

2166

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Book L.

Accepted, letter E. May 4-1910

BOOK 2166

FIELD NOTES

OF THE SURVEY OF THE

2166

2166 East Boundary of T. 22 S. R. 22 E.

East Boundary of T. 21 S. R. 22 E.

Frac. South Boundary of T. 21 S. R. 22 E.

2166

Of the Gila & Salt River Base & Meridian,
Arizona.

AS SURVEYED BY

Jesse B. Wright, United States Deputy Surveyor,

Under his Contract No. 154, dated February 9th, 1909

Survey commenced May 19, 1909

Survey completed May 22, 1909

6-151

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BOOK 2166

NAMES AND DUTIES OF ASSISTANTS.

Walter Percival Choinnon

Robt H. Fitzpatrick. "

Harvey Marsh Woodman.

Harry William Kusen Benson

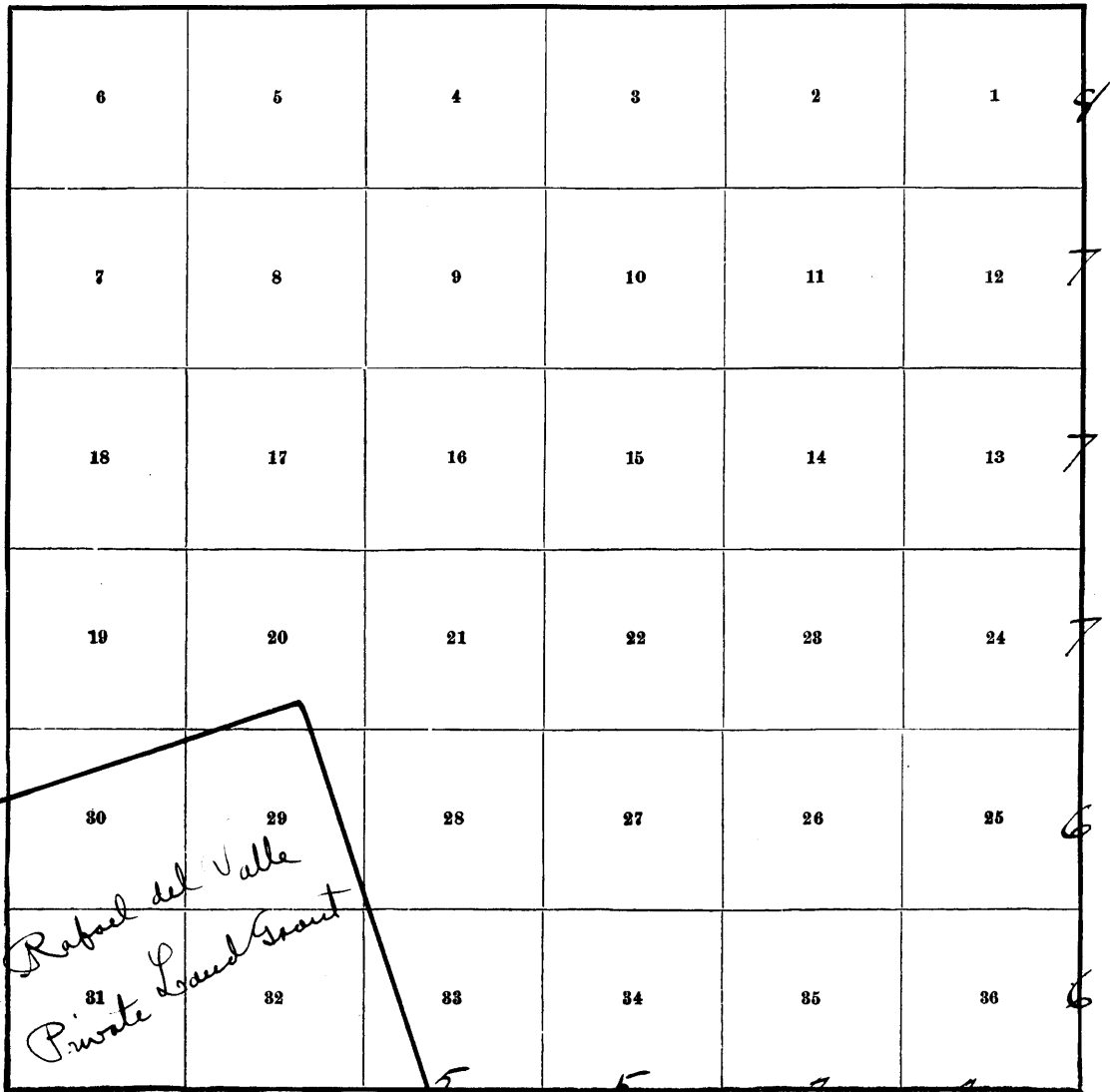
Robt. Fitzpatrick Jr. Flagman

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BOOK 2166

INDEX DIAGRAM.

