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*1855
June 29 1904*

1855

Book "A"

FIELD NOTES

BOOK 1855

RE-
OF THE SURVEY OF THE

East and South Boundaries

- of -
T. 18 S. R. 16 E.

-1855-

1855

Of the Gila ^{and} Salt River Meridian,

AS SURVEYED BY

Philip Contzen

, United States Deputy Surveyor,

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

Survey commenced *July 27th*, *1894*

Survey completed *July 28th*, *1894*

NAMES AND DUTIES OF ASSISTANTS.

John M. Traper,	chairman
H. W. Huggins,	chairman
A. A. Spright,	moundman
Manuel Salazar,	moundman
Charles M. Pogue,	axeman
Tom Jones,	axeman
Arthur Pogue,	flagman

BOOK 1855 BOOK 1855

PRELIMINARY OATHS OF ASSISTANTS.

WE, John M. Trayer and Harry W. Suggins
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

East and South boundaries of T. 18 S. R. 16 E

John M. Trayer, Chainman.

Harry W. Suggins, 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. Lynght 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

East and South boundaries of T. 18 S. R. 16 E

A. A. Lynght, 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

East and South 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

re-survey of the East and South 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

BOOK 1855

INDEX DIAGRAM.

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Meanders Page.....

Chains

For the purpose of testing the measurement and alignment of the E. and S. bds. of this Sp., which from previous knowledge derived from private surveys I know to be true, I proceed to the cor. of Sps. 17 and 18 S., Rs. 16 and 17 E., which is a stone marked and witnessed, as described by the surveyor general, which I change to cor. of Sps. 17 and 18 S. R. 17 E., destroying all traces of the old cor. Bars to fish old cor. as follows:

Set a sandstone, 18x6x5 ins. in the ground for cor. of Sps. 17 and 18 S., R. ~~16~~¹⁷ E., marked with 6 notches on N. and S. edges; from which

Amesquite, 18 ins. diam., bears N. 22 1/2° E., 204 lbs. dist., marked S 17 S R 17 E S 1 B S.

A prairie rock, 8 ins. diam., bears S. 6° E., 107 lbs. dist., marked S 18 S R 17 E S 1 B S.; and raise a mound of stone, 3 ft. base, 1 1/2 ft. high, E. of cor.

I then I proceed to resurvey the E. bdy of S. 18 S., R. 16 E.

Survey commenced July 24, 1904, and executed with a Young and Sons light mountain transit, No. 5604, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes arc, which is also the true 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 proceed as follows:

At the above described Sp. cor., latitude 31° 54' N
 longitude 110° 38' W ; I set off 31° 54' N. on the lat. arc, 19° 59' N on the decl. arc; and at 3⁰⁰ p. m., l. m. t. determined with the solar meridian and mark a point thereof; on a stone firmly set in the ground 5 chs. N. of the cor.

At 11¹⁵ 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 27, 1904.

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Stones

July 25: At 6^h 50^m a.m., l.m.t., I lay off the azimuth of Polaris, 1° 25' to the west and mark the meridian thus determined by cutting a small groove in the stone set July 24, on which the meridian falls 0.3 in. east of the mark determined by the solar.

At 7^h 15^m a.m., l.m.t., I set off 31° 54' from the lat. arc, 19° 42' from the decl. arc and mark a point in the meridian determined with the solar by a cross on the stone a broad set 5 chs. N. of my station. This mark falls 0.3 in. west 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 0' 16" west of the meridian established by the Polaris observation. Therefore I conclude that the adjustments of the instrument are satisfactory.

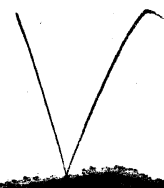
The magnetic bearing of the true meridian at 8^h 00^m a.m., is N. 12° 45' W. the angle thus determined gives the mag. decl. 12° 45' E

From the S.W. cor. the old 1/4 sec. cor. bears S. 0° 12' E.

Thence S. 700
S. 0° 12' E. bdy. of S. 16, S. 18 S., R. 17 E.
Over mountainous land, descending.

