Tp 16 N., R. 5 W. B.

Contract No 89

A. B. Mader D.S.

1225

1725

4-671

FIELD NOTES

GENERAL LAND OFFICE.

1225

PRELIMINARY OATHS OF ASSISTANTS.

We, W. E. Allen

and W. C. Meyers

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 distance to all notable objects, and the true length 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 the South, West and East boundaries of Twp. 16 N. Rg. 5 W.

of the Gila and Salt River Base and Meridian, in the Territory of Arizona.

W. E. Allen, Chainman.

W. C. Myers, Chainman.

, Chainman.

, Chainman.

Subscribed and sworn to before me this 28th day of October, 1903.

[SEAL.]

Arthur B. Mader
U.S. Deputy Surveyor. ~~Notary Public.~~

We, Oscar Clay

and Henry Clay 1A

do solemnly swear that we will well and truly perform the duties of flagman and 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 the South, West and East boundaries of Tp. 16 N. Rg. 5 W.

of the Gila and Salt River Base and Meridian, in the Territory of Arizona.

Oscar Clay, Flagman.

Henry Clay, Axman.

, Axman.

, Axman.

Subscribed and sworn to before me this 28th day of October, 1903

Arthur B. Mader

U.S. Deputy Surveyor ~~Notary Public~~

1725 BOOK 1725 1B

FIELD NOTES

OF THE Re SURVEY OF THE

S. & survey, WEST AND ~~EAST~~ BOUNDARIES

OF

TOWNSHIP No. 16 NORTH, RANGE No. 5 WEST

OF THE

GILA AND SALT RIVER

BASE AND MERIDIAN

IN THE

TERRITORY OF ARIZONA

AS SURVEYED BY

ARTHUR B. MADER

U. S. DEPUTY SURVEYOR

UNDER HIS CONTRACT No. 89

DATED DEC. 9. 1901

SURVEY COMMENCED — OCTOBER, 29, 1903

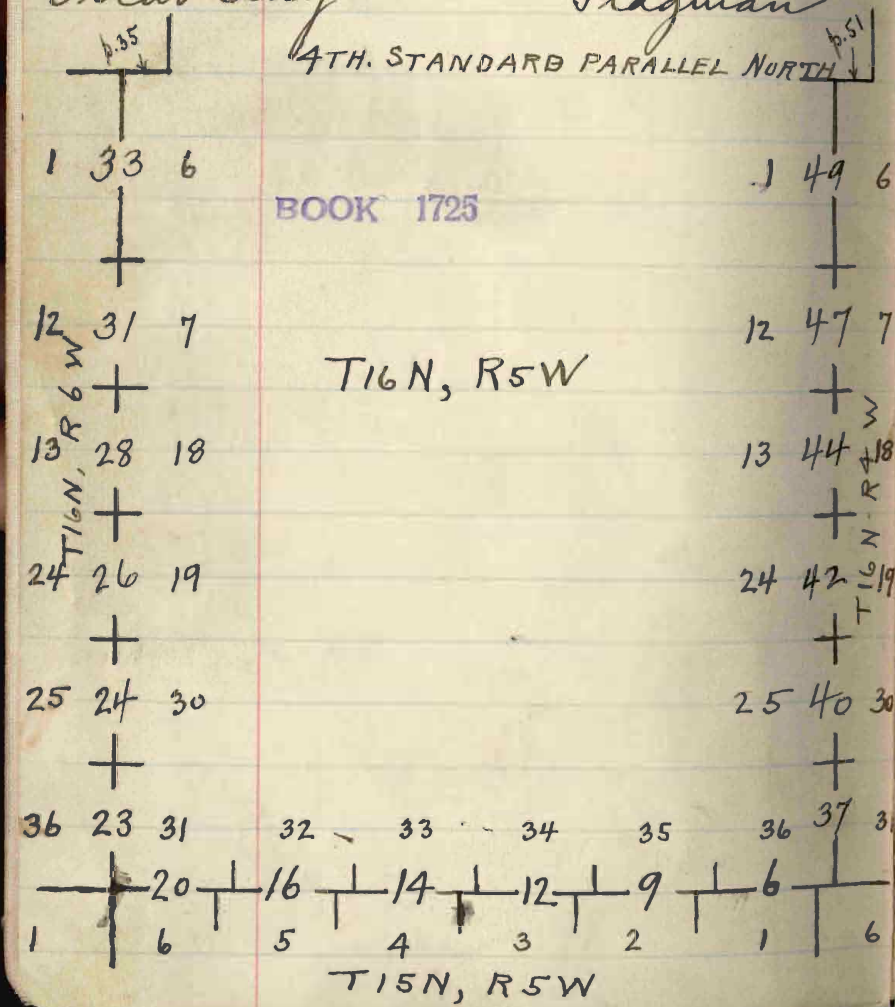
SURVEY COMPLETED — NOVEMBER, 3, 1903

October 29th 1903, At the cor.
of Secs 6-1-31-36 of Tps 15
and 16 N., Rgs 5 and 6 W., at
4h 00m p. m. l. m. & I set
off 34°-41' on the latt. arc
and 13°-17' on the decl. arc
and determine a true
meridian by the solar

BOOK 1725

NAMES AND DUTIES OF ASSISTANTS

W. E. Allen	Chainman
W. C. Meyers	Chainman
Henry Clay	Axman
Oscar Clay	Flagman



South Boundary Tp. 16 N. Rg. 5 W.

