

2716

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Book "D"

BOOK 2716

117  
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SEP 2 1914

Survey- Exteriors

# FIELD NOTES

OF THE SURVEY OF

PARTS OF THE

SOUTH and WEST Boundaries of

Township 9 South Range 24 East

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Thomas B. Matthews,

In the capacity of U. S. Surveyor, under instructions dated September 24, 1912

issued by the United States Surveyor General to govern surveys included in

Group No. 22, which were approved by the Commissioner of the General Land

Office, October 3, 1912, pursuant to authority contained in the Act of

Congress dated August 23, 1912 and June 23, 1913.

Survey commenced April 21, 1913

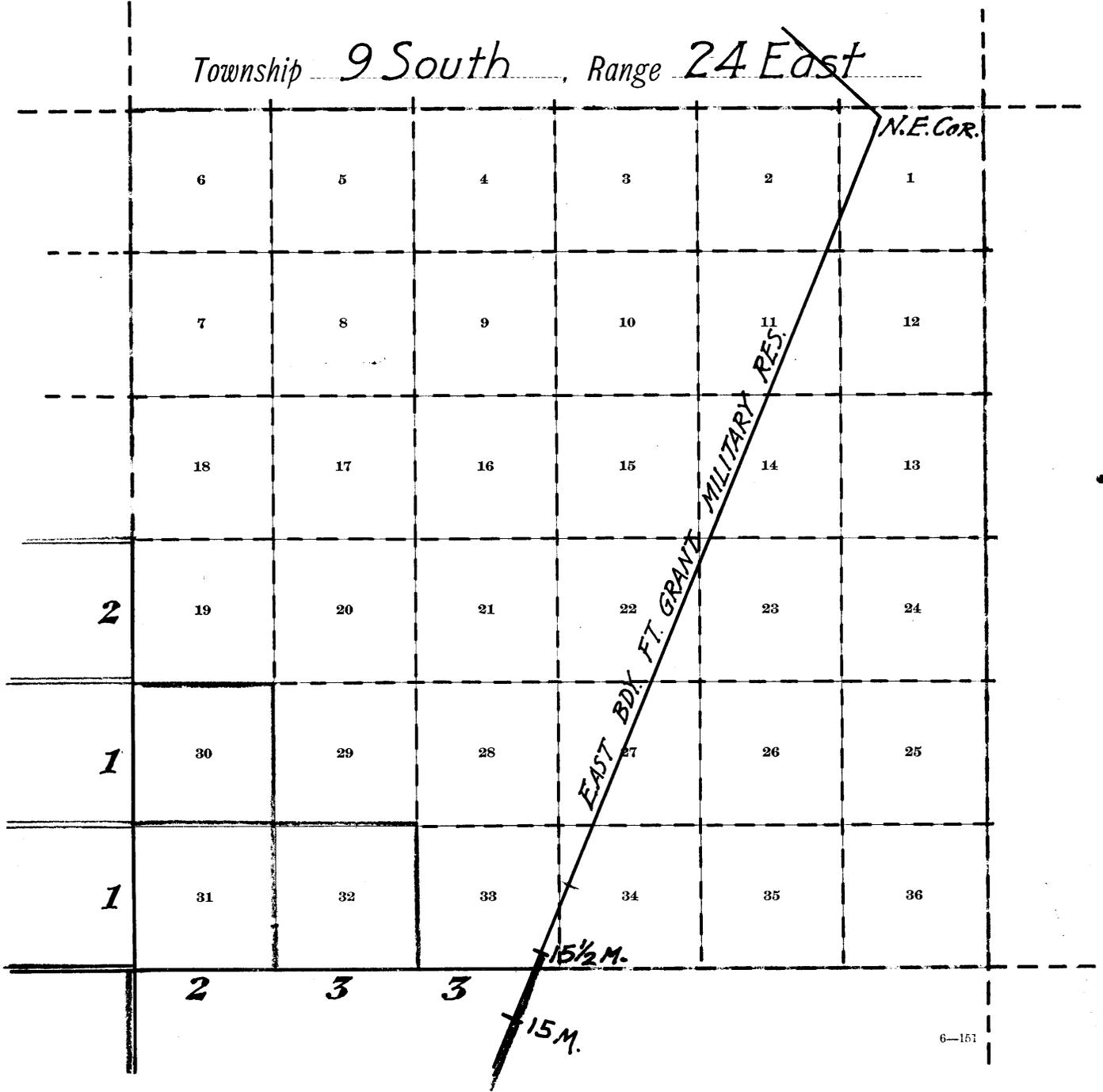
Survey completed December 20, 1913

118  
1A

BOOK 2716

# INDEX DIAGRAM.

Township 9 South, Range 24 East



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S 1/2 OF WEST BOUNDARY OF TOWNSHIP 9 SOUTH, RANGE 24 EAST

Survey commenced April 21st, 1913 and executed by Thomas B. Matthews, U. S. Surveyor, with Young & Sons Light Mountain Transit No. 8480, previously described in Bks. A, B, & C. I examine adjustments of the transit and find them to be correct; and know from recent test of the solar apparatus, by comparing its indication resulting from solar observations, made during a.m. and p.m. hours, with a meridian established by observation on Polaris, at elongation, that the instrument is in satisfactory adjustment.

At 7 h. 30 m., a.m., l.m.t., I set off 11° 48 1/2' N. on decl. arc, 32° 35 1/2' on lat. arc and determine a mer. with the solar at the cor. of Tps. 9 & 10 S., Rs. 23 & 24 E. previously re-established by me and described in book "C."

The magnetic bearing of the true mer., thus established, is N. 12° 55' W., the angle thus determined gives the magnetic decl. 12° 55' E.

Thence I run

North on true line bet. secs. 31 & 36

Over slightly rolling land, through mesquite brush 4 to 8 ft. high

- 4.75 Deep wash 10 lks. wide, clear cold water, 2 ft. deep; course S. 60° W.
- 24.00 Dry wash 70 lks. wide, 2 ft. deep, course S, 30° W.
