

Subdivisional
BOOK "ZO"

2619

FIELD NOTES

BOOK 2619

OF THE SURVEY OF THE

Subdivision lines of Tp 31 N. R. 13 E.

[Blank lined area for notes]

Of the *Gila and Salt River Basins* Meridian,
in the Territory of Arizona

EXECUTED
AS SURVEYED BY

Van L. White U.S. ~~Maunslawan~~, ~~United States Deputy Surveyor~~,
Special Instructions from the Commissioner of the General Land Office
Under ~~his Contract No.~~ _____, dated *Oct 2nd 1907 and May 15th 1908*

Survey commenced *March 7th* _____, 1911

Survey completed *March 23rd* _____, 1911

NAMES AND DUTIES OF ASSISTANTS.

T. Y. White	Chairman
Richard L. Shumway	Chairman
George B. Seig	Moundman
Herbert Gestewa	Moundman
Nelson Polacca	Axman
William R. Carson	Flagman

BOOK 2619

Book No. 2619

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PRELIMINARY OATHS OF ASSISTANTS.

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WE, T. Y. 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 the Subdivision lines of Tp 31 N. R 13 E. G. & S. P. B. & M. Arizona.

T. Y. White, Chainman.
Richard L. Shumway, Chainman.

Subscribed and sworn to before me this 5th
day of March, 1911



Van L. White
U. S. Transitman

WE, George B. Seig and Herbert Yestewa
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the Subdivision lines of Tp 31 N. R 13 E. G. & S. P. B. & M. Arizona.

George B. Seig, Moundman.
Herbert Yestewa, Moundman.

Subscribed and sworn to before me this 5th
day of March, 1911



Van L. White
U. S. Transitman

~~WE~~, 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 ~~me~~ to the best of ~~my~~ skill and ability, in the survey of the Subdivision lines of Tp 31 N. R 13 E. G. & S. P. B. & M. Arizona.

Nelson Polacca, Axman.
~~Axman~~

Subscribed and sworn to before me this 5th
day of March, 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 the Subdivision lines of Tp 31 N. R 13 E. G. & S. P. B. & M. Arizona.

William R. Carson, Flagman.

Subscribed and sworn to before me this 5th
day of March, 1911



Van L. White
U. S. Transitman

Chain

Survey commenced March 7th 1911 and executed with a W & L. E. Gurley engineers transit. No. 76 with a Burk solar attachment. 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.

For last complete test of the instrument see the field notes of the survey of the North boundary of Twp. 31 N., R 13 E. in Exterior Book "AP"

Begin at the cor. of secs. 1, 2, 35, and 36. on S. 1/4 of Twp. which I established February 14th 1911. ^{as described in Exterior Book "AO"} Latitude 36° 01' 54" N., longitude 110° 54' 42" W.

At 7^h 11^m a.m. l.m.t. set off 36° 02' N. on the lat. arc, 5° 30' S. on the decl. arc and determine a meridian with the solar at the above mentioned cor. thence I run,

N 0° 01' W, bet. Secs. 35 and 36;

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

16.10 Dry ravine 8 lbs. wide course S.W. ascend south slope of sand ridge.

21.00 Top of sand ridge bears E. and W. desc. N. slope.

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 S 35 on W. half. and S 36 on E. half.

Dig pits 18x18x12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. long, 1 1/2 ft. high W. of cor.

46.60 An Indian Hog and owl line

48.56 Enter dry rocky ravine course North from S.E.

50.00 Leave ravine course N.W. asc. S. slope.

68.00 Top of ridge bears E. and W. desc.

69.00 Dry ravine 10 lbs. wide course N.W. asc.

70.20 Top of sand ridge bears N.W. and S.E. desc.

72.25 Dry ravine 20 lbs. wide course west. asc.

78.00 Top of sand ridge bears E. and W. desc.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of Secs. 25, 26, 35, and 36. marked on brass cap. T 31 N., S. 26 ins. N.W., R 13 E. S 25 in N.E. S 36 in S.E. and S 35 in

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S.W. quadrant.

Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high. W. of cor. Pits impracticable
 Land rolling and hilly.
 Soil sandy and stony 3rd and 4th rate
 No timber

W 89° 57' E., on a random line, bet. sec. 25 and 36;
 40.00 Sub temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect E. line of Twp. 8. lvs. 3. of the cor. of sec. 25, 30, 31 and 36, which established Dec. 1, 1910, as described in Exterior Book "AS"; thence I run S 89° 54' W., on a true line, bet. sec. 25 and 36, around steep rocky S.E. slope over hilly land through scattering sage and greasewood bush. undergrowth and bunch grass.

1.50 Top of stony ridge 25 ft. above cor. bears N 25° E and S 25° W. desc. steeply.

10.50 Dry ravine 20 lbs. wide 20 ft. below top of ridge course N.E. asc.

16.50 Top of sand ridge bears N.E. and S.W. desc.

21.30 Dry ravine 10 lbs. wide course N 25° W. asc.

31.60 Top of sand ridge bears N. and S. desc.

36.80 Dry ravine 10 lbs. wide course North asc.

39.98 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 N 325 on N. half and S 36 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.

41.00 Top of sand ridge bears N. and S. desc.

50.00 Dry ravine 20 ft. below top of ridge course N.E. asc.

53.00 Top of sand ridge 15 ft. above ravine bears N.E. and S.W. desc.

59.30 Dry ravine 6 lbs. wide course N.E. asc.

63.00 Top of sand ridge bears N. and S. desc.

79.96 The cor. of sec. 25, 26, 35 and 36, hereinbefore described.

Land hilly,

Soil sandy and stony 3rd and 4th rate.

No timber

Note: - At this cor I set off 5° 28' S. on the decl. arc and at

chains

Subdivision of Twp 31 N., R 13 E.

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noon observe the sun on the meridian, and obtain a reading of $36^{\circ}03'$ N. on the lat. arc.

N. $0^{\circ}01'$ W., bet. secs 25 and 26;

Descend steep rocky N.W. slope over hilly land through scattering sage and greasewood brush undergrowth and bunch grass.

- 1.20 Dry ravine 6 lbs. wide, 10 ft. below sec. cor. Course S.W. arc.
- 12.80 Top of sand ridge bears N.E. and S.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 Cop. T 326 on W. half and S 25 on E. half. Dig pits 18x18x12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. W. of cor.
- 55.75 Dry ravine 10 lbs. wide course N.E. arc.
- 63.00 Top of sand ridge bears N.E. and S.W. desc.
- 69.25 Dry ravine 10 lbs. wide course $N 40^{\circ} E$. arc.
- 76.40 Top of ridge bears E. and W. desc.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 23, 24, 25 and 26. marked on brass Cop. T 31 N. S 23 in NW., R 13 E S 24 in N.E. S 25 in S.E. and S 26 in S.W. quadrant. Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. (Pits impracticable). Land hilly. Soil sandy and stony 3rd and 4th rate. No timber

N. $89^{\circ}54'$ E., on a random line, bet. secs 24 and 25,

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.98 Intersect E. ldy. of Twp. 13 lbs. N. of the cor. of secs. 19, 24, 25 and 36. which I established Dec. 1, 1910 as described in Exterior Book "AS", thence I run, West, on a true line, bet. secs. 24 and 25;
- Descend S.W. slope over hilly land through scattering sage and greasewood brush undergrowth and bunch grass.
- 15.15 Dry ravine 20 lbs. wide 50 ft. below cor. course

- S 25° W. arc.
- 21.40 Top of clay ridge bears N. and S. desc.
- 25.60 Dry rocky ravine 20 lbs. wide course South arc.
- 27.75 Top of clay ridge, bears N.E. and S.W. desc.
- 39.40 Dry ravine 25 lbs. wide, 8 ft. deep course N 60° W arc.
- 39.99 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 24 on N. half. and S 25 on S. half. Dig pits 18x18x12 ins. E. and W. of post 3 ft. dish. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 45.00 Top of rocky ridge bears N. and S. desc.
- 47.40 Dry rocky ravine 20 ft. below top of ridge course North arc.
- 62.40 Top of sand ridge bears N. and S. desc.
- 77.75 Dry ravine 25 ft. below top of ridge course North. arc.
- 79.98 The cor. of secs. 23, 24, 25 and 26; hereinbefore described land hilly.
Soil sandy and stony. 3rd and 4th rate.
No timber

March 7th 1911

March 13th 1911 At 8^h 10^m a.m. l.m.t. I set off. 36° 03' N. on the lat. arc. 3° 10' S. on the decl arc and determine a meridian with the solar ab. the cor. of secs. 23, 24, 25 and 26, ^{hereinbefore described} ~~26~~ ^{thence} Drum, N. 0° 01' W., bet. secs. 23 and 24.

Descend steep rocky North slope over hilly land through scattering sage and greasewood bush undergrowth and bunch grass.

- 6.35 Dry ravine 8 lbs. wide course N 40° E. arc.
- 10.00 Top of sand ridge bears N.E. and S.W. desc.
- 14.95 Dry ravine course S.E. arc.
- 21.30 Top of sand ridge bears E and W. desc steeply
- 28.80 Dry rocky ravine 100 lbs. wide 50 ft. below top of ridge course west. arc.
- 39.00 Top of clay ridge bears N.E. and S.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 23 on W. half. and S 24 on E. half. Dig pits 18x18x12 ins N. and S. of post. 3 ft. dish. and

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Chains

- and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. W. of cor.
- 42.00 Dry ravine 5 lbs. wide 15 ft. below 1/4 sec. cor. Course SW. asc.
- 65.00 Top of sand ridge bears N 40° E and S 40° W desc. steeply.
- 67.75 Dry ravine 10 lbs. wide 20 ft. below top of ridge Course SW. asc.
- 75.00 Top of steep ascent. bears hilly land bears E. and W. Enter rolling land
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 13, 14, 23, and 24 marked on brass Cop. T 31 N. S 14 in N.W., R 13 E. S 13 in N.E. S 24 in S.E. and S 23 in S.W. quadrants. Dig 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 rolling and hilly.
Soil sandy sand stony and 4th rate.
No timber

- 40.00 Cash, on a random line, bet. secs. 13 and 24, Set temp. 1/4 sec. cor.
- 79.80 Intersect E. ldy of T₃₁N; 10 lbs. S. of the cor. of secs. 13, 18, 19, and 24; established by me Dec. 1, 1910 as described in Exterior Book "A5"; thence I run, S 89° 56' W., on a true line, bet. secs. 13 and 24, Over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass.
- 39.90 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked on brass Cop. 1/4 S 13 on N. half. and S 24 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 1/2 ft. base, 1 1/2 ft. high. N. of cor.
- note: At this cor. set off 3° 07' S. on the decl. arc and ab. now observe the sun on the meridian and obtain a reading of 36° 04 1/2' N. on the lab. arc.
- 79.80 The cor. of secs. 13, 14, 23, and 24, hereinbefore described Land rolling.
Soil sandy S^d rate.

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No timber

N⁰ 01' W. bet. sec. 13 and 14.

Over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.