Township 21 South, Range 22 East



San Rafael del Valle
Private Land Grant

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Walter Percival and Robt H Fitzpatrick
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 E. by T 22. S. R. 22 E., E & from S. by T 21 S. R. 22 E.

Walter Percival Chainman.
Robert H Fitzpatrick Chainman.

Subscribed and sworn to before me this 19th
day of May, 1909



Jesse B Wright
U.S. Deputy Surveyor

WE, Harvey Marsh 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 E. by T 22. S. R. 22 E., E & from S. by T 21 S. R. 22 E.

Harvey Marsh Moundman.
_____, Moundman.

Subscribed and sworn to before me this 19th
day of May, 1909



Jesse B Wright
U.S. Deputy Surveyor

WE, Harry William Huesen 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 E. by T 22. S. R. 22 E., E & from S. by T 21 S. R. 22 E.

Harry William Huesen Axman.
_____, Axman.

Subscribed and sworn to before me this 19th
day of May, 1909



Jesse B Wright
U.S. Deputy Surveyor

I, Robert Fitzpatrick Jr., 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 E. by T 22 S. R. 22 E., E & from S. by T 21 S. R. 22 E.

Robert Fitzpatrick Jr. Flagman.

Subscribed and sworn to before me this 19th
day of May, 1909



Jesse B Wright
U.S. Deputy Surveyor

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East Boundary of T. 22 S. R. 22 E.

Chains

Survey begun May 19, 1909, and executed with a Young & Son's light mountain transit No. 6492, with Smith's patent solar attachment on side. The horizontal limb of the instrument is provided with two double verniers placed opposite to each other and each reading to 1' of arc, which is also the least reading of the latitude and declination arcs of the solar. I examine and test carefully the levels, the line of collimation and standards of the instrument and find same correct. I also examine and test the latitude arc, the declination arc and hour circle of the solar attachment and find same in correct adjustment. Then, to test the solar apparatus by comparing the results of solar observations for meridian made during a.m. & p.m. hours with a true meridian determined by observations on Polaris, I proceed as follows: At 5h p.m., l.m.t., at the Cor. of Tps. 22 & 23 S. Rs. 22 & 23 E., which is a limestone 10x10x10 ins. above ground, marked and witnessed as described by the Surveyor General, Lat. 31° 27' 37" N. Long. 110° 04' 12" W., I set off 19° 49' N. on the decl. arc and 31° 27' 30" N. on the lat. arc and determine a meridian with the solar, and mark a point in the meridian thus determined by a tack in a stake driven firmly in the ground 6 chs. N. of my station.

May 20, 1909,
At 3h 41m a.m., l.m.t., I observe Polaris at Eastern Elongation in accordance with instructions in the "Manual, and mark a point in the line thus determined by a cross on a fixed stone 6 chs. N. of my station
At 6h a.m., l.m.t., I set off the azimuth of Polaris, 1° 23' to the West, and mark a point in the true meridian thus determined by a tack in the stake 6 chs. N. of my station, which point falls 1/8 in. E. of the line as given by the solar on preceding evening.
At 7h a.m., l.m.t., I set off 19° 56' 30" N. on the decl. arc and 31° 27' 30" N. on the lat. arc and determine a meridian with the solar, which line coincides with the meridian determined by Polaris observations. Therefore I conclude that the adjustments of the instrument are satisfactory,
The magnetic bearing of the true meridian at 7h a.m. is N. 13° 30' W., The angle thus determined gives the magnetic declination as 13° 30' E.
I set a large flag on the Tp. Cor. above described, and run thence, for precision, by back & fore sights, North, bet. secs. 31 & 36 on range line.
Var. 13° 30' E.

