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FEB 13 1912

BOOK 2790
FIELD NOTES

OF THE SURVEY OF ~~THE~~ PART OF THE

Subdivisions T15N R12E
Runway Eddy T15N R12E

Of the Standard Salt River Base Meridian,

Arizona

AS SURVEYED BY

Roscoe C. Howard, United States Deputy Surveyor,

Under his Contract No. 162, dated Jan 5, 1910

Survey commenced Dec 8th, 1911

Survey completed Dec 13, 1911

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1A

NAMES AND DUTIES OF ASSISTANTS.

W. H. Johnson,	Chairman
W. D. Sabersman,	
W. M. Larson,	President
Cliff Nelson	Assistant
Lester French	Physician

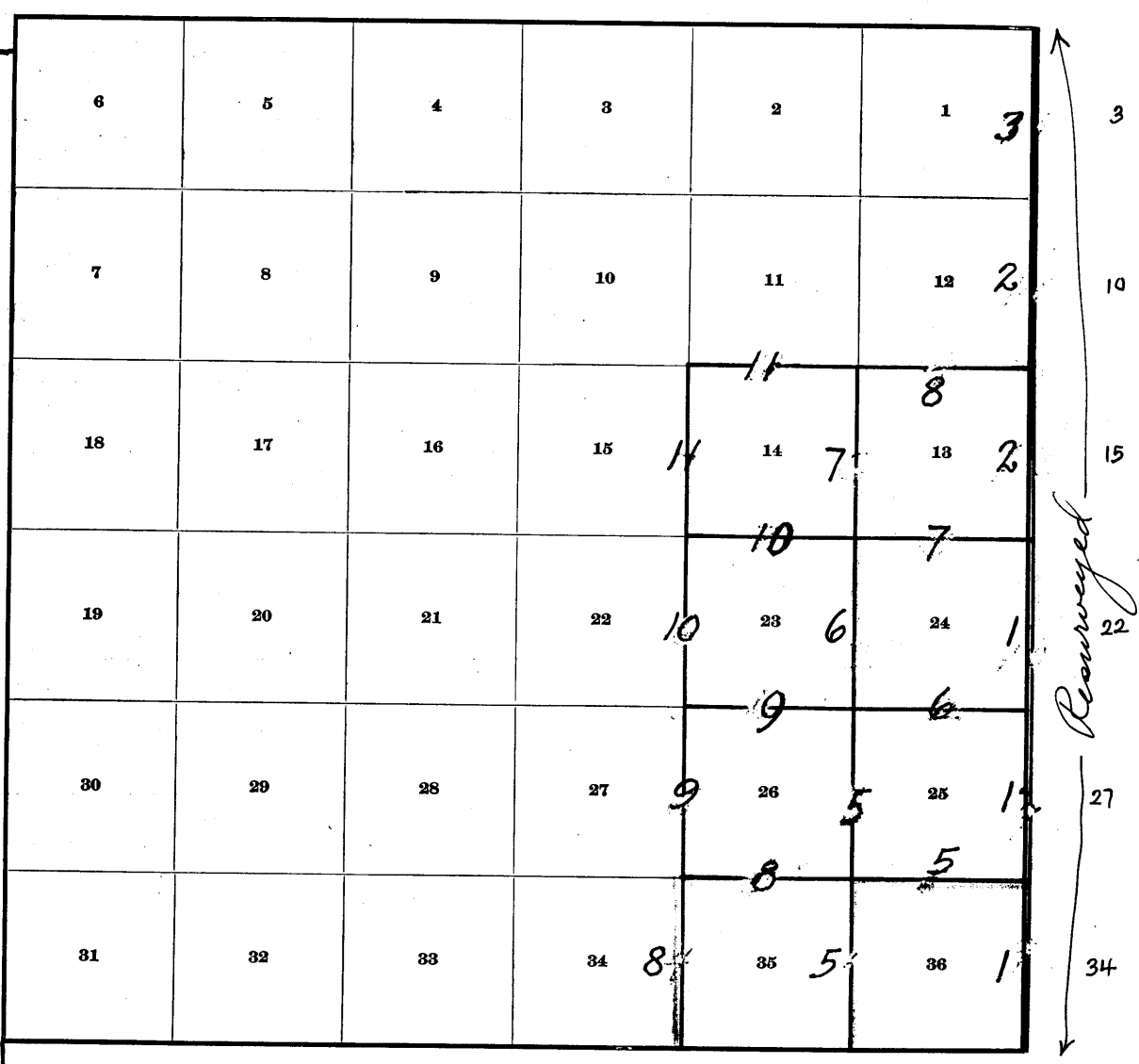
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BOOK 2790

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PRELIMINARY OATHS OF ASSISTANTS.

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 (c)

WE, Rolt Johnson and W. D. Schreanow
 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 Subdivision T18 N12 E
Rolt Johnson, Chainman.
W. D. Schreanow, Chainman.

Subscribed and sworn to before me this 4th
 day of Dec, 1911.

Roscoe Latham
 U.S. Deputy Surveyor



WE, Wm Larkin 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 Subdivision T18 N12 E
Wm Larkin, Moundman.
 _____, Moundman.

