

AUG 3-1911

46

Book A.

2274

BOOK 2274

FIELD NOTES

2274

OF THE SURVEY OF THE

South, West, Mid Sec. North Bds. T9D R 31 E
and

Resurvey of Portion of North Boundary T9D R 31 E.

2274

2274

Of the

Gila and Salt River

Meridian,

Crisp

AS SURVEYED BY

Hugh J. DuVal

, United States Deputy Surveyor,

Under his Contract No. 163, dated May 16, 1910

Survey commenced October 5, 1910

Survey completed 17, 1910

2274

2274

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BOOK 2274

NAMES AND DUTIES OF ASSISTANTS.

Orris Phillips

Chairman

J. P. Sural

Bob Mammel

Hayman

Note: As rotary being available I am in my
assistants

BOOK 2274

BOOK 2274
INDEX DIAGRAM.

Township 9D, Range 31E

6	6	5	4	3	2	1
6	7	8	9	10	11	12
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✓	19	20	21	22	23	24
✓	30	29	28	27	26	25
✓	31	32	33	34	35	36
3	3	2	2	2	1	

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Cris Phillips and J. P. Duval
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 S & W & frac. N Bdy. T9S.R31E.: Frac. W Bdy. T23S.R24E.: Frac. N Bdy T20S.R21E. North Bdy. T12S.R13E.: N.S.E & W Bdrs. T12S.R9E.: N & W Bdrs. T8S.R10E. Frac. W Bdy. T7S.R10E

Cris Phillips, Chainman.

J. P. Duval, Chainman.

Subscribed and sworn to before me this 28th
day of June, 19 10



H. S. D. S.

U.S.D.S.

WE, _____ 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 _____

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 19 _____



WE, _____ 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 _____

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 19 _____



I, Bob Manuel, 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 S.W & Frac. N bdy. T9S.R31E.: Frac. W Bdy. T23S.R24E.: Frac. N Bdy T20S.R21E.: N. Bdy. T12S.R13E.: N.S.E & W Bdrs. T12S.R9E.: N & W Bdrs. T8S.R10E.: Frac. W Bdy. T7S.R10W.

Bob Manuel, Flagman.

Subscribed and sworn to before me this 20th
day of June, 19 10



Hugh S. Duval

U.S.D.S.

South Boundary of T. 9 S., R. 31 E.

Chains.

Survey commenced Oct. 5th, 1910 and executed with a Blount & Co. light engineering transit, No. 601, fitted with W. and L. E. Gurley solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the vernier of the co-lat. arc, that of the decl. arc, reading to half minutes of arc.

The instrument has been examined and tested on several occasions by the Surveyor General of New Mexico on the true meridian at Santa Fe and in every instance approved.

I examine the adjustment of the instrument and correct the polar axis and colimation errors; then to test the Solar apparatus by a comparison of its indications with a meridian as determined by observations on Polaris, I proceed as follows:-

At my camp located at a point a few hundred feet SW. of the corner of sections 7, 12, 13 and 18 on the E. bdy. of the township, in latitude $32^{\circ}39'$ N. long. $109^{\circ}7'06''$ West; I set off $4^{\circ}38\frac{1}{2}'$ S. on the decl. arc, and $57^{\circ}21'$ on the co-lat. arc, and at 3h, p. m., l. m. t., determine a mer. with the solar and mark a point thereof on a peg driven 5 chs. N. of my station.

At 6h 37m. p. m. l. m. t., by my watch, I obs. Polaris at Eastern Elongation, and mark a point in the line thus determined by a peg driven 5 chs. N. of my station, in accordance with the manual of Instructions.

----- Oct. 5th, 1910.

Oct. 6th:- At 7h, a. m., l. m. t., I lay off the azimuth of Polaris, $1^{\circ}23'$ to the West and mark a point in the line thus determined by a pencil mark on the peg already set 5 chs. N. of my station. This point coincides with the mer. determined by the solar obs.

