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BOOK 2147

FIELD NOTES

and frac. W. OF THE SURVEY OF THE

2147 North boundary of T. 20 S. R. 11 E 2147
~~South boundary of T. 22 S. R. 9 E~~

2147

Of the *Sila* of Salt River Base ^{and} Meridian,

Camp

AS SURVEYED BY

Philip Couzger, United States Deputy Surveyor,

Under his Contract No. *144*, dated *April 11*, 1907

Survey commenced *October 1*, 1907

Survey completed *November 29*, 1907

6-151

2147

2147

2147

1A #3

BOOK 2147

NAMES AND DUTIES OF ASSISTANTS.

Walter Percival	Chairman
Chris Olsen	Chairman
Arthur M. Pogue	Wardman
Lewy G. Willets	Asst man
L. W. Witacre	Flag man

174
1B

BOOK 2147

INDEX DIAGRAM.

Township 20 S., Range 11 E

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North - boundary

South boundary

T. 22 S. R. 9 E

Meanders Page.....

#512

PRELIMINARY OATHS OF ASSISTANTS.

BOOK 2147

WE, Walter Percival and Chris Olsen
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

North boundary of T. 20 S. R. 11 E and South boundary of T. 22 S. R. 9 E.

Walter Percival, Chairman.

Chris Olsen, Chairman.

Subscribed and sworn to before me this 1st
day of October, 1907



Philip Coutzen
U. S. Deputy Surveyor
No notary available

WE, Arthur M. Pogue 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

North boundary of T. 20 S. R. 11 E and South boundary of T. 22 S. R. 9 E.

Arthur M. Pogue, Moundman.

Moundman.

Subscribed and sworn to before me this 1st
day of October, 1907



Philip Coutzen
U. S. Deputy Surveyor
No notary available

WE, Henry G. Willett 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

North boundary of T. 20 S. R. 11 E and South boundary of T. 22 S. R. 9 E.

Henry G. Willett, Axman.

Axman.

Subscribed and sworn to before me this 1st
day of October, 1907



Philip Coutzen
U. S. Deputy Surveyor
No notary available

I, L. W. Whitacre, 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

North boundary of T. 20 S. R. 11 E and South boundary of T. 22 S. R. 9 E.

L. W. Whitacre, Flagman.

Flagman.

Subscribed and sworn to before me this 1st
day of October, 1907



Philip Coutzen
U. S. Deputy Surveyor
No notary available

Chains.

Survey commenced October 1, 1907, and executed with a Young and Sons' transit, No. 7934, with Smith's solar attachment; the horizontal limb having two double verniers placed opposite to each other and reading to 30" of arc.

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

I begin at the cor. of Tps. 19 and 20 S., Rs. 11 and 12 E., which is a malpais stone, firmly set, marked and witnessed as described by the Surveyor General.

At this point in latitude $31^{\circ} 43' N.$; longitude $111^{\circ} 10' 19'' W.$; and at 6h 53m. P.M., by my watch, which is correct local mean time, I observe Polaris at eastern elongation, in accordance with the instructions in the Manual, and mark the line thus determined, by a tack driven in a wooden peg set in the ground 5 chs. north of my station. October 1, 1907.

October 2, 1907: At 7.00 A.M., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 24'$ to the West, and mark the true meridian thus determined by cutting a mark on a stone firmly set in the ground, west of the point established last night; the magnetic bearing of said true meridian is N. $13^{\circ} 00' W.$, which gives the magnetic declination $13^{\circ} E.$

Thence I run,

West bet. secs. 1 and 36.

Over rolling land, through dense mesquite and tesota undergrowth.

3.55 Dry wash, high bank, 20 ft. high, course SE.

Enter draw; and dense mesquite timber.

27.35 Leave draw, course SE, and enter rolling land. Through dense mesquite and tesota undergrowth.

40.00 Set a quartzite rock, 22 x 8 x 8 ins., 16 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. From which,

A mesquite 8 ins. dia. hrs. N. $5\frac{1}{2}^{\circ} E.$, 85 lks. dist. marked $\frac{1}{4}$ S 36 BT.

