

U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

OCT. 1 - 1917

MAR - 2 1918

**FIELD NOTES**

466 add  
468 "

OF

HOMESTEAD ENTRY SURVEY NO 461

SITUATED IN THE **SITGREAVES** NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3.

Approximately

In Section 30 , unsurveyed, Township 12 N., Range 16 E.

In Section 31 , unsurveyed, Township 12 N., Range 16 E.

of the

**Gila and Salt River Base and Meridian.**

State of

**Arizona.**

Applicant for listing **J. N. Porter,**

Residence **Heber, Arizona.**

Application No. **474** , dated **November 26** , 19 **13.**

List No. **3-3081** , dated **July 1** , 19 **14.**

Applicant for survey **J<sup>red</sup> N. Porter,**

Residence **Heber, Arizona.**

H. E. No. **026478** , dated **February 19** , 19 **16.**

Office **Phoenix, Arizona.**  
Land District

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

Under special instructions dated **April 17,** , 19 **16.**

Survey commenced **July 12** , 19 **16.**

Survey completed **July 15** , 19 **16.**

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

OATH OF ASSISTANTS

We hereby certify that we assisted R. P. A. Johnson in surveying all those parts or portions of Homestead Entry Survey No. 461, 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 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 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. 3-3081, dated July 1, 1914, for patent, under the Act of June 11, 1906, the same to be known as Homestead Entry Survey No. 461, situated within the Sitgreaves National Forest, in un surveyed Section 30, Township 12N, Range 16E, and un surveyed Section 31, Township 12N, Range 16E, approximately

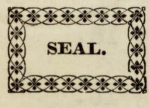
of the Gila and Salt River Basins meridian, Arizona, and the related retracements and resurveys and section subdivisions, which are represented in the following field notes as having been surveyed by me; and I further solemnly swear that all the corners of said survey have been established and perpetuated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

DISTRICT OF COLUMBIA  
CITY OF WASHINGTON

Subscribed and sworn to before me this 27<sup>th</sup> day of February, 1917.

Sylvester L. McLaughlin  
NOTARY PUBLIC, D. C.



Commission expires  
June 20, 1918.  
8-2349

## SITGREAVES NATIONAL FOREST

STATE OF ARIZONA.

Chains

Applicant for listing, J. N. Porter; Application No. 474, dated November 26, 1913; List No. 3-3081, dated July 1, 1914; H. E. 026478 made in the Phoenix Land Office on February 19, 1916, by J. N. Porter.

Surveyed under special instructions from the Surveyor General for Arizona, dated April 17, 1916 and designated as Homestead Entry Survey No. 461.

Situated in what will probably be when surveyed Secs. 30 and 31, T. 12 N., R. 16 E., 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 12, 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 13, 1916, p.m.

## OBSERVATIONS

I observe the altitude of the sun for azimuth at Cor. No. 6 of this survey hereinafter described. The reading on the reference object is set at zero and sun was observed in the upper left and lower right quadrants of the field. My watch is set for local mean time.

Lat.  $34^{\circ} 24' 30''$  N. Long.  $110^{\circ} 41' 30''$  W. from special instructions of the Surveyor General.

Chains	Telescope	Time	Horizontal Angle	Vertical Angle
	Direct	4h. 48m. 47s.	80° 05' 30"	25° 40' 00"
	Reverse	4h. 49m. 25s.	80° 35' 00"	26° 02' 00"

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

July 14, 1916 a.m.

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

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	9h. 05m. 40s.	84° 15' 00"	48° 30' 00"
Reverse	9h. 06m. 42s.	84° 47' 00"	48° 10' 00"

Bearing of references object, N. 0° 01' 48" E.

The mean of these is N. 0° 01' 24" E. and to the corresponding meridian. All the courses of this survey are referred.

TIE

July 12, 1916.

From cor. No. 1, hereinafter described.

Thence S. 22° 05' 42" W.

By traverse which appears at end of these notes.

143.46 To U. S. L. M. No. 196 H. E. S. which is a limestone 6 x 3 x 2 ft. above ground, marked U. S. L. M. No. 196 H. E. S. on west face with mound of stone 6 ft. base, 4 ft. high, along side cor.

July 12, 1916.

BOUNDARIES OF CLAIM

July 13, 1916.

