

Book B.

Copied Apr. 10, 1908
Accepted, Letter & No. 273-1910
126

2148

BOOK 2148

RE
OF THE SURVEY OF THE

2148

2148

W. boundary of T. 20 S. R. 11 E.

{ E. boundary of T. 21 S. R. 10 E.

S. boundary of T. 21 S. R. 10 E.

W. boundary of T. 21 S. R. 10 E.

{ E. boundary of T. 22 S. R. 9 E.

{ N. boundary of T. 22 S. R. 9 E.

{ W. boundary of T. 22 S. R. 9 E.

and

2148

Survey of three portions of the south land west
line of T. 21 S. R. 10 E., included within the
Arizona Land Claim, unconfirmed.

2148

of the Gila & Salt River Base & Meridian,

Arizona

AS SURVEYED BY

Philip Conzzen, United States Deputy Surveyor

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

Survey commenced October 3rd, 1907Survey completed November 26th, 1907

2148

Chris Olsen - chairman

Walter Percival - chairman

Arthur M. Pogue - soundman

Henry G. Willets - ax man

L. W. Whitacre - flag man

BOOK 2148

INDEX DIAGRAM. (*see next page*)

Township _____, *Range* _____

6	5	4	3	2	1
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31	32	33	34	35	36

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

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BOOK 2148WE, 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 W. bdy - T. 20 S. R. 11 E - E-1-W bds. of T. 21 S. R. 10 E and E-11-W boundaries of T. 22 S. R. 9 E

Walter Percival, Chainman.Chris Olsen, Chainman.

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

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 W. bdy - T. 20 S. R. 11 E - E-1-W bds. of T. 21 S. R. 10 E and E-11-W boundaries of T. 22 S. R. 9 E

Arthur M. Pogue, Moundman.

, Moundman.

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

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 survey of W. bdy - T. 20 S. R. 11 E - E-1-W bds. of T. 21 S. R. 10 E and E-11-W boundaries of T. 22 S. R. 9 E

Henry G. Willets, Axman.

, Axman.

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

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 W. bdy - T. 20 S. R. 11 E - E-1-W bds. of T. 21 S. R. 10 E and E-11-W boundaries of T. 22 S. R. 9 E

L. W. Whitacre, Flagman.

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



Philip Conzzen
U. S. Deputy Surveyor
No notary available

BOOK 2148

(K)

INDEX-DIAGRAM

OF
EXTERIORS

T. 20 S. P. 11 E.

1 15.6	4TH STANDARD PAR. S.
12 14.7	12 5.9
14 18	13 6.15
15 19	14 6.11
20 13.30	25 7.80
26. 10 31 32 33. 24 35. 26. 7. 31	
11 11 10 10 9 9	
6 5 Rkney 2	

22 N.

9E

CHICAGO, ILLINOIS, U.S.A.

Date Taken : 22.6.1910.

By : [Signature]

Sheet I

BOOK 2148

Chains.

Knowing that the W. Bdy. of T. 20 S., R. 11 E. is considerably out of limits in alignment and measurement, and that most of the corners are in a dilapidated condition, I proceed to resurvey the same before proceeding with the Subdivisional lines.

Oct. 3rd, 1907. At 7h.30m.a.m., 1 m.t., I set off 31° 38' N. on the lat.arc; 3°38'N. on the decl.arc, and determine a true meridian with the solar, at the Standard corner of Tps. 20 S., Rs. 10 and 11 E. From this cor. 1/4 cor. brs. North.

Thence I run, North, bet. secs. 31 and 36, through dense undergrowth;

Wash, 15 lks. wide, course E.

Road, bears NE. and SW.

Road, bears NW. and SE.

Road, bears NE.; ascend.

Top of ascent, brs. E. and W.

Gulch, 10 lks. wide, course E.

Old road, brs. NE.

Road, NW. and SE.

Old 1/4 corner, which I find in a dilapidated condition with stone lying on the ground. I reset same which is a porphyry stone, 18x8x6 ins., set 13 ins. in the ground, marked 1/4 on the W. face; raise mound of stone, 2 ft. base, 1-1/2 ft. high, W.of corner. Pits impracticable.

From 1/4 corner old corner of secs. 25, 30, 31 and 36 brs.

N.

Thence I run, N.

Gulch, 30 lks. wide, course NW.

Descend.

Wash, 20 lks. wide, course NE.

Shaft, 150 lks. west; ascend.

Top of ridge, brs. E. and W.

Wash, 10 lks. wide, course SE.

Road, brs. SE.

Old corner of secs. 25, 30, 31 and 36, which I find in a dilapidated condition. I re-set volcanic stone 18x10x10 ins. set 14 ins. in the ground for the corner of secs. 25 and 36, Tp. 20 S. R. 10 E., marked with 1 notch on the S. edge and 5 notches on the N. edge; no bearing trees available; raise mound of stone 2 ft. base, 1-1/2 ft. high, W.of corner. Pits impracticable.

Land, rolling and mountainous.

Soil, rocky.

No timber; undergrowth, tesota, and mesquite.

Mountainous land and land covered with dense undergrowth, or land exceptionally difficult to survey, 79.28 chs.

From above sec.corner, old 1/4 corner bears N.

Thence I run,

North on E. bdy. of sec. 25; ascending.

Top of ridge, brs. E. and W.; descend.

Foot of slope, ascend.

Top of ridge, descend.

Wash, 80 lks. wide, course SE., ascend.

Top of slope, brs. E. and W. and descend.

Old 1/4 corner, which is a sandstone 18x10x8 ins. lying on the ground.

I re-set same 13 ins. in the ground, and re-mark 1/4 on W. face; raise a mound of stone 2 ft. base, 1-1/2 ft. high, W.of corner; Cerro Colorado Mining Camp brs. West about 30 chs.

From above 1/4 cor. old corner of secs. 24 and 25 brs. N.

Thence I run North.

Road to Arivaca brs. E. and W.

4.39

BOOK 2148

Chains.	Road, brs. NE. and SW. to Arivaca.
15.66	Gulch, course NW.
29.00	Descend.
37.00	
38.60	Wash, 30 lks. wide, course NE.
39.88	Old cor. of secs. 19, 24, 25 and 30, which I find lying on the ground. I re-set same for cor. of secs. 24 and 25 only, Tp. 20 S., R. 10 E. Re-mark same with 4 notches on N. edge and 2 notches on S. edge, witnessed as described by the Surveyor General.
	Land, mountainous.
	Soil, gravelly and rocky; 3rd and 4th rate.
	No timber; undergrowth, mesquite and tesota.
	Land, mountainous, covered with dense undergrowth, or exceptionally difficult to survey, 79.72 chs.

From the above sec.cor. old $\frac{1}{4}$ cor. of secs. 19 and 24, brs. N. $1^{\circ}12'W$. Therefore, I run, North, $1^{\circ}12'W$, on E. bdy. of sec. 24. Over mountainous land, ascending. Wash, 20 lks. wide, course SE. Wash, 20 lks. wide, course SE. E. slope of Cerro Colorado Peak brs. W. about 12 chs. Wash, 10 lks. wide, course NE. Old $\frac{1}{4}$ cor., which is lying loose. I reset porphyry stone 18x10x6 ins., 13 ins. in the ground for $\frac{1}{4}$ cor. of sec. 24, which I mark $\frac{1}{4}$ on W. face; raise mound of stone 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor., whence cor. of secs. 13 and 24 brs. N. $1^{\circ}12'W$.

