

2174
4-679.

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SEP 7-1909

Accepted Dept. letter E
May 7-1910

Book E.

BOOK 2174

FIELD NOTES

OF THE SURVEY OF THE

2174 N.S. & E. Boundaries of T. 19 S. R. 25 E.

2174

Resurvey of a portion of W. bdy. T. 19 S, R. 23 E. and

Resurvey of a portion of W. bdy. T. 20 S. R. 23 E.

2174

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

AS SURVEYED BY

Jesse E. Wright, United States Deputy Surveyor,

Under his Contract No. 159, dated June 4, 1909

Survey commenced August 14, 1909

Survey completed August 17, 1909

6-161

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NAMES AND DUTIES OF ASSISTANTS.

Edgar M. Darnall, Chairman.

Santiago Vindiola, Chairman.

Guadalupe Pacheco, Moundman.

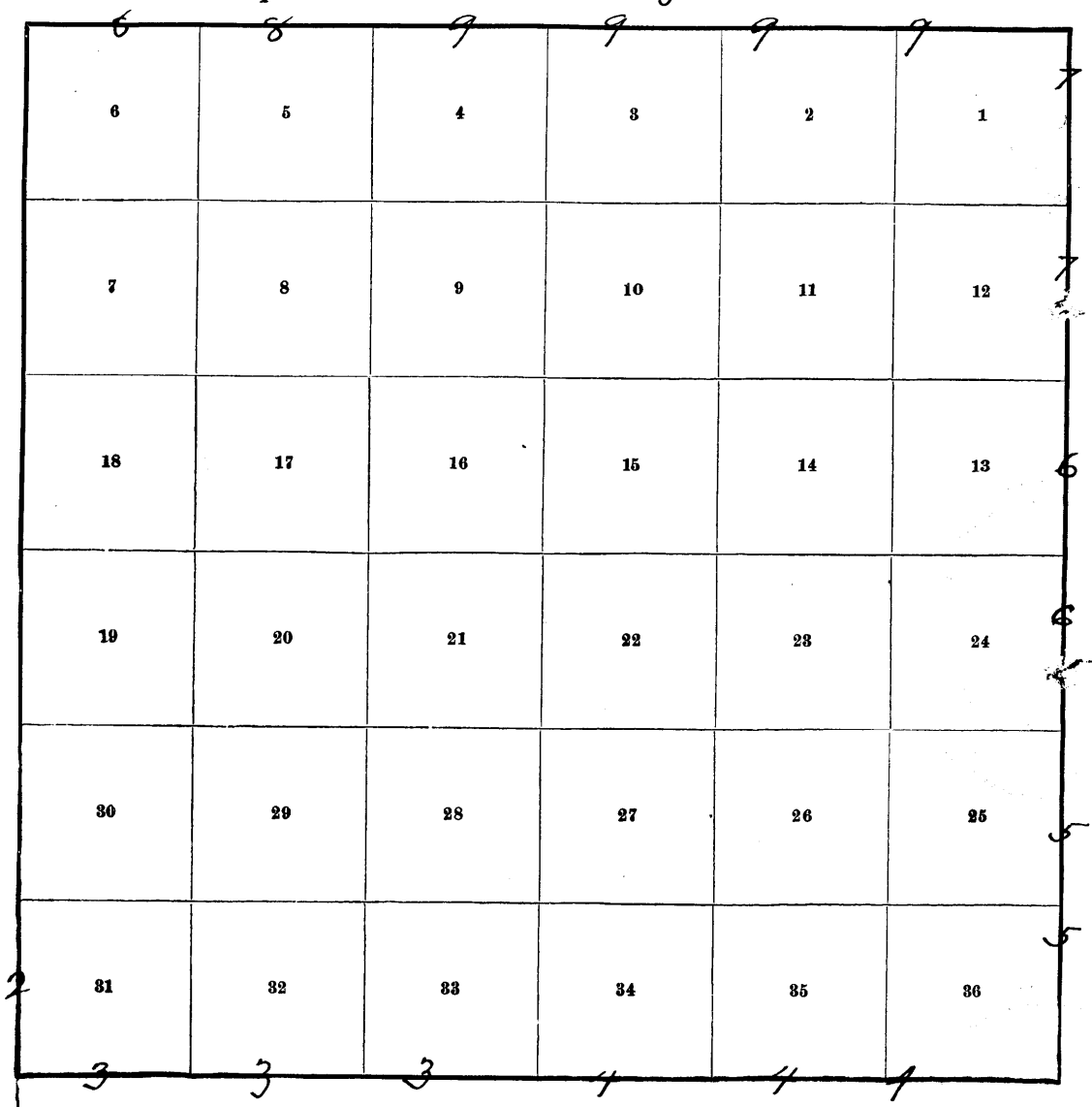
Allen A. Thompson, Axeman.

