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Book E.

Accepted, L.D. letter  
July 26/1912

2246

BOOK 2246

# FIELD NOTES

OF THE SURVEY OF THE

Subdivision lines of Tp. 9 N. Rg. 2 E.

2246

2246

Of the Gila and Salt River Meridian,

Territory of Arizona.

AS SURVEYED BY

Alfred N. Oliver., United States Deputy Surveyor,

Under his Contract No. 161, dated January 5, 1910., 190

Survey commenced June 4, 1910., 190

Survey completed June 6, 1910., 190

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BOOK 2246

NAMES AND DUTIES OF ASSISTANTS.

Len Hall Chainman

A. E. Lyon Chainman

H. T. Hartwell Axman

R. A. Coombs Flagman

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BOOK 2246

INDEX DIAGRAM.

Township 9 N., Range 2 E

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BOOK 2246

PRELIMINARY OATHS OF ASSISTANTS.

WE, Len Hall and A. E. Lyon

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

the subdivision lines of Tp. 9 N. Rg. 2 E.

Len Hall, Chainman.  
A. E. Lyon, Chainman.

Subscribed and sworn to before me this 4th.  
day of June, 1910, 190



Alfred N. Olsson  
U.S. Deputy Surveyor

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, I. H. T. Hartwell 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 me, to the best of my skill and ability, in the survey of

the subdivision lines of Tp. 9 N. Rg. 2 E.

I. H. T. Hartwell, Axman.  
\_\_\_\_\_, Axman.

Subscribed and sworn to before me this 4th.  
day of June, 1910, 190



Alfred N. Olsson  
U.S. Deputy Surveyor

I, R. A. Coombs, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivision lines of Tp. 9 N. Rg. 2 E.

R. A. Coombs, Flagman.

Subscribed and sworn to before me this 4th.  
day of June, 1910., 190



Alfred N. Olsson  
U.S. Deputy Surveyor

No notary available without loss of time and great expense.

## Subdivision of Tp. 9 N. Rg. 2 E.

Chains.

Survey commenced June 4, 1910, and executed with an A. Lietz Co. light mountain transit, No. 5631, 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, tested on the true meridian at Phoenix, found correct, and was approved by the surveyor general for Arizona

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 meridian determined by observations on Polaris, I proceed as follows:

At the standard cor. of secs. 35 and 36 on the S. bdy. of the township, which has been previously described; latitude  $34^{\circ} 04' 21''$  N., longitude  $112^{\circ} 06' 52''$  W.; I set off  $34^{\circ} 04\frac{1}{2}'$  N. on the lat. arc;  $22^{\circ} 27'$  N. on the decl. arc; and at 5h. 00m. p.m., l.m.t. determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

June 4, 1910

June 5: At 2h. 39 $\frac{1}{2}$ m. a.m. by my watch, which has correct l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 6 a.m., l.m.t., I lay off the azimuth of Polaris;  $1^{\circ} 25'$  to the west, and mark the meridian thus determined by cutting a small groove in the stone set June 4, on which the meridian coincides with the mark determined by the solar.

At 7h. 00m. a.m., l.m.t., I set off  $34^{\circ} 04\frac{1}{2}'$  N. on the lat. arc;  $22^{\circ} 31'$  N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark coincides with the meridian established by the Polaris observation.

The solar apparatus, by p.m., and a.m., observations defines positions for meridians, respectively, which coincide with the meridian established by the Polaris observation; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7h. 15m. a.m., is N.  $14^{\circ} 30'$  W.; the angle thus determined gives the mag. decl.  $14^{\circ} 30'$  E.

From the standard cor. of secs. 35 and 36 on the S. bdy. of the township

I now run

N.  $0^{\circ} 01'$  W. bet. secs. 35 and 36

Over rolling land covered with loose rocks, through dense undergrowth.

23.00

Cross wash 20 lks. wide course N. W.

26.00

Cross wash 50 lks. wide course N. W.

40.00

Set a malpais stone 20 x 6 x 6 ins. 15 ins. in the ground for  $\frac{1}{4}$  sec. cr., marked  $\frac{1}{4}$  on W. face; from which

A paloverde 5 ins. diam., bears N.  $76\frac{1}{4}^{\circ}$  W. 52

lks. dist., marked  $\frac{1}{4}$ S35BT

A paloverde 5 ins. diam., bears S.  $49\frac{1}{4}^{\circ}$  E. 47

lks. dist., marked  $\frac{1}{4}$ S36BT.