- Over rolling land, through dense tesseta & greasewood. & scattering mesquite.
- 20.33 Dry wash 30 lks. wide, course W.
 - 26.50 Draw, 3 chs. wide, course W.
 - 40.00 Set a limestone 24x15x8 ins. 18 ins. in the ground for 1/4 Sec. Cor., marked 1/4 on W. face, and dig pits 18x18x12 ins. N. & S. of stone 3 ft. dist., and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor. No bearings available.
 - 47.25 Old wood road, brs. NW. & SE.
 - 63.10 Wash 30 lks. wide, course NW. Asc. grad. through dense black brush.
 - 80.00 Top of rise, Set a limestone 20x15x10 ins. 15 ins. in ground for Cor. of Secs. 25, 30, 31 & 36, marked with 1 notch on S. and 5 notches on N. edges, and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor. No bearings available. Land, rolling. Soil, 2nd & 3rd rate, sandy. No timber. Undergrowth, tesseta, greasewood, mesquite, black brush. Rolling land covered with dense undergrowth 80.00 chs.

East Boundary of T. 22 S. R. 22 E.

Chains	
	North, bet. secs. 25 & 30. Over rolling land desc. grad. through dense blackbrush.
7.00	Wash 20 lks. wide, course W.
12.00	Wash 30 lks. wide, course W. asc.
26.00	Top of rise, desc.
38.00	Canyon 120 lks. wide, 40 ft. deep, course W.N.W. asc. grad.
40.00	Set a limestone 24x12x10 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. Cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available. Enter very dense tesseta, and blackbrush through which I chain with great difficulty.
42.00	Top of rise, desc, grad. over broken ground.
55.00	Desc. abrupt 30 ft.
56.20	Main Canyon from mountains, course West.
57.20	Asc. abrupt 30 ft., thence over very broken ground.
60.00	Leave dense undergrowth, brs. E. & W. Begin steep asc. over limestone ledges on SW. slope of mountain, with great difficulty.
79.00	Top of high limestone ridge, 500 ft. above $\frac{1}{4}$ sec. cor., brs. E. & W., Extends west about 30 chs.
80.00	Set a limestone 24x10x10 ins. 10 ins. in the ground to bedrock in mound of stone for Cor. of Secs. 24, 25, 19 & 30, marked with 2 notches on S. & 4 notches on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Land, rolling, mts. Soil, 2nd 3rd & 4th rate, sandy, stony. No timber. Undergrowth, tesseta, blackbrush, greasewood, paloverde, palmeo, ocotillo mesquite. scrub oak. Land covered with dense undergrowth, 40.00 chs. Mts. land or land covered with dense undergrowth, and exceptionally difficult to survey, 40.00 chs.
	North bet. secs. 24 & 19. Over mts. land desc. with great difficulty, over rough limestone ledges.
9.00	Gulch 50 lks. wide, course NE.
28.50	Same gulch, course NNW.
36.25	Gulch 30 lks. wide, course NW.
40.00	Foot of main slope., brs. NW. & SE. Set a limestone 20x12x12 ins. 15 ins. in ground for $\frac{1}{4}$ Sec. Cor. marked $\frac{1}{4}$ on W. face and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available. Desc. grad. over rolling land through dense blackbrush and greasewood.
47.75	Wood road, brs. NE. & SW.
56.00	Draw, 2 chs. wide course W.
80.00	Set a limestone 15x10x10 ins. 10 ins. in ground for Cor. of secs. 13, 18, 24 & 19., marked with 3 notches on N. & S. edges and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available. Land, mts., rolling. Soil, 2nd, & 3rd rate, stony, gravelly. No timber. Undergrowth, blackbrush, greasewood, mesquite, ocotillo, paloverde, palmeo, scrub oak. Mts. land exceptionally difficult to survey, ... 40.00 chs. Land covered with dense undergrowth, 40.00 chs. At this cor. at noon, I set off $19^{\circ} 58' 30''$ N! on the decl. arc and observe the sun on the meridian, The resulting lat. is $31^{\circ} 30' N$.

East Boundary of T. 22 S. R. 22 E.

