

P-1 110

See Index

Field Notes

BOOK 1293

OF THE SURVEY OF

*Retracings
of 2^d Standard North
bet. Ranges. 27, 28 &
30 East.*

BOOK 1293

Gila and Salt River Base and Meridian

1293

No. 1293

ARIZONA.

By *A. P. Johnson* D. S.

under contract dated *June 8, 1882.*

Survey commenced *July 8, 1882.*

Survey completed *July 14, 1882.*

Comp



Copia

BOOK 1293

Retracings of the 2^d
Standard North.
between Ps 27. 28. & 30 E.

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Index

Retracing 2nd Standard

North along.

South, Baby T $\text{QNR} 27\text{E}$ 5
 " " " $\text{QNR} 28\text{E}$ 17
 " " " $\text{QNR} 30\text{E}$ 24

R. 27 E.

31	32	33	34	35	36
15	10	11	10	8	6

R. 28 E.

31	32	33	34	35	36
17	18	19	19	21	22

R. 30 E.

31	32	33	34	35	36
24	25	27	29	30	32

Retracing of 2^d Standard
North South Boundary of T. & N.
R 27 E. Gila & Salt River
Meridian

Before commencing this
Survey. I carefully examined
the Solar compass, to be
used, made by Otto
Fennel of Cassel of
Germany in 1881.

The instrument is nearly
used, and was carefully tested at the true Meridian in ^{Passaic} N.
~~before commencing this Survey.~~
I took the latitude at the
Standard Cor. to Tps 9 N.
Rs 27 & 28 E. and found
it to be $34^{\circ} 06'$ North

From the Standard Cor to
Tps 9 N. Rs 27 & 28 E.
which is a volcanic stone
16 x 10 ins. properly notched

2^d Standard North through R. 272

Lines

and set firmly in the ground, with mound of stone on E. side.

Then I run West on a random line, on S. By. Sec. 36.

Var. $10^{\circ} 50' E!$

(As per observation with Solar compass)

Ascend

4000 To old $\frac{1}{4}$ sec. cor. which is ^{marked} ~~marked~~ $SE \frac{1}{4}$ on $N \frac{1}{2}$ is a volcanic stone 15×10 ins.

with stone mound on E. side. I rebuilt mound to be of proper size.

64.09 Top of spur to N. $23^{\circ} E!$ and S. $23^{\circ} W.$ and descend

8000. Found no trace of old cor. set temporary bar. and

2^d Standard N. through R. 27 E.

L. Adams

92.40

continue West, and at 40 ch
 set temporary $\frac{1}{4}$ sec. cor. at

chs find the old standard
 cor. to Secs. 34 & 35, which is
 a volcanic stone 10 x 8 ins.

in poor condition. I now
 retrace next 4 miles, and
 find all the corners correct
 both in distance and align-
 ment.

I then return destroying old
 corners, which are in very poor
 condition, and establish
 new ones as follows:

00.00 Set a post 4 ft. long, 4 ins.
 square, with marked stake
 12 ins. in the ground, for.

Standard Cor. to Secs. 35 & 36,
 marked S. C. P. of N. R. 27 E. in N.

2^d Standard North through R. 27 E

Chains

S. 36 on E. end
 S. 35 on W. faces, with 1
 notch on E & 5 notches on
 W. faces, dug pit 18+18+12
 ins. N. E & W of post 5/8 ft.
 dist. and raised a mound
 of earth 2 ft high 4 1/2 ft. base
 around post.
 Land broken
 Soil 2^d rate
 Timber of Pine,
 Vegetation of Bunchgrass.

West on S. By of Sec. 35.
 Cor. 11° 40' E.

Descent

21.60 Cross Wash 30 lbs wide, come

29 Standard North through R. 27 E.

choirs

North, and ascend.

4000 Set a Basalt stone $17 \times 8 \times 8$
 ins. in the ground, for
 Standard $\frac{1}{4}$ sec. cor. marked
 S.C. $\frac{1}{4}$ on N. face, and raised
 a mound of stone alongside,
 pits impracticable.

