

ORIGINAL

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

173

MAY 1 - 1918

MAR 14 1918

NOV 22 1918

FIELD NOTES

OF

HOMESTEAD ENTRY SURVEY NO. 399

SITUATED IN THE TUSAYAN NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 32, - surveyed, Township 22 N., Range 3 E.

of the

Gila and Salt River Base and Meridian.

State of

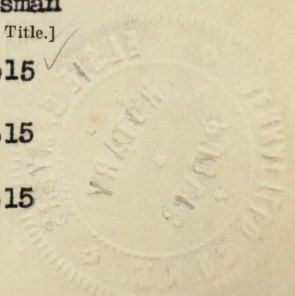
ARIZONA

*For inspection report
on this case
see HES 359*

Applicant for listing David H. Ritter,
Residence Williams, Arizona
Application No. 111, dated March 2, 1910
List No. 3-1040, dated January 26, 1911

Applicant for survey David H. Ritter,
Residence Williams, Arizona.
H. E. No. 014809, dated June 29, 1911
Office
Land District Phoenix, Arizona

Survey executed by Charles D. Hodson, Surveyor - Draftsman
[Forest Service Title.]
Under special instructions dated August 10, 1915
Survey commenced September 3, 1915
Survey completed September 5, 1915
Under Acts of June 11, 1906 and March 4, 1915



174

OATH OF ASSISTANTS

We hereby certify that we assisted **Charles D. Hodson,**
Surveyor - Draftsman in surveying all those
[Forest Service Title.]

parts or portions of Homestead Entry Survey No. **399**, 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.

Ed Baerly, Chairman
Douglas E. ...
Chairman

Subscribed and sworn to before me this **1st** day of
October, 19**15**.

Charles D. Hodson
Surveyor - Draftsman

OATH OF SURVEYOR

I, **Charles D. Hodson,** **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
August 10, 19**15**, and the laws of the United States, I have
well, faithfully, and truly, in my own proper person, surveyed a tract
of land embraced in

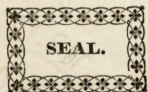
List Patent, No. **3-1040**, dated **Jan. 26**, 19**11**, for
the same to be known as Homestead Entry Survey No. **399**,
situated within the **TUSAYAN** National Forest, in
- surveyed Section **32**, Township **22 N.**, Range **3 E.**, and
- surveyed Section - - - - , Township - - - - , Range - - - - ,

of the **G. and S. R. B. and** 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.

Charles D. Hodson
Surveyor - Draftsman
[Forest Service Title.]

Subscribed and sworn to before me this *equid* day of
October, 19**15**.

Elsie C. ...
Notary Public



175

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains

Applicant for listing, David H. Ritter; Application No. 111, dated March 2, 1910; List No. 3-1040, dated January 26, 1911; H. E. 014809, made in the Phoenix Land Office on June 29, 1911. by David H. Ritter.

Surveyed under special instructions from the Surveyor

General for Arizona, dated August 10, 1915 and designated as Homestead Entry Survey No. 399.

Situated in sec. 32, T. 22 N., R. 3 E., Gila and Salt River Base and Meridian, within the Tusayan National Forest, Arizona.

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

Survey commenced September 3, 1915 and executed with a Buff and Buff transit No. 9700-6.

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 an 800 link steel tape. The slope angles were determined with a clinometer.

September 4, 1915.

At the 1/4 sec. cor. bet. secs. 5 and 32, Ts. 21 and 22 N., R. 3 E., re-established by me on Sept. 3, 1915, and cor. No. 1 of this survey, hereinafter described,

I observe the altitude of the sun for azimuth. The reading on the reference object was 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 and correction was made for apparent time. Lat. 35° 14' 05" N., Long. 112° 05' 46" W., obtained from the special instruction of the Surveyor General, and later verified.

