U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

FIELD NOTES

OF
HOMESTEAD ENTRY SURVEY NO. 562
SITUATED IN THE TONTO NATIONAL FOREST
ADMINISTRATIVE DISTRICT NO.

In Section 4, unsurveyed, Township 8 N., Range 13 E.

of the
GILA AND SALT RIVER BASE & Meridian.

State of
ARIZONA

Applicant for listing
Jacob O. Kline,
Residence
Young, Arizona.
Application No. 569, dated August 30, 1915
List No. 3-3718, dated December 2, 1915

Applicant for survey
Jacob O. Kline,
Residence
Young, Arizona.
W. M. No. 035282, dated June 30, 1917

Land Office
Phoenix, Arizona.

Survey executed by Frank D. Yost, Surveyor - Forest Service,
Under special instructions dated March 12, 1919
Survey commenced June 19, 1919
Survey completed June 20, 1919

We hereby certify that we assisted

Frank D. Yost,

Surveyor - Forest Service, in surveying all those

parts or portions of Homestead Entry Survey No. 562, 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 6th day of August, 1919.

OATH OF SURVEYOR

I, Frank D. Yost, Surveyor - Forest Service,

do solemnly swear that, in strict conformity with the special instructions of the United States Surveyor General for Arizona, dated March 12, 1919, 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. 3-3718, dated Dec. 2, 1915, for Patent, under the Act of June 11, 1906, the same to be known as Homestead Entry Survey No. 562, situated within the Tonto National Forest, in the same to be known as Homestead Entry Survey No. 562, situated within the Tonto National Forest, in

un surveyed Section 4, Township 8 N., Range 13 E., and surveyed Section ---, Township ---, Range ---

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

Subscribed and sworn to before me this fifth day of November, 1919.

Notary Public.

My commission expires March 17, 1921.
Homestead Entry Survey No. 582

To: Tonto National Forest
State of Arizona

Chains

Applicant for listing, Jacob C. Kline; Application No. 589, dated August 30, 1915; List No. 3-3718, dated Dec. 2, 1915; H. E. C66292 made in the Phoenix Land Office on June 30, 1917, by Jacob C. Kline.

Surveyed under special instructions from the Surveyor General for Arizona, dated March 12, 1919, and designated as Homestead Entry Survey No. 582.

Situated in what will probably be when surveyed Sec. 4, T. 8 N., R. 15 E., Gila and Salt River Base and Meridian, Tonto National Forest, Arizona.

Surveyed under the Acts of June 11, 1905 and October 1, 1918.

Survey commenced June 19, 1919, and executed with a "Suff and Suff transit No. 10019, 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.

June 19, 1919.

At 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 all four quadrants of the field.

My watch is set for local mean time.

Lat. 34° 04' 21" N., Long. 111° 01' 35" W., from special instructions from the Surveyor General and later verified.
At the same station I again observe the altitude of the sun for azimuth. The reading on the reference object was set at zero and the sun was observed in all four quadrants of the field.

The two obs. give a mean bearing of reference mark as N. 89° 58' 14" E. I accept bearing of reference mark as N. 89° 58' E., and to the corresponding meridian all the courses of this survey are referred by sustained angulation.

**RETRACEMENT**

From the std. cor. of Secs. 32 and 33, T. 9 N., R. 13 E., (accepted) a granite porphyry stone 7 x 5 x 6 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

Thence East,

Retracing S. bdy. Sec. 33, W/2.

40.07 Fall 2 lks. S. of Std. 1¼ cor. on S. bdy. of Sec. 33,
a granite porphyry stone 8 x 8 x 5 ins. above ground, firm set, marked and witnessed as described by the Surveyor General.

True line is N. 89° 58' E., 40.07 chs. June 19, 1919.

BOUNDARIES OF CLAIM

June 20, 1919.

Beginning at Cor. No. 1, and closing cor. on S. bdy. of Sec. 33, T. 9 N., R. 13 E.