- 2.60 Gulch, 30 lbs. wide, course W. westerly; ascend.
- 15.50 Ridge, 175 ft. above gulch, bears N. W. westerly and S. easterly; thence along N. slope.
- 21.00 Descend.
- 26.00 Gulch, 100 ft. below top of ridge, 15 lbs. wide, course N. W. westerly; ascend.
- 31.00 Spur, 120 ft. above gulch, extending N. W. westerly; descend.
- 36.00 Gulch 20 lbs. wide, course N. W. westerly; ascend.
- 39.48 Old 1/4 sec. cor., which is a stone and scattered mound of stone. I establish cor. at same point as follows:
Bench mark ^{with 1/2 in. by 6 in. bar} stone and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, E. of cor. Pits impracticable.
- From this cor. old sec. cor. bears S. 0° 12' E
- Thence S. 700 S. 0° 12' E
- 150 N. slope of mountain top bears 3 chs. E.; descend.
- 17.60 Gulch, 175 ft. below top of slope, 20 lbs. wide, course W. westerly; ascend.
- 24.00 Spur, 175 ft. above gulch, extending W. westerly; descend.

see page 2
supplemental
notes for this
mill.



31.70 Gulch, 75 ft. below top of spool, 10 lbs. wide, course N. N. W. to S. S. E.; ascend.

39.40 Old sec. ev. which is a decayed post lying on the ground, with marks obliterated. Reestablish ev. at same point for ev. of sec. 6 and 7, S. 18 S., R. 17 E., as follows.

OK
Set a quartzite stone, 20 x 14 x 10 ins., 15 ins. in the ground, marked with 1 notch on N. and 5 notches on S. edge, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, E. of ev. Site impracticable. Land, mountainous.

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

Timber, scattering mesquite.

Mountainous land, 78.88 chs.

From the above ev. old 1/4 sec. ev. bears S.

Shurfow & run

S. on W. bay of S. E.

Over mountainous land, ascending.

9.00 Top of N. slope of mountain; descend over quartzite ledges.

17.50 Enter valley bears N. N. W. and S. S. E.

22.00 Descend abruptly 50 ft.; enter gulch, course N. N. W. to S. S. E.

26.30 Cross gulch.

39.88 Old 1/4 sec. ev. which is a quartzite and scattered mound of stone. Reestablish ev. at same point as follows.

OK
Remark stone with 4 in E. face

and rebuild mound of stone, 2 ft. base, 1 1/2 ft. high E. of ev. Site impracticable.

From this ev. old sec. ev. bears S.

Shurfow & run S.

15.30 Gulch, 15 lbs. wide, course N. N. W. to S. S. E.; cross valley and begin ascent along N. slope of mountain.

21.50 Bluff 60 ft. high.

31.50 Top of slope, 300 ft. above gulch, descend over quartzite bluff.

37.00 Gulch, 170 below top of slope, 15 lbs. wide, course N. N. W. to S. S. E.; ascend.

39.95 Old sec. ev. which is a quartzite stone and a scattered mound of stone; reestablish ev. at same point for ev. of secs. 7 and 18, S. 18 S., R. 17 E., as follows.

OK
Remark stone, with 2 notches on N. and 4 notches on S. edge, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, E. of ev. Site impracticable.

Land, mountainous and level.

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

see pages
supplemental
notes for this
mill

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6.11 am

Timber, a few musquitos.
Mountainous land, 46.53 chs.
July 25: At this cor. I set off by 19° 38' N on the decl. arc
and at 12° 5' m. t., observe the sun on the meridian. The
resulting lat. is 31° 52' N or within 1' of the proper
lat.

From the cor. old 1/4 sec. cor. bears S.

Sharpen S run
S. on W. bay of S 18.

Over mountainous land descending.

- .50 Gulch, 15 lbs. wide, course W. N. W. westerly.
- 13.60 Spur, 130 ft. above gulch, extending W. westerly; descend.
- 19.30 Deep gulch, 200 ft. below top of spur, 20 lbs. wide, course
W. westerly; ascend.
- 27.30 Bluff 60 ft. high.
- 31.00 Spur, 300 ft. above gulch, extending W. westerly; ascend.
- 39.58 Old 1/4 sec. cor. which is a stone and scattered mound of stone

Re-establish cor. at ^{same} point as follows:

Remark stone 1/4 on E. face and raised mound 2 ft. base,
1/2 ft. high, E. of cor. Pits impracticable.

From this cor. old sec. cor. bears S.

Sharpen S run S.