Chains	TELESCOPE	Time	Horizontal Angle	Vertical Angle
	Direct	7h. 20m. 32s.	84° 34' 30"	20° 35' 30"
	Reversed	7h. 21m. 15s.	85° 02' 00"	20° 13' 00"
	Mean	7h. 20m. 54s.	84° 48' 15"	20° 24' 15"

Bearing of reference object, S. 0° 07' 56" W.

	Direct	7h. 22m. 03s.	84° 20' 00"	20° 53' 00"
(2)	Reversed	7h. 22m. 47s.	84° 47' 30"	20° 32' 00"
	Mean	7h. 22m. 25s.	84° 33' 45"	20° 42' 30"

Bearing of reference object, S. 0° 07' 04" W.

Mean of two obsns. S. 0° 07' 30" W., and to the corresponding meridian all courses of this survey were referred.

September 4, 1915.

RETRACEMENT and RESURVEYS

September 3, 1915.

All courses of the retracement and subdivision of Sec.

32 were run on an assumed azimuth and subsequently corrected to the meridian established as above described.

Beginning at the cor. to secs. 4, 5, 32 and 33, Ts. 21

and 22 N., R. 3 E., a yellow pine, 20 ins. dia., marked

and witnessed as described by the Surveyor General.

Thence North.

On a random line bet. secs. 32 and 33.

40.00 After careful and diligent search I am unable to find any evidence of the 1/4 sec. cor.

78.84 Fall 73 lks. W. of the cor. to secs. 28, 29, 32 and 33,

a sandstone 20 x 10 x 10 ins. above ground, marked

and witnessed as described by the Surveyor General.

Thence S. 0° 32' W.

On a true line bet. secs. 32 and 33.

39.42 (Proportional measurement)-for 1/4 cor. bet. secs. 32 and

33. Set a malpais stone 18 x 10 x 8 ins., 12 ins. in the

ground, over a small stone marked with a cross. I chisel

a cross on top and 1/4 S. on the W. face. No bearings

available, therefore dig pits 24 x 24 x 12 ins. cross-

wise on line N. and S. 3 - 1/2 ft.; and raise a

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains	mound of earth and stone 5 ft. base, 3 ft. high, W. of cor.	W. of chains
59.13	Set temporary point for 1/16 cor.	
78.84	Cor. to secs. 4, 5, 32 and 33.	
<hr/>		
	Thence West.	
40.00	After careful and diligent search I am unable to find	
80.12	any evidence of the 1/4 sec. cor. bet. secs. 5 and 32. Fall 21 lks. North of the point for cor. secs. 5, 6, 31 and 32, which I restore from the stumps of the original witness trees. The markings on these stumps being nearly obliterated, I restore this cor. as follows: Set a malpais stone 24 x 6 x 6 ins., 14 ins. in the ground, over a small stone marked with a cross. I chisel a cross on top, 5 notches on E. edge and 1 notch on W. edge; and raise a mound of stone 4 ft. base, 3 ft. high, W. of cor., whence; A yellow pine, 20 ins. dia., blazed and scribed T 21 N R 3 E S 5 B T, bears S. 85° 49' W., 229 lks. dist. A yellow pine, 16 ins. dia., blazed and scribed T 21 N R 3 E S 6 B T, bears S. 20° 58' W., 50 lks. dist. A yellow pine, 12 ins. dia., blazed and scribed T 22 N R 3 E S 32 B T, bears N. 52° 31' E., 106 lks. dist. Thence N. 89° 51' E.	
20.03	Set temporary point for 1/16 cor.	
30.04	Set temporary 1/64 sec. cor.	
40.06	(Proportional measurement) for 1/4 cor. bet. secs. 5 and 32. I set a malpais stone 30 x 14 x 10 ins., 20 ins. in	

