

1
Fourth Std Par'll North
through Range 5 West

A.

DEC 24 1908
Contract N° 89

A. B. Mader D.S

1724

1724

BOOK 1724

4-671

FIELD NOTES
GENERAL LAND OFFICE.

1724

1
BOOK 172A
Preliminary Oaths of Assistants.

We, Joseph Estes, Max Clearwaters
and Henry Clay and Edward Tomlinson
do solemnly swear that we will well and faithfully execute
the duties of Chain Carriers; 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 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 the Tp. N. 16 North Range
Range 5 West, the East, South and
west boundaries and its
subdivisions and the 4th
Standard Parallel North thro'
Range 5 West
of the Gila and Salt River Base and Meridian, in the Ter-
ritory of Arizona.

Joseph Estes Chainman.

Max Clearwaters Chainman.

Henry Clay Chainman.

Edward Tomlinson Chainman.

Sworn and subscribed before me, this 22nd

day of July 1902

Fred B. Philpott

My Commission expires Sept. 26, 1903.

Notary Public.

[SEAL.]

We, Oscar Clay and 1A
Harry Wilson BOOK 1724

do solemnly swear that we will well and truly perform the
duties of Flagman and
Axeman

in the establishment of corners and other duties, according
to instructions given us, and to the best of our skill and
ability, in the survey of the 4th Standard

Parallel North, ^{thru Range 5 West} the East
and West boundaries
and the subdivisions of
T₁ N₁ 6 N₁ R₁ E₁ 5 West

of the Gila and Salt River Base and Meridian, in the Ter-
ritory of Arizona.

Oscar C. Clay Flagman.
Harry Wilson Axeman.
..... Axeman.
..... Axeman.

Subscribed and sworn to before me this 22nd
day of July 1902

Fred B. Philpott
Notary Public.

Commission expires Sept. 26, 1902.

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BOOK 1724

FIELD NOTES

OF THE SURVEY OF THE

FOURTH STANDARD PARALLEL NORTH
THROUGH

RANGE NO 5 WEST

OF THE

GILA & 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 - July, 22nd 1902.

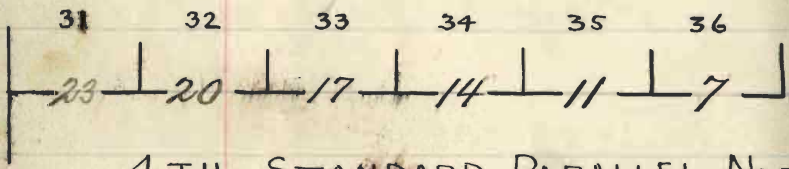
SURVEY COMPLETED - July, 24th 1902.

NAMES AND DUTIES OF ASSISTANTS.

Joseph Estes	Chairman
Max Clearwater	Chairman
Henry Clay	Chairman
Edward Tomlinson	Chairman
Harry Wilson	Axman
Oscar Clay	Flagman

BOOK 1724

T17 N, R5W



4TH. STANDARD PARALLEL NORTH

Fourth Standard Parallel North, through Rg. 5th
chains

Survey commenced July 22nd 1902, and executed with a

Fourth Standard Parallel N, thro' Rg. 5th W. ^{2A}

⊕ July, 22nd, 1902. at the cor. of Twp. 17 N, Rg. 4 and 5 west, at 4^h 00^m p. m. l. m. Y. I set off $20^{\circ} 20\frac{1}{2}'$ on the decl. arc. and $34^{\circ} 47\frac{1}{2}'$ on the lat. arc and determine a true meridian by the solar and mark the true meridian thus determined by a tack in a stake driven 5 chus. N. of my station.

⊕ At the standard cor. of Twp. 17 N. Rgs. 4 and 5 W., latitude

Fourth Standard Parallel North, through Rgs 50
chains

Survey commenced July 22nd
1902, and executed with a
Gurley Light Mountain Transit,
with solar attachment, No. ¹¹¹¹
The horizontal limb is pro-
vided with two opposite
verniers, reading to 30" of
arc, which is also the least
count of the verniers of the
latitude and declination
arcs.

The instrument was examined,
tested on the true meridian
at Phoenix, found correct
and was approved by the
Surveyor General for Arizona,

July 19th, 1902

(*) At the standard cor. of Rgs.
17 N. Rgs. 4 and 5 W., latitude

4.

BOOK 1724

Fourth Standard Parallel North through P. 5 W.

