

*Let me see the book
see July 22/07*

88
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Book N.

2087

BOOK 2087

FIELD NOTES

OF THE SURVEY OF THE

2087

2087

*Subdivision lines in Township No 32 North,
Range 12 East.*

2087

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

AS SURVEYED BY

Widney E. Blair

*Examiner of Surveys
United States Deputy Surveyor,*

Under his Contract No. Instructions dated Oct 2nd, 1907

Survey commenced December 8th, 1907

Survey completed December 18th, 1907

2087

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89

(1A)

BOOK 2087

NAMES AND DUTIES OF ASSISTANTS.

J. G. Keuh	Compassman
A. L. Warner	Chairman
F. D. Klue	Chairman
Norman Olliver	Moundman
H. L. May	Flagman

BOOK 2087

Book No. 2087

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Township 32 North, Range 12 East.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
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 _____

_____, *Chainman.*

_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 190 }



WE, _____ and _____
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 _____

_____, *Moundman.*

_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 190 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen 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 _____

_____, *Axman.*

_____, *Axman.*

Subscribed and sworn to before me this _____ }
day of _____, 190 }



I, _____, 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 _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 190 }



Chairs

Subdivision of Tps 32 N., R 12 E

Sunny Commenced Dec 8th 1907 and executed with a Young and Sons light mountain transit No 10 with solar attachment, The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

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 observations made on the sun during a.m. and p.m. hours with a true meridian determined by observations on Polaris, I proceed as follows:

At the cor. of Tps. 31 and 32 N. R's 11 and 12 E. Latitude $36^{\circ} 08' N.$, Longitude $111^{\circ} 08' W.$, Set off $36^{\circ} 08' N.$ on the lat. arc. $22^{\circ} 39' S.$ on the decl. arc, and at $2^h 53' p.m.$ l.m. determine a meridian with the solar, and mark a point thereof by a nail driven in a stake set firmly in the ground 5 chs. N. of the cor.

At $7^h 24^m p.m.$ by my watch which is correct local mean time I observe Polaris in accordance with instructions in the Manual and mark a point in the line thus determined by a nail driven in a stake set in the ground 5 chs. N. of the cor.

Astron time of obs. Dec 8th 1907

7^h 24^m

Equivalent to time Dec. 7th

31, 24

Astron. time U.C. Polaris Dec 1st (Table V Part I)

8^h 48.0

Reduction to Dec. 7th Subtract

23.6

Astron time U.C. Polaris Dec. 7

8 244 Subtract 8 211.4

Hour angle Polaris at observation

22^h 59.6

Subtract from

23^h 56.1

Nine argument for Table VII

0^h 56.5

Azimuth of Polaris at Obs.

0^o 22' E.December 8th 1907.

December 9th At 7 a.m. l.m. I lay off the azimuth

Subdivision of Twp. 32 N. R 12 E.

0° 22' to the west and mark the meridian thus determined by a nail driven in the stake set Dec. 8th on which the meridian falls 0.6 ins east of the point determined by the solar.

At 7^h 53^m a.m. L.M.T. I set off 36° 08' on the lat arc. 32° 42' 3" on the decl. arc and determined a meridian with the solar and mark a point thereof by a nail driven in the stake already set 5 chs N. of the Cor., this point falls 0.4 ins east of the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defined positions, for meridians, respectively about 0' 31" west and 0' 21" east of the meridian established by the Polaris observation, therefore I conclude that the adjustments of the instrument are satisfactory.

38.40 From the Twp. Cor already described. I retrace East on the South Body of Twp. Sec. 6 and 31 Fall 3 lks N. of the 1/4 sec. cor., which is a lime stone 15x10x2 ins. mkd and witnessed as described in the original field notes.

Course back to the Twp. Cor. N 89° 58' W.

From the cor. I run

East Sec. 6 and 31

40.03 Fall 12 lks N. of the cor. of Secs. 5, 6, 31 and 32. which is a lime stone 8x6x5 ins. above ground firmly set, mkd, and witnessed as described in the original field notes.

Course of line back to the 1/4 sec. cor. N 89° 50' W. Length of mile 78.43 chs.

East on the South Body of the Twp. Sec. 5 and 32.

39.98 Fall 6 lks N. of the 1/4 sec. cor. which is a lime stone 6x6x4 ins above ground firmly set, mkd and witnessed as described in the original field notes.

Course of line back to the sec. cor. N 89° 55' W.

From the Cor. I run

East Sec. 5 and 32

Subdivision of Twp 32 N. R 12 E.

Chain

40.08 Fall 8 lbs N. of the Cor. of sec 4, 5, 32, and 33.
 which is a lime stone 8 x 5 x 5 ins above
 ground, firmly set, mk'd. and witnessed as
 described in the original field notes
 Course of line back to the $\frac{1}{4}$ sec. cor. N 89° 53' W.
 Length of mile 80.06 chs.

Each on the South side of Twp. bet. sec
 4 and 33

40.04 Fall 8 lbs N. of the $\frac{1}{4}$ sec. cor which is a
 sand stone 6 x 6 x 6 ins above ground firmly
 set, mk'd and witnessed as described
 in the original field notes
 Course of line back to the sec. cor N 89° 53' W
 From the cor. run
 East bet. sec 4 and 33.

40.08 Fall 6 lbs N. of the Cor. of sec, 3, 4, 33 and
 34. which is a lime stone 8 x 6 x 6 ins
 above ground, firmly set, mk'd, and
 witnessed as described in the original
 field notes
 Course of line back to the $\frac{1}{4}$ sec. cor
 N 89° 55' W
 Length of mile 80.12 chs.

Dec 9th 1907

I find from my retracement of the South
 boundary of this township, that
 although the bearings do not agree
 exactly with those in the original field
 notes they are well within the allowable
 limits of 21' arc. and my chaining
 agrees closely with notes of the original
 survey therefore I proceed with the
 subdivision of the township.

