

- 1837 -

Book "6"

BOOK 1837

Mar. 21/05

66

(1)

# FIELD NOTES

OF THE SURVEY OF THE

S 3 miles of the E boundary T10S R16E

E and N boundary T10S R17E

Lines between

$\frac{32}{97}$   $\frac{25}{29}$   $\frac{20}{21}$   $\frac{17}{16}$   $\frac{9}{16}$   $\frac{10}{15}$   $\frac{11}{14}$   $\frac{11}{12}$   $\frac{1}{12}$   $\frac{4}{5}$   $\frac{8}{9}$ , the

N one mile of the E boundary, and the E

four miles of the N boundary of T10S R17E

of the Dick & Salt River Meridian,

Arizona

AS SURVEYED BY

William B. Alexander, United States Deputy Surveyor,

Under his Contract No. 117, dated June 13, 1894

Survey commenced July 18, 1894

Survey completed October 28, 1894

1837

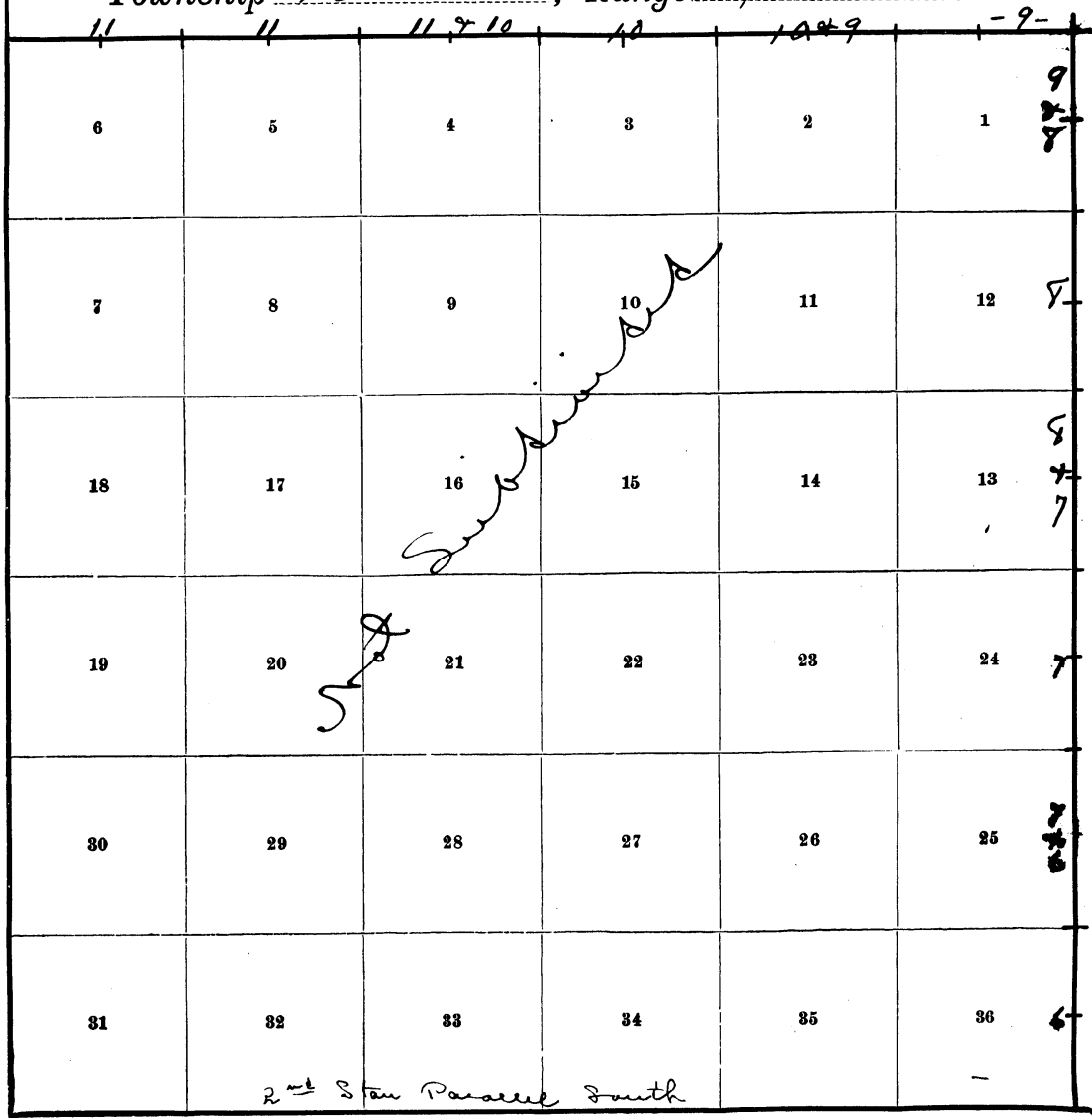


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BOOK 1837

INDEX DIAGRAM.

Township 10 South, Range 17 East



Meanders Page.....

WE, ..... and .....

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this ..... }  
day of ....., 189 }



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 ....., 189 }



WE, ..... 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 us, to the best of our skill and ability, in the survey of

....., Axman.

....., Axman.

Subscribed and sworn to before me this ..... }  
day of ....., 189 }



I, ....., 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

....., Flagman.

Subscribed and sworn to before me this ..... }  
day of ....., 189 }



BOOK 1837

INDEX DIAGRAM.

Township 10 S, Range 14 E

		16		16+17		17	
6	5	16 4	4	8	2	1	17
						15	
7	8	16 9	9	10	11	14	12
18	17	13 16	16	15	14		13
19	20	13 21	21	22	23		24
30	29	12 28	28	27	26		25
31	32	12 33	33	34	35		36

Meanders Page.....

WE, Frank C. Kelton and Edgar E. Aler

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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 <sup>THE E & N boundary T10S R17E; and the South 3 miles of the E boundary T9S R16E; and close</sup> ~~exterior and subdivisional lines necessary for connection and closing in T10S R14E~~ of the ~~line and Salt River Base and Meridian.~~

Frank C. Kelton, Chainman.

Edgar E. Aler, Chainman.

Subscribed and sworn to before me this 10 day of July, 1891904

My Comm. Exp. Sept 24 '06



Ralph W Saugworthy  
Notary Public  
Pima County

WE, Emmet J. Ford and Jesus Lopez

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

<sup>THE E and N boundary of T10S R17E; the South 3 miles of the E boundary T9S R16E; and</sup> ~~those exterior and subdivisional lines necessary for connection and closing in T10S R14E~~ of the ~~line and Salt River Base & Meridian.~~

Emmet J Ford, Moundman.

Jesus Lopez, Moundman.

Subscribed and sworn to before me this 10 day of July, 1891904

My Comm. Exp. Sept 24 '06



Ralph W Saugworthy  
Notary Public  
Pima Co.

I Francis S. Durlin 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 us, to the best of our skill and ability, in the survey of <sup>THE E and N boundary of T10S R17E; the south 3 miles of the E boundary T9S R16E; and</sup> ~~those exterior and subdivisional lines necessary for connection and closing in T10S R14E~~ of the ~~line and Salt River Base & Meridian.~~

Frank L Durlin, Axman.

\_\_\_\_\_, Axman.

Subscribed and sworn to before me this 10 day of July, 1891904

My Comm. Exp. Sept 24 '06



Ralph W Saugworthy  
Notary Public  
Pima County

I, S. Buttlar, 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 <sup>THE E & N boundary of T10S R17E; the S three miles of the E boundary T9S R16E</sup> ~~and those exterior and subdivisional lines necessary for connection and closing in T10S R14E~~ of the ~~line and Salt River Base & Meridian.~~

S Buttlar, Flagman.

Subscribed and sworn to before me this 10 day of July, 1891904

My Comm. Exp. Sept 24 '06



Ralph W Saugworthy  
Notary Public  
Pima County

Re-survey of the E. bdy. of T. 9 S., R. 16 E.

Survey commenced Oct. 7th, 1904, and executed with a Young & Sons Light Mountain Transit, No. 7520, with a solar attachment; the horizontal limb having two double verniers placed opposite each and reading to single minutes of arc.

The instrument was examined, tested on the true meridian at Phoenix, Arizona, found correct and approved by the Surveyor General for Arizona, June 25th, 1904.

