

1494

1494

F I E L D N O T E S
OF THE SURVEY OF THE
FOURTH STANDARD PARALLEL SOUTH THRU
Ranges 5, 6, 7, 8, 9, 10, 11 & 12 E.

Gila and Salt River Base and
Meridian,

ARIZONA.

By Louis Wolfley, D. S., under
Contract dated February --1885.
Survey commenced April 16, 1885.
Survey completed 18

37	3	R. 33	5	34	E. 35	36
96	94	92	91	88	86	
6	4	R. 33	6	34	E. 35	36
83	81	79	77	75	73	
6	5	R. 33	7	34	E. 35	36
90	88	86	85	83	81	
6	4	R. 33	8	34	E. 35	36
58	57	56	54	53	51	
6	5	R. 33	9	34	E. 35	36
48	49	45	43	42	40	
6	5	R. 33	10	34	E. 35	36
36	34	32	29	28	25	
6	5	R. 33	11	34	E. 35	36
23	20	19	17	15	13	
6	5	R. 33	12	34	E. 35	36
11	9	7	5	5	3	
6	5	4	3	2	1	

South

page
2
13
25
41
51
63
75
86

Preliminary Oaths of Assistants.

We R Harrison
and John Hawkes

do solemnly swear that we will well and faithfully execute the duties of Chain Carriers; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true length of all lines that we assist in measuring, to the best of our skill and ability and in accordance with instructions given us in the survey of the 4th Stand S. through Ranges
5, 6, 7, 8, 9, 10, 11 & 12 E. and 2nd
Guide Meridian Through Tps.
20, 19, 18, 17 & 16 S.

of the principal base and meridian in the Territory of Arizona.

R Harrison Chainman.

John Hawkes Chainman.

Subscribed and sworn before me, this 16th

day of April 1885

Lewis H. Coffey

Notary Public.

We William R. Kerr, Thomas Mc-
Sweeney, & Hugh Scanlon

do solemnly swear that we will well and truly perform the
the duties of Marker, Flagman &
ark man

in the establishment of corners and other duties according to
instructions given us, and to the best of our skill and ability,
in the survey of the 4th Stand S. through
Ranges 5, 6, 7, 8, 9, 10, 11 & 12 E and
2nd Inide Meridian through
Tp. 20, 19, 18, 17 & 16 S

of the principal base and meridian in the Territory of Arizona.

William R. Kerr
Thomas McSweeney
Hugh Scanlon

Subscribed and sworn to before me this 16th

day of April 1885

James Wolfley
Notary Public.



Preliminary Oaths of Assistants.

We W. A. McCarty
and J. F. Hackett

do solemnly swear that we will well and faithfully execute the duties of Chain Carriers; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true length of all lines that we assist in measuring, to the best of our skill and ability and in accordance with instructions given us in the survey of the

4th Stand S. through Ranges

5, 6, 7, 8, 9, 10, 11, & 12 E. and

the 2nd Guide Meridian

through Tps. 20, 19, 18, 17 & 16 S

of the principal base and meridian in the Territory of Arizona.

W. A. McCarty Chainman.

J. F. Hackett Chainman.

Subscribed and sworn before me, this 16th

day of April 1885

Lewis Wolley

Notary Public.

We.....

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

*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*.....

of the principal base and meridian in the Territory of Arizona.

Subscribed and sworn to before me this.....

day of.....188.....

.....
Notary Public.

The instrument used in this survey, was a solar transit made by Young & Sons. of Philadelphia Penn. Carefully tested on the Tucson Meridian the 15th day of April, and found to be correct.

35°

29

d.

N. face

Resurvey of the 4th Sec.
 South thro R 12 E.
 Cont No 78 - *W. D. Day*

4th Stand Parallel S. through R 12 East
 Pages 3 to 13.

4th Stand. Par. S. through R 11 East
 Pages 13 to 25.

4th Stand, Par. S through R 10 East,
 Pages 25 to 39.

4th Stand. Par. S. through R 9 East
 Pages 40 to 51.

4th Stand. Par. S through R 8. East
 Pages 51 to 61.

4th Stand, Par. S. through R 7. East
 Pages 61 to 73.

4th Stand Par. S. through R 6. East
 Pages 73 to 85.

4th Stand, Par. S. through R 5. East.
 Pages 86. to 100.

Fourth Stand Par S. through R 12 E.

Chain

Beginning at the Stand, cor. to Tpd
20 S. R 12 E 36. which is a Post 4 ins.
sq. firmly set in the ground marked
S. C. 20 S. on N. R 13 E. S 31 on on E
and R 12 E. S 36 on W. faces with
6 notches on N. E + W. faces, and
futz N. E + W. of post 6 ft. dist.
and mound of earth around
post.

Fence Run

West on S. ldy of Sec. 36,
C/A 12° 30' E.

- 27.00 Descend abrupt bank at an angle of 35°
- 29.00 Enter creek bottom.
- 37.00 Cross Dry Wash course N. E.
- 40.00 Set a 2 line stone 14x10x14 ins 29
ins. in the ground for Stand,
14 Sec. cor. marked S. C 14 on N. face

Fourth Stand. Parallel South

chain

and raised a mound of stone
alongside. from which
A Mesquite tree 8 ins. in diam
bears N. 15° E. 25 links dist.
marked S. C. 14 S. B. T.

41.00

cross Dry Wash course N. E. and
ascend slope at an angle of 5°

50.00

Set a 2 line stone 16 x 12 x 4 ins. 11 ins.
in the ground for cor. to Secs.
35 & 36 marked S. C. with 1 notch
on E. and 5 notches on W. edges.
and raised a mound of stone
alongside.

Surface mountainous
Soil stony & 4th rate
Grass thin

through Range 12 East

chariz

West on south bay. of Sec. 4
T₁₂ 30° E

- Ascend slope at an angle of 9°
- 30.00 Top of slope and descend at an angle of 9°
- 36.00 Foot of slope and ascend at an angle of 8°
- 40.00 After making the correct allowance I set a Lime stone 18x10x6 ins. 11 in the ground for Stand 14 Sec cor marked S.C. 14 on N. face, dug 18x12x12 ins. E.P.W. of stone 5 1/2 ft. and raised a mound of earth 1 1/2 ft 3 1/2 ft base alongside.
- 41.00 Top of slope and descend at an angle of 8°
- 57.00 Foot of slope
- 61.00 Cross Dry Wash course N.E. and ascend slope at an angle of 4°

Fourth Stand. Parallel South

Chain

80.00

After making the correct allowance for
a Sand stone $30 \times 20 \times 5$ ins. 21 ins. in
the ground for Stand Cor. to Sec. 34 & 35
marked S.E. with 2 notches on E. and
notches on W. edges. dug pits $18 \times 18 \times 12$
N.E. & W. of stone $5\frac{1}{2}$ ft. dist. and raised
mound of earth 2 ft. high $4\frac{1}{2}$ ft. base
alongside.

Surface mountainous
Soil 4^{th} rate & stony
Grass thin

West. on South bdy. of Sec. 34
@ $N 12^{\circ} 30' E$.

Ascend slope at an angle of 4°
Top of slope and descend gradually
Cross Dry Wash course N.E.

9.00

30.00

through Range 12 East.

Chains

40.00

Set a Volcanic stone $18 \times 18 \times 14$ ins. 11 in the ground for Stand. 14 Sec. cor marked S.C. 14 on N. face. and draw a mound of stone alongside and ascend slope at an angle

59.50

Top of slope and descend gradually

72.50

Cross Dry Wash Course South

80.00

After making the correct allowance

I set a Volcanic stone $14 \times 9 \times 5$ ins.

9 ins. in the ground for Stand

cor. to Secs 33+34. marked S.C

with 3 notches on E of Wedges and

raised a mound of stone alongside

From which

A Mesquite tree 5 ins. in diam bears

N 20° W. 60 links dist. marked.

T 20 S. R 12 E. S. 33. B. T.

Surface mountainous

BOOK 1407
Fourth Stand, Parallel South

chains

Soil $4\frac{1}{4}$ rate + stony
Grass floor
Scattered mesquite brush

West on South bdy. of Sec 33.

$W 12^{\circ} 30' E.$

Ascend gradually

6.00

Ascend slope at an angle of 35°

21.00

Top of rocky spur bears N.E.S.