41.60

Cross wash 15 lks. wide course N. W.

69.70

Left bank of Agua Fria River, dry, course S. W.

79.20

Right bank of Agua Fria River.

80.00

Set a malpais stone 20 x 12 x 7 ins. 15 ins. in the ground for cor. of secs. 35, 36, 35 and 36, marked with

## Subdivision of Tp. 9 N. Rg. 2 E.

Chains	1 notch on S. and E. edges; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling and covered with loose rocks. Soil, rocky; 4th. rate. No timber. Undergrowth, mesquite, greasewood and paloverde. Land covered with dense undergrowth and loose rocks, exceptionally difficult to survey 80.00 chs.
	From the standard cor. of Secs. 34 and 35 on the S, bdy. of the Tp., previously described, I run N. $0^{\circ} 02'$ W. bet. secs. 34 and 35. Over level land covered with loose rocks, through dense brush.
14.97	Cross road bears N. E. and S. W.
17.35	Left bank of Agua Fria River, dry, course S. W.
17.60	Cross road bears E. and W.
40.00	Point for $\frac{1}{4}$ sec. cor. falls in river bed.
41.50	Right bank of Agua Fria River
42.00	Set a malpais stone 18 x 8 x 6 ins. 12 ins. in the ground for witness cor. to $\frac{1}{4}$ sec. cor., marked WC $\frac{1}{4}$ on W. face; from which A mesquite 8 ins. diam., bears N. $29\frac{1}{4}^{\circ}$ W. 41 lks. dist., marked WC $\frac{1}{4}$ S34BT. No other bearing available. Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
46.55	Cross wash 15 lks. wide course E. and ascend.
71.00	Ridge bears N. E. and S. W. descend.
80.00	Set a malpais stone 18 x 10 x 8 ins. 12 ins. in the ground for Cor. of secs. 26, 27, 34 and 35, marked with 1 notch on S. and 2 notches on E. edges; from which A mesquite 4 ins. diam., bears N. $59\frac{1}{2}^{\circ}$ E. 130 lks. dist., marked T9NR2ES26BT A paloverde 4 ins. diam., bears S. $11\frac{1}{4}^{\circ}$ W. 91 lks. dist., marked T9NR2ES34BT No other bearings available. Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling and level, and covered with loose rocks. Soil, rocky; 4th. rate. No timber. Undergrowth, mesquite, paloverde, ironwood and catclaw. Land covered with dense undergrowth and loose rocks, exceptionally difficult to survey; 80.00 chs. June 5: At this cor. I set off $22^{\circ} 31\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $34^{\circ} 05'$ N.
40.00	East on a random line bet. secs. 26 and 35 Set temp. $\frac{1}{4}$ sec. cor.,
79.98	Intersect N. and S. line 5 lks. S. of the cor. of secs. 25, 26, 35 and 36, Thence I run S. $89^{\circ} 58'$ W. on a true line bet. secs. 26 and 35 Over rolling land covered with loose rock, through dense brush.
27.00	Right bank of Agua Fria River, dry, course W. and along in river bed.
39.99	Point for $\frac{1}{4}$ sec. cor. falls in river bed.
45.50	Right bank of Agua Fria River and along S. slope of mesa.
45.99	Set a malpais stone 20 x 8 x 4 ins. 15 ins. in the ground for witness cor. to $\frac{1}{4}$ sec. cor., marked WC $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
69.50	Cross wash 35 lks. wide course S. E. and ascend.

## Subdivision of Tp. 9 N. Rg. 2 E.

Chains.  
79.98

The cor. of secs. 26, 27, 34 and 35.  
Land, Rolling and mountainous and covered with loose rock.  
Soil, rocky; 4th. rate.  
No timber.  
Undergrowth, greasewood mesquite and paloverde.  
mountainous alnd and land covered with dense undergrowth  
and loose rocks, exceptionally difficult to survey 79.98  
chs.

June 5, 1910

June 6: At 7h. 00m., a.m., l.m.t., I set off  $34^{\circ} 04\frac{1}{2}'$  N.  
on the lat. arc:  $22^{\circ} 37\frac{1}{2}'$  N. on the decl. arc; and  
determine a meridian with the solar at the standard cor.  
of secs. 33 and 34 on the S. bdy. of the Tp.

