

2785  
4-679.

MAY 29 1911

Book E

# FIELD NOTES

OF THE SURVEY OF THE

BOOK 2785

First Guide Meridian East thru T346N

Of the T346N Meridian,

Arizona

AS SURVEYED BY

Rochelet Ham, United States Deputy Surveyor,

Under his Contract No. 162, dated Jan 5, 1910

Survey commenced December 11, 1910

Survey completed December 17, 1910

NAMES AND DUTIES OF ASSISTANTS.

R. B. Wallis

Chairman

E. E. Barr

Chairman

Geo. W. Beach

President

T. T. Hays

Chairman

W. G. Smith

Chairman

Clare Moore

Chairman

Arthur Schermerhorn

Flagman

(13)

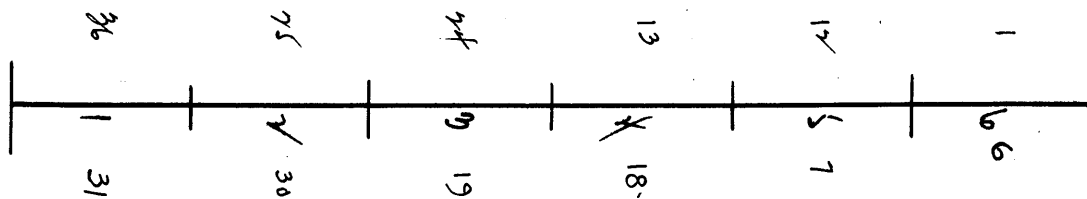
BOOK 2785  
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Through Tp. 5 N.

PRELIMINARY OATHS OF ASSISTANTS.

10

WE, R. B. Willis and E. E. Barr  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping them; that we will report the true distances to all notable objects, and the true lengths of all lines that we measure, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Front Line Meridian East thru T5 & 6 N

R. B. Willis  
E. E. Barr

Subscribed and sworn to before me this 12  
day of December, 1910



Rosevelt  
U.S. Deputy

WE, Geo. W. Hoock and G. Thorpe  
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 Front Line Meridian East thru T5 & 6 N

George W. Hoock  
G. Thorpe

Subscribed and sworn to before me this 11  
day of December, 1910



Rosevelt  
U.S. Deputy

WE, W. H. Smith and W. H. Smith  
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 Front Line Meridian East thru T5 & 6 N

W. H. Smith  
W. H. Smith

Subscribed and sworn to before me this 11  
day of December, 1910



Rosevelt  
U.S. Deputy

I, A. W. Scheringer, 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 Front Line Meridian East thru T5 & 6 N

A. W. Scheringer

Subscribed and sworn to before me this 11<sup>th</sup>  
day of December, 1910



Rosevelt  
U.S. Deputy

## 1st Guide Meridian E., Through Tps. 5 N., Bet. Rs. 4 and 5 E.

1

- Chains Survey commenced December 11, 1910, and executed with a Young & Sons light mountain transit, No. 5609, the horizontal limb being provided with two opposite verniers reading to single minutes of arc, equipped with a Smith solar attachment.
- At my camp, with my instrument set over a marked stone, set firmly in the ground, at 3 p. m., l. m. t., I set off  $22^{\circ} 58' S$  on the decl. arc;  $33^{\circ} 50' N$  on the lat. arc; and mark the meridian thus determined by a groove on a stone set firmly in the ground, 5 chs. N. of my station
- Dec. 12, 1910: At 2:05 a. m., l. m. t., I observe Polaris at western elongation, in accordance with instructions in the Manual, and mark the point in the line thus determined by a tack driven in a wooden stake 5 chs. N. of my station.
- December 12, 1910: At 8 a. m., l. m. t., I lay off the azimuth of Polaris  $1^{\circ} 24'$  to the east, and mark the point thus determined by cutting a cross (X) on the stone set December 11, 1910, which falls 0.2 ins. E. of the point determined by p. m. solar observation.
- December 12, 1910: at 9 a. m., l. m. t., I set off  $23^{\circ} 01' 30" S$  on the decl. arc;  $33^{\circ} 50' N$  on the lat. arc; and mark the meridian thus determined by a groove on a stone set Dec. 11, 1910, which falls 0.3 ins. E. of cross (X) determined by Polaris.
- The magnetic bearing of the true meridian is  $N. 14^{\circ} 30' W.$ , which gives the magnetic declination  $14^{\circ} 30' E.$
- I begin at the standard corner of Sections 31 and 36, Township 5 North, R. 4 & 5 E., Latitude  $33^{\circ} 43' 27" N.$ , Long.  $111^{\circ} 53' 24" W.$  where I find faint traces of corner. I re-establish same by setting a granite stone,  $22 \times 15 \times 5$  ins., 14 ins. in the ground, for standard cor. of Tps. 5 N. R. 4 & 5 E., marked
- S C 5 N on N.,  
5 E on E., and  
4 E on W. face; from which
- An ironwood, 12 ins. diam., brs.  $N. 58^{\circ} 46' W.$ , 121 lks. dist. marked T 5 N R 4 E S 36 B T
- No other trees available.
- Raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor
- From the standard cor. I run
- North bet. secs. 31 and 36
- Over rolling land
- 9.70 Level, bottom land.
- 25.80 Wash, 10 lks. wide, course W; enter rolling land; ascend 75 ft.
- 31.00 Top of ascent; descend
- 36.00 Bottom of descent; wash, 30 lks. wide, course W; ascend
- 38.00 Top of ascent; descend 10 ft.
- Difference between measurements of 40.00 chs., by two sets of chainmen is 4 lks; position of middle point
- By 1st set, 40.02 chs.
- By 2nd set, 39.98 chs; the mean of which is
- 40.00 Set an ironwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 31 on E. and  $\frac{1}{4}$  S 36 on W. face; from which
- An ironwood, 8 ins. diam., brs.  $S. 33^{\circ} 37' E.$ , 79 lks. dist., marked  $\frac{1}{4}$  S 31, B T
- An ironwood, 12 ins. diam., brs.  $S. 67^{\circ} 41' W.$ , 218 lks. dist. marked  $\frac{1}{4}$  S 36 B T.
- Pits impracticable.
- 41.00 Wash, course W; ascend
- 46.00 Top of ascent; descend
- 51.50 Wash, 50 lks. wide, course W; ascend
- 52.20 Top of ascent; descend
- 54.00 Wash/ 15 lks. wide, course W; ascend
- 55.00 Top of ascent; descend 10 ft.
- 56.00 Wash, 15 lks. wide, course W; ascend
- 58.00 Top of ascent; descend

