U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

FIELD NOTES

OF
HOMESTEAD ENTRY SURVEY NO. 434
SITUATED IN THE CROOK NATIONAL FOREST
ADMINISTRATIVE DISTRICT NO. 3
In Section 24, unsurveyed, Township 5 N., Range 16 E.

of the Gila and Salt River Base and Meridian.
State of ARIZONA

Applicant for listing W. L. Nail,
Residence Globe, Arizona
Application No. 203, dated January 22, 1912
List No. 3-2494, dated April 23, 1913

Applicant for survey W. L. Nail,
Residence Globe, Arizona
H. E. No. 023173, dated September 16, 1913
Office Phoenix, Arizona
Land District

Survey executed by R. P. A. Johnson, Surveyor - Draftsman
Under special instructions dated December 2, 1915
Survey commenced April 4, 1916
Survey completed April 5, 1916
OATH OF ASSISTANTS

We hereby certify that we assisted P.S. Johnson in surveying all those parts or portions of Homestead Entry Survey No. 4341, 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.

Subscribed and sworn to before me this twenty-seventh day of May, 1916.

P.S. Johnson
Surveyor Draftsman

OATH OF SURVEYOR

I, P.S. Johnson, Surveyor Draftsman, do solemnly swear that, in strict conformity with the special instructions of the United States Surveyor General for Arizona, dated December 2, 1915, 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

Lot No. 3-247, dated April 23, 1913, for the same to be known as Homestead Entry Survey No. 4341, situated within the Crook National Forest, in Section 2 1/2, Township 5 N., Range 62 E., and Section 2 1/2, Township 5 N., Range 63 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.

Subscribed and sworn to before me this 17th day of January, 1917.

P.S. Johnson
Surveyor Draftsman

SEAL
Commission expires June 30, 1918.

Sylvester L. McCraw
NOTARY PUBLIC, D.C.
Chains

Applicant for listing, W. L. Nail; Application No. 203,
dated January 22, 1912; List No. 3-2494, dated April 23,
1913; H. R. 02372, made in the Phoenix Land Office on
September 16, 1913 by W. L. Nail.
Surveyed under special instructions from the Surveyor
General for Arizona, dated December 2, 1915 and desig-
nated as Homestead Entry Survey No. 434.
Situated in T. 5 N., R. 16 E., in what will probably be,
when surveyed, Section 24, Gila and Salt River Base and
Meridian, Crook National Forest, Arizona.
Surveyed under the Acts of June 11, 1906 and March 4,
1915.

Survey commenced April 4, 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 meas-
urements made directly on the slope with a 500 link
steel tape. The slope angles were determined with a
clinometer.

April 4, 1916.

At 2h. 35m. p.m., l.m.t., I set off 33° 45’ on Lat. arc,
5° 50’ 30” N. on decl. arc and determine a meridian with
the solar at cor. No. 1, hereinafter described.

I observe the altitude of the sun for azimuth at cor. No.
1 of this survey, hereinafter described. The reading
on the meridian determined with the solar is set at zero
and the sun was observed in the upper left and lower
right quadrants of the field. My watch is set for lo-
cal mean time. Latitude 33° 45’ 10” N., Longitude 110°
40’ W., by account from the special instructions from the
Surveyor General.
<table>
<thead>
<tr>
<th>Chains</th>
<th>Telescope</th>
<th>Time</th>
<th>Horizontal Angle</th>
<th>Vertical Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>4h. 49m. 18s.</td>
<td>64° 28' 00&quot;</td>
<td>18° 51' 30&quot;</td>
<td></td>
</tr>
<tr>
<td>Reversed</td>
<td>4h. 50m. 39s.</td>
<td>84° 07' 00&quot;</td>
<td>19° 06' 00&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Difference from meridian determined by solar attachment, 0° 00' 25".

At 6h. 33.9m. p.m., l.m.t., I observe Polaris with telescope direct and reversed at Western Elongation at cor. No. 1. The reading on the meridian determined by direct solar is set at zero. The mean horizontal angle E. of star is 1° 22'. The azimuth of Polaris is 1° 21' 35" to W. The meridian thus determined therefore differs 0° 00' 25" from the meridian determined by direct solar.

