No - 312

BOOK   312

4-671

FIELD NOTES

GENERAL LAND OFFICE.

No - 312

filed

Ordinary Omts. 20/03.

field checked

Palotted Omls. Oct 2/03

Copied by E. V. nov. 17-03.

Compared 11/25/03 2 am WH?

Oaths 11/28/03 W H I

Trans. Dec. 1, 1903

Pub. notice pres. Animal Book

Accounts ck'd by Emb const Jay/04

Oaths for 19 N. R3 E

Copied C. Sn. 2/9/04.

BOOK 312

PRELIMINARY OATHS OF ASSISTANTS.

We, *Joel Anderson*   BOOK   312

and *J. G. Johnson*

do solemnly swear that we will well and faithfully execute the duties of chainmen; 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 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

Subdivisional and exterior lines of townships 20 N. R. 4 E.; 19 N. R's 2, 3, and 6 E.; 18 N. R. 6 E.; and 17 N. R's 5 and 6 E.

BOOK   312

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

Joel Anderson, Chainman.

J. G. Johnson, Chainman.

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____20th_____ day

of _____August_____, 190 2 .

Jas. G. Johnston

[SEAL.]   *Notary Public.*

We, _F. M. Lockwood, C. J. Schwartz_
Hubert Harpham and _Norman Coote_ ^A
do solemnly swear that we will well and truly perform the duties of
flagman and axmen, in the establishment of corners and other duties,
according to instructions given us, to the best of our skill and ability, in
the survey of the _Exterior_ and _Subdivisional_
lines of townships 20 N. R. 4 E.;
19 N. R's 2, 3, and 6 E.; 18 N. R 6 E.;
and 17 N. R's 5 and 6 E.

BOOK _312_

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

F. M. Lockwood ____ _Chairman_, ~~Flagman.~~

C. J. Schwartz ____, Axman.

Hubert Harpham ____, Axman.

Norman Coote ____, ~~Flagman~~ ~~Axman.~~

Subscribed and sworn to before me this _20th_ ____ day

of _August_ ____, 190 _2_.

Jos Johnston

_____ Notary Public.

No - 312

Field Notes
of the survey of the
Subdivision Lines
of
Township No. 19 N., R. No. 6 E.,
of the
Gila and Salt River Base and Meridian,
in the
Territory of Arizona,
as surveyed by
W. Oscar Secor,
U. S. Deputy Surveyor,

Under his contract No. 102,
Dated June 30. 1902.

Survey commenced Sept. 2, 1902
Survey completed Sept. 16, 1902

2

— Assistants —

Joel Anderson Chairman.