Subdivision of T₃₂N. R₁₂E

Chains

F

I commence at the cor of sec. 34. 33 and 34 on the south boundary of the township which is a blue line stone 8 x 6 x 6 ins. above ground firmly set, marked 32 N. on the N.E., 12 E on the S.E. 31 N. on the N.W. faces with 3 notches on E and W. edges
 Pits 18 x 18 x 12 ins in each sec. 5 1/2 ft. dia, with a mound of earth 4 ft base, 2 ft high W. of cor.

Dec. 10th 1907. At the above described cor. I set off 36° 08' N. on the lat arc. 22° 55' S. on the decl arc. and at 8^h 53^m a.m. I used to determine a meridian with the solar, Thence:

I run

N 0° 02' W. Bet. sec. 33 and 34 Descend N.W. Slope over low rolling sand ridges covered with scattering greasewood brush and bunch grass.

- 3.20 Dry sand wash Course S.W. asc.
- 6.25 Top of sand ridge bears N.E. and S.W. desc.
- 15.90 Dry sand wash. Course W. asc ridge.
- 23.00 Top of sand ridge bears E and W. desc. gently.
- 40.00 Set a blue line stone 15 x 8 x 4 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face, dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dia and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
- 80.00 Set a blue line stone 18 x 7 x 5 ins. 14 ins. in the ground, for cor of sec. 27. 28. 33 and 34 marked with 3 notches on E. and 1 notch on S. edges

Subdivision of Twp 32 N. R. 12 E.

Chains

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 lilly.
Soil sandy 3rd rate.
No timber.

N. 0° 02' W. bet. sec. 27 and 28.

Ascend N.E. slope over low rolling sand hills

- 6.00 Top of sand ridge, bears N.E. and S.W. desc.
18.00 Bottom of depression bears N.E. and S.W. asc.
19.80 Top of sand ridge, bears N.E. and S.W. desc. gently.
40.00 Set a blue lime stone 18x8x4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dig pits 18x18x12 ins N. and S. of cor. 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
68.00 Begin steep descent into the valley along the Moencopic Wash.
73.00 Foot of steep descent, leave sand hills, bears N.E. and S.W. enter level bottom lands, bears N.E. and S.W.
77.00 Intersect the left bank of Moencopic Wash bears N.W. and S.E.
77.50 Center of Wash, course N.W. water 40 links wide 10 ins. deep over quicksand bottom.
78.50 Right bank of Moencopic Wash bears N.W. and S.E. thence over level bottom land through scattering greasewood brush about 4 ft. high.
80.00 Set a blue limestone 18x8x4 ins. 14 ins. in the ground for cor. of sec. 21, 22, 27 and 28 marked with 3 notches on E. and 2 notches on S. edges; 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 lilly and level.
Soil, sandy 2nd and 3rd rate.
No timber.

Dec. 10th 1907. At the above cor. I set off

Subdivision of T_{p.} 32 N. R. 12 E.

Chains.

22° 51' S. on the decl. arc, and at 11^h 52½^m A.M. l. m. t. observe the sun on the meridian and obtain on the latitude arc a reading of 36° 09' N. which is a little less than the latitude obtained on former days.

N. 0° 02' W. bet. secs. 21 and 22.

Over level bottom land along the Moencopie Wash., through scattering greasewood brush about 3 ft. high.

16.50 Road, leading to Tuba City, Arizona bears N. E. and S. W.

29.75 Foot of sandstone cliffs 100 ft. high, leave level bottom land bears N. E. and S. W. asc. abruptly over cliffs and ledges.

40.00 The point for the ¼ sec. cor. falls on a rock in place 20 x 20 x 2 ft. above ground which I mark with a cross (x) for true corner point and ¼ W. of cross (x) and raise a mound of stone 2 ft. base 1½ ft. high W. of the cross.

40.40 Top of sandstone bluff 20 ft. above the ¼ sec. cor. bears N. W. and S. E. continue ascent over low sand ridges.

46.30 Top of sand ridge, bears N. E. and S. W. thence over rolling mesa land bears N. E. and S. W.

50.85 Old road leading to Tuba, Arizona, bears N. E. and S. W.

80.00 Set a blue lime stone 12 x 12 x 4 ins. 8 ins. in the ground for the cor. of secs. 15, 16, 21 and 22. marked T 32 N on N. E., R. 12 E on S. E. faces, with 3 notches on E. and S. edges, 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, hilly and level. Soil, sandy and stony, 2nd, 3rd and 4th rate. No timber.

N. 0° 02' W. bet. Secs. 15 and 16.

Over rolling sandy mesa land, covered with scattering greasewood brush, cactus and bunch

Subdivision of Tp. 32 N. R. 12 E.

Chains

- grass.
- 22.75 Leave rolling land, bears N.E. and S.W. asc. steep S. slope of mesa.
- 27.50 Top of ascent on S.E. edge of mesa. bears N.E. and S.W., thence over rolling land.
- 40.00 Set a blue lime stone 17x6x4 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor, marked $\frac{1}{4}$ on W. face. dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
- 51.75 Leave rolling land, bears N.E. and S.W. asc. S.E. slope.
- 53.25 Top of ascent on S. edge of mesa. bears N.E. and S.W. thence over nearly level land.
- 80.00 Set a blue lime stone 20x8x5 ins. 15 ins. in the ground for the cor. of sect. 9, 10, 15 and 16 marked with 3 notches on E. and 4 notches on S. edges, 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, 3rd rate.
No timber.

