

Book 1

See Index

BOOK 1326

Gila and Salt River Base ^{line} and Meridian
^{through} Ranges 9, 10, 11, 12, 13, 14, 15 F. ^{and}

Albert T. Colton

1326

4-671

No. 1026

FIELD NOTES

GENERAL LAND OFFICE.

BOOK 1326

*See corrected notes by Colton
in 1900, the R. 10 E. the 14 N.*

Albert T. Colton

Gila + Salt River Base through Rs
9, 10, 11, 12, 13, 14 + 15 E.

BOOK 1326

Field Notes of the
Survey of that portion
of the Base line ex-
tending from
T₁N. R_s 8 + 9 E to the
corner of T₁N. R_s 13 + 16 E.
Gila + Salt River Base +
Meridian, Arizona
As surveyed by
Albert T. Colton

U. S. Deputy Surveyor
Under his contract No 52
Dated Apr 18 1899

Survey commenced July
10, 1899
Survey completed July 29, 1899.

Gila + Salt River Base through
Rs 9, 10, 11, 12, 13, 14 + 15. E.

Names + Duties of Assistants.

BOOK 1326

| | |
|----------------|----------|
| Chester Irvine | Chairman |
| Harvey Elliott | " |
| Walter Bailey | " |
| John Brady | " |
| Fred Merritt | Flagman |
| Frank B. Gay | Moundman |

Index,

T. 1 N. R 9 E

| | | | | | |
|------|------|------|------|------|------|
| 31 | 32 | 33 | 34 | 35 | 36 |
| -11- | -13- | -16- | -17- | -19- | -21- |

T 1 N R 10 E.

| | | | | | |
|------|------|------|------|------|------|
| 31 | 32 | 33 | 34 | 35 | 36 |
| -23- | -24- | -27- | -29- | -31- | -32- |

T 1 N R 11 E.

| | | | | | |
|------|------|------|------|------|------|
| 31 | 32 | 33 | 34 | 35 | 36 |
| -34- | -36- | -40- | -42- | -44- | -45- |

T 1 N R. 12 E

| | | | | | |
|------|------|------|------|------|------|
| 31 | 32 | 33 | 34 | 35 | 36 |
| -47- | -49- | -51- | -52- | -54- | -56- |

T 1 N R. 13 E.

| | | | | | |
|------|------|------|------|------|------|
| 31 | 32 | 33 | 34 | 35 | 36 |
| -58- | -60- | -62- | -63- | -65- | -68- |

Gila + Salt-River Base through
 Rs 9, 10, 11, 12, 13, 14, + 15-E

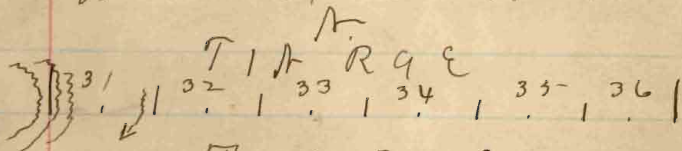
BOOK 1826

T | N R. 14 E

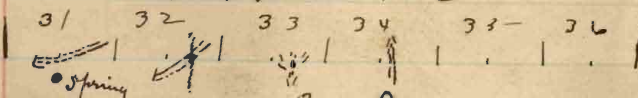
| | | | | | |
|----|----|----|----|----|----|
| 31 | 32 | 33 | 34 | 35 | 36 |
| 69 | 71 | 73 | 75 | 76 | 78 |

T | N R 15-E

| | | | | | |
|----|----|----|----|----|----|
| 31 | 32 | 33 | 34 | 35 | 36 |
| 80 | 82 | 84 | 86 | 87 | 89 |



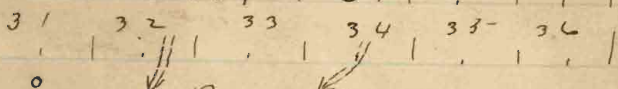
T | N R 10 E



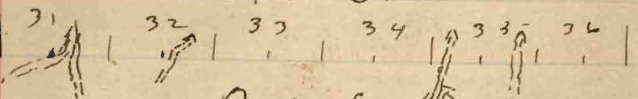
R 11 E



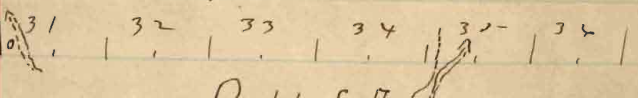
R 12 E



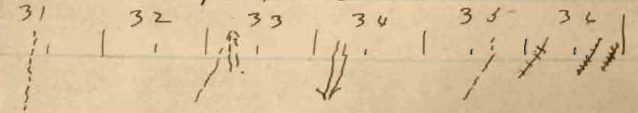
R 13 E



R 14 E



R 15-E



4
BOOK 1326

Preliminary Oaths of Assistants.

We, *Charles Irvine, John Brady,*
and *Walter Bailey, & Harry Elliott*
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 *Gila and*

Salt river Base line
through Ranges 9, 10-11-
12, 13, 14, & 15 East

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

Charles Irvine Chainman.

John Brady Chainman.

Walter Bailey Chainman.

Harry Elliott Chainman.

Subscribed and sworn before me, this *8th*

day of *July* 189*9*

Daniel C. Stewart

Notary Public

[SEAL.]

Clark District Court, Second Judi-
cial District, Arizona.