- 29.00 Dry wash 15 lks. wide, 2 ft. deep, course S. 60° W.
- 38.00 Dry wash 10 lks. wide, 1 ft. deep, course S. 30° W, thence commence gentle ascent of S. slope
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., with a brass cap marked 1/4 S 36 in W., S 31 in E. & 1913 in S. half. of post  
Dig pits 18 x 13 x 12 ins. N. & S. 3 ft. dist. & raise mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
- 45.00 Wagon road, bears N. 60° E., S. 60° W.
- 75.00 Dry wash 10 lks. wide, 1 ft. deep, course S. 30° E.
- 80.00 Set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 25, 30, 31 & 36, with a brass cap marked T 9 S in N. & 1913 in S. half, R 23 E S 25 in N.W., R 24 E S 30 in N.E., S 31 in S.E. & S 36 in S.W. quadrant.  
Dig pits 13 x 13 x 12 ins. in each sec. 5 1/2 ft. dist. & raise mound of earth 4 ft. base 2 ft. high W. of cor.  
Land level & rolling  
Soil dark sandy loam, fine texture, 2 to 3 ft. deep,  
Mesquite brush 4 to 8 ft. high, scattering grass.  
No timber.

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Thence I run

North on true line bet. secs. 25 & 30

Ascending gentle S.W. slope, through mesquite brush 4 to 6 ft. high

- 9.50 Dry wash 10 lks. wide, 1 ft. deep, course S. 30° E., thence ascend S.W. slope over rocky land
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., with a brass cap marked 1/4 S 25 in W., S 30 in E. & 1913 in S. half. Pits impract.  
Raise mound of stone 3 ft. base 3 ft. high W. of cor.
- 42.67 Old hospital building of Ft. Grant, bears N. 59° 21' W.  
Flag pole of Ft. Grant, bears N. 83 1/4° W.
- 56.00 Rocky dry wash 50 lks. wide, 5 ft. deep, course S. 60° W.
- 63.00 Rocky dry wash 1 ch. wide, 5 ft. deep, course S, 30° W.
- 80.00 Set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19, 24, 25 & 30, with a brass cap marked T 9 S in N. & 1913 in S. half, R 23 E. S 24 in N.W., R 24 E S 19 in N.E., S 30 in S.E. & S 25 in S.W. quadrant.  
Raise mound of stone 3 ft. base 3 ft. high W. of cor. Pits impract.  
Land rolling.  
Soil rocky  
Scattering grass, mesquite brush 4 to 8 ft. high with scattering yuccas 8 to 10 ft. high.  
No timber.