I begin at the cor. of Tps. 9 and 10 S. Rs. 16 and 17 E. recently established by me in lat. 32° 37.8' N. long. 110° 39' W.

I examine the bubble, collimation, and standard adjustments of the Transit, and find them to be correct.

In order to test the solar apparatus by comparing the results of observations made on the sun during a.m. and p.m. hours with a true meridian determined by observation on polaris, I proceed as follows:

Oct. 7th, 1904; At 4 h. 0 m. p.m. l.m.t., I set off 32° 38' N. on the lat. arc 5° 35-1/2' S. on the decl. arc, and mark the meridian thus established by a tack driven in a stake set firmly in the ground about 6 chs. N. of my station, 1 ch. N. of cor. of Tps. 9 and 10 S., Rs. 16 and 17 E.

At 6 h. 24 m. p.m. l.m.t., I observe polaris at eastern elongation in accordance with instructions given in the Manual, and mark the line thus established by a tack driven in a stake set firmly in the ground about 6 chs. N. of my instrument.

October 7th, 1904.

October 8th, 1904; At 6 h. 30 m. a.m. l.m.t., I lay off the azimuth of polaris 1° 25.7' W. to the west of stake set last night and mark the meridian thus established by a tack driven in a stake set the evening before; the meridian falls .32 ins. west of the mark determined by the solar observation.

At 7 h. 15 m. a.m. l.m.t., I set off 32° 38' N. on the lat. arc, 5° 49' S. on the decl. arc and mark the meridian thus established by a tack driven in stake already set; this mark falls .26 ins. W. of the meridian determined by observation on polaris.

The difference in direction of the meridian as established by solar and polaris observation is less than the probable error of observation; therefore I conclude that the adjustments are satisfactory.

The magnetic bearing of true north is 12° 45' W. at this cor.

N. on a true line bet. secs. 31-36.

Wash 40 lks. wide course E. Ascend.

Top of ridge bears N.E. Descend.

Wash, 10 lks. wide, course N.E. Ascend.

Top of ridge bears N.E. Descend.

Wash 30 lks. wide bears N.E.

Wash 20 lks. wide bears N.E.

Old 1/4 cor., decayed stake lying loose on the ground, bears W. 60 lks. dist. I re-establish as follows-

Set a quartz stone 8 x 10 x 20 ins. 15 ins. in the ground for 1/4 cor. bet. secs. 31-36, marked 1/4 on W. face;

dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3 ft. base, 2 ft. high W. of cor.

The true course of this half mile is N. 0° 52' W. 40.05 chs.

Wash 30 lks. wide course N.E. Ascend.

Top of ridge, bears N.E. Descend.

Cross well traveled road, bears N.E. Ascend.

Top of ridge, bears N.E. Descend.

Wash, 40 lks. wide, course E. N.E.

Old sec. cor. (decayed stake) bears W. 1.32 chs. dist. I re-establish as follows:

7.25  
13.50  
15.90  
21.30  
29.20  
37.30  
40.04  
  
50.60  
56.00  
64.45  
68.50  
71.90  
79.98

	Set a quartz stone 12 x 12 x 20 ins. 15 ins. in the ground for cor. <del>65</del> secs. 25-30-31-36, marked with 5 notches on N and 1 notch on S. edges; dig pits 18 x 18 x 12 ins. in each sec. 5-1/2 ft. dist., and raise a mound of earth 4 ft. base, 2ft. high W. of cor. The true course of this half mile is N. 1°-21' W 39.95 chs. Land mountainous; soil sandy and rocky, 3rd and 4th rates; timber, mesquite. Mountainous land 80.00 chs.
	-----
	N. bet. secs. 25-30.
9.50	Wash 15 lks. wide, course N.E. Ascend.
12.00	Top of ridge bears N.E. Descend.
15.20	wash 1 ch. wide bears N.E.
18.70	Trail bears N.N.E.
32.00	Wash 15 lks. wide, course E.N.E.
40.22	Old 1/4 cor. (decayed stake) bears W. 40 lks. dist. I re-establish as follows: Set a sandstone 8 x 8 x 14 ins 10 ins. in the ground for 1/4 cor. bet. secs. 25-30, marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist; raise a mound of earth, 3 ft. base, 2 ft. high W. of cor. The true course of this line is N. 0°-34' W. , 40.22 chs.
59.20	Wash 15 lks. wide, course N.E.
80.19	Old cor. (decayed stake) bears W. 142 lks. dist. I re-establish as follows: Set a sandstone 8 x 12 x 20 ins. 15 ins. in the ground for cor. of secs. 19-24-25 30, marked with 4 notches on N. and 2 notches on S. edges; dig pits 18 x 18 x 12 ins. in each sec. 5-1/2 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. The true course of this half mile is N. 1°-28' W. 39.98 chs. Land mountainous soil, rocky and sandy, 3rd and 4th rates; timber, mesquite. Mountainous land 78.00 chs.
	-----
	N. bet. secs. 19-24.
40.00	No traces of 1/4 cor. can be found
80.08	Granite stone 10 x 12 x 16 ins. 6 ins. above ground, with markings nearly obliterated and scattered mound of stones alongside, bears W. 146 lks. dist. I re-establish as follows: Set a granite stone 10 x 12 x 16 ins. 11 ins. in the ground for cor. of secs. 13-18-19-24, marked with 3 notches on the N. and S. edges; raise a mound of stones 3ft base, 3ft high W. of cor. Pits impracticable. Thence I run S. 1° 3' E. bet. secs. 19-24, ascending. Top of ridge, bears N.E. Descend. Wash, 30 lks. wide, course N.E. Ascend. Top of ridge. Descend. Cross old road bears N.E. Wash, 50 lks. wide, course N.N.E.
1.00	Point for 1/4 cor. bet. secs. 19-24 falls in wash. Course N.E.
6.13	Set a sandstone 8 x 12 x 16 ins. 11 ins. in the ground as W.C.
13.00	for 1/4 cor. bet. secs. 19-24, marked 1/4 W.C. on W. face, and raise a mound of stones 2 ft. base, 1-1/2 ft high W. of cor. Pits impracticable.
25.30	Wash 30 lks. wide, course N.E.
30.50	Cross trail, bears E. Thence through low bushy valley.
40.04-1/2	The cor. of secs. 19-24-25-30.
41.00	Land mountainous; soil rocky, 4th rate; undergrowth of mesquite; no timber. Mountainous land 80.09 chs.
64.00	October 8th, 1904; I set off 5°-55-1/2' S. on the decl. arc and at 12 h. l.m.t. observe the sun on the meridian at the cor. of secs. 19-24-25-30; the resulting lat. is 32°-39-1/2' N.
64.70	
80.09	



Survey commenced Sept. 30th, 1904, and executed with a Young & Sons Light Mountain Transit, No. 7520; the horizontal limb having two double verniers placed opposite each other and reading to single minutes of arc, this is also the least reading of the decl. and lat. arcs.

At the cor. of T. 10 S., R. 17-18 E. re-established by me July 18th, 1904, in lat.  $32^{\circ} 32\frac{1}{2}' N.$ , long.  $110^{\circ} 33' W.$ , I set off  $32^{\circ} 32\frac{1}{2}' N.$  on the lat. arc,  $2^{\circ} 53' S.$  on the decl. arc, and at 3 h. 20 m. p. m. l. m. t., determined by the solar a true meridian and mark a point thereof by a tack driven in a stake, firmly set in the ground about 3 chs. N. of my station.

At 6h. 51.4 m. p. m., I observe polaris at eastern elongation in accordance with instructions given in the Manual and mark the line thus determined on a stake driven in the ground E. of the stake set this afternoon.

September 30th, 1904.

Oct. 1st, 1904; At 7 h. 10 m. a. m. l. m. t., I lay off the azimuth of polaris  $1^{\circ} 26'$  to the W. and mark the meridian thus determined by cutting a notch in the stake set yesterday on which the true meridian falls .18 ins. E. of the meridian established by the solar observation.

At 8 h. 10 m. a. m., I set off  $32^{\circ} 32\frac{1}{2}' N.$  on the lat. arc,  $3^{\circ} 9' S.$  on the decl. arc, and mark a point in the meridian determined with the solar by a tack driven in the stake already set about three chs. N. of my station; this mark falls .24 ins. E. of the true meridian established by polaris observation.