At 8h, a. m., l. m. t., I set off $4^{\circ}54\frac{1}{2}'$ S. on the decl. arc, $57^{\circ}21'$ on the co-lat. arc and determine a meridian with the solar and mark a point in the line thereof on the peg, 5 chs. N. of my station, already set. This point coincides with the meridian as determined by Polaris.

Hence I conclude that the solar apparatus is in satisfactory adjustment.

The mag. bearing of the true meridian at 8h, a. m. is $N. 13^{\circ}2' W.$; the angle thus determined gives the mag. decl. $13^{\circ}2' E.$

From the township corner, 9 and 10 S., Rs. 31 and 32 E., a malpais stone, $18 \times 10 \times 8$ ins., properly marked and witnessed as described by the Surveyor General, I run West on a true line bet. secs. 1 and 36, over mountainous ground.

- | | |
|-------|--|
| 17.00 | Foot of hill bears NW. and SE.
Ascend over rough rocky ground. |
| 30.00 | Top of hill bears NW. and SE. About 250 ft. high, Descend. |
| 39.00 | Arroyo, 30 lks. wide, course S.
Ascend along South slope of mountain. |
| 40.00 | Set a malpais stone, $18 \times 12 \times 10$ ins., 12 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on N face, and raise a mound of stone, 2 ft. base, $1\frac{1}{4}$ ft. high, N. of cor. |
| 51.00 | Arroyo, 25 lks. wide, course SW. |
| 62.00 | Top of ridge bears NE. and SW. |

South Boundary of T. 9 S., R. 31 E.

Chains. 80.00	Point for the cor. secs. 1, 2, 35 and 36 falls on Malpais stone, 24x20x8 ins., above ground, in place, mark x at exact corner point, on top of stone, and 5 notches on the W. and 1 notch on the E. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land rough and rocky and exceptionally difficult to survey, 80.00 chs. Soil 4th rate. Good grass No timber. Oct 6th:- At this cor. I set off 4°52'S. on the decl. arc and at 11h.48m. a. m., 1. m. t., I obs. the sun on the mer., the resulting lat. is 32°36'.N ✓ ----- West on a true line bet. secs. 2 and 35, over mountainous land.
25.00	Arroyo, 25 lks. wide, course S.
40.00	Ascend. Set a malpais stone, 12x8x6 ins., 8 ins. in the ground for the ¼ sec. cor., mkd. ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
50.00	Top of mountain bears NW. and SE., Descend.
62.00	Arroyo, 15 lks. wide, course SEly. Ascend.
79.00	Top of mountain, bears N. and S. Descend.
80.00	Set a malpais stone, 18x8x6 ins., 12 ins. in the ground for the cor. of secs. 2, 3, 34 and 35, mkd. with 2 notches on the E. and 4 notches on the W. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land mountainous and exceptionally difficult to survey, 80.00 chs. Good grass. No timber. Soil 3rd rate. Oct. 6th, 1910. ----- West on a true line bet. secs. 3 and 34 over rough and mountainous ground.
20.00	Arroyo, 20 lks. wide, course S.
40.00	Set a malpais stone, 15x8x5 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Oct. 7th:- At 10h. a. m. 1. m. t., I set off 5°20'S. on the decl. arc, 57°24' on the co-lat. arc and determine a mer. with the solar at this cor.
56.00	Foot of descent, bears NW. and SE. Enter little valley bears NE. and SW.
79.40	Old wood road bears NW. and SE.
80.00	Set a malpais stone, 18x12x8 ins., 12 ins. in the ground for the cor. of secs. 3, 4, 33 and 34, mkd. with 3 notches on the E. and W. edges and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Oct. 7th:- At this cor. I set off 5°22'S. on the decl. arc, and at 11h.48m. a. m., 1. m. t. obs. the sun on the mer., the resulting lat. is 32°36'.N ✓ Land mountainous and exceptionally difficult to survey, 80.00 chs. Soil 3rd rate. Good grass. ----- West on a true line bet. secs. 4 and 33 over mountainous ground.

South boundary of T. 9 S., R. 31 E.