Thence I run

N.  $0^{\circ} 03'$  W. bet. secs. 33 and 34  
Over rolling land covered with loose rocks, through  
dense brush

13.15 Cross fence bears N. W. and S. E.

20.00 Ascend

40.00 Set a granite stone 18 x 12 x 8 ins. 12 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.

Descend.

44.00 Cross road bears N. E. and S. W. and over rolling land.

48.50 Cross road bears N. E. and S. W.

66.00 Cross wash 200 lks. wide course S. E.

72.78 Cross fence bears N. E. and S. W.

80.00 Set a granite stone 18 x 10 x 6 ins. 12 ins. in the  
ground for cor. of secs. 27, 28, 33 and 34, marked with  
1 notch on S. and 3 notches on E. edges; from whichA mesquite 5 ins. diam., bears N.  $44\frac{3}{4}^{\circ}$  E. 158  
lks. dist., marked T9NR2ES27BT.A mesquite 5 ins. diam., bears S.  $59\frac{3}{4}^{\circ}$  E. 79  
lks. dist., marked T9NR2ES34BT.A mesquite 7 ins. diam., bears S.  $58^{\circ}$  W. 77  
lks. dist., marked T9NR2ES33BT.A mesquite 8 ins. diam., bears N.  $13\frac{1}{4}^{\circ}$  W. 93  
lks. dist., marked T9NR2ES28BT.

From this cor.

House bears S.  $75^{\circ}$  EBarn bears S.  $44^{\circ}$  E.Small house bears N.  $86^{\circ}$  E.

Land, level and rolling, and covered with loose rocks.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, greasewood, paloverde and mesquite.

Land covered with dense undergrowth and loose rocks,  
exceptionally difficult to survey, 80.00 chs.

East on a random line bet. secs. 27 and 34

40.00 Set temp.  $\frac{1}{4}$  sec. cor.79.90 Intersect N. and S. line 2 lks. N. of the cor. of secs.  
26, 27, 34 and 35.

Thence I run.

N.  $89^{\circ} 59'$  W. on a true line bet. secs. 27 and 34

Over rolling land, through dense brush over loose rocks.

15.00 Cross wash 20 lks. wide course S. W.

24.00 Cross wash 20 lks. wide course S. W.

39.95 Set a malpais stone 20 x 10 x 6 ins. 15 ins. in the  
ground for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face; from whichA paloverde 5 ins. diam., bears N.  $44\frac{1}{2}^{\circ}$  E. 96

## Subdivision of Tp. 9 N. Rg. 2 E.

Chains.	lks. dist., marked $\frac{1}{4}$ S27BT. A paloverde 5 ins. diam., bears S. $36\frac{3}{4}^{\circ}$ W. 51 lks. dist., marked $\frac{1}{4}$ S34BT.
46.00	Cross wash 10 lks. wide course S. W.
53.87	Cross road, phoenix to Prescott bears N. W. and S. E.
71.11	House bears S. $72^{\circ} 08'$ W. Barn bears S. $63^{\circ}$ W. Small house bears N. $85^{\circ} 30'$ W.
72.00	Cross road bears N. W. and S. E.
73.86	Cross fence bears N. W. and S. E.
77.41	Cross fence bears N. E. and S. W.
79.90	The cor. of secs. 27, 28, 33 and 34. Land, rolling and covered with loose rocks. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood, paloverde and mesquite. Land covered with dense undergrowth and loose rocks, exceptionally difficult to survey, 79.90 chs. June 6: At this cor. I set off $22^{\circ} 38'$ N. on the decl. arc; and observe the sun on the meridian at noon, the resulting lat. is $34^{\circ} 05'$ N.
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	N. $0^{\circ} 02'$ W. bet. secs. 32 and 33 Ascending along S. E. slope of mountains, over loose rocks, through dense brush.
14.50	Cross wash 30 lks. wide course S. E.
30.00	Ridge bears E. and W. descend.
35.40	Cross drain 7 lks. wide course E. ascend.
40.00	Set a granite stone 20 x 10 x 4 ins. 15 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which A paloverde 4 ins. diam., bears S. $58^{\circ}$ E. 30 lks. dist., marked $\frac{1}{4}$ S33BT. A paloverde 4 ins. diam., bears N. $8\frac{1}{2}^{\circ}$ W. 72 lks. dist., marked $\frac{1}{4}$ S32BT.
44.00	Ridge bears E. and W. descend.
49.30	Cross drain 8 lks. wide course E. ascend.
74.50	Ridge bears E. and W. descend.
80.00	Set a malpais stone 20 x 14 x 6 ins. 15 ins. in the ground for cor. of secs. 28, 29, 32 and 33, marked with 1 notch on S. and 4 notches on E. edges; from which A paloverde 4 ins. diam., bears S. $58^{\circ}$ E. 120 lks. dist., marked T9NR2ES33BT. A paloverde 4 ins. diam., bears S. $62\frac{1}{2}^{\circ}$ W. 101 lks. dist., marked T9NR2ES32BT. No other bearings available. Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous, and covered with loose rocks. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood, paloverde and mesquite. Mountainous land and land covered with dense undergrowth exceptionally difficult to survey 80.00 chs.
	<hr/>
	East on a random line bet. secs. 28 and 33
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line 14 lks. S. of the cor. of secs. 27, 28, 33 and 34 Thence I run S. $89^{\circ} 54'$ W. on a true line bet. secs. 28 and 33 Descending over rolling land covered with loose rocks, through dense brush.
8.85	Cross fence bears N. W. and S. E.
10.50	Cross wash 250 lks. wide course S. E. and ascend rough S. E. slope of mountains.
18.00	Cross drain 7 lks. wide course S. E.



