

U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

JAN 17 1919

MAY 15 1920

FIELD NOTES

OF

HOMESTEAD ENTRY SURVEY NO. 490

SITUATED IN THE APACHE NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 2 , un surveyed, Township 3 S. , Range 31 E.  
In Section 3 , un surveyed , Township 3 S. , Range 31 E.  
In Section 10 , un surveyed , Township 3 S. , Range 31 E.  
In Section 11 , un surveyed , Township 3 S. , Range 31 E.

(Secs. 2 and 3)

of the

Gila and Salt River Base & Meridian.

State of

ARIZONA.

Applicant for listing Ed Elrage

Residence Clifton, Arizona.

Application No. 99 , dated Feb. 5 and Aug. 24 , 1910

List No. 3-1307 , dated May 20 , 1911

Applicant for survey Ed Elrage

Residence Clifton, Arizona

✓ H. E. No. 016222 , dated January 29 , 1912

Office  
Land District Phoenix, Arizona.

Survey executed by Lee C Daves Surveyor - Forest Service  
[Forest Service Title.]

Under special instructions dated June 21 , 1916

Survey commenced March 13 , 1917

Survey completed March 15 , 1917

Under Acts of June 11, 1906 and August 11, 1916



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OATH OF ASSISTANTS

We hereby certify that we assisted **Lee C. Daves** **Surveyor - Forest Service** in surveying all those parts or portions of Homestead Entry Survey No. **490**, 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 oath to assistant; hence it was taken by the surveyor.

*J. J. Ambrose*, chainman  
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Subscribed and sworn to before me this **fifteenth** day of **March**, 19 **17**.

*Lee C. Daves*  
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**Surveyor - Forest Service**

OATH OF SURVEYOR

I, **Lee C. Daves** **Surveyor - Forest Service**  
[Forest Service Title.]

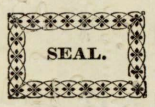
do solemnly swear that, in strict conformity with the special instructions of the United States Surveyor General for **ARIZONA**, dated **June 21**, 19 **16**, and the laws of the United States, I have well, faithfully, and truly, in my own proper person, surveyed a tract of land embraced in

**LIST**, No. **1307**, dated **May 20**, 19 **11**, for **PATENT**, under the Act of **June 11**, 19 **06**, the same to be known as Homestead Entry Survey No. **490**, situated within the **APACHE** National Forest, in **un surveyed Section 2**, Township **3 S.**, Range **31 E.**, and **un surveyed Section 3**, Township **3 S.**, Range **31 E.**, **unsurveyed Section 10**, Township **3 S.**, Range **31 E.**, **unsurveyed Section 11**, Township **3 S.**, Range **31 E.** of the **Gila and Salt River Base 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.

*Lee C. Daves*  
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**Surveyor - Forest Service**  
[Forest Service Title.]

Subscribed and sworn to before me this **fourth** day of **September**, 19 **18**.

*Ethel G. Myers*  
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**Notary Public.**



8-2349

My Commission expires March 17, 1921.



HOMESTEAD ENTRY SURVEY NO. 490

APACHE NATIONAL FOREST

1.

STATE OF ARIZONA.

Chains

Applicant for listing, Ed Elrage; Application No. 99, dated February 5, 1910 and August 24, 1910; List No. 3-1307, dated May 20, 1911; H.E. 016222 made in the Phoenix Land Office on January 29, 1912 by Ed Elrage.

Surveyed under special instructions from the Surveyor General for Arizona, dated June 21, 1916 and designated as Homestead Entry Survey No. 490.

Situated in what will probably be, when surveyed, Secs. 2, 3, 10 and 11, T. 3 S., R. 31 E., Gila and Salt River Base and Meridian, Apache National Forest, Arizona.

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

Note: The boundaries of this claim were changed so as to simplify the lines and to include all possible agricultural land intended to be embraced in the original listing, while excluding Forest Lands. The boundaries as run in this survey are in accordance with the desires of the claimant and meet with the approval of the Forest Service. This survey will be used as a basis for substitute listing and amendment of entry.

Survey commenced March 13, 1917, and executed with a Buff and Buff transit No. 9702, 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.



2.1

APACHE NATIONAL FOREST

STATE OF ARIZONA.