17.80 Top of sand ridge bears N⁶⁰° E. and S⁶⁰° W. desc. gently over N.W. slope

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 S¹⁴ on W. half and S¹³ on E. half. Dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist and raise a mound of earth 3 ¹/₂ ft. base, ¹/₂ ft. high. W. of cor.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 11, 12, 13 and 14 marked on brass cap T³¹ N. S¹¹ in N.W. R¹³ E S¹² in N.E., S¹³ in S.E. and S¹⁴ in S.W. quadrants. Dig 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.

Sand rolling.

Soil sandy 3rd rate.

No timber

March 13th 1911

March 14th 1911. At 7^h 40^m a.m. l.m.t., set off 36° 05' ¹/₂ N. on the lat. arc, 2° 46' S. on the decl. arc. and determine a meridian with the solar at the cor. of sec. 11, 12, 13, and 14th ^{above described} thence I run

40.00 S⁸⁹° 56' E. on a random line, bet. sec. 12 and 13, Set temp. ¹/₄ sec. cor.

79.80 Intersect E. bdy. of T₁ at the cor. of sec. 7, 12, 13, and 18, ^{established by me Dec. 2, 1910 as described in Exterior Book "AS",} thence I run, S⁸⁹° 56' W., on a true line, bet. sec. 12 and 13.

Over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass.

39.90 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 S¹² on N. half and S¹³ on S. half

Subdivision of T₁/2 S₁ N₁ R₁3 E.

Chain

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Dig pits 18x18x12 ins. E and W. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. N. of cor.

79.80 The cor of secs 11, 12, 13, and 14, heretofore described.
Land rolling
Soil sandy 3rd rate
No timber

N. 0° 01' W., bet. secs. 11 and 12,

Descend N.W. slope over rolling sandy land through scattering sage and greasewood bush undergrowth and bunch grass.

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 S 11 on W. half and S 12 on E. half.

Dig pits 18x18x12 ins N. and S. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. W. of cor.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins in the ground for cor. of secs. 1, 2, 11, and 12.

marked on brass cap. T 31 N. S 2 in N.W., R 13 E. S 1 in N.E., S 12 in S.E. and S 11 in S.W. quadrants.

Dig pits 18x18x12 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 rolling.
Soil sandy 3rd rate.
No timber

N. 89° 56' E., on a random line, bet. secs. 1 and 12,

40.00 Set temp. 1/4 sec. cor.

79.86 Intersect E. Poly. of T₁/2, 5 lps. N. of the cor. of secs. 1, 6, 7, and 12, established by me Dec 2, 1910 as described in Exterior Book "AS", thence I run,

S. 89° 58' W., on a true line, bet. secs. 1 and 12,

Over rolling sandy land through sage and greasewood bush undergrowth and bunch grass

22.60 Road leads to Puma City Arizona bet. N.W. and S.E.

39.93 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 1 on N. half. and S 12 on S. half.

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Dig pits 18x18x12 ins. E and W. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. N. of cor.

NOTE: At this cor. I set off. 2°43' S. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of 36°06' N. on the lat. arc.
79.86 The cor. of secs. 1, 2, 11 and 12, heretofore described.

Land rolling.
Soil sandy 3rd rate.
No timber

40.00 W 0°01' W. on a random line bet. secs. 1 and 2.
Set temp. 1/4 sec. cor.

80.08 Intersect N. bdy. of Twp. 18 N. S. 89°59' E. of the cor. of secs. 1, 2, 35 and 36, ^{recently estab. by me as described in Exterior Book "A"} thence S run

So°09' E. on a true line bet. secs. 1 and 2, Over rolling sandy land, through sage and greasewood bush undergrowth and bunch grass. Ascend gradual N.W. slope.

40.08 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. 14 S 2 on W. half and 31 on E. half.

Dig pits 18x18x12 ins N. and S. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. W. of cor.

48.15 Road leads to Puba City Arizona bears N.W. and S.E.

80.08 The cor. of secs. 1, 2, 11, and 12, heretofore described.

Land rolling
Soil sandy 3rd rate.
No timber

March 14th 1911

March 8th 1911
At 8^h 11^m a.m. l.m.t. I set off 36°02' N. on the lat. arc. 5°07 1/2' S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on S. bdy. of Twp. established by me Feb. 13, 1911 as described in Exterior Book "A" thence S run,

W 0°01' W. bet. secs. 34 and 35
Over low rolling sand hills, through scattering sage and greasewood bush undergrowth and bunch grass, descending,

Chain

Subdivision of T₁ 31 N., R 13 E.

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- 15.85 Road to Pula City Arizona bears 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 on brass cap $\frac{1}{4}$ S 34^o W. half and S 35^o W. E. half.
Dig pits 18 x 18 x 12 ins N. and S. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. W. of cor.
- 80.00 Set an iron post, 3 ft. long 2 ins. in diam. 24 ins in the ground for cor. of secs. 26, 27, 34 and 35, marked on brass cap T 31 N. S 27 in NW. R 13 E. S 26 in N.E., S 35 in S.E. and S 34 in S.W. quadrant.
Dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.
Land rolling sand hills.
Soil sandy 3rd rate.
No timber
-
- N 89° 57' E. on a random line bet. secs. 26 and 35 -
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect N and S. line 12 lbs. N. of the cor. of secs. 25, 26, 35 and 36, hereinbefore described, thence I. run, N 89° 58' W. on a true line bet. secs. 26 and 35 -
Descend steep N.W. slope over hilly sandy and stony land through scattering sage and greasewood brush undergrowth and bunch grass.
- 1.90 Dry ravine 10 lbs. wide 15 ft. below cor. course S.W. asc.
- 4.40 Top of rocky ridge bears N. and S. desc.
- 6.30 Dry ravine 20 ft. below top of ridge Course South asc.
- 9.10 Top of ridge bears N. and S. desc.
- 11.85 Dry rocky ravine Course South asc.
- 18.00 Top of rocky ridge bears N. and S. desc. steeply.
- 23.65 Dry ravine 40 lbs. wide, 50 ft. below top of ridge Course N 30° W. asc.
- 32.70 Top of ridge bears N. and S. desc.
- 34.60 Dry ravine 10 lbs. wide Course North asc.
- 36.75 Top of rocky ridge bears N. and S. desc.
- 39.30 Dry ravine 15 lbs. wide 20 ft. below top of ridge Course north asc.
- 40.05 Set an iron post 3 ft. long, 1 in in diam. 26 ins.

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- in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 26 on N. half and S 35 on S. half.
 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high.
 N. of cor. Pits impracticable
- 41.00 Top of rocky ridge 20 ft. above $\frac{1}{4}$ sec. cor. brass N. and S. desc
- 43.60 Dry ravine 20 lks. wide 40 ft. below $\frac{1}{4}$ sec. cor course N.E. asc.
- 54.00 Top of ridge bears N. and S. desc.
- 57.00 Dry ravine 5 lks. wide course north asc.
- 80.10 The cor. of secs. 26, 27, 34, and 35, heretofore described
 Land hilly.
 Soil sandy, clayey, and stony 3rd and 4th rate.
 No timber
- NOTE: At this cor. I set off $5^{\circ} 04\frac{1}{2}'$ S. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of $36^{\circ} 03'$ N. on the lab. arc.

$N 0^{\circ} 01' W.$ bet. secs. 26 and 27.

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

- 29.25 Dry ravine 10 lks. wide course N.W. asc.
- 35.00 Top of sand ridge bears N.W. and S.E. 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 27 on W. half and S 26 on E. half.
 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable
 This cor. is situated at the foot of descent in a depression, bears E. and W. ^{drains West,} asc.
- 41.70 Top of sand ridge 10 ft. above $\frac{1}{4}$ sec. cor. bears N.E. and S.W. desc
- 58.45 Dry rocky ravine 15 lks. wide course west asc.
- 61.00 Top of rocky ridge bears E and W. desc.
- 63.90 Dry rocky ravine 20 ft. below top of ridge course west asc.
- 70.70 Top of rocky ridge bears E and W. desc.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 22, 23, 26, and 27, marked on brass Cap. T 31 N. S 22 in N.W.

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Chains

R13E, S23 in N.E. S26 in S.E. and S27 in S.W. quadrants
Raise a mound of stone 2 ft. base, 1 1/2 ft. high W.
of cor. Pits impracticable
Land hilly.
Soil sandy and stony 3rd and 4th rate.
No timber

- 40.00 Set temp. 1/4 sec. cor.
- 79.92 Intersect N. and S. line 3 lks. S. of the cor. of sec.
23, 24, 25 and 26, heretofore described, thence I run,
N 89° 59' W. on a true line bet. sec. 23 and 26.
Descend N.W. slope over sandy and stony hilly land
through scattering sage and greasewood brush
undergrowth and bunch grass
- 1.40 Dry ravine 6 lks. wide 8 ft. below sec. cor. Course
N.E. asc.
- 5.85 Top of sand ridge bears N. and S. desc.
- 24.65 Dry ravine 25 lks. wide course N 15° E. asc.
- 29.00 Top of sand ridge bears N.E. and S.W. desc.
- 32.90 Dry ravine 10 lks. wide course N.E. asc.
- 39.00 Top of sand ridge bears N.E. and S.W. desc.
- 39.96 Set low 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 23 on N. half and S 26 on S. half.
Dig pits 18 x 18 x 12 ins. East W. of post 3 ft. dist.
and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft.
high. N. of cor.
- 43.25 Dry ravine course N 25° E. asc. abruptly.
- 48.50 Top of sand ridge bears N. and S. desc. steep W.
slope.
- 75.30 Dry ravine course N.E. asc.
- 79.92 This cor. of sec. 22, 23, 26, and 27, heretofore described.
Land hilly.
Soil sandy and stony 3rd and 4th rate.
No timber

March 8-1911

March 15th 1911
7^h 09^m a.m. ran L-D set off. 36° 03 1/2' N.
on the lat. arc. 2° 22' S. on the decl. arc. and
determine a meridian with the solar at the cor.

Submission of Twp 31 N. R 13 E.

BOOK 2619

- of secs. 22, 23, 26, and 27, ^{hereinbefore described} thence I run,
 N 0° 01' W, bet. secs. 22 and 23,
 Descend North slope over stony hilly land, through
 scattering sage and greasewood brush undergrowth
 and bunch grass.
- 7.00 Dry ravine course N.E. asc.
- 12.20 Top of sand ridge bears N.E. and S.W. desc.
- 14.60 Dry ravine, 10th wide 15 ft. below top of ridge
 course N.E. asc.
- 21.50 Top of sand ridge bears N.E. and S.W. desc.
- 23.60 Dry ravine course N.E. asc.
- 29.00 Top of sand ridge bears N 65° E. and S 65° W. desc.
 steep NW. 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 $\frac{1}{4}$ S 22 on W. half and S 23. on E half.
 Dig pits 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist.
 and raised a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
 high. W. of cor.
- 40.35 Dry ravine 25 lks. wide 5 ft. below $\frac{1}{4}$ sec. cor.
 course N 60° E. asc.
- 55.00 Top of sand ridge bears E and W. desc. steeply
- 69.00 Dry rocky ravine 80 ft. below top of ridge course
 west. asc. steep S. slope.
- 80.00 Set an iron post, 3 ft. long 2 ins. in diam. 24
 ins. in the ground for cor. of secs. 14, 15, 22
 and 23, marked on brass cap T 31 N. 3 15 in
 N.W., T 13 E, S 14 in N.E., S 23 in S.E. and S 22
 in S.W. quadrants.
 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft high.
 W. of cor. Pits impracticable
 Land hilly,
 Soil sandy and stony 3rd and 4th rate.
 No timber
-
- S 89° 59' E on a random line bet. secs. 14 and 23
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.98 Intersect N. and S. line 8 lks. S of the cor. of
 secs. 13, 14, 23, and 24, hereinbefore described, thence I run,
 S 89° 58' W, on a true line bet. secs. 14 and 23.
 Descend steep S.W. slope over stony hilly land through

Subdivision of N^o 31 T^o 713 E.

