No. 1365

1

BOOK 1365

(See Resurvey by Dep. Caudle 1902.)
(+ in package)

4–671

FIELD NOTES

GENERAL LAND OFFICE.

BOOK 1365

1st Guide Meridian East

Thro Township 25 North.

bet. Rs. 4 & 5 East

No. 1365

Index

1st Guide M. East

2/4					
7/1		T 25 N			
18/18		R 5 E			
19/13					
30/9					
31/6					

Field Notes

of the survey of the

First Guide meridian East

through

Township 25 North

of the

Gila and Salt River Base

and Meridian

in the

Territory of arizona

as surveyed by

Francis W. Query

U. S. Deputy Surveyor,

charles E. Perkins

Compassman as U. S. Deputy Surveyor

under his contract No. 31.

Dated June 21, 1893.

Survey commenced may 3, 1894.

Survey completed   may 4, 1894.

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<u>First Guide Meridian East</u>

chains. Survey commenced May 3ᶜᵈ,
1894, with a W. + L. E.
Gurley solar transit,
~~at 9h. 5m. time, b.w. t.~~
~~9 set off 35° 30' of lat. arc,~~
~~+ 6°06' decl. arc, and det-~~
~~ermine a true meridian~~
~~with the ____.~~ At the
standard cor. to Tps. 25
N. Rs. 4 + 5 E., as hereinbefore
described in lat. 35°28' N.
long. 111°53' W. at 9ʰ 20ᵐ
P.M. local mean time,
I take an observation
on Polaris in accord-
ance with instructions
in the manual and
find the magnetic bearing
of the star to be N. 13° 40' W.

through Tp. 25 North

chains | I drive a picket on the
line thus found 13 chains
North of the corner.

correct local mean time of
observation May 3, 1894 $9^h 20^m$
Tabular time U C Polaris May 6 $22^h 36.6 m$
Reduction 2 days to May 3, 393 × 2 = 7.9 Sec 7.9^s
L. m. t. u c Polaris, $22^h 28.7'$
may 2nd 1894, in lat.
35° 28 N, and long. 111° 53 W
as deduced from Table +
which taken from time
of observation leaves hour
angle of Polaris $10^h 51'$
Azimuth for Polaris for
lat. 35° 28' N $0.26 W$
North end of needle $13° 40' E$
The difference is the
variation $13° 14' E$
I lay off the variation of 0.76 to the west
and through the true meridian beyond may 8
may 4th, 1894 7 a. m. I take $13/4$

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chains. the magnetic bearing of the
line established last night
and find it to be 13° 41' W,
and the variation 13° 16' E.
The mean variation is
13° 14' East.

The solar apparatus by
P.m. and a.m. observations
defines the position for
true meridian the same
as that established by the
Polaris observations; there-
fore I conclude that the
adjustments of the in-
strument are satisfactory.

In my special instructions
I am instructed to "note
change in alignment" of

through Tp. 25 North (continued)

chains the Sixth Standard Parallel
North, at the Standard line
to Tps. 25 N. Rs 4 and 5 E. in
reference to the cor. of Tps.
24 and 25 N. Rs 1 E. and 1 W.,
and to establish the cor.
to Tps. 25 and 26 N. Rs. 4 and
5 E on the same parallel
of latitude as the cor to
Tps. 25 and 26 N. Rs. 1 E. and
1 W. throwing the excess of
measurement on the
first 1/2 mile in running
north from the S C. to
Tps. 25 N. Rs. 4 and 5 E.

From the data ac-
quired in retracing the
Sixth Standard Parallel
North through ranges 1, 2, 3

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chains	and 4 E. I find that the
	standard cor. to Tps. 25 N.
	Rs 4 and 5 E. is establish-
	ed on a parallel of latitude
	7.04 chains south of the cor.
	to Tp. 24 and 25 N, Rs 1 E. and
	1 W, therefore,
	From the standard cor. to
	Tps. 25 N, Rs. 4 and 5 E, as
	hereinbefore described
	I run
	North bet. secs 31 and 36.
	Var. 13° 14' E.
	over open level land.
26.00	Wash, 4 ft. deep, course N.W.
30.00	ascend gradually, 40 feet,
	thence over rolling land
47.04	Set a malpais stone 14×9
	× 8 ins 9 ins in the ground

through Tp. 25 North   (cont'd

chains	for 1/4 sec cor. marked 1/4 on
	W. face, and raised a
	mound of stone 1 1/2 feet
	high, 2 ft. base alongside,
	from which
	a cedar 16 ins diam. brs
	S 82° 08 E. 84 lks dist. marked
	1/4 S. B T.
	a Piñon 8 ins diam. brs
	N. 12° 32' W. 54 lks. dist. marked
	1/4 S. B. T.
	at this point the variation
	increased on account of
	local attraction
48.00	Enter dense cedar and piñon
53.00	Top of ascent.
	Descend 40 feet
57.00	Foot of descent.
	ascend rock ledge.