Manuel Vindiola, Flagman.

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BOOK 2174
INDEX DIAGRAM.

Boundaries
Township 19 South, Range 23 East



Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Edgar M. Darnall and Santiago Vindicola 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 Boundaries of T. 19 S. R. 23 E.

Edgar M. Darnall, Chainman.
Santiago Vindicola, Chainman.

Subscribed and sworn to before me this 7th day of August, 1909

My commission expires August 11, 1909

J. A. Fenstermaker
Notary Public

WE, Guadalupe Pacheco 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 Boundaries of T. 19 S. R. 23 E.

_____, Moundman.
Guadalupe Pacheco, Moundman.

Subscribed and sworn to before me this 7th day of August, 1909

My commission expires August 11, 1909

J. A. Fenstermaker
Notary Public
and Allen A. Thompson

WE, _____ and Allen A. Thompson 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 Boundaries of T. 19 S. R. 23 E.

Allen A. Thompson, Axman.

Subscribed and sworn to before me this 7th day of August, 1909

My commission expires August 11, 1909

J. A. Fenstermaker
Notary Public

I, Manuel Vindicola, 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 Boundaries of T. 19 S. R. 23 E.

Manuel Vindicola, Flagman.

Subscribed and sworn to before me this 7th day of August, 1909

My commission expires August 11, 1909

J. A. Fenstermaker
Notary Public

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Re-establishment of cor. of Tps. 19 & 20 S. Rs. 22 & 23 E.
Frac. W. bdrs. Tps. 19 & 20 S. Rs. 22 & 23 E.

Chains.

Survey commenced August 14, 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 verniers of the latitude and declination arcs.

I examine and test carefully the levels, the line of collimation and standards of the instrument and find same correct. I also test the latitude arc of the solar apparatus by means of the strident level and find it correct.

I am unable to find any traces of the cor. of Tps. 19 & 20 S., Rs. 22 & 23 E., which has evidently been destroyed. By means of the intersections of lines given by the two bearings on Shifflin Hall, in Tombstone, and the smoke-stack of Girard Mill, I locate approximately the position of the cor., and from this intersection I run a line North, comparing the topography of the country with the field notes furnished by the Surveyor General, which agree. At about 1 mile North from my approximate point, I find the cor. of secs. 25, 30, 31 & 36, which is a limestone 8x6x5 ins. above ground, marked and witnessed as described by the Surveyor General.

The pits and mound of earth being practically obliterated, I raise a mound of stone 3 ft. base 2 ft. high W. of this cor.

At this cor. at 5h p.m., l.m.t., I set off 14° 21½' N. on the decl. arc and 31° 44' N. on the lat. arc and determine a meridian with the solar, and mark a point in the meridian thus determined by a cross on a fixed stone 5 chs. N. of my station.

August 14, 1909.

August 15, 1909. ✓

At 3h 55m a.m., l.m.t., I observe Polaris at Upper Culmination in accordance with instructions in the "Manual", and mark the true meridian thus determined by a cross on the fixed stone 5 chs. N. of my station, which point falls .25 ins. E. of the point in the meridian determined by the solar on preceding evening.

At 7h a.m., l.m.t., I set off 14° 10½' N. on the decl. arc and 31° 44' N. on the lat. arc and determine a meridian with the solar, which meridian agrees with the meridian determined by Polaris observations.

Therefore I conclude that the adjustments of the instrument are satisfactory. Mag. Var. at 7h a.m., is 14° E.

From the cor. above described, I run, South, on a random line bet. secs. 31 & 36. Var. 14° E.

40.02 Find traces of ¼ sec. cor. on line.

I set temp. ¼ sec. cor. and continue south.

80.00 No trace of cor. of tps. 19 & 20 S. Rs. 22 & 23 E. found after diligent search.

I set temp. cor. and run thence, South, bet. secs. 1 & 6.

40.04 To ¼ sec. cor. on line, which is a limestone 8x6x6 ins. above ground, marked and witnessed as described by the Surveyor General.

I raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Thence I run,

North, on true line bet. secs. 1 & 6.

Over heavily rolling & broken land, through dense tesselata & greasewood. desc.

