

Approved June 20, 1900

7th Standard Parallel N
through

Ranges 1, 2, 3, 4, 5, 6 East
W. O. Secor D. 5.

1261

4-671 BOOK 1261

FIELD NOTES
GENERAL LAND OFFICE.

No. 1261

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- Field Notes -
of the survey of the
7th Standard Parallel North
through
Ranges 1, 2, 3, 4, 5 and 6 East
of the
Gila and Salt River Meridian
in the
Territory of Arizona
as surveyed by
W. O. Secor
U. S. deputy Surveyor
Under his Contract No 58
Dated Oct 10th 1899.

Survey commenced Dec 14, 1899
Survey completed Jan 7 - 1900

Names and Duties of Assistants

C. G. Kolster	-	-	Chairman
R. L. Merritt	-	-	Chairman
H. A. Cargile	-	-	Chairman
M. J. Bird	-	-	Chairman
T. A. Gauder	-	-	Assman
A. F. Hamilton	-	-	Assman
Ellis. Work	-	-	Flagman
A. G. Johnson	-	-	Flagman

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7th Standard Parallel N. R. 6 E.

7th Standard Parallel N. thro. R. 1 E.

Chain Survey commenced Dec 14-1899 and executed with a Buff and Berger Engineers Transit No 678 heretofore described.

I begin at the Standard corner of townships 29 N R. 1 E and 1 W recently set and described by me.

At a point 2.37 ft. south of said Standard Cor. I turn off from the true meridian recently established by me, an angle of $89^{\circ} 58'$ toward the east, and run $N 89^{\circ} 58' E$ on the secant S of sec 31. To $14^{\circ} 44' E$ through scattering Cedars and Pines over rolling ground

13.00 Leave Cedars and Pines bearing $N 89^{\circ} 58'$ Difficult measurements of 40 chs by two sets of Choumua in 3 lks; position of middle point
By 1st set 40.01 Chs

By 2nd set 39.98 chs. the mean of which is
40.00 $N 1.07$ ft from the secant

Set a line stone $14 \times 10 \times 4$ ins. 9 ins in the ground for ^{Standard} the sec cor. marked $80^{\circ} 43'$ on N face and

7th Standard Parallel North through R. 1 E

Raised a Md of Stone 2 ft base $\frac{1}{2}$ ft high
N of Cor

Diff bet measurements of 80 chs by two sets of
Chummen is 1 ch; Position of middle point

By 1st set 80.02 chs

By 2nd set 79.98 chs, the mean of which is

80.00

Set a line stone 15 x 8.7 ins 10 ins in the ground
for standard Cor of Secs 31 and 32 marked S.C. on
N with 1 notch on N. and 5 notches on E edge
and raised a Md of Stone 2 ft base $\frac{1}{2}$ ft high
N. of Cor

Land rolling

Soil 3rd rate

Scattering timber for 13 chs

N 89° 59' E through sec 32, on the south
Over rolling ground

Diff bet measurements of 40 chs by two sets of
chummen is 4 chs; Position of middle point

By 1st set 39.98 chs

By 2nd set 40.02 chs the mean of which is

7th Standard Parallel North through R. 1 E
 N 84° 54' E through sec 32 on the south

40.00 S. 0.83 ft from the south

Set a lime stone 15 x 10 x 6 ins. 9 ins in the ground
 for standard $\frac{1}{4}$ sec cor. marked SC $\frac{1}{4}$ 32 on N
 face. raised a Md of stone 2 ft base $1\frac{1}{2}$ ft
 high N of Cor

78.00 Begin rapid ascent of mesa

Diff. bet. measurements of 80 chs. by two sets of
 chainmen is 5 lks: position of middle point

By 1st set 80.02 chs

By 2nd set 79.97 chs the mean of which is

80.00 S. 1.43 ft from the south

Set a lime stone 30 x 10 x 6 ins, 20 ins in ground
 for standard Cor of Secs 32 and 33 marked S.C.
 on N with 4 notches on E and 2 notches
 on W. edges, raised a Md of stone 2 ft
 base $1\frac{1}{2}$ ft high N of Cor.

Cor at foot of abrupt ascent to mesa
 Land rolling

Soil 3rd rate

No timber

Dec. 14. 1899

7th - Standard Parallel North Through P.I.E

- N 89° 59' E on the secant through Sec 33
Ascending toward high Prairie
- 8.00 Top of high rolling Prairie between V and S
Diff. bet. measurements of 40 chs by two sets of
Chainmen is 7 lbs; position of Middle Point
By 1st set 41.03 chs
By 2nd set 39.96 chs, the mean of which is
- 40.00 S. 1.78 ft from the secant
Set a lime stone 36 x 16 x 6 ins. 15 ins in the ground -
Ground to rocky to admit stone to proper
depth - for Standard $\frac{1}{4}$ Sec Cor, marked S C
 $\frac{1}{4}$ 33 on N face, and raised a Mid of Stone
2 ft base $\frac{1}{2}$ ft high N of Cor
- 54.00 Rocky Soil, ^{has} N. descend to draw.
- 71.00 Bottom of draw, Course N 25° E
Diff. bet. measurements of 80 chs by two sets of
Chainmen is 4 lbs; position of Middle Point
By 1st set 80.02 chs
By 2nd set 79.98 chs, the mean of which is
- 80.00 S. 1.43 ft from secant

7th Standard Parallel N. Through R. 1 E

Set a line stone 20 x 8 x 6 ins 14 ins in ground
 for standard cor to sec 33 + 34 marked SC
 on N. with 3 notches on 2 and 3 notches on
 N. edges, and raised Md of stone 2 ft high
 2 ft base N of Cor
 Land rolling
 Soil at ^{the} rate rocky
 No timber

Cor on secant through sec 34
 ascending to a rocky point

20.00 Top of rocky point ^{was} ³ scattering cedars

26.00 Descend toward draw

Cliff. but measurements of 40 chs by two sets of
 chainmen is 3 lks: position of Middle Point

By 1st set 39.99 chs

By 2nd set 40.02 chs. the mean of which is

40.00 S 1.78 ft from secant

Set a line stone 15 x 14 x 10 ins ^{in ground}
 on md. of stone for standard cor ^{or} ^{marked}
 marked SC ^{or} 34 on N face. Ground to rocky
 to admit stone round depth - raised a Md

7th Standard Parallel. N. Through R. 1. E
 Each on second through Sec 34

50.00 Of stone 2 ft base & 1/2 ft high N of Cor
 Draw, Course N

Diff. bet. measurements of 80 chs by two sets of
 chains is 2 lks; position of middle point

By 1st set 80.01 chs

By 2nd set 79.99 chs the mean of which is

80.00 31.43 ft from second

Set a line stone 18x10x12 ins. 12 ins in ground
 for standard cor to sec 34 and 35. Marked 80 on

N and with 4 notches on W and 2 notches on E
 edges and raised a 2d of stone 2 ft base

1/2 ft high N of Cor

Land rolling

Soil of the rate and rocky

a few scattering Cedars - Dec 15-1899
 S 87.59 E through Sec 35. on the second

Over rolling ground through dead Cedars

28.00 Road from Williams to Grand Course bears N and S

Diff. bet. measurements of 40 chs by two sets of
 chains is 5 lks; position of middle point

By 1st set 40.02 chs

7th Standard Parallel N Through R.I.E

S 89° 59' in the secant through sec 35

By 2nd set 39.97 chs the mean of which is

40.00 S. 0.83 ft from the secant

Set a line stone 20 x 16 x 6 ins 15 ins in ground

for standard '41 see Cor marked S.C. '435 on N

face and raised a wall of stone 2 ft base

1 1/2 ft high N of Cor

60.00 Begin to ascend

Diff bet measurements of 80 chs by two sets of

Chains is 6 chs; position of middle point

By 1st set 80.03 chsBy 2nd set 79.97 chs the mean of which is

80.00 Set a line stone 36 x 14 x 4 ins, 16 ins in

the ground, - ground too rocky to sink stone

to proper depth - for standard Cor of sec

35 and 36 marked S.C. on the N face

with 1 notch on E and 5 notches on W. edge

Raised a wall of stone, 2 ft base 1 1/2 ft high

N of Cor.

Land rough and rolling.

Soil rocky at ^{the} rate. Timber Sect. Cedars

7th Standard Parallel N. Through R. 1. E.