We, *Fred Merritt*

5

and *Juan B. Gay*. BOOK 1326

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

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

Gila and Salt River Base
line through Ranges
9, 10, 11, 12, 13, 14 & 15
East,

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

Fred Merritt
Juan B. Gay

Subscribed and sworn to before me this *8th*

day of *July* 189*9*

David C. Stevens
Notary Public.
10th District Court, Second
Civil District, Arizona.

Gila Salt River Basin through
R. 9 E

BOOK
1326

cls Survey commenced July 10/1899
And executed with a Young
& Sons Light-Mountain
Transit No 5706 with
Solar attachment.

The horizontal limb is
provided with two double
series placed opposite to
each other, reading to sin-
gle minutes of arc, which
is also the least count of
the series of latitude & the
declination arcs.

The instrument was exam-
ined, tested on the true merid-
ian at Tucson, found correct
& was approved by the U.S. Sur-
veyor General for Arizona,
June 26, 1899

Gileu + Salt-River Base 7
through R 9 E BOOK 1326
No. 1326

also I begin at the witness
cor to the true cor point for
corner T 1 N R 8 + 9 E. which
is a rock 12x6x3 ins, marked
+ witnessed as described by
the Surveyor General.

Lat. $33^{\circ} - 22' - 28''$ N.

Longitude $111^{\circ} - 27' - 32''$ W

In order to test the solar ap-
paratus by comparing the
results of observations on the
sun made during A.M. +
P.M. hours with a true
meridian determined by
observations on Polaris,
I proceed as follows: -
At 4 P.M. local mean time
I set off $33^{\circ} - 22'$ on lat. arc
 $22^{\circ} - 12'$ N on Dec'd arc +
mark true meridian thus

Giles & Salt River Base
through R 9 E

BOOK 1326

chs

determined with the solar,
by cross + stone firmly set
in the ground 5 chs N of the
instrument.

July 10 1899

July 11, 1899: At 12^h 5^{min} A.M. by my
watch, which is correct local
time, I observe Polaris at East-
ern elongation, in accord-
ance with instructions
in the manual, + mark the
line thus determined, by
cross on stone firmly set in
the ground 5 chs N of my
station.

At 8 A.M. I lay off the azimuth
of Polaris 1° 28' to the West
& mark the true meridian by
cutting a small groove in the

Cpilar + Salt River Base ⁸⁹
through R 9 E

BOOK 1326

chs

stone set last evening on which the true meridian falls 12 ins West of the mark determined by solar.

At 8 A.M. I set off $33^{\circ} 22'$ on the Lat arc; $22^{\circ} 5'$ N. on declarc + mark the true meridian determined with the solar, by a cross on the stone already set 5 chs N. of my station; this mark falls 16 ins West of the true meridian established by Polaris observation.

The Solar apparatus by P.M. & A.M. observations defines position for true meridian about $6''$ E, and $8''$ W. of the meridian established by Polaris observations. I conclude that

Gila + Salt-River Base
Hirring R. 9 E.

chs

the adjustments of the instrument are satisfactory. The magnetic bearing of the true meridian at 8^h A.M. is N. 14°-12' E. the angle thus determined reduced by the table page 100, gives the mean magnetic decl 14°-8' E.

From the microscope above described I run
North

Along the Eastern base of mountain

2.50 Center of wash 10 lks wide
course S 25° W.

12.00 Top of spur + descend.
Difference between measurements by two sets of chainmen of 18 chs, is 2 lks; position of middle point by

Gila + Salt River Basin
Havens R 9 E

BOOK 1326

chs 12th 18.01 chs.

Buy 2nd 17.99 chs the mean is

18.00

I set a granite rock 30x20x10

20 ins in ground for standard

cor of T 1 N. R 8 + 9 E. marked

S.C. on N. with 6 grooves on

N. E + W. faces. Raised

end of stones 2 ft. base +

1 1/2 ft. high N. of cor.

Pits impracticable.

Land mountainous

Soil 4th rate.

No timber.

Mountainous land 18 chs

Lat 33° 23'

From the standard cor
above described I run
E. on South body of Sec 3/
descending.

BOOK 1326

Gila - Salt River Base
through R 9 Echs
22.50

Foot of mountain
Difference between meas-
urements of 40.00 chs by two
sets of chainmen is 6 lks. po-
sition of middle point
By 1st set 40.03 chs
By 2nd " 39.97 chs the mean
of which is

40.00

Set granite rock 16 x 10 x 6 ins
10 ins in ground for stand
and 1/4 sec cor. marked S & S
on N face; raise end of
stones 2 ft base 1/2 ft high
W. of cor.

Pits impracticable.

79.40

Center of a dry bed creek 80 lks
wide, course S 10° W.

Difference between measurements
of 80.00 chs by two sets of
chainmen is 10 lks. position

13

Gila + Salt River Basin
through R 9 E BOOK 1326

cls
of middle point
By 1st set - 79.95 cls
By 2nd set - 80.05 cls

80.00 The mean of which is
Set granite rock 16x22x10 ins
10 ins in ground for standard
cor of sec. 31 & 32, marked
S. C. on N. with 5 grooves on E
& 1 groove on W faces.

Rain end of stones 2 ft-
lance 1 ft high N. of cor.
Pits impracticable
Land broken.

