

Ordered filed, Dept. letter 117, Sept. 4, 07
1898 76
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2112 BOOK 2112

FIELD NOTES

OF THE SURVEY OF THE

2112

2112

Subdivisions of Township 18 South, Range 11 E.,

Resurvey of East Bdy. of Tp. 18 South, Range 11 E.,

Resurvey 2nd, Guide Meridian E. thru Rs. 10 and 11.

Retracement of a portion of the N. bdy. of Tp. 18S. Rg. 11E.

2112

Of the Gila & Salt River Base & Meridian,

Arizona.

AS SURVEYED BY

Jesse B. Wright, United States Deputy Surveyor,

Under his Contract No. 145, dated April 15, 1907.

Survey commenced August 22, 1907.

Survey completed September 13, 1907.

2112

2112

2112

BOOK 2112

For

NAMES AND DUTIES OF ASSISTANTS.

Reference is had to "B."

Sub of J. 13. R. 2 E.

17
(1A)

BOOK 2112

INDEX DIAGRAM.

returned ³⁵ Township 18 South, Range 11 East.

720 Side Meridian East

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

Meanders Page.....

Reference is had to "B. V."

Sub. of Sp. 130 R 12 E

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



Chains.

Survey commenced August 22, and executed with a Young & Sons' light mountain transit No. 7492 with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Phoenix, found correct and was approved by the Surveyor General of Arizona, July 15, 1907.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

I begin at the cor. of Tps. 18 and 19 South, Rs. 11 and 12 East, which is a stone, 17 x 10 x 7 ins., above ground, described by the Surveyor General, in lat. $31^{\circ}48'53''$ N., longitude, $111^{\circ}11'04''$ W., I set off $31^{\circ}49'$ N. on the lat. arc; and $11^{\circ}58'$ N. on the decl. arc, and at 2h.30m. p.m., l.m.t., determine with the solar a meridian, and mark a point thereof, on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 9h.30m. p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5.00 chs. N. of my station.
August 22, 1907.

August 23, 1907. At 6h. a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ}24'$ to the west, and mark the meridian thus determined by cutting a small groove in the stone set last night, on which the meridian falls 0.4 ins. east of the mark determined by the solar.

At 7h.30m. a.m., l.m.t., I set off $31^{\circ}49'$ N. on the lat. arc; and $11^{\circ}44'$ N. on the decl. arc, and mark a point on the stone already set 5.00 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about $0'22''$ W. and $0'10''$ east of the meridian established by Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h.30m. a.m., l.m.t. is $N.13^{\circ}40'$ W.; the angle thus determined gives the mag. decl. $13^{\circ}40'$ E.

Before proceeding with the subdivision of the township, I examine the east boundary, and find many of the corners destroyed and others obliterated.

I begin at the cor. of Tps. 18 and 19 S., Rs. 11 and 12 E., which is a stone described by the Surveyor General, set in a mound of stone. The markings on the stone are almost obliterated, so I set a granite stone, 24 x 15 x 10 ins., 18 ins. in the ground, marked with 6 notches on each edge, in place of the original cor. stone, and raise a mound of stone, 4 ft. base, $2\frac{1}{2}$ ft. high, S. of cor., from which,

A mesquite, 4 ins. diam., brs. $N.23^{\circ}20'$ E., 238 lks. dist., marked T 18 S R 12 E S 31 B T.

No other trees available.

Thence I run,

North, on a random line, bet. secs. 31 and 36.

2. Resurvey East Bdy. Township 18 S., Range 11 East.

Chains.
40.00 After most diligent search, I find no trace of original
1/4 sec. cor.
79.96 The only evidence of the original corner is a small
mound of stone on line.
I continue my line north, and at
119.94 Find the old 1/4 sec. cor. post on line.
159.84 Find signs of pits and mound on line. I destroy all evi-
dence of the original corner, and at same point rees-
tablish same by setting a granite stone, 24 x 15 x 10
ins., 18 ins. in the ground, for cor. of secs. 19, 24, 25
and 30, marked with 4 notches on the N., and 2 notches
on the S., and raise a mound of stone, 2 ft. base, 1-1/2
ft. high, W. of cor. Pits impracticable.
A mesquite, 8 ins. diam., brs. S. 75° W., 72 lks.
dist., marked T 18 S R 11 E S 25 B T.
A mesquite, 4 ins. diam., brs. N. 23° E., 200 lks.
dist., marked T 18 S R 12 E S 19 B T.
Thence I run,
South, bet. secs. 25 and 30 on a true line.
Over mountainous land.
7.50 Dry wash, 30 lks. wide, course SE.
14.00 Top of ridge, extends SSE.
20.00 Dry wash, 50 lks. wide, course E.
27.00 Top of ridge, extends SSE.; descend.
27.50 Descend abruptly.
37.50 Dry wash, 1.00 ch. wide, course E.
39.90 Original 1/4 sec. cor. on line. The markings being almost
obliterated, I destroy all evidences of this cor., and
set at this original point a conglomerate stone, 30 x
20 x 10 ins., 22 ins. in the ground, for 1/4 sec. cor.,
marked 1/4 on W., and raise a mound of stone, 2 ft.
base, 1-1/2 ft. high, W. of cor. Pits impracticable.
46.50 Top of ridge; extends SE.; descend.
57.50 Dry wash, 50 lks. wide, course SE.
63.00 Dry wash, 30 lks. wide, course E.
79.88 I re-establish the original sec. cor. by setting a lime-
stone, 24 x 10 x 6 ins., 18 ins. in the ground, marked
with 1 notch on the S. and 5 notches on the N., and
raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of
cor.
A mesquite, 18 ins. diam., brs. S. 79° W., 220 lks.
dist., marked T 18 S R 11 E S 36 B T.
No other tree available.
Land, mountainous.
Soil, 2nd rate.
Timber, scattering mesquite in valleys; undergrowth, mes-
quite and cacti.
Mountainous land, 79.88 chs.

South, bet. secs. 31 and 36.
Descending over mountainous land.
8.00 Gulch, 40 lks. wide, course SE.
17.90 Top of spur, extends SE.
24.50 Gulch, 1.00 ch. wide, course SSE.; ascend.
33.00 Top of ridge, extends SE. and NW.; descend.
39.98 Set a conglomerate stone, 24 x 10 x 8 ins., 18 ins. in
the ground, for 1/4 sec. cor., marked 1/4 on W. face, and
raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of
cor. Pits impracticable.
45.60 Wash, 30 lks. wide, course E.
48.00 Top of low ridge, extends SSE. and NNW.
54.00 Top of ridge, extends SSE. and NNW.
59.00 Dry creek, 2.00 chs. wide, course SE. Ascend gradually.
72.00 Top of low ridge.
79.96 The cor. of Tps. 18 and 19 S., Rs. 11 and 12 E.
August 21; at noon, I set off 12° 20' N., on the decl. arc;
and observe the sun on the meridian; the resulting lat.
is 31° 49' N.

Resurvey of the East Bdy. of Tp. 18 South, Range 11 E.

3.

Chains.

I return to cor. of secs. 24, 25, 19 and 30, and run north on the East Bdy., bet. secs. 19 and 24.

40.00 After diligent search no sign of corner found.

80.00 After diligent search no sign of corner found.

120.00 After diligent search no sign of corner found.

160.00 After diligent search no sign of corner found.

200.00 ~~Pits signs of old cor. 8 lks. to right of line.~~ continue North

235.12 After diligent search no sign of corner found.

Evidence of old cor. 8 lks. to right of line. I re-set this corner by setting a granite stone, 24 x 8 x 6 ins., 18 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked with 1 notch on the N. and 5 notches on the S. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

A mesquite, 6 ins. diam., brs. S. 57° E., 174 lks. dist., marked T 18 S R 12 E S 7 B T.

No other trees available.

Thence I run, S. 0° 1' W. on the E. bdy. of township, bet. secs. 7 and 12. Over broken, mountainous land.

9.00 Washington Mine brs. S. 27° E., about 15 chs. dist.,

15.30 Dry wash, 25 lks. wide, course SE.

25.00 Main gulch, 130 lks. wide, course SE. Begin steep ascent.

30.56 Top of ridge, extends SE. and NW.

Set a granite stone, 24 x 8 x 6 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

Begin steep descent.

46.00 Dry wash, 10 lks. wide, course SSW.

55.30 Dry wash, 20 lks. wide, course SE.

67.00 Top of ridge, extends E. Small butte brs. NW., 2 chs. dist.

73.70 Box Canon, 1.00 ch. wide, course NE.

77.00 Top of ridge.

79.12 Set a porphyry stone, 24 x 12 x 12 ins., 18 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked with 4 notches on the S. and 2 notches on the N. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

A mesquite, 6 ins. diam., brs. N. 10° E., 57 lks. dist., marked T 18 S R 12 E S 7 B T.

No other trees available.

Land, mountainous.

Soil, 2nd and 3rd rate.

Timber, mesquite; undergrowth, mesquite, palo verde and cacti.

Mountainous land, 79.12 chs.

August 23, 1907. At noon, I set off 11° 40' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31° 52' N.

S. 0° 01' W., bet. secs. 13 and 18.

Ascending over mountainous land.

5.03 Top of high ridge, extends SE. and NW. Descend.

11.00 Ravine, 60 lks. wide, course E.; ascend.

29.17 Point on high spur, extends NE., thence along E. side of mountain.

33.00 Head of gulch, course E.; ascend.

34.00 Top of ridge, extends SE.

40.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

A mesquite, 8 ins. diam., brs. N. 53-1/2° E., 364 lks. dist., marked 1/4 S 18 B T.

4.

Resurvey of East Bdy. of Tp. 18 South, Range 11 E.

Chains. No other tree available.
 Descend over stony ground.
 59.00 Gulch, 70 lks. wide, course SE.
 60.00 Ascend.
 73.00 Top of ridge, extends NE. and SW.
 77.00 Gulch, course NE.
 80.00 Set a granite stone, 22 x 10 x 6 ins., 16 ins. in the
 ground, for cor. of secs. 13, 18, 19 and 24, marked with 3
 notches on the N. and S. edges, and raise a mound of
 stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd rate.
 Timber, scattering mesquite; undergrowth, mesquite, grease-
 wood and palo verde.
 Mountainous land, 80.00 chs.

7.00 S. 0° 01' W., bet. secs. 19 and 24.
 Ascending steeply over mountainous land.
 23.00 Top of ridge, extends SE.
 29.00 Steep descent into large gulch.
 30.50 Through thick mesquite.
 Center of large gulch, 3.00 chs. wide, thence through
 dense mesquite and tesota undergrowth, course SE.
 32.00 Begin ascent.
 35.00 Top of ridge extends E.
 38.00 Gulch, 50 lks. wide, course E.
 40.00 Set a granite stone, 20 x 6 x 5 ins., 15 ins. in the
 ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise
 a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
 Pits impracticable.
 45.73 Top of ridge, extends E. High point bears E. 5 chs. dist.
 60.00 Junction of two gulches, E. and SE., thence E.
 72.00 Top of ridge, extends SE. and NW.
 80.00 The cor. of secs. 19, 24, 25 and 30.
 Land, mountainous.
 Soil, 2nd rate.
 Timber, scattering mesquite; undergrowth, abundant native
 grass.
 Mountainous land, 80.00 chs.

August 23, 1907.

August 24, 1907. At 7h. 30m. a.m., l.m.t., I set off 11°
 24' N. on the decl. arc, and 31° 53' N. on the lat. arc, and
 determine a true meridian with the solar at the cor.
 of secs. 1, 6, 7 and 12.
 Thence I run,
 North, on a random line, bet. secs. 1 and 6.
 40.00 No signs of old 1/4 sec. cor.
 80.10 Intersect the N. bdy. of township at a point 7 lks. east
 of cor. of Tps. 17 and 18 S., Rs. 11 and 12 E., which is
 a stake with stone properly marked, set in ground be-
 side stake.
 Thence I run,
 S. 0° 03' E., bet. secs. 1 and 6.
 Over rolling land, through dense mesquite and tesota
 undergrowth.
 19.00 Wire fence brs. E. and W.
 19.80 Old road, brs. NE. and SW.
 30.00 Leave dense mesquite undergrowth, and enter broken ground.
 31.80 Main gulch, 80 lks. wide, course E.
 40.12 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the
 ground, for 1/4 sec. cor., marked 1/4 on W. face, and
 raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of
 corner. Pits impracticable.

Resurvey of the East Boundary of Tp. 18 South, Range 11 E. (5)

chains.

A mesquite, 4 ins. diam., brs. N. 36-1/4° W., 53 lks. dist., marked 1/4 S 1 B T.
No other tree available.

42.00 Road, Magee Colony or Reno Ranch to Washington Mine, brs. NW. and SE.

46.50 Dry wash, 8 lks. wide, course NE.; ascend!

51.00 Top of low ridge, extends E.

53.00 Dry wash, 80 lks. wide, course E.

56.80 Dry wash, 80 lks. wide, course SE.

59.20 Top of ridge and trail, brs. E. and W.

62.10 Dry wash, 10 lks. wide, course E.

64.00 Top of ridge, extends SE. and NW.

72.40 Dry wash, 80 lks. wide, course E.

75.30 Top of low ridge, extends E. and W.

78.20 Dry wash, 20 lks. wide, course E.

80.10 The cor. of secs. 1, 6, 7 and 12.
Land, mountainous.
Soil, 2nd rate.
Timber, mesquite and tesota; undergrowth, mesquite, grease-wood and cacti.
Mountainous land, exceptionally difficult to survey, 80.-10 chs.