Chains.	
2.00	Commence steep and rocky ascent, bears N. and S.
40.00	Set a malpais stone, 15x8x6 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Oct. 7th, 1910.
44.00	Top of ridge, runs back NW.
	Descend, along SW. slope of ridge.
65.00	Ascend.
80.00	Set a malpais stone, 15x8x6 ins., 10 ins. in the ground for the cor. of secs. 4, 5, 32 and 33, mkd. with 4 notches on the E. and 2 notches on the W. edge, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Oct. 8th:- At this cor. I set off 5°45'S on the decl. arc, and at 11h.48m.a.m., l. m. t., I obs. the sun on the mer., the resulting lat. is 32°36'N. Land mountainous and exceptionally difficult to survey, 80.00 chs. Good grass. Soil 3rd rate. No timber. ----- West on a true line bet. secs. 5 and 32 over mountainous land, Ascending.
40.00	Set a malpais stone, 14x10x5 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on N. face and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Descend.
50.00	Canon, 10 lks. wide, course SE. Ascend along South slope of mountain ridge.
80.00	Set a malpais stone, 15x10x5 ins., on rocky ground, in a mound of stone, mkd. with 5 grooves on the E. and 1 groove on the W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Oct. 8th:- At 3h. p. m., l. m. t., I set off 5°48'S. on the decl. arc, 57°24' on the co-lat. arc, and determine a mer. with the solar at this cor. Land mountainous and exceptionally difficult to survey. Grass good. No timber. Soil 3rd rate. Oct. 8th, 1910. ----- West on a true line bet. secs. 6 and 31 over mountainous ground. Ascending.
,50	Top of sput, runs back North. Thence along South slope of mountain ridge.
40.00	Set a malpais stone, 18x9x5 ins., in a mound of stone, on rocky ground, for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Oct. 10th:- At this cor. I set off 6°31'S. on the decl. arc, and at 11h.47m.a.m., l. m. t. obs. the sun on the mer., the resulting lat. is 32°36'N.
80.00	Set a malpais stone, 24x9x6 ins., in a mound of stone, on rocky ground for the cor. of townships 9 and 10 S., Rs. 30 and 31 E., mkd. 9S on NE., 31E on SE., 10S on SW. and 30 E. on NW. face, with 6 notches on the N., S., E. and W. edges, and raise a mound of stone, 4 ft. base, 3 ft. high, S. of corner. Oct. 10th:- At 4h. p. m., l. m. t., I set off 6°34'S. on the decl. arc, 57°24' on the co-lat. arc and determine a mer. with the solar at this cor.

South Boundary of Township 9 South, Range 21 East.

Chains.

Land, mountainous and exceptionally difficult to survey
for 80.00 chs.

No timber.

Good grass. Soil, rocky.

Oct. 10, 1910.

West Boundary of T. 9 S., R. 31 E.

Chains.

North bet. secs. 31 and 36, ascending over rough and rocky ground 27° Slope.

16.00 Ridge bears E. and W. Descend.

36.00 Head of canon, course N.80°E. Ascend.

40.00 Set a malpais stone, 18x18x12 ins., in mound of stone, on rocky ground, for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

50.00 Ridge bears NE. and SW. Descend along W. slope of mountain over immense boulders..

80.00 Set a malpais stone, 18x12x10 ins., 12 ins. in the ground for the cor. of secs. 25, 30, 31 and 36, mkd. with 1 notch on the S. and 5 notches on the N. edge, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Land mountainous and exceptionally difficult to survey
80.00 chs. Soil 3rd rate. Grass good. No timber.

Oct. 11th:- At this cor. I set off 6°53 $\frac{1}{2}$ ' S. on the decl. arc, and at 11h.47m.a.m., l. m. t., I obs. the sun on the mer., the resulting lat. is 32°36' N.

North bet. secs. 25 and 30, descending over rough and rocky ground.