## Subdivision of Tp. 9 N. Rg. 3 E.

Chains.

36.00

Cross drain 6 lks. wide course S. E.; ascend.

40.01

Set a malpais stone 18 x 10 x 8 ins. 12 ins. in the ground for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face; from whichA paloverde 6 ins. diam., bears N.  $13\frac{1}{2}^{\circ}$  E. 121 lks. dist., marked  $\frac{1}{4}$ S28BT.A paloverde 6 ins. diam., bears S.  $19\frac{3}{4}^{\circ}$  W. 82 lks. dist., marked  $\frac{1}{4}$ S33BT.

80.02

The cor. of secs. 28, 29, 32 and 33.

Land mountainous and covered with loose rocks.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, paloverde, greasewood and mesquite

Mountainous alnd and land covered with dense undergrowth exceptionally difficult to survey 80.02 chs.

June 6, 1910.

## GENERAL DESCRIPTION.

This township is rough and mountainous, and the soil rocky and worthless excepting small pieces along the Agua Fria River, which runs through the S. E. cor. of the township, and carries water during the wet season. There is one settler in sec. 34. There is no timber in the township. Although my special instructions carried no provision for the survey of this township, it was necessary to survey these three sections in order to include the claim of E. L. Hildebrand.

*Alfred N. Bliss*  
U.S. Deputy Surveyor.

LIST OF NAMES.

BOOK 2246

A list of the names of the individuals employed by Alfred N. Oliver

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the subdivision lines of Tp. 9 N. Rg. 2 E.

showing the respective capacities in which they acted:

Len Hall ..... , *Chainman.*

A. E. Lyon ..... , *Chainman.*

..... , *Moundman.*

..... , *Moundman.*

H. T. Hartwell ..... , *Acman.*

..... , *Acman.*

R. A. Coombs ..... , *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfred N. Oliver

....., United States Deputy Surveyor, in surveying all those parts or portions of the the subdivision lines of Tp. 9 N. Rg. 2 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

Len Hall ..... , *Chainman.*

A. E. Lyon ..... , *Chainman.*

..... , *Moundman.*

..... , *Moundman.*

H. T. Hartwell ..... , *Acman.*

..... , *Acman.*

R. A. Coombs ..... , *Flagman.*

Subscribed and sworn to before me this 6th.

day of June, 1910., 190



Alfred N. Oliver

U.S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alfred N. Oliver, 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 5th. day of January, 1910, 190, 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 subdivision lines of Tp. 9 N. Rg. 2 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.

Alfred N. Oliver  
United States Deputy Surveyor.

Subscribed by said Alfred N. Oliver, and sworn to before me }  
this 26th day of July, 1900

Frank S. Ingalls  
U.S. Surveyor General



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz. July 11, 1911 1900

The foregoing field notes of the survey of a portion of the subdivision lines of Tp. 9 N. Rg. 2 E. Gila and Salt River Base and Meridian, Arizona.

executed by Alfred N. Oliver U.S. Deputy Surveyor under his contract No. 161, dated January 5 - 1910, 1900, 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.