Preliminary Retracement portion N. bdy. T. 18 S., R. 11 E.

I return to the corner of Tps. 17 and 18 S., Rs. 11 and 12 E., and retrace a portion of the north boundary running west on a random line, bet. secs. 1 and 36.

40.00 Find 1/4 sec. cor. 2 lks. S. of line, marked and witnessed as described by the Surveyor General.

80.02 Find cor. of secs. 1, 2, 35 and 36, 2 lks. S. of line, marked and witnessed as described by the Surveyor General.
Thence I run,
West, bet. secs. 2 and 35.

39.98 Find 1/4 sec. cor. on line, marked and witnessed as described by the Surveyor General.
Hence, I conclude that the north boundary of Township 18 South, R. 11 East is correct in measurement and alignment, and I discontinue survey of same.
August 24, 1907.

Resurvey 2nd. Guide Meridian bet. Rs. 10 and 11 East.

August 25, 1907. At 7h. a.m., l.m.t., I set off 11° 04' N. on the decl. arc; and 31° 49' N. on the lat. arc, and determine a true meridian with the solar at the cor. of Tps. 18 and 19 S., Rs. 10 and 11 E.

Failing to close within limits at the SW. cor. of the Tp., according to the data furnished me by the Surveyor General, I find it necessary to resurvey the West Bdy. From the S.W. Cor. I run N. on a random line and at 5 mi. 77.92 chs. find the Clos'g Cor. of T. 18 S., R. 11 E. 150 lks. W. of line, I return to S.W. Cor. of Tp. and run N. 0° 11' W. on a true line bet. Secs. 31 & 36, through dense mes. undergrowth.

.75 South side of Temporal Canon, course W.

4.00 North side of Temporal Canon; over rolling land.

39.90 Find original 1/4 sec. cor., on line, which I destroy.
Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks., position of middle point,
By 1st set, 39.98 chs.
By 2nd set, 40.02 chs., the mean of which is

40.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. from which a mesquite 5" diam. brs. S. 80° W. 48 lks. dist. marked 1/4 S. 36 B.T.

42.00 A mesq. 5" diam. brs. N. 35° E. 29 lks. dist. marked 1/4 S. 31 B.T.

43.00 Dry wash 100 lks wide, course W.

58.50 Dry wash 50 lks. wide course W.

6. Resurvey of 2nd. Guide Mer. between Rs. 10 and 11 East.

Chains.

73.50
79.64

Dry wash, 50 lks. wide, course W. ascend
Find original sec. cor. on line, which I destroy.
Difference between measurements of 80.00 chs. by two sets
of chainmen is 6 lks., position of middle point
By 1st set, 79.97 chs.

80.00

By 2nd set, 80.03 chs., the mean of which is
Set a granite stone, 24 x 15 x 10 ins., 18 ins. in the
ground, for cor. of secs. 25, 30, 31 and 36, marked with 1
notch on the S. and 5 notches on the N. edge, and
raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of
cor. Pits impracticable.

A mesquite, 4 ins. diam., brs. S. 79-1/2° E., 93
lks. dist., marked T 18 S R 11 E S 31 B T.

A mesquite, 8 ins. diam., brs. N. 25° E., 114 lks.
dist., marked T 18 S R 11 E S 30 B T.

A mesquite, 24 ins. diam., brs. N. 15° W., 293 lks.
dist., marked T 18 S R 10 E S 25 B T.

No other tree available.

Land, rolling.

Soil, 2nd rate.

Timber, mesquite and tesota; undergrowth, mesquite, grease-
wood and cacti.

Land, covered with dense undergrowth, 80.00 chs.

N. 0° 11' W. bet. Secs. 25 & 30

Ascending over mountainous land.

16.00

Top of low ridge, extends SW. and NE.

22.00

Foot of slope, ascend gradually.

Difference between measurements of 40.00 chs. by two sets
of chainmen is 6 lks., position of middle point,

By 1st set, 39.97 chs.

By 2nd set, 40.03 chs., the mean of which is

40.00

Set a limestone, 20 x 10 x 6 ins., 15 ins. in the ground,
for 1/4 sec. cor., marked 1/4 on W. face, and raise a
mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits
impracticable.

A mesquite, 4 ins. diam., brs. N. 26-1/4° W., 55 lks.
dist., marked 1/4 S 25 B T.

A mesquite, 10 ins. diam., brs. S. 59° E., 243 lks.
dist., marked 1/4 S 30 B T.

After diligent search, I find no trace of the old cor.
Ascend.

50.00

Top of knoll; descend.

55.00

Dry wash, 2.00 chs. wide, course W. Ascend.

Difference between measurements of 80.00 chs. by two sets
of chainmen is 4 lks., position of middle point

By 1st set, 79.98 chs.,

By 2nd set, 80.02 chs., the mean of which is

80.00

Set a limestone, 20 x 10 x 10 ins., 15 ins. in the
ground, for cor. of secs. 19, 24, 25 and 30, marked with
2 notches on the S. and 4 notches on the N. edge, and
raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of
cor. Pits impracticable.

Original cor. brs. N. 30° W., 30 lks. dist., which I destroy.
Land, mountainous.

Soil, sandy and gravelly; 2nd rate.

Timber, scattering mesquite; undergrowth, mesquite,
greasewood and cacti.

Mountainous land, exceptionally difficult to survey,
80.00 chs.

August 25: At noon, I set off 10°59' N. on the decl. arc,
and observe the sun on the meridian; the resulting
lat. is 31°50' N.

Resurvey of 2nd. Guide Mer., bet. Ranges 10 and 11 East.

Chains.

N. of 11th W. bet. secs. 19 & 24

8.00 Ascending over mountainous land.
Top of limestone ridge, extends E. and W.; descend.
Difference bet. measurements of 40.00 chs. by two sets
of chainmen is 8 lks., position of middle point
By 1st set, 39.96 chs.,

40.00 By 2nd set, 40.04 chs., the mean of which is
Original 1/4 sec. cor. on line, which I re-mark 1/4 on W.
face, and raise a mound of stone, 2 ft. base, 1-1/2 ft.
high, W. of cor. Pits impracticable.

61.00 Dry wash, 80 lks. wide, course SW.
Difference between measurements of 80.00 chs. by two sets
of chainmen, is 2 lks., position of middle point,
By 1st set, 79.99 chs.

80.00 By 2nd set, 80.01 chs., the mean of which is
Set a granite stone, 24 x 10 x 10 ins., 18 ins. in the
ground, for cor. of secs. 13, 18, 19 and 24, marked with 3
notches on N. and S. faces, and raise a mound of stone, 2
ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
A mesquite, 10 ins. diam., brs. S. 84° E., 310 lks. dist.
marked T 18 S R 11 E S 19 B T.
A mesquite, 10 ins. diam., brs. N. 30° E., 25 lks. dist.,
marked T 18 S R 10 E S 18 B T.

80.55 No other trees available.
Sign of original cor. 3 lks. W. of line which I destroy.
Land, mountainous.
Soil, 2nd and 3rd rate.
Timber, scattering mesquite and palo verde.
Undergrowth, mesquite, greasewood and palo verde.
Mountainous land, exceptionally difficult to survey, 80.00
chs.

N. of 11th W. bet. secs. 13 & 18

5.50 Over mountainous land.
10.50 Wash, 13 lks. wide, course W.
16.80 Over small butte.
22.70 Trail, brs. SE. and NW.
32.30 Wash, 15 lks. wide, course SW. Ascend.
Small butte; descend.

Difference between measurements of 40.00 chs. by two sets
of chainmen is 4 lks., position of middle point,
By 1st set, 39.98 chs.

40.40 By 2nd set, 40.02 chs., the mean of which is 40.00,
Set a granite stone, 20 x 16 x 12 ins., 15" in the ground for
witness cor. 1/4 sec. cor., marked 1/4 on W. face, and raise
a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
Pits impracticable.

A mesquite, 24 ins. diam., brs. S. 60° E., 103 lks.
dist. marked W. 1/4 S 18 B T.
A mesquite, 4 ins. diam., brs. N. 60° W., 17 lks. dist.,
Marked W. 1/4 S 13 B T.

After diligent search, I fail to find any trace of old
corner.

49.00 Canon, 1-1/2 chain wide, course SW. perishable ground.
55.90 Small wash, 10 lks. wide, course SW. Ascend.
57.50 Top of ridge, extends NE. and SW. Descend.
68.20 Junction of two canons, 50 lks. wide, course SW. and W. to
SW.

Difference between measurements of 80.00 chs. by two
sets of chainmen, is 8 lks., position of middle point,
By 1st set, 79.96 chs.

80.00 By 2nd set, 80.04 chs., the mean of which is
Set a granite stone, 26 x 10 x 6 ins., 19 ins. in the
ground, for cor. of secs. 7, 12, 13 and 18, marked with 4
notches on the S. and 2 notches on the N. edge, and

8. Resurvey of the 2nd. Guide Mer., bet. Ranges 10 & 11 E.

Chains.

raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
After diligent search, I fail to find any trace of old cor.

Land, mountainous.

Soil, 2nd and 3rd rate.

Timber, scattering mesquite; undergrowth, mesquite, palo verde and cacti.

Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 25, 1907.

August 26, 1907. At 7h.a.m., l.m.t., I set off 10°43'N. on the decl. arc; and 31°52'N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 7, 12, 13 and 18.

Thence I run,

N. 0° 13' W. on a true line bet. Secs. 7 & 12

Ascending over mountainous land.

6.00 Shaft and working of mine, brs. N. 34-1/2° W., about 15 chs. dist.

9.60 Trail, brs. NW. and SE.

12.00 Top of ridge, extends E. and W. Descend steep slope.

18.50 Trail, brs. NW. and SE.

22.00 Canon, 2.00 chs. wide, course W. Begin steep ascent.

33.50 Top of ridge, extends E. and W. High point brs. NE., 12 chs. dist.

38.00 Head of ravine, course W.

Difference bet. measurements of 40.00 chs. by two sets of chainmen is 8 lks., position of middle point,
By 1st set, 39.96 chs.

By 2nd set, 40.04 chs., the mean of which is

40.00 After diligent search, I fail to find any trace of old 1/4 sec. cor.

Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

Ascend along W. side of mountain.

65.50 Gulch, 20 lks. wide, course W.; ascend steep slope.

73.50 Top of ridge, extends E. and W. Descend.

Difference between measurement of 80.00 chs. by two sets of chainmen is 6 lks., position of middle point,

By 1st set, 79.97 chs.

By 2nd set, 80.03 chs., the mean of which is

80.00 ~~Point for cor. falls in gulch, hence for witness cor. set.~~

79.20 Point for W. cor. of secs. 1, 6, 7 and 12 falls on a granite rock in place, 24 x 16 x 10 ins., above ground, which I mark with a cross (x) for exact sec. cor. point, with 5 notches on S. and 1 notch N. of cross, and W. side E. raise mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

A mesquite, 6 ins. diam., brs. N. 57° E., 80 lks. dist., marked T 18 S R 11 E S E W. C. B. T.

No other trees available.

Land, mountainous.

Soil, sandy and gravelly; 2nd and 3rd rate.

Timber, scattering mesquite; undergrowth, mesquite, palo verde and cacti.

Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 26, 1907. At noon, I set off 10°38'N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31°53'N.

Resurvey of 2nd Guide Mer., between Ranges 10 & 11. (9)

From true point for cor. of secs. 1-6-7 & 12, I run
 N. 0° 11' W. on a true line bet.
 . . . secs. 1 and 6.
 15.00 Gulch, 40 lks. wide, course W.; ascend.
 19.50 Top of spur, extends W. Descend.
 27.00 Gulch, 30 lks. wide, course W.; ascend.
 30.00 Top of ridge, extends E. and W.; descend.
 34.00 Gulch, 20 lks. wide, course W.; ascend.
 38.00 Top of spur, extends W.; descend.
 Canon, 4.00 chs. wide, course W.
 Difference between measurements of 40.00 chs. by two
 sets of chainmen, is 6 lks., position of middle point
 By 1st set, 39.97 chs.,
 By 2nd set, 40.03 chs., the mean of which is
 40.00 Set a granite 24" X 12" X 10" X 18" in the ground for
 1/4 sec. cor. marked 1/4 on W. face, and raise a
 mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
 Pits impracticable.
 A mesquite, 5 ins. diam., brs. N. 21° W., 70 lks.
 dist., marked 1/4 S 1 B T.
 A mes. 3" diam. brs. S. 35° E. 25 lks. dist. marked 1/4 S. 6 B. T.
 No trace of old corner to be found.
 49.50 Gulch, 20 lks. wide, course W.
 56.50 Box Canon, 2.00 chs. wide, course S.W. ascend.
 71.00 Top of spur extends SW.
 Descend along W. slope of same.
 To the closing corner being the NW. corner of Tp. 18 S., R.
 11 E., which is a ~~stone~~ marked and witnessed as de-
 scribed by the Surveyor General.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite, palo
 verde.
 Mountainous land, exceptionally difficult to survey, 77.00
 chs.

August 26, 1907.

Subdivision of Township 18 South, Range 11 E.

Survey commenced August 27th, 1907, and executed with
 a Young & Son light mountain transit, No. 7429, with
 Smiths' solar attachment. The horizontal limb is pro-
 vided with two double verniers placed opposite to each
 other, reading to single minutes of arc, which is also
 the least count of the verniers of the latitude and
 declination arcs.