## 2 1st Guide Meridian E, Through Tps. 5 N., Bet. Rs. 4 and 5 E.

62.50	Wash, 15 lks. wide, course W.; ascend
64.00	Top of ascent; descend
65.00	Wash, course W; ascend
68.00	Top of ascent; descend 15 ft.
69.00	Wash, course W; ascend
70.00	Top of ascent; descend
73.00	Wash, course W; ascend.
74.00	Top of ascent.
76.00	Wash, course W. Ascend to corner.
	The difference between measurements of 80.00 chs., by two sets of chainmen, is 2 lks.; position of middle point
	By 1st set, 80.01 chs.
	By 2nd set, 79.99 chs.; the mean of which is
80.00	Set a granite stone, 14x8x6 ins., 9 ins in the ground for cor. of secs. 25, 30, 31 & 36, marked with 1 notch on S. edge and 5 notches on N. edge; from which
	A palo verde, 4 ins. diam., brs. N. 3°00'E., 81 lks. dist., marked T 5 N R 5 E S 30 B T
	A palo verde, 4 ins. diam., brs. N. 24°44'W., 71 lks. dist., marked T 5 N R 4 E S 25 B T
	A palo verde, 4 ins. diam., brs. S. 51°06'E., 103 lks. dist., marked T 5 N R 5 E S 31 B T
	A palo verde, 4 ins. diam., brs. S. 26°53'W., 175 lks. dist., marked T 5 N R 4 E S 36 B T
	Land, rolling.
	Timber, mesquite, palo verde, ironwood, ocotillo.
	Soil, gravelly; 2nd rate.
	Rolling land, 80.00 chs.
	December 12, 1910
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	December 13, 1910: I set off 23°07'S on the decl. arc; and at 11h. 54m. a.m., 1 m.t., observe the sun on the meridian, and obtain on the lat. arc the reading 33°44' N which agrees with other data
	N. bet. secs. 25 and 30
2.80	Wash, 10 lks. wide, course W; ascend
3.70	Top of ascent; descend 15 ft.
7.00	Wash, 70 lks. wide, course W; ascend
10.00	Top of ascent; descend
12.70	Wash, 30 lks. wide, course W; ascend
16.00	Top of ascent; descend
20.00	Bottom of descent; ascend
24.00	Top of ascent; descend
25.00	Wash, 10 lks. wide, course W; ascend 20 ft.
28.00	Top of rise; descend
29.00	Wash, 12 lks. wide, course W.
34.00	Wash, 10 lks. wide, course W; ascend
35.00	Top of rise; descend
35.80	Wash, 10 lks. wide, course W; ascend
37.90	Top of ascent; descend.
	Difference in measurement of 40.00 chs., by two sets of chainmen, is 6 lks.; position of middle point
	By 1st set, 40.03 chs.
	By 2nd set, 39.97 chs.; the mean of which is
40.00	Set a palo verde post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 25 on W., and $\frac{1}{4}$ S 30 on E. face; from which
	A palo verde, 10 ins. diam., brs. S. 5°50'E., 108 lks. dist., marked $\frac{1}{4}$ S 30 B T
	A palo verde, 4 ins. diam., brs. S. 36°03'W., 148 lks. dist., marked $\frac{1}{4}$ S 25 B T
	Magnetic declination, N. 14° 35' E.
	Thence N. descending over rolling land
41.00	Wash, 10 lks. wide, course W; ascend
41.90	Top of rise; descend 10 ft.
45.00	Flat.

## 1st Guide Meridian E., Through Tps. 5 N., Between Rs. 4 &amp; 5 E. 3

Chains	
49.80	Wash, 20 lks. wide, course W.
60.00	Wash, 30 lks. wide, course W.
63.00	Wash, 15 lks. wide, course SW.
65.00	Wash, 8 lks. wide, course SW; leave flat.
70.00	Wash, 20 lks. wide, course W.
77.10	Wash, 5ft. bank, 13 lks. wide, course W.
79.80	Wash, 10 lks. wide, course W.
	Difference between measurements of 80.00 chs., by two sets of chainmen is 12 lks.; position of middle point
	By 1st set, 80.06 chs.
	By 2nd set, 79.94 chs.; the mean of which is
80.00	Set a granite stone, 15x8x8 ins., 10 ins. in the ground, for for. of secs. 19, 24, 25 and 30, marked with 2 grooves on S. and 4 grooves on N. face; from which
	A palo verde, 12 ins. diam., brs. N. 62°14' W., 49 lks. dist. marked T 5 N R 4 E S 24 B T
	A palo verde, 10 ins. diam., brs. S. 26°03' W., 178 lks. dist. marked T 5 N R 4 E S 25 B T
	A palo verde, 5 ins. diam., brs. N. 41°30' E., 108 lks. dist., marked T 5 N R 5 E S 19 B T
	A palo verde, 8 ins. diam., brs. S. 74°02' E., 87 lks. dist., marked T 5 N R 5 E S 30 B T
	Magnetic declination, N. 14° 35' E.
	Land, rolling and level.
	Soil, gravelly; 2nd rate.
	Timber, palo verde.
	Undergrowth, greasewood, ocotillo, giant cactus.
	Rolling and level land, 80.00 chs.

