

Book L.

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2202 BOOK 2202

# FIELD NOTES

2202

OF THE SURVEY OF THE

2202

Resurvey East Boundary

Township No. 22 South  
Range No. 28 East

2202

of the Six and Salt River Base and Meridian,

Arizona

AS SURVEYED BY

Jacobs & Curry, United States Deputy Surveyor,

Under <sup>Joint</sup> ~~his~~ Contract No. 149, dated March 20, 1908,

Survey commenced September 15, 1908,

Survey completed September 18, 1908,

2202

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2202

NAMES AND DUTIES OF ASSISTANTS.

BOOK 2202

Jim A Kellis Chairman  
 Harvey A Baker "  
 Thomas Jacobs: Moundman  
 Ford C Roberts Agerman

118

BOOK 2202

INDEX DIAGRAM.

Township 22 S, Range 28 E

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

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Jim A Kellis and Harvey H. Case  
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 East boundary of J. 22. S. R. 28 E

Jim A. Kellis, Chainman.  
Harvey H. Case Chainman.

Subscribed and sworn to before me this 15  
day of September, 1908

Francis Jacobs  
Notary Public



WE, Thomas Jacobs and

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us to the best of my skill and ability, in the survey of

the East boundary of J. 22. S. R. 28 E.

Thomas Jacobs, Moundman.  
Moundman.

Subscribed and sworn to before me this 15  
day of September, 1908

Francis Jacobs  
Notary Public



WE, Fred C Roberts and

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given us to the best of my skill and ability, in the survey of

the East boundary of J. 22. S. R. 28. E.

Fred C Roberts, Axman.  
Axman.

Subscribed and sworn to before me this 15  
day of September, 1908

Francis Jacobs  
Notary Public



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\_\_\_\_\_



## Resurvey of East Boundary of T 22 S., R 28 E.

## Chains.

Survey commenced September 15, 1908, and executed with a Gurley light mountain transit, with solar attachments. 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 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 by observations on Polaris, we proceed as follows;

At our camp near the Northwest corner of sec. 25, T 22 S., R 28 E., Latitude  $31^{\circ} 29' 49''$  N., longitude  $109^{\circ} 24' 54''$  W. we set off  $31^{\circ} 30'$  N. on the lat. arc;  $2^{\circ} 55'$  N. on the decl. arc and at 4h. p.m. l.m.t., determine a meridian with the solar, and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At 7h. 53m. p.m. 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.

September 15, 1908.

September 16; At 7h. a.m. l.m.t., we lay off the azimuth of Polaris  $1^{\circ} 23'$  to the west, and mark the meridian thus determined, by cutting a small groove on the stone set September 15, on which the meridian falls 0.3 ins. east of the mark determined by the solar.

At 7h 15m. a.m. l.m.t., we set off  $31^{\circ} 30'$  N on the lat. arc;  $2^{\circ} 41'$  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 our station; this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

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

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

Upon examination of the East Bdy. of T 22 S., R 28 E. we find it defective in position and alinement, therefore we retrace the same as follows;

Beginning at the cor. of Tps. 22 S., Rs 28 and 29 E. which is a stone, firmly set, marked and witnessed, as described by the surveyor general; thence we run North bet. secs. 31 and 36.

Over mountainous land.

Descend.

19.00 Gulch, 60 lks. wide, course SW.

Ascend steep rocky mountain.

30.00 Top of butte.

Descend.

40.00 The  $\frac{1}{4}$  cor., a granite stone, 10 x 8 x 6 ins. above ground marked  $\frac{1}{4}$  on W. face; we raise a mound of stone, 3ft. base, 2ft. high. W. of cor.

Descend steep mountain.

70.00 Gulch, 40 lks. wide, course S  $60^{\circ}$  W.

Ascend.

