

Accepted S.L.O. letter & dated April 28-1913

115
1

^{4-679.}
Subdivisional
Book 6

2373 FEB 24 1913

BOOK 2373

FIELD NOTES

OF THE SURVEY OF THE

A PARTIAL

SUBDIVISION OF T 18 N R 18 W

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

AS SURVEYED BY

William B. Alexander, United States Deputy Surveyor,

Under his Contract No. 156, dated May 26, 1909, 190

Survey commenced May 21, 1910, 190

Survey completed May 30, 1910, 190

BOOK 2373

For NAMES AND DUTIES OF ASSISTANTS.

See Subdivisional Books "B" and "G"

Blank ruled area consisting of approximately 18 horizontal dashed lines.

BOOK 2373

INDEX DIAGRAM.

Township 18 N, Range 18 W

See Orig. & Supplemental Standard Book "C"

Fifth Guide Meridian West

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

EXTERIOR BOOK "A"

EXTERIOR BOOK "A"

Meanders Page

For PRELIMINARY OATHS OF ASSISTANTS.

See Subdivisional Books "B" & "G"

WE, _____ and _____ 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 _____

_____, Chainman.
_____, Chainman.

Subscribed and sworn to before me this _____ }
day of _____, 190 }



WE, _____ 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 _____

_____, Moundman.
_____, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 190 }



WE, _____ 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 _____

_____, Axman.
_____, Axman.

Subscribed and sworn to before me this _____ }
day of _____, 190 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 190 }



Subdivision of Township 18 North, Range 18 West

Chains.

Survey commenced May 21, 1910, and was executed with a Young and Sons' Light Mountain Transit No. 7520, fitted with two double verniers placed opposite to each other, and reading to single minutes of arc on the horizontal limb. The transit is also fitted with a Smith Solar attachment, the latitude and declination arcs of which also read to single minutes of arc.

The instrument was examined, tested on a true meridian at Phoenix, Arizona, found correct, and approved by the U. S. Surveyor General of Arizona, June 25, 1904.

I examine the bubble, collimation and standard adjustments of the transit and find them to be correct; then, to test the solar apparatus by comparing the results of a.m. and p.m. observations with a true meridian determined by an observation on Polaris, I proceed as follows:

At the cor. of secs. 35, 36, 1 and 2 on the south boundary of the township, recently established and described by me; latitude, $34^{\circ} 53' 57''$ N.; longitude, $114^{\circ} 07' 09''$ W., I set off $20^{\circ} 10' N.$ on the decl. arc; $34^{\circ} 54' N.$ on the lat. arc, and at 4h. 0m. p.m., l.m.t., I determine a meridian with the solar, and mark the point thereof by a tack driven in a stake set about 5 chains N. of my station.

May 21, 1910.

May 22, 1910.

At 3h, 30m. 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 tack driven in a stake set about 5 chs. N. of my station.

At 5h. 0m., a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 26'$ to the west, and find that this line coincides with the meridional line determined yesterday with the solar observation.

Magnetic Variation, $15^{\circ} 00'$ E.

Thence I run,

$N. 0^{\circ} 00' W.$, between secs. 35 and 36.

Over sharply rolling, descending ground, covered with dense undergrowth of greasewood, cactus and catsclaw, with some palo verde.

14.05 Gulch, 10 lks. wide, course W.

33.50 Wash, 1.50 chs. wide, course W.; ascend.

40.00 Set a granite stone $7 \times 10 \times 16$ ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

45.00 Descend.

60.10 Wash, 30 lks. wide, course $S. 75^{\circ} W.$

64.46 Wash, 40 lks. wide, course $S. 70^{\circ} W.$
Ascend.

80.00 Set a granite stone, $6 \times 8 \times 18$ ins., 12 ins. in the ground, for the cor. of secs. 25, 26, 35 and 36, marked with 1 notch on the E. and S. edges; dig pits $18 \times 18 \times 12$ ins., in each section $5\frac{1}{2}$ feet dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, sharply rolling.
Soil, 3rd rate, gravelly.

Dense greasewood and cactus undergrowth.
No timber, and no grass.

Sharply rolling land, and land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.

At 9h. 30m., a.m., l.m.t., at the above cor., I lay off $20^{\circ} 19' N.$ on the decl. arc; $34^{\circ} 55' N.$ on the lat. arc; and determine a meridian with the solar. From this

2. Subdivision of Township 18 North, Range 18 West.

Chains.

meridian I check exactly with the meridian from which I have been running my section line, and I therefore conclude that my solar attachment and transit is in perfect adjustment.

- Thence I run, East, on a random line, between secs. 25 and 36.
- 40.00 Set a temporary $\frac{1}{4}$ sec. cor.
- 80.07 Cor. of secs. 25, 30, 31 and 36, on east boundary of township recently established and described by me, brs. N. 2 lks.
- Thence I run, S. 89° 59' W., on a true line, between secs. 25 and 36. Over rolling land, covered with dense undergrowth of greasewood and catsclaw; descend.
- 17.00 Wash, 20 lks. wide, course SW.
- 23.00 Same wash, 20 lks. wide, course NW.
- 25.00 Road, brs. N. and S.
- 26.70 Above mentioned wash, 20 lks. wide, course SW.
- 35.69 Telegraph line brs. N. 9° 8' E. and S. 9° 8' W.
- 36.38 Santa Fe R.R. brs. N. 9° 8' E. and S. 9° 8' W.
- 37.08 Telegraph line brs. N. 9° 8' E. and S. 9° 8' W.
- 40.03 $\frac{1}{2}$ Set a granite stone 8x10x20 ins., 15 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; dig pits 18x18x12 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.
- 66.60 Wash, 30 lks. wide, course SW. Ascend.
- 80.07 The cor. of secs. 25, 26, 35 and 36, hereinbefore described. Land, rolling. Soil, 3rd rate. No timber. No grass. Dense undergrowth of greasewood, cactus, and some palo verde. Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 80.00 chains.

N. 0° 01' W., bet. secs. 25 and 26. Over rolling land, covered with dense undergrowth of greasewood, cactus and catsclaw. Descend.

- 19.00 Wash, 30 lks. wide, course W.
- 32.06 Wash, 10 lks. wide, course S. 70° W.
- 40.00 Set a granite stone, 5x10x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 75.00 Wash, 10 lks. wide, course SW.
- 80.00 Set a granite stone 7x10x15 ins., 10 ins. in the ground for the cor. of secs. 23, 24, 25 and 26, marked with 1 notch on the E. and 2 notches on the S. edges; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Rolling land. Soil, 3rd rate, gravel and sand. Dense undergrowth of greasewood and cactus. No timber and no grass. Rolling land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

At noon, at the above cor., I set off 20° 20' N. on the decl. arc, and read the lat. arc after observing the sun on the meridian; the resulting lat. reading is 34° 55 $\frac{1}{2}$ ' N.

- Thence I run, N. 89° 59' E. on a random line, bet. secs. 24 and 25.
- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
- 79.96 Intersect the E. bdy. of the township 9 lks. S. of the cor. of secs. 19, 24, 25 and 30, recently established and described by me.

Subdivision of Township 18 North, Range 18 West.

3.

Chains.

Thence I run,
 S.89° 55'W, on a true line, bet. secs. 24 and 25.
 Over rolling land, covered with dense undergrowth of greasewood and cactus. No timber, and no grass.

12.80 Wash, 70 lks. wide, course SW.
 16.20 Wagon road, brs. N. and S.
 17.50 Wash, 20 lks. wide, course SW.
 23.00 Wash, 20 lks. wide, course S.
 25.70 Telegraph line, brs. N. 9° 8' E., and S. 9° 8' W.
 26.40 Santa Fe R.R. brs. N. 9° 8' E. and S. 9° 8' W.
 27.10 Telegraph line brs. N. 9° 8' E. and S. 9° 8' W.
 Descend.

39.98 Set a granite stone 5x10x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; dig pits 18x18x12 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.

68.00 Wash, 10 lks. wide, course SW.
 76.00 Wash, 10 lks. wide, course SW.
 79.96 The cor. of secs. 23, 24, 25 and 26, hereinbefore described.
 Land, rolling.
 Soil, 2nd and 3rd rate, sandy.
 No timber; no grass.
 Dense undergrowth of greasewood, cactus and catsclaw.
 Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 80.00 chains.

N. 0° 01' W., on a true line, bet. secs. 23 and 24.
 Over rolling land, covered with dense undergrowth of greasewood, cactus and catsclaw; descending ground.

12.75 Wash, 1.00 chain wide, brs. S. 75° W.; ascend.
 25.00 Descend.
 30.75 Wash, 10 lks. wide, course SW.; ascend.
 40.00 Set a granite stone 6x10x12 ins., 8 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Descend.

43.50 Wash, 10 lks. wide, course SW.
 53.40 Wash, 40 lks. wide, course SW.
 64.00 Wash, 10 lks. wide, course W.; ascend.
 80.00 Set a malpais stone 12x16x20 ins., 15 ins. in the ground for the cor. of secs. 13, 14, 23 and 24, marked with 3 notches on the S. and 1 notch on the E. edges; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, sharply rolling.
 Soil, 3rd rate, sandy and gravelly.
 No timber.
 No grass.
 Dense undergrowth of greasewood and cactus.
 Sharply rolling land, covered with dense undergrowth and exceptionally difficult to survey, 80.00 chains.

N. 89° 55' E., on a random line, between secs. 13 and 24.

40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect the E. boundary of the township, 11 lks. N. of the cor. of secs. 13, 18, 19 and 24, recently established and described by me.

Thence I run,
 West, on a true line, between secs. 13 and 24.
 Over rolling land, covered with dense undergrowth of greasewood, cactus and catsclaw.