S 89° 58' on the second S of sec 36

Ascending through Cedars and Pines

16.00 Top of Joint of rocky ridge extending S 100 ft ^{ascend} highDiff. bet measurements of 40 chs by two sets of
Chambers is 8 lbs; position of Middle JointBy 1st set 40.04 chsBy 2nd set 39.96 chs the mean of which is

40.00 N 107 ft from the second

Set a line stone 16 x 8 x 4 in, 12 in in ground
for standard 1/4 sec cor. marked 36 1/2 36 onN. face and raised a mid of stone 2 ft base 1/2
ft high N of Cor

Cor in center of wide draw course S.E

50.00 Foot of rocky ridge, ascend

57.00 Top of " " bears N 7 S. descend

61.00 At this point I erect a signal for a true sight
Bottom of ridge. Leave Cedars and PinesDiff. bet measurements of 80 chs by two sets of
Chambers is 6 lbs; position of Middle JointBy 1st set 80.02 chsBy 2nd set 79.97 chs the mean of which is

80.00 N 2.37 ft from the second

7th Standard Parallel Through R 1 E

S 59° 58' on the second S of Sec 26

Set a line stone 20 x 14 x 6 ins, 10 ins in the ground
 for Standard Cor of Tps 29 N R 1 East 7 E marked
 S C T. 29 N ^{on N,} ~~with 6 notches~~ ^{on W,} R 1 E _A and
~~6 notches on W~~ ^{on E,} R 2 E with 6 notches on

N. E. ^W face and raised a ^W end of stone 4 ft base
 3 ft high N of cor

Land rough and hilly

Soil rocky, 4th rate

Timber Pines & Cedars 80 chs.

61.

Dec 16-1899

7th - Standard Parallel N. Through P. 2 E

I set my transit over a tack driven in a stake firmly set in the ground 2.37 ft S of the Cor, last described and at 14^h 0^m of the 17th of Dec I observe Polaris when at its greatest ^{western} elongation in accordance with instructions in the manual and mark the point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chains north of my instrument, At 8 AM. I lay off the azimuth of Polaris $1^{\circ}30'30''$ and mark the true meridian by a tack driven in a stake set in the ground, east of the point established last night.

The magnetic bearing of the true meridian is $N 14^{\circ} 45' W$ which reduced by the table on page 100 of the manual gives the mean mag. decl. $14^{\circ} 46' E$.

From the true meridian thus established I turn to the west sight 23 chs to the

7th Standard Parallel N Through R 2 E

wash and find the mean of these angles to be $89^{\circ}58'30''$ and conclude my line to this point to be correct and I turn $N 89^{\circ}58'E$ and run south of Sec 31. T₂₉ N R 2 E on the Secant

31.26 Val Verde road bears N and S

Diff. bet. measurements of 40 chs by two sets of chainmen is 2 lbs; position of middle point
By 1st set 40.0 chs

40.00 By 2nd set 39.99 chs. the mean of which is
N 1.07 ft from secant

Set a Cedar post 4 ft long by 4 ins sq two feet in the ground for standard $\frac{1}{2}$ sec cor
Marked SC $\frac{1}{2}$ 31 on the N face; Aug pits
 $18 \times 18 \times 12$ ins E and W of post 3 ft dia and
raised a mound of earth $3\frac{1}{2}$ ft base $1\frac{1}{2}$ ft high
N of Cor

45.76 Road bears N & S begin to ascend rocky
ridges covered with Cedars and Pines

60.00 Top of ridge bearing N & S

7th - Standard Parallel N. Through R 2 E

South of sec 36 on the creek

(31)
 Diff bet measurements of 80 chs by two sets of
 chains is 12 lbs; Direction of Middle Link

By 1st set 79.98 chsBy 2nd set 80.06 chs, the mean of which is

80.00

Set a line stone 20 x 16 x 2 1/2 ins in a Md
 of stone, for Standard Cor of Secs 31 & 32

Marked S on N face with 1 notch on W and
 5 notches on E edges from which

A Picaon 10 ins diam bears N 15° 20' W

38 links dist. Marked T 29 N R 2 E S 31 BT

A Picaon 12 ins diam bears N 17° 20' E 34 lbs dist

Marked T 29 N R 2 E S 32 BT

Land rolling for 45 chs

Land mountainous - 35 chs

Soil 4th rate

Timber 35 chs.

Dec 17-1899

7th Standard Parallel N. Through R. 2. E.

N 89° 59' E on the secant through see 32

- 8.00 Edge of rocky rim, bears N+S descend abruptly
- 11.00 Bottom of descent, enter dense Cedars
Diff bet measurements of 4 chs by two sets of
Chaiurmen is 6 lks; position of middle point
By 1st set 39.97 ch
By 2nd set 40.03 ch the mean of which is
- 110.00 S. 0.83 ft from the secant
Set a line stone 20x12x3 ins. 14 ins in the
ground for standard 1/4 sec Cor marked
SC 1/4 32 on N face and raised a ^{rod}
of stone 2 ft base 1/2 ft high N of Cor
- 55.00 Begin to ascend abruptly
- 59.00 Top of rocky cliff ^{point} N+S
Diff in measurements of 80 chs by two sets
of Chaiurmen is 8 lks; position of middle point
By 1st set 79.96 ch
By 2nd set 80.04 ch the mean of which is
- 80.00 S. 1.43 ft from the secant
Set a line stone 20x14x4 ins 14 ins in
the ground for standard Cor of Secs

7th Standard Parallel N Through R2E

N 89° 58' E on the second through sec 32

32 and 33 marked 3C on N with two
notches on N and 4 notches on E. Edges
and raised a Md of stone 2 ft base and
1 1/2 ft high N of Cor

Land rough and mountainous 80 chs

Soil 3rd rate

Dense Cedars and Pinons 69 Chs

N. 89° 59' E on the second through sec 33

Over rough ground, through dense Cedars and Pinon trees

Diff. bed measurements of 40 chs by two sets of
chainmen is 16 lbs; position of middle point

By 1st set 40.08 chsBy 2nd set 39.92 chs the mean of which is

40.00 S. 1.78 ft from the second.

Set a lime stone 14 x 12 x 4 ins. 10 ins. in the ground
for standard 1/4 sec cor. marked SC 1/4 33 on N face
from which

A Pinon 12 ins diam bears N.W. 32 lbs dirt

Marked SC 1/4 33 BT

A Pinon 11 ins diam bears N.E. 26 lbs dirt

Marked SC 1/4 33 BT

7th Standard Parallel N. Through R. L. E.

Diff. bet measurements of 80 chs by two sets
of chainmen is 12 lbs; position of middle point
By 1st set 81.06 chs

By 2nd set 79.94 chs the mean of which is

80.00 S. 1.90 ft from the creek

Set a line Stone 24 x 16 x 8 in, 18 in in ground
for standard Cor of Secs 33 & 34. Marked SE on
N. face with 3 notches on the east and 3 notches
on west edges, from which.

A. Pine 12 in diam, bears N 74° E. 117 lbs & dist
Marked SE, T 29 N R 2 E S 34 BT

A. Cedar 8 in diam, bears N 35° W. 108 lbs & dist
Marked S C T 29 N R 2 E S 33 BT

Land rough and mountainous - 80 chs

Soil $\frac{1}{2}$ th rate. rocky

Timber 80 chs

Dec 19 - 1899

3.60

³ on the creek through to sec 34
Through dense timber
old road. bears N + S

Diff bet measurements of 40 chs by two sets of
chainmen is 10 lbs; position of middle point

By 1st set 40.05 chs

7th Standard Parallel N Through R. L. E

By 2nd set 39.95 chs the mean of which is
40.00 S 1.78 ft from the secant

Set a lime stone $20 \times 12 \times 6$ ins, 15 ins in ground
for standard $\frac{1}{4}$ sec cor, marked SC $\frac{1}{4}$ 34 on N
from which.

A Piñon 6 ins diam bears N 30° E 5-lb dist
marked SC $\frac{1}{4}$ S 34 BT

Diff. bet measurements of 80 chs by two sets of
chainmen is 6 chs; Position of middle point

By 1st set 80.03 chs

By 2nd set 79.97 chs. the mean of which is
80.00 S 1.43 ft from the secant

Set a lime stone $12 \times 10 \times 8$ ins, 8 ins in the ground
for Standard Cor of Sec's 34 & 35 - marked SC on
N. with 4 notches on N. and 2 notches on E
Edges. from which.