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	North, bet. secs. 19 and 24.
0.10	Road, Verde River, to Phoenix, brs. NE and SW.
4.90	Top of ascent; descend
6.00	Wash, 8 lks. wide, course SW; ascend
9.05	Road, Camp Creek to Phoenix, brs. NE and SW.
11.90	Top of ascent; descend
13.05	Wash, 10 lks. wide, course W; ascend
17.90	Top of ascent; descend
20.00	Wash, 3 lks. wide, course W; descend
23.50	Wash, 10 lks. wide, course W; ascend
25.00	Top of ascent; descend
27.10	Wash, 15 lks. wide, course W.
30.50	Wash, 15 lks. wide, course W; ascend
31.85	Top of rise; descend 25 ft.
	Difference between measurements of 40.00 chs., by two sets of chainmen, is 4 lks.; position of middle point.
	By 1st set, 40.02 chs.
	By 2nd set, 39.98 chs.; the mean of which is
40.00	Set a porphyry stone, 15x12x10 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 19 on E and 24 on W; face; from which
	A palo verde, 6 ins. diam., brs. N. 35°55' E., 66 lks. dist. marked $\frac{1}{4}$ S 19 B T
	A palo verde, 6 ins. diam., brs. N. 27°10' W., 33 lks. dist. marked $\frac{1}{4}$ S 24 B T
	December 13, 1910: At this $\frac{1}{4}$ sec. cor., I set off 23°07' S on the decl. arc; 33°46' N. on the lat. arc; and determine a meridian with the solar, at 3 p.m., l.m.t.
41.00	Top of slope; descend
41.90	Wash, 8 lks. wide, course W; ascend
45.00	Top of ascent; descend
48.30	Wash, 30 lks. wide, course W; ascend
49.20	Top of ascent; descend
49.80	Wash, 8 lks. wide, course E; ascend 15 ft.
53.00	Top of ascent; descend

## 4 1st Guide Meridian E. Through Tps. 5 N., Bet. Rs. 4 and 5 E.

Chains	
54.90	Wash, 20 lks. wide, course W; descend
56.50	Wash, 10 lks. wide, course SW; ascend
57.90	Top of slope, brs. NE and SW; descend 8 ft.
62.30	Wash, 8 lks. wide, course W; ascend
63.00	Top of ascent; descend
63.90	Wash, 10 lks. wide, course W; ascend
66.00	Top of slope; descend
67.00	Wash, 8 lks. wide, course W; ascend
68.80	Top of ascent; descend
71.00	Wash, 1 chain wide, course W; ascend
74.00	Top of flat; descend
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 12 lks; position of middle point
	By 1st set, 80.06 chs.
	By 2nd set, 79.94 chs.; the mean of which is
80.00	Set a porphyry stone, 18x12x12 ins., 12 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked with 3 notches on N and S edges; from which
	A palo verde, 3 ins. diam., brs. S. 87° 50' E., 74 lks. dist. marked T 5 N R 5 E S 19 B T
	A palo verde, 8 ins. diam., brs. N. 41° 15' W., 254 lks. dist. marked T 5 N R 4 E S 13 B T
	A palo verde, 5 ins. diam., brs. S. 70° 20' W., 181 lks. dist. marked T 5 N R 4 E S 24 B T
	A palo verde, 5 ins. diam., brs. N. 64° 40' E., 205 lks. dist. marked T 5 N R 5 E S 18 B T
	Magnetic declination, N. 14° 35' E.
	Land, rolling.
	Timber, mesquite, palo verde; catclaw, giant cactus, ocotillo.
	Soil, gravelly; 1st and 2nd rate.
	Rolling land, cut by washes, 80.00 chs.
	December 13, 1910.
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	North, bet. secs. 13 and 18.
	Over rolling land, descending
2.50	Wash, 10 lks. wide, course W; ascend
3.00	Top of ascent, brs. E. and W; descend
3.90	Wash, 10 lks. wide, course W; ascend
9.70	Top of ascent, brs. E and W; descend
10.90	Wash, 12 lks. wide, course SW; descend
12.15	Wash 10 lks. wide, course Sw; ascend
15.00	Top of ascent, brs. NE and SW; descend
17.00	Wash, 10 lks. wide, course W; ascend
19.10	Top of ascent; descend
22.00	Wash, 12 lks. wide, course SW.
28.00	Wash, 20 lks. wide, course SW; ascend
31.00	Top of ascent, brs. NE and SW; descend
34.10	Bottom of flat.
36.00	Leave flat.
38.00	Wash, 20 lks. wide, course E
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 40.05 chs.
	By 2nd set, 39.95 chs.; the mean of which is
40.00	Set a porphyry stone, 15x12x8 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 13 on W and $\frac{1}{4}$ S 18 on E. face; from which
	A palo verde, 5 ins. diam., brs. N. 66° 03' E., 130 lks. dist. marked $\frac{1}{4}$ S 18 B T
	A palo verde, 4 ins. diam., brs. N. 70° 15' W., 35 lks. dist. marked $\frac{1}{4}$ S 13 B T
43.00	Ascend 15 ft.
45.00	Top of ascent; descend
45.50	Wash, 10 lks. wide, course W; ascend
46.10	Top of ascent; descend