- 9.11 Ridge, bears N. W. and S. E.; descend.
- 16.90 Shaft, 115 lbs. N.
- 25.50 Gulch, 100 ft. below ridge, 20 lbs. wide, course S. Easterly; ascend
- 34.50 Top of E. slope of ridge, 150 ft. above gulch; descend.
- 37.70 Descend bluff 50 ft high
- 39.40 Old sec. cor. which is a decayed post lying on the ground.

Re-establish cor. at same point as follows, for cor. of sec. 18 and
OK 19, S 18 S, R. 17 E.

Set a limestone, 18 x 14 x 5 ins., 12 ins. in the ground, marked with
3 nails on N. and S. edges; and raise a mound of stone, 2 ft.
base, 1/2 ft. high, E. of cor. Pits impracticable.

Land, mountainous.

Soil, stony and rocky; 4th rate.

Timber, a few musquitos and laurel; midgrowth, laurel and oak

Mountainous land, 78.98 chs.

From the above cor. old 1/4 sec. cor. bears S.

Sharpen S run

Chain

- S. on W. bdy. of sres. 19.
- Over mountainous land, descending.
- 9.00 W. side gulch, 150 ft. below ev., 15 lbs. wide, course W. to E.; ascend
- 17.00 Top of N.W. sloped ridge; descend
- 30.20 Gulch, 150 ft. below slope of ridge, 20 lbs. wide, course N.; ascend
- 32.00 Top of ridge, bears N. E. and S. N.; timber along E. slope.
- 39.38 Old $\frac{1}{4}$ sres. ev. which is a decayed post with marks obliterated.
- Reestablish ev. at same point as follows:
- Set a sandstone, 18 x 10 x 6 ins, 12 ins in the ground, marked $\frac{1}{4}$ on E. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of ev. Site impracticable.
- From this ev. old sres. ev. bears S.
- Therefore run S.
- 6.00 Ascend.
- 9.00 Enter dense mosquito undergrowth, bears E. and W.
- 18.00 Enter cedar timber, bears E. and W.
- 19.00 Gulch, 30 lbs. wide, course W. to E.; ascend
- 26.50 Ridge, 100 ft. above gulch, bears N. W. and S. E.; descend.
- 30.20 Gulch, 20 lbs. wide, course W. to E.; ascend. Lower dense brush
- 38.80 Old sres. ev. which is a decayed post.
- Reestablish ev. at same point for ev. of sres. ^{24, 28} 19 and 30, S. 18 S., B. 17 E., as follows:
- Set a sandstone, 18 x 8 x 6 ins, 12 ins. in the ground, marked with 4 notches on N. and 2 notches on S. edge; from which a mosquito, 12 ins. diam., bears N. 49 $\frac{3}{4}$ E., 227 lbs. dist., marked S. 18 S., B. 17 E. & 19 B. S.; no other trees within limits, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of ev.
- Good, mountainous.
- Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.
- Timber, cedar and scattering mosquito; undergrowth, mosquito, palmilla, and cacti.
- Mountainous or land covered with dense undergrowth, 78.18 chs

July 25, 1904.

July 26: At 7²⁰ a.m., l.m.t., set off 3105' N on the lat. arc; ^{12° 29' 7"} ~~12° 29' 7"~~ on the decl. arc; and determine a meridian with the solar at the ev. of sres. 19 and 30.

From this ev. old $\frac{1}{4}$ sres. ev. bears S.

Therefore run S.

S. on W. bdy of sres. 30.

Over mountainous land, ascending.