Chains North, bet. secs. 13 & 18,
 Over rolling land through dense tesseta, & mesquite.
 15.60 Grassy draw 2 chs. wide, course W.
 23.00 Wash 30 lks. wide, course WNW.
 26.00 Main wash 50 lks. wide, course W.
 40.00 Set a granite stone 24x15x15 ins. 18 ins. in ground for
 1/4 sec. cor. marked 1/4 on W. face and raise a mound of stone
 2 ft. base 1 1/2 ft. high W. of cor. No bearings available.
 Enter very dense mesquite & tesseta.
 61.05 Main road, brs. E. & W., Bisbee to Lewis Springs.
 80.00 Set a granite stone 20x10x10 ins. 15 ins. in ground for
 Cor. of secs. 7, 12, 13 & 18, marked with 4 notches on S. &
 2 notches on N. edges, dig pits 18x18x12 ins. in each sec.
 5 1/2 ft. dist. and raise a mound of earth 4 ft. base 2 ft.
 high W. of cor. No bearings available.
 Land, rolling. Soil, 2nd rate, sandy, gravelly.
 No timber. Undergrowth, dense mesquite, tesseta,
 blackbrush, greasewood. Very dense last 1/2 mile.
 Land covered with dense undergrowth, 40.00 chs.
 Land covered with dense undergrowth,
 and exceptionally difficult to survey, 40.00 chs.

North bet. secs. 7 & 12.
 Over rolling land through dense greasewood & black brush.
 6.20 Road, brs. NE. & SW.
 40.00 Set a granite stone 20x10x8 ins. 15 ins. in ground for
 1/4 sec. cor. marked 1/4 on W. face and raise a mound
 of stone 2 ft. base 1 1/2 ft. high W. of cor.
 No bearings available.
 53.35 Road, brs. NW. & SE.
 54.00 Telephone line, brs. N. 48° 38' W. & S. 48° 38' E.
 80.00 Set a quartzite stone 20x10x10 ins. 15 ins. in ground for
 Cor. of Secs. 1, 6, 7 & 12, marked with 5 notches on S. &
 1 notch on N. edges and raise a mound of stone 2 ft. base
 1 1/2 ft. high W. of cor. No bearings available.
 Land rolling. Soil, 2nd rate, sandy.
 No timber. Undergrowth, mesquite, greasewood, black brush
 tesseta, palneo.
 Land covered with dense undergrowth, 80.00 chs.

North bet. secs. 1 & 6.
 Over rolling land through dense mesquite brush.
 30.00 Stony wash 3 chs. wide, Course WNW. asc. grad.
 40.00 Top of rise,
 Set a quartzite stone 24x12x10 ins. 6 ins. in ground to
 bedrock in mound of stone for 1/4 sec. cor., marked
 1/4 on W. face and raise a mound of stone 2 ft. base 1 1/2
 ft. high W. of cor.
 No bearings available.
 40.20 Old road, brs. NNW. & SSE. runs through Tp. to N.
 80.00 Set a granite stone 24x15x12 ins. 18 ins. in ground for
 Cor. of Tps. 21 & 22 S. Rs. 22 & 23 E., marked with
 6 notches on each edge, and raise a mound of stone
 4 ft. base 3 ft. high S. of Cor.
 No bearings available. Pits impracticable.
 Land, rolling. Soil, 2nd rate, sandy, gravelly.
 No timber. Undergrowth, mesquite, tesseta, black brush.
 Land covered with dense undergrowth, 80.00 chs.

General Description.

This line runs over a rolling mesa, covered with dense
 undergrowth, crossing the West point of the Mts. to the E.
 The soil is dry and gravelly. No water on the line.
 Some mesquite timber is found in the main washes.
 Part of the land to the E. & W. is good grazing land.
 May 20, 1909.

Jesse B. Wright
 U.S. Deputy Surveyor.

Frac. South Bdy. T. 21 S. R. 22 E.