Subscribed and sworn to before me this 4th
 day of Dec, 1911.

Roscoe Latham
 U.S. Deputy Surveyor



WE, Cliff Wilson 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 Subdivision T18 N12 E
Cliff Wilson, Axman.
 _____, Axman.

Subscribed and sworn to before me this 4th
 day of December, 1911.

Roscoe Latham
 U.S. Deputy Surveyor



I, Lester French, 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 Subdivision T18 N12 E
Lester French, Flagman.

Subscribed and sworn to before me this 4th
 day of Dec, 1911.

Roscoe Latham
 U.S. Deputy Surveyor



Resurvey of East Bdy., of Township 18 North, Range 12 East. 10

Chains	Dec. 8th, 1911, at 9 h., a.m., l.m.t., at the true point for the cor. of Ts. 17 and 18 N., Rs. 12 and 12½ E., I set off 22° 37' 30" S., on the decl. arc, 34° 54' 30" N., on the lat. arc., and determine the meridian with the solar. Thence I run N. bet. secs. 34 and 36, ascending over rocky mountainous land.
1.06	Witness cor. to cor. of Ts. 17 and 18 N., Rs. 12 and 12½ E., previously described.
15.00	Top of ascent, descend over rolling land. After diligent search, I fail to find any trace of the old ¼ sec. cor.
40.00	Set a limestone 18 x 10 x 8 ins., 12 ins. in the ground, for ¼ sec. cor. of secs. 34 and 36, marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. No trees near. Pits impracticable. Magnetic declination N. 14° 35' E. Descending over rolling land.
42.00	Road, Winslow to Camp Verde, Brs. N.E. and S.W.
45.00	Bottom of descent, ascend over slightly rolling land. After diligent search, I fail to find any trace of the old cor.
80.00	Set a limestone 15 x 12 x 6 ins., 10 ins. in the ground for cor. of secs. 25, 27, 34 and 36, marked with 1 notch on S. edge, 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, 4 ft. base, 2 ft. high, W. of cor. No trees near. Magnetic declination N. 14° 35' E. Land mountainous and rolling. Soil: sandy and rocky 2nd and 3rd rate. No timber. Undergrowth: White sage brush, and broom weed. Land Mountainous, 15.00 chs. Land rolling, 65.00 chs. Dec. 8, 1911.

	February 26, 1913. At the above corner, I set off 8° 44' S. on the decl. arc, 34° 55' 30" N., on the lat. arc, and at 9:00 a.m., l.m.t., determine a meridian with the solar. Thence I run N. bet. secs. 25 and 27. Ascending over rolling ground.
0.70	Road brs. N.W. and S.E.
6.00	Top of ascent, descend.
30.00	Road, Winslow to old Camp Verde, brs. N.E. and S.W.
40.00	Set a limestone 15 x 10 x 8 ins., 10 ins. in the ground for ¼ sec. cor. of secs. 25 and 27, marked ¼ on W. face; dig pits 18 x 18 x 12 ins., N. and S. of stone 3 ft. dist., and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor. After diligent search, I am unable to find any trace of the old corner. Magnetic declination N. 14° 30' E.
80.00	A limestone 15 x 12 x 8, set 10 ins. in the ground for cor. of secs. 22, 24, 25 and 27, marked 2 notches on the S. edge; 4 notches on the N. edge, 18 N on N.E. face, 12½ E on S.E. face, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. No trees near. Pits impracticable. On S. edge of Dog Valley. This corner was set Dec. 8, 1911. Magnetic declination N. 14° 35' E. Land mountainous and rolling. Soil sandy and rocky, 2nd and 3rd rate. No timber. Undergrowth: white sage brush, broom weed and grass Land rolling 80.00 chains. February 26, 1913.

	Dec. 8, 1911. At the above corner I set off 22° 39' S., on the decl. arc, and at 12:00 h. M. apparent time, I observe the sun on the meridian, and obtain on the lat.

2 Resurvey of East Bdy. of Township 18 North, Range 12 East.

Chains	are the reading 34° 56' N., which agrees with other data.
	Thence I run, N. bet. secs. 22 and 24
	Descending across Dog Valley.
8.00	Road, Winslow to O'Toole's dipping camp, brs. E. and W.
21.00	N. edge of Dog Valley, ascend steep rocky, 150 ft. bluff
24.00	Top steep bluff, ascend steep 200 ft. rise.
	On diligent search, I fail to find any trace of the old $\frac{1}{4}$ sec. cor.
40.00	S. slope steep ascent, set a limestone 14 x 12 x 10 ins., 9 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 22 and 24, marked $\frac{1}{4}$ on W. face, dig pits 18 x 18 x 12 ins., N. and 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 trees near.
	Magnetic declination N. 14° 35' E. December 8, 1911.
	Feb. 26, 1913. From the above corner I run N. bet. secs. 22 and 24, continuing measurement.
73.00	Top of ascent, descend over rolling mesa.
80.00	Set a limestone 18 x 12 x 6 ins., 12 ins. in the ground for cor. of secs. 13, 15, 22 and 24, marked with 3 grooves on N. and S. edges, dig pits 18 x 18 x 12 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.
	Magnetic declination N. 14° 35' E. Land mountainous and rolling. Soil sandy and rocky, 2nd and 3rd rate. No timber. Undergrowth: grass, white sage brush, and broom weed. Mountainous land, or land covered with limestone boulders 52.00 chains. Rolling land, 28.00 chains.