The instrument was examined, tested on the true meridian,
 at Phoenix, found correct and was approved by the
 Surveyor General for Arizona, July 15, 1907.

I examine the adjustments of the transit, and correct the
 level and collimation errors, then to test the solar
 apparatus, by comparing its indications, resulting
 from solar observations made during a.m. and p.m. hours,
 with a meridian determined by observations on Polaris,
 I proceed as follows:

At the cor. of secs. 35 and 36 on the S. bdy. of Tp., which
 is a granite stone, previously described, in lat. 31° 48'
 33" N.; longitude, 111° 10' 02" W., I set off 31° 49' N. on
 the lat. arc; and 10° 20' N. on the decl. arc; and at 4h.
 30m. p.m., l.m.t., determine with the solar a meridian,
 and mark a point thereof, on a stone firmly set in the
 ground, 5 chs. N. of the cor.

At 9h. 10m. p.m., by my watch, which is correct, I observe
 Polaris at eastern elongation, in accordance with Man-
 ual of Instructions, and mark a point in the line thus
 determined, on a peg driven in the ground, 5 chs. N. of
 my station.

August 27, 1907.

10. Subdivision of Township 18 South, Range 11 East.

Chains.

August 28: At 6 a.m., l.m.t., I lay off the azimuth of Polaris 1° 24' to the west, and mark the meridian thus determined, by cutting a small groove in the stone set last night, on which the meridian coincides with the meridian determined by the solar.

At 8h.30m.a.m., l.m.t., I set off 31°49' N. on the lat. arc; 10°N. on the decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station, which coincides with the meridian established by the Polaris observation.

The magnetic bearing of the true meridian, at 8h.30m.a.m., is N.13° 40' W.; the angle thus determined gives the mag. decl. 13°40' E.

I commence at the corner of secs. 1, 2, 35 and 36 on the S. bdy. of Tp., which is a granite stone, previously described.

Thence I run, N. 0°01' W., bet. secs. 35 and 36. Over mountainous land.

- 4.00 Dry creek, 2 chs. wide, course SE. Ascend.
 - 12.00 Over top of low ridge, extends SE. and NW. Descend.
 - 20.00 Dry creek, 2.00 chs. wide, course SE.
 - 40.00 Set a porphyry stone, 20 x 10 x 8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
 - 40.50 Over ridge, extending SE. and NW.
 - 59.00 Dry creek, 50 lks. wide, course SE. In valley, 3.00 chs. wide. Ascend.
 - 71.00 Over top of ridge, extends SE.
 - 80.00 Set a quartzite stone, 20 x 12 x 12 ins., 15 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on S. and E. edges, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
A tesota, 6 ins. diam., brs. N. 57°10' E., 238 lks. dist., marked T 18 S R 11 E S 25 B T.
- No other trees within limits.
Land, mountainous.
Soil, sandy and gravelly; 2nd and 3rd rate.
Timber, scattering mesquite; undergrowth, mesquite, tesota and cacti.
Mountainous land, 80.00 chs.

East, on a random line, bet. secs. 25 and 36.

- 40.00 Set temp. 1/4 sec. cor.
 - 80.20 Intersect the E. bdy. of township at the corner of secs. 25, 30, 31 and 36.
- Thence I run,
West, on a true line, bet. secs. 25 and 36.
Over mountainous land.
- 8.00 Wash, 50 lks. wide, course SE. Ascend.
 - 16.00 Top of ridge, extends NW. and SE.
 - 22.00 Dry creek, 60 lks. wide, course SSE. Ascend.
 - 32.00 Top of ridge, extends SE. and NW.
 - 40.10 Set a quartzite stone, 20 x 12 x 8 ins.; 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of corner. Pits impracticable.
 - 43.80 Dry creek, 1.00 ch. wide, course SE.
 - 50.00 Top of small spur, extends S.
 - 54.00 Small wash, 50 lks. wide, course S. Joins above creek 4 chs. S. of line.
 - 64.85 Top of ridge, extends SSE. and NNW. Descend.
 - 75.50 Wash, 60 lks. wide, course SSE.

Subdivision of Township 18 South, Range 11 East. 11.

Chains.	
80.20	The cor. of secs. 25, 26, 35 and 36. Land, mountainous. Soil, sandy and gravelly; 2nd and 3rd rate. Timber, scattering mesquite in valleys; undergrowth, native grass, mesquite.

	N. 0° 1' W., bet. secs. 25 and 26. Descending over mountainous land.
7.50	Dry creek, 1.00 ch. wide, course SE.
12.00	Same creek, 1.00 ch. wide, course SW.
26.50	Same creek, course SE.
40.00	Set a granite stone, 24 x 12 x 8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
	Ascend along W. slope of ridge.
73.00	Top of ridge, and trail, brs. SSE. and NNW. Descend along E. side of ridge.
80.00	Point for cor. of secs. 23, 24, 25 and 26 falls on a conglomerate boulder in place, 24 x 24 x 15 ins., above ground, which I mark with a cross (x) for exact cor. point, and mark 2 notches S. of cross and 1 E. of cross, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
	Land, mountainous. Soil, 2nd rate. Timber, scattering mesquite; undergrowth, mesquite, greasewood and cacti. Mountainous land, 80.00 chs.

	August 28: At noon, I set off 9° 56' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31° 50' N.
	East, on a random line, bet. secs. 24 and 25.
40.00	Set temp. 1/4 sec. cor.
80.20	Intersect the E. bdy. of township at a point 23 lks. N. of cor. of secs. 19, 24, 25 and 30.
	Thence I run, N. 89° 50' W., on a true line, bet. secs. 24 and 25. Over mountainous land.
12.00	Gulch, 2.00 chs. wide, course ESE.; ascend.
32.00	Enter same gulch, course E.
40.10	Point for 1/4 sec. cor. falls in gulch, course E.
43.00	Leave gulch, ascend.
44.50	Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for witness cor. to 1/4 sec. cor., marked W C 1/4 on N., and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.
57.50	Gulch, 1.00 ch. wide, course S.
62.50	Gulch, 2.00 chs. wide, course ESE.; ascend steep slope.
68.00	Over gap of ridge; high point brs. S. 5.00 chs. dist.
68.50	Trail, brs. SSE. and NNW.
72.00	Gulch, 1.00 ch. wide, course SSE.; ascend.
80.20	The cor. of secs. 23, 24, 25 and 26. Land, mountainous. Soil, 2nd and 3rd rate. Timber, mesquite and tesota; undergrowth, mesquite, greasewood and cacti. Mountainous land, 80.20 chs.

	N. 0° 01' W., bet. secs. 23 and 24. Descending over mountainous land.

12. Subdivision of Township 18 South, Range 11 East.

Chains.	
4.00	Head of small ravine, brs. SE.; ascend.
7.75	Top of ridge, extends SE. and NW.; descend abrupt slope.
16.00	Gulch, 2.00 chs. wide, course SE.
16.50	Ascend over bank, 50 ft. high.
17.25	Ascend over moderately level land.
27.75	Old deserted house or mill, brs. E. 50 lks. dist.
30.00	Along slope above gulch, course SSE.
35.40	Small gulch, 30 lks. wide, course SE.; ascend.
39.00	Small gulch, 2.00 chs. wide, course SE., ascend.
40.00	Point for 1/4 sec. cor. falls in gulch, course SE.
41.00	Set a limestone, 20 x 12 x 10 ins., 15 ins. in the ground, for witness corner to 1/4 sec. cor., marked W C 1/4 on W., and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
	Begin steep ascent to top of high butte.
80.00	Set a granite stone, 36 x 24 x 12 ins., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on the S. and 1 notch on the E., and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, 2nd and 3rd rate.
	Timber, scattering mesquite and tesota; undergrowth, mesquite, greasewood and cacti.
	Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 28, 1907.

August 29, 1907 At 7h. a.m., l.m.t., I set off 9°41' N. on the decl. arc, and 31°51' N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 13, 14, 23 and 24.

	Thence I run, S. 89°50' E., on a random line, bet. secs. 13 and 24.
40.00	Set temp. 1/4 sec. cor.
80.10	Intersect the E. bdy. of Tp. at a point 12 lks. S. of cor. of secs. 13, 18, 19 and 24.
	Thence I run, N. 89°55' W., bet. secs. 13 and 24, on a true line.
	Over rugged, mountainous land.
25.00	Top of low ridge, extends SE. and NW.
	Begin steep descent.
40.05	Set a granite stone, 30 x 15 x 12 ins., 23 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of corner. Pits impracticable.
58.00	Head of wash, course N., 1.00 ch. wide.
	Begin ascent along N. slope of ridge, extends NW. and SE.
75.00	Top; descend.
80.10	The cor. of secs. 13, 14, 23 and 24.
	Land, rugged and mountainous.
	Soil, 3rd and 4th rate.
	Timber, scattering mesquite; undergrowth, mesquite, and cacti.
	Mountainous land, exceptionally difficult to survey, 80.10 chs.

North, 0°1' W., bet. secs. 13 and 24.

	Ascending over top of high butte.
1.82	Top of ridge, descend steeply over rough and broken ground.
40.00	Set a porphyry stone, 20 x 12 x 10 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

Chains.

- A mesquite, 8 ins. diam., brs. W. 64 lks. dist., marked $\frac{1}{4}$ S 14 B T.
 An oak, 30 ins. diam., brs. S. 45° E., 64 lks. dist., marked $\frac{1}{4}$ S 13 B T.
- 40.50 Wash, 30 lks. wide, course NE.
 41.50 Top of small ridge, extends NE. and SW. Descend.
 42.00 Wash, 50 lks. wide, course ENE. Ascend.
 Washes at 40.50 and 42.00 join 5.00 chs. E. of line.
 44.00 trail brs. E. and W.
 45.00 Top of small ridge, extends E. and W. Descend.
 48.00 Wash, 50 lks. wide, course E. NE.
 56.00 Center of small basin of wash, 2.00 chs. wide, course NE.
 60.00 Begin steep ascent.
 78.00 Top of high spur; descend steep slope.
 80.00 Set a conglomerate stone, 24 x 18 x 12 ins., 18 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on the S. 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. Pits impracticable.
 Land, mountainous.
 Soil, 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite, cacti, palo verde.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.
-
- S. 89° 55' E., on a random line, bet. secs. 12 and 13.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.04 Intersect the E. bdy. of township at a point 12 lks. S. of cor. of secs. 7, 12, 13 and 18.
 Thence I run,
 West, on a true line, bet. secs. 12 and 13.
 Ascending along N. slope of ridge.
 5.00 Canon, 60 lks. wide, course ENE.
 5.85 Ascend up rocky bluffs from canon, then ascend gradually over level land.
 22.00 Wash, 1.00 ch. wide, course SE.
 29.00 Descend into gulch.
 31.50 Gulch, 60 lks. wide, course SE. Ascend.
 40.02 Point for $\frac{1}{4}$ sec. cor. falls on granite stone in place, which I mark with a cross (x) for exact $\frac{1}{4}$ sec. cor. point, and $\frac{1}{4}$ N. of cross, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, N. of stone. This boulder is 30 x 18 x 12 ins. above ground.
 71.60 Begin steep ascent up mountain.
 80.04 The cor. of secs. 11, 12, 13 and 14.
 Land, mountainous.
 Soil, sandy and gravelly and rocky; 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite, palo verde and cacti.
 Mountainous land, exceptionally difficult to survey, 80.04 chs.
 August 29, 1907. At noon, I set off 9° 35' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31° 52' N.
-
- N. 0° 01' W., bet. secs. 11 and 12.
 Ascending up high mountain, 500 ft. above sec. cor., extends NE. and SW.
 34.55 Top of mountain; descend.
 40.00 Set a porphyry stone, 24 x 18 x 12 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Chains. 15 56 53
 An oak, 24 ins. diam., brs. N. ~~33° 1/2° E.~~ 56 lks. dist.,
 marked 1/4 S 11 B T. 34° 95
 An oak, 24 ins. diam., brs. N. ~~30° 1/2° E.~~ 53 lks. dist.,
 marked 1/4 S 12 B T.
 55.00 Gulch, 1.00 ch. wide, course SE.; ascend.
 65.00 Top of small ridge; descend.
 75.00 Ravine, 1.00 ch. wide, course ENE.; ascend.
 80.00 Point for cor. of secs. 1, 2, 11 and 12, falls on porphyry
 ledge, 4 x 3 x 2 ft. above ground, which I mark with
 a cross (x) for exact sec. cor. point, with 5 grooves
 S. of cross and 1 groove E. of cross, and raise a mound
 of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits
 impracticable.
 Land, mountainous.
 Soil, gravelly and stony; 3rd and 4th rate.
 Timber, scattering oak and mesquite; undergrowth, mes-
 quite, palo verde.
 Mountainous land, exceptionally difficult to survey, 80.00
 chs.