50.24 Top of Spear Cor N.S. and
 descend

80.00 Set a Basalt stone $16 \times 6 \times 4$ ins.
 11 ins. in the ground, for Stand-
 ard Cor. to Secs. 34 + 35. marked
 S.C. with 2 notches on E & 4 notches
 on W. edges, and raised a
 mound of stone alongside,
 pits impracticable -
 from which

a gnomon 6 ins. dia. to N. $49 \frac{1}{2}^{\circ}$ E. 82 lbs dist
 marked P. 9 N. R 27 E. S. 35 B. J.

29 Standard North through R. 27 E.

Chains

✓
 a Juniper 14 ins. dia. bro. N. 62° W. 249 lbs. dist.
 marked S. 9/4 R. 27 E. S. 24 B. T.
 Land broken
 Soil 29 rate
 Timber of Pine & Cedar.

West on S. Ry Sec. 24.

Var. 12° 25' E.

descend

4000 Set a Basalt stone 17+13+4
 ins. 12 ins. in the ground for
 Standard 1/4 sec. bro. marked
 S. C. 1/4 on N face, and raised
 a mound of stone alongside
 Pts unpracticable.

48.25 Cross Walk 32 lbs wide,
 course N. 16° E. and ascend

2^d Standard North through R 27 E.

Chains

72.70

Top of spur to N. 12° E. and
S. 12° W. and descend.

80.00

Set a Bassett stone 20 + 14 + 5

ins. 15 ins in the ground, for
Standard cor. to Secs. 33 & 34.

marked, with 3 notches on
E & W. edges, and raised

a mound of stone along
side, ^{to be unperceptible} from which a yellow

Pine 36 ins. dia. to. N. 72° W. 264 lb dist.

marked S. 9° N. R. 27 E. S. 33 B. S.

Land Rolling & broken

Soil 2^d rate

Timber of Pine

Vegetation of Bunchgrass.

West on S. By of Sec. 33.

29 Standard North through R. 27 E.

Far. $13^{\circ} 21' E.$

Descend

- 9.57 Cross Creek 130 lks wide,
course N. $83^{\circ} E.$ and ascend
- 4000 Set a Basalt stone $8 \times 1 \frac{1}{2} \times 5$ ins.
12 ins. in the ground, for Stand-
ard $\frac{1}{4}$ sec. cor. marked S.C.
 $\frac{1}{4}$ on N face, and raised
a mound of stone alongside
Pits unpracticable.
- 8000 Set a ^{N.} Limestone $18 \times 10 \times 6$ ins.
12 ins. in the ground, for
Standard Cor. to Secs 32 & 33.
marked S.C. with 4 notches
on E & 2 notches on W. faces.
and raised a mound of stone
alongside Pits unpract-
icable, from which

29 Standard North through R. 27 E.

Chains

a Yellow Pine 24 ins. dia. br. N. 57° E. 24 lbs. dist.
marked T. 9 N. R. 27 E. S. 34 B. J.

a Yellow Pine 18 ins. dia. br. S. 20 E. 43 lbs. dist.
marked T. 8 N. R. 27 E. S. 3 B. J.

a Yellow Pine 9 ins. dia. br. S. 66° W. 19 lbs. dist.
marked T. 8 N. R. 27 E. S. 4 B. J.

a Yellow Pine 10 ins. dia. br. N. 23° W. 19 lbs. dist.
marked T. 9 N. R. 27 E. S. 3 B. J.

Land rolling.

Soil 2^d rate

Pinus of Pine

Vegetation of Bunch grass.

West on S. Boundary Sec. 32.

Var. 12° 44' E!

Ascend

18.00 Outer Heavy timber br. N.W.

2^d Standard North through R 27 E

Chain

4000

Set a Basalt stone 18 x 10 x 4
 ins. in the ground for Stand-
 ard 1/4 sec. cor. marked ^{S.C.} 1/4 on
 N. face, and raised a mound of
 stone alongside ^{It is impractical} from which
 a Yellow Pine, 18 ins. dia. br. S. 12° E. 122 lbs.
 dist. marked S. C. 1/4 S. B. T.
 a Yellow Pine 24 ins. dia. br. N. 61° W. 83 lbs.
 dist. marked S. C. 1/4 S. B. T.

8000

Set a Basalt stone 20 x 11 x 4 ins.
 15 ins. in the ground, for Stand-
 ard Cor. to Secs. 31 & 32. marked
 S. C. with 5 notches on E & 1 notch
 on W. face, and raised a mound
 of stone alongside ^{It is impractical} from which
 a Yellow Pine 16 ins. dia. br. N. 32° E. 30 lbs. dist.
 marked T. 9 N. R 27 E. Sec 32. S. B. T.
 a Yellow Pine 9 ins. dia. br. S. 44° E. 53 lbs. dist.

