

2234

Book K.

631

2234

FIELD NOTES BOOK 2284

OF THE SURVEY OF THE

North, South, East and West Bases.

T1200 9E.

2234

2234

Of the *G.S.C.B.* Meridian,

*Arizona*

AS SURVEYED BY

*Hugh S. Duval*, United States Deputy Surveyor,

Under his Contract No. *163*, dated *May 16*, 19*10*

Survey commenced *January 27*, 19*11*

Survey completed *February 1*, 19*11*

6-151

2234

2234

BOOK 2284  
*For*

NAMES AND DUTIES OF ASSISTANTS.

*Det Book P.*

671A

BOOK 2284

# INDEX DIAGRAM.

Township T12D, Range 9E

8	12 6	12 5	12 4	11 3	11 2	11 1	4
8	7	8	9	10	11	12	4
8	18	17	16	15	14	13	3
7	19	20	21	22	23	24	3
7	30	29	28	27	26	25	3
7	31	32	33	34	35	36	1
	6	6	6	5	5	5	

Meanders Page \_\_\_\_\_

*Sub Book A.*

WE, \_\_\_\_\_ and \_\_\_\_\_

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true 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 \_\_\_\_\_, 19 \_\_\_\_\_ }



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 \_\_\_\_\_, 19 \_\_\_\_\_ }



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 \_\_\_\_\_, 19 \_\_\_\_\_ }



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 \_\_\_\_\_, 19 \_\_\_\_\_ }



Exterior lines of T. 12 S., R. 9 E. East Bdy.

Chains.

Survey commenced, Jan. 27th, 1911 and executed with Blount & Co. Light Engineering transit, No. 601, previously described under this contract.

I examine the adjustments of the instrument and correct the level errors, then to test the solar apparatus by comparing its indications, resulting from solar obs. made during a. m. and p. m. hours, with a meridian determined by obs. on Polaris, I proceed as follows:-

At the corner of Tps. 12 and 13 S., Rs. 9 and 10 E.; a malpais stone. 8x9x7 ins. above ground, properly marked and witnessed as described by the Surveyor General; lat. 32°19'58"N., Long. 111°23'W.: I set off 18°35½'S. on the decl. arc, 57°40' on the co-lat. arc, and determine a mer. with the solar at this cor. and mark a point in the line thereof on a stone firmly set 5 chs. N. of the cor. Time: 8h.0m.a.m., l.m.t.

At 3h, p. m., l. m. t., I set off 18°32'S. on the decl. arc, 57°40' on the co-lat. arc, and mark a point in the mer., thus determined on the stone, 5 chs. N. of my station, by a small groove, this point falls 6/10 of an inch to the east of the a. m. solar.

At 10h59m., p. m., l. m. t., by my watch, I obs. Polaris at Western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven 5 chs. N. of my station.

Jan. 27th, 1911.

-----

Jan. 28th:- At 7h, a. m., l. m. t., I lay off the azimuth of Polaris, 1°23' to the East, and mark the meridian thus determined, by cutting a small groove in the stone, already set, Jan. 27th, on which the mer. falls 0.3 ins., to the east of the a. m. solar.

The solar apparatus by a. m. and p. m. observations, defines positions for meridians, respectively about 0'16" W. and 0'16" E. of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h30m, a. m., N.14°W.; the angle thus determined gives the mag. decl. 14°E.

-----

From the cor. of Tps. 12 and 13 S., Rs. 9 and 10 E., previously described, I run North bet. secs. 3E and 36.

- 12.00 Enter bottom land bears NE. and West.
- 15.06 Road bears East and West.
- 28.00 Ascend along the east slope of Butte.
- 34.80 Top of ridge bears East and West, descend.
- 38.80 Cliff, 25 ft. high, bears NW. and SE. Descend.
- 40.00 Set a basalt stone, 18x28 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
- 47.00 Leave slope of Butte, bears NW. and SE. Continue over gentle east slope in undergrowth of chapparel and mesquite.

East Boundary of T. 12 S., R. 9 E.