40.00 East, bet. secs. 1 and 12, on a random line.
 Set temp. 1/4 sec. cor.
 50.50 Intersect the E. bdy. at point 52 lks. N. of cor. of secs. 6 & 7 of
 T. 18 S. R. 12 E. set Granite 24"x10"x8"18" in the gd. for Clos'g sec.
 cor. and raise md. of st. 2 ft. base 1 1/2 ft. high W. of cor. which I
 mark C.C. on N. 1 notch on E. and 5 notches on S. faces, thence I run
 over mountainous land, West on a true line bet. secs. 1 & 12
 10.00 Top of ridge, descend.
 35.00 Ravine, 60.00 lks. wide, course NE.; ascend over broken
 ground.
 40.15 Set a quartz stone, 24 x 10 x 8 ins., 18 ins. in the
 ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise
 a mound of stone 2 ft. base, 1-1/2 ft. high, North of cor.
 Pits impracticable.
 An oak, 12 ins. diam., brs. N. ~~34 1/2° E.~~ 150 lks. dist.,
 marked 1/4 S 1 B T.
 An oak, 18 ins. diam., brs. S. ~~35 1/2° W.~~ 145 lks. dist.,
 marked 1/4 S 12 B T.
 Ascend along S. slope of ridge, over land broken by num-
 erous washes.
 80.50 The cor. of secs. 1, 2, 11 and 12.
 Land, mountainous.
 Soil, stony and rocky; 3rd and 4th rate.
 Timber, scattering oak; undergrowth oak and mesquite.
 Mountainous land, exceptionally difficult to survey, 80.50
 chs.

August 29, 1907.

August 30, 1907. At 7h. a.m., l.m.t., I set off 9°19'N. on
 the decl. arc; and 31°53'N. on the lat. arc, and determine
 a true meridian with the solar at the cor. of secs. 1,
 2, 11 and 12.
 Thence I run,
 N. 0°01'W., on a random line, bet. secs. 1 and 2.
 40.00 Set temp. 1/4 sec. cor.
 79.60 Intersect the N. bdy. of township at a point 12 lks. W. of
 cor. of secs. 1, 2, 35 and 36, which is a stone marked and
 witnessed as described by the Sur. Gen., thence I run,
 S. 0°45'W., on a true line, bet. secs. 1 and 2.
 Descending over broken land.
 1.50 Dry wash, 1.00 ch. wide, course E.
 5.20 Dry wash, 1.00 ch. wide, course NE.
 17.50 Dry wash, 1.00 ch. wide, course NE.
 25.00 Canal, brs. E. and W. Leave broken land.

Chains.
 25.15 Fence brs.E. and W.; enter Magee's enclosure.
 26.60 Road, brs.E. and W.; Magee's colony brs.E.4.00 chs.dist.
 29.00 Well brs.W.80 lks.dist.
 30.00 Fence, brs.E. and W.; leave Magee enclosure.
 30.50 Road in wash,1.00 ch.wide, brs. E. and W.;course of wash,
 E.
 39.50 Top of spur,extends NE.; descend steep slope.
~~59.50~~ Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the
 ground,for 1/4 sec.cor.,marked 1/4 on W.face,and raise
 a mound of stone, 2 ft.base,1-1/2 ft.high,W.of cor.
 Pits impracticable.
 An oak,6 ins.diam., brs.S.45°W.,179 lks.dist.,
 marked 1/4 S 2 B T.
 45.00 Head of ravine,1.00 ch.wide, course E.; ascend.
 60.00 Top of ridge,extends E.and W.; descend.
 64.00 Ravine,1.00 ch.wide, course E. Ascend along E.slope
 of high ridge.
 71.50 Top of ridge. brs. E and W.
~~79.50~~ The cor.of secs.1,2,11 and 12.
 Land, mountainous.
 Soil,2nd and 3rd rate.
 Timber,oak; undergrowth,oak,mesquite.
 Mountainous land,exceptionally difficult to survey,79.50
 chs.

August 30: At noon, I set off 9°14' N. on the decl.arc;
 and observe the sun on the meridian; the resulting
 lat.is 31°49' N.

From the corner of secs.34 and 35on the South bdy.of
 township, I run,
 N.0°01'W.bet.secs.34 and 35.
 Ascending along the W. slope of ridge.
 15.00 Top of ridge,follow ridge,10.00 chs.
 25.00 Ascend along the E. slope of ridge.
 40.00 Set a granite stone, 24 x 10 x 10 ins., 18 ins.in the
 ground,for 1/4 sec.cor.,marked 1/4on W.face,and raise
 a mound of stone, 2 ft.base, 1-1/2 ft.high,W.of cor.
 Pits impracticable.
 55.00 Top of same ridge; descend.
 78.00 Gulch,1.00 ch.wide, course SSW.
 80.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the
 ground,for 1/4 sec.cor.,marked with 1 notch on S. and
 2. on E.; raise a mound of stone, 2 ft.base,1-1/2 ft.
 high,W.of cor. Pits impracticable.
 A mesquite, 4 ins. diam., brs. S. 12° W.,128 lks.
 dist.,marked T 18 S R 11 E. S 34 B T.
 Land, mountainous.
 Soil,2nd and 3rd rate.
 Timber,very scattering; undergrowth,mesquite,oak.
 Mountainous land, exceptionally difficult to,survey,80.00
 chs.

East,on a random line,bet.secs.26 and 35.
 40.00 Set temp.1/4 sec.cor.
 80.20 Intersect the N.and S.line at the cor.of secs.25,26,35
 and 36.
 Thence I run,
 West,on a true line,bet.secs.26 and 35.
 Over mountainous land.
 2.70 Top of ridge.
 8.00 Wash,60 lks.wide, course SSW.
 11.00 Small ridge, extends S.and N.
 14.00 Small wash,course SE.
 19.00 Head of small wash, course S.; ascend.

Chains.

- 27.50 Top of high ridge, extends SE. and NW.; descend.
 32.00 Top of spur, extends SSW.
 39.00 Dry wash, course S.; ascend.
 40.10 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 45.00 Top of ridge, and trail, brs. N. and S.
 49.00 Small wash, course S.
 55.32 Top of ridge, extends N. and S.
 63.00 Gulch, 3.00 chs. wide, course SW.; ascend.
 77.00 Top of ridge, descend.
 80.20 The cor. of secs. 26, 27, 34 and 35.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, very scattered oak; undergrowth, oak and mesquite.
 Mountainous land, exceptionally difficult to survey, 80.20 chs.

August 30, 1907.

August 31, 1907. At 7h. a.m., 1.m.t. I set off $8^{\circ}58'N$. on the decl. arc; and $31^{\circ}49'N$. on the lat. arc, and determine a true meridian at the cor. of secs. 26, 27, 34 and 35.

Thence I run, N. $0^{\circ}1'W$., bet. secs. 26 and 27.

Over mountainous land, ascending.

- 17.00 Top of ridge, extends SSE. and NNW.; descend.
 32.05 Set a porphyry stone, 24 x 18 x 12 ins., 18 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked WC $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 40.00 Point for $\frac{1}{4}$ sec. cor. falls in center of gulch, course SE.
 70.00 Spur, extends W.; descend into gulch, along the W. slope of ridge; then ascend over broken land.
 80.00 Point for cor. of secs. 22, 23, 26 and 27, falls on a porphyry boulder in place, 35 x 20 x 10 ins., above ground, which I mark with a cross for exact cor. of secs. 22, 23, 26 and 27, with 2 grooves S. and E. of cross, from which,
 A mesquite, 10 ins. diam., brs. S. $18^{\circ}30'W$., 150 lks. dist., marked T 18 S R 11 E S 27 B T.
 A mesquite, 8 ins. diam., brs. N. $63^{\circ}W$., 184 lks. dist., marked T 18 S R 11 E S 22 B T.
 No other trees available. Raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor.
 Land, mountainous.
 Soil, sandy and stony; 3rd rate.
 Timber, scattered mesquite; undergrowth, mesquite and oak.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

East, on a random line, bet. secs. 23 and 26.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.10 Intersect the N. and S. line at a point 5 lks. N. of cor. of secs. 23, 24, 25 and 26.
 Thence I run,
 N. $89^{\circ}58'W$., on a true line, bet. secs. 23 and 26.
 Ascending over mountainous land.
 4.00 Top of ridge, trail, extends SE. and NW.
 15.00 Gulch, 2.00 chs. wide, course SSE.
 17.00 Ascend.
 25.50 Top of ridge, descend. extends SSE and NNW.
 37.00 Gulch, 2.00 chs. wide, course SSE.; ascend.
 40.05 Set a porphyry stone, 20 x 10 x 8 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise

Chains.

a mound of stone, 2 ft. base, 1-1/2 ft. high. N. of cor.
 Pits impracticable.
 47.50 Top of ridge, extends SE. and NW.; descend.
 55.00 Deep ravine, 2.00 chs. wide, course S.; ascend.
 67.64 Top of ridge, extends SSE. and NNW.; descend.
 Deserted ranch brs. N. 33° 15' W.
 80.00 The cor. of secs. 22, 23, 26 and 27.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite and oak.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 31: At noon, I set off 8° 52' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31° 50' N.
 N. 0° 1' W.; bet. secs. 22 and 23.
 Descending along spur to gulch, 2 chs. wide, course SSW.
 5.00 Along same gulch; ascend.
 9.00 Leave gulch, ascend.
 18.50 Top of small ridge; descend to lowland.
 24.60 Same wash, 50 lks. wide, course SE.
 28.00 Gulch, 1.00 ch. wide, course SSE.; ascend.
 40.00 Set a quartzite stone, 20 x 10 x 18 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which,
 A mesquite, 15 ins. diam., brs. S. 1° E., 104 lks. dist., marked 1/4 S 23 B T.
 A mesquite, 6 ins. diam., brs. S. 58° W., 43 lks. dist., marked 1/4 S 22 B T.
 Ascend.
 57.00 Over spur, extends SE. into gulch, parallel to line.
 60.00 Ascend over rocky ridge, extends East and West.
 70.00 Top of same, ridge, descend.
 73.50 Very rough gulch, 50 lks. wide, course W.
 80.00 Set a granite stone, 36 x 20 x 12 ins., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, marked with 3 notches on the S. and 2 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
 Pits impracticable.
 A mesquite, 30 ins. diam., brs. N. 85° W., 116 lks. dist., marked T 18 S R 11 E S 15 B T.
 Land, mountainous.
 Soil, sandy and rocky; 3rd and 4th rate.
 Timber, scattering mesquite; undergrowth, mesquite, oak.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

August 31, 1907.

September 1, 1907. At 7h. a.m., l.m.t., I set off 8° 36' N. on the decl. arc; and 31° 51' N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 14, 15, 22 and 23.
 Thence I run,
 S. 89° 58' E. on a random line, bet. secs. 14 and 23.
 40.00 Set temp. 1/4 sec. cor.
 79.88 Intersect the N. and S. line at a point 2 lks. N. of cor. of secs. 13, 14, 23 and 24.
 Thence I run,
 N. 89° 57' W. on a true line, bet. secs. 14 and 23.
 Over mountainous land, ascending.
 5.06 Top of ascent, top of butte, thence along S. slope of ridge.
 35.40 Descend from high butte.
 39.94 Mark a granite boulder in place, 24 x 24 x 24 ins., above ground, for 1/4 sec. cor., marked with a cross (x) and 1/4 N. of cross, from which,

Chains.

45.15
54.16
55.91

79.88

An oak, 30 ins. diam., brs. N. 80° W., 78 lks. dist., marked 1/4 S 14 B T. No other tree available.
 Raise a mt. of stone, 2 ft. base, 1 1/2 ft. high N of cor.
 Descend over steep bluff of ravine.
 Cross ravine, 30 lks. wide, course SW.
 Ravine, 20 lks. wide, course SW.; thence ascend over high bluffs and along E. slope, on edge of bluff, above ravine, over very rough land.
 The cor. of secs. 14, 15, 22 and 23.
 Land, mountainous.
 Soil, 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite and oak.
 Mountainous land, exceptionally difficult to survey, 79.88 chs.

16.60
27.00
31.00
37.87
40.00

54.65
72.50
80.00

September 1; At noon, I set off 8°31'N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31°51'N.
 N. 0°1'W., bet. secs. 14 and 15.
 Ascending over mountainous land, along SE. side of high ridge.
 Top of ridge, extends SW. and NE. Descend.
 Head of small ravine, 10 lks. wide, ascend; course W.
 Head of small ravine, 30 lks. wide; ascend; course W.
 Top of spur, extends E. and W.; thence along W. slope of high ridge, over very broken land.
 Point for 1/4 sec. cor. falls on a porphyry stone in place, 24 x 16 x 12 ins., above ground, which I mark with a cross (x) for exact 1/4 sec. cor. point, and 1/4 W. of cross, from which,
 An oak, 15 ins. diam., brs. S. 37°30'W., 65 lks. dist., marked 1/4 S 15 B T.
 An oak, 12 ins. diam., brs. N. 81°30'E., 105 lks. dist., marked 1/4 S 14 B T.
 Thence along W. slope of high ridge, broken by numerous shall gulches, bearing W.
 Top of spur, extends W.
 Big oak tree, 36 ins. diam., on line.
 Set a granite stone, 26 x 10 x 8 ins., 10 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked with 4 notches on the S. and 2 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
 An oak, 36 ins. diam., brs. S. 27°W., 145 lks. dist., marked T 18 S R 11 E S 15 B T.
 An oak, 24 ins. diam., brs. S. 61°W., 158 lks. dist., marked T 18 S R 11 E S 14 B T.
 An oak, 8 ins. diam., brs. N. 15° E., 100 lks. dist., marked T 18 S R 11 E S 11 B T.
 An oak, 10 ins. diam., brs. N. 22° W., 234 lks. dist., marked T 18 S R 11 E S 10 B T.
 Land, mountainous.
 Soil, sandy and stony; 3rd and 4th rate,
 Timber, scattering oak; undergrowth, oak and mesquite.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

September 1, 1907.

September 2: At 7h. a.m., l.m.t., I set off 8°15'N. on the decl. arc; and 31°52'N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 10, 11, 14 and 15.
 Thence I run,

Subdivision of Township 18 South, Range 11 East, 19.