December 10th 1907

December 13-1907. At 3^h 24^m P.M. L.M. to A set off 36° 12' N. on the lat. arc. 23° 05' S. on the decl. arc. and determine a meridian with the solar at the cor. of sects, 9, 10, 15 and 16, thence A run

N. 0° 02' W. bet. sects. 9 and 10.

Over nearly level mesa land.

bears N.E. and S.W.

- 10.50 W. edge of mesa bears N.E. and S.W. desc. N.W. slope
- 13.80 Foot of steep descent, from mesa, enter low rolling sand hills bearing N.E. and S.W.
- 40.00 Set blue lime stone 13x10x4 ins. 9 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist. and raise mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
- 71.50 Sand ridge bears N.E. and S.W. desc.

73.15 South edge of pond 120 links wide bears E. 10.00 chains and W. 7 chains.

74.35 North edge of pond, asc. over low rolling sand ridges.

80.00 Set blue lime stone 18x10x4 ins. 14 ins. in the ground for the cor. of sec's. 3, 4, 9 and 10 marked with 3 notches on E. and 5 notches on S. edges, 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 and hilly. Soil sandy 3rd rate
No timber

December 16 - 1907 At 1^h 25^m P. M. C. M. T.
I set off. 36° 13' N. on the lat. arc, 23° 17' S. on the decl. arc and determine a meridian with the solar at the cor. of sec's. 3, 4, 9 and 10, thence I run

N 0° 02' W bet. sec's. 3 and 4.

Over low rolling sand hills.

38.00 Road from Red Lake to Tuba, Arizona bears N. E. and S. W.

40.00 Set blue lime stone 14x12x4 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist. raise mound of earth 3 1/2 ft. base 1 1/2 ft. high. W. of cor.

79.31 Intersect Eighth Standard Parallel North 13.32 Chains E. of the standard 1/4 sec. cor. on S. edge sec 33 T. 32 N. R. 12 E. , set a blue lime stone 12x10x4 ins. 8 ins. in the ground for closing corner of sec's. 3 and 4, marked CC on S, 3 grooves on E. and W. faces, dig pits 24x18x12 ins. crosswise on line E. and W. of stone 3 ft. dist. and S. 7 ft. dist. raise a mound of earth 4 ft. base 2 ft. high S. of cor.

Land hilly.

Soil sandy 2nd and 3rd rate.

No timber

Subdivision of Tp. 32 N. R. 12 E.

Chains.

- December 11th 1907. At 7^h. 53^m A.M. C.M.T.
I set off $36^{\circ} 08' N.$ on the lat. arc, $22^{\circ} 53' S.$ on
the decl. arc, and determine a meridian
with the solar at the cor. of secs. 4, 5, 32 and
33 on the south boundary of the township,
thence I run,
 $N 0^{\circ} 03' W.$ bet. secs 32 and 33
 Over low rolling sand hills, covered with
scattering sage and greasewood brush and
bunch grass.
- 40.00 Set a blue lime stone $14 \times 12 \times 4$ ins. 10 ins.
in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on
W. face, and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high. W. of cor. Pits impracticable
- 51.75 Cross Canyon 75 ft. deep with perpendicular
rock walls, course N.W.
- 55.00 Top of cliff bears N.W. and S.E. desc. abruptly
- 76.40 Foot of cliffs, leave hilly stony land along the
Moencopic Wash, bears N.E. and S.W.
- 79.20 Intersect the left bank of Moencopic Wash.
- 80.00 The point for the cor. of secs. 28, 29, 32 and 33
falls in the center of the Moencopic Wash a
turbid stream 50 lks. wide, Course West.
- 81.00 Right bank of Moencopic Wash, bears East W
- 81.50 Set a blue lime stone $16 \times 8 \times 5$ ins. 12 ins.
in the ground for a witness cor. to cor. of secs.
28, 29, 32 and 33, marked W.C. on N.E. face
with 4 notches on E. and 1 notch on S. edges.
dig pits $18 \times 18 \times 12$ ins. N.E., S.E., S.W., and
N.W. of cor. $5\frac{1}{2}$ ft. dist. and raise a mound of
earth 4 ft. base 2 ft. high, W. of cor.
 Land, hilly and level.
 Soil, sandy and stony 2nd, 3rd and 4th rates
 No timber.
- S. $89^{\circ} 53' E.$ on a random line bet.
secs 28th and 33rd, from the true point for cor.
of secs. 28, 29, 32 and 33.
- 40.00 Set temp. $\frac{1}{4}$ sec cor.
- 80.08 Fall 5 lks. S. of the cor. of sect, 27, 28, 33
and 34

Subdivision of Tp. 32 N. R. 12 E.

Chains

Thence I run
N. 89°55' W on a true line bet. secs.
28 and 33

Descend N.W. slope over low rolling sand
hills, covered with sage and greasewood brush,
and scattering bunch grass.

32.00 Dry ravine, course N.W. asc,

40.04 Set a blue lime stone 12x7x5 ins. 8 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face
dig pits 18x18x12 ins. E. and W. of stone 3 ft. dist
and raise mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high
N. of cor.

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

75.00 Left bank of Moencopie Wash, course W,
thence into wash.

80.08 The point for the cor. of secs. 28, 29, 32 and 33
Land, hilly
Soil, sandy 3rd rate.
No timber.

NOTE Clouds obscure the sun at noon on this
day rendering an observation for latitude
impossible.

N. 0° 03' W. bet. secs. 28 and 29.

Over level sandy bottom land along the
Moencopie Wash, through scattering greasewood
brush.

28.00 Road leading to Tuba, Arizona, bears N.E. and S.W.

40.00 Set a blue lime stone 14x12x4 ins. 10 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face
dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist.
and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high.
W. of cor.