Chains

Survey commenced Oct. 29 1903, and executed with a Gurley Light Mountain Transit with solar attachment, No. number The horizontal limb is provided with two opposite verniers, reading to 30" of arc, which is also the least count of the verniers of the latitude and declination arcs.

⊕ At the cor. of Tps. 16 N. Rgs. 4 and 5 W. latitude 34° 41' N., longitude ~~112° 40' W.~~ 112° 42' 47" W. I set my transit over a tack in a stake driven firmly in the ground and at 4h 51.6' a. m. by my watch which is correct I observe Polaris at

chains.

western elongation in accordance with instructions in the Manual, and mark the line thus determined by a tack driven in a stake set firmly in the ground, 5 chs. N. of my station.

At 7h 00m a.m. I lay off the azimuth of Polaris 1° 28.7' to the East and mark the true meridian thus determined by a tack driven in a stake set firmly in the ground.

At 8h 00m a.m I set off 34° 41' on the lat. arc; 13° 10' S. on the decl. arc. and mark the true meridian

South boundary Tps. 16 N. Rg. 5 W.

1 chains

determined with the solar by a cross on the stake already set 5 chs. N. of my station.

This mark coincides with the true meridian established by the Polaris observation. The solar apparatus by a.m. and p.m. observations defines positions for the true meridian which coincide with the true meridian established by the Polaris observation; therefore I conclude the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at

6 Resurvey

1 South bdy. Pp. 16 N. Rg. 5 W.

chains

at $8^h 00^m$ a.m. is N. 14° 18' E. the angle thus determined reduced by the table page 100 gives the mean mag. decl. N. 14° 15.4' E. ✓

October 29, 1903

October 30: At $8^h 00^m$ a.m. l.m.t. I set off 34° 41' on the lat. arc; 13° 30' S/on the decl. arc; and determine a true meridian with the solar, at the cor. of Pps. 16 N. Rgs. 4 and 5 W. which is a granite stone 12x10x5 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general.

South boundary Dpo. 16 N. Rg. 5 W.

Chains	
	Thence East
	West on S. bdy. sec. 36.
	Over rough broken mountains through dense brush and scattering juniper timber.
8.85	The cor. of Dpo. 15 N. R. 4 and 5 W. as dis. by Surv. Gen'l.
10.00	Cross wash, 20 lks. wide course N. and ascend.
21.20	Top and over rolling mountains.
40.00	Set a granite stone 16 x 12 x 6 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; and raise a mound of stone 2 ft. base 1½ ft. high N. of cor. Pits impracticable
40.98	Cross gulch, 10 lks. wide, course N.

Resurvey

BOOK 1725

South boundary Tp. 16 N. Rg. 5 W.

Chains.	
49.60	The 1/4 sec. cor. on N. bdy. sec 1 T. 15 N. R. 5 W. as dis. by Surv. and destroy all bearings pertaining to T. 16 N. R. 5 W.
57.30	Cross wash, 15 lks. wide course N.
67.50	Cross wash, 10 lks. wide, course N.
80.00	Set a quartzite stone 17 x 12 x 9 ins. 12 ins. in the ground for cor. of secs. 35 and 36 marked with 1 notch on east and 5 notches on west edges; from which a A juniper, 14 ins. diam. bears N 55½° E 31 lks. dist. marked T 16 N R 5 W S 36 B T No other tree available. And raise a mound of stone 2 ft. base 1½ ft.

South boundary Tp. 16 N. Rg. 5 W.

chains	
	high W. of cor. Pits impracticable Land, mountainous. Soil, stony; 3rd and 4th rate. Underbrush, oak and manzanita. Timber, juniper. Mountainous land or land covered with dense undergrowth 80.00 chs.
	West on S. bdy. sec. 35 Over rough mountains through dense brush.
4.50	Cross Estes road bears N. and S.
9.68	The cor. of secs. 1 and 2 T. 15 N. R. 5 W. as des. by Surv. Genl. I destroy all bearings pertaining to T. 16 N. R 5 W.

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Resurvey
BOOK 1725
South boundary Twp. 16 N. Rg. 5 W.

chains	
24.25	Cross gulch 20 lks. wide course N. 15° E. and ascend.
34.50	Top of high sharp ridge bears N. and S. and descend.
40.00	Foot of hill edge of Dillen field
	Set a malpais stone 15 x 12 x 8 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; and raise a mound of stone 2 ft. base 1½ ft. high N. of cor. Pits impracticable. Thence over rolling land through dense brush and scattering timber
49.56	The 1/4 sec. cor. on N. bdy. of sec. 2 T. 15 N. R. 5 W. as dis. by Smith & Gail
80.00	Set a granite stone 18 x 12 x 5 ins. 12 ins. in the ground for cor. of

Resurvey

BOOK 1725,

11

South boundary Tp. 16 N. Rg. 5 W.

chains

secs. 34 and 35 marked with 4 notches on west and 2 notches on east edges; from which

A juniper, 24 ins. diam. bears N. 27° 40' W.
75 lks. dist. marked T 16 N R 5 W.
S 34 B T

A juniper, 5 ins. diam. bears N 85 3/4° E.
75 lks. dist. marked T 16 N R 5 W
35 B T

Land, mountainous
Soil, 2nd and 4th rate; sandy and rocky.
Underbrush, oak and manzinata.
Timber, juniper and oak.
Mountainous land or land covered with dense underbrush
80.00 chs.

