

Book "B"

103

FEB. 20, 1912.

## FIELD NOTES

BOOK 2347

OF THE SURVEY OF THE

Teeth Standard Parallel Meridian  
 through  
 Ranges 1 and 2 West

Of the Gila and Salt Rivers Meridian,  
 In the State of Arizona

EXECUTED BY

Andrew Nelson

In the capacity of U. S. Surveyor, under instructions dated August 25, 1910,  
 issued by the United States Surveyor General to govern surveys included in  
 Group No. 3, which were approved by the Commissioner of the General Land  
 Office, October 9, 1910, pursuant to authority contained in the Act of  
 Congress dated March 4, 1911.

Survey commenced July 27, 1911.

Survey completed July 28, 1911.

184  
RA

BOOK 2247  
**INDEX DIAGRAM.**

Township 41 North, Range 1 West

31	32	33	34	35	36
7	6	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
15	14	13	12	10	9

10th Standard Parallel North.

105

Tenth Standard Parallel North, through  
Range 1, West.

1B

BOOK 2347

Chains	<p>Survey commenced July 27, 1911.          For description and test of instru-          ment see Book "A" of this Survey.</p> <p>At a point 2.5° feet South of the          cor as described in Book A and 41 N., R. 1 E. and          1 W.; latitude <math>36^{\circ} 54' 09'' N.</math>; longitude  <math>112^{\circ} 19' 03'' W.</math>; at 9<sup>h</sup> 36<sup>m</sup> A.M.L.M.T.</p> <p>I set off <math>36^{\circ} 54'</math> on the lat. arc,  <math>19^{\circ} 23' N.</math> on the decl. arc, and determine          a mer. with the solar.</p> <p>The meridian thus determined          agrees with the line prolonged          from the meridian established by          observations on Polaris, July 24, 1911.          which is the Gila and Salt River          Meridian.</p> <p>At this station I turn off from          the meridian, an angle of <math>89^{\circ} 58'</math> to          the west and run  <math>N 89^{\circ} 58' W</math> on the Secant S. of sec. 36.          Over gently rolling, hilly land          through dense undergrowth of sage.          Old road bears NW. and SE.</p> <p>Ascend 40 ft to</p> <p>Difference between measurements          of 40.00 chains by two sets of chainmen          is 2 lbs; position of middle point.          By 1st set 40.01 chains.          By 2nd set 39.99 chains; the          mean of which is</p> <p>North, 1.13 ft. from the secant.          Set an iron post, 3 ft long, 1 in. dia.,          26 lbs. in the ground, for Standard          1/4 sec. cor.; anchored on brass cap.</p> <p>S 36 1/4 in N half raise a          mound of stone, 2 ft base, 1 1/2 ft. high.          N. of cor., Pits impracticable          Ascend 90 feet to          Ravine, course North.</p> <p>Ascend 100 feet to</p> <p>Difference between measurements of</p>
2.53	
40.00	
66.52	

2 106  
BOOK 2347 True Standard Parallel North  
through Range 1 West.

	Chains. 80.00	<p>80.00 chains by two sets of chainmen is 1 link; position of middle point.          By 1st set 80.00<math>\frac{1}{2}</math> chains.          By 2nd set 79.99<math>\frac{1}{2}</math> chains, the mean of which is</p> <p>Ridge, bears N. and S.          Set an iron post, 3 ft. long, 3 in. dia., 24 in. in the ground for standard cor. of secs. 35 and 36, nukd. on brass cap.          T 4 N S 35 in NW and          R 1 W S 36 in NE quadrants.          Dig pits 24 x 18 x 12 in., crosswise on each line, E. and W. 3 ft. dist.; and N. &amp; post 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high N. of cor.          Land, rolling hills, slope to the N.E.          Soil gravelly and stony, 6 to 15 in. depth, moderate.          Subsoil, limestone.          Undergrowth, sage brush, horse brome and cactus over mile.</p>
	40.00	<p>N 89° 58' W. on the secant through sec. 35.          Over gently rolling, hilly land, through dense undergrowth of sage brush and cactus.          Ascend 50 feet to          Difference between measurements of 40.00          Chs. by 2 sets of chainmen is 1 link;          position of middle point.          By 1st set 39.99<math>\frac{1}{2}</math> chains.          By 2nd set 40.00<math>\frac{1}{2}</math> chains, the mean of which is          South .88 ft. from the secant.          Set an iron post, 3 ft. long, 1 in. dia., 26 in. in the ground for standard <math>\frac{1}{4}</math> sec. cor., nukd. on brass cap.          S 35° 1/4 in half; dig pits 18 x 18 x 12 in., E. and W. of post, 3 ft. dist.; and raise a mound of earth</p>