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains	the ground, over a small stone marked with a cross. I chisel a cross on top, 1/4 S on the N. face. No bearings available, therefore dig pits 24 x 24 x 12 ins. E. and W. 3-1/2 ft.; and raise a mound of earth 4 ft. base, 2 ft. high, N. of cor.
60.09	Set temporary 1/16 sec. cor.
80.12	The cor. to secs. 4, 5, 32 and 33.
38.95	Return to the cor. to secs. 5, 6, 31 and 32, previously described. Thence North. On a random line bet. secs. 31 and 32. Fall 64 lks. W. 1/4 sec. corner bet. secs. 31 and 32, a sandstone 8 x 8 x 6 ins. above ground, marked and witnessed as described by the Surveyor General. Thence S. 0° 56' W. On a true line bet. secs. 31 and 32.
19.48	Set temporary 1/16 sec. cor.
38.96	The cor. to secs. 5, 6, 31 and 32.
79.90	Return to the 1/4 cor. bet. secs. 31 and 32, heretofore described. Thence East. On a random latitudinal 1/4 sec. line, thru secs. 32. Fall 72 lks. S. of the re-established 1/4 cor. bet. secs. 32 and 33. heretofore described. Thence S. 89° 29' W. On a true latitudinal 1/4 sec. line thru sec. 32.
39.95	Set temporary point for center of sec. 32.
79.90	The 1/4 cor. bet. secs. 31 and 32.
September 3, 1915.	
September 4, 1915.	
	Return to the re-established 1/4 cor. bet. secs. 5 and 32, heretofore described.

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains Thence North.

On a random meridional 1/4 sec. line, through sec. 32.

78.97 Fall 67 lks. W. of the 1/4 cor. bet. secs. 29 and 32, a sandstone 12 x 8 x 6 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence S. 0° 29' W.

On a true meridional 1/4 sec. line through sec. 32.

39.75 Intersect latitudinal 1/4 sec. line at 39.81 chs. N. 89° 29' E. of the 1/4 sec. cor. bet. secs. 31 and 32, and 40.09 chs. S. 89° 29' W. of 1/4 sec. cor. bet. secs. 32 and 33. Set temporary point for center 1/4 sec. cor.

59.36 Set temporary point for 1/16 cor.

69.17 Set temporary 1/64 sec. cor.

78.97 The 1/4 cor. bet. secs. 5 and 32.

Return to the temporary center 1/4 sec. cor., heretofore described.

Thence N. 89° 29' E.

On latitudinal 1/4 sec. line.

20.05 Set temporary 1/16 sec. cor. center E/2 sec. 32.

Thence S. 0° 30' W.

On true meridional 1/16 sec. line through center SE/4 sec. 32, for flag on temp. 1/16 sec. cor. on S. bdy. SE/4 sec. 32, which is plainly visible.

39.32 Temp. 1/16 sec. cor. on S. bdy. SE/4 sec. 32, heretofore described.

Return to temp. 1/16 sec. cor. on meridional 1/4 sec. line, center S/2 sec. 32, heretofore described.

Thence N. 89° 40' E.

On true latitudinal 1/16 sec. line through SE/4 sec. 32, for flag on temp. 1/16 sec. cor. on E. bdy. sec. 32, which is plainly visible.

2179

Chains

20.04 Intersect meridional 1/16 sec. line at 19.66 chs. S. $0^{\circ} 30'$ W. of the temp. 1/16 sec. cor. at center E/2, sec. 32, and 19.66 chs. N. $0^{\circ} 30'$ E. of the temp. 1/16 sec. cor. on S. bdy. of SE/4 sec. 32. Set temp. 1/16 sec. cor. at center SE/4, sec. 32.

40.08 Temp. 1/16 sec. cor. on E. bdy. sec. 32, heretofore described.

Return to temp center 1/4 sec. cor. heretofore described.
Thence S. $89^{\circ} 29'$ W.

On latitudinal 1/4 sec. line.

19.91 Set temp. 1/16 sec. cor. center W/2 sec. 32.

Return to temp. 1/16 sec. cor. at center SE/4 sec. 32, heretofore described.

Thence S. $0^{\circ} 30'$ W.

9.83 Set temp. 1/64 sec. cor. center S/2 SE/4 sec. 32.

Thence S. $89^{\circ} 45'$ W.