2.00 Gulch 80 lks. wide, course SW. asc.

31.00 Road, top of ridge, brs. SW. & NE. desc.

39.70 Wash 10 lks. wide, course SW. asc.

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Re-establishment of cor. of Tps.19 & 20 S. Rs.22 & 23 E.

Chains
40.02

Cor. point falls in small shaft 4x4 ft. x 4 ft. deep. This, having been abandoned, I refill with stones and set a granite stone 36x24x10 ins. in mound of stone for cor. of Tps. 19 & 20 S. Rs. 22 & 23 E., marked with 6 notches on N., S., E., & W. edges, and also T. 19 S. on N.E. & R. 23 E. on SE. faces, and raise a mound of stone 5 ft. base 4 ft. high S. of cor. from which, East Smoke stack of Girard Mill brs. S. 36° 40' W. Flag pole on Court House, Tombstone, brs. S. 50° W. SE. cor. of Shifflin Hall, Tombstone, brs. S. 49 1/4° W. Flag pole on belfry, High School bldg. Tombstone brs. S. 40° 17' W. "Old Baldy", Santa Rita Mountains, brs. S. 87 1/4° W. No other bearings available. Pits impracticable. In the stone monument S. of cor. I place a closed tin can with notice within, signed by myself and witnessed by my two chainmen, warning against the destruction of this cor. For last 1/2 mile, Land, rolling, broken. Soil, 3rd rate, gravelly, stony. No timber. Undergrowth, tesseta, greasewood, mesquite. Rolling land covered with dense undergrowth, 40.02 chs.

Thence I run, North, on true line, bet. secs. 31 & 36. Over heavily rolling land, through dense tesseta & greasewood.

- 14.20 Wash 30 lks. wide, course WSW.
- 27.00 Wash 40 lks. wide, course W. asc. grad.
- 30.00 Old mining shaft brs. E. 75 lks. dist.
- 40.02 Re-establish 1/4 sec. cor. in original position by setting a limestone 18x10x6 ins. 12 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. Pits impracticable.
- 49.00 Wash 30 lks. wide, course SW. asc. grad.
- 58.00 Road br. of N. & S.W.
- 80.04 To cor. of secs. 25, 30, 31 & 36, heretofore described. Land, rolling, broken. Soil, 2nd & 3rd rate, gravelly, stony. No timber. Undergrowth, tesseta, greasewood, mesquite. Rolling land covered with dense undergrowth, 80.04 chs.

South Boundary of T. 19 S. R. 23 E.

Chains

From the cor. of Tps. 19 & 20 S., Rs. 22 & 23 E., recently reestablished by me and heretofore described, I run, as per instructions.

East, on S. bdy. of Tp. bet. secs. 31 & 6.

Over heavily rolling land, through dense greasewood & blackbrush, & tesseta.

.45 Wash 20 lks. wide, course SW. asc. grad.

14.85 Wood road, top of ridge, brs. SW. & NE. desc. grad.

39.56 Allowing 44 lks. for convergency, as per instructions, I

Set a limestone 24x15x10 ins. 18 ins. in 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.

No bearings available. Pits impracticable.

Leave dense greasewood & tesseta.

47.00 Middle of wash 150 lks. wide, course SW. asc.

67.00 Wash 10 lks. wide, course NW.

79.56 Set a limestone 24x14x12 ins. 18 ins. in ground for cor. of secs. 31, 32, 5 & 6, marked with 5 notches on E. & 1 notch on W. 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, gravelly.

No timber.

Undergrowth, tesseta, greasewood, blackbrush, mesquite.

39.56 chs. rolling land covered with dense undergrowth.

40.00 chs. rolling land.

East on S. bdy. sec. 32.

Over heavily rolling land, asc. grad.

30.70 Main road, Tombstone to Gleeson & Courtland, top of ridge, brs. SW. & NE. desc. grad.

40.00 Set a granite stone 18x12x8 ins. 12 ins. in 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. No bearings available.

80.00 Set a granite stone 24x16x10 ins. 18 ins. in ground for cor. of secs. 32, 33, 4 & 5, marked with 4 notches on E. & 2 notches on W. edges and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor.

No bearings available. Pits impracticable.

Land, rolling.

Soil, 2nd rate, gravelly.

No timber.

Undergrowth, tesseta, greasewood, mesquite, scattering.

Rolling land, 80.00 chs.

At this cor. at noon, I set off 14° 6' N. on the decl. arc and observe the sun on the meridian.

