

BOOK 1861

1861

Book "C". FIELD NOTES

OF THE SURVEY OF THE

① EAST, WEST & SOUTH BOUNDARIES OF T. 32 N. R. 11 E. ✓

WEST BOUNDARY OF T. 31 N., R. 11 E.

✓ NORTH & WEST BOUNDARIES OF T. 31 N., R. 12 E.

✓ SOUTH & WEST BOUNDARIES OF T. 32 N., R. 10 E.

✓ NORTH, EAST & WEST BOUNDARIES OF T. 33 N., R. 10 E.

1861

1861

Of the GILA & SALT RIVER BASE & Meridian,

AS SURVEYED BY

Philip Contzen, United States Deputy Surveyor,

① Under his Contract No. 124, dated Dec. 12, ¹⁹⁰⁴~~1905~~, 189

Survey commenced April 20th, 1905., 189

Survey completed May 5th, 1905., 189

W. S. Kengla,

chairman

Fred Taylor,

chairman

Arthur Poque,

mound man

Mmanuel Salazar,

axeman

G. A. Hawley,

flagman

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TOWNSHIP EXTERIOR SURVEYED UNDER CONT. 124.

Philip Contzen, U. S. D. S.

23
10

WE, W. S. Stengla and Fred Tagles
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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 E. W. and S. boundaries T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E
N. & W. boundaries of T. 31 N. R. 12 E - S. and W. boundaries of T. 32 N. R. 10 E - N. - E & W. boundaries T. 33 N. R. 10 E.
W. Stengla, Chainman.
Fred Tagles, Chainman.

Subscribed and sworn to before me this 20th
day of March, 1895

N. G. Power



I, Arthur Pague 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 E - W - S. boundaries T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E
N. & W. boundaries of T. 31 N. R. 12 E - S. and W. boundaries of T. 32 N. R. 10 E - N. - E & W boundaries T. 33 N. R. 10 E
Arthur Pague, Moundman.

Subscribed and sworn to before me this 20th
day of March, 1895

Arthur Pague, Moundman.

N. G. Power



I, Manuel Salazar 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 the E - W & S boundaries T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E
N. & W. boundaries of T. 31 N. R. 12 E - S. and W. boundaries of T. 32 N. R. 10 E - N. - E & W. boundaries T. 33 N. R. 10 E
Manuel Salazar, Axman.

Subscribed and sworn to before me this 20th
day of March, 1895

Manuel Salazar, Axman.

N. G. Power



I, G. A. Hawley, 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 E - W & S. boundaries T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E
T. 31 N. R. 12 E - N. & W. boundaries of T. 31 N. R. 12 E - S. and W. boundaries of T. 32 N. R. 10 E - N. - E & W. boundaries T. 33 N. R. 10 E
G. A. Hawley, Flagman.

Subscribed and sworn to before me this 20th
day of March, 1895

N. G. Power



(1)

WEST boundary of Tp. 32 N., R. 11 E.

Chs.

Survey commenced April 20th, 1905 and executed with a Young & Son's Light Mt. Transit, No. 5607, with Solar attachment. The hor'l. limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is the least count of the verniers of the lat. and decl. arcs.

The instrument was tested on the meridian at Phoenix, Ariz. and duly approved by the Surveyor-Gen'l.

I examine the adjustments of the transit and find them correct; then to test the solar apparatus by comparing its indications, resulting from solar observations made during a. m., and p. m. hours with a mer. determined by obs. on Polaris, I proceed, as follows-

April 20th, 1905- At the Stand. Cor. of Tps. 33 N., Rs. 10 and 11 E, as heretofore described, I set off on the lat. arc $36^{\circ} 13' N.$, and $11^{\circ} 33' N.$, on the decl. arc, and at 3 hours, 31 mins. p. m., l. m. t., by my watch which has correct time, determine with the solar a mer. and mark a point thereof on a stone set firmly in the ground, 5 chs. N. of my station.

April 20, 1905.

April 21st, 1905, At 5 hs. $24 \frac{1}{2}'$ a. m., l. m. t., I observe Polaris at E. elongation, in accordance with the manual of surveying instructions, and mark a point on the line thus determined, on a plug drive in the ground, 5 chs. N. of my station.

At 6hs. 20 mins. a. m. I lay off the azimuth of Polaris $1^{\circ} 29'$ to the W. and mark the meridian thus determined, by cutting a small groove in the stone set yesterday, on which the meridian falls 0.18 ins. east of the meridian determined with the Solar.

At 7 hs. 31 mins. a. m., l. m. t., I set off $36^{\circ} 13' N.$, on the lat. arc; $11^{\circ} 47' N.$, on the decl. arc and determine a meridian with the Solar, by a cross on the stone already set, 5. chs. N. of my station; this mark falls 0.3 ins., east of the mer. established by the Polaris observation.

The mean mag. dec. of the meridian is $14^{\circ} 41' E.$ From the above results I conclude that the adjustments of the instrument are satisfactory.

From the Stand. Cor. to Tps. 33 N., Rs. 10 and 11 E., I run WEST on the Standard and at 21.08 chs.

Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for closing cor to Tps. 32 N., Rs. 10 and 11 E., mkd. C C T 32 N. on the S. 10 E. on the W. and 11 E. on the E. faces, dig pits, 30 x 24 x 18 ins., crosswise on each line, E and W 4 ft. and S of stone, 7 ft. dist. and raise a mound of earth, 5 ft. base, $2 \frac{1}{2}$ ft. high, S. of the cor.

From which cor. I run, South bet. secs. 1 and 6. Over rolling ridges of sand and sandstone ledges.

40.00

Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. mkd. $\frac{1}{4}$ on the 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, 1 $\frac{1}{2}$ ft. high, W. of the corner.

80.00

Set a limestone, 20 x 8 x $4 \frac{1}{2}$ ins., 15 ins., in the ground for the cor. to secs. 1, 6, 7 and 12, mkd. with 1 notch on the N. and 5 notches on the S. edges; 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 the cor.

Land rolling.

Soil sandy and rocky; 4th rate.

No timber.

Chs.	South bet. secs. 7 and 12. Over rolling sandstone blocks and ledges.
24.00	Leave sandstone; thence over rough sand ledges.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. mkd. 1/4 on the W. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable.
80.00	Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for the cor. to secs. 7, 12, 13 and 18, mkd. with 2 notches on the N. and 4 notches on the S. edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the cor. Pits impracticable. Land rolling. Soil sandy and rocky; 4th rate. No timber.
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	South bet. secs. 13 and 18. Over rolling land.
40.00	Set a limestone, 18x 6 x 5 1/2 ins., 12 ins., in the ground for 1/4 sec. cor. mkd. 1/4 on the W. face; and raise a mound of stones 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable.
65.00	Enter sage brush, bears easterly and westerly.
70.00	Road brs. northwesterly and southeasterly.
80.00	Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for the cor. to secs. 13, 18, 19 and 24, mkd. with 3 notches on the N. and S. edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable. Land rolling. Soil sandy and rocky; 4th rate. No timber; undergrowth sage brush. Dense undergrowth; 15.00 chs. At 12:29 noon I set off 11° 50' N, on yhr dec'l. arc/ and observe the sun on the meridian resulting lat is 36°10' N.,
<hr/>	
	South bet. secs. 19 and 24. Over rolling land. Through sage brush.
12.00	Leave sage brush, brs. northeasterly and southwesterly.
29.28	Road brs. N. E. and S. W.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. mkd. 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the cor.
80.00	Set a limestone, 18 x 8 x 4 1/2 ins., 12 ins., in the ground for the cor. to secs. 19, 24, 25 and 30, mkd. with 4 notches on the N. and 2 notches on the S. edges; 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 the cor. Land rolling. Soil sandy and rocky; 4th rate. No timber; undergrowth sage brush. Dense undergrowth; 12.00 chs.
<hr/>	
	South bet. secs. 25 and 30. Over rolling land. Through sage brush.
40.00	Set a limestone, 20 x 6 x 4 ins., 15 ins., in the ground for 1/4 sec. cor. mkd. 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.

(3)

The West Boundary of Tp. 32 N., R. 11 E. Continued.

