

2414

Book 4

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BOOK 2414

# FIELD NOTES

OF THE SURVEY OF THE

Sixth Standard Parallel North, through Range 10 West,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

William H. Elliott,

In the capacity of U. S. Surveyor, under instructions dated February 5, 1912, issued by the United States Surveyor General to govern surveys included in Group No. 16, which were approved by the Commissioner of the General Land Office, March 1, 1912, pursuant to authority contained in the Act of Congress dated June 25, 1910

Survey commenced April 1, 1912.

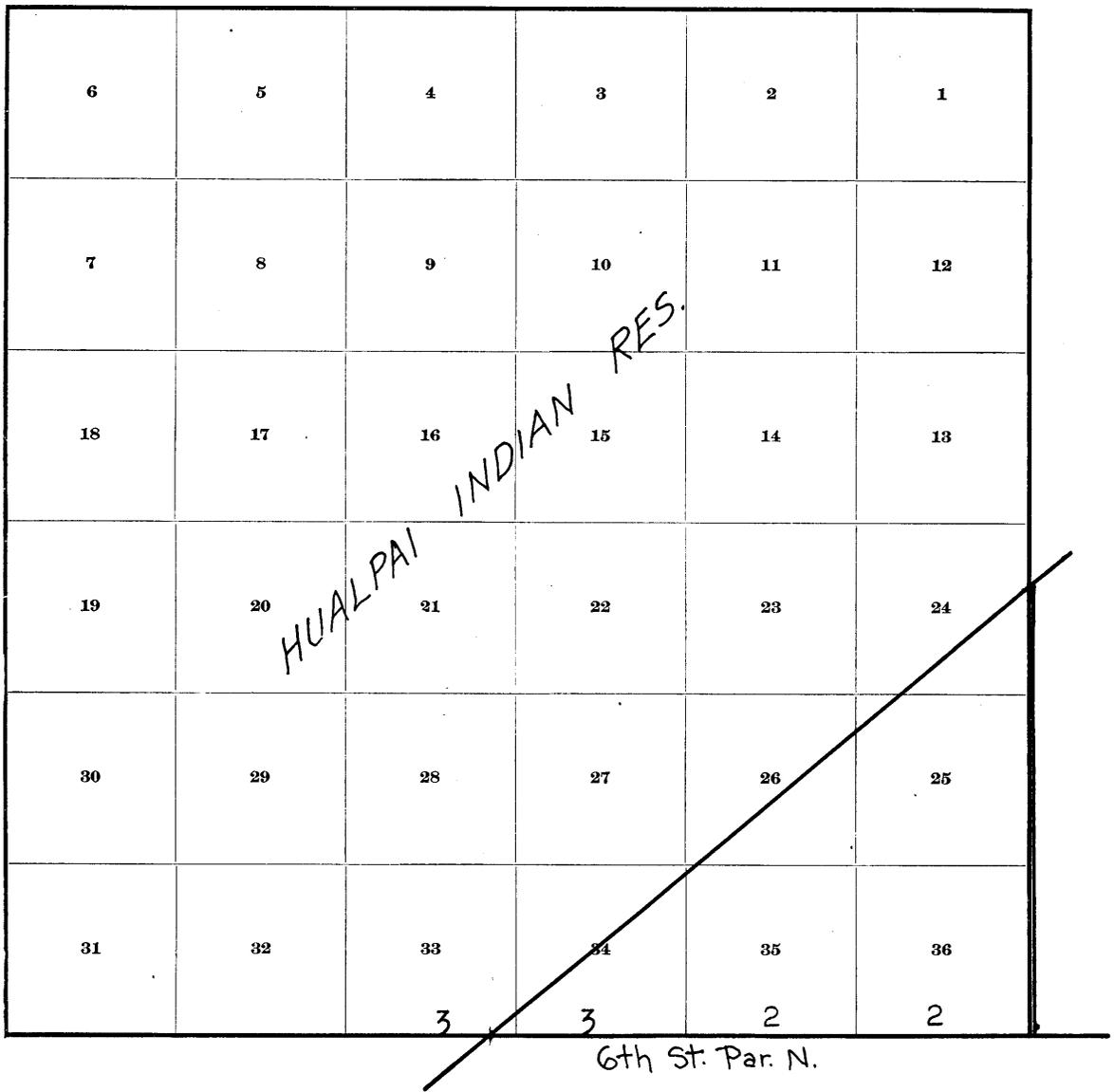
Survey completed April 3, 1912.

