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Dep't of the Interior

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1912

BOOK 1912

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

TOWNSHIP 20 SOUTH,

RANGE 18 EAST

1912

Of the GILA AND SALT RIVER Meridian,

ARIZONA

AS SURVEYED BY

Casimiro R. Barthelemy, United States Deputy Surveyor,

Under his Contract No. 139, dated April 14, 1906

Survey commenced June 15, 1906

Survey completed June 28, 1906

291A

NAMES AND DUTIES OF ASSISTANTS.

BOOK 1912

Arthur Pogue, Chairman,
Harry Mallory, Chairman,
Louis Renaud, Groundman,
L. C. Millar, Assman,
H. B. Milliken, Flagman.

BOOK 1912

INDEX DIAGRAM.

Township 20 South, Range 18 East

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BOOK 1912

PRELIMINARY OATHS OF ASSISTANTS.

WE, Arthur Pogue and Harry Mallory
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 Subdivisions of T. 20 S. R. 18 E.

Arthur Pogue, Chainman.
Harry Mallory, Chainman.

Subscribed and sworn to before me this 1st
day of June, 1906



H. G. Power

I WE, Louis Renaud 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 Subdivisions of T. 20 S. R. 18 E.

Louis Renaud, Moundman.
_____, Moundman.

Subscribed and sworn to before me this 1st
day of June, 1906



H. G. Power

I WE, L. G. Millar and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of Subdivision of T. 20 S. R. 18 E.

L. G. Millar, Axman.
_____, Axman.

Subscribed and sworn to before me this 1st
day of June, 1906



H. G. Power

I, H. B. Milliken, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of Subdivision of T. 20 S. R. 18 E.

H. B. Milliken, Flagman.

Subscribed and sworn to before me this 1st
day of June, 1906



H. G. Power

Survey commenced June 10, 1906, and executed with a W. & L. E. Gurley light mountain transit No. 1000 B. 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 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 on June 5, 1906.

I examined 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 corner of sections 1, 2, 35 and 36, on the N. bdy. of T. 20 S., R. 18 E., lat. $31^{\circ} 43' 23''$ N.; long. $110^{\circ} 28' 25''$ W. approx. I set off $31^{\circ} 43'$ N. on the lat. arc. and $23^{\circ} 17'$ N. on the decl. arc, and at 5 h., 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.

June 14, 1906.

June 15: At 1 h., 58 m., a.m., I observe Polaris at eastern elongation in accordance with the Manual of Instruction and mark a point in the line thus determined on a peg driven in the ground 5 chs. N. of my station. At 6 h., 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 June 14, on which the meridian falls 3 ins E. of the mark determined by the solar. At 7 h., a.m., l.m.t.; I set off $31^{\circ} 43'$ N. on the lat. arc, and $23^{\circ} 18'$ on the decl. arc, and mark a point in the meridian determined with the solar by a cross in the stone already set 5 chs. N. of my station; this mark falls 2 ins E. of the meridian established by the Polaris observations. The solar apparatus by the a.m. and p.m. observations defines positions for meridians respectively about $16''$ W. and $10''$ E. 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 7 h., a.m. is N. $12^{\circ} 45'$ E.

There being a number of parties outside of the two settlers who have applied for the survey of this township, who have already taken up land under forest scrip, and who are going to enter some more land in the same manner, I proceed to subdivide the whole of this township; therefore, I begin at cor. of secs. 1, 2, 35 and 36 of this township.

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Subdivision of T. 20 S., R. 18 E.

chains	Thence I run S. 0° 1' E., bet. secs. 1 and 2. Over gradually descending ground, through scattering yucca.	
9.60	Draw 80 lks. wide course S.W.W.	
24.30	Old road bears E.N.E. and W.S.W.	
26.50	Same draw 80 lks. wide course S.S.E.	
27.80	Old road bears E. and W.	
40.00	Set a limestone 18 X 10 X 6 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; dig pits, 18 X 18 X 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.	
80.00	Set a porphyrite stone 16 X 12 X 10 ins., 11 ins. in ground, for cor. of secs. 1, 2, 11 and 12, marked with 1 notch on the N. and 1 on the S. edge; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of Cor. Pits impracticable. Land, gently rolling. Soil, gravelly loam and stone; 2nd, 3rd and 4th rate. No timber; undergrowth, yucca.	
40.00	East on a random line bet. secs. 1 and 12.	
80.04	Intersect E. bdy. of Tp. 6 lks. N. of cor. of secs. 1, 6, 7 and 12, as heretofore described. Thence I run S. 89° 57' W. on true line bet. secs. 1 and 12. Over gently rolling land.	
19.00	Draw 40 lks. wide course S.W.	
26.00	Draw 2.00 chs. wide course S.W.	
40.02	Set a porphyrite stone 18 X 6 X 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dig pits 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.	
51.00	Draw 160 lks. wide course S.S.E. Land, gently rolling.	
72.00	Draw 2.00 chs. wide course S. Soil, sandy and gravelly loam, 2nd, 3rd and 4th rate.	
80.04	The cor. of secs. 1, 2, 11 and 12. No timber, undergrowth, yucca.	
7.50	South 0° 1' E., bet. secs 11 and 12. Over gradually descending ground. Enter draw course E.	
14.00	Leave draw, begin gradual ascent.	
15.90	Road bears E. and W.	
40.00	Set a limestone 18 X 6 X 5 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.	
80.00	Set a limestone 18 X 8 X 7 ins., 12 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on the S. and 1 on the east edge; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. pits impracticable. Land, gently rolling and level. Soil, sandy and gravelly loam, and stoney, 2nd, 3rd and 4th rate. No timber; undergrowth, yucca. June 15; At this cor. I set off 23° 18' N. on the decl. arc; and at 12 h. 20 m. 1.m.t., observe the sun on the meridian; the resulting lat. is 31° 42' N.	
40.00	N. 89° 57' E. on random line bet secs. 12 and 13.	
80.05	Intersect E. bdy. of Tp. 5 lks. N. of cor. of secs. 7, 12, 13 and 18. Thence I run S. 89° 59' W. on a true line bet. secs. 12 and 13. Over level land.	
20.00	Leave level land, thence over gradually rising ground.	
40.02	Set a silicate stone, 18 X 6 X 5 ins, 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.	

Subdivision of T. 20 S. R. 18 E.

chains

43.90
80.05

Draw 20 lks. wide course N.
Cor. secs. 11, 12, 13 and 14.
Lqnd, gently rolling and level.
Soil, gravelly loam, 2nd and 3rd rate.
No timber.

S. 0° 1'E. bet. secs. 13 and 14.

21.40
29.70
39.50

Draw 15 lks. wide course E.
Draw 30 lks. wide course E.
A limestone ledge 2 X 2 X 1 ins. above ground, for
witness corner to $\frac{1}{4}$ sec. cor., marked W.C. at cor. pt. on
W. face; and raised a mound of stones, 2 ft. base,
 $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

40.00
56.00
58.25
61.00
65.60
79.00
80.00

Falls in draw 30 lks. wide course N.E. Enter mountainous land.
Spur extends E., descend.
Gulch 60 lks. wide course E., enter scattering oak
timber; ascend.
Ridge bears E. and W., descend.
Gulch 30 lks. wide course E.; ascend.
Gulch 40 lks. wide course N.E. Leave mountainous land.
Set a limestone, 18 X 8 X 8 ins., 12 ins. in the ground,
for cor. of secs. 13, 14, 23 and 24, marked with
3 notches on the S. edge and 1 on the E. edge; from
which An oak, 8 ins. diam., bears S. 68° W., 108 lks,
dist., marked T. 20 S R 18 E S 25 B T.
An oak 16 ins. diam., bears N. 58° W., 3 lks. dist.,
marked T 20 S R 18 E S 14 B T. No other trees within limits.
Raised a mound of stones, 2 ft. base, $1\frac{1}{2}$ ft. high,
W. of cor. Pits impracticable.
Land, gently rolling and mountainous.
Soil, gravelly and stony, 3rd and 4th rate.
Timber, scattering oak.
Mountainous land, 39.00 chs.

June 15, 1906.

June 16: At 7 h. a.m., I set off 23° 21' on the decl.
arc., and 31° 41' on the lat. arc, and determine a
true meridian with the solar at the cor. of secs. 13, 14, 23
and 24.

40.00
49.98

Thence I run
N. 89° 59' E., on random line bet secs. 13 and 24.
Intersect E. bdy. of Tp. 5 lks. N. of the cor. of
secs. 13, 18, 19 and 24.