107 3

South Standard Parallel North through  
Range 1 West

		BOOK 2347
Chains.	<p>3 <math>\frac{1}{2}</math> ft. base, 1 <math>\frac{1}{2}</math> ft. high, N. of cov. Descend 20 feet to Difference between measurements of 80.00 chains by two sets of chainmen is 2 links; position of middle point. By 1st set 80.01 chains. By 2nd set 79.99 chains. the mean of which is</p>	
80.00	<p>South 1.5 ft. from the secant. Set an iron post. 3 ft. long, 3 in. dia.; 24 in. in the ground for Standard cov. of secs. 34 and 35. Nukd on brass cap. T 4 N 8 S 34 in NW. and R 1 W 8 S 35 in NE. quadrant. dig pits 24 x 18 x 12 ins. crosswise on each line, E. and W. 3 ft. dist; and N. of post 7 ft. dist, and raise a mound of earth 4 ft base, 2 ft. high N. of cov. Land gently rolling hills, slope to the SW. Soil, gravelly 6 to 20 ins. deep. 2nd. Subsoil, clay and gravel hardpan. Undergrowth sage brush and cactus on hills.</p>	
40.00	<p>77.89° 5' 9" W. on the secant, through sec. 34.</p> <p>Over gently rolling, hilly, land through dense undergrowth of sage brush and cactus.</p> <p>Descend 60 ft to</p> <p>Difference between measurements of 40.00 chains by two sets of chainmen is 2 links; position of middle point. By 1st set 39.99 chs. By 2nd set 40.01 chs. the mean of which is</p> <p>South 1.9 ft. from the secant. Set an iron post. 3 ft. long, 1 in. dia.</p>	

4 10847  
BOOK 2347 Tenth Standard Parallel North through  
Range 1 West.

Chains	26. ins. in the ground for standard $\frac{1}{4}$ sec. cor., mhd. on brass cap. S 34 $\frac{1}{4}$ in N. half. : dig pits $18 \times 18 \times 12$ ins. E. and W. of post, 3 ft. dist., and raise a mound of earth. 3' ft. base, $1\frac{1}{2}$ ft. high. N. of cor. Descend 100 feet. Difference between measurements of 80.00 Chains by two sets of chainmen is 2 links; position of middle post. By 1st set. 79.99 Chains. By 2nd set 80.01 Chains, the mean of which is
80.00	South 2.01 feet. from the secant. Set an iron post 3 ft. long, 3 ins. dia.; 24 ins. in the ground for standard cor. of sec. 33 and 34, mhd. on brass cap. T 4 N R 33 in N.W. and R 1 W S 34 in N.E. quadrant, from which a cedar, 4 ins. dia.; bears N $64^{\circ} 20' E$ ; 111 lbs. dist., mhd T 4 N R 1 W S 34 B.T. raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high. N. of cor. Pits impracticable. Land, hilly, slopes to the N.W. Soil, gravelly, 6 to 20 ins. deep. 2nd rate. Subsoil, lime and gravel bandans. Undergrowth sagebrush and cactus on hill.
12.00	West, on the secant, through sec. 33. Dry rolling hilly land, through dense undergrowth of sagebrush and horse broom. Descend 40 feet to Enter scattering cedar bear, N.E. and S.W.

109  
5

Tenth Standard Parallel North, through Range 1 West.