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Resurvey

BOOK 1725

South boundary Tp. 16 N. Rg. 5 W.

Chains	
	West on S. bdy. sec. 34 Over rolling land through dense brush.
2.60	Cross road bears N.W. and S.E.
9.92	The cor. of secs. 2 and 3 T.15 N. R.5 W. as run by Surv. Gnl. I destroy all bearings pertaining to T.16 N. R.5 W.
15.10	Cross road bears N. and S.
33.60	Cross wash, 20 lks. wide, course S.W.
38.65	Cross creek, 20 lks. wide course S.20° W.
40.00	Set a granite stone 20 x 15 x 4 ins. 15 ins. in the ground for 1/4 sec. cor.; marked 1/4 on N. face; from which A oak 13 ins. diam. bears N 18°55'W. 54 lks. marked 1/4 S 34 B T An oak 7 ins. diam. bears N.35°55'E. 64 lks. marked 1/4 S 34 B T

Resurvey

South boundary Twp. 16 N. Rg. 5 W.

chains	
50.23	The ¼ sec. cor. on N. bdy. Sec. 3 T 15 N. R. 5 W. as dis. by Surv. Genl. and over rolling mountains.
62.00	Cross wash 10 lks. wide course S.E.
80.00	Set a granite stone 24 x 12 x 8 ins. 18 ins. in the ground for cor. of secs. 33, and 34, marked with 3 notches on E and 3 notches on W edges; from which A pinon, 8 ins. diam. bears N 39° 42' W. 62 lks. dist. marked T 16 N R 5 W S 33 B T A juniper, 10 ins. diam. bears N 31° 46' E. 126 lks. dist. marked T 16 N R 5 W S 34 B T Land, mountainous and rolling. Soil, rocky; 4th rate. Underbrush, oak. Timber juniper. Mountainous land or land covered with dense

South boundary Tp. 16 N. Rg. 5 W.

claims.

undergrowth 80.00 chs.

West on S. bdy. sec. 33

Over rough broken mountains through dense brush and scattering timber.

10.47 The cor. of secs. 3 and 4 T 15 N. R. 5 W. I destroy as dis. by Univ. Survey markings pertaining to Tp. 16 N. Rg. 5 W

40.00 The point for 1/4 sec. cor. falls on granite stone in place 3 1/2 x 2 x 1 1/2 ft. above ground. I mark a cross (X) for exact cor. point and 1/4 N. of cross; from which

A juniper 26 ins. diam. bears N 80 1/2° W. 91 lks. dist. marked 1/4 S 33 BT

Raised a md. of stone 4 ft base, 1 1/2 ft high N. of cor. No other trees in limits

Resurvey

South boundary Tp. 16 N. Rg. 5 W.

Chains	
50.75	Cross dry wash 20 lks. wide course S.W.
51.75	The witness ¼ sec. cor. on N. bdy. sec. 4 Tp. 15 N. Rg. 5 W. I destroy ~~bearings~~ as dic by surv. Smith markings pertaining to T16 N. R. 5 W.
70.00	Enter wash course N.W.
71.00	Leave wash bears S.E.
80.00	Point for cor. falls on a granite stone in place 8 x 7 x 5 ft. above ground. I mark a cross (X) for exact cor. point for cor. of secs. 32 and 33 with 4 grooves E. and 2 grooves W. of cross; from which A pinon, 6 ins. diam. bears N 51° 42' W 74 lks. dist. marked T 16 N R 5 W S 32 B T A pinon, 14 ins. diam. bears N 87° 05' E. 91 lks. dist. marked T 16 N R 5 W S 33 B T

16 Resurvey BOOK 1725

South boundary Tp. 16 N. Rg. 5 W.

Chains

Land, mountainous.
Soil, rocky; 4th rate.
Underbrush, oak.
Timber, juniper oak and pinon.
Mountainous land or land covered with dense undergrowth, 80.00 chs.

October 30, 1903

October 31; at 8h 00m a.m. l.m.t. I set off 34° 41' N on the lat. arc; 13°49½' S. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 32 and 33.
Thence I run

Resurvey

South boundary Tp. 16 N. Rg. 5 W.

Chains	
	West on S. bdy. sec. 32 Over rolling mountains through dense brush and scattering timber.
5.60	Cross wash, 50 lks. wide course S. 65° W.
11.21	Phe cor. of secs. 4 and 5 as dis. bet Surv Surv T15 N. R. 5 W. I destroy ~~bearings~~ markings pertaining to T16 N R 5 W.
16.40	Cross creek, 40 lks. wide course N. W.
19.45	Cross creek 40 lks. wide course S. W.
19.90	W. H. Smith's house bears N. 8.00 chs. dist.
22.01	Cross wire fence bears N. and S. and Smith's barn bears N. 3.00 chs dist.