5.23 Ravine, 10 lks. wide, course NE.

10.63 Ravine, 5 lks. wide, course NE.

11.88 Ravine, 5 lks. wide, course NE.

15.00 Descend.

18.10 Foot, wash, 30 lks. wide, course SE.; ascend.

25.00 Top of W. slope of ridge.

39.00 Foot of slope.

39.94 Old cor. of secs. 13, 18, 19 and 24, which I find in a dilapidated condition. Re-set a volcanic stone, 18x10x10 ins., 12 ins. in the ground for cor. of secs. 13 and 24 only, marked with 3 notches on the N. and S. edges, and raise mound of stones 3 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

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

No timber; undergrowth, scattered mesquite and tesota.

Mountainous, 79.81 chs., and exceptionally difficult to survey.

At this corner at 11h.49m. a.m., 1.m.t., I set off $3^{\circ}43'$ S. on the decl. arc, and observe the sun on the meridian; the resulting latitude being $31^{\circ}41'N$.

Thence I run, North, on E. bdy. of sec. 13;

2.50 Ravine, 5 lks. wide, course SW.

15.00 Descend.

17.75 Wash, 5 lks. wide, course W.

19.50 Ravine, 10 lks. wide, course SE., ascend.

22.00 Top of ridge, brs. NW. and SE. and descend.

39.10 Ravine, 10 lks. wide, course NE.

39.89 Old $\frac{1}{4}$ sec.cor., which I find lying on the ground; I set a porphyry stone 18x8x6 ins., 14 ins. in the ground marked $\frac{1}{4}$ on W. face; raise mound of stone 2 ft. base, 1- $\frac{1}{2}$ ft. high, W. of cor.

From above sec.cor. of secs. 7, 12, 13 and 18 brs. N.

Thence I run, north.

5.70 Gulch, 30 lks. wide, course SW.

7.90 Gulch, 30 lks. wide, course SW.

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4. Resurvey of Fractl. West Bdy. of Tp. 20 S., R. 11 E.

Chains.	
21.40	Shaft of the Plomo No. 2 Mine brs. E. 251 lks. dist.
30.10	Ravine, 10 lks. wide, course SW. NW sec. 12, cor. 30.10
31.00	Gulch, 20 lks. wide, course SW.
39.94	Cor. to secs. 7, 12, 13 and 18, marked and witnessed as described by the Surveyor General, which I change to refer to secs. 12 and 13 only. A porphyry stone 18x6x5 ins., 12 ins. in the ground, marked with 4 notches oblique and 2 notches on north edges; and raised a mound of stone 3 ft. base, 1-1/2 ft. high, W. of cor.
	No bearings available.
	Land, mountainous. Dry water does not run off.
	Soil, gravelly and rocky; 3rd and 4th rate.
	No timber, except mesquite, abundant.
	Mountainous land, exceptionally difficult to survey.
	79.88 chs.

From above sec.cor., old 1/4 sec.cor. of secs. 7 and 12 brs. N.

Thence I run, M. sec. 12, N. 1/4 sec. 12, N. 1/4 sec. 12, North, on E. bdy. of sec. 12; down ridge, SW. 30.10 Descend abruptly. Gulch, 10 lks. wide, course SW., ascend. Gulch, 10 lks. wide, course SW., ascend. Top of ridge, brs. E. and W. Gulch, 10 lks. wide, course SW. Gulch, 10 lks. wide, course SW. Top of ridge, brs. E. and W. M. sec. 12. Top of ridge, brs. E. and W. Old 1/4 cor. 20x12x6 ins., a sandstone lying on the ground, which I firmly set 15 ins. in the ground, and marked same 1/4 on the west face for 1/4 cor. of sec. 12, with a mound of stone 3 ft. base, 1-1/2 ft. high, W. of cor. No pits or trees available.

Oct. 3, 1907. 100.00

Note: For completion of E. bdy. of Tp. 20 S., R. 11 E., see Book "A."

GENERAL DESCRIPTION.

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

Note: The 1/4 and sec. cor. on the E. bdy. of Tp. 20 S., R. 11 E., which were established for 1/4 and 3 secs. only, have been changed to 1/4 and 4 secs. respectively.

U. S. Surveyor's Benefit

for the use of 1/4 sec. cor. and 3 sec. cor.

for the use of 1/4 sec. cor. and 4 sec. cor.

for the use of 1/4 sec. cor. and 3 sec. cor.

for the use of 1/4 sec. cor. and 4 sec. cor.

for the use of 1/4 sec. cor. and 3 sec. cor.

for the use of 1/4 sec. cor. and 4 sec. cor.

for the use of 1/4 sec. cor. and 3 sec. cor.

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for the use of 1/4 sec. cor. and 4 sec. cor.

for the use of 1/4 sec. cor. and 3 sec. cor.

for the use of 1/4 sec. cor. and 4 sec. cor.

for the use of 1/4 sec. cor. and 3 sec. cor.

for the use of 1/4 sec. cor. and 4 sec. cor.

Survey commenced October 24, 1907, and executed with a Young & Son's light mountain transit, with solar attachment.

I begin at the closing corner of tps. 21 S., Rs. 10 and 11 E., as described by the Surveyor General. Latitude $31^{\circ} 38\frac{1}{2}' N$, longitude $111^{\circ} 16\frac{1}{2}' W$.

In order to test the solar apparatus, by comparing the results of observations on the sun, made during a.m. and p.m. hours, with a true meridian determined by an observation on Polaris, I proceed as follows; October 23rd; at 4h 20m p.m., l.m.t., I set off $31^{\circ} 38'$ N. on the lat. arc; $11^{\circ} 14'$ 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 instrument.

October 24th; At 5h 16.7M a.m., l.m.t., I observe Polaris at western elongation, in accordance with instructions in the Manual, and mark the line thus determined by a tack driven in a wooden peg 5 chs. N. of my station.

At 7h a.m., I lay off the azimuth of Polaris, $1^{\circ} 23.8'$ to the East and mark the meridian thus determined, by cutting a groove in the stone set last evening, on which the meridian falls .5ins. to the west of the meridian determined with the solar.

At 8h 10m a.m., l.m.t., I set off $31^{\circ} 38' N$ on the lat. arc; $11^{\circ} 28\frac{1}{2}' S$ on the decl. arc; and mark the meridian determined with the solar by a cross on the stone already set 5 chs. N of my instrument; this mark falls .5 ins. to the west of meridian determined by Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, about $26''$ east and $26''$ west of the meridian established by the Polaris observation.

From the closing corner above described, I run South $0^{\circ} 10' E$, between secs. 1 and 6
 4.00 Wash, 150 lks wide, course N E; ascend
 7.00 Top of ridge, brs E and W; descend.
 8.00 Foot of slope
 10/40 Ravine, 5 lks wide, course N W
 13.40 Ravine, 5 lks wide, course N W
 20.00 Descend
 21.50 Gulch/ 15 lks wide, course N W; ascend.
 32.25 Ravine, 7 lks wide, course N W
 34.00 Ravine, 10 lks wide, course N W; ascend.
 40.18 Old 1-4 sec. cor, which is a stone set in a delapidated mound of stone. I set a red sandstone $18 \times 8 \times 8$ ins. $\frac{1}{2}$ ft. in the ground, and mark 1-4 on W face and rebuild mound of stone 2 ft. base, 1 1-2 ft. high W. of cor.