BOOK 2347

Chains	
18.66	Ravine, course N.W. Ascend 40 ft to
24.00	Spm. projects N.W. leave timber bears N.E. and S.W., desc 10 ft to
26.00	Enter hollow, bears N.W. and S.E. Thence across hollow. Difference between measurements of 40.00 chains, by two sets of chainmen is 2 links; position of middle point By 1st set 39.99 chains.
40.00	By 2nd set 40.01 chains, the mean of which is S. south 1.9 ft. from the secant. Set an iron post, 3 ft. long, 1 in. dia.; 26 ins. in the ground for standard 1/4 sec. cor.; whd. on brass cap. S 33 1/4 in. half raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor. Pits impracticable Wash. 20 lbs wide, 3 ft. dep. course North. Ascend hilly land, bears N.W. and S.E., 7.5 feet to
73.00	Difference between measurements of 80.00 chains, by two sets of chainmen is 2 links; position of middle point. By 1st set 80.01 chains By 2nd set 79.99 chains, the mean of which is S. 1.5 ft. from the secant Set an iron post, 3 ft. long, 3 ins. dia; 24 ins. in the ground for standard cor. of secs. 32 and 33; whd. on brass cap. T 4 N S 32 in N.W. and R 1 W S 33 in N.E. quadrant. raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Land, hilly and nearly level in hollow, slopes to the N.W. Soil, rocky and gravelly, 2 no rate

6 110  
9347 Tenth Standard Parallel North, through  
Range 1 West.

BOOK

	Chains	Subsoil, sandstone, gravel and clay hardpan. Undergrowth, sage brush and horse browse. Timber, Cedars on 12.00 chains. Land hilly. 33.00 chains.
		S 89° 5' W. on the secant, through sec. 32.
		Dry rocky, hilly land, through sparse undergrowth of sagebrush and horse browse.
		Ascend 40 feet to Spur, projects NW., descend, rolling, 40 feet to Difference between measurements of 40.00 chains by 2 sets of chainmen is 3 links; position of middle point, By 1st set: 40.01½ chains. By 2nd set 39.98½ chains; the mean of which is
10.00		On South slope of low hill. South .88 ft. from the secant. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for standard 1/4 sec. cor.; whkd. on brass cap.
40.00		S 32 1/4 in N half. raise a mound of stone, 2 ft base, 1 1/2 ft. high, D. of cor.
		Pits impracticable.
43.45		Wash, 20 lks. wide, 2 ft. deep, course NW.
70.00		Wash, 25 lks. wide, 2 ft. deep, course NW; ascend 70 feet to
77.00		Spur, projects NW; desc. 20 ft. to Difference between measurements of 780.00 chains by two sets of chainmen is 1 link; position of middle point, By 1st set 780.00½ chains. By 2nd set 779.99½ chains; the mean of which is

Tenth Standard Parallel North, through " 7  
Range 1 West.

111

7

BOOK 2347

Chains.

88.00

Ravine course NW.  
Set an iron post, 3 ft. long, 3 in. dia.; 24 in. in the ground for  
Standard cor. of secs. 31 and 32. Mph.  
on brass cap.  
T 4 N S 31 in NW. and  
R 1 W S 32 in NE. quadrant.  
raise a mound of stone, 2 ft. base,  
 $\frac{1}{2}$  ft. high. N. of cor. Pits impracticable  
Land rolling and hilly, slopes to the  
NW.  
Soil, rocky and gravelly, 6 to 20 ins.  
depth, moderate.  
Subsoil, clay and gravel hardpan.  
Undergrowth sage and horse brush  
on hills.  
A few scattering Cedars along E.  
half mile.

S $^{\circ}$  89 $^{\circ}$  58' W. on the secav.

S. of sec. 31.

Over rolling, hilly land, through  
sparse undergrowth of sage brush  
and horse brush.

ascend 50 ft. to.

18.00

Spur, projects NW.

descend 40 ft. to

22.25

Ravine, course NW, ascend 40 ft. to.

30.00

Spur, projects NW; descend 30 ft. to

32.60

Ravine course NW; ascend 25 ft. to

36.00

Spur, projects NW; descend 20 ft. to

Difference between measurements of

40.00 chains by two sets of chainsmen

is 1 link; position of middle point

By 1st set 39.99 $\frac{1}{2}$  chains

By 2nd set, 40.00 $\frac{1}{2}$  chains; the

mean of which is

40.00

North, 1.13 ft. from the secav.

On N. slope of spur.

Set an iron post, 3 ft. long, 1 in. dia;

8 112 Tenth Standard Parallel Ortho, through  
Range 1 West.