The solar apparatus by a. m. and p. m. observations defines the positions for meridians respectively about  $20'' E.$  and  $16'' W.$  of the meridian established by polaris observation; therefore I conclude that the adjustments of the solar are satisfactory.

Var.  $13^{\circ} 15' E.$

From this point I run, N. bet. secs. 31-36 over sharply rolling broken land covered with dense cacti, palo verde and mesquite undergrowth.

8.25 Edge of abrupt descent into canyon.

14.00 Middle of canyon, bears E. by N.

27.00 Spur slopes S. E.

32.00 Tributary canyon, bears E. S. E.

39.00 Top of ridge bearing E.

39.62 Remains of old cor. bear west 15 lks. dist. I re-establish same as follows: <sup>a mound of stones</sup> Set a quartz stone 6 x 14 x 18 ins. 12 ins. in the ground for  $1/4$  cor. bet. secs. 31-36, marked  $1/4$  on W. face, raise a mound of stones, 2 ft. base, 2 ft. high W. of cor. Pits impracticable. The true course of this line is N.  $0^{\circ} 13' W.$  39.62 chs.

N. from  $1/4$  cor.

1.40 Gulch bears E.

5.00 Ridge bears E.

11.00 Tributary canyon bears E.

14.00 Top of mesa.

39.69 Remains of cor. bear W. 9 lks. dist. I re-establish it as follows; Set a granite stone 10 x 10 x 22 ins., 16 ins. in the ground for cor. of secs. 25-30-31-36, marked with 5 notches on N. and one notch on S. edges; raise a mound of stones, 2 ft. base, 2 ft. high W. of cor. Pits impracticable. The true course of this line is, N.  $0^{\circ} 8' W.$  39.69 chs.

Land, sharply rolling, broken by ridges and canyons; no grass; soil; 4th rate; undergrowth of cacti palo verde and mesquite.

Dense undergrowth 79.31 chs.; mountainous land 53/62 chs.

N. bet. secs. 25-30 through dense undergrowth of cacti and palo verde.

34.20 Descend into canyon.

40.00 Falls in wash; since no where in this vicinity can I find any trace of any  $1/4$  cor., in order to ensure permanency at.

39.00 I establish a W. E. 10 lks. E. of the meridional line on which I am running by setting a granite stone 6 x 8 x 14 ins. 10 ins. in the ground for W. C. to  $1/4$  cor. bet. secs. 25-30, marked  $1/4$  on W. face, and W. E. on top; from which

Chains

A mesquite, 9 ins. diam. bears S. 53° 15' W. 71 lks. dist. marked 1/4 S. 25, B.T.W.C.  
 A mesquite, 8 ins. diam. bears N. 69° 15' E. 92 lks. marked 1/4 S. 30 B.T.W.C.  
 40.00 Wash, 40 lks. wide, bears E.N.E. Ascend.  
 58.00 Top of left bank of canyon; ascend gradually hill sloping S.E.  
 66.00 Descend into small deep canyon, course E.  
 69.00 Wash, course E. Ascend.  
 73.30 Top of left bank of canyon. Ascend gradually over mesa.  
 79.60 Old cor. of secs. 19-24-25-30, bears E. 20 lks. dist.; this consists of a granite stone 7 x 8 x 12 ins. above ground with marks nearly obliterated and bear traces of pits in each section; I re-establish as follows:  
 Set a granite stone 7 x 8 x 18 ins. 12 ins. in the ground for cor. of secs. 19-24-25-30, marked with 4 notches on the N. and 2 notches on the S. edges; dig pits 18 x 18 x 12 ins. in each sec. 5-1/2 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.  
 The course of this ~~line~~ mile, is N. 0° 3' E., 79.60 chs. Land broken by canyons and covered with growth of cacti and palo verde; soil 4th rate.  
 Dense undergrowth 79.60 chs.; mountainous land 31.10 chs.  
 Note: The closing of this mile indicates the position of 1/4 cor. as follows: W.C. 1/4 25-30, as set, refers to cor. situated ~~80 lks 5 m.~~  
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 October 1st, 1904; I set off 3° 13-1/2' S. on the decl. arc and at 12 h. 0 m. l. m. t., observe the sun on the meridian at the cor. of secs. 19-24-25-30, the resulting lat. is 32° 34' N. Thence I run  
 N. bet. secs. 19-24 through undergrowth of greasewood, chollas, etc.  
 9.50 Begin roughly rolling ascent.  
 21.50 Ridge bears E & W. Descend.  
 33.00 Foot of descent. Thence over rolling land sloping W.  
 39.85 Remains of old cor. bear W. 19 lks. dist.; I re-establish cor. as follows: Set a granite stone 8 x 8 x 12 ins. 8 ins. in the ground for 1/4 cor. bet. secs. 19-24, marked 1/4 on W. side; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3 ft. base, 2 ft. high W. of cor.  
 The course of this line is, N. 0° 46' W. 39.85 chs.  
 N. from 1/4 sec. cor. over roughly rolling land. 16.65  
 Ridge bears W.N.W. Descend over rolling ground sloping N.  
 30.45 Descend abruptly.  
 31.70 Foot of descent. Enter flat of wash.  
 36.00 Middle of wash 4 chs. wide, course E.N.E.  
 40.00 Perpendicular bank, 30 ft. high.  
 40.40 Granite stone 12 x 14 x 24 ins. 18 ins. in the ground, with no visible marks but scattered mound of stones alongside, bears W. 37 lks. dist.; this cor. is described by the Surveyor General as a W.C. at 80.50 chs.; I re-establish as follows: Set a granite stone 12 x 14 x 24 ins. 18 ins. in the ground for cor. of secs. 13-18-19-24, marked with 3 notches on N. & S. edges; raise a mound of stones 2-1/2 ft. base, 2-1/2 ft. high W. of cor. Pits impracticable.  
 The true course of this line is N. 0° 32' W. ~~79.40~~ chs. Land broken by canyons; soil 4th rate; undergrowth of greasewood and chollas, etc.  
 Mountainous land 55.60 chs.; dense undergrowth 79.75 chs.  
 -----  
 from cor. pt. -----  
 N. bet. secs. 13-18, through dense undergrowth of cacti, palo verde and greasewood.  
 18.20 Descend into small canyon, course E.  
 21.50 Descend abruptly 20 ft.  
 22.50 Wash, bears E.  
 22.60 Ascend abruptly 30 ft.  
 23.50 Top of left bank of canyon.  
 30.10 Old road bears W S.W.  
 40.03 Granite stone 11 x 13 x 14 ins. above ground with traces of markings, bears E. 13 lks. dist. No traces of mound or pits, I re-establish as follows:  
 Mark 1/4 on W. Face for 1/4 cor. bet. secs. 13-18; raise a mound of stones 2 ft. base, 2 ft. high W. of cor. Pits impracticable.

and W.C. on the N.E. face.

