

Exterior
BOOK "AW"

2576

FIELD NOTES

BOOK 2576

OF THE SURVEY OF THE

East and North Boundaries of Tp 31 N.
R. 18 E.

Of the Gila and Salt River Base and Meridian,

in the Territory of Arizona

EXECUTED
AS SURVEYED BY

Jan L. White U.S. Measurman, ~~United States Deputy Surveyor,~~

Special Instructions from the Commissioner of the General Land Office

Under ~~his~~ Contract No. _____, dated ~~Oct 9th~~ 1907 and May 15th, 1908

Survey commenced April 25th, 1911

Survey completed April 28th, 1911

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BOOK 2576

NAMES AND DUTIES OF ASSISTANTS.

T. Y. White Chairman

Richard L. Shumway Chairman

Earl Albright Moundman

Nelson Polacco Axman

William R. Carson Flagman

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Book No. 2576

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PRELIMINARY OATHS OF ASSISTANTS.

WE, T. J. White and Richard L. Shumway
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of East and North Bdrays of Tp 31 N R 18 E of the G. & S. R. Base & Meridian, Arizona.

T. J. White, Chainman.

Richard L. Shumway, Chainman.

Subscribed and sworn to before me this 25th
day of April, 1911



Van L. White
U.S. Transitman

I, Carl Albright and
do solemnly swear that ~~we~~ will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ to the best of ~~our~~ skill and ability, in the survey of East and North Bdrays of Tp 31 N, R. 18 E of the G. & S. R. Base & Meridian, Arizona.

Carl Albright, Moundman.

~~Moundman.~~

Subscribed and sworn to before me this 25th
day of April, 1911



Van L. White
U.S. Transitman

I, Nelson Polacca and
do solemnly swear that ~~we~~ will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~us~~ to the best of ~~our~~ skill and ability, in the survey of East and North Bdrays of Tp 31 N R 18 E of the G. & S. R. Base & Meridian, Arizona

~~Axman.~~

Nelson Polacca, Axman.

Subscribed and sworn to before me this 25th
day of April, 1911



Van L. White
U.S. Transitman

I, William R. Carson, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of East and North Bdrays of Tp 31 N. R 18 E of the G. & S. R. Base & Meridian, Arizona.

William R. Carson Flagman.

Subscribed and sworn to before me this 25th
day of April, 1911



Van L. White
U.S. Transitman

Behrens

Survey commenced April 25th 1911; and executed with a W. & L. G. Surley engineers transit No. 76. with a Burt Solar attachments. The horizontal limb is provided with one double vernier reading to single minutes of arc. The verniers of the latitude and declination arcs read to 0'30" of arc.

I examine the adjustments of the transit and correct the level and collimation errors. then to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris & proceed as follows;

At my camp which is located near the center of Twp. 31 N. R18 E., latitude $36^{\circ}04'30''$ N., longitude $110^{\circ}24'45''$ W. I set off $36^{\circ}04\frac{1}{2}'$ N. on the lat. arc, $13^{\circ}04'N.$ on the decl. arc and at $2^h 58^m$ p.m. l.m.t. determine a meridian with the solar and mark a point thereof by a nail driven in a stake set firmly in the ground 5.00 chs. N. of my instrument.
April 25th 1911

This 25th day of April 1911. I discharge George B. Seig., No. officer authorized to administer oaths other than myself being available, without great inconvenience, delay and expense, I administered the required final oaths.

Van L. White
U.S. Transitman.

April 26th 1911. At $5^h 17^m$ a.m. l.m.t. I observe Polaris at eastern elongation in accordance with instructions in the Manual, and mark the direction thus determined by a nail driven in a stake set in the ground 5.00 chs. N. of my instrument. At $7^h 0^m$ a.m. l.m.t. I lay off the azimuth of Polaris $1^{\circ}26\frac{1}{2}'$ to the west and mark the meridian thus determined by a tack driven in the stake already set 5.00 chs N. of my instrument on which the meridian falls. 0.5 in. East of the

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fruit determined by the solar observation.

At 7^h 28^m a.m. l.m.t. & set off 36° 04½' N. on the lab. arc 13° 18' N. on the decl. arc and determined a meridian with the solar, and mark a point thereof by a tack driven in the stake already set 5.00 chs. N. of my instrument. This point falls 0.2 ins. east of the meridian established by the Polaris observation. The solar apparatus by f.m. and a.m. observations defined positions for meridians, respectively about 0' 26" west and 0' 10" east of the meridian determined by the Polaris observation, therefore I conclude that the adjustments of the instruments are satisfactory.