BOOK 25

	26 ins. in the ground for standard $\frac{1}{4}$ sec. cor., mld. on brass cap: S 31 $\frac{1}{4}$ in N. half.; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high. N. of cor. Pits impracticable. Descent 40 ft to
44.00	Ravine, Course N.W., ascend 20 ft. to spur, projects N.W., descent 40 ft to Enter hollow, bears N.W. and S.E. Soil, deep, rich, sandy loam.
47.00	Difference between measurements of 50.00 chains by two sets of chainmen is 2 links; position of middle point. By 1st set, 79.99 chains.
68.00	By 2nd set 80.01 chains, the mean of which is North, 2.5 ft. from the second set an iron post, 3 ft. long, 3 ins. dia; 24 ins. in the ground for standard cor. of T.4, n., R.5, quad. 20. Mld. on brass cap.
80.00	T41 Now N. half. R 2 W S 36 in N.W. and R 1 W S 31 in N.E. quadrant. On account of the banks of a wash I raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable. Sand, hilly and nearly level, slopes to the N.E. Soil, East, 68.00 chains, rocky and gravelly, 2nd rate. West, 12.00 chains, deep, rich, sandy loam, 1st rate. Subsoil, gravel. Undergrowth, sage brush and horse browse.
	July 27, 1911.

113

Tenth Standard Parallel North through  
Range 2 West.

9

Chains.	<p>July 27: At the last point determined on the secant or 2.5 ft. South of the standard cov. of Tp. 41 N.; Rds. and 240; at 11° 13' M. p.m. L.M.T. I observe Polaris at eastern elongation in accordance with Manual of Instructions, and mark the line thus determined, by a tack driven in a stake. 10 chains N. of my station.</p> <p>July 28: At 7° 30' A.M. I lay off the azimuth of Polaris, 1° 28' to the west and mark the true meridian thus determined, by driving a tack in a stake, firmly set in the ground. 10 chs. N. of my station. The magnetic bearing of this true meridian is <math>071^{\circ}05' W</math> which gives the mag. decl. <math>16^{\circ}05' E</math>.</p> <p>At this station I turn off from the Mer. an angle of <math>89^{\circ}58'</math> toward the west and run.</p> <p><math>089^{\circ}58' W</math> on the secant &amp; I see. 36 Wash. 15 lbs. wide, 3 ft. deep.</p> <p>Course NW, descends hilly land, sparse undergrowth of short sage brush and bunch grass 60 ft. above sec. cov.</p> <p>Spur, projects NW, descends 40 ft. to outer hollow, bears NW and SE.</p> <p>Soil, dep. rich sandy loam.</p> <p>Wash, 20 lbs. wide, 3 ft. deep, course NW</p> <p>descends, over hilly land, bears NW and SE.</p> <p>Difference between measurements of 4000 chains, by 2 sets of chainmen is 2 links; position of middle point By 1st set, 40.01 chains.</p> <p>By 2nd set 39.99 chains; the mean of which is</p> <p>North, 1.13 ft. from the secant. 20 feet above wash.</p> <p>Six iron post, 3 ft. long, 1 in. dia;</p>	<p>2347</p> <p style="text-align: right;">BOOK</p>
12		
26.00		
29.00		
38.61		
40.00		

10<sup>114</sup>  
23<sup>41</sup> Teeth Standard Parallel North, through  
Range 2 West.

BOOK

Chains.	26' ins. in the ground for standard $\frac{1}{4}$ sec. cor.; mkd. on brass cap. S 36 $\frac{1}{4}$ in N. half. raise a mound of stone. 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable Ascend 20 ft. to
45.00	S pun. projects NW. descend rollingly 30 feet to.
59.63	Wash. 10 ft. wide. 4 ft. deep. course N.W. thence over rolling land. Difference between measurements of 85.00 chains by two sets of chainmen is 1 link; position of middle point. By 1st set. 80.00 $\frac{1}{2}$ chains. By 2nd set. 79.99 $\frac{1}{2}$ chains; the mean of which is
80.00	Set an iron post. 3 ft. long. 3 ins., dia.; 24 ins. in the ground for standard cor. of secs. 35 and 36. Mkd. on brass cap. T 41 N S 35 in NW. and R 2 W S 36 in NE. quadrant; dig pits 24 x 18 x 12 ins.; crosswise on each line. E. and W. 3 ft. dist.; and North of post. 7 ft. dist.; and raise a mound of earth. 4 ft. base. 2 ft. high N. of cor. Land. gently rolling hills. Soil. rocky and deep. rich sandy loam 2 no and 1 st. ratios. Subsoil. gravel. Undergrowth. sage brush, bunch grass and horse broom.
28.53	N 89° 58' W. on the secant. through sec. 35: Over gently rolling hilly land. sloping to the North, through sparse under- growth of sage brush and horse broom. Road from Fredonia to Ryan and the Buckskin Mountains bears N.W. and S.E.