29 Standard North through R. 27 E.

Chains

marked T. 8 N. R 27 E. S. 5. B. T.

a yellow Pine 20 ins. dia. br. S. 73° W. 47 lbs. dist.

marked T. 8 N. R 27 E. S. 6 B. T.

a yellow Pine 14 ins. dia. br. S. 55° W. 83 lbs. dist.

marked T. 9 N. R 27 E. S. 31 B. T.

Land rolling.

Soil 1st rate

Timber of Pine, Spruce & Fir.

West on S. Ry of Sec. 31.

Var. 13° 20' E.

Ascend

4600 Set a post 3 ft. long, 4 ins. dia.
with marked stone 12 ins. in the
ground, for ^{Standard} 1/4 sec. Cor. marked
S. E. 1/4 Sec. to face and raised
a round stone around post

2^d Standard N. through R. 27 E.

chain

from which

An Alder 10 ins. dia. br. S. 42° W. 71 lbs dist.
marked S. C. 1/4 S. B. T.

Aspene 8 ins. dia. br. N. 17° W. 44 lbs dist.
marked S. C. 1/4 S. B. T.

8000 2^d Standard Cor. to Sp^o 9 N.
R. 26 & 27 E.

Land level

Soil 1st rate

Heavy Pine timber, Fir and
Spruce.

2^d Standard N. Range 28^c.
through

Chains

From the Standard Cor. to
Tps 9 N. Rs 27 & 28 E.
From East ^{on a random line} on S. by of Sec. 31.
Var. $11^{\circ} 38' E.$

Descend

40.00 To old Standard 1/4 sec. cor.
which is a ^{marked} volcanic stone,
12x10 ins. with stone mound
alongside,

77.30 Cross Wash 10 lbs wide course
N. $17^{\circ} E.$ and ascend.

80.00 To old Standard cor. to Sec.
31 & 32. which is a volcanic
stone 12x6 ins. properly marked,
with stone mound on E. side.

Land rolling.

Soil 2 d rate

Vegetation of Branch grass.

2d Standard N. through R. 28 E.

- Chains a random line
 East on, S. 1st By Sec. 32.
 Var. $11^{\circ} 37' E!$
- 29.00 Cross Road, corner N. W. & S. E.
- 39.91 To Standard $\frac{1}{4}$ sec. cor. which
 is a Limestone 16 x 8 ins. with
 earth mound, and pits.
 Fredig pits and rebuilt mound.
- 69.87 Top of spur to N. $21^{\circ} E!$ and
 S $21^{\circ} W.$ and descend.
- 80.00 To old Standard cor. to Secs.
 32 + 33. which is a volcanic
 stone 8 x 8 ins. square, properly
 notched with mound of stone
 on E side,
 Land broken
 Soil 2d rate
 Vegetation of Bunchgrass.

2^d Standard N. through R28 E.

Chain

Cast on a random line,
on S. By of Sec. 33.

Var. $12^{\circ} 48' E.$

40.00 Bould standard 1/4 sec. cor,
which is a ^{marked} sandstone 8x8 in.
sq. with mound of stone along
sides.

67.00 Top of hill to West, and descend

80.00 Bould Standard cor. to sec.
33 & 34. which is a volcanic
stone 12x10. ins. properly etched
with stone mound on E. side.
Land rolling.

Soil 2^d rate

Vegetation of Bunchgrass.

Cast on a random line

2^d Standard North through R. 28 E.

chains

on S. By of sec. 34.

Var. $9^{\circ} 24'$ East.

Ascend

23.00 Top of spur, br N. 10° W. and
S. 10° E. and descend.40.00 To old standard $1/4$ sec. cor.
which is a volcanic stone
 10×10 ins. sq. with stone mound
alongside,76.40 Cross drain course S. 20° E. and
ascend.80.00 To old Standard Cor. to secs.
34 & 35, which is a Limestone
 10×10 ins. properly notched
with pits and earth mound
To dig pits & rebuild mound.
Land rolling.
Soil 2^d set

2^d Standard N. through R. 28 E.

chain

Vegetation of Bunchgrass.