Chs. 78.90 80.00	Trail, bears N. easterly and S. westerly. Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to sections 25, 30, 35 and 36, marked with 5 notches on the N. and 1 notch on the S. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist. and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of the corner. Land rolling. Soil sandy and rocky; 4th rate. No timber. Undergrowth; sage and canotillo brush. Dense undergrowth; 80.00 chs.
30.00	South bet. secs. 31 and 36. Over rolling land. Descending through dense sage brush. Begin steep descent of the N. bank of the Moencopie Canon.
40.00	Set a limestone, 18 x 8 x 5 ins., 12 ins., in the ground for the 1/4 sec. cor., marked 1/4 S., on the W. face; dig pits, 18 x 18 x 12 ins., N. and S. 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of the corner.
41.50	Branch, 6 lks. wide, course S. W. and ascend.
46.00	Top.
47.50	Leave dense sage brush, bears easterly and westerly and descend.
48.00	Foot, and enter Moencopie Valley; bears easterly and westerly.
50.67	Wire fence bears easterly and westerly.
60.85	Irrigating ditch, 8 lks. wide, course W. south-westerly.
64.60	Irrigating ditch, 8 lks. wide, course W. S. W.
66.95	Wire fence, bears N. by E., and W. S. W.
67.53	Road to Tuba City bears E. N. E. and W. S. W.
67.90	Wire fence, bears W. S. W. and E. N. E.
68.00	Brinkerhoff's house bears 3 c. s. E.
69.70	Enter fruit orchard.
75.30	Wire fence, bears north-easterly and south-westerly and leave orchard.
78.27	Wire fence bears N. W. and S. E.; and enter alfalfa field.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to townships 31 and 32 N., Rs. 10 and 11 E., marked T 32 N on the N E., R 11 E on S E T 31 N on S W and R 10 E on N. W faces; with 6 notches on each edge; dig pits, 24 x 24 x 12 ins., on each line, N. E. and W. 4 ft. and S. of stone, 8 ft. dist. and raise a mound of earth, 5 ft. base, 2 1/2 ft. high, S. of the corner. Land level, rolling and mountainous. Soil sandy loam; gravelly and rocky; 2nd and 4th rate. No timber; undergrowth, sage brush. Mountainous or land covered with dense undergrowth, 48.00 chs.

April 21st, 1905.

The East Boundary of Tp. 32 N., R. 11 E.

On April 22nd, 1905.-

I proceed to the Standard Cor. to Tps. 33 N., Rs. 11 and 12 E., as heretofore established and described, where at 8 hours, 3 minutes, a. m., l. m. t., I set off 36° 13' N., on the lat. arc, and 12° 08' N., on the decl arc, and determine a meridian with the Solar, Thence I run,

(4)

The East boundary of T. 32 N., R. 11 E.

Chs.	<p>WEST on the Eighth Standard Parallel North, for a distance of 23.19 chs., to a point where I establish the closing corner to Tp. 32 N., Rs. 11 and 12 E., as follows-</p>
	<p>Set a limestone, 20 x 10 x 15 ins., 15 ins., in the ground for closing cor., marked C C T 32 N on the S R 12 E on the E</p>
	<p>and R 11 E on the W. faces; with 6 grooves on the S. E. and W., faces; dig pits, 30 x 24 x 12 ins., N. and W. 4 ft. and S. of stone 8 ft. dist., and raise a mound of earth 5 ft. base, 2 1/2 ft. high, S. of the corner.</p>
	<p>Thence I run, South bet. secs. 1 and 6. Over sandstone ridges.</p>
40.00	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W., face; dig pits, 18 x 18 x 12 ins., N. and S. 3 ft. dist., and raise a mound of stones, 3 1/2 ft. base, 1 1/2 ft. high, W. of the corner.</p>
48.00	<p>Begin steep ascent N. slope of high ridge.</p>
52.00	<p>Top, bears easterly and westerly.</p>
54.00	<p>Descend abruptly, 200 ft.</p>
80.00	<p>Set a ^{LIME} limestone, 20 x 6 x 6 ins., 15 ins., in the ground, for the corner to sections 1, 6, 7 and 12, marked with 1 notch on the N., and 5 notches on the S. edges; dig pits, 18 x 18 x 12 ins., in each section 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.</p>
	<p>Land mountainous. Soil, rocky and sandy; 4th rate. No timber. <i>and dense brush, 80. 80 chs.</i> Mountainous land 80.00 chs.</p>
	<p>----- South bet. secs. 7 and 12. Over sandstone ledges and ridges.</p>
26.00	<p>Leave sandstone and enter dense sage and rolling sand.</p>
40.00	<p>Set a limestone, 18 x 7 x 4 1/2 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; dig pits, 18 x 18 x 12 ins., and 5.3 ft. dist. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of the corner.</p>
80.00	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to sections, 7, 12, 13 and 18, marked with 2 notches on the N., and 4 notches on the S. edges; dig pits, 18 x 18 x 12 ins., in each sec. 5 1/2 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 2 ft. high, W. of the corner.</p>
	<p>Land rolling and mountainous. Soil, sandy and rocky; 3rd and 4th rate. No timber. Mountainous land 80.00 chs.</p>
	<p>----- South bet. secs. 13 and 18. Over rolling sand.</p>
40.00	<p>Through sage and canotillo brush. Set a limestone, 24 x 12 x 10 ins., 18 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; dig pits, 18 x 18 x 12 ins., N. and S. 3 ft. dist. and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of the cor.</p>
80.00	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to sections, 13, 18, 19 and 24, marked with 3 grooves on the N. and S. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.</p>

(5)

The EAST boundary of Tp. 32 N., R. 11 E.

(Continued).

chs.	Land rolling. Soil sandy; 4th rate. No timber; undergrowth sage brush.

	South bet. secs. 19 and 24. Over rolling land. Through dense sage brush.
30.00	Road bears N. E. and S. W.
40.00	Set a limestone, 24 x 14 x 4 ins., 18 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft., high, W. of the corner.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to sections, 19, 24, 25 and 30, marked with 4 grooves on the N., and 2 grooves on the S., edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.
	Land rolling. Soil sandy and gravelly; 3rd and 4th rate. No timber; undergrowth sage brush.

	South bet. secs. 25 and 30. Over sandstone ledges.
18.00	Leave sandstone ledges; thence over rolling sand.
40.00	Set a limestone, 20 x 10 x 4 ins., 15 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; dig pits, 18 x 18 x 12 ins., N. and S., 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of the corner.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to sections, 25, 30, 31 and 36, marked with 5 notches on the N., and 1 notch on the S., edges; 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 the corner.
	Land rolling and mountainous. Soil sandy and rocky; 4th rate. Mountainous land 18.00 chs.

	South bet. secs. 31 and 36. Over mountainous land.
25.00	Begin steep descent.
33.00	Foot, and enter Moencopie Valley bears north-easterly and southwesterly.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.
46.36	Road bears northwesterly and southeasterly and descend.
58.60	Right Bank of Moencopie Wash, bears north-easterly and south-westerly; descend 30 ft.
61.70	Left Bank of Moencopie wash,
68.00	Leave valley and ascend.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to Tps. 31 and 32 N., Rs. 11 and 12 E., marked T 32 N on the N E R 12 E on the S E T 31 N on the S W and R 11 E on the N. W. faces; dig pits, 24 x 24 x 12 ins., on each line, N. E. and W. 4 ft. and S. of stone 8 ft. dist. and raise a mound of earth, 5 ft. base, 2 ft. high, S. of the corner.
	Land mountainous. Soil sandy loam, gravelly and rocky.

Chs. 2nd and 4th rate.
 No timber.
 Mountainous land 45.00 chs.

April 22nd, 1905.

The South Boundary of Tp. 32 N., R. 11 E.

April 23rd, 1905, I set off $36^{\circ} 02' N.$, on the Lat. arc and $12^{\circ} 28' N.$, on the decl. arc, and at 8 hours, 2 minutes, a. m., l. m. t., I determine a true meridian with the Solar at the corner to Tps. 31 and 32 N., Rs. 10 and 11 E., as heretofore established and described by me.