A Cedar 10 ins diam. bears N $52^\circ 20'$ W. 28 lbs dist
marked S C T 29 N R 2 E S 34 BT

A Piñon 6 ins diam bears N $83^\circ 15'$ E. 35 lbs dist
Mkd S C T 29 N R 2 E S 35 BT

7th Standard Parallel N Through R 2 E

Land rough and rolling 80 chs

Soil 4th rate and rocky

Timber 80 chs

S 89° 59' E on the secant through sec 35-
through dense timber.
Over rolling ground and through dense cedars

Diff. bet. measurements of 80 chs. by two sets of
chainmen is 4 chs; position of middle point

By 1st set 41.02 chs

By 2nd set 39.98 chs the mean of which is

40.00 5.083 ft from the secant.

Set a line stake 15 x 10 x 8 ins, 10 ins in ground
for standard 1/4 sec cor, marked S E 1/4 35 on N
face from which

U. Piron 12 ins diam bears N 37° 45' W 43 chs dist

Marked S E 1/4 S 35 BT

A. Avar 36 ins diam bears N 21° 16' E, 30 chs dist

Marked S E 1/4 S 35 BT

Diff. bet measurements of 80 chs by two sets of
chainmen is 6 chs; position of middle point

By 1st set 80.03 chs

By 2nd set 79.97 chs the mean of which is

7th Standard Parallel N. Trough R2E

80.00 Set a lime stone $16 \times 10 \times 6$ ins., 10 ins in ground
for standard Cor of Secs 35 and 36. Marked SC
on N face with 1 notch on E and 5 notches on
W. edges from which

A. Piton 20 ins diam bears $N 50^{\circ} 30' W$. 72 lbs dist
Marked SCT29NR2E35BT

A Piton 8 ins diam bears $N 23^{\circ} E$ 18 lbs dist
Mkd SCT29NR2ES36BT

Land rolling - 80 chs

Soil 4th rate

Timber 80 chs Dec 19-1899
 $589^{\circ} 58' E$ on the summit S of Sec 36

Diff bar measurements of 4. chs by two sets of
chainmen is 5' lbs; position of middle point

By 1st set 40.02 chs

By 2nd set 39.97 chs the mean of which is

40.00 N. 107 ft from the second

Set a lime stone $16 \times 12 \times 10$ ins. in a bed of
stone for standard $\frac{1}{4}$ Sec Cor. Marked SC 1/4
36 on N. face. from which

A. Piton 4 ins diam bears $N 88^{\circ} E$. 4 lbs dist

7th - Standard Parallel N. Through R2E

Marked SC 1/4 S 36 BT

A Piton 10 ins diam diam N 16° W, 30 lbs dia

Marked SC 1/4 S 36 BT

73.00 Descend to gulch

74.00 Lean Cedars and Pines

79.00 Bottom of gulch, course S.W.

Diff. bet measurements of 80 chs by two sets
of Choumen is 6 lbs; Position of middle point

By 1st set 80.03 chs

By 2nd set 79.97 chs, the mean of which is

80.00 N 237 ft from the second

Set a line stake 16 x 12 x 4 ins, 10 ins in ground
for Standard Cor to Tps 29 N R's 2 + 3 E

marked SC 29 N on N, 8 E on E and 2 E on

N. faces with 6 notches on N.E. and W. faces

and raised a Md of Stone 4 ft ball

and 3 ft high N of Cor

Land rough and rolling

Sail 3rd rate

Timber 74 chs

Dec 20-1899

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BOOK 1261

7th - Standard Parallel N Through R. 3. E

I set my transit over a tack driven in a stake firmly set in the ground 2.37 ft S. of the last Cor. described, and at 1.10 AM. of the 21st of Dec. 1849, I observe Polaris when at its greatest western elongation in accordance with the instructions in the manual and mark the point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs N of my instrument.

At 8.00 AM. I lay off the azimuth of Polaris $1^{\circ} 30'$ to the east and mark the true meridian by a tack driven in a stake set in the ground east of the point established last night. The magnetic bearing of the true meridian is $N 14^{\circ} 40' W$ which reduced by the table on page 100 of the manual gives the mean mag. decl. $14^{\circ} 41' E$

From the true meridian thus established I turn to a tack sight established 15 chs West and find the mean of three angles to be $89^{\circ} 59'$

7th Standard Parallel N. Through R 3 E

and conclude my line to this point
to be correct. I therefore turn
N. 89° 58' E and run S of Sec 31, T. 29, N., R. 3, E. to
the secant.

2.00 Ascend from gulch

6.00 Top of ascent, enter dense Cedars and *Juniper*
Duff but measurements of 40 chs by two sets of
Chains is 3 lks; position of middle point
By 1st set 40.02 chs

By 2nd set 39.99 chs. the mean of which is
40.00 N 1.07 ft from the secant
Set a lime stone 18 x 12 x 4 ins. 12 ins in ground
for Standard $\frac{1}{4}$ Sec Cor. Marked S $\frac{1}{4}$ S 31 on N
face from which.

A *Juniper* 12 ins. diam. bears N 85° W, 18 chs dist
Mkd S $\frac{1}{4}$ S 31 BT

A *Juniper* 4 ins. diam. bears N. 73° E. 49 chs dist
Mkd S $\frac{1}{4}$ S 31 BT

76.00 Descend to ravine & leave timber bearing N 45

78.00 Center of ravine, Course S

7th Standard Parallel N. Trough R. 3 E.

79.00 Ascend and enter dense *Pinus* & *Cedars* ^{N+S} being
 Diff. bet measurements of rocks by the sets of
 chisimen is 2 lbs: Position of Middle Joint
 By 1st set 80.01 lbs

80.00 By 2nd set 79.99 lbs, the mean of which is
 Set a line stone 16x12x6 ins, 10 ins in ground
 for standard cor of Secs 31+32 marked SE on
 N, with 1 groove on N, and 5 grooves on E
 edges, from which.

A *Pinus* 6. ins diam bears N76°E 12 lbs dist
 Mkd SCT29 NR3ES32 BT

A *Pinus* 6. ins diam bears N41°W 89 lbs dist
 Mkd SCT29 NR3ES31 BT

Land rough and hilly.

Soil with rate and rocky.
 71 lbs.

Truiber ~~73 lbs~~, Dec 21-1899

N. 89°59'E on the summit through Sec 32

Ascending

3.00 Top of bank of ravine

12.00 Descend to ravine, 50 ft deep. Course S.W.

19.65 Center of ravine, road bears N E and S W

7th Standard Parallel N Through R 3 E

23.00 Ascend out of ravine

30.00 Lean pines & Cedars bears N + S

Diff. bet measurements of 40 chs by two sets of
Chisum is 3 lbs; Position of middle point

By 1st set 40.01 chs

By 2nd set 39.98 chs. the mean of which is

40.00 50.83 ft from the Secant.

Set a lime stone $15 \times 12 \times 5$ ins. 10 ins in ground
for standard $\frac{1}{4}$ sec cor. marked $90^\circ \frac{1}{4} 32$ on N
face and raised a wall of stone 2 ft base
 $1\frac{1}{2}$ ft high N of Cor.