3.80
27.00
36.20
39.98

Thence I run
N. 89° 59' W. on a true line bet. secs 13 and 24.
Over gently rolling land,
Draw 10 lks. wide course N.E.
Enter scattering oak timber bears N.W. & S.E.
Draw 20 lks. wide course N.E.
Set a porphyrite stone 18 X 14 X 12 ins., 12 ins.
in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, from
which
An oak, 14 ins., diam., bears N. 42° E., 240 lks., dist.,
marked T. 20 S R 18 E S 15 B T.
An oak, 10 ins. diam., bears S. 64° E., 139 lks.
dist., marked T 20 S R 18 E S 24 B T.
Raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high, W. of
cor. Pits impracticable.

68.00
79.96

Gulch 40 lks. wide course N.E., thence E. begin steep
ascent. Over mountainous land.
Cor. of Secs. 13, 14, 23 and 24.
Land, gently rolling and mountainous.
Soil, gravelly and stony, 3rd and 4th rate.
Timber, scattering oak.
Mountainous land, 12.00 chs.

S. 0° 1' E. bet. secs. 23 and 24.

9.60

Over mountainous land, ascending through oak timber.
Spur extends N.E., thence E. along slope of Mustang Mts.

Subdivision of T. 20 S., R. 18 E.

chains.

37.00 Leave timber; begin steep descent.

40.00 Cut x on porphyryite rock 4 X 4 X 3 ins. above 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.

43.00 Gulch 30 lks. wide course N., ascend along E. slope of mountain.

65.00 Top E. slope round peak; descend.

73.00 Gap bears E. and W.; ascend.

80.00 Set a porphyryite stone 18 X 12 X 5 ins. 12 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on the south edge and 1 on the East edge, from which An oak, 24 ins. diam., bears N. 60° E., 198 lks, dist. marked T 20 S R 18 E S 24 B T.

An oak 14 ins. diam., bears S. 58° E., 71 lks. dist., marked T 20 S R 18 E S 24 B T. No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.
Soil, gravelly, stony, rocky, 3rd and 4th rate.
Timber, oak; undergrowth, oak, salacirsa, cacti.
Mountainous land, 80 chs.
June 16; At this corner, I set off 23° 21' N on the decl. arc; and at 12 h. M. l.m.t., observe the sun on the meridian; the resulting lat. is 31° 40' N.

40.00 S. 89° 59' E, on random line bet. secs. 24 and 25.
80.05 Intersect E. bdy. of Tp. 9 lks. N. of cor. of secs. 19, 24, 25 and 30.
N. 89° 55' W. on a true line bet. secs 24 and 25.
Over mountainous land, descending along N. slope of ridge, through oak timber.

13.70 Enter gulch course N.E.

18.00 Leave gulch and timber; ascend.

39.40 Top of N. slope of spur, 600 ft. above gulch; descend.

40.02 Falls on blanket ledge of limestone, out x for $\frac{1}{4}$ sec. cor. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

46.70 Gulch 20 lks. wide course N.N.E.; ascend.

54.50 Spur 400 ft. above gulch, extends N.

56.00 High bluff extends 10 chs. S.

57.00 Descend.

63.50 Gulch 40 lks. wide course N.N.E., begin steep, rocky ascent.

80.05 Top of Mustang Mountains, 800 ft. above gulch, bears N. and S. Cor. of secs. 23, 24, 25 and 26.
Land, mountainous.
Soil, gravelly, stony, rocky; 3rd and 4th rate.
Timber, oak and scattering pinons; undergrowth Salacirsa, manzanita, amole, cacti.
Mountainous land, 80.05 chs.

June 16, 1906.

June 17:
At 7 h. l.m.t. I set off 31° 40' N on the lat. arc; 23° 21' N on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 23, 24, 25 and 26.
Thence I run
S. 0° 1' E., bet. secs. 25 and 26.
Over mountainous land, ascending through scattering oak.

6.00 Top of escarpment; thence along top of mountain.

19.00 Begin steep descent; leave oak timber.

34.00 Gulch 30 lks. wide course S.W.; ascend.

38.00 Spur of mountain bears E. and W.; descend.

40.00 The point for $\frac{1}{4}$ sec. cor. falls in deep gulch 40 lks. wide course S.W.; ascend.

40.50 Limestone in place, 24 X 18 X 14 ins. above ground, for witness cor. to $\frac{1}{4}$ sec. cor. marked x W C $\frac{1}{4}$ on the W. face; from which
A manzanito tree, 6 ins. diam., bears N. 26° E., 82 lks., marked S 25 B T

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chains

A manzanito tree, 6 ins. diam., bears N. 48° W., 38 lks. dist., marked $\frac{1}{2}$ S 26 B T ✓
 Raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. ✓
 1200 lks. below the top of mountain.
 44.50 Top of W. slope of porphyry ridge, descend steep grade.
 56.00 Deep gulch 40 lks wide course S.E.; ascend.
 59.00 Ridge bds. N.W. and S.E.; descend.
 65.00 Draw 15 lks. wide course S.S.E. ✓
 80.00 Set a limestone 18 X 12 X 10 ins., 12 ins., in the ground, for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on the E. and 1 notch on the S. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓ Pits impracticable.
 Land, mountainous.
 Soil, gravelly, stony and rocky; 3rd and 4th rate.
 Timber, scattering oak; undergrowth, manzanito, salaciosa, mezcal, cacti.
 Mountainous land, 80 chs.
 June 17; At this cor. I set off 23° 23' on the decl' arc; and at 12 h. M. l.m.t., observe the sun on the meridian; the resulting lat. is 31° 39' $\frac{1}{2}$ ✓

40.00 S. 89° 55' E., on a random line bet. secs. 25 and 36.
 Set temp. $\frac{1}{2}$ sec. cor.
 79.94 Intersect E. bdy. of T. 9 lks. S. of cor. of secs. 25, 30, 31 and 36, ~~XXXX~~ previously described.
 Thence I run
 N. 89° 59' W., on a true line bet. secs. 25 and 36.
 Over gently rolling land.
 3.00 Deep gulch 60 lks. wide course S.E. over mountainous ind.
 17.00 Deep gulch 50 lks. wide course S.E.; begin steep ascent. ^
 23.25 Sharp rocky spur bears S.E. and N.W.; descend.
 39.97 Falls on a porphyryite stone in place 36 X 24 X 16 ins. above ground, marked $\frac{1}{2}$ on W face, and raise a mound of stones, 2 ft. base, $1\frac{1}{2}$ ft. wide W. of cor. Pits impracticable.
 49.60 Deep gulch 40 lks. wide course S.E.; thence over rolling land.
 59.40 Deep gulch 40 lks. wide course S.E.
 77.80 Gulch 20 lks. wide course S.
 79.94 The cor. of secs. 25, 26, 35 and 36.
 Land, rolling and mountainous.
 Soil, gravelly, stony and rocky; 2nd and 3rd rate.
 No timber; undergrowth, tesatilla, mezcal, cacti.
 Mountainous land, 32.60 chs.

8.40 S. 0° 1' E., bet. secs. 35 and 36. on a true line.
 Over mountainous land, descending.
 11.20 Draw 20 lks. wide course S.E.
 17.50 Draw 20 lks. wide course S.E.; ascending.
 20.30 Spur extends N.E.; descending.
 26.20 Draw 15 lks. wide course N.E.; begin steep ascent.
 Same wash 15 lks. wide course course N.W., enter dense brush.
 33.00 Ridge bears N.W. and S.E., leave dense brush; descend.
 40.00 Set a limestone 18 X 10 X 6 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor. marked $\frac{1}{2}$ on W. face; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 49.07 Intersect the N. bdy. of San Ignacio del Babocomari Land Grant, ~~34.07~~ cor. brs. N. 88° 07' W., 17.19 chs. dist. Set a limestone 18 X 8 X 6 ins., 12 ins. in the ground, for closing cor. of secs. 35 and 36 and San Ignacio del Babocomari Land Grant, marked C C on N, S I D B on S face, with groove on E. and 5 grooves on W face & raised a md. of stone 3 ft. base & 2 ft. high N of cor.
 Land, mountainous.
 Soil, gravelly and stony; 3rd and 4th rate.
 No timber; undergrowth salaciosa, manzanito and cacti.
 Mountainous and dense brush, 49.07 chs.

June 17, 1906.

