

DEC 27 1904

1856

Book "B"
FIELD NOTES

OF THE SURVEY OF THE

BOOK 1856

West and North Boundaries

of
T. 18 S. R. 16 E.

1856

Of the Gila & Salt River Meridian,

AS SURVEYED BY

Philip Contzen, United States Deputy Surveyor,

Under his Contract No. 115, dated March 15th, 1894

Survey commenced July 28th, 1894

Survey completed August 1st, 1894

1856

NAMES AND DUTIES OF ASSISTANTS.

John M. Trapez,	chairman
H. W. Higgins,	chairman
A. A. Spright,	roundman
Manuel Salazar,	roundman
Charles M. Pogue,	axeman
Tom Jones,	axeman
Arthur Pogue,	flagman

1904

BOOK 1856

INDEX DIAGRAM.

Township 18 N., Range 16 E.

6	8	8	9	10	11	12
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2	31	32	33	34	35	36

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, John M. Trayer and H. W. Huggins
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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

the West and North boundaries of T. 18 S. R. 16 E

John M. Trayer, Chainman.
H. W. Huggins, Chainman.

Subscribed and sworn to before me this 20th
day of July, 18904



H. G. Power
NOTARY PUBLIC,
PIMA COUNTY, ARIZONA
MY COMMISSION EXPIRES
April 27th 1908

WE, A. A. Lipsight and Manuel Salazar
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

the West and North boundaries of T. 18 S. R. 16 E.

A. A. Lipsight, Moundman.
Manuel Salazar, Moundman.

Subscribed and sworn to before me this 20th
day of July, 18904



H. G. Power
NOTARY PUBLIC,
PIMA COUNTY, ARIZONA
MY COMMISSION EXPIRES
April 27th 1908

WE, Chas. M. Pogue and Tom Jones
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

West and North boundaries of T. 18 S. R. 16 E

Chas M Pogue, Axman.
Tom Jones, Axman.

Subscribed and sworn to before me this 20th
day of July, 18904



H. G. Power
NOTARY PUBLIC,
PIMA COUNTY, ARIZONA
MY COMMISSION EXPIRES
April 27th 1908

I, Arthur Pogue, 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

West and North boundaries of T. 18 S. R. 16 E.

Arthur Pogue, Flagman.

Subscribed and sworn to before me this 20th
day of July, 18904



H. G. Power
NOTARY PUBLIC,
PIMA COUNTY, ARIZONA
MY COMMISSION EXPIRES
April 27th 1908

Chains

Survey commenced July 28, 1904, and executed with a Wernig and Sons light, repeating transit, No. 5607, 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, June 10, 1904.

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 proceeded as follows:

At the ev. of Tps. 18 and 19 S., R. 15 and 16 E. as heretofore described, latitude $31^{\circ} 49'$ N., longitude $110^{\circ} 45'$ W.; I set off $31^{\circ} 49'$ N., on the lat. arc; ~~$18^{\circ} 56'$ N.~~ on the decl. arc; and, at $4^{\text{h}} 10^{\text{m}}$ p. m., l. m. t., determined with the solar, a meridian and mark a point thereof, on a stone set firmly in the ground, 5 chs. N. of this ev.

At $11^{\text{h}} 3^{\text{m}}$ p. m., l. m. t., by my watch, which is correct, I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

July 28, 1904.

July 29: At 6:30 a. m., l. m. t., I lay off the azimuth of Polaris $1^{\circ} 25'$ to the west, and mark the meridian thus determined, by cutting a small groove in the stone set July 28, in which the meridian falls 0.3 ins. east of the mark determined by the solar.

At $4^{\text{h}} 10^{\text{m}}$ a. m., l. m. t., I set off $31^{\circ} 49'$ on the lat. arc; ~~$18^{\circ} 48'$ N.~~ ~~$18^{\circ} 47'$ 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; this mark falls 0.3 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 0.16" east and west of the meridian established by

Chains

The Polaris observations; therefore I conclude, that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7^h 30^m a.m., is N. 12° 44' W.; the angle thus determined gives the mag. decl. 12° 44' E.

Shiner Run
N. on Sta., bet. sec. 31 and 36.

Over mountainous land, ascending.