Survey begun in p.m. on the 4th. and finished in a.m. on the 5th. Therefore no lat. obn. possible.

April 4, 1916.

There being no cor. of Public Land survey or U. S. L. M. within two miles, I establish U. S. L. M. No. 434 H. E. S. on backbone of long ridge between Salt River and Hay Stack Wash, 1/2 mile East of and 450 ft. above Salt River. I mark + U S L M No 434 H E S on top of an embedded granite rock 5 x 4 x 2 ft. above ground; and raise a mound of stone 6 ft. base, 4 ft. high alongside, whence:

A + on a granite boulder 5 x 3 x 2 ft. above ground, chiseled B R - U S L M No 434 H E S, bears N. 84° 01' W., 24 lks. dist.

A + on a granite boulder 4 x 3 x 2-1/2 ft. above ground, chiseled B R - U S L M No 434 H E S, bears N. 17° 06' E., 56 lks. dist.
Chains:  
Junction of Salt River and Medicine Wash, bears E 40° 40' W., approximately 3/4 mile dist.
Junction of Salt River and Canyon Creek, bears N 9° 30' E., approximately 1 1/2 miles dist.
Sombrero Butte, bears N 54° 17' W., approximately 10 1/2 miles dist.
Asteo Peak in Sierra Ancha Mountains, bears N 78° 10' W., approximately 17 miles dist.
East edge of butte situated between Canyon Creek and Salt River N of their junction, bears N 0° 55' W., approximately 1 mile dist.
West end Medicine Springs Mountain bears N 33° 05' W., approximately 8 miles dist.
Hay Stack Mountain bears S 50° 36' E., approximately 4 miles dist.

Junction of Ash Creek and Salt River bears N 7° 50' E., approximately 2 miles dist.
Cor. No. 1, H E S 434, hereinafter described, bears N 36° 13' W., 19.00 chs. dist.

BOUNDARIES OF CLAIM:
Beginning at cor. No. 1, H E S 434, and nor 20 1/4 dist.:
Identical with cor. H-1 of the list survey, which is a granite stone 12 x 6 x 14 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a granite stone 5 x 2 x 2 ins. marked with a +, 14 ins. in the ground, over which set a granite stone 24 x 14 x 6 ins. chiseled + for the point and H E S 434 on NW. face; and raise a mound of stone 3 ft. base, 2 ft. high NW. of cor., whence:
A mesquit, 8 ins. dia., bears N 25° 32' W., 86 lks. dist., scribed H E S 434 + B T.

No other witnesses available. Fits impracticable.
Chain by U. S. L. M. No. 454, H. E. S., heretofore described, bears S. 36° 13' E., 19.00 chs., measured by direct measurement. To note:

Latitude 33° 46' 10" N., Longitude 110° 40' W., from special instructions from the Surveyor General.

Mag. Var. at 5:00 p.m. 13° 30' E. Mean mag. var. 13° 40'.

Thence S. 77° 18' W. for 640.6 ft. through bush.

Over open bench.

0.70 Edge, bench. Descend 85 ft. to cor. in brush.

3.60 Foot of slope. Enter bottom. 25.0 ft. E.

4.61 Fence cor., fence bears NE. and along line.

6.83 Fence cor., fence bears SW. or leave fence.

8.90 Fence, bears NW. and SE. and extend fence.

11.38 To cor. No. 2.

Identical with cor. H-4 of the list survey, which is an embedded granite stone 40 x 24 x 10 ins. above ground and marked and witnessed as described by the Forest Service.

I destroy all trace of this list cor. and mark same stone 2 - H E S 434 on the NE. face for cor. No. 2 of this survey; and raise a mound of stone 3 ft. base, 2 ft. high NE. of cor., whence:

A mesquite, 6 ins. dia. bears N. 89° 05' W., 70 lks. dist., scribed 2 H E S 434 + B T.