.10 Thence I run S $0^{\circ} 10' E$
 5.80 Ravine, 5 lks wide, course N W; ascend
 18.00 Wash, 15 lks wide, course N W; ascend.
 23.90 Top of ridge, brs E and W
 38.50 Wash, 30 lks wide, course W; ascend
 39.98 Top of ridge; descend.
 Old sec. cor. of secs. 1-6-7+12 which is a granite stone $18 \times 10 \times 8$ ins. loosely set. I reset same $\frac{1}{4}$ ins. in the ground, and remark 1 notch on N edge and 5 notches on S edge; raise mound of stone 2 ft base, 1 1-2 ft. high W of cor.

Land, mountainous.

Soil, gravelly; 2nd and 3rd rate.

No timber; undergrowth, scattering mesquite and tesota. Mountainous or land exceptionally difficult to survey, 80.16 chs.

 Thence I run S $10' E$ between secs. 7 and 12.

7.50 Ravine, 10 lks wide, course S W; asc.
 9.20 Top of ridge, brs E and W; desc.
 12.50 Ravine, 10 lks wide, course S W, asc.

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BOOK

18.00	Top of ridge, brs E and W; desc.
28.00	Wash, 20 lks wide, coarse S W; ascend.
35.00	Top of ridge, brs N E and S W; desc.
38.40	Gulch, 5 lks wide, coarse S W; asc.
39.86	Old 1-4 sec. cor. which is a granite stone 18 x 8 x 4 ins. lying on the ground. I re-establish same by resetting 14 ins. in the ground; mark 1-4 on E face and rebuild mound of stone 2 ft. base, 1 1-2 ft. high E of cor. for 1/4 cor. of sec. 7.
.64	Thence I run S 1° 56' W
2.84	Top of ridge, brs E and W
9.04	Descend
11.44	Gulch, 10 lks wide, course S E
15.40	Gulch 10 lks wide, course S E
21.40	Top of slope, brs E and W; desc.
23.90	Gulch, 10 lks wide, course S E
28.09	Draw, 100 lks wide, coarse N E
30.40	Gulch, 20 lks wide, course S E
32/90	Top of ridge, brs E and W; desc.
35.50	Gulch, 10 lks wide, course N E
39.68	Top of ridge, brs. E and W
	Old cor. of secs. 7-12-13-18 which is a granite stone 18 x 10 x 4 ins; reset same 14 ins. in the ground, and remark 2 notches on the N edge and 4 notches on S edge; rebuild mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
	Land, mountainous.
	Soil, gravelly; 2nd and 3rd rate.
	No timber; undergrowth, tesota and mesquite.
	Mountainous or land exceptionally difficult to survey, 79.54 chs.

	From above cor. old 1-4 sec. cor. brs. S 0° 15' E.
	Thence I run S 0° 15' E bet. secs. 13 and 18.
	Over mountainous land; descending.
4.50	Gulch, 10 lks wide, course S W
9.50	Gulch, 15 lks wide, course S E; asc.
22.00	Top of ridge, brs E and W.
26.75	Wash, 10 lks wide, course S E; ascend.
30.00	Top of ridge, brs E and W; desc.
32.75	Wash, 10 lks wide, course N E; asc.
39.75	Old 1-4 sec. cor. which is a granite stone 4 x 4 ins. firmly set 6 ins. above ground; remark 1-4 on E face and rebuild mound of stone 2 ft. base, 1 1-2 ft. high E. of cor. for 1/4 cor. of sec. 18.
	From above 1-4 cor., old cor. of secs. 13-18-19-24 brs S 0° 15' E
	Thence I run S 0° 15' E bet. secs. 13 and 18, ascend.
	Top of ridge, brs E and W; desc
	Wash, 8 lks wide, course E; ascend.
	Top of ridge, brs NE and S W; desc.
	Gulch, 10 lks wide, course N E
	Top of ridge, brs E and W; desc.
	Gulch, course S E
	Old cor. of secs. 13-18/19-24 which is a quartz stone 18 x 12 x 10 ins loosely set; reset same 14 ins. in the ground and remark 3 notches on N and S edges; rebuild mound of stone 2 ft. base, 1 1-2 ft. high E of cor. for cor. of secs. 18 and 19.
	Land, mountainous.
	Soil, gravelly; 2nd and 3rd rate.
	No timber; undergrowth, scattering mesquite and tesota.
	Mountainous or land exceptionally difficult to survey, 79.51 chs.

October 24, 1907.

October 25th; At 8h 05m a.m., l.m.t., I set off 31° 36' N on the lat. arc; 11° 49' S on the decl. arc; and determine a true meridian with the solar, at the sec cor. of secs. 18 and 19.

From this cor. old 1-4 sec. cor. brs S.

Thence I run south on West bdy. of sec. 19.

- 3.50 Top of ridge, brs E and W; descend.
 11.25 Gulch, 10 lks wide, course S E; ascend.
 13.00 Top of ridge, brs E and W; descend.
 17.75 Gulch, 10 lks wide, course S E
 21.75 Wash, 10 lks wide, course N E
 23.90 Wash, 10 lks wide, course N W; ascend.
 26.00 Wash, 10 lks wide, course N E.
 29.00 Wash, 10 lks wide, course N E; ascend.
 30.00 Top of ridge, brs E and W; descend.
 38.50 Trail, brs N E.
 39.90 Old 1-4 sec. cor. I re-establish same and set a sand-
 stone 18 x 6 x 3 ins. ^{1/2} 14 ins. in the ground; marked
 1-4 on E. face; raise a mound of stone 2 ft. base, 1 1-
 2 ft. high E of cor. for $\frac{1}{4}$ cor. of sec. 19.
 From 1-4 sec. cor, old cor. of secs. 19-24-25-30 brs.
 S $3^{\circ} 20' E$
 Thence I run S $3^{\circ} 20' E$
 2.50 Top of ridge, brs E and W
 8.80 Gulch, 50 lks wide, course S W; ascend.
 11.80 Gulch, 5 lks wide, course N W
 15.00 Top of ridge, brs E and W; descend.
 20.00 Ft of descent; ascend.
 23.25 Wagon road, brs N E and S W
 24.90 Wagon road
 28.50 Top of ridge, brs E and W; descend.
 31.50 Gulch, 5 lks wide, course S E; ascend.
 35.00 Top of ridge, brs E and W; descend.
 39.83 Old cor. of secs. 19-24-25-30, which is a granite
 stone 18 x 8 x 4 ins. loosely set; reset same ^{1/2} 14 ins.
 in the ground, and mark 4 notches on N edge and 2
 notches on S edge; raise mound of stone 2 ft. base,
 1 1-2 ft. high E of cor., for cor. of secs. 19 and 30.
 Land, mountainous.
 Soil, gravelly; 2nd and 3rd rate.
 No timber.
 Land mountainous or extremely difficult to survey,
 79.73 chs.
-
- From above cor. old 1-4 cor. brs South.
 Thence I run South ~~on West bdy. of sec. 30.~~
 4.50 Gulch, 10 lks wide, course S E
 6.50 Foot of slope; ascend
 12.50 Top of ridge, brs E and W; descend.
 12.75 Trail, brs S E
 16.00 Gulch/ 5 lks wide, course S E; ascend.
 19.00 Top of ridge, brs E and W
 37.00 Foot of slope.
 41.00 Old 1-4 sec. cor, which is a porphyry stone 18 x 6 x 6 i
 ins. lying on the ground. I reset same ^{1/2} 14 ins. in
 the ground; mark 1-4 on E face and raise a mound of
 stone 2 ft. base, 1 1-2 ft. high E of cor. for cor. sec. 30.
 From above cor. old cor. of secs. 25-30-31-36 brs. S.
 Thence I run South. ascending.
 11.70 Top of ridge, brs SE and NW; descend.
 14.60 Foot of slope; wash, 5 lks wide, course N W; asc.
 27.70 Top of west slope; descend.
 29.20 Foot of slope; asc.
 32.20 Top of ridge, brs. E and W; descend.
 40.35 Old cor. of secs. 25-30-31-36 which is a porphyry stone
 18 x 6 x 6 ins., which I reset ^{1/2} 14 ins. in the ground,
 and remark 5 notches on N edge and 1 notch on S edge.
 Raise mound of stone 2 ft. base, 1 1-2 ft. high E of
 cor. for cor. of secs. 30 and 31.
 Land, mountainous.
 Soil, gravelly.
 No timber; undergrowth, tesota and mesquite.
 Land mountainous or extremely difficult to survey,
 31.35 chs.
-
- From above cor. old 1-4 cor. brs. South. ~~on W. bdy. sec. 31.~~
 Thence I run South
 Descending.
 1.75 Foot of slope; wash, 25 lks wide, course N E; a sc.