Subdivision of T. 20 S., R. 18 E.

chain	June 18, 1906.
	At 7 h.A.M. 1.m.t., I set off $23^{\circ} 25' N$ on the decl. arc; and $31^{\circ} 43' W$ on the lat. arc; and determine a true meridian with the solar at the cor. of secs. 2, 3, 34 and 35. on N. bdy Tp. Thence I run
40.00	S. $0^{\circ} 1' E$. bet. secs. 2 and 3. Over gradually descending ground.
64.00	Set a sandstone 18 X 8 X 5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits, 18 X 18 X 12 ins., N. and S. of stone, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
70.65	Draw 2 chs. wide course E., thence over rising ground.
80.00	Road bears E. and W.
	Set a sandstone, 18 X 10 X 7 ins., 12 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked with 1 notch on the N. and S. on the S. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, gently rolling. Soil, sandy and gravelly loam; 2nd and 3rd rate. No timber.

80.00	East on a random line bet. secs. 2 and 11.
80.06	Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line 7 lks., S. of the cor. of secs. 1, 2, 11 and 12.
	Thence I run S. $89^{\circ} 57' W$. on a true line bet. secs. 2 and 11. Over gently rolling land.
8.00	Draw 2.00 chs. wide course S.
22.00	Enter draw course E.S.E.
36.00	Canyon 40 lks bears N.W. and S.E.
40.03	Set a sandstone, 18 X 8 X 6 ins. 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; and raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
45.00	Leave draw; begin gradual ascent.
50.10	Draw 10 lks. wide course N.E.
80.06	The cor. of secs. 2, 3, 10 and 11. Land, gently rolling and level. Soil, sandy and gravelly loam and stony; 2nd, 3rd and 4th rate. No timber; undergrowth, yucca.

	S. $0^{\circ} 1' E$. bet. secs. 10 and 11. Over rising ground.
25.60	Draw 10 lks. wide course N.E.
33.45	Draw 20 lks. wide course N.E.
34.70	Draw 20 lks. wide course N.E.
40.00	Set a limestone 18 X 8 X 7 ins., 12 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.
49.40	Begin steep ascent, over mountainous land.
58.00	Spur bears E. and W.; descend.
80.00	Set a limestone 18 X 8 X 5 ins., 12 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked with 2 notches on the N. and S. 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, gently rolling, and mountainous. Soil, gravelly, stony and rocky; 3rd and 4th rate. No timber; undergrowth, yucca, amole, cacti. Mountainous land, 30.60 chs.
	June 18: At this cor. I set off $23^{\circ} 25' N$ on the decl. arc; and at 12 h.A.M. 1.m.t. observe the sun on the meridian; the resulting lat. is $31^{\circ} 42' W$.

	N. $89^{\circ} 57' E$. on a random line bet. secs. 11 and 14.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line 6 lks. N. of cor. of secs. 11, 12, 13 and 14.
	Thence I run West on a true line bet. secs. 11 and 14.

chain
 30.00 Over gradually rising ground.
 31.00 Top of low spur bears N. and S.
 38.30 Gulch 40 lks. wide course N.
 40.01 Draw 30 lks. wide course E.N.E.; begin gradual ascent.
 Set a limestone 18 X 6 X 6 ins., 12 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.
 46.40 Draw 10 lks. wide course S.E. over mountainous land.
 50.85 Draw 15 lks. wide course S.E.; ascend steeper grade.
 57.00 Spur bears N. and S.; descend.
 60.00 Gulch 30 lks. wide course S.; steep ascent of E. slope
 of mountain.
 80.02 The cor. of secs. 10, 11, 14 and 15.
 Land, rolling and mountainous.
 Soil, gravelly, stony; 3rd and 4th rate.
 Timber, a few ash and walnut trees along the washes;
 undergrowth, yucca, amole, cacti.
 Mountainous land, 29.17 chs.

S. 0° 1' E., bet. secs. 14 and 15.
 Over mountainous land, descending along the E. slope
 of mountain.

5.65 Descend abruptly 60 ft.
 14.60 Deep gulch 40 lks. wide course E, 700 ft. below sec. cor.
 15.85 Gulch 35 lks. wide course E., ascend.
 22.00 Ridge bears E. and W.; descend. land.
 30.60 Draw 20 lks. wide course W; ascend gradually leave mountainous
 40.00 A limestone rock in place, marked X on W face, and raised
 a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable. tainous land.
 50.30 Gulch 30 lks. wide course W.; begin steep ascent. Enter mount-
 67.00 Top of mountain, descend steep grade.
 80.00 Set a limestone 18 X 7 X 6 ins., 12 ins. in the ground,
 for cor. of secs. 14, 15, 22 and 23, marked with 3
 notches on the S. and 3 on the E. edge; and raised a
 mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of Cor.
 Pits impracticable.
 Land, mountainous and gently rolling.
 Soil, gravelly, stony and rocky; 3rd and 4th rate.
 No timber; undergrowth, salicinesa, amole, mezoal and
 cacti.
 Mountainous land, 60.30 chs.

June 18, 1906.

June 19: At 7 h. AM. l.m.t., I set off 23° 25' N on the decl.
 arc; and 31° 41' on the lat. arc; and determine a
 true meridian with the solar at the cor. of secs.
 14, 15, 22 and 23.

40.00 Thence I run E. on a random line bet. secs. 14 and 23.
 79.96 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. and S. edge 10 lks. N. of cor. of secs.
 13, 14, 23 and 24.
 Thence I run
 N. 89° 56' W. on a true line bet. secs. 14 and 23.
 Over mountainous land, ascending through oak timber.
 5.00 Spur bears N. and S.; descend.
 11.50 Gulch 20 lks. wide course N.N.E.; ascend.
 17.00 Spur bears N. and S.; descend.
 22.30 Gulch 10 lks. wide course E; ascend.
 26.00 Spur bears N. and S.; descend.
 39.98 Set a sandstone 18 X 6 X 5 ins., 12 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. P
 An oak, 6 ins, diam., bears S. 64° 45' W., 77 lks. dist.,
 marked $\frac{1}{4}$ S. 25 B T.
 An oak, 10 ins. diam., bears N. 50° W., 133 lks. dist.,
 marked $\frac{1}{4}$ S 14 B T.
 50.00 Gulch 40 lks. wide course S.W.; leave timber, ascend.
 56.20 Gulch 20 lks. wide course S.W.; ascend steeper grade
 along S. slope of mountain.

34

Subdivision of T. 20 S., R. 18 E.

chains 79.96	The cor. os secs. 14, 15, 22 and 23. Land, mountainous. Soil, gravelly and stony; 3rd and 4th rate. Timber, oak; undergrowth, oak, manzanito, amole, salaciosa, mezcal and cacti. Mountainous land, 79.96 chs.
	S. 0° 1' E. bet. secs. 22 and 23. Over mountainous land, descending through scattering oak timber.
11.00	Gulch 30 lks. wide course S.W.; ascend.
20.00	Ridge bears E. and W.; descend.
26.00	Gulch 20 lks. wide course W; ascend.
29.70	Spur bears E. and W.; descend;
31.80	Gulch 30 lks. wide course S.W.; ascend.
40.00	Set a limestone 18 X 8 X 6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; from which An oak, 18 ins. diam., bears S. 48° 45' E., 37 lks. dist., marked $\frac{1}{4}$ S. 23 B.T. An oak, 14 ins. diam., bears S 73° W, 116 lks. dist. marked $\frac{1}{4}$ S. 23 B.T. Raised a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
45.00	Top of W. slope of mountain; descend.
68.00	Foot of steep descent; descend gradually.
74.50	Draw 30 lks. wide course S.W.
80.00	Set a porphyrite stone 18 X 8 X 6 ins., 12 ins. in the ground, for cor. os secs. 22, 23, 26 and 27, marked with 2 notches on the S. and 2 on the E. edge; and raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous and gently rolling, Soil, gravelly and stony; 3rd and 4th rate. Timber, scattering oak; undergrowth, manzanito, mezcal, and cacti. Mountainous land, 68.00 chs. June 19: At this cor. I set off 23° 26' N on the decl. arc; and at 12 h.M.L.M.T., observe the sun on the meridian; the resulting lat. is 31° 40' N.
40.00	S. 89° 56' E. on a random line bet. secs. 23 and 26.
79.92	Set temp. $\frac{1}{4}$ sec. cor. Intersect the N. and S. line of lks. N. of cor. of secs. 23 and 26. Thence I run N. 89° 54' W. on a true line bet. secs. 23 and 26. Over mountainous land, descending through scattering oak.
5.00	Leave timber bears N.E. and S.W.
23.30	Gulch 20 lks. wide course S.W., 800 ft. below sec. cor. ascend.
29.40	Ridge bears N.E. and S.W.; descend through scattering oak.
35.80	Gulch 20 lks. wide course S.W.
39.96	Set a porphyrite stone 18 X 10, X 8 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; from which An ash, 9 ins. diam., bears S. 6° E., 131 lks dist., marked $\frac{1}{4}$ S 25 B.T. An oak, 12 ins. diam., bears N. 87° W., 158 lks., dist., marked $\frac{1}{4}$ S. 25 B.T.
42.90	Raised a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, N. of cor.
51.00	Same gulch 20 lks. wide course N.W.
52.70	Enter same gulch bears E. and W.
59.85	Leave gulch course N. W., thence along S. side.
63.00	Same gulch 20 lks. wide course S.W., leave scattering oak.
79.92	Same gulch 25 ft. wide course N.W.; foot of steep descent. The cor. of secs. 22, 23, 26 and 27. Land, mountainous and gently rolling. Soil, gravelly, stony and rocky; 3rd and 4th rate. Timber, scattering oak; undergrowth, mezcal, yucca, cacti. Mountainous land, 63.00 chs.