8.50 Top of ridge, bears E. and N.; descend through oak and cedar timber and dense undergrowth.

23.00 Dry wash, 200 ft. below top of ridge; 15 lbs. wide, course N. Easterly; thence over rolling and broken land.

37.50 Gulch, 20 lbs. wide, course N. Easterly.

42.00 Set of sandstone, 20 x 25 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. or marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. etc. impracticable.

54.20 Gulch, 20 lbs. wide, course Easterly.

63.00 Gulch, 20 lbs. wide, course Easterly.

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

75.30 Descend

77.70 From Martinez's house bears 25 lbs. E.

78.70 Dry wash, 40 lbs. wide, course Easterly; mound

80.00 Set of quartzite stone, 18 x 12 x 5 ins., 12 ins. in the ground, for cor. of sec. 25, 30, 31 and 36, marked with 1 notch on S. and 5 notches on N. edge; from which

An oak, 6 ins. diam., bears N. 65° E, 137 lbs. dist., marked S 18 S R 16 E S 30 B 2.

An oak, 18 ins. diam., bears S 19 1/2° E, 77 lbs. dist., marked S 18 S R 16 E S 31 B 2.

An oak, 16 ins. diam., bears S 15 1/2° N, 116 lbs. dist., marked S 18 S R 15 E S 26 B 2.

An oak, 5 ins. diam., bears N. 52° W, 33 lbs. dist., marked S 18 S R 15 E S 25 B 2; and a mound of stone, 2 ft. base, 1 1/2 ft. high,

N. of cor.

Land mountainous, broken and rolling.

Soil, generally loam and stony; 2nd, 3rd and 4th rates.

Timber, oak and cedar, undergrowth, oak, laurel, magnolia, hick, Spanish bayonet and cacti.

Mountainous or land covered with dense undergrowth, etc. etc.

Chains

- North, bet. nos. 25 and 30
Over mountainous land, ascending through oak timber and down
Emsh.
- 6.00 Edge of N. slope of mountain; descend.
 - 12.00 Gulch, 30 lbs. wide, course easterly; ascend.
 - 15.10 Old road to mine, bears N. Westerly and S. Easterly.
 - 19.50 Spur, extending easterly; descend.
 - 21.50 Gulch, 15 lbs. wide, course S. Easterly; ascend.
 - 23.00 Spur, extending easterly; descend.
 - 26.00 Deep gulch, 30 lbs. wide, course South Easterly; ascend.
 - 27.00 Small brass N. 6 lbs. dist.
 - 27.50 Small brass N. 7 lbs. dist.
 - 28.00 Shaft, brass N., 7 lbs. dist.
 - 28.50 Shaft, brass N., 7 lbs. dist.
 - 29.00 Edge of N. slope of mountain and descend
 - 31.00 Cut, brass 3 lbs. E.
 - 33.00 Cut, 10 x 6 x 5 ft. on line.
 - 33.50 Small brass 20 lbs. E.
 - 40.00 Set a quartz stone, 13 x 10 x 8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec.
w. marked $\frac{1}{4}$ on N. face, from which
An oak, 12 ins. diam., bears S. 65° E., 13 lbs. dist., marked
 $\frac{1}{4}$ S 90° E.
 - An oak, 6 ins. diam., bears N. 9 $\frac{1}{4}$ ° W., 77 lbs. dist., marked
 $\frac{1}{4}$ S. 25° E.; from this w. Juan Lopez's house bears E. about
25 lbs. dist.
 - 42.50 Edge of N. slope of mountain; descend.
 - 42.99 Wire fence, brass E. and N.
 - 45.50 Gulch, 20 lbs. wide, course easterly; ascend.
 - 49.00 Spur, extending easterly; descend.
 - 51.20 Gulch, 15 lbs. wide, course S. Easterly; ascend.
 - 62.00 Spur, 250 ft. above gulch, extending easterly; descend.
 - 67.10 Road, brass N. W. and S. E.
 - 67.30 Gulch, 10 lbs. wide, course N. E.; ascend.
 - 69.00 Edge of camp; shaft brass 30 lbs. N.; tunnel brass 130 lbs. N.
 - 70.00 Shaft, brass 130 lbs. N.
 - 70.00 Spur, extending S. Easterly; descend.
 - 78.80 Small brass 30 lbs. E.
 - 81.00 Set a limestone, 13 x 10 x 6 ins., 12 ins. in the ground, for cor. of
nos. 19, 24, 25 and 30 marked with 2 meters on S. and 4 meters
on N. side; from which
An oak, 6 ins. diam., bears N. 74° E., 65 lbs. dist., marked

For mineral
segregations see
subdivisions.