Resurvey

South boundary Tp. 16 N. Rg. 5 W.

Chains	
26.10	Cross road, bears N.E. and S.W.
40.00	Set a granite stone 17 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; from which
	A juniper, 6 ins. diam. bears N 6°33′E. 82 lks. dist. marked 1/4 S 32 B.T.
	Rock Md. Stone, 2 ft base, 1½ ft high, N. of Cor. No other trees in limits.
51.48	The 1/4 sec. cor. on N. bdy. of sec. 5 T. 15 N. R. 5 W., as des. by Surv Genl
57.50	Enter walnut timber.
57.90	Cross creek 25 lks. wide course S., running small stream from spring 12 chs. N.
61.00	Leave walnut timber.
80.00	Set a malpais stone 18 x 8 x 8 ins. 12 ins. in the ground for cor. of secs. ___, 31, ___ and 32, marked with 5 notches on E and 1 notches on W edges; from which a cross chiseled on

Reservoir

∧ South boundary Tp. 16 N. Rg. 5 W.

Chains

malpais rock in place
4 x 2 x 1½ ft. above ground
bears N. 23° 43' W. 6½ lks.
mkd. B.R. T16NR5W.S31
No other bearings avail-
able. And raise a
mound of stone 2 ft.
base 1½ ft. high, W. N
of cor. Pits impracticable.
Land, mountainous
Soil, rocky; 4th rate.
Underbrush, oak.
Timber, oak and walnut.
Mountainous land or
land covered with
dense undergrowth
80.00 chs.

Resurvey

South boundary Tp. 16 N. Rg. 5 W.

chains	
	West on S. bdy. sec. 31
	Over rough rocky mountains through dense brush
12.05	The cor. of secs. 5 and 6 T15 N. R. 5 W. as dec. by Surv. Gnl
15.20	Cross gulch 6 lks. wide course S.E. and ascend.
22.00	Cross gulch, 60 lks. wide course S.E.
28.00	Enter heavy oak timber
31.00	Leave timber
40.00	Set ~~mal~~pais stone 20 x 10 x 8 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; from which A juniper 28 ins. diam. bears N 43° W. 244 lks. dist. marked 1/4 S 31 BT Rock Red stone 2 ft. long ½ ft. by ½ N. of Cor. No other trees in limits

Resurvey

South boundary Dp. 16 N. Rg. 5 W.

Chains	
40.50	Dop and over rolling mountains
51.98	Phe 1/4 cor. on N. bdy. of sec. 6 Dp. 15 N. Rg. 5 W. as dis. by Surv. Genl I destroy ~~bearings~~ markings pertaining to Dp. 16 N. Rg. 5 W.
90.40	Phe cor. of Dps. 15 and 16 N. Rgs. 5 and 6 W. which is a rock in place, marked and witnessed as described by surveyor general. Land, mountainous Soil, rocky; 4th rate. Underbrush, oak. Timber, oak juniper and cedar. Mountainous, heavily timbered land or land covered with dense

South boundary Dp. 16 N. Rg. 5 W.

Chains.	
	undergrowth 90.40 chs.

West boundary Tp. 16 N. Rg. 5 W.

chains	
	North bet. secs. 31 and 36
	Over rough rocky mountain top
40.00	Set a malpais stone 18 x 12 x 10 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, from which A Juniper 8 ins. diam. bears N85°-3'E 2 84 lks. dist. marked 1/4 S 31 B.T. No other bearings available.
	ascend over large malapi boulders through scrub oak
50.00	top - then descend
66.50	cross draw, 15 lks. wide course E
79.79	A 24 ins. Juniper tree, on line, marked with 2 notches on N and S sides
80.00	Set a malpais stone 17 x 12 x 10 ins. 12 ins. in the ground for cor. of Secs. 25 30 31 36 and marked with 1 notches on S 5 and notches on N edges; from which A juniper 24 ins. diam. bears S0°02'E. 20½ lks. dist. marked T 16 N R 5 W S 31 B T

West boundary Pp. 16 N. Rg. 5 W.

chains.

A juniper 12 ins. diam. bears S 61°04' W. 25-9 lks. dist. marked T 16 N R 6 W S 36 B T No other trees available and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th rate. Timber, oak and juniper. Mountainous land 80.00 chs

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North bet. secs. 25 and 30 Over rough rolling mountains.

40.00 Set a malpais stone 18 x 10 x 6 ins, 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raise a

West boundary Pp. 16 N. Rg. 5 W.

Chains

mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.

72.00 Cross wash, 10 lks. wide, course N. E.

80.00 Set a mallais stone 20 x 8 x 8 ins. 15 ins. in the ground for cor. of secs. 19 24 25 and 30, marked with 2 notches on S and 4 notches on N edges; from which juniper 12 ins. diam. bears N 13° E. 57 lks. dist. marked T 16 N R 5 W 19 B T

juniper 14 ins. diam. bears N 74° W. 28 lks. dist. marked T 16 N R 6 W S 24 B T. No other trees available. And raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, scattering oak

West boundary Dp. 16 N. Rg. 5 W.

and juniper.
Mountainous land 80.00 chs.

October 31, 1903.