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## RS. 23 OF WEST BOUNDARY FRACTIONAL TOWNSHIP 9 SOUTH, RANGE 24 EAST

- Thence I run  
North on true line bet. secs. 19 & 24  
Over rolling, rocky land
- 5.00 Hospital building of Ft. Grant bears S. 22° 48' W.,  
Flag-pole at Ft. Grant bears S. 39° 51' W.
- 18.00 Rocky wash 50 lks. wide, 5 ft. deep, course S.W.
- 32.00 Wagon road, bears E. & W.
- 37.00 Bonita Creek, clear cold water, 30 lks. wide, 3 ft. deep,  
course West, banks 30 ft. high
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the  
ground for  $\frac{1}{4}$  sec. cor., with a brass cap marked  $\frac{1}{4}$  S 24 in  
W., S 19 in E. & 1913 in S. half, from which  
A juniper 14 ins. in dia. bears S. 29 $\frac{1}{2}$ ° W. 308 lks. dist.  
marked  $\frac{1}{4}$  S 24 B T  
A juniper 24 ins. in dia. bears S 24° E. 247 lks. dist.  
marked  $\frac{1}{4}$  S 19 B T
- 46.00 Rocky wash 50 lks. wide, 15 ft. deep, course West.
- 50.00 Foot of Graham Mt., bears E. & W., ascend steep rocky S.  
slope 500 ft.
- 67.00 Top of spur slopes East, thence descend N.E. slope 100 ft.
- 69.00 Ascend rocky S.E. slope 200 ft. to
- 75.00 Top of spur slopes East, thence descend along E. slope to  
cor.
- 80.00 Set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in the  
ground for cor. of secs. 13, 18, 19 & 24, with a brass cap  
marked T 9 S in N. & 1913 in S. half, R 23 E S 13 in N.W.,  
R 24 E S 18 in N.E. S 19 in S.E. & S 24 in S.W. quadrant,  
from which,  
A black-jack 8 ins. in dia. bears N. 28 $\frac{1}{2}$ ° W. 87 lks. dist.  
marked T 9 S R 23 E S 13 B T  
A black-jack 8 ins. in dia. bears N. 19 $\frac{1}{2}$ ° E. 119 lks. dist.  
marked T 9 S R 24 E S 18 B T  
A post oak 8 ins. in dia. bears S. 20 $\frac{3}{4}$ ° E. 230 lks. dist.  
marked T 9 S R 24 E S 19 B T  
A post oak 14 ins. in dia., bears S. 20° W. 235 lks. dist.  
marked T 9 S R 23 E S 24 B T  
Land S half, rolling rocky. N. half, rough mountainous.  
Soil thin rocky  
S. half, scattering grass & mesquite brush. N. half scat-  
tering grass & timber.  
Note: at the above described cor. I set off 11° 51 $\frac{1}{2}$ ° N.  
on decl. arc and at 11 h. 58 m. 46 s., a.m., l.m.t., observe  
the sun on the mer. and obtain a reading of 32° 33 $\frac{1}{2}$ ' on lat.  
arc.  
April 21, 1913.

PART OF SOUTH BOUNDARY OF -----  
TOWNSHIP 9 SOUTH, RANGE 24 EAST  
April 21, 1913  
From the cor. of Tps. 9 & 10 S., Rs. 23 & 24 E. previously  
re-established by me and described in book "C."