I begin at the cor. of Twp. 30 and 31 N., R's 18 and 19 E. ^{as established by Sidney E. Blodt, Feb. 27, 1909,} which is an iron post 3 ins. in diam. 12 ins. above ground, firmly set, marked on brass cap.

T 31 N. in N. half and T 30 N. in S. half, R 18 E. S 36 in N.W. R 19 E. S 31 in N.E., R 19 E S 6 in S.E. and R 18 E. S 1 in S.W. quadrants. from which,

A cedar 10 ins. in diam. bears N 87° E 125 lbs. dist. marked T 31 N. R 19 E S 31 B.T.

A cedar 20 ins. in diam. bears S 17½° E 51 lbs. dist. marked T 30 N. R 19 E. S 6 B.T.

A cedar 18 ins. in diam. bears S 26½° W 29 lbs. dist. marked T 30 N. R 18 E S 1 B.T. and

A cedar 20 ins. in diam. bears N 9½° W. 137 lbs. dist. marked T 31 N. R 18 E S 36 B.T.

Latitude 36° 01' 54" N., Longitude 110° 21' 33" W.

At 9^h 58^m a.m. l.m.t. & set off 36° 02' N. on the lab. arc. 13° 19½' N. on the decl. arc. and determined a meridian with the solar at the above described cor., thence I run,

North, ch. sec. 31 and 36,

across gradually over rolling S.W. slope, through scattering cedar timber and sage brush undergrowth.

30.25 Road bears N 40° W. and S 40° E.

40.00 Set an iron post 3/4 in. long, 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked on brass cap. 1/4 S 36 on W. half and S 31 on E. half. from which.

A cedar 8 ins. in diam. bears N 9½° W 377 lbs. dist. marked 1/4 S 36 B.T. and

A cedar 7 ins. in diam. bears S 51¾° E 150 lbs. dist.

marked $\frac{1}{4}$ S 31 B.T.
 44.00 Saw timber bears N 30° E. and S 30° W.
 80.00 Set an iron post 3 ft. long. 3 ins. in diam. 24 ins. in the ground for cor. of sec. 25, 30, 31 and 36. marked out brass cap T 31 N. in N. half., R 18 E S 25 in N.W., R 19 E S 30 in N.E., S 31 in S.E. and S 36 in S.W. quadrant.
 Dig pits 18x18x12 ins. in each sec. 5 $\frac{1}{2}$ ft. diam. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.
 Land rolling.
 Soil sandy 3rd rate.
 Timber cedar.

North, bet. sec. 25 and 30,
 Ascend S.W. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass
 10.20 Dry ravine 15 lks wide 4 ft deep, course S. 25° W. ascend steeply.
 25.00 Enter scattering cedar timber bear E and W.
 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked out brass cap $\frac{1}{4}$ S 25 on W. half and S 30 on E. half. from which.
 A cedar 14 ins. in diam. bears N 66° E 40 lks. dist. marked $\frac{1}{4}$ S 30 B.T. and
 A cedar 10 ins. in diam. bears S 22 $\frac{1}{2}$ ° W 55 lks. dist. marked $\frac{1}{4}$ S 25 B.T.
 45.80 Top of stony ridge 20 ft. above $\frac{1}{4}$ sec. cor. bears N 35° E. and S 35° W. desc. N.W. slope over hilly land.
 71.20 Dry ravine 25 lks. wide 8 ft. deep course S 30° W. abe.
 80.00 Set an iron post 3 ft. long 3 ins. in diam. 24 ins. in the ground for cor. of sec. 19, 24, 25 and 30 marked out brass cap T 31 N. in N. half., R 18 E S 24 in N.W., R 19 E S 19 in N.E., S 30 in S.E. and S 25 in S.W. quadrant. from which.
 A pinion pine 5 ins. in diam. bears N 44° E 60 lks. dist. marked T 31 N, R 19 E, S 19 B.T.
 A pinion pine 8 ins. in diam. bears S 18° E 90 lks. dist. marked T 31 N, R 19 E, S 30 B.T.

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A cedar 12 ins. in diam. bears $S36\frac{1}{2}^{\circ}W$ 72 lks. dist.
marked T₃₁N. R₁₈E S₂₅ B.T. and

A cedar 14 ins. in diam. bears $N32\frac{3}{4}^{\circ}W$ 86 lks. dist.
marked T₃₁N. R₁₈E S₂₄ B.T.

Land rolling and hilly.

Soil sandy and stony 3rd and 4th rats.

Timber principally fine land cedar.