57.25 Leave bottom land, bears N.E. and S.W. at foot
of sand stone cliffs, asc, abruptly.

60.50 Top of cliffs 75 ft. high. bears N.E. and S.W. thence
over rolling sandy mesa.

80.00 Set a blue lime stone 22x12x4 ins. 17 ins. in
the ground for cor. of secs. 20, 21, 28 and 29,
marked with 4 notches on E. and 2 notches on S.

Subdivision of Op 32 N. R 12 E.

Chain

edged; dig pits 18x18x12 ins. in each sec 5 1/2 ft. dist.
raise a mound of earth 4 ft. base 2 ft. high W of
Cor.

Land, rolling and hilly

Soil sandy and stony 2nd 3rd and 4th rate

No timber

S 89° 55' E on a random line bet sec 21 and 28.

40.00 Set temp 1/4 Sec. Cor.

80.10 Wall 5 lbs N of the Cor. of sec 21, 22, 27 and 28
Thence Down

N 89° 53' W. on a true line bet sec. 21 and 28

Over level bottom land covered with scattering
greasewood brush about 4 ft. high

3.10 Right Bank Monecopia Wash N.W. and S.E.

5.40 Center of Wash in bend from S.E. to S.W.

8.10 Right bank of same Wash from N.E. and S.W. thence
over level bottom land.

13.00 Right bank of Monecopia wash from N.W. and S.E.

14.50 Center of same wash in bend from S.E. to S.W.

15.75 Right bank of Monecopia Wash from N.E. and S.W.
thence over level bottom land.

30.45 Road to Pinta Arizona, from N.E. and S.W.

40.05 Set a blue line stone 14x10x4 ins. 10 ins. in
the ground for 1/4 Sec Cor marked 1/4 on N. face
dig pits 18x18x12 ins. E and W. of stone 3 ft. dist
and raise a mound of earth 3 1/2 ft. base 1 1/2 ft.
high N. of Cor.

51.00 Leave bottom land from N.E. and S.W. at
foot of sand stone cliffs, are abruptly

54.90 Top of bluff. 75 ft. high from N.E. and S.W. Entire
rolling sandy mesa land.

65.60 Top sand ridge 10 ft. high from N.E. and S.W. desc.

80.10 The Cor. sec 20, 21, 28 and 29.

Land hilly rolling and level.

Soil sandy and stony 2nd, 3rd and 4th rate.

No timber

December 11th 1907

Subdivision of Pk 320N, R12E.

Chains

December 13th 1907. At 7^h 54^m a.m. L. L. Drex. off 36° 10' N. on the lat. arc 23° 08' S. on the decl. arc. and determined a meridian with the solar at the cor. of sec. 20, 21, 28 and 29.

Thence Drun

N 0° 03' W. bet. sec. 20 and 21

Over rolling sandy mead land. covered with scattering greasewood, sagebrush and bunch grass

19.80 Top of sand ridge bet N 6. and S.W. dir.

40.00 Set a blue line stone 18x14x4 ins 12 ins. in the ground. for 1/4 sec. cor. marked 1/4 on W. face dig pits 18x18x12 ins. N and S. of stone 3 ft. dist and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.

52.40 Road leading to Nuba Ariz bet East W.

54.00 Leave rolling land bet N 6. and S.W. at foot of mead ascend S.E. slope

59.80 Top of ascent. on S. edge Mead, bet N 6. and S.W. enter rolling sandy land.

80.00 Set a blue line stone 14x12x4 ins. 10 ins in the ground for cor. of sec 16, 17, 20 and 21 marked with 4 notches on E and. 3 notches on S. edges, 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 and hilly.
Soil sandy 2nd and 3rd rate.
No timber

S 89° 53' E on a Random line bet. sec 16 and 21

40.00 Set. temp. 1/4 sec. cor.

80.08 Fall 5 lbs. N. of the cor. of sec 15, 16, 21 and 22
Thence Drun

N 89° 51' W on a true line bet sec 16 and 21
Over rolling sandy mead land.

40.04 Set a blue line stone 14x8x4 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face, dig pits 18x18x12 ins. East W. of stone 3 ft. dist and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.

Subdivision of Twp. 32 N. R. 12 E.

Chains

- 40.10 Level rolling land bears N.E. and S.W. ascend steeply over S.E. slopes.
- 45.00 Top of ascent on S. edge of mesa 50 ft. above the 4 sec. cor. enter rolling sandy mesa land bears N.E. and S.W.
- 80.08 The cor. of sec. 16, 17, 20 and 21
Land rolling and hilly.
Soil sandy, stony and gravelly 3rd and 4th rate.
No timber

N^o 03' W. bet. sec. 16 and 17

- 30.00 Over rolling sandy mesa land covered with scattering sagebrush greasewood and bunch grass
Foot of high mesa level rolling land bears N.E. and S.W. asc. steeply over S.E. slopes.
- 35.50 Top of ascent on S.E. edge of mesa bears N.E. and S.W. thence over nearly level land.
- 40.00 Set a blue line stone 14x10x4 ins. 10 ins. in the ground for 1/4 sec. cor. marked "4 on W. face dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
- 50.00 N. edge of mesa bears N.E. and S.W. desc. N.W. slope
- 67.00 South edge of pond 8 ins. deep.
- 80.00 The point for cor. of sec. 8, 9, 16 and 17. falls in the pond. where natural causes would doubtless cause its destruction. Therefore at
- 66.00 Set a blue line stone 18x7x4 ins. 12 ins. in the ground for witness cor. to cor. of sec. 8, 9, 16, 17 marked W. on N.E. face, with 4 notches on E and S. edges. dig pits 18x18x12 ins. on E., S.E., S.W. and N.W. of stone 5 1/2 ft. dist and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land rolling.
Soil sandy 2nd and 3rd rate.
No timber.

S 89° 51' E on a random line bet. sec. 9 and 16.