Chains
 S 15 S R 16 E S 19 B S
 An oak, 10 ins. diam., bears S 24 1/4° E., 55 lbs. dist., marked
 S 15 S R 16 E S 30 B S.
 An oak, 6 ins. diam., bears S 52 1/2° W., 55 lbs. dist., marked
 S 18 S R 15 E S 25 B S.
 An oak, 6 ins. diam., bears N. 57 1/4° W., 53 lbs. dist., marked
 S 18 S R 15 E S 24 B S.
 Land, mountains.
 Soil, gravelly, stony and rocky; 3rd and 4th metr.
 Timber, oak, and Laurel; undergrowth, oak, Laurel, ferns, etc., my-
 cal, Spanish bayonet and cacti.
 Mountains of land covered with dense undergrowth, 30.00 chs.
 July 29: At this pt. I set off 18° 44' N on the incl. and, and
 at 12 1/4 m. j., observed the sun on the meridian; the resulting
 lat. is 31° 51' 19"

X North, bet. crests 19 and 24.
 Over mountains land, descending through oak timber and dense
 brush.
 .30 Small gulch, course E. and W.; ascend.
 1.40 Spur, bears E. and W.; descend.
 3.00 Group of shafts, tunnels and dumps, bear W. about 10 chs.
 dist.
 6.80 Gulch, 15 lbs. wide, course S. E.; bear timber and brush; ascend.
 8.00 Old shaft bears 4 chs. W.
 23.00 Shaft, bears 2 chs. W.
 26.00 Bluff, bears 1 ch. W.
 27.30 Top of E. slope of mountain, 500 ft. above gulch; descend through
 oak timber and dense brush.
 37.30 River ferry, bears E. and W.
 38.00 Gulch, 300 ft. below slope, 15 lbs. wide, course E. and W.; ascend.
 38.50 Shaft, bears 150 lbs. E.
 39.00 Shaft, bears 145 lbs. E.
 39.30 Shaft, bears 135 lbs. E.
 41.00 Set a limestone, 12 x 12 x 4 ins., 12 ins. in the ground, for 1/4 sec. and
 marked 1/4 on N. face, from which
 An oak, 14 ins. diam., bears N. 62° E., 60 lbs. dist., marked
 1/4 S 19 B S.
 An oak, 6 ins. diam., bears S. 35 1/2° W., 127 lbs. dist., marked
 1/4 S 24 B S; wood traces on mound of stem, 2 ft. base, 1 1/2 ft. high, N. of cor.
 Par. 13° E.

411.15	Vertical and Rosemont trail, bears N. Westerly and S. Easterly.
411.80	Spur, extending Easterly; descend.
42.30	Gravel, 15 lbs. wide, course Easterly; ascend.
48.70	cut, bears 30 lbs. N.
49.70	cut bears 40 lbs. N.
51.111	Spur, extending Easterly; descend.
54.20	Gravel, 15 lbs. wide, course Easterly; ascend.
57.00	Spur, extending Easterly; descend.
57.411	cut, bears 6 ch. E.
61.50	Gravel, 15 lbs. wide, course Easterly; ascend.
65.20	Spur, extending Easterly; descend.
67.30	Gravel, 10 lbs. wide, course Easterly; ascend.
72.00	Spur, extending Easterly; descend.
75.20	Gravel, 15 lbs. wide, course E. S. Easterly; ascend.
79.50	Top of east slope of high limestone mountain, about 500 ft. above 4 sec. cor.
80.00	Set a limestone, 18 x 10 x 8 in. 12 in. in the ground, for cor. of sec. 13, 18, 19 and 24, marked with 3 notches on E. and N. edges; from which A corner, 12 in. diam., bears S. 9° N., 90 lbs. dist., marked S 18 S R 16 E S 24 13 S; neither top or within limit and raise a mound of stone, 3 ft. base, 2 ft. high, N. of cor. Site impracticable. From this cor., high mound from bears S. 34 1/4° N.; Vertical mining cave bears N. about 2 miles dist. Limestone mountains. Soil, stony and rocky; 4th rate. Timber, oak, laurel, and pines; undergrowth, oak, laurel, fratilla, mescal, Spanish bayonet and cacti. Mountainous or land covered with dense undergrowth, 80.00 ch. July 25, 1904.