Chains

- scattering sage and greasewood brush undergrowth and bunch grass.
- 5.20 Dry ravine 5 lks. wide course S 60° W. asc.
- 8.00 Top of sand ridge bears N.E. and S.W. desc.
- 16.90 Dry rocky ravine course S 60° W. asc.
- 27.00 Top of sand ridge bears N.E. and S.W. desc.
- 39.99 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 14 on N. half and S 23 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 ³/₄ ft. diam, ¹/₂ ft. high. N. of cor.
- NOTE: On this cor. I set off 2° 19½' S. on the decl. arc and at noon observed the sun on the meridian the resulting latitude being 36° 04½' N.
- 40.20 Dry rocky ravine 25 ft. below ¹/₄ sec. cor. course S.W. asc.
- 41.00 Top of sand ridge bears N and S. desc.
- 41.85 Dry ravine 10 lks. wide course south. asc.
- 48.50 Top of sand ridge bears N. and S. desc.
- 54.45 Dry ravine 15 lks wide 50 ft. below top of ridge course S 60° W. asc.
- 62.40 Top of sand ridge bears N. and S. desc.
- 69.70 Head of rocky ravine 30 lks. wide 10 ft. deep. course South asc.
- 72.00 Top of rocky spur bears N. and S. desc.
- 78.70 Dry ravine 40 lks. wide 30 ft. below top of ridge course South asc.
- 79.98 The cor. of secs. 14, 15, 22, and 23 herebefore described. Land hilly. Soil sandy and stony 3rd and 4th rate. No timber

N 0° 01' W, Sec. 14 and 15
 are on S.E. slope over stony hilly land through scattering sage and greasewood brush and bunch grass

- 12.00 Top of sand ridge bears N.E. and S.W. desc.
- 13.65 Dry ravine course S.W. asc.
- 36.00 Top of sand ridge bears N.E. and S.W. desc.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins

BOOK 2619

in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap. $\frac{1}{4}$ S 15 on W. half, and S 14 on E. half.

Dig pits 18x18x12 ins N. and S. of post. 3 ft. dia. and raise a mound of earth $3\frac{1}{2}$ ft. base,

$1\frac{1}{2}$ ft. high. W. of cor. This cor. is at foot descent in depression between N.E. and S.W. ^{drains SW.} _{and}

43.00 Top of sand ridge bears N.E. and S.W. desc.

80.00 Set an iron post 3 ft. long, 2 ins. in diam 24 ins. in the ground for cor. of secs. 10, 11, 14, and 15, marked on brass cap. T 31 N. S 10 in. N.W., R 13 E

S 11 in N.E., S 14 in S.E. and S 15 in S.W. quadrants.

Dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dia. 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.

No timber

March 15th 1911

March 16th 1911 At 8^h 09^m a.m. l.m.c. D set off. $36^{\circ} 05' 2''$ N. on the lat. arc. $1^{\circ} 59' 3''$ on the decl. arc and determine a meridian with the solar alt. the cor. of secs. 10, 11, 14, and 15, ^{above described} thence I run,

$N 89^{\circ} 58' E$ on a random line bet. secs. 11 and 14.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.86 Intersect N. and S. line at the cor. of secs. 11, 12, 13, and 14, heretofore described, thence I run, $S 89^{\circ} 58' W$ on a true line bet. secs. 11 and 14 Over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass

39.93 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 11 on N. half, and S 14 on S. half.

Dig pits 18x18x12 ins. E and W. of post 3 ft. dia. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. N. of cor.

59.00 Begin gradual descent over N.W. slope

79.86 The cor. of secs. 10, 11, 14, and 15, heretofore described.

Land rolling.

Soil sandy 3rd rate.

No timber

N⁷⁰°01' W. 1/4 sec. 10 and 11

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

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 S 10 on W. half and S 11 on E. half. Dig pits 18x18x12 ins. N. and S. of post 3 ft. dia. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high. W. of cor.

53.65 An Indian Hogan on line.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of sec. 2, 3, 10 and 11. marked on brass cap. T 31 N. 33 in N.W., R 13 E S 2 in N.E., S 11 in S.E. and S 10 in S.W. quadrant.

Dig pits 18x18x12 ins. in each sec. 5 1/2 ft. dia. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.

Land rolling
Soil sandy 3rd rate.
No timber

N⁸⁹°58' E. on a random line bet. sec. 2 and 11

40.00 Set temp. 1/4 sec. cor.

79.80 Intersect N. and S. line 2 lks. S. of the cor. of sec. 1, 2, 11, and 12, heretofore described, thence run, S⁸⁹°57' W. on a true line, bet. sec. 2 and 11, over rolling sandy land through sage and greasewood brush undergrowth and bunch grass.

39.90 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 2 on N. half and S 11 on S. half.

Dig pits 18x18x12 ins. E and W. of post 3 ft. dia. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. N. of cor.

Note: At this cor. I set off 1°56' S. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of 36°06' N. on the lat. arc.

Subdivision of Twp 31 N., R. 13 E.

16 Chain

BOOK 2619

79.80 The cor. of secs. 2, 3, 10, and 11, heretofore described.
Land rolling.
Soil sandy 3rd rate.
No timber

W⁰01^W on a random line bet. secs. 2 and 3.

40.00 Set temp. 1/4 sec. cor.

80.20 Intersect N. bdy. of Twp. 38 lks. 58⁹ 59^E of the
recently established by me as described in Exterior Book "AP"
cor. of secs. 2, 3, 34, and 35. Thence I run
S⁹ 17^E on a true line bet. secs. 2 and 3.
Around N. slope over rolling sandy land, through
sage and greasewood brush undergrowth and
bunch grass.

6.90 Road to Cuba City Arizona bears N.W. and S.E.

22.00 Top of low sand ridges bears E and W. due
gradually

40.20 Set an iron post, 3 ft long, 1 in. in diam. 26
in. in the ground for 1/4 sec. cor. marked
on bears Cap. 1/4 S 3⁰ W. half and S 2
0⁰ E. half.

Dig pits 18x18x12 in. N. and S. of post, 3 ft deep,
and raise a mound of earth 3 1/2 ft. long, 1 1/2
ft. high, W. of cor.

58.00 North of descent in depression bears N.E. and
S.W. drains to the S.W. also gradually.

80.20 The cor. of secs. 2, 3, 10, and 11, heretofore described.
Land rolling.
Soil sandy 3rd rate.
No timber

March 16th 1911

March 9th 1911 7^h 40^m a.m. I run & set off 36° 02' N.
on the lat. arc. 4° 43 1/2' S. on the decl. arc and
determine a meridian with the solar at the cor.
of secs. 3, 4, 33, and 34, on S. bdy. of Twp. estab. by
me Feb. 13, 1911 as described in Exterior Book "AO", thence I run,

W⁰02^W, bet. secs. 33 and 34,

Around S.W. slope over hilly sandy land through
scattering sage and greasewood brush undergrowth
and bunch grass

1.40 Top of ridge 15 ft. above cor. bears N 50° W and
S 50° E. due.

Chains

17

- 4.00 Foot of descent. Leave hilly land bears N.W. and S.E. Enter level land.
- 26.65 Dry sand wash 50 lbs. wide 8 ft. deep course N25°W. are. Leave level land bears N.W. and S.E. Enter hilly land.
- 28.50 Road leads to Oraibi, Arizona, bears N25°W and S25°E.
- 39.20 Top of rocky ridge bears E. and W. desc.
- 40.00 The point for the 1/4 sec. cor. falls on ledge of solid sandstone. where it is impracticable to set an iron post. therefore I continue my line and measurements.
- 41.00 Foot of descent Leave hilly land bears N.E. and S.W. Enter level land
- 41.70 Set an iron post 3 ft. long 1 in in diam. 26 ins. in the ground for witness cor. to the 1/4 sec. cor. marked out brass Cop. T 31 N. R 13 E. S 33. S 34 in N. half. and W.C. 1/4 in S. half.
Dig pits 18x18x12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base. 1 1/2 ft. high W. of cor.
- 44.50 Leave undergrowth bears N.W. and S.E. Enter cultivated land bears N.W. 6.00 chs. and S.E. 3.50 chs. dist.
- 58.55 Leave cultivated land bears N.W. 5.00 chs. and S.E. 4.00 chs. dist.
- 59.00 Leave level land bears N.W. and S.E. Enter hilly land. ascend S.W. slope.
- 73.00 Top of sand ridge bears N40°E. and S40°W. desc.
- 78.75 Dry ravine 10 lbs. wide course West. are.
- 80.00 The point for the cor. of secs. 27, 28, 33 and 34 falls on solid sandstone ledge. therefore I cut a cross at the exact cor. point. and at
- 80.40 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for witness cor. to the cor. of secs. 27, 28, 33 and 34 marked out brass Cop. W.C. in N. half. T 31 N. S 28 in N.W. R 13 E. S 27 in N.E., S 34 in S.E. and S 33 in S.W. quadrants.
Dig pits 18x18x12 ins N.E. S.E. S.W. and N.W. of post 5 1/2 ft. dist. and raise a mound of

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earth 4 ft. base, 2 ft. high. W. of cor.
Land level and hilly.
Soil sandy and stony 3rd and 4th rate.
No timber

From true point for cor. of secs. 27, 28, 33 and 34, 1 run,
N. 89° 57' E., on a random line, bet. secs. 27 and 34,
40.00 Set temp. 1/4 sec. cor.

80.00 Intersect N. and S. line, 5 lbs. S. of the cor. of secs.
26, 27, 34, and 35, ^{heretofore described} thence run,
S 89° 55' W. on a true line bet. secs. 27 and 34
Over low rolling sand hills, through scattering
sage and greasewood brush undergrowth and
trench grass.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 in.
in the ground for 1/4 sec. cor. marked on
bear cap 1/4 S 27 on N. half. and S 34 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 1/2 ft. base
1 1/2 ft. high N. of cor.