A mesquite 10 ins. dia. hrs. S. $1^{\circ} W.$, 141 lks. dist., marked $\frac{1}{4}$ S 1 BT.

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

80.00 Set a granite stone 20 x 10 x 12 ins., 15 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked with 1 notch on E. and 5 notches on W. edges, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, rolling.

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

Timber, mesquite and tesota; undergrowth, mesquite, tesota and casti.

Land covered with dense undergrowth, or land exceptionally difficult to survey, 80.00 chs.

West bet. secs. 2 and 35.

Over rolling land, through dense mesquite and tesota undergrowth.

5.90 Dry wash, 20 lks. wide, course NE.

40.00 Set a porphyry stone 24 x 6 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, N. of cor. Pits impracticable.

80.00 Set a malpais stone 22 x 10 x 12 ins., 16 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, marked with 2 notches on E. and 4 notches on W. edges, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, rolling.

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

Timber, mesquite and tesota; undergrowth, mesquite,

Chains.

teseta, casti and seapweed and pale verde.
Land covered with dense undergrowth, or exceptionally difficult to survey, 80.00 chs.

West bet. secs. 3 and 34.
Over rolling land, through dense mesquite and teseta undergrowth.

40.00 Set a granite stone 22 x 10 x 8 ins., 16 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.

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

80.00 Set a Granite stone 22 x 8 x 10 ins., 16 ins. in the ground for cor. to secs. 3, 4, 33 and 34, marked with 3 notches on E. and W. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling.

Soil, sandy, gravelly and stony; 2nd, 3rd and 4th rate. Timber, mesquite and teseta; undergrowth, mesquite, teseta and casti.

Land, covered with dense undergrowth, or land exceptionally difficult to survey, 80.00 chs.

West bet. secs. 4 and 33.
Over rolling mountainous land.

37.00 Dry wash, 60 lks. wide, course SE.

40.00 Set a malpais stone 20 x 8 x 10 ins., 15 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

62.75 Dry wash, 25 lks. wide, course NE.

Enter rough rocky hills.

80.00 Set a malpais stone 22 x 10 x 10 ins., 16 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked with 4 notches on E. and 2 notches on W. edges, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous and hilly.

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

Timber, scattering mesquite, pale verde and teseta.

Land mountainous, or exceptionally difficult to survey, 80.00 chs.

West bet. secs. 5 and 32.

Over mountainous land.

12.30 Dry wash, 15 lks. wide, course SE.

Ascend steep mountain slope.

36.20 Top of pass or saddle.

40.00 A malpais stone in place 36 x 18 ins. 18 ins. above 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.

55.15 Dry wash, 15 lks. wide, course N. Ascend.

80.00 Set a porphyry stone 20 x 8 x 8 ins., 15 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 5 notches on E. and 1 notch on W. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, rough and mountainous.

Soil, stony and rocky, 4th rate.

No timber.

Land mountainous or exceptionally difficult to survey, 80.00 chs.

West bet. secs. 6 and 31.

Over mountainous land, ascending over rough boulders.

25.00 Top of spur, hrs. N. and S. Descend.

34.50 Gulch, 15 lks. wide, course SE. Ascend.

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

Chains.

55.60
73.60

Guleh, 20 lks. wide, course SE. Ascend over bluffs. Intersect W. hdy. of Tp. at a point 5.50 chs. N. of cor. of Tps. 19 and 20 S., Rs. 10 and 11 East. Faint traces of old corners visible.

Set a malpais stone 18 x 12 x 10 ins., 12 ins. in the ground for closing cor. of Tps. 19 and 20 S., R. 11 E., marked CC on E. with 6 grooves on N., S., and E. faces, and raise a mound of stone 2 ft. base, 1½ ft. high E. of cor. Pits impracticable.

Land, rough and mountainous.

Soil, rocky; 4th rate.

Timber, a few mesquite.

Land, mountainous, or exceptionally difficult to survey, 73.60 chs.

October 2, 1907.

General Description.

This line runs over rough and mountainous land. Tp. 19 S., R. 11 E. is rolling and mountainous, and there are several settlers in the township and it should be subdivided.