Soil stony 3rd rate.
Brush mesquite & cat-
claw 80 cls

July 11, 1899

East of S body sec 32
Through dense mesquite brush

Gibber + Salt-River Base
through R 9 E.

chs

22.00 Base of spur bro N. & S.

28.00 Top and descend.

Difference in measure-
ments of 40 chs by two sets
of chainmen is 6 chsPosition of middle point
By 1st set 39.97 chsBy 2nd set 40.03 chs

The mean of which is

40.00 Set granite sock 20x8x6 ins.

10 ins in ground for standard

1/4 sec cor mark S.C. 1/4 ~~at~~ S at

N faces. Raise end of stone

2 ft base 1/2 ft high H of cor.

Pits impracticable

60.00 Ascend.

63.00 Top of hill bro N. & S.

Fr of hill

Difference in measurements

Gilman + Salt River Base ¹⁵⁻
Longitude R 9 E BOOK 1326

cls

of 80.00 cls by two sets
of chainmen is 12 cls

Position of middle point

By 1st set is 79.94 cls

" 2nd " " 80.06 cls.

The mean of which is

80.00

Set granite rock 24x20x10 in
16 ins in ground for cor

ners 32 + 33 marked SC on

N. with 4 grooves on E + 2
grooves on W faces.

Build end of stone 2 ft
wide, 1/2 ft high N. of cor

Pits impracticable

Land broken + mountainous

Soil rocky 3rd rate

Some mesquite brush 22 cls

mountainous 78 cls

#6

1326

Gilman + Salt-River Base
through R. 9 E

BOOK
chs

East on S body Sec 33
over mountainous land
Difference in measure-
ments of 40.00 chs by two
sets of chainmen is 4ths.
Position of middle point
By 1st set 39.98 chs
.. 2nd .. 40.02 "

40.00 The mean of which is
Set granite rock 16x8x6 ins
10 ins in ground for 1/4 sec
cor marked S.C. 1/4 S on N. face
with 3 corners on E + 3 corners
on Reverse Mound of
stones 2 ft base 1 1/2 ft high
N. of cor. Pits inprac-
ticable.

Difference in measure-
ments of 80 chs by two
sets of chainmen is 14ths

Gila & Salt River Basin 17
through R 9 E BOOK 1326

chs

Position of middle point

By 1st cut 80.07 chs

" 2nd " 79.93 "

The mean of which is

80.00

Set granite rock 24x18x18 in
18 ins in ground for standard

cor sees 33 + 34 marked

S.C. on N face with 3 grooves

on E + 3 grooves on W faces

Build end of stones 2 ft-
base 1 1/2 ft-high north of

cor. Pits impracticable

Soil rocky 4th rate

Land mountainous 80 chs

East - on S body see 34

over mountainous land

Difference in measure-

ments of 40 chs by 2 sets

of chainmen is 2 chs

BOOK 1326

Gila + Salt River Base through R 9 E

chs

Position of middle point
By 1st set 40.01 chs
" 2nd " 39.99 "

The mean of which is

40.00

Set granite rock 16x8x6 ins
10 ins in ground for standard
1/4 sec cor marked S.C. 1/4 S on
N face. Build out of stone
2ft base 1 1/2 ft high at cor.
Pits impracticable
Barks well 10 chs N.

July 12, 1899.

Difference bet measurements
80 chs by 2 sets of chammes
is 6 chs. Position of
middle point

By 1st set 80.03 chs
" 2nd " 79.97 "

The mean of which is

80.00

Set granite rock 20x10x8 ins

Gila + Salt River Basin¹⁹
through R 9 E

BOOK 1326

chs

12 ins in ground for cor
secs 34 + 35 marked S.C. on
N face with 2 grooves on E
+ 4 grooves on W faces. Build
mid of stones 2ft base 1ft
high N of cor. Pits in-
practicable.

Soil rocky, 3rd rate.

Land mountainous.

80 chs

E on S bdy sec 35-
over mountainous land
Difference in measurements
of 40 chs by two sets of
chainmen is 8 chs

Position of middle point-

By 1st set - 40.04 chs

" 2nd " 39.96 "

The mean of which is

20

Silent Salt River Base
through R. 9 E.

BOOK
chrs

40.00 Sil-granite rock 20x18x10 ins
12 ins in ground for standard
1/4 sec cor marked S.C. 1/4 S
on N. face. Build end of
stones 2ft base 1/2ft high
North of cor Pito in
practicable,

Difference in measurement
80.00 chs by 2 sets of chammun
is 8 lks. Position of middle
point.

By 1st set - 80.04 chs

.. 2nd ... 79.96.

The mean of which is

80.00 Granite rock in place
60x48x40 ins above ground
marked with x at cor point
S.C on N face 1 groove on E
+ 5 grooves on W faces.

Build end of stones 2ft

Gila + Salt-River Base²¹
Horsing R. 9 E BOOK 1326

cls

base 1/2 ft high N. on cor
secs 35 + 36.

Soil 4th rate, rocky
Land mountainous so cls

E on S body sec 36

18.00

Top of rocky mountain
Difference in measurements
40.00 cls by two sets of channels
is 6 cls.

Position of middle point-

By 1st set- 40.03 cls

" 2nd " 39.97 "

The mean of which is

40.00

Set granite rock 20x12x4 ins
12 ins in ground for stand
and 1/4 sec cor marked S C 1/4 S
on N face. Build and
of stones 2 ft base 1/2 ft high
N of cor. Pits impracticable

22
1326
BOOK
Giles + Salt River Base
through R. G. E.

ble.

July 13, 1899.

Difference in measurements
80 chs by two sets of chainmen
is 8 lks.