$\frac{1}{2}$ of a mile in length and
descend at an angle of 35°

38.00

Foot of slope

40.00

After making the correct
allowance I set a 2 line stone

$24 \times 8 \times 5$ ins. 17 ins. in the ground

for Stand $\frac{1}{4}$ Sec. cor. marked
S.C. $\frac{1}{4}$ on N. face and raised

through Range 12 East

Charris

43.20 a mound of stone alongside
Cross Dry Wash course S
50.50 Cross Dry Wash course S.E
8 chs wide and ascend slope at an
angle of 12°

80.00 After making the corer allow
I set a Volcanic stone $2\frac{1}{2} \times 6 \times 4$
9 ins. in the ground for. Stand
Cor. to Sec. 32+33, marked S.
with 4 notches on E. and 2 notches
on W. edge, and raised a mound of stone
alongside.

Surface Mountainous

Soil very rocky

Grass fair

This mile is through the
Pajarito Mountains

Fourth Stand, Parallel. South

Chains

West on South bay. of Sec. 32.
at $12^{\circ} 30' E$.

9.00

Ascend slope at an angle of 12°
Top of divide of the Parfarito
mountains and descend at an
angle of 14°

34.00

Cross Dry Wash course S.W. and
ascend slope at an angle of 6°

38.00

Top of spur and descend.

40.00

After making the correct allowance
I set a Volcanic stone $2 \times 1 \times 8$
ins. 14 ins. in the ground for
Stand 14 Sec. cor. marked S.C. $\frac{1}{4}$
on N. face. and raised a mound
of stone alongside.

43.00

Cross Dry Wash course S. and
ascend slope at an angle of 35°

68.00

Top of rocky spur bears N + S.

through Range 12 East

757.00

and descend at an angle of 35° Foot of slope and ascend at an angle
of 25°

80.00

After making the correct allowance
I set a Volcanic stone $36 \times 12 \times 10$ ins. $2\frac{1}{2}$
ins. in the ground for Stand, co
to Secs. 31 + 32, marked with 5
notches on E. and 1 notch on W.
edges, and raised a mound of
stone alongside. on rocky side
between two rocky peaks of the
Parfait's Mountains.

Surface mountainous
Soil $4\frac{1}{4}$ rate + stony
Grass fair

Fourth Stand, Parallel South

Chain

West on South bay. of Sec 3
N $12^{\circ} 30' E$.

22.00

Descend slope on an angle of 20°
Foot of bluff and ascend slope
at an angle of 10° along N. face
of ridge bears E & W.

38.50

Top of spur and descend.

40.00

A mesquite tree 5 in. in diam.
which I marked S.C. 44 S. on N.
face. for Stand. 44 Sec. cor. dug
pits $18 \times 18 \times 12$ in. E & W. of tree $5\frac{1}{2}$ ft
dist. and raised a mound of
earth around tree, and continue
to descend slope at an
angle of 10°

59.00

Foot of slope and ascend at
an angle of 8°

74.00

Top of ridge bears N.W. & S.E.

through Range 12 East

chains

80.00

After making the correct allowance
I set a Volcanic stone 26x14x12
ins. 19 ins. in the ground for
Stand cor. to T₁ S. 20 S. R. 11
E. marked S.C. with 6 notches
on N. E + W. edges, and raised a
mound of stone alongside
Surface Mountain
Soil 4th rate + stony
Grass fair
Scattering mesquite

The Stand, crosses the
Parjants mountains from East
to West. This range bears
N + S. and breaks into the
valley abruptly two miles North

Fourth Stand Parallel South

Carins

of the line. South of the
line it spreads to the West.
The highest peaks are just
North of the line. formation
Volcanic. Considerable
indications of minerals.

I carefully examined the
adjustments of my solar transit
to-day particularly the latitude
and reversing apparatus and
found them correct.

April 18th 1855-

From the Stand. cor. to
Sp. 20 S. R. 11 + 12 E. just

through Range 11 East

Chain

established by me. From W. on
South bay of Sec. 36.
Va $12^{\circ} 30' E.$

- 7.00 Descend slope at an angle of 8°
Leave slope and enter valley.
- 27.00 Leave valley and ascend slope at
an angle of 12°
- 40.00 After making the correct allowance
I set a Volcanic stone $10 \times 8 \times 8$ ins.
6 ins. in the ground for Stand $1/4$
Sec. cor. marked S.C. on N. face.
and raised a mound of stone
alongside, and continue to ascend
- 45.00 Top of slope and descend at
an angle of 4°
- 50.00 After making the correct allowance
I set a Volcanic stone $10 \times 12 \times 5$ ins.
13 ins. in the ground for ^{Stand} Cor. to

Fourth Stand. Parallel South

Chains

Sec. 35 & 36 marked. S.C. with
1 notch on E. and 5 notches on
W. edges. and raised a mound
of stone alongside.

Surface mountainous

Soil 4th rate & stony

Grass good

Scattering mesquite brush

West. on South bay. of Sec. 35,
Va 12^o 30' E.

0.50

Enter creek bottom

2.75

Cross Dry Wash course North
and ascend slope ^{at} an angle of 7^o

38.00

Cross Dry Wash course N. and
enter valley.

40.00

After making the correct allowance.

through Range 11 East

Chains

I set a Volcanic stone 16x9x5 ins.
11 ins. in the ground for Stand $\frac{1}{4}$
Sec. cor. marked S.C. $\frac{1}{4}$ on N. face
and raised a mound of stone
alongside.

57.00 Leave Valley and ascend slope at
an angle of 4°

61.00 Top of slope bears N + S. and
descend at an angle of 25°

68.00 Cross Dry Wash course N. and
ascend slope at an angle of 23°

74.00 Top of ridge bears N + S.

80.00 After making the correct allowance
I set a Volcanic stone 18x10x6 ins. 13
ins. in the ground for Stand. cor.
to Secs. 34 & 35 marked S.C. with
2 notches on E. and 4 notches
on W. edges. and raised a mound

Fourth Stand Parallel South

Chains

of stone alongside.

Surface mountainous

Soil 4th rate + stony

Grass good

Scattering mesquite brush

West on South by. of Sec 34,
Va 12° 30' E

Descend slope at an angle of 10°
10.00 Cross Dry Wash course N and ascend
slope at an angle of 9°

17.00 Top of ridge bears N + S. and
descend slope at an angle of 5°

28.00 Foot of slope

30.00 Ascend slope at an angle of 4°

40.00 After making the correct allowance
I set a Volcanic stone 18x10x6 ins.

through Range 11 East

Charis

13 ins. in the ground for Stand "4 Sec
 cor. marked S.C. "4 on N. face. and
 raised a mound of stone, alongside

59.75

Top of ridge bears N.E. + S.W. and
 descend over rolling ground.

80.00

After making the correct allowance
 I set a volcanic stone 18x10x8 ins. 11
 ins. in the ground for Stand so
 to Sec. 33+34. marked S.C
 with 3 notches on E + W. edges.
 and raised a mound of stone
 alongside,

Surface mountainous
 Soil 3rd rate + stony
 Grass good

Fourth Stand, Parallel South

Chains

West on South ldy. of Sec. 33,
Va 12° 30' E.

22.75
40.00

Descend over rolling ground
Cross Dry Wash course N.
Set a Volcanic stone 12x8x8 ins.
7 ins. in the ground for Stand,
44 Sec. cor. marked S.C. 4 not.
face. dug pits 18x18x12 ins. E.W.
of stone 5 1/2 ft. dist, and raised
a mound of earth 1 1/2 ft. high
3 1/2 ft. base alongside.

74.50
80.00

Enter Valley bears N.E + S.W.
Set a Volcanic stone 18x10x7 ins.
13 ins. in the ground for Stand,
Cor. to Secs. 32 + 33, marked S.C.
with 4 notches on E. and 2
notches on W. edges. dug pits
18x18x12 ins. N.E + W. of stone 5 1/2 ft.

through Range 11 E.

Chain

dist. and raised a mound of
earth 2 ft. high $4\frac{1}{2}$ ft. base
alongside

Surface level

Soil 3% rate

Grass good

West on South side of Sec. 32.

VA 12 30 E

In Valley bears N.E. + S.W.

2.75

Cross road bears N.E. & S.W.

Cerro Colorado mountains bears

N.E. $1\frac{1}{2}$ miles dist. from this
point on the road, Posidexter
station bears S.W. $3\frac{1}{2}$ miles

dist. and Pedro's acquire's
ranch bears North $1\frac{1}{2}$ miles dist.