Chains	<p>May 21, 1909.</p> <p>At 7h a.m., l.m.t., at the Cor. of Tps. 21 & 22 SRs. 22 & 23 E. recently established by me and heretofore described, I set off 20° 9' N. on the decl. arc and 31° 33' N. on the lat. arc and determine a true meridian with the solar, Thence I run, as per instructions, West, on a true line bet. secs. 1 & 36.</p> <p>Over rolling land desc. grad. through dense mesquite, brush, Old road, brs. NNW. & SSE.</p> <p>14.00</p> <p>40.00 Set a sandstone 24x15x12 ins. 18 ins. in 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. No bearings available. Thence through very dense mesquite, with great difficulty.</p> <p>70.25 Wash 30 lks. wide, course NW.</p> <p>80.00 Set a granite stone 24x12x8 ins. 18 ins. in ground for Cor. of Secs. 1, 2, 35 & 36, marked with 1 notch on E. & 5 notches on W. edges? and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of Cor. No bearings available.</p> <p>Land rolling., Soil, 2nd & 3rd rate, sandy, gravelly. Timber, some mesquite in main wash. Undergrowth, mesquite, tesseta, greasewood. Land covered with dense undergrowth, ... 40.00 chs. Land covered with dense undergrowth, and exceptionally difficult to survey, ..40.00 chs.</p> <hr/> <p>West bat. secs. 2 & 35.</p> <p>Over rolling land through dense mesquite, tesseta, & blackbrush, with great difficulty.</p> <p>1.50 Wash 50 lks. wide, in draw 4 chs. wide, course WNW. asc.</p> <p>4.00 Top of bank, desc. over stony ground.</p> <p>8.00 Wash 40 lks. wide, course WNW. asc.</p> <p>10.45 Road, brs. NW. & SE. Bisbee to Charleston.</p> <p>13.00 Telephone line Bisbee to Fairbanks, brs. NW. & SE.</p> <p>30.00 Draw 6 chs. wide, course WSW.</p> <p>40.00 Set a sandstone 24 x15 x10 ins. 18 ins. in 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. No bearings available.</p> <p>60.00 Enter draw, brs. WNW., 3 chs. wide, & heavy mesquite.</p> <p>80.00 Set a sandstone 20x15x10 ins. 15 ins. in ground for Cor. of Secs. 2, 3, 34 & 35, marked with 2 notches on E & 4 notches on W. edges and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. from which,</p> <p>A mesquite tree 6 ins. diam. brs. S. 42$\frac{1}{2}$° E. 85 lks. dist., marked T. 22 S. R. 22 E. S. 2 B.T.</p> <p>A mesquite tree 6 ins. diam. brs. S. 28$\frac{1}{2}$° W. 26 lks. dist., marked T. 22 S. R. 22 E. S. 3 B.T.</p> <p>A mesquite tree 6 ins. diam. brs. N. 65$\frac{1}{4}$° W. 60 lks. dist., marked T. 21 S. R. 22 E. S. 34 B.T.</p> <p>No other bearings available.</p> <p>Land, rolling, broken. Soil, 2nd & 3rd rate, sandy, gravelly, clayey. Timber, some mesquite in washes. Undergrowth, mesquite, tesseta, blackbrush, greasewood. Land covered with dense undergrowth and exceptionally difficult to survey, 80.00 chs. At this Cor. at noon, I set off 20° 11' N. on the decl. arc and observe the sun on the meridian. The resulting lat. is 31° 33' N.</p>
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Frac. South Bdy. of T. 21 S. R. 22 E.

Chains

West bet. Secs. 3 & 34.
 Over rolling land desc. grad. in draw, through dense heavy mesquite with great difficulty.
 20.00 Leave draw & dense mesquite, brs. NW. & SE.
 Asc. grad. through dense tesseta & blackbrush.
 40.00 Set a sandstone 18x10x10 ins. 12 ins. in 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.
 No bearings available.
 Desc. grad. over somewhat broken ground.
 80.00 Set a pine post 4x4 ins. 3 ft. long 2 ft. in ground for Cor. of secs. 3, 4, 33 & 34, marked,
 T. 21 S. S. 34 on NE.,
 R. 22 E. S. 3 on SE.,
 T. 22 S. S. 4 on SW., and
 R. 22 E. S. 33 on NW. faces with 3 notches on E. & W. faces, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
 No bearings available.
 Land, rolling. Soil, 2nd & 3rd rate, sandy, gravelly, stony,
 Timber, some mesquite. Undergrowth, mesquite, tesseta blackbrush, greasewood.
 Land covered with dense undergrowth, 60.00 chs.
 Land covered with dense undergrowth, and exceptionally difficult to survey, 20.00 chs.

West, bet. secs. 4 & 33 .
 Over rolling land desc. grad., through dense mesquite brush.
 30.00 Road, brs. NW. & SE.,
 35.00 Draw 2 chs. wide, course NW.
 40.00 Set a granite stone 24x12x10 ins. 18 ins. in ground for $\frac{1}{4}$ Sec. Cor. marked $\frac{1}{4}$ on N. face from which,
 A mesquite tree 6 ins. diam. brs. N. $53\frac{1}{4}^{\circ}$ W. 360 lks. dist., marked $\frac{1}{4}$ S. 33 B.T.
 A mesquite tree 4 ins. diam. brs. S. $14\frac{1}{2}^{\circ}$ W. 230 lks. dist., marked $\frac{1}{4}$ S. 4 B.T.
 58.00 Intersect E. Bdy. of San Rafael del Valle Grant, at pt. whence, $3\frac{1}{2}$ mile Cor. of Grant ^{marked and set as above} brs. S. $15^{\circ} 31' 30''$ E. 2.16 chs. dist.
 Set a quartzite stone 24x15x10 ins. 18 ins. in ground for Closing Cor. of Secs. 4 & 33, marked
 C.C. R. 22 E. on E.,
 S.R.D.V. on W., and with
 6 grooves on N. & S. faces, and
 raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high E. of cor.
 No bearings available.
 Land, rolling. Soil, 2nd & 3rd rate, sandy, gravelly.
 No timber.
 Undergrowth, mesquite, tesseta, greasewood,
 Land covered with dense undergrowth, 58.00 chs.

