

**ORIGINAL**  
U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

49  
NOV 22 1918

AUG 2- 1917

**FIELD NOTES**

OF

HOMESTEAD ENTRY SURVEY NO. 454

MAR-2 1918

SITUATED IN THE SITGREAVES NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 3 , unsurveyed, Township 11 N., Range 16 E.

In Section 34 , unsurveyed, Township 12 N., Range 16 E.

and

Establishment of U S L M No. 454- H E S.

of the

Gila and Salt River Base and Meridian.

State of

ARIZONA

Applicant for listing Luis Padilla, ✓

Residence Heber, Arizona

Application No. 229 , dated October 19 , 1910 ✓

List No. 3-1635 ✓ , dated December 7 , 1911 ✓

Applicant for survey Geo. E. Shelley, ✓

Residence Heber, Arizona

H. E. No. 026433 ✓ , dated January 7 , 1915 ✓

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 June 30 , 1916

Survey completed July 1 , 1916

Under Acts of June 11, 1906, March 4, 1915 and June 30, 1916



OATH OF ASSISTANTS

We hereby certify that we assisted P. P. A. Johnson  
Surveyor Draftsman [Forest Service Title.] in surveying all those  
parts or portions of Homestead Entry Survey No. 454, 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.

Nelson F. Newman, Chairman  
-----  
Chester A. Lee, Chairman  
-----

Subscribed and sworn to before me this fourteenth day of  
August, 1916.

P. P. A. Johnson  
Surveyor Draftsman

OATH OF SURVEYOR

I, P. P. A. Johnson, Surveyor Draftsman  
[Forest Service Title.]

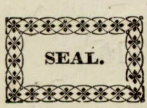
do solemnly swear that, in strict conformity with the special instruc-  
tions of the United States Surveyor General for Arizona, dated  
April 17, 1916, and the laws of the United States, I have  
well, faithfully, and truly, in my own proper person, surveyed a tract  
of land embraced in List No. 3-1635 dated December 7, 1911 and  
abstract of land upon the application of Geo. E. Shelley  
Application, No. 229, dated October 19, 1910, for  
patent, under the Act of June 11, 1906,  
the same to be known as Homestead Entry Survey No. 454,  
situated within the Sitgreaves National Forest, in  
unsurveyed Section 3, Township 11 N, Range 16 E, and  
unsurveyed Section 34, Township 12 N, Range 16 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.

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

Subscribed and sworn to before me this thirtyfirst day of  
March, 1917.

Eschel M. Gatchell  
-----  
Notary Public



My Commission expires Mar. 17 1921



SITGREAVES NATIONAL FOREST

STATE OF ARIZONA.

Chains

Applicant for listing, Luis Padilla; Application No. 229, dated October 19, 1910; List No. 3-1635, dated December 7, 1911; H. E. 026433, made in the Phoenix Land Office on January 7, 1915 by George E. Shelley. Also a tract of unlisted land adjoining claimant's entry was included in this survey; the land is agricultural

in character, was desired by entryman and will be listed as a basis for amendment of his entry No. 026433.

The strip excepted for a road right of way has been included in this survey since it is no longer required by the Forest Service for protection of Government interests.

Surveyed under special instructions from the Surveyor General for Arizona, dated April 17, 1916 and designated as Homestead Entry Survey No. 454.

Situated in what will probably be, when surveyed, Secs. 3 and 34, Ts. 11 and 12 N., R. 16 E., Gila and Salt River Base and Meridian, Sitgreaves National Forest, Arizona.

Surveyed under the Acts of June 11, 1906, March 4, 1915 and June 30, 1916.

Survey commenced June 30, 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.

June 30, 1916, p.m.

I observe the altitude of the sun for azimuth at cor. No. 4, 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° 24' N., Long. 110° 39' W., from special instructions from the



SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Surveyor General.