Fourth Stand, Parallel South

chains

3.00

from the same point.

24.00

Cross Dry Wash course N.
Leave Valley bears N.E. + S.W.

29.00

Cross Low divide and enter
valley bears N.E. + joins the
other valley 10 chs. N.

40.00

Set a Volcanic stone 12 x 8 x 5
ins. 7 ins. in the ground
for Stand "4 Sec. cor. marked
S.C. "4 on N. face, dug pit
18 x 18 x 12 ins. E + W. of stone 5 1/2 ft.
dist. and raised a mound
of earth 1 1/2 ft. high 3 1/2 ft. base
alongside.

45.00

Leave Valley bears N.E. + S.W.
and ascend over rough ground.

50.00

Set a Post, 4 ft. long 4 ins. eq.
with marked stone 12 ins. in

through Range 11 East.

Chains

the ground for Stand. Cor. to Secs.
31 + 32 marked S. 6. T20 S. R11 E.
on N. S32 on E. and S31 on W.
faces with 5 notches on E. and 1
notch on W. faces, dug pits 8 x 8
12 ins. N. E + W. of Post, 5 1/2 ft. dist.
and raised a mound of earth
2 ft. high 4 1/2 ft. base around
post. from which

A mesquite tree 10 ins. in diam
bears N 1° E. 15 links dist. marked
T20 S. R11 E. S32, B, T,

A mesquite tree 10 ins. in diam
bears ~~W 1/2 N~~ 150 links dist. marked
marked T20 S. R11 E. S31, B, T,

Surface rolling
Soil 4th rate
Good grass

Fourth Stand, Parallel South

Chains

Scattering Insh

West. on South lay. of
Sec 31.

Va 12° 30' E.

Ascend over rolling ground.

40.00

Set a Volcanic stone 2 1/4 x 1 1/2 x 1 1/2
ins. 17 ins. in the ground
for Stand, 1/4 Sec. cor. marked

61.00

S. C 1/4 on N. face and raised
a mound of stone alongside
cross Dry Wash course East
and enter Valley bears Easterly

71.00

Leave valley and cross low
divide.

78.00

Enter same Valley bears Easterly

80.00

Set a Volcanic stone 1 1/4 x 1 1/2 x 5

through Range 11 East

Chamiz

ins. 30 ins. in the ground for
Stand. cor. to Tps. 20 S. R 10 + 11
marked S. C. with 6 notches
N. E. + Wedges. and raised a
mound of stone alongside
30 links S. of Dry wash
from which

An Oak tree 16 ins. in diam
bears N 5 1/4° E. 331 links dist.
marked T 20 S. R 11 E. S 31. B. T.

An Oak tree 14 ins. in diam bears
N 7 3/4° W. 215 links dist. marked
T 20 S. R 10 E. S 36. B. T.

Baboquivari peaks bears N 64° 26'
Peak of the Cerros Colorado bears North.

The Stand crosses the East
face of the Cerros Colorado mountain
Surface rolling

Fourth Stand, Parallel South

hains

Soil 3rd rate
Grass poor

The Standard runs over mostly rolling country.

The grass is very good, and the soil is 3rd rate.

There is no water along the line just surveyed.

The Cerros Colorado Mountains bear North of the West end of the Parjarito range

From the Stand. cor. to Tps. 20 S. R. 10 + 11 E. just established by me. I run W. on South

through Range 10 East

chains

bdy of sec. 36.
Val $2^{\circ} 30' E$.

Along bank of creek

6.00 Cross Dry Wash course easterly and ascend over rolling ground.

40.00 Deposited a marked stone 2 ins. in the ground for ^{Stand} Sec. cor. dug pit 18 x 18 x 12 ins. E & W. of stone $5\frac{1}{2}$ ft. dist. and raised a mound of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base over it. In E. pit, drove a stake 2 ft. long 2 ins. sq. 12 ins. in the ground marked S. C. W. on N. face

57.30 Arvaca mountain bears $S 78^{\circ} 29' W$ from this point

81.00 Set a Volcanic stone 12 x 8 x 6 ins. 7 ins. in the ground for Stand. cor. to Secs. 35 & 36. marked S. C.

Fourth Stand. Parallel. South

chain

with 1 notch on E. and 5
notches on W. edges. dug pits
18x18x12 ins. N. E & W. of stone
5 1/2 ft. dist. and raised a
mound of earth 2 ft. high
4 1/2 ft. base alongside
from which

A Mesquite tree 6 ins. in
diam bears N. 54° W. 30 links
dist. marked T 20 S. R 10 E.
S 35. B. T.

Surface rolling
Soil 2nd to 3rd rate
Good grass
Scattering mesquite brush

through Range 10 East.

Chains

West on South bdy. of Sec. 35
 Or 13° E

- Ascend over rolling ground
 21.30 Cross Altar road bears N. E. S. 90°
 40.00 Deposited a marked stone 12 ins. in
 the ground for Stand. 1/4 Sec. cor. dug
 pits 18x18x12 ins E & W. of stone 5 1/2
 ft. dist. and raised a mound
 of earth 1 1/2 ft. high 3 1/2 ft. base over it.
 In E. pit drove a stake 2 ft. long
 2 ins sq. 12 ins. in the ground
 marked S. C. 1/4 S. on N. face
 80.00 Set a Volcanic stone 14x12x10 ins. 9 ins. in
 the ground for Stand. Cor. to Secs. 34 & 35
 marked S. C. with 2 notches on E. and
 4 notches on W. edges and raised a
 mound of stone alongside
 on point of knoll.

Fourth Stand, Parallel, South

chains

Surface rolling
 Soil 2nd/₄ to 3rd/₄ rate
 Grass poor
 Scattering Mesquite brush

West on South ldy. of
 Sec. 34.

W 13° E.

2.33

10.00

Descend gradually
 Set a Volcanic stone 16x12x10 ins.
 9 ins. in the ground for Stand,
 1/4 Sec. cor. marked S. 6. 1/4 on
 on face, and raised a mound
 of stone alongside. and cross
 Dry wash course North
 Jose Rins house bears S. 6 chs

through Range 10 East

chain

dist from this point,

57.00 Enter creek course N.E.

55.00 Leave " " "

56.00 Enter corral

63.30 Leave corral, a house bears S 1 chain, dist. from this point,

70.00 Set a Volcanic stone 98x12x8 ins. 90 ins. in the ground for stand cor. to Secs. 33 + 34. marked S. b. with 3 notches on E + W. edge and raised a mound of stone alongside.

Surface rolling

Soil 2nd to 3rd rate

Good grass

Scattering Mesquite brush

Fourth Stand, Parallel South

chain

West on South side, of Sec. 33.
Elev. $13^{\circ}E$.

40.00

Ascend gradually
Set a Volcanic Stone $12 \times 7 \times 7$
ins. \times ins. in the ground
for Stand 14 Sec. cor. marked
S. 6 14 on N. face and raised
a mound of stone alongside.
There is a road bears E & W
150 links N. from this point.
from Rivis to Sanders &
Aravaca

40.30

Cross road bears N. E + S W,
it intersects the E + W. road
5 chs North.

43.00

Cross Dry Wash course S. E.

42.00

Ascend slope at an angle of 10°

42.00

Sanders house and barley

through Range 10 East

chains

field bears S $1\frac{1}{4}$ mile dist. from
this point.

67.00

Top of round point and descend
slope at an angle of 5° .

A mine and pump bears

South $\frac{1}{3}$ of a mile dist. from
this point

80.00

A sand stone in place. 20×18
ins. above the ground which I
marked with a cross (+) at exact
cor. point. for. Stand cor. to Sec.
32 & 33. marked S.E. with 4 notches
on E. and 2 notches on N. edges,
and raised a mound of
stone alongside. from which
An Oak tree 10 ins. in diam
bears N 10° E. 90 links dist.
marked T 20 S. R 10 E. S 33. B. T.

Fourth Stend. Parallel South

chains

Surface 40 chs mountainous
" 40 chs level
Soil 3rd to 4th rate
Grass good

West on South bdy. of
Sec. 32.

7/4 13°E

Descend slope at an angle of 8°
Cross Dry Wash course N.

Top of ridge bears N. & S. and
descend slope at an angle of
15°

Foot of slope and ascend
slope at an angle of 15°

Top of spur bears N.E. & S.W.
and descend at an angle of 18°

9.50

16.00

28.00

34.00

through Range 10 East.

