

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

135

SEP 4 - 1917

**FIELD NOTES**

OF

HOMESTEAD ENTRY SURVEY NO. 470

MAR 26 1918

SITUATED IN THE COCONINO NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 17 , unsurveyed, Township 17 N. , Range 3 E.

of the

Gila and Salt River Base and Meridian.

State of

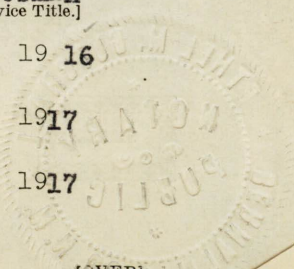
ARIZONA

*27806 is entry of rd stripes*

Applicant for listing	Lee Smart,		
Residence	Clarkdale, Arizona		
Application No.	406	, dated	February 24 , 1913
		dated	May 3 , 1913 and
List No.	3-2522	, dated	March 17 , 1915

Applicant for survey	Lee Smart,		
Residence	Clarkdale, Arizona		
H. E. No. 024099		dated	April 27, 1914 and
H. E. No. 027806		, dated	July 10 , 1915
Office			
Land District	Phoenix, Arizona		

Survey executed by	R. P. A. Johnson,	Surveyor - Draftsman	
		[Forest Service Title.]	
Under special instructions dated	May 16	,	1916
Survey commenced	May 25	,	1917
Survey completed	May 26	,	1917
Under Acts of	June 11, 1906 and August 11, 1916		



OATH OF ASSISTANTS

We hereby certify that we assisted R. D. Johnson Surveyor Draftsman in surveying all those parts or portions of Homestead Entry Survey No. 470, 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.

Chas Robinson, Chairman

John E Adams, Chairman

Subscribed and sworn to before me this fourth day of June, 19 17.

R. D. Johnson  
Surveyor Draftsman

OATH OF SURVEYOR

I, R. D. 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 May 16 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

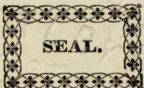
Patent, No. 3-2522, dated May 3, 1913, for June 11, 1906, under the Act of June 11, 1906, the same to be known as Homestead Entry Survey No. 470, situated within the Cocconino National Forest, in 17 surveyed Section 17, Township 17N, Range 3E, and - surveyed Section - - - , Township - - - , Range - - - ,

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.

R. D. Johnson  
Surveyor Draftsman  
[Forest Service Title.]

Subscribed and sworn to before me this nineteenth day of July, 19 17.

Ethel M. Gutchall  
Notary Public



COCONINO NATIONAL FOREST

STATE OF ARIZONA

Chains

Applicant for listing, Lee Smart; Application No. 406, dated February 24, 1913; List No. 3-2522, dated May 3, 1913 and March 17, 1915; H. E. 024099 and 027806, made in the Phoenix Land Office on April 27, 1914 and July 10, 1915 by Lee Smart.

The list in this case was erroneously made by legal subdivisions in an unsurveyed Section and no attempt was made to locate the original list lines on the ground. This survey is in the nature of a cooperative survey and will be used as a basis for amendatory listing and entry.

Surveyed under special instructions from the Surveyor General for Arizona, dated May 16, 1916 and designated as Homestead Entry Survey No. 470.

Situated in what will probably be, when surveyed, sec. 17, T. 17 N., R. 3 E., Gila and Salt River Base and Meridian, within the Coconino National Forest, Arizona.

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

Survey commenced May 25, 1917 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.

May 25, 1917, p.m.  
I observe the altitude of the sun for azimuth at cor. No. 1, hereinafter described. The reading on the reference object is set at zero and the sun was observed in

Chains the upper left and lower right quadrants of the field.

My watch is set for local mean time.

Lat. 34° 51' 40" N., Long. 112° 04' 30" W., from Jerome  
Quadrangle, U. S. G. S.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	3h. 07m. 07s.	85° 01' 30"	45° 42' 00"
Reversed	3h. 08m. 07s.	84° 27' 00"	46° 00' 30"

Bearing of reference object, N. 0° 02' 20" E.

I again observe the altitude of the sun at the 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	3h. 09m. 33s.	85° 27' 00"	45° 10' 30"
Reversed	3h. 10m. 13s.	84° 49' 30"	45° 31' 00"

Bearing of reference object, N. 0° 02' 26" E.

The mean bearing of reference object is N. 0° 02' 23" E. and to the corresponding meridian all the courses of this survey are referred.

RETRACEMENT

May 25, 1917.

Beginning at the W. C. to secs. 7, 8, 17 and 18, a sandstone 12 x 8 x 8 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence East.

