

Book G.

2138

Accepted Letter 5 - July 31-1910

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BOOK 2138

FIELD NOTES

2138

OF THE SURVEY OF THE

2138

West Boundary T. 41 S. R. 14 E.

2138

Of the *T. and S. R. 14 and Meridian,*
Arizona

AS SURVEYED BY

Jacobs & Curry, United States Deputy Surveyors,
Under his Contract No. *148*, dated *March 20th*, 1908
Survey commenced *August 9th*, 1908
Survey completed *August 12th*, 1908

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BOOK 2138

NAMES AND DUTIES OF ASSISTANTS.

<i>Harry J. Young</i>	<i>Chairman</i>
<i>Jim A. Kellis</i>	<i>"</i>
<i>James Hughes</i>	<i>Recorder</i>

BOOK 2138

INDEX DIAGRAM.

Township 11 S, Range 14 E

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BOOK 2138

PRELIMINARY OATHS OF ASSISTANTS.

WE, Harry S. Young and Jim A. Kellis
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 the boundaries of S 10 S - R 14 E,

Harry S. Young, Chainman.
Jim A. Kellis, Chainman.

Subscribed and sworn to before me this 10th
day of August, 1908

Francis Jacobs
Notary Public



My commission expires September 20, 1911

WE, J. James Neephs 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 the boundaries of S 10 S - R 14 E,

James Hughes, Moundman.
_____, Moundman.

Subscribed and sworn to before me this 10th
day of August, 1908

Francis Jacobs
Notary Public



My commission expires September 20, 1911

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 _____



West Boundary of T 11 S., R 14 E.

Chains.

Survey commenced August 9th. 1908., and executed with a W. and L. E. Gurley high mountain transit. 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 verniers of the latitude and declination arcs.

We examined the adjustments of the transit, and correct the level and colination 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 by observation on Polaris, we proceed as follows;

At our camp on sec. 32 T 11 S., R 14 E.; latitude $32^{\circ}26'$ N., longitude $110^{\circ}55'$ W., we set off $32^{\circ}26'$ N on the lat. arc; $15^{\circ}47'$ N on the decl. arc, and at 5p. 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 our station.

At 10h. 18^m. p. m., l.m.t., we observe Polaris at eastern elongation, in accordance with Manual of Instructions and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of our station.

August 9, 1908

August 10, At 7 a. m. l.m.t., we lay off the Azimuth of Polaris, $1^{\circ}24'$ to the W., and mark the meridian thus determined, by cutting a small groove in the stone set August 9th., on which the meridian falls 0.4ins. east of the mark determined by the solar.

At 8h. a.m. l.m.t., we set off $32^{\circ}26'$ N, on the lat. arc, $15^{\circ}35'$ N on the decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5chs. north of our station.

This mark falls 0.3ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p. m. and a. m. defines positions for meridians, respectively about $0'21''$ W. and $0'16''$ E. of the meridian established by the Polaris observation, therefore, we conclude that the adjustments of the instrument are satisfactory.

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

We commence at the cor. of Tps. 11 and 12 S., Rs. 13 and 14 E., which is a stone firmly set, marked and witnessed as described by the surveyor general.

Thence we run

N. bet. secs 31 and 36.

Over rough and hilly land.

1.30 Gulch 15 lks. wide, course S. 75° E.

Ascend.

8.00 Ridge brs. E. and W.

Descend.

15.75 Wash 20 lks. wide, course S. 60° E.

Ascend.

29.50 Ridge brs. SE and NW.

Descend abruptly.

West Boundary of T 11 S. R 14 E.

Chains.
40.00

Set granite stone 16 x 10 x 5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone 3ft. base, 2ft. high, W. of cor. Pits impracticable.

75.00
80.00

Thence along W. side of bottom.
Ascend along E. slope of steep ridge.
Set granite stone 18 x 10 x 5 ins., 12 ins. in the ground, for cor. of secs. 25. 30. 31 and 36, marked with 1 notch on S. and 5 notches on N. edge.
Raise a mound of stone 3ft. base, 2ft. high, W. of cor. Pits impracticable.

Land, broken and level.
Soil, 2nd and 3rd rate.
Timber, Mesquite and Paloverde.
Mountainous land, extremely difficult to survey 66.30 chs
Land covered with dense undergrowth 7.00 chs.
Land level and broken 6.70 chs.

August 10, 1908.

25.00
26.50
40.00

August 11, At 7h. 15m. a.m., l.m.t., we set off $32^{\circ}26'N$. on the lat. arc, $15^{\circ}19'N$ on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 25. 30. 31 and 36.

Thence we run
N. bet. secs. 25 and 30.
Over mountainous land,
Ascend.