BOOK 1855

- Chain
9.00 Top of E. slope of ridge; ascend through scattering cedar and
mosquito timber.
- 36.40 Very wash, 250 ft. below slope, 40 lbs. incl. course W. westerly; ascend.
- 39.50 Old $\frac{1}{2}$ sec. ev. point determined from old bearing trans. Reestablish
ev. at same point as follows:
Set a porphyry stem 18 x 10 x 6 ins., 12 ins. in the ground, marked $\frac{1}{2}$ on
E. face, from which
A cedar 8 ins. diam., bears S. 13 $\frac{1}{2}$ ° E., 74 lbs. dist., marked $\frac{1}{2}$
S. 30° S.
A cedar, 8 ins. diam., bears S. 46° E., 125 lbs. dist., marked $\frac{1}{2}$
S 30° S.; and raised a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high,
E. of ev.
From this ev. old sec. ev. bears S.
Shore for 8 run S
- 2.00 Spur, extending N. W.; ascend.
- 4.70 Very wash, 30 lbs. incl. course N. W. westerly; ascend.
- 09.65 Old sec. ev. which is ^{old} first lying on the ground, Reestablish
ev. at same point for ev. of secs. 30 and 31, S. 18 S., R. 17 E.; as
follows:
Set a porphyry stem, 24, 12 x 4, 15 ins. in the ground, marked
with 5 notches on N. and 7 notch on S. edge, from which
A cedar, (old B.S. which I remark) 24 ins. diam., bears N. 83° E., 38
lbs. dist., marked S. 18 S. R. 17 E. S. 30° S.
A cedar, (old B.S.) 24 ins. diam., bears S. 70° E., 168 lbs. dist.,
marked S. 18 S. R. 17 E. S. 31° S.; and raised a mound of stone
2 ft. base, $\frac{1}{2}$ ft. high, E. of ev.
Land, mountainous.
Soil, generally brown and stony; 2nd, 3rd and 4th cuts.
Timber, scattering cedar, mosquito and hackberry; undergrowth,
mosquito, *trouta fraxinella* and earth.
Mountainous land, 79.15 chs.
This ev. stands 250 ft. above gulch.
-
- From the above ev. old $\frac{1}{2}$ sec. ev. bears S.
Shore for 8 run
S. on W. bdy. of sec. 31.
Over mountainous land, ascending, through scattering cedar
timber and bush.
- 13.00 Low cedar and bush, bear E. and W.
- 15.00 Bridge, 100 ft. above ev. bears E. and W.; ascend.
- 32.00 Summit, 120 ft. below ridge; into draw, course southerly.

Chain
39.62 Old $\frac{1}{4}$ sec. cor. which is a decayed stake lying on the ground, with marks obliterated. Reestablish cor. at same point as follows:
OK
Set a sandstone, $18 \times 10 \times 8$ ins, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on E. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of cor.
From this cor. old st. cor. bears ~~S. 80° 55' E.~~
Shirafon & run ~~S. 80° 55' E.~~
6.00 Draw across, course E. S. Easterly, across through scattering oak.
21.00 Ridge, 100 ft. above draw, low oak, descend.
34.00 Draw, 140 ft. below, course southerly.
39.00 Old $\frac{1}{4}$ sec. cor. which is a decayed post lying on the ground. Reestablish cor. at same point as follows:
OK
Set a malpais stone, $18 \times 8 \times 8$ ins, 12 ins. in the ground, for cor. Sps. 18 and 19 S., Rs. 16 and 17 E., marked with 6 notches on each edge, and raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor.
Ground, mountainous and level.
Soil, gravelly loam and stony, 2nd, and 4th rates.
Timber, scattering magnolia and oak, undergrowth, vinorana and cacti
Mountainous land, 46.00 chs.

July 26, 1914.

Borough of the S. Edge of S. 18 S. R. 16 E.
July 27: At 7^h 11^m a.m. l.m.t., I set off $31^{\circ} 49' N$ on the lat., $19^{\circ} 15' W$ on the decl. arc, and determined a true meridian with the solar at the cor. of Sps. 18 and 19 S., Rs. 16 and 17 E.
From cor. old $\frac{1}{4}$ sec. cor. bears S. $88^{\circ} 30'$ W.
Shirafon & run
S. $88^{\circ} 30'$ W., on the N. edge of sec. 1, S. 19 S., R. 16 E.
Over mountainous land, ascending from draw.
2.50 Spur, extending S. E., descend.
6.50 Draw, 60 ft. below spur, course S., ascend
11.00 Spur, 75 ft. above draw, extending S.
16.00 Descend
21.20 Draw, 75 ft. below spur, 60 lbs. wide, course S., ascend.
24.00 Spur, 75 ft. above draw, bears N. and S.; descend.
27.50 Draw, 60 ft. below spur, 1 ch. wide, course S., ascend.
33.00 Spur, 80 ft. above draw, extending S.; descend.
40.37 Old decayed stake lying on ground. Reestablish cor. at

BOOK 1855

chain

OK

same point as follows:

Set a granite stone, 18 x 10 x 8 ins, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on S. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high S. of cor.

From this cor. old sec. cor. bears N.

Shoreford & run N.

