

18

WEST BOUND  
Tp 17 N. R 2 E  
CONTRACT N° 92  
GIRARD

BOOK 1406

1406

No. 1000

4-671

FIELD NOTES  
GENERAL LAND OFFICE.

✓

Preliminary Oaths of Assistants.

1

We, *A. N. Oliver* .....  
and *E. M. Donald* .....

do solemnly swear that we will well and faithfully execute  
the duties of Chain Carriers; 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 distance 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 *West boundary of*  
*Sp 17 N. R. 2 E. and all the*  
*interior boundaries of Sp 18 N. R.*  
*2 E.* .....

of the Gila and Salt River Base and Meridian, in the Ter-  
ry of Arizona.

*A. N. Oliver* Chainman.

*E. M. Donald* Chainman.

..... Chainman.

..... Chainman.

Sworn and subscribed before me, this *9<sup>th</sup>* .....

day of *June* 18*02* .....

*R. K. Shoemaker*

Notary Public.

My commission  
[SEAL] expires Feb'y

*1406*

We,

G. G. Gilmore

C. A. Risinger

BOOK 1406

1A

do solemnly swear that we will well and truly perform the duties of Acemen and Measurers

in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the West boundary of Tp 17 North R. 2 East and all the interior boundaries of Tp. 18 N R. 2, E.

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

Park W. Latimer Flagman.

C. A. Risinger Aceman.

G. G. Gilmore Aceman.

Aceman.

Subscribed and sworn to before me this 9<sup>th</sup>

day of June

R. K. Hornaker

Notary Public.

My commission expires 7th 3 1903

No. 1406

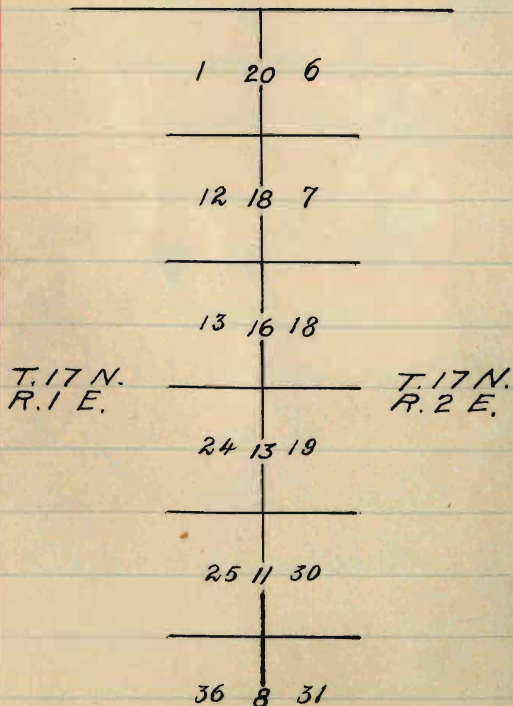
Field Notes  
of the survey of the  
West Boundary  
of  
Township No. 17 North  
Range No. 2 East  
of the  
Gila and Salt River  
Base and Meridian  
in the  
Territory of Arizona  
as surveyed by  
James Bell Girard,  
U.S. Deputy Surveyor  
Under his contract No. 92.  
Dated April 24, 1902

Survey commenced June 9, 1902  
Survey completed June 11, 1902

Names and duties of  
Assistants

A. N. Oliver	Chairman
E. McDonald	Chairman
C. A. Risinger	Assman
G. G. Gilmore	Assman
P. W. Latimer	Flagman

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Survey commenced June 9, 1902, and executed with an A. Lietz Co. light mountain transit, No. 902, with Saegmüller 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 arc.

To test the solar apparatus by comparing its indications, resulting from solar observations made during a. m. and p. m. hours,

with a true meridian determined by observations on Polaris. I proceed as follows:

June 9. At the standard corner of Tps. 16 and 17 N., Rgs. 1 and 2 E., latitude  $34^{\circ} 49' 22''$  N., longitude  $112^{\circ} 11' 05''$  W. at  $2^{\text{h}} 15.35^{\text{m}}$  a.m. C.M.T., by my watch, which is correct, I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point on the line thus determined on a plug driven in the ground 4.00 chains N. of my station.

June 9. At  $6^{\text{h}} 30^{\text{m}}$  a.m.

l. m. t., I lay off the azimuth of Polaris,  $1^{\circ} 29'$ , to the west and mark the true meridian thus determined by a tack driven in a stake set firmly in the ground 4.00 chains N. of my station.

