

1718

BOOK 1718

1718

4-671

FIELD NOTES

GENERAL LAND OFFICE.

*1<sup>st</sup> Guide Meridian West  
thro Township 25 North*

1718

BOOK 1718

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T 25 K  
R. 4 K

Field Notes  
of the survey of the  
First Guide Meridian West  
through  
Township No. 25 North  
of the  
Gila Salt River Case and Meridian  
in the  
Territory of Arizona  
as surveyed by  
Francis W. Survey  
U. S. Deputy Surveyor  
Charles E. Perkins  
Compassman & U. S. Deputy Surveyor  
under his contract No. 31,  
dated June 21, 1893.

Survey commenced April 25, 1894  
Survey completed April 26, 1894

## First Guide Meridian

chains

Survey commenced April  
 26, 1894, with a N. + S. E.  
 Gurley solar transit. ~~At~~  
~~9<sup>h</sup> 10<sup>m</sup> a.m. I went 9 out off~~  
~~35° 30' on lat. arc, 10° 34'~~  
~~decl. arc, and determine a~~  
~~true meridian with the~~  
~~solars,~~ at the standard  
 cor. to Tps. 25 N. R. 4 and  
 5 W., heretofore described  
 in latitude 35° 28' N., longi-  
 tude 112° 50' W. at 8<sup>h</sup> 35<sup>m</sup>  
 P.M., local mean time, I  
 take an observation on  
 Polaris in accordance with  
 instructions in the Manual  
 and find the magnetic  
 bearing of the star to be  
 N. 7° 46' W. I drive a

West  
chain

through. To 25 North  
pieces on the line thus found  
50 ch. north of the corner.

Astronomical time by watch  
which is also local mean time

April 25<sup>th</sup> 8<sup>h</sup> 35<sup>m</sup> P.M.

Tabular time U.C. Polaris.

Table (1) Apr. 10<sup>th</sup> 23<sup>h</sup> 39.40'

Reduction 10 days

39.80 x 10 = 39.80, Subtract 35.37'  
23<sup>h</sup> 04.03'

Cor. of U.C. Polaris Apr 25,

Which taken from time of  
observation leaves true

angle of Polaris 9<sup>h</sup> 31.0'

Azimuth of Polaris for

Lat. 35° 28' N. Table (2) 0.55<sup>th</sup>

North end of middle 17.46 E

The difference is the Variation 16° 01' E

I lay off the azimuth to the

East and drive a picket on  
the true meridian thus  
determined 5.00 chains  
north of corner.

April 25, 1894.

April 26, 1894 at 7 a.m. I take  
the magnetic bearing of  
the line established last  
night and find it to be  
 $N. 17^{\circ} 48' W.$  and the variation  
 $16^{\circ} 53' E.$  The mean variation  
is  $16^{\circ} 51' E.$

→ From the Standard  
cor aton derived.  
I run.

North 7<sup>th</sup> sec. 31  $\frac{1}{4}$  36

through T<sub>p</sub>. 25 North (cont'd)

chains.

Var. 16° 51' E

Over mountainous land.

Descend 200 feet.

23.00 Foot of descent, thence over rolling land.

40.00 Set a malpais stone 22x16 x 17 ins. 16 ins in the ground for 1/4 sec. on marked 1/4 on N. face and raised a mound of stone 1 1/2 ft. high, 2 ft. base, alongside. Pits in- practicable

71.00 Enter scattering cedar

80.00 Set a malpais stone 30x20x14 ins. 22 ins in the ground for cor. to secs. 25, 30, 31 and 36, marked with 5 notches on N. and 1 notch on S. edges,

## First Guide meridian West

chains and raised a mound of stone  $1\frac{1}{2}$  ft high, 2 ft. base, alongside, from which

a cedar 26 ins. diam. hrs  
 S.  $38^{\circ} 11' E$ , 115 lbs. dist, marked  
 T. 25 N., R 4 W., S. 31 B.T.

a cedar 15 ins. diam. hrs  
 S.  $15^{\circ} 07' W$ , 98 lbs. dist,  
 marked T. 25 N. R 5 W. S. 36 B.T.

a cedar 6 ins. diam. hrs  
 N.  $68^{\circ} 15' W$ . 120 lbs. dist, mark-  
 ed T. 25 N. R 5 W. S. 25 B.T.

No other trees within limits.

Land, mountainous and rolling.

Soil, rocky, 4<sup>th</sup> rate.

No timber.

mountainous land, 23 chs.



through Sp. 25 North (continued)

chains. North bet. sec. 25 and 30.

Var.  $10^{\circ}51'E$ .

at this point the variation decreases on account of local attraction.

Over rolling land.

31.00 ascent 10 feet.