A. G. Johnson "

J. M. Lockwood Moundman

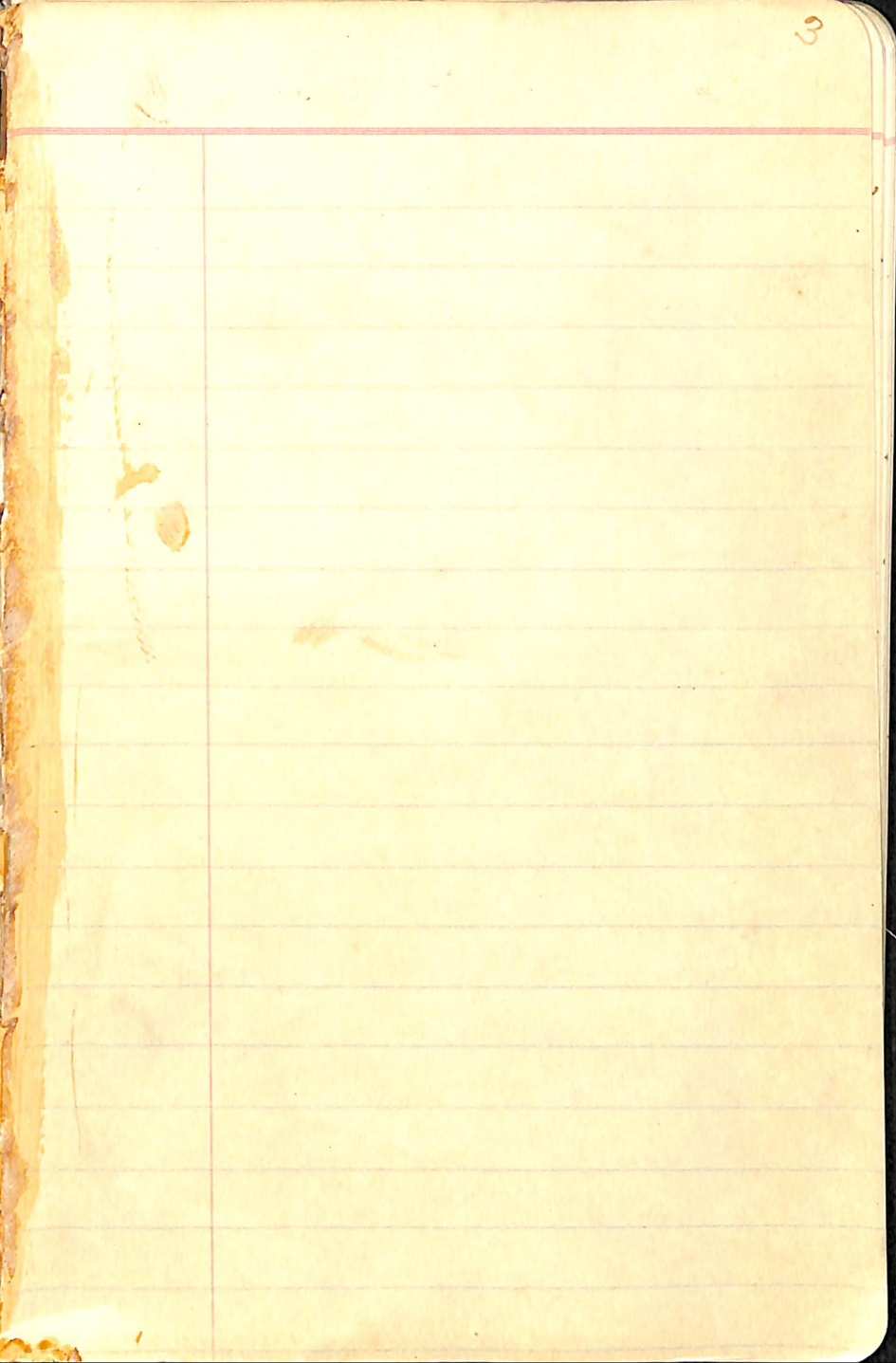C. J. Schwartz Axman

Hubert Harpham "

Norman Cook Flagman

Township *19 N*   Range *6 E*

BOOK 312   County,

NORTH

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

WEST   EAST

SOUTH

4 Sub. Lines T. 19. N. R. 6 E.

Survey commenced Sept. 2, 1902,
and executed with a Buff and
Berger engineer's transit with solar
attachment.

I carefully examine the adjust-
ments of my transit and find the
same to be correct; then, to test
the solar apparatus, by comparing
its indications, resulting from
solar observations made during
a.m. and p.m. hours, with a
true meridian determined by
observations on Polaris, I proceed
as follows:

Near the cor. of secs. 8.9. 16 & 17 Tp.
19 N. R. 6 E., I set off 8° 04' N. on
the decl. arc; and, at noon observe
the sun on the meridian; the
resulting lat. is 35° 03' N.

At 3^h p. m. l. m. t. I set off 8°03'
N. on the decl. arc; 35°03' N. on the
lat. arc and determining a true
meridian with the solar and
mark a point thereof, on a stone
firmly set in the ground, 5 chs.
N. of my station.

Allowing my instrument to re-
main at same point I observe
Polaris at eastern elongation,
in accordance with the Manual
of Instructions, and mark a point
in the line thus determined, on a
stake driven in the ground, 5
chs. N. of my station. $8^h 43$ m. p. m.
time of observation.
                    Sept. 2, 1902.

Sept. 3, 1902. At 7 a. m. I lay
off the azimuth of Polaris, 1°29'
to the west, and mark the true

meridian thus determined, by
cutting a groove in the stone set
Sept. 2, on which the true meridian
falls one half inch west of the
mark determined by the solar.

At 8^h a.m. l. m. t., & set off
$7°48'$ N. on the decl. arc; $35°03'$
N. on the lat. arc, and mark a
point in the true meridian de-
termined with the solar, by a
cross on the stone already set
5 chs. N. of my station; this mark
falls 0.4 ins. east of the true
meridian established by the
Polaris observation.

I therefore conclude that the
adjustments of my instrument
are satisfactory.

The magnetic bearing of the

true meridian, at 8^h a. m. is
N. 13° 55' W., the angle thus determined,
reduced by the table, page 100,
gives the mean mag. decl. 13° 52'
E.

From the cor. of secs. 31 and
32 on the S. bdy., which is a
limestone 12 × 12 × 5 ins. above
ground, marked and witnessed
as described by the Surveyor
General.

I run N. 0° 03' W., between secs.
31 and 32.

Over mountainous land, though
dense pine timber and oak brush.