Chains	
	The course of this line is, N. 0° 11' E. 40.03 chs. N. from 1/4 cor. bet. secs. 13-18 over roughly rolling land. Descend into lowlands.
10.00	Bottom, over roughly rolling lowlands.
16.50	Gulch bears E.N.E.
18.85	Right bank of wash bears E.N.E.
28.20	Left bank of same wash, Ascend over rolling land.
29.70	Remains of old cor. bears W. 4 lks. dist. I re-establish
39.86	as follows: Set a granite stone 8 x 12 x 18 ins. 12 ins. in the ground for cor. of secs. 7-12-13-18, marked with 2 notches on N. and 4 notches on S. edges; raise a mound of stones 2-1/2 ft. base, 2-1/2 ft. high W. of cor. Pits impracticable. The course of this line is N. 0° 3' W. 39.86 chs. Land broken by canyon; soil stony 4th rate; undergrowth pf cacti, palo verde and grease wood. Dense undergrowth 79.89 chs.; mountainous land 45.16 chs. October 1st, 1904.
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	October 2nd 1904. N. from cor. of secs. 7-12-13-18, over roughly rolling land covered with dense cacti, palo verde and mesquite. Ascend Var. 13° 15' E.
4.00	Ridge bears E.N.E.
11.10	Gulch bears E.
17.00	Top of ridge bears E.
31.00	Wash, 50 lks. wide, bears E.N.E. Ascend.
35.50	Top of ascent, thence over rolling land.
39.86	Remains of old 1/4 cor. bear W. 44 lks. dist. I re-establish as follows: Mark 1/4 on W. of a granite stone 7 x 12 x 8 ins. above ground for 1/4 cor. bet. secs. 7-12.; from which A mesquite 10 ins. diam. bears S. 29° 30' W. 76 lks. dist. marked 1/4 S. 12 B.T. A mesquite 6 ins. diam. bears S. 28° E. 27 lks. dist. marked 1/4 S. 7 B.T.
	The true course of this line is N. 0° 38' W. 39.86 chs. N. for 1/4 cor. bet. secs. 7-12, over sharply rolling land.
3.00	Gulch bears E. Ascend.
9.00	Top of ascent; over rolling ground.
14.60	Gulch bears W.S.W.
26.10	Wash, 40 lks. wide, bears E.
39.97	Remains of old cor. bear E 99 lks. dist. I re-establish this cor., remark 5 notches on N. and one mark on S. edges of the granite stone 6 x 9 x 9 ins. above ground for cor. of secs. 1-6-7-12; raise a mound of stones, 2-1/2 ft. base, 2-1/2 ft. high W. of cor. Pits impracticable.
	The true course of this line is, N. 1° 29' E. 39.98 chs. Land rolling and broken by canyons; soil 3rd and 4th rates; undergrowth of cacti, palo verde and mesquite. Mountainous land 75.47 chs.; dense undergrowth 79.83 chs.
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	October 2nd, 1904: At 9 h. 40. 'a.m. l.m.t., I set of 3° 34-1/2' S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 1-6-7-12.
	Thence I run N. bet. secs. 1-6 over roughly rolling land.
2.90	Wash, 15 lks. wide, bears N.N.E.
11.80	Descend.
16.50	Wash 20 lks. wide bears N.E. Ascend.
18.20	Top of ascent over rolling land.
31.20	Wash, 30 lks. wide bears E.
39.71	The remains of 1/4 sec. cor., decayed mesquite post, bear W. 10 lks. dist. I re-establish the cor. as follows: Set a granite stone 10 x 12 x 16 ins. 10 ins. in the ground for 1/4 cor. bet. secs. 1-6, marked 1/4 on W. face; raise a mound of stones 2ft. base, 2ft. high W. of cor. A palo verde, 7 ins. diam. bears S. 19° W. 43 lks. dist. marked 1/4 S. 1, B.T. A palo verde 5 ins. diam. bears N. 86° E. 60 lks. dist. marked 1/4 S. 6 B.T.
	The true course of this line is N. 0° 9' W. 39.71 chs. N. from 1/4 cor. bet. secs. 1-6, through dense undergrowth.
3.56	Trail bears N.E.
9.30	Wash 20 lks. wide, bears E.N.E.
21.30	Wash, 15 lks. wide, bears N.E.
32.89	Trail bears N.E.



Chains

4.70  
5.70  
10.00  
12.00  
40.00  
42.20

A palo verde 8 ins.diam.bears N. 2° 45' W. 59 lks. dist.marked 1/4 S. 35' B.T.  
A palo verde 8 ins.diam.bears S. 74° 30' E. 49 lks dist.marked 1/4 S. 2 B.T.  
The true course of this line is S. 89° 57' W. 39.80 chs. W. from 1/4 cor.bet.secs.2-35.  
Wash, 40 lks.wide,bears N.E.  
Trail bears N.E.  
Asecdd.  
Top of ascent.  
Falls in wash 125 lks.wide,course N.E. No traces of cor. can be found.  
A decayed mesquite post 2ins.diam. loose in the ground bears N. 29 lks.dist. This post has marks... barely discernable. I re-establish as follows:  
Set a granite stone 5 x 12 x 16 ins. 10 ins.in the ground for ~~the~~ to cor.of secs.2-3-34-35,marked ~~the~~ on top with 2 notches on E.and 4 notches on W. faces;raise a mound of stones 2 ft.base, 2ft.high W.of cor. Pits impracticable.  
The true course of this line is, N. 89° 36' W. 42.20 chs. Land rolling; soil 3rd and 4th rates;undergrowth of cacti, pale verde and mesquite.  
Dense undergrowth 82.00 chs.

October 2nd, 1904.

10.00  
12.00  
23.60  
38.00  
38.94

October 3rd, 1904; W. on a true line bet.secs. 3-34 from stone just set.  
Var. 13° 15' E.  
Ridge bears N.E.  
Wash 20 lks.wide,bears N.E.  
Wash 10 lks.wide,bears N.E.  
Ridge bears N.E.  
Decayed post, loose in a mound of dirt bears N. 83 lks.dist. I re-establish cor.as follows:  
Set a sandstone 8 x 11 x 20 ins. 15 ins.in the ground for 1/4 cor. bet.secs. 3-34; dig pits 18 x 18 x 12 ins. E. & W. of stone, 3 ft.dist.and raise a mound of earth 3 ft base, 1-1/2 ft.high N.of cor.  
The true course of this line is, N. 88° 47' W.38.95 chs. from the 1/4 cor.bet.secs.3-34 I run W.

5.00  
13.85  
17.75  
20.00  
21.65  
29.00  
36.00  
40.06

Wash 1 ch.wide,bears N.E.  
Gulley bears N.E.  
Spur bears N.E.  
Wash 15 lks.wide,bears N.E.  
Roadon top of spur bears N.E.  
Wash 10 lks.wide,bears N.E.  
Low spur bears N.E.  
Decayed stake loose on a small mound of earth bears N. 49 lks. dist. I re-establish cor.as follows:  
Set a granite stone 6 x 8 x 14 ins. 10 ins.in the ground for cor.of secs.3-4-33-34,marked with 3 notches on E.& W. edges; dig pits 18 x 18 x 12 ins.in each sec.5-1/2 ft.dist.;and raise a mound of earth 4 ft.base,2ft.high W. of cor. The true course of this line is, N. 89° 18' W. 40.06 chs.  
Land rolling;soil 3rd and 4th rates;undergrowth of cacti and mesquite.  
Dense undergrowth 79.00 chs.

October 3rd, 1904; At 9 h.40 m.a.m.1.m.t., I set off 3° 58' S. on the decl.arc, 32° 38' N. on the lat.arc,and determine a meridian with the solar at the cor.of secs.3-4 33-34

5.00  
19.00  
29.30  
33.60  
40.00  
46.50  
49.05  
63.00  
80.00

Thence I run W. bet.secs. 4-33.  
Wash 150 lks.wide,bears N.E.  
Spur bears N.E.  
Ridge bears N.E.  
Wash, 60 lks.wide,bears N.E.  
No traces of 1/4 cor.bet.secs. 4-33 can be found.  
Ridge bears N.E.  
Wash 15 lks.wide,bears N.E.  
Wash 30 lks.wide,bears N.E.  
Can find no traces of cor.of secs.4-5-32-33.  
Land rolling;soil 3rd rate;undergrowth of chollas,pale verde

Chains

mesquite.  
Dense undergrowth 80.00 chs.

Oct. 3rd, 1904; I set off 4° 00' S. on the decl. arc and at 12 h. a. m. t., observe the sun on the meridian at the point for cor. of secs. 4-5-32-33; the resulting lat is 32° 38' N.

Thence I run W. south of sec. 32

3.40 Trail bears S.W.  
5.70 Wash, 30 lks. wide, bears N.E.  
14.00 Ridge bears N.E.  
19.10 Small wash, bears N.E.  
33.00 Wash, 30 lks. wide bears N.E.  
40.00 No signs or traces of 1/4 cor. bet. secs. 5-32 can be found.  
50.25 Wash, 10 lks. wide, bears N.E.  
59.00 Ridge bears N.E.  
62.40 Wash, 8 lks. wide, bears N.E.  
67.00 Ridge bears N.E.  
69.20 Wash, 10 lks. wide, bears N.E.  
80.00 No traces of cor. of secs. 5-6-31-32 can be found.  
Land gently rolling; soil 3rd rate; undergrowth of cacti and mesquite.  
Dense undergrowth 80.00 chs.

West S. of sec. 31.