## 1st Guide Meridian East, Through Tps. 5 N., Between Rs. 4 &amp; 5E 5

Chains	
47.30	Wash, 8 lks. wide, course W; ascend
56.20	Descend gradually over flat; enter wash, 10 lks. wide, course SSW.
58.40	Leave wash, ascend
60.90	Wash, 6 lks. wide, course E.
63.50	Wash, 10 lks. wide, course W.
66.00	Same wash, course E.
69.20	Same wash, course W; ascend
71.00	Top of ascent, brs E and W; descend
72.00	Bottom of descent, wash, 10 lks. wide, course SW; ascend
	Difference bet. measurements of 80.00 chs., by two sets of chainmen is 12 lks.; position of middle point
	By 1st set, 80.06 chs.
	By 2nd set, 79.94 chs.; the mean of which is
80.00	Set a porphyry stone, 14x10x4 ins., 9 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked with 2 notches on N. and 4 notches on S. edge; from which
	A palo verde, 6 ins. diam., brs. N. 80°05'E., 61 lks. dist. marked T 5 N R 5 E S 7 B T
	A palo verde, 4 ins. diam., brs. N. 59°26'W., 191 lks. dist. marked T 5 N R 4 E S 12 B T
	A palo verde, 4 ins. diam., brs. S. 76°35'W., 123 lks. dist. marked T 5 N R 4 E S 13 B T
	A palo verde, 14 ins. diam. brs. S. 51°40'E., 200 lks. dist. marked T 5 N R 5 E S 18 B T
	Land, rolling.
	Soil, gravelly; 2nd and 3rd rate.
	Timber, palo verde, grasswood, giant cactus, ocotillo.
	Rolling land, ascents and descents, 10 to 25 ft, 80.00 chs.
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	North, bet. secs. 7 and 12.
	Over rolling, gravelly land.
0.70	Top of ascent, brs. E and W; descend
2.80	Wash, 10 lks. wide, course W.
6.90	Wash, 1 ch. wide, course W; ascend
9.00	Top of ascent, brs. E and W; wash, 12 lks. wide, course W.
10.10	Wash, 5 lks. wide, course W; ascend
19.00	Top of ascent, brs. E and W; descend
19.50	Wash, 5 lks. wide, course W; ascend
20.00	Top of ascent; descend
25.00	Wash, 75 lks. wide, course SW; descend
35.40	Wash, 5 lks. wide, course W; ascend
36.20	Top of ascent, brs. E and W; descend
38.80	Wash, 3 lks. wide, course SW.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen is 8 lks.; position of middle point
	By 1st set, 40.04 chs.
	By 2nd set, 39.96 chs.; the mean of which is
40.00	Set a porphyry stone, 15x8x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 7 on E. and $\frac{1}{4}$ S 12 on W. face; from which
	A palo verde, 12 ins. diam., brs. S. 61°40'W., 46 lks. dist. marked $\frac{1}{4}$ S 12 B T
	A palo verde, 4 ins. diam., brs. S. 78°20'E., 73 lks. dist. marked $\frac{1}{4}$ S 7 B T
	December 14, 1910: At this $\frac{1}{4}$ sec. cor., I set off 23°11' on the decl. arc; and at 11h 54m. a.m., l.m.t., observe the sun on the meridian, and obtain on the lat. arc, the reading, 33° 47' N which agrees with other data.
41.10	Top of ascent, brs. E and W; descend
42.20	Wash, 12 lks. wide, course W; ascend
43.30	Top of ascent, brs. E and W; descend
44.20	Wash, 5 lks. wide, course W; ascend
46.10	Top of ascent, brs. E and W; descend
49.60	Wash, 5 lks. wide, course W; ascend
51.10	Top of ascent, brs. E and W; descend
52.20	Wash, 10 lks. wide, course W.
54.00	Wash, 3 lks. wide, course W.
56.00	Wash, 5 lks. wide, course W; ascend