On latitudinal 1/64 sec. line through center SW/4 SE/4 sec. 32. Flag on temp. 1/64 sec. cor., center S/2 S/2 sec. 32, is plainly visible.

11.37 Intersect S. bdy. right-of-way of Atchison Topeka and Santa Fe railway, as produced from the East.

Note: A curve in the said right-of-way at this point made the production of the South line necessary. This curve is from the claim, therefore it will not conflict with this survey.

Return to the temp. 1/16 sec. cor. on the S. boundary of the SW/4, sec. 32, heretofore described.

Thence N. $0^{\circ} 42'$ E.

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA.

Chains
39.09

On a random meridional 1/16 sec. line.
Fall 1 lk. W. of the temp. 1/16 sec. cor. at the center
of the W/2, sec. 32.

Thence S. 0° 43' W.

On a true meridional 1/16 sec. line thru center SW/4,
sec. 32.

39.09 The temp. 1/16 sec. cor. on S. boundary of the SW/4,
sec. 32.

September 4, 1915.

BOUNDARIES OF CLAIM

September 5, 1915.

Beginning at cor. No. 1

Identical with the re-established 1/4 sec. cor. bet.
secs. 5 and 32, heretofore described. I chisel 1-
H E S 399 on the N. face of same stone.

No witnesses available.

Lat. 35° 14' 05" N., Long. 112° 05' 46" W., obtained from
the special instructions of the Surveyor General, and
later verified.

Mag. decl. at 8h. 00m. a.m., l.m.t., 14° 54' E.

Mean mag. decl. 14° 51.4' E.

Thence S. 89° 51' W.

On line bet. secs. 5 and 32.

4.35 Fence, bears N. and S.

10.02 To cor. No. 2, and C. C. on line bet. secs. 5 and 32.

Also point for 1/64 sec. cor. on the S. boundary of
the SE/4 SW/4, sec. 32.

Set a sandstone 24 x 10 x 8 ins., 14 ins. in the ground,
over broken glass. I chisel a cross at the point,
2 - H E S 399 on the NE. face, C C on the N. face; and
raise a mound of stone 2 ft. base, 1-1/2 ft. high, N.
of cor. whence;

Chains

A pine, 7 ins. dia., blazed and scribed
2 H E S 399 + B T, bears S. 71° 15' W.,
58 lks. dist.

A pine, 8 ins. dia., blazed and scribed
2 H E S 399 + B T, bears S. 7° 49' E.,
103 lks. dist.

Note: After careful and diligent search no evidence
of the cor. of the listing survey was found.

Thence N. 0° 36' E.

Over level ground. On mean course bet. E/2 and W/2
of SE/4 SW/4.

2.18 To cor. No. 3.

At intersection of the W. boundary of the SE/4 SW/4
SW/4, sec. 32 with the S. line of the Atchison Topeka
and Santa Fe Railway Right of Way as produced from
the tangent to the East.

Set a malpais stone 20 x 12 x 10 ins. (no longer stone
available), 12 ins. in the ground, over a small stone
marked with a cross. I chisel a cross at the point
and 3 - H E S 399 on the SE. face; and raise a mound
of stone 2 ft. base, 1-1/2 ft. high; SE. of cor.,
whence;

A pine, 6 ins. dia., blazed and scribed
3 H E S 399 + B T, bears N. 81° 29' W.,
49 lks. dist.

A pine, 6 ins. dia., blazed and scribed
3 H E S 399 + B T, bears S. 48° 04' W.,
39 lks. dist.

Note: After careful and diligent search no evidence
of the cor. of the listing survey was found.

Thence N. 67° 45' E.