Chains . March 13, 1917.  
 At Cor. No. 1 of this claim hereinafter described, Lat.  
 33° 11' 52" N., Long. 109° 08' 28" W., from the U.S.G.S.  
 Topographic Sheet, of the Morenci Quadrangle, 1 obs.  
 Polaris at W. Elong. at 8h. 01.'8 p.m., 1.m.t.  
 Reference mark: a light on the U S G S B. M., approximate-  
 ly 13 chs. dist. in a northeasterly direction.  
 Angles read by repetitions from star to mark.  
 One set of repetitions being two direct and two reversed  
 positions of the telescope.

1	1/4 (171° 08' 30") =	42° 47' 08"
2	1/4 (171° 08' 00") =	42° 47' 00"

Diff bet. obsns. is 08" or 0.'1  
 Azimuth of star 178° 38' 49" ✓  
 Mean angle 42° 47' 04"  
 Azimuth of mark 221° 25' 53" ✓  
 which corresponds to a bearing of N. 41° 25' 53" E.  
 Accept bearing of reference mark as N. 41° 26' E., from  
 which all the courses of this survey were deflected  
 by sustained angulation.

March 13, 1917.

March 14, 1917  
 Beginning at Cor. No. 1.

Deposit a basalt stone 6 x 4 x 3 ins. marked with a +  
 24 ins. in the ground, over which set an iron post  
 2 in. in dia., 36 ins. long with brass cap marked  
 1917 1 E S 490 in E. quadrant; and raise a mound  
 of stone 4 ft. base, 2 ft. high E. of cor., whence:  
 The U S G S Bench Mark, which is an iron post  
 3 1/2" in dia., showing 12 ins. above ground,  
 marked 3972, bears N. 41° 26' E., 13.07 chs.  
 dist.



APACHE LAND NATIONAL FOREST

STATE OF NEW MEXICO.

Chains	<p>A live oak 32 ins. in dia., bears S. 31° 45' E., 29 lks. dist., marked 1 H E S 490 + B T. U S L M No. 237 H E S, which is a granite stone 25 x 20 x 7 ins. in mound of stone, marked U S L M 237 H E S on S. face set over + chiseled on S. side of a red sandstone column on S. bank of San Francisco River, bears N. 43° 45' 30" W., 80.93 chs. dist. by traverse which appears at the end of these notes. Mag. decl. at 7:00 a.m., is 13° 30' E., which gives</p>
	<p>the mean mag. decl. as 13° 27' E. Lat. 33° 11' 52" N., Long. 109° 08' 28" W., from Morenci Quadrangle U.S.G.S. Topographic sheet.</p>
	<p>I turn an angle of 5° 33' to the left from the reference mark above mentioned.</p>
	<p>Thence N. 35° 53' E. Along left bank San Francisco River, up stream.</p>
27.50	<p>Harden Cienega Creek, running water, 20 lks. wide, 1 ft. deep, course NW.</p>
27.98	<p>To cor. No. 2.</p>
	<p>Deposit a sandstone 8 x 6 x 4 ins. marked with a + 14 ins. in the ground, over which set a conglomerate stone 24 x 16 x 8 ins., chiseled + for the point and 2 H E S 490 on SE. face; and raise a mound of stone 4 ft. base, 2 ft. high SE. of cor.</p>
	<p>No witnesses available. Pits impracticable.</p>
	<p>Note: The San Francisco River was not intended to form a meander boundary of this claim.</p>
	<p>Thence N. 89° 22' E.</p>
	<p>Over sandy river bottom.</p>
88.00	<p>Old channel San Francisco River, 100 lks. wide, running water, 25 lks. wide, 6 ins. deep, course SW.</p>



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84.

APACHE MOUNT NATIONAL FOREST

STATE OF ARIZONA.

Chains  
8.50 Asc. 10 ft. bank, bears NE. and SW.  
9.00 Asc. 250 ft. to cor. on W. point rocky spur ridge.  
14.15 To cor. No. 3.  
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 9 ins., chiseled + for the point and 3  
H E S 490 on SW. face; and raise a mound of stone 4  
ft. base, 2 ft. high SW. of cor., whence:  
No witnesses available. Pits impracticable.

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Thence S. 39° 55' E.  
Desc. 150 ft. to cor. along rocky SW. slope.  
26.71 To cor. No. 4.  
Point for cor. falls on a limestone boulder in place,  
showing 48 x 40 x 24 ins. above ground. I chisel same  
boulder + on top 4 H E S 490 on W. face; and raise a  
mound of stone 4 ft. base, 2 ft. high W. of cor.,  
whence:  
No witnesses available. Pits impracticable.