There is water in Tp. 19 S., R. 11 E.

Philip Couzess
U. S. Deputy Surveyor.

Chains.

Oct. 4, 1907. At 7h. 30m. a.m., l.m.t., I set off $31^{\circ}42'N.$ on the lat. arc, and $4^{\circ}01'S.$ on the decl. arc, and determine meridian at the $\frac{1}{4}$ cor. of secs. 7 and 12, just re-established by me.

Thence I run north, bet. secs. 7 and 12.
 Gulch, 5 lks., course W.; ascend.
 Ascend over bluffs.
 Top of high bluff.
 Top of ridge, brs. E. and W.
 Descend over bluffs and large rocks.
 A sandstone boulder in place $4 \times 3 \times 2$ ft. above ground, which I mark with a cross (x) for exact cor. point, for secs. 12 & 12 and 1 notch N. and 5 notches S. of cross, from which,
 An oak, 24 ins. diam., brs. S. $27^{\circ}W.$, 142 lks., marked
 T 20 S R 10 E S 12 B T.
 No other trees available.

I raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, west of cor.

Mountainous land.
 Soil, rocky and gravelly, 4th rate.
 Timber, a few oaks.
 Mountainous land, exceptionally difficult to survey, 40.00 chs.

North, bet. secs. 1 and 6, ascending along W. slope, over rough boulders.
 24.00 Foot of high bluff, mark a cross and W C $\frac{1}{4}$ on the S. face of ledge; raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high along side; thence I set off 10 chs. W.
 Thence I run north. 16.00 chs. + 24.00 chs. =
 40.00 Thence E. 10 chs. to a point, and over westerly slopes; impracticable to establish $\frac{1}{4}$ cor.
 64.00 Point on true line, slopes S.W.
 80.00 Paint trace of old township corner.
 Set a malpais stone $20 \times 10 \times 8$ ins., 15 ins. in the ground, for cor. of Tps. 19 and 20 S., R. 10 E. on the W. bdy. of Tp. 20 S. R. 11 E., marked with 6 notches on N. and W. edges, and raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of corner.
 Land, mountainous.
 Soil, rocky and gravelly; 3rd and 4th rate.
 Timber, scattering oaks; undergrowth, mesquite.
 Land, exceptionally difficult to survey, 80.00 chs.

October 4, 1907.

At this cor. at 11h. 49m. a.m., l.m.t., I set off $4^{\circ}6\frac{1}{2}'S.$ on the decl. arc, and observe the sun on the meridian, the resulting latitude being $31^{\circ}43\frac{1}{2}'N.$

GENERAL DESCRIPTION.

The W. boundary of Tp. 20 S. R. 11 E. runs through a very rocky country. The country is covered with an undergrowth of mesquite and tesota, with very little timber.

Chains.

Survey commenced November 27th, 1907, and executed with a Young and Sons' transit, No. 7934, with Smith's solar attachment; the horizontal limb having two double verniers placed opposite to each other and reading to 30" of arc.

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

I begin at the cor. of Tps. 22 and 23 S., Rs. 8 and 9 E. which is a stone, firmly set, marked and witnessed as described by the Surveyor General.

At this point in latitude 31° 28' N., ; longitude 111° 28' 39" W.; and at 3 hrs. 2.9m. A. M. by my watch, which is correct local mean time, I observe Polaris at western elongation, in accordance with the instructions in the Manual, and mark the line thus determined, by a tack driven in a wooden plug set in the ground five chains north of my station. November 27th, 1907.

November 28th, 1907: At 7h 30m A.M. l.m.t., I lay off the azimuth of Polaris 1° 24' to the East, and mark the true meridian thus determined by cutting a mark on a stone firmly set in the ground, west of the point established last night; the magnetic bearing of said true meridian is N. 12° 30', which gives the magnetic declination 12° 30' E..

Knowing from my survey of the north bdy. of this township that the south boundary is in excess of measurement, from the above mentioned township cor.