The resulting lat. is 31° 43 1/2' N.

East, on S. bdy. sec. 33.

Over mts. land desc. grad.

6.00 Main wash, 2 chs. wide, course WSW., asc. along NW. slope through dense tesseta & greasewood.

40.00 Set a granite stone 24x15x12 ins. 18 ins. in 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.

56.00 Top of ridge, brs. WSW. & ENE., thence along broken N. slope.

80.00 Set a limestone 26x12x8 ins. 19 ins. in ground for cor. of secs. 33, 34, 3 & 4, marked with 3 notches on E. & W. edges, and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. No bearings available.

Land, Mts.

Soil, 2nd rate, gravelly.

No timber.

Undergrowth, tesseta, greasewood, mesquite, blackbrush.

Mts. land covered with dense undergrowth, 80.00 chs.

Chains	<p>East on S. bdy. sec. 34. Over mts. land asc. through dense mesquite tesseta & black brush.</p> <p>5.00 Top, desc. NE. slope of ridge. 20.00 Foot. 28.30 Wash 2 chs. wide, course NW. 32.90 Same wash, course SW. asc. NW. slope of ridge. 40.00 Set a limestone 24x12x8 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. Pits impracticable.</p> <p>44.40 Old road, top of ridge, brs. SW. & NE. Desc. S. slope of ridge, over broken ground.</p> <p>80.00 Set a limestone 20x12x8 ins. 15 ins. in ground for cor. of secs. 34, 35, 2 & 3, 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. No bearings available.</p> <p>Land mts. broken: Soil, 2nd & 3rd rate, sandy, gravelly, stony. No timber. Undergrowth, mesquite, tesseta, greasewood. Mts. land, or land covered with dense undergrowth, 80.00 chs.</p> <hr/> <p>East on S. bdy. sec. 35. Over mts. land asc. thro' dense tesseta & greasewood.</p> <p>15.00 Top of spur, brs. S. & N. desc. 20.00 Top of butte 200 ft. high is 15 chs. N. 40.00 Set a sandstone 30x15x8 ins. on bed rock in mound of stone 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>44.50 Draw 2 chs. wide, course WSW. asc. 75.00 Top of spur from ridge, brs. NW. & SE. desc. 80.00 Set a granite stone 24x12x8 ins. 18 ins. in ground for cor. of secs. 35, 36, 1 & 2, marked with 5 notches on W. & 1 notch on E. 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, mts. Soil, 3rd rate, stony. No timber. Undergrowth, tesseta, greasewood, mesquite. Mts. land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.</p> <hr/> <p>East, on S. bdy. Sec. 36. Over mts. land, asc. steep over broken stony ground with great difficulty.</p> <p>1.00 Head of gulch, course NW. 18.00 Top of high point on ridge, brs. SW. & NE. desc. grad. very broken stony ground. along SE. slope. 40.00 Set a granite 24x12x10 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. 41.00 Gulch 30 lks. wide, course SW. near head. Many small gulches running SW. ground very broken & stony. 64.20 Gulch 80 lks. wide, course SW. 40 ft. deep, asc. 80.00 Set a granite stone 30x14x12 ins. 10 ins. in ground to bedrock in mound of stone for Cor. of Tps. 19 & 20 S. Rs. 23 & 24 E., marked with 6 notches on N., S., E., & W. edges and raise a mound of stone 5 ft. base 4 ft. high S. of cor. No bearing trees available. Pits impracticable.</p> <p>Rincon Peak brs. N. 77° 10' W. Highest peak in Dragoon Mts. brs. N. 4° 32' E. This cor. is near NW. foot of a sharp, lone butte, about 2 miles from top of same which is not visible over ridge. Land, mts. very broken. Soil, 2nd & 3rd rate, stony. No timber. Undergrowth, tesseta, mesquite, greasewood. Mts. land or land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs. August 15, 1909.</p>
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East Boundary of T. 19 S. R. 23 E.

