

3492

4-679

Book "F"

361-8-1921

COMPLETED

BOOK 3492
FIELD NOTES

OF THE RESURVEY OF

Part of the East boundary of the Luis Maria Baca Float No 5 (21M to 23 M)

AND OF THE SURVEY OF

part of the East boundary, and

part of the Subdivision lines of

Fractional Township 18 North, Range 7 West.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Otis Ross, U. S. Surveyor.

In the capacity of U. S. Surveyor, under Special Instructions dated October 15, 1919, issued by the United States Surveyor General to govern surveys included in Group No. 104, Arizona, which were approved by the Commissioner of the General Land Office, October 29, 1919, and Assignment Instructions dated November 7, 1919

Resurvey and Survey commenced March 13, 1920

Resurvey and Survey completed March 15, 1920

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INDEX DIAGRAM.

Township *Range*

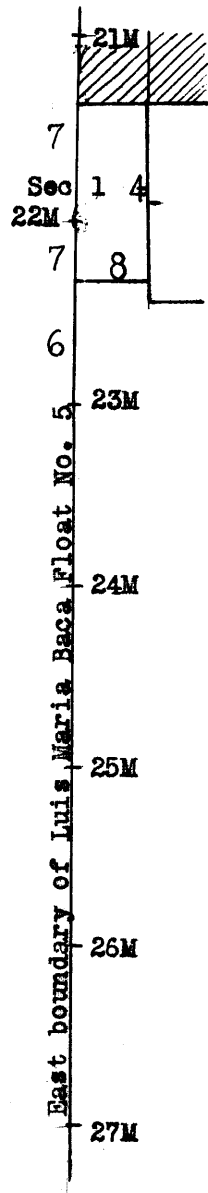
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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Index diagram

Fractional Township 16 North, Range 7 West,




Luis
Maria
Baca
Float
No.5

_____ Lines surveyed under this Group.

_____ Lines resurveyed under this Group.

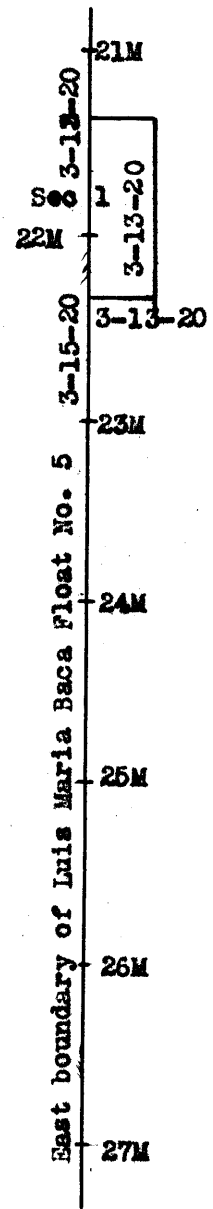
_____ Accepted surveys.

 Areas surveyed as per accepted plats on file.

BOOK 3492

Date Diagram

Fractional Township 18 North, Range 6 West,



On the above diagram:-
Red lines indicate surveys, and
Blue lines indicate resurveys,
 executed by Otis Ross, U. S. Surveyor,
 on dates shown thereon, and
Black lines indicate accepted surveys.

Survey commenced March 13, 1920, and executed with a Young and Sons mountain transit No. 8501; the instrument is equipped with a full vertical circle and the Smith solar attachment; unless otherwise specified all azimuth determinations are accomplished with the solar attachment.

March 14, 1920: I examine the adjustment of the instrument and correct all errors, then to test the solar apparatus by comparing its indications from observations made during a. m. and p. m. hours with a meridian established by Polaris observation proceed as follows

In camp near the NE. cor. of T. 18 N., R. 6 W., Gila and Salt River Base and Meridian, Arizona, in latitude $34^{\circ} 59' N.$, and longitude $112^{\circ} 50' W.$, at 7 h. 58.4 m. p.m., l.m.t., I observe Polaris at western elongation, making four observations, two each with the telescope in direct and reversed positions, and mark the mean point in the line thus determined, on a peg driven firmly in the ground 5 chs. N.