## Resurvey of East Boundary of E 22 S., R 28 E.

Chains.	
72.00	Top of bank.
73.50	Stock corral on line.
80.21	A point from which a trace of the cor. of secs. 25. 30 31 and 36, brs. E. 19 lks. dist. Set a tufa stone, 24 x 10 x 6 ins. 18 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. Dig pits 18 x 18 x 12 ins., in each sec. 5½ ft. dist., and raise a mound of earth and stone, 4ft. base, 2ft. high, W. of cor; from which The NW cor. of house, ( Clark and Watson's J H E ranch ) brs. S. 32½° E., about 8 chs. dist. The true course of the last ¼ mile is N. 0°/3' E. Land, very mountainous. Soil, 3rd and 4th rates. No timber. Mountainous land, 80.21 chs.
	North bet. secs. 25 and 30. Over rolling land. Ascend.
27.50	Road, brs. NE and SW.
31.50	Ridge, brs. E and W. Descend.
39.80	Wire fence, brs. N 60° E and S 60° W.
40.20	We find little evidence of the ¼ sec. cor. We set a sandstone 14 x 12 x 4 ins. 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone 3ft. base, 2ft. high, W. of cor. Pits impracticable.
40.35	Telegraph line, parellel to railroad.
41.10	El Paso and Southwestern Ry. track, brs. S 63½° W. and 5° curve left NE.
42.80	Wire fence parellel to the railroad.
47.80	Wash. 50 lks. wide, course SW. Ascend.
80.35	The cor. of secs. 19.24.25 and 30. A stone 8 x 6 x 4 ins. above ground, marked with 2 notches on S. and 4 notches on N. edge; we raise a mound of stone 3ft. base, 2ft. high, W. of cor. Pits impracticable. Land rolling. Soil, 2nd and 3rd rate. No timber.
	September 16, 1908.
	September 17; At 7h. 40m. a.m. l.m.t.; we set off 31° 30' N. on the lat. arc; 2° 18' N. on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 19.24 25 and 30. Thence we run North bet. secs. 19 and 24. Over rolling land. Descend.
1.00	Road, brs. NE and SW.
30.15	Wash. 25 lks. wide, course SW.
38.70	A trace of the ¼ cor;
40.10	Set a malpais stone 16 x 10 x 6 ins. 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face. Dig pits 18 x 18 x 12 ins. N. and S. of stone, 3ft. dist., and raise a mound of earth 3ft. base, 2ft. high. W. of cor.
40.70	Thence North A point from which the cor. of secs. 13.18.19 and 24 brs. E. 22 lks. dist., a stone 7 x 5 x 3 ins. found on the ground.

## Resurvey of East Boundary of T 22S., R 28 E.

Chains. Set a sandstone 16 x 8 x 6 ins., 11 ins. in the ground for cor. of secs. 13 18 19 and 24, marked with 3 notches on N. and S edges.  
 Raise a mound of stone, 4ft. base, 2ft. high, W. of cor.  
 Pits impracticable.  
 The true course of the last  $\frac{1}{2}$  mile is  $N 0^{\circ} 19' E$ .  
 Land rolling.  
 Soil, 2nd and 3rd rate.  
 No timber.

## Secs.

N. bet. 13 and 18.  
 Over rolling land.  
 13.85 Wire fence, brs. NE and SW.  
 Enter field.  
 22.10 Wire fence, brs. NE 1 ch., thence SE., and SW.  
 39.50 Wash 30 lks. wide, course S  $25^{\circ} W$ .  
 40.46 A point from which the  $\frac{1}{4}$  sec. cor. brs. E. 10 lks dist.  
 The stone being much under size, we reestablish the cor. by setting  
 A porphyry stone 20 x 8 x 6 ins. 15 ins. in the ground, at the original cor. point, for  $\frac{1}{4}$  sec. cor, marked  $\frac{1}{4}$  on W. face, and raise a mound of stone.  $2\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high. W. of cor. Pits impracticable.  
 The true course of this  $\frac{1}{2}$  mile is N  $0^{\circ} 9' E$ .  
 Thence North.  
 5.00 Wash, 25 lks. wide, course S  $20^{\circ} W$ .  
 5.55 Road, brs. NE and SW.  
 40.12 A point from which the cor. of secs. 7.12.13 and 18, brs. E. 64 lks. dist., the post having disappeared,  
 We set a porphyry stone, 20x8 x 6 ins. at original cor. point, 15 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. on each sec. -  $5\frac{1}{2}$  ft. dist., and raise a mound of earth 4ft. base, 2ft. high, W. of cor.  
 The true course of this  $\frac{1}{2}$  mile is N.  $0^{\circ} 55' E$ . 40.13 chs.  
 Land, rolling.  
 Soil, 2nd rate.  
 No timber.