16.00 Canon, course W., 15 lks. wide, Ascend.

22.00 Top of ridge bears E. and W. Descend.

30.00 Canon, 15 lks. wide, course W. Ascend.

34.00 Ridge bears E. and W., Descend.

36.00 Arroyo, 20 lks. wide, course W., Thence over badly broken ground along foot of West slope of Black Hills.

40.00 Set a malpais stone, 24x15x6 ins., on rocky ground, partly in the ground and in mound of stone, for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

80.00 Set a malpais stone, 20x14x4 ins., partly in the ground and in mound of stone, on rocky ground, for the cor. of secs. 19, 24, 25 and 30, mkd. with 2 notches on the S. and 4 notches on the N. edge, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Land mountainous and exceptionally difficult to survey,
80.00 chs. No timber. Grass good. Soil 3rd rate.

Oct. 11th:- At 3h. p. m., l. m. t., I set off 6°56' S. on the decl. arc, 57°23' on the co-lat. arc and determine a mer. with the solar at this cor.

Oct. 11th, 1910 .

North bet. secs. 19 and 24 along West side of Black Hills over rough and broken ground.

6.00 Arroyo, 20 lks. wide, course SW.

20.00 Arroyo, 15 lks. wide, course SW.

37.00 Arroyo, 20 lks. wide, course SW.

40.00 Set a malpais stone, 15x12x6 ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Oct. 12th:- At this cor., I set off 7°16' S. on the decl. arc, and at 11h.47m.a.m., l. m. t., I obs. the sun on the mer., the resulting lat. is 32°38' N. ✓

W. bdy. of T. 9 S., R. 31 E.

Chains.

76.00

80.00

Arroyo, 20 lks. wide, course SW

Set a malpais stone, 18x7x6 ins., 12 ins. in the ground for the cor. of secs. 13, 18, 19 and 24, mkd. with 3 notches on the N. and S. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Oct. 12th; At this cor., I set off 7°18' S. on the decl. arc, 57°22' on the co-lat. arc and determine a mer. with the solar at 3h, p. m., 1. m. t.

Land mountainous and exceptionally difficult to survey, 80.00 chs. No timber. Good grass. Soil rocky.

Oct. 12th, 1910.

North bet. secs. 13 and 18 along West side of Black Hills over rough and broken ground.

.10

40.00

Little arroyo, 4 lks. wide, course W.

Set a malpais stone, 15x8x6 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

80.00

Set a malpais stone, 15x8x7 ins., partly in ground and mound of stone, on rocky ground for the cor. of secs. 7, 12, 13 and 18, mkd. with 4 notches on the S. and 2 notches on the N. edge, and raise a mound of stone, 2ft. base, 1½ ft. high W. of cor.

Oct. 13th:- At this cor. I set off 7°39' S. on the decl. arc, and at 1h.46p.m., 1 m. t. I obs. the sun on the mer., the resulting lat. is 32°39' N

Land rough and broken and mountainous. Exceptionally difficult to survey, 80 chs. Soil 3rd rate. Good grass No timber.

North bet. secs. 7 and 12, along W. side of Black Hills over rough and rocky ground.

40.00

Set a malpais stone, 16x8x6 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Ascend.

71.00

80.00

Top of point of high rocky ridge, Descend, Slope. 30°. Set a malpais stone, 15x9x8 ins., 10 ins. in the ground for the cor. of secs. 1, 6, 7 and 12, mkd. with 1 notch on the N. and 5 notches on the S. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land mountainous. Soil 3rd rate. Good grass. No timber. Land mountainous and exceptionally difficult to survey, 80 chs.

Oct. 13th:- At 3h, p. m., 1. m. t., I set off 7°41' S. on the decl. arc, 57°20' on the co-lat. arc and determine a mer. with the solar at this cor.

Oct. 13th, 1910.

North bet. secs. 1 and 6, descending over rough and rocky ground.

10.00

30.00

Canon, 20 lks. wide, course W. Ascend steep slope. Top of ascent, thence descending gradually over rough rocky ground along West slope of mountain.