Azimuth of Polaris at western elongation = $1^{\circ} 21' 53''$.

March 15, 1920: I lay off the azimuth of Polaris $1^{\circ} 22'$ to the east, and mark the meridian thus determined by a tack in a peg driven firmly in the ground, 5 chs. N.

At 7 h. 30 m. a.m., l.m.t., I set off $34^{\circ} 59' N.$ on the lat. arc; $2^{\circ} 05\frac{1}{2}' S.$ on the decl. arc; and determine a meridian with the solar, which I find to agree with the true meridian.

At app. noon, with the lat arc unchanged, I observe the sun on the meridian; the resulting reading of the decl. arc, is $2^{\circ} 00' S.$; which agrees with the computed declination of the sun.

At 4 h. 30 m. p.m., l.m.t., with the lat. arc unchanged, I set off $1^{\circ} 56\frac{1}{2}' S.$ on the decl. arc; and determine a meridian with the solar which I find to agree with the true meridian.

As all of the solar observations during the usual hours of solar work come within $1' 30''$ of the true meridian, I conclude that the adjustments of the instrument are satisfactory.

Unless otherwise specified all measurements are made with a Lufkin steel tape 5 chains in length, compared with a Chesterman standard steel tape and found correct. The measurements are made on the slope, the vertical angle determined, and the slope measurements properly reduced to true horizontal distances.

Survey of a portion of East bdy. of frac. T. 18 N., R. 7 W.

Chains The original cor. of Ts. 18 and 19 N., R. 6 W., and frac. Ts. 18 and 19 N., R. 7 W., is an iron post 3 ins. in diam., properly marked on brass cap, firmly set in a mound of stone, and witnessed by a mound of stone, S. of cor., and three bearing trees, as follows

- A pine, 30 ins. in diam., brs. N. 80° E., 117 lks. dist., marked T 19 N R 6 W S 31 BT.
- A pine, 30 ins. in diam., brs. S. 29° W., 44 lks. dist., marked T 18 N R 7 W S 1 BT.
- A pine, 10 ins. in diam., brs. N. 7° W., 55 lks. dist., marked T 19 N R 7 W S 36 BT.

Thence

South, on a true line, on E. bdy. of sec. 1. Over mountainous land, thru dense timber and undergrowth. Ascend 67 ft. over N. slope.

- 1.20 Spur, slopes W. Descend 75 ft., over SW. slope.
- 10.46 Foot of descent at bend of gulch, course from S. to NW. Ascend 35 ft. along E. side of gulch.
- 18.42 Cross same gulch, course N. from SE. Ascend 126 ft. over N. slope.
- 25.26 N. rim of mesa, brs. E. and W. Leave mountainous and enter level land. Thence over mesa to
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 1 only, marked on brass cap

$\frac{1}{4}$ S 1	
	1920

from which

- A pine, 8 ins. in diam., brs. S. 14 $\frac{1}{2}$ ° W., 82 lks. dist., marked $\frac{1}{4}$ S 1 BT.
- A pine, 6 ins. in diam., brs. N. 27° W., 54 lks. dist., marked $\frac{1}{4}$ S 1 BT.

Continue over mesa, thru dense timber and undergrowth.

- 45.23 Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of sec. 6 only, marked on brass cap

$\frac{1}{4}$ S 6	
1920	

from which

- A pine, 6 ins. in diam., brs. N. 45 $\frac{3}{4}$ ° E., 82 lks. dist., marked $\frac{1}{4}$ S 6 BT.
- A pine, 6 ins. in diam., brs. S. 82 $\frac{1}{2}$ ° E., 33 lks. dist., marked $\frac{1}{4}$ S 6 BT.

Continue over level top of mesa.

