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1866

Book "A."

FIELD NOTES

BOOK 1866

OF THE SURVEY OF THE A

PORTION OF-

THE SUBDIVISIONAL LINES OF T. 31 N., R. 11 E.

1866

1866

Of the Gila and Salt River Base & Meridian,

AS SURVEYED BY

PHILIP CONTZEN.

, United States Deputy Surveyor,

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

Survey commenced June 2nd, 1905., 189

Survey completed June 3rd, 1905., 189

NAMES AND DUTIES OF ASSISTANTS.

W. S. Kingle,	chairman
Fred. Taylor,	chairman
Arthur Poque,	workman
Mmanuel Salazar,	axeman
G. G. Hawley,	flagman

BOOK 1866

INDEX DIAGRAM.

Township 31 N., Range 11 E.

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PRELIMINARY OATHS OF ASSISTANTS.

BOOK 1866

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WE, W. S. Kengla 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

the subdivisional lines of T. 31 N. R. 11 E

W. S. Kengla, Chainman.

Fred Tagles, Chainman.

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

W. G. Power



WE, Arthur Pogue 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

the subdivisional lines of T. 31 N. R. 11 E

Arthur Pogue, Moundman.

....., Moundman.

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

W. G. Power



WE, 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 subdivisional lines of T. 31 N. R. 11 E

Manuel Salazar, Axman.

....., Axman.

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

W. 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 subdivisional lines of T. 31 N. R. 11 E

G. A. Hawley, Flagman.

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

W. G. Power



Chs.

The greater part of this township being covered with deep drift sand and sand ridges, and cut by numerous gulches and canons; I survey only the agricultural portions lying in the Moencopie Canon.

Survey commenced June 2nd, 1905, and executed with a Young and Son's light mountain transit No. 5607 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.

The instrument was examined on the Meridian at Phoenix, Arizona, and was duly approved by the Surveyor-General.

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

At the corner to secs. 3, 4, 33 and 34, Tps. 31 and 32 N., R. 11 E., as heretofore described by me, I set off 36° 07' N., on the Lat. arc; 22° 13' N., on the decl. arc, and at 4 hours, 36 minutes, p. m., l. m. t., by my watch which has correct, l. m. t., I determine a meridian with the Solar and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the corner.

June, 2nd, 1905.

June 3rd, at 2 hours, 37 minutes, a. m., l. m. t., I observe Polaris at Eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a plug driven in the ground, 5 chs. N. of the cor.

At 6 hours, a. m., l. m. t., I lay off the azimuth of Polaris, 1° 29' to the W., and mark the meridian thus determined, by cutting a small groove in the stone set June 2nd, on which the meridian falls 0.1 ins., W. of the mark determined with the Solar.

At 7 hours, 30 minutes, a. m., l. m. t., I set off 36° 07' N., on the Lat arc; 22° 18' N., on the decl arc; and determine a meridian with the Solar, and mark a point thereof, by a cross on the stone already set, 5 chs. N. of my station; this mark falls 0.2 ins., E. of the meridian determined by the Polaris observation.

The magnetic bearing of the meridian at 8 a. m. properly reduced gives the Mean Mag. Decl. 14° 29' E.

From the cor. to secs. 3, 4, 33 and 34, on the Tp. line, bet. Tps. 31 and 32 N., R. 11 E., I run, S. 0° 02' E., on a true line, bet. secs. 3 and 4. Over level bottom land.

2.00

Leave Moencopie Canon and begin steep ascent of the S. bank of Canon.

10.00

Top, brs. easterly and westerly; thence over rolling sand.

40.00

Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for 1/4 se. 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.

80.00

Set a limestone, 20 x 8 x 5 ins., 15 ins., in the ground for the corner to sections 3, 4, 9 and 10, mkd. with 5 notches on the S. and 3 notches on the E. edges; dig pits, 18 x 18 x 12 ins., in each sec. 5 1/2

Subdivisions of T. 31 N., R. 11 E.