Chains

40.00

After making the correct allowance I set a Sand Stone $18 \times 12 \times 12$ ins 11 ins. in the ground for Stand $1/4$ Sec. cor. marked S. 6 $1/4$ on N. face. and raised a mound of stone alongside. from which a Mesquite tree 5 ins. in diam bears N 40° E. 140 links dist. marked S. 6 $1/4$ S. B. T.

43.20

Cross Dry Wash course N. and ascend slope at an angle of 12° of the Gigas mountains

65.00

Top of spur bears N. S. and descend at an angle of 16°

71.00

Cross Dry Wash course N. E. and ascend slope at an angle of 12°

80.00

After making the correct allowance. Set a Sand stone $18 \times 10 \times 6$ ins. 11 ins.

Fourth Stand. Parallel South

hairs

in the ground for Stand.
 E. of to Secs. 31 + 32, marked
 S.E. with 5 notches on E.
 and 1 notch on W. edges and
 raised a mound of stone
 alongside.

Surface mountainous
 Soil 4th rate
 Grass good
 Scattering Mesquite trees

West on South side of
 Sec. 31

of a 13° E.

Ascend slope at an angle
 of 32°

Top of round point bears

4.50

through Range 10 East

chain

- N.E. and descend
- 37.40 Foot of slope and ascend at an angle of 15°
- 40.00 After making the correct allowance I set a granite stone $14 \times 8 \times 8$ ins. 9 ins. in the ground for Stand. $\frac{1}{4}$ Sec. cor. marked S.C. $\frac{1}{4}$ on N. face. and raised a mound of stone alongside.
- 74.00 Top of main range of the Gias mountains and descend.
- 80.00 along steep slope of loose slide rock the Standard to Tps 20 S. Range 9 + 10 E. falling in slide rock where a durable corner could not be established I proceed on same course and at
- 85.00 I set a granite stone $24 \times 18 \times 6$ ins

BOOK 151
Fourth Stand, Parallel South

chain

17 ins. in the ground for
Witness cor. to The 20 S.
R2 9 & 10 E. marked W. 6
with 6 notches on N. E & W.
edges, and raised a mound
of stone alongside.

The Cor. is on South
spur bearing S. W.

East of this point is a
steep south slope of loose
slide rock.

Sugar loaf peak bears $88^{\circ} 30' W.$
which is a shaft of granite
rock 1850 ft. high from base
to peak, as shown by my
instrument

Peak of the Gijas bears $N 45^{\circ} E$

through Range 10 East.

Chains

Surface mountainous
Soil 4 $\frac{1}{4}$ rate
Some Grass

The Gijae mountains bear N & S. and break into the valley about three miles North of the line, on the South they bear to the East, the highest peak is in the Northern range, Arivaca Creek rises in the S. E. and runs N. W. separating the Gijae mountains from the range South of it.

April 28th 1885

Fourth Stand Parallel South

chains

From the Witness cor. to
The 20 S. R. 9+10 E. just
established by me. From
West on S. Day. of Sec. 36.
7d 13° E.

4.00

Foot of slope and cross Dry
Wash course S.W., and ascend
slope at an angle of 15°

4.00

Top of slope and descend at
an angle of 30°

0.00

Foot of slope and cross Dry
Wash course S.W., and
ascend slope at an angle of
10°

4.00

Top of slope and descend
at an angle of 12°

5.00

After making the correct allow-
ance. I set a granite stone

BOOK 1434
through Range 9 East

chain

18x6x4 in. 11 in. in the ground
for Stand 1/4 Sec. cor. marked
S. 1/4 on N. face. and raised a
mound of stone alongside.

13.50

Cross Dry Wash to base S.W.
and ascend slope at an angle
of 15°

18.00

Top of slope and descend at an
angle of 10°

75.00

After making the correct allowance
I set a granite stone 24x10x6
in. 17 in. in the ground for
Stand. cor. to Secs. 35 + 36. marked
S. 1/4 with 1 notch on E. and 5
notches on W. edges. and raised a
mound of stone alongside.

Surface mountainous
Soil 4th rate & rocky

Fourth Stand, Parallel South

Chains

Grass good.

West on South bay. of Sec.
35.At 13⁰⁰.Descend slope at an angle
of 10°

9.50

Foot of slope and descend
over rolling ground

20.00

Cross Dry Wash course S.W.

40.00

Set a Granite stone 30x12x8
in. 21 in. in the ground for.

Stand 14 Sec. cor. marked

S. b. 14 on N. face. and

raised a mound of stone

alongside, and continue to

descend over rolling ground,

through Range East.

chanis

0.00

Set a Granite stone 18x12x6 ins. 12 ins. in the ground for Stand cor. to Secs. 34+35 marked S. C. with 2 notches on E. and 4 notches on Wedges, and raised a mound of stone alongside.

Surface mountainous
Soil 4th rate & stony
Good grass

West on South ldy. of Sec. 34,
V. 13th E.

Continue to descend over broken ground.

40.00

Set a Granite stone 24x6x6 ins. 17 ins. in the ground for Stand "4 Sec. cor. marked S. C. " on N. face -

Fourth Stand, Parallel South

Chairs

0.00

dug pits $18 \times 18 \times 12$ in. E & W.
of Stone $5\frac{1}{2}$ ft. dist. and
raised a mound of earth
 $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base alongside.
Set a Post 4 ft. long 4 in.
sq. with marked Stone 12 in.
in the ground for Stand
Cor. to Sec. 33 & 34, marked
S. 6. T 20 S. R 9 E. on N,
S 34 on E. and S 33 on W.
faces with 3 notches on E & W.
edges. dug pits $18 \times 18 \times 12$ in.
N. E & W. of Post $5\frac{1}{2}$ ft. dist.
and raised a mound of
earth 2 ft. high $4\frac{1}{2}$ ft. base
around post, from which
A. Mesquite tree 12 in. in diam
bears N 79° W. 96 links. dist.

through Range 9 East.

chain

marked S. 6. T 20 S, R 96. S 33, B. T.

Surface rolling

Soil 4th rate

Good grass

West on South lay. of Sec. 33,
Vh 13° E

Descend gradually

7,50

Cross road bear N + E.

leading to a ranch about 3 miles
S. E. of this point.

19,20

Entered Arivaca Creek Valley course N.

25,00

cross Arivaca Dry Wash course N.

40,00

Set a Post 3 ft. long 3 ins. sq. with
marked stone 12 ins. in the ground
for Stand $\frac{1}{4}$ Sec. cor. marked S. 6 $\frac{1}{4}$
S. on N. face. dug pits 18 x 18 x 12 ins E + W.

Fourth Stand, Parallel South

Charris

of post $5\frac{1}{2}$ ft. dist. and raised a mound of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base around post, from which a

A mesquite tree 10 ins. in diam bears North 10 links dist. marked S.B. 14 S.B.T.

48.50

cross Dry Wash course to 50 links wide and ascend out of valley.

49.00

Foot of bluff and ascend slope at an angle of 30°

51.25

Edge of mesa and descend.

75.00

cross road bears N+S.

80.00

Set a granite stone $24 \times 12 \times 6$ ins. 17 ins. in the ground for Stand. cor. to Secs. 32+33, marked S.B. with 4 notches

through Range & East.

Chain

on E. and 2 notches on W. edges,
and raised a mound of stone
alongside.

Surface rolling
Soil 3rd to 4th rate
Good grass

West on South bdy. of
Sec. 32.

Th 13°C.

Continue to descend over rolling
mesa.

18.90

cross road bears N. W. + S. E.

40.00

Set a Granite stone 24 x 24 x 6 ins. 7 ins.
the ground for Stand. 1/4 Sec. cor.
marked S. E. 1/4 on N. face. and raised a
mound of stone alongside.

Fourth Stand, Parallel South

Chains

9.00

0.00

Cross trail bears N.W. + S.E.
Set a Granite stone $16 \times 10 \times 8$ ins. 11
ins. in the ground for Stand cor.
to Secs. 31 & 32, marked S.E. with
5 notches on E. and 1 notch on W.
edges, and set a boulder 2 ft in
diam for monument alongside.
Surface rolling mesa
Soll 3rd to 4th rate
Grass fire

West on South bay. of Sec. 31,
W 13th E.

Over rolling mesa.

40.00

Set a Granite stone $30 \times 12 \times$
 6 ins 21 ins. in the ground
for Stand 1/4 Sec. cor. marked

through Range 9 East,

Chamis

S.C. 114 on N. face. and raised a mound of stone alongside

41.50

Edge of mesa and descend into valley

47.00

Enter Valley bears N.E. + S.W.