TRACT A

Beginning at cor. No. 1

## SITGREAVES NATIONAL FOREST

STATE OF ARIZONA.

Chains 31 Identical with Cor. H-14 of the list survey, which is  
 .1 an unmarked stake in mound of stone. 31 I destroy all  
 .3 trace of this list cor. 08  
 . Deposit a sandstone 4 x 3 x 1 ins. marked with a +  
 16 ins. in the ground, over which set a sandstone 26 x  
 8 x 4 ins. chiseled + for the point and 1 H E S 461  
 on NE. face. No witnesses available, therefore, dig  
 pits 24 x 24 x 12 ins. crosswise on claim lines 7 ft.  
 dist., and raise a mound of earth 4 ft. base, 2 ft.  
 high, 3-1/2 ft. dist. NE. of cor., whence:  
 U. S. L. M. No. 196 H. E. S., heretofore, described  
 bears S. 22° 05' 42" W. 143.46 chs. dist. 30.31  
 Lat. 34° 23' 43" N. Long. 110° 41' 35" W. from special  
 instructions of the Surveyor General, and later verified.  
 Mag. decl. at 9:00 a.m., 14° 30' E. Mean Mag. decl.  
 14° 27' E.  
 Thence N. 18° 04' W. 3 x 3 x 3  
 In open along edge of timber; ascend 20 ft. to spur.  
 7.50 Leave open. Enter timber, bears E. and W.  
 9.20 Spur bears E. and W. Descend 10 ft. to bench.  
 12.50 Foot descent. Ascend 10 ft. to saddle.  
 17.50 Saddle. Descend 20 ft. to bottom.  
 23.00 Leave timber, bears NW. and SE. Enter open level land.  
 25.80 Fence cor. Fence bears ENE. and along line.  
 37.60 Road bears NE. and SW.  
 39.24 Cor. No. 2.

Identical with cor. H-13 of the list survey, which is a  
 sandstone 12 x 4 x 8 ins. above ground, marked and wit-  
 nessed as described by the Forest Service. I destroy  
 all trace of this list cor.  
 Deposit a limestone 4 x 3 x 1 ins. marked with a +  
 16 ins. in the ground, over which set a limestone  
 26 x 10 x 8 ins. chiseled + for the point and 2 H E S 461  
 on E. face; raise a mound of stone 3 ft. base, 2 ft. high  
 E. of cor., whence:

Chains  
A yellow pine, 16 ins. dia. bears N. 62° 18' E.  
132 lks. dist. scribed 2 H E S 461 + B T.  
A yellow pine, 30 ins. dia. bears S. 24° 40' E.  
91 lks. dist. scribed 2 H E S 461 + B T.

Thence N. 3° 25' E.  
Over level land in edge of timber.  
6.00 Road bears NNW. and SSE.  
8.45 Enter cultivated land bears NNW. and SSE.  
12.00 Leave cultivated land bears NE. and SW.  
14.19 Road bears NE. and SW.  
16.95 Cor. No. 3.

Identical with cor. H-12 of the list survey, which is a sandstone 14 x 3 x 8 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor.

Deposit a limestone 6 x 3 x 3 ins. marked with a + 18 ins. in the ground, over which set a limestone 28 x 8 x 4 ins. chiseled + for the point and 3 H E S 461 on E. face: raise a mound of stone 3 ft. base, 2 ft. high E. of cor., whence:

A yellow pine, 26 ins. dia. bears S. 68° 45' E.  
170 lks. dist. scribed 3 H E S 461 + B T.  
A yellow pine, 30 ins. dia. bears S. 6° 30' W.  
125 lks. dist. scribed 3 H E S 461 + B T.

Thence N. 34° 45' E.  
Along foot steep E. slope through scattered timber.  
2.45 Road bears N. and S.  
12.44 Cor. No. 4.

Identical with cor. H-11 of list survey which is an unmarked stake in mound of stone. I destroy all trace of this list cor.  
Deposit a limestone 7 x 4 x 2 ins. marked with a +

## SITGREAVES NATIONAL FOREST

STATE OF ARIZONA.

