

Exterior
BOOK-V

2549

MAR. 28. 1911

FIELD NOTES

BOOK 2549

OF THE SURVEY OF THE

*North boundary of Township No. 29 North
Range No. 16 East*

*Of the Gila and Salt River base and Meridian,
in the Territory of Arizona*

EXECUTED
AS SURVEYED BY

Sidney E. Blunt, United States ~~Deputy Surveyor~~ *Examiner of Surveys*

Special Instructions from the Commissioner of the General Land Office
Under ~~his Contract No.~~, dated *October 5th 1907 and May 15th*, 1908

Survey commenced *April 9th*, 1909

Survey completed *April 10th*, 1909

NAMES AND DUTIES OF ASSISTANTS.

Van L. White Compassman

Lafayette Jennings Chairman

7 Chas L. Shumway Chairman

7 Fred R. Warner Moundman

Arthur A. Beard Wagonman

Jay E. Fellick Flagman

7 Harry Lake May Flagman

BOOK 2549

INDEX DIAGRAM.

Township No. 29 N., Range No. 16 E

1	2	4	4	6	7
6	5	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

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS

WE, and
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

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this }
day of, 190 }



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, 190 }



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, 190 }



I,, 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

....., Flagman.

Subscribed and sworn to before me this }
day of, 190 }



See Exterior Book "P"

North boundary of Twp. 29 N, R 16 E.

153
10

BOOK 2549

Chains

Survey commenced April 9th 1909, and executed with a W. and S. G. Surley engineers transit No. 76, with a Burh Solar Attachments; The horizontal limb is provided with one double vernier, reading to single minutes of arc., the vernier of the lat. and decl. arc reading to 0' 30" of arc.

I examined the adjustments of the transit and find them to be perfect and know from recent tests of the solar apparatus by comparing its indications, resulting from solar observations made during am. and pm. hours, with a meridian established by observation on Paris, that the instrument is in satisfactory adjustment.

therefore I begin at the Cor. of Twp. 29 and 30 N, R's 16 and 17 ^{on 4th Guide Meridian East} E. which I established Dec. 21st 1908 ^{as described in Standard Book "B"} Latitude 35° 56' 41" N, Longitude 110° 34' 23" W.

At 7^h 30^m am. ^{1. m. h.} I set off 35° 56' 1/2" N, on the lat. arc and 7° 30' 1/2" N, on the decl. arc and determined a meridian with the solar at the above mentioned Cor.

Thereof I run, West, on a random line, along the north boundary of Twp 29 N, R. 16 E, setting temp. 1/4 sec. and 3/4 sec. corners, at intervals of 4000 Chs., and at 479,76 Chs. intersect West boundary of Twp. 15 N. S. of the Cor. of Twp. 29 and 30 N, R's 15 and 16 E. which.

I established April 8th 1909, as described in Exterior Book "N" The falling answers to a correction of 0' 01" or 2 1/2 lbs. N. per mile counting from the N.E. Cor. of the Twp. therefore I run,

S 89° 59' E., bet. sec 6 and 31, marking and flagging true line,

Ascend N.W. slope over hilly stony land through scattering pine and cedar timber.

- 5.75
- 16.00
- 26.00
- 38.50
- 39.76

Top of knoll 40 ft. above Cor. desc over N.E. slope.
Dry ravine course N.E. asc.
Top of sand ridge from N.E. and S.W. desc.
Dry ravine course N. asc.
Set an iron post 3 ft. long, 1 in. in diam 26 ins. in the ground for 1/4 sec cor. marked on brass cap. 1/4 S 31 on N. half and 36 on S. half, from which. A cedar 8 ins. in diam. bears N 59 1/2° W 282 lbs. dist. marked 1/4 331 B.T.

BOOK 2549

A Cedar 8 ins. in diam., bears S $27\frac{1}{4}^{\circ}$ E 96 lbs. dist.
marked 1436 BT.

41.00 Top of sand ridge bears N and S. decl.

59.76 Dry runnel course n.w. asc.

69.26 Top of sand ridge bears N.W. and S.E. decl.

70.26 Dry runnel course n.w. asc.

72.75 - Level hilly land bears N.E. and S.W., enter stony
mountainous land bears N.E. and S.W. ascend abruptly
rocky W. slope of mesa.