Chains

80.00 Set a basalt stone, 18x12x12 ins., 12 ins. in the ground, for the cor. of secs. 25, 30, 31 and 36, mkd. with 1 notch on the S. and 5 notches on the N. edge, and dig pits, 18x18x12 ins., in each section, 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land semi mountainous. Soil 3rd rate. Some undergrowth of mesquite and chapparrel



North bet. secs. 25 and 30

40.00 Set a basalt stone, 14x8x6 ins., 10 ins. in the ground for the 1/4 sec. cor., mkd. 1/4 on W. face, and dig pits, 18x18x12 ins., N. and S. of cor., 3 ft. dist. and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.00 Set a basalt stone, 14x8x6 ins., 10 ins. in the ground for the cor. of secs. 19, 24, 25 and 30, mkd. with 2 notches on the S. and 4 notches on the N. edges, and dig pits, 18x18x12 ins., in each section, 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling. Soil 3rd rate. Some chapparrel and mesquite undergrowth.



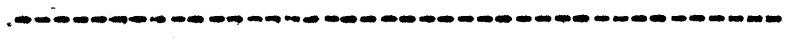
North bet. secs. 19 and 24.

40.00 Set a basalt stone, 15x8x5 ins., 10 ins. in the ground for the 1/4 sec. cor., mkd. 1/4 on W. face, and dig pits, 18x18x12 ins., N. and S. of cor., 3 ft. dist. and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.00 Set a basalt stone, 14x10x8 ins., 10 ins. in the ground for the cor. of secs. 13, 18, 19 and 24, mkd. with 3 notches on the N. and S. edges, and dig pits, in each section, 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling. Soil 3rd rate. Some chapparrel and mesquite undergrowth.

Jan. 28th:- At this cor., I set off 18° 19' S. on the decl. arc, and at 12h13m, p. m., 1. m. t., I obs. the sun on the mer., the resulting lat. is 32° 23' N.



North bet. secs. 13 and 18.

30.00 Arroyo, 25 lks. wide, course E.

32.57 Road bears E. and W.

36.00 Ascend Butte.

40.00 Set a basalt stone, 15x10x5 ins., 10 ins. in the ground, for the 1/4 sec. cor., mkd. 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.  
Va. 14° 52' E.

43.00 Top of Butte, bears E. and W. Des cend.

69.70 Foot of descent, bears E. and W. Thence over rolling ground.

80.00 Set a basalt stone, 18x12x9 ins., 12 ins. in the ground, for the cor. of secs. 7, 12, 13 and 18, mkd. with 2 notches on the N. and 4 notches on the S. edges, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

## Chains.

Land rolling and semi mountainous. Soil 3rd rate.  
some mesquite and chapparel undergrowth.

---

North bet. secs. 7 and 12. Va.  $13^{\circ}35'E$ .

- 40.00 Set a basalt stone,  $15 \times 7 \times 7$  ins., 10 ins. in the ground for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on W. face, and dig pits,  $18 \times 18 \times 12$  ins., N. and S. of cor., 3 ft. dist. and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 72.40 Old road bears E. and W.
- 80.00 Set a basalt stone,  $18 \times 6 \times 5$  ins. 12 ins. in the ground for the cor. of secs., 1, 6, 7 and 12, mkd. with 1 notch on the N. and 5 notches on the S. edges, and dig pits,  $18 \times 18 \times 12$  ins., in each section,  $5\frac{1}{2}$  ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Jan. 28th:- At 3h, p. m., 1. m. t., I set off  $18^{\circ}16\frac{1}{2}'S$ . on the decl. arc,  $57^{\circ}36'$  on the co-lat. arc and determine a mer. with the solar at this cor.

Land rolling. Soil 3rd rate. Mesquite and chapparel undergrowth.

---

North bet. secs. 1 and 6.

- 40.00 Set basalt stone,  $15 \times 7 \times 7$  ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on W. face, and dig pits,  $18 \times 18 \times 12$  ins., N. and S. of cor., 3 ft. dist. and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a basalt stone,  $14 \times 6 \times 6$  ins., 10 ins. in the ground, for the cor. of Tps. 11 and 12 S., Rs. 9 and 10 E., mkd 11S on NE., 10E on SE., 12 S on SW. and 9E on NW. face, with 6 notches on the N., E., S. and W. edges, dig pits  $24 \times 24 \times 12$  ins., N., E. and W.  $\frac{1}{4}$  ft. and S. of stone, 8 Ft., and raise a mound of earth, 5 ft. base,  $2\frac{1}{2}$  ft. high, S. of cor. Whence  
A mesquite, 6 ins. in diam., bears  $N.54^{\circ}30'E$ ., 84 lks. dist., mkd. T11SR10ES31BT.  
A mesquite, 4 ins. in diam., bears  $S.43^{\circ}E$ ., 41 lks. dist., mkd. T12SR10ES6BT.  
A mesquite, 7 ins. in diam., bears  $S.73^{\circ}W$ ., 70 lks. dist., mkd. T12SR9ES1BT.  
A mesquite, 8 ins. in diam., bears  $N.5^{\circ}W$ ., 48 lks. dist., mkd. T11SR9ES36BT.