Position of middle point:

By 1st set 80, 04 chs

" 2nd " 79, 96 "

The mean of which is

80, 00

Set granite rock 30 x 18 x 14 in

20 ins in ground for cor

T. 1 N. R. 9 + 10 E marked

S. C. 1 N on N face 10 E

on E face + 9 E on W face

+ 6 grooves on N. E. + W. faces

Build end of stones 2 ft base

1 1/2 ft high N of cor. Pits

impracticable

Soil rocky 4th rate

Land mountainous 80 chs

Gila & Salt River Base²³

Through R 10 E

1326

chs

E on S bdy sec 31
over mountainous land
Difference in measure-
ments 40 chs by two sets
of chainmen is 44cs. Posi-
tion of middle point.

By 1st set 39.98 chs

.. 2nd .. 40.02 chs

The mean of which is

40.00

Set granite rock 18x10x10 ins
10 ins in ground for standard

1/4 sec cor marked D.C. 1/4 S on

N. Build incl of stones

2 ft base 1 1/2 ft - high N.

of cor. Pit is impracticable.

La Bary spring 10 chs S.

48.00

Right-bank La Bary wash
course S. 87° W.

49.00

Left-bank

Difference in measure

24

BOOK 1326 Gila + Salt River Base
through R 10 E

chs

ments of 80 chs by two
sets of charimen is 4 lbs
Position of middle pt
By 1st set 79. 98 chs
.. 2nd .. 80, 02 ..

80.00

The mean of which is
Granite rock in place
96 x 48 x 24 ins above ground
mark x at car front sec
31 + 32, S.C. on N. face; 5-
grooves on E + 7 on W faces.
Build mound of stones
2 ft base + 1 1/2 ft high N of car
Pits impracticable
Sail 4th rate rocky.
Land mountainous 80 chs

E on S. body sec 32
over mountainous land
Difference in measure.

Gila + Salt-River Basins ²⁵
through R 10 E BOOK 1326

chs

ments 40 chs by 2 sets
of chainmen is 6 lks.

Position of middle point

By 1st set 39.97 chs

" 2nd " 40.03 "

The mean of which is

40.00

Set granite rock 16x10x8 in
10 ins in ground for $\frac{1}{4}$ sec
cor marked S.C. $\frac{1}{4}$ S on N face.

Build mid of stones 2 ft
base $\frac{1}{2}$ ft ^{high} N of cor
Pits impracticable.

57.25-

Road to Bark + Cressmillhouse
hrs N + S.

58.00

Right bank Marlow wash
course S 30° W.

58.50

Left bank

Difference in measure-
ments 80 chs by 2 sets
of chainmen is 8 lks

26

BOOK 1326

Gila + Salt-River Basin
through R 10 E

chs

Position of middle point-
B of 1st set 79.96 chs
" 2nd - 80.04 "

80.00

The mean of which is
Set granite sock 24x10x6 ins
18 ins in ground for cor
see 32 + 33. Build and
of stones 2ft base 1/2ft-
high N. of cor. Pits in-
practicable. The stone
I mark S.C. on N face, 4
grooves on E + 2 on W faces
Bark + Cresswell road about
10 chs ~~N.~~ N.

Soil $\frac{1}{4}$ th rate rocky
Land mountainous do chs

Gila + Salt-River Base 27

through R 10 E BOOK 1526

chs

E on S ldy sec 33

over mountainous land.

19.00

foot of bluff 30 ft high

nearly perpendicular

impractical to ascend

Mark X at point of inter-

section. 2 offset S 2 chs

end of offset. Thence E 2.7 chs

thence N. 2 chs to line.

On top of bluff hrs N + S.

22.00

Descend

34.00

Foot of bluff

37.00

Ascend

Difference in measure-

ments 40 chs by 2 sets of

chainmen is 10 chs

Position of middle point

By 1st set 39.95 chs

" 2nd set " 40.05 "

The mean of which is

28
1326

Gila + Salt-River Base
through R 10 E

chs

40.00

Mark + on side of rock
bluff 8ft high marked
S.C. 1/4 Son W side.

Build end of stone on W
Pits impracticable

67.00

head of Tully cañon
course S. Willow spring
about 60 chs down cañon

Difference in measure-
ments of rocks by 2 sets of
chainmen is 10 chs

Position of midpoint

By 1st set 79.95 chs

" 2nd " 80.05 "

The mean of which is

80.00

Set granite rock 24x12x9 in
1/2 in in ground for cor-
ners 33 + 34 marked
S.C. on W. with 3 grooves
on E + 3 on W. faces.

Gilman & Salt River Base²⁹
through R 10 E BOOK 1326

chs

Build end of stones
2ft base 1 1/2ft high N. of cor
Pile impracticable.

Soil 4th rate, rocky.

Land mountainous & chs

July 14 1899

E an S bdy sec 34.
over mountainous land
Differences in measure-
ments 40 chs by 2 sets of
chainmen is 4 lks

Position of middle point

By 1st set 40.02 chs

" 2nd " 39.98 "

The mean of which is

40.00

Set granite sock 16x10x8 ins
10 ins in ground for 1/4 sec

cor marked S C 1/4 5 on N face

Build end of stones 2ft-

base 1 1/2ft high N of cor

30

1326 Gila + Salt River Base

through R 10 E

BOOK
chs

Pito impracticable

In bottom of cañon course N.

Difference in measurements
80 chs by 2 sets of chainmen
is 6 lks.