Thence I run, EAST, on a random line, along the south boundary of Tp. 32 N., R. 11 E., setting temporary $1/4$ and sec. cors., at intervals of 40. chs., (set 1st $1/4$ cor. at 38. 42 ch. pt.) and at 478.44 chs., intersect the east boundary of the Tp. at the corner to Tps. 31 and 32 N., Rs. 11 and 12 E., heretofore established and described by me; thence I run, WEST bet. secs. 1 and 36, on a true line, over mountainous land.

Ascending.

- 4.00 Top of mesa.
 - 14.00 Descend abruptly 80 ft; thence descend.
 - 33.00 Foot.
 - 35.50 Edge of S. bank of the Moencopie Wash, and descend abruptly 40. ft.
 - 36.30 Cross South edge of wash, course N. W.
 - 40.00 The point for $1/4$ sec. cor. falls in overflowed land.
 - 46.30 Ascend vertical, 30 ft. top bears N. and S.
 - 47.00 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for witness corner to the $1/4$ sec. cor., marked W. C. $1/4$ on the 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 $1/2$ ft. base, 1 $1/2$ ft. high, N. of the cor.
 - 49.90 Left bank of Moencopie Wash and descend abruptly 20 ft. *Moencopie Creek 20 lbs. wide course SW.*
 - 53.50 Right bank of Moencopie wash and ascend abruptly 25 ft., top bears ~~northerly~~ easterly and westerly.
 - 58.30 Road bears north-easterly and south-westerly and ascend.
 - 64.70 Top bears northerly and southerly.
 - 80.00 Set a limestone, 20 x 10 x 6 ins., 15 ins., in the ground for the corner to secs. 1, 2, 35 and 36, marked with 1 notch on the E., and 5 notches on the W. edges; 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 the corner.
- Land mountainous and level.
 Soil, sandy loam and gravelly 2nd and 3rd rate.
 No timber.
 Mountainous land 50.00 chs.

April 23rd, 1905.

April 24th, 1905, ^{at 7h. 36m AM.} at the corner just previously set and described by me, I set off $36^{\circ} 02' N.$, on the Lat arc $12^{\circ} 48' N.$, on the decl. arc and determine a meridian with the Solar; Thence I run, WEST bet. secs. 2 and 35.
 Over rolling land.
 Descending.

- 4.00 Old stone house bears 6 chs. S.
- 20.00 Enter canotillo and sage brush bears northlery and southerly.
- 40.00 Set a limestone, 20 x 8 x 4 ins., 15 ins., in the ground for $1/4$ sec. cor. marked $1/4$ on the N. face;

The South Boundary of Tp. 32 N., R. 11 E.

(Continued).

(7)

	Chs.	dig pits 18 x 18 x 12 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 the cor.
	74.00	Begin steep descent.
	76.50	Foot bears N. E. and S. W.
		Ascend.
	80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to secs. 2, 3, 34 and 35, marked with 2 notches on the E., and 4 notches on the W., edges; 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 the corner.
		Land rolling and mountainous.
		Soil sandy; gravelly and rocky; 3rd and 4th rate.
		No timber, undergrowth sage.
		Mountainous land covered with undergrowth; 60 chs.

		WEST bet. secs. 3 and 34.
		Over mountainous land.
	2.24	To edge of bluff, 70 ft. high,
	2.70	Foot,
		Owing to the high banks of the Moencopie Wash, which crosses this line a number of times, I offset at this point, 4 chs., to the North; thence I run on offset lines WEST 32.00 chs., thence South on offset 4.00 chs., back to true line,
	40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the 1/4 sec. cor., marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.
	52.00	Dam bears N. and S. ^{enter reservoir} and leave reservoir
	63.00	Ascend vertical 40 ft. Top of spur of mesa bears N. E. and S. W. and descend.
	66.90	Foot, and ascend.
	68.00	Top bears N. and S.
	68.70	Descend abruptly, 30 ft.
	77.60	Foot, wire fence bears N.W. and S. E.
	77.70	Road bears N. W. and S. E.
	78.50	Branch, 30 lks. wide, course northerly and ascend vertical 30 ft.
	79.57	Top bears N. and S.
	80.00	Set a limestone, 20 x 8 x 4 ins., 15 ins., in the ground for the corner to sections 3, 4, 33 and 34, marked with 3 notches on the E. and W. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.
		Land mountainous.
		Soil sandy and rocky; 4th rate.
		No timber.
		Mountainous land 80.00 chs.

		WEST bet. secs. 4 and 33.
		Over level land.
	2.07	Descend abruptly 20 ft. and enter Moencopie Wash, course S. W.
	5.00	Leave wash and ascend vertical 60. ft.
	12.10	Descend.
	13.00	Foot, and enter Moencopie Wash, course N. W. ^{30 lks. wide.}
	18.73	Descend steeply.
	19.50	Foot and enter Moencopie Wash, course south-westerly.
	19.80	Leave wash and ascend.
	20.00	Top of S. bank of Wash.
	21.00	Enter corn field.
	29.00	Wire fence bears N. and S. and leave corn field.
	32.73	Irrigating ditch, 8 lks. wide, course southerly.
	38.50	Stone house bears about 8 chs., N.

see page 3
supplemental
notes.

Chs.	
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the Cor. Enter corn field.
43.80	Road bears northerly and southerly.
54.00	Leave corn field.
71.00	Dry reservoir 70 lks. wide.
73.50	Branch, 10 lks. wide, course N. W.
74.25	Ascend bank.
79.00	East side of reservoir.
80.00	The point for the corner of sections 4, 5, 32 and 33 falls in reservoir.
81.00	Set a limestone, 18 x 7 x 4 1/2 ins., 12 ins., in the ground for witness corner, to the corner of sections, 4, 5, 32 and 33, marked W. C. 4 notches on the E., and 2 notches on the W. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land level, broken and mountainous. Soil sandy loam gravelly and rocky; 2nd and 4th rate. No timber. Mountainous land 15.00 chs.

	WEST bet. secs. 5 and 32. Over level land. From the corner point in reservoir. Leave reservoir.
.30	Witness corner; thence over gradually rising ground.
1.00	Top of spur from the south side of valley and descend.
37.00	Set a limestone, 18 x 6 x 4 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.
40.00	Foot, of descent bears northerly and southerly.
41.50	Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for the corner to secs. 5, 6, 31 and 32, marked with 5 notches on the E., and 1 notch on the W. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.
80.00	Land rolling. Soil, sandy and gravelly; 3rd and 4th rate. No timber.

	WEST, bet. secs. 6 and 31. Over level land.
7.00	Cabin bears 6 chs. N.
8.59	Moencopie wash, clear water, gentle current, 1 ch. wide, course southwesterly.
14.69	Enter alfalfa field.
21.46	Leave field.
21.56	Enter barley field.
23.68	Enter alfalfa field and leave barley field.
31.95	Wire fence bears N. E. and S. W. and leave alfalfa field.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.
40.48	Wire fence bears N. W. and S. E.
47.77	Wire fence bears N. W. and S. E.
47.81	Enter barley field.
71.00	Leave barley field.

Chs.
71.05
71.10
76.00
77.03
78.44

Wire fence bears N. W. and S. E.
Irrigating ditch, 10 lks. wide, course N.W.
Brinkerhoff's house, bears 7 chs. N.
Wire fence bears N. W. and S. E.
The corner to Tps. 31 and 32 N., Rs. 10 and 11 E., as heretofore established and described by me.
Land level and gently rolling.
Soil sandy loam and gravelly; 1st, 2nd, and 3rd rate.
No timber. April 24th, 1905.

General Description.

This line runs principally through the Moencopie Valley, partly over cultivated land and partly over the banks of the Canon, most of the farms of the Moqui Indians are partly south and north of this line.
NOTE- In establishing the boundaries of this township I did not find any corners that were established by Charles von Erxleben, Deputy Surveyor.

Boundaries of Tp. 32 N., R. 11 E.

Latitudes, departure and closing errors.

Line Designated	True Bearing	Distance	N.	S.	E.	W.
South Boundary	WEST.	478.44 ✓				478.44 ✓
West Boundary	NORTH.	480.00 ✓	480.00 ✓			
8th. Stand. Par' 1. N.	EAST.	477.89 ✓			477.89 ✓	
East Boundary.	South.	480.00 ✓		480.00 ✓		
Convergency.					.53 ✓	
Totals,			480.00 ✓	480.00 ✓	478.42	478.44 ✓
Error in lat.			480.00			478.42
			0.00 ✓	Error in Dep.		0.02

The West Boundary of Tp. 31 N., R. 11 E.