77.05 Top of abrupt ascent on W. edge of mesa. Level stony
mountainous land bears N and S., enter rolling land.
bears N and S.

79.15 East edge of mesa. Level rolling land bears N.W.
and S.E., enter stony mountainous land bears
N.W. and S.E. descend abruptly over N.E. slope of mesa.

79.76 Set an iron post 3 ft. long 3 ins. in diam. 24 ins.
in the ground for cor. of sec. 5, 6, 31 and 32 m'd's
on brass cap. R₁₆E on E. half. T₃₀N S₃₂ in N.E.
T₂₉N. S₃₅ in S.E. S₃₆ in S.W. and S₃₁ in N.W.
quadrant.

No trees available.

Build a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high.
W. of cor. Pits impracticable.

Land rolling hilly and mountainous.

Soil sandy and stony 3rd and 4th rate.

Timber pine and cedar.

Mountainous land 4.90 Chv.

NOTE: - At the temp. $1\frac{1}{4}$ sec. cor. bet. sec. 4 and 33. on n
bdry of T₂₉N, R₁₆E. Set off 7 $^{\circ}$ 34' N. on the decl. arc. and ab
ove the horizon observe the sun on the
meridian the resulting lab. being 35 $^{\circ}$ 57' N.

April 9th 1909

April 10th 1909, At 7^h 30^m a.m. ^{1. mt.} Set off 35 $^{\circ}$ 58 $\frac{1}{2}$ ' N.
on the lab arc 7 $^{\circ}$ 53' N. on the decl. arc. and
determine a meridian with the solar ah.
the cor. of sec. 5, 6, 31 and 32, ^{above described} Mineral Spring,
S₈₉ 54' E., bet. sec. 5 and 32.

Descend E. slope of mesa over stony mountainous
land through scattering pine and cedar
timber.

16.00 Dry runnel course N. asc. W. slope of spur.

North boundary of T₂₉N R16E.

Chains

BOOK 2549

- 32.50 Top of spur head N and S: desc. E slope.
- 37.50 Dry ravine course N. asc.
- 40.00 Set an iron post 3ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked on brass @ op 1/4 S 32 on N. half and S 5 on S half; from which.
A cedar 6 ins. in diam head N 27 1/2° E 176 lks. dist. marked 1/4 S 32 B.T.
A cedar 12 ins. in diam. head S 28 1/2° E 107 lks. dist. marked 1/4 S 5 B.T.
- 42.00 Top of spur head N.W. and S.E. desc.
- 46.00 Dry ravine course N.W. asc.
- 49.50 Top of spur head N.W. and S.E. desc.
- 50.25 Dry ravine course N.W. asc.
- 54.25 Top of rocky spur head N.W. and S.E. desc.
- 55.50 Dry ravine course N. ascend abruptly. rocky W. slope of mesa.
- 65.00 Top of ascent on W. edge of mesa head N.E. and S.W. head mountainous land head N.E. and S.W., enter rolling mesa land head N.E. and S.W. ascend gradually over W. slope.
- 66.00 Top of ascent on mesa head N.E. and S.W. desc N.E. slopes.
- 70.50 Sand stone ledge 10 ft. high. head N.E. and S.W. desc.
- 80.00 Set an iron post 3ft. long 3 in. in diam 24 ins. in the ground for. cor. of sec 4, 5, 32 and 33. marked on brass cap R16E on E half. T 30 N S 33 in N.E. T 29 N. S 4 in S.E. S 5 in S.W. and S 32 in N.W. quadrants, from which.
A cedar 8 ins. in diam. head N 36 1/2° E 157 lks. dist. marked T 30 N. R16E S. 33 B.T.
A cedar 4 ins. in diam. head S 34 3/4° E 68 lks. dist. marked T 29 N. R16E S 4 B.T.
A furrow pine 4 ins. in diam. head S 6° W 85 lks. dist. marked T 29 N R16E S 5 B.T. and
A cedar 5 ins. in diam. head N 47 1/4° W 170 lks. dist. marked T 30 N R16E S. 32 B.T.

Land rolling and mountainous.
Soil sandy and stony 3rd and 4th rate.
Timber furrow pine and cedar.
Mountainous land. 65.00 Chs.