32.00 Top of ascent. Enter dense cedar and pinon brush.

40.00 a malpais rock in place  $4 \times 3 \times 2$  ft. above ground, which I mark with a cross (+) at exact cor. point and  $1/4$  on W. face, for  $1/4$  sec. cor., and raised a mound of stone  $1 1/2$  ft high, 2 ft. base, alongside, from which a cedar 6 ins diam. bro.

## Fruit Guide meridian West

chain N.  $38^{\circ} 05' E$ . 62 lks dist.

marked  $1/4$  B. B.T.

a cedar 10 ins. diam. brs

N.  $87^{\circ} 11' W$ . 27 lks dist., mark-

ed  $1/4$  B. B.T.

63.00 Leave dense cedar and  
pinon brush, enter  
scattering cedar.

Descent 85 feet.

80.00 Set a malpais stone  $20 \times$

$16 \times 11$  ins. 15 ins. in the

ground for cor to recs.

19, 24, 25 and 30, marked

with 4 notches on N. and

2 notches on S. edges, and

raised a mound of stone

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

alongside, from which

a cedar 21 ins. diam. brs

through Sp. 25 North (continued)

chains S.  $55^{\circ} 04' E$ , 142 lbs dist,  
 marked T. 25 N. R. 4 W. b. 30 B.T.  
 a cedar 6 ins. diam. bcs  
 N.  $41^{\circ} 31' W$ , 228 lbs. dist. marked  
 T. 25 N. R. 5 W. b. 24 B.T.

No other trees within limits.

Land, rolling.

Soil, rocky, 4<sup>th</sup> rate.

No timber.

Dense cedar & pinon brush, 31 lbs.

At this cor. I set off  $13^{\circ} 23' N$ .  
 on the decl arc, and at  
 11 h. 57<sup>m</sup> a. m. l. m. t. observe  
 the Sun on the meridian;  
 the resulting latitude is  
 $35^{\circ} 32' N$ , the true latitude  
 nearly.

## First Guide meridian West

- chains North bet sec. 19 and 24.  
 Var.  $16^{\circ} 50' E$ .  
 over rolling land.  
 Descend 40 feet
- 33.00 Foot of descent; small  
 ravine, course E.
- 40.00 Bet a malpais stone  $16 \times$   
 $10 \times 8$  ins. 11 ins. in the  
 ground for  $\frac{1}{4}$  sec. cor.  
 marked  $\frac{1}{4}$  on W. face,  
 and raised a mound of  
 stones  $\frac{1}{2}$  ft high, 2 ft.  
 base, alongside; from  
 which  
 a cedar 20 ins. diam. hrs.  
 $S 45^{\circ} 20' E$ , 15 lks. dist, marked  
 $\frac{1}{4}$  S. B.T.
- a cedar 24 ins. diam. hrs  
 $S. 50^{\circ} 15' W$ , 12 lks. dist.

through Tp. 25 North (contd)

chains. marked 1/4 S. B.T.

45.00 ascend 30 feet

51.00 Top of ascent.

80.00 Set a malpais stone 16x12x  
10 ins. 11 ins. in the ground

for cor. to sec. 13, 18, 19 and  
24, marked with 3 notches

on N. and S. edges, and  
raised a mound of stone

1 1/2 ft. high, 2 ft. base,  
alongside, from which  
a cedar 20 ins. diam.

brs N. 13° 17' E. 64 lks. dist.

marked T. 25 N. R. 4 N. S. 18 B.T.

a cedar 6 ins. diam. brs,

S. 88° 15' E. 78 lks. dist.

marked T. 25 N. R. 4 N. S. 19 B.T.

a cedar 14 ins. diam. brs

S. 77° 01' W. 112 lks. dist.

## First Guide meridian West

chains marked T. 25 N. R. 5 W. S. 24 B. T.  
 a cedar 17 ins. diam. hrs  
 N.  $12^{\circ} 31'$  W. 227 lks. dist.  
 marked T. 25 N. R. 5 W. S. 13 B. T.  
 Land, rolling.  
 Soil, rocky,  $\frac{1}{2}$  rate.  
 Timber, scattering cedar.

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North bet. secs 13 and 18.

Var.  $16^{\circ} 48' E.$

over broken land.

10.00 Descent 150 feet.

21.00 Foot of descent

Ravine, 10 ft. deep, course S. E.

ascend 80 ft.