5.00 Wash, 50 lks. wide, bears N.E.  
8.00 Low ridge bears N.E.  
12.90 Wash 10 lks. wide, bears E.N.E.  
32.70 Trail bears S.W. in center wash, 65 lks. wide.  
38.05 Small wash, bears E.N.E.  
40.00 No traces can be found of 1/4 cor. bet. secs. 6-31.  
49.60 Wash, 10 lks. wide, bears N.E.  
80.08 Cor. T. 9-10 S., Rs. 16-17 E. bears N., 5.54 ~~chs.~~ dist.  
Land gently rolling; soil 3rd rate; undergrowth of chollas and mesquite.  
Dense undergrowth 80.08 chs.  
The true course and length of the last three miles, i.e., the west three miles, of the N. bdy. T. 10 S., R. 17 E. is N. 88° 41' W. 240.13 chs.

October 3rd, 1904.

Boundaries T. 10 S., R. 17 E.  
Latitudes, departures and closing errors.

Line designated	True b'r's Dist.:	Bearings:		Departures:	
		N.:	S.:	E.:	W.:
2nd Stan. Par. North	West.....	480.00			480.00
E. bdy. T. 10 S. R. 16 E.	N. 00° 8' W.	483.90	483.90		1.09
W. 3 miles of N. bdy.	S. 88° 41' E.	240.13		5.54	240.08
W. 1/2 mile bet. secs. 3-34:					
on N. bdy. T. 10 S., R. 17 E.	S. 89° 18' E.	40.06		0.49	40.06
E. 1/2 mile bet. secs. 3-34:					
on N. bdy. T. 10 S., R. 17 E.	S. 88° 48' E.	38.95		0.83	38.94
W. 1/2 mile bet. secs. 2-35:					
on N. bdy. of T. 10 S., R. 17 E.	S. 89° 36' E.	42.20		0.29	42.20
E. 1/2 mile bet. secs. 2-35 on					
N. bdy. of T. 10 S. R. 17 E.	N. 89° 57' E.	39.80	0.03		39.80
Mile bet. secs. 1-36 on					
N. bdy. T. 10 S. R. 17 E.	N. 89° 06' E.	79.90	1.26		79.90
N. 1/2 mile E. of sec. 1	S. 00° 26' E.	39.60		39.60	0.30
S. 1/2 mile of sec. 1	S. 00° 09' E.	39.71		39.71	0.10
N. 1/2 mile E. of sec. 12	S. 01° 25' W.	39.98		39.97	0.99
S. 1/2 E. of sec. 12	S. 00° 38' E.	39.86		39.86	0.44
N. 1/2 mile E. of sec. 13	S. 00° 03' E.	39.86		39.86	0.04
S. 1/2 mile E. of sec. 13	S. 00° 11' W.	40.03		40.03	0.13
N. 1/2 mile E. of sec. 24	S. 00° 32' E.	39.90		39.90	0.37
S. 1/2 mile E. of sec. 24	S. 00° 16' E.	39.85		39.85	0.19
Mile E. of sec. 25	S. 00° 00' W.	79.60		79.60	0.20
N. 1/2 mile E. of sec. 36	S. 00° 08' E.	39.69		39.69	0.09
S. 1/2 mile E. of sec. 36	S. 00° 13' E.	39.62		39.62	0.15
Convergency					0.46
Totals		485.19	484.84	483.12	482.41
Errors			0.35		0.71

## Chains

Survey commenced Oct. 16th, 1904, and executed with a Young & Sons Light Mountain Transit, No. 7520, the horizontal limb having two double verniers placed opposite each other, and reading to single minutes of arc, which is also the least reading of the lat. and decl. arc.

At the cor. of secs. 32-33, which is a pine post 4" x 4" x 4 ft. above ground, marked S.C. T. 10 S., R. 14 E. on N., S. 33 on E., and S. 32 on W. faces and firmly set in a mound of stone 2 ft. base 2 ft. high, on the Second Standard Parallel South, lat.  $32^{\circ} 32' 1/2''$  N., long.  $110^{\circ} 55'$  W.

October 16th, 1904; At 5 h. 40.5 m. a.m., l.m.t., I observe polaris at western elongation, in accordance with instructions given in the manual, and mark a point in the line thus determined, on a stake driven in the ground about 5 chs. N. of my station.

At 7 h. 30 m. a.m. l.m.t., I lay off the azimuth of polaris  $1^{\circ} 26'$  to the E. and mark the meridian thus determined by a tack driven in a stake set 5 chs. N. of my station.

At 8 h. 40 m. a.m., l.m.t., I set off  $32^{\circ} 32' 1/2''$  N. on the lat. arc,  $8^{\circ} 52'$  on the decl. arc, and mark a point in the meridian determined by solar observation by a notch cut in the stake already set about 5 chs. N. of my station; this mark falls .4 ins. E. of the meridian established by polaris observation.

The solar apparatus by a.m. observation determines a direction for the meridian which checks sufficiently close with the polaris observations, therefore I conclude that the adjustments of the solar are satisfactory.

Thence I run, N.  $0^{\circ} 2'$  W. bet. secs. 32-33.

Var.  $13^{\circ} 15'$  E.

8.00  
40.09

Spur bears E. Thence over gulches and ridges bearing E. Remains of  $1/4$  cor. bears E. 14 lks. dist. I re-establish as follows: Set a quartz stone 5 x 6 x 18 ins. 12 ins. in the ground for  $1/4$  cor. bet. secs. 32-33, marked  $1/4$  on W. face; raise a mound of stones 2 ft. base, 2 ft. high W. of cor. Pits impracticable.

The true course of this line is, N.  $0^{\circ} 10'$  E. 40.09 chs. N.  $0^{\circ} 2'$  W. from  $1/4$  cor. bet. secs. 32-33.

8.00  
31.90  
40.27

Ridge bears W.S.W.

Wash, 20 lks. wide, bears S.W.

Remains of sec. cor. bears E. 6 lks. dist. I re-establish as follows: Set a quartz stone 6 x 6 x 15 ins. 10 ins. in the ground for cor. of secs. 28-29-32-33, marked with 4 notches on the E. and one notch on the S. edges; raise a mound of stones 2 ft. base, 2 ft. high W. of cor. Pits impracticable

The true course of this line is, N.  $0^{\circ} 3'$  E. 40.27 chs. Land, mountainous; soil 4th rate, some undergrowth of mesquite and cacti.

Mountainous land 80.36 chs.

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From the cor. of secs. 28-29-32-33, I run N.  $0^{\circ} 2'$  W. bet. Secs 28+29

5.00  
13.00  
17.00  
26.00  
40.08

Ridge bears S.W.

Gulch bears S.W.

Ridge bears S.W.

Wash, 20 lks. wide, bears S.W.

Remains of  $1/4$  cor. bear E. 5 lks. dist. I re-establish as follows:

Set a quartz stone 5 x 13 x 15 ins. 10 ins. in the ground for  $1/4$  cor. bet. secs. 28-29, marked  $1/4$  on W. face; raise a mound of stones, 2 ft. base, 2 ft. high W. of cor.

The true course of this line is N.  $0^{\circ} 2'$  E.

From the  $1/4$  cor. bet. secs. 28-29, I run N.  $0^{\circ} 2'$  W.

15.00  
21.30  
28.50  
39.17

Ridge bears S.W.

Gulch bears S.W.

Ridge bears S.W.

Remains of sec. cor. bear W. 143 lks. dist. I re-establish as follows:

Set a granite stone 6 x 9 x 18 ins. 12 ins. in the ground for cor. of secs. 20-21-28-29, marked with 4 notches on the E. and 2 notches on the S. edges.

A mesquite 10 ins. diam. bears S.  $60^{\circ} 30'$  W. 67 lks.

dist. marked T. X., R. XIV, S. 1111 11.

Raise a mound of stones 2 ft. base 2 ft. high W. of cor.

The true course of this line is N.  $2^{\circ} 1'$  W. 39.20 chs.

Chains

Land sharply rolling; soil 4th rate, undergrowth of mesquite and cacti.  
 Mountainous land 79.25 chs.