At the corner of Tps. 31 and 32 N., Rs. 10 and 11 E., heretofore described by me, On April 25th, 1905, at 7 hours, 28 1/2 minutes, a. m., l. m. t., I set off 36° 03' N., on the Lat. arc, 13° 07' N., on the decl. arc and determine a meridian with the Solar. Thence I run,

11.00
15.76
15.86
25.13
25.15
26.00

South bet. secs. 1 and 6.
Over level land.
Irrigating ditch, 10 lks. wide, course north-westerly. Enter corn field.
Wire fence bears E. N. E. and W. S. W.
Irrigating ditch, 10 lks. wide, course west south westerly and leave corn field.
Wire fence bears W. N. W. and E. S. E.
Descend.
Brook branch, 20 lks. wide, course westerly.
Moencopie wash

<p>Chs. 26.30 26.56 31.00 32.10 33.00 33.50 40.00 61.00 63.00 64.60 80.00</p>	<p>Ascend. Top of bank. Ascend. Top. Descend. Foot. Set a limestone, 18 x 6 x 4 1/2 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the cor. Begin steep ascent. Top bears easterly and westerly. Top of bluff 100 ft. high, and leave Moencopie canon, course westerly. Set a limestone, 18 x 6 1/2 x 5 ins., 12 ins., in the ground for the corner to secs. 1, 6, 7 and 12, marked with 1 notch on the N. and 5 notches on the S. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft., dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling level and broken. Soil, sandy loam; gravelly and rocky. No timber. Undergrowth sage and canotillo brush. NOTE- At this point I discontinue the survey of this line owing to high bluffs and deep canons.</p>
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General Description.

Township 31 N., R. 11 E., is a sandy and rocky waster, traversed by box canons and deep gulches and ravines. There are no settlers in the township.

The North boundary of Tp. 31 N., R. 12 E.

April 26th, 1905. At the corner of Tps. 31 and 32 N., Rs. 11 and 12 E., previously established and described by me I set off 36° 02' N., on the Lat. arc, 13° 26' N., on the decl arc and at 7 hours, 26 minutes a. m., l. m. t., I determine a meridian with the Solar.
Thence I run,
East bet. secs. 6 and 31.
Over rolling sand.
13.50 Enter dense sage and canotillo, bears N. and S.
38.40 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.
78.40 Set a limestone, 20 x 7 x 4 1/2 ins., 15 ins., in the ground for the corner to secs. 5, 6, 31 and 32., mkd. with 5 notches on the E., and 1 notch on the W. edges; 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 the corner.
Land rolling.
Soil sandy; 4th rate.
No timber.
Undergrowth sage and canotillo brush.

EAST, bet. secs. 5 and 32.

(11).

The North Boundary of Tp. 31 N., R. 12 E.

(Continued).

Chs.	Over rolling sand. Through sage and canotillo brush.
40.00	Set a limestone, 18 x 6 x 4 1/2 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 base, 1 1/2 ft. high, N. of the cor.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to secs. 4, 5, 32 and 33, marked with 4 notches on the E., and 2 notches on the W. edges; 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 the corner. Land rolling. Soil sandy and 4th rate. No timber. Undergrowth sage and canotillo brush; 80.00 chs.

	EAST bet. secs. 4 and 33. Over rolling sand. Through sage and canotillo brush.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.
80.00	Set a limestone, 18 x 8 x 4 ins., 12 ins., in the ground for the corner to secs. 3, 4, 33 and 34, marked with 3 notches on the E. and W. edges; dig pits, 18 x 18 x 12 ins., in each section 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling. Soil sandy and 4th rate. No timber. Undergrowth sage and canotillo brush; 80.00 chs.

	EAST bet. secs. 3 and 34. Over rolling sand. Through sage and canotillo brush.
26.50	Ascend steeply 40 ft.
28.00	Top of sandstone cliff.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the N. face; dug pits 18 x 18 x 12 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, W. of the corner. Land rolling. Soil sandy; 4th rate. No timber; undergrowth sage and canotillo 40 chs.
	NOTE- At this point I discontinue the survey of this line owing to impassible canons and steep bluffs. April 26th, 1905.

General Description.

Townships 31 and 32 N., R. 12 E., are sandy deserts traversed by deep canons and sandstone ridges; there are no settlers living in these townships and there is no agricultural land. Therefore, I do not subdivide the same in compliance with my instructions.

The West Boundary of Tp. 31 N., R. 12 E.

From the cor. to Tps. 31 and 32 N., Rs. 11 & 12 E.,

	<p>after setting off 36° 07' N., on the Lat arc, and 13° 46' N., on the decl. arc, at 7 hours, 55 minutes, a. m., 1. m. t., April 27th, 1905, and determining a meridian with the Solar, I run, South bet. secs. 1 and 6. Over rolling sand.</p>
40.00	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the sec. 1/4 cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.</p>
44.00	<p>Enter sage and canotillo brush, bears easterly and westerly.</p>
80.00	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the cor. to secs. 1, 6, 7 and 12, marked with 1 notch on the N. and 5 notches on the S. edges; dig pits, 18 x 18 x 12 ins., in each section 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling. Soil sandy and rocky; 4th rate. No timber; undergrowth sage and canotillo 36.00 chs.</p>
40.00	<p>South bet. secs. 7 and 12. Over gently rolling sand. Through sage and canotillo brush. Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.</p>
80.00	<p>Set a limestone, 18 x 7 x 4 ins., 12 ins., in the ground for the corner of secs. 7, 12, 13 and 18, marked with 2 notches on the N. and 4 on the S. edges; 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 the corner. Land gently rolling. Soil sandy and 4th rate. No timber. Undergrowth sage and canotillo brush; 80.00 chs.</p>
40.00	<p>South bet. secs. 13 and 18. Over rolling sand. Through sage and canotillo brush. Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.</p>
80.00	<p>Set a limestone, 20 x 7 x 4 1/2 ins., 15 ins., in the ground for the corner to sections 13, 18, 19 and 24, marked with 3 notches on the N. and S. dges; dig pits 18 x 18 x 12 ins., in each section 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling. Soil sandy and 4th rate. No timber. Undergrowth sage and canotillo brush; 80.00 chs. NOTE- At this point I discontinue the survey of this line on account of the rough and broken character of the ground.</p>

April 27th, 1905.

General Description.

There are a few patches of agricultural land in Tp. 31 N., R. 11 E., lying in the Moencopie canon. The remainder of the Tp. is a sandy rocky desert.

(13)

The west boundary of Tp. 32 N., R. 10 E.

Chs.	
	At the Standard Corner to Tps. 33 N., Rs. 9 and 10 E., as heretofore established by me, on April 28th, 1905, at 7 hours, 36 minutes, a. m., l. m. t, I set off $36^{\circ} 13' N.$, on the Lat. arc, $14^{\circ} 05' N.$, on the decl. arc and determine a meridian with the solar. Thence I run, WEST, on the Eighth Standard Parallel North for a distance of 18.97 chs., where I establish the closing corner of Tps. 32 N., Rs. 9 and 10 E., as follows- Set a limestone, 18 x 6 x 5 1/2 ins., 12 ins., in the ground, marked C C T 32 N on the S R 10 E on the E. R 9 E on the W faces; with 6 grooves on the S. E. and W. faces; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, S. of the cor. Pits impracticable. Thence I run, South bet. secs. 1 and 6. Over broken and rolling masses of sandstone.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the Cor. Pits impracticable.
80.00	Set a limestone, 18 x 8 x 4 1/2 ins., 12 ins., in the ground for the corner to secs. 1, 6, 7 and 12, marked with 1 notch on the N., and 5 notches on the S. edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable. Land mountainous. Soil, rocky; 4th rate. No timber. Mountainous land 80. chs.
	----- South bet. secs. 7 and 12. Over mountainous land. Descending over sandstone boulders.
3.00	Foot and enter sage brush bears easterly and westerly.
10.00	Descend.
20.00	Foot.
27.00	Leave sage brush bears northeasterly and southwesterly and ascend.
40.00	Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the cor. Pits impracticable. Begin steep descent over rocky ledges
41.00	Stone house, bears about 30. chs., W.
43.00	Top of mesa bears northeasterly and southwesterly.
50.50	Adobe house bears about 25 chs., W.
52.50	Edge of Echo Cliffs bears north-easterly and south-westerly. Descend abruptly 200 ft.
63.00	Foot; thence over rolling land.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to secs. , 7, 12, 13 and 18, marked with 2 notches on the N. and 4 notches on the S. edges; raised a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable. Land mountainous and rolling. Soil sandy and rocky; 3rd and 4th rate. Mountainous land 63.00 chs. Undergrowth sage and canotillo brush.
	----- South bet. secs. 13 and 18.