East on a random line, on
S. By Sec. 35.

Cor. $14^{\circ} 48' E$.

24.34 To closing Cor. to Secs 1 & 2
N. 8 N. R 28 E. and ascend

29.87 Top of spur to N. $20^{\circ} E$ and
S. $20^{\circ} W$. and descend

4000 To old Standard $\frac{1}{4}$ sec. cor.
which is a limestone, 8x8
in. sq. with stone mound
alongside

8000 To old Standard cor. to Secs.
35 & 36. which is a volcanic
stone properly scratched, with
stone mound alongside,

29 Standard North through R. 28E

Lains

Rebuilt mound
Land broken
Soil 2d rate
Vegetation of Bunchgrass.

Cast on a random line on
S. Ry. Sec. 36.

Var. $13^{\circ}33'E$

over rolling land

24.30 To old closing cor. to Sps
8 N. Rs 28 & 29 E. which is
a Post in earth mound
with pit.

39.94 To old Standard $1/4$ sec.
Cor. which is a ^{marked} Limestone
 12×10 ins. with earth mound
and pit.

29 Standard N. through R. 28 E.

chains

79.94 Indig pit and rebuilt mound.
 do old Standard Cor. to Sp
 9 N. Rs 28 + 29 E. which is
 a Limestone 18 + 8 ins. prop-
 erly notched, with stone
 mound 3 ft. high on E. side,
 Land rolling
 Soil 2d rate

Vegetation of Bunch grass.
 July 8. 1882.

29 Standard North through R
30 E.

chains

From the Standard
Cor. to Sps of N. Rs 29 &
30 E. which is a Lime-
stone 104 10 ins. sq. properly
notched with stone mound
on E. side. From
East on a random line, on
S. By Sec. 31.

Var. 130 50' E.

Ascend

- 9.00 Leave timber to N.W.S.
22.50 Cross mesa and descend in
timber to N.W.S.
40.30 To old 1/4 sec. cor. which is a
^{marked} limestone 104 8 ins. with
stone mound on E. side.
from which a cabin to
N. E. 14 chs dist.

29 Standard N. through R. 30 E

chains

53.75 Cross Mita Rosa creek
25 lbs wide, course N. 15° E!
and ascend

67.20 Top of Mesa br N. W. and
S. E.

80.35 Soap point 6 lbs South of old
Cov. to Secs. 5, 6, 31 & 32.
which is a limestone 18 1/16
in. with etone mound on
E. side

The return course S. 89° 58' W.
Land mountainous

Soil 2 d. rate

Timber of Pine

Vegetation of Bunchgrass.

East on a random line

2^d Standard N. through R. 30 E.

chain on S. By. of Sec. 32.

Var. $13^{\circ}53' E!$

- ✓ 1.50 across mesa & descend
 9.75 cross gulch 10 lbs wide course
 N. W. and ascend.
 18.15 Top of mesa by N. W. and
 S. E. and across same
 40.50 To a point 12 lbs N of old
 Standard cor. which is a
 limestone 10×12 ins. with
 stone mound on E. side.
 Return course is $N. 89^{\circ}50' W.$
 80.50 To old Standard cor. to
 Secs. 32 & 33. which is a
 volcanic stone 18×4 ins.
 properly notched with mound
 of stone on E. side.
 Land rolling

2^d Standard N. through R. 30 E

Chains

Soil 2^d rate

Timber scattering Pine & Cedar.

Being unable to find any other old corners on this Standard, I make it a true line, running East, bet. Secs. 4 & 33.

Var. $13^{\circ} 56' E$

ascend in timber to N & S.

4000 Set a Lava stone $18 \times 14 \times 12$ ins.

12 ins. in the ground, for Standard of sec. bet. marked S.C. $\frac{1}{4}$ on N face, and raised a mound of stone alongside. Pit impracticable.

8000 Set a Lava stone $20 \times 16 \times 10$ ins.

29 Standard N. through R. 30 E.

Chain

15 ins. in the ground for
Standard Cor. to Secs. 33 & 34
marked S.C. with 3 notches
on E & W edges, and raised
a mound of stone alongside
Pits unpracticable.

Land rolling.

Soil 3^d rate

Number of Pine
vegetation of Bunchgrass.

East on a true line bet.

Secs. 3 & 34.