Position middle point -

By 1st set 80.03 chs

.. 2nd " 79.97 "

The mean of which is

80.00

Set granite rock 30x24x6 in

20 in in ground for cor sees

34 + 35. marked S.C. on N face

2 grooves on E + 4 grooves

on W faces. Build mid

of stones 2 ft - base 1 1/2 ft - high

N of cor. Pito-impracticable.

Soil 4th rate rocky

Land mountainous rocks

Gila + Salt River Basin³¹
through R 10 E

BOOK 1326

chs

E on S bdy sec 35-
over mountainous land
Difference in measure-
ments 40 chs by 2 sets chain-
men is 4 lks

Position middle point
By 1st set 40.02 chs
" 2nd " 39.98 "

The mean of which is
+ on top rock ledge 2 ft-
high 1/4 S on top ledge.
Build and stone 2 ft base
1 1/2 ft high N of cor point
Pits impracticable

Difference in measure-
ments of 80 chs by 2 sets
chainmen is 6 lks

Position of middle point
By 1st set 80.03 chs
" 2nd " 79.97 "

40.00

marked
B.C.

32 Gila + Salt-River Base

BOOK ¹³²⁶

through R 10 E

cls

80,00

The mean of which is
Set granite rock 26x20x6 ins
18 ins in ground for cor sec
35 + 36 marked S.C. on N
1 groove on E + 5 on W faces
Build rd stones 2ft base
1 1/2 ft high N of cor.
Pits impracticable.
Soil 3rd rate rocky
Land mountainous. 80 chs

E on S bdy sec 36
over mountainous land
Difference in measure-
ments 40 chs is 10 lbs
Position middle front-
By 1st set 40.03 chs
" 2nd " 39.93 "

The mean of which is
40,00 Set granite rock 20x12x12 ins

Gila + Salt-River Base ³³
through R. 10 E No. 1326
BOOK 1326

chs

10 ins in ground for $\frac{1}{4}$ sec cor
marked S.C. $\frac{1}{4}$ S on N face
Build incl of stones
2 ft base $\frac{1}{2}$ ft high N of
cor. Pits impracticable.

5-4.20

Foot of precipitous ^{scarp} bluff 60 ft high
Offset 1 ch S.

Thence E 6 chs

Thence N 1 ch to line

Difference in measure-
ments of 80 chs by 2 sets
chainmen is 12 chs

Position of middle point

By 1st set 80.06 chs

" 2nd " 79.94 "

The mean of which is

80.00

Rock in place $48 \times 48 \times 50$ ins
above ground

mark + at cor point -

S.C. 1 N on N face, 11 E

34 1326 Gilat Salt River Base

BOOK

through R 11 E

chs

on E face +10 E on W face
6 grooves on N. E & W faces
for cor to T 1 N. Rs 10 + 11 E.

Build end of stones 2ft base
1 1/2 ft high N of cor.

Pits impracticable.

Soil 3rd rate rocky

Scattering mesquite brush.

Land mountainous 86chs

July 15, 1899

Dist instrument to find 2d - 33.23'

E on S body see 31

over mountainous land

Difference in measure-
ments of 40 chs by 2 sets
of chainmen is 4 lks

Position of middle point

By 1st set 39.98 chs

" 2nd " 40.02 "

Gila & Salt-River Base ³⁵⁻
through R. 11 E

BOOK 1326

chs

40.00

the mean of which is
Make \times on top rock ledge
10 ft high course of ledge
N. 10' E, S 10' W, at cor point,
mark S.C. 1/4 B on N side of
ledge. Build end of stone
2 ft base 1 1/4 ft high N. of cor.
Pits impracticable.

Difference in measure-
ments 80 chs by 2 sets of
chainmen is 6 lks.

Position of middle point

By 1st set - 80.03 chs

" 2nd " 79.97 "

The mean of which is

80.00

Rack in place 48x48x30 ins
above ground. Mark \times
at cor point. S.C. on N face
3-grooves on E & 1 on W face
Build end of stones 2 ft base

Gila + Salt River Base
through R 11 E

chs

1 1/2 ft-high h. of cor sees 31 + 32
 Pits impracticable
 Soil 3rd rate, rocky
 Scattering mesquite brush.
 Land mountainous 80 chs

E on S bdy see 32
 Difference in measure-
 ments of 40 chs by 2 sets
 chain is 6 fcs

Position middle point-

By 1st set 39.97 chs

" 2nd " 40.03 "

The mean of which is

40.00

Set rock 24 x 18 in 18 in in
 ground for 1/4 sec cor
 marked S.C. 1/4 3 on N. face

Build med of stone 2 ft-
 base 1 1/2 ft-high h. of cor
 Pits impracticable.

Gila & Salt-River Base ³⁷
through R 11 E BOOK 1326

cls
66.69

Top of precipitous bluff
about 300 ft high to S 20° W.
about 1 mile + N. 23° W about
1 1/2 miles. I try N + S of this
point but cannot obtain a
base for triangulation on
account of the configuration
of the country. Set flag at
66.69 ch front + set flag on
line in valley E of this point
July 17, 1899

I mark flag point set in val-
ley yesterday evening by set-
ting a rock firmly in ground
+ cut a f at exact point.
I set instrument over this
point + sight to flag
on bluff + turn angle 90°
to N. + lay off 3 chs + mark
point by a rock set front

Galena + Salt River Base
 Urango R 11 E

BOOK
 1326
 chs

in ground, cut + at exact
 point. I try N. + S from
 S end of this base + 3 chs
 is the longest base that
 can be obtained where
 flag on bluff can be seen,
 from valley below.