40.00   Set a lime stone 18 × 14 × 5
ins. in a md. of stone for
¼ sec. cor. marked ¼ on W.
face, from which a spruce

	18 ins. diam. bears N. 20° W. 6 lks dist. marked ¼ S. 31 B.T. A spruce 40 ins. diam. bears S. 56° 30' E. 34 lks. dist. marked ¼ S. 32 B. T.
65. 30.	Descend to gulch.
68 .25	Bottom of gulch, course S. 60° E. ascend.
75. 00	Top of ascent.
80. 00	Set a lime stone 16 × 10 × 6 ins. in a md. of stone for cor. of secs. 29, 30, 31 and 32, marked with one notch on S. and 5 notches on E. edges. from which a pine 36 ins. diam. bears N. 39° 30' W. dist. 116 lks. marked T. 19 N. R. 6 E. S. 30 B. T. A pine 16 ins. diam bears

N. 33° E. dist. 92 lks marked
T. 19 N. R. 6 E. S. 29 B. T.
A pine 32 ins. diam. bears
S. 73° E 100 lks. dist. marked
T. 19 N. R. 6 E, S 32 B. T.
A pine 30 ins. diam. bears
S. 52° W. dist. 148 lks. marked
T. 19 N. R. 6 E. S. 31 B. T.
Land mountainous, 80 chs.
Dense pine 80 chs. Soil
3rd rate.

	West on a random line bet.
	secs. 30 and 31
40.00	Set temp. ¼ sec. cor.
80.07	Intersect W. b'd'y. of Tp. 20
	lks. N. of cor. of secs. 25, 30, 31
	and 36, thence I run
	N. 89° 51' E. on a true line
	bet. secs. 30 and 31 over
	mountainous land, through
	dense pines.
40.035	Set a lime stone 16 × 12 × 7 ins.
	in a md. of stone for ¼ sec.
	cor. marked ¼ on N. face
	from which
	A pine 15 ins. diam. bears
	S. 53° 30' W. dist. 43 lks. marked
	¼ S. 31 B. T.
	An oak 8 ins diam. bears N. 26° E.
	dist. 45 lks marked ¼ S. 30 B. T.

60.00	Descend to gulch.
64.85	Bottom of gulch 150 ft. deep, course S. 40° E. ascend
67.50	Top of ascent.
80.07	Cor. of secs. 29, 30, 31 and 32
	Land mountainous 80.07 chs.
	Dense pines 80.07 chs. Soil
	3rd rate.

Sept. 3. 1902

Sept. 4. At 8^h a. m. l. m. t.
& set off 35° 00' N. on the
lat. arc, 7° 23' N. on the decl.
arc, and determine a true
meridian with the solar
at the cor. of secs. 29, 30, 31
and 32. Thence & run
East on a true line bet.
secs. 29 and 32.
Over mountainous land,
through dense pine timber
and oak brush.

27.40	Edge of precipitous bluff bears N.E. & S.W. descend diagonally.
36.00	Foot of bluff. Flat sandstone bench
36.92	Edge of precipitous bluff. As point for ¼ sec. cor. will come in unsafe place & set a S.S. 30 × 16 × 8 ins. in a

md. of stone for witness cor.
to the ¼ sec. cor. marked W. C.
¼ on N. face, from which

A pine 14 ins. diam. bears
N. 45° W, 36 lks. dist. marked
W. C. ¼ S. 2 9 B. T.

A juniper 6 ins. diam. bears
S. 35° W. 30 lks. dist. marked
W. C. ¼ S 32 B. T.

Descend abruptly.

47.00	Bottom of cañon 1000 ft deep, course N. E., ascend abruptly.
62.30	Top of point, bears S. W. & S. E.

As it is impossible to proceed
further on this line, I set
a S. S. 18 X 16 X 12 ins. in a
md. of stone for witness
cor. to cor. of secs. 28, 29,
32 & 33, marked W. C. with

one notch on S and 4 notches
on E. edges, from which
An oak 8 ins diam. bears
N.70° W. 35 lks. dist. marked
T. 19 N. R. 6 E. W. C. S 29 B.T.
A spruce 30 ins. diam. bears
S. 12° W. 65 lks. dist. marked
T. 19 N. R. 6 E. W. C. S 32 B.T.
No other trees in dist.
Raised a md. of stone 2 ft. base 1½
ft high W. of cor. Pits impracticable

	N. 0° 03' W. bet. secs. 29 & 30
	Ascending through dense pines
12.85	Edge of bluff, bears E. & W.
	Descend abruptly.
17.50	Bottom of gulch 200 ft. deep,
	course E. for 5 chs. then N.E.
	Ascend.
19.40	Top of ascent, descend to gulch
21.25	Bottom of gulch 40 ft. deep,
	course N. E., ascend.
24.00	Top of bluff bears N. E. & S. W.
40.00	Set a lime stone 16 × 10 × 6 ins.
	in a md. of stone for 1/4 sec.
	cor., marked 1/4 on W. face,
	from which
	A pine 38 ins. diam. bears
	N. 78° 30' W. 92 lks. dist.
	marked 1/4 S, 30 B.T.
	An oak 10 ins. diam. bears

S. 52° 30' E. 54 lks dist. marked
¼ S. 29 B.T.

Descend to gulch.