- 49.50 South rim of mesa, brs. NE. and SW. Leave level, and enter mountainous land. Descend 40 ft., over SE. slope.
- 54.45 Gulch, course NE. Ascend 47 ft., over NW. slope.
- 60.23 North rim of mesa, brs. NE. and SW. Leave mountainous land, and enter level land. Thence over mesa, to
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 1 and 12 only, marked on brass cap

T 18 N	
S 1	
S 12	
R 7 W	

1920

from which

- A juniper, 14 ins. in diam., brs. S. 28 $\frac{1}{2}$ ° W., 105 lks. dist., marked T 18 N R 7 W S 12 BT.
- A juniper, 25 ins. in diam., brs. N. 21 $\frac{1}{2}$ ° W., 104 lks. dist., marked T 18 N R 7 W S 1 BT.

At 2.63 chs. S. of this cor., wire fence, brs. N. 20° W. and S. 20° E.

Survey of a portion of the E. bdy. of fracl. T.18 N. R.7 W. 5

Chains.

The closing cor. of secs. 6 and 7, T.18 N., R.6 W., is established at 5.23 chs. S. of this cor. as described in Book "E."

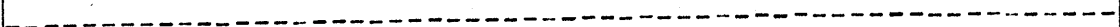
Land, mountainous and level.

Soil, rocky, 4th rate.

Timber, dense pine, cedar and juniper.

Undergrowth, dense oak brush, catclaw and greasewood.

Good grass.



Resurvey of a portion of the Boundary of
Luis Maria Baca Float No. 3, (East line).

6
Chains.

The boundary of the Luis Maria Baca Float No. 5 was surveyed by G. Burton Foster, U.S.D.S. in 1877. The portion of fractional T. 18 N., R. 7 W., surveyed under Group 104, is bounded on the west by the 21st and 22nd miles of said Float Bdy. The 21st mile was retraced by David W. Eaton, U.S.T. in 1918, and no other retracement or resurvey of said mile is of record. There is no record of any retracement or resurvey of the 22nd mile.

Retracement for Resurvey.

From the original 21 mile monument, hereinafter described, S. 2° 03' W., as per Eaton's record of retracement, on random line on 21st mile of Float boundary.

25.70 Fall 8 lks. W. of the closing cor. of frac. Ts. 18 and 19 N., R. 7 W., hereinafter described.

True course and dist. of line back to 21 mile mon. are therefore N. 1° 53' E., 25.70 chs.

Continue line and measurement.

79.51 Fall 23 lks. W. of the original 22 mile monument hereinafter described.

True course and dist. of line back to 21 mile mon. are therefore N. 1° 53' E., 79.51 chs.

Thence,

S. 1° 53' W., as per course developed by retracement described above, on random line, on 22nd mile of Float boundary.

79.07 Fall 7 lks. W. of the original 23 mile monument, hereinafter described.

True course and dist. of line back to 22 mile mon. are therefore N. 1° 50' E., 79.07 chs.

Resurvey.

The original 23 mile monument is a wood post, 3 ins. square marked "BLV 23M" on W. face, and firmly set in a mound of earth. No accessories.

Alongside old post, set an iron post, 3 ft. long, 2 ins. in diam., 18 ins. in the ground, to bed rock, supported in a mound of stone for 23 mile monument, marked on brass cap,

LMBF
No. 5
23 M

1920

from which, trees are marked:

A pine, 6 ins. diam., brs., S. 37½° W., 31 lks. dist., marked "L M B F No. 5 23 M BT."

A cedar, 10 ins. diam., brs., N. 70¼° W., 47 lks. dist., marked "L M B F No. 5 23 M B T."

Thence,

N. 1° 50' E., on a true line, on 22nd mile of Baca Float Bdy.

Over mountainous land, thru, dense timber and undergrowth. Descend 180 ft., over NE. slope.