BOOK 2549

- S_{89°59'} E, bet. sec. 4 and 33,
 Descend E. slope over rolling mesa land through
 scattering pinon pine and cedar timber.
- 3.50 East edge of mesa land rolling land bears N.W. and
 S.E. enter mountainous land bears N.W. and S.E. desc.
 abrupt rocky E slope of mesa
- 7.50 Dry ravine course N.E. asc.
- 14.50 Top of spur bears N.E. and S.W. desc.
- 17.00 Dry ravine course N. and W. slope.
- 32.25 Top of ascent on W. edge of mesa bears N and S.
 bears mountainous land bears N and S, enter hilly
 land bears N and S. ascend gradually, over W. slope
- 40.00 Set an iron post 3ft. long 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor. marked on bears cap. $\frac{1}{4}$ S.
 33 on N. half and S 4 on S half. from which
 A pinon pine 8 ins. in diam bears N $3\frac{1}{4}$ W 244 lbs.
 dist. marked $\frac{1}{4}$ S 33 B.T.
- A cedar 4 ins. in diam bears S $34\frac{1}{4}$ E 69 lbs. dist.
 marked $\frac{1}{4}$ S 4 B.T.
- 41.00 Top of ridge bears N. and S. desc.
- 57.00 Dry ravine course N.E. asc.
- 62.00 Top of ridge bears N. and S. desc.
- 80.00 Set an iron post 3ft. long 3 ins. in diam. 24 ins.
 in the ground for cor. of sec. 34, 33 and 34, marked
 on bears cap. R₁₆E on E half, T₂₉N S $34\frac{1}{2}$ on N.E. T₂₉,
 N 33 on S.E. S 4 on S.W. and S 33 on N.W. quadrant
 from which
 A pinon pine 4 ins. in diam. bears N 64 E 82 lbs.
 dist. marked T₂₉N, R₁₆E S 34 B.T.
- A pinon pine 6 ins. in diam bears S $79\frac{1}{2}$ E 87 lbs.
 dist. marked T₂₉N, R₁₆E S 33 B.T.
- A pinon pine 8 ins. in diam. bears S $60\frac{1}{4}$ W 72 lbs. dist.
 marked T₂₉N, R₁₆E S 4 B.T. and
- A pinon pine 4 ins. in diam. bears N 24 W 141 lbs.
 dist. marked T₂₉N, R₁₆E S 33 B.T.
- Land hilly and mountainous.
 Soil sandy and stony 3rd and 4th rate.
 Timber pinon pine and cedar.
 Mountainous land. 28.75 Chs.

S_{89°59'} E, bet. sec. 3 and 34,
 Descend E slope over hilly sandy land through

North boundary of T₃₀N₁R₁₆E

Chain

- scattering pinion pine and cedar timber.
- 1.00 East edge of mesa bears N.E. and S.W. level hilly land bears N.E. and S.W. enter stony mountainous land bears N.E. and S.W. descend abruptly over S.E. slope of mesa.
- 7.50 Dry ravine at foot of abrupt descent. Course N.E. arc' spur.
- 9.50 Top of spur bears N and S. desc.
- 19.00 Dry ravine course S.E. arc.
- 23.00 Top of spur bears N.W. and S.E. desc.
- 31.00 Dry ravine course S.E. arc.
- 39.00 Top of high sand spur bears N and S. desc.
- 40.00 Set an iron post. 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cov. marked on bear cap 1/4 S 34 on N half and S 30 on S half; from which.
- A cedar 16 ins. in diam. bears N 5 1/2° W 307 lbs. dist. marked 1/4 S 34 B.T.
- A cedar 14 ins. in diam. bears S 30 3/4° E 36 lbs. dist. marked 1/4 S 3 B.T.
- 65.50 Dry ravine course S.E. arc.
- 69.50 Top of spur bears N.E. and S.W. desc.
- 76.00 Dry ravine course S.E. arc.
- 80.00 Set an iron post. 3 ft. long 3/4 in. in diam., 24 ins. in the ground for cov. of sec. 2, 3, 34 and 35, marked on bear cap T₃₀N₁R₁₆E on E half. T₃₀N₁S₃₅ in N.E. T₂₉N₁S₂ in S.E. S₃ in S.W. and S₃₄ in N.W. quadrants from which.
- A cedar 12 ins. in diam. bears N 56 1/2° E 455 lbs. dist. marked T₃₀N₁R₁₆E S₃₅ B.T.
- A cedar 12 ins. in diam. bears N 57 1/2° W 434 lbs. dist. marked T₃₀N₁R₁₆E S₃₄ B.T.
- No other trees available.
- Dig pits 24x24x12 ins. in each sec. S.E. and S.W. of post 5 1/2 ft. dist. and raise a mound of earth. 4 ft. base 2 ft. high W. of cov.
- Land hilly and mountainous.
- Soil sandy and stony 3rd and 4th rate.
- Timber pinion pine and cedar.
- Mountainous land 79.00 chs.
- NOTE: - At this cov. set off. 7° 56' N. on the decl. arc and at noon observed the sun on the meridian and obtain on the lat arc a reading of 35° 57' N. nearly -