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From the cor. of secs. 20-21-28-29 I run N. 0° 2' W.  
 Wash, 30 lks. wide, bears N.W.  
 Ridge bears N.E.  
 Gulch bears S.W.  
 Ridge bears S.W.  
 Gulch bears S.W.  
 Remains of old cor. bears E. 104 lks. dist. I re-establish as follows:  
 Set a granite stone 7 x 7 x 15 ins. 10 ins. in the ground for 1/4 cor. bet. secs. 20-21, marked 1/4 on W. face; raise a mound of stones 2ft. base, 2ft. high W. of cor.  
 The true course of this line is, N. 1° 28' E. 39.69 chs.  
 From the 1/4 cor. bet. secs. 20-21, I run N. 0° 2' W.  
 Ridge bears W.S.W.  
 Wash, 20 lks. wide, bears W.S.W.  
 Ridge bears S.W.  
 Gulch bears S.W.  
 Remains of sec. cor. bears W. 14 lks. dist. I re-set as follows:  
 Set a quartz stone 8 x 8 x 13 ins. 8 ins. in the ground for cor. of secs. 16-17-20-21, marked with 4 notches on the E. and 3 notches on the S. edges; raise a mound of stones 2ft. base, 2ft. high W. of cor. Pits impracticable.  
 The true course of this line is N. 0° 14' W. 40.92 chs.  
 Land sharply rolling; soil 4th rate; undergrowth of mesquite and cacti.  
 Mountainous land 80.60 chs.

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October 16th, 1904; I set off 8° 55-1/2' S. on the decl. arc, and at 12 h. observe the sun on the meridian at the cor. of secs. 16-17-20-21; the resulting lat. is 32° 35' N.  
 N. 0° 2' W. bet. secs. 16-17 over rolling land.  
 Foot of descent.  
 Wash, 10 lks. wide, bears N.W.  
 Trail bears W. by S. Enter dense undergrowth of mesquite and catsclaw.  
 Wash, 35 lks. wide, bears W. by S.  
 Leave dense undergrowth.  
 Remains of 1/4 cor. bears E. 38 lks. dist. I re-set as follows:  
 Set a granite stone 6 x 9 x 12 ins. 8 ins. in the ground for 1/4 cor. bet. secs. 16-17, marked 1/4 on W. face; raise a mound of stones, 2ft. base, 2ft. high W. of cor. Pits impracticable.  
 True course of this line is N. 0° 31' E. 39.42 chs.  
 N. 0° 2' W. from 1/4 sec. cor.  
 Enter dense prickly pear.  
 Ridge bears W. by S.  
 Leave dense prickly pear.  
 Wash, 15 lks. wide, bears W.  
 Wash, 20 lks. wide, bears W. by S.  
 Remains of sec. cor. bears W. 39 lks. dist. I re-set as follows:  
 Set a quartz stone 8 x 12 x 12 ins. 8 ins. in the ground for cor. of secs. 8-9-16-17, marked with 4 notches on E & S. edges; raise a mound of stones 2ft. base, 2ft. high W. of cor. Pits impracticable.  
 The true course of this line is N. 0° 35' W. 40.75 chs.  
 Land, rolling; soil 3rd and 4th rate; undergrowth of mesquite, cacti and catsclaw.  
 Mountainous land 80.17 chs.; dense undergrowth 21.50 chs.

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E. from cor. of secs. 8-9-16-17.  
 Wash, 20 lks. wide, bears W. by S.  
 Enter dense undergrowth of catsclaw and mesquite.  
 Leave undergrowth.  
 Find traces of 1/4 sec. cor. I re-establish as follows:  
 Set a granite stone 7 x 10 x 13 ins. 8 ins. in the ground for 1/4 cor. bet. secs. 9-16 marked 1/4 on N. face; raise a mound of stones 2ft. base, 2ft. high N. of cor.  
 The true course of this line is E. 40.05 chs.  
 from 1/4 sec. cor. Over sharply rolling land.

4.20  
 13.00  
 18.80  
 27.00  
 35.00  
 39.68  
  
 2.00  
 15.30  
 32.00  
 35.35  
 40.92  
  
 9.00  
 10.70  
 22.00  
 24.00  
 31.00  
 39.42  
  
 2.50  
 10.00  
 15.00  
 25.40  
 39.60  
 40.75  
  
 11.00  
 15.00  
 20.00  
 40.05



Chains

0.30 Small wash, bears S.W.  
 11.00 Ridge bears S.W.  
 36.00 Wash, 20 lks. wide, bears W.S.W.  
 40.65 Granite stone with traces of markings, and a scattered mound of stones alongside bears S. 5 lks. dist. I re-establish as follows:  
 Set a granite stone 7 x 10 x 18 ins. 12 ins. in the ground for cor. of secs. 9-10-15-16, marked with 3 notches on the E. and 4 notches on the S. edges; raise a mound of stones 2ft. base, 2ft. high N. of cor. Pits impracticable. The true course of this line is S. 89° 56' E. 40.65 chs. Land rolling; soil 3rd and 4th rates; undergrowth of cacti, mesquite and catsclaw.  
 Dense undergrowth 5.00 chs.; mountainous land 40.65 chs.

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10.00 E. from cor. of secs. 9-10-15-16, over rolling land. Ascend through dense cacti.  
 32.00 Top of hill. Leave dense cacti.  
 40.00 Top of prominent hill. Descend.  
 Falls in small wash bearing S. No traces of 1/4 sec. cor. can be found; therefore at  
 41.00 Set a granite stone 8 x 10 x 16 ins. 10 ins. in the ground for W.E. to 1/4 cor. bet. secs. 10-15, marked W.E. 1/4 on N.; raise a mound of stones 2 ft. base 2ft. high N. of cor.  
 48.00 Spur bears S. by W.  
 57.00 Enter dense mesquite undergrowth.  
 61.00 Wash, 125 lks. wide, bears W.S.W.  
 66.00 Leave dense mesquite.  
 80.20 Remains of sec. cor. I re-establish as follows:  
 Set a granite stone 6 x 12 x 24 ins. 18 ins. in the ground for cor. of secs. 10-11-14-15, marked with 2 notches on the E. and 4 notches on the S. edges; raise a mound of stones 3ft. base, 3 ft. high W. of cor. Pits impracticable. From the location of this point, it is evident that W.E. between secs. 10-15 witnesses a 1/4 cor. 90 lks. W. The true course of this line is E. 80.20 chs. Land sharply rolling; soil 4th rate; undergrowth of cacti and mesquite.  
 Dense undergrowth 19.00 chs.; mountainous land 80.20 chs.  
 October 16th, 1904.

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October 17th, 1904.  
 E. from cor. of secs. 10-11-14-15 over rolling land.  
 Spur bears W.S.W.  
 Enter dense undergrowth of prickly pear, mesquite, etc.  
 14.00 Traces of 1/4 cor. I re-establish as follows:  
 20.00 Set a quartz stone 6 x 9 x 15 ins. 10 ins. in the ground for 1/4 cor. bet. secs. 11-14 marked 1/4 on N. face; raise a mound of stones 2ft. base, 2 ft. high N. of cor.  
 40.10 The true course of this line is E. 40.10 chs.  
 E. from 1/4 cor.  
 10.40 Trail bears E. by S.  
 29.10 Descend into prominent wash.  
 40.00 Fall in wash 50 lks. wide, course S.W. No traces of cor. of secs. 11-12-13-14 can be found.  
 Land rolling; soil 4th rate; undergrowth of cacti and mesquite.  
 Mountainous land 80.10 chs.

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N 0° 1' W. bet. secs. 11-12 over roughly rolling land and through dense undergrowth of cacti and mesquite.  
 30.00 Leave dense undergrowth.  
 33.30 Trail bears E.  
 38.40 Wash, 15 lks. wide, bears W.S.W.  
 40.00 No traces of 1/4 sec. cor. can be found.  
 55.30 Ridge and trail bear W. by S.  
 68.20 Coplen wash, 20 lks. wide, bears W S.W.  
 70.10 Trail bears E.N.E.  
 78.00 Spur bears W. by S.  
 82.15 Wash, 20 lks. wide, bears S.W.  
 83.62 Remains of sec. cor., a granite with markings clearly distinguishable and a scattered mound of stones alongside, bear W. 70 lks. dist. I re-establish as follows:  
 Set a granite stone 6 x 7 x 13 ins. 8 ins. in the ground for cor. of secs. 11-12, marked with 1 notches on the

Chains

E. and 5 notches on the S. edges; raise a mound of stones 2ft. base, 2ft. high W. of cor. Pits impracticable. Land mountainous; soil 3rd and 4th rates; undergrowth of cacti and mesquite. *True course of mile N 0°-30' W*  
 Dense undergrowth 30.00 chs; mountainous land 83.62 chs.