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains	On the S. line of the Atchison Topeka and Santa Fe Railway Right of Way produced from the East.
5.60	Wire fence, bears N. and S.
6.00	Wire fence, bears E. and W.
7.10	Road, bears E. and W.
20.04	W. C. to cor. No. 4. Set a sandstone 20 x 6 x 4 ins. (no longer stone available), 12 ins. in the ground, over broken glass. I chisel a cross at the point, W.C - 4 H E S 399 on the S. face; and raise a mound of stone 2 ft. base, 1-1/2 ft. high, S. of cor. No bearings available, pits impracticable.
20.29	To point for cor. No. 4. At intersection of latitudinal 1/64 sec. line through SW/4 SE/4, sec. 32, with Atchison, Topeka and Santa Fe Railway Right of Way. In center of well travelled road near gate of Right of Way fence. I mark this point by driving a galvanized iron bar, 3/4 in. dia., 30 ins. long, 30 ins. in the ground. Note: After careful and diligent search no evidence of the corner of the listing survey was found.
	Thence N. 89° 45' E. On latitudinal 1/64 sec. line bet. N/2 and S/2 SW/4 SE/4, sec. 32.
0.25	W. C. to cor. No. 4. Set a malpais stone 24 x 10 x 8 ins., 14 ins. in the ground, over a small stone marked with a cross. I chisel a cross at the point and W. C. 4 H E S 399 on the S. face; and raise a mound of stone 2 ft. base, 1-1/2 ft. high S. of cor.
	No bearings available. Pits impracticable.
4.35	Wire fence, bears N. and S.

184

HOMESTEAD ENTRY SURVEY NO. 399

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains
11.37

To cor. No. 5, also point for 1/64 sec. cor. at the center of the S/2 of the SE/4, sec. 32.

Set a malpais stone 24 x 12 x 8 ins., 14 ins. in the ground, over a small stone marked with a cross. I chisel a cross at the point and 5 - H E S 399 on the SW. face; and raise a mound of stone 3 ft. base, 2 ft. high, SW. of cor.

No bearings available. Pits impracticable.

Thence S. 0° 30' W.

Along meridional 1/16 sec. line bet. E/2 and W/2 SE/4, sec. 32.

9.83 To cor. No. 6, and C. C. on line bet. secs. 5 and 32,

Also point for 1/16 sec. cor. on the S. line of the SE/4, sec. 32. Set a malpais stone 18 x 12 x 6 ins. (no longer stone available), 12 ins. in the ground, over broken glass. I chisel a cross at the point, 6 - H E S 399 on the NW. face, C C on the N. face, and 1/16 S. on the SE. face; and raise a mound of stone 2 ft. base, 1-1/2 ft. high, N. of cor., whence:

A yellow pine, 30 ins. dia., blazed and scribed 1/16 - 6 H E S 399 + B T, bears N. 41° 47' W., 189 lks. dist.

A yellow pine, 9 ins. dia., blazed and scribed 1/16 - 6 H E S 399 + B T, bears S. 41° 33' W., 197 lks. dist.

The cor. to secs. 4, 5, 32 and 33, heretofore

described, bears N. 89° 51' E.; 20.03 chs. dist.

The 1/4 sec. cor. bet. secs. 5 and 32, heretofore

described, bears S. 89° 51' W., 20.03 chs. dist.

Thence S. 89° 51' W.

1.45 Wire fence, bears N. and S.

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains

1.55 Road, bears N. and S.

1.65 Wire fence, bears N. and S.

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

AREA

Total Area - - - - - 22.36 acres

IMPROVEMENTS

Approximately 1/2 mile of wire fence.

Value ----- \$ 50.00

Other improvements consist of house, barn and fences situated on the legal subdivisional portion of the claimant's entry.

DESCRIPTION

This claim is situated at the foot of the N. slope of Davern Hill. The soil is a clay loam and will produce good crops of hay, grain, and vegetables. Approximately 10 acres were under cultivation.

Water for domestic purposes is obtained from a spring a short distance SW. of cor. No. 1 of this survey. The overflow from this spring also supplies water for a small stock tank. Irrigation is not possible on the claim.

There is no timber of commercial value on the claim.

I saw no indication of mineral on the claim.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicts.