November 1st; at 8h 00m a. m. l.m.t. I set off 34° 43' N. on the lat. arc; 14° 09' S. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 19, 24, 25 and 30.

Thence I run.
North bet. secs. 19 and 24.
Over rough mountains through dense brush.

40.00 Set a malpais stone 14 x 10 x 8 ins, 10 ins. in the ground for 1/4

West boundary Dp. 16 N. Rg. 5 W.

Chains	
	sec. cor. marked 1/4 on W. face; from which
	A juniper, 20 ins. diam. bears S 59 1/4° E. 106 lks. dist. marked 1/4 S 19 BT.
	No other tree available. Raise a mound of stone 2 ft. base 1 1/2 ft. high, W. of cor. Pits impracticable
58.70	Edge of cañon and descend into canon.
60.50	Cross wash in bottom of cañon 40 lks. wide course W. and ascend.
63.05	Dp and over rolling mountains.
80.00	Set a malpais stone 17 x 10 x 8 ins. 12 ins. in the ground for cor. of secs. 13 18 19 and 24, marked with 3 notches on N. and 3 notches on S. edges; from which

West boundary Tp. 16 N. Rg. 5 W.

Chains

A juniper, 36 ins. diam. bears N. 17° 42' W.
196 lks. dist. marked T 16 N R 6 W
13/18 B T

a Oak, 22 ins. diam. bears S. 4° 02' W.
164 lks. dist. marked T 16 N R 6 W
20/19 B T No other trees available. and raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th rate.
Underbrush, oak.
Timber, scattering juniper.
Mountainous land or land covered with dense undergrowth 80.00 chs.

North bet secs. 13 and 18.
Over rough mountain

West boundary Tp. 16 N. Rg. 5 W.

Chains	
	through dense brush.
5.00	Croso gulch, 15 lks. wide, course S. W. and ascend.
19.80	Top ridge bears E. and W. and descend.
36.00	Croso gulch, 20 lks. wide, course S. W.
40.00	Set a malpais stone 16 x 10 x 5 ins. ~~9~~ 11 ins. in the ground for 1/4 sec. cor.; marked 1/4 on W face; from which juniper 8 ins. diam. bears N. 40° 37' E. 227 lks. marked 1/4 S 18 B T juniper 14 ins. diam. bears S 57° 15' E. 233 lks. marked 1/4 S 18 B T. No other tree available. And raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable. Ascend S. slope Seepage Mountain.
62.75	Top of mountain and

West boundary Tp. 16 N. Rg. 5 W.

Chains	
	over mountain top.
63.50	Descend rough N. slope.
71.65	Cross gulch, 20 lks. wide, course N. 80° W. and ascend.
75.30	Top ridge bears W. and descend.
80.00	Set a malpais stone 22 x 12 x 5 ins. 17 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked with 4 notches on S and 2 notches on N edges; And raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th rate. Underbrush, oak. Timber, a few scattering junipers. Mountainous land or land

West boundary Tp. 16 N. Rg. 5 W.

Chains.	
	covered with dense under-growth 80.00 chs.
	North bet. secs. 7 and 12. Over rough broken mountains through dense brush and scattering timber.
4.60	Cross ravine, 10 lks. wide course N. W.
15.70	Pop ridge brs. E. and W.
25.00	Cross Cottonwood Creek, 25 lks. wide course S. 30° W. and ascend.
40.00	Set a malpais stone 22 x 14 x 8 ins. 17 ~~16~~ ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raise

West boundary Twp. 16 N. Rg. 5 W.

chains.

a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable.

46.80 Cross W. fork Cottonwood Creek, 15 lks. wide course S.E. and ascend.

64.50 Top and descend.

80.00 Set a malpais stone 19 x 8 x 6 ins, 15 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked with 5 notches on S and 1 notches on N. edges; from which A juniper 20 ins. diam. bears S 58° E. 133 lks. dist. marked T 16 N R 5 W S 1/6 B T No other trees available. And raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th rate.

Underbrush, oak.

West boundary Pp. 16 N. Rg. 5 W.

Chains	Timber, juniper. Mountainous land or land covered with dense undergrowth 80.00 chs.
	North bet. secs. 1 and 6. Over rolling mountains through dense brush and scattering timber.
2.35	Descend N. slope.
12.90	Bottom leave brush and enter heavy timber.
35.60	Cross gulch 15 lks. wide, course E. leave timber and ascend through dense brush.
40.00	Point for 1/4 sec. cor. falls

West boundary Twp. 16 N. Rg. 5 W.

Chains	
	on granite rock in place 5 x 3 x 2 ft. above ground, I mark a cross (X) for exact cor. point and 1/4 W. of cross; and raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
51.50	Top ridge bears E. and W. Spring bears N. 46° E. 1200 ft. dist. and descend.
54.40	Bottom and ascend over rolling mountains through dense brush and scattering cedar timber.
99.60	Top of mountain and timber becomes heavy.
110.10	Top of mountain.

West boundary Dpt. 16 N. Rg 5 W.