44.25	Bottom of gulch, course S. 70° E. ascend.
49.00	Top of bluff bears N. 70° W & E.
62.00	Edge of bluff bears N. W & S. E. descend abruptly.
65.00	Bottom of cañon, course S.E. ascend
67.65	Top of bluff, bears N. W. & S. E.
76.35	Edge of bluff, bears N. E. & S. W. descend abruptly
80.00	Set a S.S. 20 X 16 X 6 ins. in a md. of stone for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on S and 5 notches on E. edges, from which A spruce 7 ins diam. bears

N. 85° W. dist 50 lks. marked
T. 19 N. R. 6 E. S. 19 B. T.
An oak 5 ins. diam. bears
N. 75° E. dist. 48 lks. marked
T. 19 N. R. 6 E. S 20 B. T.
Land mountainous 80 chs.
Dense pines and oaks 80 chs.
Soil 4th rate.
Raised a mound of stone 2 ft
base 1½ ft high W. of cor. Pits
impracticable. No other trees in
limits

	S. 89° 51' W. on a random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.
79.85	Intersect W. b'dy, Tp. 3 lks. N. of cor. of secs. 19, 24, 25 and 30. Thence I run N. 89° 50' E. on a true line bet. secs 19 and 30 Over mountainous land, through dense pines and oaks.
39.925	Set a lime stone 18×14×6 ins. in a md. of stone for ¼ sec. cor. marked ¼ on N. face, from which An oak 8 ins. diam. bears N. 77° E. dist. 15 lks marked ¼ S. 19. B. T. An oak 7 ins diam. bears S. 20° W. dist. 46 chs. marked

	¼ S. 30 M. T.
70.00	Descend to gulch
75.30	Bottom of gulch course N.E.
	ascend.
79.85	The cor. of secs. 19, 20, 29
	and 30.
	Land mountainous 79.85 chs
	Dense pines and oaks 79.85 chs
	Soil 4th rate.

E. on a true line bet. secs 20 & 29
Ascending dbruptly through
dense oak brush.

3.50   Top of pt. descend steep
slope diagonally.

7.10   Top of spur bears N. E.,
descend abruptly into cove.

13.20   Bottom of cove, ascend pre-
cipitously.

19.00   Top of spur. Descend abruptly.

20.15   Edge of bluff 1500 ft. high.
As I am unable to proceed
further on this line I set
a sandstone 20 X 16 X 10 ins.
in a md. of stone for wit-
ness cor. to the ¼ sec. cor.
marked W.C. ¼ on N. face
from which a spruce 14 ins.
diam. bears N. 4° E. dist.

18 lks. marked W. C. ¼ S
20 B. T.

A spruce 12 ins diam. bears
S. 1° E. dist. 30 lks. marked
W. C. ¼ S. 29 B. T.

Land mountainous 20.15 chs.
Dense pine, spruce and
oak brush 20. 15 chs. Soil
4th rate.

22

N. 0° 03' W. bet. secs. 19 and 20.
Over mountainous land though
dense pine, spruce and oak
brush descending abruptly
to cañon.

2.65 Bottom of cañon 500 ft. deep,
course N. E. ascend prepipitous
bluff.

22.00 Top of bluff bears N. E. & S. W.
continue to ascend.

32.80 Edge of bluff of West Branch
of Oak Creek bears E. & W.
Descend abruptly.

36.59 As the point for the ¼ sec. cor.
comes in an insecure place
I set a sandstone 18 X 12 X 5 ins
in a md. of stone for witness
cor. to the ¼ sec. cor. marked
W. C. ¼ on W. face from which

a spruce 10 ins. diam. bears
N. 65° E. 18 lks. dist. marked
W. C. ¼ S. 20 B. T.
A spruce 5 ins. diam. bears
N. 88° W. dist. 40 lks. marked
W. C. ¼ S 19 B. T.

59.20	West Branch of Oak Creek 15 lks. wide, course E. ascend abruptly.
79.00	Top of tongue from mesa bears S. E. & N. W.
79.16	As the point for sec. cor. comes in deep gulch where it would be difficult to maintain, I set a sandstone 28 × 14 × 6 ins. in a md. of stone for witness cor. to cor. of secs. 17, 18, 19 and 20, marked W. C., with three

notches on S. and 5 notches
on E. edges, from which a
cedar 10 ins. diam. bears
N. 86° E. dist. 12 lks. marked
W. C. T. 19 N. R. 6 E. S. 17 B. T.
A spruce 12 ins. diam. bears
N. 50° W. dist. 31 lks marked
W. C. T. 19 N. R. 6 E. S. 18 B. T.
A pine 6 ins diam. bears
S 25° W. dist 25 lks. marked
W. C. T. 19 N. R. 6 E. S. 19 B. T.
Land mountainous 80 chs.
Dense pines and spruce 80 chs.
Soil 4th rate
                Sept. 4 - 1902
Raised a md. of stone 2 ft. base
1½ ft. high W. of cor. Pits im
practicable. No other trees in
limits.

Sept 5: At 8ʰ a. m. l. m. t.
I set off 34°59' N. on the
lat. arc, 7°03' N. on the
decl. arc, and determine
a true meridian with
the solar at the witness
cor. of secs. 17, 18, 19 & 20.
Because of the impossibility
of running west bet. secs.
18 and 19, I run N. 0°03' W.
bet. secs. 17 and 18 on a
random line.