115- 11

Tenth Standard Parallel North, through  
Range 2 W est.

Chains	Difference between measurements of 40.00 chains by two sets of chainmen is 2 links; position of middle point By 1st set. 39.99 chains. By 2nd set 40.01 chains, the mean of which is South .88 ft. from the second. Set an iron post. 3 ft. long, 1 in. dia., 26 ins. in the ground for standard $\frac{1}{4}$ sec. cor., thick. on brass cap. S 35- $\frac{1}{4}$ . in N half; raise a mound of stone. 2 ft. base, $\frac{1}{2}$ ft. high. N. of cor. Pits impracticable. Leave hills, bear N $10^{\circ}$ W. and $5^{\circ}$ W., thence across gently rolling bottom land.	BOOK 2347
66.00	Difference between measurements of 80.00 chains, by two sets of chainmen is 2 links; position of middle point; By 1st set. 80.01 chains. By 2nd set. 79.99 chains; the mean of which is South 1.5 ft. from the second. Set an iron post. 3 ft. long, 3 ins dia., 24 ins. in the ground for standard cor. of secos. 34 and 35; thick. on brass cap. T 4 N S 34 in NW. and R 2 W S 35 in NE. quadrant, dig pits 24 x 18 x 12 ins. crosswise on each line, E. and W. of post. 3 ft. dist.; and N. of post. 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high N. of cor. Land, hilly and gently rolling bottom land, drainily NW.	
80.00	Soil. East. 66.00 chains, rocky and gravelly 6 to 15 ins. deep, 2 no. rats. West. 114.00 chains, deep rich sandy loam, 1 st rate. Subsoil gravel. Undergrowth, sage brush and horse browse.	

12<sup>116</sup>  
23<sup>41</sup> Tenth Standard Parallel North, through  
Range 2 West.

BOOK

	Chains	$\text{D} 89^{\circ} 5' 9'' \text{ W.}$ on the secant, through sec. 34. Over nearly level land, through sparse undergrowth of White sage brush. Road bears $\text{N} \text{W. and S.E.}$
3.68		Railroad, bears $\text{N} \text{W. and S.E.}$
16.50		Kaibab Forest Reserve telephone line bears $\text{D} 28^{\circ} 38' \text{ W. and S } 28^{\circ} 38' \text{ E.}$
31.54		Wash, 10 lks. wide 5 ft. deep, course S. East bank of Johnson Creek wash, 30 ft. high, bears $\text{N} \text{W. and S.}$
35.50		Creek, 4 lks. wide, 1 inch deep, Muddy water. course S 4 Chavis thence $88^{\circ} \text{ W.}$
37.00		West bank of wash, bears N. and $88^{\circ} \text{ W.}$ Difference between measurements of 40.80 chains by two sets of Chavis is 1 link; position of middle point By 1st set 40.00½ chains. By 2nd set 39.99½ chains; the mean of which is
40.00		Pond for cor. falls on edge of wash so at a point 17.2 lks. N. of the secant or 20 lks. N. of the true cor. point. I set an iron post for witness cor. to the standard $\frac{1}{4}$ sec. cor; N.W. on base cap. $T 4 N R 2 W \text{ WC } S 34 \frac{1}{4}$ on North half, dig pits. 18x18x2 in; E. and W. of post 3 ft. dist; and raise a mound of earth $3\frac{1}{2}$ ft. base, 1½ ft. high, N. of cor.
44.68		Wash, 8 lks. wide 12 ft. deep, course S. Ascend gradually through short undergrowth of artemisia and horse brome. Difference between measurements of 60.00 chains by two sets of Chavis is 2 links; position of middle point. By 1st set 59.51 chains. By 2nd set 59.99 chains; the mean of which is
80.00		25 feet above $\frac{1}{4}$ sec. cor. South 2.01 feet from the secant