A + on an embedded granite boulder 4 x 3 x 1-1/2 ft. above ground, chiseled B R - 2 H E S 434, bears S. 2° 13' E., 50 lks. dist.

Thence N. 17° 42' W. has twice set out, measurement

Over level brushy land.

3.00 East bank Salt River, 4 ft. high, bears SE. Ascend rocky river bed 30 ft., and 3 ins. A

51.00 East bank Salt River, 4 ft. high, bears SSE. Ascend 15 ft. to cor. in brush.
<table>
<thead>
<tr>
<th>Chains</th>
<th>51.55</th>
<th>Irrigation ditch, course SSE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>57.50</td>
<td>Fence bears NW. and SE.</td>
<td></td>
</tr>
<tr>
<td>58.78</td>
<td>To cor. No. 3.</td>
<td></td>
</tr>
</tbody>
</table>

Identified with cor. H-3 of the list survey, which is a granite stone 20" x 16" x 10 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a sandstone 4 x 2 x 2 ins. marked with a +, 14 ins. in the ground, over which set a sandstone 24 x 12 x 8 ins., chiseled + for the point and S - H E S 434 on 3. face; and raise a mound of stone 3 ft. base, 2 ft. high, 3. of cor., whence:

- A mesquit, 12 ins. dia., bears N. 84° 56' E., 123 lks. dist., scribed S H E S 434 + B T.
- A mesquit, 8 ins. dia., bears N. 43° 32' E., 68 lks. dist., scribed S H E S 434 + B T.

April 4, 1916.

April 5, 1916.

At 7h. 40m. a.m., l.m.t., I set off 33° 45'-1/2" on lat. arc, 6° 07' N. on decl. arc, and determine a meridian with the solar at cor. No. 3. Thence S. 19° 48' E.

- Fence bears ESE. and NNW.
- Foot descent. Ascend 25 ft. to cor.
- Arroyo, 5 lks. wide, 1 ft. deep, course WNW.
- Fence bears NNE. and SSW.
- To cor. No. 4.

Identical with cor. H-2 of the list survey, which is a sandstone 12 x 10 x 10 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a granite stone 6 x 2 x 2 ins. marked with a +, 14 ins. in the
ground, over which set a granite stone 24 x 14 x 8 ins. chiseled + for the point and 4 - H E S 434 on W. face; and raise a mound of stone 3 ft. base, 2 ft. high W. of cor., whence:

- A palo verde, 6 ins. dia., bears N. 42° 18' E.,
  56 lbs. dist., scribed 4 H E S 434 + BT.
- A mesquite, 4 ins. dia., bears S. 88° 12' E.,
  57 lbs. dist., scribed 4 H E S 434 + BT.

Thence S. 30° 45' W.
Descend 40 ft. in brush to flat.

1.58 Fence bears NNE. and SSW.
8.50 Fence bears NE. and SW.
15.00 Ascend 70 ft. to bench, along NE. slope.
24.50 Top of bench.
28.20 Edge bench. Descend 20 ft. to ravine.
31.70 Ravine, course WNW. Ascend 20 ft. to cor.

Cor. No. 1, the place of beginning.

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AREA

Total Area - - - - - - - - - - - - - - - - - - - - - - 62.00 acres

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IMPROVEMENTS

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

Approximately 1-1/8 mile of wire fence.

Value -----------------$175.00

The applicant's house was washed away by flood in spring of 1916 and at time of survey he was living in tent on N. end of claim.

There is approximately 15 acres in cultivation.
There is a gas engine and pump on river bed West of cor. No. 3, but well was washed out and engine out of repair as result of flood. Value -------------- $350.00

**DESCRIPTION**

This claim consists of small flat on East side of Salt River, known locally as Gleason Flat, approximately 22 miles NE. of East end of Roosevelt Lake. The tract is largely bottom land extending to edge of low bench on East.

The soil in the bottom is a sandy loam, fertile and produces good crops when irrigated. At the time of survey about 1/2 of the claim was covered with from 2 to 6 ins. of sand, deposited by recent floods. The slopes to bench are rocky and non-tillable.