Chains 16 ins. in the ground, over which set a limestone 26 x 8 x 8 ins. chiseled + for the point and 4 H E S 461 on SE. face; raise a mound of stone 3 ft. base, 2 ft. high, SE. of cor., whence:

A yellow pine, 22 ins. dia. bears N. 83° 30' W.  
62 lks. dist. scribed 4 H E S 461 + B T.

A yellow pine, 24 ins. dia. bears N. 6° 15' W.  
64 lks. dist. scribed 4 H E S 461 + B T.

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Thence N. 56° 00' E.

Along SE. side of road exception. Across open draw.

8.50 Enter cultivated land, bears E. and W.

13.10 Cor. cultivated land, bears W. and SSW.

13.63 Cor. No. 5.

Deposit a limestone 7 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 5 H E S 461 on S. face; raise a mound of stone 3 ft. base, 2 ft. high, S. of cor., whence:

A yellow pine, 22 ins. dia. bears S. 13° 55' E.  
72 lks. dist. scribed 5 H E S 461 + B T.

A yellow pine, 20 ins. dia. bears S. 63° 21' W.  
208 lks. dist. scribed 5 H E S 461 + B T.

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Thence S. 79° 02' E.

.54 Fence bears NNE. and SSW.

.57 Cor. No. 6.

Identical with cor. H-7 of list survey which is an unmarked stake in a mound of stone. I destroy all trace of this list cor.

Deposit a limestone 3 x 3 x 2 ins. marked with a + 14 ins. in the ground, over which set a limestone 24 x 20 x 8 ins. chiseled + for the point and 6 H E S 461 on S. face; raise a mound of stone 3 ft. base, 2 ft. high

Chains S. of cor., whence:  
 A yellow pine, 16 ins. dia. bears N. 55° 28' E.  
 47 lks. dist. scribed 6 H E S 461 + B T.  
 A yellow pine, 16 ins. dia. bears S. 22° 09' W.  
 44 lks. dist. scribed 6 H E S 461 + B T.  
 July 13, 1916.

July 14, 1916.  
 Thence S. 54° 50' E.

Over open level land.

1.75 Brookbank Wash, 60 lks. wide, 6 ft. deep. Course NE.

14.00 Cor. No. 7.  
 Identical with cor. H-6 of list survey which is a mound  
 of rocks. No markings.

Deposit a limestone 6 x 3 x 2 ins. marked with a +  
 22 ins. in the ground, over which set a limestone  
 32 x 16 x 8 ins. chiseled + for the point and 7 H E S 461  
 on W. face; raise a mound of stone 3 ft. base, 2 ft. high.  
 W. of cor., whence:  
 A yellow pine, 16 ins. dia. bears S. 16° 24' E.  
 22 lks. dist. scribed 7 H E S 461 + B T.  
 A yellow pine, 16 ins. dia. bears N. 83° 06' E.  
 140 lks. dist. scribed 7 H E S 461 + B T.

Thence West.

Over open level land.

6.80 Foot ascent. Ascend 50 ft. to spur. Enter timber,  
 bears NW. and SE.

11.90 Top spur bears N. and S. Descend 50 ft. to cor.

15.20 Fence bears NNE. and SSW.

17.00 Cor. No. 8.

Identical with cor. H-5 of the list survey which is a  
 pile of rock. No markings. I destroy all trace of  
 this list cor.



SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Deposit a limestone 3 x 2 x 2 ins. marked with a +.  
14 ins. in the ground, over which set a limestone  
24 x 8 x 10 ins. chiseled + for the point and  
8 H E S 461 on NW. face; raise a mound of stone  
3 ft. base, 2 ft. high, NW. of cor., whence:

A yellow pine, 34 ins. dia. bears S. 39° 26' E.

83 lks. dist. scribed 8 H E S 461 + B T.

A yellow pine, 16 ins. dia. bears N. 54° 56' E.

61 lks. dist. scribed 8 H E S 461 + B T.

Thence S. 37° 00' W.

Along foot West slope in edge of timber.

12.00 Cor. No. 9.

Identical with cor. H-4 of the list survey, which is  
a limestone 14 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 limestone 2 x 2 x 2 ins. marked with a +.  
14 ins. in the ground, over which set a limestone  
24 x 10 x 8 ins. chiseled + for the point and 9 H E S 461  
on W. face; raise a mound of stone 3 ft. base, 2 ft. high,  
W. of cor., whence:

A yellow pine, 22 ins. dia. bears S. 76° 30' E.