Chains August 16, 1909.
 At 7h a.m., l.m.t., at the cor. of Tps. 19 & 20 S. Rs. 23 & 24 E. recently established by me and heretofore described, I set off 13° 52' N. on the decl. arc, and 31° 43½' N. on the lat. arc and determine a true meridian with the solar.
 Thence I run,
 North, on E. bdy. of Tp. bet. secs. 36 & 31.
 Var. 14° E.
 Over mts. & broken, stony ground with great difficulty
 Desc.
 2.90 Gulch 80 lks. wide, course SW. asc.
 33.00 Top of ridge, brs. WSW. & ENE. desc.
 40.00 Set a granite stone 24x12x6 ins. 18 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.
 No bearings available.
 51.55 Wash 20 lks. wide, course W.
 54.15 Wash 80 lks. wide, course SW. asc.
 74.00 Top of ridge, brs. WSW. & ENE. desc. steep.
 As cor. point will fall in edge of wash, at
 79.60 Set a granite stone 30x15x10 ins. 24 ins. in ground for witness cor. to cor. of secs. 25, 30, 31 & 36, marked WC. on NE. face, with 1 notch on S. & 5 notches on N. edges, & raise a mound of stone 3 ft. base 2 ft. high W. of cor.
 No bearings available.
 80.00 To cor. point in S. edge of wash.
 Land, Mts. broken.
 Soil, 2nd & 3rd rate, gravelly, stony.
 No timber.
 Undergrowth, tesseta, mesquite, willow.
 Mts. & broken land, exceptionally difficult to survey,
 80.00 chs.

From true point for cor. of secs. 25, 30, 31 & 36, North, bet. secs. 25 & 30.
 Over heavily rolling land desc. grad.
 2.40 Middle of main wash 2 chs. wide, course W. asc. grad.
 11.25 Main road, Tombstone to Gleeson, brs. E. & W.
 24.34 Wash 30 lks. wide, course W.
 29.25 Wash 20 lks. wide, course SW.
 40.00 Cor. point for ¼ sec. cor. falls in N. edge of small wash 10 lks. wide, course SSE.
 40.15 Set a Granite stone 24x12x8 ins. 18 ins. in ground for witness cor. to ¼ sec. cor. marked WC. ¼ on W. face, and raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
 No bearings available.
 66.00 Old road, top of ridge, brs. SW. & NE. desc.
 80.00 Set a limestone 30x12x10 ins. 10 ins. in ground to bed-rock in mound of stone, for cor. of secs. 19, 24, 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.
 No bearings available.
 Land heavily rolling.
 Soil, 2nd rate, sandy, gravelly.
 No timber.
 Undergrowth, scattering mesquite, tesseta, willow in washes.
 Rolling land, 80.00 chs.

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BOOK 2174
East, Boundary of T. 19 S. R. 23 E.

Chains

North, bet. secs. 24 & 19.
 Over mts. land asc.:
 1.50 Top of ridge, brs. SW. & ENE. desc. steep.
 8.30 Wash 2 chs. wide, course WSW. asc.
 30.00 Spur, brs. SW. & NE. desc.
 40.00 Set a limestone 24x12x8 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.
 48.00 Ridge, brs. WSW. & ENE. desc.
 50.00 Head of draw, brs. WSW. asc.
 54.00 Long Spur, brs. WSW. desc.
 61.10 Gulch 20 lks. wide, course WSW. asc.
 73.00 Ridge, brs. W. & E. desc.
 78.00 Head of gulch, brs. WNW. asc.
 80.00 Set a quartzite stone 24x14 x12 ins. 18 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 1/2 ft. high W. of cor. No bearings available.
 Land, mts.
 Soil, 2nd rate, gravelly.
 No timber.
 Undergrowth, scattering mesquite, tesseta, palmeo.
 Good native grass.
 Mountainous land, 80.00 chs.
 At this cor. at noon, I set off 13° 47' N. on the decl.
 arc and observe the sun on the meridian;
 The resulting lat. is 31° 46' N.

North bet. secs. 13 & 18.
 Over mts. land asc.
 3.00 Point of spur, brs. NW. & SE. desc.
 25.00 Gulch 120 lks. wide, course W. asc.
 39.00 Top of ridge, brs. SW. & NE. desc.
 40.00 Set a granite stone 24x12x8 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.
 50.00 Spur, brs. WSW. & ENE. desc.
 53.00 Gulch 30 lks. wide, course SW. asc.
 60.00 Ridge, course WSW. & ENE. desc.
 62.80 Gulch 30 lks. wide, course SW. asc.
 72.38 Top of ridge, old road on same, brs. WSW. & ENE. desc.
 80.00 Set a granite stone 24x12x8 ins. 18 ins. in ground for
 cor. of secs. 12, 13, 7 & 18, marked with 4 notches on S. &
 2 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, Mts.
 Soil, 2nd & 3rd rate, gravelly, stony.
 No timber.
 Undergrowth, mesquite, tesseta, palmeo, yucca.
 Mountainous land, 80.00 chs.