At  $7^{\text{h}} 00^{\text{m}}$  a. m. l. m. t., I set off  $55^{\circ} 11'$  for my co-latitude;  $22^{\circ} 54'$  N. for my declination, and mark a point in the true meridian determined with the solar, by a mark on the stake already set 4.00 chains N. of my station; this mark falls 0.25 ins. west of the true meridian



established by the Polaris observation.

The solar apparatus, by a. m. and p. m. observations, defines positions for true meridians, respectively about  $0^{\circ}30''$  east and  $0^{\circ}30''$  west of the true meridian established by the Polaris observations; therefore I conclude the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7 a. m., is  $N. 14^{\circ} 25' W.$ ; the angle thus determined, reduced by the table, page 100, gives the mean mag. decl.  $14^{\circ} 21' E.$

West boundary of Tps. 17 N. Rgs. 2 E.  
Chains

June 9, 1902

June 10: At 7<sup>h</sup> 00<sup>m</sup> a. m., I set off  $55^{\circ} 11'$  for my co-latitude;  $22^{\circ} 59' N.$  for my declination; and determine a true meridian with the solar, at the standard cor. of Tps. 17 N., Rgs. 1 and 2 E.

I begin at the standard corner of Tps. 17 N. Rgs. 1 and 2 E. which is a sandstone  $18 \times 12 \times 8$  ins. marked and witnessed as described by the surveyor general

Phelps. I run  
over Mountainous Land.  
North, bet secs. 31 and 36  
Descending N. slope of

## West boundary of Pps. 17 W. Rg. 2 E.

Chains

enters along on top of ridge  
brs. N.W. and S.E.; through  
scattering cedars.

11.00 Descend into cañon through  
oak brush.

19.60 Bottom of cañon and  
ascend. Course of cañon  
N.W. brs. S.E.

36.00 Top of ridge, bears N.W.  
and S.E.

40.00 Set a sandstone  $24 \times 18 \times 6$   
ins. 18 ins. in the ground,  
for  $\frac{1}{4}$  sec. cor., marked  
 $\frac{1}{4}$  on W. face; from  
which

A cedar, 8 ins. diam. bears  
S.  $64^{\circ}$  W., 137 lks. dist.,  
marked  $\frac{1}{4}$  S 36 BT.

A cedar, 6 ins. diam. bears  
S.  $88^{\circ} 30'$  E. 132 lks. dist.

West boundary Pp. 17 N. Pg. 2 E.  
chains

marked  $\frac{1}{4}$  S 31 BT.

43.00 Descend into ravine

59.00 Bottom of ravine, course  
N.W. bears S.E. and  
ascend S.W. slope.

74.00 Top of ridge, bears N.W.  
and S.E.

80.00 Set a malpais 24 X 14 X 5  
ins. 18 ins. in the ground,  
for cor. secs. 25, 30, 31 and  
36; marked with 5 notches  
on N. and 1 notch on S.  
edges; and raised a  
mound of stone 3 ft. base  
2½ ft. high, W. of cor.  
Pits impracticable  
Land, mountainous  
Timber, cedar  
Soil, rocky; 4<sup>th</sup> rate.  
Underbrush, oak.

West boundary Pp. 17 N. Pg. 20.  
Chains.

Mountainous land or  
land covered with dense  
underbrush, 80.00 chs.

North, bet. secs. 25 and 30.

Descending N. slope of  
mountains, through <sup>Dense</sup> oak  
brush and scattering  
cedar timber.

17.00 Begin sharp descent into  
cañon.

28.25 Bottom cañon, course N.W.  
bears S.E. and ascends.

30.00 Pop and descend along  
S.E. slope.

40.00 Set a malpais 18x12x6  
ins., 12 ins. in the ground  
for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$   
on W. face; from which  
A cedar 6 ins. diam. bears

## West boundary Twp. 17 N. Rg. 25 E.

Chains

N.  $47^{\circ}30'$  W. 78 lks. dist.marked  $\frac{1}{4}$  S 25 BT.

No other tree within limits.

55.00 <sup>Pits impracticable</sup>  
Dry wash, course N.  $70^{\circ}$  E.  
bears S.  $70^{\circ}$  W.