3.50	Top of ridge, brs E and W; descend.
3.90	Foot of descent; ravine 5 lks wide course N W; asc.
7.00	Top of ridge, brs E and W.; descend.
12.00	Wash, 20 lks wide, course S W; ascend.
18.50	Wash, 10 lks wide, course westerly .
20.00	Enter wash, course N W.
23.75	Leave same wash.
39.00	Top of ridge, brs E and W.
40.00	Old l-4 cor, which is a porphyry stone 18 x 8 x 6 ins. loosely set; re-establish same and reset ^{1/4} Ins . in the ground; raise a mound of stone 2 ft - base, 1 1-2 ft. high E. of cor; remark l-4 on E face of stone Old cor. of Tps. 21 and 22 S., Rs. 10 and 11 E. brs S 0° 30' E
	Thence I run S 0° 30' E
2.50	Top of ridge, brs E and W; descend.
13.50	Foot of descent; gulch, 5 lks wide, course S E; ascend.
14.00	Gulch, 10 lks wide, course N E; ascend.
19.00	Top of ridge, brs E and W; descend.
22.00	Ft of descent.
23.00	Wash, 30 lks wide, course N E
24.50	Wash, 30 lks wide, course N W
27.00	Wash, 30 lks wide, course N E; ascend.
32.40	Wash, 60 lks wide, course N E.
40.10	Cor/ of Tps. 21 and 22 S., Rs. 10 and 11 E, as described by the U. S. Surveyor-General for Arizona.
	Land, mountainous.
	Soil, gravelly.
	No timber; undergrowth, scattering mesquite and tesota.
	Mountainous or land exceptionally difficult to survey, 80.10 chs.
	October 25, 1907.

GENERAL DESCRIPTION.

The country over which this line passes, is mountainous and rough. Good grass abounds which furnishes excellent feed for cattle.

• 28 • 008 To • vbd saw no

^{no} Philip Conzem

U S Deputy Surveyor.

October 26, 1907; I commence survey at the cor. of sec 35 and 36 Tps 21 and 22 S.Rgs 10 and 11, which I described October 25, 1907. Latitude $31^{\circ} 33' N.$ Longitude $111^{\circ} 16 \frac{1}{2} W.$

October 26th; At 8h 05m a.m., l.m.t., I set off $31^{\circ} 33' N$ on the lat arc; $12^{\circ} 10' S$ on the decl arc; and determine a true meridian with the solar at the above described corner.

Old 1-4 cor of sec 36 brs S $89^{\circ} 6' W$
Thence I run S $89^{\circ} 6' W$ bet secs 1 and 36
Descending
5.26 Draw and wash, 150 lks wide, course N E; ascend.
9.50 Top of ridge, brs N E and S W; descend
16.35 Foot of slope; wash course S W; ascend
19.00 Trail, brs N W and S E; descend
36.15 Wash, 60 lks wide, course S W
39.93 Old 1-4 cor of secs 35 and 36, which is a sandstone $18 \times 10 \times 6$ ins. loosely set; reset same $\frac{1}{2}$ ins. in the ground, for 1-4 cor of sec 1; remark 1-4 on S face; rebuild mound of stone 2 ft base, 1 1-2 ft high S of cor. for cor. of sec 1
Old cor of secs 35 and 36 brs West
Thence I run W
8.20 Wash, 20 lks wide, course S W
25.00 Wash, 10 lks wide, course S E
30.00 Trail, brs N W
30.25 Trail brs N E
30.60 Wire fence
36.00 Witness corner of secs 35 and 36, which is a sandstone $10 \times 5 \times 2$ ins above ground, marked W C on N face; 1 notch on E edge and 5 notches on W edge; re-establish as witness cor of secs 1 and 2. and raises a mound of stone Road, brs N W; enter plowed field. $\frac{3}{4}$ ft base $\frac{1}{2}$ ft high S of cor. Cor point falling in plowed field subject to overflow.
40.00 Land, mountainous.
Soil, gravelly; 2nd and 3rd rate.
Timber, few mesquites; undergrowth, mesquite and tseta.
Mountainous or land exceptionally difficult to survey,
79.93 chs.

Old 1-4 cor of sec 35 brs W

Thence I run W, ~~down bdy.~~ of sec. 2.

Over cultivated land.

1.80 Wash, 80 lks wide, course N W
3.75 Wash, 60 lks wide, course S E
6.50 Wash, 60 lks wide, course S W
7.00 Enter dense undergrowth
13.00 Leave dense undergrowth
23.00 Leave plowed field.
28.00 Wire fence, brs N E
40.00 Old 1-4 cor of sec 35, which is a granite stone $18 \times 8 \times 6$ ins. loosely set; reset same $\frac{1}{2}$ ins. in the ground, for 1-4 cor of sec 2; remark 1-4 on S face and rebuild mound of stone 2 ft base, 1 1-2 ft high S of cor. for cor. sec 2.

A mesquite 6 ins diam brs N $40^{\circ} E$ 173 lks dist;
marked 1-4 S 35 B T
Old cor of secs 34 and 35 brs W
Thence I run W
1.24 Road, brs N and S
4.50 Old road, brs N W
12.00 Wash, 10 lks wide, course S E
14.50 Wash, 10 lks wide, course S E
18.50 Leave field; ascend
19.50 Top of ridge, brs N and S; desc.
21.10 Foot of slope
25.00 Ascend
26.00 Top of ridge, brs N E and S W; desc
27.50 Ft of slope; gulch, course S W
34.00 Top of ridge, brs N W and S E; desc.
37.00 Ft of slope; gulch 10 lks wide, course N E
40.16 Old cor of secs 34 and 35 which is a granite stone $18 \times 6 \times 6$ ins. loosely set; reset same $\frac{1}{2}$ ins. in the ground for cor of sec 2; remark 1-4 on S face and rebuild mound of stone 2 ft base, 1 1-2 ft high S of cor. for cor. sec 2.

1 l-2 ft high N of cor.
An oak 12 ins diam brs S 85° E 182 lks dist; marked
T 23 S R 9 E S 2 B T.

Land, mountainous.

Soil, gravelly; 2nd and 3rd rate.

Timber, a few oaks, mesquites and tesotas; undergrowth,
mesquite and tesota.