Chains	
61.00	Top of ascent, brs. E and W; descend
69.00	Wash, 20 lks. wide, course SW; ascend
69.50	Top of ascent, brs. NE and SW; descend
71.10	Wash, 20 lks. wide, course SW; ascend
72.20	Top of ascent, brs. NE and SW; descend
75.30	Wash, 10 lks. wide, course SW;
76.50	Wash, 1.50 chs. wide, course SW
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 80.05 chs.
	By 2nd set, 79.95 chs.; the mean of which is
80.00	Set a porphyry stone, 15x8x6 ins., 10 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked with 1 notch on N and 5 notches on S. edge; from which
	A palo verde, 4 ins. diam., brs. S. 23° 25' E., 235 lks. dist. marked T 5 N R 5 E S 7 B T
	A palo verde, 3 ins. diam., brs. N. 30° 35' W., 148 lks. dist. marked T 5 N R 4 E S 1 B T
	A palo verde, 6 ins. diam., brs. N. 42° 30' E., 188 lks. dist. marked T 5 N R 5 E S 6 B T
	A palo verde, 4 ins. diam., brs. S. 78° 00' W., 197 lks. dist. marked T 5 N R 4 E S 12 B T
	Magnetic declination, N. 14° 35' E.
	Land, rolling.
	Soil, gravelly; 2nd and 3rd rate.
	Timber, palo verde.
	Undergrowth, ocotillo, giant cactus.
	Rolling land, cut with washes; ascents and descents from 10 to 25 ft., 80.00 chs.
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	North, bet. secs. 1 and 6
	Over rolling land, ascending
4.75	Top of ascent, brs. E and W; descend 10 ft.
9.00	Wash, 10 lks. wide, course W; ascend 10 ft.
10.10	Top of ascent, brs. E and W; descend
13.15	Wash, 6 lks. wide, course W; ascend
18.00	Top of ascent, brs. E and W; descend 6 ft.
20.15	Wash, 8 lks. wide, course W; ascend
21.05	Top of ascent, brs. E and W; descend
22.00	Wash, 10 lks. wide, course W; ascend
23.50	Top of ascent, brs. E and W; descend
25.00	Wash, 5 lks. wide, course W; ascend
26.00	Top of ascent, brs. E and W; descend
28.40	Flat, 2 chs. wide, brs. W.; ascend
32.00	Top of ascent, brs. E and W; descend
32.50	Road, Fort McDowell to Cave Creek, brs. NW and SE.
33.00	Wash, 8 lks. wide, course SW; descend
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 40.04 chs.
	By 2nd set, 39.96 chs.; the mean of which is
40.00	Set a quartz stone, 14x10x6 ins., 9 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 1 on W and $\frac{1}{4}$ S 6 on E face; from which
	A palo verde, 6 ins. diam., brs. N. 69° 20' E., 82 lks. dist. marked $\frac{1}{4}$ S 6 B T
	A palo verde, 4 ins. diam., brs. N. 28° 30' W., 91 lks. dist. marked $\frac{1}{4}$ S 1 B T
	Magnetic declination, N. 14° 35' E.
	December 14, 1910: At this $\frac{1}{4}$ sec. cor., at 3 p.m., l.m.t., I set off 23° 11' S on the decl. arc; 33° 48' N on the lat. arc; and determine a meridian with the solar
	Thence descend
45.50	Wash, 12 lks. wide, course SW.
47.15	Wash, 5 lks. wide, course SW.
50.00	Wash, 5 lks. wide, course W
58.00	Wash, 8 lks. wide, course SW
61.00	Wash, 6 lks. wide, course SW.

## 1st Guide Meridian E? Through Tps. 5 N., Bet. Rs. 4 and 5 E.

7

Chains	
69.50	Enter wash, 10 lks. wide, course SW
71.15	Leave wash, 10 lks. wide, course SW; ascend
71.85	Top of ascent, brs. NE and SW.; descend
73.00	Wash, 15 lks. wide, course NW.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 80.04 chs.
	By 2nd set, 79.96 chs.; the mean of which is
80.00	Set a porphyry stone, 18x4x5 ins., 12 ins. in the ground for cor. of Tps. 5 and 6 N., Rs. 4 and 5 E., marked with 6 notches on each edge; dig pits 24x24x12 ins., on each line, N., E., and W., 4 ft., and S. of stone, 8 ft. dist.; and raise a mound of earth, 5 ft. base, 2½ ft. high, S. of cor.
	Land, rolling.
	Soil, gravelly; 2nd rate.
	No timber.
	Undergrowth, palo verde, greasewood, giant cactus, ocotillo.
	Rolling land, cut with washes, ascents and descents from 10 to 25 ft., 80.00 chs.

December 14, 1910.

## 1st Guide Meridian E. Through Tps. 6 N., Bet. Rs., 4 and 5 E.

	From the cor. of Tps. 5 and 6 N., Rs., 4 and 5 E., I run North, bet. secs. 31 and 36.
	Over rolling land, ascending
2.10	Top of ascent, brs. E and W; descend 12 ft.
9.55	Bottom of descent; draw, 12 lks. wide, course W; ascend
11.25	Top of ascent, brs. E and W; descend
12.05	Descend 9 ft.
16.20	Wash, 15 lks. wide, course W; ascend
19.85	Top of ascent, brs. E and W; descend 10 ft.
21.07	Wash, 10 lks. wide, course W; ascend
24.00	Top of ascent, brs. E and W; descend
26.00	Wash, 15 lks. wide, course W; ascend
30.00	Top of ascent, brs. E and W.
31.00	Descend
33.18	Bottom of descent; gulch
34.12	Wash, 15 lks. wide, course W
38.00	Wash, 10 lks. wide; course W.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 8 lks.; the position of middle point
	By 1st set, 40.04 chs.
	By 2nd set, 39.96 chs.; the mean of which is
40.00	Set a paloverde post 3 ft. long, 3 ins. sq., 24 ins. in the ground, for ¼ sec. cor., marked ¼ S. 31 on E. face and 36 on W. face; from which
	A palo verde, 4 ins. diam., brs. S. 61° 05' E., 82 lks. dist.
	Marked ¼ S 31 B T
	A palo verde, 4 ins. diam., brs. S. 72° 04' W., 92 lks. dist.
	marked ¼ S 36 B T
	Magnetic declination, 14° 35' E.
42.55	Top of ascent, brs. E and W; descend
45.11	Wash, 20 lks. wide, course W.; ascend
47.15	Top of ascent, brs. E and W.
48.00	Descend
50.25	Bottom of descent; draw, course W; ascend
51.12	Top of ascent, brs. E and W; descend
52.00	Wash, 50 lks. wide, course W; descend
54.00	Wash, 100 lks. wide, course W; ascend
58.00	Top of ascent, brs. E and W; descend