Chains	Telescope	Time	Horizontal Angle	Vertical Angle
	Direct	4h. 40m. 05s.	80° 28' 00"	29° 29' 00"
	Reversed	4h. 41m. 00s.	80° 58' 00"	29° 49' 00"

Bearing of reference object, N. 0° 08' 29" 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 upper left and lower right quadrants of the field.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	4h. 42m. 45s.	80° 08' 30"	28° 56' 30"
Reversed	4h. 43m. 25s.	80° 40' 30"	29° 20' 00"

Bearing of reference object is N. 0° 08' 30" W.

The mean of these is N. 0° 08' 30" W., and to the corresponding meridian, all the courses of this survey are referred.

June 30, 1916.

There is no corner of the Public Land Survey or U. S. L. M. within two miles of this claim. I, therefore establish U. S. L. M. No. 454 H. E. S. on rocky point 100 ft. above and to the W. of Black Canyon, SW. of junction of Black Canyon with small unnamed draw from the West. The country in this vicinity is a high timbered plateau, and it is impossible to find any point from which prominent topographical features are visible.

I chisel a + for the point on top of a limestone outcrop 5 x 5 x 1 ft. above ground and U. S. L. M. No. 454 H. E. S. on NW. face; and raise a mound of stone 6 ft. base, 4 ft. high alongside of cor., whence:

A yellow pine, 16 in. dia., bears N. 83°



## SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

21' E., 28 lks. dist., scribed

U S L M No 454 H E S + B T.

A yellow pine, 14 ins. dia., bears S. 21°

37' E., 72 lks. dist., scribed

U S L M No. 454 H E S + B T.

A yellow pine, 10 ins. dia., bears S. 35°

44' W., 64 lks. dist., scribed

U S L M No 454 H E S + B T.

A Douglas Fir, 18 ins. dia., bears N. 70°

32' W., 13 lks. dist., scribed

U S L M No 454 H E S + B T.

Cor. No. 1, H. E. S. 454, hereinafter described,

bears N. 31° 07' E., 6.32 chs. dist., by

direct measurement.

Cor. No. 9, H. E. S. 192, which is a sandstone

10 x 8 x 10 ins. above ground, chiseled

9 - H E S 192 on SE. face, bears S. 15° 49'

22" W., 32.75 chs. dist., by traverse which

appears at the end of these notes.

Cor. No. 2, H. E. S. 199, which is a limestone

15 x 10 x 10 ins. above ground, chiseled

2 - H E S 199 on N. face, bears N. 29° 01'

30" E., 224.63 chs., dist., by traverse which

appears at the end of these notes.

U. S. L. M. No. 182, H. E. S. which is a lime-

stone 5 x 2 x 2 ft. above ground, chiseled

U S L M No 182 H E S on West face, with

mound of stone 6 ft. base, 4 ft. high E. of

cor., bears S. 24° 08' 22" W., 282.67 chs.

dist., by traverse which appears at the end

of these notes.

U. S. L. M. No. 179, H. E. S. which is a lime-

stone 12 x 4 x 2 ft. above ground, chiseled

U S L M No 179 H E S on E. face, with mound



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SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

of stone 6 ft. base, 4 ft. high W. of cor., bears N. 45° 35' 39" E., 246.84 chs. dist., by traverse which appears at the end of these notes.

Standard Cor. for Secs. 31 and 36, T. 13 N., Rs. 16 and 17 E., bears N. 23° 42' 50" E., 502.03 chs. dist., by traverse which appears at the end of these notes.

BOUNDARIES OF CLAIM

Beginning at cor. No. 1.

Identical with cor. H-5. of the list survey, which is a sandstone 16 x 6, 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 4 x 4 x 1 ins. marked with a +, 14 ins. in the ground, over which set a sandstone 24 x 14 x 4 ins., chiseled + for the point and 1 - H.E.S 454 on N. face; and raise a mound of stone 3 ft. base, 2 ft. high N. of cor., whence:

A yellow pine, 26 ins. dia., bears N. 53° 22' W., 83 lks. dist., scribed 1 H E S 454 + B T.