$34^{\circ} 49'$
 $34^{\circ} 47\frac{1}{2}'$ N., longitude $112^{\circ} 40'$

W., I set my transit over
 a tack in a stake driven
 firmly in the ground, and
 at ~~11^h 19.6^m~~ ^{11^h 28^m} p. m. by my
 watch, which is 1^m fast
 of l. m. t. I observe Polaris
 at eastern elongation in
 accordance with instruction
 in the Manual, and mark
 the line thus determined
 by a tack driven in a stake
 set firmly in the ground,
 5 chains north of my
 station.

July 22, 1902.

July 23rd: At 7 a. m. I lay
 off the Azimuth of Polaris,

Fourth Standard Parallel North through R. 5 W.

$1^{\circ} 28' 30''$ to the West, and mark the true meridian thus determined by a tack driven in a stake set firmly in the ground.

At $8^{h} 00^{m}$ a.m. I set off $34^{\circ} 47\frac{1}{2}'$ ^{$34^{\circ} 49'$} ^{$76^{\circ} 12' 30''$} N on the latitude arc; $20^{\circ} 24\frac{1}{2}'$ N. on the decl. arc; and mark the true meridian 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 Polar-is observation; therefore, I conclude that the adjustments of the

Fourth Standard Parallel North through Pt. 5 W.

Chains

- 8.00 Ascend through dense brush
 13.00 Top of mountain and descend.
 22.00 Enter Humphrey wash
 course S. E.
 30.50 Leave wash.

Difference between meas-
 urements of 40.00 chs., by
 two sets of chainmen, is
 5 lbs.; position of middle
 point

By 1st set, 40.025 chs.

By 2nd set, 39.975 chs.;

the mean of which is

- 40.00 Set a granite stone 14x10x7
 ins., ¹⁶9 ins. in the ground,
 for standard $\frac{1}{4}$ sec. cor.
 marked S. C. $\frac{1}{4}$ on N. face;
 dug pits 18x18x12 ins., E.
 and W. of stone, 3 ft. dist.

North Standard Parallel North through P. 5 W.
chains

and raise a mound of earth, $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, N. of cor.

52.00 Ascend through dense bush and scattering timber

69.29 Cross bush fence, bears N. and S.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 6 lks.; position of middle point

By 1st set, 80.03 chs.

By 2nd set, 79.97 chs.;

the mean of which is

80.00 Set a malpais stone $22 \times 14 \times 10$ ins. 16 ins. in the ground, for standard cor. of secs. 35 and 36, marked SC on

Fourth Standard Parallel North through Q. 5 W.
chains

on N., with 1 groove on E.
and 5 grooves on W. faces;
and raised a mound
of stone 2 ft. base 3 ft.
high N. of cor.; from which
A cedar 22 ins. diam. bears
N. 81° E. 71 lks. dist. marked
SCT17NRSWS36BT.

A cedar 18 ins. diam. bears
N. 31° W. 59 lks. dist. marked
SCT17NRSWS35BT.

Land, mountainous
Soil rocky and loam,
1st and 4th rate.

Undergrowth

Timber, juniper and cedar.

Mountainous land or
land covered with dense
undergrowth 80.00 chs.

North Standard Parallel North through P. 5 W.
chains

West on S. bdy. sec. 35

Over rolling mountains
through heavy timber.

- 1.32 Cross road bears N. and S.
7.12 Cross brush fence bears N. and S.
17.41 Cross wire fence bears N. and S.
and ditch bears S. E. and N. W.
21.00 Enter Humphrey wash, course
N. 65° E.
34.45 Leave wash.
34.56 Cross road bears S. W. and N. E.
35.00 Ascend steep mountain
through dense brush.

Difference between measure-
ments of 40.00 chs., by two
sets of chainmen & lks.;
position of middle point
By 1st set, 40.04 chs.

12.

Fourth Standard Parallel North through R. 5 W.
chains

- By 2nd set, 39.96 chs.
the mean of which is
- 40.00 Set a malpais stone 15 x 12 x 8 ins. 10 ins.
in the ground for standard
1/4 sec. cor. marked S.C. 1/4
on N. face; and raise
a mound of stone 2 1/2 ft.
base 2 1/2 ft. high, N. of
cor. Pits impracticable.
- 42.00 ~~⊗~~ Top of mountain and
over top.
- 51.50 Descend W. slope.
- 63.00 Cross gulch, 10 lks. wide,
course S. 70° E. and ascend
steep, rocky E. slope.
- 76.00 Top and descend.
Difference between measure-
ments of 80.00 chs, by two
sets of chainmen is 15 lks.;

Fourth Standard Parallel North through R. 5 W.
chains

position of middle point

By 1st set, 80.075 chs.