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chs.	
60.90	Top of ledge, 60 ft. high,
	Descent 40 ft
61.00	Foot of descent.
67.00	ascent rock ledge
67.50	Top of ledge, 10 ft high.
68.00	Foot of ledge
	Thence through scattering
	cedar and piñon
87.04	Set a malpais stone 22 ×
	12 × 9 ins 16 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, and
	raised a mound of
	stone 1½ ft. high, 2 ft.
	base, alongside; from
	which
	a Piñon 5 ins diam. brs.

through Tp. 25 North (cont'd)

chs.   N. 54° 10' E. 222 chs. dist.
         marked T. 25 N. R. 5 E. B. 30 BT.
         a Piñon 9 ins. diam. brs.
         N. 18° 28' W. 166 chs dist marked
         T. 25 N. R. 4 E. B. 25 - BT.
         a Piñon 8 ins. diam. brs.
         S. 74° 24' W. 47 chs. dist
         marked T. 25 N. R. 4 E. B. 36 BT.
         a Piñon 6 ins. diam. brs.
         S. 34° 09' W 40 chs. dist mark-
         ed T. 25 N. R. 4 E B. 36 BT.
         Land, level and rolling.
         Soil, alluvial & rocky, 2nd & 4th rate.
         No timber
         Dense cedar and Piñon brush, 20 chs

         _____

         North bet. secs. 25 and 30.
              Var. 12° 29' E
         At this point the variation

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chs.

	decreases on account of local
	attraction
	Over broken rolling land.
12.00	Descend 20 feet.
14.00	Foot of descent
	ascend rock ledge.
16.00	Top of ledge, about 40 ft. high.
17.00	Foot of ledge
	ascend gradually 30 feet
23.00	Rock ledge, 25 ft. high.
26.00	Top of ledge, and descend 45 ft.
31.00	Foot of descent.
	Enter open park
35.50	Leave park, enter scattering
	pinon brush.
40.00	Set a malpais stone 24 x
	20 x 16 ins. 18 ins. in the
	ground for 1/4 sec. cor. marked
	1/4 on W. face, and raised

through Tp. 25 North (cont'd)

chs.	a mound of stone 1 1/2 ft. high, 2 ft. base, alongside, from which
	a cedar 20 ins. diam. brs N. 75° 02' E. 32 lks dist. marked 1/4 S. B.T.
	a Pinon 14 ins. diam. brs S. 46° 24' W. 26 lks dist. marked 1/4 S. B.T.
44.00	Descend 10 feet
47.00	Leave brush, enter open park.
49.00	Foot of descent
55.00	Leave open park, enter scattering cedar and pinon brush
64.00	Descend 30 feet.
66.15	Foot of descent, wash 3 ft. deep, course S. W. ascend 20 feet

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chs.

69.00 Top of ascent

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

ascend gradually 30 ft.

80.00 Set a malpais stone 20 x
16 x 14 ins 15 ins. in the
ground for cor. to secs.
19, 24, 25 and 30, marked
with 4 notches on N. and
2 notches on S. edges, and
raised a mound of stone 1½
ft high, 2 ft. base, alongside,
from which

a Pinon 8 ins. diam. brs
N. 75° 04' E. 31 lks. dist
marked T. 25 N. R. 5 E. S. 19 B.T.
a cedar 8 ins. diam. brs.
S. 30° 04' E. 35 lks. dist.

through Tp 25 North   (cont'd)

chs.

market T. 25 N. R 5 E. b. 30 B.T.
a Piñon 6 ins diam. bes.
b. 52° 15' W. 48 chs. dist.
market T. 25 N. R. 4 E. b. 25 B.T.
a Piñon 12 ins. diam. bes
N. 31° 43' W. 18 chs dist.
market T. 25 N. R. 4 E. b. 24 B.T.
Land rolling and hilly.
Sail, rocky, 3rd rate
No timber
Dense cedar and Piñon brush
7 chs.