On a random line bet. secs. 8 and 17.

44.50 Fall 16 lks. N. of the 1/4 cor. bet. secs. 8 and 17, a limestone 10 x 8 x 6 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence N. 89° 46' W.

COCONINO NATIONAL FOREST

STATE OF ARIZONA

Chains  
19.75 On true line bet. secs. 8 and 17.  
Set temp. 1/16 sec. cor. on S. line SW/4, sec. 8.  
39.50 Point for cor. secs. 7, 8, 17 and 18 falls in Verde River.  
Thence West.  
5.00 W. C. to secs. 7, 8, 17 and 18, heretofore described.  
May 25, 1917.

BOUNDARIES OF CLAIM

May 26, 1917.

Beginning at cor. No. 1 and Closing Corner on line bet. secs. 8 and 17.

Deposit a sandstone 4 x 4 x 2 ins. marked with a + 14 ins. in the ground, over which set a sandstone 24 x 14 x 6 ins., chiseled + for the point, 1 - H E S 470 on SE. face and C C on SSE. face; and raise a mound of stone 2 ft. base, 1-1/2 ft. high on closing line S. 21° 47' E. of cor., whence;

A walnut, 6 ins. dia., blazed and scribed 1 H E S 470+ B T, bears S. 60° 22' E., 93 lks. dist.

A sycamore, 12 ins. dia., blazed and scribed 1 H E S 470 + B T, bears S. 29° 04' W., 48 lks. dist.

Point for cor. secs. 7, 8, 17 and 18, heretofore described, bears N. 89° 46' W., 7.87 chs. dist.

1/4 cor. bet. secs. 8 and 17, heretofore described, bears S. 89° 46' E., 51.63 chs. dist.

Lat. 34° 51' 40" N., Long. 112° 04' 30" W., obtained from Jerome Quadrangle, U. S. G. S.

Mag. decl. at 8h. 00m. a.m., l.m.t., 15° 14' E. Mean mag. decl., 15° 10.7' E.

Thence S. 89° 46' E.

Along line bet. secs. 8 and 17, through sycamore and

COCONINO NATIONAL FOREST

STATE OF ARIZONA

Chains willows in old bed of river, course N. and S.

2.05 Leave old bed of river. Ascend 10 ft. over old bank; slopes W.

2.20 Fence on top of bank bears N. and S. Thence over open level land.

2.40 Enter cultivated land, bears N. and S.

5.25 Leave cultivated land, bears NW. and SE. Ascend 15 ft. in brush to W. C.

6.25 Ditch, 5 lks. wide, 1 ft. deep, course SE.

6.62 Fence at foot of SW. slope; bears NW. and SE.

7.73 W. C. to cor. No. 2, C. C. on line bet. secs. 8 and 17 and 1/16 sec. cor.

Deposit a malpais stone 6 x 6 x 2 ins. marked with a +, 6 ins. in the ground, over which set a malpais stone 24 x 12 x 8 ins.; chiseled + for the point, W C 2 - H E S 470 on SW. face, 1/16 on NE. face and C C on S. face; surround cor. with a mound of stone 5 ft. base, 1 ft. high; and raise a mound of stone 2 ft. base, 1-1/2 ft. high S. of cor., whence:

A mesquit, 4 ins. dia., blazed and scribed W C 1/16 2 H E S 470 + B T, bears S. 52° 05' W., 37 lks. dist.

Ascend 120 ft. over rock slide with SW. exposure to point for cor.

11.88 True point for Cor. No. 2 and C. C. on line bet. secs. 8 and 17 (also point Cor. 1/16 sec. cor) which falls in a rock slide and would not be permanent if set. It was impracticable to set W. C. on line 2 to 3, or extension thereof, within 3:00 chs. of point for cor. No. 2. Therefore at a point S. 89° 46' E., 71 lks. from true point for cor., chisel + for the point, W C 1/16 2 - H E S 470 SW. of cross, and C C South of cross, on rock projection showing 36 x 24 x 6 ins. above top of a malpais cliff 50 ft. high; and raise a

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COCOONINO NATIONAL FOREST

STATE OF ARIZONA

Chains

mound of stone 3 ft. base, 2 ft. high NE. of cor.

No bearings available. Pits impracticable.  
From true point for cor. No. 2.

Point for cor. secs. 7, 8, 17 and 18, heretofore described, bears N. 89° 46' W., 19.75 chs. dist.  
1/4 sec. cor. bet. secs. 8 and 17, heretofore described, bears S. 89° 46' E., 19.75 chs. dist.

