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Book C.

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BOOK 2149

FIELD NOTES

2149

RE

OF THE SURVEY OF THE

2149

Fourth Standard Parallel South through Ranges 10 and 11 East.

2149

Of the Gila and Salt River Base and Meridian,

Arizona

AS SURVEYED BY

Philip S Contzen, United States Deputy Surveyor,

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

Survey commenced October 6th, 1907

Survey completed October 23rd, 1907

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BOOK 2149

NAMES AND DUTIES OF ASSISTANTS.

Walter Percival	chainman
Chris Olsen	chainman
A. A. Lysight	chainman
José Servantis	chainman
Arthur M. Pogue	mound man
Henry G. Willets	ax man
L. W. Whitacre	flagman

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1B

Book No. 2149

BOOK 2149

INDEX DIAGRAM.

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4TH STANDARD PAR. SOUTH

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4TH STANDARD PAR. SOUTH R. 10 E

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BOOK 2149

PRELIMINARY OATHS OF ASSISTANTS.

WE, Walter Percival - Chris Olsen - A. A. Lyeight - and Jose Servanti 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 re-survey of the Fourth Standard Parallel South, Ranges 10 E. and 11 East

Walter Percival, Chainman.

Chris Olsen, Chainman.

Jose Servanti, Chainman.

A. A. Lyeight, Chainman.

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

SEAL

Philip Contzen
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 re-survey of the 4th Standard Parallel South Ranges 10 E. and 11 East

Arthur M. Pogue, Moundman.

....., Moundman.

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

SEAL

Philip Contzen
U. S. Deputy Surveyor
No notary available

WE, Henry G. Willets 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 re-survey of the 4th Standard Parallel South Ranges 10 E. and 11 East

....., Axman.

Henry G. Willets, Axman.

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

SEAL

Philip Contzen
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 re-survey of the 4th Standard Parallel South Ranges 10 E. and 11 E

L. W. Whitacre, Flagman.

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

SEAL

Philip Contzen
U. S. Deputy Surveyor
No notary available

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Survey commenced October 5, 1907, and executed with a Young & Sons light mountain transit provided with Solar attachment. No. 7934.
I begin at the standard corner of township 20 south, range 11 east. Latitude 31° 38½' N., longitude 111° 10½' W. as witnessed & described by the Surv. Gen'l.
Inorder to test the solar apparatus, by comparing the results of observations on the sun, with a true meridian determined by observations on Polaris, I proceed as follows;
At 4h p. m., l. m. t., I set off 31° 38' N. on the lat. arc; 4° 33' S. on the decl. arc; and mark the meridian thus determined with the solar, by a cross on a stone, firmly set in the ground 5 chs. N. of my station.
At 6h 37' p. m. I observe Polaris at Eastern elongation, in accordance with instructions in the Manual, and mark the line thus determined by a tack driven in a wooden stake 5 chs. N. of my instrument.
October 5, 1907.

October 6, 1907; At 7h 30' a. M. I lay off the azimuth of Polaris 1° 23.7' to the west and mark the meridian thus determined, by cutting a groove in the stone, on which the meridian falls 0.4 lks. east of the mark determined by the solar.
At 8h a. m., I set off 31° 38' N. on the lat. arc; 4° 48' S. on the decl. arc, and mark the true meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my instrument; this mark falls 0.3 lks. east of meridian by Polaris observation
The solar apparatus, by p. m. and a m. observations, defines positions for meridians, 28" west and 16" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