Descend,
Bottom brs. SE and NW.
Set granite stone 16 x 8 x 5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face. from which

A paloverde, 12 ins. in diam. brs. S. $85\frac{1}{2}^{\circ}E$, 164 lks. dist., marked $\frac{1}{4}$ S 30 B T.
A Paloverde, 10 ins. in diam. brs. N. $27^{\circ}W$, 18 lks. dist., marked $\frac{1}{4}$ S 25 B T.

64.00
70.00
80.00

Enter wash, course S. $20^{\circ}E$.
Leave wash, course S. $20^{\circ}E$.
Set granite stone 24 x 6 x 4 ins., 18 ins. in the ground, for cor. of secs. 19. 24. 25 and 30, marked with 2 notches on S. and 4 notches on N. edge, from which

A paloverde, 10 ins. in diam. brs. S. $63\frac{3}{4}^{\circ}E$, 106 lks. dist., marked T 11 S R 14 E S 30 B T.
A mesquite, 6 ins. in diam. brs. N. $68\frac{1}{4}^{\circ}W$, 60 lks. dist., marked T 11 S R 13 E S 24 B T.

No other trees available. Dig pits 18 x 18 x 12 ins. in each sec. 15 ft. dist., and raise a mound of earth 4ft. base, 2ft. high, W. of cor.

Land, hilly, mountainous and level.
Soil, 2nd and 3rd rate.
Timber, Mesquite and Paloverde.
Land level 9.10 chs.
Land nountainous and hilly, 70.90 chs.

At the above cor. at 12h. 05m. p.m. lmt. I set off $15^{\circ}14'N$. on the decl. arc and observe the sun on the meridian; the resulting latitude is $32^{\circ}27'N$.

West boundary of T 11 S., R 14 E.

Chains

N. bet. secs. 19 and 24
 Over rolling land, covered with undergrowth.
 10.00 Leave bottom.
 Ascend abruptly.
 13.00 Top of rocky mesa.
 40.00 Set granite stone 18 x 10 x 4 ins., 12 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and
 dig pits 18 x 18 x 12 ins., N. and S. of cor.,
 3ft. dist., and raise a mound of earth 4ft. base,
 2ft. high, W. of cor.
 48.00 Descend.
 63.25 Wash 15 lks. wide, course SW.
 Ascend.
 64.40 Road hrs. SE and NW.
 76.00 Ridge hrs. SE and NW.
 80.00 Set granite stone 24 x 12 x 6 ins., 18 ins. in the
 ground, for cor. of secs. 13. 18. 19 and 24, marked
 with 3 notches on S. and N. edges.
 Dig pits 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft.
 dist., and raise a mound of earth 4ft. base, 2ft.
 high W. of cor.
 Land, hilly.
 Soil, 3rd rate.
 No timber.
 Hilly land, covered with dense undergrowth, 80.00 chs.

August 11, 1908.

August 12, At 8 a. m. l.m.t., we set off $32^{\circ}28'N$ on
 the lat. arc, $15^{\circ}0'N$ on the decl. arc, and determine
 a true meridian with the solar, at the cor. of
 secs. 13. 18. 19 and 24.

Thence we run
 N. bet. secs. 13 and 18.
 Over rolling land, covered with dense undergrowth.
 37.50 Descend.
 39.00 Reach bottom.
 40.00 Set granite stone 18 x 16 x 6 ins., 12 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face.
 Dig pits 18 x 18 x 12 ins., N. and S. of cor., 3ft.
 dist., and raise a mound of earth 4ft. base, 2ft.
 high, W. of cor.
 41.00 Wash 20 lks. wide, course S. $10^{\circ}E$.
 52.00 Wash 20 lks. wide, course S. $10^{\circ}W$.
 59.00 Wash continues, course S. $10^{\circ}E$.
 71.00 Wash continues, course S. $10^{\circ}W$.
 80.00 Set granite stone 18 x 10 x 6 ins., 12 ins. in the
 ground, for cor. of secs. 7. 12. 13 and 18, marked
 with 4 notches on S., and 2 notches on N. edge.
 Dig pits 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist.,
 and raise a mound of earth 4ft. base, 2ft. high,
 W. of cor.
 Land, rolling and covered with dense undergrowth.
 Soil, 3rd rate.
 No timber.
 Rolling land, covered with undergrowth, 80.00 chs.

N. bet. secs. 7 and 12.
 Over rolling land, without timber.
 40.00 Set granite stone 24 x 10 x 8 ins., 18 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face.
 Dig pits 18 x 18 x 12 ins., N. and S. of cor., 3ft.

West boundary of T 11 S., R 14 E.

Chains.

80.00

dist., and raise a mound of earth 4ft. base, 2ft. high W. of cor.
 Set granite stone 24 x 16 x 5 ins., 18 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, marked with 5 notches on S. and 1 notch on N. edge.
 Dig pits 18 x 18 x 12 ins., in each sec., 5 1/2 ft. dist. and raise a mound of earth and stone 4ft. base, 2ft. high, W. of cor.
 Land, rolling.
 Soil, 3rd rate.
 No timber.
 Rolling land 80.00 cha.

