

Ordered filed Dept. letter E. Dept. # 001
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Book "C."
4-679.

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BOOK 2111

FIELD NOTES

OF THE SURVEY OF THE

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S. Bdy. of T. 18 S., R. 11 East.

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Of the G. & S. R.B. & Meridian,

Arizona.

AS SURVEYED BY

Jesse B. Wright, United States Deputy Surveyor,

Under his Contract No. 145, dated April 15, 1907

Survey commenced Aug. 20, 1907.

Survey completed Aug. 21, 1907.

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BOOK 2111

FOR NAMES AND DUTIES OF ASSISTANTS.

Reference is had to "M," S.Bdy.T.6.N.,R.12.E.

BOOK 2111

INDEX DIAGRAM.

Township 18 South, Range 11 East.

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

Reference is had to "M," S. Bdy.T. 6 N., R.12 E.

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 _____, 190 }



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 _____, 190 }



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 _____, 190 }



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 _____, 190 }



chains

Survey commenced August 20th, 1907, and executed with a Young & Son light mountain transit, No. 7492, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Phoenix, found correct and was approved by the Surveyor General for Arizona, July 15, 1907. I examine the adjustments of the transit, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined on Polaris, I proceed as follows:-

At the cor. of Tps. 18 and 19 S., Rs. 11 and 12 E., latitude, $31^{\circ} 48' 33''$ N, longitude $111^{\circ} 17' 26''$ W. Inset off $31^{\circ} 49' N.$ on the lat. arc, and $12^{\circ} 34' N.$ on the decl. arc, and at 4h 30m, p.m., l.m.t., determine with the solar a meridian, and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At 5h 30m p.m., by my watch, which is correct, I observe Polaris at eastern elongation, in accordance with the Manual Of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

August 20, 1907.

August 21, 1907. At 6 a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 24'$ to the west and mark the meridian thus determined, by cutting a small groove in the stone set last night, on which the meridian coincides with the meridian determined by the solar.

At 8h 30m., a.m., l.m.t., I set off $31^{\circ} 49' N.$ on the lat. arc., $12^{\circ} 24' N.$ on the decl. arc and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station, which coincides with the meridian established by the Polaris observation.

The magnetic bearing of the true meridian, at 8h 30m a.m., is N. $13^{\circ} 40' W.$, the angle thus determined gives the mag. decl. $13^{\circ} 40' E.$

I commence at the cor. of Tps. 18 and 19 S., Rs. 11 and 12 East and run N. on a random 470.35 chs. I fall 24 lks. S. of cor. of Tps. 18 and 19 S., Rs. 11 and 12 East.

Thence I run, S. $89^{\circ} 58'$ on the S. bdy. between secs. 11 and 36.

6.60
11.80
19.80

Over mountainous land.
Dry wash, 1.00 ch. wide, course S.; ascend.
Top of ridge; descend.
Dry creek, 2.00 chs. wide, in valley 8.00 chs. wide, course SE. Ascend ridge.

33.00
38.50
40.00

Top of ridge, extends SE. and NW. Descend.
Small wash, 50 lks. wide, course E. of S.
Set a quartz stone, 20 X 10 X 8 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

A mesquite, 4 ins. diam., brs. N. $77^{\circ} 15' E.$, 160 lks. dist., marked $\frac{1}{4}$ S 36 B T. No other trees within limits.

42.00
47.00

Ascend.
Top of low ridge.
Dry creek, 40 lks. wide, in valley 4.00 chs. wide, course S.

chains
52.10
57.00
62.00
68.30
76.50
80.00

Trail, brs. SSE, and NNW; ascend.
Ridge, extends S. and N.
Dry wash, 20 lks. wide, course SE.
Top of ridge, extends SE. and NW.
Dry wash, 50 lks. wide, course S., in valley 4.00 Chs.
Set a granite stone, 20 X 8 X 6 ins., 15 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked with 1 notch on the E. and 5 notches on the W. edge, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
A mesquite, 5 ins. diam., brs. N. 64° 15' E., 300 lks. dist., marked T 18 S R 11 E S 36 B T.
No other trees available.
Land, mountainous.
Soil, sandy and gravelly, 2nd and 3rd rate.
Timber, scattering mesquite; undergrowth, mesquite, greasewood and cacti.
Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 21, 1907. At noon, I set off 12° 20' N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 31° 49' N.

S89° 58' W along the S. bdy. of Sec. 35.

1.50
6.50
16.50
24.00
31.50
37.00
40.00

Ascending over mountainous land.
Top of ridge, extends SE. and NW. Trail extends SE. and NW.
Dry wash, in gulch, 50 lks. wide. course S. ascend.
Top of ridge, extends SSE. and NNW.,
Brook in small valley, course SE.
Wash, 20 lks. wide, in valley 3.00 chs. wide, course SSE.
Top of ridge, trail brs. SSE.
Set a granite stone, 24 X 10 X 8 ins., 18 ins. in the ground, for 1/2 sec. cor., marked 1/2 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
A mesquite, 5 ins. diam., brs. S. 40° W., 115 lks. dist., marked 1/2 S 2 B T.