North bet. secs. 7 and 12.  
 Over rolling land.  
 5.60 Wash, 50 lks. wide, course SW.  
 28.00 Road, brs. NE and SW.  
 40.65 A point from which the  $\frac{1}{4}$  sec. cor. brs. E. 70 lks. dist.,  
 The stone being much under size, we set  
 A granite stone 18 x 12 x 8 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.  
 The true course of this  $\frac{1}{2}$  mile is N.  $59^{\circ} E$ , 40.66 chs.  
 Thence North  
 19.40 Gulch, 25 lks. wide, course SW.  
 35.70 Gulch, 15 lks. wide course SW.  
 40.53 A point from which the cor. of secs. 1.6.7 and 12, brs. E 85 lks. dist., a stone 8 x 5 x 3 ins. above ground, marked with 5 notches on S. and 1 notch on N.  
 Raise a mound of stone 3 ft. base, 2ft. high, W. of cor.  
 Pits impracticable.  
 The true course of this  $\frac{1}{2}$  mile is N.  $1^{\circ} 12' E$ . 40.54 chs.  
 Land, rolling.  
 Soil, 3rd rate.  
 No timber.

September 17, 1908.

## Resurvey of East boundary of T 22S., R 29 E.

Chains.

September 18; At 8h. a.m. l.m.t., we set off  $31^{\circ}32'N$  on the lat. arc;  $1^{\circ}58\frac{1}{2}'N$  on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 1, 6, 7, and 12.

Thence we run North bet. secs. 1 and 6. Over mountainous land. Descend.

2.85 Gulch, 20 lks. wide, course  $S 15^{\circ}W$ . Ascend.

25.00 Ridge, brs. NE and SW. Descend.

31.00 Descend over bluffs into canon.

32.30 Bottom of canon, 100 ft. deep,  $S. 60^{\circ}W$ . Ascend.

33.00 Top of canon wall. Ascend ridge

39.80 Ridge brs. E and W. Descend.

40.40 A point from which the  $\frac{1}{4}$  sec. cor. brs. E 18 lks. dist. The stone being very much under size and laying on the ground, we set a malpais stone 18 x 12 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. The true course of this  $\frac{1}{2}$  mile is  $N. 0^{\circ}15'E$ . Thence North

3.60 Gulch 20 lks. wide, course SW. Ascend steep hill.

16.00 Ridge, brs. E and W. Descend.

40.24 A point from which the Tp. cor. bears E. 12 lks. dist. a stone 8 x 6 x 5 ins. above ground, marked and witnessed as described by the Surveyor General. True course of this  $\frac{1}{2}$  mile,  $N. 0^{\circ}10'E$ . Land mountainous and broken, Soil 3d rate, No timber. Mountainous land, 80.64 chs.

September 18, 1908.

## General Discription.

The south <sup>mile</sup> of the east Bdy. of this Tp. runs over rocky, mountainous land, thence over rolling land, for a distance of four miles, the last mile being broken and rocky.

Clark and Watson have a cow ranch on sec. 31. and there is also two settlers on sec. 18, T 22S., R 29 E. There is no timber, but good grass along the line.

*James P. Jacobs*  
U. S. Deputy Surveyor.

Wickenburg, Arizona; January 20, 1909.



FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

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

*re the*

*East boundary of S. 22 S. R. 28 E.*

showing the respective capacities in which they acted:

*Jim A. Kellis*

....., Chainman.

*Harvey N. Cake*

....., Chainman.

*Thomas Jacobs*

....., Moundman.

*Fred C. Roberts*

....., Moundman.

....., Axman.

....., Axman.

....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

*Jacobs & Curry*

....., United States Deputy Surveyor, in surveying all

those parts or portions of the

*East boundary of S. 22 S. R. 28 E.*

..... of the *Six and*

*Salt River Canyon* meridian, *Territory* of *Arizona*, which are represented in the foregoing field notes as having been surveyed by ~~him~~ *them* and under ~~his~~ *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*

*Jim A. Kellis*

....., Chainman.

*Harvey N. Cake*

....., Chainman.

*Thomas Jacobs*

....., Moundman.

*Fred C. Roberts*

....., Moundman.

....., Axman.

....., Axman.

....., Flagman.

Subscribed and sworn to before me this

*68*

day of *October*, 190

*Francis P. Jacobs*

*Notary Public*



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Francis Jacobs, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 20 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

Resurvey of the boundaries of  
Township 22 South Range 28 East

of the Silva and Salt River 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 Jacobs  
United States Deputy Surveyor.

Subscribed by said Francis B. Jacobs, and sworn to before me }  
this 28th day of February, 1910

~~My commission expires February 15, 1913,~~



H. S. LeCompte  
Notary Public

APPROVAL Frank S. Ingalls  
U. S. SURVEYOR GENERAL & D. A.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz Mar 7, 19010

The foregoing field notes of the survey of the East Boundary of  
Tp. 22 S. R. 28 E. of the Silva and Salt River  
Base and Meridian, Arizona

executed by Francis B. Jacobs and Daniel J. Curry  
under ~~his~~ contract No. 148, dated Mar. 20, 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.