- 40.00 from the true point for cor. of sec. 8, 9, 16 and 17, Set temp. 1/4 sec. cor.

Subdivision of T₁. 32 N. R. 12 E.

Chain

- 80.06 Intersect the cor of. sec 9 10 15 and 16.
Thence Drum
N 89° 51' W on a true line bet. sec. 9 and 16.
Over rolling sandy mesa land covered with
scattering sage and greasewood brush and
 bunch grass.
- 15.00 West edge mesa land toward N.E. and S.W. desc
- 17.25 Foot desc. enter rolling sand hills. toward
N.E. and S.W.
- 35.50 Top of low sand ridge toward N.E. and S.W. desc.
- 40.03 Set a blue line stone 20x10x4 ins 16 ins in
the ground for 1/4 sec. cor. marked 1/4 on N face
dig. pits 18x18x12 ins. E and W. of stone 3 ft. dia
and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft.
high N. of cor.
- 41.00 West edge of pond, water 8 ins deep.
- 80.06 The true point for cor of sec. 8, 9, 16 and 17.
Land rolling and hilly
Soil sandy 3rd rate
No timber -
This pond is formed by melting snow-water
and rains which collect in this basin and
is not a permanent body of water.
December 13th 1907.

December 16th 1907. At 8th 55^m a.m. by L. D.
Set off. 36° 12' N. on the lat. arc. 23° 16' S. on the
decl. arc and determine a true meridian with
the solar at the true point for cor of sec. 8, 9, 16
and 17. which falls in pond. Thence Drum
N 0° 03' W. bet. sec. 8 and 9.

- Through pond 6 ins deep. over level sandy bottom
- 23.00 North edge of pond, thence over level alkali
flat.
- 39.00 Leave alkali flat toward E and W enter low
rolling sand hills
- 40.00 Set a line stone 18x7x4 ins, 12 ins. in the
ground for 1/4 sec. cor. marked 1/4 on W face
dig. pits 18x18x12 ins N and S. stone 3 ft. dia
and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high
W. of cor.
- 56.75 Road from Red Lake to Nuba Ariz toward N.E. and S.W.

Subdivision of Twp. 32 N. R. 12 E.

Chains

80.00 Set a lime stone 12x12x4 ins. 8 ins in the ground for cor. of secs 4, 5, 8 and 9., 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 level and rolling
Soil sandy and gravelly 2nd and 4th rate.
No timber.

40.00 S 89° 51' E on a standard line bet. secs 4 and 9.
Set temp 1/4 sec. cor.

80.12 Fall 8 lbs. S. of the cor. of secs. 3, 4, 9 and 10.
Thence I run

N 89° 54' W. on a true line bet. secs 4 and 9.
Over low rolling sand hills.

1.4.25 Low sand ridge bears, N. E. and S. W. desc.

25.00 Foot of descent, enter level land, bears N. E. and S. W.

40.06 Set a lime stone 12x10x4 ins. 8 ins. in the ground, for 1/4 sec. cor, marked 1/4 on N. face, dig pits 18x18x12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1/2 ft. high N. of cor.

54.25 Road from Red Lake to Tuba, Arizona, bears N. E. and S. W.

80.12 The cor. of secs. 4, 5, 8 and 9.

Land, rolling and level.

Soil, sandy, 2nd and 3rd rate.

No timber.

N. 0° 03' W. bet. secs. 4 and 5.

Over low rolling sand hills covered with scattering sage and greasewood brush and bunch grass.

20.00 A point about 2 chains E. of Indian Hogans,

40.00 Set a blue lime stone 12x10x4 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1/2 ft. high. W. of cor.

79.52 Intersect Eighth Standard Parallel North, 13.15 Chains E. of Standard 1/4 sec. cor on the S. bdy. of Sec. 32 Twp. 32 N. R. 12 E.

Chains

Set blue line stone 14x10x4 ins. 10 ins. in the ground for C.C. of secs. 4 and 5, marked C C on S., 4 grooves on E., 2 grooves W faces, dig pits 24x18x12 ins. crosswise on line E. and W. of stone 3 ft. dist. S. 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high. S. of cor.

December 16th 1907.

December 12th 1907 At 7^h 53^m A.M. C.M.T.
I set off 36° 08' N. on the lat. arc, 22° 58' S. on the decl. arc, and determine a meridian with the solar at cor. of secs. 5, 6, 31 and 32 on the S. boundary of the township, thence I run,

N. 0° 04' W. bet. secs. 31 and 32.

Descend N.W. slope over low rolling sand ridges and barren rock ledges.

- 4.00 Bend in dry wash, course changes from N.W. to N.E. asc.
- 15.75 Top of sand ridges bears N.E. and S.W. desc.
- 20.50 Same wash, course N.W. asc.
- 20.72 Foot of abrupt ascent, ab. foot of cliffs bears N.E. and S.W.
- 22.25 Top of sand stone cliffs, bears E. and W. 75 ft. high, desc. abruptly.
- 24.70 Foot of abrupt desc, desc. gently.
- 25.25 Same wash, course N.E. asc.
- 33.00 Top of sand ridge, bears, N.E. and S.W. desc.
- 40.00 Set a blue line stone 18x9x5 ins. 14 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, dig pits 18x18x12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
- 42.00 Enter flat, bears N.E. and S.W., thence over level sandy land covered with greasewood brush 4 ft. high.
- 56.50 Center of Moencopie Wash, 2 chains wide, 25 ft. deep, water 25 lks. wide, 5 ins. deep, course S.W. asc.
- 60.30 Foot of sandstone bluffs bears N.E. and S.W. and abruptly
- 65.00 Top of ascent, S. edge of mesa bears N.E. and S.W. enter rolling sandy land
- 66.00 Road leading to Tuba, Arizona, bears S.E. and N.W.