Chains	
140.30	Cross road, bears E. and W.
168.00	Cross Pole Creek, 15 lks. wide, course E.
178.60	Set a granite stone 20 x 14 x 8 ins. 15 ins. in the ground, for closing cor. of Dpts. 16 N. Rgs. 5 and 6 W., marked C.C. on S.; with 6 grooves on S., E., and W. faces; and raised a mound of stone 2 ft. base 1½ ft. high, S of cor. Pits impracticable. From this cor. the standard ¼ sec. cor. on S. bdy. of sec. 31 T 17 N. R. 5 W. bears East 18.65 chs. dist. Land, mountainous

West boundary Tp. 16 N. Rg. 5 E.

Chains

Soil, rocky; 4th rate.
Underbrush, oak.
Timber, pine and cedar.
Mountainous and heavily timbered land or land covered with dense undergrowth 178.60 chs.

November 1, 1903

Resurvey of the
East boundary Tps. 16 N. Rg. 5 W.

Chains	
	November 2: At 8h 00m a.m. l. m. t. I set off 34° 41' N on the lat. arc; 14° 28' S on the decl. arc; and determine a true meridian with the solar at the cor. of Tps. 16 N. Rgs. 4 and 5 W., previously described.
	Thence I run North bet. secs. 31 and 36. Over rolling land through dense brush and scattering cedar timber.
17.50	Cross ravine, 10 lks. wide, course N. E.
40.00	Set a cedar post, 3 ft. long, 5 ins. sq., 24 ins. in the ground, for 1/4 sec.

Resurvey of the BOOK 1725

East boundary Tp. 16 N. Rg. 5 W.

Chains.	
	cor. marked 1/4 S 36 on W. and 31 on E. faces; from which
	A juniper 20 ins. diam. bears N 43° 04' W. 227 lks. dist. marked 1/4 S 36 B T.
	No other tree available. Dug pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist.; and raised a mound of earth 3 1/2 ft. base 1 1/2 ft. high, W. of cor.
50.60	Cross wash 15 lks. wide, course N 20° E.
70.70	Cross wash, 50 lks. wide, course N. E.
80.00	Set a cedar post, 3 ft. long, 4 ins. sq., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, marked

Reserves of the
East boundary Dp. 16 N. Rg. 5 W.

Chains

T 16 N. S 30 on N. E.
R 4 W S 31 on S. E.
S 36 on S. W. and
R 5 W S 25 on N. W. faces;
with 1 notch on S. and
5 notches on N. edges;
from which

A cedar, 16 ins. diam. bears S 14° 20' E.
63 lks. dist. marked T 16 N R 4 W
S 31 B T

cedar 8 ins. diam. bears S 19° 20' W
21 lks. dist. marked T 16 N R 5 W
S 36 B T

A cedar, 5 ins. diam. bears N 41° 40' E.
44 lks. dist. marked T 16 N R 4 W
S 30 B T

cedar 17 ins. diam. bears N 31° 35' W
14 lks. dist. marked T 16 N R 5 W
S 25 B T.

Land, rolling
Soil, gravelly; 3rd rate.
Underbrush, oak

40 Resurvey BOOK 1725

East boundary Twp. 16 N. Rg. 5 W.

Chains	
	Timber, cedar, oak and juniper. Land covered with dense undergrowth 80.00 chs.
	North bet. secs. 25 and 30. Over rolling land through dense brush and scattering cedar timber
17.00	Cross road bears E. and W.
17.60	Edge of Clay Creek, course E.
19.30	N. edge of Clay Creek and ascend over rocky mountains.
40.00	Set a malpais stone 28 x 10 x 8 ins. 21 ins. in the ground for 1/4 sec. cor. marked 1/4 on W.

Resurvey

East boundary Tp. 16 N. Rg. 5 W.

Chains	
	face; from which A cedar, 8 ins. diam. bears S. 72° W. 194 lks. dist. marked T 16 N R 5 W S 25 B T.
	Also other tree available. And raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable
40.20	Top ridge bears E. and W. and descend.
56.30	Cross gulch 10 lks. wide course E.
71.00	Enter heavy cedar timber
76.00	Timber becomes scattering
80.00	Set a malpais stone 18 x 12 x 10 ins. 12 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked with 2 notches on S and 4 notches on N edges; from which A cedar, 20 ins. diam. bears S 37° 20' W 82 lks. dist. marked T 16 N R 5 W S 25 B T

East boundary Tp. 16 N. Rg. 5 E.

Chains

A cedar, 10 ins. diam. bears N 20° 08' W
73 lks. dist. marked T 16 N R 5 W
S 24 B T

No other trees available.
Raise a mound of stone
2 ft. base 1½ ft. high, W.
of cor. Pits impracticable
Land, mountainous and rolling.
Soil, rocky; 4th rate.
Underbrush, oak.
Timber, cedar and juniper.
Mountainous land, heavily
timbered land or land
covered with dense under-
growth 80.00 chs.

North bet. secs. 19 and 24
Over rolling mountains
through scattering cedar timber.

Resurvey

East Boundary Dpn. 16 N. Rg 5 W.