40.00

Set a malpais stone, 18x7x7 ins., partly in the ground and in mound of stone, on rocky ground, for the ¼ sec. cor.,

W. bdy. of T. 9 S., R. 31 E'

Chains.

mkd. $\frac{1}{2}$ on W. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Oct. 14th:- At this cor. I set off 7°59' S. on the decl. arc, 57°20' on the co-lat. arc and at 10h, a. m., l. m. t., determine a mer. with the solar at this cor.

80.00 Set a malpais stone, 15x12x12 ins., 10 ins. in the ground for the cor. of tps. 8 and 9 S., Rs. 30 and 31 E., mkd. SS on NE., 31 E. on SE., 9 S on SW. and 30 E. on NW. face with 6 notches on the N., E., S., and W. edges and raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor. Land mountainous and exceptionally difficult to survey, 80.00 chs. Good grass. No timber. Soil 3rd rate.

Oct. 14th:- At this cor. I set off 8°1' S. on the decl. arc, and at 11h.46m. a. m., l. m. t., obs. the sun on the mer., the resulting lat. is 32°41' N.

Oct. 14th, 1910/

Survey and Resurvey of part of the North Boundary, T. 9 S., R. 31 E.

Chains.	
	<p>From the cor. of secs. 1, 2, 35 and 36, a malpais stone, 8x10x9 ins. above ground, properly marked, to the West of which I build a mound of stone, 2 ft. base, 1½ ft. high, I run West on a random line, and at 40.00 chs. fail to find ¼ sec. cor. and at 80.00 chs. fail to find cor. of secs. 2, 3, 34 and 35, at 120 chs. found no trace of the ¼ sec. cor bet. secs. 3 and 34 and at 160 chs. no trace of the cor. of secs. 3, 4, 33 and 34, I then continue my line west and at 400.60 chs. Intersect the cor. of Tps. 8 and 9 S., R. 30 and 31 E. previously described.</p> <p>Thence I run East on a true line bet. secs. 6 and 31 along North side of Black Hills, ascending over rough rocky ground.</p>
15.00	Descend.
21.60	Canon, 20 lks. wide, course North. Ascend
38.88	Wire fence, bears N.10°W. and S.10°E. Drift fence. Top of ridge running N. from mountain top. Descend.
40.60	Set a malpais stone, 18x12x4 ins., 12 ins. in the ground for the ¼ sec. cor., mkd. ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
80.60	<p>Set a malpais stone, 24x12x12 ins., partly in the ground and in mound of stone, on rocky ground, for the cor. of secs. 5, 6, 31 and 32, mkd. with 1 notch on the W. and 5 notches on the E. edge and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p> <p>Land mountainous. Soil rocky. No timber.</p> <p>Land mountainous and exceptionally difficult to survey.</p> <p>Oct. 15th:- At 10h. a. m., 1. m. t., I set off 8°21½'S. on the decl. arc, 57°19' on the co-lat. arc and determine a mer. with the solar at this cor.</p> <p>-----</p> <p>East on a true line bet. secs. 5 and 32, descending along N. side of Black Hills.</p>
40.00	Set a malpais stone, 15x10x7 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
43.00	Arroyo, 20 lks. wide, course N.10°W. Ascend.
60.00	Top of ridge bears NE. and SW., descend.
80.00	<p>Set a malpais stone, 15x10x10 ins., 10 ins. in the ground for the cor. of secs. 4, 5, 32 and 33, mkd. with 2 notches on the W. and 4 notches on the E. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p> <p>Land mountainous. Soil rocky. No timber.</p> <p>Land mountainous and exceptionally difficult to survey, 80.00 chs.</p> <p>Note:- The sky was overcast at noon and the sun not visible.</p> <p>Oct. 15th, 1910.</p> <p>-----</p> <p>East on a true line bet. secs. 4 and 33, descending.</p>
3.50	White Rock Canon, 50 lks. wide, course NE., ascend.
10.00	Top of ridge bears NE. and SW. Thence over rolling rocky ground.
40.00	Set a malpais stone, 15x12x10 ins., 10 ins. in the ground for the ¼ sec. cor., mkd. ¼ on N. face, and raise a mound

Survey and Resurvey of N. bdy. of T. 9 S., R. 31 E.