20 lks. dist. scribed 9 H E S 461 + B T.

A yellow pine, 28 ins. dia. bears N. 51° 15' E.

34 lks. dist. scribed 9 H E S 461 + B T.

Thence S. 5° 22' W.

Ascend 20 ft. in open to spur.

1.80 Top rocky spur, extends westerly. Descend 20 ft. to level  
bench.

2.90 Foot descent. Thence over level bench along foot of  
W. slope.

Chains

17.55 Cor. No. 10.

Identical with cor. H-3 of the list survey, which is a sandstone 14 x 3 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 3 x 3 x 2 ins. marked with a cross 16 ins. in the ground, over which set a sandstone 26 x 12 x 4 ins. chiseled + for the point and 10 H E S 461 on W. face; raise a mound of stone 3 ft. base, 2 ft. high W. of cor., whence:

A yellow pine, 22 ins. dia. bears N. 82° 15' E.  
18 lks. dist. scribed 10 H E S 461 + B T.

A yellow pine, 22 ins. dia. bears S. 45° 30' E.  
25 lks. dist. scribed 10 H E S 461 + B T.

Thence S. 45° 47' E.

Over level land in timber.

19.16 Cor. No. 11.

Identical with cor. H-2 of the list survey which is an unmarked stake in mound of stone. I destroy all trace of this list cor.

Deposit a sandstone 4 x 3 x 2 ins. marked with a + 14 ins. in the ground, over which set a limestone 24 x 8 x 6 ins. chiseled + for the point and 11 - H E S 461 on W. face; raise a mound of stone 3 ft. base, 2 ft. high, W. of cor., whence:

A yellow pine, 20 ins. dia. bears N. 6° 15' W.  
67 lks. dist. scribed 11 H E S 461 + B T.

A yellow pine, 8 ins. dia. bears S. 32° 15' W.  
87 lks. dist. scribed 11 H E S 461 + B T.

Thence S. 0° 04' W.

Descend 10 ft. to arroyo.

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA.

Chains  
1.15 Arroyo 30 lks. wide, 4 feet deep. Course W. Ascend  
10 ft. to level.

1.50 Top ascent. Thence over level land in edge of timber.

20.00 Leave level and ascend 20 ft. to rocky spur.

21.30 Top rocky spur extends westerly. Descend 20 ft. in  
scattered timber to cor.

*spur  
extends in  
one  
direction  
only*

23.52 Cor. No. 12.

Identical with cor. H-1 of list survey which is a mound of rock. No marking. I destroy all trace of this list cor. Deposit a sandstone 3 x 3 x 2 ins. marked with a + 20 ins. in the ground, over which set a limestone 30 x 10 x 8 ins. chiseled + for the point and 12 H E S 461 on NW. face; raise a mound of stone 3 ft. base, 2 ft. high, NW. of cor., whence:

A yellow pine, 10 ins. dia. bears S. 43° 40' W.

89 lks. dist. scribed 12 H E S 461 + B T.

A yellow pine, 6 ins. dia. bears N. 47° 51' W.

56 lks. dist. scribed 12 H E S 461 + B T.

Thence West.

Across open draw.

3.40 Brookbank Wash, 70 lks. wide, 8 ft. deep. Course NNW.

7.08 Cor. No. 1, the place of beginning.

July 14, 1916.

July 15, 1916.

TRACT B

Beginning at Cor. No. 13.

Deposit a sandstone 7 x 4 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 13 H E S 461 on NW. face; raise a mound of stone

Chains

3 ft. base, 2 ft. high, NW. of cor., whence:

A yellow pine, 18 ins. dia. bears N. 20° 50' E.  
27 lks. dist. scribed 13 H E S 461 + B T.

A yellow pine, 26 ins. dia. bears N. 74° 53' W.  
81 lks. dist. scribed 13 H E S 461 + B T.

Cor. No. 4, TRACT A, heretofore described bears  
N. 89° 58' E. 89 lks. dist.

Thence S. 89° 58' W.

Ascend 40 ft. in timber to ridge.