Mountainous land, land covered with dense undergrowth,
or exceptionally difficult to survey, 80.16 chs'

October 26th; At the above corner, at 11h 44m a.m., l.m.t.
I set off 12° 14' S on the decl. arc; and observe the
sun on the meridian. The resulting latitude is 31° 33'
N., which agrees with other data.

Old 1-4 cor of sec 34 brs N. 88° W
Thence I run N. 88° 00' W on N. side of sec. 3.

40.00 Ascending
Old 1-4 cor of sec 34 which is a sandstone 18 x 8 x 6 ins
reset same 14 ins in the ground for 1-4 cor of sec 3;
remark 1-4 on S face and rebuild mound of stone 2 ft
base, 1 l-2 ft high S of cor.
In order to ascertain the course of the line to be survey-
ed through the Arivaca Land Grant, I now observe a
flag set on a high point East of the 1-4 cor of sec 32.
The resulting course is West.

Thence I run West

Top of ridge, brs NE and SW

10.50 Ft of slope; ascend.
12.00 Top of ridge, slope southerly; descend.
13.50 Ft of slope; ascend.
16.40 Closing corner of Arivaca Land Grant, as described by
the surveyor-general.
18.00 Top of ridge, slope southerly; descend.
20.05 Wire fence, brs N E
31.00 Wire fence, brs N W
40.00 Set a sandstone 18 x 8 x 6 ins. 14 ins. in the ground,
for cor of secs 3-4-33-34, marked with 3 notches on E
and W edges; raise mound of stone 2 ft base, 1 l-2 ft
high N of cor.

A tesota 5 ins diam brs S 81° 130' N 32 lks dist;
marked T 23 S 10 E S 2 B T.

Land, rolling and mountainous.

Soil, gravelly.

Timber, a few oaks, mesquite and tesota.

Mountainous or land exceptionally difficult to survey,
80.00 chs.

October 26, 1907.

October 27th; At Bhtasnos, 13mi, I set off 31° 33' N on
the lat. arc; 12° 30' S on the decl. arc; and determine
a true meridian with the solar at the above corner.

Thence I run West on N. side of sec. 4.
Over rolling and mountainous land; through dense tesota
and mesquite undergrowth.

4.00 Wash, 20 lks wide, course S W
5.20 Wash, 40 lks wide, course N W; ascend.
17.25 Wash, 15 lks wide, course N E.
21.90 Road, brs N W and S E (Ore Blance)
23.50 Wash, 40 lks wide, course N E; ascend.
25.50 Top of ridge, brs Northward; descend.
30.00 Ft of slope; draw 3 chs wide, course S W.; ascend.
40.00 Set a slate stone 18 x 8 x 6 ins. 14 ins. in the ground
for the 1-4 cor of sec. 4 and 3, marked 1-4 on S face
raise mound of stone 2 ft base, 1 l-2 ft high S of
cor.

47.50 Gulch, 30 lks wide, course N W
53.45 Wash, 20 lks wide, course N E; ascend.
58.20 Wash, 20 lks wide, course N E; center of draw 14 chs
65.00 Top of ridge, brs N E and S W; descend.
75.30 Gulch, 20 lks wide, course N E; ascend.

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80.00	Set a sandstone 18 x 8 x 6 ins. ¹² 14 ins, in the ground, for cor. of secs 4 and 5 marked with 4 notches on E edge and 2 notches on W edge; raise mound of stone 2 ft base, 1 1-2 ft high S of cor. Land, rolling and mountainous. Soil, gravelly; No timber; undergrowth, tesota and mesquite. Mountainous land, land covered with dense undergrowth or exceptionally difficult to survey, 80.00 chs.	
	Thence I run West on N. bdy. of sec. 5. Over mountainous land, ascending. Wagon road, Arivaca to Saric, Sonora, brs N and S. Old Fraguita Mining Camp, south 30 chs. Top of ridge, brs NE and NW; desc. Wash, 50 lks wide, course N W; ascend. Fraguita Wash, 60 lks wide, course N W Closing corner of Arivaca Land Grant, as described by the surveyor-general. a granite stone 6 x 6 ins above ground	
10.60	Wash, 30 lks wide, course N E; asc. S. slope.	
11.00	Old 1-4 cor. of secs 31, which is a sandstone 18 x 10 x 8 ins; reset same 14 ins. in the ground, for 1-4 cor.	
12.00	of sec 5; remark same 1-4 on S face and rebuild mound of stone 2 ft base, 1 1-2 ft high S of cor.	
16.00	Old cor of secs 31 and 32 brs S. 85° 25' W.	
30.10	Thence I run S. 85° 25' W.	
31.42	Wash, 20 lks wide, course N E; ascend	
35.75	Top of N. slope of rocky hills.; descend.	
40.00	Gulch 20 lks wide, course N E; ascend. Top of N. slope/ descend.	
47.00	Old cor. of secs. 31 and 32, which is a sandstone 18 x 8 x 6 ins. loosely set; reset same 14 ins. in the ground for cor of secs 5 and 6, marked with 5 notches on E edge and 1 notch on W edge; rebuild mound of stone 2 ft base, 1 1-2 ft high S of cor.	
15.00	Land, mountainous.	
22.00	Timber, a few mesquite and oaks.; undergrowth, mesquite and tesota.	
29.40	Soil, gravelly; 2nd and 3rd rate.	
35.00	Mountainous or land exceptionally difficult to survey, 75.00 chs.	
	Old 1-4 cor of sec 31 brs West.	
	Thence I run West. bet secs 31 and 6.; descending	
1.75	Wash, 30 lks wide, course N E; ascend.	
15.00	Top of S slope of rocky knoll	
16.00	Descend.	
30.00	Foot of slope; wash, 150 lks wide, course N E ; ascend.	
35.00	Top of ridge, brs NE and SW; desc.	
36.08	Old 1-4 cor of sec. 31, reset sandstone 18 x 10 x 6 ins. 14 ins. in the ground; marked 1-4 on S face; raise mound of stone 2 ft base, 1 1-2 ft high S of cor.	
	Old corner of Tps 21 and 22 S Rs 9 and 10 E hrs 588' 20" W	
12.42	Thence I run 588' 20" W	
15.42	Gulch, 20 lks wide, course N E	
33.00	Gulch, 10 lks wide, course S W	
40.40	Top of N slope of hill.; descend.	
42.92	Wash, 50 lks wide, course S E	
	Corner of Tps 21 and 22 S, Rs 9 and 10 E, as described by the surveyor-general.	
	Land, mountainous.	
	Soil, gravelly.; 2nd and 3rd rate.	
	Timber, scattering oak.	
	Mountainous or land exceptionally difficult to survey, 79.00 chs.	
	October 27, 1907.	

GENERAL DESCRIPTION.

The South boundary of T 21 S R 10 E is mountainous, and the eastern portion is extremely rough. The soil is of a poor character. Timber is scarce, a few oaks and mesquites being scattered along the lines.

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BOOK

Undergrowth of mesquite and tecaota is very thick. There is some cultivated land and several mining claims adjoin the line.

Philip Contzen

U. S. Deputy Surveyor.

. 4748 B

Chains.

I begin at the corner of Tps. 21 and 22 S., Rs 9 and 10 E. properly witnessed and described by the U. S. Surveyor-General for Arizona.

October 28, 1907; At 8h 15m a.m., l.m.t., I set off $31^{\circ} 33' N.$ on the lat. arc; $12^{\circ} 51' S.$ on the decl. arc; and determine a true meridian with the solar. From the above described cor. old 1-4 sec. cor. brs. N. $9^{\circ} 45' W.$

Thence I run N $9^{\circ} 45'$ W bet. secs. 31 and 36; descending. 18.00 Wash, 30 lks wide, course N E; ascending. 33.00 Gulch, 10 lks wide, course S W.