	N. bet. secs. 13 and 15. Descending over rolling mesa.
40.00	Set a limestone 18 x 12 x 4 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 13 and 15, marked $\frac{1}{4}$ on W. face, dig pits 18 x 18 x 12 ins., N. and S. of stone 3 ft. from cor. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
45.00	Road to O'Toole's homestead brs. N.E. and S.W.
80.00	A limestone 18 x 10 x 8 ins., set 12 ins. in the ground for cor. of secs. 10, 12, 13 and 15, marked with 2 notches on the N. edge, and 4 notches on the S. edge, 18 N on N.E. face, 18 $\frac{1}{2}$ E on S.E. face, dig pits 18 x 18 x 12 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 trees near. Magnetic declination N. 14° 30' E. This corner was set December 8, 1911. Land rolling. Soil sandy. Undergrowth: broomweed. Rolling land, 80.00 chs. February 26, 1913.

	December 8, 1911: N. bet. secs. 10 and 12. Descending over rolling mesa.
17.00	Bottom descent, draw 50 lks. wide, course W, ascend.
20.00	Top of ascent, brs. E. and W., ascend. After diligent search, I fail to find any trace of the old $\frac{1}{4}$ sec. cor.
40.00	Set a limestone 15 x 12 x 10 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 10 and 12, marked $\frac{1}{4}$ on W. face; dig pits 18 x 18 x 12 ins., N. and 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 trees near.
70.00	Top of ridge, brs. E. and W., descend. After diligent search, I fail to find any trace of the old cor.
80.00	Set a limestone 18 x 15 x 4 ins., 12 ins. in the ground for cor. of secs. 1, 3, 10 and 12, marked with 1 notch on N. edge; and 5 notches on S. edge, dig pits 18 x 18 x 12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist., and raise a

Resurvey of East Bdy. of Township 18 North, Range 12 East. 3

Chains mound of earth 4 ft. base, 2 ft. high, W. of cor. No trees near.
 Magnetic declination N. 15° E.
 Land rolling. Soil sandy, 2nd and 3rd rate.
 No timber. Undergrowth: White sage brush, and broom weed. Rolling land, 80.00 chains.

N. bet. secs. 1 and 3. Descending over rolling land.

10.00 Bottom of descent, ascend.
 23.00 Road O'Toole's homestead to Sunshine, brs. S.W. and N.E.
 37.00 Top of ascent, descend. After diligent search, I fail to find any trace of the old $\frac{1}{4}$ sec. cor.
 40.00 Set a limestone 15 x 12 x 6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 1 and 3, marked $\frac{1}{4}$ on W. face; dig pits 18 x 18 x 12 ins. N. and S. of cor., 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 trees near.
 79.81 Intersect S. bdy. of T. 19 N., R. 12 E., 3.53 chs. W. of cor. for Ts. 18 and 19 N., Rs. 12 and $12\frac{1}{2}$ E., which is a limestone 24 x 10 x 8 ins. mkd. and witnessed as described by the Surveyor General.
 Set a limestone 18 x 12 x 6 ins., 12 ins. in the ground for closing cor. of T. 18 N., Rs. 12 and $12\frac{1}{2}$ E., marked C C on S. face, 6 grooves on S. E. and W. faces, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. No trees near. Pits impracticable.
 Magnetic declination N. 15° E.
 Land rolling. Soil sandy and rocky. No timber.
 Undergrowth: white sage brush, and broom weed.
 Rolling land, 79.81 chs.

December 8, 1912.

Rascellem
 U. S. Deputy Surveyor.

Subdivision of Township 18 North, Range 12 East.

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Chains	Dec. 9, 1911, at the true meridian established by me at my camp, by observation on Polaris, I set off 22° 45' S., on the decl. arc, 34° 56' N., on the lat arc; and at 3:30 h., p.m., l.m.t., I determine a true meridian with the solar, and mark the meridian thus determined, 5 chs. N. of my station, which falls 0.6 ins. E. of cross (X) established by observation on Polaris.
	Dec. 10, 1911, at my station, I set off 22° 49' S., on the decl. arc, 34° 56' N., on the lat. arc, and at 8:30 a.m., l.m.t., determine a true meridian with the solar, and mark a point in same 5.00 chs. N. of my station, which point is 0.5 ins. W. of true meridian established by Polaris. I, therefore, judge the adjustments of my solar to be correct.
	Dec. 10, 1911, at the cor. of secs. 1, 2, 35 and 36, I set off 22° 50' S. on the decl. arc, 34° 54' 30" N., on the lat. arc, and at 9:30 a.m., l.m.t., determine the true meridian with the solar.
	February 27, 1913. From the cor. of secs. 1, 2, 35 and 36 on the S. boundary, as described in book "L", I run N 0° 1' W., bet. secs. 35 and 36.
	Descending over rolling land.
15.00	Enter dense cedars.
40.00	Set a limestone 20 x 10 x 8 ins., 16 ins. in the ground for $\frac{1}{4}$ cor. of secs. 35 and 36, marked $\frac{1}{4}$ on W. face, from which: A cedar 15 ins. in diam., brs. N. 82° E., 270 lks. dist., marked $\frac{1}{4}$ S 36 B T. A cedar 10 ins. in diam., brs. S. 50° 15' W., 65 lks. dist. marked $\frac{1}{4}$ S 35 B T. Magnetic declination N. 14° 30' E.
	Leave dense cedars.
80.00	A limestone 14 x 8 x 6 ins., set 9 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on the S. edge, and 1 notch on the E. edge, dig pits 18 x 18 x 12 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 trees near. Magnetic declination N. 14° 20' E. This corner was set December 10, 1911. Land rolling. Soil sandy, 2nd and 3rd rate. No timber, 55.00 chs, Dense timber 25.00 chs. Undergrowth: Dense scrub cedar, white sage brush and broom weed. Rolling land, covered with dense cedar brush, 25.00 chs. Rolling land, 55.00 chs. February 27, 1913.