Chains.

- of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.00 Set a malpais stone, $15 \times 10 \times 7$ ins., 10 ins. in the ground for the cor. of secs. 3, 4, 33 and 34, mkd. with 3 notches on the E. and W. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Land rolling and mountainous. Soil 4th rate.
Good grass. No timber.
- on a true line,
East, bet. secs. 3 and 34 over rocky rolling ground.
- 40.00 Set a malpais stone, $18 \times 10 \times 9$ ins., 12 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.00 Set a malpais stone, $14 \times 12 \times 10$ ins., 10 ins. in the ground for the cor. of secs. 2, 3, 34 and 35, mkd. with 4 notches on the W. and 2 notches on the E. edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Land rolling and rocky. No timber. Good grass.
Soil 3rd rate.
- Oct. 17th:- At this cor. I set off $9^{\circ} 7\frac{1}{2}'$ S. on the decl. arc, and at 11h. 46m. a. m., 1. m. t., I obs. the sun on the mer., the resulting lat. is $32^{\circ} 41'$ N.
- East on a true line bet. secs. 2 and 35 over rolling ground.
- 40.00 Set a malpais stone, for the $\frac{1}{4}$ sec. cor., $15 \times 8 \times 6$ ins., 10 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. $\frac{1}{4}$ on N. face and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- Oct. 17th:- At this cor. I set off $9^{\circ} 10'$ S. on the decl. arc, $57^{\circ} 19'$ on the colat. arc and at 3h, p. m., 1. m. t., I determine a mer. with the solar.
- 80.00 The cor. of secs. 1, 2, 35 and 36.
Land rolling. Soil 3rd rate. Good Grass. No timber.
- Oct. 17th, 1910.

T. 9 S. R. 31 E.

Table of Latitudes and Departures

Edy.	Course.	Dists.	N.	S.	E.	W.
S.	West	480.00				480.00
W.	North	480.00	480.00			
N.	East	480.60			480.60	
E.	South	80.00		80.00		
"	S. 0°12'E.	80.35		80.35	.28	
"	S. 0°21'W.	80.01		80.01		.49
"	S. 0°10'E.	160.36		160.36	.46	
"	S. 0°19'E.	39.70		39.70	.22	
"	South	39.58		39.58		
	Convergency,				.46	
			480.00	480.00	482.02	480.49
					480.49	
					1.53	
	Excess Eastings, 153 lks.					

GENERAL DESCRIPTION.

This township is very rough and rocky. The Southern and Western portions contain what is know as the black hills. Mountains of malpais stone. There is good grass all over the township however. There are no settlers in this township are there any wells of water streams or springs.

August F. Deed
U. S. D. S.

For

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

see Book M.

LIST OF NAMES.

BOOK 2274

A list of the names of the individuals employed by _____

_____, 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 _____

showing the respective capacities in which they acted:

- _____, Chainman.
- _____, Chainman.
- _____, Moundman.
- _____, Moundman.
- _____, Axman.
- _____, Axman.
- _____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____

_____ meridian, _____ of _____, 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 _____

- _____, Chainman.
- _____, Chainman.
- _____, Moundman.
- _____, Moundman.
- _____, Axman.
- _____, Axman.
- _____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



23
BOOK 2274
I, For See Book M, United States Deputy Surveyor, do

solemnly swear that, in pursuance of a contract received from _____, bearing date of the _____ day of _____, 19____, 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 _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

_____ of the _____ meridian, in the _____ of _____, 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 _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. Jan'y 13, 1912
The foregoing field notes of the survey of the South West 1/4 Sec 31 E and Survey of Portion of North Boundary of Tp 9 S R 31 E
Gile and Salt River Base and Meridian, Arizona

executed by Hugh J. Du Val M.D.
under his contract No. 163, dated May 16, 1910, 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. Gatzert
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.