Chs.	Over rolling land.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the cor.
49.00	Begin ascent of N. slope of rocky ridge.
62.00	Top bears easterly and westerly and descend.
71.00	Foot.
80.00	Set a limestone, 20 x 7 1/2 x 5 ins., 15 ins., in the ground for the corner to secs. 13, 18, 19 and 24, marked with 3 notches on the N. and S. edges; raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable. Land rolling and mountainous. Soil, sandy and rocky; 4th rate. No timber. Mountainous land; 22.00 chs.

	South bet. secs. 19 and 24.
	Over rolling land.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; raised a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable.
41.50	Road bears north-westerly and south-easterly.
80.00	Set a limestone, 18 x 7 x 4 1/2 ins., 12 ins., in the ground for the corner to sections 19, 24, 25 and 30, marked with 4 notches on the N. and 2 notches on the S. edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Land rolling. Soil sandy and rocky; 4th rate. No timber.

	South bet. secs. 25 and 30.
	Over close sandstone ridges and rocky gulches.
40.00	Set a limestone, 24 x 8 x 4 ins., 18 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner.
80.00	Set a limestone, 20 x 12 x 4 ins., 15 ins., in the ground for the corner to secs., 25, 30, 31 and 36, marked with 5 notches on the N., and 1 notch on the S. edges; 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 the cor. Land mountainous. Soil sandy and rocky; 4th rate. No timber. Mountainous land 80.00 chs.

	South bet. secs. 31 and 36.
	Over mountainous land.
	Ascending over sandstone boulders.
11.60	Top of spur and descend.
13.50	Foot, and begin ascent along the W. edge of mesa.
29.00	Top of ascent bears E. and W. and descend.
32.00	Foot, gulch 1 ch. wide, course southwesterly.
33.00	Ascend vertical 100 ft.
35.00	Top.
37.00	Descend.
37.50	Rocky gulch, 40 ft. deep, course southwesterly and ascend steeply.
38.30	Top.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor., marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft.

Chs. 40.60 42.50 43.60 80.00	high, W. of the cor. Descend. Foot and ascend. Top; thence over close ridges and rocky gulches. Set a limestone, 20 x 8 x 4 ins., 15 ins., in the ground for the corner to townships 31 and 32 N., Rs. 9 and 10 E., marked T 32 N on the N E R 10 E on the S E T 31 N on the S W and R 9 E on the N. W. faces; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, S. of the corner. Pits impracticable. Land mountainous. Soil sandy and rocky; 4th rate. No timber. Mountainous land 80. chs.
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April 28th, 1905.

 General Description of west boundary of Tp. 32 N.,
 R. 10 E.

The line runs over mountainous and rolling land. There is no timber or water along the line. Tp 32 N., R. 9 E., west of the line is mountainous and broken. The northern part is traversed by the Echo Cliffs. The trading post of the Willow Springs and a number of Indian huts are located in the north-eastern portion of the township.

April 29th, 1905, at 7 hours, 21 minutes, a. m., l. m. t., at the corner to Townships 31 and 32 N., Rs. 9 and 10 E., I set off 36° 08' N., on the Lat. arc., 14° 24' N., on the decl arc and determine a meridian with the Solar.

Thence I run, EAST on a random line along the south boundary of Tp. 32 N., R. 10 E., setting temporary 1/4 and sec. cors., at intervals of 40. chs., (set 1st cor. at 38.42 chs.) and at 478.40 chs., intersect the South boundary of the Tp., 30 lks. S. of the corner of Tps. 31 and 32 N., Rs. 10 and 11 E., and heretofore established and described by me. The falling answers to a corrections of 0° 02' or 5 lks. N., per mile, counting from the S. W. Cor. of the Tp. Therefore, I run, S. 89° 58' W., on a true line, bet. secs. 1 and 36. Over level land.

9.20 21.70 27.58 27.68 32.65 39.00 40.00 46.50 46.70	Irrigating ditch, 8 lks. wide, course north-westerly-grain barn on line. Wire fence bears northeasterly and southwesterly, and enter corn field. Wire fence bears northerly and southerly, and leave corn-field. Irrigating ditch, 10 lks. wide, course northerly and enter alfalfa field. Leave alfalfa field and enter corn patch. Leave corn patch. Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner. Wire fence bears north-westerly and south-easterly. Wire fence bears northwesterly and southeasterly and road bears northeasterly and southwesterly.
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Chs.
58.00
80.00

Leave level land; thence over low close ridges.
Set a limestone, 20 x 8 x 4 1/2 ins., 15 ins., in the ground for the corner to sections 1, 2, 35 and 36, marked with 1 notch on the E. and 5 notches on the W. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.
Land level and rolling.
Soil, sandy and gravelly; 1st, 2nd, and 3rd rate.
No timber.

S. 89° 58' W., on a true line, bet. secs. 2 and 35.
Over gently rolling land.

10.00
11.25
12.00
26.00
28.00
28.80
31.45
38.10
40.00

Ascend.
Top and descend.
Foot.
Descend.
Descend abruptly 30 ft.
Foot, dry wash, 30 lks. wide, course S. westerly.
Same wash, 30 lks. wide, course N. westerly.
Same wash, 30 lks. wide, course S. westerly.

80.00

Set a limestone, 18 x 8 x 4 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the cor.
Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for the corner to secs. 2, 3, 34 and 35, marked with 2 notches on the E. and 4 notches on the W. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.
Land rolling.
Soil, sandy and rocky; 4th rate.
No timber.

April 29th, 1905.

At the corner just previously established and described, at 7 hours, 34 minutes, a. m., l. m. t., I set off 14° 42' N., on the decl arc, 36° 08' N., on the lat. arc and determine a meridian with the Solar; thence I run S. 89° 58' W., on a true line, bet. secs. 3 and 34.
Over rolling land.

40.00

Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.

58.75
70.70
80.00

Road bears northwesterly and southeasterly.
Road bears northwesterly and southeasterly.
Set a limestone, 18 x 7 x 4 1/2 ins., 12 ins., in the ground for the corner to sections, 3, 4, 33 and 34, marked with 3 notches on the E. and W. edges; and raise a mound of stones, 2 ft. base, 2 ft. high, W. of the cor.
Pits impracticable.
Land rolling.
Soil sandy and rocky; 4th rate.
No timber.

40.00

S. 89° 58' W., on a true line, bet. secs. 4 and 33.
Over gently rolling sandstone.
Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the N. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, N. of the corner.
Pits impract.

(17)

The South Boundary of Tp. 32 N., R. 10 E. (Continued.)

Chs.
57.66
80.00

Road bears northerly and southerly.
Set a limestone, 20 x 7 x 4 1/2 ins., 15 ins., in the ground for the corner to sections, 4, 5, 32 and 33, marked with 4 notches on the E., and 2 notches on the W., edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the cor.
Land rolling.
Soil, sandy and rocky; 4th rate.
No timber.

40.00

S. 89° 58' W., on a true line bet. secs. 5 and 32.
Over gently rolling sandstone.
Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the N. face; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, N. of the corner.
Pits impracticable.

80.00

Set a limestone, 20 x 7 1/2 x 5 ins., 15 ins., in the ground for the corner to sections, 5, 6, 31 and 32, marked with 5 notches on the E., and 1 notch on the W. edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable.
Land rolling.
Soil, sandy and gravelly; 3rd and 4th rate.
No timber.