150 Draw 80 ft. below spur, 1 ch. wide, course S., ascend.

500 Spur, bears N. and S., descend.

1700 Enter draw, course S. Easterly

23.50 Dry wash, 40 lbs. wide, course S. Easterly.

34.00 Level draw, and ascend through scattering oak timber.

44.00 Old sec. cor. which is a scattered mound of stone. Reestablish cor. at same point as follows:

Set a sandstone, 18 x 8 x 6 ins ^{12 ins} in the ground, for cor. of sec. $\frac{1}{4}$ cor. marked with 1 notch on E. and 5 notches on W. side, from which

~~An oak, 8 ins. diam., bears N. 67° E., 110 lbs. dist., marked S 10 S R 16 E S 25 B S.~~

OK An oak, 12 ins. diam., bears S 27° E., 213 lbs. dist., marked S 19 S R 16 E S 1 B S.; no other trees within limit, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.

Ground, mountains and level.

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

Timber, scattering oak.

Mountains land, 63.45 chs.

From the above cor. old $\frac{1}{4}$ sec. cor. bears N.

Shore & run

N. on N. bdy of sec. 2. ascending

500 Spur, bears N. and S., thence along N. slope of ridge, over spur extending ^{N.} through scattering oak timber.

800 Old road, bears N. and S.

39.87 Old $\frac{1}{4}$ sec. cor. which is a scattered mound of stone. Reestablish cor. at same point as follows:

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 S. face, from which

An oak (old B S), 10 ins. diam., bears S. 22 1/2° E., 49 lbs. dist., marked $\frac{1}{4}$ S 2 B S.

~~An oak (old B S), 10 ins. diam., bears N. 37 1/2° W., 52 lbs. dist., marked $\frac{1}{4}$ S 25 B S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.~~

chains

From this ev. old s.e. ev. bears N.

Shrewport & run N.

39.67

39.67

Old s.e. ev. which is a scattered mound of stone. Reestablish ev. at same point as follows:

Set a sandstone, 18 x 10 x 6 ins, 12 ins. in the ground, for ev. of s.e. 2, and 3, marked with 2 notches on E. and 4 notches on N. ridge, from which

An oak, 11 ins. diam., bears S. 13 1/4 N, 19 1/2 lbs. dist., marked S 19 S R 16 E S 3 1/3 S. 20 1/2 lbs. tree in same point, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, E. of ev.

Land, mountainous.

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

Timber, scattering oak.

Mountainous land, 79.54 chs.

July 27: At this ev. I set off 19° 12' N on the dial. arc; and at 12^h 6^m l. m. t., observed the sun on the meridian; the resulting lat. is 31° 49' N or within of the proper lat.

From the above ev. old 1/4 s.e. ev. bears N.

Shrewport & run

N. side of body of s.e. 2.

Over mountainous land, descending through oak timber.

4.11 Small gulch, course northerly; ascend along N. slope of ridge over spurs extending northerly

39.74 Old 1/4 s.e. ev. which is a decayed post in a mound of stone. Reestablish ev. at same point as follows:

Set a sandstone, 18 x 12 x 5 ins, 12 ins in the ground, for 1/4 s.e. ev. marked 1/4 on E. face, from which

An oak, 11 ins. diam., bears S. 60° E, 114 lbs. dist., marked 1/4 S 3 1/3 S.

An oak, 10 ins. diam., bears S. 21 1/2 N, 100 lbs. dist., marked 1/4 S 3 1/3 S, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, E. of ev.

From this ev. old s.e. ev. bears N.

Shrewport & run N.

8.110 Large oak, bears N. W. and S. E.

11.000 Ridge, bears N. W. and S. E., thence over rolling land.

39.74 Old s.e. ev. which is an old stake. Reestablish ev. at same point as follows:

Set a sandstone, 18 x 12 x 10 ins., 12 ins. in the ground, for ev. of s.e. 3, and 4, marked with 2 notches on E. and N. ridge, from which

An oak, 11 ins. diam., bears S. 88 1/4 E, 74 lbs. dist., marked

Chain

S 19 S R 16 E S 3 B S; no other trees within limit, and raised mound of stone, 2 ft. base, 1 1/2 ft high, S. of ev.
Land, mountainous and rolling
Soil, gravelly loam and stone; 2nd, 3rd and 4th rows.
Timber, oak
Mountainous land, 57.74 chs.