80.00

Set a Post 4 ft. long 4 ins. sq. with marked stone 12 ins. in the

ground for Stand cor. to Tps. 20 S.

R. 5 + 9 E. marked S.C. T 20 S. on

N. R 9 E^{S 31} on E. and R 8 E^{S 36} on W. faces

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

dug pits 24 x 18 x 12 ins. cross-wise

on each line. N. E + W. of Post 6

ft. dist. and raised a mound of

of earth 2 1/2 ft. high 5 ft. base

around post.

Baboquivari peak bears N 38° 25' E.

Leero Colorado " " N 66° 12' W.

Sugar loaf " " S 89° W.

Fourth Std. Pm. S. through R 9 East.

Chavis

A field of barley on foot
hills bears N 5° W. about 4
miles. dist.

Surface rolling mesa.
Soil 3rd to 4th rate

Grass fine
Scattering Mesquite ^{bush} 40%
No mesquite bush " "

The Eastern part of this
township is mountainous,
The Western part is rolling.
The grass is fine, and the
soil is mostly 3rd to 4th rate.
There was no water at the
time of the survey.
Considerable evidence of minerals

Fourth Std. Par. S. through R & East.

Chamie

in the mountain portion.

From the Stand, Cor. to Tps.
20 S. R2 8 & 9 E. just established by me
I run West on South ldy. of Sec. 3
N 91° 13' E.

1.25

Cross road bears N. E & S. W.
leading to a house 3 miles S. W. from
this point.

40.00

Deposited a marked stone 12 ins. in
the ground for 1/4 Sec. cor. dug pit
18 x 18 x 12 ins. E & W. of stone 5 1/2 ft. dist
and raised a mound of earth
1 1/2 ft. high 3 1/2 ft. base over it. In E.
pit drove a stake 2 ft. long 2 ins. dia.
12 ins. in the ground marked 1/4 S. on
N. face.

Fourth Stand, Parallel South

Series
0.00

Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in
the ground for Stand. cor.
to Sec. 35 + 36. marked S. C.

T20 S. R 8 E. on N. S 36 on E.
and S 35 on W. faces with 1
notch on E. and 5 notches on
W. faces, dug pits 18x18x12
ins. N. E + W. of post 5/2 ft.
dist, and raised a mound
of earth 2 ft. high 4 1/2 ft.
base around post.

Surface rolling
Soil 3rd to 4th rate
Grass fair

through Range 8 East,

chain

West on South bdy. of Sec. 35
W 13° E.

Ascend gradually.

40.00

Deposited a marked stone 12 ins
in the ground for $\frac{1}{4}$ Sec. cor,
dug pits 18x18x12 ins, E & W. of cor.
 $5\frac{1}{2}$ ft. dist, and raised a mound
of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base
over it. In E. pit drove a stake
2 ft. long 2 ins. sq. 12 ins. in the
ground marked S. C. $\frac{1}{4}$ E. on N.
face.

80.00

Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in the
ground for Stand. Cor. to Sec. 34 &
35 marked S. C. T20 S. R 8 E. on
it. S 35 on E. and S 34 on W. face
with 2 notches on E. and 4 notches

Fourth Stand. Parallel South

hairs

on W. face, dug pits 18
x 18 x 12 ins. N. E + W. of post
5 1/2 ft. dist, and raised a
mound of earth 2 ft. high
4 1/2 ft. base around post.

Surface rolling
Soil 3rd to 4th rate
Grass fine

West on South bdy. of S. 34.
Wa 13° E.

Ascend gradually

10.00
Deposited a marked stone
12 ins. in the ground for
Stand 44 sec. cor. dug pits 18 x 18
x 12 ins. E + W. of post 5 1/2 ft.
dist. and raised a mound of

through Range 5 East.

larine

each $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base over it,
In E. pit drove a stake 2 ft. long
2 ins. sq. 12 ins. in the ground
marked S. 6. 44 S. on N. face.

80.00

Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in the
ground for Stand. Cor. to Secs.
33 & 34. marked S. 6. T 20 S. R 8 E.
on N. S 34 on E. and S. 33 on W.
faces with 3 notches on E & W.
faces, dug pits $18 \times 18 \times 12$ ins. N. E.
& W. of Post $5\frac{1}{2}$ ft. dist, and
raised a mound of earth 2
ft. high $4\frac{1}{2}$ ft. base around frost

Surface rolling

Soil 3^{rd} to 4^{th} rate

Grass fine

Fourth Stand. Parallel. South

chains

West on South bdy. of Sec 33.
W a 13° E.

Ascend gradually.

70.00

Deposited a marked stone 12 ins. in the ground for Stand. $\frac{1}{4}$ Sec. cor. dug pits 18 x 18 x 12 ins. E & W of Cor. 5 $\frac{1}{2}$ ft. dist. and raised a mound of earth 1 $\frac{1}{2}$ ft. high. 3 $\frac{1}{2}$ ft. base on it. In E. pit drove a stake 2 ft. long 2 ins. sq. 12 ins. in the ground marked S. C. 145. on W. face.

0.00

Set a Post 4 ft. long 4 ins. sq. with marked stone 12 ins. in in the ground for Stand. cor. to Secs. 32 & 33. marked S. C. 120 S. R & E. on N. S 33 on E. and S 32 on W. face with

through Range SEast.

Lans

4 notches on E. and 2 notches on W.
faces, dug pits $18 \times 18 \times 12$ ins. N.E. & W.
of post. $5\frac{1}{2}$ ft. dist. and raised a
mound of earth 2 ft. high $4\frac{1}{2}$ ft.
base around post.

Surface. rolling
Soil 3^{rd} /₁₁ to 4^{th} /₁₁ rate
Grass fine

West on South bay. of Sec. 32.
W 13° E.

Ascend gradually.

10.00 Deposited a marked stone 12
ins. in the ground. for Stand. $11/4$
Sec. cor. dug pits $18 \times 18 \times 12$ ins. E & W.
of cor. $5\frac{1}{2}$ ft. dist. and raised a
mound of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$

Fourth Stand Parallel South

chassis

80.00

base over it. In E. pit drove
a stake 2 ft. long 2 ins. sq.
12 ins. in the ground
marked ^{S. 6} 4 S. on W. face
Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in
the ground for Stand. cor. to
Secs. 31 & 32. marked S. 6. 200
R. S. E. on N. S 32 on E. and
S 31 on W. faces with 5 notches
on E. and 1 notch on W. faces.
dug pits 18x18x12 ins. N. E. + W. of
post. 5 1/2 ft. dist. and raised
a mound of earth 2 ft. high
4 1/2 ft. base around post.
Surface rolling
Soil 3 rd to 4 th rate.
Grass fine.

through Range & East

Chains

West on South Ady. of Sec. 31
N α 13 $^{\circ}$ E.

Ascend gradually.

40.00

Deposited a marked stone 12 ins in the ground for Stand $\frac{1}{4}$ Sec. cor. dug pits 18x18x12 ins. E & W. of cor. 5 $\frac{1}{2}$ ft. dist, and raised a mound of earth 1 $\frac{1}{2}$ ft. high 3 $\frac{1}{2}$ ft. base north. In E. pit drove a stake 2 ft. long 2 ins. sq. 12 ins. in the ground marked S 65 $\frac{1}{2}$ S. on N. face.

80.00

Set a Post 4 ft. long 4 ins. sq. with marked stone 12 ins. in the ground for Stand. cor. to T $\frac{1}{2}$ 20 S. R α 74 $\frac{1}{2}$ E marked S. 6. T $\frac{1}{2}$ 20 S on N. R 8 $\frac{1}{2}$ E. S 31 on E. R 7 $\frac{1}{2}$ E. S 36 on W. faces with 6 notches on N. E & W. faces. dug pits 18x18x12 ins. N. E & W. of post. 6 ft. dist.

Fourth Stand, Parallel South

Chains

cross-wise on each line and raised
a mound of earth $2\frac{1}{2}$ ft. high
5 ft. base around post.

Sugar loaf peak bears $S 87^{\circ} 30' W$.

Baboquivadi peak bears $N 70^{\circ} 8' W$.

beers Colocol.. .. $N 73^{\circ} 31' E$.

This same peak bears
due north of Cor to Re. 10+116.