	February 27, 1913: From the cor. of secs. 25, 26, 35 and 36, I run E. on a random line bet. secs. 25 and 36.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.33	Fall 35 lks. S. of cor. of secs. 25, 27, 34 and 36, as described in my original notes. Thence I run S. 89° 45' W., on a true line bet. secs. 25 and 36.
40.16 $\frac{1}{2}$	Set a limestone 15 x 10 x 4 ins., 10 ins. in the ground for $\frac{1}{4}$ cor. of secs. 25 and 36, marked $\frac{1}{4}$ on N. face, dig pits 18 x 18 x 12 ins., E. and W. of cor, 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. No trees near. Magnetic Declination N. 14° 25' E.
80.33	The cor. of secs. 25, 26, 35 and 36. Land rolling. Soil sandy, 2nd rate. No timber. Undergrowth: white sage brush. Rolling land, 80.33 chs. February 27, 1913.

	December 10, 1911. N. 0° 1' W., bet. secs. 25 and 26. Ascending over rolling land.
37.00	Top of ascent, descend.

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Chains 40.00	Set a limestone 24 x 8 x 6 ins., 16 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 25 and 26, 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. Magnetic declination N. $14^{\circ} 20'$ E. Thence descending through draw, over rocky land.
55.00	Leave draw, ascend.
80.00	Top W. bank of wash, marked a cross (X) on a limestone boulder 12 x 6 x 12 ins. above the ground for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on the S. edge, and 1 notch on the E. edge., and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. No trees near. Pits impracticable. Magnetic declination N. $14^{\circ} 45'$ E. Land rolling and mountainous. Soil sandy and rocky, 2nd, 3rd and 4th rate. Timber none. Undergrowth: white sage brush and broom weed. Mountainous land, very steep slopes, and covered with loose limestone boulders, and exceptionally difficult to survey, 43.00 chains. Rolling land, 37.00 chains.

	At the cor. of secs. 23, 24, 25 and 26, I set off $22^{\circ} 51'$ S., on the decl. arc, and at 12 h. M., l.m.t., observe the sun on the meridian, and obtain on the lat. arc, the reading $34^{\circ} 56'$ N., which agrees with other data. Thence I run, N. $89^{\circ} 58'$ E., on a random line, bet. secs. 24 and 25.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.98	Intersect E. bdy. of Tp. 6 lks. N. of the cor. of secs. 22, 24, 25 and 27. Thence I run, N. $89^{\circ} 59'$ W., on a true line, bet. secs. 24 and 25. Ascending over rolling and mountainous land.
25.00	Top of ascent, descend.
39.99	Set a limestone 15 x 12 x 10 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 24 and 25, marked $\frac{1}{4}$ on the N. face, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. No trees near. Pits impracticable. Magnetic declination N. $14^{\circ} 40'$ E.
77.00	Descend steep bank of wash.
78.50	Bottom of wash, 50 lks. wide, brs. N.E., ascend.
79.98	To cor. of secs. 23, 24, 25 and 26. Land rolling and mountainous. Soil sandy and rocky. No timber. Undergrowth: scattered scrub cedar, white sage brush and broom weed. Mountainous land, or land covered with limestone boulders, 3.00 chs. Mountainous land, 86.98 chs.

	N. $0^{\circ} 1'$ W., bet. secs. 23 and 24. Descending over rolling land.
24.00	Road, O'Toole's dipping pen to Winslow, brs. E. and W.
40.00	Set a limestone 15 x 12 x 10 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., of secs. 23 and 24, marked $\frac{1}{4}$ on the W. face, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. No trees near. Pits impracticable. Magnetic declination N. $14^{\circ} 40'$ E. December 10, 1911. February 27, 1913. From the above $\frac{1}{4}$ sec. cor., I run N. $0^{\circ} 1'$ W., bet. secs. 23 and 24, continuing measurement. Descending over rolling land.
60.00	N. end of Dog Valley; asc. steep, rocky 200 ft. rise.
77.00	Top of rise; descend over rolling land.
80.00	Set a limestone 15 x 10 x 8 ins., 10 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked with 3

Subdivision of Township 18 North, Range 12 East.