44.20 A spring bears North 35.40 ch. dist.

50.00 Top of ridge bears N. and S. due.

68.00 Dry ravine 80 ft. below top of ridge course North
due.

76.00 Top of clay ridge bears N.W. and S.E. due.

80.00 True point for cor. of secs. 27, 28, 33, and 34,
Land hilly. ^{on rocky ledge}

Soil sandy and clayey 3rd and 4th rate
No timber

Note: At this cor. point I set off 4° 41' S. on the decl. arc
and at noon observed the sun on the meridian
the resulting latitude being 36° 03' N.

N 0° 02' W. bet. secs. 27. and 28, from true point for cor.
Ascend steep S.W. slope over hilly land, through
scattering sage and greasewood brush undergrowth
and trench grass

0.40 Witness corner to corner of secs. 27, 28, 33 and 34, heretofore described.
3.02 Top of sand ridge 15 ft. above cor. bears N.W. and S.E.
due steep N.E. slope.

15.50 Foot. of steep descent bears hilly land bears E and W.

Subdivision of Twp 31 N. T. 13 E.

Chain

19

- Enter rolling land.
- 15.75 Heavy undergrowth and bunch grass bears E and W.
Enter cultivated land, bears East 10.00 chs. and
West 6.00 chs. dist.
- 21.70 Dry ravine 30 lbs. wide 5 ft. deep. Course N.E.
- 22.50 Heavy cultivated land bears East 8.00 chs. and
West 12.00 chs. dist., Enter low rolling sand
hills bears E and W. asc. S.E. slope.
- 29.50 Top of sand ridge 25 ft. high bears N.E. and S.W. desc.
- 37.75 Foot of descent in depression bears E and W. drains
East, asc. steeply.
- 40.00 The point for the $\frac{1}{4}$ sec. cor. falls on solid ledge
of sand stone where it is impracticable to
establish a post cor. therefore at.
- 39.15 Set an iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for witness cor. to the $\frac{1}{4}$ sec. cor.
marked out bears cap T 31 N. R 13 E. S 27. 328 in
S half and W.C. $\frac{1}{4}$ in N half.
Raise a mound of stone 2 ft. base. $1\frac{1}{2}$ ft. high. W.
of cor. Pit impracticable
- 54.00 Top of sand ridge bears E and W. desc steeply.
- 56.40 Dry ravine 10 lbs. wide Course N 55° E. asc.
- 66.00 Top of sand ridge bears N.E. and S.W. desc.
- 71.00 Dry ravine 10 lbs wide 20 ft. below top of ridge
Course N.E. asc.
- 74.00 Top of ridge bears N.E. and S.W. desc.
- 76.15 Dry ravine Course N.E. asc.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24
ins. in the ground for cor. of secs. 21, 22, 27, and
28. marked out bears cap. T 31 N. 321 in NW.
R 13 E. S 22 in N.E. 327 in S.E. and 328 in S.W.
quadrant.
Dig pits 18 x 18 x 12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist. and
raise a mound of earth 4 ft. base. 2 ft. high.
W. of cor.
Land rolling and hilly.
Soil sandy and stony 3rd and 4th rate.
No timber

N 89° 55' E. on a random line bet. secs. 22 and 27
40.00 Set temp $\frac{1}{4}$ sec. cor.

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- 80.08 Intersect N. and S. line 18 lks. N. of the cor. of secs. 22, 23, 26, and 27, heretofore described, thence I run, $N89^{\circ}57' W.$, at a true line, bet. secs. 22 and 27, over hilly sandy land, through scattering sage and greasewood bush undergrowth and bunch grass.
- 6.00 Begin steep descent over N.W. slope
- 24.10 Dry rocky ravine 20 lks. wide course $S65^{\circ} W.$ arc.
- 32.00 Top of sand ridge bears N.W. and S.E. desc.
- 40.04 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 $4^{\circ} S 22$ on N. half and $S 27$ on S. half. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. N. of cor. Pits impracticable.
- 53.00 Foot of steep descent, leave undergrowth and bunch grass bears N.E. and S.W. Enter cultivated land bears N.E. 10.00 chs. and S.W. 6.00 chs. dist.
- 57.20 Dry sand wash 20 lks. wide, 3 ft. deep. course North.
- 61.60 Leave cultivated land bears North 8.00 chs. and South 5.00 chs. dist. Enter undergrowth around steep E slope of sand ridge
- 63.50 Top of sand ridge bears $N46^{\circ} E.$ and $S40^{\circ} W.$ desc.
- 69.00 Foot of descent in depression bears N.E. and S.W. drains to the N.E. arc.
- 73.15 Top of rocky spur 30 ft. high bears N. and S. desc.
- 77.30 Dry rocky ravine course S.E. arc.
- 80.08 The cor. of secs. 21, 22, 27, and 28, heretofore described. Land rolling and hilly. Soil sandy sand stony 3rd and 4th rate. No timber

March 9th 1911

March 17th 1911: Ab. 7^h 09^m a.m. limit. Det. off. $36^{\circ} 03\frac{1}{2}' N.$ on the lat. arc, $1^{\circ} 35' S.$ on the decl. arc and determine a meridian with the solar at the cor. of secs. 21, 22, 27, and 28, ^{heretofore described} thence I run, $N0^{\circ} 02' W.$, bet. secs. 21 and 22, ascend S. slope over stony hilly land, through sage and greasewood bush undergrowth and bunch.

8.20 Top of sand ridge bears E and W. desc.

Subdivision of Twp 31 N., R 13 E.

Chain

21

- 11.55 Dry ravine 10 lbs. wide 25 ft. below top of ridge
course east. asc.
- 16.00 Top of sand ridge bears East W. desc.
- 23.50 Dry rocky ravine 30 lbs. wide 30 ft. deep course
East. asc.
- 31.00 Top of sand ridge bears East W. desc.
- 34.40 Dry ravine course N.E. asc.
- 40.00 Set out iron post 3 ft. long 1 in. in diam. 26 in.
in the ground for $\frac{1}{4}$ sec. cor. marked on brass
cap T 321 on W. half. and 322 on E. half.
- 43.65 Dig pits 18x18x12 in. N. and S. of post 3 ft. dist.
build raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$
ft. high. W. of cor.
- 53.75 Dry ravine 25 ft. below $\frac{1}{4}$ sec. cor. course East.
asc.
- 71.00 Top of sand ridge bears N.E. and S.W. desc.
- 71.00 Dry rocky ravine course N70°E asc.
- 80.00 Set out iron post 3 ft. long 2 in. in diam. 24
in. in the ground for cor. of sec. 15, 16, 21, and
22. marked on brass cap. T 31 N. S 16 in N.W., R 13
E. S 15 in N.E., S 22 in S.E. and S 21 in S.W.
quadrant.
- Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high.
W. of cor. Pits impracticable
Land hilly.
Soil sandy and stony 3rd and 4th rate.
No timber
-
- S 89° 57' E. on a random line bet. sec. 15 and 22.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.98 Intersect N. and S. line 3 lbs. S. of the cor. of sec.
14, 15, 22, and 23, hereinbefore described, thence I run,
N 89° 58' W. on a true line bet. sec. 15 and 22.
Ascend S.E. slope over rolling and hilly sandy
land through scattering sage and greasewood
brush undergrowth and bunch grass.
- 1.15 Top of sand ridge 20 ft. above cor. bears N.E.
and S.W. desc

BOOK 2619

- 21.25 Dry ravine 25 lks. wide course S.W. asc.
- 25.60 Top of sand ridge 25 ft. above ravine bears N.E. and S.W. desc.
- 33.00 Each edge of rocky Canyon bears N.W. and S.E. desc. abruptly.
- 34.50 Dry ravine in bottom of Canyon course N.W. asc.
- 36.00 Top of abrupt ascent on West edge of Canyon bears N.W. and S.E. Continue steep ascent over N.E. slope
- 39.99 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 $\frac{1}{2}$ S 15 on N. half and S 22 on S. half. Pig pits 18 x 18 x 12 ins. East W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. tall, $1\frac{1}{2}$ ft. high N. of cor.
- 42.00 Top of sand ridge 25 ft. above $\frac{1}{4}$ sec. cor. bears N. and S. desc. steeply
- 54.00 Each edge of Canyon bears N. and S. desc. abruptly over cliffs and ledges
- 64.85 Foot of abrupt descent in Canyon. Cross ravine course N.E. asc abruptly over sand stone wall 100 ft. high along N. side of Canyon
- 72.00 Top of abrupt descent on N. side of Canyon bears N.E. and S.W., hard hilly stony land bears N.E. and S.W. Enter rolling sandy land.
- 79.98 Top cor. of secs. 15, 16, 21 and 22, heretofore described. Land rolling, hilly, and broken. Soil sandy and stony 3rd and 4th rate. No timber

W^o 02' W., 1/4 sec. 15 and 16;

Ascend S. slope over hilly sandy land, through scattering sage and greasewood brush undergrowth and bunch grass

- 22.00 Top of sand ridge bears E and W. desc.
- 26.75 Dry ravine 15 lks. wide 30 ft. below top of ridge course N 35° E. asc. steeply.
- 36.00 Top of sand ridge bears N 25° E. desc.
- 39.85 Dry ravine 10 lks. wide course west. 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

Subdivision of Tp 31 N., R 13 E.

23

Chains

- Exp 1/4 S 16 on W half and S 15 on E. half.
 Raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor.
 Pits impracticable
- 46.00 Top of sand ridge bears E. and W. desc.
- 62.75 Dry rocky ranuel 100 lbs. wide, 60 ft. deep covered
 Earth. also.
- 67.15 Top of rocky ridge bears E. and W. desc. gradually.
- 77.40 South edge of Canyon on sand stone rim rock
 80 ft. high. bears N 70° W and S 70° E. desc. abruptly.
- 79.00 Dry ranuel on foot of descent in Canyon course
 N.W. asc.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins.
 in the ground for cor. of sec. 9, 10, 15 and 16.
 marked on brass Exp T 31 N. S 9 in N.W., R 13 E
 S 10 in N.E. S 15 in S.E. and S 16 in S.W. quadrants.
 Dig pits 18 x 18 x 12 ins. in each sec, 5 1/2 ft. deep.
 and raise a mound of earth 4 ft. base, 2 ft.
 high W. of cor.
 Sand hilly and broken.
 Soil sandy and stony 3rd and 4th rates.
 No timber
-
- 89° 58' E. on a random line bet. sec. 10 and 15
- 40.00 Set temp. 1/4 sec. cor.
- 80.12 Intersect N. and S. line 12 lbs. N. of. of the cor.
 of sec. 10, 11, 14, and 15, hereinbefore described, thence I run,
 N 89° 53' W. on a true line bet. sec. 10 and 15
 Descend gradually over W. slope through
 scattering sage and greasewood brush undergrowth
 and bunch grass
- 13.25 Dry ranuel 10 lbs. wide, 20 ft. below cor. Course
 S 45° W. asc.
- 16.00 Top of sand ridge bears N.E. and S.W. desc.
- 25.80 Dry ranuel 20 ft. below top of ridge course S 25° W
 also.
- 33.00 Top of sand ridge 15 ft. above ranuel bears N.E.
 and S.W. desc.
- 40.06 Set an iron post 3 ft. long 1 in. in diam. 26 ins.
 in the ground for 1/4 sec. cor. marked on brass
 exp. 1/4 S 10 on N. half. and S 15 on S. half.
 Raise a mound of stone 2 ft. base, 1 1/2 ft. high.