I run East on a random line, along the S. bdy of Tp. 22 S., R. 9 E., setting the first 1/4 sec. cor. at 52.00 chs. and the succeeding Sec. cors. and 1/4 sec. cors. at intervals of 40.00 chs; and at 492.05 chs. intersect the E. bdy. of township 70 lks. S. of Cor. to Tps. 22 and 23 S., Rs. 9 and 10 E., which is a stone, firmly set, marked and witnessed as described by the Surveyor General. The falling answers to a correction of 0° 05', or 11 2/3 lks. N. per mile counting from the SE. cor. of the Tp.; Therefore I run, S. 89° 55' W. bet. secs. 1 and 36, marking and blazing true line.

Over mountainous land.

- 2.50 Draw, course SW; ascend.
- 6.00 Top of ridge, brs. N and S.; descend.
- 15.00 Draw, 250 lks. wide, course SW, and ascend.
- 21.80 Top of ridge, slopes SE.
- 29.30 Draw, 1.00 ch. wide, course SE. Ascend.
- 40.00 Top of ridge, brs. NW and SE.
Set a porphyry stone 18 x 10 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, N. of cor. Pits impracticable.
- 42.00 Head of gulch, 10 lks. wide, course SE. Ascend.
- 47.30 Top of rocky ridge, NW and SE., descend.
- 57.85 Gulch, 10 lks. wide, course E. Comes from NW., ascend.
- 58.40 Top of ridge, course SE. Descend.
- 66.80 Tinaja Canon, 50 lks. wide, course S.; ascend.
- 77.00 Head of gulch, course NE.
- 80.00 A porphyry boulder 5' x 3' x 3' above ground, for cor. of secs. 1, 2, 35 and 36, marked with 1 notch on E. and 5 notches on W. edges, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor., from which,
An oak 6 ins. dia. brs. N. 57° E., 106 lks. dist. marked T 22 S R 9 E S 36 BT ✓
An oak 7 ins. dia. brs. S. 68 1/2° E., 97 lks. dist. marked T 23 S., R 9 E S 1 BT.
An oak 4 ins. dia. brs. S. 20 1/2° W., 45 lks. dist., marked T 23 S R 9 E S 2 BT.

Chains.

An oak 4 ins. dia. brs. N. 71° W., 22 lks. dist., marked T 22 S R 9 E S 35 BT.
 Land, mountainous.
 Soil, rocky and gravelly; 3rd and 4th rate.
 Timber, scattering oak.
 Land, mountainous, or exceptionally difficult to survey, 80.00 chs.

November 28, 1907.

November 29, 1907. At 9h 10m A.M. l.m.t., I set off 31° 28' on the lat. arc; 21°, 20' S. on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 1, 2, 35 and 36, on S. bay. of Tp.

4.50
35.30
40.00

Thence I run, S. 89° 55' W. bet. secs. 2 and 35. Ascending. Over mountainous land. Top of ridge, brs. N. and S. Descend. Gulch, 10 lks. wide, course S. Ascend. Set a sandstone 18 x 10 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. from which,

An oak 10 ins. dia. brs. N. 32 $\frac{1}{2}$ ° E., 110 lks. dist., marked $\frac{1}{4}$ S 35 BT.

An oak 7 ins. dia. brs. S. 47° E., 215 lks. dist. Marked $\frac{1}{4}$ S 2 BT.

43.00
58.00
70.00
72.00
79.00
80.00

Top of ridge, brs. N. and S. Descend. Gulch, 15 lks. wide, course S. Ascend. Top, and descent from high bluffs, N. and S. 100 ft. high.

Foot. Descend over high bluff, 200 ft. high. Set a sandstone 18 x 10 x 8 ins., 12 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, marked with 2 notches on E. and 4 notches on W. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Whence,

Cross (x) on bluff 18^W x 4^W x 3^W brs. N. 20 lks. Land, mountainous. Soil, stony; 4th rate. Timber, scattering oak. Land, mountainous or exceptionally difficult to survey, 80.00 chs.

S. 89° 55' W. bet. secs. 3 and 34. Descending.

40.00

Set a sandstone 18 x 10 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., from which,

A mesquite 8 ins. dia. brs. S. 3° 00' E., 133 lks. dist., marked $\frac{1}{4}$ S 3 BT.