4.10 Wagon road, brs. N. and S.
 10.14 Telegraph line brs. N. 9° 8' E. and S. 9° 8' W.
 10.80 Santa Fe R.R. brs. N. 9° 8' E. and S. 9° 8' W.
 11.50 Telegraph line brs. N. 9° 8' E. and S. 9° 8' W.
 Descend.

4. Subdivision of Township 18 North, Range 18 West.

Chains.

20.20 Wash, 20 lks. wide, course SW.
 40.00 Set a malpais stone 7x10x20 ins., 15 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 47.00 Wash, 10 lks. wide, course SW.
 62.90 Wash, 20 lks. wide, course SW.
 64.80 Same wash, 20 lks. wide, course NW.
 67.00 Same wash, 20 lks. wide, course SW.
 80.00 The cor. of secs. 13, 14, 23 and 24, hereinbefore described. Land, rolling. Soil, 3rd rate. Dense undergrowth of greasewood, cactus and catsclaw. No timber, and very little grass. Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 80.00 chains.
 May 22, 1910.

May 23, 1910.
 N. $0^{\circ} 01' W.$, bet. secs. 13 and 14.
 Over roughly rolling land, covered with dense undergrowth of greasewood, cactus and catsclaw.

Descend.
 8.00 Gulch, 50 lks. wide, course SW.; ascend.
 40.00 Set a malpais stone 6x8x16 ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; dig pits 18x18x12 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. Descend.
 46.30 Gulch, 15 lks. wide, course SW.; ascend.
 48.50 Ridge, brs. SW. and NE.; descend.
 53.50 Gulch, 20 lks. wide, course SW.; ascend.
 58.00 Ridge, brs. SW. and NE. Descend.
 64.80 Gulch, 10 lks. wide, course SW.; ascend.
 75.70 Ridge brs. SW. and NE.; descend.
 80.00 Set a granite stone 10x10x16 ins., 11 ins. in the ground for the cor. of secs. 11, 12, 13 and 14, marked with 1 notch on the E. and 4 notches on the S. edges; raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, roughly rolling. Soil, 3rd rate, stony. Dense undergrowth of greasewood, cactus and catsclaw. No timber or grass. Roughly rolling land, covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.

At 9h.00m. a.m., 1.m.t. at the above cor., I set off $34^{\circ} 57\frac{1}{2}' N.$ on the lat. arc; $20^{\circ} 30\frac{1}{2}' N.$ on the decl. arc; and determine a meridian with the solar.

Thence I run, East, on a random line, between secs. 12 and 13.
 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 79.94 Intersect the E. bdy. of the township, 13 lks. N. of the corner of secs. 7, 12, 13 and 18, recently established and described by me, Thence I run, N. $89^{\circ} 54' W.$ on a true line, bet. secs. 12 and 13. Over rolling land covered with dense undergrowth of greasewood, cactus, and catsclaw. Descending.
 28.00 Wash 25 lks. wide, course SW. Ascend.
 35.41 Signal Station, bears $3.38^{\circ} E.$ Descend.
 39.97 Set a malpais stone 6x8x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 42.00 Gulch, 25 lks. wide, course SW.; ascend.
 60.00 Ridge brs. SW. and NE.; descend.

Subdivision of Township 18 North, Range 18 West.

5.

Chains.

65.50 Gulch, 15 lks.wide, course SW.; ascend.
 72.00 Ridge brs. SW.and NE.; descend.
 79.94 The cor.of secs. 11,12,13 and 14, hereinbefore described.
 Land, rolling sharply.
 Soil, 3rd rate, stony.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 No timber, and very little grass.
 Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 79.94 chs.

N. 0° 0' W., bet. secs. 11 and 12.
 Over sharply rolling land, covered with dense undergrowth of greasewood, cactus and catsclaw.
 Descend.

32.00 Wash, 2.00 chs. wide, course SW.
 33.00 Ascend bluff about 40 feet high, brs. SW, and NE. Enter mountainous land.
 34.00 Top ridge, brs. SW. and NE.; descend.
 40.00 Set a malpais stone 8x8x14 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Ascend.
 50.50 Ridge brs. SW. and NE. Descend.
 57.00 Gulch, 15 lks. wide, course SW.
 63.00 Gulch, 20 lks.wide, course SW.; ascend.
 69.00 Ridge brs. SW. and NE.; descend.
 80.00 Set a granite stone 6x6x16 ins., 11 ins. in the ground for the cor. of secs. 1, 2, 11 and 12, marked with 1 notch on the E. and 5 notches on the S. edges; and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, rolling and mountainous.
 Soil, 2nd and 3rd rate.
 No grass and no timber.
 Mountainous land, or land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

S. 89° 54' E. bet. secs. 1 and 12, on a random line.

40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect E. bdy. of the Tp., 13 lks. S. of the cor. of secs. 1, 6, 7 and 12, recently established and described by me. Thence I run, West, on a true line, between secs. 1 and 12.
 Over mountainous land, covered with dense undergrowth of greasewood, cactus and catsclaw.
 Ascend.
 15.00 Ridge, brs. SW. and NE. Descend.
 27.00 Gulch, 15 lks.wide, course SW.; ascend.
 30.00 Descend.
 33.70 Gulch, 20 lks.wide, course SW. Ascend.
 37.00 Ridge brs. NE. and SW. Descend.
 40.00 Set a malpais stone 6x10x14 ins., 10 ins. in the ground marked $\frac{1}{4}$ on the N. face and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Ascend.
 47.00 Ridge brs. NE. and SW. Descend.
 61.60 Gulch, 15 lks.wide, course SW.; ascend.
 66.00 Ridge brs. SW. and NE. Descend.
 72.70 Gulch, 10 lks.wide, course SW. Ascend.
 75.00 Descend.
 80.00 The cor. of secs. 1, 2, 11 and 12, hereinbefore described.
 Land, mountainous.
 Soil, 2nd rate.
 Dense undergrowth of greasewood, cactus and catsclaw.
 No timber. No grass.
 Mountainous land, and land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

6. Subdivision of Township 18 North, Range 18 West.

Chains.

At noon, at the above cor., I set off $20^{\circ} 31\frac{1}{2}'$ N. on the decl. arc, and observe the sun on the meridian; the resulting lat. reading is $34^{\circ} 58\frac{1}{2}'$ N.

Thence I run,

N. $0^{\circ} 12'$ W. on a random line, between secs. 1 and 2.

Over rolling land, covered with dense undergrowth of greasewood, cactus, and catsclaw.

Descend.

40.00

Set temp. $\frac{1}{4}$ sec. cor.

78.08

Intersect the N. bdy. of the Tp., 2.75 chs E. of cor. to secs. 1, 2, 35 and 36, a malpais stone 5 ins. above ground, marked and witnessed as described by the Surveyor General. I change markings on this cor. to refer to secs. 35 and 36 only, and set a closing cor. as follows:

Set a malpais stone $8 \times 8 \times 15$ ins., 10 ins. in the ground for the closing sec. cor. of secs. 1 and 2 on the S. bdy. of Tp. 19 N., R. 18 W., marked with 5 grooves on the W. and 1 groove on the E. faces, and C C on the S. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.

Thence I run,

S. $0^{\circ} 01'$ E. on a true line bet. secs. 1 and 2.

Over rolling land, covered with dense undergrowth of greasewood cactus and catsclaw.

Descend.

15.10

Gulch, 15 lks. wide, course SW. Ascend.

21.10

Ridge, brs. E. and W. Descend.

38.08

Set a malpais stone $6 \times 8 \times 18$ ins., 12 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Ascend.

54.00

Ridge, brs. SW. and NE. Descend.

59.50

Gulch, 40 lks. wide, course SW. Ascend.

68.00

Descend.

73.00

Junction of two washes 30 lks. wide, course SSW. and SW.

78.08

The cor. of secs. 1, 2, 11 and 12, heretofore described.

Land, sharply rolling.

Soil, 3rd rate, gravelly.

Dense undergrowth of greasewood, cactus, and catsclaw.

No timber and no grass.

Sharply rolling land, and land covered with dense undergrowth, and exceptionally difficult to survey, 78.08 chs.

May 23, 1910.

May 24, 1910.

Commence at the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp. recently established and described by me.

Thence I run,

N. $0^{\circ} 01'$ W., bet. secs. 34 and 35.

Over mountainous land, covered with dense undergrowth of greasewood, cactus and catsclaw.

Ascending.

29.00

Wash, 20 lks. wide, course S. 80° W.

33.80

Wash, 50 lks. wide, course S. 70° W. Ascend over rolling land.

40.00

Set a granite stone $8 \times 10 \times 18$ ins., 12 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked with $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Thence over rolling land.

80.00

Set a granite stone $8 \times 10 \times 15$ ins., 10 ins. in the ground for the cor. of secs. 26, 27, 34 and 35, marked with 1 notch on the S. and 2 notches on the E. edges; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, rolling and mountainous.

Soil, 2nd and 3rd rate, stony.

Subdivision of Township 18 North, Range 18 West.

7.

Chains.

Dense undergrowth of greasewood, cactus, and catsclaw.
No grass or timber.
Mountainous land, 33.80 chs.; rolling land, 46.80 chs.
Mountainous land, or land covered with dense undergrowth,
and exceptionally difficult to survey, 80.00 chains.