I now set instrument at
 N. end of base + sight to
 S. end + turn off angle to flag
 on bluff - $84^{\circ} 2'$. I reverse
 telescope + repeat angle
 three times + find $84^{\circ} 2'$ correct.
 The distance from flag on bluff

to S end of base is then

$$\tan 84^{\circ} 2'$$

$$9.367906 \times 5 = 47.84 \text{ chs}$$

I now set instrument at
 flag on bluff + find angle
 $5^{\circ} 58'$, repeat 3 times + find
 angle correct. I also repeat

Cities - Salt-River Base ³⁹
through R. H. E

BOOK 1526

chs

angle at S. end of base &
find 90° correct.

From S end of base I run
W on S bdy of sec 33 over
rough mountainous land
through dense mesquite
brush.

Difference in measure-
ments of 32.53 chs by 2 sets
of chainmen is 6 lks.

Position of middle point

By 1st set 32.58 chs

" 2nd " 32.56. "

The mean of which is

32.53

Impracticable to proceed further
I mark witness cor to sec
32 & 33, 2 chs E of true cor
point. A rock in place
 $48 \times 48 \times 48$ ins above ground.
Mark + at cor point - +N.C.S.C

Gila + Salt-River Base
through R 11 E

BOOK
chs

on N. face, 4 grooves on E +
2 on W faces. Build
end of stones 2 ft base 1 1/2 ft
high N or cor, Pits imprac-
ticable.

Soil 4th rate, rocky
Land mountainous 82 chs

From witness cor to sec
32 + 33

E on S bdy sec 33
over mountainous land
through dense mesquite brush

Difference in measure-
ments 38 chs by two sets
chainmen is 4 lks

Position middle point

By first set 38.02 chs

" 2nd " 37.98 "

The mean of which is

Gila + Salt-River Basin ⁴¹
through R 11 E BOOK 1326

chs
38.00 Set granite rock 20x10x 8 3/4
10 ins in ground for 1/4 sec
cor. Marked S.C. 1/4 Son N. face
Build end of stones 2ft base
1 1/2 ft high N. of cor.
Pits impracticable.

60.50 Center Hewitt's cañon 1 ch wide
course S 23° W
Difference in measure-
ments 78 chs by two sets
chainmen is 10 lks
Position middle point
By 1st set 78.05 chs
" 2nd " 77.93 "

The mean of which is

78.00 Set granite rock 16x10x 8 ins
10 ins in ground for corseco
33 + 34. Marked S.C. on N. face
3 grooves on E + 3 on W face.
Build end of stones 2ft

42 Gila + Salt River Base

1326 through R 11 E

BOOK
chs

base $1\frac{1}{2}$ ft-high N of cor.
Pits impracticable
Soil 3rd rate stony
Dense Mesquite brush + Cateclaw
Land mountainous 78 chs.

E on S bdy see 34

Difference in measurements
40 chs by 2 sets of barometer
is 12 fms.

Position middle point

By 1st set 40.06 chs

" 2nd " 39.94 "

The mean of which is

40.00 Set granite sock $14 \times 8 \times 7$

8 ins in ground for $\frac{1}{4}$ sec cor.

Marked S.C. $\frac{1}{4}$ on N face

Build end of stones 2 ft base

$1\frac{1}{2}$ ft-high N of cor

Pits impracticable

Gila + Salt-River Basin ⁴³
Urang R II E BOOK 1326

chs

Difference in measurements 80 chs by two sets
chammen is 10 lbs

Position middle point-

By 1st set 80.03 chs

" 2nd " 79.93 "

The mean of which is

80.00

Set granite rock 16 x 9 x 6 ins
10 ins in ground for cor sees

34 + 35, marked S.C. on N face,
2 grooves on E + 4 on W face

Build end of stones 2 ft base

11 ft high N. of cor.

Pits impracticable.

Sail 4th rate rocky

Dense brush scrub oak.

Land mountainous 80 chs

July 18, 1899

44

BOOK

Chila - Salt-River Basin
1326
through R 11 E

chs

E on S bdy sec 35-
over mountainous land
Difference in measure-
ments 40 chs is 4 lbs
Position middle point-
By 1st set - 39.98 chs
.. 2nd .. 40.02 "

The mean of which is
40.00 Salt-granite rock 16 x 8 x 8 in
10 ins in ground for $\frac{1}{4}$ sec cor.
marked S.C. $\frac{1}{4}$ S on N face
Build end of stones 2 ft - beam
1 1/2 ft - high N of cor.
Pits impracticable.

5-8.50

Bottom Villas cañon
1.50 chs wide course S 10° W
Difference in measure-
ments 40 chs by two
sets of chainmen is
8 lbs. Position middle point

45

Chico + Salt-River Basins
through R 11 E

BOOK 1326

chs

By 1st set - 79.96 chs
" 2nd " 80.04 "

80.00

The mean of which is
Set granite rock 18 x 8 x 8 in
10 ins in ground for courses
35 + 36, marked S.C. on N face
1 groove on E + 5 on W faces
Build end of stones 2 ft -
base 1 1/2 ft high N of cor
Pits impracticable
Soil 3rd rate, rocky
Scattering brush Calceolans
Land mountainous 80 chs

E on S bdy see 36
on mountainous land
Difference in measure-
ment 40 chs by 2 sets of
chains is 4 lbs
Position middle point

46
BOOK 1326

Gila + Salt River Base
through R 11 E

chs

By 1st set 39.98 chs

" 2nd " 40.02 "

40.00

The mean of which is

Set granite rock 17 x 8 x 6 ins

10 ins in ground for 1/4 sec cor

marked S.E. 1/4 on N. face.