3.50 Top ridge bears N. and S. Descend 40 ft. to bottom.

7.50 Foot descent. Thence over level land in edge of timber.

19.26 Cor. No. 14.

Identical with cor. H-10 of list survey which is a  
pile of stone. No markings. I destroy all trace  
of this list corner. Deposit a sandstone 3 x 2 x 1  
ins. marked with a + 6 ins. in the ground, over which  
set a sandstone 25 x 10 x 8 ins. chiseled + for the  
point and 14 H E S 461 on N. face, (impracticable to  
set stone deeper); raise a mound of stone 4 ft. base,  
2 ft. high, around cor., whence:

A yellow pine, 14 ins. dia. bears N. 37° 29' E.  
31 lks. dist. scribed 14 H E S 461 + B T.

A yellow pine, 18 ins. dia. bears S. 56° 06' E.  
112 lks. dist. scribed 14 H E S 461 + B T.

Thence N. 55° 19' W.

Over open level land. Fence on line.

6.35 Leave bottom. Enter timber, bears N. and S., and ascend  
55 ft. to ridge.

12.30 Top ridge bears NE. and SW. Descend 55 ft. to draw.

18.00 Foot descent. Leave timber, bears ENE. and SW. Enter  
open draw. Cor. fence. Fence bears NNE. Leave  
fence.

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

20.97 Cor. 15.

Identical with cor. H-9 of the list survey which is an unmarked stake in a mound of rock. I destroy all trace of this list cor.

Deposit a limestone 5 x 4 x 2 ins., marked with a + 18 ins. in the ground, over which set a limestone 28 x 18 x 8 ins. chiseled + for the point and 15 H E S 461 on E. face; raise a mound of stone 3 ft. base, 2 ft. high

E. of cor., whence:

A yellow pine, 24 ins. dia. bears N. 38° 38' E.

48 lks. dist. scribed 15 H E S 461 + B T.

A yellow pine 18 ins. dia. bears N. 65° 02' W.

63 lks. dist. scribed 15 H E S 461 + B T.

Thence N. 71° 09' E.

Along foot of S. slope.

3.20 Fence bears SSW. and NNE.

10.09 Cor. No. 16.

Identical with cor. H-8 of list survey which is a cross on a limestone boulder 18 x 16 x 12 ins. above ground, surrounded by mound of stone. I destroy all

trace of this list cor., and mark + on top of same stone and 16 H E S 461 on S. face; raise a mound of stone 3 ft. base, 2 ft. high S. of cor., whence:

A yellow pine, 14 ins. dia. bears N. 66° 53' E.

91 lks. dist. scribed 16 H E S 461 + B T.

A cross on a limestone boulder 8 x 6 x 5 ft.

above ground, bears N. 51° 43' W. 10 lks.

dist., marked B R 16 H E S 461.

Thence S. 79° 02' E.

Across open level land.

3.00 Leave open. Enter timber, bears NW. and SE. and ascend

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA.

Chains 60 ft. along rocky south slope.

32.00 Top ascent; descend 60 ft. to cor.

39.17 Cor. No. 17.

Deposit a limestone 5 x 5 x 2 ins., marked with a + 22 ins. in the ground, over which set a limestone 32 x 12 x 10 ins. chiseled + for the point and 17 H E S 461 on SW. face; raise a mound of stone 3 ft. base, 2 ft. high, SW. of cor., whence:

A yellow pine, 20 ins. dia. bears S. 47° 24' W. 158 lks. dist. scribed 17 H E S 461 + B T.

A yellow pine, 22 ins. dia. bears N. 14° 22' E. 76 lks. dist. scribed 17 H E S 461 + B T.

Cor. No. 5, TRACT A, heretofore described bears S. 79° 02' E. 71 lks. dist.

Thence S. 56° 00' W.

Along NW. side of road exception, across open draw.

.50 Enter cultivated land, bears E. and W.

5.75 Leave cultivated land, bears E. and WSW.

13.87 Cor. No. 13, the place of beginning.

AREA

TRACT A - - - - - 65.51 acres.

TRACT B - - - - - 42.35 acres.

Total area - - - - - 107.86 acres.

IMPROVEMENTS.

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

A combination house and barn, 30 x 30 ft., the SW. cor.

of which bears N. 16° 02' E. 7.20 chs. dist. from

Cor. No. 4.