-
- East, on a random line between secs. 26 and 35.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.00 Intersect the N. and S. line at the cor. of secs. 25, 26, 35
and 36, hereinbefore described.
Thence I run,
West, on a true line, between secs. 26 and 35.
Over rolling land, covered with dense undergrowth of
greasewood, palo verde and cactus.
40.00 Set a granite stone 7x10x18 ins., 12 ins. in the ground
for the $\frac{1}{4}$ sec. cor., bet. secs. 26 and 35, marked $\frac{1}{4}$ on
the N. face, and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$
ft. high, N. of cor. Pits impracticable.
40.35 Wash, 30 lks. wide, course SW.
51.75 Wash, 20 lks. wide, course S. 20° W.
80.00 The cor. of secs. 26, 27, 34 and 35, hereinbefore described.
Land, rolling.
Soil, 3rd rate stony.
Dense undergrowth of greasewood, cactus, and palo verde.
No timber or grass.
Rolling land, covered with dense undergrowth and difficult
to survey, 80.00 chs.

At 9h, 30m., a.m., l.m.t., at the above cor., I lay off 20° 42'
N. on the decl. arc; 34° 55' N. on the lat. arc, and deter-
mine a meridian with the solar.

- Thence I run,
N. 0° 02' W., bet. secs. 26 and 27.
Over rolling land, covered with dense undergrowth of
greasewood, palo verde, cactus and catsclaw.
33.00 Wash, 70 lks. wide, course SW.
40.00 Set a granite stone, 6x8x15 ins., 10 ins. in the ground
for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise
a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
72.00 Wash, 10 lks. wide, course SW.
80.00 Set a granite stone 10x10x20 ins., 15 ins. in the ground
for the cor. of secs. 22, 23, 26 and 27, marked with 2
notches on the E. and 2 notches on the S. edges; and
raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of
cor. Pits impracticable.
Land, sharply rolling.
Soil, 3rd rate, gravelly.
Dense undergrowth of greasewood, cactus and palo verde.
No timber or grass.
Rolling land, covered with dense undergrowth and excep-
tionally difficult to survey, 80.00 chains.

-
- East, on a random line, between secs. 23 and 26.
40.00 Set a temp. $\frac{1}{4}$ sec. cor.
80.00 Intersect N. and S. line, 7 lks. S. of cor. of secs. 23, 24, 25
and 26 hereinbefore described.
Thence I run,
S. 89° 57' W., on a true line, bet. secs. 23 and 26.
Over rolling land, covered with dense undergrowth of
greasewood, cactus and catsclaw brush.
33.00 Wash, 50 lks. wide, course SW.
40.00 Set a malpais stone 8x12x18 ins., 12 ins. in the ground
for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face, and raise
a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits

8. Subdivision of Township 18 North, Range 18 West.

Chains.

impracticable.
 75.00 Wash, 50 lks. wide, course S.
 78.00 Same wash, 50 lks. wide, course NW.
 80.08 The cor. of secs. 22, 23, 26 and 27, hereinbefore described.
 The wash last mentioned runs SW. at a point 1.50 chs. W. of
 cor.
 Land, rolling.
 Soil, 2nd rate.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 No timber or grass.
 Rolling land covered with dense undergrowth and difficult
 to survey, 80.08 chs.

N. 0° 01' W., bet. secs. 22 and 23.
 Over mountainous land, covered with dense undergrowth of
 greasewood, cactus and catsclaw.
 Descend.
 11.00 Wash 30 lks. wide, course W.; ascend.
 25.00 Descend.
 38.00 Wash, 10 lks. wide, course S. 75° W.; ascend.
 40.00 Set a malpais stone 12x12x15 ins., 10 ins. in the ground
 for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise
 a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
 47.50 Begin descent.
 58.55 Wash, 10 lks. wide, course W.; ascend.
 74.00 Descend.
 80.00 Set a granite stone 8x10x16 ins., 11 ins. in the ground
 for the cor. of secs. 14, 15, 22 and 23, marked with 3
 notches on the S. and 2 notches on the E. edges, and
 raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of
 cor. Pits impracticable.
 Land, mountainous.
 Soil, 2nd rate, stony.
 Dense undergrowth of greasewood, cactus and palo verde.
 No timber or grass.
 Mountainous land, or land covered with dense undergrowth,
 and exceptionally difficult to survey, 80.00 chains.

At noon, the sun is obscured with clouds and a latitude
 observation is impracticable.
 N. 89° 57' E. on a random line, bet. secs. 14 and 23.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect the N. and S. line, 7 lks. N. of cor. of secs. 13, 14,
 23 and 24, hereinbefore described. Thence I run from
 cor.
 West, on a true line, bet. secs. 14 and 23.
 Over sharply rolling land, covered with dense undergrowth
 of greasewood, cactus, and catsclaw.
 40.00 Set a malpais stone 6x8x15 ins., 10 ins. in the ground
 for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise
 a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 Pits impracticable.
 42.50 Wash, 10 lks. wide, course SW.
 80.00 The cor. of secs. 14, 15, 22 and 23, hereinbefore described.
 Land, sharply rolling.
 Soil, 2nd and 3rd rate.
 Dense undergrowth of greasewood, cactus and palo verde.
 No timber or grass.
 Sharply rolling land, or land covered with dense under-
 growth, and exceptionally difficult to survey, 80.00
 chs.

N. 0° 01' W., bet. secs. 14 and 15.
 Over mountainous land, covered with dense undergrowth
 of greasewood of greasewood, cactus, catsclaw and
 palo verde.
 Descend.

Subdivision of Township 18 North, Range 18 West

Chains.
 1.00 Wash 1.00 chain wide, course W.; ascend.
 23.00 Top of ridge, bra. W. and E.; descend.
 26.85 Wash, 10 lks. wide, course S. 75° W.; ascend steeply.
 37.00 Ridge bra. E. and W.; descend.
 40.00 Set a malpais stone, 8x8x18 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 60.00 Wash, 1.50 chs. wide, course SW.
 70.00 Ridge bra. SW. and NE. Descend.
 75.00 Wash, 10 lks. wide, course S. 30° W. Ascend.
 80.00 Set a malpais stone 10x12x18 ins., 12 ins. in the ground for the cor. of secs. 10, 11, 14 and 15, marked with 2 notches on the E. and 4 notches on the S. edges; and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, 2nd rate, stony.
 Dense undergrowth of greasewood, cactus, catsclaw, and palo verde.
 No timber or grass.
 Mountainous land, or land covered with dense undergrowth and exceptionally difficult to survey, 80.00 chains.

 East, on a random line, bet. secs. 11 and 14.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.01 Intersect the N. and S. line, 6 lks. S. of the cor. of secs. 11, 12, 13 and 14 hereinbefore described. Thence S. 89° 57' W. on a true line, bet. secs. 11 and 14. Sharply rolling land, covered with dense undergrowth of greasewood, cactus, and palo verde.
 Descend.
 25.50 Wash, 1150 lks. wide, course SW.
 Ascend.
 40.00 Set a granite stone 8x10x15 ins., 10 ins. in the ground, for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Descend.
 40.30 Wash, 20 lks. wide, course SW.
 59.30 Wash, 20 lks. wide, course S. 60° W.
 64.00 Wash, 60 lks. wide, course SW.
 78.00 Wash, 10 lks. wide, course SW.
 80.01 The cor. of secs. 10, 11, 14 and 15, hereinbefore described. Sharply rolling land.
 Dense undergrowth of greasewood, cactus and palo verde.
 Soil, 3rd rate, gravelly.
 No grass; no timber.
 Sharply rolling land, covered with dense undergrowth, and exceptionally difficult to survey, 80.01 chains.
 May 24, 1910.

 May 25, 1910.
 E. 0° 01' W., bet. secs. 10 and 11.
 Over mountainous land, covered with dense undergrowth of greasewood, cactus and catsclaw.
 Ascend.
 3.50 Ridge, bra. E. and W.; descend.
 16.55 Draw, course SW.; ascend.
 26.00 Ridge, bra. E. and W.; descend.
 31.00 Wash, 10 lks. wide, course SW.; ascend.
 40.00 Set a malpais stone 6x12x14 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Descend.
 68.50 Wash, 15 lks. wide, course W.; ascend.
 73.00 Descend.

10. Subdivision of Township 18 North, Range 18 West.

Chains.

- 77.00 Wash, 10 lks. wide, course SW.; ascend.
 80.00 Set a malpais stone 8x10x18 ins., 12 ins. in the ground, for the cor. of secs. 2, 3, 10 and 11, marked with 2 notches on the E., and 5 notches on the S. edges; and raise a mound of stones 3 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.
 Soil, 2nd rate, stony.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 No timber or grass.
 Mountainous land, covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

- N. 89° 57' E. on a random line, between secs. 2 and 11.
 40.00 Set a temp. ¼ sec. cor.
 79.98 Intersect the N. and S. line, 9 lks. N. of the cor. of secs. 1, 2, 11 and 12, hereinbefore described.
 Thence I run,
 N. 89° 59' W. on a true line, bet. secs. 2 and 11.
 Over mountainous land.
 Covered with dense undergrowth of greasewood, cactus, and catsclaw.
 Descend.
 3.45 Wash, 20 lks. wide, course SW.; ascend.
 39.99 Set a malpais stone 7x12x18 ins., 12 ins. in the ground for the ¼ sec. cor., marked ¼ on the N. face, and raise a mound of stones 3 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
 Descend.
 44.00 Wash, 10 lks. wide, course SW.; ascend.
 60.00 Descend.
 78.50 Wash, 10 lks. wide, course SW.; ascend.
 79.98 The cor. of secs. 2, 3, 10 and 11, hereinbefore described.
 Land, mountainous.
 Soil, 2nd rate, rocky.
 Dense undergrowth of greasewood, cactus and catsclaw.
 No timber or grass.
 Mountainous land, covered with dense undergrowth, and exceptionally difficult to survey, 79.98 chs.