Surface rolling

Soil 3rd to 4th rate

Grass fair

There is fine grass for miles
N + S. of the line, but no trees
and no brush,

The soil is poor, and
no water was seen on the

BOOK 184
through Range & East

Charlie

surface, but by appearances it
could be had by sinking a few
feet.

I carefully examined the
adjustments of my solar trans-
sit particularly the latitude and
reversing apparatus and found
them correct.

April 21st / 1885 -

From the Stand. cor. to Twp
20 S. R2. 7 & 8 E. just established by
me. From West. on South bay of
Sec. 36

N 13° E.

Fourth Stand, Parallel South

Chains

40.00

Deposited a marked stone 12
ins. in the ground. for Stand
1/4 Sec. cor. dug pits 18x18x12 ins
E & W. of stone 5 1/2 ft. dist. and
raised a mound of earth 1 1/2 ft.
high 3 1/2 ft. base over it. In E.
pit drove a stake 2 ft. long 2 ins.
sq. 12 ins. in the ground marked
S.E. 1/4 S. on N. face.

80.00

Set a Post 4 ft. long 4 ins
sq. with marked Stone 12
ins. in the ground for Stand
cor. to Secs. 35 & 36. marked S. 1/4
T20 S. R. 7 E. on N. S. 36 on E.
and S. 35 on W. faces. with 1
notch on E. and 5 notches on W.
faces. dug pits 18x18x12 ins. N. E. 1/4
of post. 5 1/2 ft. dist. and raised a

through Range 7 East

Chains

mound of earth 2 ft. high 4 1/2 ft. base around post.

Surface rolling
Soil 3rd to 4th rate
Grass fine

West on South ldy. of Sec. 35
2 1/2 13° E.

- 31.50 Cross Dry Wash course S.E.
33.50 Cross trail bears N + S,
38.00 Cross trail bears N 2/4 S.E.
40.00 Deposited a marked stone 12 ins. the ground ^{stand} for 1/4 Sec. cor, dug fur 18x18x12 ins. E 4 W. of stone 5 1/2 ft. dist. and raised a mound of earth 1 ft. high 3 1/2 ft. base over it. In E put down a stake 2 ft. long 2 ins.

Fourth Stand: Parallel. South

Chains

80.00

12 ins. in the ground
marked S. 6th S. on N. face
Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in
the ground for stand. cor. to
Sec. 34 & 35. marked S. 6.

T20 S. R 7 E. on N. S35 on E.
and S34 on W. faces with
2 notches on E. and 4 notches
on W. edges, dug pits 18x12
ins. N. E & W. of post, 1/2
ft. dist. and raised a mound
of earth 2 ft. high 4 1/2 ft.
base - around post.

Surface rolling

Soil 3rd to 4th rate

Grass fine

through Range 7 East.

Chamiz

West on South bay. of Sec. 34.
 Va 13° E.

Ascend gradually

40.00

Deposited a marked stone 12 ins. in the ground for Stand 44 Sec. corner dug pits 18x18x12 ins. E & W. of stone 5 1/2 ft. dist. and raised a mound of earth 1 1/2 ft. high 3 1/2 ft. base over it. In E. pit drove a stake 2 ft. long 2 ins. sq. 12 ins. in the ground marked S. 44 shown N. face.

80.00

Set a slate stone 16x10x5 ins. 11 ins. in the ground for Stand corner to Secs. 33 & 34. marked S. 44 with 3 notches on E & W. edge dug pits 18x18x12 ins. E & W. of stone 5 1/2 ft. dist. and raised a

Fourth Stand, Parallel South

Chains

mound of earth 2 ft. high
4 1/2 ft. base alongside.
from which

A Mesquite tree 8 ins. in diam.
bears N 38° E. 25 links dist
marked T20 S. R 7 E. S34, B, T.

A Mesquite tree bears N 40° W.
180 links dist. marked,
T20 S. R 7 E. S33, B, T.

Surface rolling
Soil 3rd to 4th rate
Grass fine

West on South bay. of S33.
T9 13° E.

Ascend gradually.

Ascend slope at an angle of 10°

4.50

BOOK 1434
through Range 7 East.

Chains

- 36.00 Ascend slope at an angle of 20°
- 40.00 After making the correct allowance
I set a slate stone 30×86 ins. $2 \frac{1}{2}$
ins. in the ground for Stand $1 \frac{1}{4}$
Sec. cor. marked S.C. $1 \frac{1}{4}$ on N. face
and raised a mound of stone
alongside, on steep S. slope.
A spring of water in a gulch
bears South 3 Chs. dist. from
this point. ascend slope at
an angle of 35°
- 65.00 Top of main ridge of the
Babogquivari Mountains bears
N + S.
Sugar loaf peak bears S. about
5 Chains dist. and descend
slope at an angle of 15°
- 78.00 Foot of slope

Fourth Stand, Parallel, South

Chains

80.00

After making the correct allowance. I. Set a slate stone $25 \times 12 \times 6$ ins. 17 ins. in the ground for Stand cor. to Secs. 32 & 33, marked with 4 notches on E. and 2 notches on W. edges. and raised a mound of stone along side.

Surface mountainous
Soil $\frac{1}{4}$ rate & rocky
Grass good

West on South ldy. of S32
N 91° 3'E.

26.00

On ridge bearing E+W.
Descend slope at an angle

through Range 7 East.

Chamis

of 28°

36.50

Cross Dry Wash course S.W. and ascend slope at an angle of 20°

40.00

After making the correct allowance I set a slate stone $26 \times 8 \times 7$ ins.

19 ins. in the ground for Station

114 Sec. cor. marked S.L. 114 on N face. and raised a mound of stone alongside, and continue to

60.00

ascend slope at an angle of 20°
Top of slope and descend at an angle of 50°

68.00

Foot of slope and along steep and rocky side hill.

80.00

After making the correct allowance I set a black rock in place 18×18 ins. above the ground which I marked S.C. with a cross (+)

Fourth Stand, Parallel South

Chains

at exact cor. point, for Stone
cor. to Secs. 31 + 32. with 5
notches on E. and 1 notch on
W. edge. and raised a
mound of stone alongside
on black rock point.

Surface mountainous
Soil rocky
Grass fair

West on South bay.
of Sec. 31.

$\approx 13^{\circ}E$.

Along steep South slope
Descend slope at an angle
of 25°

7.00

21.00

Foot of slope and cross Dry

through Range 7 East.

Chamie

Wash course S. W.

35.00

Ascend slope at an angle of 15°

40.00

After making the correct allowance. I set a Granite stone $18 \times 16 \times 10$ in. 11 in. in the ground for Stand. 4th Sec. cor. marked S. b. on N. face. and raised a mound of stone alongside.

43.50

Top of slope bears E & W. and descend slope at an angle of 80°

80.00

Set a Granite stone $48 \times 36 \times 4$ in. 38 in. in the ground for Stand. cor. to Tps. 20 S. R 6 & 7 E marked S. b. with 6 notches on N. E & W edges. and raised a mound of stone alongside.

East part of the Quijotoa

Fourth Stand. Parallel South

Chains

mountain bears $N42^{\circ}22'W$.
West peak of same range
bears $N47^{\circ}45'W$.

Surface mountainous
Soil 4th rate
Grass fair
Dense Mesquite + \odot Cotillo
bush

There is fine grass to the
very top of the Baboquivari
range. The East portion
is covered with considerable
Oak + Mesquite trees.

Water was found at the
East foot of the range.

through Range East.

Charis

The grass is good for miles
N + S. of the line.

The surface is very rough
on the East side, and rocky on
the West side.

Considerable evidence of
minerals in the mountains, and
in the foot. hills.

April 22nd / 11 1885

From the Stand cor. to Tps.
20 S. R. 6 + 7 E. just established
by me. I run West on South
lay of Sec. 36

W 13° E.

Descend along rocky ridge
bear E + W,

Fourth Stand. Parallel South

chain

40.00

A Palo Verde tree 4 ins. in diam. which I marked S. 6. 1/4 S. on N. face for Stand. 14 Sec. cor. dug pits 18x18x12 ins. E + W. of tree 5 1/2 ft. dist, and raised a mound of earth around tree.

80.00

Set a Granite stone 20x8x4 ins. 14 ins. in the ground for Stand Cor. to Secs. 35 + 36 marked. S. 6. with 1 notch on E. and 5 notches on W. edges, and raised a mound of stone alongside.

Low hills on which can be seen fields of grain below N. W. about 10 miles dist.