Var. $13^{\circ} 56' E$.

Ascend

29.50

Top of ridge bet N. Ex S.W.
and descend.

29 Standard N. through R. 30 E

chain

4000

Set a sandstone 18x14x4
ins. pins in the ground, for
Standard 1/4 Sec. Cor. marked
S. C. 1/4 on N. face and raised
a mound of stone alongside
Pits unpracticable.

54.20 Leave timber to N.S.

69.85 Cross gulch 25 lbs wide, course
N. E. and as usual.

8000 Set a sandstone 10x10x8 ins.
4 ins. in the ground for Stand-
ard Cor. to Secs. 34x35.
marked S. C. with 2 notches
on E. & 4 notches on W. faces,
and raised a mound of stone
alongside from which
a Juniper bin. dist. to N. 34 lbs dist.
marked S. 9 N. R 30 E. S. 34x35 B. S.

2^d Standard N. through R. 30 E.

chains

a Juniper Cuis. dia. 6 in. S. 30° E. 96 lbs dist.
marked S. & N. R. 30 E. S. 2 B. S.

Land rolling

Soil 2^d rate

Timber of Pine and Juniper

Vegetation of Bruch grass.

one true line

East_x on S. By of Sec. 35.

Cor. 13° 50' E.

Board

12.30 Cross Road course N. W x S. E.

19.65 Cross low sq. course N x S.

40.00 Set a Sandstone 8 x 8 x 6 in.
Cuis. in the ground for Stand-
ard 1/4 sec. Cor. marked S. C 1/4^d
on N. face, and raised a
mound of stone alongside

2^d Standard N. through R. 30 E.

Chain

Pits impracticable.

45.75 Top of ridge by N. 30° E.
 & S. 30° W. and descend.

48.30 Enter timber bearo N. 40° W.
 and S. 40° E.

60.85 Enter Valley by N. 30° E.
 & S. 30° W.

80.00 Set a Sandstone 20x16x4
 ins. 15 ins. in the ground for
 Standard Cor. to sec. 35 & 36.
 marked S. C. with notch
 on E & 5 notches on W. face,
 and raised a mound of
 stone alongside, Pits imp-
 racticable.

Land unmountainous

Soil 3^d rate

Timber of Pine and Juniper

29 Standard N. through R. 30 E.

chain

Vegetation of Bunchgrass.

^{a true line on}
East on ⁿ S. By of sec. 36
Var. 13° 50' E.

descend

14.50 cross low Sag. to N. and
ascend

26.20 Top of Ridge, to N. Ex S. W.
and descend.

40.00 Set a Sandstone 20 x 16 x 12
in. 15 in. in the ground
for Standard $\frac{1}{4}$ sec. cor.
marked S.C. $\frac{1}{4}$ on N face,
and raised a mound of
stone along road, Pt
irreproachable

41.35 Enter valley to N. Ex S. W.

2^d Standard N. through R. 30 E

Chairs

62.74 Cross Wash course N. E. &
ascend

80.00

Set a post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in
the ground for ^{standard} Cor. b Sp.
9 N. R. 30 & 31 E. marked
S. C. 2. 9 N. on N.

R 3 & E. 31 on E and

R 3 & E. 36 on W. faces,
with 6 notches on N. E & W.
faces, dug pits 24 x 18 x 12
ins. N. E & W. ^{at post} crosswise on
each line, 6 ft. dist. and
raised a mound of earth
2 1/2 ft. high 5 ft. base around
post.

Land rolling.

Soil 2^d rate

2^d Standard h. through R. 30 E.

chains.

Vegetation of Pencilgrass
and cactus.

I carefully examined the
adjustments of my Solar
Compass to day, particu-
larly the latitude and
reversing apparatus and
found them correct.

July 14. 1882.

No. 1293

U. S. Surveyor General's Office,
Tucson, Arizona, Jan'y, 12, 1883

The foregoing Field Notes of the survey of

Retracing
of 2nd Standard North,
between Ranges 27, 28
and 30 East.

of the Gila and Salt River Base and Meridian, Arizona,
executed by W. P. Johnson,

D. S., under his contract of the 9th, day of
June, 1882, having been critically ex-

amined and the necessary corrections and explanations
made, the said Field Notes and the surveys they de-
scribe, are hereby approved.

J. W. Robbins
Surveyor General.