Chains

notches on the S. edge, 1 notch on E. edge, and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
Magnetic declination N. 14° 45' E.

Land mountainous and rolling.
Soil sandy and rocky, 2nd, 3rd and 4th rate.
No timber.
Undergrowth: white sage brush, broom weed, and grass.
Mountainous land, and land covered with limestone boulders, very steep slopes, and exceptionally difficult to survey, 18.00 chs.
Rolling land, 62.00 chs. February 27, 1913

December 11, 1911:

At the cor. of secs. 13, 14, 23 and 24, I set off 22° 55' S., on the decl. arc, 34° 57' N., on the lat. arc, and at 9 h., a.m., 1.m.t., I determine a true meridian with the solar.

Thence I run S. 89° 59' E., on a random line, bet. secs. 13 and 24.

Descending over rocky, mountainous land.

40.00 Set temp. ¼ sec. cor.

80.08 Intersect E. bdy. of T., 20 lks. S. of the cor. of secs. 13, 15, 22 and 24.

Thence I run S. 89° 52' W., on a true line.

Ascending over mountainous land 100 ft.

35.00 Top of ridge brs. N. and S., descend.

40.04 Set a limestone 15 x 8 x 6 ins., 10 ins. in the ground for ¼ sec. cor. secs. 13 and 24, marked ¼ on the N. face, raise a mound of stone 2 ft. base, 1½ ft. high N. of cor. No trees near. Pits impracticable.

Magnetic declination N. 15° E.

56.00 Bottom of descent, ascend steep, rocky; 200 ft. rise.

65.00 Top of steep slope, ascend over rocky land, through dense cedars.

80.08 The cor. of secs. 13, 14, 24 and 25.

Land mountainous, steep rocky slopes.

Soil sandy and rocky, 2nd, 3rd and 4th rate.

No timber. Undergrowth: dense scrub cedar, white sage brush, and broom weed.

Mountainous land, broken steep rocky slopes, or covered with dense underbrush, and exceptionally difficult to survey, 80.08 chs. December 11, 1911.

February 27, 1913:

N. 0° 1' W., bet. secs. 13 and 14.

Descending over rolling land.

40.00 A limestone 18 x 10 x 6 ins., set 12 ins. in the ground, for ¼ sec. cor. of secs. 13 and 14, marked ¼ on W. face, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. No trees near, Pits impracticable.

Magnetic declination N. 15° E.

This corner was set December 11, 1911.

February 27, 1913.

December 11, 1911. From the above quarter-section cor.

I run N. 0° 1' W.

39.60 Road, Pat O'Toole's homestead, Canyon Diablo station brs. E. and W.

40.00 Set a limestone 18 x 10 x 8 ins., 12 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on S. edge, 1 notch on E. edge, 18 N on N.E. face, 12 E on S.E. face, and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. No trees near. Pits impracticable.

Magnetic declination N. 15° E.

Land rolling. Soil sandy. No timber.

Undergrowth: white sage brush, and broom weed.

Rolling land, 80.00 chs.

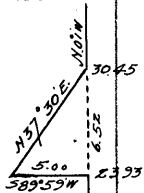
At this cor. I set off 22° 56' 30" S., on the decl. arc, and at 12 h. M. apparent time, observe the sun on the meridian, and obtain on the lat. arc the reading 34° 58' N., which agrees with other data.

December 11, 1911

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Subdivision of Township 18 North, Range 12 East.