BOOK 2549

- S_{89°59'} E., bet. sec. 2 and 35;
 Around W slope of spur over mountainous land through scattering pinion pine and cedar timber and bunch grass.
- 0.10 Top of spur bears N. and S. desc. E slope
 7.00 Foot of descent in dry ravine Course S.W. comes from E. thence in ravine.
 14.00 Leads ravine Course W. comes from N.E. asc. N.W. slope of spur
 18.00 Top of spur bears N.E. and S.W. desc. S.E. slope.
 22.00 Dry ravine Course S.W. asc. abrupt rocky N.W. slope
 34.75 Top of abrupt rocky ascent. Leads mountainous land bears N.W. and S.E. enter hilly land bears N.W. and S.E. ascend gradually.
 40.00 Set an iron post 3ft long 1 in in diam. 26 in in the ground for $\frac{1}{4}$ sec. Cor. marked on brass cap $\frac{1}{4}$ S 35 on N. half and 32 on S. half, from which. A cedar 8 ins. in diam. bears N 45 $\frac{1}{2}$ W. 197 lbs. dist. marked $\frac{1}{4}$ S 35 B.T.
 A cedar 6 ins. in diam. bears S 14° E 189 lbs. dist. marked $\frac{1}{4}$ S. 2 B.T.
 48.00 Wood road bears N.W. and S.E.
 54.00 Top of ridge bears N.W. and S.E. desc. N.E. slope
 80.00 Set an iron post. 3ft long. 3 ins. in diam. 24 in. in the ground for cor. of sec. 1, 2, 35 and 36. marked on brass cap R₁₆E on E half. T 30 N S 36 in N.E. T 29 N S 1 in S.E. S 2 in S.W. and S 35 in N.W. quadrant. from which.
 A cedar 16 ins. in diam. bears N 59 $\frac{1}{2}$ E 77 lbs. dist. marked T 30 N. R₁₆E S 36 B.T.
 A cedar 12 ins. in diam. bears S 74 $\frac{3}{4}$ W 204 lbs. dist. marked T 29 N. R₁₆E. S 2 B.T.
 A cedar 6 ins. in diam. bears N 57 $\frac{3}{4}$ W. 72 lbs. dist. marked T 30 N R₁₆E. S 35 B.T.
 No other trees available
 Dig pit. 36 x 36 x 12 ins. in sec. 1. S.E. of post. 5 $\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high. W. of cor.
 Land hilly and mountainous.
 Soil sandy and stony 3rd and 4th rate.
 Pines, pinion pine and cedar.
 Mountainous land 34.75 chs.