Land rolling. Soil 3rd rate. Mesquite underbrush.  
Jan. 28th, 1911.

---

S. bdy. of T. 12 S., R. 9 E.

Chains.

Jan. 30th.

From the cor. of tps. 12 and 13 S., Rs. 9 and 10 E., previously described, I run

West on a true line bet. secs. 1 and 36.

Ascending steep mountain spur

13.50

Top of spur, bears NE. and SW. Descend.

40.00

Set a basalt stone, 20x14x9 ins., 15 ins. in the ground for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

45.82

Arroyo, 15 lks. wide, course N. Ascend SE. slope of MT.

80.00

Set a basalt stone, 17x11x7 ins., 12 ins. in the ground, for the cor. of secs. 1, 2, 35 and 36, mkd. with 1 notch on the E. and 5 notches on the W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

Land mountainous. Soil 4th rate. Scattering mesquite brush.

-----  
West on a true line bet. secs. 2 and 35.  
Ascent steeper.

36.45

Precipitous mountain ridge bears N. and S. Descend.

40.00

Set a basalt stone, 16x7x6 ins., 10 ins. in the ground for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

70.00

Ravine, 7 chs. wide, course S. Ascend.

80.00

Set a basalt stone, 17x10x6 ins., 12 ins. in the ground, for the cor. of secs. 2, 3, 34 and 35, mkd. with 2 notches on the E. and 4 notches on the W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

Land mountainous and difficult to survey. Soil 4th rate. No timber.

Jan. 30th:- At this cor., I set off  $17^{\circ}44\frac{1}{2}'$  S. on the decl. arc,  $57^{\circ}40'$  on the co-lat. arc, and determine a mer. with the solar at this cor., at 3h. p. m., 1. m. t.

-----  
West on a true line bet. secs. 3 and 34.  
Ascend,

2.50

Ridge bears NE. and SW. Descend.

32.00

Leave hills hills bears NE. and SW. Thence ascending gradually along S. slope of ridge.

40.00

Set a basalt stone, 13x9x8 ins., 8 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

80.00

Set a basalt stone, 16x9x5 ins., 10 ins. in the ground, for the cor. of secs. 4, 3, 33 and 34, mkd. with 3 notches on the E. and W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land semi mountainous. Soil 4th rate. No timber.  
-----



## South boundary of T. 12 S., R. 9 E.

Chains.

West on a true line bet. secs. 4 and 33. Va.  $13^{\circ}32'E$ .

40.00 Set a basalt stone,  $15 \times 7 \times 5$  ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.00 Set a blue limestone,  $15 \times 10 \times 6$  ins., 10 ins. in the ground for the cor. of secs. 4, 5, 32 and 33, mkd. with 2 notches on the W. and 4 notches on the E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land sloping to S. Soil 3rd rate. No timber.

Jan. 30th, 1910.

Note:- The sky was overcast at noon and solar obs. impossible.

-----  
West on a true line bet. secs. 5 and 32, ascending along South slope of mountain.

40.00 Set a limestone,  $15 \times 9 \times 5$  ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

55.00 Road bears N. and S.

80.00 Set a limestone,  $15 \times 8 \times 7$  ins., 10 ins. in the ground, for the cor. of secs. 5, 6, 31 and 32, mkd. with 1 notch on the W. and 5 notches on the E. edge, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land sloping to S. Soil 3rd rate. No timber.

-----  
West on a true line bet. secs. 6 and 31.

40.00 Set a limestone,  $16 \times 10 \times 6$  ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.

44.52 Road bears NE. and SW.

78.63 Set a limestone,  $18 \times 12 \times 10$  ins., 12 ins. in the ground, for the cor. of Tps. 12 and 13 S., Rs. 8 and 9 E., mkd. 12S on NE., 9E on SE., 13S on SW., 8E on NW. face, with 6 notches on the N., S., E. and W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, S. of cor.