39.96 Old 1-4 sec. cor. which is a sandstone 8 x 6 ins., 6 ins. above ground, firmly set; marked 1-4 on W face; remark same for 1-4 sec. cor. of sec. 36; rebuild mound of stone 2 ft. base, 1 1-2 ft. high W. of cor.

42.50 Thence N $11^{\circ} 45' E.$ bet. sec. 30 and 31; ascend. Top of ridge, brs E and W; descend.

60.00 Foot of descent; asc.

64.00 Top of ridge, brs E and W; descend.

69.60 Gulch, 10 lks wide, course N W; ascend.

72.00 Top of spur, extending N W; descend.

80.00 Old cor. of secs. 30 and 31; I reset granite stone 18 x 8 x 8 ins. $\frac{1}{2}$ 4 ins. in the ground for cor. of secs. 25 and 36, Tp. 21 S., R 9 E.; remark 5 notches on N edge; 1 notch on S edge; rebuild mound of stone 2 ft. base, 1 1-2 ft. high W of cor.

Land, mountainous.
Soil, gravelly.
Timber, scattering oak; undergrowth, mesquite and tesota.
Mountainous or land exceptionally difficult to survey, 80.00 chs.

From above cor., closing corner of Arivaca Land Grant brs North.

Thence I run North on E. bdy. of Sec. 25.

1.00 Gulch, 10 lks wide, course N W; ascend. W slope of mountain.

3.00 Top of slope, brs W; descend.

8.70 Gulch, 50 lks wide, course N E

16.30 Gulch, 15 lks wide, course S E; ascend.

21.75 Top of ridge, brs E and W; descend.

25.00 Closing corner Arivaca Grant, which is a stone marked and witnessed as described by the Surveyor General. At the above closing corner, I direct my instrument on a flag set on a high point about 20 chs. S. of the 1-4 sec. cor. of secs. 7 and 12. Thus I ascertain the course to be North.

Thence I run North

39.00 Wash, 30 lks wide, course N E.

40.00 Set a sandstone 18 x 10 x 4 ins., $\frac{1}{2}$ 4 ins. in the ground, for 1-4 sec. cor. of sec. 25, marked 1-4 on W. face; raise mound of st ne 2 ft. base, 1 1-2 ft. high W. of cor.

Ascend.

58.00 Top of slope, brs E and W; descend.

63.00 Foot of slope; ascend.

72.00 Top of ridge, brs E and W; descend.

80.00 Set a sandstone 24 x 12 x 8 ins. $\frac{1}{2}$ 4 ins. in the ground, for cor. of secs. 24 and 25, marked with 4 notches on N edge and 2 notches on S. edge; raise a mound of stone 2 ft. base, 1 1-2 ft. high W of cor.

Land, mountainous.
Soil, rocky.
No timber.
Mountainous or land exceptionally difficult to survey, 80.00 chs.

At 11h 44m a.m., l.m.t., I set off $12^{\circ} 54' 30'' S.$ on the decl. arc and observe the sun on the meridian. The resulting latitude is $31^{\circ} 35' N.$, which agrees with other data.

Thence I run North on E. boundary of Sec. 24.

Survey & Resurvey of W. bdy. of T. 21 S., R. 10 E.

Chain

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8.00	Ft. of slope; gulch, 10 lks wide, course N.W.; ascend.
26.33	Wire fence, brs N.E. and S.W.
32.00	Top of spur, brs E and W; descend.
34.00	Foot of descent; ascend.
36.00	Top, brs E and W
40.00	Set a sandstone 20 x 12 x 10 ins., 16 ins. in the ground, for the 1-4 cor. of sec. 24; marked 1-4 on W face; raise a mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
46.50	Wilbur Wash, 150 lks wide, course N.E.
64.50	Adobe house, brs W 50 lks.
71.00	Arivaca Creek, 2 chs. wide, course N.W.
73.00	Well, brs W 10 chs.
74.50	Small garden, E of line
75.00	Adobe house--Wilbur--brs E 125 lks.
80.00	Set a sandstone 18 x 8 x 6 ins. ^{1/2} 14 ins. in the ground, for cor. of secs. 13 and 24, marked with 3 notches on N and S edges; raise mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
	Land mountainous.
	Soil, gravelly, 2nd and 3rd rate.
	Timber, some mesquite and cottonwoods.
	Mountainous land, land covered with dense undergrowth, or exceptionally difficult to survey, 80.00 chs.
	October 28, 1907.
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	October 29th; At 8h 05m a.M., l.m.t., I set off 31° 36' N. on the lat. arc; 13° 11' S on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 23 and 24, Tp. 21 S, R 9 E.
	Thence I run North, along E. bdy. of sec. 13.
32.47	Ascending through dense mesquite and tesota undergrowth.
33.58	Wire fence, brs N.W.
40.00	Road to Buenos Ayres, brs N.W.
	Set a sandstone 20 x 10 x 6 ins. ^{1/2} 16 ins. in the ground for 1-4 cor. of sec. 13, marked 1-4 on W. face; raise a mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
	A mesquite 4 ins. diam. brs S 13° 45' W 77 lks dist; marked T 21 S R 9 E 1-4 S 13 B T
	A mesquite 5 ins. diam. brs N 53° W 123 lks dist; marked T 21 S R 9 E 1-4 S 13 B T.
59.50	Gulch, 10 lks wide, course N.W.
61.00	Gulch, 10 lks wide, course S.W.
67.50	Gulch, 10 lks wide, course S.W.
68.25	Gulch, 10 lks wide, course S.W.
80.00	Set a granite stone 20 x 10 x 8 ins. ^{1/2} 16 ins. in the ground, for cor. of secs. 12 and 13, marked with 2 notches on N edge and 4 notches on S edge; raise a mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
	Land, mountainous.
	Soil, gravelly; 2nd and 3rd rate.
	Timber--few mesquites.
	Mountainous land, covered with dense undergrowth or exceptionally difficult to survey, 80.00 chs.
<hr/>	
	Thence I run North, along E. bdy. of sec. 12.
	Ascending along West slope.
5.25	Gulch, 30 lks wide, course S.W.; ascend.
8.00	Shaft, Oro Fino claim, brs W 2 chs.
10.00	Top of ridge, brs E and W; descend.
14.95	Closing corner of Arivaca Land Claim, which is a stone described by the Surveyor-General for Arizona.
19.50	Gulch, 50 lks wide, course S.W.; steep rocky ridge.
29.50	Top of ridge, brs E and W; descend.
40.18	Set a granite stone 22 x 12 x 10 ins., 17 ins. in the ground, for 1-4 cor. of sec. 12, marked 1-4 on W face; raise a mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
	Descend.
15.10	Gulch, 20 lks wide, course N.W.; ascend.
24.00	Top of West slope.