Value - - - - - \$200.00

There is approximately one mile of wire and brush fence.

Value - - - - - \$100.00

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

DESCRIPTION

This is an "L" shaped claim along Brookbank Canyon and small draw from the west. The general slope

is to the N. and E.

The elevation is approximately 6800 ft.

The bottom land is open level land. The portion along

Brookbank Canyon is cut by a deep wide wash, while

the portion on draw coming in from the west has no

well defined water course.

The soil is a sandy loam very deep and fertile and will produce good crops.

Timber consists of a good stand of yellow pine along the boundaries and on the slopes and benches.

There is no water for irrigation or domestic use.

The land is not known to be mineralized.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicting or adjoining claims. H. E. S. 196 of John Nelson lies approximately 3/4 of a mile to the south.

Heber, Arizona, the nearest post office is 8 miles to ENE. and Holbrook, Arizona, the nearest railroad point is 58 miles to NE.

Chains

TRAVERSES

TRACT A

Cor.	Course	Dist.	N.	S.	E.	W.	
1-2	N. 18° 04' W.	39.24	37.31			12.17	
2-3	N. 3° 25' E.	16.95	16.92		1.01		
3-4	N. 34° 45' E.	12.44	10.22		7.09		
4-5	N. 56° 00' E.	13.63	7.62		11.30		
5-6	S. 79° 02' E.	14.57		11.11	5.56		
6-7	S. 54° 50' E.	14.00		8.06	11.44		
7-8	West	17.00				17.00	
8-9	S. 37° 00' W.	12.00		9.58		7.22	
9-10	S. 5° 22' W.	17.55		17.47		1.64	
10-11	S. 45° 47' E.	19.16		13.36	13.73		
11-12	S. 0° 04' W.	23.52		23.52		.03	
12-1	West	7.08				7.08	
			<u>193.14</u>	<u>72.07</u>	<u>72.10</u>	<u>45.13</u>	<u>45.14</u>
					72.07	45.13	
Error in lat. and dep.					0.03	0.01	

Closing error, 1:6112.

TRACT B

Cor.	Course	Dist.	N.	S.	E.	W.	
13-14	S. 89° 58' W.	19.26		19.01		19.26	
14-15	N. 55° 19' W.	20.97	11.93			17.24	
15-16	N. 71° 09' E.	10.09	3.26		9.55		
16-17	S. 79° 02' E.	39.17		7.45	38.45		
17-13	S. 56° 00' W.	13.87		7.76		11.50	
			<u>103.36</u>	<u>15.19</u>	<u>15.22</u>	<u>48.00</u>	<u>48.00</u>
					15.19	48.00	
Error in lat. and dep.					0.03	0.00	

Closing error, 1:3445.

Survey completed July 15, 1916.

*R. L. Johnson*

Surveyor - Draftsman.



Chains

Direct Solar at cor. 6, H. E. S. 461 of J. N.

Porter, July 14, 1916.

Lat.  $34^{\circ} 24' 30''$ . Long.  $110^{\circ} 41' 30''$ . Elevation  
6800 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	9h. 05m. 40s.	$84^{\circ} 15' 00''$	$48^{\circ} 30' 00''$	$^{\circ} +$
Reverse	9h. 06m. 42s.	$84^{\circ} 47' 00''$	$48^{\circ} 10' 00''$	$^{\circ} +$
	9h. 06m. 11s.	$84^{\circ} 31' 00''$	$48^{\circ} 20' 00''$	
			$40''$	
			$48^{\circ} 19' 20''$	

Decl.  $21^{\circ} 40' 33''$  N.

$$\text{Cos. } Q. = \frac{\sin. 21^{\circ} 40' 33''}{\cos. 34^{\circ} 24' 30'' \times \cos. 48^{\circ} 19' 20''}$$

$$\tan. 34^{\circ} 24' 30'' \times \tan. 48^{\circ} 19' 20''$$

$$\log. \sin. 21^{\circ} 40' 33'' = 9.567443$$

$$\log. \cos. 34^{\circ} 24' 30'' = 9.916470$$

$$\log. \cos. 48^{\circ} 19' 20'' = 9.822783$$

$$\frac{9.828190}{9.822783} = \log. .67327$$

$$\log. \tan. 34^{\circ} 24' 30'' = 9.835645$$

$$\log. \tan. 48^{\circ} 19' 20'' = 10.050477$$

$$\frac{9.886122}{9.886122} = \log. .76935$$

$$\text{Cos. } Q. = .09608$$

$$Q. = 84^{\circ} 29' 12''$$

Bearing of reference object, N.  $0^{\circ} 01' 48''$  E.

