FIELD NOTES

OF

HOMESTEAD ENTRY SURVEY NO. 539

SITUATED IN THE CORONADO NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 11, Unsurveyed, Township 24 S., Range 19 E.
In Section 14, Unsurveyed, Township 24 S., Range 19 E.

of the
GILA AND SALT RIVER BASE & Meridian.
State of
ARIZONA

Applicant for listing
Fred Horn,

Residence
Nogales, Arizona.

Application No.
103

dated
March 21, 1909

List No.
3-43

dated
February 24, 1909

Applicant for survey
John P. Chapman,

Residence
Nogales, Arizona.

H. R. No.
029159

dated
January 7, 1916

Office
Land District, Phoenix, Arizona.

Survey executed by
C. A. Long, Surveyor - Forest Service.

Under special instructions dated
March 23, 1917

Survey commenced
May 24, 1917

Survey completed
May 25, 1917

Under Acts of
June 11, 1906, and August 11, 1916. [OVER]
OATH OF ASSISTANTS

We hereby certify that we assisted

Surveyor - Forest Service,

in surveying all those

parts or portions of Homestead Entry Survey No. 539, 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

caths to Assistants; hence,

they were taken by the

Surveyor.

C. A. Long,
Chairman.

F. W. M. (Signature)
Chairman.

Subscribed and sworn to before me this 25th
day of

May, 1917.

Surveyor - Forest Service.

OATH OF SURVEYOR

I, C. A. Long, Surveyor - Forest Service

[Forest Service Title],
do solemnly swear that, in strict conformity with the special instruc-

tions of the United States Surveyor General for Arizona, dated

March 28, 1917, 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. 3-43, dated February 28, 1909, for

Patent, under the Act of

June 11, 1906, for

the same to be known as Homestead Entry Survey No. 539,
situated within the

CORONADO National Forest, in

Unsurveyed Section 11, Township 24 S., Range 19 E., and

Unsurveyed Section 14, Township 24 S., Range 19 E.,

of the Gila and Salt River Base & 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.

C. A. Long,
Surveyor - Forest Service

[Forest Service Title].

Subscribed and sworn to before me this

November, 1918.

Etzel J. Myers

Notary Public.

My Commission Expires March 17, 1921.
Homestead Entry Survey No. 589
Coronado National Forest
State of Arizona

Chains:
Applicant for listing, Fred Horn; Application No. 103, dated March 21, 1908; List No. 3-45, dated February 24, 1909; H. R. 029188 made in the Phoenix Land Office on January 7, 1916, by John P. Chapman.
Surveyed under special instructions from the Surveyor General for Arizona, dated March 28, 1917, and designated as Homestead Entry Survey No. 589.
Situated in what will probably be when surveyed, secs. 11 and 14, T. 24 S., R. 19 E. Gila and Salt River Base and Meridian, Coronado National Forest, Arizona.

Survey commenced May 24, 1917, and executed with a Buff and Buff transit No. 10830, 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 24, 1917.
At Cor. H-1 of the list survey and what will be Cor. No. 1 of the survey hereinafter described at 6h. 37m. 30s. p.m., l.m.t., I observe Polaris with telescope direct, reading an angle of 31° 12' 30" from star to right, to a reference mark about 3 miles dist.
Latitude 31° 21' 00" N., Longitude 110° 22' 40" W., from U.S.G.S. sheet of Hereford quadrangle.
GREENWICH M.T. U.C. POL. MAY 24, 1917, 9h. 24.01. A.M.

LONGITUDE CORRECTION 1.2m.

L.M.T. U.C. POL. MAY 24, 1917, 9h. 22.8m.

ASTRON. L.M.T. U.C. POL. MAY 23, 1917 21h. 22.8m.

ASTRON. L.M.T. OF OBSN. MAY 23, 1917 30h. 37.6m.

HOUR ANGLE 9h. 14.7m.

AZIMUTH OF POL. AT OBSN. 0° 51' 38" W.

BEARING OF REFERENCE MARK N. 30° 20' 32" E.

At the same point at ch. 29m. p.m., l.m.t. I again observe Polaris with telescope reversed, reading an angle of 51° 15' from star to right, to the same reference mark.

ASTRON. L.M.T. U.C. POL. MAY 23, 1917 21h. 22.8m.

ASTRON. L.M.T. OF OBSN. MAY 23, 1917 30h. 39.6m.

HOUR ANGLE 9h. 16.2m.

AZIMUTH OF POL. AT OBSN. 0° 51' 25" W.

BEARING OF REFERENCE MARK E. 30° 21' 25" E.

The bearing of reference mark as determined by taking the mean of the two observations is N. 30° 20' 58" E. and to the corresponding meridian all the courses of this survey were referred;

MAY 24, 1917.