80.00 Set blue lime stone 17x7x4 ins. 13 ins. in the ground for the cor. of secs. 29, 30, 31 and 32 marked with 5 notches on E. and 1 notch on S. edges, 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 and hilly Soil sandy and stony 3rd and 4th rate of November

S. 89° 51' E. on a random line bet. secs. 29 and 32

40.00 Set set temp. 1/4 sec cor.

80.10 Fall 3 lks. S. of cor. of secs. 28, 29, 32 and 33 Thence I run

N. 89° 52' W. on a true line bet. secs. 29 and 32. Over level bottom land, along Moencopie Wash, through greasewood brush, 4 ft. high.

14.10 Ravine, course S.W.

21.75 Road to Luba, Arizona, bears N.E. and S.W.

30.00 Leave level bottom land, N.E. and S.W. asc,

36.60 Foot of sand stone bluffs, bear N.E + S.W. asc abruptly

40.05 Set a lime stone 12x10x4 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor.

60.00 Top of ascent, E. edge of Mesa, bears N.E. and S.W. thence over rolling mesa land.

80.10 The cor. of secs. 29, 30, 31 and 32.

Land rolling and hilly. Soil sandy and stony 3rd and 4th rate of November

N. 89° 55' W. on a random line bet. secs. 30 and 31.

40.00 Set temp. 1/4 sec cor

78.15 Fall 44 lks. N. of cor of secs. 25, 30, 31 and 36 on W. bdy of the township, thence I run.

N. 89° 46' E. on a true line bet. secs. 30 and 31. Over low rolling sand hills, asc. gently;

38.15 Set a blue lime stone 15x7x4 ins. 10 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face, dig pits 18x18x12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. N. of cor.

78.15 The cor. of secs. 29, 30, 31 and 32. Land rolling Soil sandy 3rd rate of November

Subdivision of Twp. 32 N. R. 12 E.

Chains

December 12th 1907, At the above cor. I get off. 22° 01' S. on the decl. arc. and at 11^h 53^m 1/2^{sec} A.M. l. m. t. I observe the sun on the meridian, and obtain on the latitude arc a reading of 36° 09' N.

N. 0° 0' W. bet. secs. 29 and 30

Over low rolling sand hills, asc. gently.

40.00 Set a blue lime stone 14x10x4, 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dig pits 18x18x12 ins. N. and S. of stone, 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 a blue lime stone 12x9x4 ins, 8 ins. in the ground for the cor. of secs. 19, 20, 29 and 30 marked with 5 notches on E. and 2 notches on S. edges, 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 and level.

Soil, sandy, 3rd and 4th rate.

No timber.

S. 89° 52' E. on a random line bet. secs. 20 and 29.

40.00 Set temp. 1/4 sec cor.

80.22 Fall 10 lks. N. of cor. of secs. 20, 21, 28 and 29.

Thence I run.

N. 89° 48' W. on a true line, bet. secs. 20 and 29.

Over low rolling hills, covered with scattering sage and greasewood brush, and bunch grass.

10.40 Road to Tuba, Arizona, bears N.E. and S.W.

40.11 Set a blue lime stone 16x12x4 ins, 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face dig pits 18x18x12 ins. E. and W. of stone, 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high, N. of cor.

80.22 The cor. of secs. 19, 20, 29 and 30.

Land, rolling

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

No timber.

December 12-1907

Subdivision of Tp. 32 N. R. 12 E

Chains

	December 14 th 1907, At. 7 ^h 54 ^m A.M.C. m.t. ✓ I set off 36° 10' N. on the latitude arc, 23° 06' S. on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 19, 20, 29 and 30, thence I run, S 89° 46' W. on a random line bet. secs. 19 and 30.
40.00	Set temp. 1/4 sec cor.
77.71	Fall 4 W. S. of cor of secs. 19, 24, 25 and 30 on W. bdy. of township, Thence I run, N. 89° 48' E. on a true line bet. secs. 19 and 30.
2.70	Descend abruptly over S.E. slope
37.71	Foot of abrupt descent, thence over level mesa land. Set a blue lime stone 12x12x4 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face dig pits 18x18x12 ins. E and W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.
69.40	Leave mesa, bear N.E. and S.W. desc. abruptly.
77.71	The cor. of secs. 19, 20, 29 and 30. Land rolling and level. Soil, sandy and stony, 3 rd and 4 th rate. No timber.
	N. 0° 04' W. bet. secs. 19 and 20
4.40	Ascend S.E. slope sand ridge over hilly land.
40.00	Top of asc, Sledge mesa bears N.E. and S.W. Set a blue lime stone 14x10x4 ins. 10 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face, dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist. and raise mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
45.20	Road to Tuba, Arizona, bears E. and W.
50.00	Begin steep asc, S. slope mesa
76.00	Top of mesa, S. edge of mesa, bears N.E. and S.W.
80.00	Set a blue lime stone 15x10x4 ins. 10 ins. in the ground for cor. of secs. 17, 18, 19 and 20 marked with 5 notches on E. and 3 notches on S. edges, dig pits 18x18x12 ins. in each sec. 5 1/2 ft. dist. raise a mound of earth 4 ft. base 2 ft. high W. of cor.

Subdivision of Tp. 32 N. R. 12 E.

Chains.

Land rolling and level.
Soil, sandy and stony 3rd and 4th rate.
No timber.