80.00

S. 89° 58' W., on a true line bet. secs. 6 and 31.
Over rolling land.
Set a limestone, 18 x 8 x 4 1/2 ins., 12 ins., in the ground for 1/4 sec. cor., marked 1/4 on the N. face; and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of the corner; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist.

78.40

The corner to townships 31 and 32 N., Rs. 9 and 10 E.
Land rolling.
Soil sandy and gravelly; 3rd and 4th rate.
No timber.

April 30th, 1905.

General Description.

This line runs over level and broken. The soil is mostly sand. There is no timber on the line. Tp. 31 N., R. 10 E. is mountainous and broken. There are a few sections in the northeast part of the township situated in the Moencopie Wash and Valley; that contain some agricultural land.

Boundaries of Tp. 32 N., R. 10 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes.		Departures.	
			N.	S.	E.	W.
South Boundary	S. 89° 58' W.	478.40		.30		478.40
West "	North.	480.00	480.00			
8th. Stand. Par' 1.	East.	477.89			477.89	
East Boundary	South.	480.00		480.00		
Convergency,					.53	
Totals,			480.00	480.30	478.42	478.40
Error in Lat.				480.00	478.40	
				.30	.02	

Chs. I proceed to the corner of Townships 33 N., Rs. 10 and 11 E., as heretofore established and described by me. May 1st, 1905, at 8 hours, 5 minutes, a. m., 1. m. t., I set off $36^{\circ} 13' N.$, on the lat. arc; $15^{\circ} 04' N.$, on the decl. arc and determine a meridian with the Solar.

Thence I run,
 North bet. secs. 31 and 36.
 Over rolling sand.
 Through sage and canotillo brush.

40.00 Set a limestone, $18 \times 6 \times 5 \frac{1}{2}$ ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ " on the W. face; dig pits, $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist., raise a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of the corner.

80.00 Set a limestone, $18 \times 7 \times 5$ ins., 12 ins., in the ground for the corner to secs. 25, 30, 31 and 36, marked with 1 notch on the S. and 5 notches on the N. edges; and raise a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, W. of the corner.
 Pits impracticable.
 Land rolling.
 Soil, sandy; 4th rate.
 No timber.
 Under growth sage and canotillo brush 80.00 chs.

North bet. secs. 25 and 30.
 Over rolling sand.
 Through sage and canotillo brush.

40.00 Set a limestone, $18 \times 6 \times 4 \frac{1}{2}$ ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ " on the W. face; dig pits, $18 \times 18 \times 12$ 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 the corner.

80.00 Set a limestone, $18 \times 6 \times 5$ ins., 12 ins., in the ground, for the corner to secs. 19, 24, 25 and 30, marked with 2 notches on the S and 4 notches on the N. edges; 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 the corner.
 Land rolling.
 Soil, sandy and rocky; 4th rate.
 No timber.
 Undergrowth; sage and canotillo, 80. chs.

North bet. secs. 19 and 24.
 Over rolling sand and sandstone.
 Through sage and canotillo brush.

40.00 Set a limestone, $18 \times 6 \times 5$ ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ " on the W. face; and raise a mound of stones, 2 ft. base, $1 \frac{1}{2}$ ft. high, W. of the corner. Pits impracticable.

80.00 Set a limestone, $20 \times 8 \frac{1}{2} \times 5$ ins., 15 ins., in the ground for the corner to sections 13, 18, 19 and 24, marked with 3 notches on the N. and 3. edges; dig pits, $18 \times 18 \times 12$ ins., in each section, $5 \frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner.
 Land rolling.
 Soil, sandy and rocky; 4th rate.
 No timber.
 Undergrowth; sage and canotillo, 80.00 chs.

North bet. secs. 13 and 18.
 Over rolling sand.
 Through dense sage.

40.00 Set a limestone, $18 \times 6 \times 5$ ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ " on the W. face; dig pits,

Chs.	18 x 18 x 12 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 the corner.
80.00	Set a limestone, 18 x 6 x 5 1/2 ins., 12 ins., in the ground for the corner to secs., 7, 12, 13 and 18, marked with 2 notches on the N. and 4 notches on the S. edges; dig pits, 18 x 18 x 12 ins., in each section, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling. Soil sandy and 4th rate. No timber.

	North bet. secs. 7 and 12. Over rolling sand and sandstone.
40.00	Set a limestone, 17 x 8 x 1 1/2 ins., 11 ins., in the ground for the 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.
80.00	Set a limestone, 20 x 8 x 5 ins., 15 ins., in the ground for the corner to sections 1, 6, 7 and 12, marked with 1 notch on the N. and 5 notches on the S. edges; and raise a mound of stones, 2 ft. base, 1 1/2 ft. high, W. of the corner. Pits impracticable. Land rolling. Soil sandy and rocky; 4th rate. No timber.

	North bet. secs. 1 and 6. Over mountainous land. Descending over sandstone ledges.
20.00	Foot bears easterly and westerly and ascend.
22.50	Sandstone chimney, 70 ft. high, bears 4 chs. E.
26.00	Top bears easterly and westerly and descend.
27.00	Foot.
29.50	Begin steep ascent.
40.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, W. of the corner.
44.00	Top, bears northeasterly and southwesterly. Thence over gently rolling land.
80.00	Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to Tps. 33 and 34 N., Rs. 10 and 11 E., marked T 34 N on the N E R 11 E on the S E T 33 N on the S W R. 10 E on the N W, with 6 notches on each edge; dig pits, 24 x 24 x 12 ins., on each line, N. E. and W., 4 ft. and S. of stone, 8 ft. dist., and raise a mound of earth, 5 ft. base, 2 1/2 ft. high, S. of the corner. Land mountainous and gently rolling. Soil, sandy and rocky; 4th rate. No timber. Mountainous land 42.00 chs.

May 1st. 1905.

General Description.

This line runs over sand ridges and sandstone reefs and ledges; there is no water or timber along the line. Tp. 33 N., R. 11 E., is composed of sand ridges and broken ground in the southern part, while the northern portion of the township is high table land.

- Chs. Note- May 2nd, 1905, was spent in traversing from the corner to Tps. 33 and 34 N., Rs. 10 and 11 E., to the Cor. to Tps. 33 N., Rs. 9 and 10 E., at which corner on May 3rd, 1905, at 7 hours, 34 minutes, a. m., 1. m. t., I set off $36^{\circ} 13' N.$, on the lat. arc and $15^{\circ} 35 \frac{1}{2}' N.$, on the decl arc and determine a meridian with the solar.
- Thence I run,
North bet. secs. 31 and 36.
Over rolling sand and sandstone.
- 10.00 Enter scattering cedar timber.
- 40.00 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on the W. face, whence
A cedar, 25 ins., in diam. brs. N. $6 \frac{3}{4}^{\circ} E.$,
146 lks. dist. mkd. $\frac{1}{4} S. 31^{\circ} B. T.$
A cedar, 18 ins., in diam. brs. S. $35^{\circ} W.$, 148 lks. dist. mkd. $\frac{1}{4} S. 36^{\circ} B. T.$
- 50.00 Wood road bears E. and W.
- 80.00 Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for the corner to sections, 25, 30, 31 and 36, marked with 1 notch on the S. and 5 notches on the N. edges; whence,
A cedar, 24 ins., in diam. brs., N. $40 \frac{1}{2}^{\circ} E.$,
100 lks. dist. mkd. T. 33 N., R. 10 E., S. $30^{\circ} B. T.$
A cedar, 6 ins., in diam. brs. S. $34 \frac{1}{4}^{\circ} E.$, 118 lks. dist. mkd. T 33 N R 9 E S $36^{\circ} B. T.$
No other trees within limits; and raise a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, W. of the corner. Pits impracticable.
Land rolling.
Soil, sandy and rocky; 4th rate.
Timber scattering cedar.
-
- North bet. secs. 25 and 30.
Over rolling sand.
- 40.00 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on the W. face; whence
A Cedar, 18 ins., in diam. brs. S. $45^{\circ} E.$, 4 lks. dist. mkd. $\frac{1}{4} S 30^{\circ} B. T.$
A cedar, 12 ins., in diam. brs. S. $45^{\circ} W.$, 4 lks. dist. mkd. $\frac{1}{4} S 25^{\circ} B. T.$
- 80.00 Set a limestone, 19 x 7 x $4 \frac{1}{2}$ ins., 15 ins., in the ground for the corner to secs. 19, 24, 25 and 30, marked with 2 notches on the S. and 4 notches on the N. edges; whence
A Cedar, 14 ins., in diam. brs. N. $16 \frac{1}{4}^{\circ} E.$,
173 lks. dist. mkd. T. 33 N., R 10 E S $19^{\circ} B. T.$
A cedar, 30 ins., in diam. brs. S. $71 \frac{1}{4}^{\circ} E.$,
157 lks. dist. mkd. T 33 N R 10 E S $30^{\circ} B. T.$
A cedar, 30 ins., in diam. brs. S. $46^{\circ} W.$, 208 lks. dist. mkd. T 33 N R 9 E S $25^{\circ} B. T.$
A cedar, 36 ins., in diam. brs. N. $11^{\circ} W.$,
53 lks. dist. mkd. T 33 N. R 9 E S $24^{\circ} B. T.$
Land rolling.
Soil sandy and rocky; 4th rate.
Timber scattering cedar.
-
- North bet. secs. 19 and 24.
Over rolling sand and sandstone.
- 25.00 Enter heavy cedar timber bears northeasterly and south-westerly.
- 40.00 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on the W. face, whence
A cedar, 24 ins., in diam. brs. S. $81 \frac{1}{2}^{\circ} E.$,
72 lks. dist. mkd. $\frac{1}{4} S 19^{\circ} B. T.$