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Thence S. 22° 20' W.  
Desc. 10 ft. from rock point.  
1.00 Bottom. Thence across rocky creek bottom.  
10.00 Enter heavy cottonwood and sycamore timber, bears NW.  
and SE.  
12.60 Hardén Cienega Creek (dry) 200 lks. wide, course NW.  
Leave timber, bears NW. and SE.  
13.50 Asc. 45 ft. to cor. On N. slope.  
14.87 To cor. No. 5.  
Point for cor. falls on a limestone boulder, in place,  
showing 40 x 24 x 12 ins. above ground. I chisel same  
stone + for the point and 5 H E S 490 on N. face; and  
raise a mound of stone 4 ft. base, 2 ft. high N. of



Chains	<p>cor., whence:</p> <p>No witnesses available. Pits impracticable.</p> <p>Note: After careful search no list corners were found.</p> <p>March 14, 1917.</p>
	<p>March 15, 1917.</p> <p>Thence N. 56° 30' W.</p>
	<p>Along NE. slope.</p>
28.40	<p>To cor. No. 6.</p> <p>Deposit a sandstone 4 x 3 x 2 ins., marked with a +</p> <p>14 ins. in the ground, over which set a sandstone</p> <p>24 x 10 x 6 ins., chiseled + for the point and 6</p> <p>H E S 490 on N. face; and raise a mound of stone 4</p> <p>ft. base, 2 ft. high N. of cor., whence:</p> <p>A juniper, 18 ins. dia., bears S. 36° 10' E.,</p> <p>125 lks. dist., marked 6 H E S 490 + B T.</p>
	<p>No other witnesses available. Pits impracticable.</p>
	<p>Thence S. 48° 26' W.</p> <p>Over mesa, through scattering low mesquite brush.</p>
12.42	<p>To cor. No. 7.</p> <p>Deposit a limestone 5 x 4 x 2 ins., marked with a +</p> <p>16 ins. in the ground, over which set a limestone</p> <p>26 x 16 x 7 ins., chiseled + for the point and 7</p> <p>H E S 490 on N. face; and raise a mound of stone 4</p> <p>ft. base, 2 ft. high N. of cor., whence:</p> <p>A mesquite 4 ins. dia., bears S. 59° 30' E.,</p> <p>44 lks. dist., marked 7 H E S 490 + B T.</p>
	<p>No other witnesses available. Pits impracticable.</p>
	<p>Thence N. 66° 22' W.</p>
	<p>Desc. 110 ft. to cor.</p>
4.90	<p>Bottom of rocky W. slope, bears N. and S., thence over</p> <p>sandy river bottom.</p>



66.

APACHE NATIONAL FOREST

STATE OF ARIZONA

Chains 9.89 To cor. No. 1 and point of beginning.  
 Note: After careful search no list corners were found.

AREA

Area of this claim is 85.00 acres.

IMPROVEMENTS

The improvements made upon and for the benefit of this claim and belonging to the claimant consist of the following:  
 A frame house 40 x 60 ft., the long side extending E. and W., the NE. cor. of which bears S. 42° 33' W., 7.35 chs. dist. from cor. No. 3.  
 Value - - - - - \$1200.00

DESCRIPTION

This claim is situated on the San Francisco River at the mouth of Harden Cienega Creek. The latter flows from SE. to North across the land.  
 The soil in the river and creek bottom is sand, with boulders and gravel in many places. The hillsides are rocky and unfit for cultivation.  
 Water is obtained for domestic purposes from the River. About 30 acres were in cultivation, but this area has been completely washed out by the San Francisco River.  
 No indications of mineral were observed on the claim.

CONFLICTS AND ADJOINING CLAIMS

No conflicts nor adjoining claims. H. E. S. 237 lies approximately one mile NW. of this claim.



Chains

TRAVERSE

Cor.	Course	Dist.	N	S	E	W
1-2	N. 35°53' E.	27.98	22.67		16.40	
2-3	N. 89°22' E.	14.15	.16		14.15	
3-4	S. 39°55' E.	26.71		20.49	17.14	
4-5	S. 22°20' W.	14.87		13.75		5.65
5-6	N. 56°30' W.	28.40	15.68			23.68
6-7	S. 48°26' W.	12.42		8.24		9.29
7-1	N. 66°22' W.	9.89	3.96			9.06
		134.36	42.47	42.48	47.69	47.68

Error in Lat. and Dep.