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N. of cor. Pits impracticable
 NOTE: At this cor. I set off $1^{\circ}32\frac{1}{2}'$ S. on the decl. arc
 and at noon observed the sun on the meridian
 and obtain a reading of $36^{\circ}05\frac{1}{2}'$ N. on the lat.
 arc

44.70 Dry ravine 25 ft. below $\frac{1}{4}$ sec. cor. Course S.W. asc.

49.45 Top of sand ridge bears N.E. and S.W. desc.

61.30 Dry ravine 10 lbs wide 30 ft. below top of ridge
 Course S40°W. asc.

66.50 Top of sand ridge bears N.E. and S.W. desc.

76.80 Each edge of canyon on sand stone rim rock.
 100 ft. high bears N70°W. and S70°E. desc. abruptly.

80.12 The cor. of sec. 9, 10, 15, and 16, heretofore described.
 Land hilly and broken.
 Soil sandy and stony 3rd and 4th rates.
 No timber

N60°02' W. to sec. 9 and 10.

Ascend S.W. slope over broken stony hilly land, through
 scattering sage and greasewood brush, undergrowth,
 and bunch grass

3.00 Top of rocky ridge bears East W. desc.

5.80 Enter dry ravine 25 lbs. wide 3 ft. deep. Course
 S.W. thence in ravine

22.00 Leave ravine comes from N.E. asc. gradually over
 S.W. slope

27.60 Moor of sand stone wall 100 ft. high. bears
 N.W. and S.E. asc. abruptly.

30.00 Top of abrupt ascent on sand stone rim rock.
 Along north edge of canyon bears N70°W. and
 S70°E. asc. gradually.

34.00 Top of sand ridge bears East W. desc. N. 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 $14^{\circ}39'$ on W. half. and S10 on E. half.
 Dig pits 18x18x12 ins. N. and S. of post. 3 ft. dist.
 and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft.
 high. W. of cor.

42.50 Dry ravine 20 lbs. wide Course S.W. asc.

64.50 Top of sand ridge bears N.E. and S.W. desc.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins.

Subdivision of N^o 31 N., R 13 E.

Chain

in the ground for cor. of secs. 3, 4, 9, and 10 marked on brass cap # 31 N, 34 in N.W., R 13 E. 33 in N.E., 310 in S.E. and 39 in S.W. quadrant. Raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable. Land broken and hilly. Soil sandy and stony 3rd and 4th rate. No timber

40.00 Set temp 1/4 sec. cor.
 80.08 Intersect N. and S. line 8 lks. S. of the cor. of secs. 2, 3, 10, and 11, heretofore described, thence I run, N 89° 56' W. on a true line bet. secs. 3 and 10. Over rolling sandy land through sage and greasewood brush undergrowth and bunch grass.

40.04 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 # 3 on N. half. and 310 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 1/2 ft. base. 1 1/2 ft. high N. of cor.

58.75 Over rolling sandy land bears N.E. and S.W. Enter stony hilly land. desc. abruptly over NW. slope.

78.10 Dry ravine 20 lks wide 20 ft. deep. Course N.W. are.

80.08 The cor. of secs. 3, 4, 9, and 10, heretofore described. Land rolling and hilly. Soil sandy and stony 3rd and 4th rate. No timber

40.00 Set temp. 1/4 sec. cor.
 80.24 Intersect N. ldy of N^o 28 lks. S 89° 59' E of the cor. of secs. 3, 4, 33, and 34, recently established by me as described in Exterior Book "AP", thence I run, S 0° 14' E. on a true line bet. secs. 3 and 11, Over rolling sandy land through sage and greasewood brush undergrowth and bunch grass

BOOK 2619

- 40.24 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 34 on W. half, and S 3 on E. half.
Dig pits 18x18x12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 56.25 Leave rolling land bears E and W. Enter hilly land. desc over S. slope.
- 67.45 North edge of Canyon on sand stone rim rock 100 ft. high. bears E and W. desc. abruptly over cliffs and ledges.
- 71.50 Bottom of Canyon runs W. and W. are abruptly.
- 76.75 Top of abrupt ascent on sand stone rim rock. along south edge of Canyon bears E. and W. asc. gradually
- 80.24 The cor. of sees. 3, 4, 9, and 10, heretofore described. Land rolling hilly and broken.
Soil sandy and stony 3rd and 4th rate.
No timber

March 17th 1911

March 10th 1911
At 8^h 10^m a.m. I. m. l. Deph off $36^{\circ} 02' N.$
on the lat. arc. $4^{\circ} 20\frac{1}{2}'$ S. on the decl. arc and determine
a meridian with the solar at the cor. of sees 4, 5
32 and 33 on the S. bdy. of the Tp. recently established by me as described in Exterior Book "AO", thence I run,

$N 0^{\circ} 03' W.$, bet. sees. 32. and 33,

Along E. slope over hilly sandy land, through sage and greasewood bush undergrowth and bunch grass

- 21.00 Begin steep ascent over over S.E. slope of sand ridge.
- 32.35 Top of sand ridge bears $N 50^{\circ} E.$ and $S 50^{\circ} W.$ desc. gradually over 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 32 on W. half and S 33 on E. half.
Dig pits 18x18x12 ins N. and S. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 44.00 Dry rocky ravine 20 ft. wide 25 ft. below $\frac{1}{4}$ sec. Cor. course $N 60^{\circ} E.$ asc. steeply
- 59.00 Top of steep ascent, leave hilly land bears NE and S.W. Enter rolling land.

Subdivision of Twp 31 N., R 13 E.

Chains

27

- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 28, 29, 32, and 33 marked out brass cap. T 31 N. S 29 in N.W. R 13 E S 28 in N.E. S 33 in S.E. and S 32 in S.W. quadrants. Dig pits 18x18x12 ins in each sec. 5 1/2 ft. deep, and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land rolling, and hilly.
Soil sandy and stony 3rd and 4th rate.
No timber
-
- 40.00 Set temp. 1/4 sec.
79.94 Intersect N. and S. line 35 lbs. S. of the witness cor. to cor. of sec. 27, 28, 33, and 34, ^{heretofore described} thence S run, from true point for corner, S 89° 59' W. on a true line bet. sec. 28 and 33. Descend gradually over W. slope through sage and greasewood brush undergrowth and bunch grass
5.40 Top of sand stone ledge 25 ft. high. bears N. and S. dec. abruptly.
8.00 Top of abrupt descent. Land broken stony and hilly land and undergrowth bears N. and S. Enter level cultivated land bears N. 10.00 chs. and S. 12.00 chs. dist.
12.20 Dry ravine 20 lbs. wide 4 ft. deep course N 20° E.
14.40 Level cultivated land bears North 15.00 chs. and South 12.00 chs. dist. Enter hilly. clayey land and undergrowth bears N. and S. asc. E. slope.
17.50 Top of clay ridge bears N. and S. dec.
32.00 Dry ravine 15 lbs. wide course N.E. asc.
39.97 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked out brass cap. 1/4 S 28 on N. half and S 33. on S. half. Dig pits 18x18x12 ins E and W. of post. 3 ft. deep. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.
48.80 Top of sand ridge bears N 25° E and S 25° W. dec.

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- 50.20 Dry ravine 15 lks. wide, 20 ft. below top of ridge
Course $N 25^{\circ} E$. asc. steeply
- 64.00 Top of steep ascumb; leave hilly land head N. and
S. Enter rolling land.
- 79.94 The cor. of secs. 28, 29, 32, and 33, heretofore described.
Land rolling and hilly.
Soil sandy and stony 3rd and 4th rate.
No timber

$N 0^{\circ} 03' W$, bet. sec. 28 and 29.

Over rolling sandy land through scattering sage
and greasewood brush undergrowth and bunch
grass.

- 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 $S 29$ on W. half and $S 28$ on E. half.
Dig pits 18 x 18 x 12 ins. N. and S. of post. 3 ft. diam.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
high. W. of cor.

NOTE: On this cor. set off $4^{\circ} 17\frac{1}{2}'$ S. on the decl. arc
and at noon observe the sun on the meridian
and obtain a reading of $36^{\circ} 03' N$. on the lat. arc.

- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins.
in the ground for cor. of sec. 20, 21, 28, and 29.
marked out brass cap $S 31$ N. $S 20$ in N.W., R 13 E.
 $S 21$ in N.E. $S 28$ in S.E. and $S 29$ in S.W. quadrants.
Dig pits 18 x 18 x 12 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.
No timber

$N 89^{\circ} 59' E$ on a random line bet. sec. 21 and 28.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.

- 79.88 Intersect N. and S. line 18 lks. N. of the cor. of sec.
21, 22, 27, and 28, heretofore described, thence 2 run,
 $N 89^{\circ} 53' W$. on a true line bet. sec. 21 and 28.
Ascend steep rocky E. slope over hilly land through
scattering sage and greasewood brush under-
growth and bunch grass

Chain

29

- 4.75 Top of sand ridge 50 ft. above cor. bears N 30° E. and S 35° W. desc.
- 10.75 Dry ravine 10 lbs. wide 20 ft. below top of ridge bears N E. asc.
- 24.00 Top of sand ridge bears N. and S. desc.
- 28.95 Dry rocky ravine 25 lbs. wide course north, asc. steep.
- 39.94 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 N 45 21 on N. half and S 28 on S. half
Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. deep, and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.
- 61.00 Top of steep ascent. Level hilly land bears N. and S. Better rolling sandy land bears N. and S.
- 79.88 The cor. of secs. 20, 21, 28, and 29, heretofore described Land rolling and hilly. Soil sandy and stony 3rd rate. No timber

March 10th 1911

This 10th day of March 1911: I discharge Harry Keyser and employ Herbert Yestewa to perform the duties of Moundman, No officer authorized to administer oaths other than myself being available, without great inconvenience, delay, and expense I administer the required preliminary and final oaths

Jan L. White.
U.S. Transitioner

- March 18th 1911 7^h 08^m a.m., L.M.L. I set off 36° 03 1/2' N. on the lat. arc. 1° 11 1/2' S. on the decl. arc. and determine a meridian with the polar as the cor. of secs. 20, 21, 28, and 29, ^{heretofore described} thence I run, N 6° 03' W. 1/2 sec. 20 and 21, Over rolling sandy land, through scattering sage and greasewood bush undergrowth and bunch grass
- 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 N 45 20 on W. half and S 21 on E. half
Dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. deep.