June 19, 1906.

Subdivision of T. 20 S., R. 18 E.

chains

June 20, 1906.

At 7^{am} h., l.m.t., I set off 31° 40' N on the lat. arc; 23° 20' N on the decl' arc; and determine a true meridian with the solar at the cor. of secs. 22, 23, 26 and 27. Thence I run S. 0° 1'E. bet. secs. 26 and 27. Over gradually descending ground. Draw 20 lks. wide course W. Draw 30 lks. wide course S.E. Set a porphyrite stone 18 X 10 X 6 ins., 12 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. Draw 30 lks. wide course S.E. Enter draw bears S.W. and N.E. Same wash 40 lks. wide course S.W. Leave draw. Set a sandstone 18 X 10 X 6 ins., 12 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, marked with 1 notches on the S. and 2 on the E. edge; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Land, gently rolling and level. Soil, sandy and gravelly loam; 2nd and 3 rd rate. No timber.

40.00
79.96

South 89° 54' E. on a random line bet. secs. 26 and 35. Set temp. 1/4 sec. cor. Intersect N. and S. line 20 lks. S. of cor. of secs. 25 and 36. Thence I run N. 89° 58' W. on a true line bet. secs. 26 and 35. Over rolling land

6.20
14.00
26.70
39.00
39.98
48.60
65.00
71.20
79.96

Draw 20 lks. wide course S.S.E. A round hill bears S. 18 chs. Draw 40 lks. wide course S.S.W. Draw 40 lks. wide course S.S.W. Set a porphyrite stone 18 X 10 X 8 ins., 12 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. Deep draw 20 lks. wide course S.S.W. Draw 1.00 chain wide course W.S.W. Draw 30 lks. wide course S.W. The cor. for secs. 26, 27, 34 and 35. Land, rolling. Soil, gravelly and stoney; 3rd and 4th rare. No timber; undergrowth, vinorama along washes. June 20: At this cor. I set off 23° 20' N on the decl. arc; and at 12 h., l.m.t., observe the sun on the meridian; the resulting lat. is 31° 39' N.

20.00
25.00
40.00
41.00
46.45

S. 0° 1'E. bet. secs. 34 and 35. on a true line. Over gradually descending ground. Draw 3 cha. wide course S.S.W. Along E. side of draw course S. Set a porphyrite stone 18 X 10 X 8 ins., 12 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. Leave side of draw course S.W. Intersect the N. bdy. of San Ignacio del Babocomari Land Grant, 33 1/2 M. cor. brs. N. 88° 07' W., 17.12 chs. dist. Set a porphyrite stone 18 X 12 X 8 ins., 12 ins. in the ground, for closing cor. of secs. 34 and 35 and San Ignacio del Babocomari Land Grant, marked CC on N. S. I D B on S. face, with 2 grooves on E. and 4 grooves on W. face. Raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.

chains

Land gently rolling.
Soil, gravelly and stony; 3rd and 4th rate,
No timber.

June 20, 1906.

June 21

At 7 h. AM. I set off $31^{\circ} 43'$ on the lat. arc; and $23^{\circ} 28'$ on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 3, 4, 33 and 34 on the N. bdy. of tp. previously described.

Thence I run

S. $0^{\circ} 2'$ E. bet. secs. 3 and 4.

Over level land.

19.00 Old road bears E. and W.

19.80 Old road bears E. and W.

24.00 Begin gradual ascent.

37.85 Road bears E. and W.

40.00 Set a limestone 18 X 6 X 6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 X 18 X 12 ins.; $\frac{1}{2}$ and $\frac{3}{4}$ of stone, 5 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

51.90 Old road bears N.E. and S.W.

54.20 Draw 15 lks. wide course N.E.

75.70 same wash course N.W.

80.00 Set a limestone 18 X 10 X 7 ins., 12 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 raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, gently rolling and level.

Soil, sandy and gravelly loam and stony, 2nd, 3rd and 4th rate.

No timber.

East on a random line bet. secs. 3 and 10.

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

79.96 Intersect N. and S. line 5 lks. S. of the cor. of secs. 2, 3, 10 and 11.

Thence I run

S. $89^{\circ} 58'$ W. on a true line bet. secs. 3 and 10.

Over gradually rising ground.

11.50 Draw 10 lks. wide course N.

20.40 Draw 20 lks. wide course N.

29.20 Draw 30 lks. wide course N.

35.40 Draw 20 lks. wide course N.

39.30 Draw 20 lks. wide course N.

39.98 Set a limestone 18 X 6 X 6 ins., 12 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.

Begin steep ascent.

49.00 Spur of Mustang Mountains bears N. and S.

Descend steep slope.

60.00 Draw 15 lks. wide course S.W.; ascend.

69.00 Top of spur bears N. and S.; descend.

76.00 Foot of steep descent.

78.90 Same wash 15 lks. wide course N.N.W.

79.96 The cor. of secs. 3, 4, 9 and 10.

Land, gently rolling.

Soil, gravelly and stony; 3rd and 4th rate.

No timber; undergrowth, yucca and vinorama.

Mountainous land, 35.98 chs.

June 21: At this cor. I set of $23^{\circ} 27'$ on the decl. arc; and at 12h. 1 m. AM. I observe the sun on the meridian; the resulting lat. is $31^{\circ} 42'$ N.

S. $0^{\circ} 2'$ E. bet. secs. 9 and 10.

Over gradually rising ground.

40.00 Set a limestone 18 X 12 X 10 ins., 12 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.

Subdivision of T. 20 S., R. 18 E.

chains.

43.00 Top of swell bears E. and W.; descend gradually.
 48.00 Mustang dome 1200 ft. high, brw. No. about 25 chs. dist.
 54.70 Draw 20 lks. wide course W.
 73.30 Small draw course W.S.W.
 80.00 Set a limestone 18 X 14 X 6 ins., 12 ins. in the ground,
 for cor. of secs. 9, 10, 15 and 16, marked 4 notches
 on the S. and 3 notches on the E. edge; and raise a
 mound of stone 2 ft. base, 1½ ft. high, W. of cor.
 Pits impracticable.
 Land, gently rolling.
 Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
 No timber.

40.00 N. 89° 58' E. on a random line bet. secs. 10 and 15.
 79.92 Set temp. ¼ sec. cor.
 Intersect the N. and S. line 1¼ lks. S. of cor. of secs.
 10, 11, 14 and 15. of cor.
 Thence I run
 S. 89° 56' W. on a true line bet. secs. 10 and 15.
 24.00 Over mountainous land, ascending.
 Top of Mustang Mountain 5⁰⁰ft. above cor. secs. 10,
 11, 14 and 15.
 bears N. and S.; begin steep descent.
 35.80 Crevice 20 lks. wide course S.E.
 39.96 Set a limestone 18 X 6 X 6 ins., 12 ins. in the ground,
 for ¼ sec. cor. marked ¼ on N. face and raise a mound
 of stone 2 ft. base, 1½ ft. high, W. of cor. Pits
 impracticable.
 62.00 Foot of steep descent bears N. and S.; thence descend
 gradually.
 68.00 Draw 20 lks. wide course S.W.
 74.00 Draw 30 lks. wide course S.W.
 79.92 The cor. of secs. 9, 10, 11 and 15.
 Land, mountainous and gently rolling.
 Soil, gravelly, stony and rocky; 3rd and 4th rate.
 No timber; undergrowth, mezcal, manzanito, salaciosa
 and cacti.
 Mountainous land, 62.00 chs.