<p>Chs. 80.00 <i>OK</i></p>	<p>A cedar, 28 ins., in diam. brs. N. 43 1/2° W., 263 lks. dist. mkd. 1/4 S, 24 B T. Set a limestone, 20 x 6 x 4 1/2 ins., 15 ins., in the ground for the corner to secs. 13, 18, 19 and 24, marked with 3 notches on the N. and S. edges; whence A cedar, 12 ins., in diam. brs. N. 60° E., 77 lks. dist. mkd. T 33 N R 10 E., S 18 B T. A cedar, 18 ins., in diam. brs. S. 64 1/2° E., 33 lks. dist. mkd. T 33 N R 10 E S 19 B T. A Cedar, 36 ins., in diam. brs. S 74 1/2° W., 106 lks. dist. marked T 33 N R 9 E S 24 B T. A cedar, 24 ins., in diam. brs. N. 55° W., 92 lks. dist. mkd. T 33 N R 9 E S 13 B T., and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of the cor. Pits impracticable. No other trees within limits. Land rolling. Soil, sandy and rocky; 4th rate. Timber cedar. Heavily timbered land 55.00 chs.</p>
<p>40.00 <i>OK</i></p>	<p>North bet. secs. 13 and 18. Over rolling sand and sandstone. Through cedar timber. Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the 1/4 sec. cor. marked 1/4 on the W. face; whence A Cedar, 36 ins., in diam. brs. N. 77° E., 82 lks. dist. mkd. 1/4 S 18 B T. A cedar, 12 ins., in diam. brs. S. 3° W., 46 lks. dist. marked 1/4 S., 13 B T.</p>
<p>80.00 <i>OK</i></p>	<p>Set a limestone, 20 x 7 x 5 ins., 15 ins., in the ground for the corner to secs. 7, 12, 13 and 18, marked with 4 notches on the S. and 2 notches on the N. edges; whence A cedar, 30 ins., in diam. brs. S. 8° E., 156 lks. dist. mkd. T 33 N R 10 E S 18 B T. A cedar, 30 ins., in diam. brs. S 30° W., 85 lks. dist. mkd. T 33 N., R 9 E., S 13 B T. A cedar, 18 ins., in diam. brs. N 16° W., 251 lks. dist. mkd. T 33 N R 9 E S 12 B T. No other trees within limits; dig pits, 18 x 18 x 12 ins., in sec. 7, 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the cor. Land rolling. Soil, sandy and rocky; 4th rate. Timber cedar. Heavily timbered land 80. chs.</p>
<p>40.00 <i>OK</i></p>	<p>North bet. secs. 7 and 12. Over rolling sand and sandstone. Through heavy cedar timber. Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the W. face; whence A cedar, 24 ins., in diam. brs. N. 11 1/2° E. 99 lks. dist. mkd. 1/4 S 7 B T. A cedar, 12 ins., in diam brs. N. 19 1/2° W., 108 lks. dist. mkd. 1/4 S 12 B T.</p>
<p>80.00 <i>OK</i></p>	<p>Set a limestone, 20 x 8 x 4 1/2 ins., 15 ins., in the ground for the corner of secs. 1, 6, 7 and 12, marked with 5 notches on the S. and 1 notch on the N. edges; A cedar, 12 ins., in diam. brs. N. 47 3/4° E., 102 lks. dist. mkd. T 33 N R 10 E S 6 B T. A Cedar, 30 ins., in diam. brs. S 45° E., 88 lks. dist. mkd. T 33 N R 10 E., S 7 B T. A cedar, 10 ins., in diam. brs. N 48° W., 225 lks. dist. mkd. T 33 N R 9 E S 1 B T. No other trees within limits, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of the corner.</p>

Chs. Pits impracticable.
Land rolling.
Soil, sandy and rocky; 4th rate.
Timber cedar.
Heavily timbered land 80. chs.

North bet. secs. 1 and 6.
Over rolling sand and sandstone.
Through heavy cedar timber.

40.00 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground
for 1/4 sec. cor. marked 1/4 on the W. face; whence
ck
A cedar, 26 ins., in diam. brs. N. 7° E., 148
lks. dist. mkd. 1/4 S. 6° B T.
A Cedar 26 ins., in diam. brs. S. 23° W., 86 lks.
dist. mkd. 1/4 S. 1° B T.

80.00 Set a limestone, 20 x 7 x 4 ins., 15 ins. in the ground
for the cor. to Tps. 33 and 34 N., Rs. 9 and 10 E., mkd.
with 6 notches on each edge; from which
A cedar, 30 ins., in diam. brs. N. 1 1/4° E.,
111 lks. dist. mkd. T 34 N R 10 E S 31 B T.
A cedar, 30 ins., in diam. brs. S. 31 1/4° E.,
78 lks. dist. mkd. T 33 N., R 10 E S 6 B T.
A cedar, 16 ins., in diam. brs. S. 13° W., 68 lks.
dist. mkd. T 33 N R 9 E S 1° B T.
A cedar, 18 ins., in diam. brs. N. 43 3/4° W., 100
lks. dist. mkd. T 34 N R 9 E S 36° B T.
Land rolling.
Soil sandy and rocky; 4th rate.
Timber cedar.
Heavily timbered land 80.00 chs.

May 3rd. 1905.

General Description.

This line runs over rolling sand and broken masses of sandstone, and mostly through heavy cedar timber. There is no water or grass along the line. The township west of the line is mountainous rugged and broken.

The North boundary of Tp. 33 N., R. 10 E.

From the Cor. to Tps. 33 and 34 N., Rs. 9 and 10 E.
May 4th, 1905- I set off 36° 18' N., on the Lat. arc;
15° 54' N., on the Decl. arc and at 8 hours, 6 minutes,
a. m., 1. m. t., I determine a meridian with the Solar.
Thence I run,
EAST, on a random line, along the north boundary of Tp.
33 N., R. 10 E., setting temporary 1/4 and sec. cors.
at intervals of 40. chs., (set 1st. cor. at 39.54 chs),
and at 479.54 chs., intersect the E. boundary of the Tp.
4 lks. S. of the Cor. to Tps. 33 and 34 N., Rs. 10 and
11 E., as heretofore described.
The falling being ~~only~~ 4 lks., therefore, I run,
WEST, on a true line, bet. secs. 1 and 36.
Over rolling sand.

40.00 Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground
ck
for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high,
N. of the corner.

80.00 Set a limestone, 18 x 7 x 4 1/2 ins., 12 ins., in the
ground for the corner of sections, 1, 2, 35 and 36,

(23)

The North Boundary of Tp. 33 N., R. 10 E.