Chains	February 27, 1913. From the cor. of secs. 11, 12, 13 and 14, I run N. 89° 52' E., on a random line bet. secs. 12 and 13.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.48	Fall 16 lks. S. of cor. of secs. 10, 12, 13, and 15, as described in notes of the resurvey of the E. boundary of T. 18 N., R. 12 E. Thence I run S. 89° 45' W., on a true line bet. secs. 12 and 13. Descending over rolling land.
40.24	Set a limestone 15 x 8 x 6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 12 and 13, marked $\frac{1}{4}$ on N. face, dig pits 18 x 18 x 12 ins. E. and W. of stone 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor. Magnetic declination N. 15° E.
80.48	The cor. of secs. 11, 12, 13 and 14. Land rolling. Soil sandy, 2nd and 3rd rate. No timber. Rolling land 80.48 chains.
	From the cor. of secs. 2, 3, 34 and 35 on the S. bdy. of the township ----- established by me and described in notes of the N. bdy. of T. 17 N., R. 12 E., I run N. 0° 1' W., bet. secs. 34 and 35. Descending over rolling, rocky land.
15.00	Top of gulch, brs. E., descend steep rocky slope, 100 ft.
16.50	Bottom of gulch, 20 lks. wide, ascend.
20.00	Top of N. bank of gulch, descend.
23.93	Top of S. bank of Canyon Diablo, brs. W., impossible to chain, steep rocky, 200 ft. descent, and to determine the dist. across the canyon, I set a flag on line on N. bank of canyon, then measure base line S. 89° 58' W., 5.00 chs. to point from which the flag brs. N. 37° 30' E., therefore, tan. of 52° 30' x the base = 6.52 chs., which added to 23.93 chs.; makes 30.45 chs. to the N. bank of the canyon.
30.45	Top of N. bank of Canyon Diablo.
40.00	Set a limestone 14 x 8 x 6 ins., 9 ins. in the ground, for $\frac{1}{4}$ cor. of secs. 34 and 35, marked $\frac{1}{4}$ on W. face, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Magnetic declination N. 14° 35' E.
42.00	S. bank of Canyon Diablo, brs. E.
50.00	N. bank of Canyon Diablo, descend.
67.00	S. bank of Canyon, brs. N.E., descend 75 ft. over steep rocky slope of canyon.
76.00	Bottom of descent, bottom N. bank of Canyon, brs. E., ascend 50 ft.
77.00	Top of N. bank of Canyon.
80.00	Set a limestone 10 x 10 x 8 ins., 7 ins. in the ground for cor. of secs. 26; 27, 34 and 35, marked with 1 notch on the S. edge, and 2 notches on E. edge, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Magnetic declination N. 14° 45' E. Land mountainous and rolling. Soil sandy and rocky, 2nd, 3rd and 4th rate. No timber. Undergrowth: scattered scrub cedar, white sage brush, and broom weed. Land mountainous and rolling, with steep rocky slope, and covered with loose limestone boulders, and exceptionally difficult to survey, 80.00 chains.
	From the cor. of secs. 26, 27, 34 and 35, I run E. on a random line, bet. secs. 26 and 35.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.18	Intersect N. & S. line, 10 lks. S. of cor. of secs. 25, 26, 35 and 36. Thence I run S. 89° 56' W., on a true line bet. secs 26 and 35. Descending over mountainous and rolling land.
35.00	Top E. bank of Canyon Diablo, steep rocky 200 ft. descent.
35.09	Set a limestone 15 x 8 x 6 ins., 10 ins. in the ground,



Subdivision of Township 18 North, Range 12 East.

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Chains	for a witness cor. to $\frac{1}{4}$ sec. cor. of secs. 26 and 35, marked W C $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. No trees near. Pits impracticable.
	Magnetic declination N. $14^{\circ} 45'$ E.
40.09	Point for $\frac{1}{4}$ sec. cor. falls in Canyon Diablo, course N., impracticable to set cor.
55.00	Bottom W. bank of canyon, ascend 200 ft.
60.15	Top W. bank of Canyon Diablo, ascend.
80.18	The cor. of secs. 26, 27, 34 and 35. Land mountainous and rolling. Soil sandy and rocky, 2nd, 3rd and 4th rate. No timber. Undergrowth: scrub cedar, white sage brush, and broom weed. Land mountainous, and steep slopes, covered with loose rock, and exceptionally difficult to survey, 80.18 chs.

	Thence I run N. $0^{\circ} 1'$ W., on a true line, bet. secs. 26 and 27, over mountainous rocky land.
13.00	Draw 1.00 ch. wide, brs. E., ascend.
40.00	Top of ascent, a limestone, 15 x 8 x 6 ins., set 10 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 26 and 27, marked $\frac{1}{4}$ on W. face, dig pits 18 x 18 x 12 ins., N. and 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 trees near. This corner was set December 12, 1911. February 27, 1913.
	December 12, 1911. From the above quarter-section cor. I run N. $0^{\circ} 1'$ W.
13.00	Top of W. bank of Canyon Diablo, line runs W. along perpendicular slope of Canyon Diablo, impossible to chain same.
	Thence I run S. $89^{\circ} 58'$ W., 10.00 chs., thence N. $0^{\circ} 1'$ W.
40.00	Thence I run N. $89^{\circ} 58'$ E., 10.00 chs., which puts me back on true line at point for cor. of secs. 22, 23, 26 and 27, which falls on the steep, rocky, perpendicular slope of the W. bank of Canyon Diablo, impossible to set cor., therefore, I chain W. 2.00 chs., and mark a cross (X) on a limestone boulder 24 x 12 x 18 ins. above the ground, for witness cor. to cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. edge, W. C on N.E. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No trees near. Pits impracticable. Land mountainous and rolling. Soil sandy and rocky, 2nd, 3rd and 4th rate. No timber. Undergrowth: scrub cedar, white sage brush, and broom weed. Land mountainous, steep rocky slopes, covered with loose rock, and exceptionally difficult to survey 80.00 chs.

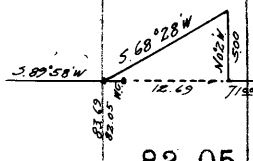
	At the true point for the cor. of secs. 22, 23, 26 and 27, I set off $23^{\circ} 1' 30''$ S., on the decl. arc, and at 12 h. M. apparent time, I observe the sun on the meridian, and obtain on the lat. arc the reading $34^{\circ} 56'$ N. which agrees with other data.
	Thence I run N. $89^{\circ} 56'$ E., on a random line bet. secs. 23 and 26.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.05	Intersect N. and S. line, 4 lks. S. of cor. of secs. 23, 24, 25 and 26. Thence I run, S. $89^{\circ} 58'$ W., on a true line bet. secs. 23 and 26.
15.00	4.00 chs. N. to O'Toole's pasture fence cor., fence brs. N. and W.
20.00	Top of rise, descend over rolling land.
40.02 $\frac{1}{2}$	In small draw, brs. N. set a limestone 15 x 10 x 8 ins.,

10 Subdivision of Township 18 North, Range 12 East.

Chains 10 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 23 and 26, marked $\frac{1}{4}$ on N. face, dig pits 18 x 18 x 12 ins. E. and W. of stone, 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor. No trees near.
Magnetic declination N. $14^{\circ} 35'$ E.