The claim is joined on the North by the Right -of-Way of the Atchison, Topeka and Santa Fe Railway, and on the East and South by the legal subdivisional portion

Chains

of the claimant's entry 014809, which consists of the following: W/2 SE/4 SE/4 SE/4, SW/4 SE/4 SE/4, sec. 32, T. 22 N., R. 3 E., and the NE/4 NE/4 NW/4, NW/4 NW/4 NE/4, N/2 SW/4 NW/4 NE/4, W/2 NE/4 NW/4 NE/4, NE/4 NE/4 NW/4 NE/4, N/2 NW/4 NE/4 NE/4, NW/4 NE/4 NE/4 NE/4, sec. 5, T. 21 N., R. 3 E.

Williams, the nearest post office and market point, is 6 miles in a westerly direction.

TRAVERSE

Course	Dist.	N	S	E	W
S. 89° 51' W.	10.02		0.03		10.02
N. 0° 36' E.	2.18	2.18		0.02	
N. 67° 45' E.	20.29	7.68		18.78	
N. 89° 45' E.	11.37	0.05		11.37	
S. 0° 30' W.	9.83		9.83		0.09
S. 89° 51' W.	20.03		0.05		20.03
	<u>73.72</u>	9.91	9.91	30.17	30.14
			<u>9.91</u>	<u>30.14</u>	

Error in Lat. and Dep. .00 .03

Closing error 1:2457.

Survey completed September 5, 1915.

Charles D. Hodson

Surveyor - Draftsman

Leave this out -
The above legal sub. is embraced in the entry survey

TUSAYAN NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar at 1/4 cor. bet. secs. 5 and 32.

September 4, 1915.

Position Telescope	l.m.t.	Horizontal Angle	Vertical Angle
Direct	7h. 20m. 32s.	84° 34' 30"	20° 35' 30"
Reverse	7h. 21m. 15s.	85° 02' 00"	20° 13' 00"
Mean	7h. 20m. 54s.	84° 48' 15"	20° 24' 15"
	Ref. corr. for elevation		01' 58" ✓
	Alt.		20° 22' 17" ✓

Lat. 35° 14' 05" N.
Long. 112° 05' 46" W. = 7h. 28m. 23s. ✓
Elev. 7600 ft.

12h. - 7h. 28m. 23s. = 4h. 31m. 37s. ✓
7h. 20m. 54s. - 4h. 31m. 37s. = 2.82h. ✓
Decl. = 7° 29' 49.1" - 0° 02' 35.5" = 7° 27' 14". ✓

log. sin. 7° 27' 14" = 9.113034 ✓
log. cos. 35° 14' 05" = 9.912113 ✓
log. cos. 20° 22' 17" = 9.971951 ✓
9.884064 ✓
9.228970 ✓ = log. .16942 ✓

log. tan. 35° 14' 05" = 9.849008 ✓
log. tan. 20° 22' 17" = 9.569758 ✓
9.418766 = log. .26228 ✓

Cos. Azimuth = .09286 ✓
Azimuth = S. 84° 40' 19" E. ✓
Bearing of Reference Object, \angle 84° 48' 15"
S. 0° 07' 56" W. ✓

Position Telescope	l.m..t.	Horizontal Angle	Vertical Angle
Direct	7h. 22m. 03s.	84° 20' 00"	20° 53' 00"
Reverse	7h. 22m. 47s.	84° 47' 30"	20° 32' 00"
Mean	7h. 22m. 25s.	84° 33' 45"	20° 42' 30"
	Ref. corr. for elev.		01' 56" ✓
	Alt.		20° 40' 34"

log. sin. 7° 27' 14" = 9.113034 ✓
log. cos. 35° 14' 05" = 9.912113 ✓
log. cos. 20° 40' 34" = 9.971086 ✓
9.883199 ✓
9.229835 = log. .16976 ✓

log. tan. 35° 14' 05" = 9.849008 ✓
log. tan. 20° 40' 34" = 9.576793 ✓
9.425801 = log. .26656

Cos. Azimuth = .09680 ✓
Azimuth = S. 84° 26' 41" E. ✓
84° 33' 45"
Bearing of reference Object, S. 0° 07' 04" W.