A mesquite 5 ins. dia. brs. N. 28° 00' W., 162 lks. dist., marked $\frac{1}{4}$ S 34 BT.

43.00
46.00
53.00
64.00
76.00
80.00

Foot of descent. Ascend. Top of rocky ridge, brs. N. and S. Descend. Foot and enter draw, course S. Leave same draw, course S. Ascend. Top of ridge, brs. E. and W. Descend.

Set a malpais stone 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked with 3 notches on E. and W. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor., from which,

A mesquite 6 ins. diam. brs. S 58 $\frac{1}{2}$ ° E., 45 lks. dist., marked T 23 S R 9 E S 3 BT.

A mesquite 3 ins. diam. brs. N. 29° W., 90 lks. dist., marked T 22 S R 9 E S 33 BT.

No other trees within limits; pits impracticable. Land mountainous. Soil, rocky and gravelly; 2nd and 3rd rate. Timber, a few mesquite; undergrowth, mesquite and tesota.

Chains.

Land, mountainous or exceptionally difficult to survey, 80.00 chs.

S. 89° 55' W. bet. secs. 4 and 33.

Over mountainous land, through dense mesquite and tesota undergrowth.

- 3.10 Gulch, 5 lks. wide, course SW.
 10.30 Wash, 25 lks. wide, course SW. Ascend.
 18.40 Wash, 30 lks. wide, course SW. ascending.
 20.00 Road, brs. SW and NE.
 32.85 Gulch, 15 lks. wide, course SW. Ascend.
 40.00 Set a porphyry stone 18 x 8 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 stones 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 42.50 Top and descend.
 49.60 Wash, 10 lks. wide, course SW. Ascend.
 52.80 Gulch, 8 lks. wide, course SE. Ascend.
 57.50 Top and descend.
 60.00 Gulch, 10 lks. wide, course SE.
 61.60 Gulch, 10 lks. wide, course SE. Ascend.
 63.90 Gulch, 10 lks. wide, course SE. Ascend.
 71.00 Gulch, 12 lks. wide, course NE.
 72.65 Gulch, 15 lks. wide, course NE. Ascend.
 77.65 Top and descend.
 80.00 Set a granite stone 18 x 10 x 6 ins., 12 ins. in the ground, for cor. of secs. 4/5/32 and 33, marked with 4 notches on E. and 2 notches on W. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky and stony; 3rd and 4th rate.
 Timber, mesquite and tesota; undergrowth, mesquite, tesota and yucca.
 Land mountainous, covered with dense undergrowth, or exceptionally difficult to survey, 80.00 chs.

S. 89° 55' W. bet. secs. 5 and 32.

Over mountainous land, through dense mesquite timber and yucca. Descending over W. slope of rocky bluffs.

- 15.80 Rocky gulch, 20 lks. wide, course SW. Ascend.
 26.00 Garcia Rancho, in Mexico, brs. South about $\frac{1}{2}$ mile.
 26.50 Old road, brs. SE and NW.
 37.20 Gulch, 80 lks. wide, course SE. Ascend.
 40.00 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 stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor., from which,
 A mesquite 20 ins. dia. brs. S. 50 $\frac{1}{4}$ ° W., 470 lks. dist., marked $\frac{1}{4}$ S 5 BT.
 A mesquite 8 ins. dia. brs. N. 13 $\frac{1}{4}$ ° E., 325 lks. dist., marked $\frac{1}{4}$ S 32 BT.
 46.00 Top and descend.
 46.90 Wash, 5 lks. wide, course SE. Ascend.
 53.15 Old road, brs. N. and S.
 61.10 Old road, brs. SE and NW.
 61.90 Old road, brs. NE and SW.
 66.75 Wash, 10 lks. wide, course SE.
 67.50 Wash, 10 lks. wide, course SE. Ascend.
 80.00 Set a granite stone 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 5 notches on E. and 1 notch on W. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky and stony, 3rd and 4th rate.
 Timber, mesquite, tesota and Yucca.
 Land, mountainous, covered with dense undergrowth, or land exceptionally difficult to survey, 80.00 chs.