- At 9h. 30m. a.m., 1.m.t., at the above cor., I set off 20° 53' N. on the decl. arc; 34° 58½' N. on the lat. arc, and determine a meridian with the solar.
 Thence I run,
 N. 0° 01' W., on a random line, bet. sec. 2 and 3.
 40.00 Set temp. ¼ sec. cor.
 78.00 Intersect the N. bdy. of the Tp., 2.80 chs. E. of the cor. of secs. 2, 3, 34 and 35, a malpais stone 5 ins. above ground, marked and witnessed as described by the Survey or General. Change markings of this cor. to refer to secs. 34 and 35 only, and set a closing cor. as follows:
 Set a malpais stone 8x10x15 ins., 10 ins. in the ground for the closing corner of secs. 2 and 3, on the S. bdy. of T. 19 N., R. 18 W., marked with 2 grooves on the E. and 4 grooves on the W. faces; C C on the S. face; and raise a mound of stones 3 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
 Thence I run,
 S. 0° 01' E., on a true line, bet. secs. 2 and 3.
 Over roughly rolling land, covered with dense undergrowth of greasewood, cactus, and catsclaw.
 38.00 Set a malpais stone 8x10x18 ins., 12 ins. in the ground, for the ¼ sec. cor., marked ¼ on the W. face; and raise a mound of stones 3 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
 Descend.
 42.50 A wash, 50 lks. wide, course SW. Ascend.
 50.00 Descend.

Subdivision of Township 18 North, Range 18 West.

11.

Chains.	
57.50	Wash, 10 lks. wide, course SW.; ascend.
63.00	Ridge, brs. NE. and SW.; descend.
78.00	The cor. of secs. 2, 3, 10 and 11, hereinbefore described. Land roughly rolling. Soil, 3rd rate. Dense undergrowth of greasewood, cactus, catsclaw. No grass or timber. Roughly rolling land, covered with dense undergrowth, and exceptionally difficult to survey, 78.00 chains.

	At noon, I set off $20^{\circ} 53\frac{1}{2}'$ N. on the decl. arc, and observe the sun on the meridian at the cor. of secs. 3, 4, 33 and 34 on the S. by of the Tp., recently established and described by me; the resulting latitude reading is $34^{\circ} 54'$ N. Thence I run, N. $0^{\circ} 02'$ W., bet. secs. 34 and 33. Over extremely mountainous land, covered with loose rocks and black malpais boulders, and dense greasewood and cactus brush. Descend. Line runs along easterly slope of Black Mountains.
7.10	Rocky gulch, 20 lks. wide, course NE.; ascend.
22.00	Top of ridge, brs. E. Descend over boulders.
30.00	Rocky gulch, 15 lks. wide, course NE.; ascend.
34.00	Top of ridge, brs. E. and W. Descend towards the east. Descend.
40.00	Point for $\frac{1}{4}$ sec. cor. falls in rocky gulch, course NE., 30 lks. wide; therefore, I set witness corner as follows: ascend.
41.00	Set a malpais stone, 6x8x18 ins., 12 ins. in the ground for a witness corner to the $\frac{1}{4}$ sec. cor., bet. secs. 33 and 34, marked W C $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
51.00	Top of high ridge, brs. NE. and SW., sloping from the SW. to the NE.; descend.
58.60	Rocky gulch, course SE.; ascend.
70.00	Descend.
74.00	Junction of two gulches, course SE. and SSE., total width, 50 lks.; ascend.
80.00	Set a malpais stone 10x12x16 ins., 11 ins. in the ground for the cor. of secs. 27, 28, 33 and 34, marked with 2 notches on the E. and 1 notch on the S. edges; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land extremely mountainous, covered with malpais boulders. Soil, 3rd rate, rocks. Dense undergrowth of greasewood and cactus. No timber or grass. Extremely mountainous land, covered with boulders and undergrowth, and exceptionally difficult to survey, 80.00 chains.

	East, on a random line, bet. secs. 27 and 34.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.95	Intersect the N. and S. line at the cor. of secs. 26, 27, 34 and 35 hereinbefore described. Thence I run, West, on a true line, between secs. 27 and 34. Over mountainous land, covered with dense undergrowth of greasewood, cactus, and catsclaw. Descend.
18.00	Wash, 20 lks. wide, course SW.; ascend.
39.97 $\frac{1}{2}$	Set a malpais stone 8x10x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Descend.

12. Subdivision of Township 18 North, Range 18 West.

Chains.

- 42.00 Gulch, 20 lks. wide, course SW.; ascend.
 50.00 Descend.
 57.00 Sacramento Wash, 2.50 chains wide, course S.
 58.25 Ascend.
 79.95 The cor. of secs. 27, 28, 33 and 34, hereinbefore described.
 Land, mountainous.
 Soil, 3rd rate, stony.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 No timber or grass.
 Mountainous land covered with dense undergrowth, and exceptionally difficult to survey, 79.95 chains.
 May 25, 1910.

 May 26, 1910.

- N. $0^{\circ} 02'$ W., bet. secs. 27 and 28.
 Over mountainous land, covered with dense undergrowth of greasewood, catsclaw and cactus.
 Descend.
 12.00 Gulch, 60 lks. wide, course NE. Ascend.
 30.00 Top of ridge, brs. NE. and NW. Descend.
 37.00 Gulch, 40 lks. wide, course SE. Ascend.
 40.00 Set a granite stone 6x10x16 ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Descend.
 64.40 Gulch, 30 lks. wide, course SE. Ascend.
 68.00 Top of ridge, brs. SE. and NW. Descend.
 72.30 Gulch, 25 lks. wide, course SE.; ascend.
 80.00 Set a malpais stone 6x6x18 ins., 12 ins. in the ground, for the cor. of secs. 21, 22, 27 and 28, marked with 3 notches on the E. and 2 notches on the S. edges, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, 3rd rate, stony.
 Dense undergrowth of greasewood, cactus and catsclaw.
 No timber or grass.
 Mountainous land, covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

 East, on a random line, between secs. 22 and 27.

- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect the N. and S. line, 4 lks. N. of cor. of secs. 22, 23, 26 and 27, hereinbefore described, thence I run, N. $89^{\circ} 58'$ W., on a true line, bet. secs. 22 and 27.
 Over mountainous land, covered with dense undergrowth of greasewood, cactus, and catsclaw.
 1.50 Wash, course SW., 50 lks. wide.
 Ascend.
 26.00 Ridge brs. SW. and NE. Descend.
 30.00 Gulch, 35 lks. wide, course SW. Ascend.
 36.00 Ridge, brs. SW. and NE.
 Descend.
 40.00 Set a malpais stone 6x6x14 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Ascend.
 48.00 Ridge brs. SW. and NE. Descend.
 59.00 Sacramento Wash, 3.00 chains wide, course SE.
 71.00 Ascend.
 80.00 The cor. of secs. 21, 22, 27 and 28, hereinbefore described.
 Land, mountainous.
 Soil, 3rd rate, gravel and sand.
 Dense undergrowth of greasewood, cactus, catsclaw, and palo verde.
 No timber, and very little grass.

Subdivision of Township 18 North, Range 18 West, 13.

Chains.

Mountainous land, covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

At 9h.30m. a.m., l.m.t., at the above corner, I lay off 21°04'N. on the declination arc; 34°56'N. on the latitude arc, and determine a meridian with the solar. Thence I run, N.0°02' W., between secs.21 and 22.

Over mountainous land, covered with dense undergrowth of catsclaw, greasewood, cactus, and palo verde. Ascend.

- 5.00 Descend.
- 10.00 Gulch, 15 lks.wide, course SE. Ascend.
- 14.00 Ridge, bears NW.and SE. Descend.
- 15.00 Enter west bank of Sacramento Wash, course SSE. Enter level land.
- 17.00 Center west channel of Sacramento Wash, 3.00 chs. wide, course SSE.
- 20.00 Leave east bank of Sacramento Wash, course SSE.
- 33.00 Cross same channel of Sacramento Wash, 3.00 chains wide, course SW. Enter dense mesquite brush.
- 40.00 Set a schist rock 6x8x14 ins., 10 ins. in the ground for the 1/4 sec.cor. ,marked 1/4 on the west face, and raise a mound of stones 3 ft. base, 1 1/2 ft. high,W. of corner. Pits impracticable.

A catsclaw tree, 10 ins.in diam., brs.S.40°E., 0.22 chs. dist., marked 1/4 S 22 B T.

No other tree available.

- 44.00 Enter Sacramento Wash, 2.00 chs.wide, course SSE.
- 53.00 Leave Sacramento Wash, course SSW.
- 78.00 Set a malpais stone 8x10x15 ins., 10 ins. in the ground for a witness corner to corner of sections 15,16,21 and 22, marked W C on the NE.face; 18 N on the NW. face, 18 W on the SE. face; 3 notches on the S. and E. edges; and raise a mound of stones 3 ft. base, 1 1/2 ft. high; west of witness corner; whence
 - A willow tree, 18 ins. in diam., brs.N.33°40'W., 4.06 chs., marked W C T 18 N R 18 W S 16 B T.
 - A catsclaw tree, 12 ins. in diam., brs. S.56°10' W., 3.34 chs. dist., marked W C T 18 N R 18 W S 21 B T.
 - A catsclaw tree 10 ins. in diam., brs.S.47°10'E., 2.73 chs. dist., marked W C T 18 N R 18 W S 22 B T.

No other tree available.

- 78.50 Enter Sacramento Wash, course SSE.
- 80.00 Point for corner of secs. 15,16,21 and 22 falls in the Sacramento Wash, where it is impracticable to establish the corner.

Land, rolling.
 Soil, 3rd rate, stony.
 Scattering timber of mesquite, catsclaw, willow.
 No grass.
 Dense undergrowth of greasewood, catsclaw,mesquite, cactus, willow and palo verde.
 Rolling land covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

From true point for corner, I run, S.89° 58'E. on a random line, between secs.15 and 22.