Summit of Red Butte bears $S 40^\circ 10' E$

76.00 Lean clearing and cuts pines, pines
and Cedars bearing N + S

Diff. bet measurements of 80 chs by two sets of
Chisum is 2 lbs; Position of middle point

By 1st set 80.01 chs

By 2nd set 79.99 chs the mean of which is

80.00 51.43 ft from the Secant

Set a red sand stone $20 \times 18 \times 4$ ins

7th Standard Parallel N. Through P. 3. E

15 in in the ground for Standard Cor to sec's
32 and 33 marked S on N, with 2 grooves
on N and 4 grooves on 2 edges, from which
a prism 6 in diam bears $N 53^{\circ} 20' W$ 74 lbs dist
Mkd S C T 29 N R 3 E S 32 BT

A prism 10 in diam bears $N 3^{\circ} 15' E$ 143 lbs dist
Marked S C T 29 N R 3 E S 33 BT

Land rough & rolling 80 chs

Sail 4th rate

Timber 34 chs

$N 89^{\circ} 59' E$ through sec 33 on the secant
Over rolling ground, through set-pitons & Cedars
Cliff, but measurements of 40 chs by the sets of
Chasmen in 4 chs; position of Middle Locust

By 1st set 39.98 chs

By 2nd set 40.02 chs, the mean of which is

40.00 S 178 ft from the secant

Saw a lime stone $30 \times 12 \times 3$ in 20 ins in ground
for Standard 1/4 sec cor, marked S C 1/4 35 on
N. face and raised mid. of stone 2 ft base 1/2
ft high N of Cor. Red Bull bears $S 26^{\circ} 10'$ West

7th Standard Parallel N. Through R. 3 E

62.00 Cedars and Pines become dense
 Diff bet measurements of 80 chs by two sets
 of chainmen is 6 lks; Direction of Middle Point
 By 1st set 79.97 chs

By 2nd set 82.03 chs, the mean of which is
 80.00 51.90 ft from the secant
 Set a lime stone 12 x 12 x 10 ins, 8 ins in the ground
 for Standard Cor to see. 33 & 34 marked SC on N
 with 3 grooves on 2 and wedges, from which
 A Pinon 6 ins diam bears N 53 E 8 lks dist
 Mkd SCT 29 NR 3 E S 34 BT
 A Pinon 7 ins diam bears N 52 40 W 32 lks dist
 Mkd SCT 29 NR 3 E S 33 BT
 Land rolling
 Soil 3rd rate
 Timber 80 chs 18 chs.

Dec 22-1849

7th Standard Parallel N. Through R3E

Range on the second traverse see 34
~~Series~~

- 15.00 Leave timber and enter clearing bearing N+S
- 28.00 Enter dense Cedars + Pines and ascend
- 39.00 Top of ridge. bears N+S
 Diff bet measurements of 40 chs by two sets of
 chainmen is 8 lbs; position of middle point
 by 1st set 40.04 chs
 by 2nd set 39.96 chs the mean of which is
- 40.00 S 1.78 ft from the second
 Set a lime stone 15x10x7 ins, 9 in in ground
 for standard $\frac{1}{4}$ sec cor marked SC 1/4 34 on N
 face from which
 A Pinon 8 ins diam bears N 41° W 20 lbs dist
 Marked SC 1/4 5 34 BT
 A Cedar 12 ins diam bears N 79° 30' E 48 lbs dist
 Marked SC 1/4 3 34 BT
- 42.00 Descend gradually from ridge
- 63.00 Bottom of descent enter small clearing, bears N+S
- 68.00 Enter dense Pines + Cedars ascend gentle slope
 Diff bet measurements of 80 chs by two sets of
 chainmen is 6 lbs; position of middle point

7th Standard Parallel N Through R. 3. EBy 1st set 89.03 chs

80.00 By 2nd set 79.97 chs, the mean of which is
 S 1.43 fm to second
 Set a line stone 14 x 14 x 4 ins. 8 in high ground
 for Standard Ev to Secs 34 and 35 marked 3 C on
 N with 4 grooves on N and 2 grooves on E Edges
 from which

A pin 10 in diam bears N 30° E 67 lks dist

Marked S C T 29 N R 3 E S 35 BT

A pin 8 in diam bears N 9° W 63 lks dist

Marked S C T 29 N R 3 E S 34 BT

Land rolling.

Sail 3rd rate~~Timber 62 chs~~

S 89° 58' on the second through Sec 35

Over rolling ground through Cedars & Pines

17.00 Descend to gulch

22.00 Bottom of gulch, course S.W. ascend

28.00 Top of steep incline, continue to ascend gradually
 Diff. bet measurements of 40 chs by two sets
 of chainers is 6 lks. position of middle point

By 1st set 39.97 chs

7th Standard Parallel N. Through R. B. Co

40.00

By 2nd set 40.02 chs the mean of which is

50.83 ft from the secant

Set a lime stone 15x5x5 ins 9 in in ground
for standard $\frac{1}{4}$ sec Cr. Marked SC $\frac{1}{4}$ 35 on
N face from which

A Diagon 4 ins diam bears N 15° W 12 lbs distMkd SC $\frac{1}{4}$ S 35 BTA Cedar 18 ins diam bears N 5° E 55 lbs distMkd SC $\frac{1}{4}$ S 35 BT

Diff. bet measurements of 80 chs by two sets of
chainmen is 2 lbs, position of middle point

By 1st set 80.01 chsBy 2nd set 79.99 chs the mean of which is

80.00

Set a lime stone 16x12x6 ins, 10 ins in ground

for standard Cr. to Secs 35 & 36 marked SC on
N with 1 groove on E and 5 grooves on W edges
from which

A Diagon 6 ins diam bears N 32° E, 28 lbs dist

Mkd SC T 29 N R 3 E S 36 BT

A Diagon 10 ins diam bears N 40° W 18 lbs dist

7th Standard Parallel N. Through R. 3 E

Wkd S.C.T. 29. N.R. 3. E.S. 35. T.B.T

Land rolling and rough

Soil 4th rate

Timber 80 chs

Dec 23 - 1899

S 89.58° W on the second south of sec 36

21.00

Vicinity to ravine, bear dense firs & Cedars

36.00

Ravine, course S.W. ascend thro' scattering firs

Diff. bet measurements of 4. chs by two sets of
chainmen is 5 chs; Position of Middle JointBy 1st set 40.03 chsBy 2nd set 39.98 chs the mean of which is

40.00

N. 107 ft from the second

Set a line stone 23 x 18 x 6 ins. 15 ins in the ground
for Standard 1/4 sec cor marked S 2 1/4 36 on N. from which

A pine 12 ins diam bears N 23° E 2 1/4 hrs dist

Wkd S.C. 1/4 S 36 T.B.T

56.00

Lean firs and cuts dense Cedars & Spruces

62.00

I marked a flag for a test sight at this point
Diff. bet measurements of two sets of chainmen
is 3 chs; Position of Middle JointBy 1st set 80.02 chsBy 2nd set 79.99 chs. the mean of which is

7th Standard Parallel. N. Through R. 3 E.

62.00

I marked a flag for a test sight at this point

80.00

At 2.37 ft from the second

Set a lime stone 28x16x6 in. in Md. of stone
for Standard Cor to Tpi 29 N R 3 + 4 EMarked SC 29 N on N. 4 E on E + 3 E on W
faces with 6 grooves on N. E. and W faces
from which.

A Cedar 6 in diam bears N 63° 46' E. 26 ft dist

Mkd SCT 29 N R 4 E S 31 BT

A Cedar 14 in diam bears N 68° 20' W. 45 ft dist

Mkd SCT 29 N R 3 E S 36 BT

Sand rolling

Soil 3rd note

49 chs.

Timber ~~50~~ chs

Dec 24-1899

7th Standard Parallel N. Through R. 4. E

- Note -

Continuous, cloudy weather for several
day's observations on Palaris not possible -
Dec 26 - 1899, 8 am

N. $89^{\circ} 55' E$ on the line south of sec 31. T29N R4E
On rolling ground through dense Cedars & Pines
Diff. bet measurements of 40 chs by two sets of chainsmen
is 4 lks; Position of middle point

By 1st set 40.02 chs

By 2nd set 39.98 chs the mean of which is

40.00 N 1.07 ft from the secant

Set a lime stone $16 \times 12 \times 4$ ins 70 ins in ground
for Standard $\frac{1}{4}$ Sec Cor marked S.C. $\frac{1}{4}$ 31 on
N face from which.