- S 89° 59' E, bet. sec. 1 and 36,
 Descend N.E. slope over hilly sandy land through
 scattering cedar and pinon pine timber and bunch
 grass.
- 25.00 Top of descent in dry ravine course N.E. leave timber
 bear N.E. and S.W. ascend N.W. slope of ridge.
- 29.00 Top of ridge bear N.E. and S.W. desc.
- 34.00 Dry ravine course N.E. asc.
- 39.00 Top of ridge bear N.W. and S.E. desc.
- 40.00 Set an iron post, 3 ft. long 1 in. in diam., 26 in.
 in the ground for $\frac{1}{4}$ sec. cor marked on bear
 Cap $\frac{1}{4}$ S 36 on N. half. and S 1 on S half.
 Dig pits 18x18x12 in East W. of post 3 ft. dia. and
 raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft high N. of
 cor.
- 44.00 Dry ravine course N.E. asc.
- 45.90 Wire fence on crest of ridge bear N. and S. desc.
- 48.00 Top of descent leave hilly land bear N.W. and
 S.E. enter rolling cultivated land bear N.W. and
 S.E.
- 64.00 Wood road bear N.W. and S.E.
- 70.00 Leave rolling cultivated land bear N.W. and S.E.
 enter hilly land bear N.W. and S.E. asc over
 N.W. slope.
- 77.00 Leave hilly land bear N. and S. enter stony
 mountainous land bear N. and S. ascend steeply.
- 80.00 Intersect the Cor of Twp. 29 and 30 N. R 16 and 17
 E, on 4th Guide Meridian East, described in Standard Book "B"
 Land rolling hilly and mountainous.
 Soil sandy and stony 3rd and 4th rate.
 Pinon pine and cedar.
 Mountainous land 3.00 chs.

April 10th 1909

BOOK 2549

Boundaries of Twp 29 N, R16 E.
 Latitudes departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N	S	E	W
South Boundary (72nd Parallel North)	N 89° 57' W	480.06	chs	chs	chs	chs
West Boundary	North	480.00	480.00			
North Boundary	S 89° 57' E	479.76		0.14	479.76	
East Boundary (4th Guide Meridian East)	South	480.00		480.00		
Convergence Totals			480.14	480.14	480.27	480.06
			480.14	480.14	480.06	
			ERROR IN LAT 0.00		ERROR IN DEP 0.21	

General Description

This township is rough broken and mountainous in the northern and western parts and rolling in the south eastern part while some level land is found in the valley along the Craib Wash and on the tops of the mesas. Prairie land is found over the greater part of the township. The township is poorly watered and poorly timbered with a scattering growth of pine and cedar. The soil of the bottom land along the Craib Wash is very rich and produces good crops. The township should be subdivided.

Arduy E. Blount
 U.S. Examiner of Surveys

NOTE: Original affidavits in book of Exterior.

LIST OF NAMES.

A list of the names of the individuals employed by *Sidney C. Blunt*

Examiner of Surveys

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 North boundary*

of T. No. 29 N. R. No 16 E. of the Gila and Salt River base and Meridian in the Territory of Arizona
showing the respective capacities in which they acted

Van L. White

Compassman

Lafayette Jennings , Chainman.

Chas. L. Shumway , Chainman.

Fred L. Warner , Moundman.

..... , Moundman.

Arthur A. Beard , Axman.

..... , Axman.

Jay E. Jellinek and Harry L. May , 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 , 190



162
10
BOOK 2549

EXAMINER OF SURVEYS
FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Sidney E. Blout, United States ~~Deputy Surveyor~~ ^{Examiner of Surveys}, do solemnly swear that, in pursuance of ~~a contract~~ ^{Special Instructions} received from ~~the Commissioner of the~~ ^{the Commissioner of the} United States Surveyor General ~~for~~ ^{Land Office}, bearing date of the ~~2nd day of Oct. 1907 and 15th day of May~~ ^{2nd day of Oct. 1907 and 15th day of May}, 1908, 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~~ ^{Commissioner of the} ~~Land Office~~ ^{United States Surveyor}, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of ~~the~~ ^{the}
North boundary of
Township N^o 29 North, Range N^o 16 East
Base & ^{of the} 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 the and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Subscribed by said Sidney E. Blout, and sworn to before me }
this 25 day of April, 1908 }
See
Examiner of Surveys
United States Deputy Surveyor
Examiner of Surveys.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, APR 25, 1908

The foregoing field notes of the survey of the

North boundary of

Township N^o 29 North, Range N^o 16 East of the
Gila and Salt River Base and Meridian, Arizona.

executed by Sidney E. Blout - U.S. Examiner of Surveys
under ~~his contract No.~~ ^{Special Instructions from the} ~~Commissioner of the General Land Office~~ ^{Commissioner of the General Land Office}, dated October 2, 1907 and May 15, 1908, ~~190~~, 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
SURVEYOR GENERAL OF ARIZONA

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

United States Surveyor General