Chains.

40.00
79.90

S. $89^{\circ}57'$ E, on a random line, bet. secs. 11 and 14.
Set temp. $\frac{1}{4}$ sec. cor.
Intersect the N. and S. line at a point 7 lks. S. of epr. of
secs. 11, 12, 13 and 14.

20.00
79.95

Thence I run,
West, on a true line, bet. secs. 11 and 14.
Over broken, mountainous land.
Ravine, 1.00 ch. wide, course S. ascend.
Point for $\frac{1}{4}$ sec. cor. falls on porphyry stone in place,
30 x 20 x 12 ins., above ground, which I mark with a
cross (x) for exact $\frac{1}{4}$ sec. cor., and $\frac{1}{4}$ N. of cross,
from which,
An oak, 20 ins. diam., brs. N. 45° E., 58 lks. dist.,
marked $\frac{1}{4}$ S 11 B T.
An oak, 16 ins. diam., brs. S. 2° W., 60 lks. dist.,
marked $\frac{1}{4}$ S 14 B T.

50.29
79.90

Top of ridge; descend.
The cor. of secs. 10, 11, 14 and 15.
Land, mountainous and broken.
Soil, sandy and gravelly and stony; 2nd and 3rd rate.
Timber, scattering oak; undergrowth, oak and mesquite.
Mountainous land, exceptionally difficult to survey,
79.90 chs.

12.00
21.00
28.25
29.00
40.00

North, $0^{\circ}1'$ W., bet. secs. 10 and 11.
Descend steeply into ravine.
Ravine, 1.00 ch. wide, course W.; ascend.
Top of spur; thence along W. slope of ridge.
Prospect shaft, brs. E. 25 lks. dist.
Prospect shaft, dump on line.
Set a porphyry stone, 24 x 8 x 6 ins., 18 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise
a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor.
An oak, 24 ins. diam., brs. N. 89° E., 35 lks. dist.,
marked $\frac{1}{4}$ S 11 B T.
An oak, 18 ins. diam., brs. N. 60° W., 33 lks. dist.,
marked $\frac{1}{4}$ S 10 B T.

48.00
80.00

Canon, 1.00 ch. wide, course SSW. Begin steep ascent.
Set a porphyry stone, 36 x 24 x 15 ins., 27 ins. in the
ground, for cor. of secs. 2, 3, 10 and 11, marked with 5
notches on the S. and 2 notches on the E. edge, and
raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of
cor. Pits impracticable.
An oak, 24 ins. diam., brs. S. $49^{\circ}30'$ E., 111 lks. dist.,
marked T 18 S R 11 E S 11 B T.
No other trees available.
Land, mountainous.
Soil, sandy and gravelly; 2nd and 3rd rate.
Timber, scattering oak; undergrowth, dense oak and mesquite.
Mountainous land, exceptionally difficult to survey, 80.00
chs.
September 2: At noon, I set off $8^{\circ}9'$ N. on the decl. arc,
and observe the sun on the meridian; the resulting lat.
is $31^{\circ}53'$ N.

40.00
79.92

East, on a random line, bet. secs. 2 and 11.
Set temp. $\frac{1}{4}$ sec. cor.
Intersect the N. and S. line at the cor. of secs. 1, 2, 11 and
12.

10.00
20.00

Thence I run,
West, on a true line, bet. secs. 2 and 11.
Descending along the S. slope of ridge.
Cross ravine, 75 lks. wide, course S. Ascend.
Top of low ridge, descend.

Chains.
28.00
~~39.96~~
60.00
75.00
~~79.92~~

Canon, 1.00 ch. wide, course S.
Descend along S. slope of ridge.
Set a granite stone, 24 x 18 x 12 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor.
Pits impracticable.
Ascend over high peaks.
Top of peak, extends NNE. and SSW. Descend abruptly, over broken land.
Canon, 50 lks. wide, course N.; ascend.
The cor. of secs. 2, 3, 10 and 11.
Land, mountainous.
Soil, sandy and gravelly; 2nd and 3rd rate.
Timber, dense oak; undergrowth, oak and mesquite.
Mountainous land, exceptionally difficult to survey,
79.92 chs.

September 2, 1907.

40.00
~~79.20~~
25.00
37.00
~~39.20~~

September 3, 1907. At 7h. a.m., 1. m. t., I set off 7°53' N. on the decl. arc; and 31°53' N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 2, 3, 10 and 11.
Thence I run, N. 0°1' W., on a random line, bet. secs. 2 and 3.
Set temp. 1/4 sec. cor.
Intersect the N. bdy. of township at a point 2 lks. W. of cor. of secs. 2, 3, 34 and 35, which is a stone marked and witnessed as described by the Sur. Gen., Thence I run, South, on a true line, bet. secs. 2 and 3.
Ascending over mountainous land.
Top of ridge, descend abruptly.
Canon, 3.00 chs. wide, course E.; ascend.
Set a porphyry stone, 24 x 18 x 12 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
Pits impracticable.
A cedar, 8 ins. diam., brs. S. 12° W., 65 lks. dist., marked 1/4 S 3 B T.
An oak, 15 ins. diam., brs. N. 78° E., 46 lks. dist., marked 1/4 S 2 B T.
Top of ridge, extends SE, and NW.; descend over high ridge.
Canon, 3.00 chs. wide, course SE. Ascend abrupt slope.
Top of ridge.
Descend steeply along E. slope of ridge.
Wash, 75 lks. wide, course ENE. Ascend.
Top of small ridge.
Main trail, brs. NE. and SW.
The cor. of secs. 2, 3, 10 and 11.
Land, mountainous.
Soil, sandy and stony; 3rd and 4th rate.
Timber, dense mesquite and tesota; undergrowth, oak and mesquite.
Mountainous land, exceptionally difficult to survey,
79.20 chs.

45.50
51.00
56.00
64.10
74.50
76.00
79.00
79.20

September 3rd: At noon, I set off 7°47' N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 31°49' N.
From the cor. of secs. 3, 4, 33 and 34 on the S. bdy. of Tp. I run, N. 0°2' W., bet. secs. 33 and 34.
Beginning gradual ascent along the E. slope of low ridge, extends N. and S.
26.00 Cross head of small gulch, course SW.

Chains
 37.20 Trail, brs.NE.and SW.
 40.00 Set a quartzite stone, 30 x 20 x 10 ins., 20 1/2 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face,and raise a mound of stone, 2 ft.base, 1-1/2 ft.high,W.of cor. Pits impracticable.
 A mesquite, 6 ins. diam., brs. S. 73°W.,147 lks. dist., marked 1/4 S 33 B T.
 64.65 Top of spur, extends SW.
 80.00 Point for cor.of secs.27,28,33 and 34, falls on porphyry boulder in place, 2 x 1 x 1 ft. above ground, which I mark with a cross (x) for exact point of cor.of secs. 27,28,33 and 34,with 1 groove on S.face and 3 grooves on E.face,from which,
 A mesquite,10 ins.diam., brs.N.58° W.,48 lks.dist., marked T 18 S R 11 E S 28 B T.
 A mesquite,6 ins.diam., brs. N. 49°E.,118 lks.dist., marked T 18 S R 11 E S 27 B T.
 A mesquite, 8 ins.diam., brs. S. 32° W.,135 lks. dist., marked T 18 S R 11 E S 33 B T.
 No other tree available. Raise a mound of stone, 2 ft. base,1-1/2 ft.high,W.of cor. Pits impracticable.
 Land, mountainous.
 Soil, stony and gravelly, 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite, cedar and oak.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.
 September 3, 1907.

September 4, 1907. At 7h.a.m.,1.m.t., I set off 7°31'N. on the decl.arc; and 31° 49'N. on the lat.arc, and determine a true meridian with the solar at the cor.of secs.27,28,33 and 34.
 Thence I run,
 East, on a true line, bet.secs.27 and 34.
 40.00 Set temp.1/4 sec.cor.
 80.00 Intersect the N.and S.line at the cor.of secs.26,27,34 and 35.
 Thence I run,
 West, on a true line, bet.secs.27 and 34.
 Over mountainous land.
 00.50 Gulch,80 lks.wide; course SSE. Ascend.
 22.00 Top of ridge, extends N.and S.; descend.
 40.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground,for 1/4 sec.cor.,marked 1/4 on N.face,and raise a mound of stone, 2 ft.base,1-1/2 ft.high,N.of cor. Pits impracticable.
 Thence over rolling land, covered with dense undergrowth.
 76.00 Gulch,50 lks.wide, course SE.
 80.00 The cor.of secs.27,28,33 and 34.
 Land,mountainous and and rolling.
 Soil,sandy and gravelly, 2nd and 3rd rate.
 No timber; undergrowth,oak and mesquite.
 Mountainous land,or land covered with dense undergrowth, exceptionally difficult to survey,80.00 chs.

N.0°2'W.,bet.secs.27 and 28.
 Over mountainous land.
 11.25 Main gulch, 1.00 ch.wide, course SW.; spring in gulch; begin steep ascent along E. slope of ridge.
 20.00 High peak of ridge, brs.W.10.00 chs.dist., descend.
 20.50 Gulch,30 lks.wide; course E. Begin steep ascent over high ridge.
 40.00 Set a conglomerate stone, 24 x 10 x 8 ins.,in mound of stone,for 1/4 sec.cor.,marked 1/4 on W.face,and raise unable to set in ground

22. Subdivision of Township 18 South, Range 11 East.

Chains.

a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.
Pits impracticable.
Top of high peak brs. west, 2.00 chs. dist. Descend.
57.00 End of descent, thence through lowland and dense mesquite and tesota undergrowth.
68.00 Temporal Canon, course SW. Stream of water, 8 lks. wide, 3 ins. deep. and ascend
80.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for the cor. of secs. 21, 22, 27 and 28, marked with 2 notches on the S. and 3 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
A mesquite, 20 ins. diam., brs. S. 22° W., 186 lks. dist., marked T 18 S R 11 E S 28 B T.
A mesquite, 8 ins. diam., brs. N. 75° W., 103 lks. dist., marked T 18 S R 11 E S 21 B T.
No other trees available.
Land, mountainous.
Soil, sandy and stony; 2nd and 3rd rate.
Timber, mesquite; undergrowth, tesota, mesquite and oak.
Mountainous land, exceptionally difficult to survey, 80.00 chs.

September 4, 1907. At noon, I set off 7°25' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31°50' N.
East, on a random line, bet. secs. 22 and 27.
40.00 Set temp. 1/4 sec. cor.
80.00 Intersect the N. and S. line at the cor. of secs. 22, 23, 26 and 27.
Thence I run,
West, on a true line, bet. secs. 22 and 27.
Over mountainous land.
2.00 Gulch, 50 lks. wide, course S.
6.00 Top of smooth slope, extends N. and S.
16.30 Wash, 50 lks. wide, in gulch, 2.00 chs. wide, course SSE.
Wash, 30 lks. wide, parallel to line for 5.00 chs., then to head, course S. E.
35.00 Top of spur, extends SSE. Descend.
40.00 Set a conglomerate stone, 20 x 16 x 10 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.
A juniper, 10 ins. diam., brs. S. 69°30' W., 425 lks. dist., marked 1/4 S' 27' B T.
Descend.
62.00 Temporal Canon, SW.
80.00 The cor. of secs. 21, 22, 27 and 28.
Land, mountainous.
Soil, 2nd and 3rd rate.
Timber, scattering oak and juniper; undergrowth, oak and mesquite.
Mountainous land, exceptionally difficult to survey, 80.00 chs.
September 4, 1907.

September 5, 1907. At 7h.a.m., l.m.t., I set off 7°9' N. on the decl. arc; and 31°50' N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 21, 22, 27 and 28.
Thence I run,
N. 0°2' W., bet. secs. 21 and 22.
Ascending over mountainous land.
26.00 Begin descent into gulch. from ridge, brs. NW and SE.
38.00 Gulch, 50 lks. wide, course SSE. Ascend.

Subdivision of Township 18 South, Range 11 East, 23.

Chains.
40.00

69.00
70.50

80.00

40.00
80.10

5.00
17.50

26.14
31.00
36.20
38.50
40.05

45.50
51.00
70.00
75.00
80.10

40.00

48.00
51.95

61.00
74.00

Set a conglomerate stone, 24x16x15 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
A mesquite, 12 ins. diam., brs. S. 51° W., 100 lks. dist., marked 1/4 S 21 B T.
A mesquite, 12 ins. diam., brs. S. 25° E., 193 lks. dist., marked 1/4 S 22 B T.

Ascend.
Descend abruptly into canyon.
Canyon, 3.00 chs. wide, course SE., 50 ft. deep.
Ascend steep slope.

Set a limestone, 24x10x8 ins., 18 ins. in the ground for cor. of secs. 15, 16, 21 and 22, marked 18 S on NE. and 11 E. on SE. face, with 3 notches on the S. and E. edges, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
Old corral across canyon, brs. S. 54° W., about 8 chs. dist. Land, mountainous.
Soil, sandy and gravelly; 2nd and 3rd rate.
Timber, scattered mesquite; undergrowth, mesquite.
Mountainous land, exceptionally difficult to survey, 80.00 chs.

East, on a random line, bet. secs. 15 and 22.
Set temp. 1/4 sec. cor.
Intersect the N. and S. line at a point 5 lks. N. of cor. of secs. 14, 15, 22 and 23.
Thence, I run, N. 89° 58' W. on a true line, bet. secs. 15 and 22. Ascending over mountainous land.
Ridge, extends N. and S. Descend.
East branch of Temporal Canyon, 75 lks. wide, course SW.; ascend.