NOTE: At this cor I set off. $13^{\circ}21'$ N. on the decl. arc
and at noon observed the sun on the meridian
and obtain a reading of. $36^{\circ}03\frac{1}{2}'$ N. on the lab.
arc

North, Feb. sec. 19. and 24,
Ascend S.E. slope over stony hilly land, through
scattering pinon pine and cedar timber and
scattering sage brush undergrowth and bunch
grass

35.00 Top of rocky divide bears $N35^{\circ}E$ and $S35^{\circ}W$. desc
steep rocky N.W. slope

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap.
 $45^{\circ}24'$ on W. half. and $S19^{\circ}$ on E. half. from which.
A pinon pine 6 ins. in diam. bears $N83\frac{3}{4}^{\circ}W$ 90 lks.
dist. marked $\frac{1}{4}$ S₂₄ B.T. and

A cedar 14 ins. in diam. bears $S51\frac{1}{4}^{\circ}E$ 62 lks.
dist. marked $\frac{1}{4}$ S₁₉ B.T.

56.00 Dry ravine course N.W. asc.

59.80 Top of rocky ridge bears N.W. and S.E. desc

62.35 South edge of canyon 50 ft. deep, desc. abruptly.

63.00 Bottom of canyon course N.W. asc. abruptly.

64.50 Top of ascent on N. wall of canyon bears E and W.

64.55 Descend abruptly over south wall of canyon, 30 ft.
deep

65.60 Bottom of canyon course N.W. asc. abruptly.

67.00 Top of ascent on north wall of canyon bears
E and W. asc. gradually

76.35 Top of ascent on sand stone ledge 10 ft. high.
bears $N25^{\circ}W$ and $S25^{\circ}E$. desc N.E. slope

80.00 Set an iron post 3 ft. long 3 ins. in diam. 24
ins. in the ground for cor. of sec. 13, 18, 19, and

East boundary of Tp 31 N., R 18 E

chains

24 marked on brass cap T 31 N. in N. half., R 18 E
 S 13 in N.W., R 19 E S 18 in N.E., S 19 in S.E. and S 24
 in S.W. quadrants, from which.
 A firrow pine 5 ins. in diam. bears $N 31 \frac{3}{4}^{\circ} E 81$ lks.
 dist. marked T 31 N., R 19 E S 18 B.T.
 A firrow pine 5 ins. in diam. bears $S 49^{\circ} E 174$ lks.
 dist. marked T 31 N., R 19 E, S 19 B.T.
 A firrow pine 14 ins. in diam. bears $S 92 \frac{1}{2}^{\circ} W 151$
 lks. dist. marked T 31 N., R 18 E S 24 B.T. and
 A firrow pine 6 ins. in diam. bears $N 19 \frac{3}{4}^{\circ} W 249$
 lks. dist. marked T 31 N., R 18 E S 13 B.T.
 Land hilly and broken
 Soil sandy and stony 3rd and 4th rate.
 Timber Firrow pine and cedar

- North, 1/4 sec. 13 and 18,
 Descend N.E. slope over broken stony hilly
 land through scattering firrow pine and cedar
 timber, and sage brush undergrowth
- 2.65 Sand stone ledge 15 ft. high bears $N 50^{\circ} W$. and $S 50^{\circ} E$
 - 11.00 Dry rocky ravine course $N 45^{\circ} W$. asc.
 - 18.00 Top of rocky spur bears E and W., extends 2.00 ch. W.
of line desc.
 - 25.90 Dry ravine 20 lks. wide course west. asc.
 - 38.00 Top of rocky ridge bears E and W. desc.
 - 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for $\frac{1}{4}$ sec. cor. marked on brass
cap. $\frac{1}{4}$ S 13 on W. half and S 18 on E half. from
which
 A firrow pine 5 ins. in diam. bears $N 14 \frac{3}{4}^{\circ} E 74$
 lks. dist. marked $\frac{1}{4}$ S 18 B.T. and
 A firrow pine 8 ins. in diam. bears $S 49 \frac{1}{2}^{\circ} W 53$
 lks. dist. marked $\frac{1}{4}$ S 13 B.T.
 - 49.00 Dry ravine 25 lks. wide course N.W. asc.
 - 61.75 Top of sand ridge bears E and W. desc.
 - 64.65 Dry ravine 10 lks. wide course N.W. asc.
 - 69.00 Top of sand ridge bears E and W. desc.
 - 78.80 Dry ravine 8 lks. wide course west. asc.
 - 80.00 Set an iron post 3 ft. long 3 ins. in diam. 24
ins. in the ground for cor. of sec. 7, 12, 13 and
18. marked on brass cap. T 31 N. in N. half.