A trail about 2 miles North leads to water, and goes

through Range 6 East.

Chamis

East through the mountains

Surface mountainous

Soil 4th rate

Grass fair

Dense mesquite & acacia brush

West on South bdy. of Sec 3
T₉ R₃ E.

Descend along ridge bears E & W

15.00

Foot of slope.

20.00

cross Dry Wash course Westerly

25.00

Along Dry Wash course Westerly

40.00

Set a L. iron stone 30 x 25 x 5 in.

20 in. in the ground for station

1/4 Sec. cor. marked. S. C. 1/4 on N.

face. and raised a mound of
stone alongside.

Fourth Stand, Parallel South

Charris

marked stone 12 in. in the ground for Stand cor. to Secs. 33 & 34. marked S. 6. T20 S. R 6 E. on N. S 34 on E. and S. 33 on W. faces with 3 notches on E & W. faces, dug pits 18 x 18 x 12 in. N. E & W. of Post. 5 1/2 ft. dist. and raised a mound of earth 2 ft. high 4 1/2 ft. base around post, from which,

A Mesquite tree 8 in. in diam bears N 45° W. 110 links dist marked T20 S. R 6 E. S 33, C. T.

Surface level

S dil 2nd to 3rd rate

Scattering Mesquite brush

through Range 6 East

Chains

West on South bdy. of Sec. 33
W α 13 $^{\circ}$ E.

Descend gradually

40.00

Deposited a marked stone 12 in.
in the ground for Stand. $\frac{1}{4}$ S.
Cor. dug pits 18 \times 18 \times 12 ins. E α E
of Cor. 5 $\frac{1}{2}$ ft. dist. and raised
mound of earth 1 $\frac{1}{2}$ ft. high
ft. base over it. In E. pit drove
a stake 2 ft. long 2 ins. sq.
ins. in the ground marked
S. 6 $\frac{1}{4}$ S. on N. face, from which
A mesquite tree 6 ins. in diam
bears N 45 $^{\circ}$ E. 75 links dist.
marked S. 6 $\frac{1}{4}$ S. B. T.

79.50

A Mesquite tree 4 ins. in diam

80.00

Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in

Fourth Stand, Parallel South

Chairs

the ground for Stand, cor
cor. to Secs. 32 + 33, marked
S. 6. T20S. R6E. on N. S33
on E. and S32 on W. faces
with 4 notches on E. and
2 notches on W. faces, dug
pits 18x18x12 in, N. E + W. of
post 5 1/2 ft. dist. and raised a
mound of earth 2 ft. high
4 1/2 ft. base around post,
from which

A mesquite tree 4 in. in
diam bears East 50 links
dist. marked T20S. R6E.
S33 B. T.

Surface rolling
Soil 3rd to 4th rate
Grass poor.

through Range 6 East.

Chamie

West on South bay. of Sec. 32
T₉ 13⁰⁰ E.

40.00

Deposited a marked stone 12
ins. in the ground for Stand
1/4 Sec. cor, dug pits 18x18x12 ins
E+W of stone 3 1/2 ft. dist. and
raised a mound of earth 1 1/2
ft. high 3 1/2 ft. base over it. In
E. pit drove a stake 2 ft. long
2 ins. sq. 12 ins. in the ground
marked S. b. 1/4 S. on N. face.
from which, in the

A Mesquite tree 15 ins. in diam
bears N 70° W. 170 links. dist.
marked S. b. 1/4 S. B. T.

50.00

cross trail bears N. W. + S. E

72.00

cross trail bears N. + S.

Fourth Stand. Parallel South

chains
 20.00

Set a Post 4 ft. long 4 ins. sq. with marked stone 12 ins. in the ground, for Stand. cor. to Secs. 31 & 32. marked S. 6. T20 S. R 6 E. on N. S 32 on E. and S. 31 on W. faces with 5 notches on E. and 1 notch on W. faces, dug pits 18 x 18 x 12 ins. N. E & W. of post $5\frac{1}{2}$ ft. dist. and raised a mound of earth 2 ft. high $4\frac{1}{2}$ ft. base around post, from which a Mesquite tree 8 ins. in diam. bears $N 8^{\circ} W. 118$ links. dist. marked.

T20 S. R 6 E S 31, B. T.

Surface rolling
 Soil $3\frac{1}{4}$ to $4\frac{1}{4}$ rate
 Grass poor

through Range 6 East

Channi

West on South bay. of Sec 31
R 13 E

40.00 A Mesquite tree 6 ins. in diam
which I marked S.C 14 S. on N. face
for Stand. 1/4 Sec. cor. dug pits
18x18x12 ins. E+W. of tree 5 1/2 ft. dist.
and raised a mound of earth
around tree.

80.00 Set a post 4 1/2 ft long 4 ins. sq.
with marked stone 12 ins. in the
ground for Stand. cor. to Tps.
20 S. R 5 E. marked S. C.
T 20 S. on N. R 6 E. S 31 on E.
and R 5 E. S. 36 on W. faces with
6 notches on N. E+W. faces, dug
pits 24x18x12 ins. cross-wise on
each line N. E+W. of post. 6 ft.

04
Fourth Stand. Parallel. South

Chains

dist. and raised a mound
of earth $2\frac{1}{2}$ ft. high 5 ft.
base around fork from which
A Mesquite tree 8 ins. in diam
bears $N30^{\circ}E$. 1 chain dist.
marked T20 S. R6E. S31B, T1
A Mesquite tree 6 ins. in
diam bears $N45^{\circ}W$. 90 links dist.
marked T20 S. R5E. S36. B, T1
Caboquivari peak bears $N58^{\circ}49'E$
Tuijotōa peak bears $N44^{\circ}22'W$
Sugarloaf peak bears $S88^{\circ}40'E$
Surface rolling
Soil $3\frac{1}{4}$ to $4\frac{1}{4}$ rate
Grass poor

through Range 6 East

Chamiz

There is a fair growth of Mesquite and Palo Verde trees, and cacti of several varieties along the line.

No water was found at the time of the survey.

The surface is mostly rolling, and the soil is not very good. The grass is poor.

I carefully examined the adjustments of my solar transit to-day particularly the latitude and reversing apparatus and found them to be correct.

April 23rd 1885

Fourth Stand, Parallel South

Chains

From the Stand, cor. to
Twp. 20 S. R. 5 & 6 E. just
established by me. From
West on South ldy. of Sec. 36
N. 130 E.

Over level ground

10.00

Cross trail bears N. E & S. W.

40.00

Deposited a marked stone 12
ins. in the ground for Stand,
1/4 Sec. cor. dug pits 18x18x12 ins.
E & W of stone 5 1/2 ft. dist. and
raised a mound of earth 1/2
ft. high 5 1/2 ft. base over it.
In E. pit drove a stake 2 ft.
long 2 ins. sq. 12 ins. in the
ground marked S. 6 1/4 S. on
N. face.

through Range 5 East

Chambers

41.50

Cross trail bears N.W. + S.E.

1.50

Cross trail bears N.E. + S.W.

9.90

Cross road bears N + S.

0.00

Set a Post 4 ft. long 4 in. sq. with marked stone 12 in. in the ground for Stand. Cor. to Secs. 35 + 36, marked S. 6. T 20 S.

R 5 E. on N. S 36 on E. and S 35 on W. faces. with 1 notch on E and 5 notches on W. faces.

dug pits 18 x 18 x 12 in. N.E. + W. of post 5-1/2 ft. dist. and raised a mound of earth 2 ft. high 4-1/2 ft. base around post.

from which

A mesquite tree 8 in. in diam bears N 45° W. 115 links dist. marked T 20 S. R 5 E. S. 35. T. 20 S.

Fourth Stand Parallel South

Chain

Surface level
Soil 2 ⁰⁰⁰/₇ to 3 ⁰⁰/₇ rate
Grass fair

West on South bdy of S 35
of a 30⁰E

7.00

Cross trail bears N + S.

There are several tanks
that bear South about two
miles dist from this point,
but contain no water.

40.00

Deposited a marked stone 12
ins. in the ground for Stand
14 Sec. Cor, dug pits 18 x 18 x 12 ins.
E + W. of stone 5 ¹/₂ ft. dist. and
raised a mound of earth 1 ¹/₂
ft. high 3 ¹/₂ ft. base over it.

through Range 5 East,

Cham's

In E. pit drove a stake 2 ft. long
2 ins. sq. 12 ins. in the ground
marked S. 6 1/4 S. on N. face,
from which,

A Mesquite tree 8 ins. in diam.
bears N 35° E. 80 links. dist. marked
S. 6 1/4 S. B. T.