Deposit a sandstone 6 x 4 x 3 ins. marked with a "+ 10 ins. in the ground on solid rock over which set an iron post 2 ins. dia., 36 ins. long, with brass cap marked 1919 on S. rim, 1 H E S 582 in SE. quadrant, and C C in S. half, surrounded by a mound of stone 3 ft. base, 1 ft. high; raise a mound of stone 3 ft. base, 2 ft. high on claim line S. of cor., whence:

A juniper 30 ins. dia., brs. S. 9° 46' E., 9.00 chs.
dist., blazed and scribed C C 1 H E S 582 + B T

No other witnesses available. Fits impracticable.
The Std. Cor. of Secs. 32 and 33, T. 9 N., R. 13 E., here-
tofore described, brs. S. 89° 58' W., 9.52 chs. dist.
The Std. 1/4 cor. on S. bdy. Sec. 33, heretofore describ-
ed, brs. N. 89° 58' E., 30.55 chs. dist.

Cor. N-1 of the list survey, which is a sandstone 16 x 8 x 5 ins. above ground, marked and witnessed as described by the Forest Service, brs. N. 12° 01' W., 9 lks. dist. I destroy all trace of this list cor.

Lat. 34° 04' 21" N., Long. 111° 01' 35" W., from special instructions from the Surveyor General and later verified.

Mag. decl. at 8 a.m. is 14° 30' E., Mean Magnetic decl. is 14° 26' E.

Thence N. 89° 58' E.

Along S. bdy. of Sec. 33, T. 9 N., R. 13 E.
Chains
2.91 Wash, 60 lns. wide, 5 ft. deep, (dry), course N.
Bottom of desc.: Ascend gradual N. slope 30 ft. over
open grassland.
16.02 To Cor. No. 2, and Closing Cor. on S. bdy. of Sec. 33,
T. 9 N., R. 13 E.
Deposit a granite stone 3 x 2 x 2 ins. marked with a +
20 ins. in the ground on solid rock, over which set an
iron post 2 ins. dia., 36 ins. long with brass cap md.
1919 on S. rim and 2 H E S 582 in SW. quadrant and C C
in S. half, surrounded by a mound of stone 3 ft. base,
1 ft. high; raise a mound of stone 5 ft. base, 2 ft.
high, S. of cor., washoe:
A juniper 20 ins. dia., brs. N. 84°32'E., 10.16 chs.
dist. Blazed and scribed C C 2 H E S 582 + B T
No other witnesses available. Fits impracticable.
Std.1/4 cor. on S. bdy. Sec. 33, heretofore describ-
ed, brs. N. 89°58'E., 15.55 chs. dist.
Std. cor. of Secs. 32 and 33. T. 9 N., R. 13 E., her-
etofore described, brs. S. 89°58' W., 24.94 chs. dist.
Cor. N-6 of the list survey, which is a sandstone
6 x 5 x 4 ins. above ground, marked and witnessed
as described by the Forest Service; bears N. 10°02'W.
21 lns. dist. I destroy all trace of this list cor.
Cor. N-7 of the list survey, which is a sandstone
8 x 8 x 3 ins. above ground, marked and witnessed
as described by the Forest Service, bears
W. 86°01' N., 4.60 chs. dist. I destroy all
trace of this list cor.

Note: It was not observed until after this survey had been
completed that the special instructions required the N.
bdy. of the claim be made proportional in length to the
W/2 of Sec. 33 T. 9 N., R. 13 E., as retraced. Inasmuch
as the survey covers the area intended to be em-
braced in the original listing, the additional work and
expense incident to making the changes in order to com-
ply with the above requirement, do not appear to be
warranted.
Thence South,

Descend 20 ft. over open W. slope.

6.00 To Cor. No. 3,

Deposit a granite stone 4 x 3 x 2 ins. marked with a + 15 ins. in the ground, over which set a granite stone 24 x 8 x 6 ins. chiseled + for the point and 3 H E S 582 on SW. face; raise a mound of stone 5 ft. base, 2 ft. high, SW. of cor., whence:

No witnesses available. Fits impracticable.