East Boundary of T. 19 S. R. 23 E.

Chains

North, bet. secs. 12 & 7. through dense blackbrush
 Over mts. land desc. with great difficulty.

13.00 Gulch 50 lks. wide, course W. asc.
 20.00 Point of Spur, brs. W. & E. desc.
 26.00 Gulch 40 lks. wide, course WSW. asc.
 40.00 Set a limestone 24x12x8 ins. 18 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. No bearings avail.

47.00 Ridge, brs. WSW. & ENE. desc.
 52.00 Head of gulch, course SW. asc.
 60.00 Ridge, brs. WSW. & ENE. desc. through dense scrub oak
 with great difficulty.

72.00 Gulch 40 lks. wide, course W.
 80.00 Set a limestone 24x10x8 ins. 18 ins. in ground for
 cor. of secs. 1, 6, 12 & 7, marked with 5 notches on S. &
 1 notch on N. edges, and raise a mound of stone 2 ft.
 base 1½ ft. high W. of cor. No bearings available.

Land, Mts.
 Soil, 3rd rate, gravelly, stony.
 No timber.
 Undergrowth, tesselata, blackbrush, scrub oak, palmeo.
 Mts. land covered with dense undergrowth, and
 exceptionally difficult to survey, 80.00 chs.

North, bet. secs. 1 & 6.
 Over mts. land desc. through dense scrub oak, &
 blackbrush, with great difficulty.

6.05 Gulch 50 lks. wide, course WSW. asc.
 20.40 Gulch 50 lks. wide, course W. asc. steeper.
 40.00 Set a limestone 24x12x6 ins. 18 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.
 No bearings available.

48.80 Gulch 50 lks. wide, course SW.
 60.55 Gulch 80 lks. wide, course SW. asc. steep.
 66.00 Ridge, brs. WSW. & ENE. desc.
 71.00 Gulch 60 lks. wide, course SW.
 80.00 Set a limestone 30x15x15 ins. 20 ins. in ground to
 bed-rock in mound of stone for cor. of Tps. 18 & 19 S.
 Rs. 23 & 24 E., marked with 6 notches on N., S., E. & W.
 edges, and raise a mound of stone 5 ft. base 4 ft. high
 S. of cor. No trees available. Pits impracticable.

A large stone monument on top of the sharp Butte SE. of
 SE. cor. of Tp. brs. S. 2° 28' E.
 A large monument, presumably a U.S.L.M. on high butte
 W. of Tombstone, brs. S. 86° 5' W.
 E. smoke stack of Girard mill brs. S. 43° 25' W.
 Belfry, high school bldg, Tombstone, brs. S. 44° 15' W.
 Magnetic var. at this cor. is 13° 50' E.
 This cor. is on SW. slope of Dragoon mts. near foot of
 main slope.

Land, mountainous.
 Soil, 2nd & 3rd rate, gravelly, stony.
 Timber, few oak tree.
 Undergrowth, scrub oak, blackbrush, palmeo, yucca.
 Mts. land covered with dense undergrowth, and
 exceptionally difficult to survey, 80.00 chs.
 August 16, 1909.

North Boundary of T. 19 S. R. 23 E.

Chains

August 17, 1909.

At 7h a.m., l.m.t., at the cor. of Tps. 18 & 19 S. Rs. 23 & 24 E., recently established by me and heretofore described, I set off 12° 33' N. on the decl. arc, and 31° 48½' N. on the lat. arc, and determine a true meridian with the solar.

Thence I run, as per instructions, West, on a random line on N. bdy. of Tp.

setting temp. ¼ & sec. corners at intervals of 40 & 80 chs.

At 5 mi. 79.00 chs., I intersect W. bdy. of Tp. at pt. 84 lks. S. of cor. of Tps. 18 & 19 S. Rs. 23 & 23 E., which is a mesquite post 4 ins. sq., well preserved and firmly set in large mound of stone and marked as described by the Surveyor General.

Thence I run,

S. 89° 54' E., on a true line on N. bdy. of Tp., bet. secs. 6 & 31.

Over very broken land, through dense tesseta, mesquite & greasewood.

23.00 Gulch 50 lks. wide, course SW.

39.00 Set a limestone 18x18x10 ins. 12 ins. in ground for ¼ sec. cor. marked ¼ on N. face, and raise a mound of stone 2 ft. base 1½ ft. high N. of cor. No bearings available.