25.66 Gulch, course NW. Ascend 175 ft., over SW. slope.

33.75 Spur, slopes W. Descend 215 ft., over NW. slope.

40.50 Gulch, course W. Ascend 110 ft., over SW. slope.

47.80 Spur, slopes W. Descend 30 ft. over NW. slope, to

52.84 Intersect closing cor. of secs. 1 and 12, hereinafter described, at head of gulch, course NE.

Continue line and measurement.

Ascend 215 ft., over S. slope.

Resurvey of a portion of
Luis Maris Baca Flat No. 5, (E. line).

Chains.	
69.40	S. rim of mesa, bears E. and W. Leave mountainous and enter level land.
79.07	<p>Thence over mesa, thru. dense timber and undergrowth.</p> <p>Intersect the original 22 mile monument, which is a wood post, 3 ins. square, marked BLV-22M on W. face, firmly set in mound of earth and stone, and witnessed by the original bearing tree, a pine 25 ins. in diam., N. 36° E. 50 lks. dist., marked BLV 22MBT.</p> <p>This tree being dead, establish new bearing tree as follows:</p> <p style="padding-left: 40px;">An oak, 22 ins. diam., brs., S. 72° W., 30 lks. dist., marked LMBF No. 5 22 M BT.</p>
	<p>Land, mountainous and level.</p> <p>Soil, rocky, 4th rate.</p> <p>Timber, dense pine, cedar and juniper.</p> <p>Undergrowth, dense oak brush, catclaw and greasewood.</p> <p>Good grass.</p>

	<p>From 22 mile monument, N. 1° 53' E. on a true line on 21st mile of Baca Flat bdy. Over mountainous land, thru. dense timber and undergrowth across top of mesa.</p>
8.36	N. rim of mesa, brs. E. and W. Leave level and enter mountainous land. Descend 110 ft. over N. slope.
17.40	Gulch, course NW. Ascend 107 ft., over SW. slope.
20.90	Spur, slopes NW. Descend 115 ft., over NE. slope.
35.57	Gulch, course NW. Ascend 131 ft., over SW. slope, to
49.00	Rim of mesa, brs. NW. and SE. Leave mountainous land and enter rolling land on top of mesa.
53.81	<p>Intersect the original closing cor. of fracl. Ts. 18 and 19 N., R. 7 W., which is an iron post 3 ins. in diam., projecting 12 ins. above ground, firmly set, properly marked on brass cap, and witnessed by a mound of stone E. of cor., and a pine, 20 ins. in diam., S. 54° E., 38 lks. dist., marked properly.</p> <p>Continue line and measurement.</p>
	Over rolling land on top of mesa, bearing NW. and SE.
61.50	Rim of mesa, brs. NW. and SE. Leave rolling and enter mountainous land. Descend 70 ft. over NE. slope.
69.50	Gulch, course W. Ascend 80 ft., over S. slope, to
79.51	<p>Intersect the original 21 mile monument, which is a limestone 12x12x4 ins. above ground, firmly set, marked BLV 21M on W. face, and witnessed by a pine tree, 12 ins. in diam., N. 6° W., 81 lks. dist., marked BLV 21MBT.</p> <p>Land, level, mountainous and rolling.</p> <p>Soil, rocky, 4th rate.</p> <p>Timber, dense, pine, cedar and juniper.</p> <p>Undergrowth dense brush, catclaw and greasewood.</p> <p>Good grass.</p>

8 Survey of a portion of Subdivision lines of fracl. T.18 N. R. 7 W.

Chains.

From the cor. of secs. 1 and 12, on E. bdy. of Tp., hereinbefore described,

West, on a true line, bet. secs. 1 and 12.

Over level land, on top of mesa, thru. dense timber and undergrowth.

3.00 Fence, brs. SE. and NW.

18.40 W. rim of mesa, brs. N. and S. Leave level and enter mountainous land. Descend 285 ft., over W. slope, to closing cor.

28.00 Fence, brs. N. and S.

31.05 Intersect the E. line of the bdy. of the Luis Maria Baca Float No. 5, which forms the W. bdy. of this fractional Tp., at a point 26.23 chs. S. 1°50' W., from 22 mile monument, hereinbefore described.