From the standard corner above described, I run S. 88° 10' W. S. bdy. of sec. 36.
10.00 Over mountainous land, descending. C. C. OF TWS. EXAMD. & SURVD. AS DESCRIBED BY THE SUR. GEN'L.
20.50 Gulch, 20 lks wide, course N W; ascend.
31.00 Top of ridge, brs N and S, descend.
Difference between measurements of 31.45 chs. is 6 lks; position of middle point
By 1st set, 31.45 chs.
By 2nd set, 31.51 chs; the mean of which is
31.48 Old standard 1/4 cor, which is a granite stone 18 x 10 x 8 ins. loosely set; I reset same 13 ins. in the ground and remark SC 1/4 on N. face and rebuild mound of stone 2 ft. base, 1 1/2 ft. high N. of cor.
From above standard 1-4 cor. old standard cor of secs. 35 and 36 brs. N. 88° 5' W.
Thence I run N. 88° 5' W
10.00 Gulch, 30 lks wide, course N W; descend.
Difference between measurements of 39.78 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, 39.80 chs.
By 2nd set, 39.76 chs; the mean of which is
39.78 Old standard cor. of secs. 35 and 36, which is a granite stone firmly set, and marked S6 on N face, 1 groove on E face and 5 grooves on W face. with md of stone
Land, mountainous } 2 ft. base 1½ ft. high N. of cor.
Soil, gravelly.
No timber; undergrowth, tesotilla and mesquite.
Land mountainous or exceptionally difficult to survey, 79.23 chs.

From standard cor. of secs 35 and 36, old standard 1-4 cor. brs. S 89° 40' W
Thence I run S. 89° 40' W along S bdy of sec. 35
9.50 Enter draw
10.53 Closing corner of secs. 1 and 2, T 21 S R 11 E Marked and witnessed and described by the Surveyor General

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11.70	Wash, 50 lks wide, course N
15.50	Leave draw and ascend
30.00	Top of ridge, brs. N and S
	Difference between measurements of 39.30 chs. by two sets of chainmen is 4 lks; position of middle point By 1st set, 39.32 chs. By 2nd set, 39.28 chs; the mean of which is
39.30	Old stand ard 1-4 cor. which is a porphyry stone 18 x 12 x 8 ins. loosely set; reset same 13 ins in the ground and remark S C 1-4 on N face; rebuild mound of stone 2 ft. basell-2 ft. high N. of cor.
	From standard 1-4 cor I proceed S. 88°50'W.
1.50	Wash, 20 lks wide, course N W.
4.50	Spur, extending N.
7.00	Draw 3 chs. wide, course N E
9.25	Wash, 25 lks wide, course S W
12.35	Wash, 40 lks wide, course N W; ascend. a steep ridge.
26.00	Top of ridge, brs N and S (500 ft. high) descend.
33.50	Gulch/ course N E; ascend
38.50	Top of ridge, brs. N and S; descend.
	Difference between measurements of 43.42 chs. by two sets of chainmen is 6 lks; position of middle point By 1st set, 43.45 chs. By 2nd set, 43.39; the mean of which is
43.42	Old standard cor. of secs. 34 and 35, which is a volcanic stone 18 x 10 x 8 ins. loosely set; reset same 14 ins. in the ground and remark S C on N face; 2 grooves on E face and 4 grooves on W. face; rebuild mound of stone 2 ft base, 1 1-2 ft. high N. of cor.
	Land, mountainous.
	Soil, gravelly and rocky; 3rd and 4th rate.
	No timber; undergrowth, tesota and mesquite.
	Land mountainous, covered with dense undergrowth or exceptionally difficult to survey, 82.72 chs.

	From above standard cor. of secs/ 34 and 35, old 1-4 cor. brs. West.
	Thence I run West on South bdy of sec. 34 marked Surv. Gen'l. Over mountainous land, ~~and witnessed and described by the~~
9.00	Closing corner of secs. 2 and 3, T 21 S R 11 E.
13.00	Wash, 120 lks wide, course N then N E; ascend
17.00	Top of spur, extending N E; descend.
23.50	Wash/ 30 lks wide course N E; ascend.
29.50	Top
31.50	Foot of slope; ascend
	Difference between measurements of 39.73 chs. by two sets of chainmen is 4 lks; position of middle point By 1st set, 39.75 chs. By 2nd set, 39.71 chs; the mean of which is
39.73	Old standard cor. which I find laying on the ground; reset sandstone 18 x 18 x 3 ins. 14 ins. in the ground for standard 1-4 cor. of sec. 34, marked S C 1-4 on N face; raise a mound of stone 2 ft. base 1 1-2 ft. high N. of cor.
	From above standard 1-4 cor. I run W.
4.70	Gulch, 20 lks wide, course S. ascend.
19.20	Top of ridge; descend.
25.30	Foot of ridge; ascend
29.30	Top of slope, brs N and S; descend
	Difference between measurements of 40.15 chs. by two sets of chainmen is 6 lks; position of middle point By 1st set, 40.18 chs By 2nd set, 40.12 chs; the mean of which is
40.15	Old standard cor. of secs. 33 and 34, which I find in a delapidated condition; reset porphyry stone 18 x 12 x 10 ins. 14 ins. in the ground, marked S C on N face; 3 grooves on E and W faces; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.
	Land, mountainous.
	Soil gravelly.
	No timber.
	Mountainous or land exceptionally difficult to survey, 79.88 chs.