Chains	
23.00	Timber becomes dense.
36.00	Ridge bears N.E. and S.W.
40.00	Set a malpais stone 18 x 10 x 4 ins. 12 ins. in the ground for ¼ sec. cor.; marked ¼ on W face; from which A cedar 18 ins. diam. bears S 55° 08' W 45 lks. marked ¼ S 24 B T A cedar 16 ins. diam. bears N 38° 08' W. 62 lks marked ¼ S 24 B T No other tree available. Raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.
50.00	Timber becomes scattering.
65.00	Descend steep N. slope
80.00	Set a granite stone 20 x 14 x 9 ins. 15 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked with 3 notches on N and 3 notches on S edges; from which A cedar, 24 ins. diam. bears S 41° 18' W 115 lks. dist. marked T 16 N R 5 W. S 24 B T

44 Reserves

BOOK 1725

East boundary Pp. 16 N. Rg. 5 W.

Chains

A cedar, 18 ins. diam. bears N 37°42' W. 179 lks. dist. marked T 16 N R 5 W S 13 B T No other trees available. Raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable. Land, mountainous Soil, rocky 4th rate. Timber, cedar and juniper. Mountainous and heavily timbered land 80.00 chs.

November 2, 1903

November 3: At 8h 00m a. m. l. m. t. I set off 34° 43½' N on the lat. arc; 14° 47' E. on the decl. arc; and determine a true meridian with the solar at the cor. of

Resurvey

East boundary Dp. 16 N. Rg. 5 W.

Chains	
	secs. 13, 18, 19 and 24.
	Thence Drum
	North bet. 13 and 18.
	Over rolling mountains.
11.20	Cross gulch, 10 lks. wide course N. 70° W.
40.00	Set a granite stone 20 x 12 x 6 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable
46.25	Cross gulch, 10 lks. wide course N. E.
57.65	Cross Pine Creek, 70 lks. wide, course N. 70° E.
58.00	Ascend steep S. slope
62.50	Ridge bears N. E and S. W.

46 Resurvey BOOK 1725

East boundary Dp. 16 N. Rg 5 W.

chains	
	and descend.
70.50	Bottom
72.00	Cross Horse Wash, 30 lks. wide, course N.E.
80.00	Set a malpais stone 16 x 9 x 6 ins, 12 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked with 4 notches on S and 2 notches on N edges; from which A cedar, 14 ins. diam. bears N 22¼° W. 148 lks. dist. marked T 16 N R 5 W S 12 B T A cedar 12 ins. diam. bears N 88° 57' E. 154 lks. dist. marked T 16 N R 4 W S 7 B T No other trees available.
	And raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
	Land, mountainous
	Soil, 4th rate.
	Timber, scattering cedars.

Reserve

East boundary Twp. 16 N. Rg. 5 W.

Mountainous land

80.00 chs.

North bet. secs. 7 and 12

Over rolling mountains through scattering cedars.

20.00 Timber becomes dense.

40.00 Set a granite stone 17 x 12 x 6 ins. 12 ins. in the ground for 1/4 sec. cor.; marked 1/4 on W face; from which

A cedar 26 ins. diam. bears S 64 1/4° W 65 lks. marked 1/4 S 12 B T

A cedar 6 ins. diam. bears N 8 3/4° W 170 lks. marked 1/4 S 12 B T

No other tree available.

Raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable

Thence through scattering cedars.

East boundard Tp. 16 N. Rg. 5 E.

chains	
65.50	Crosswash, 15 lks. wide, course E.
75.00	Cross creek, 100 lks. wide, S 75° E.
77.50	Ascend steep S. slope.
80.00	Set malpais stone 22 x 17 x 5 ins. 17 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked with 5 notches on S and 1 notches on N edges; from which A cedar, 8 ins. diam. bears S 46° W. 8 lks. dist. marked T 16 N R 5 W S 12 B T A cedar, 6 ins. diam. bears N 65° 16' W. 73 lks. dist. marked T 16 N R 5 W S 1 B T A cedar, 6 ins. diam. bears N 44° 12' E. 67 lks. dist. marked T 16 N R 4 W S 6 B T No other tree available. Raise a mound of stone 2 ft. base 1½ ft. high W. of cor. Pits impracticable Land, mountainous.

East boundary Tp. 16 N. Rg. 5 W.

Chains.	
	Soil rocky; 4th rate.
	Timber, cedar.
	Mountainous and heavily timbered land 80.00 chs.
	North bet. secs. 1 and 6.
	Over rolling mountains through scattering cedar timber and dense brush.
12.00	Leave brush and timber becomes heavy.
28.00	Over level land, cross Ellis road bears E. and W.
32.00	Cross wash, 15 lks. wide, course N. E.
37.00	Cross wash, 20 lks. wide, course N. E.

East boundary Dp. 16 N. Rg. 5 W.

Chains	
40.00	Set a ~~mal~~ais stone 14 x 12 x 10 ins. 10 7 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; from which; A cedar 14 ins. diam. bears S 72° 45' E. 26 lks. dist. marked 1/4 S 6 B T A pine 10 ins. diam. bears West 3 lks. dist. marked 1/4 S 1 B T
53.80	Cross wash, 15 lks wide, course N. 25° E, and over rolling land through dense brush.
80.00	Cross wash, course E.
94.50	Cross road, bears N W and S E.
114.25	Cross Humphries wash 200 lks. wide, course S. E.
119.00	Ascend S. W. slope.
138.00	Cross wash 20 lks. wide, course S. W.