Cor. H-5 of the list survey, which is a sandstone 6 x 6 x 4 ins. above ground, marked and witnessed as described by the Forest Service, bears N. 19° 42' E., 77 lks. dist.; I destroy all trace of this list cor.

Thence East,

Over open grassland;

5.00 To Cor. No. 4,

Deposit a granite stone 5 x 3 x 2 ins. marked with a + 15 ins. in the ground, over which set a sandstone 24 x 10 x 4 ins. chiseled + for the point and 4 H E S 582 on SW. face; raise a mound of stone 5 ft. base, 2 ft. high SW. of cor., whence:

A juniper 24 ins. dia., brs. N. 41° 19' E.,
529 lks. dist.

A juniper 24 ins. dia., brs. S. 75° 32' E.,
689 lks. dist.

Each blazed and scribed 4 H E S 582 + B T

No other witnesses available.

Cor. H-4 of the list survey, which is a sandstone 9 x 6 x 6 ins. above ground, marked and witnessed as described by the Forest Service, bears N. 3° 21' W., 27 lks. dist. I destroy all
Chains

trace of this list cor.

Thence South,

Over level open grassland.

1.37 Wash, 40 lks. wide, banks 3 ft. high, (dry) course West.

7.21 Wash, 45 lks. wide, banks 3 ft. high, (dry) course W. 60° N., Ascend 12 ft. over rocky N. slope, thru oak brush.

10.00 To Cor. No. 5, 40. Measured as directed.

Deposit a sandstone 4 x 3 x 3 ins. marked with a + 14 ins., in the ground, over which set a granite stone 24 x 6 x 6 ins. chiseled + for the point and H E S 582, on NW. face; raise a mound of stone 3 ft. base, 2 ft. high NW. of cor., whence:

A juniper 30 ins. dia., brs. S. 18° 36' E., 647 lks. dist.

A juniper 30 ins. dia., brs. S. 29° 36' W., 592 lks. dist.

Each blazed and scribed H E S 582 + B T

Cor. H-3 of the list, survey, which is a sandstone 6 x 10 x 4 ins. above ground, marked and witnessed as described by the Forest Service, bears N. 25° 56' E., 79 lks. dist.

I destroy all trace of this list cor.

Thence West,

Ascend 40 ft. over rocky NE. slope, thru heavy oak brush.

9.67 Top of ascent on small spur, bears NW. Descend 30 ft. over rocky W. slope, thru heavy oak brush.

17.49 Wash, 45 lks. wide, 3 ft. deep (dry), course N. 30° E.

Bottom of descent. Ascend E. slope, 20 ft., over open grassland.

20.02 To Cor. No. 6.
HOMESTEAD ENTRY SURVEY NO. 582
TOMPO NATIONAL FOREST
STATE OF ARIZONA

Chains
Deposit a sandstone 5 x 4 x 3 ins. marked with a + 18
ins. in the ground, over which set a sandstone 24 x 12
x 10 ins. chiseled + for the point and 6 H E S 582 on
NE. face; raise a mound or stone 3 ft. base, 2 ft. high,
NE. of cor., whence:
A + on an embedded granite boulder showing 36 x 24
x 2 ins. above ground, chiseled 6 H E S 582
+ 3 R, brs. S. 22° 06' W., 75 lks. dist.
A + on an embedded granite boulder showing
36 x 30 x 12 ins. above ground, chiseled
6 H E S 582 + 3 R, brs. N. 78° 40' B.,
92 lks. dist.
No other witnesses available.
Cor. H-2 of the list survey, which is a sand-
stone 6 x 8 x 2 ins. above ground., marked
and witnessed as described by the Forest
Service, brs. N. 20° 45' E., 41 lks. dist.,
I destroy all trace of this list cor.

Thence N. 0° 06' E.
Along E. slope, over open grass land.
14.96 To Cor. No. 1, the place of beginning.

AREA
Total area, -- -- -- -- -- -- -- -- 27.49 Acres.

IMPROVEMENTS
The improvements belonging to the claimant are located
upon his entry 025327, which adjoins this survey on
the North.