From standard cor. of secs. 33 and 34, old 1-4 cor brs. W.
Thence I run W. on S. bdy of sec. 33.
19.48 Closing corner of secs. 3 and 4, T 21 S R 11 E, described by the U. S. Surveyor General for Arizona.
22.70 Wash, 10 lks wide, course N W
27.00 Draw, course N; ascend.
38.00 Top of ridge, brs N W; descend.
Difference between measurements of 39.80 chs. by two sets of chainmen is 2 lks; position of middle point
By 1st set, 39.81 chs.
By 2nd set, 39.79 chs; the mean of which is
39.80 Old standard 1-4 cor, a volcanic stone 18 x 8 x 6 ins. which I find lying on the ground; reset same 14 ins. in the ground and remark S C 1-4 on N face; rebuild mound of stone 2 ft. base/ 1 1-2 ft. high N. of cor.
Thence I run West
8.70 Draw, 125 lks wide, course N W, ascend.
14.00 Top of ridge, brs. N and S; descend.
15.00 Foot of ridge.
17.00 Spur, extending N W; descend.
18.00 Foot of spur; ascend.
20.00 Top of ridge, brs N W; descend.
28.00 Enter Sopori Valley and dense tesota and mesquite undergrowth.
Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks; position of middle point
By 1st set, 40.03 chs
By 2nd set, 39.97 chs; the mean of which is
40.00 I find a delapidated mound of stone and faint traces of the standard corner. I set a granite stone 18 x 6 x 6 ins. 14 ins. in the ground for the standard cor. of secs. 32 and 33, which I mark S C on N face; 4 grooves on E face and 2 grooves on W face; raise a mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.
Land, mountainous.
Soil, gravelly; 2nd and 3rd rate
No timber; undergrowth, mesquite and tesota.
Mountainous or land exceptionally difficult to survey,
79.80 chs. October 6, 1907.

October 7th; At 8h a m, l m t , I set off 31°39' N of the lat arc; 5° 11½ S. on the decl. arc; and determine a true meridian with the solar, at the standard corner of secs. 32 and 33, set by me last night.
Thence I run West along S. bdy of sec. 32.
Over level land, through dense undergrowth.
4.00 Sopori wash, 50 lks wide, course N.
5.80 Brush fence, brs. N 80° W
9.38 Closing corner of secs. 4 and 5 T 21 S R 11 E as described by the U. S. Surveyor General for Arizona.
19.10 Irrigating ditch.
20.50 Well, 10 chs. S.
26.50 Canas House, 5 chs S; adobe shack belonging to Leonardo Saurez, 6 chs. N.
27.95 Wire fence, brs N and S
33.87 Road, brs N W and S E
Difference between measurements of 39.90 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, 39.92 chs
By 2nd set, 39.88 chs; the mean of which is
39.90 I find faint traces of old 1-4 cor; I reset sandstone 18 x 12 x 10 ins., 14 ins. in the ground, and mark same S C 1-4 on N face; raise a mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.
From above cor, old standard cor. of secs. 31 and 32 brs West.
Thence I run West
3.43 Brush fence, brs N E
3.55 Road, brs N E and S W
3.85 Wash, 30 lks wide, course N E

18.10 Draw, 2 chs. wide, course N E; ascend.
23.60 Top of slope, brs N E and S W
Difference between measurements of 39.97 chs. by two sets of chainmen is 2 lks; position of middle point
By 1st set, 39.98 chs
By 2nd set, 39.96 chs; the mean of which is
39.97 Old standard corner of secs. 31 and 32, which is a sandstone 18 x 10 x 10 ins. lying on the ground; reset same 14 ins. in the ground and remark S C on N face; 5 grooves on E face and 1 groove on W face; raise a mound of stone 2 ft. base, 1 1-2 ft. high N of cor.
The above corner is erroneously described in the original notes.
Land, rolling and level.
Soil, gravelly.
No timber.; undergrowth, mesquite and tesota.
Land covered with dense undergrowth and exceptionally difficult to survey, 79.87 chs.