Top of ridge, descend.
Wash, 1.00 ch. wide, course SW.; ascend.
Top of ridge, extends N. and S.; descend.
Gulch, 60 lks. wide, course SSW.
Set a quartz stone, 24x10x8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.
An oak, 15 ins. diam., brs. S. 56° 45' W., 100 lks. dist., marked 1/4 S 22 B T.
An oak, 12 ins. diam., brs. N. 25° W., 105 lks. dist., marked 1/4 S 15 B T.

Head of small ravine, 60 lks. wide, course S.
Wash, 1.00 ch. wide, course SSW. 2.00 chs. S.
Wash, 1.00 ch. wide, course SW.; joins with the above about
Head of small ravine, 50 lks. wide, course S.
The cor. of secs. 15, 16, 21 and 22.
Land, mountainous; soil, 2nd and 3rd rate.
Timber, scattering mesquite and oak; undergrowth, oak.
Mountainous land, exceptionally difficult to survey, 80.10 chs.
September 5. At noon, I set off 7° 3' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31° 51' N.

N. 0° 2' W., bet. secs. 15 and 16.
Ascending over steep mountainous land.
Set a granite stone, 30x10x10 ins., 22 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
Top of spur, extends W.
Long spur extends 1/4 mile; Temporal Canyon at point, heads NE.
Head branch of Temporal Canyon, course SW., ascend.
Spur, extends W. High peak on divide, brs. E. 10 chs. dist.
Thence along W. side high peak.

Chains.	
80.00	Point for cor. of secs. 9, 10, 15 and 16 falls on ledge in place, 3x2x2 ft. above ground, which I mark with a cross (x) for exact cor. point, with 4 grooves S. and 3 grooves E. of cross; raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable. An oak, 10 ins. diam., brs. S. 52° E., 22 lks. dist., marked T 18 S R 11 E S 15 B T. An oak, 12 ins. diam., brs. N. 23° W., 80 lks. dist., marked T 18 S R 11 E S 9 B T. No other trees available. Land, mountainous; soil, sandy and stony, 2nd and 3rd rate. Timber, oak and juniper. Mountainous land, exceptionally difficult to survey, 80 chs.
40.00	S. 89° 58' W. on a random line, bet. secs. 10 and 15. Ascending over mountainous land.
80.06	Set temporary 1/4 sec. cor. Intersect N. and S. line, 7 lks. N. of the cor. of secs. 10, 11, 14 and 15; thence I run,
18.00	N. 89° 55' W. on a true line bet. secs. 10 and 15. descend East branch of Temporal Canyon, 75 lks. wide, course S. Ascending through scattering oak timber.
40.03	Set a granite stone 24x10x6 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone 2 ft. base, 1-1/2 ft. high, N. of cor. No trees available. Pits impracticable.
48.00	Top of gap in divide, main spur extends S.; begin steep descent through dense scrub oak.
80.06	To cor. of secs. 9, 10, 15 and 16. Land, mountainous; soil, stony, 3rd rate; timber, oak, juniper; undergrowth, dense scrub oak and scattering mesquite. Mountainous land, exceptionally difficult to survey, 80.06 chs. Sept. 5, 1907.
	September 6: At 7h. a.m., a.m.t., I set off 6° 47' N. on the decl. arc; and 31° 52' W. on the lat. arc; and determine a true meridian with the solar at the cor. of secs. 9, 10, 15 and 16. Thence I run, N. 0° 2' W., bet. secs. 9 and 10. Ascending over mountainous land.
23.00	Top of high ridge; descend.
40.00	Point for 1/4 sec. cor. falls on boulder in place, 24x10x10 ins. above ground, which I mark with a cross for exact 1/4 sec. cor. point, with 1/4 W. of cross (x), and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable. Thence along W. side of high ridge,
80.00	set a quartz stone, 24x15x10 ins., 18 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked with 5 notches on the S. and 3 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, sandy and stony, 2nd and 3rd rate. Timber, none; undergrowth, oak and mesquite. Mountainous land, exceptionally difficult to survey, 80.00 chs.
40.00	S. 89° 55' E. on a random line, bet. secs. 3 and 10. Set temp. 1/4 sec. cor.
80.18	Intersect the N. and S. line at a point 9 lks. S. of cor. of secs. 2, 3, 10 and 11. Thence I run, N. 89° 59' W. on a true line, bet. secs. 3 and 10. Ascend over mountainous and broken land.
8.00	Canyon, 1.00 ch. wide, course SE.
12.00	Ascend steeply along S. slope of ridge, thence along through canyon and on slope.
25.00	Ascend over ridge.
34.00	Top of ridge; descend.
40.09	Point for 1/4 sec. cor. falls in wash, course SE., impracti-

Chains. 40.87	<p>cable to establish. ascend.</p> <p>I mark a porphyry boulder in place, 6 x 4 x 4 ft. above ground for witness cor. to 1/4 sec. cor., marked with a cross (X) and W C; from which,</p> <p>A cedar, 4 ft. diam., brs. S. 89° E., 83 lks. dist., marked W C 1/4 S 10 B T.</p> <p>An oak, 2 ft. diam., brs. N. 8° 30' E., 57 lks. dist., marked W C 1/4 S 3 B T.</p> <p>Trail, brs. N. of cor., 710 lks. dist.</p>
61.00 80.18	<p>Top of high ridge; descend abruptly.</p> <p>The cor. of secs. 3, 4, 9 and 10.</p> <p>Land, mountainous; soil, sandy and stony; 3rd and 4th rate.</p> <p>Timber, scattering oak and cedar.</p> <p>Mountainous land, exceptionally difficult to survey, 80.18 chs.</p>

1.00 40.00	<p>Land, is very mountainous, impossible to run the line bet. secs. 3 and 4 by the ordinary methods of surveying.</p> <p>From the S. bdy. of township, I run, N. 0° 2' W. bet. secs. 32 and 33.</p> <p>Ascending gradually over mountainous land.</p> <p>Box canon, 150 lks. wide, 50 feet deep, course SW.</p> <p>Set a granite stone, 24 x 15 x 10 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor.</p> <p>Pits impracticable.</p> <p>A mesquite, 10 ins. diam., brs. S. 56-1/2° W., 184 lks. dist., marked 1/4 S 32 B T.</p>
52.00 60.00	<p>No other trees available.</p> <p>Gulch, 180 lks. wide, course SW.; ascend.</p> <p>Top of knoll.</p>
72.00	<p>Descend into Temporal Canon, course SSW. Enter dense mesquite and tesota undergrowth.</p>
80.00	<p>Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, marked with 1 notch on the S. and 4 notches on the E. edge, from which,</p> <p>A mesquite, 10 ins. diam., brs. N. 73-1/2° E., 48 lks. dist., marked T 18 S R 11 E S 28 B T.</p> <p>A mesquite, 6 ins. diam., brs. S. 8° W., 18 lks. dist., marked T 18 S R 11 E S 32 B T.</p> <p>A mesquite, 6 ins. diam., brs. S. 70° E., 34 lks. dist., marked T 18 S R 11 E S 33 B T.</p> <p>A mesquite, 6 ins. diam., brs. N. 1° W., 16 lks. dist., marked T 18 S R 11 E S 29 B T.</p>
<p>At this cor. the canon is 8.00 chs. wide.</p> <p>Main wash of canon is 4.00 chs. wide.</p>	
<p>Land, mountainous and broken; soil, sandy, 2nd and 3rd rate.</p> <p>Timber, mesquite, tesota; undergrowth, oak, mesquite.</p> <p>Mountainous land, exceptionally difficult to survey, 80 chs.</p>	
<p>Sept. 6: At noon, I set off 6° 41' N., on the decl. arc; and observe the sun on the meridian; the resulting lat. is 31° 49' N.</p>	

40.00 80.00	<p>East, on a random line, bet. secs. 28 and 33.</p> <p>Set temp. 1/4 sec. cor.</p> <p>Intersect the N. and S. line at a point 5 lks. N. of cor. of secs. 27, 28, 33 and 34.</p>
.50 20.00	<p>Thence I run, over mountainous land.</p> <p>N. 89° 58' W. on a true line, bet. secs. 28 and 33.</p> <p>Gulch, 80 lks. wide, course SW.</p> <p>Top of high peak, brs. S. 5.00 chs. dist.; descend.</p>
40.00	<p>Set a malpais stone, 24 x 10 x 8 ins., 18 ins. in the</p>

26. Subdivision of Township 18 South, Range 11 East.

Chains.

ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 45.50 Wash, 20 lks. wide, course WSW.
 48.00 Wash, 50 lks. wide, course SW.
 65.00 Wash, 80 lks. wide, course S.; ascend.
 73.00 Top of spur, extends SW. Descend.
 78.00 Enter Temporal Canon.
 80.00 The cor. of secs. 28, 29, 32 and 33.
 Land, mountainous.
 Soil, sandy and stony; 2nd and 3rd rate.
 Timber, scattered mesquite and tesota; undergrowth, tesota, mesquite, juniper.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

September 6, 1907.

September 7, 1907. At 7h.a.m., l.m.t., I set off 6°24' N. on the decl. arc; and 31°49' N. on the lat. arc; and determine a true meridian with the solar at the cor. of secs. 28, 29, 32 and 33.

N. 0°2' W., bet. secs. 28 and 29.

In bottom of Temporal Canon, through dense mesquite and tesota undergrowth.

15.00 Leave Temporal Canon to right, and continue to ascend in glen.
 26.50 Leave gulch to right, and ascend steep slope.
 40.00 Set a granite stone, 30 x 20 x 10 ins., 22 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 A mesquite, 6 ins. diam., brs. S. 50- $\frac{1}{2}$ ° E., 78 lks. dist., marked $\frac{1}{4}$ S 28 B T.
 No other tree available.
 50.00 Ascend abruptly.
 68.00 Spur, extends E.
 80.00 Set a granite stone, 24 x 10 x 10 ins., 18 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, marked with 2 notches on the S. and 4 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, stony and gravelly; 3rd and 4th rate.
 Timber, mesquite and tesota; undergrowth, mesquite and tesota.
 Mountainous land, covered with dense undergrowth, exceptionally difficult to survey, 80.00 chs.

S. 89°58' E. on a random line, bet. secs. 21 and 28.

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

80.06 Intersect the N. and S. line at a point 5 lks. S. of cor. of secs. 21, 22, 27 and 28.

Thence I run,

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

Over mountainous land.

13.00 Gulch, 50 lks. wide, course SE.; ascend.

34.95 Top of ridge, extends N. and S. Descend.

40.05 Point for $\frac{1}{4}$ sec. cor. falls on porphyry boulder in place, which I mark with a cross for exact $\frac{1}{4}$ sec. cor. point, and $\frac{1}{4}$ N. of cross, boulder 24 x 24 x 12 ins. above ground. I raise a mound of stone, 2 ft. base, 1- $\frac{1}{2}$ ft. high, N. of boulder. Pits impracticable.

A mesquite, 6 ins. diam., brs. N. 60° W., 34 lks. dist., marked $\frac{1}{4}$ S 21 B T.

44

Chains.

- No other tree available.
 Gulch, 50 lks. wide, course S. Ascend steep slope.
 Top of ridge, extends N. and S. Descend.
 Gulch, 80 lks. wide, course S.; ascend.
 The cor. of secs. 20, 21, 28 and 29.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, scattered mesquite; undergrowth, mesquite and
 tesota.
 Mountainous land, exceptionally difficult to survey, 80.06
 chs.
 September 7, 1907. At noon I set off $6^{\circ}18'N.$ on the decl.
 arc, and observe the sun on the meridian; the resulting
 lat. is $31^{\circ}50'N.$
-
- N. $0^{\circ}2'W.$, bet. secs. 20 and 21.
 Over mountainous land.
 5.00 Deep ravine, 2.00 chs. wide, course E.; ascend.
 Low gap on divide, 20.00 chs. east.
 40.00 Point for $1/4$ sec. cor. falls on bluff, where I mark a
 granite stone, 24 x 10 x 8 ins., above ground, which I
 mark with a cross (x) for exact $1/4$ sec. cor. point, with
 $1/4$ W. of cross, and raise mound of stone, 2 ft. base,
 $1-1/2$ ft. high, W. of cor. Pits impracticable.
 45.00 Top of high peak on divide; descend over bluff.
 60.00 Head of gulch, course SW.; ascend.
 65.00 Top of spur, extends SW.
 77.00 Gulch, 50 lks. wide, course SW. Ascend over steep slope.
 80.00 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the
 ground, for cor. of secs. 16, 17, 20 and 21, marked with 3
 notches on the S. and 4 notches on the E. edge, and
 raise a mound of stone, 2 ft. base, $1-1/2$ ft. high, W. of
 cor. Pits impracticable.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, scattering oak and juniper; undergrowth, oak and
 mesquite.
 Mountainous land, exceptionally difficult to survey, 80.00
 chs.
 September 7, 1907.
-
- September 8, 1907. At 7h.a.m., l.m.t., I set off $6^{\circ}02'N.$
 on the decl. arc; and $31^{\circ}52'N.$ on the lat. arc, and deter-
 mine a true meridian with the solar at the cor. of secs.
 16, 17, 20 and 21.
 Thence I run,
 East, on a random line, bet. secs. 16 and 21.
 40.00 Set temp. $1/4$ sec. cor.
 80.00 Intersect the N. and S. line at the cor. of secs. 15, 16, 21
 and 22.
 Thence I run,
 West, on a true line, bet. secs. 16 and 21.
 Over mountainous land.
 7.00 Temporal Canon, 1.00 ch. wide, course S. Ascend steeply
 over bluff:
 40.07 Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the
 ground, for $1/4$ sec. cor., marked $1/4$ on N. face, and raise
 a mound of stone, 2 ft. base, $1-1/2$ ft. high, N. of cor.
 Pits impracticable.
 An oak, 12 ins. diam., brs. N. $72^{\circ}E.$, 165 lks. dist.,
 marked $1/4$ S 16 B T.
 An oak, 15 ins. diam., brs. S. $37^{\circ}E.$, 85 lks. dist.,
 marked $1/4$ S 21 B T.
 43.00 Top of spur, extends SSE.