October 17th, 1904; I set off 9° 15' S. on the decl. arc, 32° 37' N. on the lat. arc, and at 9 h. 40 m. a.m. l.m.t., determine a meridian with the solar at the cor. of secs. 1-2-11-12.

9.50  
21.00  
26.50  
31.00  
40.00

Thence I run E. bet. secs. 1-12. Wash, 20 lks. wide, bears W.S.W. Spur bears S. Gulch bears S. Spur bears S. Decayed stake loose in mound of earth, bears N. 14 lks. dist.

I re-establish cor. as follows: Set a granite stone 6 x 7 x 14 ins. 8 ins. in the ground *marked 1/2 on W face*, for 1/4 sec. cor. bet. secs. 1-12; raise a mound of stones 2ft. base, 2 ft. high N. of cor. Pits impracticable.

The true course of this line is N. 89° 48' E. 40.00 chs. E. from 1/4 sec. cor

2.50  
19.00  
26.00  
29.50  
37.20  
40.18

Coplen wash, 20 lks. wide, bears W.S.W. Spur bears S.W. Gulch bears S.W. Spur bears S.W. Gulch bears S.W.

Remains of cor., granite stone with scattered mound alongside, bears S. 11 lks. dist. I re-establish cor. as follows:

Set a granite stone 12 x 18 x 30 ins. 23 ins. in the ground for cor. of secs. 1-12, marked with 1 notch on N. and 5 notches on S. edges; raise a mound of stones 2-1/2 ft. base, 2ft. high W. of cor. Pits impracticable.

The true course of this line is S. 89° 51' E. 40.18 chs. Land sharply rolling; soil 3rd and 4th rates; scattered undergrowth of mesquite and cacti, some grass. Mountainous land 80.18 chs.

October 17th, 1904; I set off 9° 17-1/2' S. on the decl. arc, and at 12 h. observe the sun on the meridian at the cor. of secs. 1-12; the resulting lat. is 32° 37' N. In order to locate the N.E. cor. of T. 10 S., R. 14 E., I run N. on a random line from the cor. of secs. 1-12.

40.00  
80.00

No traces of 1/4 cor. can be found; set temp. cor. No traces of Tp. cor. can be found; set temp. cor.

*Salt point*  
From the N.E. cor. of T. 10 S., R. 14 E., I run W. on a random line and finding no traces of cors.; set temp. cors. at intervals of 40.00 chs.

240.00

Set temp. sec. cor.

October 17th, 1904.

October 18th, 1904.

40.00  
80.55

W. from temp. cor. of secs. 3-4-33-34. No traces of 1/4 sec. cor., set temp. cor. Decayed mesquite post in mound of earth on line.

In order to account for closing, and verify location of Tp. cor., I run S. on a random line bet. secs. 4-5. Diligent search reveals no traces of 1/4 sec. cor., set temp. cor.

40.00

A granite stone with traces of markings, and a scattered mound of stones alongside, bears E. 3 lks. dist.

82.04

S. on a random line from old cor. of secs. 4-5-8-9.

41.00

Remains of 1/4 sec. cor. bear W. 6 lks. dist.

81.87

S. from 1/4 sec. cor. Cor. of secs. 8-9-16-17 recently re-established by me, bears W. 9 lks. dist.

October 18th, 1904; I set off 9° 39-1/2' S on the decl. arc, and at 12 h. l.m.t., observe the sun on the meridian at the cor. of secs. 8-9-16-17; the resulting lat. is 32° 36' N.

9 a.m.

*9-41 1/2*  
*retroff on day*  
*California*

Chains

2.50	Thence I run N. 0° 8' E. on a true line bet. secs. 8-9.
5.40	Road to Tucson bears W. by S.
13.40	Wash, 20 lks. wide, bears W. by S.
27.00	Small wash, bears W.
40.87	Spur bears S.W.
	Remains of 1/4 sec. cor. I re-establish as follows:
	Set a granite stone 9 x 12 x 18 ins. 12 ins. in the ground
	for 1/4 cor. bet. secs. 8-9, marked 1/4 on W. face; raise
	a mound of stones, 2-1/2 ft. base, 2-1/2 ft. high W. of cor.
	An oak, 12" diam. bears N. 42° 30' E. 41 lks. dist.,
	marked 1/4 S. 9 <sup>th</sup> . No other trees available
2.05	From 1/4 sec. cor. I run, N. 0° 5' E.
17.33	Wash, 30 lks. wide, bears W.S.W.
30.00	Road bears S.S.W.
37.00	Wash, 20 lks. wide, bears W.S.W. Ascend.
41.00	Descend.
	Remains of cor. of secs. 4-5-8-9.
	Set a quartz stone 8 x 9 x 16 ins. 10 ins. in the ground
	for cor. of secs. 4-5-8-9, marked with 4 notches on E. and
	5 notches on the S. edges; and raise a mound of stones
	2-1/2 ft. base, 2-1/2 ft. high W. of cor. Pits impracticable.
	Land rolling; soil 4th rate, some undergrowth of mesquite
	and catsclaw; good grazing.
	Mountainous land 81.00 chs.
	-----
41.05	N. 0° 1' W. bet. secs. 4-5 over rolling land.
	Set a granite stone 12 x 12 x 14 ins. 10 ins. in the ground
	for 1/4 cor. bet. secs. 4-5, marked 1/4 on W. face; dig pits
	18 x 18 x 12 ins. N. & S. of stone 3ft. dist. and raise
	a mound of earth 3-1/2 ft. base, 1-1/2 ft. high W. of cor.
49.30	Small wash, bears W.S.W.
73.00	Prominent wash, bears W.S.W. Enter dense mesquite.
78.00	Leave dense mesquite.
82.04	The remains of cor. of secs. 4-5-32-33.
	I re-establish cor. as follows:
	Set a granite stone 10 x 10 x 14 ins. 10 ins. in the ground
	for cor. of secs. 4-5-32-33, marked with 4 notches on E.
	and 2 notches on W. edges; dig pits 18 x 18 x 12 ins.
	in each sec. 3-1/2 ft. dist. and raise a mound of earth
	3-1/2 ft. base, 2ft. high W. of cor.
	Land rolling; soil 3rd rate; undergrowth of mesquite and cacti.
	Dense undergrowth 5.00 chs.; mountainous land 40.00 chs.
	-----
	October 18th, 1904; I set off 9° 39-1/2' S. on the decl.
	arc, and at 12 h. 1.m.t. observe the sun on the meridian
	at the cor. of secs. 4-5-32-33; the resulting lat. is 32°
	38' N.
	From this cor. I run, E. on a true line setting sec. and
	1/4 sec. cors. at proportionate distances.
11.00	A tributary wash, 30 lks. wide, bears S.
18.85	Wash, 20 lks. wide, bears W.S.W.
23.15	Same wash, bears W.N.W. Continue along N. side of wash.
27.45	Cross same wash; bears S. at this point.
33.30	Road bears S.
40.07	Set a granite stone 8 x 9 x 13 ins. 8 ins. in the ground
	for 1/4 cor. bet. secs. 4-33, marked 1/4 on N. face; dig pits
	18 x 18 x 12 ins. E & W. of stone 3ft. dist. and raise a
	mound of earth 3-1/2 ft. base, 1-1/2 ft. high N. of cor.
45.55	Small wash, bears W.S.W.
65.15	Trial, bears S.E.
80.14	Set a granite stone 6 x 7 x 15 ins. 10 ins. in the ground
	for cor. of secs. 3-4-33-34, marked with 3 notches on E.
	& W. edges; raise a mound of stones 2-1/2 ft. base, 2-1/2 ft.
	high W. of cor. Pits impracticable.
	Land gently rolling; soil 3rd rate; good grazing; very
	little undergrowth.
	-----
	E. on a true line bet. secs. 3-34.
7.60	Old road bears N.E.
27.40	Tributary wash, bears S.S.W.
32.00	Spur bears W.S.W.
40.07	Set a granite stone 10 x 12 x 15 ins. 10 ins. in the ground
	for 1/4 cor. bet. secs. 3-34, marked 1/4 on N. face; raise a
	mound of stones, 2-1/2 ft. base, 2-1/2 ft. high N. of cor.