From above standard cor. of secs. 31 and 32, old 1-4 cor. brs West.
Thence I run West along S bdy of sec. 31.
Over level and rolling land; through dense undergrowth
9.85 Closing corner of secs. 5 and 6 T 21 S R 11 E, which is a sandstone 24 x 15 x 10 ins. as described by the Surveyor General for Arizona.
11.70 Wash, 10 lks wide, course N W; ascend.
19.15 Road, brs N W; ascend
33.00 Top of ridge, brs N and S; descend.
36.70 Wash, 15 lks wide, course S E
Difference between measurements of 39.79 chs. by two sets of chainmen is 6 lks; position of middle point
By 1st set, 39.82 chs.
By 2nd set, 39.76 chs; the mean of which is
39.79 Old standard 1-4 corner which I find is a volcanic stone 18 x 10 x 10 ins. lying on the ground; reset same 14 ins. in the ground and remark S C 1-4 on N face; raise mound of stone 2 ft. base, 1 1-2 ft. high N. of corner.
From above corner, old standard corner of tps. 20 S., ranges 10 and 11 E brs West.
Thence I run West on S bdy of sec 31
21.35 Wash, 60 lks wide, course S E
27.00 Wash, 50 lks wide, course S E
31.00 Rocky spur, extending N E
The difference between measurements of 39.81 chs. by two sets of chainmen is 2 lks; position of middle point
By 1st set, 39.82 chs
By 2nd set, 39.80 chs; the mean of which is
39.81 Old standard corner of tps. 20 south, ranges 10 and 11 east, which I find in a delapidated condition. Reset sandstone 18 x 12 x 10 ins., 14 ins. in the ground, and mark same with 6 grooves on N, E and W faces, also S C on N face, from which
A hackberry tree 8 ins. diam. brs N 4° 15' E 297 lks dist; marked T 20 S R 11 E S 31 B T
A mesquite tree 6 ins. diam. brs N 19° 30' W 250 lks dist; marked T 20 S R 10 E S 36 B T
Land, level and rolling.
Soil, gravelly and rocky.
No timber except a few mesquite and hackberry.
Land covered with dense undergrowth or exceptionally difficult to survey, 79,060chs.

October 7, 1907.

NOTE.

The course of this line was ascertained by direct solar observations with the solar attachment, at intervals of 10 and 20 chains, therefore it is a true standard line.

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GENERAL DESCRIPTION.

The Fourth Standard Parallel South through Range 11 East traverses a mountainous country, the soil of which is very gravelly. Several settlers are located on each side of the line. There is no timber and the undergrowth is dense mesquite and tesota.

Philip Coutzen

U. S. Deputy Surveyor.

October 22, 1907; At 8h 15m a. m., l. m. t., I set off 31° 39' N. of the lat. arc; 10° 46' S. on the decl. arc and determine a true meridian with the solar, at the standard corner of tps. 20 S., Rs. 10 and 11 East. I test the meridian thus determined, on the line through Range 11 E, which I finished Oct. 7th, and find the result to check, consequently I conclude the adjustments of my instrument are satisfactory.

From above corner, old standard 1-4 cor. brs West.

Thence I run West on S bdy of sec. 36.

10.35 INTERSECT CLOSING CORNER OF TPS. 21 S. RGS. 10 & 11 E, WHICH IS A STONE 6 × 12 × 14 INS. ABOVE GROUND, MARKED AND WITNESSED AS DESCRIBED BY THE SURV. GEN'L.