80.00 Set a sandstone  $18 \times 14 \times 4$   
ins  $12$  ins. in the ground  
for cor. secs. 19, 24, 25 and  
30; marked with 4 notches  
on N. and 2 notches on  
S. edges; dug pits  $18 \times 18 \times$   
 $12$  ins., in each sec.  $5\frac{1}{2}$  ft.  
dist.; and raised a  
mound of earth 4 ft.  
base 2 ft. high, W. of  
cor.

Land, mountainous.

Soil, rocky and sandy;  
 $4^{\text{th}}$  rate.

Timber, cedar.

West boundary Twp. 17 N. Rg. 2 E.

Chains.

Underbrush, oak.

Mountainous land or  
land covered with dense  
underbrush 80.00 chs.

North bet. secs 19 and 24.

Over level bottom through

Dense oak brush.

0.90 Left bank dry wash, course  
N.W. bears S.E. and along  
in same.

6.25 Leave dry wash without  
crossing it. Course N.E.  
bears S.

11.00 Ascend along S.E. slope.

17.50 Top of ridge, bears E. and  
W. and descend steep  
N. slope.

18.00 Bottom of cañon, course  
N.E. bears S.W. and

## West boundary Pp. 17 N. Ag. 2 C.

Chains

- ascend steep S. E. slope
- 36.00 Pop of ridge, bears S. W. and N. E.
- 40.00 Set a sandstone 20 X 12 X 4 ins. 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face; from which a cedar 10 ins. diam bears N.  $65^{\circ}45'W$ . 96 lks. dist. marked  $\frac{1}{4}$  S 24 BT. No other bearing tree available.
- ~~41~~ <sup>is impracticable</sup>
- 42.00 Bottom ravine, course N. E. bears S. W. and ascend.
- 48.00 Head of draw, course S. E.
- 52.00 Pop and over rolling top mountains.
- 80.00 Set a malpais 22 X 12 X 10 ins. 17 ins. in the ground for cor. secs. 13, 18, 19 and 24; marked with 3 notches



West boundary T<sub>17</sub> N. R<sub>2</sub> E.

Chains

on N. and S. edges; from which

A cedar 10 ins. diam. bears  
S. 61° E. 20 lks. dist. marked  
T<sub>17</sub> N R<sub>2</sub> E S<sub>19</sub> BT.

A cedar 6 ins. diam. bears  
S. 27° 15' W. 67 lks. dist. marked  
T<sub>17</sub> N R<sub>1</sub> E S<sub>24</sub> BT.

No other bearing trees  
available. Pits. Impracticable  
Land, mountainous.

Soil, rocky and sandy;  
4¢ rate

Timber, cedar.

Underbrush, oak.

Mountainous land or land  
covered with dense brush  
80.00 lks.

June 10, 1902.

West boundary Twp. 17 N. Rg. 2 E.  
Chains

June 11: At 7:00<sup>m</sup> a. m. l. m. t.

I set off  $55^{\circ} 08'$  for my  
co-latitude;  $23^{\circ} 04'$  N.  
for my declination; and  
determine a true meridian  
with the solar, at the  
cor. of secs. 13, 18, 19 and 24

Thence I run

North bet. secs. 13 and 18.

Over rolling mountains,  
descending general N.  
slope, through <sup>Dense</sup> oak brush  
and scattering cedar  
timber

40.00 Set a cedar post 3 ft.  
long, 4 ins. sq. 24 ins. in  
the ground, for  $\frac{1}{4}$  sec.  
cor., marked  $\frac{1}{4}$  S 13 on  
W. and 18 on E. faces;  
from which, Pts. impracticable

West boundary Twp. 17 N. Rg. 2 E.

Chains

A cedar 10 ins. diam. bears  
N. 80° 22' E. 113 lks. dist.

marked  $\frac{1}{4}$  S 18 BT., No other trees  
<sup>available</sup>

80.00

Deposited a marked stone,  
12 ins. in the ground, for  
cov. of secs. 7, 12, 13 and 18;  
dug pits 18 X 18 X 12 ins., in  
each sec., 4 ft. dist.; and  
raised a mound of earth,  
4 ft. base, 2 ft. high, over  
deposit.

In S. E. pit drove a cedar  
stake, 2 ft. long 2 ins. sq.  
12 ins. in the ground,  
marked

T 17 N 37 on N. E.,

R 2 E S 18 on S. E.,

S 13 on S. W., and

R 1 E S 12 on N. W. faces; with  
4 notches on S. and 2

West boundary Sp. 17 N. Rg. 2 E.  
Chains

notches on N. edges.