- 40.00 Set temporary 1/4 sec.cor.
- 80.10 Intersect the N.and S. line, 3 lks.N.of the corner of secs.14,15,21 and 22, hereinbefore described. Thence I run, N.89°57'W. on a true line, between secs.15 and 22.

14. Subdivision of Township 18 North, Range 18 West.

Chains.

- Over sharply rolling land, covered with dense undergrowth of greasewood, cactus, catsclaw and palo verde.
- 40.05 Set a porphyry stone 6x8x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on the N.face; and raise a mound of stones 3 ft.base, $1\frac{1}{2}$ ft. high, N.of cor.
- Descend.
- 41.00 Gulch, 40 lks.wide, course SW.
- 51.00 Gulch, 1.00 chain wide, course SW.
- Ascend.
- 55.00 Ridge brs. N.and S. Descend.
- 72.00 Gulch, 35 lks.wide, course S.
- 77.00 Enter Sacramento Wash, course SSE.
- 80.00 The true point for corner of secs.15,16,21 and 22, in Sacramento Wash.
- Land, rolling.
Soil, 3rd rate, gravelly.
Dense undergrowth of greasewood, catsclaw, cactus, palo verde and some scattering willow.
No grass. Scattering willow and catsclaw timber.
Rolling land, covered with dense undergrowth, and exceptionally difficult to survey, 80.10 chains.

At noon, at the above corner point, I set off $21^{\circ}04'N.$ on the decl. arc, and observe the sun on the meridian; the resulting latitude reading is $34^{\circ}56\frac{1}{2}'N.$

- Thence I run,
 $N.0^{\circ}02'W.$, between secs. 15 and 16.
Over rolling land, covered with dense undergrowth of greasewood, catsclaw, cactus and palo verde.
- 3.00 Leave Sacramento Wash, course SSE.
- 6.80 Wash, 2.00 chs. wide, course $S.20^{\circ}E.$
- 40.00 Set a malpais stone 8x10x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on the W. face; and dig pits 18x18x12 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.
- 57.15 Ascend.
- 77.00 Thence over rolling land.
- 80.00 Set a malpais stone 12x12x15 ins., 10 ins., in the ground for the cor.of secs.9,10,15 and 16, marked with 3 notches on the E.and 4 notches on the S.edges; and raise a mound of stones 3 ft.base, $1\frac{1}{2}$ ft. high, W.of cor.
- Land, rolling.
Soil, 3rd rate.
Dense undergrowth of greasewood, cactus, catsclaw and palo verde.
No timber or grass.
Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 80.00 chains.

- $S.89^{\circ}57'E.$, on a random line, between secs.10 and 15.
- 40.00 Set a temp. $\frac{1}{4}$ sec.cor.
- 80.12 Intersect the N.and S. line at the cor.of secs.9,10,15 and 16, above described.
- Thence I run,
 $N.89^{\circ}57'W.$, on a true line, between secs.10 and 15.
Over sharply rolling land, covered with scattering greasewood; cactus undergrowth.
- Descend.
- 7.00 Gulch, 10 lks.wide, course $S.70^{\circ}W.$
- Ascend.
Thence over mountainous land.

Chains.

- 17.00 Summit of ridge, brs. NE. and SW. Descend.
 38.00 Wash, 15 lks. wide, course SW. Ascend.
 40.06 Set a malpais stone 6x8x16 ins., 11 ins. in the ground
 for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise
 a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 Pits impracticable.
 41.30 Same wash as at 38.00 chains, 15 lks. wide, course NW.
 42.50 Same wash, 15 lks. wide, course S. 70° W.
 45.00 Same wash, 15 lks. wide, course NW.
 47.00 Same wash, 15 lks. wide, course S. 75° W.
 Ascend.
 58.00 Ridge bears SW. and NE.
 Descend.
 62.50 Wash, 20 lks. wide, course SW.
 75.30 Wash, 30 lks. wide, course SW.
 78.30 Wash, 20 lks. wide, course S.
 Ascend.
 80.12 The cor. of secs. 9, 10, 15 and 16, hereinbefore described.
 Land, sharply rolling and mountainous.
 Soil, 3rd rate, gravel and sand.
 Scattering undergrowth of greasewood and cactus.
 No timber or grass.
 Sharply rolling land, 7.00 chains.
 Mountainous land, 73.12 chains.
 Scattering undergrowth, 80.12 chains.
 Difficult to survey, 80.12 chains.

N. 0° 02' W., between secs. 9 and 10.

Over rolling land, covered with scattering undergrowth
 of greasewood, cactus and catsclaw.

- 40.00 Set a malpais stone 6x8x18 ins., 12 ins. in the ground
 for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and
 raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of
 corner.
 Pits impracticable.
 41.95 Gulch, course SSW. Enter mountainous land.
 Ascend.
 58.50 Descend abruptly.
 60.00 Wash, 70 lks. wide, course SSW.
 Ascend.
 80.00 Set a malpais stone 6x8x20 ins., 15 ins. in the ground
 for the corner of secs. 3, 4, 9 and 10, marked with
 5 notches on the S. and 3 notches on the E. edges;
 and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high
 W. of corner. Pits impracticable.
 Land, rolling and mountainous.
 Soil, 3rd rate, gravelly.
 No timber or grass.
 Dense undergrowth of greasewood, cactus, and palo verde.
 Rolling land, 41.95 chains.
 Mountainous land, 38.05 chains.
 Rolling and mountainous land, covered with dense under-
 growth, and exceptionally difficult to survey, 80.00
 chains.

S. 89° 57' E. on a random line, between secs. 3 and 10.

- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 80.08 Intersect the N. and S. line 7 lks. S. of corner of secs.
 2, 3, 10 and 11, hereinbefore described.
 Thence I run,

Chains West, on a true line, bet. secs. 3 and 10.
Over, sharply rolling, land, covered with dense undergrowth
of greasewood, cactus and catsclaw.

8.00 Gulch, 10 lks. wide, course SW.

40.04 Set a malpais stone 8x12x24 ins., 18 ins. in the ground for
the $\frac{1}{4}$ sec. cor. of secs. 3 and 10, marked $\frac{1}{4}$ on the N.
face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft.
high, N. of corner.

Pits impracticable.

55.00 Wash, 2.00 chains wide, course S. 80° W.

74.35 Gulch, 80 lks. wide, course S. 20° W.

80.08 The cor. of secs. 3, 4, 9 and 10, hereinbefore described.

Land, sharply rolling.

Soil, 3rd rate, sandy.

No timber or grass.

Dense undergrowth of greasewood, cactus and catsclaw.

Sharply rolling land, covered with dense undergrowth,
and difficult to survey, 80.08 chs.

May 26, 1910.

May 27, 1910

N. 0° 02' W., on a random line, bet. secs. 3 and 4.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

78.05 Intersect the N. bdy. of the township, 2.79 chs. east of
cor. of secs. 3, 4, 33 and 34 on the south boundary T. 19 N.

Chains.

R.18 W., as set by Deputy Surveyor Rodolf, under his Contract No.155, a malpais stone 6 ins. above ground, marked and witnessed as described by the Surveyor General. This closing being more than the limits required by the Manual, I change markings of cor.of secs. 3, 4, 33 and 34 to refer to secs. 33 and 34 only, and set a closing corner as follows:

Set a malpais stone 8x10x15 ins., 10 ins. in the ground for the closing section corner to secs.3 and 4, marked C C on the S.face, 3 grooves on the E. and 3 grooves on the W.faces; and raise a mound of stones 3 ft.base, 1 1/2 ft. high, S.of cor. Pits impracticable.

Thence I run, S.0°02' E., on a true line, bet. secs.3 and 4, over sharply rolling land, covered with greasewood, cactus and cats-claw brush.

- 6.00 Wash, 20 lks.wide, course SW
- 27.00 Wash, 50 lks.wide, course S.60° W.
- 38.05 Set a malpais stone 8x12x20 ins., 15 ins. in the ground for the 1/4 sec.cor., marked 1/4 on the W.face; and raise a mound of stones 3 ft.base, 1 1/2 ft. high,W.of cor. Pits impracticable.
- Ascend.
- 46.55 Ridge brs. SW.and NE.; descend.
- 64.40 Wash, 4.00 chs. wide, course SW.; ascend.
- 78.05 The cor.of secs.3,4, 9 and 10, hereinbefore described. Land, sharply rolling. Soil, 3rd rate, stony. Hence undergrowth of greasewood, cactus and catsclaw. No grass or timber. Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 78.05 chs.

It being impracticable to subdivide in the usual way on account of the south boundary of this township entering unsurveyable land at the 1/4 sec.cor. south of sec. 33, as previously explained, I proceed to the cor.of secs. 27,28,33 and 34 hereinbefore described, and run West, on a true line south of sec.28.

Over mountainous land, covered with loose boulders (the east side of the black Mountains) and scattering greasewood and palo verde brush.

Ascend.