General Description.

The Frac. S. Bdy. of this Tp. runs over a somewhat broken, & rolling mesa, covered with dense mesquite, black brush, and greasewood. There is some mesquite timber in the larger washes, and good grass in the draws.
 No water found at any point on this line.

May 21, 1909.

Jesse B. Wright
 U.S. Deputy Surveyor.

East Boundary of T. 21 S. R. 22 E.

Chains	
	<p>May 22, 1909, I again examine and test carefully all the adjustments of my transit and find same satisfactory. At 7h a.m., l.m.t., at the Cor. of Tps. 21 & 22 S. Rs. 22 & 23 E. as recently established by me and heretofore described, I set off 20° 21' N. on the decl. arc and 31° 33' N. on the lat. arc and determine a true meridian with the solar, which line agrees with the line of the E. Bdy. of Tp. 22 S. R. 22 E., which was run by back and fore sights from a true meridian established by Polaris observations.</p> <p>Thence I run,</p> <p>as per instructions,</p> <p>North, on range line bet. Secs. 36 & 31.</p> <p>Var. 13½° E.</p> <p>Over rolling land, through dense mesquite brush.</p> <p>40.00 Set a quartzite stone 20x15x10 ins. 15 ins. in ground for ¼ Sec. Cor. marked ¼ on W. face and raise a mound of stone 2 ft. base 1½ ft. high W. of Cor.</p> <p>No bearings available.</p> <p>60.00 Edge of mesa, brs. E. & W. desc. through very dense mesquite with great difficulty.</p> <p>62.00 Enter draw, course NW.</p> <p>65.00 Wash 1 ch. wide, course WNW.</p> <p>80.00 Set a sandstone 24x12x6 ins. 18 ins. in ground for Cor. of Secs. 25, 30, 31 & 36, marked with 1 notch on S. & 5 notches on N. edges, and raise a mound of stone 2 ft. base 1½ ft. high W. of cor. from which, A mesquite tree 4 ins. diam. brs. N. 29° E. 46 lks. dist., marked T. 21 S. R. 23 E. S. 30 B.T.</p> <p>No other bearings available.</p> <p>Land, rolling.</p> <p>Soil, 2nd rate, sandy, gravelly.</p> <p>No timber. Undergrowth, mesquite, tesseta.</p> <p>Land covered with dense undergrowth, 60.00 chs.</p> <p>Land covered with dense undergrowth, and exceptionally difficult to survey, 20.00 chs.</p>

	<p>North bet. Secs. 25 & 30.</p> <p>Over rolling land, through dense mesquite brush.</p> <p>2.65 Main wash from mts. to E., 150 lks. wide, course W.</p> <p>3.20 Asc. abrupt 12 ft.</p> <p>4.60 Top of mesa, brs. brs. E. & W.</p> <p>10.00 Leave mesquite, brs. E. & W. enter dense black brush and greasewood.</p> <p>40.00 Set a sandstone 15x10x10 ins. 10 ins. in ground for ¼ Sec. Cor. marked ¼ on W. face, dig pits 18x18x12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high W. of Cor.</p> <p>No bearings available.</p> <p>80.00 Set a sandstone 15x12x12 ins. 10 ins. in ground for Cor. of Secs. 24, 19, 25 & 30, marked with 2 notches on S. & 4 notches on N. edges and raise a mound of stone 2 ft. base 1½ ft. high W. of cor.</p> <p>No bearings available.</p> <p>Land, rolling.</p> <p>Soil, 2nd & 3rd rate, sandy, gravelly.</p> <p>No timber.</p> <p>Undergrowth, mesquite, greasewood, black brush, tesseta.</p> <p>Land covered with dense undergrowth, 80.00 chs.</p>
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East Boundary of T. 21 S. R. 22 E.