North bet secs. 19 and 24
        Var. 13° 30' E.
at this point the var-
iation increased on
account of local attraction.
over rolling land, through

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chs.	
	dense cedar and pinon.
	Ascend a small red butte.
7.00	Top of butte, 60 ft high.
	Descend 50 ft.
10.00	At this point the variation
	increased on account of
	local attraction
14.00	Foot of descent.
18.00	Leave dense cedar and
	pinon, enter small open park.
26.00	Enter scattering cedar and Pinon.
28.04	Road, course E. and W.
30.00	Enter dense pinon and cedar.
	ascend gradually, 20 ft.
31.00	Top of ascent.
40.00	Set a malpais stone 16 x
	14 x 11 ins 11 ins in the
	ground for 1/4 sec. cor.
	marked 1/4 on W. face, and

through Tp. 25 North   (cont'd)

chs.	
	raised a mound of stone, 1½ ft. high, 2 ft. base, alongside, from which a Pinon 10 ins diam. brs S. 49° 03' E. 78 lks. dist marked ¼ S. B.T. a cedar 8 ins diam. brs. N. 83° 56' E. 115 lks dist, marked ¼ S. B.T.
	Var. 13° 24' E. at this point the variation decreased on account of local attraction
46.00	Top of rock ledge, 10 ft. high. Descend 50 feet.
51.00	Leave brush, enter open park.
59.00	Leave park, enter scattering cedar and pinon
63.00	Foot of descent.

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chs.	
	Ravine, 4 ft. deep, course W. ascend 40 feet.
69.00	Top of ascent, ridge, course E and W.
71.50	Leave scattering brush, enter open park
76.00	Leave park, and enter dense pinon and cedar
80.00	Set a malpais stone 30 × 20 × 18 ins. 22 ins. in the ground for cor. to secs 13, 18, 19 & 24, marked with 3 notches on N. and E. edges, and raised a mound of stone 1½ ft high, 2 ft. base, alongside, from which
	a Pinon 8 ins. diam. brs N. 70° E. 75 lks. dist marked

through Tp. 25 North   (cont⁴)

chs

T. 25 N. R. 5 E. B. 18 B.T.

a Pinon 10 ins. diam.

brs. S. 6° 57' E. 27 lks. dist

marked T. 25 N R. 5 E. B. 19 BT.

a Pinon 8 ins. diam brs

S. 62° 17' W. 22 lks. dist,

marked T. 25 N R. 4 E. B. 24 B.T.

a Pinon 8 ins. diam brs.

N. 02° 05' W 33 lks. dist,

marked T. 25 N. R. 4 E. B. 13 B.T.

Land, rolling.

Soil, stony, 3rd rate

No timber

Dense brush, 43 chs.

at this corner I set off

16° 08' N. on the decl arc

and at 11ʰ 57ᵐ a.m. l.m.t.

observe the sun on the

First Guide Meridian East

cks.

meridian; the resulting
lat. is 35° 31', the true
laptude nearly.

Thence 9 nm
North bet. secs. 13 and 18.
Var. 16° 03' E
at this point the var —
iation increased on ac —
count of local attraction
over rolling land, through
dense pinon and cedar brush

26.00 Var. 15° 00' E
at this point the varia-
tion decreased on account
of local attraction.

40.00 Set a mathano stone
24 x 18 x 16 ins. 18 ins. in
the ground, for 1/4 sec. cor.

through Tp. 25 North (cont'd)

chs.	marked 1/4 on W. face, and raised a mound of stone 1/2 ft high, 2 ft base, alongside from which
	a Pinon 10 ins diam. brs 6 26° E. 51 chs. dist. marked 1/4 6. B.T.
	a Pinon 8 ins diam. brs N. 63° 05' W. 64 chs. dist. marked 1/4 6. B.T.
	Var 17° 10' E
	at this point the var- iation increased on account of local at- traction.
52.50	Descend 50 feet
80.00	Set a malpais stone 20 x 14 x 12 ins. 15 ins in the ground for cor to ess.

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cho.

T. 12, 13 and 18, marked
with 2 notches on N. and
4 notches on S. edges,
and raised a mound of
stone 1½ ft. high, 2 ft. base
alongside, from which
a Pinon 8 ins. diam.
brs. N. 59° 49' E 35 chs. dist.
marked T. 25 N. R. 5 E. B. 7 B.T.
a cedar 8 ins. diam. brs.
S. 8° 46' E 35 chs. dist. marked
T. 25 N. R. 5 E. S. 18 B.T.
a Pinon 16 ins. diam. brs
S. 47° 30' W, 11 chs. dist. marked
T. 25 N. R. 4 E. S. 13 B.T.
a cedar 12 ins. diam. brs
N. 18° 32 W. 17 chs. dist, marked
T. 25 N. R. 4 E. S. 12 B.T.
Land, broken and rolling.

through Tp. 25 North (cont'd)

chs	
	Soil, rocky, 2ᵈ and 4ᵗʰ rate
	No timber
	Dense cedar and pinon brush
	50 chs.

North bet secs 7 and 12.

    Var. 11°30' E.

at this point the variation
began to decrease on account
of local attraction.
over mountainous land
through cedar and pinon brush.

1.00	Descent 200 feet
7.00	Leave brush.
10.60	Road, course N.E. and b. W.
11.60	Ravine, 10 feet deep, course N.W.
12.00	Enter thick cedar and
	pinon brush.
	Ascend 60 feet.