By 2nd set, 79.925 chs.;

the mean of which is

80.00 Set a malpais stone $20 \times 10 \times 8$ ins. 15 ins.

in the ground, for standard
cor. of secs. 34 and 35, mark

Fourth Standard Parallel N. thro. R. 5 W. BOOK 1724 12A

(X) July 23rd 1902, at the
S. $\frac{1}{4}$ cor. to sec. 35, I set
off $20^{\circ} 10'$ N. on the decl. arc
and at ~~12^{h.} 00^{m.}~~^{noon}, l. m. t, observed
the sun on the meridian;
the resulting reading on
the lat. arc is $34^{\circ} 47' \frac{1}{2}$ ⁷⁷₂
which is the latitude
nearly.

North Standard Parallel North through R. 5 W.

chains

position of middle point

By 1st set, 80.075 chs.

By 2nd set, 79.925 chs.;

the mean of which is

80.00

Set ~~an~~ malpais stone $20 \times 10 \times 8$ ins. 15 ins.

in the ground, for standard
cor. of secs. 34 and 35, mark-
ed S.C. on N., with 2 grooves
on E. and 4 grooves on W.
faces; and raise a mound
of stone $2\frac{1}{2}$ ft. base $2\frac{1}{2}$ ft.
high N. of cor. Pits im-
practicable,

Land, mountainous
Soil, rocky; 3rd rate.

Underbrush, oak.

Timber, cedar and juniper.
Mountainous or heavily
timbered land or land

Fourth Standard Parallel North through R. 5 W.
chains.

covered with dense under-
growth, 80.00 chs.

Weston S. ldy. sec. 34.

Descend W. slope

10.94 Cross road bears N.W. and S.E.

19.58 Cross wash 95 lks. wide
course S.E. and ascend.

33.25 Ascend rough slope through
dense brush.

39.70 Top of mountain and over
rolling mountain top.

Difference between measure-
ments of 40.00 chains by
two sets of chainmen is
7 lks.; position of middle
point

By 1st set, 40.035 chs.

Fourth Standard Parallel North through R. 5 W.
chains

By 2nd set. 39.965 chs.
the mean of which is

40.00 Set analphais stone 18 x 10 x 5 ins. 12 ins.

in the ground, for standard
1/4 sec. cor., marked SC 1/4
on N. face; from which
A cedar 9 ins. diam. bears
N. 22° 04' E. 32 chs. dist.,
marked SC 1/4 S 34 BT. No.
other trees available.

And raise a mound of
stone 2 ft. base 1 1/2 ft. high
N. of cor. Pits imprac-
ticable.

45.00 Enter dense cedar timber.

67.50 Cross Wickieup Cañon,
75 chs. wide Course N. 75° E.

Difference between measure-
ments of 80.00 chs. by two

Fourth Standard Parallel North through R. 5 W.
chains

sets of chainmen is 11 lks.;
position of middle point

By 1st set, 80.055 chs.

By 2nd set, 79.945 chs.;

the mean of which is

80.00

Set a malpais stone 22 x 6 x 4 ins, 18 ins.

in the ground for standard
cor. of secs. 33 and 34, marked

SC on N., with 3 grooves on

E. and W. faces; from which

A cedar, 6 ins. diam. bears N. 58° 48' E.

125 lks. dist. marked SCT17NR5WS34BT

A cedar, 8 ins. diam. bears N 72° 24' W.

65 lks. dist. marked SCT17NR5WS33BT.

Land, mountainous.

Soil 1st and 4th rate; rocky
and loamy.

Undergrowth, oak.

Timber, cedar.

Mountainous or heavily

North Standard Parallel North through Q. 5 W.
chains

timbered land or land
covered with dense under-
growth 80.00 chs.

July 23, 1902.

July 24: at 8^h 00^m a.m. l.m.t.

X I set off ^{34° 49' 74"} ~~34° 47' 1/2"~~ Now the
lat. arc; ^{20° 00'} ~~20° 00' 1/2"~~ N. on the
decl. arc; and determine
a true meridian with
the solar at the standard
cor. of secs. 33 and 34.

Thence I run
West on the S. ldy. sec. 33
Over rolling mountains
through dense brush
and scattering timber.

36.50 Cross Pole Creek, 20 lks.

North Standard Parallel North through Pg 5 W.

chains

wide, course N. 20° E. and ascend

Difference between measurements of 40.00 chs. by two sets of chainmen is 10 lks.; position of middle point

By 1st set, 40.05 chs.