Chains

Direct Solar at cor. S. N. E. S. E. 1 of 2  
 July 14, 1916.  
 Elev. 5800 ft.  
 Direct 91.00m. 40s. 84° 13' 00" 48° 30' 00"  
 Reverse 91.00m. 42s. 84° 47' 00" 48° 10' 00"  
 91.00m. 11s. 84° 21' 00" 48° 30' 00"  
 48° 13' 30"  
 Decl. 21° 40' 33" N.  
 Cos. 91.00m. 40s. 84° 13' 30" = 9.88443  
 Cos. 91.00m. 42s. 84° 47' 30" = 9.88443  
 Cos. 91.00m. 11s. 84° 21' 30" = 9.88443  
 Log. tan. 48° 13' 30" = 10.00477  
 Log. tan. 48° 30' 00" = 10.00477  
 Log. tan. 48° 13' 30" = 9.88443  
 Log. tan. 48° 30' 00" = 9.88443  
 Log. tan. 48° 13' 30" = 9.88443  
 Log. tan. 48° 30' 00" = 9.88443  
 Cos. 91.00m. 40s. 84° 13' 30" = 9.88443  
 Cos. 91.00m. 42s. 84° 47' 30" = 9.88443  
 Cos. 91.00m. 11s. 84° 21' 30" = 9.88443  
 Bearing of reference object, N. 0° 01' 48" E.

Chains

HOMESTEAD ENTRY SURVEY NO. 461

SITGREAVES NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar at cor. No. 6, H. E. S. 461 of J. N.

Porter, July 13, 1916.

Lat.  $34^{\circ} 24' 30''$ . Long.  $110^{\circ} 41' 30''$ . Elevation  
6800 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	4h. 48m. 47s.	$80^{\circ} 05' 30''$	$25^{\circ} 40' 00''$	$^{\circ} +$
Reverse	4h. 49m. 25s.	$80^{\circ} 35' 00''$	$26^{\circ} 02' 00''$	$+^{\circ}$
	4h. 49m. 06s.	$80^{\circ} 20' 15''$	$25^{\circ} 51' 00''$	
			$1' 34''$	
			$25^{\circ} 49' 26''$	

Decl.  $21^{\circ} 46' 42''$  N.

$$\text{Cos. Q.} = \frac{\sin. 21^{\circ} 46' 42''}{\cos. 34^{\circ} 24' 30'' \times \cos. 25^{\circ} 49' 26''}$$

$$\tan. 34^{\circ} 24' 30'' \times \tan. 25^{\circ} 49' 46''$$

$$\log. \sin. 21^{\circ} 46' 42'' = 9.569393$$

$$\log. \cos. 34^{\circ} 24' 30'' = 9.916470$$

$$\log. \cos. 25^{\circ} 49' 26'' = 9.954308$$

$$\frac{9.698615}{9.954308} = \log. .49959$$

$$\log. \tan. 34^{\circ} 24' 30'' = 9.835645$$

$$\log. \tan. 25^{\circ} 49' 26'' = 9.684786$$

$$\frac{9.520431}{9.684786} = \log. .33146$$

$$\text{Cos. Q.} = .16813$$

$$\text{Q.} = 80^{\circ} 19' 15''$$

Bearing of reference object, N.  $0^{\circ} 01' 00''$  E.

20

Chains. Direct bearing of cor. No. 6, H. E. 2. 201 of

former, July 13, 1916.

Lat. 34° 24' 30" Long. 110° 41' 30" Elevation

6800 ft.