38  
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BOOK 2414

# INDEX DIAGRAM.

Township 25 North, Range 10 West.



## Sixth Standard Parallel North, through Range 10 West. 1

Chains.

Survey commenced April 1, 1912, and executed with a Young & Son's light mountain transit No. 8480, with Smith's patent solar attachment on side. The horizontal limb of the instrument is provided with two double verniers each reading to 1' of arc, which is also the least reading of the verniers of the latitude and declination arcs.

I examine and test all the adjustments of the transit and solar attachment, and finding same correct; then, in order to test the solar apparatus by comparing the results of observations on the sun, for meridians, made during p.m. & a.m. hours respectively, with a true meridian as determined by observation of Polaris, I proceed as follows :

At noon, . . . , at my camp, which is situated near the corner point of secs. 26, 27, 34 & 35, T. 25 N., R. 10 W., I set off  $4^{\circ}38\frac{1}{2}'$  N. on the declination arc, and observe the sun on the meridian. The resulting lat. is  $35^{\circ}31\frac{1}{2}'$  N.

At 3h p.m., l.m.t., I set off  $4^{\circ}41\frac{1}{2}'$  N. on the decl. arc, and my observed lat.,  $35^{\circ}31\frac{1}{2}'$  N. on the lat. arc, and determine a meridian with the solar, and mark the meridian thus determined by a tack in a stake driven firmly in the ground 5 chs. N. of my station.

At 6h 44m p.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 in a fence post 7 chs. N. of my station. April 1, 1912.

April 2, 1912.

At 8h a.m., l.m.t., I set off the azimuth of Polaris,  $1^{\circ}26'$  to the East, and mark the true meridian thus determined by a tack in the stake 5 chs. N. of my station, which point falls .35 ins. E. of the point in the meridian as determined by the solar on the preceding afternoon. Then I set off  $4^{\circ}58\frac{1}{2}'$  N. on the decl. arc, and  $35^{\circ}31\frac{1}{2}'$  N. on the lat. arc, and determine a meridian with the solar, and mark a point in the meridian thus determined by a tack in the stake 5 chs. N. of my station, which point falls .20 ins. E. of the point in the true meridian as determined by Polaris observation.

The solar apparatus, by p.m. & a.m. hours observations, defines positions for meridians about 20" W., and 10" E., respectively of the true meridian as determined by observation of Polaris; therefore I conclude that my instrument is in satisfactory adjustment.

The magnetic bearing of the true meridian at 8h a.m. is N.  $15^{\circ}45'$  W.; the angle thus determined gives the magnetic declination as  $15^{\circ}45'$  E.

I proceed to the Standard cor. of Tps. 25 N., Rs. 9 & 10 W. which is an iron post 3 ins. in diam. 1 ft. above ground, with brass cap, marked and witnessed as described by the Surveyor-General, lat.  $35^{\circ}30'34''$  N., long.  $113^{\circ}18'14''$  W.

At the above described cor., at 9h a.m., l.m.t., I set off  $4^{\circ}59'$  N. on the decl. arc, and  $35^{\circ}30\frac{1}{2}'$  N. on the lat. arc, and determine a meridian with the solar. Thence I run, as per instructions, Var.  $15^{\circ}45'$  E.

## 2 Sixth Standard Parallel North, through Range 10 West.

- Chains.
- West, on South bdy. sec. 36.  
Over heavily rolling land, desc. through scattering cedar & pinon.
- 9.00 Draw, 1 ch. wide, course NW., road in same. asc. along N. slope.
- 28.30 Top of ridge, brs. NW. & SE., road on same, desc. Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 8 lks.; position of middle point, by 1st set 40.04 chs., by 2nd set 39.96 chs., the mean of which is
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for standard  $\frac{1}{4}$  sec. cor., marked on brass cap,  $\frac{1}{4}$  S 36 in N. half; raise a mound of stone 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor. No trees available, pits impracticable.
- 46.00 Wood road, brs. NE. & SW., in draw 2 chs. wide, course SW., asc.
- 74.00 Top of ridge, brs. NE. & SW., desc. Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 10 lks.; position of middle point, by 1st set 80.05 chs., by 2nd set 79.95 chs.; the mean of which is
- 80.00 Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in the ground for standard cor. of secs. 35 & 36, marked on brass cap, T 25 N R 10 W, in N. half, S 36 in NE., and S 35 in NW. quad; from which, A pinon tree 8 ins. diam. brs. N.  $84\frac{1}{2}^{\circ}$  W. 54 lks. dist., Marked T 25 N R 10 W S 35 S C B T. A pinon tree 9 ins. diam. brs. N.  $101\frac{1}{2}^{\circ}$  E. 86 lks. dist., marked T 25 N R 10 W S 36 S C B T.
- Land, heavily rolling, mts.  
Soil, 3rd rate, gravelly, dry.  
Sparse cedar, pinon, scrub oak, native grass.