Chains.	
51.80	Top of ridge, extends SW. Dead tree on line.
62.50	Descend over spur, extends W.
72.00	Ravine, 1.00 ch. wide, course SW.; ascend.
80.14	The cor. of secs. 16, 17, 20 and 21. Land, mountainous. Soil, sandy and gravelly; 2nd and 3rd rate. Timber, scattering oak and juniper. Mountainous land, exceptionally difficult to survey, 80.14 chs.

	N. 0° 2' W., bet. secs. 16 and 17. Ascending over mountainous land.
1.00	Top of spur, extends WSW.
6.00	Head of gulch, 10 lks. wide, course W.
20.00	Gulch, 50 lks. wide, course W.
30.10	Top of spur, extends WSW.
37.00	Gulch, 20 lks. wide, course W.; ascend.
40.00	Set a granite stone, 20 x 10 x 10 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
47.00	Gulch, 30 lks. wide, course W.; ascend.
55.00	Top of spur, extends W.; descend.
61.00	Gulch, 30 lks. wide, course W.; ascend.
65.00	Top of spur, extends W.; descend.
69.00	Gulch, 20 lks. wide, course W.; ascend.
73.00	Top of spur, extends W.; descend.
77.00	Gulch, 50 lks. wide, course W.; ascend.
80.00	Set a granite stone, 24 x 10 x 8 ins., 18 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable. Baboquivari Peak brs. S. 72-1/2° W. Land, mountainous. Soil, stony and rocky; 3rd and 4th rate. Timber, oak and juniper. Mountainous land, exceptionally difficult to survey, 80.00 chs.

	East, on a random line, bet. secs. 9 and 16.
40.00	Set temp. 1/4 sec. cor.
60.34	Intersect the N. and S. line at a point 5 lks. N. of cor. of secs. 9, 10, 15 and 16. Thence I run, N. 89° 58' W., on a true line, bet. secs. 9 and 16. Over mountainous land, descending.
15.00	Head of W. branch of Temporal Canon, course S.
26.00	Deep gulch, course SE. Begin steep ascent.
30.00	Trail, brs. NW. and SE.; top of main divide, brs. N. and S.
40.17	Set a granite stone, 24 x 15 x 10 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable. An oak, 8 ins. diam., brs. S. 32° E., 36 lks. dist., marked 1/4 S 16 B T. An oak, 8 ins. diam., brs. N. 12-1/2° E., 14 lks. dist., marked 1/4 S 9 B T.
	Lpw gap on divide brs. N. 4.00 chs. dist. High peak on divide brs. S. 5.00 chs. dist. Descend along N. side of spur.
45.50	Trail, brs. NE. and SW.; head of gulch brs. N. 1.00 chs. dist., course W.
60.10	Top of ridge, extends W. and E.; thence down ridge.
80.34	The cor. of secs. 8, 9, 16 and 17.

Chains.

Land, mountainous. Soil, sandy and stony; 2nd and 3rd rate. Timber, oak and juniper.
 Mountainous land, exceptionally difficult to survey, 80.34 chs.
 Sept. 8: at noon, I set off 5°56'N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 31°52'N.

I discontinue the survey of my line north, owing to the extreme ruggedness and mountainous character of the land. I run,
 N. 0°3'W., bet. secs. 31 and 32.
 Through dense mesquite and tesota undergrowth.
 Temporal Canyon, course W.
 Point of ridge, extends SW.; descend into canyon.
 Canyon, 1.00 ch. wide, course SW., ascend.
 Same canyon, course SE.
 Same canyon, course SW.; leave canyon and ascend.
 Set a granite stone, 20x10x8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
 A mesquite, 10 ins. diam., brs. S. 1°W., 50 lks. dist., marked 1/4 S 31 B T.
 A mesquite, 10 ins. diam., brs. S. 26°E., 45 lks. dist., marked 1/4 S 32 B T.
 Leave dense undergrowth, and ascend along E. slope.
 Spur, extends E., descend.
 Gulch, 80 lks. wide, course SE.; ascend steep slope.
 Top of ridge, extends E. and W.; high point brs. W., 5.00 chs. dist.
 Point for cor. of secs. 29, 30, 31 and 32 falls on conglomerate boulder in place, 3x2x2 ft. above ground, which I mark with a cross (x) for exact cor. point, with 1 groove on S. and 5 grooves on E. of cross, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
 Land, mountainous. Soil, sandy, and stony; 2nd and 3rd rate. Timber, mesquite; undergrowth, mesquite, tesota and oak.
 Mountainous land, or land covered with dense undergrowth, exceptionally difficult to survey, 80.00 chs.
 September 8, 1907.

September 9, 1907. At 7h. a.m., 1.m.t., I set off 5°39'N. on the decl. arc; and 31°49'N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 29, 30, 31 and 32.
 Thence I run, East on a random line, bet. secs. 29 and 32.
 Set temp. 1/4 sec. cor.
 Intersect the N. and S. line 9 lks. N. of cor. of secs. 28, 29, 32 and 33.
 Thence I run,
 N. 89°56'W. on a true line, bet. secs. 29 and 32.
 In Temporal Canyon.
 Leave Temporal Canyon.
 Begin steep ascent.
 Top of high peak on divide, descend abruptly.
 Set a granite stone, 30x10x10 ins., 22 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.
 Gulch, 150 lks. wide, course S. Ascend steep slope.
 Dry wash, 10 lks. wide, course SE. ascend
 The cor. of secs. 29, 30, 31 and 32.
 Land, mountainous. Soil, sandy and stony; 2nd and 3rd rate. Timber, scattering mesquite and oak.
 Mountainous land, exceptionally difficult to survey, 80.14 chs.

West, on a random line, bet. secs. 30 and 31.

6.50
 17.00
 22.00
 28.00
 33.00
 40.00

 50.12
 59.50
 75.00
 80.00

 40.00
 80.14

 7.00
 20.00
 40.07

 68.00
 74.00
 80.14

30. Subdivision of Township 18 South, Range 11 East.

chains.
40.00 Set temp. 1/4 sec. cor.
70.40 Intersect the W. bdy. of Tp. 19 lks. N. of cor. of secs. 25, 30, 31 and 36.
Thence I run N. 89° 52' E. on a true line, bet. secs. 30 and 31. Over mountainous land.
30.40 Set a granite stone, 24x10x8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.
42.43 Begin steep ascent, through dense undergrowth, over rolling land.
56.43 Top of high dividing ridge, extends N. and S. Descend steeply.
70.40 The cor. of secs. 29, 30, 31 and 32.
Land, mountainous. Soil, sandy and gravelly; 2nd & 3rd rate. Timber, scattering mesquite; undergrowth, mesquite and oak. Mountainous land, covered with dense undergrowth, exceptionally difficult to survey, 70.40 chs.
Sept. 9: At noon, I set off 5° 33' N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 31° 49' N.

5.00 N. 0° 3' W., bet. secs. 29 and 30, over mountainous land.
40.00 Ravine, course E.; ascend.
Set a granite stone, 20x10x8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
47.00 Top of high peak, brs. W. 1/4 mile dist. from line.
57.00 Top of divide, descend.
80.00 Point for cor. of secs. 19, 20, 29 and 30 falls in gulch 3.00 chs. wide, course SW. At a point S. 89° 56' W., 2.25 chs. I set a granite stone, 24x10x6 ins., 18 ins. in the ground, for witness cor. to cor. of secs. 19, 20, 29 and 30, marked with 2 notches on the S. and 5 notches on the E. edges and W. C. on NE. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
A mesquite, 18 ins. diam., brs. S. 44° W., 93 lks. dist., marked T 18 S R 11 E S 30 W C B T.
A mesquite, 18 ins. diam., brs. S. 61° E., 72 lks. dist., marked T 18 S R 11 E S 30 W C B T.
A mesquite, 6 ins. diam., brs. N. 25-1/2° E., 145 lks. dist., marked T 18 S R 11 E S 19 W C B T.
No other tree available.
This witness cor. is set 225 lks. S. 89° 56' W. of the true cor.
Land, mountainous. Soil, sandy and stony, 2nd and 3rd rate. Timber; mesquite; undergrowth, mesquite and oak. Mountainous land, exceptionally difficult to survey, 80.00 chs.
From true point for cor. of secs. 19, 20, 29 and 30, I run S. 89° 56' E. on a random line, bet. secs. 20 and 29.
40.00 Set temp. 1/4 sec. cor.
80.08 Intersect N. and S. line, 5 lks. S. of cor. of secs. 20, 21, 28 and 29. Thence I run, N. 89° 58' W. on a true line, bet. secs. 20 and 29. Over mountainous land, ascending.
16.25 Top of divide, high peak on divide is 10 chs. S.; low gap of divide is 30 chs. NE.; begin steep descent.
35.00 Spur extends N.
40.04 Set a granite 24x10x8 ins., 18 ins. in the ground for 1/4 sec. cor., marked 1/4 S 20, on N. face, and raise a mound of stone 2 ft. base, 1-1/2 ft. high, N. of cor. No B.T.'s available. Pits impracticable.
Baboquivira Peak brs. S. 77° W.
San Juan Ranch or ranch house of Placedo Moreno brs. N. 44° W.
46.60 San Juan Ranch or ranch house of Placedo Moreno brs. N. 35° W.
80.08 To cor. of secs. 19, 20, 29 and 30.
Land, mountainous. Soil, 3rd rate, stony. Timber, oak, juniper, mesquite; undergrowth, scrub oak.

Chains.

Mountainous land, exceptionally difficult to survey,
80.08 chs.

September 9, 1907.

September 10, 1907. At 7h.a.m., l.m.t., I set off $5^{\circ}17'$ N. on the decl. arc; $31^{\circ}50'N$. on the lat. arc, and determine a true meridian with the solar at the true point for cor. of secs. 19, 20, 29 and 30.

Thence I run,
S. $89^{\circ}52'W$. on a random line, bet. secs. 19 and 30.

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

70.45 Intersect the W. boundary at a point 9 lks. S. of cor. of secs. 19, 24, 25 and 30.

Thence I run,
N. $89^{\circ}56'E$. on a true line, bet. secs. 19 and 30.
Descending over mountainous land.

4.50 Dry wash, 80 lks. wide, course S.

20.00 Point of ridge on ledge of marble, extends ESE.

30.45 Set a limestone, $20 \times 16 \times 10$ ins., 15 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

A mesquite, 12 ins. diam., brs. S. $5^{\circ}W$., 86 lks. dist., marked $\frac{1}{4}$ S 30 B T.

30.75 Dry wash, 30 lks. wide, course SW.

Thence along the N. side of gulch.

68.20 Witness cor. to cor. of secs. 19, 20, 29 and 30.

70.45 Cor. point for secs. 19, 20, 29 and 30.

Land, mountainous.

Soil, sandy and stony; 2nd and 3rd rate.

Timber, mesquite and tesota; undergrowth, mesquite.

Mountainous land, exceptionally difficult to survey, 70.45 chs.

From true point for cor. of secs. 19, 20, 29 and 30, I run N. $0^{\circ}3'W$., bet. secs. 19 and 20.

Over mountainous land.

40.00 Set a limestone, $20 \times 10 \times 6$ ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

A mesquite, 10 ins. diam., brs. S. $49^{\circ}E$., 155 lks. dist., marked $\frac{1}{4}$ S 20 B T.

A mesquite, 8 ins. diam., brs. N. $61^{\circ}W$., 48 lks. dist., marked $\frac{1}{4}$ S 19 B T.

High limestone hill brs. W. of line, 5.00 chs. dist.

San Juan ranch house, brs. S. $46\frac{1}{2}^{\circ}E$.

42.00 Dry wash, 50 lks. wide, course SSE.

Along E. side of limestone ridge, brs. N. and S.

80.00 Point for cor. of secs. 17, 18, 19 and 20 falls on porphyry ledge on N. end of ridge, extends N. and S.

Set a porphyry stone, $20 \times 10 \times 10$ ins., 15 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, marked with 3 notches on the S. and 5 notches on the E. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, sandy and stony; 2nd and 3rd rate.

No timber; undergrowth, oak and mesquite.

Mountainous land, exceptionally difficult to survey,
80.00 chs.

September 10: At noon, I set off $5^{\circ}10'N$. on the decl. arc; and observe the sun on the meridian; the resulting lat. is $31^{\circ}51'N$.

Thence S. $89^{\circ}58'E$. on a random line, bet. secs. 17 and 20.

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

80.26 Intersect the N. and S. line at the cor. of secs. 16, 17, 20 and 21.

chains.