Pits impracticable.

Land south slope of mountain ridge. No timber.  
Soil 4th rate.

Jan. 31st:- At this cor., I set off  $17^{\circ}30\frac{1}{2}'S$ . on the decl. arc, and at 12h13 $\frac{1}{2}$ m, p. m. l. m. t., I obs. the sun on the mer., the resulting lat. is  $32^{\circ}20'N$ .

-----

From the cor. of Tps. 12 and 13 S., Rs. 8 and 9 E.,  
previously described, I run  
North bet. secs. 31 and 36. Ascending. Va.  $13^{\circ}12'E$ .

- 40.00 Set a limestone, 15x10x4 ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable. Descend.
- 41.05 Arroyo, 25 lks. wide, course SE. Ascend.
- 58.70 Cedar post, 4 ins. sq., 3 ft. above ground, set in a stone mound mkd. S.H. 3-1390 on N. and SH.WE X 4-1390 on W., bears E., 25 lks. dist.
- 74.50 Ridge bears E. and W. Thence along W. slope of mountain,
- 77.10 Post, 4 ins. sq., 5 ft. out of ground, mkd. USLM 1390 and set in a mound of stone, 5 ft. base, 4 ft. high, bears N.  $74^{\circ}20'E$ . Corner set on high rocky cliff, impossible to chain.
- 80.00 Set a limestone, 18x9x5 ins., 12 ins. in the ground, for the cor. of secs. 25, 30, 31 and 36, mkd. with 1 notch on the S. and 5 notches on the N. edge, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. monument described at 77.10 chs., bears S.  $78^{\circ}10'E$ . on top of cliff about 350 feet above corner.

Jan. 31st:- At 3h, p. m., l. m. t., I set off  $17^{\circ}28'S$ . on the decl. arc,  $57^{\circ}39'$  on the co-lat. arc, and determine a mer. with the solar at this cor.

Land mountainous. Soil 4th rate. No timber.

-----  
North bet. secs. 25 and 30 descending along W. slope of mountain.

- 18.00 Ascend..
- 25.00 Ridge bears NW. and SE. Descend NE. slope.
- 39.00 Cliff 75 feet high, bears E. and W. Descend.
- 40.00 Set a limestone, 18x9x6 ins., 12 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.
- 41.80 Road bears E. and W.
- 46.00 Ravine, 1 ch. wide, course NE. Ascend.
- 49.00 Ridge bears E. and W.
- 72.00 Foot of hill descent very gradual, bears E. and W.
- 80.00 Set a limestone, 16x10x6 ins., 10 ins. in the ground for the cor. of secs. 24, 25, 19 and 30, mkd. with 2 notches on the S. and 4 notches on the N. edge, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

Land mountainous. Soil 4th rate. No timber.  
Jan. 31st, 1911.

-----  
North bet. secs. 19 and 24.  
Descending gradually in undergrowth of mesquite, pale verde and cactus.

- 40.00 Set a quartzite stone, 13x8x6 ins., 8 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.
- 58.70 Arroyo, 25 lks. wide, course East.

West boundary of T. 12 S., R. 9 E.

Chains.

66.74 Road bears E. and W.  
 80.00 Set a limestone, 18x7x5 ins., 12 ins. in the ground, for the cor. of secs. 13, 18, 19 and 24, mkd. with 3 notches on the S. and N. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land rolling. Soil 3rd rate. Mesquite, palo verde and cactus undergrowth.

-----  
 North bet. secs. 13 and 18.

1.87 Arroyo, 25 lks. wide, course SE.  
 40.00 Set a basalt stone, 14x9x5 ins., 10 ins. in the ground, for the ¼ sec. cor., mkd. ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

63.35 Road bears E. and W.  
 66.30 Prospect hole, 4x4x12 feet deep bears W. 30 lks. dist. Ascend.

67.00 Top of ridge bears E. and W. Descend.  
 73.00 Foot of descent bears E. and W., Ascend.  
 79.40 Ridge bears E. and W. Descend.

80.00 Set a porphyry stone, 16x9x5 ins., 10 ins. in the ground, for the cor. of secs. 7, 12, 13 and 18, mkd. with 4 notches on the S. and 2 notches on the N. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
 Pits impracticable.

Land rolling. Soil 3rd rate. Mesquite, palo verde and cactus.