- I run  
East on true line bet. secs. 6 & 31  
Over slightly riling land. through mesquite brush 4 to 8  
ft. high
- 12.00 Dry wash 15 lks. wide, 2 ft. deep, course S. 30° W.
- 13.00 Wagon road, bears N. 30° E., S. 30° W.
- 29.00 Wagon road, bears N. 30° E., S. 30° W.
- 37.00 Dry wash 25 lks. wide, 6 ft. deep, course S. 30° W.
- 39.54 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in  
ground for  $\frac{1}{4}$  sec. cor., with a brass cap marked  $\frac{1}{4}$  S 31 in  
N. & S 6 1913 in S. half, from which  
A willow 12 ins. in dia., bears S. 44 $\frac{1}{2}$ ° E. 150 lks. dist.  
marked  $\frac{1}{4}$  S 6 B T  
No more trees in dist. Pits impract.  
Raise mound of stone 3 ft. base 3 ft. high N. of cor.
- 43.00 Creek 50 lks. wide, 1 ft. deep, clear cold water, course  
S. 60° W., thence ascend over rolling, rocky land through  
scattering mesquite brush 3 to 4 ft. high.
- 55.00 Dry wash 50 lks. wide, 3 ft. deep, course N. 80° W.
- 79.00 Wagon road, bears S. 60° W., N. 60° E.
- 79.54 Set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in the  
ground for cor. of secs. 5, 6, 31 & 32, with a brass cap  
marked T 9 S in N., T 10 S 1913 in S. & R 24 E in W. half,  
S 31 in N.W., S 32 in N.E., S 5 in S.E. & S 6 in S.W. quad-  
rant, from which

PART OF SOUTH BOUNDARY OF TOWNSHIP 9 SOUTH, RANGE 24 EAST BOOK 2716

A cottonwood 12 ins. in dia. bears N. 1 1/2° W. 322 lks. dist. marked T 9 S R 24 E S 31 B T No more trees in dist. Dig pits 13 x 13 x 12 ins. in each sec. 5 1/2 ft. dist. & raise a mound of earth 4 ft. base 2 ft. high W. of cor. Land level & rolling Soil loose sandy loam, medium to fine texture, on W. half, E. half red sandy loam, medium to coarse texture 12 ins. deep in gravel sub-soil, loose rock on top of ground. Mesquite brush & scattering yuccas 5 to 8 ft. high. Scattering trees along creek.

Thence I run East on true line bet. secs. 5 & 32 Ascending W. slope over rocky ground through mesquite brush 3 to 4 ft. high.

- 5.00 Wagon road bears N. 60° W., S. 60° E.
23.00 Dry wash 15 lks. wide, 1 ft. deep, course South.
27.00 Dry wash 25 lks. wide, 3 ft. deep, course S. 60° W.
40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., with a brass cap marked 1/4 S 32 in N. & S 5 1913 in S. half. Pits impract.
64.00 Raise mound of stone 3 ft. base 3 ft. high N. of cor.
80.00 Dry wash 50 lks. wide, 10 ft. deep, course S.W.
Set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 4, 5, 32 & 33, with a brass cap marked T 9 S in N., T 10 S 1913 in S. & R 24 E in W. half, S 32 in N.W., S 33 in N.E., S 4 in S.E. & S 5 in S.W. quadrant. Pits impract.
Raise mound of stone 3 ft. base 3 ft. high W. of cor.
Land rolling
Soil rocky, coarse texture, 12 ins. deep on clay sub-soil
Mesquite brush 3 to 4 ft. high, scattering yuccas 5 to 10 ft. high
No timber.

April 21st, 1913.

1913 Dec. 20th; At 10h.0m., a.m., l.m.t., I set off 23° 25' S. on decl. arc, 32° 35' on lat. arc and determine a mer. with the solar at the cor. of secs. 4, 5, 32 & 33, described above.

Thence I run East on true line bet. secs. 4 & 33 Over rolling rocky land through mesquite brush 3 to 4 ft. high

- 6.00 Dry rocky gulch 2 chs. wide, 20 ft. deep, course S.W.
22.00 Dim wagon road bears N.E. & S.W.
27.00 Dry rocky wash 1 ch. wide, 10 ft. deep, course S.W.
33.00 Dry rocky gulch 1 ch. wide, 16 ft. deep, course S.W.
40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., with a brass cap marked 1/4 S 33 in N. & S 4 1913 in S. half, from which
A post oak 8 ins. in dia. bears S. 25 1/2° E. 387 lks. dist. marked 1/4 S 4 B T
A post oak 7 ins. in dia. bears N. 27 1/2° E. 235 lks. dist. marked 1/4 S 33 B T
53.00 Dry rocky wash 30 lks. wide, 2 ft. deep, course S.W.
65.79 Intersect E. bdy. of Ft. Grant Military Reservation 30.88 chs. N. 22° 30' E. of 15th mile cor., established by me July 14th, 1914, as described in book "A"
At the above described point of intersection I set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in ground for Closing cor. of Tps. 9 & 10 S., R. 24 E., with a brass cap marked CC W. of center T 9 S in N., T 10 S 1913 in S. & R 24 E in W. half, S 33 in N.W., & S 4 in S.W. sector. Pits impract.
Raise mound of stone 3 ft. base 3 ft. high W. of cor.
Note: the above described closing cor. was not set until after the E. bdy. of Ft. Grant Military Reservation had been established July 14th, 1914, as per notes in book "A."