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At the above cor. at noon, I set of  $5^{\circ}01\frac{1}{2}'$  W. on the decl. arc, and observe the sun on the meridian. The resulting lat. is  $35^{\circ}30\frac{1}{2}'$  N.

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- West, on S. bdy. sec. 35.  
Over heavily rolling, broken land, through scattering cedar and pinon:
- 6.00 Drain 10 lks. wide, course SW., asc.
- 19.00 Top of ridge, brs. NE. & SW., desc. over limestone cliffs.
- 33.00 Foot of cliffs, enter draw, course NW.
- 36.00 Main road, brs. NW. & SE. Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 6 lks.; position of middle point, by 1st set, 40.03 chs., by 2nd set, 39.97 chs.; the mean of which is
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for standard  $\frac{1}{4}$  sec. cor., marked on brass cap,  $\frac{1}{4}$  S 35 in N. half; raise a mound of stone 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.
- 42.00 Leave draw, asc.
- 50.00 Top of ridge, brs. N. & S., desc.
- 59.00 Wash, 10 lks. wide, course NW., asc.
- 69.00 Top of ridge, brs. N. & S., desc.
- 77.00 Wash, 20 lks. wide, course NNE., wood road, in same, asc. Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 8 lks.; position of middle point, by 1st set 80.04 chs., by 2nd set 79.96 chs.; the mean of which is
- 80.00 Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in the ground for standard cor. of secs. 34 & 35, marked on brass cap, T 25 N R 10 W, in N. half, S 35 in NE., and S 34 in NW. quad.; from which,

Chains.

A cedar tree 8 ins.diam.brs.N.33 $\frac{1}{2}$ °W. 115 lks. dist.,  
marked T 25 N R 10 W S 34 S C B T .

A cedar tree 8 ins.diam.brs. N. 8 $\frac{1}{4}$ °E. 42 lks. dist.,  
marked T 25 N R 10 W S 35 S C B T .

Land, mts., broken.

Soil, 3rd rate, gravelly, stony, dry.

Sparse cedar and pinon. Timber mostly cut away.

Fair grass. April 2, 1912.

April 3, 1912.

At 8h a.m., l.m. t., at the above described corner, S. 34 T. 25,

I set off 5°21 $\frac{1}{2}$ ' N. on the decl. arc, and 35°30 $\frac{1}{2}$ ' N. on  
the lat. arc, and determine a meridian with the solar.

Thence I run,

West, on S. bdy. sec. 34.

Over broken, mts. land, asc. through scattering cedar.

- 8.00 Top of ridge, brs. NE. & SW., desc.  
28.30 Wood road, brs. NE. & SW.  
28.50 Wash, 15 lks. wide, in draw, 2 chs. wide, course NE., asc.  
35.00 Top of ridge, brs. N. & S., desc.  
Difference bet. measurements of 40.00 chs. by 2 sets of  
chainmen is 4 lks.; position of middle point,  
by 1st set, 40.02 chs.,  
by 2nd set, 39.98 chs.; the mean of which is  
40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in  
the ground for standard  $\frac{1}{4}$  sec. cor., marked on brass cap,  
 $\frac{1}{4}$  S 34 in N. half; from which,  
A cedar tree 8 ins.diam.brs. N.81 $\frac{3}{4}$ °E. 50 lks. dist.,  
marked S C  $\frac{1}{4}$  S 34 B T.  
Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$  ft. high N. of cor.  
47.25 Road, brs. NW. & SE., in draw 3 chs. wide, course NW., asc.  
54.00 Top of ridge, brs. NW. & SE., desc.  
66.50 Wire fence, brs. NW. & SE.  
Difference bet. measurements of 80.00 chs. by 2 sets of  
chainmen is 6 lks.; position of middle point,  
by 1st set, 79.97 chs.,  
by 2nd set, 80.03 chs.; the mean of which is  
80.00 Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in  
the ground for standard cor. of secs. 33 & 34, marked on  
brass cap, T 25 N R 10 W, in N. half,  
S 34 in NE., and  
S 33 in NW. quad.; from which,  
A cedar tree 8 ins.diam.brs. N.85 $\frac{3}{4}$ °E. 35 lks. dist.,  
marked T 25 N R 10 W S 34 S C B T.  
A pinon tree 8 ins.diam.brs. N.34 $\frac{1}{2}$ °W. 172 lks. dist.,  
marked T 25 N R 10 W S 33 S C B T.  
Daniel's ranch house brs. S. 45° W. 5 chs. dist.  
A well brs. N. 50° W. 3 chs. dist., good water.  
Land, mts., broken.  
Soil, 3rd rate, gravelly, stony.  
Sparse cedar, pinon, scrub oak, fair grass.