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R₁₈E S₁₂ in NW, R₁₉E S₇ in NE, S₁₈ in SE. and
S₁₃ in SW. quadrant. from which.

A cedar 16 ins. in diam. bears N₄₄¹/₄°E 98 lbs. dist.
marked T₃₁N, R₁₉E S₇ B.T.

A cedar 10 ins. in diam. bears S₅₄°E 126 lbs. dist.
marked T₃₁N, R₁₉E, S₁₈ B.T.

A cedar 7 ins. in diam. bears S₅₄°W 78 lbs. dist.
marked T₃₁N, R₁₈E S₁₃ B.T. and

A cedar 8 ins. in diam. bears N₆₁¹/₄°W 86 lbs. dist.
marked T₃₁N, R₁₈E, S₁₂ B.T.

Land broken and hilly.

Soil sandy and stony 3rd and 4th rate.

Timber pinon pine and cedar

April 26th 1911.

April 27th 1911 At 6^h 58^m a.m. l.m. to Dept. off. 36° 05¹/₂' N.
on the lat. arc 13° 37¹/₂' N. on the decl. arc and
determine a meridian with the solar at the cor.
of sec. 7, 12, 13 and 18^{above described} thence run
North, Sec. 7 and 12,

Ascend steep S. slope over stony hilly land through
scattering pinon pine and cedar timber, and
scattering sage brush undergrowth and bunch
grass.

- 1.00 Top of ridge 8 ft. above cor. bears E and W. desc.
4.80 Dry ravine 30 lbs. wide course west. arc.
13.40 Sand stone ledge 20 ft. high. bears E and W.
20.00 Top of ridge bears E and W. desc.
35.00 Sand stone ledge 10 ft. high. bears N₇₀°E and S₇₀°W.
40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for ¹/₄ cor. marked on brass
cap. ¹/₄ S₁₂ on W. half and S₇ on E. half. from which
A pinon pine 9 ins. in diam. bears N₄₃¹/₂°E 120
lbs. dist. marked ¹/₄ S₇ B.T. and.
A pinon pine 10 ins. in diam. bears S₁₄¹/₂°W 105
lbs. dist. marked ¹/₄ S₁₂ B.T.
52.50 Dry ravine 10 lbs. wide course S₇₀°W. arc.
60.00 Top of low sand hill bears N.E. and S.W. desc.
70.45 Sand stone ledge 15 ft. high. bears N₆₀°E and S₆₀°W
79.00 Low timber bears N₆₀°E and S₆₀°W.
80.00 Set an iron post 3 ft. long. 3 ins. in diam.
24 ins. in the ground for cor. of sec. 1, 6, 7 and 12.

marked on brass cap T₃₁N. in N. half, R₁₈E S₁ in N.W., R₁₉E. S₆ in N.E., S₇ in S.E. and S₁₂ in S.W. quadrant, from which.

A fir or pine 14 ins. in diam. bears S₃₆°E 210 lks. dist. marked T₃₁N. R₁₉E. S₇ B.T. and

A cedar 12 ins. in diam. bears S₂₇½°W 191 lks. dist. marked T₃₁N. R₁₈E S₁₂ B.T. No other trees available.

Dig pits 18x18x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high. W. of cor.

Land broken and hilly.

Soil sandy and stony 3rd and 4th rates.

Timber Fir or pine and cedar

North, Sec. 1 and 6,

Descend N.W. slope over hilly sandy and stony land through sage and greasewood brush undergrowth and bunch grass.

1.22 Road bears N₆₀°E and S₆₀°W.

4.35 Dry sandy ravine 40 lks. wide 6 ft. deep. Course S₆₀°W and.

20.00 Enter scattering cedar and fir or pine timber bears N₆₀°E and S₆₀°W.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S₁ or W. half and S₆ or E. half. from which. A cedar 12 ins. in diam. bears N₂₅°E 1½ lks. dist. marked ¼ S₆ B.T. and

A fir or pine 6 ins. in diam. bears N₆₃¾°W 83 lks. dist. marked ¼ S₁ B.T.

43.20 Sand stone ledge 10 ft. high. bears E and W.

60.45 Sand stone ledge 12 ft. high. bears N.W. and S.E.

66.00 Top of rocky ridge on divide bears E and W. desc.

69.00 Sand stone ledge 15 ft. high. bears N₃₅°E. and S₃₅°W. desc. abruptly.

80.00 Set an iron post 3 ft. long 3 ins. in diam. 24 ins. in the ground for cor. of T₃₁N. and S₂N., R₁₈E and R₁₉E. marked on brass cap. T₃₂N. in N. half., T₃₁N. in S. half., R₁₈E S₃₆ in N.W. R₁₉E S₃₁ in N.E., R₁₉E. S₆ in S.E. and R₁₈E. S₁ in S.W. quadrant. from which.