40.30
47.10
54.00
59.00
63.00
68.20
74.75
79.28

No other tree available.
Head of small ravine, course S.
Top of ridge.
Center of level valley, 3.00 chs. wide, Brs. N. and S.
Wash, 30 lks. wide, course S. Ascend. steeply over rocky cliff.
Top of ridge, high point brs. N. 5.00 chs. dist.
Dry wash, 10 lks. wide, course S. Ascend.
Top of ridge, extends N. and S.
Set a conglomerate stone, 36 X 24 X 15 ins., 24 ins. in the ground, for witness cor. to cor. 34 and 35, 32, 3, 34 and 35, as cor. will fall in gulch, marked with 2 notches on the E. and 4 notches on the W. edge, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
A mesquite, 6 ins. diam., brs. S. 68 1/2° W., 38 lks. dist., marked T 18 S R 11 E S 3 B T. W C.
A mesquite, 6 ins. diam., brs. N. 70 1/2° W., 107 lks. dist., marked T 18 S R 11 E S 34 B T. W C.

80.00

No other trees available.
Point for cor. of secs. 2, 3, 34 and 35 falls in gulch, course S.
Land, mountainous.
Soil, sandy and gravelly, 2nd and 3rd rate.
Timber, scattering mesquite; undergrowth, mesquite, greasewood.
Mountainous land, exceptionally difficult to survey, 80.00 chs.

Survey of South Boundary of Township 18 South, Range 11 East.

Chains

- S. $89^{\circ}58'W.$ along the South Bdy. of Sec. 34.
 Leave gulch, ascend steeply over mountainous land.
- 11.00 Top of high ridge, extends N. and S.
 22.00 Descend steeply.
 18.20 Head of gulch, course SW. Ascend.
 23.21 Point of ridge, extends S.
 24.00 Begin steep descent.
 31.50 Dry wash, 50 lks. wide, course SE. Ascend.
 40.00 Point for $\frac{1}{4}$ sec. cor. falls on E. slope of ridge, where I set a limestone, 30 x 24 x 16 ins., 22 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 44.23 Top of ridge, extends N. and S.; descend steep slope.
 53.50 Junction of two washes, 50 lks. wide, course SW. Begin steep ascent.
 62.68 Top of ridge, extends SE. and NW. Descend gradually.
 73.00 Abrupt descent into canon.
 75.00 Canon, 1.00 ch. wide, course S.
 80.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked with 3 notches on E. and W. edges, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- A mesquite, 10 ins. diam., brs. S. $2^{\circ}30'E.$, 93 lks. dist. marked T 19 S R 11 E S 3 B T.
 A mesquite, 10 ins. diam., brs. N. $3-\frac{1}{2}^{\circ}E.$, 34 lks. dist., marked T 18 S R 11 E S 34 B T.
 A mesquite, 6 ins. diam., brs. N. $23-\frac{1}{2}^{\circ}W.$, 77 lks. dist., marked T 18 S R 11 E S 33 B T.
- No other tree available.
 Land, mountainous.
 Soil, sandy and rocky; 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite and small brush.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 21, 1907.

August 22, 1907. At 7h. a.m., l.m.t., I set off $12^{\circ}05'$ N. on the decl. arc; and $31^{\circ}49'N.$ on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 3, 4, 33 and 34.

- Thence I run,
 S. $39^{\circ}58'W.$, on the S. bdy. of Tp. S. of sec. 33.
 Over mountainous land.
- 5.00 Main gulch, 2.00 chs. wide, course S. Ascend steeply.
 33.50 Dry wash, 40 lks. wide, course S.
 40.00 Set a granite stone, 30 x 24 x 18 ins., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ 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 Descend gradually over broken ground.
 Set a conglomerate stone, 24 x 12 x 12 ins., 18 ins. in the ground, for cor. of secs. 4, 5, 33 and 32, marked with 4 notches on the E. and 2 notches on the W. edge, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, none; undergrowth, scattering mesquite and brush.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

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Survey of South Boundary of Township 18 South, Range 11 East.