Chains	
	<p>North bet. secs. 24 & 19. Over rolling land through dense greasewood, tesseta, and blackbrush.</p>
40.00	<p>Set a limestone 20x12x10 ins. 15 ins. in ground for $\frac{1}{4}$ Sec. Cor. marked $\frac{1}{4}$ on W. face and dig pits 18x18x12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of Cor. No bearings available.</p>
80.00	<p>Set a limestone 20x10x6 ins. 15 ins. in ground for Cor. of Secs. 13, 18, 19, & 24, marked with 3 notches on N. & S. edges, and raise a mound of stone 4 ft. base 2 ft. high W. of Cor. No bearings available. Land, rolling. Soil, 2nd & 3rd rate, sandy. No timber. Undergrowth, mesquite, tesseta, blackbrush, greasewood. Land covered with dense undergrowth, ... 80.00 chs. At this Cor. at noon, I set off $20^{\circ} 23' N$, on the decl. arc and observe the sun on the meridian. The resulting lat. is $31^{\circ} 35' 30'' N$.</p>
	<p>North bet. secs. 13 & 18.</p>
30.70	<p>Over rolling land through dense greasewood & blackbrush. Dim road, brs. NW. & SE.</p>
40.00	<p>Set a limestone 15x10x8 ins. 10 ins. in ground for $\frac{1}{4}$ Sec. Cor. marked $\frac{1}{4}$ on W. face and raise a mound of stone covered with earth 4 ft. base 2 ft. high W. of Cor. No bearings available.</p>
50.00	<p>Desc.</p>
55.00	<p>Wash 30 lks. wide, course W. asc.</p>
58.00	<p>Top of mesa, brs. E. & W.</p>
67.85	<p>Road, brs. NE. & SW.</p>
80.00	<p>Set a limestone 24x12x8 ins. 18 ins. in ground for Cor. of Secs. 12, 13, 7 & 18, marked with 2 notches on N. & 4 notches on S. edges and raise a mound of stone covered with earth 4 ft. base 2 ft. high W. of Cor. No bearings available. Pits impracticable. Land, rolling. Soil, 2nd & 3rd rate, sandy, gravelly. No timber. Undergrowth, blackbrush, greasewood, mesquite, tesseta. Land covered with dense undergrowth, 80.00 chs.</p>
	<p>North bet. Secs. 7 & 12.</p>
40.00	<p>Over rolling land, through dense blackbrush & scattering mesquite. asc. grad. Set a limestone 24x15x8 ins. 18 ins. in ground for $\frac{1}{4}$ Sec. Cor. marked $\frac{1}{4}$ on W. face and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. from which, A mesquite tree 4 ins. diam. brs. S. $79^{\circ} W$ 48 lks. dist., marked $\frac{1}{4}$ S. 12 B.T. No other bearings available. Pits impracticable.</p>
80.00	<p>Set a limestone 18x12x6 ins. 12 ins. in ground for Cor. of Secs. 1, 6, 7 & 12, marked with 5 notches on S. & 1 notch on N. edges and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of Cor. No bearings available. Land, rolling. Soil, 2nd rate, gravelly. No timber. Undergrowth, mesquite, tessets, greasewood. Land covered with dense undergrowth, .. 80.00 chs.</p>

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East Boundary of T. 21 S. R. 22 E.

Chains
 North, bet. secs. 1 & 6.
 Over gently rolling land asc. grad. through dense blackbrush and greasewood & scattering mesquite.
 40.00 Set a limestone 18x10x6 ins. 12 ins. in ground for $\frac{1}{4}$ Sec. Cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of Cor.
 No bearings available.
 47.00 Top of knoll, brs. E. & W. desc.
 62.00 Wash 130 lks. wide, course W. asc. steep over very stony ground, with great difficulty.
 73.50 Top of rough limestone knoll, 200 ft. above $\frac{1}{4}$ Sec. cor., brs. E. & W. High point on same 6 chs. W. desc. steep.
 80.00 Foot of slope, enter grassy flat, brs. E. & W.
 86.12 Intersect 4th Standard Parallel North, at point whence $\frac{1}{4}$ Sec. Cor. on S. Bdy. Sec. 36 of T. 20 S. R. 22 E., mkd. & wit. as described by Sur. Gen. brs. E. S. 97 chs. dist.
 Set a limestone 18x12x12 ins. 12 ins. in ground for Closing Cor. of Tps. 21 S. Rs. 22 & 23 E., marked, C.C. T. 21 S. on S., and 6 grooves on E. & W. & S. faces and raise a mound of stone 3 ft. base 2 ft. high S. of Cor. from which,
 A mesquite tree 4 ins. diam. brs. S. $5\frac{1}{2}^{\circ}$ E. 225 lks. dist. marked T. 21 S. R. 23 E. S. 6 C.C.B.T.
 A mesquite tree 4 ins. diam. brs. S. 37° W. 4.00 chs. dist., marked T. 21 S. R. 22 E. S. 1 C.C.B.T.
 Land, rolling, mts,
 Soil, 3rd & 4th rate, gravelly, stony.
 No timber.
 Undergrowth, mesquite, greasewood, blackbrush, tesseta.
 Land covered with dense undergrowth, 68.12 chs.
 Mts. lan exceptionally difficult to survey, 18.00 chs.
 ,
 ,