East Boundary Tp. 16 N., Rg. 5 W.

chains.	
148.00	Croso wash, 20 lks. wide course S. W.
149.00	Leave brush and enter heavy timber.
157.00	Croso wash, 8 lks. wide, course S. W.
178.73	Intersect the 4th Standard Parallel North 9.15 chs. W. of the 1/4 sec. cor. on S. bdy of sec. 31 T 17 N. R 4 W. and Set a granite stone 16 x 10 x 7 ins. 11 ins. in the ground, for closing cor. of Tps. 16 N. Rgs. 4 and 5 W., marked C C on S; with 6 grooves on S., E., and W. faces; from which A cedar, 9 ins. diam. bears S 61° 44' W 65 lks. dist. marked T 16 N R 5 W S 1 B T C C.

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BOOK 1725

East boundary Tp. 16 N. Rg. 5 E.

Chains. A cedar 8 ins. diam. bears S60°40'E. 53 lks. dist. marked C C T 16 N R 4 W S 6 B T.

Land, mountainous.

Soil, 4th rate; rocky.

Underbrush, oak.

Timber, cedar and juniper

Mountainous land, heavily timbered land or land covered with house

(X)

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November 4, 1903. At the cor. of secs 23, 24, 25 & 26, I set off 15° 1/2 on the declination arc; and at 12h 00 m by my watch, which is correct L. M. T, observe the sun on the meridian, and obtain on the lat. arc, the reading 34° 42' N which is the lat. nearly

Boundaries Tp. 16 N., R 5 W.

Latitudes, Departures and Closing Errors.

Line designated	True Bearing	Distance	Latitudes N. chns.	Latitudes S. chns.	Departures E chns.	Departures W chns.
Fourth Standard Parallel North	West	489.50				489.60 ~~489.50~~
W. bdy. T16N., R5W.	South	~~578.60~~		578.60		
S. bdy. T16N. R5W	East	490.40			490.40	
E. bdy. T16N., R5W	North	578.73	578.73			
Convergancy						.61
TOTALS			578.73	578.60	490.40	~~490.21~~
			578.60		490.21	490.11
Error in latitude			.13	Error in Dep.	.19	
					29	

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This Township is rough and mountainous. The easterly half is more or less covered with a heavy growth of cedar timber. The township is well watered and the soil along the creek bottoms is very fertile.

Arthur B. Mader
U.S. Deputy Surveyor.

November 4, 1903.

LIST OF NAMES.

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A list of the names of the individuals employed by Arthur B. Mader 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 South, West and East boundaries of Tp. 16 N. Rg. 5 W.

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, showing the respective capacities in which they acted.

W. E. Allen, Chainman.
W. C. Meyers, Chainman.
, Chainman.
, Chainman.
Henry Clay, Axman.
, Axman.
Oscar Clay, Flagman.

FINAL OATH OF ASSISTANTS.

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We hereby certify that we assisted Arthur B. Mader United States Deputy Surveyor, in surveying all those parts or portions of the South, West and East boundaries of Tp. 16 N. Rg. 5 W.

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, as 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 Arizona.

W. E. Allen, Chainman.
W. E. Myers, Chainman.
, Chainman.
, Chainman.
Henry Clay, Axman.
, Axman.
Oscar Clay, Flagman.

Subscribed and sworn to before me this 3rd day of November, 1903.

Arthur B. Mader
U.S. Deputy Surveyor. ~~Notary Public.~~

[SEAL.]

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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I, Arthur B. Mader, United States Deputy Surveyor, do solemnly swear that in pursuance of a contract received from Hugh N. Price, United States Surveyor-General for Arizona, bearing date of the Dec 9th day of December, 1901, 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 Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the South West and East boundaries of Tp. 16 N. Rg. 5 W.

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, as 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 perpetu-

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ated in strict accordance with the Manual of Surveying Instructions, the special instructions of the United States Surveyor-General for Arizona, and in the specific manner described in the field notes, and that the foregoing are the TRUE field notes of such survey; and should any fraud be detected I will suffer the penalty of perjury, under the provisions of an act of Congress approved August 8, 1846.

Arthur B. Mader

U. S. Deputy Surveyor.

Subscribed and sworn to before me this 23rd day of December, 1903

Woodbridge

Notary Public

4890b150-8-02

Commission expires April 16, 1905

BOOK 1725

BOOK 1725

Arthur B. Mader

U.S. Deputy Surveyor

Subscribed & sworn to by Arthur B Mader before me this 28th day of July 1904

J. M. W. Moore

Recorder U.S.L.O.

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APPROVAL. BOOK 1725

Office of the

United States Surveyor-General,

Phoenix, Arizona.

July 20 - 1904

The foregoing field notes of the sur-
vey of S. Bdy & Survey W & E. Bdrs
T 16 N R 5 W
of the Gila and Salt River Base and Me-
ridian, in the Territory of Arizona,
executed by A. B. Mader
United States Deputy Surveyor, under his
contract No. 89, dated Dec. 9 1901,
having been critically examined, and the
necessary corrections and explanations mad
the said field notes, and the surveys
they describe, are hreby approved.

Frank Arnold

U. S. Surveyor-General.