45.00 Road, brs. N.E. and S.W.
48.00 Top of rise, descend.
51.50 Bottom of descent, ascend.
71.00 10.00 chs. N. to Pat O'Toole's frame cabin, sheep dipping pen, steam pump, and water tank, top of E. bank of Canyon Diablo, steep perpendicular slope, impossible to chain, to determine the dist. across the canyon, I set a flag on line on the W. bank of the canyon, and measure a base line N. $0^{\circ} 2'$ W., 5.00 chs., to a point from which the flag brs. S. $68^{\circ} 28'$ W., therefore, $\tan. 68^{\circ} 30' \times$ the base = 12.69 chs., the dist. across the canyon which added to 71.00 makes 83.69, top of W. bank of canyon.

82.05 The witness corner to cor. of secs. 22, 23, 26 and 27. Land mountainous and rolling. Soil sandy and rocky, 2nd, 3rd, and 4th rate. No timber. Undergrowth: scrub pine, white sage brush and broom weed. Land mountainous, steep rocky slope, loose limestone boulders, and exceptionally difficult to survey 80.05 chs.



From true point for cor. of secs. 22, 23, 26 and 27, I run 5.00 chs. W.
Thence I run, N. $0^{\circ} 1'$ W., on an off-set line 5.00 chs. W. of true line, bet. secs. 22 and 23, it being impossible to chain or triangulate. Desc. over rolling land.

40.00 I ch. 5.00 chs. E., and set a limestone 14 x 6 x 4 ins., 9 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 22 and 23, marked $\frac{1}{4}$ on W. face, dig pits 18 x 18 x 12 ins., N. and S. of cor., 3 ft. dist., raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. No trees near.
Magnetic declination N. $14^{\circ} 35'$ E.

58.30 Enter side canyon, descending along side of canyon.
60.00 Bottom of descent along canyon, ascend steep 100 ft. slope.
62.00 Top of ascent, descend.
71.00 Bottom of descent, canyon brs. E., ascend steep 75 ft.
80.00 Top of ridge, set a limestone 15 x 8 x 6 ins., 10 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, marked with 3 notches on the S. edge, 2 notches on the E. edge, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. No trees near. Pits impracticable.
Magnetic declination N. 15° E.
Land mountainous and rolling. Soil sandy and rocky, 2nd, 3rd and 4th rate. No timber. Undergrowth: scrub cedar, white sage brush, and broom weed. Land mountainous and rolling, steep rocky slopes, and covered with loose rock, and exceptionally difficult to survey, 80.00 chs.

December 12, 1911.

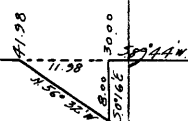
February 27, 1913. From the cor. of secs. 13, 14, 23 and 24, I run S. $89^{\circ} 49'$ W., on a true line, bet. secs 14 and 23, descending steep 200 ft. into Dog Valley Wash.

25.50 Bottom of descent, Dog Valley Wash, 3 chs. wide, brs. N. W., ascend steep rocky 200 ft. ascent.
39.95 On steep N.E. slope, a limestone 18 x 8 x 6 ins., set 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 14 and 23, marked $\frac{1}{4}$ on N. face, with mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. No trees near. Pits impracticable.
Magnetic declination N. 15° E.

Chains	
	. This corner was set December 13, 1911. February 27, 1913.
	December 13, 1911.
52.00	Top of steep ascent, descend to Canyon Diablo.
61.00	Top of E. bank of Canyon Diablo, descend steep, rocky 200 ft. descent.
65.00	Bottom of canyon, 2.00 chs. wide, ascend steep W. slope.
70.80	Top W. bank Canyon Diablo.
79.90	The cor. of secs. 14, 15, 22 and 23. Land mountainous. Soil sandy and rocky, 2nd, 3rd and 4th rate. No timber. Undergrowth: scrub cedar, white sage brush, and broom weed Mountainous land, steep slopes, and loose rocks, and exceptionally difficult to survey, 79.90 chs.

	From the cor. of secs. 14, 15, 22 and 23, I run N. 0° 1' W., on a true line bet. secs. 14 and 15. Descend- ing through dense cedars.
15.00	Gulch 40 lks. wide brs. E., ascend 200 ft. rocky slope. Leave dense cedars.
20.00	Top of ascent, descend.
40.00	On steep N. slope, set a limestone 15 x 18 x 6 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor. of secs. 14 and 15, marked $\frac{1}{4}$ on W. face, raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor., from which: A cedar 6 ins. in diam., brs. S. 85° W., 15 lks. marked $\frac{1}{4}$ S 15 B T. No other tree available. Pits im- practicable. Magnetic declination N. 15° E.
44.00	Gulch brs. E., ascend steep 250 ft. slope.
49.00	Top of cliff, ascend.
75.00	Top of ascent, descend.
80.00	Set a limestone 18 x 8 x 6 ins., 12 ins. in the ground for cor. of secs. 10, 11, 14 and 15, marked with 4 notches on the S. edge; and 2 notches on the E. edge, raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. No trees near. Pits impracticable. Magnetic declination N. 15° E. Land mountainous. Soil sandy and rocky, 2nd, 3rd and 4th rate. No timber. Undergrowth: dense scrub cedar, white sage brush and broom weed. Land mountainous, with steep slopes covered with loose rocks, or dense cedar brush, and exceptionally diffi- cult to survey 80.00 chs.