Chains	
60.18	Wash, 10 lks. wide, course W; ascend
61.22	Top of ascent, brs. E and W; descend
63.00	Wash, 10 lks. wide, course W; ascend
65.11	Top of ascent, brs. E and W; descend
66.27	Wash, 30 lks. wide, course W; ascend
68.12	Top of ascent, brs. E and W; descend
71.00	Wash, 1 ch. wide, course W; leave gravelly ground, enter rocky land
72.00	Wash, 30 lks. wide, course W; ascend
75.92	Steep ascent, 40 ft.
	Difference bet. measurement of 80.00 chs., by two sets of chainments 12 lks.; position of middle point
	By 1st set, 80.06 chs.
	By 2nd set, 79.94 chs.; the mean of which is
80.00	Set a slate stone, 16x10x6 ins., 11 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked with 1 notch on S. and 5 notches on N. edge; 6 N on NE face; 5 E on SE face 4 E on SW face; from which
	A palo verde, 3 ins. diam., brs. S. 10° 40' W., 263 lks. dist. marked T 6 N R 4 E S 36 B T
	No other trees available.
	Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, rolling.
	Soil, gravelly and rocky; 2nd, 3rd, 4th rate.
	No timber.
	Undergrowth, palo verde, prickly pear, giant cactus.
	Rolling and rocky land, 80.00 chs.
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	North, bet. secs. 25 and 30
	Over steep and rocky ground, ascending
8.33	Top of ascent, brs. NE and SW; descend 75 ft., steeply.
16.12	Bottom of descent; draw, 10 lks. wide, course SW; ascend
20.00	Along draw.
29.00	Ascend steeply 75 ft. over rocky and mountainous land, extremely difficult. Leave draw.
35.35	Top of ascent; descend steeply 25 ft.
37.13	Bottom of descent; ascend
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 16 lks.; position of middle point
	By 1st set, 40.08 chs.
	By 2nd set, 39.92 chs.; the mean of which is
40.00	Set a granite stone, 18x12x6 ins., 12 ins. in the ground for ¼ sec. cor. marked ¼ S 25 on W and 30 on E. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Magnetic declination, N. 14° 35' E.
	December 15: At this ¼ sec. cor., at 11h 55m a.m. l.m.t., I set off 23¼ S on the decl. arc; observe the sun on the meridian, and obtain on the lat. arc. the reading. 33° 50' N which agrees with other data.
	Magnetic declination N. 14° 35' E.
	Thence ascend
42.50	Top of ascent; descend 125 ft., steeply.
49.25	Bottom of descent; wash, 1 ch. wide, course SW
50.25	Ascend steeply, 50 ft.
55.95	Top of ridge, brs. NE and SW; descend
57.98	Bottom of descent; ascend steeply 150 ft., through dense ocotillo.
66.00	Top of ascent, brs. NE and SW; descend steeply 200 ft.
76.00	Bottom of descent; wash, 10 lks. wide, course SW; ascend
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 20 lks.; position of middle point
	By 1st set, 80.10 chs.
	By 2nd set, 79.90 chs.; the mean of which is

1st Guide Meridian E. Through Tps. 6 N., Bet. Rs. 4 & 5 E.