A yellow pine, 16 ins. dia., bears S. 21° 55' W., 168 lks. dist., scribed 1 H E S 454 + B T.

U. S. L. M. No., 454 H. E. S. heretofore described bears S. 31° 07' W., 6.32 chs. dist., by direct measurement.

Lat. 34° 23' 38" N. Long. 110° 39' W., from special instructions from the Surveyor General. Checked by Forest Service Base Map.

Mag. decl. at 5 p.m. 14° 20' E. Mean mag. decl., 14° 21' E.

Thence N. 51° 17' W.

In open, over level land. Fence bears N. 10° E. and along line.

*with place map  
in sec 27  
is sat. 3/22/21*



SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains  
6.25

To cor. No. 2.

At cor. fence. Fence bears S. 51° 17' E. and N. 5° 30' W.

Identical with cor. H-4 of the list survey, which is a limestone 12 x 6 x 6 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a limestone 5 x 5 x 1 ins. marked with a +, 18 ins. in the ground, over which set a limestone 28 x 10 x 8 ins., chiseled + for the point and 2 - H E S 454 on E. face; and raise a mound of stone 3 ft. base, 2 ft. high E. of cor., whence:

A yellow pine, 22 ins. dia., bears S. 43° 29' W., 69 lks. dist., scribed 2 H E S 454 + B T.

A yellow pine, 28 ins. dia., bears S. 49° 08' E., 160 lks. dist., scribed 2 H E S 454 + B T.

Cor. H-3 of the list survey, which is a limestone 14 x 14 x 22 ins. in mound of stone, marked and witnessed as described by the Forest Service, bears N. 31° 30' E., 15.39 chs. I destroy all trace of this list cor.

Thence N. 15° 08' W.

Leave listed and enter unlisted land. In open, along West slope.

6.20 Foot of ascent. Ascend 65 ft. in timber to ridge.

9.90 Top ridge bears E. and W. Descend 65 ft. to bottom.

11.80 Foot descent. Fence bears NW. and SE. Thence over cultivated bottom land.

13.30 Fence bears N. 58° E. and S. 58° W. Leave cultivated land.

13.97 To cor. No. 3.

Deposit a limestone 3 x 2 x 2 ins. marked with a +, 16



Chains	<p>ins. in the ground, over which set a limestone 26 x 10 x 8 ins., chiseled + for the point and 3 - H E S 454 on E. face; and raise a mound of stone 3 ft. base, 2 ft. high E. of cor., whence:</p> <p style="padding-left: 40px;">A yellow pine, 20 ins. dia., bears S. 69° 57' W., 134 lks. dist., scribed 3 H E S 454 + B T.</p> <p style="padding-left: 40px;">A pinon, 6 ins. dia., bears S. 37° 11' W., 60 lks. dist., scribed 3 H E S 454 + B T.</p> <hr/> <p>Thence N. 36° 17' E.</p> <p>Ascend 50 ft. along SW. slope in woodland.</p> <p>11.00 Top ascent. Descend 40 ft. to cor. in pine timber.</p> <p>19.52 To cor. No. 4.</p> <p>Identical with cor. H-2 of the list survey, which is a limestone boulder 2 x 2 x 1 ft. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. and mark + on top and 4 - H E S 454 on S. face of same boulder for cor. No. 4 of this survey; and raise a mound of stone 3 ft. base, 2 ft. high S. of cor., whence:</p> <p style="padding-left: 40px;">A yellow pine, 26 ins. dia., bears N. 44° W., 21 lks. dist., scribed 4 H E S 454 + B T.</p> <p style="padding-left: 40px;">A yellow pine, 26 ins. dia., bears S. 63° W., 22 lks. dist., scribed 4 H E S 454 + B T.</p> <p style="text-align: right;">June 30, 1916.</p> <hr/> <p>July 1, 1916.</p> <p>Thence S. 71° 19' E.</p> <p>Leave unlisted and enter listed land. Descend 15 ft. to wash through scattering pine timber.</p> <p>4.35 West bank Black Canyon Wash, 4 ft. high, course NNW.</p> <p>7.60 East bank Black Canyon Wash, 3 ft. high, course NNW.</p> <p>Ascend 5 ft. to cor. in open.</p> <p>12.62 Road bears N. and S.</p>
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SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

13.00

Telephone line bears N. 20° E. and S. 20° W.