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35.40	Gulch, 15 lks wide, course S W; ascend.
40.20	Old cor. of secs. 6 and 7; reset granite stone 18 x 8 ^{and 1/2} ins. 6 ins., 14 ins. in the ground for cor. of secs. 1 and 12, marked with 1 notch on N edge and 5 notches on S edge. Raise mound of stone 2 ft. base, 1 1-2 ft. high W. of cor.
	Land, mountainous.
	Soil, gravelly; 2nd and 3rd rate.
	Timber, mesquite and tesota.; undergrowth, mesquite and tesota.
	Mountainous or land exceptionally difficult to survey, 80.20 chs.
<hr/>	
4.50	From above corner, old 1-4 cor. brs N 2° W
8.50	Thence I run N 2° W bet. secs. 1 and 6
26.10	Ridge, brs N E and S W
40.00	Gulch, 10 lks wide, course S W; ascend
43.30	Top of high ridge; descend.
43.50	Old 1-4 cor. of sec. 6, which is a granite stone 18 x 10 x 6 ins; reset same 14 ^{1/2} ins. in the ground, for the 1-4 sec. cor. of sec. 1; remark 1-4 on W face and rebuild mound of stone 2 ft. base, 1 1-2 ft. high W of cor.
	Thence I run North 1° 45' E
	To C.C. of Tps. 21 S. Rgs. 9 and 10 E., which is a stone marked and witnessed as described by the Surveyor General. From this C.C. the W.C. to Stand. Cor. of Tp. 20 S., Rgs. 9 and 10 E. brs. West 5.70 chs.
	Soil, gravelly; 3rd and 4th rate.
	Timber, a few mesquite, tesota and oak. Land, mountainous.
	Mountainous or land exceptionally difficult to survey, 83.00 chs.

October 29, 1907.

GENERAL DESCRIPTION.

This boundary traverses a mountainous country, the soil of which is gravelly. Timber is mesquite, a few oaks and cottonwoods along the creeks. There is running water in Aravaca Creek.

Philip Pantzer

U. S. Deputy Surveyor.

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the 1000 ft. of the 2nd stage of the
B.C. River. This is the main stream
of the B.C. River. It is about 1000 ft.
wide at the mouth of the river.

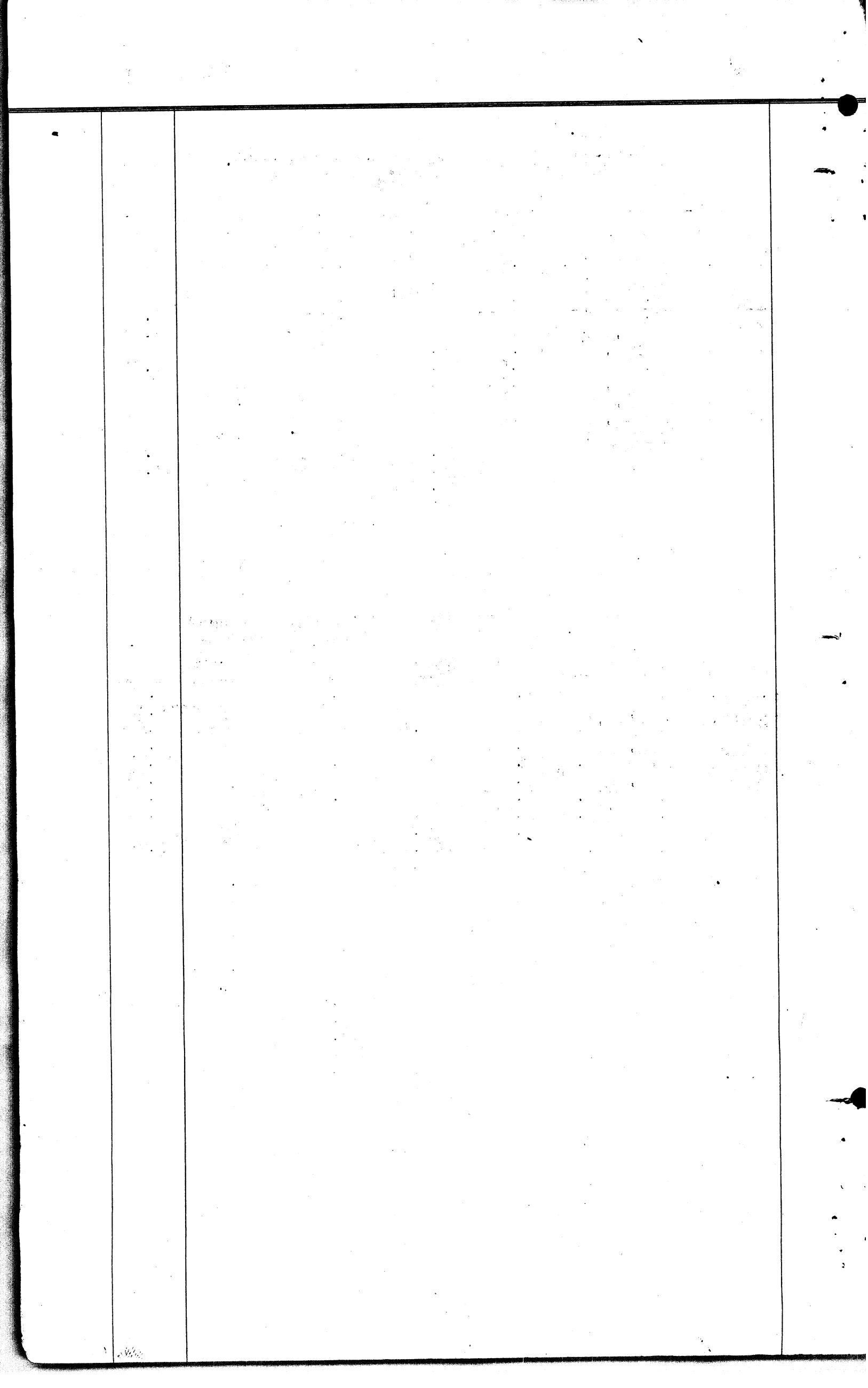
~~1000~~

Boundaries of Township 20 South, Range 11 East.
Latitude, departure and closing errors.

Line Des- ignated.	True Bearing.	Dist- ance.		Latitude.		Departure.
				N.	S.	E.
S. Bdy.	S.88°10'W. N.88°05'W. S.88°40'W. S.88°50'W. West,	31.45 39.78 39.30 43.42 319.15	1.33	1.01 .23 .88		31.43 39.76 39.30 43.41 319.15
W. Bdy.	North, N.1°12'W.	159.00 79.81	159.00 79.79			1.67
N. Bdy.	North, East,	245.33 473.60	245.33			473.60
E. Bdy.	South,	483.02		483.02	.45	
Convergency.				485.45 485.14 .31	485.14	474.05 474.05 .67

Boundaries of Township 21 South, Range 10 East.
Latitude, departure and closing errors.