By 2nd set, 39.95 chs.

the mean of which is

40.00

Set a malpais stone $18 \times 12 \times 6$ ins. 12

ins. in the ground for standard $\frac{1}{4}$ sec. cor. marked S.C. $\frac{1}{4}$ on N. face; from which

A pinion, 10 ins. diam. bears N 57° W.

23 lks. dist. marked S.C. $\frac{1}{4}$ S 33 B.T.

piece round of stone $\approx \frac{1}{2}$ hgt., ≈ 4 hore T. of Cor.

Thence descend

72.00 Cross Pole Creek, 20 lks.

wide, course S. 70° E. and ascend.

Fourth Standard Parallel North through A. 5 W.
chains

76.00

Pop and descend.

Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks.; position of middle point

By 1st set, 80.03 chs.

By 2nd set, 79.97 chs.

the mean of which is

80.00

Set a granite stone 18 x 12 x 8 ins. 12

ins. in the ground for standard cor. of secs. 32 and 33, marked SC, on N., with 4 grooves on E. and 2 grooves on W. faces; and raise a mound of stone 2 1/2 ft. base 2 1/2 ft. high, N. of cor. Pits impracticable. Land, mountainous Soil, rocky; 4th rate.

Fourth Standard Parallel North through R. 5 W.
chains.

Undergrowth, oak.

Timber, cedar.

Mountainous land or
land covered with dense
undergrowth 80.00 chs.

West, on S. bdy. sec. 32.

Over rolling mountains

2.00 Cross Pole creek, 20 lks. wide,
course N. 60° E. and through
dense brush on point.

12.00 Cross Pole Creek, 20 lks. wide
course S. E. and over point
through dense brush.

20.00 Cross Pole Creek, 20 lks. wide
course N. E. and ascend

24.50 Pop and descend.

31.00 Cross Pole Creek, 20 lks. wide,

Fourth Standard Parallel North through A. 5 W.

Chains

course S. E. and ascend.

36.30

Pop and descend.

Difference between measurements of 40.00 chs. by two sets of chainmen is 14 lks.; position of middle point

By 1st set, 40.07 chs.

By 2nd set, 39.93 chs.

the mean of which is

40.00

Set a schist stone $18 \times 12 \times 4$ ins. 12 ins.

in the ground for standard $\frac{1}{4}$ sec. cor., marked S C $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft.

base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

42.50

Cross Pole Creek, 20 lks. wide course S. E. and over broken ground through

Fourth Standard Parallel North through Q. 5 W.

chains

dense brush

74.40 Cross Pole Creek, 20 lks. wide
course N. E.

75.40 Cross road, bears S. W. and N. E.
and ascend.

Difference between measure-
ments of 80.00 chs. by two
sets of chainmen is 14 lks.;
position of middle point

By 1st set, 80.07 chs.

By 2nd set, 79.93 chs.;

the mean of which is

80.00 The point for standard
sec. cor. falls on the West
side of a granite rock
in place, 25 x 20 x 10 ft.
above ground, on which
I cut a cross (X) at the
exact cor. point, for

Fourth Standard Parallel North through R. 5 W.
Chains

standard cor. of secs. 31
and 32, marked SC on N.,
with 5 grooves E. and 1
groove W. of cross; and
raise a mound of stone
2 ft. base 2 ft. high, N.
of cor. Pits impracticable.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, cedar.

Underbrush, oak.

Mountainous land or
land covered with dense
undergrowth 80.00 chs.

West on G. by. sec. 31.

Over point through dense
brush

Fourth Standard Parallel North through R. 5 W.

chains

- 6.25 Cross Pole Creek 15 lks. wide,
course S.
- 8.75 Cross Pole Creek 15 lks. wide,
course N. E.
- 12.20 Cross Pole Creek, 15 lks. wide,
course S. E.
- 19.50 Cross Pole Creek, 15 lks. wide
course N. E. and ascend
steep, rocky slope of
mountain through dense
brush.
- 30.00 Pop and descend.

Difference between measure-
ments of 40.00 chs. by two
sets of chainmen is 12 lks.;
position of middle point

By 1st set, 40.06 chs.

By 2nd set, 39.94 chs.;

the mean of which is

North Standard Parallel North through A. 5 W.

chains

40.00

Set a schist stone $24 \times 12 \times 5$ ins. 18 ins.

in the ground for standard
 $\frac{1}{4}$ sec. cor., marked SE $\frac{1}{4}$
 on N. face; and raise
 a mound of stone 2 ft.
 base $2\frac{1}{2}$ ft. high N. of
 cor. Pits impracticable

40.30

Cross gulch, 11 lks. wide,
 course S. E. and ascend
 steep rocky mountain.

55.00

Pop and descend.