26.42 Top of raise,; descend.

Difference between measurements of 39.63 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, ~~39.~~65 chs;
By 2nd set, ~~39.~~61 chs; the mean of which is

~~39.63~~ 40.63

Find trace of old 1-4 cor; re-establish same by setting a porp hyry stone 21 x 8 x 8 ins., 16 ins. in the ground, for standard 1-4 cor., marked S C 1-4 on N face; raise a mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.

From this corner old standard corner brs. West.

Thence I run West

21.95 Dry wash, 10 lks wide, course S E

Difference between measurements of 39.69 chs. by two sets of chainmen is 2 lks; position of middle point
By 1st set, 39.68 chs
By 2nd set, 39.70 chs; the mean of which is

39.69 Old standard corner of secs. 35 and 36, bearing tree cut down; reset malpais stone 18 x 8 x 6 ins., ~~14~~ 12 ins. in the ground; marked S C on N face; 1 groove on E face and 5 grooves on W face; raise a mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.

Land, rolling.

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

No timber.; undergrowth, tesota and mesquite.

Land covered with dense undergrowth or exceptionally difficult to survey, ~~79.32 chs.~~ 80.32 chs.

From above corner, old 1-4 sec. cor. brs West.

Thence I run West S. of sec. 35.; ascending over rolling hills.

1.28 Dry wash, 20 lks wide, course S E

~~xxxx crossing corners of secs 4 and 5 xxxxxxxx~~

6.80 Road, brs S W

Difference between measurements of 39.85 chs. by two sets of chainmen is 4 lks: position of middle point
By 1st set, 39.83 chs
By 2nd set, 39.87 chs; the mean of which is

39.85 Find pits and delapidated mound of stone but no corner stone. Re-establish cor. by setting a porphyry stone 21 x 8 x 8 ins. ~~15~~ 16 ins. in the ground, marked S C 1-4 on N. face; rebuild mound of stone 2 ft. base, 1-2 ft. high N of corner.

From above 1-4 cor old standard cor. of secs 34 and 35 brs. West.

Thence I run West

.73 Dry wash, 10 lks wide, course S E

14.00 Arivaca stage road, brs N E and S W

31.75 Dry wash, course S E, 10 lks wide .

Difference betsen measurements of 40.08 chs. by two sets of chainmen is 6 lks; position of middle point
By 1st set, 40.05 chs
By 2nd set, 40.11 chs; the mean of which is

40.08 Old standard cor. which I find lying on the ground. Reset stone 18 x 10 x 10 ins. ~~14~~ 12 ins. in the ground, for standard cor of secs 34 and 35; marked S C on N face; 2 grooves on E face; 4 grooves on W face; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N of cor.

Land, rolling and level

Soil, rocky and gravelly

No timber,; undergrowth, tesota and mesquite.

Land covered with dense undergrowth or exceptionally difficult to survey, 79.93 chs.

October 22nd; At 11h 45m a. m., l.m.t., I set off 10° 50' S. on the decl. arc and observe the sun on the meridian. The resulting latitude is 31° 39'/N. which agrees with my other calculations.

From the cor. of secs. 34 and 35, old 1-4 cor. brs. West
Thence I run West S. of sec. 34; descending over rolling hills.

24.00 Dry wash, 10 lks wide, course N W:
Difference between measurements of 39.92 chs. by two sets of chainmen is 2 lks; position of middle point
By 1st set, 39.91 chs.
By 2nd set, 39.93 chs; the mean of which is

39.92 Old standard 1-4 corner, which is a granite stone firmly set in the ground; remark same S C 1-4 on N face and rebuild mound of stone 2 ft. base, 1 1-2 ft. high N of cor.

From above standard 1-4 cor, old standard cor. of secs. 33 and 34 brs. West.
Thence I run West.