S. 89° 48' E. on a random line bet. secs. 17 and 20
 40.00 Set temp. 1/4 sec cor.
 80.21 Fall 3 link S. of the cor. of secs. 16, 17, 20 and 21
 Thence I run
 N. 89° 49' W. on a true line bet. secs. 17 and 20.
 Over low rolling sand hills, asc. gently.
 40.11 1/2 Set a blue line stone 20x14x4 ins. 15 ins. in
 the ground for 1/4 sec. cor. marked 1/4 on N. face
 dig pits 18x18x12 ins. E. and W. of stone, 3 ft.
 dist. and raise a mound of earth 3 1/2 ft.
 base 1 1/2 ft. high. N. of cor.
 70.00 Top of asc. E. edge of mesa, bears N.E. and S.W.
 80.21 The cor. of secs. 17, 18, 19 and 20.
 Land rolling
 Soil, sandy and stony 3rd and 4th rate.
 No timber.

December 14 - 1907, At the above described
cor. at 11^h 54^m. A.M. C.M.T. I set off 23° 10'
S. on the decl. arc, and observe the sun on
the meridian, and obtain on the latitude
arc. a reading of 36° 11' N.

S. 89° 48' W. on a random line bet. secs. 18 and 19.
 40.00 Set temp. 1/4 sec cor.
 77.64 Fall 12 links N. of cor. of secs. 13, 18, 19 and 24 on
 W. bdy. of township.
 Thence I run,
 N. 89° 43' E. on a true line bet. secs. 18 and 19.
 Over low rolling sand hills, covered with scattering
 sage and greasewood brush and bunch grass
 asc. gently.
 26.65 Road to Tuba, Arizona, bears N.E. and S.W.
 37.64 Set a blue line stone 14x8x4 ins. 9 ins. in the
 ground for 1/4 sec. cor. marked 1/4 on N. face.

Subdivision of T₁P. 32 N. R. 12 E.

111

Chains

- dig pits 18X18X12 ins. E. and W. of stone, 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft high. N. of cor.
- 77.64 The cor. of secs. 17, 18, 19 and 20.
Land rolling
Soil, sandy, 3rd and 4th rate
No timber.
- ³
N 0° 04' W. bet. secs. 17 and 18.
Over rolling sandy mesa land, covered with scattering sage and greasewood brush, and bunch grass.
- 8.75 Leave mesa, bears N.E. and S.W. desc. abruptly,
18.00 Foot of abrupt desc. desc. gently.
28.10 Road to Tuba, Arizona, bears N.E. and S.W.
40.00 Set a blue lime stone 12X9X4 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face dig pits 18X18X12 ins. N. and S of stone 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 a blue lime stone 14X9X5 ins. 10 ins. in the ground, for the cor. of secs. 7, 8, 17 and 18 marked with 5 notches on the E. and 4 notches on S edges, 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 and stony 3rd and 4th rate.
No timber.
- December 14 - 1907.
- December 17th 1907 At. 7 h. 56^m A.M. C. m. t.
I set off 36° 12' N. on the lat. arc, 23° 16' S. on the decl. arc. and determine a true meridian with the solar at cor. of secs. 7, 8, 17 and 18.
Thence I run
S 89° 49' E. on a random line bet. secs. 8 and 17,
40.00 Set a temp. 1/4 sec cor.
80.16 Fall 3 lks. N of true point, for cor. of secs. 8, 9 16 and 17, which fall in pond.
Thence I run,

Chains

N 89° 48' W. on a true line bet. secs 8 and 17.
 24.00 W. edge of pond, bears N and S, asc. gradually.
 40.08 Set a blue lime stone 16 x 8 x 4 ins. 12 ins. in
 the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N.
 face, dig pits 18 x 18 x 12 ins. E. and W. of stone
 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft.
 base $\frac{1}{2}$ ft. high N. of cor.
 80.16 The cor. of secs 7, 8, 17 and 18.
 Land rolling
 Soil, sandy 3rd and 4th rate.
 No timber.

S. 89° 43' W. on a random line bet. secs. 7 and 18.
 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 77.34 Fall 18 links S. of cor. of secs. 7, 12, 13 and 18, on
 W. bdy. of township, thence I run,
 N. 89° 51' E. on a true line bet. secs. 7. and 18.
 Over low rolling sand hills, desc. gently.
 20.35 Depression, bears N.E. and S.W. asc.
 33.35 Top of sand ridge, bears N.E. and S.W. desc.
 37.34 Set a blue lime stone 13 x 8 x 5 ins. 9 ins. in
 the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face
 dig pits 18 x 18 x 12 ins. E. and W. of stone 3 ft.
 dist. and raise a mound of earth 3 $\frac{1}{2}$ ft.
 base $\frac{1}{2}$ ft. high N. of cor.
 75.95 Road from Red Lake to Tuba, Arizona, bears
 N.E. and S.W.
 77.34 The cor. of secs, 7, 8, 17 and 18
 Land, rolling
 Soil, sandy and stony 3rd and 4th rate.
 No timber.

³
 N. 0° 04' W. bet. secs. 7 and 8.
 Over low rolling sand hills
 1.60 Road from Red Lake to Tuba, Arizona, bears
 N.E. and S.W.
 40.00 Set a blue lime stone 15 x 8 x 4 ins. 10 ins. in
 the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face.
 dig pits ^{18 x 18 x 12 ins} N. and S. of stone 3 ft. dist. and raise
 a mound of earth 3 $\frac{1}{2}$ ft. base $\frac{1}{2}$ ft. high W. of cor.

Chains.

80.00 Set a blue lime stone 16x8x4 ins. 12 ins. in the ground for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on E. and 5 notches on S edges, dig pits 18x18x12 ins. in each section 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.

December 17-1907. At above described cor. at 11^{h.} 56^m A.M. C.M.T. I set off 23° 20' 19" S. on the decl. arc. observe the sun on the meridian and obtain on the latitude arc, a reading of 36° 13' N.