Chains	
80.00	Set a porphyry stone, 18x8x8 ins., 12 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked with 2 notches on the S. and 4 notches on N edge; from which A palo verde, 4 ins. diam., brs. N. 50° W., 15 lks. dist., marked T 6 N R 4 E S 24 B T Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. No other bearing trees available. Land, mountainous and rocky. Soil, rocky, 3rd, 4th and 5th rate. No timber. Undergrowth, cactus, scrub palo verde, cholla and ocotillo Mountainous and rocky land, exceptionally difficult to survey, 80.00 chs.
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	North, bet. secs. 19 and 24, Over mountainous and rocky land, ascending
3.29	Top of ascent 150 ft.; descend
6.09	Bottom of descent, wash, 10 lks. wide, course W S
8.00	Wagon road, brs. NE and SW.
9.75	ascend 100 ft.
13.15	Top of ascent; descend
23.85	Bottom of descent; ascend
26.50	Top of ridge, brs. E and W; descend 100 ft.
32.85	Bottom of descent; wash 1 ch. wide, course W; ascend 75 ft.
36.90	Top of ascent; descend 50 ft.
38.00	Wash, 1 ch. wide, course SW by S Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 12 lks.; position of middle point By 1st set, 40.06 chs. By 2nd set, 39.94 chs., the mean of which is
40.00	Point for ¼ cor. sec. 24 falls in wash.
39.75	Set a porphyry stone, 15x6x4 ins., 10 ins. in the ground for wit. ¼ sec. cor., marked ¼ S. 24 W C on W. <sup>and 19<sup>th</sup></sup> face, and raise a mound of stone, 2 ft. base 1½ ft. high W. of cor. Magnetic declination, N. 14° 30' E. December 15, 1910: at this ¼ sec. cor., at 3 p.m., l.m.t., I set off 23° 14' 30" S on the decl. arc; 33° 51' N on the lat. arc; and determine a meridian with the solar.
40.50	Leave wash, ascend steeply.
43.50	Top of ridge, brs. E and W; descend
46.10	Bottom of descent; ascend steeply 150 ft.
54.90	Road, brs. E and W.
56.05	Gold Hill road, brs. E and W.
60.00	Top of W. slope, brs. E and W; descend steep W. slope.
70.15	Bottom of descent; Oriental wash, course SW.
71.50	Leave Oriental wash; ascend steep 200 ft. slope.
74.90	Top of ascent; descend steep E. slope. Difference bet. measurement of 80.00 chs., by two sets of chainment, is 24 lks.; position of middle point By 1st set, 80.12 chs. By 2nd set, 79.88 chs., the mean of which is
80.00	A cross (X) on a porphyry rock in place, 12x18x18 ins. above ground, for cor. of secs. 13, 18, 19 and 24, marked with 3 grooves on S and N. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Magnetic declination, N. 14° 35' E. Land, mountainous. Soil, rocky; 4th and 5th rate. No timber. Undergrowth, scrub mesquite and palo verde. Mountainous land, rocky, steep ascents and descents and exceptionally difficult to survey, 80.00 chs. December 15, 1910.
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Chains	North, bet. secs. 13 and 18 Descending over very mountainous land on E. slope of Oriental wash.
9.00	Oriental wash, 30 lks. wide, course SE; ascend steep slope, 150 ft.
12.25	Top of W. slope; descend steeply 100 ft. to Oriental wash.
14.10	Oriental wash, 25 lks. wide, course W.
14.25	Begin steep ascent of 800 ft. to Oriental Peak.
18.00	6 chs. E. to Oriental mine.
30.49	100 ft. shaft
32.00	Top of W. slope of Oriental Peak E. 3 chs., and 750 ft. high to peak; descend along W slope of Oriental Peak. Difference bet. measurement of 40.00 chs., by two sets of chainment, is 16 lks.; position of middle point By 1st set, 40.08 chs. By 2nd set, 39.92 chs., the mean of which is
40.00	Set a porphyry stone, 14x10x8 ins., 9 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 13 on W and 18 on E face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
41.65	Ridge; descend 100 ft.
43.00	Gulch, 20 lks. wide, course W; ascend 75 ft.
45.20	Top of ridge, brs. E and W; descend 150 ft.
51.45	Bottom of draw, course Sw; ascend 200 ft.
56.55	Top. Steep ascent ascending along E slope of steep ridge
60.15	Top of ascent, brs. NE and SW; descend 50 ft.
61.00	Bottom of descent; ascend 100 ft.
67.60	Top of ascent, brs. NE and SW; descend steep NE slope 500 ft.
79.50	Bottom of slope. Difference bet. measurement of 80.00 chs., by two sets of chainment, is 20 lks.; position of middle point By 1st set, 80.10 chs. By 2nd set, 79.90 chs., the mean of which is
80.00	Set a granite stone, 20x10x8 ins., 13 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked with 2 notches on N. and 4 notches on S. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Magnetic declination, N. 14° 00' E. Land, very mountainous. Soil, rocky; 4th and 5th rate. No timber. Undergrowth, scattered mesquite and catclaw. Very mountainous and rocky land, with very steep ascents and descents and exceptionally difficult to survey, 80.00 chs.
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	North, bet. secs. 7 and 12. Over steep slate slope of continental mountain, ascending 1500 ft. rise.
1.75	Bottom; ascend along W side of N and S ridge
19.25	Top of ledge, brs. NW and SE; ascend Difference bet. measurement of 40.00 chs., by two sets of chainment, is 20 lks.; position of middle point By 1st set, 40.10 chs. By 2nd set, 39.90 chs., the mean of which is
40.00	On S. face of rocky, slate cliff, a cross (X) on a slate ledge in place, 12x12x24 ins. above ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 7 on E and 12 on W face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. December 16, 1910: At this $\frac{1}{4}$ sec. cor., at 3 p.m., l.m.t., I set off 23° 17' S on the decl. arc; 33° 52' 30" N on the lat. arc, and determine a meridian with the solar.

- Chains Thence ascend steep slope of Continental mountain to top.
- 45.50 Top of East Peak of Continental Mountain, brs. NW and SE. Descend NE slope of Continental Mountain, through dense scrub oak 1400 ft. to bottom. Difference bet. measurement of 80.00 chs., by two sets of chainmen is 10 lks.; position of middle point  
By 1st set, 80.05 chs.  
By 2nd set, 79.95 chs., the mean of which is
- 80.00 Set a slate stone, 20x6x4 ins., 13 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked with 1 notch on N. and 5 notches on S. edge; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
Land, mountainous.  
Soil, rocky; 4th and 5th rate.  
No timber  
Undergrowth, scrub oak, scattered mesquite and Spanish bayonet.  
Very mountainous land, rocky, steep slopes; very steep ascents and descents, or land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.

December 16, 1910.