14.13

To cor. No. 5.

Deposit a limestone 3 x 3 x 2 ins. marked with a +, 14 ins. in the ground, over which set a limestone 24 x 14 x 6 ins., chiseled + for the point and 5 - H E S 454 on SSW. face; and raise a mound of stone 3 ft. base, 2 ft. high SSW. of cor., whence:

A yellow pine, 8 ins. dia., bears N. 66° E., 105 lks. dist., scribed 5 H E S 454 + B T.

A yellow pine, 18 ins. dia., bears S. 32° 30' E., 104 lks. dist., scribed 5 H E S 454 + B T.

Cor. H-1 of the list survey, which is a limestone 10 x 10 x 16 ins. above ground, marked and witnessed as described by the Forest Service, bears S. 71° 19' E., 51 lks. dist. I destroy all trace of this list cor.

Thence S. 33° 48' E.

Along foot of W. slope, ascending 10 ft. in open to cor.

2.50

Leave foot of slope.

8.63

To cor. No. 6.

Identical with cor. H-7 of the list survey, which is a limestone 14 x 10 x 10 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a limestone 2 x 2 x 2 ins., marked with a +, 16 ins. in the ground, over which set a limestone 26 x 7 x 5 ins., chiseled + for the point and 6 - H E S 454 on W. face; and raise a mound of stone 3 ft. base, 2 ft. high W. of cor., whence:

A yellow pine, 16 ins. dia., bears S. 83° 03' E., 28 lks. dist., scribed 6 H E S 454 + B T.



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STATE OF ARIZONA

Chains

A yellow pine, 26 ins. dia., bears S. 20° 19' W.,  
56 lks. dist., scribed 6 H E S 454 + B T.

Thence S. 61° 08' W.

Descend 10 ft. through scattering pine to cor.

11.07 Telephone line, bears N. 20° E. and S. 20° W.

11.98 Road bears N. 23° E. and S. 23° W.

13.56 To cor. No. 7.

Identical with cor. H-6 of the list survey, which is  
a limestone 12 x 8 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 lime-  
stone 2 x 2 x 1 ins. marked with a +, 14 ins. in the  
ground, over which set a limestone 24 x 5 x 5 ins.,  
chiseled + for the point and 7 - H E S 454 on W. face;  
and raise a mound of stone 3 ft. base, 2 ft. high W.  
of cor., whence:

A yellow pine, 22 ins. dia., bears N. 88° 33' E.,  
16 lks. dist., scribed 7 H E S 454 + B T.

A yellow pine, 24 ins. dia., bears N. 36° 05' W.,  
65 lks. dist., scribed 7 H E S 454 + B T.

Thence S. 31° 56' W.

Over level land, through scattering pine timber.

14.30 East bank Black Canyon Wash, 4 ft. high, course NNE.

16.45 West bank Black Canyon Wash, 4 ft. high, course NNE.

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

AREA

Area of listed land - - - - - 30.75 acres

Area of unlisted land - - - - - 18.37 acres

Total Area - - - - - 49.12 acres



SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

IMPROVEMENTS

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

An uncompleted log dwelling, 22 x 12 ft., the long side of which bears N. and S. and the NE. cor. of which bears N. 71° 37' W., 5.30 chs. dist. from cor. No. 6.

Value ----- \$ 75.00

There is approximately one mile of wire fence.