Note: It was impracticable to place the mound South of the cor.

From point for cor. No. 2.

Thence S. 5° 22' W.

Descend 140 ft. over rock slide, steep WSW. slope.

12.20 Leave rock slide, bears NNW. and SSE. Desc. 10 ft.

along foot of WSW. slope.

20.06 To cor. No. 3.

Deposit a sandstone 6 x 4 x 4 ins. marked with a +, 14 ins. in the ground, over which set a sandstone 24 x 15 x 6 ins., -chiseled + for the point and 3 - H E S 470 on NW. face; and raise a mound of stone 2 ft. base, 1-1/2 ft. high NW. of cor., whence:

A sycamore, 14 ins. dia., blazed and scribed  
3 H E S 470 + B T, bears S. 82° 00' W.,  
133 lks. dist.

A desert willow, 4 ins. dia., blazed and scribed  
3 H E S 470 + B T, bears N. 88° 16' E.,  
23 lks. dist.

Thence S. 89° 59' W.

Over bottom.

2.00 To cor. No. 4.

Deposit a malpais stone 6 x 6 x 4 ins. marked with a +, 16 ins. in the ground, over which set a malpais stone 26 x 8 x 6 ins. chiseled + for the point and 4 - H E S 470 on NE. face; and raise a mound of stone 2 ft. base,

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Chains

1-1/2 ft. high NE. pf cor., whence:

A sycamore, 14 ins. dia., blazed and scribed

4 H E S. 470 + B T, bears S. 73° 28' E.,

70 lks. dist.

A sycamore, 10 ins. dia., blazed and scribed

4 H E S 470 + B T, bears N. 12° 44' E.,

46 lks. dist.

Thence N. 21° 47' W.

Up old bed of river, course NW. Ascend 15 ft.

5.50 Top bank old bed of river, bears NW. and SE. Thence

over level bottom land in heavy brush.

16.60 Bank old bed river bears N. and S. Leave bottom land

and descend 10 ft. to cor.

21.56 To cor. No. 1 and place of beginning.

AREA

Total Area - - - - - 13.87 acres

IMPROVEMENTS

The improvements made upon this claim consist of the following:

Approximately 1/2 mile of wire fence.

Value ----- \$100.00

Approximately 1/4 mile of ditch.

Value ----- \$ 50.00

Claimant's houses, barns, outbuildings, fences and ditches, valued at approximately \$2000.00, are located upon the adjoining portion of his entry described by legal subdivisions.

DESCRIPTION

This survey is situated on the NE. side of the Verde River at the mouth of Sycamore Creek, which flows through the



HOMESTEAD ENTRY SURVEY NO. 470

COCONINO NATIONAL FOREST

STATE OF ARIZONA

Chains

legal subdivisional portion of claimant's entry.  
 The soil on portion surveyed is a silt loam, and at the  
 time of survey approximately 4 acres were under culti-  
 vation. The claimant cultivates approximately 45  
 acres on the legal subdivisional portion of his home-  
 stead.  
 Water for all purposes is obtained from Sycamore Creek.  
 There is no timber of commercial value upon the claim.  
 I saw no indications of mineral upon the claim. The  
 entryman was present at time of survey and agreed to  
 the changes as made.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicts or adjoining claims. The legal  
 subdivisional portion of claimant's entry, more fully  
 described as follows: N/2 SE/4 SE/4, NE/4 SE/4 SE/4 SE/4,  
 sec. 7, NE/4 SW/4 NW/4 SW/4, S/2 SW/4 NW/4 SW/4, SE/4 NW/4  
 SW/4, N/2 SW/4 SW/4, N/2 S/2 SW/4 SW/4, S/2 SE/4 SW/4  
 SW/4, W/2 SE/4 SE/4 NW/4, SW/4 NE/4 SE/4 NW/4, W/2 E/2 E/2 SW/4,  
 SW/4 NE/4 SW/4, W/2 SE/4 SW/4, sec. 8 joins this survey  
 on the North. Mr. Lee Smart, the claimant has agreed to  
 relinquish that portion of his homestead entry situated  
 in the unsurveyed portion of sec. 8; described by the  
 following subdivisions: W/2 SE/4 SE/4 NW/4, SW/4 NE/4  
 SE/4 NW/4.

Clarkdale, Arizona, the nearest post office and trading  
 point, lies in a Southerly direction and is reached  
 by 9 miles of rough wagon road. Sycamore, Arizona,  
 the nearest railroad point, is approximately 1 mile  
 NW. of this claim.