Thence I run,
 N. 89°58'W. on a true line, bet. secs. 17 and 20.
 Over mountainous land, covered with dense undergrowth.
 Gulch, 150 lks.wide, course SW. at foot of main slope.
 20.00 Set a granite stone, 30x15x10 ins., 22 ins. in the ground.
 40.13 for 1/4 sec.cor., marked 1/4 on N.face, and raise a mound of stone, 2 ft. base, 1-1/2 ft.high, N.of cor.
 Pits impracticable.
 A mesquite, 4 ins.diam., brs. S. 51° E., 277 lks. dist., marked 1/4 S 20 B T.
 No other trees available.
 49.50 Gulch, 150 lks.wide, course SW.
 62.00 Box Canyon, 2.00 chs.wide, course S., 40 ft.deep.
 80.26 The cor.of secs.17,18,19 and 20.
 Land, mountainous.
 Soil, 2nd and 3rd rate.
 No timber; undergrowth, mesquite.
 Mountainous land, covered with dense undergrowth, exceptionally difficult to survey, 80.26 chs.
 September 10, 1907.

September 11, 1907. At 7h. a.m., l.m.t., I set off 4° 53' N. on the decl.arc, and determine a true meridian with the solar at the cor.of secs.17,18,19 and 20.
 Thence I run,
 S.89°56'W. on a random line, bet. secs.18 and 19.
 40.00 Set temp. 1/4 sec.cor.
 70.60 Intersect the N. and S. line of the W. bdy. of Tp. at a point, 9 lks.S.of cor.of secs. 13,18,19 and 24.
 Thence I run,
 East, on a true line, bet. secs.18 and 19.
 Over mountainous land.
 6.30 Trail, brs.NE. and SW.
 11.80 Main canyon, 150 lks.wide, course SW.
 21.00 Old road, brs.NE. and SW.
 30.60 Set a granite stone, 24x10x10 ins., 18 ins. in the ground, for 1/4 sec.cor., marked 1/4 on N.face, and raise a mound of stone 2 ft.base, 1-1/2 ft.high, N.of cor.
 Pits impracticable.
 45.30 Wash, 1.00 ch. wide, course SW.
 54.00 Wash, 3.00 chs.wide, course S.
 70.60 The cor.of secs.17,18,19 and 20.
 Land, mountainous.
 Soil, sandy and stony; 2nd and 3rd rate.
 Timber, scattered mesquite; undergrowth, mesquite.
 Mountainous land, 70.60 chs.

N.0° 3' W., bet. secs.17 and 18.
 Over mountainous land.
 5.00 Descend from low ridge, thence over level land.
 40.00 Set a quartz stone, 24x10x8 ins., 18 ins. in the ground, for 1/4 sec.cor., marked 1/4 on W.face, and raise a mound of stone, 2 ft. base, 1-1/2 ft.high, W.of cor.
 Pits impracticable.
 50.00 Wash, 1.00 ch. wide, course W.
 60.00 Small ridge, extends SW. and NE.
 62.50 Small wash, 1.00 ch.wide, course SW.; ascend.
 70.20 Top of ridge, extends SW. and NE.; descend.
 78.50 Wash, 1.00 ch.wide, course SW.
 56.00 Wash, 1.00 Ch. wide, course SW.

Chains.

80.00

Set a porphyry stone, 36 x 24 x 12 ins., 27 ins. in the ground, for cor. or secs. 7, 8, 17 and 18, marked with 4 notches on the S. and 5 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.

A mesquite, 24 ins. diam., brs. S. 35° 30' E., 7 1/2 lks. dist., marked T 18 S R 11 E S 17 B T.

E. mes. 12" diam. brs. S. 64° W. 109 lks. dist. mkd. T. 18 S. R. 11 E. S. 18 B T.
 E. mes. 10" " " " N. 48° E. 190 lks. " " " T. 18 S. R. 11 E. S. 8 B T.

Soil, sandy and stony; 2nd and 3rd rate. land, mountainous. Timber, none; undergrowth, mesquite.

Mountainous land, exceptionally difficult to survey, 80.-00 chs.

September 11; At noon, I set off 4° 48' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 31° 52' N.

40.00

80.32

S. 89° 58' E., on a random line bet. secs. 8 and 17.

Set temp. 1/4 sec. cor.

Intersect the N. and S. line at a point 5 lks. S. of cor. of secs. 8, 9, 16 and 17.

Thence I run,

West, on a true line, bet. secs. 8 and 17.

Over mountainous land.

20.00

46.16

Descend along point of ridge on S. side of canon.

Set a granite stone, 24 x 18 x 12 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of corner. Pits impracticable.

A mesquite, 10 ins. diam., brs. N. 70° W. 270 lks. dist., marked 1/4 S 8 B T.

No other tree available.

52.00

56.67

77.00

80.32

Wash, 50 lks. wide, course S.

Top of ridge, extends N. and S.

Wash, 1.00 ch. wide, course SW.

The cor. of secs. 7, 8, 17 and 18.

Land, mountainous.

Soil, sandy and stony; 2nd and 3rd rate.

Timber, scattering mesquite; undergrowth, mesquite and oak.

Mountainous land, exceptionally difficult to survey, 80.32 chs.

September 11, 1907.

40.00

70.65

September 12, 1907. At 7h. a.m., l.m.t., I set off 4° 31' N. on the decl. arc, and 31° 52' N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 7, 8, 17 and 18.

Thence I run,

West, on a random line, bet. secs. 7 and 18.

Set temp. 1/4 sec. cor.

Intersect the W. bdy. of Tp. at the cor. of secs. 7, 12, 13 and 18.

Thence I run,

East, on a true line, bet. secs. 7 and 18.

Descending over mountainous land.

3.50

Gulch, 50 lks. wide, head brs. NE., 8.00 chs. dist.

Ascend along W. slope of spur.

17.00

22.00

24.50

30.65

Head of ravine, course S.

Top of ridge, extends SSW. and NNE.; descend.

Head of ravine; course S.; ascend.

Set a quartz stone, 24 x 16 x 12 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.

34. Subdivision of Township 18 South, Range 11 East.

Chains.

A mesquite, 12 ins.diam., brs. ~~N 111/2° W. 150~~ lks. dist., marked 1/4 S 7 B T.
 A mesquite, 24 ins.diam., brs. S. 43° W. 50 lks. dist. marked 1/4 S 18 B T.
 Cor. point falls on steep slope; ascend.
 38.00 Top of ridge; descend.
 46.00 Wash, 20 lks. wide, course SSW.; ascend.
 57.16 Top of spur; descend.
 68.30 Head of small ravine, 50 lks. wide, course S.
 70.65 The cor. of secs. 7, 8, 17 and 18.
 Land mountainous.
 Soil, sandy & stony; 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite.
 Mountainous land, exceptionally difficult to survey, 70.65 chs.
 Sept. 12: At noon, I set off 4° 25' N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 31° 52' N.

N. 0° 3' W., bet. secs. 7 and 8.
 Ascending over high ridge.
 16.75 Top of ridge. descend.
 23.25 Ravine 60 lks. wide, course W.;
 32.50 Wash, 60 lks. wide, course W.
 40.00 Set a granite stone 30 x 24 x 10 ins., 22 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft high, W. of corner. Pits impracticable.
 Ascend over high ridge.
 60.00 Top of ridge, extends E. and W.; descend.
 80.00 Set a quartz stone, 20 x 16 x 12 ins., 15 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on the S. and E. edges, and raise a mound of stone, 2 ft. base, 1-1/2 ft high, W. of cor. Pits impracticable.
 A mesquite, 18 ins.diam., brs. S. 38° 30' W. 150 lks. dist., marked T 18 S R 11 E S 7 B T.
 A mesquite, 20 ins.diam., brs. N. 54° W. 150 lks. dist., marked T 18 S R 11 E S 6 B T.
 No other trees available.
 Land, mountainous.
 Soil, sandy and gravelly; 2nd and 3rd rate.
 Timber, scattering mesquite; undergrowth, mesquite and oak.
 Mountainous land, exceptionally difficult to survey, 80.00 chs.

September 12, 1907.

September 13, 1907. At 7h.a.m., l.m.t., I set off 4° 8' N. on the decl. arc, and 31° 53' N., on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 5, 6, 7 and 8.
 The line bet. secs. 5 and 6 runs through very mountainous land, impossible to run this line by the ordinary methods of surveying.
 Thence I run;
 West, on a random line, bet. secs. 6 and 7.
 40.00 Set temp, 1/4 sec. cor.
 70.00 Intersect the W. bdy. of township 25 lks. S. of the cor., of true ft. of secs. 1, 6, 7 and 12.
 Thence I run, S. 89° 50' E.
 on a true line, bet. secs. 6 and 7.
 Over mountainous land.

Subdivision of Township 18 South, Range 11 East.

35.

Chains

1.65 Gulch, 30 lks. wide, course NW.
 Ascend along N. slope of ridge.
~~38.34~~ Set a conglomerate stone, 24 x 10 x 8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, N. of cor. Pits impracticable.
 35.00 Top of ridge, extends SW. and NE.
 Begin steep descent along S. slope of ridge.
 43.50 Gulch, 20 lks. wide, course SW.
 48.50 Main gulch, 1.00 ch. wide, course SW.; ascend.
 52.00 Top of ridge, extends N. and S. Descend.
 60.00 Wash, 20 lks. wide, course SW.
~~70.54~~ The cor. of secs. 5, 6, 7 and 8.
 Land, mountainous.
 Soil, sandy and stony; 2nd and 3rd rate.
 Timber, very scattered; undergrowth, mesquite.
 Mountainous land, exceptionally difficult to survey, 70.54 chs.

40.00 N. 0° 3' W. on a random line, bet. secs. 5 and 6.
 Set temp. 1/4 sec. cor.
~~78.30~~ Intersect the N. bdy. of tps. at a point 7 lks. N. of cor. of secs. 5, 6, 31 and 32.
 Thence I run, S. 0° 06' E.
 on a true line, bet. secs. 5 and 6.
 Over mountainous land.
 4.80 Wash, 20 lks. wide, course SW.; ascend.
~~88.30~~ Set a granite stone 28" x 12" x 10" in the ground for 1/4 section corner marked 1/4 on West face, and raise a mound of stone, 2 ft. base, 1-1/2 ft. high, W. of cor. Pits impracticable.
 A white oak, 2 ft. in diam., brs. N. 75° E. .51 lks. dist. marked 1/4 S 5 B T.
 An oak 6" diam. brs. N. 24° W. .96 lks. dist. mkd. 1/4 S. 6 B. T.
 Ascend steep slope.
 43.80 Top of high ridge, extends SW. and NE.
 55.80 Top of ridge, extends SW. and NE. Descend.
 76.30 Gulch, 30 lks. wide, course E.
~~78.30~~ The cor. of secs. 5, 6, 7 and 8.
 Land, mountainous.
 Soil, sandy and stony; 2nd and 3rd rate.
 Timber, scattered mesquite and oak; undergrowth, oak.
 Mountainous land, exceptionally difficult to survey, 78.30 chs.

To prove the closure of sec. 6 I find it necessary to retrace the N. bdy of sec. 6, hence from Cor. of secs. 5, 6, 31 & 32 on N. bdy I run West along N. bdy of sec. 6.
 40.20 Find old 1/4 sec. cor. 12 lks. S. marked and witnessed as desc. by
 Surv. Gen. Course N. 89° 50' E. 40.20 chs. I set over cor. & cont. West
 70.10 To closing cor. of tps. 17 & 18 S. R. 11 E. 9 lks. S. true course of last half mile is N. 89° 50' E. 29.90 chs.

Gen. Description

This township embraces the main range of the Sierrita Mountains. The southern part consists of rolling hills covered in the rainy season with an abundant growth of native grass. The northern portion is very rough, mountainous, broken by deep canons. The higher portions of the mountains are covered with oak and juniper timber.

I omitted the survey of secs. 3, 4, 8 and 9, as containing no agricultural land, and rough, being impracticable for chaining. The following settlers, George Harris, Alma Harris, Edwin Harris, Dave Lively and George Magoo occupy and cultivate about 160 acres in sec. 1; this settlement being known as the McGee colony, or Reno Ranch. The old San Juan ranch in Sec. 20, is occupied by Placido Moreno. The entire township, during the greater portion of the year, is covered with a fine

growth of native grass, and would pasture many cattle. There are several fine springs of water in the township which I believe are permanent. In many places, there are evidences of past mining activity; old tunnels, shafts and drifts, but at present no mining is being done in the township.

Along the western border of the township is an outcropping of limestone; in several places, finely crystalized into marble. The main ridge of the Sierraeta Mts. consist of porphyry, and in some parts quartzites. These ledges show up mostly through a conglomerate of quartzite and porphyry.

Jesse B. Wright,
U. S. Deputy Surveyor.

*For authority for red ink corrections
see Deputy's letter July 11-1909.*

For FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

See Book B. Oaths of 1/31/31 Pg. 12 E.

LIST OF NAMES.

A list of the names of the individuals employed by _____ BOOK 2112

_____, 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 _____ }



54

BOOK 2112

(37)

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

See Book B. - Subs. of T. 13 P. R. 12 E

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.

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, Ariz. July 19, 1909

The foregoing field notes of the survey of *the subdivisions of T. 18 South Range 11 East, Resurvey of East boundary of T. 18 South Range 11 East, Resurvey of 2nd Guide Meridian between Rps. 10 and 11 E and retracement of a portion of the North boundary of T. 18 P. R. 11 E, of the Gila and Salt River Meridians in the Territory of Arizona*

executed by *Jesse D. Wright U.S. Deputy Surveyor* under his contract No. *145*, dated *April 15*, 190 *7*, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.