DESCRIPTION
The area covered by this survey lies in a shallow draw.
The general drainage is to the north. The soil is a sandy loam about 3 ft. deep, and somewhat rocky. The area is mainly suitable for pasture land. There is no water on the area. There is no commercial timber on the claim.

No indications of mineral were observed on the claim.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicts. The survey is adjoined on the North by claimant's H. E. 025327 embracing W/2 SW/4; N/3 NW/4 NE/4 SW/4; SW/4 SE/4 NW/4; and SE/4 SW/4 NW/4; Sec. 33, T. 9 N., R. 13 E.

Little Walnut Administrative Site lies about 1/2 mile in a northeasterly direction.

Young, Arizona, the nearest settlement and postoffice is about four miles in a northeasterly direction.

TRaverse

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<th>Course</th>
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<th>N</th>
<th>S</th>
<th>E</th>
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Error in Lat. and Dep.

Closing Error, 1:1944

Survey completed June 20, 1919,

Surveyor - Forest Service,
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<td>24° 15'37&quot;</td>
<td>24° 15'37&quot;</td>
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Decl. 25° 25' 42" N.

\[
\cos Q = \frac{\sin 22° 25' 42"}{\cos 24° 13' 55"} = \frac{\tan 34° 04' 21" \times \cos 24° 13' 55"}{\tan 24° 13' 55"}
\]

\[
sin. 25° 25' 42" = 0.428594492
\]
\[
\cos. 24° 13' 55" = 0.91123061
\]
\[
\cos. 34° 04' 21" = 0.83984422
\]
\[
9.783092 = \log. 53638
\]
\[
9.483476 = \log. 30442
\]
\[
\cos Q = 0.28196
\]
\[
Q = 77° 10' 55"
\]

Bearing of Reference mark, N. 89° 58' 19" E.
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<th>Chains</th>
<th>Telescope</th>
<th>Pos.</th>
<th>L.m.T.</th>
<th>Sun</th>
<th>P.M.</th>
<th>Horizontal Angle</th>
<th>Vertical Angle</th>
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|        | Direct    | ⁰    | Ah 54m 25s | 167° 37' 30" | 25° 49' 30"
|        | Reversed  | ⁰    | Ah 56m 45s | 167° 56' 00" | 24° 50' 30"
|        | Direct    | ⁰    | Ah 55m 10s | 166° 07' 30" | 25° 41' 30"
|        | Reversed  | ⁰    | Ah 56m 06s | 167° 26' 00" | 24° 58' 30"
| Means  | ⁰        | Ah 55m 36s | 167° 46' 45" | 25° 20' 00" |

Corr. for ref. 1'35"

Decl. 23° 25' 42" N.

\[
\cos Q = \frac{\sin 23° 25' 42"}{\cos 34° 04' 21" \times \cos 25° 18' 25"}
\]

\[
\times \tan 25° 18' 25"
\]

\[
\sin 23° 25' 42" = 0.394482
\]

\[
\cos 34° 04' 21" = 0.916051
\]

\[
\cos 25° 18' 25" = 0.915232
\]

\[
9.7250619 = \log 9.52096
\]

\[
\tan 34° 04' 21" = 9.3301722
\]

\[
\tan 25° 18' 25" = 9.5747199
\]

\[
9.5049921 = \log 9.31981
\]

\[
\cos Q = 0.9115
\]

\[
Q = 77° 46' 37"
\]

Bearing of Reference mark, N. 89° 58' 08" E.
**TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 582, STATE OF ARIZONA**

<table>
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<th>CORNERS</th>
<th>BEARING</th>
<th>DISTANCE</th>
<th>LATITUDES</th>
<th>DEPARTURES</th>
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APPROVAL

Office of the United States Surveyor General,

Phoenix, Arizona, May 10, 1920

The foregoing field notes of Homestead Entry Survey No.

582

executed by Frank D. Yost, Surveyor

[Forest Service Title]

under his special instructions, dated March 12, 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.

FRANK P. TROTT

U. S. Surveyor General.