July 30: At 4^h 35^m a. m. l. m. t., set 31° 52' N on the lat.
arc; 18° 33' N on the decl. arc and determine a meridian
with the solar at the cor. of secs. 13, 18, 19 and 24.

8.00

North, bet. secs. 13 and 18.

Along E. slope of mountain, through scattering timber and dense
brush.

8.00 Begin strip present.

36.30 Descend abruptly 80 ft.

412.00 Set a calcareous stone, 18 x 10 x 8 in., 12 in. in the ground.

6 hours /
OK $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. This cor. stands 700 ft. below top of mountain.

73.30 Gulch, 600 ft. below $\frac{1}{4}$ sec. cor., 30 lbs wide, course N. Westerly.

80.00 Set a quartzite stone, 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked with 4 notches on S. and 2 notches on N. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Ground, mountainous.

Soil, gravelly, stony and rocky; soil and 4th rate.

Timber, scattering oak, laurel and cedar, undergrowth, laurel, oak, prairie, Spanish bayonet, amov. and cacti.

Mountainous or land covered with dense undergrowth, 80.00 chs.

North, bet. secs. 7 and 12.

Over mountainous land, descending.

13.40 Gulch, 200 ft. below sec. cor., 40 lbs wide, course N. Westerly; ascend.

40.00 Set a porphyry stone, 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 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

40.80 Spur, 600 ft. above gulch, extending S. Easterly; descend.

80.00 Set a sandstone, 18 x 12 x 10 ins., 12 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked with 5 notches on S. and 1 notch on N. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Ground, mountainous.

Soil, gravelly, stony and rocky; soil and 4th rate.

Timber, scattering oak, undergrowth, prairie, Spanish bayonet and cacti.

Mountainous land, 80.00 chs.

July 30. At this cor. I set off, $18^{\circ}30'$ N on the decl. arc, and at $12^{\text{h}} 6^{\text{m}}$ l.m.t., observe the sun on the meridian; the resulting lat. is $31^{\circ}53'$ or within 1' of the proper lat.

North, bet. secs. 1 and 6.

Over mountainous land, ascending.

8.40 Gulch, 40 lbs wide, course N. Westerly, ascend.

19.00 Gulch, 30 lbs wide, course S. Westerly.

29.50 Ridge, trans. Easterly and Westerly; descend.

34.15 Gulch, 10 lbs wide, course Westerly; ascend.

6hams/
40.00JK
67

41.00

46.50

60.00

78.00

80.00

Set a porphyry stone, 18x8x8 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 1/2 ft. high, N. of cor. Site impracticable.

Ridge, cross Easterly and Westerly; descend.

Dry wash, 50 lbs. wide across Westerly; ascend.

Ridge, cross N. Westerly and S. Easterly; descend.

Set a sandstone, 18x12x12 ins., 12 ins. in the ground for witness cor. to cor. of Sps. 17 and 18 S., Rs. 15 and 16 E, marked with 6 notches on each edge; and raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor. Site impracticable.

Box fault falls in dry wash, 50 lbs. wide, across Westerly. Land, mountainous.

Soil, gravelly and stony; 2nd and 4th roots.

Timber, scattering oak; undergrowth, palmito, Spanish bayonet and cacti.

Mountainous land, 80.00 chs.

July 30, 1904.

General Description.

This line runs over mountainous land. Sp. 18 S., R. 15 E., is mountainous in the E. and rolling in the W. The Uchertia and Siptaka mining camps are in this township.

Philip Contzen
U. S. Deputy Surveyor.