Boundaries of T. 21 S. R. 22 E.
 Latitudes, Departures, and closing errors.

Lines Desig.	True bearing.	Distance.	Latitudes		Departures	
			N.	S.	E.	W.
S. Bdy.	East.	298.00			298.00	
E. Bdy.	North.	486.12	486.12			
N. Bdy.	West.	475.70				475.70
W. Bdy.	South.	351.42		351.42		
S.R. del. V.)	N. $76^{\circ}28'30''$ E	142.94	33.43		138.98	
P.L.G.)	S. $13^{\circ}31'30''$ E	173.34		168.53	40.54	
Convergency,						.44
			519.55	519.95	477.52	476.14
				519.55	476.14	
				.40	1.38	

General Description.

The E. Bdy. of this Tp. runs over a rolling plain, through a dense growth of mesquite, tesseta, and blackbrush. The soil, is a sandy loam or gravelly, and is dry. No water noted near the line. Good grass is found in some of the larger draws. No timber of any note on the line.

Having employed my assistants in the immediate vicinity of the work and as great delay and expense would have been incurred to appear before a Notary Public or other officer duly qualified to administer the necessary oaths, I was compelled to administer the preliminary and final oaths to my assistants.
 May 22. 1909.

Case B. Wright
 U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by *Jesse B. Wright*

_____ *J* _____, 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 _____

• *E by T22 S.R22 E, E & Soc S. by T21 S.R22 E*

showing the respective capacities in which they acted:

- _____ *Walter Percival* _____, Chainman.
- _____ *Robert H Fitzpatrick* _____, Chainman.
- _____ *Harvey Marsh* _____, Moundman.
- _____ _____, Moundman.
- _____ *Harry William Heisen* _____, Axman.
- _____ _____, Axman.
- _____ *Robert Fitzpatrick, Jr.* _____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted *Jesse B. Wright*

_____ *J* _____, United States Deputy Surveyor, in surveying all those parts or portions of the *E by T22 S.R22 E and S. by T21 S.R22 E*

_____ of the *Gila B.*
Salt River Base & meridian, *Terr.* _____ of *Arizona*, 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 *Arizona*

- _____ *Walter Percival* _____, Chainman.
- _____ *Robert H Fitzpatrick, Jr.* _____, Chainman.
- _____ *Harvey Marsh* _____, Moundman.
- _____ _____, Moundman.
- _____ *Harry William Heisen* _____, Axman.
- _____ _____, Axman.
- _____ *Robert Fitzpatrick, Jr.* _____, Flagman.

Subscribed and sworn to before me this *30th*
day of *May*, 190*9*

Frederick
U.S. Dep. Surveyor



10710

BOOK 2166

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Jesse B. Wright, 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 9th day of February, 1909, 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 East boundary of Twp 22 N R 22 E; the East and fractional South boundaries of Twp 21 N R 22 E of the Gila & Salt River Base & meridian, in the Terr 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.

Jesse B Wright
United States Deputy Surveyor.

Subscribed by said Jesse B Wright, and sworn to before me
this 5th day of June, 1909

[Signature]
U.S. Commissioner



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. Jan'y 20-1910, 190

The foregoing field notes of the survey of the East boundary of Twp 22 N R 22 E, the East and fractional South boundaries of Twp 21 N R 22 E, Gila and Salt River Base and Meridian, Arizona.

executed by Jesse B Wright, U.S. Dep. Sur
under his contract No. 154, dated July 9, 1909, 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.