West, on S. bdy. sec. 33.

Over mts. land, desc. stony W. slope, through dense cedar.

- 2.30 Road, brs. NNE. & SSW.  
3.00 Wash, 20 lks. wide, course NNE., asc.  
10.38 Intersect SE. bdy. line of Hualpai Indian Reservation  
N.50°E. 16.18 chs. from 60 $\frac{1}{2}$  mile cor., which is a rock  
in place 24x16x10 ins. above ground, marked and  
witnessed as described by the Surveyor-General.  
Set an iron post 3 ft. long, 3 ins. in diam. 24 ins. in  
the ground for standard closing cor. of T.25 N., R.10 W.,  
marked on brass cap, S C T 25 N R 10 W S 33 in NE. sector,  
C C W. of centre, and H I R in NW. half; from which,  
A cedar tree 12 ins.diam.brs. N.61°E. 218 lks. dist.,  
marked T 25 N R 10 W S C C C B T.  
raise a mound of stone 4 ft. base, 2 ft. high E. of cor.  
Land broken, mts. Soil, 3rd rate, gravelly. Few cedars.

42

Sixth Standard Parallel North, through Range 10 West.

At this cor., at noon, I set off  $5^{\circ} 24'$  N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is  $35^{\circ} 30\frac{1}{2}'$  N.

General Description.

The 6th Standard Barallel North, through frac. Range 10 West, runs over broken, or heavily rolling land, with numerous limestone outcroppings. The soil is in general a loose, dry calcareous gravel, originally covered with cedar and pinon, which has been cut away. There are no indications of mineral along the line.

April 3, 1912.

*William H. Ellis*

U. S. Surveyor.

5  
43

SEP 4-1912

4-680

BOOK 2414

### CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,  
William H. Elliott, U. S. Surveyor, during the periods and in the capacities  
 stated opposite our several signatures, in surveying, <sup>under Group 16</sup> all those parts or portions of the  
6th Standard Parallel North, through Range 10 West  
Section No. 25,  
Arizona.

of the Gila & Salt River Base & Meridian, in the State of Arizona  
 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.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
<i>Ben Lyon</i>	Mch. 6, 1912	June 17, 1912.	Chairman.
<i>Eric Hanagan</i>	Mch. 6, 1912	June 17, 1912.	Chairman.
<i>Henry Elbalhall</i>	Mch. 6, 1912	May 15, 1912.	Flagman.
<i>Randy L. Stoeslun</i>	Mch. 6, 1912	June 9, 1912.	Axeman.
<i>Charles Grubb</i>	Mch. 6, 1912	Apr. 3, 1912.	Moundman.
<i>R.B. McNeal</i>	Apr. 4, 1912.	Apr. 17, 1912.	Moundman.

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

*William H. Elliott*  
U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, William H. Elliott, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona, Group 16 bearing date of the 5th day of February, 1912, 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 the 6th Standard Parallel North, through Range 10 West

of the Gila & Salt River Meridian, in the State of Arizona, 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 Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

William H. Elliott  
U. S. Surveyor.

Subscribed by said William H. Elliott, and sworn to before me }  
this 15th day of October, 1912



Frank S. Ingalls  
SURVEYOR-GENERAL OF ARIZONA

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, April 21, 1913

The foregoing field notes of the survey of the 6th Standard Parallel North, through Range 10 West of the Gila & Salt River Base & Meridian, Arizona.

executed by William H. Elliott, U.S. Surveyor under his special instructions, <sup>for Group 16</sup> dated February 5, 1912, 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  
U. S. 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.