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A Cedar 24 ins. in diam. bears $N 73\frac{1}{2}^{\circ} E$ 18 lks. dist
marked T 32 N., R 19 E. S 31 B.T.

A firrow pine 9 ins. in diam. bears $S 10\frac{1}{2}^{\circ} E$ 33
lks. dist. marked T 31 N., R 19 E. S 6 B.T.

A Cedar 12 ins. in diam. bears $S 39^{\circ} W$. 181 lks. dist.
marked T 31 N., R 18 E. S 1 B.T. and

A firrow pine 10 ins. in diam. bears $N 20\frac{1}{2}^{\circ} W$ 78
lks. dist. marked T 32 N., R 18 E. S 36 B.T.

Land broken and lilly.

Soil sandy and stony 3rd and 4th rate.

Timber Firrow pine and Cedar

April 27th 1911

North boundary of Twp 31 N. R18 E

chains

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April 27th 1911. At 10^h 30^m a.m. ^{l.m.t.} Apparent time
I set off 36° 07' N. on the lab. arc. 13° 39' N. on the
decl. arc and determine a meridian with the
solar ab. the cor. of Tps. 31 and 32 N. R18 and 19 E.,
which I established this morning. ^{as here described,} thence I run,
N. 89° 58' W., on a random line, along the N. bdy. of
Twp 31 N., R18 E., setting temp. 1/4 sec. and sec. cor.
at intervals of 40.00 chs.

NOTE: At the temp. cor. of sec. 1, 2, 35 and 36. I set off
13° 40' N. on the decl. arc. and at noon observed
the sun on the meridian and obtain a reading
of 36° 07' N. on the lab. arc.

At 477.82 chs., intersect the West boundary of
Twp. At the cor. of Tps. 31 and 32 N. R17 and 18 E.
^{established by me April 11, 1911 as described in Exterior Book "AV"}
thence I run,

S. 89° 58' E., bet. sec. 6 and 31., marking and blazing
the true line,

Descend N.E. slope over hilly land through cedars
and fir and pine timber, and scattering sage and
greasewood bush undergrowth and bunch
grass.

2.25 Dry ravine 25 chs. wide 8 ft. deep course S 30° E.
at S.W. slope.

11.82 Top of sand ridge 20 ft. above ravine bears
N 20° E and S 26° W. decl

19.85 Dry ravine 20 chs. wide course S 25° W asc.

32.80 Top of sand ridge bears N. and S. decl.

37.82 Set an iron post 3 ft. long 1 in. in diam. 26
ins. in the ground for 1/4 sec. cor. marked
on brass cap 1/4 S 31 on N. half and S 6 on S. half
from which.

A cedar 14 ins. in diam. bears N 83 1/2° W 30 chs.
dist. marked 1/4 S 31 B.T. and.

A fir and pine 10 ins. in diam. bears S 29° W 36
chs. dist. marked 1/4 S 6 B.T.

April 27th 1911.

April 28th 1911 At 7^h 58^m a.m. l.m.t. I set off 36° 07' N.
on the lab. arc. 13° 56 1/2' N. on the decl. arc and
determine a meridian with the solar ab. the
1/4 sec. cor. bet. sec. 6 and 31. thence I run
S. 89° 58' E., bet. sec. 6 and 31., 8 half miles.

Chain North boundary of T₃₁N, R₁₈E.

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53.17 Dry ravine 20 lvs. wide 30 ft. below top of ridge
course S 30° E. asc.

73.82 Top of rocky ridge trend N. and S. desc.

77.82 Set an iron post 3 ft. long 3 ins. in diam. 24 ins.
in the ground, for cor. of sec. 5, 6, 31, and 32
marked on base of T₃₁N, R₁₈E. in E. half, T₃₂N,
S 32. in N.E. T₃₁N, S 5 in S.E. S 6 in S.W. and S 31
in N.W. quadrant, from which.

A cedar 7 ins. in diam. bears N 55 ³/₄° E 274 lvs.
dist. marked T₃₂N, R₁₈E S 32 B.T.

A cedar 10 ins. in diam. bears S 79 ¹/₂° W 133 lvs.
dist. marked T₃₁N, R₁₈E, S 6 B.T. and

A cedar 8 ins. in diam. bears N 12 ¹/₂° W 54 lvs.
dist. marked T₃₂N, R₁₈E, S 31 B.T.

No other trees within the prescribed limits.