June 21, 1906.

June 22:

At 7 h. AM, 1 m.t., I set off 23° 28' on the decl. arc;
 and 31° 42' 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
 S. 0° 2' E. bet. secs. 15 and 16.
 Over gradually descending ground.
 .45 Draw 10 lks. wide course S.W.
 4.55 Draw 15 lks. wide course S.W.
 7.35 Draw 20 lks. wide course S.W.
 26.35 Draw 20 lks. wide course S.W.
 40.00 Set a limestone 18 X 12 X 10 ins., 12 ins. in the ground,
 for ¼ sec. cor. marked ¼ on W. face and raise a mound
 of stone 2 ft. base, 1½ ft. high, W. of cor. Pits
 impracticable.
 52.20 Draw 40 lks. wide course N.W., thence S.W.
 80.00 Set a limestone 18 X 14 X 12 ins. 12 ins. in the ground,
 for cor. of secs. 15, 16, 21 and 22, marked with 3
 notches on the S. and E. edges; and raised a mound of
 stone 2 ft. base, 1½ ft. high, W. of cor. Pits
 impracticable. Stone also marked 20 S on N.E. & 18 E on S.E. faces.
 Land, gently rolling.
 Soil, Gravelly and stony; 3rd and 4th rate.
 No timber.

40.00 N. 89° 58' E. on a random line bet. secs. 15 and 22.
 79.92 Set temp. ¼ sec. cor.
 Intersect N. and S. line, 6 lks. N. of cor. of secs,
 14, 15, 22 and 23.
 Thence I run

Subdivision of T. 20 S., R. 18 E.

On chains

S. 89° 59' W. on a true line bet. secs. 15 and 22.
 Over mountainous land, ascending.
 5.00 Ascend over bluffs.
 9.00 Top of bluffs bears NE and SW, thence along S. slope of spur which bears S.W. and N.E.
 16.00 Begin steep descent.
 36.00 Foot of steep descent; descent gradually.
 Leave mountainous land.
 39.95 Set a limestone 21 X 7 X 6 ins., 16 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face, and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
 58.00 Draw 1.00 ch. wide course S.W.
 79.90 The cor. of secs. 15, 16, 21 and 22.
 Land, gently rolling and mountainous.
 Soil, gravelly, stony and rocky; 3rd and 4th rate.
 No timber; undergrowth, manzanito and pacti.
 Mountainous land, 36.00 chs.
 June 22: At this cor. I set off 23° 27' N. on the decl. arc; and at 12. h. 2 m., p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 31° 41' N.

S. 0° 2' E., bet. secs. 21 and 22.
 Over gently rolling land.
 10.50 Draw 1.00 ch. wide course W.
 21.00 Draw 1.00 ch. wide course W., thence S.W.
 37.00 Draw 1.00 ch. wide course W.
 40.00 Set a sandstone 24 X 7 X 5 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.
 62.00 Draw 1 ch. wide course S.W.
 80.00 Set a sandstone 18 X 8 X 8 ins., 12 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked 2 notches on the S. and 3 notches on the E. edges, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
 Land, gently rolling.
 Soil, gravelly loam; 2nd and 3rd rate.
 No timber.

N. 89° 59' E., on a random line bet. secs. 22 and 27.
 40.00 Set temp. 1/4 sec. cor.
 79.94 Intersect N. and S. line 4 lks, N. of cor. of secs. 22, 23, 26 and 27.
 Thence I run
 N. 89° 59' W. on a true line bet. secs. 22 and 27.
 Over descending ground.
 5.00 Draw 40 lks. wide course S.W.
 39.50 Set a sandstone 18 X 10 X 8 ins., 12 ins. in the ground, for witness corner to 1/4 sec. cor. marked W.C. 1/4 on N. face, from which
 An oak, 16 ins. diam., brs. N. 7° 30' E., 98 lks. dist., marked W C 1/4 S 22 B T.
 An oak, 30 ins. diam., brs. S. 65° E. 109 lks., dist., marked W C 1/4 S 27 B T.
 Raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
 39.97 Point for 1/4 sec. cor. falls in draw 30 lks. wide course S.W.
 55.80 Draw 25 lks. wide course S.
 74.50 Draw 60 lks. wide course S.W.
 79.94 The cor. of secs. 21, 22, 27 and 28.
 Land, gently rolling.
 Soil, gravelly and stony; 3rd and 4th rate.
 Timber, a few oak, ash and walnut trees along washes.

S. 0° 2' E. bet. secs. 27 and 28.
 Over gradually descending ground.
 10.00 Draw 60 lks. wide course S.W.
 40.00 Set a sandstone 18 X 9 X 5 ins., 12 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.
 43.80 Old road bears N.W. and S.E.

XX

chains
59.00
62.00
66.50
80.00

Enter stony draw course S.W.
Baton of draw 40 lks. wide course S.W.
Leave draw.
Set a sandstone 18 X 14 X 12 ins., 12 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on S and 3 notches on East edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
Land, gently rolling and level.
Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
No timber.

June 22, 1906.

40.00
89.90

June 23: At 7 h. a.m., l.m.t., I set off 31° 39' N., on the lat. arc; and 23° 28' N on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 27, 28, 33 and 34.

Thence I run S. 89° 59' E., on a random line bet. secs. 27 and 34.
Set temp. 1/4 sec. cor.
Intersect the N. and S. line 2 lks. N. of cor. of secs. 26, 27, 34 and 35.

3.40
18.50
31.00
39.95

Thence I run N. 89° 58' W. on a true line bet. secs. 27 and 34.
Over gently rolling land;
Draw 40 lks. wide course S.W.
Draw 120 lks. wide course S.
Draw 130 lks. wide course S.
Set a sandstone 18 X 10 X 4 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on the N. face and raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.

72.00
79.90

Draw 140 lks. wide course S.
The cor. of secs. 27, 28, 33 and 34.
Land, gently rolling.
Soil, gravelly and stony; 3rd and 4th rate.
No timber.

11.20
23.00
27.00
40.00

S. 0° 2' E., data true line bet. secs. 33 and 34.
Over gradually descending ground.
Old road bears S.W. and N.E.
Along W. Sides of wash, course S.E.
Leave the side of wash.
Set a sandstone 18 X 6 X 6 ins., 12 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.

43.83

Intersect the N. bdy. line of the San Ignacio del Babocomari Land Grant at a point from which the 32 1/2 mile cor. hrs. N. 88° 07' W. 17.28 chs. dist.
Set a sandstone 18 X 10 X 5 ins., 12 ins. in the ground, for closing cor. of fractional secs. 33 and 34 and the San Ignacio del Babocomari Land Grant, with 3 grooves on the E. and W. faces, marked CC on the N. and S I D B on S. face.
Riase a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
Land, gently rolling.
Soil, gravelly and stony; 3rd and 4th rate.
No timber.

June 23, 1906.

18.00
40.00

June 24: At 7 h. am, l.m.t., I set off 31° 43' N on the lat arc; and 23° 27' N on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 4, 5, 32 and 33, on N. bdy. of tp. previously described.

Thence I run S. 0° 2' E., bet. secs. 4 and 5.
Over level land.
Leave level land; enter gently rolling land.
Set a limestone 18 X 7 X 4 ins., 12 ins. in the ground,

Chains

for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 X 18 X 12 ins., N. and E. of stone, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Draw 1.00 ch. wide course S.W.
 78.00 Set a silicate stone 18 X 8 X 5 ins., 12 ins. in the
 80.00 ground for cor. of secs. 4, 5, 8, and 9, marked with
 5 notch on the S. and 4 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, gently rolling and level.
 Soil, gravelly loam; 2nd and 3rd rate.
 No timber.

 East on a random line bet. secs. 4 and 9.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect the N. and S. line 12 lks. S. of cor., of secs.
 3, 4, 9 and 10.
 Thence I run
 S. $89^{\circ} 59'$ W. on a true line bet. secs. 4 and 9.
 Over gently rolling land.
 34.20 Old road bears N. and S.
 34.40 Draw 120 lks. wide course N.; ascend gradually.
 40.03 Set a limestone 18 X 6 X 6 ins., 12 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.
 48.00 Top of S. slope of low ridge brs. N. and S.; descend
 gradually.
 74.00 Draw 100 lks. wide course N.W.
 80.06 The cor. of secs. 4, 5, 8 and 9.
 Land, gently rolling.
 Soil, gravelly and stony; 2nd, 3rd and 4th rate.
 No timber.