Build end of stones 2 ft base

1 1/2 ft high N of cor.

Pits impracticable.

Difference in measure-
ments 80 chs by 2 sets of
chambers is 10 chs

Position middle point

By 1st set 79.93 chs

" 2nd " 80.03 "

80.00

The mean of which is

Set granite rock 36 x 12 x 8 ins

20 ins in ground for standard

cor thru N Rio 11 + 12 E marked

S.E. 1/4 on N face, 12 E on

Gilas + Salt River Base ⁴⁷
through R. 12 E BOOK 1326

chs

East face + 11 E on W face
6 groups on N. E + W. faces
Build mid of stones 2 ft ~~high~~
1 1/2 high N of cor.
Pits impracticable.
Scattering brush + cats claw
soil 3rd rate
Land mountainous 80 chs

+++
E. on S bdy Sec 31 R 12 E
Over mountainous land
Difference in measure-
ments 40 chs by 2 sets of
chainmen is 6 lks
Position middle point
By 1st set 39.97 chs
" 2nd " 40.03 "
The mean of which is
40.00
Quartz rock in place
48 x 48 x 2 yms above ground

Gila + Salt River Base
through Part 2 E

1 mark + at cor point - for
 $\frac{1}{4}$ ac cor, with S.C. $\frac{1}{4}$ S on
 N. face. Build end of stones
 2ft base $1\frac{1}{2}$ ft high N. of cor.
 Pits impracticable.

Difference in measure-
 ments 80 chs by 2 sets of
 chainmen is 14 lbs

Position middle point

By 1st set 79.93 chs

" 2nd " 80.07 "

80.00

The mean of which is
 Quartz rock in place
 $48 \times 48 \times 24$ ins above ground
 Make + at exact cor point -
 for courses 31 + 32. Marked
 S.C. on N face, 5-grooves on
 E + 1 on W faces

Build end of stones 2ft base
 $1\frac{1}{2}$ ft high N of cor. Pits

Gila & Salt River Basin ⁴⁹
through R 12 E

BOOK 1826

cho

impracticable

Soil 3rd rate, rocky
Scattering brush, Palo Verde
& mesquite

Land mountainous 80 cho

July 19, 1899

E on S bdy sec 32
over mountainous land

Difference in measure-
ments 40 cho by 2 sets of
chainsmen is 6 lks

Position middle point -

By 1st set 40.03 cho

" 2nd " 39.97 "

The mean of which is

40.00

Set Porphyry rock 12x10x8 in
8 in in ground for 1/4 sec cor
marked S.C. 1/4 S on N. face

Build end of stones 2 ft base

1 1/2 ft high N. of cor

50
BOOK 1326 Gila + Salt River Base
through R 12 E

chs

67.50

Pits impracticable
Center of N. fork Whifford's cañon
130 chs wide at bottom course S.
Difference in measure-
ments 80 chs by 2 sets of
chainmen is 4 chs.

Position middle point
By 1st set 80.02 chs
" 2nd " 79.98 chs

80.00

The mean of which is
Rock in place 24x18x8 in
above ground. I make + at
at exact cor point for cor
secs 32 + 33, mark S.C. on N face
4 grooves on E + 2 on N face
Build end of stones 2 ft base
1 1/2 ft high N of cor
Pits impracticable
Soil 3rd rate, stony
Scattering brush, Mesquite

Cpila + Salt River Base ⁵¹
through R 12 E

BOOK 1326

chs

Land mountainous 80 chs

Cor S bdy sec 33

over mountainous land
Difference in measure-
ments 40 chs by two sets

of chainmen is 4 lks
Position middle point -
By 1st set 40.02 chs
" 2nd " 39.98 "

The mean of which is

40.00

Porphyry ledge 15' is above
ground. Mark + at exact
cor point - for 1/4 sec cor, mark
S. C. 1/4 S on N. side of ledge
Build end of stones 2 ft - base
1 1/2 ft - high N of cor.

Pits impracticable

Difference in measure-
ments - 80 chs by 2 sets of

5-2 Gila + Salt-River Base
through R 12 E

BOOK 1326

champion is 2 lks
Position middle point
By 1st at 80.01 ch
" 2nd " 79.99 "

80.00 The mean of which is
Set granite rock 16x10x10 ins
10 ins in ground for sec cor.
Cor sees 33 + 34 marked
S.C. on N. face, 3 grooves on E
+ 3 on W faces. Build mid
of stones 2 ft base 1 1/2 ft high
N of cor. Pits impracticable.
Soil 3rd rate, rocky
Scattering mesquite brush
Land mountainous sochs

E on S bdy see 34
32.00 N.E. cor of an old stone house
20 lks S. at head of Whifford
cañon, course S 45° W

Cuba + Salt River Base ⁵³
through R. 12 E

BOOK 1826

chs

Difference in measure-
ments 40 chs by 2 sets of
chainmen is 10 lbs
Position middle point-

By 1st set 40.03- chs

By 2nd .. 39.95- "

The mean of which is

40.00

Sub-granite rock 16 x 8 x 8 ins
10 ins in ground for $\frac{1}{4}$ sec. cor.
marked S.C. $\frac{1}{4}$ on N. face.

Build end of stones 2 ft base
 $1\frac{1}{2}$ ft high N. of cor.

Pits impracticable.