22.00 Top of ascent

Descent 100 feet

40.00 Get a malpais stone 12 x

10 x 9 ins. 8 ins. in the

through Sp. 25 North (cont'd)

- chain's ground for  $\frac{1}{4}$  sec. cor. marked  
 $\frac{1}{4}$  on W. face and raised  
 a mound of stone  $1\frac{1}{2}$  ft high,  
 2 ft. base, alongside;  
 from which  
 a cedar 6 ins diam. tree  
 b.  $88^{\circ} 15' E$ . 31 lbs. dist marked  
 $\frac{1}{4}$  S. B. T.
- a cedar 8 ins diam. tree  
 b.  $79^{\circ} 5' W$ . 22 lbs. dist.  
 marked  $\frac{1}{4}$  S. B. T.
- 42.00 Foot of descent. Ravine, 2  
 ft. deep, course S. E.  
 ascent 150 feet.
- 59.00 Top of ascent, ridge, course  
 W. Thence over rolling  
 land.
- 80.00 Set a malpais stone  $14 \times 9$   
 $\times 8$  ins. 9 ins. in the

First Guide meridian West

chains ground, for cor. to sec  
7, 12, 13 and 18, marked  
with 2 notches on N. and  
4 notches on S. edges, and  
raised a mound of stone  
 $1\frac{1}{2}$  ft high, 2 ft. base,  
alongside. Pits impracti-  
cable.

Land, broken and rolling  
Soil, rocky, 4<sup>th</sup> rate.

Timber, scattering cedar.

North lat. sec. 7 and 12-

Var.  $17^{\circ} 01' E$

at this point the variation  
increases on account of  
local attraction.

1.08 Foot of almost perpen-  
dicular rock wall, 160



- through Sp. 25 North (cont'd)
- chains. ft. high, course E. and W.
- 2.00 Top of wall.
- Thence over gently rolling mesa.
- 40.00 a malpais rock in place  
 $2 \times 2 \times 4$  ft. above ground,  
 which I marked  $\frac{1}{4}$  sec. cor.  
 with a cross (+) at exact  
 cor. point and  $\frac{1}{4}$  on W. face  
 and raised a mound of  
 stone  $1\frac{1}{2}$  ft. high, 2 ft.  
 base, alongside. Pits  
 impracticable.
- 80.00 Set a malpais stone  $18 \times$   
 $10 \times 8$  ins.  $12$  ins. in the  
 ground for cor to sec  
 $1, 6, 7$  and  $12$ , marked with  
 $1$  notch on N. and  $5$  notches  
 on S. edges, and raised a  
 mound of stone  $1\frac{1}{2}$  ft.

## First Guide Meridian West

chains high, 2 ft. base, along grade.  
 Pits impracticable  
 Land, broken and rolling.  
 Soil, rocky, 4<sup>th</sup> rate.  
 No timber

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North bet. sec. 1 and 6.

Var.  $15^{\circ} 03' E$ .

Over mountainous land.

ascend 150 feet

20.00 Top of butte

Descent 200 feet.

33.00 Foot of descent.

ascend 60 feet.

40.00 Set a maelpais stone  $10 \times$

$14 \times 10$  ins.  $11$  ins. in the  
 ground for  $1/4$  sec. cor.

marked  $1/4$  on W. face,  
 and raised a mound of

through Sp. 25 North (cont'd)

claims stone  $1\frac{1}{2}$  ft. high, 2 ft. base, alongside. Pits impracticable.

41.00 Top of ascent.  
Descend 40 feet.

43.00 Foot of descent.

Thence over rolling land.

80.00 Set a malpais stone  $30 \times 20 \times 18$  ins. 22 ins. in the ground for cor. to Sp. 25 and 26 N, Rs. 4 and 5 N. marked with 6 notches on each edge, and raised a mound of stone  $1\frac{1}{2}$  ft. high, 2 ft. base, alongside. Pits impracticable.

Land, mountainous and rolling.  
Soil, rocky, 4<sup>th</sup> rate.

First Guide meridian west

chains, no timber.

April 25, 1894.

General Description.

The township on the west is broken and mountainous, but contains good grazing land.

The township on the East is broken and cut by deep canons, covered with dense brush and some good grass.

There are a few "tanks" of water in cataract creek.

Charles E. Perkins

Compassman <sup>and</sup>

U.S. Deputy Surveyor

U. S. Surveyor-General's Office,

TUCSON, A. T., July 13, 1895

The foregoing Field Notes of the Surveys of  
 the 1<sup>st</sup> Guide meridian  
 West thro: T<sup>p</sup>: 25 North

Gila and Salt River Meridian  
 in Arizona executed by  
 F. W. Oury

U. S. Deputy Surveyor, under his contract dated  
 June 21<sup>st</sup> 1893  
 having been critically examined, the necessary correc-  
 tions and explanations made, the said Field Notes and  
 the surveys they describe are hereby approved.

Geo. Manning

U. S. Surveyor-General  
 for the Territory of Arizona.