6 chains
July 31. At 7^h 15^m a. m., by m. t., I set off 31° 54' N on the
lat. line, — 18° 18' N. on the decl. arc, and determine a true
meridian with the solar at the ev. point of S. 17 and 18 S.,
R. 15 and 16 E., as heretofore described.
I run S run, East, bet. sres. 6 and 31.
From ev. point in wash.
8" Lower wash, ascend.
10.00 Spur, extending S. Westerly; descend.
27.70 Gulch, 50 lbs. wide, course S. westerly; ascend.
40.00 Set a porphyry stone in place, 4 x 4 ft., 3 ft. above ground
on which
cut a cross (x) at the exact ev. point for $\frac{1}{4}$ s. ev. marked $\frac{1}{4}$
on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft.
high, N. of ev. Site impracticable.
46.00 Ridge, bears N. Easterly and S. Westerly, 7000 ft above S. p. ev.
descend.
49.20 Gulch, 20 lbs. wide, course S. Westerly; ascend.
56.00 Spur, extending S. Westerly; descend.
63.50 Gulch, 15 lbs. wide, course S. Westerly; ascend.
68.50 Spur, extending N. Westerly; descend.
80.00 Set a porphyry stone, 18 x 10 x 8 ins., 12 ins. in the ground for
ev. of sres. 5, 6, 31 and 32, marked with 5 notches on E. and
1 notch on W. side; and raise a mound of stone, 3 ft. base,
2 ft. high, N. of ev. Site impracticable.
Ground, mountainous.
Soil, stony and rocky; 4th north.
Timber, scattering cedar, undergrowth, maple.
Mountainous land, 80.00 chs.

East, bet. sres. 5 and 32.
Over mountainous land, descending
4.25 Gulch, 20 lbs. wide, course N. Easterly; ascend.
16.50 Spur, extending N. Easterly; descend.
39.80 Gulch, 40 lbs. wide, course N. Easterly; ascend.
41.00 In gulch.
41.30 Set a porphyry stone, 18 x 10 x 8 ins., 12 ins. in the ground, for
witness ev. to $\frac{1}{4}$ s. ev. marked N. E. $\frac{1}{4}$ on N. face; from
which
a rock, 20 ins. diam., bears N. 42° W., 250 lbs. dist., marked
N E $\frac{1}{4}$ S 32° E.; no other tree within limit, and raise a
mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of ev. Site im-

6 hours

practicable.

45.30 Gulch, 30 lbs. wide, course N., thence N. Easterly.

53.00 Spur, extending N. Easterly; descend.

55.20 Gulch, 20 lbs. wide, course Northerly; ascend.

64.50 Top of N. W. slope of spur; descend.

71.50 Gulch, 20 lbs. wide, course N. Easterly; ascend.

73.00 Ridge, bears N. and S. descend.

80.00 Set a porphyry stone, 18 x 10 x 6 in., 1/2 in. in the ground, for ev. of sres. 4, 5, 32 and 33, marked with 4 notches on E. and 4 notches on W. side; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of ev. Pits impracticable.

Land, mountainous.

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

Timber, scattering cedar and oak.

Mountainous land, 80.00 hrs.

July 31: At this ev. I set off 18° 15' N. on the decl. arc and at 12^h 4^m l.m.t., observe the sun on the meridian; the resulting lat. is 31° 54' N or within 1' of the proper lat.

East bet. sres. 4 and 33.

Over mountainous land, descending.

11.20 Gulch, 20 lbs. wide, course N. Easterly; ascend.

15.00 N. slope of spur; descend.

17.30 Gulch, 10 lbs. wide, course Northerly.

19.50 Gulch, 15 lbs. wide, course N. Easterly; ascend.

24.00 Top of spur, extending Northerly from Mt. Fagan; descend.

25.00 Mining camp, bears N. 7 1/2° E., about 1 mile dist.

30.50 Gulch, 15 lbs. wide, course N. Easterly; ascend.

33.00 Spur, extending N. Easterly; descend.

38.90 Gulch, 15 lbs. wide, course N. Easterly; ascend.

40.00 Set a limestone, 18 x 12 x 8 in., 1/2 in. in the ground, for 1/4 sres. ev. marked 1/4 on N. face, from which

An oak, 8 in. diam., bears S. 36 1/4° E., 44 lbs. dist., marked 1/4 S. 4 B 3.

An oak, 8 in. diam., bears N. 79° W., 61 lbs. dist., marked 1/4 S. 33 B 3; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of ev.