<p>Chs.</p>	<p>marked with 1 notch on the E. and 5 notches on the W. edges; 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 the corner. Land rolling. Soil sandy and rocky; 4th rate. No timber.</p>
	<p style="text-align: right;">May 4th, 1905.</p> <hr/> <p>May 5th, 1905, ^{at 8 AM} at the corner just previously described by me I set off 36° 18' N., on the Lat. arc; 16° 10' 1/2' E., on the decl. arc; and determine a meridian with the Solar; thence I run, WEST, on a true line, bet. secs. 2 and 35. Over rolling sand.</p>
<p>40.00</p>	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the N. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of the corner.</p>
<p>74.00</p>	<p>Enter dense sage bears northeasterly and southwesterly.</p>
<p>80.00</p>	<p>Set a limestone, 20 x 7 x 5 ins., 15 ins., in the ground for the corner to sections, 2, 3, 34 and 35, marked with 2 notches on the E. and 4 notches on the W. edges; 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 the corner. Land rolling. Soil sandy and 4th rate. No timber. Dense undergrowth 6 chs.</p>
	<hr/> <p>WEST on a true line bet. secs. 3 and 34. Over gently rolling sand. Through dense sage.</p>
<p>40.00</p>	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.</p>
<p>60.00</p>	<p>Red Butte bears about 12 chs. N. Enter scattering cedar timber.</p>
<p>80.00</p>	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for the corner to sections, 3, 4, 33 and 34, marked with 3 notches on the E. and W. edges, whence A Cedar, 12 ins., in diam. brs. N. 23 3/4° W., 184 lks. dist. mkd. T 34 N, R 10 E S 33 B T.; no other trees within limits; dig pits, 18 x 18 x 12 ins., in secs. 3, 4, and 34, 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling. Soil sandy; 4th rate. Timber cedar; undergrowth sage brush.</p>
	<hr/> <p>WEST, on a true line, bet. secs. 4 and 33. Over rolling land. Through dense sage.</p>
<p>40.00</p>	<p>Set a limestone, 18 x 6 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. marked 1/4 on the 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 1/2 ft. base, 1 1/2 ft. high, N. of the corner.</p>
<p>80.00</p>	<p>Set a limestone, 20 x 7 1/2 x 5 ins., 15 ins., in the ground for the corner to secs. 4, 5, 32 and 33, marked with 4 notches on the E. and 2 notches on the W. edges; 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 the corner.</p>

Chs.

Land gently rolling.
Soil sandy; 4th rate.
Timber cedar; undergrowth sage 80.00 chs.

WEST, on a true line bet. secs. 5 and 32.
Over rolling sand.
Through sage brush.

32.00
40.00

Leave sage brush and over sandstone.
Set a limestone, 18 x 6 x 4 1/2 ins., 12 ins., in
the ground for 1/4 sec. cor. marked 1/4 on the N.
face; whence

A Cedar, 18 ins., in diam. brs. N. 47 1/4° E.,
82 lks. dist. marked 1/4 S 32° B T.

A Cedar, 18 ins., in diam. brs. S. 15° 3/4 E.,
65 lks. dist. mkd. 1/4 S. 5° B T.

65.00

Enter heavy cedar timber, bears northerly and south-
erly.

80.00

Set a limestone, 18 x 6 x 5 ins., 12 ins., in the
ground for the corner to secs. 5, 6, 31 and 32,
marked with 5 notches on the E. and 1 notch on the
W. edges; whence

A cedar, 36 ins., in diam. brs. N. 1° E., 230
lks. dist. mkd. T 34 N R 10 E S 32° B T.

A Cedar, 12 ins., in diam. brs. S. 59 3/4° E.,
184 lks. dist. mkd. T 33 N R 10 E S 5° B T.

A Cedar, 30 ins., in diam. brs. S. 82 1/4° W.,
29 lks. dist. mkd. T 33 N R 10 E, S 6° B T.

A cedar, 36 ins., in diam. brs. N 6 1/4° W.,
122 lks. dist. mkd. T 34 N R 10 E S 31° B T.

Land rolling.
Soil sandy and rocky; 4th rate.
Timber cedar.
Heavily timbered land, 15.00 chs.

WEST, on a true line bet. secs. 6 and 31.
Over rolling sand.

40.00

Through heavy cedar timber.
Set a limestone, 18 x 6 x 5 ins., 12 ins., in the
ground for 1/4 sec. cor. marked 1/4 on the N. face;
whence,

A cedar, 20 ins., in diam. brs. S 31 1/2° E.,
76 lks. dist. marked 1/4 S 6° B T.

A cedar, 20 ins., in diam. brs. N. 7 1/4° W.,
142 lks. dist. marked 1/4 S. 31° B T.

79.54

The Corner to Tps. 33 and 34 N., Rs. 9 and 10 E.
Land rolling.

Soil, sandy and rocky; 4th rate.
Heavily timbered land of cedar 79.54 chs.

May 5th, 1905.

General Description.

This line runs over low sand ridges; as well as
sandstone ledges. There is no water on the line.
Tp. 34 N., R. 10 E., is mostly rolling sand; the
western portion is mountainous. There is some cedar
timber on this township.

Philip Couzner
U. S. Deputy Surveyor.

NOTE- For latitudes, departures, closing errors, etc.,
of this tp. See next page.

BOUNDARIES OF Tp. 33 N., R. 10 E.

Latitudes, departures and closing errors.

Line Designated.	True Bearing.	Distance	Latitude		Departure.	
			N.	S.	E.	W.
8th. Stand. Par'l.	WEST.	480.00				480.0
W. Boundary,	NORTH.	480.00	480.00			
N. "	EAST.	479.54			479.54	
E. "	South.	480.00		480.00		
Convergency,					.53	
Totals,			480.00	480.00	480.00	480.00
			480.00		480.00	
Error in Lat.			.00	Er. in Dep.	.07	

LIST OF NAMES.

A list of the names of the individuals employed by

Philip Coutzen

....., 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 E-W & S boundaries of T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E - N & W boundaries of T. 31 N. R. 12 E - S and W boundaries of T. 32 N. R. 10 E - N-E & W boundaries of T. 33 N. R. 10 E* showing the respective capacities in which they acted:

W. S. Kengla Chainman.

Fred Tagles Chainman.

Arthur Pogue Moundman.

Mmanuel Salazar Axman.

G. A. Hawley Axman.

G. A. Hawley Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

Philip Coutzen

....., United States Deputy Surveyor, in surveying all

those parts or portions of the *E-W & S boundaries of T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E - N & W boundaries of T. 31 N. R. 12 E - S and W boundaries of T. 32 N. R. 10 E - N-E & W boundaries of T. 33 N. R. 10 E* of the *Gila and Salt River* 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, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for *Arizona*

W. S. Kengla Chainman.

Fred Tagles Chainman.

..... Moundman.

Arthur Pogue Moundman.

..... Axman.

Mmanuel Salazar Axman.

G. A. Hawley Flagman.

Subscribed and sworn to before me this *10th* day of *June*, 18*95*

H. G. Power



BOOK 27
1861

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Philip Contzen, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank A. Ingalls United States Surveyor General for Arizona, bearing date of the 12th day of December, 1904, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the E-W & S boundaries of T. 32 N. R. 11 E - W. boundary of T. 31 N. R. 11 E, N & W boundaries of T. 31 N. R. 12 E - S and W boundaries of T. 32 N. R. 10 E - N-E & W boundaries of T. 33 N. R. 10 E of the Gila & Salt River 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 General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Philip Contzen
United States Deputy Surveyor.

Subscribed by said Philip Contzen, and sworn to before me }
this 16th day of June, 1905

Frank A. Ingalls
U. S. Surveyor General
for Arizona



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, A. T. July 26th 1905

The foregoing field notes of the survey of the East West & South boundaries of T. 32 N. R. 11 E, West Bdy. T. 31 N. R. 11 E, N & W boundaries of T. 31 N. R. 12 E, South & West boundaries of T. 32 N. R. 10 E N E & W boundaries of T. 33 N. R. 10 E of the Gila and Salt River Base and Meridian, in the Territory of Arizona

executed by Philip Contzen U. S. deputy surveyor under his contract No. 124, dated December 12th 1904, ~~190~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank A. 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.~~