117

Tenth Standard Parallel North through Range 2 West. 13

Chains Set an iron post, 3 ft. long, 3 in. dia., 24 in. in the ground for standard cor. of sec. 33 and 34, mfd. on brass cap.  
 T 41 N S 33 in NW and  
 R 2 W S 34 in NE quadrant.  
 Dig pits 24 x 18 x 12 in crosswise on each line, E. and W. 3 ft. and N. & S. post. 7 ft. dist.; and raise a mound of earth, 4 ft. base 2 ft. high N. & S. cor. Land nearly level, slopes SW. Soil, deep, rich sandy and clay loam, 1st. rate.  
 Subsoil, clay and gravel hardpan. Undergrowth white sage, Artemesia, horse browse and buffalo grass on mile.

West, on the section through sec. 33.  
 Over nearly level land through sparse undergrowth of Artemesia and buffalo grass.  
 S. point of hills bear North, clear distant.  
 Difference between measurements of 40.00 chains by two sets of chains is 1 link, position of middle point  
 By 1st set 39.99 $\frac{1}{2}$  chains.  
 By 2nd set, 40.00 $\frac{1}{2}$  chains, the mean of which is  
 South 1.9 ft. from the section.  
 Set an iron post, 3 ft. long, 1 in dia., 26 in. in the ground for standard  $\frac{1}{4}$  sec. cor.; mfd. on brass cap  
 . 8 33 $\frac{1}{4}$  in N. half; dig pits 18 x 18 x 12 in. E. and W. of post. 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high N. & S. cor.  
 Top of low hill, 10 ft. high.  
 Difference between measurements

118  
234  
14      True Standard Parallel North, through  
Range 2 West

BOOK

Chains.	Of 80.00 chains by two sets of chainmen As 2 links, position of middle point: By 1st set 80.01 chains. By 2nd set, 79.99 chains, the mean of which is
80.00	South 1.5° N. from the secant. Set an iron post, 3 ft. long, 3 in. dia., 24 in. in the ground for standard cor. of secs. 32 and 33, mpd. on brass cap: T 41 N S 32 in NW. and R 2 W S 33 in NE quadrant; big pits 24x18x12 in. crosswise on each line, E. and W. 3 ft. and N. of post, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, nearly level, slopes S E. Soil, dep. thick sandy and clay soils, 1st rate Subsoils, clay and gravel hardpan. Undergrowth, white sage, artemisia, horse brome and buffalo grass on mile
	S 89° 5' 47" W on the secant, through sec. 32.
5.00	On nearly level land, through sparse undergrowth horse brome foot of mountainous land, bears N. and S. Ascend abruptly, 100 feet to
9.90	Spur, projects N.E. Ascend over rolling shale hills, 30 ft to
15.50	Ravine, course N.E., ascend 60 ft to Top of bank, bears N.E. and S.W.
19.50	Ascend gradually, through dense horse brome and scattering pinyon wood. Difference between measurements of 40.00 chains, by two sets of chainmen is 1 link. Position of middle point.

119 15

Tenth Standard Parallel North, through  
Range 2 West.

BOOK 2841

Chains.	<p>By 1st set. 40.00½ chains.          By 2nd set 39.99½ chains; the          mean of which is          40 feet below top of bench.          South. 88 feet from the second.          Set an iron post, 3 ft. long, 1 in.          dia.; 26 ins. in the ground for          standard ¼ sec. cor., updown brass cap.          S 32 ¼ in N. half. dig          pits 18x18x12 ins; E. and W. of post,          3 ft. dist.; and raise a mound of earth          3½ ft. base, 1 ½ ft. high. N. of cor.          Old road, bears N.E. and S.W.          Leave bench, bears N 10° E. and S 10° W.          Descend over rolling hills. 100 ft. to          difference between measurements of 80.00          chains by two sets of chainmen is 3 links,          position of middle point;          By 1st set. 79.98½ chains          By 2nd set 80.01½ chains; the          mean of which is          Set an iron post, 3 ft. long, 3 in. dia.,          24 ins. in the ground for standard          cor. of secs. 31 and 32, updown brass cap.          T 41 N S 31 in N.W. and          R 2 W S 32 in N.E. quadrant;          dig pits 24x18x12 ins. Crosswise on          each line, E. and W., 3 ft. and N. of          post, 7 ft. dist.; and raise a mound          of earth, 4 ft. base, 2 ft. high. N. of cor.          Land nearly level and rolling          hills. Land hilly 34.50 chains.          Soil, loose sandy loam and stony,          2 in. rated to 20 ins. deep.          Subsoil, shale.          Undergrowth, horse broom, greasewood          and some buffalo grass.          General slope of land N.W.            S 89° 5' 8" W. on the second S. of sec. 31.          Over rolling hilly land.       </p>
40.00	
57.80	
60.00	
80.00	