- 23.00 Rocky gulch, course NE.; ascend.
- 25.00 Descend.
- 29.50 Rocky wash, 40 lks.wide, course N.70°E.; ascend.
- 34.00 Descend.
- 39.50 Rocky gulch, course SE.; ascend.
- 40.00 Set a malpais stone 10x12x15 ins., 10 ins. in the ground for the 1/4 sec.cor., marked 1/4 on the N.face; and raise a mound of stones 3 ft.base,1 1/2 ft.high,N.of cor.
- 50.00 Ascend abruptly.
- 53.00 Spur, brs. NE.; descend.
- 53.50 Small gulch, course NE.
- 55.00 Small gulch, course NE.; ascend.
- 60.00 Top ridge, brs.NE.; descend.
- 68.50 Rocky gulch, course NE.; ascend abruptly.
- 77.00 On N. side of same gulch, course E.
- 80.00 Set a tufa stone 8x10x18 ins., 12 ins. in the ground for the cor.of secs. 28,29,32 and 33, marked with 1 notch on S. and 4 notches on E.edges; and raise a mound of stones 3 ft. base, 1 1/2 ft. high,W.of cor. Land, extremely mountainous, cut by deep rocky gorges; covered with loose volcanic rock. Soil, 4th rate, rocky. Scattering undergrowth of greasewood, cactus and palo verde.

16. Subdivision of Township 18 North, Range 18 West.

Chains.

No timber or grass.

Extremely mountainous land, covered with scattering brush and exceptionally difficult to survey, 80.00 chains.

Note: Line enters Black Mountains at this point, and is impracticable to survey further to the west.

Thence I run,
N. 0° 02' W., bet. secs. 28 and 29.

Over extremely mountainous land, covered with large malpais boulders, and some scattering greasewood undergrowth.

Ascend.

1.50 Descend.

3.00 Rocky gulch, course N., width 40 lks.; ascend steeply.

4.30 Top of high ridge brs. E. from main mountain range; descend.

14.00 Gulch, 30 lks. wide, course E.; ascend.

18.00 Ridge, brs. N. 60° E. from main range; descend.

36.00 Rocky gulch, course NE.; ascend.

40.00 Set a malpais stone 8x12x16 ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Descend.

46.70 Rocky draw, course NE. Ascend.

52.50 Top of peak; descend.

59.00 Descend abruptly.

64.00 Rocky gulch, course N. 75° E.; ascend. Enter palo verde and cactus.

68.00 Descend.

73.50 Gulch, 30 lks. wide, course E.; ascend.

80.00 Set a malpais stone 5x10x18 ins., 12 ins. in the ground for the cor. of secs. 20, 21, 28 and 29, marked 2 notches on the S. and 4 notches on the E. edges, and mark bearing trees as follows:

A palo verde tree, 8 ins. in diam., brs. S. 49° 25' E., 2.29 chs., marked T 18 N R 18 W S 28 B T.

A palo verde tree 4 ins. in diam., brs. S. 67° 27' W., 1.87 chs., marked T 18 N R 18 W S 29 B T.

A palo verde tree 3 ins. in diam., brs. N. 42° 05' W., 2.34 chs., marked T 18 N R 18 W S 20 B T.

A palo verde tree 4 ins. in diam., brs. N. 6° 15' E., 2.70 chs., marked T 18 N R 18 W S 21 B T.

Extremely mountainous land, covered with large boulders. Soil, 4th rate, rocky.

Timber, palo verde; no grass.

Extremely mountainous land, covered with large malpais and other boulders, and scattering greasewood, palo verde, cactus brush, and exceptionally difficult to survey, 80.00 chains.

At noon, at the above cor. I set off 21° 15' N. on the decl. arc, and observe the sun on the meridian; the resulting latitude reading is 34° 55' N.

Thence I run,

East, on a random line, bet. secs. 21 and 28.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect the N. and S. line at the cor. of secs. 21, 22, 27 and 28, hereinafter described. Thence I run,

West, on a true line, bet. secs. 21 and 28.

Over mountainous land, the easterly slope of the Black Mountains.

Covered with loose rock and dense brush of greasewood, cactus, catsclaw and palo verde.

Descend.

4.00 Draw, course S. 20° E. Ascend.

Subdivision of Township 18 North, Range 18 West.

19.

Chains.

- 7.00 Draw, course SE. Ascend over boulders.
- 40.00 Set a malpais stone 6x8x15 ins., 10 ins. in the ground, for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
A palo verde 5 ins. in diam., brs. S. $18^{\circ}30'E.$, 2.40 chs., marked $\frac{1}{4}$ S 28 B T.
No other tree available.
Continue steep ascent over boulders.
- 80.00 The cor. of secs. 20, 28 and 29, hereinbefore described. Land, extremely mountainous, covered with boulders. Soil, 4th rate, rocky.
Dense undergrowth of greasewood, cactus, palo verde. No grass; some timber of palo verde.
Mountainous land covered with boulders and dense undergrowth, and exceptionally difficult to survey, 80.00 chs.
-
- N. $0^{\circ}02'W.$, bet. secs. 20 and 21.
Over mountainous land, covered with malpais boulders, and dense undergrowth of greasewood, cactus, palo verde, and catsclaw.
Ascend.
- 12.50 Descend.
- 18.50 Gulch, course E., width, 50 lks.
Ascend.
- 40.00 Set a malpais stone 8x10x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Descend.
- 58.00 Rocky draw, course E. Ascend.
- 72.00 Top of ascent, brs. SE. and NW.; descend.
- 74.25 Wash, 50 lks. wide, course SE.; ascend.
- 78.00 Ascend more rapidly.
- 80.00 Set a malpais stone 6x8x16 ins., 11 ins. in the ground for the cor. of secs. 16, 17, 20 and 21, marked with 3 notches on the W. and 4 notches on the E. edges, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous and covered with boulders.
Soil, 3rd and 4th rate, stony.
No timber or grass.
Dense undergrowth of greasewood, cactus, catsclaw and palo verde.
Mountainous land, covered with malpais boulders and dense undergrowth, and exceptionally difficult to survey, 80.00 chs.
-
- At 5h. 00m. p.m., 1 m. t., at the above cor., I set off $34^{\circ}57'N.$ on the lat. arc; $21^{\circ}16'N.$ on the decl. arc, and determine a meridian with the solar.
Thence I run,
East on a random line, bet. secs. 16 and 21.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.93 Intersect the N. and S. line at the true point for the cor. of secs. 15, 16, 21 and 22; thence I run,
West, on a true line, bet. secs. 16 and 21.
Over rolling land, covered with dense undergrowth of greasewood, cactus, catsclaw and palo verde.
- 0.30 Leave main Sacramento Wash, course SE.
- 6.00 Sand wash 40 lks. wide, course E.
- 12.00 Ascend bank, brs. NNW. and SSE.
- 17.00 Sand wash 30 lks. wide, course N. $70^{\circ}E.$
- 25.00 Draw, course SE.
- 39.96 Set a malpais stone 6x8x15 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Chains.

Pits impracticable.
 45.00 Ascend steep slope, trend NW. and SE.
 49.00 Ascent more gentle.
 79.95 The cor. of secs. 16, 17, 20 and 21, hereinbefore described
 Land, rolling.
 Soil, 2nd and 3rd rate, sandy.
 Dense undergrowth of greasewood, cactus, catsclaw and
 palo verde.
 No timber or grass.
 Rolling land, covered with undergrowth, and generally
 difficult to survey, 79.95 chains.
 May 27, 1910.

 May 28, 1910.

N. 0° 02' W. over gently rolling land covered with dense
 undergrowth of greasewood, cactus (chollas), and
 large malpais boulders, between secs. 16 and 17.
 40.00 Set a malpais stone 6x8x18 ins., 12 ins. in the ground
 for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise
 a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
 80.00 Set a malpais stone 6x10x16 ins., 11 ins. in the ground
 for the cor. of secs. 8, 9, 16 and 17, marked with 4
 notches on the S. and E. edges; and raise a mound of
 stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits imprac-
 ticable.
 Land, rolling.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 Thickly covered with large malpais boulders.
 Soil, 3rd rate, rocky.
 No timber or grass.
 Rolling land covered with dense undergrowth and large
 boulders and exceptionally difficult to survey 80.00
 chains.

 East, on a random line, between secs. 9 and 16.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.90 Intersect the N. and S. line, 9 lks. N. of the cor. of secs.
 9, 10, 15 and 16, hereinbefore described.
 Thence I run,
 N. 89° 56' W., on a true line, bet. secs. 9 and 16.
 Over rolling land, covered with dense undergrowth of
 greasewood, cactus, and catsclaw.
 Descending.
 5.00 Enter the valley of the Sacramento Wash, course S.
 5.80 Main sand wash of the Sacramento Wash, 1.30 chs. wide,
 course S.
 17.00 Sand wash, 30 lks. wide, course S.
 22.00 Sand wash 40 lks. wide, course S.
 28.00 Leave the Valley of the Sacramento Wash, course S. Ascend.
 39.95 Set a malpais stone 6x8x14 ins., 20 ins. in the ground
 for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face, and raise
 a mound of stones 3 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
 Pits impracticable.
 45.00 Draw, course S.
 55.00 Ascend abruptly.
 70.00 Thence over rolling ascent.
 79.90 The cor. of secs. 8, 9, 16 and 17, hereinbefore described.
 Land, rolling.
 Soil, 2nd and 3rd rate, sandy, stony.
 No timber or grass.
 Dense undergrowth of greasewood, catsclaw, cactus, and
 some palo verde.
 Rolling land, covered with dense undergrowth, and excep-
 tionally difficult to survey, 79.90 chains.

Chains.

At 9h. 30m. a.m., l.m.t., at the above cor., I set off $34^{\circ} 57\frac{1}{2}'$ N. on the lat. arc; $21^{\circ} 24\frac{1}{2}'$ N. on the decl. arc, and observe the sun and thereby determine a meridian with the solar.

Thence I run,
N. $0^{\circ} 02'$ W., bet. secs. 8 and 9.
Descend over rolling land, covered with dense undergrowth of greasewood, cactus, and thickly strewn with large malpais boulders.