Telescope Time Horizontal Vertical  
and angle

Direct 41. 43m. 47s. 80° 03' 30" 22° 40' 00"

Reverse 42. 44m. 52s. 80° 31' 00" 22° 02' 00"

41. 43m. 00s. 80° 30' 15" 22° 21' 00"

21. 49' 25"

Decl. 21° 46' 42"

cos. 9. = sin. 21° 46' 42"

tan. 34° 24' 30" x tan. 22° 40' 00"

log. sin. 21° 46' 42" = 9.366323  
log. cos. 24' 30" = 9.916470  
log. cos. 22° 40' 00" = 9.924308  
9.366323 = log.

log. tan. 34° 24' 30" = 9.833376  
log. tan. 22° 40' 00" = 9.624788  
9.833376 = log.

cos. 9. = 1.6813

tan. 34° 24' 30" = 0.6813

bearing of reference object, N. 0° 01' 00" 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.

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.

TABLE AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 461, STATE OF ARIZONA.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
1-2	N. 18° 04' W.	32.24	37.31			12.17	12.16	453.81	
2-3	N. 3° 25' E.	16.95	16.92		1.01		1.01	17.09	
3-4	N. 34° 45' E.	12.44	10.22		7.09		9.11	93.10	
4-5	N. 56° 00' E.	13.63	7.62		11.30		27.50	209.55	
5-6	S. 79° 02' E.	.57		11	56		39.36		4.33
6-7	S. 54° 50' E.	14.00		8.06	11.44		51.36		413.96
7-8	West	17.00				17.00	45.80		
8-9	S. 37° 00' W.	12.00		9.58		7.22	21.58		206.74
9-10	S. 5° 22' W.	17.55		17.47		1.64	12.72		222.22
10-11	S. 45° 47' E.	19.16		13.36	13.73		24.81		331.21
11-12	S. 0° 04' W.	23.52		23.52		0.3	38.51		905.37
12-1	West	7.08				7.08	31.40		
		193.14	72.07	72.10	45.13	45.14		773.55	2083.83
			7708	7708	4513	4513		773.55	
								20/ 1310 28	
								65.51 Acres.	

DIRECTIONS.—1. Carry out calculations to two decimals only.  
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TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 461, STATE OF Arizona.

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
Tract B.									
13-14	S. 89° 58' W.	19.26		01		19.26	53 74		00 00
14-15	N. 55° 19' W.	20.97	11 23			17 24	17 24	205 85	
15-16	N. 71° 09' E.	10.09	3 26		9 55		9 55	31 13	
16-17	S. 79° 02' E.	39.17		7 45	38 45		57 55		428 17
17-13	S. 56° 00' W.	13.87		7 76		11 50	84 50		655 72
		103.36	15 19	15 22	48 00	48 00		236 98	1083 89
			15 70	15 70	48 00	48 00			236 98
								20/846 91	
									42 35 Acres.

23

DIRECTIONS.—1. Carry out calculations to two decimals only.

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TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 461, STATE OF

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
USLM196HES-TP1	N. 9° 34' W.	6.81	6 72		T I E.				
TP1-TP2	N. 12° 03' E.	28.11	27 49		5 87				
TP2-TP3	N. 55° 55' E.	25.00	14 01		20 71				
TP3-TP4	N. 23° 10' E.	40.70	37 42		16 01				
TP4-TP5	S. 67° 40' E.	16.17		6 14	14 96				
TP5-TP6	N. 13° 07' E.	23.30	22 69		5 29				
TP6-TP7	N. 34° 09' W.	6.98	5 78			3 92			
TP7-TP8	N. 8° 27' W.	19.69	19 48			2 89			
TP8-TP9	S. 87° 11' E.	1.25		06	1 25				
TP9-1	N. 21° 36' W.	5.95	5 53			2 19	log. 53.96 = 1.732072		
			139 12	6 20	64 09	10 13	log. 132.92 = 2.123591		
			6 20		10 13		tan. 22° 05' 42" = 2.608481		
			132 92		53 96		log. 132.92 = 2.123591		
							cos. 22° 05' 42" = 9.966874		
							2.166717 = log. 145.46		

25

APPROVAL

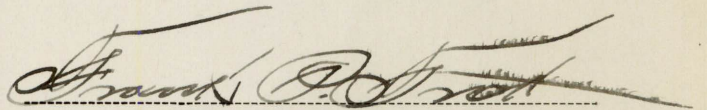
Office of the United States Surveyor General,

Phoenix, Arizona, May 22, 1918

The foregoing field notes of Homestead Entry Survey No.

461

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.