40.00   Set temp. ¼ sec. cor.
80.22   I fall one link east of
cor. of secs. 7, 8, 17 & 18, thence
I run S. 0°03' E. on a true
line bet. secs. 17 and 18
Over mountainous land,
through dense pine & oak brush

11.35	Gulch, course S.E.
22.00	Gulch, course S.E. ascend
40.11	Set a S.S. 22×14×10 ins. in a md. of stone for ¼ sec. cor. marked ¼ on W. face, from which
	A pine 26 ins. diam. bears N.45°E. dist. 49 lks, marked ¼ S. 17 B.T.
	A pine 30 ins. diam. bears S. 25° W. dist. 38 lks, marked ¼ S. 18 B.T.
44.55	Top of ridge bet. gulches, bears N.W. & S.E.
51.00	Descend steep slope diagonally.
54.50	Bottom of cañon, cours S.E. Ascend.
73.85	Top of ascent. Descend.
78.30	Edge of rim of East Fork of

	Oak Creek bears E. & W.
	Descend precipitously.
80.00	Bottom of gulch 600 ft deep.
81.06	The witness cor. to cor. of secs
	17, 18, 19 & 20.
	Land mountainous, 80.22 chs
	Dense pines 80.22 chs
	Soil 4 th rate

From the cor. of secs. 32 & 33 on
the south B'dy. which is a
quartz rock 6×10 ins. above
ground, marked and witnessed
as described by the Surveyor
General, & run N 0°03' W. bet.
secs. 32 & 33.
Over mountainous land,
through dense pines and oak
brush.

18.50   Edge of rim of cañon, bears
N.W. & S.E. Descend abruptly.

20.48   Set a S.S. 36 × 24 × 12 ins. in
a md. of stone for witness
cor. to the ¼ sec. cor. marked
W.C. ¼ on W. face from which
a spruce 18 ins. diam. bears
S. 15° W. dist. 26 lks marked
W.C. ¼ S. 32 B. T.

An oak 8 ins. diam. bears N.
60° E. 4.8 lks dist. marked
W. C. ¼ S. 33. B. T.
It is impossible to proceed
further on this line.

From the cor. of secs. 33 & 34 on
the S. B'dy. which is a limestone
6 X 12 ins. above ground, marked
and witnessed as described by
the Surveyor General, & run
N. 0° 02' W. bet. secs 33 & 34.
Through dense pine, spruce
and oak brush over mount-
ainous land descending

2.10   Bottom of gulch, course
       N. 75° E. ascend.
20.60 Top of ascent, descend.
40.00 Set a limestone 18 X 12 X 10 ins.
       in a md. of stone for ¼ sec.
       cor. marked ¼ on W. face, from
       which
       A pine 36 ins. diam. bears
       S. 8° W. 12 lks. dist. marked
       ¼ S. 33 B. T.

A pine 10 ins. diam. bears E.
44 lks. dist. marked ¼ S. 34. B.T.
Ascend.

55.55 | Top of ascent, edge of vertical
bluff 1000 ft. high.
Descend precipitously.

61.15 | Bottom of cañon, course
N.E. ascend abruptly.

75.80 | Top of point bears N.W. &
S.W. set a sandstone 16×10
×10 ins. in a md. of stone
for witness cor. of secs. 27,
28, 33 & 34, marked W.C.,
with one notch on S and
3 notches on E. edges, from
which a

A pine 24 ins. diam. bears
N. 80° W. 85 lks. dist, marked
W.C. T. 19 N. R. 6 E. S 33 B.T.

No other trees. Raises a md. of st
2 ft base 1½ ft high W. of cor. Pits impractica

76.10   Edges of perpendicular bluff
2500 ft. high.
It is impossible to proceed
further on this line.
Land mountainous 76.10 cho.
Dense pines, spruce & oak brush
76.10 cho.
Soil 4th rate.
            Sept. 5. 1902

one
ble.

Sept 6: At 8 h a. m. l. m. t.
I set off 6° 40', on the decl.
arc., 35° 03' N. on the lat.
arc; and determine a true
meridian with the solar at
the cor. of secs. 8, 9, 16 & 17.
Thence I run
S. 0° 03' E. bet. secs. 16 & 17.
Through dense pines descanding

40.00 Set a malpais 18 X 14 X 6 ins.
in a md. of stone for ¼ sec.
cor. marked ¼ on W. face,
from which
An oak 10 ins. diam. bears
N. 85° W. dist. 15 lks; marked
¼ S. 17 B. T.
An oak 8 ins. diam. bears
S. 70° E. dist. 18 lks, marked
¼ S. 16 B. T.