Chains.

- S. 89° 55' W. bet. secs. 6 and 31.
Over mountainous land, ascending.
- 1.00 Top and descend.
- 14.80 Old road, brs. NW and SE and descend through dense mes-
quite and tesota undergrowth.
- 20.00 Feet and ascend.
- 22.35 Wash, 20 lks. wide, course NW.
- 23.50 Descend.
- 24.10 Same wash, 25 lks. wide, course NW. Ascend.
- 31.80 Gulch, 15 lks. wide, course NE. Ascend N. slope of
hill.
- 40.00 Set a sandstone 18 x 10 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.
- 49.50 Top and descend, over rocky boulders.
- 57.50 Feet and ascend.
- 61.50 Top and descend over bluff.
- 63.10 Feet
- 63.50 Draw, 50 lks. wide, course SW. Ascend.
- 64.50 Top and descend.
- 69.10 Gulch, 10 lks. wide, course NW.
- 73.75 Gulch, 20 lks. wide, course NW. Ascend.
- 77.00 Top and descend.
- 78.10 Gulch, 10 lks. wide, course NE. Ascend.
- 82.25 Gulch, 10 lks. wide, course NE. Ascend steep.
- 88.00 Top and descend.
- 92.05 Intersect the Cor. of Tps. 22 and 23 S., Rs. 8 and 9 E.

Land, mountainous. *as witnessed and described by the Surveyor General*
 Soil, rocky and stony; 3rd and 4th rate.
 Timber, mesquite and Yucca.
 Land, mountainous, covered with dense undergrowth, or
 exceptionally difficult to survey, 92.05 chs.
 November 29, 1907.

General Description.

This line runs over mountainous land. The land
 in Tp. 23 S., R. 9 E. is principally mountainous, but
 suitable for grazing purposes, and some portions of it
 could be cultivated. There is one settler named
 Perfirio Rodriguez in the eastern portion of this Tp.
 This Tp. is made frasl. by the International Bdy.
 line bet. U. S. and Mexico.

Philip Coutzen

U. S. Deputy Surveyor.

*For red ink corrections see deputy's letters dated
 June 8 and May 11, 1908.*

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

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LIST OF NAMES.

BOOK 2147

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

....., 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 North boundary of T. 20 S. R. 11 E and South boundary of T. 22 S. R. 9 E ^{and frac. West} showing the respective capacities in which they acted:

Walter Percival Chainman.

Chris Olsen Chainman.

Arthur M. Pogue Moundman.

Henry G. Willets Axman.

..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Philip Contzen

....., United States Deputy Surveyor, in surveying all those parts or portions of the North boundary of T. 20 S. R. 11 E and South boundary of T. 22 S. R. 9 E ^{and frac. West}

..... of the Gila and Salt River ^{Base & 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 Chris Olsen Chainman.

Walter Percival Chainman.

Arthur M. Pogue Moundman.

..... Moundman.

Henry G. Willets Axman.

..... Axman.

Sp. A. Whitacre Flagman.

Subscribed and sworn to before me this 26th day of December, 1907



Philip Contzen
U. S. Deputy Surveyor
no notary available

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BOOK 2147

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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 11th day of April, 1907, 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 ^{said by West} Instructions, and the laws of the United States, surveyed all those parts or portions of the North Boundary of T. 20 S. R. 11 E. - and South Boundary of T. 22 S. R. 9 E.

of the Gila & Salt River Base 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.

Philip Coutzen
United States Deputy Surveyor.

Subscribed by said Philip Coutzen, and sworn to before me }
this 26th day of December, 1907

James R. Newcomb
U. S. Commissioner 1st Jud. Dist.
Territory of Arizona.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz Aug. 16, 1907
The foregoing field notes of the survey of the north and south boundary of T. 20 S. R. 11 E. and south boundary of T. 22 S. R. 9 E. Gila and Salt River Base and Meridian, Arizona

executed by Philip Coutzen U.S. Deputy Surveyor
under his contract No. 144, dated April 11, 1907, 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.