Chains

68.90  
80.14

Ascend gradually, along N. side of wash having a general westerly bearing.  
Cross said wash.  
Set a granite stone 8 x 8 x 13 ins. 8 ins. in the ground for cor. of secs. 2-3-34-35, marked with 2 notches on the E. and 4 notches on the W. edges; raise a mound of stones 2ft. base, 2ft. high W. of cor.  
Land gently rolling; soil 3rd rate; very little undergrowth of cacti and mesquite. Good grazing.  
October 18th, 1904.

11.28  
32.00  
32.90  
35.00  
40.07

October 19th, 1904.  
E. on a true line bet. secs. 2-35.  
Road bears N.E.  
Enter dense undergrowth of mesquite and catsclaw.  
Wash, 30 lks. wide, bears W.S.W.  
Leave dense undergrowth.  
Set a granite stone 8 x 13 x 16 ins. 10 ins. in the ground for 1/4 cor. bet. secs. 2-35, marked 1/4 on N. face; raise a mound of stones, 2ft. base, 2ft. high N. of cor.

46.25  
49.25  
51.00  
56.30  
67.25  
69.00  
80.14

Enter an old sheep corral.  
Leave same.  
Enter dense undergrowth of mesquite.  
Wash, same as above, bears W. by N.  
Same wash, bears W. by S.  
Leave dense mesquite.  
Set a granite stone 7 x 7 x 15 ins. 10 ins. in the ground for cor. of secs. 1-2-35-36, marked with 1 notch on E. and 5 notches on W. edges; raise a mound of stones 2ft. base, 2ft. high W. of cor. Pits impracticable.  
Land rolling; soil 3rd rate; some mesquite undergrowth; good grazing.  
Dense undergrowth 21.00 chs.;

6.00  
34.25  
40.07

E. bet. secs. 1-36. Ascend gradually.  
Low ridge bears W.S.W. Over gently rolling land.  
Trail bears S.E.  
Set a granite stone 8 x 8 x 14 ins. 10 ins. in the ground for 1/4 cor. bet. secs. 1-36, marked 1/4 on N. face; raise a mound of stones 2ft. base, 1-1/2 ft. high N. of cor.

50.00  
68.00  
80.14

Ascend.  
Top of stony point bearing N. & S. Descend.  
Set a granite stone 7 x 9 x 16 ins. 10 ins. in the ground for N.E. cor. of T9-10 S., R. 14 E.; marked with 6 notches on N.S. & W. edges; raise a mound of stones 3ft. high, 3-1/2 base, W. of cor.  
The location of this Tp. cor. is determined by locations of cor. of secs. 1-12 on E. bdy. of Tp. and cor. of secs. 4-5-32-33 on N. bdy. of Tp., all intermediate cors. being set at proportionate distances.  
Land rolling; soil 3rd and 4th rates; good grazing; scattered undergrowth of mesquite.  
Mountainous land 30.14 chs.

*See p. 11  
book 2735  
S.P.  
ant. f.c.*

12.00  
14.90  
15.00  
15.40  
26.80  
35.00  
37.85  
38.20  
40.00

October 19th, 1904; At 9 h. 40 m., a.m., l.m.t., I set off 9° 59' S. on the decl. arc, 32° 38' N. on the lat. arc, and determine a meridian with the solar at the N.E. cor. of T9-10 S., R. 14 E.

Thence I run, S. over sharply rolling land.  
Enter dense mesquite undergrowth.  
Wash, 20 lks. wide, bears W.  
Leave undergrowth of mesquite.  
Road to Oracle, bears E.  
Rocky ridge bearing E. & W. Descend.  
Spur bears W.  
Trail bears E.  
Small wash, bears W.  
Set a granite stone 7 x 7 x 15 ins. 10 ins. in the ground for 1/4 cor. of sec. 1, marked 1/4 on W.; raise a mound of stones 2-1/2 ft. base, 2-1/2 ft. high W. of cor.

44.30  
44.50  
54.90  
60.00

Road bears E.N.E.  
Trail bears E. by S.  
Coplen wash, bears W.S.W.  
The cor. of secs. 1-12. Land sharply rolling; very little undergrowth of mesquite; soil 3rd rate. Mts. land 80.00 chs.

Boundaries of resurvey. T.10 S., R. 14 E.  
Latitude, departures and closing errors.

Line designated	True b'r'g	Dist.	Latitude.		Departures.	
			N.	S.	E.	W.
W. 1/2 mile bet. secs. 9-16	East	40.05	Chs.	Chs.	Chs.	Chs.
E. 1/2 mile bet. secs. 9-16	S. 89 56' E	40.65	0.0	40.05	40.65	0.0
Mile bet. secs. 10-15	East	80.20		80.20		
W. 1/2 of mile bet. secs. 11-14	East	40.10		40.10		
E. 1/2 mile bet. secs. 11-14	East	40.00		40.00		
Mile bet. secs. 11-12	N. 00 30' W	83.62	83.62			0.72
W. 1/2 mile bet. secs. 11-12	N. 89 48' E	40.00	0.14	40.00		
E. 1/2 mile bet. secs. 11-12	S. 89 51' E	40.18	0.11	40.18		
Mile E. of sec. 1	North	80.00	80.00			
E. 4 miles of N. bdy	West	320.55				320.55
Mile bet. secs. 4-5	S. 00 01' E	82.04	82.04	0.03		
N. 1/2 mile bet. secs. 8-9	S. 00 05' W	41.00	41.00			0.06
S. 1/2 mile bet. secs. 8-9	S. 00 08' W	40.87	40.87			0.09
Convergency						0.10
Totals			163.76	164.07	321.21	321.52
Errors			163.76	0.31	321.21	0.31

William B. Dyman

U.S. Deputy Surveyor

Oct. 19, 1904.

LIST OF NAMES.

A list of the names of the individuals employed by William B. Alexander

....., United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the <sup>re-</sup>survey of E + N 1/4 T10S R17E;

and the South 3 miles of E. 1/4 T9S R16E; and those exterior + subdivisional lines necessary for connection and closing in T10S R17E of the Gila + Salt River Base and Meridian, Arizona.

showing the respective capacities in which they acted:

Frank C. Keltow....., Chainman.

Edgar E. Ater....., Chainman.

Emmet T. Ford....., Moundman.

Jesus Lopez....., Moundman.

Frank L. Durlin....., Axman.

....., Axman.

L. Buttlar....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted William B. Alexander

....., United States Deputy Surveyor, in <sup>re</sup>surveying all

those parts or portions of the East and north boundary of

T10S R17E; the south three miles of the east boundary

of T9S R16E; and those exterior and subdivisional lines

necessary for connection and closing in T10S R17E of the Gila

and Salt River Base 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

Frank C. Keltow, Chainman. ✓

Edgar E. Ater....., Chainman. ✓

Emmet T. Ford....., Moundman. ✓

Jesus Lopez....., Moundman. ✓

Frank L. Durlin....., Axman.

....., Axman.

L. Buttlar....., Flagman.

Subscribed and sworn to before me this 20

day of October, 1891 1904

My Comm. Exp. Sept 24 '06



Ralph W. Langworthy  
Notary Public  
Pima County

86 (20)  
BOOK 1887

I, William B. Alexander, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Dist. of Arizona, bearing date of the 13 day of June, 1894, 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 Dist. of Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the east and north boundary of T10S R17E, the south three miles of the east boundary of T9S R16E; and the exterior and subdivisional lines necessary for connection and closing in T10S R14E of the Gila and Salt River Base 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 Dist. of Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

William B. Alexander  
United States Deputy Surveyor.

Subscribed by said William B. Alexander and sworn to before me }

this 1 day of December, 1894

My Comm. Exp. Sept 24 '06

Ralph W. Sargent  
Notary Public  
Pres. County



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz., June 10<sup>th</sup> 1905, 1895

The foregoing field notes of the survey of the North and East boundaries of T10 S, R17 E, the south three miles of the East Eddy of T9 S, R16 E, and the exterior and subdivisional lines necessary for connections and closing of T10 S, R14 E, of the Gila and Salt River Base and Meridian, in the Territory of Arizona

executed by Wm B. Alexander, U.S. deputy surveyor under his contract No. 117, dated June 13<sup>th</sup> 1905, 1895, 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.