47.00 Top of high ridge, bears N. and S.; descend.

72.80 Gulch, 15 lbs. wide, course N. Easterly; ascend.

77.00 Ridge, bears Northerly and Southerly; descend.

80.00 Set a sandstone, 20 x 10 x 5 in., 1/2 in. in the ground, for ev.

Chains

OK

of sec. 34, 33 and 34, marked with 3 notches on E. and W. rods; from which
 A mosquito, 6 ins. diam., bears N. 49° E., 207 lbs. dist., marked S 17 S R 16 E S 34 13 S.
 A mosquito, 8 ins. diam., bears S. 87 1/2° E., 134 lbs. dist., marked S 18 S R 16 E S 3 13 S.; no other trees within limit, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of ev. pits impracticable.
 Land, mountainous.
 Soil, gravelly and stony; 4th rate.
 Timber, scattering oak and mosquito.
 Mountainous land, 8000 chs.

East, bet. sec. 3 and 34.

Over mountainous land, descending

- .60 Gulch, 20 lbs. wide, course N. Easterly; ascend.
- 7.00 S. slopes of ridge, descend.
- 10.00 Gulch, 15 lbs. wide, course N. Easterly; ascend.
- 16.00 Spur, extending N. Easterly descend.
- 24.00 Enter dense brush, bears Northerly and Southerly.
- 40.00 Set a sandstone, 18 x 8 x 6 ins., 12 ins. in the ground for 1/4 sec. ev. marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of ev. pits impracticable.
- 47.00 Gulch, 20 lbs. wide, course N. Easterly; ascend.
- 77.00 Dip, bears N. E. and S. W.; thence over level land.
- 80.00 Set a sandstone, 18 x 8 x 6 ins., 12 ins. in the ground, for ev. of sec. 2, 3, 34 and 35, marked with 2 notches on E. and 4 notches on W. rods; from which
 A mosquito, 10 ins. diam., bears S. 13 1/2° E., 209 lbs. dist., marked S 18 S R 16 E S 2 13 S.; no other trees within limit, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of ev. pits impracticable.
 Land, mountainous, level and rolling.
 Soil, gravelly limestone and stony; 2nd, 3rd and 4th rate.
 Timber scattering mosquito; undergrowth, mosquito and brush.
 Mountainous land covered with dense undergrowth, 80.00 chs.

OK

July 31, 1904.

August: At 7¹¹ ¹¹ a.m. l.m.t., I set off 31° 54' N on the lat. arc. ~~18° 4' N~~ ^{18° 4' N} on the sol. arc; and determine a true meridian with the solar at the ev. of sec. 2, 3, 34 and 35.
 Shown to run
 East, bet. sec. 2 and 35.

see page 1
supplemental
notes
for this mile

see page 4
supplemental
notes for this
mile.

6 chains Over level land, through dense brush.
 41.1111 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor.
 marked $\frac{1}{4}$ on N. face, from which
 A mesquite, 11 ins. diam., bears S. 18 $\frac{1}{2}$ ° E., 209 lbs., marked
 $\frac{1}{4}$ S. 213 S.; no other trees within limit, and raise a mound of
 stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Site impracticable; inter
 rolling land.
 51.30 Dry wash, 31 lbs. wide, course N. Easterly.
 81.000 Set a sandstone, 20x6x6 ins., 15 ins. in the ground, for cor. of sec
 1, 2, 35 and 36, marked with 1 notch on E. and 5 notches on N.
 edge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of
 cor. Site impracticable.
 Ground, rolling and level.
 Soil, gravelly loam and stony; 2nd, 3rd and 4th notes.
 Timber, scattering mesquite; underground mesquite, locust and cacti.
 Ground covered with dense undergrowth, 81.000 chs.

East, bet. sec. 1 and 36.
 Over rolling land, through dense brush.
 22.70 Dry wash, 15 lbs. wide, course Northwly.
 39.1111 Enter W. Anderson's canyon, course Northwly
 39.80 Wash 120 lbs. wide, course Northwly witness post.
 40.60 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor.
 marked $\frac{1}{4}$ on N. face; from which
 A mesquite, 6 ins. diam., bears N. 70° E., 157 lbs. dist., marked WC
 $\frac{1}{4}$ S 36 13 S.
 A mesquite, 6 ins. diam., bears S. 35 $\frac{1}{2}$ ° W., 23 lbs. dist., marked WC
 $\frac{1}{4}$ S 1 13 S.
 42.51 Road, bears Northwly and Southwly.
 44.1111 Cross canyon.
 51.60 Enter gulch, course N. W.
 59.60 Cross gulch, course N.; ascend.
 63.50 Side of spur, descend.
 67.50 Bottom gulch, course N. S. W.
 69.00 Cross gulch; ascend.
 71.1111 Top, bears N. W. and S. E.
 72.81 Enter ret. E. by of the Spr. 418 lbs. N. of cor. of Spr ~~17~~ ^{17 and 18 S.} R 17
 E., as heretofore described
 Set a conglomerate stone, 24x10x6 ins., 18 ins. in the ground, for closing
 cor. of Spr 17 and 18 S, R 16 E, marked 66 on N.; with 6 grooves on N.,
 S. and W. face, from which
 A mesquite, 9 ins. diam., bears S. 64 $\frac{1}{2}$ ° W., 236 lbs. dist., marked