 S. $0^{\circ} 2'$ E. bet secs. 8 and 9.
 Over gently rolling land.
 17.00 Draw 1.00 ch. wide course W.; ascend.
 30.00 Spur of mountain, bears N.W. and S.E.; descend steep
 slope.
 36.15 Draw 10 lks. wide course W.; ascend.
 40.00 Set a porphyryite stone, 18 X 8 X 6 ins., 12 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.
 55.00 Top of W. slope of round mountain; top of mountain is
 7 chs. E.; descend.
~~Descend~~
 59.40 Draw 20 lks. wide course W.; begin gradual descent.
 76.30 Draw 80 lks. wide course S.W.
 80.00 Set a silicate stone 18 X 12 X 10 ins., 12 ins. in
 the ground, for cor. of secs. 8, 9, 16 and 17, marked
 with 4 notches on the S. and 4 notches on the E. edge;
 and raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 Land, mountainous and gently rolling.
 Soil, gravelly and stony; 3rd and 4th rate.
 No timber.
 June 24: At this cor. I set off $23^{\circ} 26'$ Non the decl. arc;
 and at 12h. 2 m.l.m.t., observe the sun on the
 meridian and the resulting lat. is $31^{\circ} 42'$ N.

 N. $89^{\circ} 59'$ E. on a random line bet. secs. 9 and 16.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.08 Intersect N. and S. line 7 lks. S. of cor., of secs.
 9, 10, 15 and 16.
 N. $89^{\circ} 58'$ W. on a true line bet. secs. 9 and 16.
 Over gently rolling land.
 40.04 Set a limestone 18 X 8 X 6 ins., 12 ins. in the ground,
 for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face; dig pits 18 X 18
 X 12 ins., E. and W. of stone, 3 ft. dist., and raise

Subdivision of T. 20 S., R. 18 E.

chains

49.70 a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
50.00 Old road bears S.S.W. and N.N.E.
80.08 Draw 1.00 ch. wide course S.W.
The cor. of secs. 8, 9, 16 and 17.
Land, gently rolling.
Soil, Gravelly loam and stony; 2nd, 3rd and 4th rate.
No timber.

18.00 S. 0° 2' E. bet. secs. 16 and 17.
40.00 Over gently rolling land.
Draw 1.00 ch. wide course S.W.
Set a sandstone 18 X 8 X 7 ins., 12 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 impracti-
cable.
50.60 Draw 140 lks. wide course S.W.
80.00 Set a limestone 18 X 10 X 8 ins., 12 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, gently rolling.
Soil, gravelly loam; 2nd and 3rd rate.
No timber.

40.00 S. 89° 58' E. on a random line bet. secs. 16 and 21.
80.04 Set temp. 1/4 sec. cor.
Intersect N. and S. line 16 lks. S. of cor. of sec. 16,
17, 20 and 21. of cor.
Thence I run
West on a true line bet. secs. 16 and 21.
Over gradually descending ground.
37.55 Draw 20 lks. wide course S.W.
40.02 Set a limestone 18 X 6 X 6 ins., 12 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, W. of cor. Pits
impracticable.
67.60 Road bears N. and S.
80.04 The cor. of secs. 16, 17, 20 and 21.
Land, gently rolling.
Soil, gravelly loam; 2nd and 3rd rate.
No timber.

June 24, 1906.

June 25:
At 7 h. a.m., l.m.t., I set off 31° 41' on the lat.
arc; and 23° 26' on the decl. arc; and determine a true
meridian with the solar at the cor. of secs. 16, 17,
20 and 21.
Thence I run
S. 0° 2' E., bet. secs. 20 and 21.
Over gradually descending ground.
40.00 Set a limestone 18 X 10 X 5 ins., 12 ins. in the ground,
for 1/4 sec. cor. marked 1/4 on W. face; and dig pits, 18 X
18 X 12 ins., N. and S. of stone, 3 ft. dist.; and raise
a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
51.45 Wire fence bears E. and W.
80.00 Set a silicate stone 18 X 12 X 9 ins., 12 ins. in the
ground, for cor. of secs. 20, 21, 28 and 29, marked with
notches on the S. and E. edges, dig pits 18 X 18 X 12 ins.,
in each sec. 5 1/2 ft. dist.; and raise a mound of earth,
4 ft. base, 2 ft. high, W. of cor.
Land, gently rolling.
Soil, gravelly loam; 2nd and 3rd rate.
No timber.

40.00 East on a random line bet. secs. 21 and 28.
79.98 Set temp. 1/4 sec. cor.
Intersect the N. and S. line 16 lks. S. of cor. of secs.
21, 22, 26 lks. S. of cor.
Thence I run

Subdivision of T. 20 S., R. 18 E.

chains

S. 89° 57' W. on a true line bet. secs. 21 and 28.
Over gently rolling land, sloping S.
27.30 Draw 60 lks. wide course S.W.
39.98 Set a porphyrite stone, 18 X 9 X 7 ins., 12 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, W. of cor.
Pits impracticable.
46.00 Draw 40 lks. wide course S.W.
50.44 Wire fence brs. S.S.E. and N.N.W.
70.50 Deep draw 140 lks. wide course S.
79.96 The cor. of secs. 20, 21, 28 and 29.
Land, gently rolling,
Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
No timber.

S. 0° 2' E. bet. secs. 28 and 29.
Over gradually descending grade.
18.00 Draw 160 lks. wide course S.W.
22.80 Draw 100 lks. wide course S.W.
31.00 Corral 3 chs. west.
40.00 Set a sandstone 18 X 6 X 6 ins., 12 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.
44.50 Wire fence brs. N.W. and S.E.
72.00 Enter Babocomari bottom course S.E.
80.00 Set a silicate stone 18 X 8 X 8 ins., 12 ins. in the ground,
for cor. of secs. 28, 29, 32 and 33, marked with 1
notches on the S. and 4 notches on the E. edge; dig pits,
18 X 18 X 12 ins., in each sec. 5 $\frac{1}{2}$ ft. dist.; and raise
a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, gently rolling and level.
Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
No timber.
June 25: At this cor. I set off 23° 25' N. on the decl. arc;
and at 12 h. M.L.M.T., observe the sun on the meridian
and the resulting lat. is 31° 39' N.

N. 89° 57' E. on a random line bet. secs. 28 and 33.
Set temp. $\frac{1}{4}$ sec. cor.
40.00 Intersect N. and S. line 9 lks. N. of cor. bet. secs. 28, 29, 32 and 33.
80.02 Thence I run
N. 89° 59' W. on a true line bet. secs. 28 and 33.
Over level land.
Descending over gently rolling land, sloping S.
4.00 Enter stony draw course S.W.
18.00 Dry wash 40 lks. wide course S.W.
23.00 Leave draw.
40.01 Set a sandstone 18 X 10 X 8 ins., 12 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, W. of cor. Pits
impracticable.
57.00 Draw 1.00 ch. wide course S.W.
73.00 Wire fence brs. S. W. and N. E.
75.00 Enter Babocomari bottom land, course S.E.
80.02 The cor. of secs. 28, 29, 32 and 33.
Land, gently rolling and level.
Soil, sandy and gravelly loam and stony; 2nd, 3rd and
4th rate.
Timber, a few ash in draw.

S. 0° 2' E. bet. secs. 32 and 33, on a true line.
Over level land.
5.33 Wire fence brs. S.E. and N.W.
7.70 Road bears S.E. and N.W.
9.96 Wire fence braes N.E. and S.W.
10.00 Telegraph line bears S.E. and N.W.
10.44 Wire fence bears S.E. and N.W.
11.60 Railroad bears S.E. and N.W.
12.13 Wire fence bears S.E. and N.W.