Put pits 18 x 18 x 12 ins. in each sec. 5 ¹/₂ ft. dist. and
raise a mound of earth 4 ft. base, 2 ft. high.
W of cor.

Land hilly

Soil sandy and stony 3rd and 4th rate,
Timber Cedar.

S 89° 58' E, bet. sec 5 and 32,

Descend S.E. slope over stony hilly land, through
scattered cedar timber and sage brush underneath
and bunch grass.

11.00 Dry rocky ravine 30 ft below cor. Course S 35° W. asc.

26.00 Top of rocky ridge bears N 20° W. and S 20° E. desc.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in
the ground for ¹/₄ sec. cor. marked on base of ¹/₄ S 32,
on N. half and S 5 on S. half. from which.

A cedar 14 ins. in diam. bears N 25 ¹/₂° E 51 lvs. dist.
marked ¹/₄ S 32. B.T. and

A cedar 12 ins. in diam. bears S 65° E 153 lvs. dist.
marked ¹/₄ S 5 B.T.

45.55 Dry rocky ravine 25 ft. below ¹/₄ sec. cor. Course
S 35° E. asc.

66.00 Top of ridge trend N. and S. desc.

78.25 Top of steep descent. desc. gradually.

80.00 Set an iron post 3 ft. long 3 ins. in diam. 24
ins. in the ground for cor. of sec. 4, 5, 32 and 33

marked on brass cap T₁₈E. in E. half, T₃₂N, S
33 in N.E., T₃₁N, S₄ in S.E. S₅ in S.W. and S₃₂
in N.W. quadrant. from which.

A cedar 10 ins. in diam. bears N₃₁³/₄° E 421
lbs. dish. marked T₃₂N, R₁₈E S₃₃ B.T. and

A cedar 12 ins. in diam. bears N₆₉° W 168 lbs. dish.
marked T₃₂N, R₁₈E S₃₂ B.T. No other tree
suitable for bearing trees available.

Pig pits 18x18x12 ins. in each sec. 5¹/₂ ft. dish. and
have a mound of earth 4 ft. base, 2 ft. high. W. of
cor.

Sand hilly.

Soil sandy and stony 3rd and 4th rate.

Timber pinion fine and cedar

S₈₉° 58' E., Sec. 14 and 33,

Descend East slope over rolling sandy land through
scattering cedar timber and scattering sage and
greasewood brush undergrowth and bunch grass

2.00 Leave timber bears N and S.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for 1/4 sec. cor. marked on brass
cap 1/4 S₃₃ in N. half and S₄ on S. half.

Pig pits 18x18x12 ins. E and W. of post. 3 ft. dish.
dupl. raise a mound of earth 3¹/₂ ft. base, 1¹/₂ ft.
high. N. of cor.

46.10 Dry ravine 20 lbs. wide banks 1 ft. high. Course
South asc.

62.00 Enter scattering cedar and pinion fine timber
bears N₃₀° W. and S₃₀° E.

80.00 Set an iron post 3 ft. long 3 ins. in diam. 24 ins.
in the ground for cor. of secs. 3, 4, 33, and 34
marked on brass cap. R₁₈E in E. half, T₃₂N,
S₃₄ in N.E., T₃₁N, S₃ in S.E., S₄ in S.W. and
S₃₃ in N.W. quadrant. from which.

A cedar 7 ins. in diam. bears N₆₅¹/₂° E 189 lbs.
dish. marked T₃₂N, R₁₈E, S₃₄ B.T.

A pinion fine 15 ins. in diam. bears S₄₂° E 229
lbs. dish. marked T₃₁N, R₁₈E S₃ B.T.

A cedar 8 ins. in diam. bears S₆° W 170 lbs. dish.
marked T₃₁N, R₁₈E, S₄ B.T. and

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A cedar 6 ins. in diam. bears N7°W 42 lbs. dist. marked T₃₂N, R₁₈E, S₃₃B.T.

Land rolling.

Soil sandy 3rd rate.

Timber Cedars and piñon pine.

S_{89°58'} E., bet. sec. 3. and 34,

Ascend W. slope through scattering cedar and piñon pine timber and scattering Sage and greasewood brush undergrowth and bunch grass.

4.00 Top of sand ridge bears N40°E. and S40°W. decl.

24.20 Sand stone ledge 25 ft. high. bears N. and S., cedar timber bears N. and S.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cov. marked on brass cap. $\frac{1}{4}$ S₃₄ on N. half and S₃ on S. half. Dig pit 18x18x12 ins. East W. of post. 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base, $\frac{1}{2}$ ft. high. N. of cov.