Line Des- ignated.	True Bearing.	Dist- ance.		Latitude.		Departure.
				N.	S.	E.
S. Bdy.	S.89°06'W. West,	39.93 120.16		.63		39.92 120.16
	N.88°00'W. West,	40.00 160.00	1.40			39.98 160.00
	S.88°25'W. West,	35.00 36.08		2.80		34.88 36.08
W. Bdy.	S.88°30'W. N.9°45' W.	42.92 39.96		1.25		42.90 6.77
	North,	360.42	39.38			
	N.2°00'W.	40.00	360.42	360.42		1.40
	N.1°45'E.	43.30	39.98			
N. Bdy.	East,	88.95	43.28	43.28		1.32
	N.89°10'E.	39.70		.58		88.95
	East,	360.28				39.70
E. Bdy.	S.0°10'E.	120.02		120.02		360.28
	S.1°56'W.	39.68		39.66		.35
	S.0°15'E.	79.51		79.51		1.34
	South,	39.90		39.90		
	S.3°20'E.	39.33		39.76		
	South,	121.35		121.35		2.32
	S.0°30'E.	40.10		40.10		.35
Convergency.				485.04 484.98 .06	484.98	484.07 483.43 .64



JUL 26 1909

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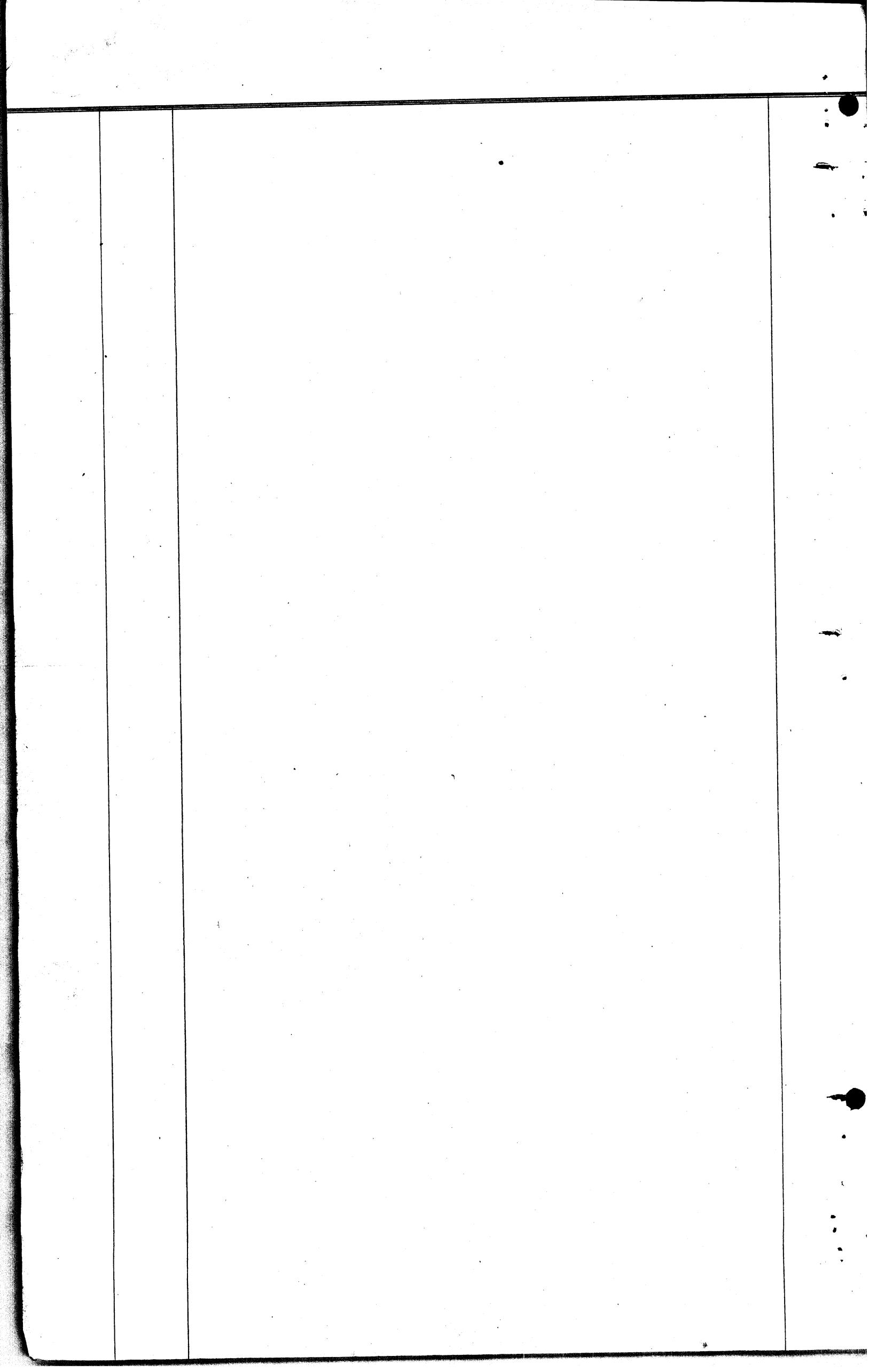
Boundaries of Township 21 South, Range 9 East.
Latitude, departure and closing errors.

Line Des- nated.	True Bearing.	Dist- ance.	Latitude. N.	Latitude. S.	Departure. E.	Departure. W.
E. Bay.	North,	229.95	229.95			
Arivaca	S.42°12'W.	21.08		15.62		14.16
P.L.C.	S.37°15'W.	78.06		62.14		47.25
	S.41°38'W.	27.82		20.79		18.48
	S.39°11'W.	52.18		40.48		32.97
	S.52° E.	16.66		10.26	13.13	
	S.50°30'E.	25.71		16.35	19.84	
	S.49°56'E.	14.37		9.25	11.00	
	S.51°27'E.	88.25		55.00	69.02	
Convergency.			229.95	229.86	112.99	112.86
			229.86		112.89	
			.09		.10	

Boundaries of Township 22 South, Range 10 East.
Latitude, departure and closing errors.

Line Des- ignated.	True Bearing.	Dist- ance.	Latitude.		Departure. E. W.	
			N.	S.	E.	W.
N. Bdy.	West,	125.54				125.54
Axivaca	S. 51°44' E.	27.94		17.30	21.94	
P.L.G.	S. 52°18' E.	70.52		43.12	55.80	
	N. 39°00' E.	38.48	29.90		24.22	
	N. 37°42' E.	38.60	30.54		23.60	
			60.44	60.42	125.56	125.54
			60.42		125.54	
			.02		.02	

Philip Conley
U. S. Deputy Surveyor



FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

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(18)

LIST OF NAMES.

BOOK 2148

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 the N. bdy
of T. 20 S. R. 11 E - E-11 & W. boundaries of T. 21 S. R. 10 E and
E-11 & W. boundaries of T. 22 S. R. 9 E
 showing the respective capacities in which they acted:

Chris Olsen, Chainman.

Walter Percival, Chainman.

Arthur M. Pogue, Moundman.

, Moundman.

Henry G. Willets, Axman.

, Axman.

S. H. Whitacre, 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 W. bdy of T. 20 S. R. 11 E
E-11 & W. boundaries of T. 21 S. R. 10 E
and E-11 & W. boundaries of
T. 22 S. R. 9 E of the G. & S.

River Base X 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.

S. H. Whitacre, Flagman.

Subscribed and sworn to before me this

26th

day of December, 1907



Philip Contzen

U. S. Deputy Surveyor
 No notary available.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Philip Cautzen, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from the 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 Instructions, and the laws of the United States, surveyed all those parts or portions of W. side of T. 20 S. R. 11 E - E. ad. 3d W.
lands. of T. 21 S. R. 10 E and E-11 & W.
Boundaries of T. 22 S. R. 9 E. 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.

Philip Cautzen
 United States Deputy Surveyor.

Subscribed by said Philip Cautzen, and sworn to before me }
 this 26 day of December, 1907 }
 James P. Smeeth



U. S. Commissioner 1st Jud. Dist.
 Territory of Arizona.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz Aug. 16, 1909
 The foregoing field notes of the survey of the West Boundary of
Tp. 20 R. 11 E. the E. R. and W. Boundaries of
Tp. 21 R. 10 E. the N. E. and Boundary of
Tp. 22 R. 9 E. and the survey of those portions
of the E. and W. Boundaries of Tp. 21 R. 10 E. included
within the Arizona Land Office, unconfirmed, Gila
and Salt River Base and Meridian, Arizona.
 executed by Philip Cautzen, 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.