Chains

OK

S 18 S R 16 E S 17 S. no other trees within limit, and raise a mound of stone, 3 ft. ^{high} ~~wide~~, 2 ft. ^{wide} ~~high~~, N. of ev. Site impracticable.

Land, rolling.

Soil, gravelly loam; 2nd, 3rd. and 4th rates.

Timber, scattering mesquite; undergrowth, mesquite and totol.

Land covered with dense undergrowth, 72.81 chs.

August 1, 1914.

General Description.

This line runs over mountains, rolling and level land.

S. 17 S., R. 16 E., is mountainous in the southwest, east and center and rolling in the north.

Philip Couzger

W. S. Deputy Surveyor.

Line Desig.	True Bearing.	Distance.	Latitudes. Departures.			
			N.	S.	E.	W.
North Boundary.	East.	473.21			473.21	
Portion of E.Bdy.	South	4.18		4.18		
	S. 0° 6' E.	78.75		78.75	0.14	
	S. 0° 5' E.	39.68		39.68	0.06	
	S. 0° 10' E.	39.88		39.88	0.12	
Portion of S.Bdy.	South	275.93		275.93		
	S. 0° 55' E.	39.00		38.99	0.62	
	S. 88° 30' W.	40.37		1.06		40.35
	West,	278.34				278.34
	S. 89° 50' W.	77.29		0.24		77.29
West Boundary.	S. 89° 45' W.	78.86		0.34		78.86
	North,	480.00	480.00			
Convergency,					0.45	
Totals,			480.00	479.05	474.60	474.84
			479.05			474.60
Error in Latitude			0.95			0.24
				Error in Departure		

Boundaries Sp 18d R16 E.

LIST OF NAMES.

A list of the names of the individuals employed by Philip Conzen, 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 the West and North boundaries of T. 18 S. R. 16 E. showing the respective capacities in which they acted:

- John M. Trapey ✓, Chainman.
- H. W. Huggins ✓, Chainman.
- A. A. Lyright ✓, Moundman.
- Mmanuel Salazar ✓, Moundman.
- Chas. M. Pogue ✓, Axman.
- Tom Jones ✓, Axman.
- Arthur Pogue ✓, Flagman.

FINAL OATH OF ASSISTANTS

We hereby certify that we assisted Philip Conzen, United States Deputy Surveyor, in surveying all

those parts or portions of the West and North boundaries of T. 18 S. R. 16 E.

of the Gila and Salt River 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

- John M. Trapey ✓, Chainman.
- H. W. Huggins ✓, Chainman.
- A. A. Lyright ✓, Moundman.
- Mmanuel Salazar ✓, Moundman.
- Chas M Pogue ✓, Axman.
- Tom Jones ✓, Axman.
- Arthur Pogue ✓, Flagman.

Subscribed and sworn to before me this 17th day of December, 1894



H. G. Power
NOTARY PUBLIC,
YUMA COUNTY, ARIZONA
MY COMMISSION EXPIRES

April 27th 1908

BOOK 1856

I, Philip Coutzen, 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 15th day of March, 1904, 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 West and North boundaries of T. 18 S. R. 16 E

of the Gila and Salt River 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; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Philip Coutzen
United States Deputy Surveyor.

Subscribed by said Philip Coutzen, and sworn to before me }
this 17th day of December, 1904



Clinton D. Hoover,
Clerk U.S. District Court,
First District of Arizona.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz., May 1st 1915
The foregoing field notes of the survey of the North and West boundaries of T. 18 S. R. 16 E. of the Gila and Salt River Base and Meridian, in the territory of Arizona

executed by Philip Coutzen, U.S. deputy surveyor under his contract No. 115, dated March 15, 1904, 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.