62.40

cross road bears N. W. & S. E.

80.00

Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in the
ground for Stand. Cor. to Secs.
34 & 35. marked S. 6 1/2 S. R 5 E.
on N. S 35 on E. and S 34 on W.
faces with 2 notches on E. and 4
notches on W. faces, dug pits 8 x 18
x 12 ins. N. E & W of post 5 1/2 ft. dist.
and raised a mound of earth
2 ft. high 4 1/2 ft. base around post

Fourth Stand, Parallel South

Chavis

from which
A Mesquite tree 14 ins. in
diameter bears N 2° E. 140 links
dist. marked T 20 S. R 5 E.
S 35. B. T.

Sand hills about 3 miles
North from this point, and
fields of grain are noticeable
at the S. E. foot of them,
and also deserted Indian
Villages.

Surface level
Soil 4th rate
Grass poor
Dense Mesquite brush

through Range 5 East.

Charris

West on South bay. of Sec. 34
 of $913^{\circ}E$.

Ascend gradually

40.00

Deposited a marked stone 12
 ins. in the ground for Stand.
 $\frac{1}{4}$ Sec. cor. dug pits $18 \times 18 \times 12$ ins. E & W
 of stone $5\frac{1}{2}$ ft. dist. and raised a mound
 of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base over it.
 In E. pit drove a stake 2 ft. long 2 ins.
 sq. 12 ins. in the ground marked S.C. 1440
 on N. face.

80.00

Set a Post 4 ft. 4 ins sq. with
 marked stone 12 ins. in the
 ground for Stand. cor. to Secs.
 33 & 34. marked S. 6, T 20 S. R 5 E.
 on N. S 34 on E. and S 33 on W.
 face with 3 notches on E & W face
 dug pits $18 \times 18 \times 12$ ins. N. E & W. of

Fourth Stand Parallel South

Chains

of Post $5\frac{1}{2}$ ft. dist. and raised
a mound of earth 2 ft. high
 $4\frac{1}{2}$ ft. base around post,
from which,

• A Mesquite tree 4 ins. in diam
bears N 10° E. 1 chain dist,
marked T20 S. R5 E. S34. B. T.

A Mesquite tree 7 ins. in diam
bears N 45° W. 40 links dist,
marked T20 S. R5 E. S33. B. T.

Surface level

Soil 4th rate

Grass poor

Dense Mesquite bush

West on South lay. of Sec 33,
Qa 13 E

through Range 5 East.

Chamie

40.00

Ascend gradually,
Deposited a marked stone 12 ins.
in the ground for Stand $\frac{1}{4}$ Sec. cor.
dug pits 18x18x12 ins. E & W of stone
 $5\frac{1}{2}$ ft. dist. and raised a mound
of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base
over it. In E. pit drove a stake
2 ft. long 2 ins. sq. 12 ins. in
the ground marked S. 6 $\frac{1}{4}$ S. on N. face

80.00

Set a Post 4 ft. long 4 ins. sq. with
marked stone 12 ins. in the ground for
Stand. cor. to Secs. 32 & 33, marked S. 6
T20 S. R 5 E on N. S 33 on E and S 32
on W. faces with 4 notches on E. and
2 notches on W. faces, dug pits 18x18
x12 ins. N. E & W. of post $5\frac{1}{2}$ ft. dist. and
raised a mound of earth 2 ft high $4\frac{1}{2}$ ft.
base around post. from which

17
1908
Fourth Stand, Parallel South

Chains

A Mesquite tree 10 ins. in diam bears N. E. 1 chain dist. marked T20 S. R 5-E. S 33. B. T.

Surface level

Soil 4th rate

Grass poor

Dense Mesquite + Palo Verde brush

West on South. lay. of S 32.
N 13° E.

Ascend gradually.

40.00
Deposited a marked stone 12 ins. in the ground for Stand 44 Sec. cor. dug pits 18x18x12 ins. E & W. of stone 5 1/2 ft. dist. and raised a mound of earth

through Range 5 East.

chain

1 1/2 ft. high 3 1/2 ft. base over it.
In E. pit drove a stake 2 ft. long 2
ins. sq. 12 ins. in the ground
marked S. 6 1/4 S. on N. face,
from which,

A Mesquite tree 12 ins. in. diam.
bears N.W. 35 links dist. marked
S. 6 1/4. S. B. T.

\$0.00

Set a Post 4 ft. long 4 ins. sq.
with marked stone 12 ins. in
the ground for Stand. cor. to Secs
31+32. marked S. 6 1/4 S. R 5 E.
on N. S 32 on E. and S 31 on W
faces with 5 notches on E. and 1
notch on W. faces, dug pits 1 ft. 10
x 12 ins. N. E. & W. of post. 5 1/2
ft. dist. and raised a mound of
earth 2 ft. high 4 1/2 ft. base

Fourth Stand, Parallel South

Chains

around post, from which
a Mesquite tree 12 ins. in diam.
bears $N 2^{\circ} E$. 190 links dist,
marked T 20 S. R 5 E. S 32. P. T.
Surface level
Soil 4th rate
Grass poor
Dense Palo Verde & Mesquite
bush

West on South bdy. of Sec 31
 $N 13^{\circ} E$.

40.00.

Deposited a marked stone
12 ins. in the ground for Stand
114 Sec. dug pits $18 \times 18 \times 12$ ins.
E & W. of Stone $5 \frac{1}{2}$ ft. dist. and
raised a mound of earth $1 \frac{1}{2}$

through Range 5 East,

Chaniz

ft. high $5\frac{1}{2}$ ft. base over it. In E. pit
drew a stake 2 ft. long 2 ins. sq.
12 ins. in the ground marked
S. 6 $1\frac{1}{4}$ S. on N. face

80.00

Set a Post 4 ft. long 4 ins. sq. with
marked stone 12 ins. in the ground
for Stand. cor. to T₂₀ S. R₂₄ E. S₆
marked S. 6. T₂₀ S. on N. R₅ E. S.
31 on E. R₄ E. S₃₆ on W. faces
with 6 notches on N. E + W. faces
dug pits 24 x 18 x 12 ins. Cross-wise
on each line 6 ft. dist. and
raised a mound of earth $2\frac{1}{2}$ ft.
high 5 ft. base around post.

From which

A Palo Verde tree 10 ins. in diam
bears N. $35^{\circ} 4' E$. 216 links. dist.
marked T₂₀ S. R₅ E. S₃₁. B. T₁

Fourth Stand, Parallel South

Cherrie

A Mesquite tree 7 ins. in
diameter bears $N 73^{\circ} 50' W$, 116
links dist. marked.

T20 S. R 4 E. S 36. B. T.
Baboquivari peak bears $N 6^{\circ} E$.

Sugar loaf " " $S 8^{\circ} 15' E$.

East point of the Gujotua
range bears $N 27^{\circ} 45' W$.

High point of short mountain
range bears $S 13^{\circ} E$, this
range bears $N. W + S. E$ and
is about three miles in
length, with highest points
at the $N. W$.

Surface level

Soil 3rd to 4th rate

Grass poor

Dense mesquite brush

through Range 5 East.

A fair growth of Mesquite and Palo Verde trees, and considerable cacti of several varieties are found along the line.

The grass is fair, and the soil is mostly $3\frac{1}{4}$ to $4\frac{1}{4}$ rate

I was unable to continue the line West from this point, as my supply water had given out, and my men and horses being completely exhausted, I sent men to the North, South & West in search of Indian Villages, which are located on the maps, but they returned and reported

BOOK 194
all of the Indian Villages
deserted, and no water to be
found. It was with the
greatest difficulty that we
made our way back, and
finally found water in
the Catoquinari Mountains.

For final route see book No. 2.

U. S. Surveyor General's Office,

Tucson, Arizona, July 27 - 1885

The foregoing Field Notes of the Survey of the

Fourth Standard

Parallel South
through Ranges
5-6-7-8-9-10-11 & 11
East

Of the Gila and Salt River Base and Meridian, Arizona, execu-

ted by Lewis Wolfley

Deputy Surveyor, under his contract of the Twenty eighth

day of February, 1885, having been

critically examined and the necessary corrections and explana-

tions made, the said Field Notes and the surveys they describe

are hereby approved

Ronald Johnson
Surveyor General.