	At the cor. of secs. 10, 11, 14 and 15, I set off 23° 06' S., on the decl. arc, and at 12 h. M. apparent time, I observe the sun on the meridian, and obtain on the lat. arc, a reading 34° 58' N. Thence I run N. 89° 49' E., on a random line bet. secs. 11 and 14.
40.00	Set temp. $\frac{1}{4}$ sec, cor.
80.12	Intersect N. and S. line, 11 lks. S. of cor. of secs. 11, 12, 13 and 14. Thence I run S. 89° 44' W., on a true line, des- cending towards Canyon Diablo.
23.00	S. 10.00 chs. to homestead of Pat O'Toole's, frame house, and sheep corral.
30.00	Top E. bank, Canyon Diablo, steep, rocky 200 ft. descent, impossible to chain, to determine the dist. across the Canyon, I set a flag on line on W. bank, then measure a base line S. 0° 16' E., 8.00 chs. to a point from which the flag brs. N. 56° 32' W., therefore, tan. 56° 16' x the base, or 1.497 x 8 = 11.98 chs., the dist. across the Canyon, which added to 30.00 chs., makes 41.98 chs., the top of W. bank of Canyon.
48.06	Set a limestone 15 x 8 x 6 ins., 10 ins. in the ground,



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Subdivision of Township 18 North, Range 12 East.

Chains

for witness corner to $\frac{1}{4}$ sec. cor. of secs. 11 and 14, marked W. C $\frac{1}{4}$ on N. face, raise a mound of stone $2\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor. No trees near. Pits impracticable.

80.12 Cor. of secs. 10, 11, 14 and 15.

Land mountainous.

Soil sandy and rocky, 2nd, 3rd and 4th rate.

No timber. Undergrowth: scattered scrub cedar, white sage brush and broom weed.

Land mountainous, steep rocky slope, covered with loose rock, and exceptionally difficult to survey, 15.00 chs.

Rolling land 65.12 chs.

Dec. 13, 1911.

GENERAL DESCRIPTION.

Township 18 N., R. 12 E., is cut from N. to S. by Canyon Diablo, a winding precipitous canyon, from 200 to 300 ft. deep, and 7.00 to 27.00 chs. wide at the top; 1 to 3.00 chs. wide at the bottom, impossible to cross with a wagon.

Ridges in south half of the township are covered with cedars, N. half barren, except for white sage brush and broom weed. White sage brush and broom weed covers entire township. No water in the township, except in Canyon Diablo, 2 or 3 tanks, which will dry during a dry season.

Patrick O'Toole, settler, is located in sec. 14, frame house, sheep corral, and water tank.

W. Roscell
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 Race Allen

....., 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

Sulphur Mountain N. 1/2 E. 1/4 Sec 10 N. 1/2 E.
+ E. 1/4 Sec 10 N. 1/2 E.

showing the respective capacities in which they acted:

Bill Johnson....., Chainman.

W. D. Schoenover....., Chainman.

W. M. Lankford....., Moundman.

....., Moundman.

Cliff Nelson....., Axman.

....., Axman.

Lester French....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Race Allen

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

those parts or portions of the Sulphur Mountain N. 1/2 E.
+ E. 1/4 Sec 10 N. 1/2 E.

..... of the G. & S. R.

B. S. meridian, 100 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

W. D. Schoenover....., Chainman.

Bill Johnson....., Chainman.

W. M. Lankford....., Moundman.

....., Moundman.

Cliff Wilson....., Axman.

....., Axman.

Lester French....., Flagman.

Subscribed and sworn to before me this 11
day of Dec, 1911.



Race Allen
U. S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Roscoe C. Ham, 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 5th day of Jan., 1910, 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 Subdivision Lines in P. 12 E. Resurvey [City] to N. 12 E.

of the E. & S. R. B. V. meridian, in the T. 12 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.

Roscoe C. Ham
United States Deputy Surveyor.

Subscribed by said Roscoe C. Ham, and sworn to before me }
this 31st day of January, 1912



Ray B. Thomson
United States Commissioner
Western Division of the District
of Missouri

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona Nov. 24, 1912

The foregoing field notes of the survey of the Subdivision Lines in T. 12 N. - R. 12 E. and the Resurvey of the East Boundary of T. 12 N. - R. 12 E. of the Gila and Salt River Base and Meridian, Arizona

executed by Roscoe C. Ham, U. S. Deputy Surveyor under his contract No. 162, dated Jan. 5, 1910, 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.
OF ARIZONA.

~~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~~