25.00 Gulch, 70 lks. wide, course E.
40.00 Set a malpais stone $6\frac{1}{2} \times 16$ ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

57.20 Wash, 1.00 chain wide, course SE.
80.00 Set a malpais stone $8 \times 10 \times 18$ ins., 12 ins. in the ground for the cor. of secs. 4, 5, 8 and 9, marked with 4 notches on the E. and 5 notches on the S. edges, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, rolling, and covered with large boulders.
Soil 3rd rate, rocky.
No timber or grass.
Dense undergrowth, greasewood, and cactus.
Rolling land, covered with boulders and dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

Thence I run,
S. $89^{\circ} 56'$ E. on a random line, bet. secs. 4 and 9.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.
80.00 Intersect the N. and S. line, 9 lks. S. of the cor. of secs. 3, 4, 9 and 10, hereinbefore described.

Thence I run,
West, on a true line, bet. secs. 4 and 9.
Over rolling land, covered with dense undergrowth of greasewood, and catsclaw, and cut by small washes.

3.50 Sand wash brs. SW. Enter at this point.
8.00 Leave same sand wash, course SW.
20.00 Sand wash, 40 lks. wide, course S. 30° W.
Ascend.

24.00 Ridge brs. N. and S. Descend.
34.00 Enter valley of the Sacramento Wash, brs. N. and S.
35.00 Sand wash 50 lks. wide, course S.
36.50 Sand wash 20 lks. wide, course S.
40.00 Set a malpais stone $8 \times 10 \times 24$ ins., 18 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

47.00 Sand wash, 1.00 chain wide, course S.; main Sacramento Wash.
61.00 Sand wash, 1.00 chain wide, course S., 20° E.
68.00 Draw, course SE.
80.00 The cor. of secs. 4, 5, 8 and 9, hereinbefore described.

Land, sharply rolling.
Soil, 3rd rate, sandy.
No grass or timber.
Dense undergrowth of greasewood and catsclaw.
Sharply rolling land, covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

At noon, at the above cor., I set off $21^{\circ} 25\frac{1}{2}'$ N. on the decl. arc; and observe the sun on the meridian; the resulting lat. reading is $34^{\circ} 58\frac{1}{2}'$ N.

Thence I run,
N. $0^{\circ} 02'$ W., on a random line, bet. secs. 4 and 5.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.

22. Subdivision of Township 18 North, Range 18 West.

Chains.

- 78.06 Intersect the N.bdy. of the township, 2.77 chs. E. of the cor. of secs. 4, 5, 32 and 33 on the S.bdy. of T. 19 N., R. 18 W., as set by Deputy Surveyor Rodolf under his Contract No. 155, a malpais stone, 6 ins. above ground, marked and witnessed as described by the Surveyor General. This closing being more than the limit required by the Manual, I change markings of cor. of secs. 4, 5, 32 and 33 to refer to secs. 32 and 33 only, and set a closing corner at the point of the intersection of my random line, as follows:
- Set a malpais stone 7x9x17 ins., 12 ins. in the ground for the closing corner of secs. 4 and 5 on the S.bdy. of Tp. 19 N., R. 18 W., marked C C on the S. face, and 4 grooves on the E. and 2 grooves on the W. faces, and raise a mound of stones 3 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
- Thence I run,
S. 0° 02' E., on a true line, bet. secs. 4 and 5.
Over mountainous land, covered with malpais boulders, and dense undergrowth of greasewood, cactus, catsclaw, and palo verde.
- Descend.
- 1.00 Wash, 50 lks. wide, course SE.
6.50 Wash, 70 lks. wide, course S., 30° E.; ascend.
16.00 Descend.
26.40 Wash, 30 lks. wide, course SE.
31.50 Wash, 40 lks. wide, course S. 70° E.
38.06 Set a malpais stone 8x10x15 ins., 10 ins. in the ground, for the ¼ sec. cor., marked ¼ on the W. face; and raise a mound of stones 3 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
63.00 Draw, course S. 30° E.
Ascend.
68.00 Summit, brs. E. and W.
70.50 Draw, course S. 70° E.
78.06 The cor. of secs. 4, 5, 8 and 9, hereinbefore described. Land, mountainous, covered with malpais boulders. Soil, 3rd rate, gravelly and rocky. No timber and no grass. Dense undergrowth of greasewood, catsclaw, and cactus. Mountainous land, covered with boulders, and dense undergrowth, and exceptionally difficult to survey 78.06 chains.

May 28, 1910.

May 29, 1910.

- It being impracticable to subdivide this township in the usual way for reasons already given. I now proceed to the cor. of secs. 20, 21, 28 and 29, hereinbefore described, and run
- West on a true line, bet. secs. 20 and 29.
Over extremely mountainous land, the easterly slope of the Black Mountains; covered with boulders. Some undergrowth of greasewood, cactus, and palo verde.
- 16.00 Rocky gulch, 40 lks. wide, course S. 70° E.
Ascend abruptly.
31.00 Descend; the ridge brs. NW. and SE.
35.50 Draw, course SE.; ascend.
40.00 Set a malpais stone 8x10x14 ins., 10 ins. in the ground for the ¼ sec. cor., marked ¼ on the N. face; and raise a mound of stones 3 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
Descend rapidly.
46.00 Deep rocky gully, 1.00 chain wide, course N.; ascend.
47.50 Rocky spur, brs. N.; descend.
48.50 Rocky draw, course N. Ascend steep slope.
57.00 Descend.
63.50 Gulch, 60 lks. wide, course NE. Ascend.
65.00 Ascend abruptly.
75.50 Top of steep rocky ridge, extending north about ¼ of a mile.
Descend abruptly.

Subdivision of Township 28 North, Range 18 West. 23.

Chains.
 79.50 Draw, course NW. Ascend.
 80.00 Rock in place, 2 ft.x 3 ft.x 3 ft. above ground (malpais) marked with a cross (x) at the exact corner of secs. 19, 20, 29 and 30, and 5 notches on the E. and 2 notches on the S. sides, and raise a mound of stones 3 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
 Land, extremely mountainous, covered with boulders.
 Soil, 4th rate.
 No timber or grass.
 Scattering undergrowth of greasewood and cactus, and palo verde.
 Mountainous Land, covered with boulders and exceptionally difficult to survey 80.00 chains.

 Thence I run,
 N. 0° 05' W., bet. secs. 19 and 20.
 Descending over extremely mountainous land cut by gorges and cliffs.
 10.00 Line enters unsurveyable land, and I discontinue at this point.

 It being impracticable to subdivide the township in the usual manner as previously explained, I proceed to the cor. of secs. 16, 17, 20 and 21 hereinbefore described, and at this corner at 9h. 30m. a.m., l.m.t., I set off 34° 56 1/2' N. on the lat. arc; 21° 34' N. on the decl. arc, and determine a meridian with the solar.
 Thence I run,
 West, on a true line, bet. secs. 17 and 20.
 Over extremely mountainous land, covered with loose rock and scattering undergrowth of greasewood, catslaw, and cactus.
 10.50 Wash, 50 lks. wide, course S. 60° E.
 21.00 Rocky gulch, course E.
 39.50 Rocky gulch, course NE. Ascend steep slope.
 40.00 Set a malpais stone 6x12x18 ins., 12 ins. in the ground for the cor. of sec. 17, marked with 5 notches on the N. face; and raise a mound of stones 3 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
 65.00 Ascend abruptly.
 76.00 Top of ridge, bet. NE. and SW.; descend.
 80.00 Set a malpais stone 6x10x20 ins., 15 ins. in the ground for the cor. of secs. 17, 18, 19 and 20, marked with 5 notches on E. and 3 notches on the S. edges; and raise a mound of stones 3 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
 Land extremely mountainous covered with boulders and rock.
 Soil, 4th rate, rocky.
 No grass or timber.
 Scattering undergrowth of greasewood, catslaw, and cactus.
 Extremely mountainous land, covered with boulders and scattering undergrowth and exceptionally difficult to survey, 80.00 chains.
 Land west of this corner is extremely mountainous, and impracticable to survey.

 Thence I run,
 N. 0° 05' W., bet. secs. 17 and 18.
 Over extremely mountainous land, covered with boulders and scattering undergrowth of greasewood, cactus, and catslaw.
 Descend abruptly.
 3.75 Rocky gulch, course N. 75° E.
 19.00 Rocky gulch, course NE.; ascend.
 22.00 Descend steep slope.
 35.00 Draw, course NE.

Chains.
 37.00 Draw, course E. Ascend.
 40.00 Set a malpais stone 6x7x16 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Descend.
 48.00 Draw, course SE. Ascend over rolling land, covered with dense undergrowth of greasewood, cactus, and catsclaw.
 70.00 Summit; descend steep mountainous slope.
 74.00 Wash, course E., 15 lks. wide. Ascend.
 78.00 Descend.
 79.50 Set a malpais stone 7x10x18 ins., 12 ins. in the ground for a witness corner for cor. of secs. 7, 8, 17 and 18, marked W C on the NE. face; 5 notches on the E., and 4 notches on the S. edges; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 80.00 Point for cor. of secs. 7, 8, 17, and 18 falls in wash $1\frac{1}{2}$ chs. wide, course E.
 Soil, 3rd rate, rocky.
 No timber or grass.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 Mountainous land, covered with boulders, or dense undergrowth, and exceptionally difficult to survey, 80.00 chs..