34

40.30	Bottom of gulch, course S.E. ascend.
56.00	Top of ascent
80.00	Set a malpais 18 X 12 X 4 ins.

in a md. of stone for cor. of
secs. 16, 17, 20 & 21 marked with
3 notches on S. and 4 notches
on E. edges, from which

A pine 26 ins. diam. bears
N. 16° W. 46 lks. dist. marked
T. 19 N. R. 6 E. S. 17 B T.

An oak 4 ins. diam. bears
N. 43° E. 47 lks. dist. marked
T. 19 N. R. 6 E. S. 16 B. T.

An oak 6 ins. diam. bears
S. 21° E. dist. 106 lks. marked
T. 19 N. R. 6 E. S. 21 B. T.

An oak 6 ins. diam. bears
S. 74° W. 105 lks. dist. marked
T. 19 N. R. 6 E. S. 20 B. T.

Land rolling 80 chs.
Dense pines and oak brush
 80 chs.

W. on a random line bet. secs.
17 & 20

50.00	Set temp. witness ¼ sec. cor.
79.86	Intersect N. & S. line 107 lks.

N. of witness cor. to cor. of secs.
17, 18, 19 & 20, thence I run
N. 89° 50' E. from proper point
for sec. cor. bet. secs. 17 & 20
Over mountainous land.

20.00	Ascend abruptly
30.00	Top of point of mesa. As point

for ¼ sec. cor. will come in
unsafe place, I set a lime
stone 18 X 18 X 6 ins. in a md.
of stone for witness cor. marked
W. C. ¼ on N. face from which
a pine 7 ins diam. bears
S 70° W. 56 lks dist. marked
W. C. ¼ S. 20 B. T. No other trees
Raised a md. of stone 2 ft. base 1½ ft.
high. N of. cor. Pits impracticable.

	Descend precipitously 1200 ft.
64.00	Bottom of cañon, course S.W.
	ascend abruptly
70.00	Top of bluff of mesa, bears
	N. E. & S. W.
79.86	The cor. of secs. 16, 17, 20 & 21
	Land mountainous.
	Soil 4th rate 79.86 chs.
	Sept 6 - 1902

Sept. 7: At 8ʰ a.m. l.m.t.
I set off 6°18″ on the decl. arc;
35°02′ N. on the lat. arc;
and determine a true
meridian with the solar
at the cor. of secs. 16, 17, 20 & 21.
Thence I run S. 0°03′ E. bet.
secs 20 & 21

Through dense pines and
oak brush, over moutainous
land, descending

12, 55	Bottom of cañon, course S. 60° W. ascend abruptly.
18.20	Top of bluff S. side, bears N.E. & S.W. descend
25.00	Bottom of cañon, course W. ascend.
35.75	Top of ascent
40.00	Set a S.S. 18 X 14 X 8 ins., in a

md. of stone for ¼ sec. cor.
marked ¼ on W. face, from which

A pine 18 ins. diam. bears
N. 18° E. dist. 43 lks. marked
¼ S. 21 B. T.

A pine 22 ins. diam. bears
W. 95 lks dist. marked
¼ S. 20. B. T.

60.60	Descend diagonally along W. slope of gulch
70.00	Bottom of gulch, course S. 30° W., ascend diagonally
73.40	Edge of lime stone cliff, bears S.E. & N. W. descend abruptly.
76.45	Gulch course W. ascend a perpendicular cliff 600 ft high
77.81	Top of cliff. Set a S.S. sandstone 18 X 14 X 15 in a md. of stone for witness cor. to cor. of secs 20, 21, 28 & 29

marked W. C. with 2 notches
on S. and 4 notches on E. edges,
from which

A pine 24 ins. diam. bears
S. 60° W. 19 lks. dist. marked
W. C. T. 19 N. R. 6 E. S. 20 B. T.
A spruce 20 ins. diam. bears
N. 45° E. 60 lks. dist. marked
W. C. T. 19 N. R. 6 E. S. 21 B. T.

Land mountainous 80 chs
Dense pines 80 chs
Soil 4th rate.

No other trees in limits. Raised
a mound of stone 2 ft. base 1½
ft. high. It of cor. Pits impractic-
able.

From the cor. of secs. 8, 9, 16 & 17
I run E. on a true line
bet. secs. 9 & 16
Over rolling ground, through
dense pines and oak brush.

40.00 Set a malpais 26 X 12 X 5 ins.
in a md. of stone for ¼ sec.
cor. marked ¼ on N. face,
from which
A pine 28 ins. diam. bears
S. 60° E. 148 lks. dist. marked
¼ S. 16 B. T.
A pine 16 ins. diam. bears
N. 62° W. 54 lks. dist. marked
¼ S. 9 B. T.