Chains	Cor.	Course	Dist.	N.	S.	E.	W.
	1-2	S. 89° 46' E.	11.88		0.05	11.88	
	2-3	S. 5° 22' W.	20.06		19.97		1.88
	3-4	S. 89° 59' W.	2.00		0.00		2.00
	4-1	N. 21° 47' W.	21.56	20.02			8.00
			55.50	20.02	20.02	11.88	11.88
					20.02		11.88
					0.00		0.00

Error in Lat. and Dep.

Closing error, none.

Survey completed May 26, 1917.

(Sgd.)

Surveyor-Draftsman

COCONINO NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar, May 25, 1917 at Cor. No. 1.

Lat. 34° 51' 40" N., Long. 112° 04' 30" W., Elev. 3600 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	3h. 07m. 07s.	85° 01' 30"	45° 42' 00"	☉
Reversed	3h. 08m. 07s.	84° 27' 00"	46° 00' 30"	☽
	3h. 07m. 37s.	84° 44' 15"	45° 51' 15"	
			50"	
			45° 50' 25"	

Decl., 20° 58' 42" N.

$$\text{Cos. } Q. = \frac{\sin. 20^\circ 58' 42'' \text{ N.}}{\cos. 34^\circ 51' 40'' \times \cos. 45^\circ 50' 25'' - \tan. 34^\circ 51' 40'' \times \tan. 45^\circ 50' 25''}$$

log. sin. 20° 58' 42" = 9.553901 ✓  
 log. cos. 34° 51' 40" = 9.914099 ✓  
 log. cos. 45° 50' 25" = 9.843022 ✓  
 9.796780 = .62630

log. tan. 34° 51' 40" = 9.842984 ✓  
 log. tan. 45° 50' 25" = 10.012741 ✓  
 9.855725 = .71734 ✓

Cos. Q. = .09104

Q. = 84° 46' 35"

Bearing of reference object, N. 0° 02' 20" E.

(2)

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	3h. 09m. 33s.	85° 27' 00"	45° 10' 30"	
Reversed	3h. 10m. 13s.	84° 49' 30"	45° 31' 00"	
	3h. 09m. 53s.	85° 08' 15"	45° 20' 45"	
			51"	
			45° 19' 54"	

Decl., 20° 58' 43" N.

$$\text{Cos. } Q. = \frac{\sin. 20^\circ 58' 43'' \text{ N.}}{\cos. 34^\circ 51' 40'' \times \cos. 45^\circ 19' 54'' - \tan. 34^\circ 51' 40'' \times \tan. 45^\circ 19' 54''}$$

log. sin. 20° 58' 43" = 9.553907 ✓  
 log. cos. 34° 51' 40" = 9.914099 ✓  
 log. cos. 45° 19' 54" = 9.846956 ✓  
 9.792848 = .62065

log. tan. 34° 51' 40" = 9.842984 ✓  
 log. tan. 45° 19' 54" = 10.005028 ✓  
 9.848012 = .70471 ✓

Cos. Q. = .08406

Q. = 85° 10' 41"

Bearing of reference object, N. 0° 02' 26" E.



DIRECTIONS.—1. Carry out calculations to two decimals only.  
 2. In balancing Latitudes and Departures do not obliterate or change the original figures. Do not change the footing of the original figures, but put below them the corrected footing in red ink. Put the corrected figure or figures above in red ink. 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. 470, STATE OF ARIZONA

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
1-2	S. 89° 46' E.	11.88		05	11.88		11.88		59
2-3	S. 5° 22' W.	20.06		19.97		1.88	21.88	43694	
3-4	S. 89° 59' W.	2.00		00		2.00	18.00		0.00
4-1	N. 21° 47' W.	21.56	20.02			8.00	8.00	160.16	
		55.50	20.02	20.02	11.88	11.88	160.16	43753	
			20.02	20.02	11.88	11.88		16016	
								20 / 27737	
								13 868	Acres.

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ET

APPROVAL

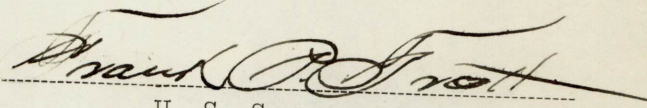
Office of the United States Surveyor General,

Phoenix, Arizona, May 15, 1918

The foregoing field notes of Homestead Entry Survey No.

470

executed by R.P.A. Johnson, Surveyor-Draftsman [Forest Service Title.]  
under his special instructions, dated May 16, 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.