57.00 The Crainth Wash. 100 lbs. wide, 20 ft. deep. course S_{65°}W. asc. gradually.

62.00 Enter scattering piñon pine and cedar timber bears N_{50°}E and S_{50°}W.

80.00 Set an iron post 3 ft. long 3 ins. in diam. 24 ins. in the ground for cov. of sec. 2, 3, 34 and 35 marked on brass cap. R₁₈E in E. half., T₃₂N, S₃₅ in N.E. T₃₁N, S₂ in S.E. S₃ in S.W. and S₃₄ in N.W. quadrant. from which.

A piñon pine 10 ins. in diam. bears N_{56 $\frac{1}{2}$ °}E 252 lbs. dist. marked T₃₂N, R₁₈E, S₃₅ B.T.

A piñon pine 14 ins. in diam. bears S_{103 $\frac{1}{4}$ °}E 159 lbs. dist. marked T₃₁N, R₁₈E, S₂ B.T.

A piñon pine 15 ins. in diam. bears S_{18 $\frac{1}{2}$ °}W 167 lbs. dist. marked T₃₁N, R₁₈E, S₃ B.T. and

A cedar 9 ins. in diam. bears N_{30 $\frac{1}{4}$ °}W 182 lbs. dist. marked T₃₂N, R₁₈E, S₃₄ B.T.

Land rolling.

Soil sandy 3rd and 4th rate.

Timber piñon pine and cedar.

NOTE: At this cov. I set off 13° 59 $\frac{1}{2}$ ' N. on the decl. arc

and at noon observe the sun on the meridian and obtain a reading of $36^{\circ}07\frac{1}{2}'$ N. on the lat. arc. which is a little higher than the calculated latitude of this place.

S $89^{\circ}58'E$, Feb. sec. 2 and 35,
Ascend N.W. slope over rolling sandy land through scattering cedar and pinon pine timber and scattering sage and greasewood brush undergrowth and bunch grass.

- 3.40 Top of sand ridge 10 ft. above cor. bears N. and S. desc. E. slope. Bears rolling land bears N. and S. Enter hilly land.
- 7.00 Leave timber bears N. and S.
- 14.38 Road bears $N20^{\circ}E$ and $S25^{\circ}W$.
- 16.40 Dry ravine 20 lbs. wide course $N20^{\circ}E$. asc.
- 23.00 Enter scattering pinon pine and cedar timber bears N. and S.
- 25.00 Top of sand ridge bears N. and S. desc.
- 31.15 Foot of descent in depression bears N.W. and S.E. dip to the N.W. asc.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap. $S35$ on N. half and $S2$ on S. half from which.
A cedar 16 ins. in diam. bears $S54^{\circ}E$ 201 lbs. dist. marked $\frac{1}{4}$ S. B. T. No other trees available
Dig pits $18 \times 18 \times 12$ ins E and W. of post. 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. N. of cor.
- 40.25 Dry ravine course North asc.
- 53.70 Top of ridge bears N.W. and S.E. desc.
- 56.55 Dry ravine 15 lbs. wide course $N25^{\circ}W$. asc.
- 76.00 Top of rocky ridge bears N.W. and S.E. desc.
- 78.85 A point from which an Indian Hogan bears North 50 lbs. dist.
- 80.00 Set an iron post 3 ft. long 3 ins. in diam. 24 ins. in the ground for. cor. of sec. 1, 2, 35 and 36 marked on brass cap. $N18E$ in E half. $T32N$, $S36$ in N.E., $T31N$, $S1$ in S.E. $S2$ in S.W. and $S35$ in N.W. quadrant. from which.

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A cedar 12 ins. in diam. bears $N 49\frac{1}{4}^{\circ} E$ 136 lks
dist. marked T 32 N. R 18 E S 36 B.T.

A pinion pine 14 ins in diam. bears $S 68\frac{1}{4}^{\circ} E$ 89
lks. dist. marked T 31 N R 18 E S 1 B.T.

A pinion pine 12 ins. in diam. bears $S 70^{\circ} W$ 338
lks. dist. marked T 31 N. R 18 E S 2 B.T. and

A pinion pine 7 ins. in diam. bears $N 37^{\circ} W$ 157
lks. dist. marked T 32 N. R 18 E. S 35 B.T.

Land rolling and hilly

Soil sandy and stony 3rd and 4th rate.