Subdivision of T. 20 S., R. 18 E.

chains	Babocomari creek 90 lks. wide course S.E.; leave
14.00	bottom, thence over rolling land.
22.00	Draw 1.00 ch. wide course N.E.
39.80	Old road bears E. and W.
40.00	Set a limestone 18 X 7 X 6 ins., 12 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.
41.28	Intersect N. bdy. line of the San Ignacio del Babocomari Land Grant at point from which the 31 $\frac{1}{2}$ mile cor. brs. N. 88° 07' W., 17.16 chs. dist.
	Set a limestone 18 X 10 X 7 ins., 12 ins. in the ground, for closing cor. of secs. 32 and 33 and the San Ignacio del Babocomari Land Grant, with grooves on the W. and 4 grooves on the E. edge; marked CC on the N. and S I D B on the S faces.
	Raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, rolling and level.
	Soil, sandy and gravelly loam, and stony; 2nd, 3rd and 4th rate.
	No timber.
	June 25, 1906.
	<hr/> June 26: <hr/>
	At 7 h., a.m., l.m.t., I set off 31° 43' N on the lat. arc; and 23° 24' N on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 5, 6, 31 and 32.
	Thence I run
	S. 0° 3' E. bet. sec. 5 and 6.
	Over gently rolling land.
34.80	Road bears N.W. and S.E.
40.00	Set a sandstone 18 X 14 X 5 ins., 12 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.
68.00	Road bears N.W. and S.E.
78.30	Draw 30 lks. wide course E.
80.00	Set a sandstone 18 X 10 X 8 ins., 12 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked with 5 notch on the S. and 5 notches on the E. face; and raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, gently rolling.
	Soil, gravelly and stony; 3rd and 4th rate.
	No timber.
	<hr/> East on a random line bet. secs. 5 and 8. <hr/>
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.08	Intersect N. and S. line. 6 lks. N. of cor. bet. secs. 2, 5, 8 and 9. cor.
	Thence I run
	N. 89° 57' W., on a true line bet. secs. 5 and 8.
	Over gradually descending ground.
7.00	Draw 90 lks. wide course S.W.
17.00	Enter draw course W.
25.00	Leave draw course S.W.
40.04	Set a limestone 18 X 6 X 5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; dig pits, 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
57.00	Enter draw course S.
62.00	Leave draw; gradual ascent.
66.50	Old road bears N.W. and S.E.
76.00	Draw 90 lks. wide course S.E.
80.08	The cor. of secs. 5, 6, 7 and 8.
	Land, gently rolling and level.
	Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
	No timber.
	June 26: At this cor. I set off 23° 23' N on the decl.

Subdivision of T: 20 S., R. 18 E.

chains

arc and at 12 h. 2 m. P.M.l.m.t., observe the sun on the meridian; the resulting lat. is 31° 42' 30" N.

West on true line bet. secs 6 and 7.

17.30

Top of ascent; descend.

24.05

Small draw course S.W.; ascend.

31.00

Small draw 60 lks. wide course S.W.

40.00

Set a limestone 28 X 8 X 7 ins., 21 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.

79.30

Intersect the W. bdy. line, 54 lks. S. of sec. land 12, T. 20 S., R. 17 E., previously described.

Set a limestone 18 X 8 X 6 ins., 12 ins. in the ground, for closing cor. of secs. 6 and 7, marked C C on E., with 5 grooves on the S. and 1 groove on N. faces, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, E. of cor. Pits impracticable.

Land, Rolling and level.

Soil, gravelly and stony; 3rd and 4th rate.

No timber.

S. 0° 3' E. bet. secs. 7 and 8.

Over gently rolling land.

39.50

Draw 2.00 chs. wide course E.

40.00

Set a granite stone 18 X 14 X 7 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W face, dug pits, 18 X 18 X 12 ins., E. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

66.40

Draw 130 lks. wide course E.

75.90

Draw 200 lks. wide course E.

80.00

Set a sandstone 18 X 14 X 12 ins., 12 ins. in the ground, for cor. of 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.

Land, gently rolling.

Soil, gravelly and stony; 3rd and 4th rate.

No timber.

June 26, 1906.

June 27:

At 7 h. a.m., l.m.t., I set off 31° 42' on the lat. arc; 23° 21' on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 7, 8, 17 and 18.

S. 89° 57' E. on a random line bet. secs. 8 and 17.

40.00

Set temp. 1/4 sec. cor.

80.10

Intersect the N. and S. line, 9 lks. S. of cor. bet. 16 and 17.

Thence I run

S. 89° 59' W. on a true line bet. secs 8 and 17.

Over gently rolling land.

7.30

Draw 80 lks. wide course S.W.

27.75

Old road bears N.W. and S.E.

40.05

Set a silicate stone 18 X 6 X 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on the N. face; dig pits, 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

42.85

Old road bears N.N.W. and S.S.E.

57.65

Old road bears N.W. and S.E.

63.70

Enter draw course S.

69.00

Leave draw.

80.10

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

Land, gently rolling and level.

Soil, sandy and gravelly loam, and stony; 2nd, 3rd and 4th rate.

No timber.

West on true line bet. secs. 7 and 18.

Over gradually rising ground.

29.00

Top bears N.E. and S.W., thence over nearly level land.

chains
40.00

Set a sandstone 18 X 10 X 5 ins., 12 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.

49.60
69.80
79.20

Enter rolling land.
Draw 30 lks. wide course N.W.
Draw 100 lks. wide course N.W.
Intersect the W. bdy. line, 102 lks. S. $0^{\circ}20'$ E., of cor. of secs. 12 and 13, T. 20 S., R. 17 E., previously described.

Set a sandstone 21 X 6 X 6 ins., 15 ins. in the ground, for closing corner of secs. 7 and 18, marked C C on E. with 4 grooves on S. and 2 grooves on N. faces, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Land, gently rolling and nearly level.
Soil, gravelly and stony; 3rd and 4th rate.
No timber.

June 27: At this cor. I set off $23^{\circ}21'$ N. on the decl. arc; and at 12 h. 2 m. P.M. observe the sun on the meridian; the resulting lat. is $31^{\circ}42'$.

7.00
29.70
40.00

S. $0^{\circ}3'$ E. bet. secs. 17 and 18'
Over gently rolling land.
Draw 100 lks. wide course E.
Draw 200 lks. wide course E.
Set a sandstone 18 X 9 X 6 ins., 12 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.

80.00

Thence along W. side of draw course S.
Set a sandstone 21 X 9 X 7 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. faces, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, gently rolling and level.
Soil, sandy and gravelly loam, and stony; 2nd, 3rd and 4th rate.
No timber.

40.00
80.12

N. $89^{\circ}59'$ E. on a random line bet. secs. 17 and 20.
Set temp. $\frac{1}{4}$ sec. cor.
Intersect N. and S. line 5 lks. S. of cor. of secs. 16, 17, 20 and 21.
Thence I run
S. $89^{\circ}57'$ W. on a true line bet. secs. 17 and 20.
Over gently rolling land.

26.70
40.06

Old road bears N.N.W. and S.S.E.
Set a limestone 18 X 6 X 6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face and dig pits, 18 X 18 X 12 ins. E. and W. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
Enter draw course S.

73.00
78.00
80.12

Leave draw.
The cor. of secs. 17, 18, 19 and 20.
Land, gently rolling and level.
Soil, gravelly loam; 2nd and 3rd rate.
No timber.

20.40
40.00

West on true line bet. secs. 18 and 19.
Over gradually rising ground.
Draw 80 lks. wide course S.E.
Set a limestone 18 X 8 X 6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face and dig pits, 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

79.01

Intersect the W. bdy. line 228 lks. S. $0^{\circ}10'$ E., of cor. of secs. 13 and 24 of T. 20 S., R. 17 E.,
Set a sandstone 18 X 14 X 12 ins., 12 ins. in the ground, for closing cor. of secs. 18 and 19, marked C C on N. with 3 grooves on N. and S. faces, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits

Subdivision of T. 20. S., R. 18 E.

chains

impracticable.
Land, gently rolling.
Soil, gravelly and stony; 3rd and 4th rate.
No timber.

June 27, 1906.

11.48
16.70
34.00
40.00
44.22
45.05
80.00

June 28: At 7 h AM 1. mt., I set off 31° 41' N. on the lat. arc and 23° 20' 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. 0° 3' E., bet secs. 19 and 20.
Along the W. side of draw.
Wire fence brs. E. and W., leave side of draw course S.E.
Draw 100 lks. wide course E.
Draw 160 lks. wide course E.
Set a sandstone 18 X 8 X 6 ins., 12 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.
Wire fence brs. E.S.E. and W.N.W., cor. wire fence 40 lks. E.
Wire fence bears S W and N.E.
Set a sandstone 18 X 8 X 6 ins., 12 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on the S. and 5 notches on the E. faces, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
Land, gently rolling.
Soil, gravelly and stony; 3rd and 4th rate.
No timber.

40.00
80.06
25.00
40.03
58.00
59.60
67.00
80.06

N. 89° 57' E. on a random line bet. secs. 20 and 29.
Set temp. 1/4 sec. cor. at cor.
Intersect the N. and S. line of secs. 20, 21, 28 and 29.
Thence I run
S. 89° 57' W. on a true line bet. secs. 20 and 29.
Over gradually descending ground.
Carrillo's ranch house, 30 chs. Side course E.
Set a silicate stone, 18 X 8 X 8 ins., 12 ins. in the ground for cor. of secs. marked 1/4 on N. face, and dig pits, 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
Enter draw course S.
Road bears N.W. and S.E.
Arroyo 60 lks. wide course S.; leave draw, thence over gradually rising ground.
The cor. of secs. 19, 20, 29 and 30.
Land, gently rolling and level.
Soil, Sandy and gravelly loam and stony; 2nd, 3rd and 4th rate.
No timber.