80.00 Set a malpais 18 X 12 X 12 ins.
in a md. of stone for cor.
of secs. 9, 10, 15 & 16, marked
with 4 notches on S. and

3 notches on E. edges, from which
An oak 8 ins. diam. bears
S. 0° 30' E. 5 lks. dist. marked
T. 19 N. R. 6 E. S. 15 B. T.
An oak 5 ins. diam. bears
S. 87° W. 28 lks. dist. marked
T. 19 N. R. 6 E. S. 16 B. T.
An oak 14 ins. diam. bears
N. 61° W. 147 lks. dist. marked
T. 19 N. R. 6 E. S. 9 B. T.
A pine 16 ins. diam. bears
N. 50° E. 94 lks. dist. marked
T. 19 N. R. 6 E. S. 10 B. T.
Land rolling. Dense pines
& oaks 80 chs.
Soil 4th rate
Sept. 7 – 1902

Sept. 8: At 8^h a. m. l. m. t.
I set off 5°55' N. on the decl.
arc; 35°03' N. on the lat.
arc; and determine a true
meridian with the solar
at the cor. of secs. 9, 10, 15 & 16
Thence I run

S. 0°02' E. bet secs. 15 & 16
Over mountainous land,
through dense pines and
oak brush.

40.00   Set a malpais 16 × 14 × 6 ins
in a md. of stone for ¼ sec.
cor. marked ¼ on W. face
from which

An oak 6 ins. diam. bears
N. 45° W. 80 lks dist. marked
¼ S. 16 B. T.

A pine 26 ins. diam. bears

S. 35° E. 72 lks dist. marked
¼ S. 15 B. T.

57.00 Edge of bluff of cañon, bears
N.W & S.E. descend

67.60 Bottom of cañon, course
S. 70° E., ascend.

80.00 Set a sandstone 16 X 12 X 8 ins
in a md. of stone for cor. of
secs. 15, 16, 21 & 22 marked with
3 notches on S and E. edges
from which
An oak 7 ins. diam. bears
N. 50° E., dist 95 lks marked
T. 19 N. R. 6 E. S. 15 B. T.
A pine 18 ins. diam. bears
N. 80° W. 31 lks dist. marked
T. 19 N. R. 6 E. S. 16 B. T.
An oak 8 ins. diam. bears
S. 18° E. dist. 83 lks marked

T. 19 N. R. 6 E. S. 22 B. T.
a pine 16 ins. diam. bears
S. 40° W. dist. 177 lks, marked
T. 19 N. R. 6 E. S. 21 B. T.
Land mountainous 80 chs.
Dense pines & oaks 80 chs.
Soil 3rd rate

	W. on a random line bet. secs 16 & 21
40.00	Set temp. ¼ sec. cor.
80.28	The cor. of secs. 16, 17, 20 & 21. Thence I run E. on a true line bet. secs 16 & 21.
40.14	Set a lime stone 18 X 12 X 7 ins in a md. of stone for ¼ sec. cor. marked ¼ on N. face, from which
	A pine 32 ins. diam. bears N. 6° W. dist. 49 lks, marked ¼ S. 16 B. T.
	An oak 6 ins. diam. bears S 18° E, 37 lks dist. marked ¼ S. 21 B. T.
72.25	Gulch, course N.
80.28	The cor. of secs. 15, 16, 21 & 22 Land mountainous 80.28 chs

Dense pines & oaks 80.28 chs
Soil 3rd rate .

S. 0°02' E bet. secs. 21 & 22.
Over mountainous land
through dense pines & oaks,
ascending

23.00 Top of ridge bears N.E.&S.W,
descend steep slope diagonally

40.00 Set a s.s. 22 x 14 x 10 ins in
a md. of stone for ¼ sec.
cor., marked ¼ on W. face,
from which
An oak 8 ins. diam. bears
S. 40° E. dist. 43 lks. marked
¼ S. 22 B.T.
A pine 10 ins. diam. bears
N. 43° W. dist. 17 lks, marked
¼ S. 21 B.T.

44.00 Bottom of gulch, course N.E.
ascend

51.50 Top of ascent, descend

72.70	Bottom of gulch, course S. W. ascend diagonally
80.00	Set a lime stone 26 × 14 × 8 ins in a md. of stone for cor. of secs 21, 22, 27 & 28, marked with 2 notches on S and 3 notches on E edges, from which

A pine 24 ins. diam. bears
S. 45° W. 55 lks dist. marked
T. 19 N. R. 6 E. S. 28 B. T.
An oak 8 ins. diam. bears
N. 42° W. 41 lks dist. marked
T. 19 N. R. 6 E. S. 21 B. T.
An oak 8 ins. diam. bears
N. 28° E. 40 lks. dist. marked
T. 19 N. R. 6 E. S. 22 B. T.
A pine 20 ins. diam. bears
S. 22° E. 35 lks. dist. marked
T. 19 N. R. 6 E. S. 27 B. T.

Land mountainous 80 chs
Dense pines & oaks 80 cho.
Soil 4 th rate .