From the above ev. old 1/4 sec. ev. bears N.

Shiraford & run
N. east N. Edy. of sec 4.

Over mountainous land, along N. slope ridge now 5/8ms' extending N. through scattering oak.

- 12.50 Dry wash, 15 lbs. wide, course N. into small bush.
- 29.11 Draw, 60 lbs. wide, course N., over broken N. slopes.
- 39.62 Old 1/4 sec ev. which is a scattered mound of stone. Reestablish

ev. at same point as follows:

Set a granite stone, 18 x 10 x 8 ins, 12 ins. in the ground, for 1/4 sec. marked 1/4 on S. face, from which

An oak, 10 ins. diam, bears S. 43 1/2° E., 55 lbs. dist., marked 1/4 S 4 B S; no other trees within limit, and raised a mound

of stone, 2 ft. high, S. of ev. Site impracticable.

From this ev. old sec. ev. bears N.

Shiraford & run N.

- 3.85 Dry wash, 10 lbs. wide, course N.
- 17.81 Dry wash, 10 lbs. wide, course N. over broken N. slopes.
- 33.51 Draw, 1 ch wide, course N. over broken N. slopes.
- 39.62 Old sec. ev. point determined from old bearing tree.

Reestablish ev. at same point as follows:

Set a sandstone, 14 x 10 x 8 ins, 12 ins in the ground, for ev. of sec 4, marked with 4 notches on E. and 2 notches on N. side. from which an oak, 9 ins. diam, bears S 89° E., 137 lbs. dist., marked S 19 S R 16 E S 4 B S; no other trees within limit and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of ev. Site impracticable.

Land, mountainous.

Soil, gravelly loam and stone; 2nd, 3rd and 4th rows.
Timber, scattering oak; undergrowth, oak.

Mountainous, or land covered with dense undergrowth, 79.24 chs.

July 27, 1914.

July 28: At 4^h 15^m a.m., l.m.t., B set off 31° 49' on the

Chain

the lat. cor. ^{19° 2' 37"} ~~19° 1' 44"~~ on the decl. cor.; and set a witness a meridian with the solar at the cor. of sres 4, 5, 32 and 33.

From this cor. old $\frac{1}{4}$ sec. cor. bears $\# S 89^{\circ} 50' W$
Therefore from

$S 89^{\circ} 50'$ W on N. body of sres 5.

Over mountainous land, along N. slope of ridge, through scattering oak timber and dense brush.

- 16.30 Dry wash, 10 lbs. wide, a turner over spurs of ridge, extending N.
- 22.00 Dry wash, 10 lbs. wide, crosses N. ever broken N. spurs.
- 38.00 Idem, 10 lbs. wide, crosses N. ever broken N. spurs.
- 38.64 Old $\frac{1}{4}$ sec. cor. which is a decayed stake lying on the ground.

Re-establish cor. at same point as follows.

Set a sandstone, 18 x 10 x 4 ins, 12 ins in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on S. face, from which

An oak, 10 ins diam, bears S. 3° E. 140 lbs. dist, marked $\frac{1}{4}$ S 5 B S.

An oak, 10 ins. diam, bears S 15 $\frac{1}{2}$ W. 187 lbs. dist, marked $\frac{1}{4}$ S 5 B S.

and raise a mound of stone, 2 ft. base, 12 ft. high, S. of cor.

From this cor. old sec. cor. bears $\# S 89^{\circ} 50' W$.

Therefore from $\# S 89^{\circ} 50' W$

34.30 Begin descent from slope of ridge; leave dense brush.

37.41 Enter Burial canyon, course N. N. W. strictly.

~~38.65~~
~~39.05~~
41.15 Cor. point in wash, determined by old S. D. course N. W.

Set a quartzite stone, 18 x 9 x 5 ins, for witness cor. to re-establish cor. of sres 5 and 6, marked W. 6, with 5 notches on E. and 1 notch on N. edge, from which

An oak, 10 ins. diam, bears S. 55° W, 73 lbs. dist, marked W 6 S 19 S R 16 E S 6 B S; no other tree within limit, and raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor. Site impracticable.

Land, mountainous.

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

Timber, scattering oak

Mountainous land, covered with dense undergrowth, 77.19 chs.