6.80 Road, brs S W
11.20 Dry wash, 60 lks wide, course S E
12.70 Ranch, 6 chs. South
12.65 Road, brs N W
12.65 4 wire fence, brs N W
20.60 Road, brs southerly
31.10 Dry wash, 10 lks wide, course N
33.90 4 wire fence, brs. NW and SE.
Difference between measurements of 40.30 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, 40.32 chs
By 2nd set, 40.28 chs; the mean of which is

~~40.10~~
~~40.30~~ Old standard cor. of secs. 33 and 34 which is a malpais stone 18 x 10 x 10 ins., loosely set, which I reset ~~12~~ 14 ins. in the ground; remark same S C on N. face; 3 grooves on E and W faces; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.

Land, mountainous.
Soil, gravelly and stony; 2nd and 3rd rate.
No timber; undergrowth tesota and mesquite.
Land mountainous, covered with dense undergrowth, or exceptionally difficult to survey, ~~80.22 chs.~~ 80.02 chs.

From the standard cor. of secs. 33 and 34, old 1-4 cor. brs. West.
Thence I run West S. of sec. 33. over mountainous land.

3.80 Dry wash, 15 lks. wide, course N.
11.40 Dry wash, 20 lks wide, course N
20.60 Dry wash, 10 lks wide, course N E.
Difference between measurements of 39.55 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, 39.57 chs,
By 2nd set, 39.53 chs; the mean of which is

39.55 Old standard 1-4 cor. which I find loosely set. Reset malpais stone 18 x 7 x 6 ins. ~~23~~ 24 ins. in the ground and remark same S C 1-4 on N face; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.
From above 1-4 cor, old standard cor. of secs. 32 and 33 brs. West.
Thence I run west.

1.00 Dry wash, 10 lks wide, course N E
5.00 Dry wash, 30 lks wide, ourse N E
30.15 Enter mountainous land.
37.00 Mine shaft 50 lks south
Difference between measurements of 40.15 chs. by two sets of chainmen is 2 lks; position of middle point
By 1st set, 40.16 chs
By 2nd set, 40.14 chs, the mean of which is

40.15 Find mound of stone . Set granite stone 21 x 8 x 8 ins 16 ~~15~~ ins. in the ground, for standard corner of secs. 32 and 33; marked S C on N face; 4 grooves on E face; 2 grooves on W face; build mound of stone 2 ft. base, 1 1-2 ft. hi gh N. of cor.

An oak 8 ins. diam. brs. N. 10° W. 86 lks dist; marked T 20 S R 10 E S 32 B T.
Pesqueira Mining camp brs S W 40 chs. dist.
Land mountainous and extremely rocky.
Soil, gravelly, 2nd and 3rd rate.
No timber; undergrowth, tesota and mesquite.
Mountainous land, land covered with dense undergrowth, or exceptionally difficult to survey, 79.70 chs.

October 22, 1907.

October 23rd; at 8h 05' a.m., l.m.t., I set off 31° 39' N. on the lat. arc; 11° 07' S. on the decl. arc., and determine a true meridian with the solar, at the standard corner of secs. 32 and 33.
Standard 1-4 ssec. cor. brs West.
Thence I run West S. of sec. 32. over rocky mountainous land.

10.30 Dry wash, 25 lks wide, course northerly
15.08 Mine shafts N and S of line
25.00 Dry wash, 10 lks wide, course N W
28.10 Dry wash, 10 lks wide, course N E
Difference between measurements of 40.66 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, 40.68 chs
By 2nd set, 40. 64 chs; the mean of which is
40.66 Old standard 1-4 cor which is a sandstone 18 x 10 x 10 ins. lying on the ground: reset same ~~1-4~~ ins. in the ground and remark S C 1-4 on N face, whence
A mesquite 5 ins. diam. brs N. 40° E 140 lks dist; marked S C 1-4 S 32 B T.
Rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of corner.

Old standard corner of secs. 31 and 32 brs. S 89° 10'W.
Thence I run S. 89° 10' W.