	S. 0°02' E bet. secs. 27 & 28
	Over mountainous land,
	through dense pines & oak bush
12.20	Edge of precipitous bluff, bears
	W. & S.E. descend
15.15	Bottom of gulch, course S. W
	ascend
18.85	Top of spur
21.35	Edge of bluff of spur 2000 ft high
	Set a S.S. sandstone 24 X 14 X 6 ins. in a
	md. of stone for witness cor.
	to ¼ sec. cor. marked W. C.
	¼ on W. face, from which
	a pine 14 ins. diam. bears
	N. 40° E. dist 48 lks. marked
	W. C. ¼ S. 27 B. T. no other trees in limits.
	Raised a md. of stone 2 ft. base 1½ ft high
	It is impossible to proceed further
	on this line.
	Land mountainous 21.35 cho

Dense pines & oak brush
21.35 cho.
Soil 4 th rate.
    Sept. 8 - 1902

Sept. 9 : At 8ʰ a. m. l. m. t.
☉ set off 5° 33″ on the decl. arc;
35° 01' N. on the lat arc;
and determine a true merid-
ian with the solar at the
cor. of secs. 21, 22, 27 & 28.
Thence ☉ run W. on a true
line bet. secs. 21 & 28.
Over mountainous land,
through dense pines &
oak brush.

3.00	Bottom of gulch, course S. 30° W. ascend
17.35	Top of ascent, descend
31.65	Bottom of gulch, course S. 60° W. ascend diagonally
36.35	Top of ascent
40.00	Set a s.s. 18 × 12 × 8 ins, in a md. of stone for ¼ sec.

cor., marked ¼ on N. face,
from which

A pine 18 ins. diam. bears
N. 12° W. dist 28 lks, marked
¼ S. 21 B. T.

A pine 8 ins. diam. bears
S. 65° W. dist 27 lks marked
¼ S. 28 B. T.

40.30	Descend steep slope
45.45	Bottom of gulch, course S.E.
	ascend steep slope
51.50	Top of ascent, descend
62.00	Bottom of cañon, course
	S. 30° E. ascend
66.65	Top of ascent
70.50	Set a lime stone 13 X 11 X 9 ins
	in a md. of stone for witness
	cor to cor. of secs. 20, 21, 28 & 29
	marked W. C. with 2 notches

on S and 4 notches on E.
edges, from which

An oak 8 ins. diam. bears
N. 68° E. 22 lks dist. marked
W. C. T. 19 N. R. 6 E. S. 21 B.T.
A pine 30 ins. diam. bears
S 11° E. 70 lks. dist. marked
W. C. T. 19 N. R. 6 E. S. 28 B.T.

71.20   Edge of vertical bluff of
mesa 1500 feet high bears
N. & S.

Land mountainous 71.20 chs
Dense pines & oaks 71.20 chs.
Soil 3rd rate.

No other trees in limits; Raised
a md. of stone 2 ft. base 1½ ft
high W of cor. Pits impracticable.

N. 0° 02 W. bet. secs. 9 & 10
Over mountainous land,
through dense pine & oak
timber

40.00   Set a malpais 18 X 16 X 6 ins.
in a md. of stone for ¼ sec.
cor. marked ¼ on W. face,
from which

A pine 32 ins. diam. bears
S. 45° W. one lk dist; marked
¼ S. 9 B.T.

A pine 42 ins. diam. bears
S. 59° E. 45 lks. dist, marked
¼ S 10 B.T.

80.00   Set a malpais 18 X 16 X 6 ins.
in a md. of stone for cor.
of secs. 3,4, 9 & 10 marked
with 3 notches on E. & 5
notches on S. edges, from which

An oak, 6 ins. diam. bears
N. 38° E. 27 lks. dist. marked
T. 19. N. R. 6 E. S. 3 B. T.
A pine 26 ins. diam. bears
N. 15° W. 42 lks. dist. marked
T. 19 N. R. 6 E. S. 4 B. T.
A pine 30 ins. diam. bears
S. 82° W. 57 lks. dist. marked
T. 19 N. R. 6 E. S. 9 B. T.
A pine 8 ins. diam. bears
S. 70° E. 72 lks. dist. marked
T. 19 N. R. 6 E. S. 10 B. T.
Land mountainous 80 chs
Dense pines & oaks 80 chs.
Soil rocky, 4th rate

Sub. Lines S. 19 N. R. 6 E.

	W. on a random line bet. secs 4 & 9.
40.00	Set temp. ¼ sec. cor.
79.66	Intersect N. & S. line 25 lks N. of cor. of secs. 4, 5, 8 & 9. Thence I run:
	N. 89° 49' E. on a true line bet secs. 4 & 9
	Over rolling ground, through dense pines
39.83	Set a malpais 17 X 14 X 5 ins in the ground for ¼ sec. cor. marked ¼ on N. face, from which
	A pine 10 ins. diam. bears N. 1° E. 30 lks. dist. marked ¼ S. 4 B. T.
	A pine 18 ins. diam. bears S. 10° W. 162 lks. dist. marked

¼ S. 9 B. T.

79.66 The cor. of secs 3, 4, 9 & 10

Land rolling   79.66 chs.

Dense pines   79.66 chs

Soil 3rd rate.