BOOK 2619

and raise a mound of earth 3½ ft. base, 1½ ft. high. W. of cor.
 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 16, 17, 20, and 21, marked on brass cap T₃₁ N₁ S 17 in N.W., R13E. S 16 in N.E. S 21 in S.E. and S 20 in S.W. quadrant. Dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high. W. of cor.
 Land rolling.
 Soil sandy 3rd rate.
 No timber

S 89° 53' E. on a random line bet. secs. 16 and 21
 40.00 Set temp. ¼ sec. cor.
 79.86 Intersect N. and S. line 8 lks. N. of the cor. of secs. 15, 16, 21 and 22, ^{hereinbefore described} thence run N 89° 50' W. on a true line bet. secs. 16 and 21.
 Ascend over hilly sandy land, through scattering sage and greasewood bush undergrowth and bunch grass
 12.00 Top of sand ridge bears N.W. and S.E. desc.
 20.80 Dry ravine courses N.W. asc.
 39.00 Top of sand ridge bears N. and S. desc.
 39.93 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 S 16 on N. half, and S 21 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 3½ ft. base, 1½ ft. high. N. of cor.
 47.20 Dry ravine 20 lks. wide course N.E. asc.
 54.00 Top of steep ascent, leaves hilly land bears N.E. and S.W. Enter rolling land bears N.E. and S.W.
 79.86 The cor. of secs. 16, 17, 20, and 21, hereinbefore described.
 Land rolling and hilly.
 Soil sandy 3rd rate.
 No timber

N 0° 03' W. bet. secs. 16 and 17.
 Over rolling sandy land, through scattering sage and greasewood bush undergrowth and bunch

Subdivision of T₃₁N, R₁₃E.

Chain

grass.

20.00 Leave rolling land bears E and W. Enter hilly land bears E. and W. desc N. slope.

32.80 Head of dry ravine course N.E. asc.

38.00 Top of sand ridge bears N.E. and S.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 out brass cap N4S 17 on W. half and S16 on E. half Dig pits 18x18x12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

72.53 Dry ravine 20 lbs. wide course N.E. asc.

73.60 Top of ridge 15 ft. above ravine bears N.E. and S.W. desc.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 8, 9, 16 and 17. marked out brass cap T31 N. S8 in N.W. R13 E, S9 in N.E. S16 in S.E. and S17 in S.W. quadrant.

Dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land rolling and hilly.
Soil sandy and stony $\frac{1}{2}$ rate.
No timber

S^v89°50'E. on a random line bet. secs. 9 and 16.

40.00 Set temp $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line 5 lbs S. of the cor. of secs. 9, 10, 15, and 16, heretofore described, thence I run, N89°52' W. on a true line bet. secs. 9 and 16. Descend S.W. slope over hilly sandy land through scattering sage and greasewood brush undergrowth and bunch grass.

1.50 Dry ravine 30 lbs. wide 3 ft. deep course N.W. asc. gradually.

4.75 Begin abrupt ascent over sand stone cliffs. bears N60° W. and S60° E.,

10.00 Top of ascent on sand stone rim rock. bears N.E. and S.W. asc. gradually.

21.00 Top of sand ridge bears N60° E and S20° W. desc.

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- 37.50 Dry ravine 10 lks. wide course north asc.
- 39.98 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 9 on N. half and S 16 on S. half. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. N. of cor. Pits impracticable
- 42.50 Top of sand ridge bears N. and S. desc.
- 49.85 Dry ravine 8 lks. wide course N.E. asc.
- 68.50 Top of sand ridge bears N.E. and S.W. desc.
- 74.05 Dry ravine 10 lks. wide course N.E. asc.
- 76.00 Top of ridge bears N.E. and S.W. desc.
- 79.75 Dry ravine 5 lks. wide course north asc.
- 79.96 The cor. of sec. 8, 9, 16 and 17, heretofore described. Land hilly. Soil sandy and stony 3rd and 4th rate. No timber
- NOTE: At this cor. Deb off. $1^{\circ} 09' 3''$ on the decl. arc, and at noon observe the sun on the meridian and obtain a reading of $36^{\circ} 05\frac{1}{2}'$ N. on the lat. arc.

$N 0^{\circ} 03' W.$, bet. sec. 8 and 9,

Ascend S.E. slope over hilly sandy and stony land through scattering sage and greasewood bush undergrowth and bunch grass.

- 13.00 Top of sand ridge bears $N 40^{\circ} E.$ and $S 40^{\circ} W.$ desc.
- 18.50 Dry ravine course N.E. asc.
- 26.00 Top of sand ridge bears N.E. and S.W. desc.
- 35.85 Dry rocky ravine 12 lks. wide course N.E. 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, $\frac{1}{4}$ S 8 on W. half and S 9 on E. half. Dig pits 18 x 18 x 12 ins. N. and S. of post. 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. W. of cor.
- 41.50 Top of sand ridge bears N.E. and S.W. desc.
- 57.15 Dry ravine 20 lks. wide course N.E. asc.
- 62.75 Top of sand ridge bears N.E. and S.W. desc.
- 76.62 South edge of canyon on sand stone rim rock. bears E and W. descend abruptly over

Subdivision of Twp 31 N., R 13 E.

33

Chains

- Cliffs and ledges.
- 80.00 The point for Cor. of secs. 4, 5, 8, and 9, falls in dry ravine at foot of abrupt descent in Canyon course west, therefore I continue my alignment and measurements, asc. and ab.
- 80.20 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for witness cor. to the cor. of secs. 4, 5, 8 and 9, marked out brass cap. W.C. in N. half, T 31 N. S 5 in N.W., R 13 E. S 4 in N.E., S 9 in S.E. and S 8 in S.W. quadrants. Dig pits 18 x 18 x 12 ins. N.E., S.E., S.W. and N.W. of post 5 1/2 ft. diam. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor. Land hilly and broken. Soil sandy and stony 3rd and 4th rate. No timber.
-
- From true point for Cor. of secs. 4, 5, 8, and 9, in ravine, I run, S 89° 52' E on a random line bet. secs. 4 and 9.
- 40.00 Set temp. 1/4 sec. cor.
- 80.00 Intersect N. and S. line 10 lbs. N. of the Cor. of secs. 3, 4, 7, and 10, heretofore described, thence I run, N 89° 48' W. on a true line bet. secs. 4 and 9. Ascend E. slope over stony hilly land through scattering sage and greasewood brush undergrowth and bunch grass.
- 1.00 Top of sand ridge bet. N. and S. desc.
- 6.55 East edge of Canyon on sand stone ledge 75 ft. high. Bears N 50° E. and S 50° W. desc. abruptly.
- 10.00 Bottom of Canyon course S.W. asc.
- 21.30 Top of abrupt ascent on West wall of Canyon bears N 60° E. and S 60° W. asc. gradually.
- 28.00 Top of sand ridge bet. N. and S. desc. W. slope.
- 35.30 Canyon 100 lbs. wide, 60 ft. deep course South asc. steeply.
- 39.90 Top of sand ridge bet. N. and S. 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 out brass cap 1/4 S 4 on N. half and S 9. on S. half

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- Dig pits 18x18x12 ins. East W. of post 3 ft. dia. and raise a mound of earth. 3 1/2 ft. base, 1 1/2 ft. high N. of cor.
- 56.00 East edge of canyon on sand stone rim rock. 70 ft. high. bears N 20° W. and S 20° E. desc. abruptly
- 80.00 The ^{true point for} cor. of secs. 4, 5, 8, and 9, in ravine, course West. Land hilly and broken Soil sandy and stony 3rd and 4th rate. No timber
-
- From true point for cor. of secs. 4, 5, 8 and 9, run, N 0° 03' W. on a random line bet. secs. 4 and 5
- 40.00 Set temp. 1/4 sec. cor.
- 80.08 Intersect N. bdy. of Twp. 35 lbs. S 89° 59' E of the cor. of secs. 4, 5, 32, and 33. recently established by me as described in Exterior Book "AP"; thence I run, S 0° 18' E., on a true line, bet. secs. 4 and 5; ascend N.W. slope over hilly sandy and stony land, through sage and greasewood bush, undergrowth and bunch grass.
- 7.50 Top of sand ridge bears N.E. and S.W. desc.
- 31.75 Dry rocky ravine 25 lbs. wide course west. etc.
- 40.00 Top of sand ridge bears E and W. desc. steeply.
- 40.08 Set an iron post 3 ft long 1 in. in diam. 20 ins. in the ground for 1/4 sec. cor. marked on brass cap. 1/4 35 on W. half, and 34. on E half. Dig pits 18x18x12 ins. N. and S. of post 3 ft. dia. and raise a mound of earth 3 1/2 ft base 1 1/2 ft. high W. of cor.
- 50.00 Dry ravine in head of canyon 35 ft. below 1/4 sec. cor. course west. etc.
- 54.50 Top of sand ridge bears N.E. and S.W. desc.
- 65.80 North edge of canyon on sand stone rim rock 75 ft. high bears N 70° W. and S 70° E. desc. abruptly
- 68.00 Foot descent in canyon course N.W. asc.
- 72.00 Top of rocky knoll. desc.
- 75.00 Dry sand wash course N.W. asc.
- 78.50 Top of rocky ridge bears East W. desc.
- 79.88 at the corner of secs. 4, 5, 8 and 9 herebefore described.
- 80.00 The true point for cor. of secs. 4, 5, 8 and 9, in ravine, course West. Land hilly and broken. Soil sandy and stony 3rd and 4th rate. No timber

March 18th 1900

Subdivision of T₃₁N, R₁₃E.

Chain

March 11th 1911th At 8^h 10^m a.m. l.m.l. - D set off 36° 02' N. on the lat. arc. 3° 57' S. on the decl. arc. and determine a meridian with the solar at the cor. of sec 5, 6, 31 and 32. on S. bdy. of T₃₁; recently established by me as described in Exterior Book "AO", thence I run,

N 10° 03' W. Feb. sec. 31 and 32.

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

- 4.45 Dry ravine course N.E. arc.
- 8.00 Top of sand ridge bears E. and W. dec.
- 18.00 Dry ravine 5 lbs. wide course west. arc.
- 36.35 Top of sand ridge bears E. and W. dec.
- 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins in the ground for 1/4 sec. cor. marked out brass cap 1/4 S 31 on W. half, and S 32. on E. half. Raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable.
- 40.40 Dry ravine 15 lbs. wide course west. arc.
- 43.40 Top of sand ridge bears E. and W. dec.
- 65.25 Dry ravine 75 ft. below 1/4 sec. cor. ^{course W.} as e.
- 71.70 Top of high rocky ridge bears E. and W. dec.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins in the ground for cor. of sec. 29, 30, 31 and 32. Marked out brass cap T 31 N, S 30 in N.W. T 13 E, S 29, in N.E. S 32 in S.E. and S 31 in S.W. quadrants. Raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable. Land hilly. Soil sandy and stony 3rd and 4th rate. No timber.

N 89° 57' E. on a random line Feb. sec. 29 and 32.

- 40.00 Set temp. 1/4 sec. cor.
- 80.02 Intersect N. and S. line 10 lbs. N. of the cor. of sec. 28, 29, 32. and 33, hereinbefore described, thence I run, N 89° 59' W. on a true line Feb. sec 29 and 32. Over rolling sandy land, through sage and greasewood bush undergrowth and bunch grass.
- 40.01 Set an iron post 3 ft. long 1 in. in diam. 26 ins

BOOK 2619

in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 29 on N. half, and S 32 on S. half. Dig pits 18x18x12 ins. E. and W. of post. 3 ft. dia. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high. N. of cor.