Chains	S.89°58'W.along the S.bdy.of Tp.,S.of sec.32. Over mountainous land, covered with dense brush.
2.00	Box canyon,150 lks.wide, course SW.; ascend.
10.00	Top of spur, extends S.
16.95	Trail on top of ridge, brs.N. and S.; descend.
20.00	Enter dense mesquite and tesota.
38.50	Dry wash,10 lks.wide, course SW.
40.00	Set a conglomerate stone, 24 x 10 x 8 ins., 18 ins. in the ground,for 1/4 sec.cor.,marked 1/4 on N.face,and raise a mound of stone, 2 ft.base,1-1/2 ft.high,N.of cor. Pits impracticable. A mesquite,10 ins.diam., brs.N.60°E.,58 lks.dist., marked 1/4 S 32 B T. A mesquite, 12 ins.diam., brs.S.70°E.,75 lks.dist., marked 1/4 S 5 B T.
42.00	Descend into Temporal Canyon.
50.00	Leave canyon, and ascend, course SW.
58.00	Top of knoll,extends N. Descend through valley,through dense mesquite and tesota undergrowth.
70.00	Intersect Temporal Canyon, course NW.
80.00	Set a granite stone, 20 x 10 x 10 ins., 15 ins. in the ground,for cor.of secs.5,6,31 and 32,marked with 5 notches on the E. and 1 notch on the W.edge,and raise a mound of stone, 2 ft.base,1-1/2 ft.high,W.of cor. Pits impracticable. A mesquite, 24 ins.diam., brs.S.10°30'E.,125 lks. dist.,marked T 19 S R 11 E S 5 B T. A mesquite, 24 ins.diam., brs. N. 41-1/2° E.,26 lks.dist., marked T 18 S R 11 E S 32 B T. A mesquite, 24 ins.diam., brs. S. 59-1/2° W.,167 lks.dist., marked T 19 S R 11 E S 6 B T. A mesquite, 12 ins.diam., brs. N. 36° W.,280 lks. dist., marked T 18 S R 11 E S 31 B T.
	Land, mountainous. Soil,sandy and gravelly; 2nd and 3rd rate. Timber,mesquite; undergrowth,mesquite,tesota. Mountainous land, covered with dense undergrowth,except- tionally difficult to survey,80.00 chs. August 22: At noon, I set off 12°00'N.on the decl.arc, and observe the sun on the meridian; the resulting lat. is 31°49'N.
	----- S.89°58' W., along the S. bdy.of Tp. S.of sec.31. Descending gradually, in valley, and through dense undergrowth.
8.00	Old canal, course SW.
16.00	Enter dry wash, course westerly.
40.00	Point for 1/4 sec.cor.,falls in creek, liable to be de- stroyed!
41.00	Set a granite stone, 24 x 10 x 10 ins., 18 ins. in the ground,for witness cor. to 1/4 sec.cor. marked W C 1/4 on N.,and raise a mound of stone, 2 ft.base,1-1/2 ft. high, N.of cor. Pits impracticable. A mesquite, 10 ins.diam., brs.N.12-1/2°W.,47 lks. dist.,marked W C 1/4 S 31 B T. A mesquite, 20 ins.diam. brs. S.56-1/2°E.,135 lks.dist.,marked W C 1/4 S 6 B T.
47.50	Leave creek to right, course WNW.
70.35	The cor.of Tps.18 and 19 S.,Rs.10 and 11 E.,which is a granite stone,marked and witnessed as described by the Surveyor General. Land, rolling. Soil,sandy and gravelly; 2nd and 3rd rate. Timber,mesquite and tesota. Land, covered with dense undergrowth,70.35 chs. -----

Line designated	True bearing	Distance	Latitude		Departure	
			N.	S.	E.	W.
S. Bdy	S. 89° 58' W	470.35		.24		470.35
W. Bdy	N. 0° 11' W	477.90	477.90			1.50
N. Bdy	N. 89° 50' E	70.10	.20		70.10	
N. Bdy	East	400.00			400.00	
E. Bdy	S. 0° 3' E	80.10		80.10	.07	
E. Bdy	S. 0° 1' W	239.12		239.12		.08
E. Bdy	South	159.84		159.84		
Convergency,				.45		
			478.10	479.30	470.62	471.93
				478.10		470.62

Error in lat. 1.20 Error in dep. 1.31

General Description.

The main range of the Sierrita Mountains are in the western part of this township, making it so rugged and mountainous that the two western tiers of this township are impossible to be surveyed by the ordinary methods of surveying. These mountains extend along the south boundary. There are settlers in the north-eastern part of the township. The main watercourses extend in a southwesterly-northeasterly direction,

James B. Wright
U. S. Deputy Surveyor.

For FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

Reference is had to "M." S.Bdy.T.6 N., R.12 E.

LIST OF NAMES.

BOOK 2111

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.

_____, Axman.

_____, Axman.

_____, 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.

_____, Axman.

_____, Axman.

_____, Flagman.

Subscribed and sworn to before me this _____

day of _____, 190 _____



BOOK 2111

For **FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.**

Reference is had to "M." S. Bdy. T.6 N., R.12 E.

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 _____, 190 _____, 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 _____, 190 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, *July 19, 1909.*

The foregoing field notes of the survey of South Boundary of T.18 S., R.11 E. of the Gila and Salt River Base and Meridian in the Territory of Arizona,

executed by Jesse B. Wright, U.S. deputy surveyor under his contract No. 145, dated April 15, 1907, 190 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

J. M. D. 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.