41.00 Draw, 2 chs. wide, course SW.

63.00 Gulch 60 lks. wide, course SW.

79.00 Set a granite stone 20x10x8 ins. 15 ins. in ground for cor. of secs. 5, 6, 31 & 32, marked with 1 notch on W. & 5 notches on E. edges, and raise a mound of stone 4 ft. base 2 ft. high W. of cor. No bearings available.

Land, broken,

Soil, 3rd rate, stony.

No timber.

Undergrowth, tesseta, mesquite, greasewood, cacti.

broken land covered with dense undergrowth, 79.00 chs.

S. 89° 54' E., bet. secs. 5 & 32.

Over rolling land, through very dense mesquite, tesseta, black brush, with great difficulty.

35.00 Main wash 4 chs. wide, course WSW.

40.00 Set a limestone 24x14x8 ins. 18 ins. in ground for ¼ sec. cor. marked ¼ on N. face, and raise a mound of stone 2 ft. base 1½ ft. high N. of cor. No bearings available.

45.50 Road, brs. ENE. & WSW. from Dragoon mts. to Haberstocks ranch and Tombstone.

54.00 Old road, brs. ENE. & WSW.

68.50 Old road, brs. NE. & SW.

Leave dense undergrowth, and begin steep asc. along stony NW. slope of Butte.

80.00 Set a Granite stone 36x15x15 ins. on bed rock in mound of stone for cor. of secs. 4, 5, 32 & 33, marked with 2 notches on W. & 4 notches on E. edges, and raise a mound of stone 4 ft. base 3 ft. high W. of cor.

No bearings available. Top of Butte is SE. 3 chs. dist. Land, rolling & mts.

Soil, 2nd & 3rd rate, sandy, stony.

No timber.

Undergrowth, mesquite, tesseta, greasewood, cacti, palmeo.

Rolling land covered with dense undergrowth or mts.

land exceptionally difficult to survey, 80.00 chs.

At this cor. at noon, I set off 13° 28' N. on the decl. arc, and observe the sun on the meridian.

The resulting lat. is 31° 48½' N.

North Boundary of T. 19 S. R. 23 E.

Chains

- S. 89° 54' E. bet. secs. 4 & 33.
Over mts. land, asc. very stony ground, with great difficulty.
- 2.00 Top of N. side of Butte, desc. stony NE. slope.
20.00 Foot of main slope, enter dense tesseta & black brush.
17.90 Road, brs. NW. & SE.
24.00 Wire fence, brs. N. & S. enter pasture of John Haberstock.
40.00 Set a limestone 24x15x8 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 trees available.
A vacant house belonging to J. Haberstock, brs. S. 14 chs.
57.60 Wire fence, brs. NE. & SW.
58.75 Wire fence, brs. N. & S. Leave pasture.
80.00 Set a limestone 15x12x10 ins. 10 ins. in ground for cor. of secs. 3, 4, 33 & 34, marked with 3 notches on E. & W. edges, and raise a mound of stone 3 ft. base 2 ft. high W. of cor. No bearings available.
Land, mts. rolling.
Soil, 2nd & 3rd rate, gravelly, stony.
No timber.
Undergrowth, mesquite, tesseta, greasewood, black brush.
Mts. land exceptionally difficult to survey, 20.00 chs.
Land covered with dense undergrowth, 60.00 chs.
-
- S. 89° 54' E. bet. secs. 3 & 34.
Over mts. land, along broken S. slope, with great difficulty, through dense tesseta & mesquite.
- 12.00 Gulch 50 lks. wide, course SW.
40.00 Set a limestone 24x12x6 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.
42.00 Gulch 40 lks. wide, course S.
75.00 Gulch 50 lks. wide, course SW.
80.00 Set a granite stone 20x12x10 ins. 15 ins. in ground for cor. of secs. 2, 3, 34 & 35, marked with 4 notches on W. & 2 notches on E. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
No bearings available.
Land, mts. broken.
Soil, 3rd rate, stony.
No timber.
Undergrowth, mesquite, tesseta, scrub oak, cacti.
Mts. land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.
-
- S. 89° 54' E. bet. secs. 2 & 35.
Over mts. land, along broken S. slope, through dense tesseta & black brush, with great difficulty.
- 8.00 Gulch 50 lks. wide, course SW.
40.00 Set a limestone 24x12x8 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.
50.00 Gulch 150 lks. wide, course WSW. asc.
65.00 Spur, brs. S. & N. desc.
80.00 Set a sandstone 18x10x10 ins. 12 ins. in ground for cor. of secs. 1, 2, 35 & 36, marked with 5 notches on W. & 1 notch on E. edges, and raise a mound of stone 3 ft. base 2 ft. high W. of cor. No bearings available.
Land, mts.
Soil, 3rd rate, stony.
No timber.
Undergrowth, scrub oak, tesseta, black brush, yucca, palmeo.
Mts. land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.