- 66.00 Begin gradual descent over W. slope.
- 77.18 N. of sand stone ledge 30 ft. high. bears N. and S. decl. Over broken stony land bears N. and S.
- 80.02 The cor. of secs. 29, 30, 31, and 32, heretofore described. Land rolling and broken. Soil sandy and stony 3rd and 4th rate. No timber

Note: At this cor. Det. off $3^{\circ}54'$ S. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of $36^{\circ}03'$ N. on the lat. arc

S $89^{\circ}57'$ W. on a random line bet. secs. 30 and 31

- 40.00 Det temp $\frac{1}{4}$ sec. cor.
- 79.26 Intersect the 3rd Guide Meridian East. 18 lbs. S. of the cor. of secs. 25, 30, 31 and 36. recently established by me as described in Standard Book "T", thence I run, S $89^{\circ}55'$ E., on a true line, bet. secs 30 and 31, Over rolling sandy land, through scattering sage and greasewood, brush, underground and bunch grass.
- 12.00 Leave rolling land bears N. and S., Enter hilly clayey land. Ascend steep N.W. slope of ridge.
- 13.70 N. of clay ridge bears $N 25^{\circ} E.$ and $S 25^{\circ} W.$ decl.
- 22.00 Foot of descent in depression 30 ft. below top of ridge bears N.E. and S.W. drains to the N.E. and
- 38.30 N. of clay ridge 50 ft. high bears N. and S. decl.
- 39.26 Set an iron post 3 ft. long 1 in. in diam. 26 in. in the ground for $\frac{1}{4}$ sec cor marked on brass cap $\frac{1}{4}$ S 30 on N. half and S 31 on S. half. Raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable
- 39.60 Dry ravine 5 lbs. wide 10 ft. below $\frac{1}{4}$ sec. cor course South. asc.
- 41.55 N. of clay ridge bears $N 70^{\circ} W.$ and $S 70^{\circ} E.$ decl.

Chain

64.00 Foot of descent on N.E. slope, asc along N.W. slope.
 78.55 Top of sand ridge bears N and S. desc.
 79.26 The cor. of secs. 29, 30, 31, and 32, heretofore described.
 Land rolling and hilly.
 Soil sandy and clayey 3rd rate.
 No timber

No 03' W. Secs. 29 and 30.

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

1.05 Dry ravine 10 lbs wide 8 ft. below cor. Course W. asc.

6.40 Top of sand ridge bears E. and W. desc.

9.15 Dry ravine 15 lbs. wide 25 ft. below top of ridge Course west. asc.

24.90 Top of clay ridge 25 ft. high bears N 70° E. and S 70° W. desc.

30.00 Dry ravine 8 lbs. wide 30 ft. below top of ridge Course S 65° W. asc.

40.00 Saw iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked on brass sig. 4 S 30 on W. half and S 29 on E. half
 Raise a mound of stone 2 ft. base 1/2 ft. high W. of cor. Pits impracticable

This cor. is situated on top of ascent on sand ridge, bears N 65° E. and S 65° W. desc.

43.30 Dry ravine 10 lbs. wide 30 ft. below 1/4 sec. cor. Course S 50° W. asc. steep.

75.45 Top of steep ascent. thence over low rolling sand hills

80.00 Saw iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 19, 20, 29, and 30 marked on brass top 7 31 N. S 19 in NW, R 13 E. S 20 in N.E. S 29 in S.E. and S 30 in S.W. quadrants.
 Dig 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.
 Sand hilly.
 Soil sandy and clayey 3rd rate.

No timber

March 11th 1911

BOOK 2619

March 20th 1911 9^h 08^m a.m. Lm. & D run off $36^{\circ} 03\frac{1}{2}' 77$.
 on the lat. arc. $0^{\circ} 24' 3$. on the decl. arc. and
 determine a meridian with the solar at the
 cor. of sec. 19, 20, 29, and ^{above described} 30, thence I run,
 $S 89^{\circ} 57' E$. on a random line bet. sec. 20 and 29.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line 4 lbs. N. of the cor. of sec.
 20, 21, 28 and 29, hereinbefore described, thence I run,
 $N 89^{\circ} 57' W$. on a true line bet. sec. 20 and 29.
 Over rolling sandy land, through sage and
 greasewood bush undergrowth and bunch
 grass.

39.98 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. $\frac{1}{4} S 20$ on N. half and $S 29$. on S. half.
 Dig pits $18 \times 18 \times 12$ ins E and W. of post. 3 ft. deep.
 did raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$
 ft. high. N. of cor.

79.96 The cor. of sec. 19, 20, 29, and 30, hereinbefore described.
 Land rolling.
 Soil sandy 3rd rate.
 No timber

$N 89^{\circ} 55' W$. on a random line bet. sec. 19 and 30

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.22 Intersect the 3rd Guide Meridian East. 4 lbs. N. of
 the cor. of sec. 19, 24, 25 and 30. ^{recently established by me as} described in Standard Book "T"
 Thence I run
 $S 89^{\circ} 57' E$. on a true line, bet. sec. 19 and 30,
 Over rolling sandy land, through scattering
 sage and greasewood bush undergrowth and
 bunch grass.

18.00 Leave rolling land head NW. and SE. Enter
 hilly land head NW. and S.E. asc. W. slope

39.22 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 $\frac{1}{4} S 19$ on N. half and $S 30$ on S. half
 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high.
 N. of Cor. Oil impracticable

Subdivision of Twp 31 N., R 13 E.

- 50.60 Top of sand ridge bears $N65^{\circ}E.$ and $S65^{\circ}W$ disc.
- 54.65 Dry ravine 12 lbs. wide course $N60^{\circ}W.$ asc steep
- 64.90 Top of steep ascent. Low hilly land bears $N.W.$ and $S.E.$. Enter rolling land.
- 79.22 The cor. of secs. 19, 20, 29, and 30, heretofore described. Land rolling and hilly. Soil sandy $3d$ rate. No timber

Note:- At this cor. I set off $0^{\circ}21'S.$ on the decl. arc and on noon observe the sun on the meridian and obtain on the lat. arc a reading of $36^{\circ}03\frac{1}{2}'N.$

$N0^{\circ}03'W.$ bet. secs. 19, and 20. Over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass.

- 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 $S19$ on $W.$ half, and $S20$ on $E.$ half. Dig pits $18 \times 18 \times 12$ ins. $N.$ and $S.$ of post. 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base. $1\frac{1}{2}$ ft. high $W.$ of cor.
- 80.00 Set an iron post 3 ft. long. 2 ins. in diam. 24 ins. in the ground for cor. of secs. 17, 18, 19 and 20 marked on brass cap $T31 N. S18$ in $N.W.$, $R13 E. S17$ in $N.E.$, $S20$ in $S.E.$ and $S19$ in $S.W.$ quadrants. Dig pits $18 \times 18 \times 12$ ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high $W.$ of cor. Land rolling. Soil sandy $3d$ rate. No timber

March 20th 1911

March 21st 1911. At 8^h 08^m a.m. l.m.t. I set off $36^{\circ}04\frac{1}{2}'N.$ on the lat. arc. $0^{\circ}00\frac{1}{2}'S.$ on the decl. arc and determine a meridian with the solar at the cor. of secs 17, 18, 19, and 20, ^{above described} thence I run

BOOK 2619

- S. $89^{\circ}57'$ E. on a random line bet. sec. 17 and 20.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.92 Intersect N. and S. line 5 lks. S. of the cor. of sec. 16, 17, 20, and 21, heretofore described, thence I run, N. $89^{\circ}59'$ W. on a true line, bet. sec. 17 and 20. Ascend S.E. slope over rolling sandy land through scattering sage and greasewood bush undergrowth and bunch grass.
- 12.00 Proof of sand ridge bears N.E. and S.W. desc.
- 39.96 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 17 on N. half and S 20 on S. half. Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. deep, and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. N. of cor.
- 79.92 The cor. of sec. 17, 18, 19, and 20, heretofore described. Land rolling. Soil sandy 3rd rate. No timber
-
- N. $89^{\circ}57'$ W. on a random line bet. sec. 18 and 19.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.16 Intersect the 3rd Guide Meridian East 8 lks. N. of the cor. of sec. 13, 18, 19, and 24 ^{recently established by the as} _{Thence I run,} described in Standard Book "T" East, on a true line, bet. sec. 18 and 19. Descend E. slope over rolling sandy land, through scattering sage and greasewood bush undergrowth and bunch grass.
- 2.00 Proof of declivity in depression bears N.E. and S.W. drains to the N.E. side.
- 39.16 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 18 on N. half and S 19 on S. half. Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. deep and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. N. of cor.
- Note: - At this cor. I set off $0^{\circ}02\frac{1}{2}'$ N. on the decl. arc and at noon observed the sun on the meridian and obtain a reading of $36^{\circ}04\frac{1}{2}'$ N. on the lat. arc.
- 79.16 The cor. of sec. 17, 18, 19, and 20, heretofore described.

Subdivision of T₁ 31 N. R 13 E.

Chain

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Land rolling.
Soil sandy 3rd rate.
No timber

W⁰⁰ 3' W. line sec 17. and 18.

Descend N. slope over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass.

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 18 on W. half and S 17. on E. half. Dig pits 18x18x12 ins. N. and S. of post, 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high. W. of cor.

54.20 Foot of descent in depression toward N.E. and S.W. drains to the S.W. side.

60.00 Wk of sand ridge toward N.E. and S.W. desc. gently.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of sec. 7, 8, 17, and 18, marked on brass cap T 31 N. S 7 in NW. R 13 E. S 8 in N.E. S 17 in S.E. and S 18 in S.W. quadrant.

Dig pits 18x18x12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.