- North, bet. secs. 1 and 6.  
Over mountainous land, descending to foot of Continental Mountain.
- 6.00 Draw, course NW; descend
- 24.80 Bottom of descent; wash 45 lks. wide, course SE; ascend 40 ft.
- 26.00 Top of ascent, brs. E and W; descend 50 ft.
- 28.18 Bottom of descent; wash, 50 lks. wide, course W; ascend steeply 200 ft.
- 37.00 Top of ascent, brs. E and W; descend 100 ft. on W. slope. Difference bet. measurement of 40.00 chs., by two sets of chainmen is 20 lks.; position of middle point  
By 1st set, 40.10 chs.  
By 2nd set, 39.90 chs., the mean of which is
- 40.00 Set a porphyry stone, 15x12x6 ins., 10 ins. in the ground for ¼ sec. cor., marked ¼ S 1 on W face and 6 on E face; from which  
A juniper, 6 ins. diam. brs. S. 4° 10' E. 295 lks. dist., marked ¼ S 6 B T  
No other trees available.  
Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
- 43.20 Draw, course SW; ascend 250 ft.
- 48.25 Top of ridge, rhyolite dyke, brs. N. 51½° E, S. 51½° W; desc. 40 ft.
- 49.50 Bottom of draw, ascend 150 ft.
- 55.20 Top of ascent, ridge brs. SW and NE; desc. 150 ft. through dense scrub oak.
- 62.75 Bottom of draw, course W; ascend 100 ft.
- 70.00 Top of ridge, brs. E and W; descend 50 ft.
- 71.50 Bottom of descent; draw, course SW; ascend 100 ft.
- 74.25 Top of ascent, brs. SW and NE; descend 100 ft.
- 78.15 Bottom of descent; draw, course SW; ascend 75 ft. Difference bet. measurement of 80.00 chs., by two sets of chainmen is 20 lks.; position of middle point  
By 1st set, 80.10 chs.  
By 2nd set, 79.90 chs., the mean of which is
- 80.00 Set a quartzite stone, 14x10x10 ins., 9 ins. in the ground for cor. of Tps. 6 and 7 N., Rs. 4 and 5 E., marked with 6 notches on each edge; 6 N on SW; 7 N on NE; 4 E on NW 5 E on SE faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.  
Magnetic declination, N. 14° 15' E.

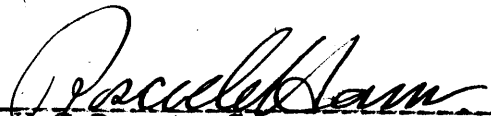
12 1st Guide Meridian E. Through Tps. 6 N., Bet. Rs. 4 and 5 E.

Chains Land, mountainous.  
 Soil, rocky; 4th and 5th rate.  
 No timber.  
 Undergrowth, scrub oak; Spanish bayonet.  
 Very mountainous land, rocky, steep ascents and descents,  
 or land covered with dense undergrowth and exception-  
 ally difficult to survey, 80.00 chs.  
 December 17, 1910: At the Cor. of Tps. 6 and 7 N., Rs. 4 & 5 E.,  
 I set off  $23^{\circ}20'$  on the decl. arc; and at 11h56m. p.m., l.m.t.,  
 observe the sun on the meridian, and obtain on the lat.  
 arc the reading,  $33^{\circ}54'$ , N which agrees with other data.  
 December 17, 1910.

GENERAL DESCRIPTION.

Township 5 North, Range 4 East, is a rolling desert,  
 cut by many washes and dry runs; drainage, Southwest.  
 Has a couple of peaks in central portion. North  
 boundary is mountainous, well covered with scrub palo  
 verde, catclaw, mesquite, ocotillo, Spanish bayonet,  
 giant cactus, greasewood and ironwood. There is no  
 water. Soil, a gravelly, decomposed granite, heavy  
 in feldspar.

Township 6 North, Range 4 East, is rolling along  
 the Southeast portion, cut by washes; drainage South-  
 west. Northern portion of Guide Meridian is moun-  
 tainous. No water. Soil gravelly and rocky. The  
 formation is slate, porphyry, granite, lime, inter-  
 mixed and standing on end, and is greatly broken up.  
 No timber. Undergrowth is scrub mesquite, scrub oak,  
 palo verde and giant cactus.

  
 U.S. Deputy Surveyor.

December 17, 1910.



FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Roscoe A. Horn

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 first

Guide Meridian East through Tps. 5 & 6 N.

showing the respective capacities in which they acted:

R. B. Miller, Chairman.

E. E. Bass, Chairman.

George W. Hand, Moundman.

T. Thorpe, ~~Chairman~~ Moundman.

W. G. Smith, Axman.

Cleve Moore, ~~Chairman~~ Axman.

Andrew Schermyron, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Roscoe A. Horn

United States Deputy Surveyor, in surveying all

those parts or portions of the

First Guide Meridian East  
Thru T 5 & 6 North,

of the

T 5 & 6 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  
Andrew Schermyron, ~~Chairman~~ Flagman.

E. E. Bass, Chairman.

George W. Hand, Moundman.

T. Thorpe, ~~Moundman~~ and Chairman.

R. B. Miller, Chairman.

W. G. Smith, Axman.

Cleve Moore, ~~Chairman~~ Axman & Flagman.

Subscribed and sworn to before me this 20th day of Jan, 1911



Roscoe A. Horn  
U. S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

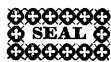
I, Roscoe C Ham, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S Ingalls United States Surveyor General for Arizona bearing date of the 5<sup>th</sup> day of Jan, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity 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 ~~Tomb of the Unknown~~ First Guide Meridian East Thru T 5 & 6 N.

B of the 3<sup>rd</sup> meridian, in the County 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.

Roscoe C Ham  
United States Deputy Surveyor.

Subscribed by said Roscoe C Ham, and sworn to before me }  
this 1<sup>st</sup> day of February, 1911

W. H. Murray  
W. H. Murray



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. Nov. 24, 1914.

The foregoing field notes of the survey of the First Guide Meridian East through Tps 5 and 6 North 5th and 6th Ranges 2nd Meridian, Arizona

executed by Roscoe C Ham under his contract No. 162, dated January, 1910, 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.  
OF ARIZONA.

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