Value ----- \$100.00

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DESCRIPTION.

This claim lies in the bottom of Black Canyon, at an elevation of 6600 ft. It consists of bottom land with steep rough ridges in Western portion. The general slope is to the NNE.

The timber consists of a scattering stand of yellow pine along East boundaries, with fair stand of pine on ridges between cors. 2 and 3, and on N. and E. slope of ridge between cors. 3 and 4. The SE. slope of ridge between cors. 3 and 4 has a scattered stand of pinon, juniper and scrub pine.

The soil in bottom land is a sandy loam of good depth, and produces good crops. The soil on ridges is shallow, rocky and non-agricultural.

There is no water for irrigation. Water for domestic use can be obtained from shallow holes in Black Canyon Wash.

I saw no indications of mineral upon the claim.

There are approximately 8 acres in cultivation.

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CONFLICTS AND ADJOINING CLAIMS

There are no known conflicting or adjoining claims.

H. E. S. 192 of Fred Baca is 1/2 mile to SSW.



SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains Heber, Arizona, the nearest post office, is 4 miles to NE. Holbrook, Arizona, the nearest railroad point and commercial center is approximately 54 miles dist. The road for the 4 miles to Heber is poor, and from Heber to Holbrook is good.

-----TRAVERSE-----

Cor.	Course	Dist.	N	S	E	W
1-2	N. 51° 17' W.	6.25	3.91			4.88
2-3	N. 15° 08' W.	13.97	13.49			3.65
3-4	N. 36° 17' E.	19.52	15.74		11.55	
4-5	S. 71° 19' E.	14.13		4.53	13.39	
5-6	S. 33° 48' E.	8.63		7.17	4.80	
6-7	S. 61° 08' W.	13.56		6.55		11.88
7-1	S. 31° 56' W.	17.55		14.89		9.28
		93.61	33.14	33.14	29.74	29.69
			33.14		29.69	
Error in Lat. and Dep.			.00		.05	

Closing error, 1:1872.

Survey completed July 1, 1916.

Note: This list survey located claim in section 27, which location was found to be erroneous by tie to sec. cor. made in connection with this survey.

*P. P. A. Johnson*  
Surveyor - Draftsman



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Chains

Direct Solar, June 30, 1916, at cor. No. 4,

H. E. S. 454, Geo. E. Shelley.

Lat. 34° 24' N., Long. 110° 39' W. Elevation 6600 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	4h. 42m. 45s.	80° 08' 30"	28° 56' 30"	0+
Reversed.	4h. 43m. 25s.	80° 40' 30"	29° 20' 00"	0°
	4h. 43m. 05s.	80° 24' 30"	29° 08' 15"	
			1' 22"	
			29° 06' 53"	

Decl. 23° 09' 24"✓

$$\text{Cos. Q.} = \frac{\sin. 23^\circ 09' 24''}{\cos. 34^\circ 24' \times \cos. 29^\circ 06' 53''} - \frac{\tan. 34^\circ 24' \times \tan. 29^\circ 06' 53''}{\cos. 29^\circ 06' 53''}$$

log. sin. 23° 09' 24" = 9.594665 ✓  
 log. cos. 34° 24' = 9.916514 ✓  
 log. cos. 29° 06' 53" = 9.941336 ✓  
 9.736815 ✓ = .54553 ✓

log. tan. 34° 24' = 9.835509 ✓  
 log. tan. 29° 06' 53" = 9.745800 ✓  
 9.581309 ✓ = .38134 ✓

Cos. Q. = .16419 ✓  
 Q. = 80° 33' ✓

Bearing of reference object, N. 0° 08' 30" W. ✓



Chains

Direct Solar, June 30, 1916 at cor. No. 4,

H. E. S. 454, Geo: E. Shelley.

Lat. 34° 24' N.; Long. 110° 39' W.; Elevation 6600 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	4h. 40m. 05s.	80° 28'	29° 29'	° +
Reversed	4h. 41m. 00s.	80° 58'	29° 49'	+ °
	4h. 40m. 32s.	80° 43'	29° 39'	
			1' 22"	
			29° 37' 38"	