5.60 Dry wash, 20 lks wide, course N E
12.60 Dry wash, 10 lks wide, course northerly; ascend.
27.00 Top of spur, brs N and S
32.20 Dry wash, 20 lks wide, course northerly.
37.00 Dry wash, 20 lks wide, course northerly.
Difference between measurements of 39.70 chs. by two sets of chainmen is 4 lks; position of middle point
By 1st set, 39.72 chs;
By 2nd set, 39.68 chs; the mean of which is
39.70 Find a delapidated moundof stone, evidently for cor. of secs. 31 and 32. I set granite stone 21 x 12 x 5 ins., 16 ins. in the ground, which I mark S C on N face; 5 grooves on E face and 1 groove on W face; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of corner.
Land mountainous.
Soil, gravelly; 3rd and 4th rate.
No timber; undergrowth, mesquite and tesota.
Land mountainous, covered with dense undergrowth, or exceptionally difficult to survey, 80.36 chs.

Thence I run West S of sec. 31, ascending over mountainous land.

2.76 Graded road.
3.80 Top of ridge; descend.
10.70 Dry wash, 15 lks wide, course northerly; ascend slope
24.30 Top of round point; descend
37.50 Ft. of slope; dry wash, 10 lks wide, course northerly; ascend
39.80 Old standard 1-4 corner which is a granite stone 18 x 8 x 8 ins/ loposely set; I reset same ~~15~~ ins. in the

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ground and remark S C 1-4 on N. face; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of cor.
Thence I run West
33.80 Top of high ridge, brs N and S; descend.
~~33.18~~ ~~59.80~~ C. C. of Tps. 21 S., Rs. 9 & 10 E., made & witnessed as described by the Surveyor General.
Corner point falls in slide rock.
49.80 Difference between measurements of 54.80 chs. by two sets of chainmen is 6 lks; position of middle point
By 1st set, 54.83 chs
By 2nd set, 54.77 chs; the mean of which is
54.80 Old witness corner, which is a granite stone 20 x 12 x 6 ins. loosely set. I reset same 15 Ins. in the ground and remark W C S C on N face; 6 grooves on E and W. faces; rebuild mound of stone 2 ft. base, 1 1-2 ft. high N. of corner.
Land, mountainous.
Soil, gravelly and rocky.
No timber; undergrowth, tesota and mesquite.
Land mountainous, covered with dense undergrowth, or exceptionally difficult to survey, ~~54.65~~ 54.80 chs.
October 23, 1907.

NOTE.

The Fourth Standard Parrallel South was checked on the meridian as determined by direct solar observations at intervals of 10 and 20 chains.

GENERAL DESCRIPTION.

The Fourth Standard Parallel South runs over a mountainous, heavily mineralized country. Several mining claims adjoin the line, and some development work has been done. The soil is gravelly and there is practically no timber. Undergrowth, which is plentiful, is tesota and mesquite.

Philip Coutzen

U. S. Deputy Surveyor.

2.

For authority for red ink corrections see Deputy's letter Nov. 23-1908.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

BOOK 2149

LIST OF NAMES.

A list of the names of the individuals employed by Philip S 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 the 4th re- Standard Parallel South through Ranges 10 E & 11 E showing the respective capacities in which they acted:

A. A. Wright, Chainman.
Walter Percival, Chainman.
Jose Servanti, Moundman.
Chris Olsen, Moundman.
, Axman.
, Axman.
, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Philip S Contzen re, United States Deputy Surveyor, in surveying all those parts or portions of the 4th Standard Parallel South through Ranges 10 E & 11 E

of the Gila & Salt R.B.& 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

A. A. Lyright : Chainman.
Chris Olsen, Chainman.
Jose Servanti - Walter Percival, Chainman.
Chris Olsen, Moundman.
, Moundman.
, Axman.
Henry G. Wallets, Axman.
D. N. Whitacre, Flagman.

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

SEAL

Philip S Contzen
U. S. Deputy Surveyor

No notary available

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BOOK 2149

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 11 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 Instructions, and the laws of the United States, surveyed all those parts or portions of the 4th Standard Parallel South, through Ranges 10 & 11 East

of the Gila and 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; 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 26th day of December, 1907

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz., Aug 16, ~~189~~ 1907.

The foregoing field notes of ~~the survey of~~ the resurvey of the Fourth Standard Parallel South through Ranges 10 and 11 East, Gila and Salt River Base and Meridian Arizona

executed by Philip Contzen U.S. Deputy Surveyor under his contract No. 144, dated April 11, ~~189~~ 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.

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