BOUNDARIES OF CLAIM

Beginning at cor. no. 1.

Identical with cor. 2-1 of the list survey which is a sandstone 22 x 10 x 6 ins. above ground; marked and witnessed as described by the Forest Service.

I destroy all trace of this list cor. and in the same place deposit a porphyry stone, 1 x 3 x 4 ins. marked with a + 24 ins. in the ground, ever which set an iron post, 2 ins. dia. 36 ins. long with brass cap,
Chains marked 1917 on S. and 1 H.E. S. 539 on N.

Rise a mound of stone 4 ft. base 3 ft. high N. of cor. whence:

A white oak 16 ins. dia. bears S. 90° 06' E.

97 lms. dist.

A Walnut 12 ins. dia. bears S. 74° 36' E.,

107 lms. dist.

Each blazed and scribed 1 H.E. S. + 539 B.T.

International boundary monument No. 105 which is an iron post, 1-1/2 x 1-1/2 x 7 ft. above ground, firmly set on a concrete pedestal, and marked and witnessed as described by the Surveyor General, bears S. 26° 16' W. 38.95 chs. dist.

by traverse which appears at end of these notes.

Cor. No. 2 H.E. S. 532 which is a sandstone in place showing 2 x 3 x 3 ft. above ground,

marked 2 H.E. S. 532 bears S. 79° 27' E. 52.71

chs. by traverse which appears at end of these notes.

The observed magnetic declination at 8 a.m. is 13° 00' E.

which corrected for diurnal change gives a mean magnetic declination of 13° 27' E.


Hence N. 44° 36' W.

Ascend 25 ft. to cor. over gradual NE. slope, through scattering oak.

11.50 Dim road bears NE. and SW.

16.00 Draw, course NE.

31.00 To cor. No. 2.

Identical with cor. H-2 of the list survey, which is a sandstone 20 x 10 x 7 ins. above ground, marked and witnessed as described by the Forest Service.
Chains

destroy all trace of this list cor. and in the same place deposit a sandstone 3 x 4 x 4 ins. marked with a + 24 ins. in the ground, over which set an iron post 2 ins. dia. 36 ins. long, with brass cap marked 1917 on S. and 2 H E S 539 in NE quadrant, raise a mound of stone 4 ft. base 3 ft. high NE. of cor., whence;

A Black oak 12 ins. dia. bears N. 30° 20' E.,
204 lbs. dist.

A Black oak, 12 ins. dia. bears N. 86° 10' E.
236 lbs. dist.

Each blazed and scribed 2 H E S + 539 B T.

Thence N. 22° 44' W.

descend 10 ft. over open, gently-rolling E. slope.

0.15 cor. of wire fence from which fence bears N. 22° 44' W.
and S. 45° 00' E.

2.50 draw course N. 75° 00' E., bottom of descent, ascend
35 ft. to cor. over gently rolling E. slope.

27.50 cross-wire fence bears S. 25° 00' E. and N. 25° 00' W.

38.00 to cor. No. 8.

identical with cor. No. 8 of the list survey, which is a sandstone 14 x 8 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 1 x 2 x 4 ins. marked with a + 24 ins. in the ground, over which set an iron post 2 ins. dia. 36 ins. long with brass cap marked 1917 on S. and 2 H E S 539 on E., raise a mound of stone 3 ft.
base 2 ft. high NE. of cor., whence;

A Juniper, 30 ins. dia. blazed and scribed 3
H E S + 539 BE. bears S. 25° 50' E., 441.
Chains

No other bearing trees or objects available.

May 24, 1917.

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May 26, 1917.

Thence N. 29° 35' E.

Descend 30 ft. over open E. slope along SE. side of wire fence, 5 lks. distant and paralleling line.

2.83 Cut off fence bears NW. and SE.

6.00 Enter edge of plowed land.

17.66 Wire fence bears NW. and SE. Leave plowed land.

16.00 Cross wire fence bears N. 30° 00' E., and S. 30° 00' W.

Continue along NW. side of same.

21.00 Wash 60 lks. wide, course SE. Enter scattering sycamore.

22.00 To Cor. No. 4.

Deposit a sandstone 2 x 4 x 5 ins. marked with a + 16 ins. in the ground, over which set a sandstone 12 x 12 x 24 ins. chiseled + for the point and a H E S 539 on S. face; raise a mound of stone 4 ft. base, 3 ft. high. S. of cor., whence:

A walnut 16 ins. dia. bears N. 79° 10' E.

188 lks. dist.

An ash 24 ins. dia. bears S. 37° 40' E.

49 lks. dist.

Each blazed and scribed H E S + 539 B T.

