 10' W.	60.34		2.98		60.27
2-3	N. 1° 53' W.	19.97	19.96			0.66
3-4	N. 87° 08' E.	60.03	3.00		59.95	
4-1	S. 2° 45' E.	19.99		19.97		0.96
		160.33	22.96	22.95	60.91	60.93
			22.95			60.91

Error in Lat. and Dep. .01 .02

Closing error, 1:7190.

Survey completed, December 10, 1915.

R. L. Johnson

Surveyor - Draftsman

COMPUTES AND ADJUSTS CLAIMS

There are no conflicting or adjoining claims.
Globe, the nearest railroad point, is 100 miles distant.
and Payson, the nearest post office, is 8 miles distant.
both being reached by good wagon roads.

PHOENIX NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar at Cor. No. 4, December 10, 1915.

Lat. 34° 19' 10" N. Long. 111° 17' 23" W.

Elevation 5000 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	2h. 43m. 31s.	46° 06' 00"	16° 43' 00"	+
Reversed	2h. 44m. 18s.	45° 41' 30"	17° 10' 00"	+
Mean	2h. 43m. 54s.	45° 53' 45"	16° 56' 30"	
	7h. 25m. 10s.		02' 40"	ref. cor.
	10h. 09m. 04s.		16° 53' 50"	

Decl. 22° 53' 25" S.

$$Q. = \frac{\sin. 22^\circ 53' 25''}{\cos. 34^\circ 19' 10'' \times \cos. 16^\circ 53' 50''} = \frac{\tan. 34^\circ 19' 10'' \times \tan. 16^\circ 53' 50''}{\cos. 34^\circ 19' 10'' \times \cos. 16^\circ 53' 50''}$$

log. sin. 22° 53' 25" = +	9.5899135	
log. cos. 34° 19' 10" = -	9.9169311	
log. cos. 16° 53' 50" = -	9.9808337	
	9.6921487	= log. .492208
log. tan. 34° 19' 10" =	9.8341988	
log. tan. 16° 53' 50" =	9.4825453	
	9.3167441	= log. .207369
Cos. Q. =	.699577	
Q. =	45° 36' 25"	

Bearing of reference object, N. 0° 17' 20" E.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	10h. 21m. 22s.	21° 58' 30"	29° 37' 00"	+
Reversed	10h. 22m. 42s.	22° 14' 00"	29° 12' 00"	+
Mean	10h. 22m. 02s.	22° 06' 15"	29° 24' 30"	
	4h. 34m. 50s.		01' 27"	
	5h. 47m. 12s.		29° 23' 03"	

Decl. 22° 52' 23" S.

$$\text{Cos. } Q. = \frac{-\sin. 22^\circ 52' 23''}{\cos. 34^\circ 19' 10'' \times \cos. 29^\circ 23' 03''} = \frac{\tan. 34^\circ 19' 10'' \times \tan. 29^\circ 23' 03''}{\cos. 34^\circ 19' 10'' \times \cos. 29^\circ 23' 03''}$$

log. sin. 22° 52' 23" = +	9.5896042	
log. cos. 34° 19' 10" = -	9.9169311	
log. cos. 29° 23' 03" = -	9.9401924	= log. .540108
	9.7324807	
log. tan. 34° 19' 10" =	9.8341988	
log. tan. 29° 23' 03" =	9.7505910	
	9.5847898	= log. .384406
Cos. Q. =	.924514	
Q. =	22° 24' 18"	

Bearing of reference object, N. 0° 18' 03" W.

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NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar at Cor. No. 4, December 10, 1911

Chains

Lat. $34^{\circ} 19' 10''$ N. Long. $111^{\circ} 17' 23''$ W.

Elevation 3000 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	2h. 43m. 21s.	$46^{\circ} 05' 00''$	$13^{\circ} 43' 00''$	
Reversed	2h. 44m. 18s.	$45^{\circ} 41' 40''$	$13^{\circ} 10' 00''$	
Mean	2h. 43m. 54s.	$45^{\circ} 23' 20''$	$13^{\circ} 26' 30''$	
	7h. 23m. 10s.		$13^{\circ} 40' 40''$	1st. 107.
	10h. 03m. 00s.		$15^{\circ} 33' 10''$	

Decl. $22^{\circ} 53' 25''$ S.

Cor. C. =

Lat. $34^{\circ} 19' 10''$ N. Long. $111^{\circ} 17' 23''$ W.

Lat. $34^{\circ} 19' 10''$ N. Long. $111^{\circ} 17' 23''$ W.

Loc. $34^{\circ} 19' 10''$ = 2.9193311
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 Loc. $34^{\circ} 19' 10''$ = 2.9193311

Cor. C. = 2.9193311

Bearing of reference object, N. $0^{\circ} 14' 30''$ E.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	10h. 21m. 23s.	$21^{\circ} 58' 30''$	$29^{\circ} 27' 10''$	
Reversed	10h. 22m. 42s.	$22^{\circ} 34' 00''$	$29^{\circ} 18' 00''$	
Mean	10h. 22m. 02s.	$22^{\circ} 06' 15''$	$29^{\circ} 22' 30''$	
	4h. 34m. 50s.		$01' 27''$	
	2h. 47m. 18s.		$29^{\circ} 23' 00''$	

Decl. $22^{\circ} 53' 25''$ S.

Cor. C. =

Lat. $34^{\circ} 19' 10''$ N. Long. $111^{\circ} 17' 23''$ W.

Lat. $34^{\circ} 19' 10''$ N. Long. $111^{\circ} 17' 23''$ W.

Loc. $34^{\circ} 19' 10''$ = 2.9193311
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Cor. C. = 2.9193311

Bearing of reference object, N. $0^{\circ} 18' 00''$ W.

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.

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. 423, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.		N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.				
1-2	S. 87° 10' W.	60.34		2 98		60 27	61 58		184 12	✓
2-3	N. 1° 53' W.	19.97	19 96			0 66	0 66	13 17		✓
3-4	N. 87° 08' E.	60.03	3 00		59 95		159 96	179 88		✓
4-1	S. 2° 45' E.	19.99		19 97	0 96		120 88		2413 97	✓
		160.33	22 96	22 95	60 91	60 93		193 05	2598 09	
			22 96	22 96	60 92	60 92			193 05	
									2405 04	
									120 25	✓
	Closing error, 1:7190									Acres.

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EMIL

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. 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. I. 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. 423, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
	Tie for cor.		for secs. 1, 6, 7 and 12, T. 11 N., R. 10 and 11 E. to cor. No. 1.						
1/4 - 1	S. 68° 10' W.	5.13		1 91		4 76			
1-2	S. 89° 29' W.	25.48		0 23		25 48			
2-3	N. 83° 29' W.	25.69	2 92			25 52			
3-4	S. 75° 22' W.	13.32		3 37		12 89			
4-No. 1	S. 30° 12' W.	17.46		15 09		8 78			
			2 92	20 60	0 00	77 43			
				2 92		0 00			
				17 68		77 43			
	Resultant bearing, S. 77° 08' 16" W., 79.42 chs.								

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APPROVAL

Office of the United States Surveyor General,

Phoenix, Arizona, June 19 , 1917.

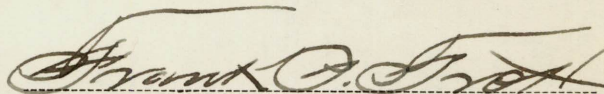
The foregoing field notes of Homestead Entry Survey No.

423

executed by R.P.A. Johnson, Surveyor-Draftsman

[Forest Service Title.]

under his special instructions, dated September 23 , 1915, 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.