17.00

33.00

40.00

47.50

65.00

71.25

81.78

N. bet. secs. 1 and 6.
 Over rolling land, without timber.
 Descend.
 Gulch 5 lks. wide, course S. 60 E.
 Ascend steep side of gulch.
 Set granite stone 18 x 10 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which
 A mesquite, 10 ins. in diam. brs. N. 54 1/2 W., 41 lks. dist., marked 1/4 S 1 B T. No other trees available.
 Dig pits 18 x 18 x 12 ins. N. and S. of cor., 3ft. dist., and raise a mound of earth and stone 4ft. base, 2ft. high, W. of cor.
 Gulch 30 lks. wide, course SE.
 Ascend.
 Ridge brs. SE and NW.
 Gulch 10 lks. wide, course S. 60 E.
 Intersect 2nd Standard Parallel South, 14,27 chs. N. 89° 51' E. of Std. cor. of secs. 35 and 36, T 10 S., R 13 E. which is a post firmly set, marked and witnessed as described by the surveyor general.
 Where we set a granite stone 18 x 10 x 6 ins., 12 ins. in the ground, for closing cor. of Tps. 11 S., Rs. 13 and 14 E., marked C. C. on S., with 6 grooves on E. W. and S. faces.
 Dig pits 24 x 24 x 12 ins., 5 1/2 ft. E. and W., and 7ft. S., and raise a mound of earth and stone 5ft. base, 2ft. high, S. of cor.
 Land, rolling.
 Soil, 3rd rate.
 No timber.
 Land rolling and broken
 Connections, 81.78 chs.
 14.27 chs.

August 12, 1908.

General Discription.

The land over which this line passes is rolling and broken, and cut by many gulches; it is unfit for agricultural purposes, it however is good grasing land.
 There is no large timber, but considerable mesquite and paloverde.
 Wickenburg, Arizona December 12, 1908.

Francis B. Jacobs
 U. S. Deputy Surveyor.

Boundaries of T. 11 S., R. 14 E.

Latitudes, departures, and closing errors.

Line designated,	True bearing,	Distance	Latitudes		Departures.	
			N.	S.	E.	W.
W. Bdy.	North.	481.78 ✓	481.78			
2d. St. Pl. S.	N. 89 51' E.	60.95 ✓	.16		60.95	
" " " "	N. 89 38' E.	40.50 ✓	.31		40.50	
" " " "	East.	78.69 ✓			78.69	
" " " "	N. 89 43' E.	40.22 ✓	.20		40.22	
" " " "	N. 89.40' E.	40.17 ✓	.23		40.17	
" " " "	N. 89.14' E.	40.45 ✓	.54		40.45	
" " " "	East.	16.75 ✓			16.75	
Eastline.	S. 0 1' E.	484.32 ✓		484.32	.14	
South Bdy.	West.	319.54 ✓				319.54
Convergency.						.31 ✓
			483.22	484.32	318.16	319.54
				483.22		318.16
Error in latitude				1.10	Er, indep.	1.38

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

BOOK 2138

LIST OF NAMES.

A list of the names of the individuals employed by Jacobs & Curry, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the boundaries of T11S-R14E.

- showing the respective capacities in which they acted:
- Harry S. Young Chairman.
- Jim A. Hollis Chairman.
- James Hughes Moundman. ~~X~~
- Moundman.
- Axman.
- Axman.
- Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Jacobs and Curry, United States Deputy Surveyor, in surveying all those parts or portions of the boundaries of T11S-R14E.

..... of the S and S-R. Base and meridian, Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by them and under their 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

- Harry S. Young Chairman.
- Jim A. Hollis Chairman.
- James Hughes Moundman. ~~X~~
- Moundman.
- Axman.
- Axman.
- Flagman.

Subscribed and sworn to before me this 27 day of August, 1908



Lewis Jacobs
Notary Public

My commission expires September 28, 1911

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Francis B. Jacobs David J. Curry United States Deputy Surveyor, do solemnly swear that, in pursuance of a ^{joint} contract received from Francis S. Ingalls United States Surveyor General for Arizona, bearing date of the 20th day of March, 1908, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the boundaries of T. 11. S. R. 14 E.

_____ of the S & S - R.
Base and 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 Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Francis B. Jacobs
United States Deputy Surveyor.

Subscribed by said Francis B. Jacobs, and sworn to before me }
this 27 day of September, 1909



Frank S. Ingalls
United States Surveyor General.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. Sept. 30, 1909
The foregoing field notes of the survey of the West Boundary
of T. 11. S. R. 14 E. Gila and Salt Rivers
Meridian, Arizona.

executed by Francis B. Jacobs and David J. Curry
under ^{joint} contract No. 148, dated March 20th, 1908, 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.