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chs.

15.00 Top of ascent, ridge, course
N. W.

Descent 60 feet.

28.00 Foot of descent. Leave
dense brush; enter scatter-
ing pinon and cedar.
Thence over nearly level land.

40.00 Set a malpais stone 12 x
11 x 9 ins. 8 ins. in the
ground for 1/4 sec. cor.
marked 1/4 on W. face, and
raised a mound of stone
1 1/2 ft high, 2 ft. base
alongside, from which
a cedar 14 ins. diam.
brs. S. 66° 51' W. 176 lks dist.
marked 1/4 S. B.T.
a Pinon 10 ins. diam.
brs. N. 71° 53' E. 237 lks. dist.

through Tp. 25 North   (cont'd)

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

Var. 13° 22' E.

at this point the variation
began to increase on ac-
count of local attraction

80.00   Set a cinder 12 x 12 x 11 ins.
8 ins. in the ground for
cor. to secs. 1, 6, 7 and 12,
marked with 1 notch
on N. and 5 notches on
S. edges, and raised a
mound of stone 1½ ft.
high, 2 ft. base,
alongside; from which
a cedar 10 ins. diam. bro.
S. 55° 30' W. 67 lks. dist.
marked T 25 N. R. 4 E. S. 12 B.T.
a cedar 8 ins. in diam-
bro. S. 76° 03' E. 227 lks.

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chs.

dist marked T. 25 N. R. 5 E. B. 7 B.T.
a cedar 14 ins diam. brs
N. 35° 56' W. 263 lks dist.
marked T. 25 N. R. 4 E. S. 1 B.T.
a Pinon 14 ins. diam brs
N. 69° 11 W. 252 lks. dist
marked T. 25 N. R. 4 E. B. 1 B.T.
Land, mountainous and rolling.
Soil, rocky, 2 & 4th rate,
No timber
Dense cedar and pinon brush 23 chs.

North bet secs. 1 and 6.
        Var. 13° 30' E
Over nearly level land,
through scattering brush.

40.00   Set a malpais stone 12 x 10
x 8 ins. 8 ins. in the
ground for 1/4 sec. cor.

through Tp 25 North (cant'd)

chs.

marked 1/4 on W. face.
and raised a mound of
stone 1 1/2 ft high, 2 ft.
base, alongside; from
which

a cedar 8 ins in diam. brs
S. 89° 11' E. 196 lks dist, marked
1/4 S. B.T.

a Pinon 10 ins. diam
brs. N. 8° W. 142 lks. dist.
marked 1/4 S B.T.

Var. 13° 15' E.

at this point the variation
began to decrease on ac-
count of local attraction.

50.00   Set a post 4 1/2 ft. long, 8
ins square, 12 ins. in the
ground for cor. to Tps. 25
and 26 N. Rs. 4 and 5 E. marked

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chs.

T. 26 N. S. 31 on N. E.,
R. 5 E. S. 6 on S. E.
T. 25 N. S. 1 on S. W., and
R. 4 E. S. 36 on N.W. faces,
with 6 notches on each
edge, and raised a
mound of stone 1 1/2 ft.
high, 3 ft. base, around
post, from which

a cedar 12 ins. diam. brs
N. 61° 57' E. 268 lks. dist.
marked T. 26 N. ^{R.5.E.} S. 31 B.T.

a cedar 12 ins. diam brs
S. 18° 04' E. 104 lks. dist.
marked ^{Tp. 25 N.} R. 5 E. S. 6 B.T.

a cedar 10 ins. diam. brs.
S. 19° 10' W. 52 lks. dist
marked T. 25 N. ^{R.4.E.} S. 1 B.T.

a Pinon 8 ins. diam. brs

through Tp. 25 North (cont'd)

chs

N. 2° 06' W, 279 chs dist
Tp. 26 N.
marked R .4 E. ℔ 36 B.T.
Land, gently rolling.
Soil, stony, 2nd rate.
No timber

may 4th, 1894.

General Description

The township on the
west is rolling and
level, covered with scat-
tering cedar brush and
good grass

The township on the
east is more broken,
containing some pine timber
and much thick cedar
and pinon brush,

This township is

First Guide Mer. E. thus I 25 N.

covered with good grass.

Charles E. Perkins

Compassman and

U.S. Deputy Surveyor

U. S. Surveyor-General's Office,

TUCSON, A. T., July 17, 1895.

The foregoing Field Notes of the Surveys of

the 1st Guide meridian
East thro Tp: 25 North

———————— Gila and Salt River Meridian

in   Arizona   executed by

F. W. Oury –

U. S. Deputy Surveyor, under his contract dated

June 21st 1893

having been critically examined, the necessary correc-
tions and explanations made, the said Field Notes and
the surveys they describe are hereby approved.

Levi H. Manning

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