At point of intersection, set an iron post, 3 ft. long, 2 ins. in diam., 16 ins. in the ground to bed rock, supported in a mound of stone, for closing cor. of secs. 1 and 12, marked on brass cap,

LMBF No. 5	T18N	CC
	S 1	
	S12	
	R7W	

1920

from which,

A pinyon, 10 ins. in diam., brs. N. 51° E., 12 lks. dist., marked T18N R7W S 1 CC BT.

A pinyon, 8 ins. in diam., brs. S. 55° E., 26 lks. dist., marked T18N R7W S12 CC BT.

Land, level and mountainous.

Soil, rocky, 4th rate.

Timber, dense pine cedar and juniper.

Undergrowth, dense oak brush, catclaw and greasewood.

Good grass.

The continued satisfactory adjustment of the solar apparatus during the resurveyed portion of the lines before described, is indicated from field tests described in Book "G" of this group.

Boundaries of fracl. Sec. 1, Fracl. T. 18 N., R. 7 W.
Latitudes, Departures and Closing Errors.

Line designated.	True course.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
Subdivision line 1/12	West,	31.05				31.05
West bdy. of Tp., (Bdy. of Luis Maria Baca Float No. 5)	N. 1°50' E.	26.23	26.22		.84	
	N. 1°53' E.	53.81	53.78		1.77	
North bdy. of Tp.,	East,	28.63			28.63	
East bdy. of Tp.,	South,	80.00		80.00		
Convergency,					.01	
<u>Totals,</u>			80.00	80.00	31.25	31.05
			80.00		31.05	
<u>Error in latitude,</u>			.00			
<u>Error in departure,</u>					.20	

GENERAL DESCRIPTION.

This township is rendered fractional by conflict with the Luis Maria Baca Float No.5. The portion of this township subdivided under this group, as described in the foregoing notes, consists of level mesas, separated by broken mountainous land in the gulches. A dense growth of pine, cedar and juniper timber, and a dense undergrowth of buck brush, catclaw and greasewood covers the surveyed area. The soil is rocky, 4th rate, but supports a good growth of grass, suitable for grazing. There is no permanent running water. There are no signs of valuable mineral deposits. There are no settlers. A fence is the only improvement. No road traverses this part of the township.

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FIELD ASSISTANTS.
to Otis Ross, U. S. Surveyor.

NAMES.	CAPACITY.
See Book "A"	

CERTIFICATE OF UNITED STATES SURVEYOR.

I, Otis Ross, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 104, Arizona, bearing date of the 15th day of October, 1919, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, ^{re-} surveyed all those parts or portions of the East boundary of the Luis Maria Baca Float No. 5, and surveyed all those parts or portions of the the East boundary, and Subdivision lines of

Fractional Township 18 North, Range 7 West,

of the Gila and Salt River

Base and Meridian, in the State of Arizona, which are represented in and by diagram on page 2 hereof the foregoing field notes, as having been executed by me, and under my direction; and that all the corners of resurvey and said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General, for Group 104, Arizona,

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

Place Juneau, Alaska
Date Nov 29 1921



U. S. Surveyor.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz. December 10, 1921.

The foregoing field notes of the ^{re-} survey of part of the East boundary of the Luis Maria Baca Float No. 5 (21M to 23M), and of the survey of part of the East boundary, and part of the Subdivision lines of

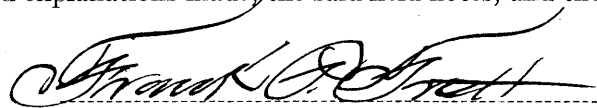
Fractional Township 18 North, Range 7 West,

of the Gila and Salt River Base and Meridian,

in the State of Arizona,

executed by Otis Ross, U. S. Surveyor,

under his special instructions dated October 15, 1919 for Group 104, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys resurveys and they describe, are hereby approved.



U. S. 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.~~