A Piron 7 ins diam bears N $40^{\circ} 45' W$. 107 lks dist

Mkd S.C. $\frac{1}{4}$ 31. BT

A Piron 8 ins diam bears N $72^{\circ} 2' E$. 52 lks dist

Mkd S.C. $\frac{1}{4}$ 31. BT

42.00 Descend to draw

45.00 Bottom of draw course S.W. ascend
gradually through scattered Pines, Pines & Cedars

50.00 Low Pines and cuts. Dense Pines and Cedars

Diff. bet measurements of 80 chs by two sets

7th Standard Parallel. N. Through R. & E

of chainmen is 3 lks; Position of middle point

By 1st set 80.02 ch

By 2nd set 79.98 chs the mean of which is

80.00

Set a lime stone 16 x 10 x 5 ins 10 ins in ground
for standard cor. to Secs 31 & 32 marked SC on
N with 19 grooves on W and 5 grooves on E
edges. from which

A Cedar 16 in diam bears N 30° 40' W 20 lks dist

Mkd SC. T 29 N R 4 E S 31 BT

A Fir 12 ins diam bears N 6° 45' E 43 lks dist

Mkd SCT 29 N R 4 E S 32 BT

Laid rolling + rough

Soil 4th rate

Thru 80 chs Dec 26 - 1899

N 89° 59' E on the secure thro sec 32

15.00

Descend to gulch. Course SW

16.50

Center of gulch ^{30 lks wide} ascend gradually

38.00

Descend to gulch ^{30 lks wide} 50 ft deep Course SW

Diff bet measurements of 4 chs by two sets of
chainmen is 8 lks. Position of middle point

By 1st set 40.04 chs

7th Standard Parallel Through R. 4. E

- By 2nd set 39.96 chs the mean of which is
 40.00 S. 0.83 ft from the secant
 Set a lime stone 16x12x4 ins. 10 ins the ground
 for standard 1/4 sec. cor, marked S C 1/4 32 on N
 face, from which
 A. Cedar 12 in diam bears N 62° E 26 lbs dist
 Mkd S C 1/4 S 32 TBT
 A. Dicotyl 6 in diam bears N 79° 20' W 13 lbs dist
 Mkd S C 1/4 S 32 TBT
- 42.00 Bottom of gulch course S.W. ascend
 48.00 Top of ridge ^{cut} N 2° S W
 53.00 Descend
 55.00 Bottom of gulch course S.W. ascend
 58.00 Top of steep ascent, continue to ascend gradually
 63.00 Top of ridge, bears N 2 ^{qu} S W
 71.00 Descend through a bunch Cedars
 79.00 Bottom of descent, enter scattering of pines
 Diff. bet. measurements of 80 chs by two sets of
 chains is 8 lbs, position of middle point
 By 1st set 80.04 chs

7th Standard Parallel N. Through R. H. E.

By 2nd set 79.96 chs the mean of which is
80.00 S 1.43 ft from the secant

Set a lime stone 24 x 14 x 5 ins 15 ins in
the ground for standard Cor to Secs 32 + 33

Mkd SC on N with 2 grooves on N and 4
grooves on E faces from which

A Pine 10 in diam bears N 29° W 78 lbs dist

Mkd SCT 29 N R 4 E S 32 BT

A Pine 14 in diam bears N 84° E 110 lbs dist

Mkd SCT 29 N R 4 E S 33 BT

Land rough and mountainous 80 chs

Soil 4th rate rocky

Timber 80 chs

Dec 27 1899

N 89° 59' E on the secant thro sec 33

10.40 Descend to ravine

13.50 Bottom of ravine course SW

26.00 Ravine course N 75° W, ascend

Diff bet. measurements of 40 chs by two sets of
choumenis is 6 lbs; position of middle point

By 1st set 40.03 chs

By 2nd set 39.97 chs the mean of which is

7th Standard Parallel N. Through R. 4E

40.00 S 1.78 ft from the secant

Set a lime stone $16 \times 10 \times 8$ ins, 10 ins in ground
for Standard $\frac{1}{4}$ sec Cor marked SC $\frac{1}{4}$ 33 on North
from which

A $\frac{1}{2}$ iron 10 in diam bears $N 3^\circ W$, 22 lbs disk

Mkd SC $\frac{1}{4}$ 33 BT

A $\frac{1}{2}$ iron 6 ins diam bears $N 42^\circ E$, 33 lbs disk

Mkd SC $\frac{1}{4}$ S 33 BT

Diff. bet measurements of 80 chs by two sets of
chainmen is 4 lks; Position of Middle Point

By 1st set 80.02 chs

By 2nd set 79.98 chs the mean of which is

80.00 S 1.90 ft from the secant

Set a lime stone $18 \times 10 \times 6$ ins, 12 ins in ground
for Standard Cor. to sec's 33 & 34 marked SC on N
with 3 notches on E and 3 notches on W edges
from which

A $\frac{1}{2}$ iron 6 ins diam bears $N 37^\circ E$, 31 lbs disk

Mkd SCT 29 NR 4 ES 34 BT

A $\frac{1}{2}$ iron 10 in diam bears $N 61^\circ 30' W$, 30 lbs disk

7th Standard Parallel N. Through R. 4 E

Worked SC T 29 N R 4 E S 33 BT

Land rolling

Sail 3rd rate

Timber 80 Chs

E on the second through sec 34

28.00

Begin to descend to draw

36.00

Bottom of draw. course S ascend

through settlement of fives

Differed measurements of 4.0 chs by two sets
of chainmen is 2.0 chs: Position of Middle PointBy 1st set 40.01 chsBy 2nd set 39.99⁰⁰ chs the mean of which is

40.00

S 1.78 ft from the second

Set a line stone 16 x 15 x 8 ins in a 7th of
stone for standard 1/4 sec Cor marked SC 1/4

34 on N from which

A fine 12 ins diam bears N 29.40° W. 60 chs dist

Wpd SC 1/4 S 34 BT

A fine 7 ins diam bears N 4° E. 119 chs dist

Wpd SC 1/4 S 34 BT

40.20

Top of strip ascent continues to ascend gradually

7th Standard Parallel St. Through R. & E

- 60.00 Top of ascent begin to descend to draw
 65.00 Bottom of draw, course S ascend abruptly
 66.30 Top of steep ascent continue to ascend gradually
 73.50 Begin to descend to draw
 75.00 Bottom of draw, course S, ascend
 78.00 Top of ridge bears N + S

Diff bed measurements of 80 chs by two sets
 of chainmen is 8 chs; position of middle point
 By 1st set 80.04 chs

- By 2nd set 79.96 chs the mean of which is
 80.00 S 143 ft from the summit

Set a line stone 15 x 15 x 6 ins 10 ins in ground
 for standard Cr to see 34 and 35 marked
 SC on N with 2 grooves on E and 2 grooves
 on W edges from which

a line 8 ins diam bears N 7° 15' W. 42 chs dist
 Marked SCT 29 NR 4 E S 34 BT

A line 10 ins diam bears N 48° 15' E. 56 chs dist
 Marked SCT 29 NR 4 E S 35 BT

Land rolling

7th Standard Parallel N. Through R. L. ESoil 1th rate and rocky

DEC 28-1899

Grass, Junipers and Cedars 80 chs

589.54' 2 on the secant through sec 35

Over rolling ground

Cliff bet measurements of 40 chs by two sets of
 chainmen is 8 lbs; Position of Middle Point

By 1st set 39.96 chsBy 2nd set 40.04 chs the mean of which is

40.00

5.083 ft from the secant

Set a lime stone 16x12x12 in, 10 ins in ground
 for standard 1/4 cor. marked SC 1/4 35 on N face
 from which.

A Pine 24 in diam. bears N 77° W; 82 lbs dial

Mkd SC 1/4 S 35 BT

A Pine 12 in diam bears N 85° E; 70 lbs dial

Mkd SC 1/4 S 35 BT

57.84

Old road bears N 10° E. S 10° W

Cliff bet measurements of 80 chs by two sets of
 chainmen is 9 lbs; Position of Middle Point

By 1st set 79.95 chsBy 2nd set 80.04 chs the mean of which is

7th Standard Parallel N. Through R4E

80.00 Set a lime stone $18 \times 12 \times 10$ ins. 12 ins in ground
for stand and Cr to Secs 35+36 marked SL on
N. with 1 notch on E and 5 notches on W edge
from which

A cedar 24 ins diam bears $N 57^{\circ} W$ 45 lbs dist

Mkd SCT29 NR4ES35 BT

A Fir 44 ins diam bears $N 57^{\circ} 30' E$, 19 lbs dist

Mkd SCT29 NR4ES36 BT

Land rolling.

Soil $\frac{1}{2}$ th mile

Dense Fir & Cedars for 80 chs, DEC 29-1899
 $S 87^{\circ} 58' E$ on the second $\frac{1}{2}$ of sec 36

Through dense cedars and firs.