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North Boundary of T. 19 S. R. 23 E.

- Chains
- S.89° 54' E. bet. secs. 1 & 36.
Over mts. land, asc. broken W. slope. with great difficulty.
 - 4.10 Old road, top spur, brs. SW. & NE. desc.
 - 9.50 Gulch 20 lks. wide, course SW. asc.
 - 24.00 Gulch 20 lks. wide, course SW.
 - 33.50 Gulch 30 lks. wide, course SW.
 - 40.00 Set a limestone 28x12x8 ins. on bed rock in mound of stone 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.
 - 49.50 Old road, top spur, brs. SW. & NE. desc.
 - 66.50 Gulch 20 lks. wide, course SW. asc.
 - 69.00 Gulch 30 lks. wide, course SW. asc. steep.
 - 76.00 Spur, brs. SW. & NE. desc. SE. slope.
of same.
 - 80.00 To cor. of Tps: 18 & 19 S. Rs. 23 & 24 E. heretofore established and described.
Land, mts. broken.
Soil, 3rd rate, stony.
No timber.
Undergrowth, scrub oak, mesquite, blackbrush, cacti.
Mts. land exceptionally difficult to survey, 80.00 chs.

General Description.

The S. Bdy. of this Tp. is over a series of rolling ridges, general trend, SW. & NE.
The E. Bdy. runs over a series of rolling grassy ridges, gradually ascending to the NE. cor. near foot of SW. slope of Main range of Dragoon mts.
The North Boundary runs over broken ground near foot of S. slope of Dragoon mts. There was formerly some oak timber on this line but all timber has been cut away.

Boundaries of T. 19 S. R. 23 E.
Latitudes, Departures, & closing errors.

Line Designated	True Bearing.	Distance.	Latitudes.		Departures.	
			N.	S.	E.	W.
South Bdy.	West.	479.56				479.56
West Bdy.	North.	480.04	480.04			
North Bdy.	S.89° 54' E.	479.00		.84	479.00	
East Bdy.	South.	480.00		480.00		
Convergency						.44
Totals,			480.04	480.84	479.44	479.56
				480.04		479.44
Error in lat.,				.80	Error Dep.	.12

August 17, 1909.

Jesse 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
....., 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
N. S. & E. Boundaries of T. 19 S. R. 23 E.
showing the respective capacities in which they acted:

- Edgar M. Darnall , *Chainman.*
- Santiago Vindiola , *Chainman.*
- Guadalupe Pacheco , *Moundman.*
- , *Moundman.*
- Allen A. Thompson , *Arman.*
- , *Arman.*
- Manuel Vindiola , *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Jesse B. Wright
....., United States Deputy Surveyor, in surveying all
those parts or portions of the Boundaries of T. 19 S. R. 23 E.
.....
..... of the Gila and
Salt River Base & meridian, Territory 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.

- Edgar M. Darnall , *Chainman.*
- Santiago Vindiola , *Chainman.*
- , *Moundman.*
- Guadalupe Pacheco , *Moundman.*
- , *Arman.*
- Allen A. Thompson , *Arman.*
- Manuel Vindiola , *Flagman.*

Subscribed and sworn to before me this 25th
day of August, 1909

Jesse B. Wright
U.S. Deputy Surveyor



No notary or other officer with seal available without incurring great loss of time and great difficulty.

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BOOK 2174

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 fourth day of June, 1907, 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

Boundaries of Township 23 South Range 15 East of the Gila & Salt

Pue Bact 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.

Jesse B Wright
United States Deputy Surveyor.

Subscribed by said Jesse B Wright, and sworn to before me
this 30th day of August, 1909

W. H. Keckey
U.S. Commissioner



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. July 2, 1910

The foregoing field notes of the survey of the North, South and East boundaries of Twp 19 R. 23 E., Recovery of a portion of the West boundary of Twp 19 R. 23 E. and Recovery of a portion of the West boundary of Twp 20 R. 23 E. Gila and Salt River Base and Meridian, Arizona.

executed by Jesse B. Wright U.S. Dep. Sur. under his contract No. 159, dated June 4, 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.