Feb. 1st:- At this cor., I set off 17°14'S. on the decl. arc, and at 12h13m, p. m., 1. m. t., I obs. the sun on the mer., the resulting lat. is 32°23'N.

-----  
 North bet. secs. 7 and 12.

1.91 Ravine, 25 lks. wide, course E. Ascend.  
 33.00 Ridge bears E. and W. Descend.  
 40.00 Set a porphyry stone, 18x9x4 ins., 12 ins. in the ground, for the ¼ sec. cor., mkd. ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
 Pits impracticable.

56.00 Arroyo, 25 lks. wide, course E. Ascend.

76.80 Ridge bears E. and W. Descend.  
 80.00 Set a porphyry stone, 18x8x5 ins., 12 ins. in the ground, for the cor. of secs. 1, 6, 7 and 12, mkd. with 1 notch on the N. and 5 notches on the S. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
 Pits impracticable.

Land rolling. Soil 3rd rate. Mesquite, palo verde and cactus undergrowth.

Feb. 1st:- At 3h, p. m., 1. m. t., I set off 17°11'S. on the decl. arc, 57°36' on the co-lat. arc, and determine a mer. with the solar at this cor.

-----  
 North bet. secs. 1 and 6 over rolling ground.

12.00 Arroyo, 25 lks. wide, course E.  
 40.00 Set a porphyry stone, 15x8x6 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on W. face, and raise a mound

Chains.

of stone, 2 ft. base, 1½ ft. high, W. of cor.

80.00 Set a porphry stone, 16x12x12 ins., 10 ins. in the ground for the cor. of Tps. 11 and 12 S., Rs. 8 and 9 E., mkd. 11S on NE., 9E on SE., 12S on SW., and 8E on NW. face, with 6 notches on the N., S., E. and W. edges, and raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor.

Land rolling. Soil 3rd rate. Mesquite, and pale verde undergrowth.

Feb. 1st, 1911.

-----

Chains.

From the cor. of Tps. 11 and 12 S., Rs. 9 and 10 E., previously described, I run West on a random line setting temp.  $\frac{1}{4}$  sec. and section cors., at intervals of 40 chs. and at 478.79 chs., intersect the W. bdy. of the township at a point 72 lks. S. of the cor. of Tps. 11 and 12 S., Rs. 8 and 9 E., previously described.

The falling answers to a correction of  $0^{\circ}05'$ , or 12 lks. N. per mile. I therefore return to the cor. of Tps. 11 and 12 S., Rs. 9 and 10 E. and run

N.  $89^{\circ}55'W.$  on a true line bet. secs. 1 and 36.  
Va.  $13^{\circ}14'E.$  Ascending gradually in mesquite underbrush.

- 6.00 Road bears NW. and SE.
- 8.91 Arroyo, 115 lks. wide, course SE.
- 14.00 Same arroyo, 130 lks. wide, course NE
- 40.00 Set a basalt stone, 15x6x6 ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and dig pits, 18x18x12 ins., E. and W. of cor., 3 ft. dist. and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 80.00 Set a porphyry stone, 22x12x7 ins., 16 ins. in the ground, for the cor. of secs. 1, 2, 35 and 36, mkd. with 1 notch on the E. and 5 notches on the W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land rolling. Soil 3rd rate. Mesquite undergrowth.

-----  
N.  $89^{\circ}55'W.$  on a true line bet. secs. 2 and 35. ascending through mesquite undergrowth,

- 19.51 Same arroyo, 81 lks. wide, course SE.
- 31.85 Same arroyo, 100 lks. wide, course NE.
- 40.00 Set a basalt stone, 18x9x5 ins., 12 ins. in the ground for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 43.00 Same arroyo, 100 lks. wide, course SE.
- 56.00 Same arroyo, 100 lks. wide, course NE.
- 71.00 Same arroyo course SE.
- 77.00 Leave arroyo, course Here NE.
- 80.00 Set a basalt stone, 15x9x4 ins., 10 ins. in the ground, for the cor. of secs. 2, 3, 34 and 35, mkd. with 2 notches on the E. and W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land rolling. Soil 2nd rate. Mesquite undergrowth.

-----  
N.  $89^{\circ}55'W.$  on a true line bet. secs. 3 and 34.