6.50 Begin to descend to draw

7.60 Bottom of draw. course SW

36.00 Trail bears S. 2 $\frac{1}{2}$ and NW.

Cliff bet measurements of 4 chs by two sets of
chairs is 8 lbs; friction of middle joint

By 1st set 40.04 ch

By 2nd set 39.96 ch the mean of which is

40.00

At 1.07 ft from the second

7th Standard Parallel N. Through R. 4. E

Set a lime stone $18 \times 12 \times 9$ ins, 12 ins in ground
for standard $\frac{1}{4}$ sec Cor. Marked SC $\frac{1}{4}$ 36m N
from which.

A Pine 14 in diam bears 47° W. 149 lbs dist
Marked SC $\frac{1}{4}$ 536 BT

A Pine 5 in diam bears $N 17^\circ 45' E$. 77 lbs dist
Marked SC $\frac{1}{4}$ 536 BT. Ascending

55.00 Top of ridge bears N.W. and S.E.

58.10 Begin steep descent to wide draw

68.00 Bottom of draw. course S.E.

69.50 Road bears $N 30^\circ W$ and $S 30^\circ E$

70.50 Begin steep ascent

75.00 Top of ridge bearing S.E. and N.W.

Cliff bet measurements of 80 chs by two sets of
chainmen is 12 chs; ~~direction~~ of Middle Fork

By 1st set 80.06 chs

By 2nd set 79.94 chs the mean of which is

80.00 $N 2.37^\circ$ from the descent

Set a lime stone $18 \times 12 \times 6$ ins 12 ins in ground
for standard Cor to T for 29th R. 4 and 5th East

7th Standard Parallel. N. Through R4E

Marked SC on N. with 6 Notches on N.E. and W
faces, from which

A Pin 6 in diam bears N 75° W, 52 lbs dist

Marked SCT 29 NR 4 ES 36 BT

A Pin 10 in diam bears N 51° 40' E, 68 lbs dist

Marked SCT 29 NR 5 ES 31 BT

Land rough and hilly

Soil 4th rate

Some cedars and pines and Gentiana

Pines for 80 Chs

DEC 30 - 1899

7th - Standard Parallel N. Through R 5^E

- Note -

Weather continues cloudy with no possibility
of taking an observation on Polaris -
N 89° 58' E on the second S of sec 31
Through dense cedars and pines

- 6.00 Begin steep descent to draw
- 8.50 Bottom of draw ^{and} trail bears N.W. + S.E. Ascend
- 15.00 Top of low ridge bears S.E. and N.W.
- 38.00 Begin to descend to draw. Leave Pines + Cedars
Diff bet measurements of 4.00 chs by two sets of
chainmen is 6 lks. position of middle point
By 1st set 4.003 chs
By 2nd set 39.97 chs the mean of which is
- 40.00 N 107 ft from the second
Set a lime stone 16x12x6 ins, 10 ins in ground
for standard $\frac{1}{4}$ sec. marked SC $\frac{1}{4}$ 31 on
N face from which
A Pine 8 in diam bears N 79° 30' W, 112 lks dist
Mkd SC $\frac{1}{4}$ 31 BT
A Pine 10 ins diam bears N 41° 30' E, 115 lks dist
Marked SC $\frac{1}{4}$ 31 BT
- 49.00 Bottom of draw - Course S

7th Standard Parallel N. Through R 5-E

- 55.20 To rail fence enclosing dry tank
- 56.47 Fence & side of tank
- 61.75 Road from Log staff to Grand Cañon bears N and S, begin abrupt ascent
- 62.75 Top of steep ascent. Leave pines and continue to ascend gradually, enter dense Cedars & pines
- 70.30 Top of ridge bearing N & S
Cliff bet measurements of 80 chs by two sets of chainmen is 12 chs; position of middle point
By 1st set 80.16 chs
By 2nd set 79.94 chs the mean of which is
- 80.00 Set a lime stone 14 x 12 x 10 in, 9 in in ground for standard cor to see's 31 & 32 marked S on N. with 1 notch on N. and 5 notches on E faces from which
A Quins 10 in diam bears N 31° 30' W 11 chs dist
Marked S C T 29 N R 5 E S 31 B T
A Cedar 6 in diam bears N 58° E, 33 chs dist
Marked S C T 29 N R 5 E S 32 B T
Land rough and hilly

7th Standard Parallel N. Through R. 5 ESoil 2th rate

Timber 80 chs Dec 31-1899

N 89° 59' E on the second trim sec 32

Thru dense cedars & pines, over hilly ground

- 0.80 Begin to descend to draw
- 5.00 Bottom of draw course S.W. Enter seat of pines, ascend
- 7.20 Top of ascent, descend toward draw
- 21.60 Bottom of draw course S.W. ascend
- 22.32 old road bears N. 5° E & S 5° W
- 27.00 Top of low ridge bears N + S
- Stiff bed measurement of 40 chs by two sets of
Chauvin is 8 lks; position of Middle Joint
- By 1st set 39.96 chs
- By 2nd set 40.04 chs the mean of which is
- 40.00 S. 0.83 ft from the second
- Set a line stone 20 x 12 x 9 ins. 14 ins in ground
for standard 1/4 sec cor. marked S. C. 1/4 S 32 on N
face from which
- A cedar 12 ins diam bears N 73° E. 31 lks dist
Marked S. C. 1/4 S 32 BT
- A Pine 24 ins diam bears N 84° W. 124 lks dist

7th - Standard Parallel, N. Through R. 5. E

Marked SC 1/4 S 32 BT

5-2.00

Begin to descend toward draw

5-8.66

Old road bears N 20° W + S 20° E

6-4.50

Center of draw, course S. E. ascend

7-2.00

Top of low ridge, bearing S E + N W

Leff ket measurement of 80 chs by two sets of

Chimney is 9 chs; Position of middle point

By 1st set 79.96 chsBy 2nd set 80.05 chs the mean of which is

80.00

S 1.43 ft from the second

Set a line stone 14 x 10 x 6 ins. in mid of stone

for standard cor to sec's 32 + 33 marked SC

on N with 2 notches on W and 4 notches on

E. Edges, from which.

A. Giron 10 ins diam bears N 10° 45' E. 53 chs dist

Marked SCT 29 NR 5 E S 33 BT

A. Giron 6 ins diam bears N 32° 30' W. 66 chs dist

Mkd SCT 29 NR 5 E S 32 BT

Land rough and hilly 80 chs

Soil 4th rate + rocky

7th Standard Parallel N. Through R. 5 E

Dense Spruce + Cedar with scattering of
 Pines 80 chs Jan 1 - 1900
 $N 87^{\circ} 59' E$ on the secant, ~~sec~~, see 33

Through dense Spruce + Cedar, scattering Pines

Stiffest measurements of 40 chs by two sets of
 chainmen is 10 lbs; position of Middle Point

By 1st set 40.05 chs

By 2nd set 39.95 chs the mean of which is

40.00 S 1.78 ft from the secant

Set a line stone 8 x 12 x 7 ins, 12 ins in ground
 for standard 1/4 sec cor marked SC 1/4 33 on N face
 from which.

A Pine 14 in diam bears $N 33^{\circ} 20' W$, 87 lbs dia

Marked SC 1/4 S 33 BT

A Pine 14 in diam bears $N 45^{\circ} 40' E$, 188 lbs dia

Marked SC 1/4 S 33 BT

Stiffest measurements of 80 chs by two sets of
 chainmen is 6 lbs; position of Middle Point

By 1st set 80.03 chs

By 2nd set 79.97 chs the mean of which is

80.00 S 1.90 from the secant

7th Standard Parallel N. Through R. 5. E

Set a lime stone $16 \times 12 \times 4$ ins 10 ins in ground
for Standard Cor to Secs 33 & 34 marked SC on
N. face with 3 notches on E + 3 notches on W
faces, from which

A Pinon 6 ins diam bears $N 24^{\circ} 30' E$, 6, 1/2 lbs dist
Marked SCT 29 NR 5 ES 34 BT

A Pine 8 ins diam bears $N 12^{\circ} 45' W$, 1/2 lbs dist
Marked SCT 29 NR 5 ES 33 BT

Land rough + rocky

Soil 4th rate

Timber Dense Pinons + Cedars + Scattered Pines ^{80 chs}
East on the secant through sec 34

Through dense Cedars + Pinons + scattered Pines
Sliff bet measurements of 40 chs by two sets of
chainmen is 6 lbs; position of Middle point

By 1st set 40.03 chs

By 2nd set 39.97 chs the mean of which is

40.00 S 1.78^{1/2} from the secant

Set a lime stone $18 \times 10 \times 4$ ins, 12 ins in ground
for Standard 1/4 sec Cor marked. Marked SC

1/4 34 on N face, from which

7th Standard Parallel N. Through R. 5 E.