PART OF SOUTH BOUNDARY OF TOWNSHIP 9 SOUTH, RANGE 24 EAST.

Land rolling  
Soil thin & rocky  
Good grass, mesquite brush 4 to 5 ft. high  
Scattering scrub oak timber along washes

Dec. 20th, 1915.

Boundaries of T. 9 S., R. 23 E.  
Latitudes, departures, & closing errors  
(Surveyed portion within Ft. Grant Military Reservation)

Line designated	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
S. bdy. of Tp.	West	120.00				120.00
	S. 89° 57' W.	80.57		0.09		80.57
W. bdy. Ft. Grant	N. 7° 24' W.	323.09	320.40			41.61
N. bdy. secs. 15 & 16	East	81.96			81.96	
E. bdy. sec. 15	S. 0° 01' E.	80.00		80.00	0.03	
N. bdy. sec. 23	S. 89° 50' E.	80.00		0.23	80.00	
N. bdy. sec. 24	S. 89° 56' E.	80.26		0.12	80.26	
E. bdy. of Tp.	South	240.00		240.00		
Convergency					0.11	
			320.40	320.44	242.36	242.18
			320.40			
Error in lat. - - - - -			0.04		242.18	
Error in dep. - - - - -					0.18	

Boundaries of T. 9 S., R. 24 E.  
Latitudes, departures, & closing errors  
(Surveyed portion within Ft. Grant Military Reservation)

Line designated	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
S. bdy. of Tp.	West	159.54				159.54
W. " of Tp.	North	160.00	160.00			
N. " sec. 30	S. 89° 57' E.	79.50		0.07	79.50	
E. " " 30	S. 0° 03' E.	80.00		80.00	0.07	
N. " " 32	S. 89° 59' E.	79.98	0.03		79.98	
E. " " 32	S. 0° 02' E.	80.00		80.00	0.05	
Convergency - - - - -					0.14	
			160.03	160.07	159.74	159.54
			160.03			
Error in lat. - - - - -			0.04		159.54	
Error in Dep. - - - - -					0.20	

Boundaries of T. 10 S., R. 24 E.  
Latitudes, departures, & closing errors  
(Surveyed portion within Ft. Grant Military Reservation)

Line designated	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
S. bdy. Ft. Grant	S. 78° 36' W.	164.71		32.44		160.87
	N. 50° 01' W.	1.05	0.67			10.80
W. " of Tp.	N. 0° 01' W.	183.10	183.10			0.05
N. " of Tp.	East	225.33			225.33	
E. " Ft. Grant.	S. 22° 30' E.	164.28		151.78		62.87
Convergency - - - - -					0.10	
Totals - - - - -			183.77	184.22	225.43	224.59
			183.77			
Error in lat. - - - - -			0.45		224.59	
Error in dep. - - - - -					0.84	

*Thomas B. Matthews*

U. S. Surveyor

FOR FINAL OATH OF UNITED STATES SURVEYOR.

See book "A."

I, \_\_\_\_\_, 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 March 20 \_\_\_\_\_, 1915

The foregoing field notes of the survey of Parts of the  
South and West Boundaries  
of Township No.9 South Range No.24 East  
of the Gila and Salt River Base and Meridian  
Arizona

executed by Thomas B. Matthews, U.S. Surveyor  
under his special instructions dated September 24, 1912 for Group 22, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

  
\_\_\_\_\_  
U. S. Surveyor General.  
of Arizona.

~~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.~~

~~U. S. Surveyor General.~~