Decl. 23° 09' 24" N.

$$\text{Cos. } Q. = \frac{\sin. 23^{\circ} 09' 24''}{\cos. 34^{\circ} 24' \times \cos. 29^{\circ} 37' 38''} - \frac{\tan. 34^{\circ} 24' \times \tan. 29^{\circ} 37' 38''}{\cos. 29^{\circ} 37' 38''}$$

log. sin. 23° 09' 24" = 9.594665 ✓  
 log. cos. 34° 24' = 9.916514 ✓  
 log. cos. 29° 37' 38" = 9.939149 ✓  
 $\frac{9.739002}{9.939149} = \text{log. } .54828$  ✓  
 log. tan. 34° 24' = 9.835509 ✓  
 log. tan. 29° 37' 38" = 9.754889 ✓  
 $\frac{9.590398}{9.754889} = \text{log. } .38940$  ✓

Cos. Q. = .15888 ✓

Q. = 80° 51' 29" ✓

Bearing of reference object, N. 0° 8' 29" 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. 454, STATE OF Arizona.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M.D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
1-2	N. 51° 17' W.	6.25	3 91			4 88	12 20	47 70	
2-3	N. 15° 08' W.	13.97	13 49			3 65	3 66	49 37	
3-4	N. 36° 17' E.	19.52	15 74		11 55		11 54	181 64	
4-5	S. 71° 19' E.	14.13		4 53	13 39		36 46		165 16
5-6	S. 33° 48' E.	8.63		7 17	4 80		54 64		391 77
6-7	S. 61° 08' W.	13.56		6 55		11 88	47 55		311 45
7-1	S. 31° 56' W.	17.55		14 89		9 28	26 37		392 65
		93.61	33 14	33 14	29 74	29 69		278 71	1261 03
			33 14	33 14	29 72	29 72			278 71
									982 32
									49 12 Acres.
	Closing error 1:1872								

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EMH



DIRECTIONS.—1. Carry out calculations to two decimals only.  
 2. In balancing Latitudes and Departures do not obliterate or change 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. 454, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
	N. 31° 07' E.	6.32	5 41		3 27		log. 115.60	2.062958	log. 257.95
	S. 11° 27' W.	10.65	10 44				log. 257.95	2.411536	
	S. 20° 51' W.	28.34	26 48		10 09		log. tan. 24° 08' 22"	9.651422	
	S. 74° 37' E.	6.51	1 73		6 28				
	S. 15° 16' W.	22.81	22 01		6 01				
	S. 44° 08' W.	13.02	9 34		9 07		log. 257.95	2.411536	
	S. 82° 39' W.	8.71	1 11		8 64		log. cos. 24° 08' 22"	9.960258	
	S. 43° 30' W.	7.98	5 79		5 49		log. 282.67	2.451278	
	S. 3° 05' E.	18.95	18 91		1 02				
	S. 17° 30' W.	18.51	17 65		5 57				
	N. 89° 45' W.	29.96	0 13		29 96				
	S. 18° 10' W.	157.90	150 03		49 23				
			5 54	263 49	10 57	126 17			
			5 54	5 54		10 57			
			257 95			115 60			