A Pine 2 ins diam bears N 50° 40' E, 32 lbs dist
Marked SC 4534 BT

A Pine 1 1/2 ins diam bears N 62° 40' W, 7 1/2 lbs dist
Marked SC 4534 BT

61.24 Old road bears N 5° E & S 5° W

Diff bet measurements of 8 chs by two sets of
chromium is 8 lbs; position of Middle Point

By 1st set 80.04 chs

By 2nd set 79.96 chs the mean of which is

80.00 S 143 ft from the secant

Set a line stone 18 x 12 x 3 ins 12 ins in the ground
for standard cor to sec's 34 and 35. Marked SC on N
with 2 grooves on E and 4 grooves on W edges
from which

A Fir 8 ins diam bears N 28° 40' E 71 links dist
Marked SCT 29 N R 5 E S 35 BT

A Fir 4 ins diam, bears N 45° W, 41 lbs dist
Marked SCT 29 N R 5 E S 34 BT

Land rolling. Soil 3rd rate

Timber, dense firs & Cedars. Sect of firs. Jan 2-1900

7th - Standard Parallel N. Through R. 5^E

S 89° 59' E on the secant through Sec 35

Through dense cedars and *Fir*ous
 Diff. bet measurements of 40 chs by two sets of
 chainmen is 4 lks; position of middle point

By 1st set 39.98 chsBy 2nd set 40.02 chs the mean of which is

40.00

S. 0.83 ft from the secant

Set a lime stone 20x8x4 in, in mid of stone
 for standard 1/4 Sec Cor. marked SC 1435 on N
 face from which

A *Fir*ous 8 in diam bears N 80° E 7 lks dist

Marked SC 1435 BT

A Cedar 16 in diam bears N 79° 15' W 36 lks dist

Marked SC 1435 BT

Diff. bet measurements of 80 chs by two sets of
 chainmen is 6 lks; position of middle point

By 1st set 79.97 chsBy 2nd set 80.03 chs the mean of which is

80.00

Set a lime stone 16x12x5 in 10 in in ground
 for standard Cor to Sec's 35+36 marked SC
 on N with 1 notch on E & 5 notches on W. edges

7th Standard Parallel N Through R. S. E

From which -

A Dixon 4 in diam bears N 85° 40' W 77 lbs disk

Marked SCT 29 N R 5 E S 35 BT

A Dixon 6 in diam bears N 83° E, 27 lbs disk

Marked SCT 29 N R 5 E S 36 BT

Land rolling.

Soil rocky. 4th rate

Timber dense Cedars + Pines 80 chs

Jan 3 - 1900

S 89° 58' on the secant S of sec 36

Through dense Cedars + Pines

20.00 Iron Pines + Cedars and enter open fork fern 4+5

At this point I set a flag for a test sight.

Cliff bet measurements of 40 chs by two sets of
Chauvin is 2 lbs, position of middle point

By 1st set 40.01 chs

By 2nd set 39.99 chs the mean of which is

40.00 N. 107 ft from the secant

Set a line stone 16 x 12 x 5 in 10 in in ground
for standard 1/4 sec Cor marked SC 1/4 36 on N
face, and raised a mid of stone 2 ft base.

5-5-

BOOK 1261

7th Standard Parallel N. Through R 5 E

and 2 ft high ^{no} of Cor

57.50 Small arroyo, course S E

65.50 Trace open park & enter dense cedars and
Junos. bearing N + S

Diff. bet measurements of 80 chs by two sets
of chainmen is 6.44; Position of Middle point

By 1st set 80.03 chs

By 2nd set 79.97 chs the mean of which is
N 257 ft from ^{the} ~~the~~ ^{corner}

80.00

Set a lime stone 28x16x4 ins 16 ins in
the ground for standard cor to Tps 29 N

R 5 + 6 E marked S C 29 N on N, 6 E on E

and 5 E on W faces with 6 grooves

on NE + W faces. from which

A cedar branch 12 in diam bears N 65° W 41. Standard

Marked S C T 29 N R 5 E S 36 B T

A Juno 6 ins diam bears N 51° 20' E 40. Standard

Marked S C T 29 N R 6 E S 31 B T

Land rolling

Sail 3rd rate

34.50 chs.

Timber dense Junos cedars for ~~the~~ June 4, 1900

- Note -

In order to test my line by an observation on Polaris I return to the standard $\frac{1}{4}$ sec cor on S. side, see 36.T 29 N R 5 E + set my transit over a point 1.07 ft. S of said cor and at 12.15 Am Jan 5th I observe Polaris when at its greatest western elongation in accordance with instructions in the manual, and mark the line thus determined by a tack driven in a stake set in the ground about four feet of my instrument.

At 7-30 Am I lay off the azimuth of Polaris $1^{\circ} 30' 30''$ to the east + mark the true meridian thus determined, east of the point established last night by a tack driven in a stake set in the ground.

From the true meridian thus established I turn to a flag 20 chs west which I had erected for a test sight and find the angles to be as follows

1. $89^{\circ} - 58' - 30''$

2. $89^{\circ} 58' 30''$

3. $89^{\circ} 58' 00''$

Mean $89^{\circ} 58' 20''$

The diff bet the observed bearing of my line and the bearing it should have is probably less than the error of observation. I therefore consider my line a good one.

7th - Standard Parallel. N Through R. 6. E
 N 69° 55' E on the secant of sec 31

- 14.00 Pass Cedars & Firns bearing N + S
- 20.30 Road bears N 10° W and S 10° E
- 26.00 Enter dense Cedars & Firns bearing N + S. ascend
 Cliff. bet measurements of 40 chs by two sets of
 Chaining is 14 chs; position of middle point
 By 1st set 40.07 chs
 By 2nd set 39.93 chs the mean of which is
 40.00 N 10.07 ft from the secant
- Set a line stone 16 x 10 x 9 ins, in md of stone
 for standard 1/2 sec cor marked SC 1431 on N
 face. from which
- A Firn 10 ins diam bears N 42° W 26 chs dist
 Marked SC 14531 BT
- A Cedar 12 ins diam bears N 60° 20' E 22 chs dist
 Marked SC 14531 BT
- 73.00 Top of ridge, bearing N + S, descend
 Cliff. bet measurements of 80 chs by two sets of
 Chaining is 6 chs; position of middle point
 By 1st set 80.03 chs
 By 2nd set 79.97 chs the mean of which is

7th Standard Parallel N. Through R6E

80.00 Set a line stone 18x9x4 ins. in md of stone
for Standard cr to sees 31+32 Marked
SC on N. with 1 notch on W and 5
notches on E. edges from which
a Pin 10 ins diam bears N 22° 30' E 49 lbs diam
Marked S C T 29 N R 6 E S 32 B T

A Cedar 8 ins diam bears N 51° 46' W 39 lbs diam
Marked S C T 29 N R 6 E S 31 B T

Land rough & hilly

Soil 3rd rate - rocky

Timber, Fir, & Cedars for 68 chs

Jan 5 - 1900

7th Standard Parallel N thro R 6 E

N 89° 5' 9" E on the secant through sec 32

- 0.04 Edge of bluff of Cañon, bears N+S, descend abruptly
- 11.30 Bottom of Cañon, Course S 10° E, 75 ft deep, ascend ^{gradually}
- 20.20 Top of ridge, bears N+S
- Diff. bet measurements of 40 chs by two sets of
chainmen is 8 lks; position of middle point
- By 1st set 39.96 chs
- By 2nd set 40.04 chs the mean of which is
- 40.00 S. 0.83 ft from the secant
- Set a line stone 16 x 12 x 5 in, in a md of stone
for standard 1/4 sec cor marked SC 1/4 32 on
N. face from which
- A Diem 8 in diam bears N 64° E 17 lks dist
Marked SC 1/4 S 32 BT
- A Diem 6 in diam bears N 46° 46' W 59 lks dist
Marked SC 1/4 S 32 BT
- Diff. bet measurements of 80 chs. by two sets of
chainmen is 10 lks; position of middle point
- By 1st set 79.98 chs
- By 2nd set 80.05 chs the mean of which is
- 80.00 S. 1.43 ft from the secant

7th Standard Parallel N. Trough R 6 E

Set a line stone 16x16x4 ins, 10 ins in ground
for standard cor to sec 32+33, marked
SC on N with 2 grooves on W and 4 grooves
on E edges from which.