Cor. No. 3 of H. E. S. 301, which is a limestone 11 x 11 x 10 ins. above ground, bears N. 72° 34' W., 6.44 cs. dist. by direct measurement.

Witness Cor. H-4 of the list survey, which is a sandstone 22 x 8 x 6 ins. marked and witnessed as described by the Forest Service, bears N. 29° 33' E. 80 lks. dist. I destroy all trace of this list cor.
Chains

Thence S. 44° 36' E.

Ascend 75 ft. to cor. over rolling W. slope, through scattering oak.

0.54 Wire fence bears E. and W.

6.10 Road bears N. and S.

17.90 Arroyo 15 lks. wide 5 ft. deep, course SW.

30.00 Leave scattering oak, thence over open mesa land.

54.15 To Cor. No. 5.

Identical with Cor. H-5 of the list survey, which is a sandstone 20 x 18 x 6 ins. above ground, marked and witnessed as described by the Forest Service.

I destroy all trace of this list cor. Deposit a porphyry stone 2 x 5 x 7 ins. marked with a + 17 ins. in the ground, over which set a porphyry stone 8 x 8 x 27 ins. chiseled + for the point and 5 H E S 539 on W. face; raise a mound of stone 4 ft. base, 5 ft. high W. of cor., whence:

A white oak 6 ins. dia. bears S. 57° 50' E.

154 lks. dist.

A black oak, 16 ins. dia. bears N. 69° 00' E.

372 lks. dist.

Each blazed and scribed 5 H E S + 539 B T.

Thence S. 29° 47' W.

Descend 110 ft. over open mesa.

12.00 Begin steep descent of SW. slope. Enter scattering timber.

15.00 Foot of steep descent.

27.20 Wire fence bears NW. and SE.

31.00 Wash 100 lks. wide, course S. 60° 00' E., bottom of descent. Ascend 10 ft. to cor.

32.75 To Cor. No. 1, the place of beginning.
HOMESTEAD ENTRY SURVEY NO. 539
CORONADO NATIONAL FOREST
STATE OF ARIZONA

Chains

Total area: 168.76 Acres

Improvements

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

An L shaped adobe house, 32 ft. on W., 32 ft. on N., and 16 ft. on E. and S. ends. The SE. cor. of which bears N. 17° 45' E., 8.67 chs. dist. from Cor. No. 1.

Value: $200.00

An adobe store house 12 x 24 ft., course of long sides E. and W., the SE. Cor. of which bears N. 22° 40' W., 16.98 chs. dist. from Cor. No. 1.

Value: $75.00

About 2-1/2 miles of barbed wire fencing.

Value: $300.00

Total value of improvements: $875.00

Description

This claim is located in a rolling valley, through which runs an intermittent stream. Springs near the house furnish permanent water for domestic use and for watering about 400 head of cattle. Scattered scrub oak is the only timber on the claim.

The soil is a brown adobe, first rate. 90% of the area is suitable for dry farming. However, there is now only about 50 acres under cultivation, which produces good crops of forage, beans and corn.

No indications of mineral were observed on the claim.

Conflicts and adjoining claims.

There are no conflicts. H E S No. 301 is nearby to the North. H E S No. 532 is 3/4 miles to the South.
and H E S 302 is about 1 5 chs. to the west.
Nogales, Arizona, the nearest post office, railway
station and trading place, is 35 miles to the west.

<table>
<thead>
<tr>
<th>Cor.</th>
<th>Course</th>
<th>Dist.</th>
<th>N.</th>
<th>S.</th>
<th>E.</th>
<th>W.</th>
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<td>1-2</td>
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| Error in Lat. and Dept. |          |         |     |     |     |     |
| 1.38 | 1.01    |         |     |     |     |     |

Closing error, 1.6286

TIE FROM COR. 1-H E S 339 TO COR. 2-H E S 532.

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<td>S. 69° 43' W.</td>
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TIE FROM COR. 1-H E S 539 TO INTERNATIONAL BDY.

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<th>N.</th>
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Survey completed May 25, 1917.

Surveyor - Forest Service
## TABLES AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 539, STATE OF ARIZONA

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<thead>
<tr>
<th>CORNERS</th>
<th>BEARING</th>
<th>DISTANCE</th>
<th>LATITUDES</th>
<th>DEPARTURES</th>
<th>DOUBLE M.D.</th>
<th>N. AREAS</th>
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### Closing Error: 1.3286

Surveyors are required to use the Standard Field Tables issued by the G.L.O.
APPROVAL

Office of the United States Surveyor General,

Phoenix, Arizona, April 10, 1920

The foregoing field notes of Homestead Entry Survey No.

539

executed by C. A. Long, Surveyor under his special instructions, dated March 28, 1917, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

[Signature]
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.

[Signature]
U. S. Surveyor General.