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EMH



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TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 454, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
USLM - No. 1454	N. 31° 07' E.	U. S. L.	M. No. 454	H. E. S.	to 9 H. E. S.	S. 192.	log. 31.51	-	1.498448
1,454 -Tp.	S. 11° 27' W.	6.32	5 41	10 44	3 27	2 11	log. cos. 15° 49' 22" -	-	9.983225
TP. - 9, 192	S. 20° 51' W.	28.34		26 48		10 09	32.75 ✓ -	1.515223 ✓	
			5 41	36 92	3 27	12 20	log. 8.93	-	10.950851 ✓
				5 41		3 27	log. 31.51	-	1.498448 ✓
		N. 15° 49' 22" E., 32.75 chs.					log. tan. 15° 49' 22" -	-	9.452403 ✓
							log.		10.950851
							sine. 15° 49' 22" -	-	9.435625 ✓
							32.75 ✓	-	1.515226 ✓
USLM 454 - USLM 179	N. 45° 35' 39" E.	U. S. L. M. No. 454 H. E. S. to S. C. for secs. 31 and 36, T. 13 N., R. 16 and 17 E.	172 72		176 34		log. 201.90	-	2.305136 ✓
USLM 179 - S. C.	N. 5° 05' 22" E.	246.84	286 92		25 56		log. 459.64	-	2.662418 ✓
		288.06	459 64		201 90		log. cos. 23° 42' 50" -	-	9.642718 ✓
							log. 201.90	-	2.305136 ✓
							sine 23° 42' 50" -	-	9.604409 ✓
							502.03 ✓	-	2.700727 ✓
							459.64	-	2.662418 ✓
							cos. 23° 42' 50" -	-	9.961689 ✓
							502.03 ✓	-	2.700729 ✓

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EMH



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CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
	N. 31° 07' E.	U. S. L. 6.32	5 41 ✓		3 27 ✓				
	N. 31° 56' E.	17.55	14 89 ✓		9 28 ✓				
	N. 61° 08' E.	13.56	6 55 ✓		11 88 ✓				
	N. 33° 48' W.	8.63	7 17 ✓			4 80 ✓	log. 108.99 -	2.037386 ✓	
	N. 8° 00' E.	2.27	2 25 ✓		0 32 ✓		log. 196.42 -	2.293185 ✓	
	N. 4° 07' E.	35.00	34 91 ✓		2 51 ✓		log. tan. 29° 01' 30" -	9.744201 ✓	
	N. 50° 14' E.	27.08	17 32 ✓		20 82 ✓				
	N. 39° 43' E.	22.27	17 13 ✓		14 23 ✓		log. 196.42 -	2.293185 ✓	
	N. 50° 03' E.	10.00	6 42 ✓		7 67 ✓		log. cos. 29° 01' 30" -	9.941714 ✓	
	N. 24° 25' E.	29.80	27 13 ✓		12 32 ✓		log. 224.63 -	2.351471 ✓	
	N. 34° 10' E.	29.14	24 11 ✓		16 37 ✓				
	N. 52° 49' E.	15.00	9 07 ✓		11 95 ✓				
	N. 46° 13' E.	12.18	8 42 ✓		8 79 ✓				
	N. 19° 45' W.	16.62	15 64 ✓			5 62 ✓			
			196 42 ✓		119 41 ✓	10 42			
					10 42				
					108 99				

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ENTH



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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.

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TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 454, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.			DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.				
	U. S. L. M. No.									
USLM454- 2,199	N. 29°01'29" E.	224.65	196.42		108.99					
2,199 - 1,199	N. 42° 34' E.	53.68	39.53		36.31			log. 176.34 -	2.246350	
1,199 - USLM179	S. 26° 09' E.	70.44		63.23	31.04			log. 172.72 -	2.237342	
			235.95	63.23	176.34			log. tan. 45°35'39" -	10.009008	
			63.23							
			172.72					log. 176.34 -	2.246350	
								log. sin. 45°35'39" -	9.855943	
								log. 246.84	2.392407	

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APPROVAL

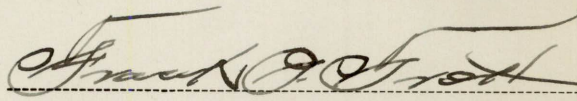
Office of the United States Surveyor General,

Phoenix, Arizona, May 22, 1918

The foregoing field notes of Homestead Entry Survey No.

454

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.