42.47 47.68  
.01 .01

Closing error 1:9501

TIE to U S L M 237 H.E.S.

Course	Dist.	N	S	E	W
N. 10°47' W.	1.07	1.05			.20
S. 50°00' E.	20.00		12.86	15.32	
South	17.50		17.50		
S. 16°00' E.	36.00		34.61	9.92	
S. 50°00' E.	10.00		6.43	7.66	
N. 62°55' E.	26.14	11.90		23.27	
		12.95	71.40	56.17	.20
			12.95	.20	
			58.45	55.97	

S. 43° 45' 30" E., 80.93 chs. dist.

The listing survey locates this claim in sec. 9, T. 3 S., R. 31 E., unsurveyed, which location is found to be in error by reason of the tie to U.S.L.M. No. 237 H.E.S., the position of which is determined by connection to public land corner.

Survey completed March 15, 1917.

*L. E. Dancy*

Surveyor - Forest Service



NATIONAL FOREST

STATE OF ARIZONA

Chains

Chains

TRAVEL

Course	Dist.	N	S	E	W
N. 32° 23' E.	27.98	23.67			
N. 89° 22' E.	14.15			13.40	
S. 39° 22' E.	28.71		20.42		17.14
S. 23° 20' W.	14.87		13.75		5.68
N. 56° 30' W.	28.40	15.68			23.68
S. 48° 25' W.	13.42		8.24		9.29
N. 60° 22' W.	9.89	3.92			9.00
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	134.38	42.47	43.48	47.69	47.68
			42.47	47.68	
			101.	101.	

Error in lat. and dep.

Closing error 1:9501

TIE TO U.S. L.M. 327 H.D.S.

Course	Dist.	N	S	E	W
N. 10° 47' W.	1.07				1.00
S. 60° 00' E.	20.00		12.88		16.32
South	17.50		17.50		
S. 16° 00' E.	28.00		24.61		9.92
S. 80° 00' E.	10.00		6.43		7.66
N. 62° 55' E.	28.14	11.90			23.27
<hr/>					
	12.95	71.40	66.14		20.
		12.95			20.
		66.45	66.27		

S. 43° 45' 30" E., 80.93 chas. dist.

The listing survey locates this claim in sec. 9, T. 3  
S., R. 31 E., unsurveyed, which location is found to  
be in error by reason of the tie to U.S.L.M. no. 327  
H.D.S., the position of which is determined by connec-  
tion to public land corner.  
Survey completed March 16, 1917.

Surveyor - Forest Service



DIRECTIONS.—1. Carry out calculation 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. 490, STATE OF ARIZONA

CORNERS.	BEARING.	DISTANCE.	LATITUDES.		DEPARTURES.		DOUBLE M. D.	N. AREAS.	S. AREAS.
			NORTH.	SOUTH.	EAST.	WEST.			
1-2	N. 35° 53' E.	27.98	22 67		16 40		16 40	371 79	
2-3	N. 89° 22' E.	14.15	16		14 15		46 95	7 51	
3-4	S. 39° 55' E.	26.71		20 49	17 14		78 24		1603 14
4-5	S. 22° 20' W.	14.87	15 69	13 75		5 65	89 73		1233 79
5-6	N. 56° 30' W.	28.40	15 68		23 68		60 39	947 52	
6-7	S. 48° 26' W.	12.42		8 24		9 29	27 41		225 86
7-1	N. 66° 22' W.	9.89	3 96			9 06	9 06	35 88	
		<u>134.36</u>	42 47	42 48	47 69	47 68		1362 70	3062 79
			42 48	42 48	47 69	47 69			1362 70
								20	1700 09
	Closing error 1:9501								85 00
									Acres
									007

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APPROVAL

Office of the United States Surveyor General,

Phoenix, Arizona, March 17, 1920

The foregoing field notes of Homestead Entry Survey No.

490

executed by *Lee C. Daves, Surveyor* [Forest Service Title.]  
under his special instructions, dated *June 21*, 1916, having  
been critically examined, and the necessary corrections and explanations  
made, the said field notes, and the surveys they describe, are hereby  
approved.

*Frank P. Trott*  
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.