Difference between measure-
 ments of 80.00 chs. by two
 sets of chainmen is 12 lks.;
 position of middle point

By 1st set, 80.06 chs.

By 2nd set, 79.94 chs.;

the mean of which is

80.00

Set a granite stone $22 \times 10 \times 8$ ins. 18 ins.

Fourth Standard Recalled North through R. 5th
 chains

in the ground, for standard
 cor. of Tps. 17 N. Rgs. 5 and
 6 W., marked S C on N.,
 with 6 grooves on N. E. and
 W. faces; and raise a
 mound of stone 2 ft. base
 2½ ft. high N. of cor.

Pits impracticable
 Land, mountainous.

Soil, rocky; 4th rate.

Underbrush, oak.

No timber.

Mountainous land or
 land covered with dense
 undergrowth 80.00 chs.

July 24th 1902

Arthur B. Mader
 V. S. Deputy Surveyor

Fourth Standard Parallel N, thro' Rg. 5 W.

General Description

This line runs at its easterly end, for $2\frac{1}{2}$ miles over the wash of Humphrey's Wash and alternately ~~of~~ over the adjacent rolling hilly banks which are densely covered with brush. The wash is composed of very fertile soil and if water were available, it would be very rich ranch land. The westerly end of the line crosses bold, rocky and in many cases barren mountains which are not fit for any purpose

whatsoever but
grazing for cattle
where covered with brush.
The drainage has a
northeasterly trend.
The land south of the
line is very mountainous
and broken in character
and covered with dense
brush and cedar
timber. The land
north of the line is
mountainous in character
and covered with dense
brush.

A. B. Mader
U. S. Deputy Surveyor.

finds with reference to date of 1/6/04

"In the survey of the Standard
Parallel north, sights were taken
about every 15 or 20 fathoms and
solar observations taken with the
Sector" from Deputy Masters
letter dated, Percatt. June 1st/04.

A list of the names of the individuals employed
by .. Arthur B. Mader ..

U S. Deputy Surveyor, to assist in running, measuring
and marking the lines and corners described in the forego-
ing Field Notes of the survey of the 4th Standard.

Parallel North thro' Range 5 West, the
East south and West boundaries
and the subdivisions and
connecting lines of T^p. N^o. 16
North, Range N^o. 5 West

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

Joseph Estes .. Chainman.

Max Clearwater .. Chainman.

Henry Clay .. Chainman.

Edward Tomlinson .. Chainman.

Harry Wilson .. Axeman.

.. Axeman.

Oscar Clay .. Flagman.

Final Oath of Assistants.

We hereby certify that we assisted Arthur B. Mader U. S. Deputy Surveyor, in surveying all those parts or portions of the 4th Standard Parallel North, the East, South and west boundaries and the subdivisions of Twp. No 16 North Range No 5 West

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.

- Joseph Estes Chairman.
- Max Cleaveland Chairman.
- Henry C. Lay Chairman.
- Edward Trullison Chairman.
- Axeman.
- Harry Wilson Axeman.
- Oscar C. Lay Flagman.

Sworn and subscribed before me, this 26th day of August 1902

Fred B. Philpott

My Commission expires Sept. 26, 1902.

Notary Public.

[SEAL.]

Final Oath of U. S. Deputy Surveyor.

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I, Arthur B. Mader

U. S. Deputy Surveyor, do solemnly swear that in pursuance of a contract received from Hugh H. Price

United States Surveyor General for Arizona, bearing date of the 9th day of Dec. 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 4th

Standard Parallel North thro Range 5 West the East, south and west boundaries and the subdivisions and connecting lines of Tp. N^o 16 North Range N^o 5 West

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 surveys have been established and perpetuated in strict accordance with the Manual of printed 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

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suffer the penalty of perjury, under the provisions of an act of Congress approved August 8, 1846.

Arthur B. Mader

U. S. Deputy Surveyor.

Sworn to and subscribed before me this... 11th.....

day of September..... 1902

Fred B. Philpott.....

My Commission expires Sept. 26, 1902.

Sworn to & subscribed before me
this 28th day of June 1904

J. M. Moore

Receiver U. S. Land Office
Pecos & Arizona

BOOK 1724

A P P R O V A L. BOOK 1724

Office of the

United States Surveyor-General,

Phoenix, Arizona.

July 20-1904

The foregoing field notes of the survey of 4th Stand. Par., N. the R. S. W.

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

executed by *A. R. Mader*,

United States Deputy Surveyor, under his contract No. 89, dated *Dec. 9* — 1901,

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. Galloway

U. S. Surveyor-General.