Difference in measure-
ments ^{by 2 sets chainmen} 80 chs is 10 lbs

Position middle point-

By 1st set 80.03- chs

.. 2nd .. 79.95- "

The mean of which is

80.00

cliff 10 ft high. Marked at top

5-4

1326

Gila + Salt-River Base
through R. 12 E

BOOK

cls

act cor point for cor sees 34 + 35
mark S.C. on N + 2 on W
E + 4 on W faces. Build up
of stones 2 ft base 1 1/2 ft high
N. of cor. Pits impracticable.
Soil 4th rate, rocky

Dense brush of scrub oak.

Land mountainous 80 chs

July 21, 1899

E on S bdy see 35-

Difference in measure-
ments 40 chs by 2 sets of
chainmen is 10 chs

Position middle point

By 1st set - 39.93 chs

" 2nd " 40.05 "

The mean of which is

40.00

Granite rock in place 48 x 36 x
24 ins above ground. Make +

Gilmer & Salt-River Base ⁵⁻⁵⁻
Wrough R. 12 E

BOOK 1326

chs

at exact cor point - for $\frac{1}{4}$ sec
cor, mark S.C. $\frac{1}{4}$ on N. face,
Build mid of stones 2ft base
 $1\frac{1}{2}$ ft high N. of cor. Pits imprac-
ticable.

Difference in measure-
ments 80 chs by 2 sets of
chainman is 8 chs.

Position middle point

By 1st set 79.96 chs

" 2nd " 80.04 "

The mean of which is

80.00

Rock in place $24 \times 24 \times 18$ in
above ground. Mark $\frac{1}{4}$ at
exact cor point - for cor
secs 35 & 36. Mark S.C. on
N. face, 1 groove on E & 5 on
W faces. Build mid of stones
2ft base $1\frac{1}{2}$ ft high N. of cor.
Pits impracticable.

5-6

Giles + Salt River Base

BOOK

1326

through R. 12. E

no

Sail 4th rate + rocky
 Dense brush of scrub oak
 Land mountainous 80 chs
 Spring in Haunted cañon
 13-chs S of this cor

Even S. today see 36
 over mountainous land
 Difference in measure-
 ments 40 chs by 2 sets
 chainmen is 6 lks
 Position middle point
 By 1st set - 40.03 chs
 " 2nd " 39.97 "

The mean of which is
 40.00 Sit granite rock 14 x 10 x 8 ins
 5 ins in ground for 1/4 sec cor
 marked S.C. 1/4 S on N face
 Build end of stones 2 ft
 base 1 1/2 ft high N. of cor.

Giles + Salt River Basin ⁵⁷

through R 12 E BOOK 1326

chs Pits impracticable

Difference in measurements 80 chs by 2 sets of chainmen is 16 lks

Position middle point

By 1st set 80.08 chs

" 2nd " 79.92 "

The mean of which is

80.00 Rock ledge 3 ft high. Mark
+ at exact cor point ^{Standard} for cor
of T₁ 1 N. Rs 12 + 13 E marked

S.E. 1 N. on N side, 13 E on E.
12 E on W. + 6 poles on N.
E. + W faces.

Build end of stone 2 ft base
1 1/2 ft high N. of cor.

Pits impracticable.

Soil 4th rate rocky

Dense brush a scrub oak

Land mountainous 80 chs

5-8 1926 Gila + Salt River Base
through R 13 E

BOOK
chs

note
I observe Polaris at Eastern
elongation at my camp at the
head of haunted cañon
July 22, find adjustment
satisfactory.

34.00

++
E on S. bdy Sec 31 R 13 E
over mountainous land

Bottom of Haunted cañon
Course N. 88° E. 60 chs. Then n.
Difference in measure-
ments 40 chs by 2 sets of
chainline is 8 chs.

Position middle point

By 1st set 39.96 chs

.. 2nd .. 40.04 ..

the mean of which is

40.00

Set granite rock 14x14x10 lbs
8 ins in ground for 1/4 sec
cor marked S.C. 1/4 S on N. face

Gilca + Salt River Base ⁵⁻⁹
through R 13 E

BOOK 1326

chs

Build end of stones 2 ft base
1 1/2 ft high N. of cor.

Pits impracticable.

62.00

Bottom of deep canon, course n.

width ✓

Difference in measure-
ments 80 chs by 2 sets of
chambers 8 chs

Position middle point

By 1st set 79.96 chs

" 2nd " 80.04 "

The mean of which is

80.00

Set granite rock 16 x 8 x 6 in
10 in in ground for cor see
31 + 32. marked S.C. on n. face
5 grooves on E, + 1 on W faces.

Build end of stones 2 ft-
base 1 1/2 ft high N. of cor.

Pits impracticable.

Soil 3rd rate.

Dense brush of scrub oak

60

BOOK 1326
msGila & Salt River Base
Drainage R 13 E

+ few cedar.

Land mountainous 80 chs.

July 22^d / 1899.

E on S bdy sec 32.

Over mountainous land

20.00 Top high mountain bdy N & S.

Difference in measure-
ments 40 chs by 2 sets of
chainmen is 4 chs

Position of middle point

By 1st set - 39.98 chsBy 2nd set - 40.02 ..

the mean of which is

40.00 Set granite sock 13" x 12" x 4" in

10 ins in ground for 1/4 sec cor
marked S.E. 1/4 on N. face.Build md of stones 2 ft
base 1 1/2 ft high h. of cor
Pits impracticable,

41.00 Bottom deep cañon 20 chs wide