Chs.	dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of the corner. Land rolling, mountainous and level. Soil sandy and rocky; 2nd and 3rd rate. No timber. Undergrowth sage. Mts. land 8.00 chs.
40.00	WEST, on a true line, bet. secs. 4 and 9. Over rolling land through sage. Set a limestone, 18 x 7 x 5 ins., 12 ins., in the ground for 1/4 sec. cor. mkd. 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.
80.00	Set a limestone, 19 x 8 x 5 ins., 15 ins., in the ground for the cor. to secs. 4, 5, 8 and 9, mkd. with 5 notches on the S. and 4 notches on the E. 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; dense undergrowth 80. chs.
40. 80.02	N. 0° 02' W., on a random line, bet. sect. 4 and 5. Set temp. 1/4 sec. cor. Intersect the N. boundary of the sp. at 4 lks. W. of the cor. pt. to secs. 4, 5, 33 and 33, as heretofore described; thence I run, From cor. pt. in reservoir, South on a true line, bet. secs. 4 and 5. Over level land.
.45 3.00 9.00	Leave reservoir. Leave Mcencoipe Canon, and ascend vertical 75 ft. Top, brs. N. W. and S. E.; thence over gently rolling land.
40.02	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 corner.
80.02	The cor. to secs. 4, 5, 8 and 9. Land gently rolling, mountainous and level. Soil sandy loam; and rocky; 2nd and 4th rate. No timber; undergrowth sage brush. Mts. land 6.00 chs.
40.00	WEST, on a true line, bet. secs. 5 and 8. Over gently rolling land through sage brush. Set a limestone, 18 x 8 x 4 1/2 ins., 12 ins., in the ground for 1/4 sec. cor. mkd. 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.
61.00	Leave sage bears northerly and southerly.
64.00	Begin ascent of E. slope of ridge.
70.50	Top brs. northeasterly and southwesterly.
75.50	Descend.
77.50	Enter sage brush, brs. northeasterly and southwesterly.
80.00	Set a limestone, 18 x 10 x 4 ins., 12 ins., in the ground for the cor. to secs. 5, 6, 7 and 8, mkd. with 5 notches on the S. and E. 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 gently rolling and mountainous. Soil sandy and rocky; 4th rate.

Chs. No timber.
Undergrowth sage brush.
Mts. or land covered with undergrowth; 72.00 chs.

40. N. 0° 03' W., on a random line, bet. secs. 5 and 6.
80.06 Set temp. 1/4 sec. cor.
Intersect the north boundary of the Tp. at 2 lks. E. of the cor. to secs. 5, 6, 31 and 32, as heretofore described; thence I run,
S. 0° 04' W., on a true line, bet. secs. 5 and 6.
Over level land.

5.00 Leave Moencopie Canon and begin steep ascent.
34.70 Top of canon bank, bears easterly and westerly and ascend.

40.06 Set a limestone, 20 x 8 x 5 ins., 15 ins., in the ground for 1/4 sec. cor. mke. 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.

46.00 Top br. easterly and westerly and descend.
80.06 The cor. to secs. 5, 6, 7 and 8.
Land level, rolling, and mountainous.
Soil sandy loam; and rocky; 2nd and 4th rate.
No timber; undergrowth sage brush.
Mts. land; 29.70 chs.

40.00 WEST, on a random line, bet. secs. 6 and 7,
Set temp. 1/4 sec. cor.
~~79.50~~ Intersect the W. boundary of the Tp. at the cor. of
~~78.50~~ secs. 1, 6, 7 and 12, as heretofore described; thence I run,
EAST, on a true line, bet. secs. 6 and 7.
Over gently rolling land through sage brush.

38.50 Set a limestone, 18 x 6 x 5 ins., 13 ins., in the
39.50 ground for 1/4 sec. cor. mke. 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, W. of the cor.

74.00 Ascend.
~~79.50~~ The cor. of secs. 5, 6, 7 and 8.
78.50 Land rolling.
Soil sandy and 4th rate.
No timber.
Undergrowth sage; 79.50 chs.

June 3rd, 1905.

GENERAL DESCRIPTION.

The lands within this township south of the Moencopie Canon, are covered with sand and traversed by deep canons, and unfit for cultivation.
There are some small patches of farming land in secs. 4, 5, and 6.

Philip Contzen
U. S. Deputy Surveyor.

x At this Cor., at noon, I set off 22° 19' N. on decl. arc, and observe the sun on the meridian; the resulting lat. being 36° 7' N.

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LIST OF NAMES.

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A list of the names of the individuals employed by Philip Couzner

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

subdivisional lines of T. 31 N. R. 11 E

showing the respective capacities in which they acted:

W. S. Kengla, Chainman.

Fred Tagler, Chainman.

Arthur Pogue, Moundman.

Moundman.

Manuel Salazar, Axman.

Axman.

G. A. Hawley, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Philip Couzner

United States Deputy Surveyor, in surveying all

those parts or portions of the subdivisional lines of
T. 31 N. R. 11 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 Tagler, Chainman.

Arthur Pogue, Moundman.

Moundman.

Axman.

Manuel Salazar, Axman.

G. A. Hawley, Flagman.

Subscribed and sworn to before me this 10th
day of June, 1890



W. G. Power

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

BOOK 1866

I, Philip Cantzen, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. 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 subdivisional lines of T. 31 N., R. 11 E.

of the Gila and 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 Cantzen, United States Deputy Surveyor.

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

Frank S. 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 subdivisional lines of T. 31 N., R. 11 E. of the Gila and Salt River Base and Meridian, in the Territory of Arizona

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

Frank S. Ingalls, United States Surveyor General.

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.