15.60
15.90
22.31
29.00
40.00
47.15
62.00
66.00
67.70
79.07

West on a true line bet. secs. 19 and 30.
Over gently rolling land.
Enter Babocomari bottom course S.E.
Enter Babocomari creek 30 lks. wide course S.E.
Wire fence S. 32° 30' W.
Leave Babocomari bottom.
Set a sandstone 18 X 7 X 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face and dig pits 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
Road bears N.W. and S.E.
S. Miranda's house 5 chs. N. side course N.
Corral 4.00 chs. N. side course N.
Wire fence bears S.W. and N.E.
Intersect the W. bdy. line 164 lks. S. 0° 9' W., of cor. of secs. 24 and 25, T. 20 S., R. 17 E.
Set a sandstone 18 X 9 X 7 ins., 12 ins. in the ground for closing corner of secs. 19 and 30, marked C.C. on the E. face and 4 grooves on the N. and 2 grooves on the S. faces.
and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.

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chains

and dig pits, 24 X 18 X 12 ins., crosswise on each line, and standards, 3 ft., and E. of stone, 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, E. of cor.
 Land, gently rolling.
 Soil, sandy and gravelly loam, and stony; 2nd, 3rd and 4th rate.
 No timber.
 June 28: At this cor. I set off 23° 19' N. on the decl. arc; and at 12 h. 3 m., p. m., l.m.t., observe the sun on the meridian; the resulting lat. is 31° 40'.

Thence I run

S. 0° 3' E., bet. secs. 29 and 30.
 Over gently rolling land.
 4.00 Enter Babocomari creek bottom course S.E.
 5.00 Enter Babocomari creek 30 lks. wide course S.E.
 17.17 Telegraph line bears S.E. 70° E.
 17.37 Wire fence bears S.E. and N.W.
 18.22 Railroad tracks bears S.E. 70° E.
 39.82 Cor. of wire fence 50 lks. E. of cor. of secs. 29 and 30.
 40.00 Set a limestone 18 X 8 X 7 ins., 12 ins. in the ground, for cor. of secs. 29 marked 3 1/4 on W. face, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.
 Pits impracticable.
 51.50 Road bears E.S.E. and W.N.W.
 59.85 Road bears E.N.E. and W.S.W.
 80.00 Set a limestone 18 X 8 X 8 ins., 12 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, marked with 1 notch on the S. and 5 notches on the E. edges, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.
 Pits impracticable.
 Land, gently rolling, and level.
 Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
 No timber.

40.00 N. 89° 57' E. on a random line bet. secs. 29 and 32.
 Set temp. 1/4 sec. cor.
 80.00 Intersect N. and S. line Belkssens. of cor. of secs. 28, 29, 32 and 33.

Thence I run

N. 89° 59' W. on a true line bet. secs. 29 and 32.
 Over level land.
 4.42 Wire fence bears S.E. 41° E.
 6.00 Road bears S.E. 41° E.
 8.61 Telegraph line bears S.E. 41° E.
 9.09 Railroad siding bears S.E. 41° E.
 10.06 Railroad tracks bears S.E. 41° E.
 10.55 Wire fence bears S.E. 41° E.
 11.50 Babocomari creek 90 lks. wide course S.E.
 16.00 Leave Babocomari creek bottom, ascending.
 20.00 Top of ascent course N.W.; thence over gently rolling land sloping N.
 20.80 Railroad water tank 9 chs. N. of cor. of secs. 29 and 30.
 21.50 Elgin Station house 9 chs. W. of cor. of secs. 29 and 30.
 39.70 Road bears S.E. and N.W.
 40.00 Set a limestone 18 X 8 X 8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face and dig pits, 18 X 18 X 12 ins, E. and W. of stone, 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
 48.20 Road bears N.E. and S.W.
 64.00 Windmill 30 chs. N. of cor. of secs. 29 and 30.
 76.80 Enter draw course N.E.
 77.60 Old road bears N.E. and S.W.
 80.00 The cor. of secs. 29, 30, 31 and 32.
 Land, gently rolling and level.
 Soil, sandy and gravelly loam and stony; 2nd, 3rd and 4th rate.
 No timber.

West on a true line bet. secs. 30 and 31.
 Over level land.

chains

9.35.

40.00

79.30

7.30

10.00

32.00

38.66

Leave draw; thence over gently rolling land.
 Set a limestone 18 X 8 X 6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face and dig pits 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist, and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, N. of cor.
 Intersect the W. bdy. 219 lks. S. of cor. of secs. 25 and 36 of T. 20 S., R. 17 E. previously described.
 Set a limestone 18 X 7 X 6 ins., 12 ins. in the ground, for closing cor. marked C C on E. face and 5 grooves on the N and 1 groove on the S. edges; and dig pits, 24 X 18 X 12 ins. crosswise on each line, N. and S. 3 ft., and E. of stone, 7 ft. dist., and raise a mound of earth, 4 ft. base
 Land, gently rolling and level. (2 ft. high, E. of cor.)
 Soil, Sandy and gravelly loam, 1st, 2nd and 3rd rate.
 No timber.

S. 0° 3' E. on line bet. secs. 31 and 32.
 Over level land.

Old road bears N.E. and S.W.

Leave draw.

Enter draw course N.E.

Intersect the N. bdy. line of San Ignacio del Babocomari Land Grant $30\frac{1}{2}$ miles cor. bears N. 88° 7' W., 17.09 chs. dist.

Set a sandstone 18 X 8 X 8 ins., 12 ins. in the ground for closing cor. of secs. 31 and 32 and the San Ignacio del Babocomari Land Grant, marked C C on the N and S I D B on the S faces and 5 grooves on the E. and 1 groove on the W. faces and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Land, Gently rolling and level.

Soil, rich and gravelly loam, 1st, 2nd and 3rd rate.

No timber.

June 28, 1906.

General Description.

This township is gently rolling in the central and western parts, while the eastern portion lies in the Mustang Mountains. The soil of the rolling part of the township is gravelly loam, covered with a good growth of grass. Oak timber is found in the mountainous sections. The N.M. & A. railroad runs through the southern part of the township. Elgin Station is in the south eastern part of Sec. 29 and Carrillo's ranch is situated near the middle of same section. S. Miranda's ranch is in the southwestern part of section 19. The Babocomari creek flows through the southern part of the township.

U. S. Deputy Surveyor.

J. R. Barthelmy

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

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LIST OF NAMES.

A list of the names of the individuals employed by *Pasimiro R. Barthelmy*

Pasimiro R. Barthelmy, 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 *Subdivisions of T20S.R18E.*

showing the respective capacities in which they acted:

Arthur Pogue, Chainman.

Harry Mallory, Chainman.

Louis Renaud, Moundman.

L. C. Millar, Axman.

H. B. Milliken, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted *Pasimiro R. Barthelmy*

Pasimiro R. Barthelmy, United States Deputy Surveyor, in surveying all those parts or portions of the *Subdivisions of T20SR18E.*

of the *Sila and Salt* *River Basal and* meridian, *Territory of Arizona*, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for *Arizona*.

Arthur Pogue, Chainman.

Harry Mallory, Chainman.

Louis Renaud, Moundman.

L. C. Millar, Axman.

H. B. Milliken, Flagman.

Subscribed and sworn to before me this *11th* day of *August*, 190*6*

H. G. Power



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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

BOOK 1912

I, Casimiro R. Barthelmy, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 14 day of April, 1906, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of Subdivisions of Township 20 South Range 18 East

of the Gila and Salt River Base and meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Casimiro R. Barthelmy
United States Deputy Surveyor.

Subscribed by said Casimiro R. Barthelmy and sworn to before me }
this 14th day of August, 1906



Alcantara
CLERK U. S. DISTRICT COURT FOR
FIRST JUDICIAL DISTRICT, ARIZONA.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. March 15th, 1907
The foregoing field notes of the survey of the subdivisions of T. 20 S., R. 18 E.,
of the Gila and Salt River Base and Meridian, in the
Territory of Arizona.

executed by Casimiro R. Barthelmy
under his contract No. 139, dated April 14th, 1906, 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.