S 89° 48' E. on a random line bet. secs. 5 and 8.
 40.00 Set temp. 1/4 sec cor.
 80.12 Fall 5 lks. S. of cor. of secs. 4, 5, 8 and 9. Thence I run,
 N. 89° 50' W. on a true line bet. secs. 5 and 8.
 Over low rolling sand ridges, asc, gently
 15.00 Top of ridge, bears N. and S. desc.
 19.00 Begin rapid desc. over N.W. slope.
 40.06 Set a blue lime stone 14x8x4 ins. 10 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face dig pits 18x18x12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high. N. of cor.
 80.12 The cor. of secs. 5, 6, 7 and 8.
 Land rolling
 Soil sandy 3rd and 4th rate.
 No timber.

December 17-1907.

December 18-1907. At 7^{h.} 56^m A.M. C.M.T. I set off 36° 13' N. on the lat. arc. 23° 19' 8" S. on the decl. arc. and determine a true meridian with the solar at cor. of secs. 5, 6, 7 and 8
 Thence I run

Chains.

S. 89° 51' W. on a random line bet. secs. 6 and 7.
 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 76.80 Fall 13 lks. N. of cor. of secs. 1, 6, 7 and 12 on W. bdy. of township. Thence S run.
 N. 89° 45' E. on a true line bet. secs. 6 and 7.
 Over low rolling sand ridges, asc. gently.
 5.55 Top of sand ridge bears N.E. and S.W. desc.
 36.80 Set a blue lime stone 13x8x5 ins. 9 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face dig pits E. and W. of stone 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high N of cor.
 76.80 The cor. of secs. 5, 6, 7 and 8.
 Land, rolling
 Soil, sandy 3rd and 4th rate.
 No timber.

3

N 0° 04' W. bet. secs. 5 and 6.
 40.00 Set a blue lime stone 15x8x4 ins. 10 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 2 ft. high N. of cor.
 79.62 Intersect Eighth Standard Parallel North, 1321 chains E. of standard $\frac{1}{4}$ sec. cor. on the S bdy. Sec 31 T₄N. R₁₂E Set a blue lime stone 15x8x4 ins. 10 ins. in the ground, for closing corner of secs. 5 and 6, marked CC on S. face, 5 grooves on E. and 1 groove on W. faces, dig pits 24x18x12 ins. crosswise on line E. and W. of stone 3 ft. N. and S. of stone 3 ft. dist. raise a mound of earth 4 ft. base 2 ft. high. S. of cor.
 Land rolling and hills
 Soil sandy 3rd rate.
 No timber

Dec 18 1907

Retracement of West Bdry of Twp. 32 N. R. 12 E.
Chaussi

Dec 12th 1907. At ^{117.54^m Am.} 12^h 54' from C.M.C.D
set off 36° 09' N on the lat. arc. 23° 02' S.
on the decl arc and determine a meridian
with the solar on the cor of sec 25, 30, 31
and 36. on the W. bdy of the Twp. Three
Drum

South on W Bdry of Twp. Bet. sec.
31 and 36.

39.66 Wall 7 lks E. of the 14 sec. cor which is a
lime stone 8 x 6 x 4 ins. above ground
firmly set. mkd and witnessed as
described in the original field notes.
Course of line back to the sec. cor
N 0° 06' E.

From the 14 sec. cor Drum
South Bet. sec 31 and 36.

39.96 Wall 7 lks E. of the Cor. of Twp. 31 and
32 N. R. 11 and 12 E. previously described
Course of line back to the 14 sec. cor
N 0° 06' E.

Length of mile 79.62 Chd.

Dec. 12th 1907

General Description

The land contained in this township
is nearly all high sandy mees as
the soil ranging from 2nd rate
along the Wash. to 4th
rate on the hills in the southern
part of the township

The soil of the bottom land along
the Wash is nearly all washed land.
and will produce crops of nearly
all kinds with irrigation

The poor character of the soil over the
greater portion of this township, together
with the great lack of rainfall over
this section of the country renders
the land valuable for agricultural
purpose. The scanty growth of
brush of different kinds together
with scattering bunches of grass

furnished, feed for sheep and goats during the winter season when there is snow to enable the Navajo Indians to take their sheep onto the range. There is no timber or mineral within the township, and no permanent settlements.

Dec. 12-1907

Solney E. Blush
Examined & Surveyed

For authority of red ink corrections
see letter of Nov. 16-1908.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Sidney E. Blunt

Examiner of Surveys, 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 Township No 32 N, Range 12 E
showing the respective capacities in which they acted:

- J. G. Kent Compassman
- M. L. Warner , Chainman.
- F. D. Klies , Chainman.
- Norman Allison , Moundman.
- , Moundman.
- , Axman.
- , Axman.
- H. L. May , Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Sidney E. Blunt

Examiner of Surveys, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivision lines of Township No 32 North, Range No 12 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 him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

- General for Commissioner G. O.
- J. G. Kent Compassman
 - M. L. Warner , Chainman
 - F. D. Klies , Chainman.
 - Norman Allison , Moundman.
 - , Moundman.
 - , Axman.
 - , Axman.
 - H. L. May , Flagman.

Subscribed and sworn to before me this }
day of , 190



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Sidney E. Blount, ^{Examiner of Surveys} United States Deputy Surveyor, do solemnly swear that in pursuance of a contract received from The Commissioners of the General Land Office, bearing date of the 2nd day of Oct, 1907, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ^{Commissioner of the} United States Surveyor General for General Land Office, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The Subdivisional and Exterior lines of T 32 N. R 12 E.

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 General for 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.

Sidney E. Blount
^{United States Deputy Surveyor.}
Examiner of Surveys

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. November 27th, 1908

The foregoing field notes of the survey of the subdivisional and exterior lines of T 32 N. R 12 E. of the Gila and Salt River Base and meridian in the Territory of Arizona

executed by Sidney E. Blount ^{U.S. Examiner of surveys} under his contract No. 726, dated October 2nd, 1907, 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.