There is no merchantable timber on the tract. The cover consists of a heavy stand of mesquit along West boundary. Water for irrigation and domestic use is obtained from Salt River, being pumped from a well in edge of River bed.

I saw no indications of mineral upon this claim.

**CONFLICTS AND ADJOINING CLAIMS**

There are no conflicting, adjoining or nearby claims.

Globe, the nearest railroad point, post office and commercial center, is approximately 50 miles to South and is reached by 25 miles of poor trail, 10 miles of poor road and 15 miles of good road.
<table>
<thead>
<tr>
<th>Chain</th>
<th>Cor.</th>
<th>Course</th>
<th>Dist. W</th>
<th>S</th>
<th>E</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>2.50</td>
<td>77° 18' W</td>
<td>11.38</td>
<td>11.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3</td>
<td>17° 42' E</td>
<td>56.78</td>
<td>55.00</td>
<td>17.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td>19° 48' E</td>
<td>27.89</td>
<td>26.24</td>
<td>9.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-1</td>
<td>30° 46' W</td>
<td>31.70</td>
<td>27.24</td>
<td>16.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Error in Lat. and Dep. 55.98 27.32 27.32 0.02 0.00

Closing error, 1:6467.

Survey completed April 5, 1916.

Surveyor - Draftsman

P.A. Johnson
Direct Solar, April 4, 1916.

Cor. No. 1, H. E. S. 434 of W. L. Hail.

Lat. 33° 45' 10" N.  Long. 110° 40' W.  Elev. 2500 ft.

Decl. 5° 52' N.

Telescope  Time  Horizontal Angle  Vertical Pos. Angle  Sun Angle
Direct  4h. 49m. 18s. 84° 28' 00"  18° 51'30"  18° 51'30"  18° 51'30"
Reversed  4h. 50m. 39s. 84° 07' 00"  19° 06'00"  19° 06'00"  19° 06'00"
Mean  4h. 49m. 58s. 84° 17' 30"  18° 58'45"  18° 58'45"  18° 58'45"

\[
\cos \theta = \frac{\sin 5° 52' N \times \cos 33° 45' 10" \times \cos 18° 56' 12"}{\cos 33° 45' 10" \times \cos 18° 56' 12"}
\]

\[
\tan 33° 45' 10" = \frac{9.36249}{9.824939} = \log \frac{.09930}{.22927}
\]

Bearing of reference object, N. 0° 00' 34" E.
<table>
<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>
<th>S. AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NORTH</td>
<td>SOUTH</td>
<td>EAST</td>
<td>WEST</td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>S. 77° 16' W</td>
<td>11.36</td>
<td>11.10</td>
<td>11.10</td>
<td>11.10</td>
<td>11.10</td>
<td>27.75</td>
</tr>
<tr>
<td>2-3</td>
<td>N. 17° 42' E</td>
<td>50.76</td>
<td>25.77</td>
<td>26.24</td>
<td>17.87</td>
<td>17.87</td>
<td>1000.54</td>
</tr>
<tr>
<td>3-4</td>
<td>S. 19° 46' E</td>
<td>27.89</td>
<td>26.24</td>
<td>9.45</td>
<td>45.19</td>
<td>1185.79</td>
<td></td>
</tr>
<tr>
<td>4-1</td>
<td>S. 30° 46' W</td>
<td>26.70</td>
<td>37.77</td>
<td>16.22</td>
<td>33.42</td>
<td>2045.85</td>
<td></td>
</tr>
</tbody>
</table>

Closing error, 1.6467

|          |          |          |          |          |          |          |          |
|          |          | 55.99    | 55.99    | 27.32    | 27.32    | 1259.95 |

62.998 Acres.
APPROVAL

Office of the United States Surveyor General,

Phoenix, Arizona, August 3, 1917

The foregoing field notes of Homestead Entry Survey No. 434

executed by R. P. A. Johnso, Surveyor-Draftsman, under his special instructions, dated December 2, 1915, 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.