A Quion 6 ins diam bears N 57° E, 47 lbs dish
Marked SCT 29 NR 6 E S 33 BT

A Quion 12 ins diam bears N 48° W, 52 lbs dish
Marked SCT 29 NR 6 E S 32 BT

Land rough + hilly.

Sail rocky 3rd rate

X Dense cedars + Quions 80 chs
N 87° 59' E on the secant through sec 33
Through dense cedars + Quions

Diff. bet measurements of 40 chs by two sets of
Chouvenet is 8 chs; Position of middle point

By 1st set 40.04 chs

By 2nd set 39.96 chs the mean of which is

40.00 S. 1.78 ft from the secant

Set a line stone 24x12x5 ins, 18 ins in ground
for standard 1/4 sec cor marked SC 1/4 33 on
N face from which

7th Standard Parallel N. through R 6 E

A Section 10 in diam bears N 58° 10' E 182 lbs dist

Marked SC 1/4 S 33 T 3 T

A Section 6 in diam, bears N 74° 30' W 48 lbs dist

Marked SC 1/4 S 33 T 3 T

This cross is at N. edge of small clearing which
bears N + S

43.00 Enter dense Cedars & Sections, bearing N + S

67.20 Rim of deep cañon bears N. W. + S E, descend
abruptly.

78.00 Bottom of cañon. Course S. E. Cedars & Sections
become scattering.

Cliff bet measurements of 80 chs by two sets
of chainmen is 16 chs. Position of middle point
By 1st set 80.08 ch

By 2nd set 79.92 ch the mean of which is
80.00 S. 1.90 ft from the second

Set a lime stone 18 x 17 x 4 in. in mid of stone
for Standard Cr to Secs 33 + 34 marked
SC on N with 3 notches on E and 3
notches on W edges from which

7th Standard Parallel N. Through R. 6. E

A. From this point bears N 75° E. 46 lks dist

Marked S C T 29 N R 6 E S 3 4 B T

A. From this point bears N 86° W. 40 lks dist

Marked S C T 29 N R 6 E S 3 5 B T

Land rough & hilly.

Soil rocky 4th rate.

Timber 80 cts.

Jan 6 - 1900

ran on the creek through sec 34

Ascending small ridge

3.00 Top of low ridge bears N + S. descend

10.00 Bottom of ravine, course S E. ascend

23.00 Top of ridge bears N + S descend

27.00 Bottom of gulch 75 ft deep course S. E. ascend

31.00 Top of ridge bears N + S

Cliff bet measurements of 40 chs by two sets
of chains is 12 lks; position of middle point

By 1st set 40.06 chs

By 2nd set 39.94 chs the mean of which is

40.00 31.78 ft from the second

Set a line stone 18 x 12 x 6 ins. in md of stone

7th - Standard Parallel N. Through R. 6. E

for Standard Corner Marked SC 1/4 34 on N
face from which

A Pin 4 in diam bears N 72° E. 69 lbs die
Marked SC 1/4 34 BT

A Pin 6 in diam bears N 69° 15' E. 116 lbs die
Marked SC 1/4 34 BT

49.00 Begin to descend to draw

55.00 Bottom of draw. Course 3. ascend

59.00 Top of ridge bears N + S

Cliff bet measurements of 80 chs by two sets
of chainmen is 6 chs; Position of Middle Fork
By 1st set 80.03 chs

By 2nd set 79.97 chs the mean of which is
80.00 5.143 ft from the second

Set a lime stone 24 x 12 x 8 in. 16 in in ground
for Standard Cor to sees 34 + 35. Marked SC
out with 2 notches on E and 4 notches
on W edge and raised a bed of stone
3 ft base 3 ft high. N of Cor
N. trees in distance

7th - Standard Parallel N. Through R. 6. E

Land rough & hilly,

Soil rocky. \perp th rate,

Scattering Cedars & Junos 80 chs

389° 59' E on the secant through sec 35
over rolling ground

Diff. bet measurements of 40 chs by two sets
of chainmen is 4 lks; Position of Middle Point

By 1st set 40.02 chs

By 2nd set 39.98 chs the mean of which is

40.00 S. 0.83 ft from the secant

Set a lime stone 24x24x6 ins, 16 ins in ground
for standard $\frac{1}{4}$ sec Cor. Marked 30' 4.35 on N
face and mixed a wd. of stone 3 ft base and
3 ft high N of Cor.

73.00 Begin to descend.

75.00 Bottom of steep descent, continue gradual descent

Diff. bet measurements of 80 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 lime stone 24x24x4 ins. 15 ins in ground

7th Standard Parallel N. Through R. 6. E

for Standard Cor to sects 35+36. Marked
 SC on N with one notch on E and 5 notches
 on W. edges and raised a wd of stone
 3 ft base 3 ft high N of Cor.

Land rough & rolling.

Sail 3rd rate

Timber Scattering 80 chs

389.88' E on the secant 3 of sec 36

Over rolling ground. No timber

Cliff bet measurements of 40 chs by two sets
 of chainmen is 3 lks'. Position of middle point

By 1st set 20.02 chs

By 2nd set 39.99 chs the mean of which is

40.00 N 107 ft from the secant

Set a line stone 16 x 14 x 5 ins, 10 ins in
 the ground for Standard 1/4 sec Cor

Marked SC 1/2 36 on N face, and

raised a wd of stone 2 ft base 2 ft
 high N of Cor.

Cliff bet measurements of 80 chs by two sets
 of chainmen is 4 lks'. Position of middle point

7th Standard Parallel N. Through R6EBy 1st Sep 80.02 chsBy 2nd Sep 79.98 chs the mean of which is

80.00 N. 2.37 ft from the secant

Set a lime stone 20x10x8 in 14 in in ground

for Standard Cor to Tps 29 N R 6 + 7 E

Marked SC 29 N on N-7E on E and

6 E on W face, with 6 notches on

N.E. & W faces and raised a Mt
of stone 4 ft base + 4 ft high N
of Cor from which.A Disc 6 in diam bears N 19° 46' W
221 links dist

Mkd SCT 29 N R 6 E S 36 T 3

Land rolling

Set 3rd rate

No timber.

Jan 7-1900

W. Oscar Secor.

U.S. Deputy Surveyor.

U. S. Surveyor-General's Office,

Tucson, A. T., May 31 st, 1900,

The foregoing field notes of the surveys of the 7th Standard Parallel North through Ranges 1, 2, 3, 4, 5 & 6 East, G. & S. R. B. & Mer., in Arizona, executed by

--- W. O. SECOR ---

U. S. Deputy Surveyor, under his contract dated Oct. 10th, 1899, having been critically examined, the necessary corrections and explanations made, the said field notes and the surveys they describe are hereby approved.

George Christ

U. S. Surveyor General,
for the Territory of Arizona.

BOOK 1261

BOOK 1261

We, T. A. Gander, A. J. Hamilton, Ellis Work and
A. G. Johnson

do solemnly swear that we will well and truly perform the duties
of Assessors and Surveyors,

in the establishment of corners and other duties, according to instruct-
ions given us, and to the best of our skill and ability, in the survey
of the Gila and Salt River Meridian from the 6th Standard
Parallel North to the north boundary of Township 31 N.
& the 7th Standard Parallel N. through five ranges West &
six ranges E.

of ^{from} the Gila and Salt River Base and Meridian, in the Territory of Arizona.

A. J. Hamilton
T. A. Gander
Ellis Work
A. G. Johnson.

Subscribed and sworn to before me this 15th

day of November 1899

Geo. Robinson
Notary Public.

PRELIMINARY OATHS OF ASSISTANTS.

We, Charles Kolster, R. L. Merritt, H. A. Cargile,

and M. J. Bird

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 Meridian from the 6th Standard Parallel North to the north boundary of Township 31 north, & the 7th Standard Parallel N. through five ranges west & six ranges E.

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

Charles Kolster

Chainman.

R. L. Merritt

Chainman.

H. A. Cargile

Chainman.

M. J. Bird

Chainman.

Subscribed and sworn before me, this 15th

day of November 1899

Geo. Johnston

Notary Public.

(SEAL)