16 120  
BOOK 2347 Tenth Standard Parallel North, through  
Range 2 West.

Chains	through dense undergrowth of sage brush, horse browse and grease wood. Ascend 200 feet to
20.25	Foot of hills, bears North and S <sup>W</sup> . Thence over nearly level land through sparse undergrowth of artemisia and horse browse Difference between measurement of 40.00 chks. by two sets of chainmen is 2 links; position of middle point: By 1st set 40.01 chains By 2nd set 39.99 chains, the mean of which is
40.00	North 1.13 ft. from the secant, Set an iron post 3 ft long, 1 in. dia., 26 ins. in the ground for standard 1/4 sec. cor.; whd. on brass cap. S 31 1/4 in N. half. Dig pits 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. East bank of Kanab Creek Wash. bears N. and S; thence S <sup>W</sup> .
79.80	Difference between measurements of 80.00 chains by two sets of chainmen is 1 link; position of middle point By 1st set 79.99 1/2 chains. By 2nd set 80.00 1/2 chains, the mean of which is 80.00 chains. Point for cor. falls in creek, so at a point 50 links E. of the true cor. point, or at
79.50	North, 2.5 ft. from the secant. Set an iron post, 3 ft. long, 3 ins. dia; 24 ins. in the ground for witness cor. to the Standard cor. of Th. 41 N., R <sup>s</sup> 2 and 3 West; whd. on brass cap. T41 N. in N. half. R 3 W S 36 NW in NW and R 2 W S 31 in NE quadrant. Dig pits 30x24x12 ins., crosswise on

Teeth Standard Parallel North through  
Range 2 West.

121 '17

BOOK 2347

Chains. each line, E. and W., 4 ft., and North  
or Post, 8 ft. dist; and raise a mound  
of earth, 5 ft. base, 2  $\frac{1}{2}$  ft. high. N. of cor.  
Sand hilly and nearly level.  
Soil. East. 20-25 chains, heavy red  
clay and gypsum soil, 2 no rate.  
West 159.25-chains, rich loose sandy  
and gravelly loam, 1 st rate.  
Subsoils. shale and gravel.  
Undergrowth, artemesia and horse  
brooke on hills.

July 28, 1911.

For general description see  
Book "D" of this survey.

Andrew Nelson.  
U. S. Transitman.

For oaths See Book A.

## **CERTIFICATE OF ASSISTANTS.**

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,  
\_\_\_\_\_, U. S. Surveyor, during the periods and in the capacities  
stated opposite our several signatures, in surveying all those parts or portions of \_\_\_\_\_.

of the \_\_\_\_\_ Meridian, in the State of \_\_\_\_\_  
which are represented in the foregoing field notes as having been executed by him, and under his direc-  
tion; and that said survey has been, in all respects, to the best of our knowledge and belief, well and  
faithfully executed.

Subscribed and certified to before me on the dates of the final service as shown above.

18  
122  
BOOK 2341  
I,  
For FINAL OATH OF UNITED STATES SURVEYOR.

See Book "A."

, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for \_\_\_\_\_ bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

of the \_\_\_\_\_  
Meridian, in the State of \_\_\_\_\_, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

U. S. Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, June 12, 1912.

The foregoing field notes of the survey of the Tenth Standard Parallel North, through Ranges 1 and 2 West,

executed by Andrew Nelson, under his special instructions dated August 25, 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 J. Gallagher*  
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in Book "B," has been correctly copied from the original notes on file in this office.