Land rolling
Soil sandy 3rd rate.
No timber

March 21st 1911

March 22nd 1911. 9^h 08^m a.m. I met Dick J. and 36° 05' N. on the lat. arc. 0° 23' N. on the decl. arc. and determine a meridian with the solar alt. the cor. of sec. 7, 8, 17, and 18, ^{above described} thence I run S 89° 54' E. on a random line bet. sec. 8 and 17

40.00 Set temp $\frac{1}{4}$ sec. cor.

79.92 Intersect N and S. line 10 lbs. N. of the cor. of sec. 8, 9, 16, and 17, heretofore described, thence I run, N 89° 55' W. on a true line bet. sec. 8, and 17, Ascend S.E. slope over rolling sandy land through sage and greasewood brush undergrowth and

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- bunch grass.
- 7.00 Top of sand ridge 20 ft. above cor. bears $N 30^{\circ} E.$ and $S 30^{\circ} W.$ desc. gradually.
- 39.96 Set an iron post 3 ft. long 4 in. in diam. 26 in. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap. $N 4 S 8$ on N. half and $S 17$ on S. half.
Dig pits $18 \times 18 \times 12$ in. E and W. of post. 3 ft. deep and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. N. of cor.
- 79.92 The cor. of secs. 7, 8, 17, and 18, heretofore described.
Land rolling.
Soil sandy 3rd rate
No timber
-
- With on a random line bet. secs. 7 and 18.
- 40.00 Set temp $\frac{1}{4}$ sec. cor.
- 79.06 Intersect the 3rd Guide Meridian East. 5 lbs. S. of the cor. of secs. 7, 12, 13, and 18, recently established by me as described in Standard Book, T, thence 1 run, $S 89^{\circ} 58' E.$, on a true line, bet. secs. 7 and 18,
Cross steep N. slope through scattering sage and greasewood bush undergrowth and bunch grass.
- 28.15 Dry ravine 5 lbs. wide course N.E. arc.
- 29.00 Top of sand ridge bears N.E. and S.W. desc.
- 31.25 Dry ravine 8 lbs. wide course N.E. arc over rolling land.
- 39.06 Set an iron post 3 ft. long 4 in. in diam. 26 in. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap. $N 4 S 7$ on N. half and $S 18$ on S. half.
Dig pits $18 \times 18 \times 12$ in. E and W. of post. 3 ft. deep and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. N. of cor.
- Note: At this cor. Dreb off $0^{\circ} 26'$ N. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of $36^{\circ} 05\frac{1}{2}'$ N. on the lat. arc.
- 79.06 The cor. of secs. 7, 8, 17, and 18, heretofore described.
Land hilly and rolling
Soil sandy 3rd rate.
No timber

$N 0^{\circ} 03' W.$ bet. secs. 7 and 8.

Subdivision of T₁P₃₁N., R₁₃E.

Chains

Descend N. slope over rolling sandy land through sage and greasewood bush undergrowth and bunch grass.

6.40 Dry ravine 6 lks. wide course west. asc.

26.00 Top of sand ridge bears E. and W. desc.

38.20 Dry ravine 5 lks. wide 10 ft. below 1/4 sec. cor. course S.W. asc.

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 14 S 7 on W. half and S 8 on E. half. Raise a mound of stone 2 ft. base 1 1/2 ft. high. W. of cor. Pits impracticable

42.85 Top of sand ridge bears N.E. and S.W. desc

50.50 Foot of descent in depression bears N.E. and S.W. drains to the S.W. asc.

56.75 Top of sand ridge bears N.E. and S.W. desc.

58.30 Foot of descent in depression bears N.E. and S.W. drains to the S.W. asc

78.00 Top of sand ridge 8 ft. high bears N.E. and S.W. desc.

80.00 Set an iron post 3 ft. long 2 ins. in diam 24 ins. in the ground for cor. of secs. 5, 6, 7, and 8 marked on brass cap T 31 N S 6 in N.W. R 13 E. S 5 in N.E. S 8 in S.E. and S 7 in S.W. quadrants. Dig pits 18x18x12 ins. in each sec. 5 1/2 ft. deep and raise a mound of earth 4 ft. base. 2 ft. high. W. of cor.

Land rolling and hilly.

Soil sandy 3rd rate.

No timber

March 22nd 1911

March 23rd 1911 at 8^h 37^m a.m. level D set off. 36° 06' N. on the lat. arc. 0° 46' N. on the decl. arc and determine a meridian with the solar at the cor. of secs 5, 6, 7, and 8, above described, thence I run,

S 89° 55' E, on a random line, bet. sec. 5 and 8;

40.00 Set temp 1/4 sec. cor.

80.04 Intersect N. and S line 5 lks. N. of the true point for sec. 4, 5, 8, and 9. ^{run} thence I run ^{course West}

N 89° 53' W. on a true line bet. sec. 5 and 8.

BOOK 2619

- Descend in ravine over hilly sandy and stony land, through scattering sage and greasewood brush undergrowth.
- 1.00 Leave ravine, 30 lbs. wide 5 ft. deep course NW. asc.
- 5.20 Begin abrupt ascent over wall of canyon toward NW. and S.E.
- 7.75 Top of abrupt ascent on sandstone rim rock. 100 ft. high toward NW. and S.E. asc. gradually.
- 15.00 Top of sand ridge toward N. and S. desc.
- 38.65 Dry ravine 10 lbs wide course N.E. asc.
- 40.02 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. 43 5 on N. half and 38 on S. half.
Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high. No. of cor. Pits impracticable
- 45.50 Top of sand ridge toward N.E. and S.W. desc.
- 51.40 Dry ravine 15 lbs. wide, course N.E. asc.
- 53.00 Top of sand ridge toward N.E. and S.W. desc.
- 56.50 Dry ravine course N.E. asc.
- 58.00 Top of sand ridge toward N. and S. desc.
- 62.60 Dry ravine 15 lbs. wide 20 ft. below top of ridge course N.E. asc.
- 76.25 Top of sand ridge toward N.E. and S.W. desc.
- 80.04 The cor. of secs. 5, 6, 7, and 8, heretofore described.
Land hilly and broken
Soil sandy and stony 3rd and 4th rate.
No timber
-
- N $89^{\circ}58'$ W. on a random line bet. secs. 6 and 7.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 78.98 Intersect the 3rd Guide Meridian East, 3 lbs. N. of the cor. of secs. 1, 6, 7, and 12^{as recently established by me} as described in Standard Book "T"
^{Traverse 1 run,}
S $89^{\circ}59'$ E. on a true line bet. secs. 6 and 7.
- Ascend W. slope over hilly sandy land through scattering sage and greasewood brush undergrowth and bunch grass.
- 16.50 Top of sand ridge toward N. and S. desc.
- 20.85 Dry ravine 15 lbs. wide course NW. asc.
NW. slope over rolling sandy land.
- 38.98 Set an iron post. 3 ft. long 1 in. in diam. 26 ins.

Subdivision of Twp 31 N., R 13 E.

Claims

in the ground for 1/4 sec. cor. marked out brass cap 14 S 6 on N. half and S 7. on S. half.

Dig pits 18x18x12 ins. E. and W. of post. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high. N. of cor.

Note: - At this cor. Dreh. off. 0° 49 1/2' N. on the decl. arc and at noon observe the sun on the meridian and obtain a reading of 36° 06' N. on the lat. arc.

78.98 The cor. of secs. 5, 6, 7, and 8, heretofore described. Land rolling and hilly. Soil sandy Brd rate. No timber

40.00 No 03' W. on a random line bet. secs. 5 and 6. Set temp. 1/4 sec. cor.

79.96 Intersect N. ltry. of Twp. 32 lks. S 89° 59' E of the cor. of sec. 5, 6, 31, and 32, recently established by me as described in Exterior Book "AP", thence I run, S. 0° 17' E, on a true line, bet. secs. 5 and 6, Descend S.W. slope over low rolling sand hills. through scattering sage and greasewood brush. undergrowth and bunch grass.

7.00 A pair from which an Indian Hog was bred wash 120 lks. dist.

30.80 Rocky Canyon 150 lks. wide 60 ft. deep curved S.E.

35.85 North edge of canyon on sand stone rim rock. 150 ft. high bears E and W. desc abruptly over broken stony land.

39.96 Set an iron post. 3 ft. long, 1 in. in diam. 26 in in the ground for 1/4 sec. cor. marked out brass cap 14 S 6 on W. half and S 5 on E. half Dig pits 18x18x12 ins. N. and S. of post. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. W. of cor.

40.65 Dry sand wash 25 lks. wide in bottom of canyon curves wash around S. wall of canyon

50.00 Top of abrupt ascent on South side of canyon bears E. and W. thence ascend gradually over sandy land.

79.96 The cor. of secs. 5, 6, 7, and 8, heretofore described.

BOOK 2619

Land. hilly and broken
Soil sandy and stony 3rd and 4th rate.
No timber

March 23rd 1912

General Description

This township contains three varieties of land, level, rolling and hills, and the soil ranges from clay to sandy loam. The soil of the bottom land in the canyon which cuts through the central part of the township in a northerly direction is a sandy loam capable of producing different kinds of crops, without irrigation in fact several small tracts are being farmed at the present time by the Navajo Indians who live in the township.

The soil of the mesa portions of the township and the ridges which extend down into the main canyon, is either very sandy or stony and can be nearly all be classed as third and fourth rate.

The mesa country is covered with a good growth of bunch grass which affords good pasture for sheep and other kinds of stock. The steep ridges, many of which are of a clay formation, are almost barren except for a scant growth of sage and greasewood bush.

There is no timber in the township, and a small alkali spring in section 27, furnished the only water found in the township.

No mineral of any kind was found in the township, and no stone suitable for building purposes.

From surface indications it is very probable that large quantities of coal underlie this township.

There are three Navajo Indian families living in the township, one in sec. 6, one on the line between sections 10 and 11 and one on the line between sections 35 and 36, besides these several other families were camping in the township.

their permanent homes being elsewhere.

Van L. White

U.S. Forester

Mar. 23 - 1911

4819

~~U.S. TRANSITMAN~~
FINAL OATHS OF ~~DEPUTY SURVEYOR~~ AND HIS ASSISTANTS.

BOOK 2619

LIST OF NAMES.

A list of the names of the individuals employed by Van 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 the Subdivision
lines of Tp 31 N. R 13 E., G. & S. R. B. & M. Arizona.
showing the respective capacities in which they acted:

T. Y. White, Chainman.
Richard L. Shumway, Chainman.
George B. Seig, Moundman.
Herbert Yestewa, Moundman.
Nelson Polacca, Axman.
~~Axman~~
William R Carson, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Van L. White
U.S. Transitman, ~~United States Deputy Surveyor~~, in surveying all
those parts or portions of the Subdivision lines of Tp 31 N.
R 13 E.

of the Gila and
Salt River Bas. & 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 ~~surveyed~~ ^{executed}, and the
corner monuments established, according to the instructions furnished by the ~~United States Surveyor~~

~~General~~ Commissioner of the General Land Office
T. Y. White, Chainman.
Richard L. Shumway, Chainman.
George B. Seig, Moundman.
Herbert Yestewa, Moundman.
Nelson Polacca, Axman.
~~Axman~~
William R Carson, Flagman.

Subscribed and sworn to before me this 16th
day of May, 1911



Van L. White
U.S. Transitman

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BOOK 2619

TRANSITMAN
FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Van L. White U.S. Transitman, ~~United States Deputy Surveyor~~, do solemnly swear that, in pursuance of ~~a contract~~ Special Instruction received from The Commissioner of the General Land Office, bearing date of the 2nd day of Oct. 1907 ~~and~~ 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 ~~United States Surveyor~~ Commissioner of the ~~General Land Office~~, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivision lines of Township No. 31 North of Range No. 13 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 ~~United States Surveyor~~ Commissioner 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 Vegas, N.M.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona, APR 25, 1914

The foregoing field notes of the survey of the Subdivision lines of
Township N^o 31 North, Range N^o 13 East of the
Gila and Salt River Base and Meridian, Arizona.

executed by VAN L. WHITE, U.S. Transitman, under Special Instructions
~~executed by~~ from the Commissioner of the General Land Office
~~under his contract No.~~, dated October 2, 1907 and May 15th, 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 S. Ingalls
United States Surveyor General
SURVEYOR-GENERAL OF ARIZONA

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