Land, mountainous

Soil, sandy and gravelly;  
3<sup>rd</sup> rate.

Timber, cedar.

Mountainous land 80.00  
chains.

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North bet. secs 7 and 12.

Over rolling mountains  
descending general N.  
slope.

26.00 Cross dry wash, 100 lks.  
wide, course N.W. bears  
S.E.

40.00 Set a malpais 18x12x10  
ins. 12 ins. in the ground  
for  $\frac{1}{4}$  sec. cor., marked  
 $\frac{1}{4}$  on W. face; dug pits  
18x18x12 ins., N. and S.

West boundary Twp. 17 N. Rg. 2 E.

Chains

of stone 3 ft. dist.; and raised a mound of earth,  $3\frac{1}{2}$  ft. base  $1\frac{1}{2}$  ft. high, N. of cor.

42.00 Cross dry gully course N.W. bears S.E.

62.00 Cross dry wash 40 lks. wide course N.W. bears S.E.

80.00 Set a sandstone  $26 \times 20 \times 6$  ins., 20 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked with 1 notch on north and 5 notches on S. edges; from which a cedar 8 ins. diam. bears S.  $78^\circ$  E. 22 lks. dist marked T17NR2E S7BT.

A cedar 6 ins. diam. bears N.  $70^\circ 45' W$ . 17 lks. dist marked T17NR1E S1 BT.

West boundary Pp. 17 N. Rg. 2 E.  
Chains

A cedar 8 ins. diam. bears  
S.  $58^{\circ}$  W. 54 lks. dist. marked  
T17NR1ES12BT.

A cedar 16 ins. diam. bears  
N.  $35^{\circ}30'$  E. 74 lks. dist. marked  
T17NR2ES6BT.

Land, mountainous  
Soil, sandy and gravelly;  
3<sup>rd</sup> rate.

Timber, cedar.

Mountainous land 80.00 chs.

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North bet. secs. 1 and 6.

Over rolling mountains  
descending general N.  
slope, through scattering  
cedars.

40.00 Set a sandstone 18x12x8  
ins. 12 ins. in the ground  
for  $\frac{1}{4}$  sec. cor. marked

## West boundary Tps. 17 N. Rg. 2 E.

Chains.

$\frac{1}{4}$  on W. face; from which  
 A cedar 8 ins. diam bears  
 N.  $30^{\circ}20'E$ . 260 lps. dist. marked  
 Pits impracticable  
 $\frac{1}{4}$  56 BT. No other trees available

53.00

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

80.00

Set a sandstone  $26 \times 16 \times 12$  ins.  
 20 ins. in the ground, for  
 cor. of Tps. 17 and 18 N. Rgs.  
 1 and 2 E., marked  
 18 N on N. E.  
 2 E on S. E.  
 17 N on S. W. and

1 E on N. W. faces; with  
 6 notches on each edge;  
 dug pits  $24 \times 24 \times 12$  ins.,  
 on each line, N., E., and  
 W., 4 ft., and S. of stone,  
 8 ft. dist.; and raised  
 a mound of earth, 5 ft.

West boundary Sp. 17 N. Rg. 2 E.

Chains

base,  $2\frac{1}{2}$  ft. high, S. of  
cor.

Land, mountainous  
Soil, sandy and gravelly;  
3<sup>rd</sup> rate.

Timber, a few scattering  
cedars.

Mountainous land 80.00 chs.

June 11, 1902

This township is rough  
and mountainous and  
the soil rocky and sandy,  
worthless for agricultural  
purposes but valuable  
for grazing.

This township is covered  
with a scattering growth  
of cedar timber. No water,  
No settlers.



No. 1406

James Bell Girard  
U.S. Deputy Surveyor.  
June 11<sup>th</sup> 1902

BOOK 1406  
APPROVAL.

24

OFFICE OF THE U.S. SURVEYOR GENERAL.

Phoenix, Arizona.

The foregoing field notes of the survey of West Boundary of  
Sp. 17 North Range 2 East  
executed by James B. Girard, Sr.  
under his contract No. 92 dated ---  
Apr 24 1902, having critically  
examined and the necessary corrections  
and explanations made, the said field  
notes, and the surveys they describe,  
are hereby approved.

Mugh H. Price  
U.S. Sur. Gen for Arizona.