Timber pinion pine and cedar

$S 89^{\circ} 58' E$, Feb. sec. 1 and 36,

Descend S.E. slope over hilly sandy land through
scattering pinion pine and cedar timber and
scattering sage and greasewood brush undergrowth

6.00 Dry rocky ravine course $S 40^{\circ} W$. asc.

19.00 Top of rocky ridge bears $N 30^{\circ} E$ and $S 30^{\circ} W$. desc.

24.50 Sand stone ledge 10 ft. high. bears N and S. desc.

25.00 Leave timber bears N and S.

39.40 Dry ravine 5 lks. wide course north asc

40.00 Set iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for $\frac{1}{4}$ sec. cor. marked on bear cap.
 $\frac{1}{4}$ S 36 on N. half and S 1 on S. half.

Dig pits 18 x 18 x 12. ins E and W. of post. 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft.
high. N. of cor.

55.00 Top of rocky ridge bears N. and S. desc.

58.00 Hook of descent in depression bears $N 40^{\circ} W$. and
 $S 40^{\circ} E$. drains to the N.W. asc.

60.00 Enter scattering cedar and pinion pine timber
bears N and S.

80.00 Intersect the cor. of Tps. 31 and 32. N. R. 18
and 19 E., heretofore described.

Land hilly.

Soil sandy and stony 3rd and 4th rate

Timber pinion pine and cedar

April 28th 1911.

Boundaries of Twp. 31 N., R 18 E.
 Latitudes, Departures, and Closing Error.

Line Designated	True Bearing	Dist.	Latitudes		Departures	
			N	S	E	W
South Boundary	N89°58' W	478.70	.28			478.70
West Boundary	North	480.00	480.00			
North Boundary	S89°58' E	477.82		.28	477.82	
East Boundary	South	480.00		480.00		
Convergency					.52	
TOTALS			480.28	480.28	478.34	478.70
	Error in Lat.		480.28			478.34
			0.00			
				Error in Dep.		0.36

General Description

This township is rough and broken in the eastern northern and western parts, rolling in the interior and southern portions, while some level land is found along the Craib Wash., while prairie land is found in the southern part. The soil over the greater portions of the township is a sandy loam, producing an abundant growth of nutritious grasses.

The township is poorly watered, and poorly timbered with cedar and piñon pine. The township should be surveyed on account of the grazing facilities which it affords.

Van L. White

April 28th 1911

U.S. Measurman

LIST OF NAMES.

A list of the names of the individuals employed by Jan L. White

U.S. Transitman, ~~United States Deputy Surveyor~~, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of East and North Bdrps of Tp 31 N R 18 E of the G. & S. P. Base & Meridian, Arizona. showing the respective capacities in which they acted:

T. Y. White, Chainman.

Richard L. Shumway, Chainman.

Carl Albright, Moundman.

~~Moundman.~~

Nelson Polacca, Axman.

~~Axman.~~

William R. Carson, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Jan L. White

U.S. Transitman, ~~United States Deputy Surveyor~~, in surveying all those parts or portions of the East and North Bdrps of Tp 31 N. R. 18 E.

of the Gila and Salt River Basins Meridian, Territory of Arizona, which are represented in the foregoing 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 ^{executed} surveyed, and the corner monuments established, according to the instructions furnished by the ~~United States Surveyor~~

~~General for~~ Commissioner of the General Land Office

T. Y. White, Chainman.

Richard L. Shumway, Chainman.

Carl Albright, Moundman.

~~Moundman.~~

~~Axman.~~

Nelson Polacca, Axman.

William R. Carson, Flagman.

Subscribed and sworn to before me this 15th day of May, 19 11

Jan L. White

U.S. Transitman



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TRANSITMAN
FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Van L. White, ^{Transitman} United States Deputy Surveyor, do solemnly swear that, in pursuance of ^{Special Instructions} ~~contract~~ received from the Commissioner of the General Land Office, bearing date of the 2nd day of Oct. 1907 ~~day of~~ and the 15th day of May 1908, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ^{Commissioner} ~~United States Surveyor~~ of the ~~General~~ General Land Office, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the East and North boundaries of Township No 31 North of Range No. 18 East #

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the ^{Commissioner} ~~United States Surveyor~~ of the ~~General~~ Land Office and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Van L. White
~~United States Deputy Surveyor.~~
^{Transitman}

Subscribed by said Van L. White, and sworn to before me }
this 27th day of December, 1912.

Lytton R. Taylor
U.S. Commissioner
at Las Cruces, N.M.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, APR 25, 1914

The foregoing field notes of the survey of the

East and North boundaries of

Township No 31 North, Range No 18 East of the
Gila and Salt River Base and Meridian, Arizona

executed by VAN L. WHITE, U.S. Transitman, under Special Instructions from
executed by the Commissioner of the General Land Office
under his contract No. _____, dated October 2, 1907 and May 15, 1908, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

Frank J. Ingalls
~~United States Surveyor General.~~

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.