188

Chains Direct solar at 1/4 cor. bet. secs. 5 and 32. September 4, 1915.

Vertical Angle	Horizontal Angle	I.M.F.	Position Telescope
20° 35' 30"	84° 34' 30"	Vh. 23m. 83a.	Direct
20° 33' 00"	85° 02' 00"	Vh. 21m. 12a.	Reverse
20° 34' 15"	84° 48' 15"	Vh. 23m. 83a.	Mean
20° 35' 15"			Ref. corr. for elevation
20° 35' 15"			Alt.

Lat. 33° 14' 05" N.
 Long. 112° 05' 45" W. = Vh. 23m. 83a.
 Elev. 7600 ft.
 13h. - Vh. 23m. 83a. = 4h. 21m. 37a.
 Vh. 23m. 83a. = 4h. 21m. 37a. = 2.82h.
 Defl. = 7° 29' 42.1" - 0° 02' 35.8" = 7° 27' 14"
 Log. sin. 7° 27' 14" = 0.13084
 Log. cos. 35° 14' 05" = 0.91813
 Log. cos. 20° 32' 17" = 0.97151
0.88104
 0.23890 = log. 1.6943
 Log. tan. 35° 14' 05" = 0.84908
 Log. tan. 20° 32' 17" = 0.57973
0.41876 = log. 2.6232
 Cos. Azimuth = 0.92366
 = 2. 84° 40' 19" E.
 Azimuth = 84° 48' 13"
 Bearing of Reference Object = 0° 07' 50" W.

Vertical Angle	Horizontal Angle	I.M.F.	Position Telescope
20° 33' 00"	84° 30' 00"	Vh. 23m. 03a.	Direct
20° 32' 00"	84° 41' 30"	Vh. 23m. 47a.	Reverse
20° 32' 30"	84° 35' 15"	Vh. 23m. 83a.	Mean
20° 40' 15"			Ref. corr. for elev.
20° 40' 34"			Alt.

Log. sin. 7° 27' 14" = 0.13084
 Log. cos. 35° 14' 05" = 0.91813
 Log. cos. 20° 40' 34" = 0.97108
0.88132
 0.23835 = log. 1.6937
 Log. tan. 35° 14' 05" = 0.84908
 Log. tan. 20° 40' 34" = 0.57973
0.41881 = log. 2.6233
 Cos. Azimuth = 0.92360
 = 2. 84° 35' 43" E.
 Azimuth = 84° 33' 43"
 Bearing of Reference Object = 0° 07' 04" 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. 399, STATE OF ARIZONA, TUSAYAN

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
1-2	S. 89° 51' W.	10.02		0 03		10 02	10 02	0 30	✓
2-3	N. 0° 36' E.	2.18	2 18		0 02	0 02	0 02	0 04	✓
3-4	N. 67° 45' E.	20.29	7 68		18 78	18 81	144.46		✓
4-5	N. 89° 45' E.	11.37	0 05		11 37	48 94	2 45		✓
5-6	S. 0° 30' W.	9.83		9 83		60 21	591 86		✓
6-1	S. 89° 51' W.	20.03	9 91	0 05		40 08	2 00		✓
		73.72	9 91	9 91	30 17	30 14	146 95	594 16	✓
			9 91	9 91	30 15	30 15		146 95	
								20) 447 21	
								22 36 acres.	
									Em 14
									189

Closing error 1:2457

APPROVAL

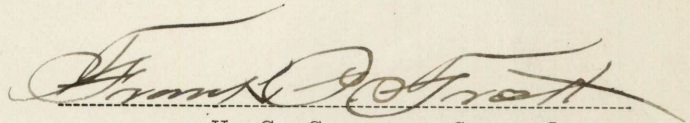
Office of the United States Surveyor General,

Phoenix, Arizona, March 16 , 1918.

The foregoing field notes of Homestead Entry Survey No.

399

executed by **Charles D. Hodson, Surveyor-Draftsman** [Forest Service Title.]
under his special instructions, dated **August 10** , 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.