- 1.40 Arroyo, 50 lks. wide, course SE.
- 15.86 Road bears N. and S.
- 40.00 Set a porphyry stone, 15x7x6 ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 54.50 Arroyo, 100 lks. wide, course NE.
- 73.50 Arroyo, 100 lks. wide, course SE.
- 80.00 Set a porphyry stone, 15x9x5 ins., 10 ins. in the ground, for the cor. of secs. 3, 4, 33 and 34, mkd. with 3 notches on the E. and W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land rolling. Soil 2nd rate. Mesquite undergrowth.  
-----

Chains.

N.89°55'W. on a true line bet. secs. 4 and 33.

- 0.84 Enter arroyo, course NE.
- 5.40 Leave arroyo, course SE.
- 32.80 Enter arroyo, course NE.
- 37.50 Leave arroyo, course SE.

40.00 Set a basalt stone, 15x7x6 ins., 10 ins. in the ground for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Feb. 2nd:- At this cor., I set off 16°56 $\frac{1}{2}$ 'S. on the decl. arc, and at 12h14m, p. m., l. m. t., I obs. the sun on the mer., the resulting lat. is 32°25'N.

61.00 Arroyo, 75 lks. wide, course NE.

80.00 Set a porphyry stone, 15x10x7 ins., 10 ins. in the ground, for the cor. of secs. 4, 5, 32 and 33, mkd. with 2 notches on the W. and 4 notches on the E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Land rolling. Soil 2nd rate. Mesquite undergrowth.

-----

N.89°55'W. on a true line bet. secs. 5 and 32.

40.00 Set a porphyry stone, 16x9x5 ins., 10 ins. in the ground, for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Feb. 2nd:- At 2h, p. m., l. m. t., I set off 16°55'S. on the decl. arc, 57°35' on the co-lat. arc, and determine a mer. with the solar at this cor.

80.00 Set a porphyry stone, 15x8x7 ins., 10 ins. in the ground, for the cor. of secs. 5, 6, 31 and 32, mkd. with 1 notch on the W. and 5 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Land rolling. Soil 3rd rate. Mesquite undergrowth along line.

-----

N.89°55'W. on a true line bet. secs. 6 and 31.

40.00 Set a porphyry stone, 18x7x6 ins., 12 ins. in the ground for the  $\frac{1}{4}$  sec. cor., mkd.  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

78.79 The cor. of Tps. 11 and 12 S., Rs. 8 and 9 E., previously described.

Land rolling. Soil 3rd rate. Mesquite undergrowth.

Feb. 2nd, 1911.

-----

Bdy.	Course.	Dists.	Norths.	Souths.	Easts.	Wests.
S. W. E. N.	West	478.63				478.63
	North	480.00	480.00			
	S. 89° 55' E.	478.79		.72	478.79	
	South	480.00		480.00		
	Convergency				.46	
			480.00	486.72	479.25	478.63

Excess Southings, 72 lks.  
Excess Eastings, 62 lks.

GENERAL DESCRIPTION.

Soil on gentle slope is 2nd rate clayey loam with gravel.  
Undergrowth is chaparel in eastern part with mesquite in western part, cacti, palo verde and iron wood.  
Mountains in southern part are mineralized.

*August DeLul*  
U. S. D. S.

*Jr* FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

*See Book M.*

LIST OF NAMES.

BOOK 2284

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

....., 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 .....

showing the respective capacities in which they acted:

- ....., *Chainman.*
- ....., *Chainman.*
- ....., *Moundman.*
- ....., *Moundman.*
- ....., *Arman.*
- ....., *Arman.*
- ....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in surveying all those parts or portions of the .....

..... of the .....

..... meridian, ..... of ....., 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 .....

- ....., *Chainman.*
- ....., *Chainman.*
- ....., *Moundman.*
- ....., *Moundman.*
- ....., *Arman.*
- ....., *Arman.*
- ....., *Flagman.*

Subscribed and sworn to before me this ..... }  
day of ....., 19 .....





FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

BOOK 2284

*De Book M*

I, \_\_\_\_\_, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from \_\_\_\_\_ United States Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, 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 \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, 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 \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

*Received July 13, 1912*

The foregoing field notes of the survey of *the North South East and West Boundaries of T12 R9 E Gila and Salt River Base Line Meridian, Arizona*

executed by *Hugh J. Darval W.D.S.* under his contract No. *163*, dated *May 16*, 19*10*, 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.