At noon, at the above corner point, I set off $21^{\circ} 35' N.$ on the decl. arc; and observe the sun on the meridian; the resulting lat. reading is $34^{\circ} 57\frac{1}{2}' N.$

Thence I run, East, on a random line, bet. secs. 8 and 17.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 80.03 Intersect the N. and S. line 6 lks. N. of cor. of secs. 8, 9, 16 and 17 hereinbefore described. Thence I run, $N. 89^{\circ} 57' W.$, on a true line, bet. secs. 8 and 17. Over rolling land, covered with dense undergrowth of greasewood, catsclaw and cactus.
 40.01 Set a malpais stone 5x7x16 ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 49.00 Enter wash, 1.50 chs. wide, course $N. 80^{\circ} E.$ Thence along up the bed of wash.
 53.00 Leave same wash, course $N. 80^{\circ} E.$
 70.00 Enter same wash, 1.50 chs. wide, course $S. 80^{\circ} E.$ Thence along bed of same wash.
 80.03 True point for cor. of secs. 7, 8, 17 and 18, in wash 1.50 chains wide, course E.
 Land, rolling.
 Soil, 3rd rate, sandy.
 No timber or grass.
 Dense undergrowth of greasewood, cactus, and catsclaw.
 Rolling land, covered with dense undergrowth and exceptionally difficult to survey, 80.03 chs.

Thence I run, West on a random line, between secs. 7 and 18.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.
 81.2D Intersect the 5th. Guide Meridian West, 2.45 chains N. of the corner of secs. 7, 12, 13, and 18, a lava stone 5 ins. above ground, marked and witnessed as described by the Surveyor General. I change markings on this corner to refer to secs. 12 and 13 only, and establish a closing corner at the point of my intersection as follows:
 Set a malpais stone 6x10x14 ins., 10 ins. in the ground for the closing corner of secs. 7 and 18 on 5th Guide

Cor. common to 4 secs. established by Alexander, Nov. 27, 1911. See Page 5, Original, & Suppl. Standard Book "C"

Subdivision of Township 18 North, Range 18 West

25
Cor. common to
4 sec. established
by Alexander Nov. 27
1911. See page 5.
Orig. & Suppl. Standard
Book "C"

Chains

Meridian West, which is the west boundary of the town-
ship, marked C C on the E. face, 2 grooves on the N.,
and 4 grooves on the S. faces; and raise a mound of
stones 3 ft. base, 1 1/2 ft. high, E. of cor. Pits imprac-
ticable.

From the CC I run

- East, on a true line, bet. secs. 7 and 18.
Descend over mountainous land, covered with greasewood,
catsclaw, and cactus; dense undergrowth.
- 41.20 Set a malpais stone 6x9x15 ins., 10 ins. in the ground
for the 1/4 sec. cor., bet. secs. 7 and 18, marked 1/4 on
the N. face, and raise a mound of stones 3 ft. base, 1 1/2
ft. high, N. of cor. Pits impracticable.
Thence over rolling land, covered with dense undergrowth
as stated.
- 46.00 Enter wash coming from the WSW. and bearing east along
line; width, 1.20 chains.
- 81.20 The true cor. point for cor. of secs. 7, 8, 17 and 18, in
wash.
Land, mountainous and rolling.
Soil, 3rd rate, stony and sandy.
No grass or timber.
Dense undergrowth, greasewood, catsclaw and cactus.
Mountainous land, or land covered with dense undergrowth
and exceptionally difficult to survey, 81.20 chs.

From true point for cor. of secs. 7, 8, 17 and 18, I run,
N. 0° 05' W., bet. secs. 7 and 8.

Over mountainous land, covered with dense undergrowth of
greasewood, cactus and catsclaw.

- 0.40 Center of wash, 1.50 chains wide, course E.
Ascend.
- 12.00 Summit of ridge, brs. N. 70° E., and S. 70° W.; descend.
- 40.00 Set a malpais stone, 6x12x16 ins., 12 ins. in the ground
for the 1/4 sec. cor., marked 1/4 on the W. face, and raise
a mound of stones 3 ft. base, 1 1/2 ft. high, W. of cor. Pits
impracticable.
- 59.00 Gulch, 50 lks. wide, course E.
- 67.20 Draw, course S. 70° E.; ascend.
- 75.00 Summit of ridge, brs. E. and W.; descend.
- 80.00 Set a malpais stone 8x10x20 ins., 15 ins. in the ground
for the cor. of secs. 5, 6, 7 and 8, marked with 5 notches
on the E. and 5 notches on the S. edges, and raise a
mound of stones 3 ft. base, 1 1/2 ft. high, W. of cor. Pits
impracticable.
Land, mountainous.
Soil, 3rd and 4th rate.
No timber or grass.
Dense undergrowth of greasewood, cactus, catsclaw.
Mountainous land, covered with dense undergrowth, and
exceptionally difficult to survey, 80.00 chains.
May 29, 1910.

May 30, 1910.

S. 89° 57' E. men a random line, bet. secs. 5 and 8.

- 40.00 Set temp. 1/4 sec. cor.
- 80.00 Intersect the N. and S. line, 6 lks. S. of cor. of secs. 4, 5,
8 and 9 hereinbefore described. Thence I run,
West, on a true line, bet. secs. 5 and 8.
Over sharply rolling land, covered with large malpais
boulders, and through dense undergrowth of greasewood,
cactus and catsclaw.
- 40.00 Set a malpais stone 10x12x18 ins., 12 ins. in the ground
for the 1/4 sec. cor., marked 1/4 on the N. face, and raise
a mound of stones 3 ft. base, 1 1/2 ft. high, N. of cor.
Pits impracticable.
- 80.00 The cor. of secs. 5, 6, 7 and 8, hereinbefore described.

26. Subdivision of Township 18 North, Range 18 West.

Chains.

Land, sharply rolling, and covered with large malpais boulders.
Soil, 4th rate, stony.
No timber or grass.
Sharply rolling land, covered with malpais boulders and dense undergrowth, and exceptionally difficult to survey, 80.00 chains.

- 40.00 N. 0° 03' W., on a random line, between secs. 5 and 6. Set a temp. $\frac{1}{4}$ sec. cor.
- 78.07 Intersect the N. bdy. of the Tp., 2.62 cha. east of the corner of secs. 5, 6, 31 and 32 set by Deputy Rodolf under his Contract No. 155, a malpais stone 5 ins. above ground, marked and witnessed as described by the Surveyor General. This being out of the prescribed limits, I change markings on cor. of secs. 5, 6, 31 and 32 to refer to secs. 31 and 32 only, and establish a closing corner at my point of intersection as follows: Set a malpais stone 5x8x16 ins., 11 ins. in the ground for the closing corner of secs. 5 and 6, marked C C on the S. face, and 5 grooves on the E, and 1 groove on the W. faces, & raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.
Thence I run,
S. 0° 03' E., on a true line between secs. 5 and 6.
Over rolling ascending slope covered with dense undergrowth of greasewood, cactus, catsclaw, and some palo verde.
- 38.07 Set a malpais stone 6x7x18 ins., 12 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the W. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 78.07 The cor. of secs. 5, 6, 7 and 8, hereinbefore described.
Land, rolling and covered with dense undergrowth of greasewood, cactus, catsclaw, and palo verde.
Soil, 3rd rate, stony.
No timber, and very little grass.
Rolling land, covered with dense undergrowth, and difficult to survey, 78.07 chains.

At 9h. 30m., a.m., l.m.t., at the above cor., I set off 21° 43' N. on the decl. arc; 34° 58' N. on the lat. arc, and determine a meridian with the solar.

Thence I run,
West, on a random line, bet. secs. 6 and 7.

- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
- 81.23 Intersect the 5th Guide Meridian West, 2.32 cha. N. of the cor. of secs. 1, 6, 7 and 12, a lava stone, 5 ins. above ground, marked and witnessed as described by the Surveyor General. This being out of limits, I change markings on cor. of 1, 6, 7 and 12 to refer to secs. 1 and 12 only, and establish a closing corner as follows at my point of intersection.
Set a malpais stone 6x8x18 ins., 12 ins. in the ground for the closing corner of secs. 6 and 7, marked C C on the E. face, 1 groove on the N. and 5 grooves on the S. faces; and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Thence I run,
East, on a true line, bet. secs. 6 and 7.
Over sharply rolling and mountainous land, covered with large malpais boulders and a dense undergrowth of greasewood, cactus, catsclaw, and palo verde.

- 41.23 Set a malpais stone 8x10x16 ins., 11 ins. in the ground for the $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on the N. face, and raise a mound of stones 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 81.23 The cor. of secs. 5, 6, 7 and 8, hereinbefore described.
Land, sharply rolling and mountainous.

Cor. common to 7 secs.
Established by Alexander
Nov. 27, 1911. See Page 5, Orig.
& Suppl. Standard Book C

Chains.

Soil, 4th rate, rocky.
 No timber or grass.
 Dense undergrowth of greasewood, cactus, cataclaw, and
 palo verde.
 Mountainous land, or land covered with dense undergrowth,
 and exceptionally difficult to survey, 81.23 chs.
 May 30, 1910.

GENERAL DESCRIPTION.

For general description and report, see page 10, Book A of field notes of the East boundary of T.18 N., R.18 W.

July 1, 1910.

William D. Alexander
 U. S. Deputy Surveyor

For FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

See Subdivisional Books "B" and "G"

LIST OF NAMES.

A list of the names of the individuals employed by _____, 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 _____

showing the respective capacities in which they acted:

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____ meridian, _____ of _____, 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 _____

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

Subscribed and sworn to before me this _____ day of _____, 190 _____



For FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

See Subdivisional Books "B" & "G"

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 190 _____, 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 _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

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

*For final oaths US Deputy Surveyor
See Books " " "*

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona, Feb. 26, 1913, 190 _____

The foregoing field notes of the survey of *the Subdivision lines*

in part in Tp. 18 North, Range 18 West

Gila and Salt River Base and Meridian

executed by *Arizona*
William B. Alexander U.S. Deputy Surveyor
under his contract No. *156*, dated *May 26*, 190*9*, 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. Galloway
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.