From the above cor. old $\frac{1}{4}$ sec. cor. bears $\# S 89^{\circ} 45' W$
Therefore from

$S 89^{\circ} 45'$ W on N. body of sres 6, from cor. point.

In canyon, through scattering oak.

- 1.00 Road, bears N. and S.
- 2.50 Witness cor.

For 1/4 cor.
see supplemental
notes page 8

- 6 chains
7.1111 Broad canyon and as end
- 10.1111 S. slope of ridge.
- 13.00 Broad.
- 19.1111 Enter draw, E. S. E., and dense brush.
- 35.1111 Leave draw and dense brush; and as end.
- 39.4111 Old 1/4 sec. cor. which is a decayed and scattered mound of stone.
 Reestablish cor. at same point as follows:
 Set a granite stone, 18 x 12 x 5 ins, 12 ins in the ground, for 1/4 sec
 cor. marked 1/4 on S face, from which
 An oak, 6 ins diam, bears S. 67° E., 60 lbs dist, marked 1/4 S E B S.
 and raise a mound of stone, 2 ft. base, 1 1/2 ft high, S. of cor.
 From this cor. old S. E. cor. bears S. 89° 45' W.
 Show for S run S 89° 45' W.
- 11.1111 Ridge, bears N. W. and S. E.; as end.
- 5-50 Gulch, 75 ft. below top of ridge, in the ridge, course S. E. and S.;
 as end.
- 12.1111 Ridge, 100 ft. above gulch, bears N. W. and S. E.; as end
- 17.1111 Gulch, 75 ft. below ridge, 15 lbs. wide, course S. E.; as end.
- 23.1111 S. slope of ridge, 100 ft. above gulch, as end.
- 34.5111 Gulch, 75 ft. below top of slope of ridge, course S. E.; as end.
- 39.46 Old S. E. cor. which is a decayed stake lying on the ground. Re-
 establish cor. at same point as follows:
 Set a granite stone, 18 x 10 x 8 ins, 12 ins. in the ground, for cor
 of S 19 S R 16 E & S 15 E & S 16 E, marked with 6 notch on each
 edge, from which
 An oak, 12 ins. diam, bears S. 11° E., 323 lbs. dist., marked
 S 19 S R 16 E & S 16 E; An oak 12 ins. diam, bears S 12 1/2° W, 326
 lbs. dist., marked S 19 S R 15 E & S 16 E; and other trees, and raised a
 3 ft. base, 2 1/2 ft. high, S. of cor.
 Ground, mountainous.
 Soil, gravelly loam and stony; and under 4th rate.
 Timber scattering oak and mesquite, undergrowth, mesquite and laurel.
 Mountainous, or land covered with dense undergrowth, 78.86 ch.

July 28, 1914.

Philip Contzen
W. S. Deputy Surveyor.

For red ink corrections see deputy's letters of
Jan'y. 26, 1915. and May 10, 1915.

LIST OF NAMES.

A list of the names of the individuals employed by Philip Couzler

....., 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 ^{re} the

East and South boundaries of T. 18 S. R. 16 E

showing the respective capacities in which they acted:

- John M. Traylor ✓, Chainman.
- H. W. Huggins ✓, Chainman.
- A. A. Lygght ✓, Moundman.
- Manuel Salazar ✓, Moundman.
- Chas. M. Pogue ✓, Axman.
- Tom Jones ✓, Axman.
- Arthur Pogue ✓, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Philip Couzler

....., United States Deputy Surveyor, in ^{re} surveying all those parts or portions of the East and South boundaries of T. 18 S. R. 16 E

..... of the Gila & 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. Traylor ✓, Chainman.
- H. W. Huggins ✓, Chainman.
- A. A. Lygght ✓, Moundman.
- Manuel 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,
PIMA CO
AZONA
MY COMMISSION EXPIRES

April 27th 1908

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BOOK 1855

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Philip Contzen, 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, 1894, 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 the East and South boundaries of T. 18 S R. 16 E

_____ of the Gila 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 Contzen
United States Deputy Surveyor.

Subscribed by said Philip Contzen, and sworn to before me }
this 17th day of December, 1894

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



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, 19th May 1st 1905, 189

The foregoing field notes of the survey of resurvey of the South and East 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 Contzen, U.S. deputy Surveyor under his contract No. 113, dated March 5, 1904, 189, 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.