

Recd Mar 29, 1894

1.

approved by Hon Comm? Jan 30. 95

1969

100

6961

BOOK 1969

Book I.
4-671

1969

1969

FIELD NOTES

~~GENERAL LAND OFFICE~~

Amended West boundary
_____ of the _____

White Mountain Indian
Reservation - Arizona -

By Charles E. Perkins D.S.

Contract N^o 34.

February 6, 1894.

1969

Field Notes
of the survey of the
Amended West Boundary
of the
White Mountain
Indian Reservation
In the
Territory of Arizona
as surveyed by
Charles E. Perkins,
U.S. Deputy Surveyor
Under his Contract No 34
Dated February 6, 1894

Survey commenced March 10, 1894
Survey completed March 14, 1894

Amended West Boundary of the

Names & Duties of Assistants

Pearl G. Ellison .. Chairman

William G. Shanley Chairman

Edward P. Shanley Assman

Index

Title	Page 1	Mile 14-	Page 43
Mile 1-	4, 5 & 6	" 15-	" 47
" 2-	7	" 16-	" 50
" 3-	9	" 17-	" 54
" 4-	14	" 18-	" 58
" 5-	17	" 19-	" 62
" 6-	20	" 20-	See Index Book II
" 7-	23	" 21-	" " " II
" 8-	26	" 22-	" " " II
" 9-	28		
" 10-	30		
" 11-	34		
" 12-	36		
" 13-	40		

2A
BOOK 1969

Preliminary Oaths of Assistants.

We, Pearl J. Ellison
and William G. Shanley
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 Amended

West Boundary of the
White Mountain Indian
Reservation

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

Pearl J. Ellison Chainman.
William G. Shanley Chainman.
..... Chainman.
..... Chainman.

Subscribed and sworn before me, this 9th
day of March 1894

Charles E. Perkins
Notary Public.

[SEAL.]

U.S. Surveyor

We, Edward P. Shanley 28

BOOK 1969

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

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

Amended West Boundary of the White Mountain Indian Reservation

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

Edward P. Shanley

Subscribed and sworn to before me this 9th

day of March 1894

Charles E. Perkins

Notary Public.

U.S. Surveyor

White Mt Indian Reservation

Haines

In accordance with my special instructions, for the survey of the Amended West Boundary of the White Mt Indian Reservation, of date the 26th February 1894; I proceeded to the summit of Chromo Butte a well known peak in the Apache Range of Mountains, where I found a malpais rock firmly set in the ground and marked and witnessed as described in the notes furnished me by the Surveyor General

At this point on the night of March 9 1894

BOOK 1969

Round West Boundary of the
chains

I observed Polaris at
its western elongation
at 8^h-09^m P.M. and found
its magnetic bearing to be
N 9° 37' W

North end of the needle 9° 37' E

The azimuth is 1° 30' W

The difference is the Va. 8° 07' E

March 9, 1894

From this corner I run

N 45° E on 1st mile

Va. 8° 07' E

6.00 Descend ^{300 ft} abruptly and continue
along the north side of
Chromo Butte

36.00 Cropping of silver bearing
ledge

40.00 Set a sandstone 20x17x14 ins.
16 in the ground for cor
to the 1/2 mile, marked

White Mt Indian Reservation

chains

W.M. I.R. A.W.B. $\frac{1}{2}$ M. on the
south east face, and
raised a mound of stone
2 ft high $3\frac{1}{2}$ ft base
alongside

Pits impracticable

At this point the va.
began to decrease

Va. $7^{\circ} 41' E$.

Ascend gradually 40 ft
and continue along the
N side of Chromo Butte.

71.00 Va N $7^{\circ} 17' E$

Upon examination I found
croppings of iron ore on
Chromo Butte

0.00 Set a sandstone $21 \times 20 \times 4$ ins.
15 ins in the ground for
the cor to 1 mile, marked

Amended West Boundary of the
Chams

W.M.D. R. A.W.B. 1. m on its
S.E. face, and raised a mound
of stone $1\frac{1}{2}$ ft high $2\frac{1}{2}$ ft base
alongside.

Pits impracticable.

Land, mountainous

Soil, 4th rate, producing
a little grass

Timber, scattering scrub
cedar.

The line runs near to the
top along the northern
side of Chromo Butte.

Small ravines fall towards
the north and gradually
enlarge until they reach
a large ravine about
 $\frac{1}{2}$ mile north, which
flows towards the east

White Mt Indian Reservation
chains

N. 45° E. on 2nd mile

On 7° 42' E

Ascend abruptly 200 ft

16.30 Top of spur, of Chrome
Butte, which projects N
and is covered with
croppings of iron ore

On 8° 42' E

Descend 190 ft

32.10 Bed of ravine, course N 16° E

40.00 Set a quartzite rock

21 x 19 x 14 ins, 16 ins in the
ground, for the cor. to
the 1 1/2 mile, marked W.M.I.

R.A.W.B. 1 1/2 m, on its S.E. face,

and raised a mound
of stone 2 1/2 ft high
3 1/2 ft base alongside.

Amended West Boundary of the
chains

Pits impracticable

Va. $10^{\circ}40'E$

Descend 80 ft

43.00 Ravine 160 ft wide 40 ft deep

Course $N4^{\circ}E$.

61.00 Rocky Bluff.

Descend 200 ft abruptly

72.00 Ravine 60 ft wide 20 ft deep

Course North

80.00 Set a sandstone $19 \times 18 \times 16$ ins

1.5 ins in the ground, for
the cor. to 2 miles, marked

W.M. & R.A.W.B. 2 m, on its

S.E. face, and raised a mound
of stone 3 ft high, 4 ft base
alongside.

Pits impracticable

Land, mountainous

Soil, 4th rate producing

White Mt Indian Reservation

chains

some grass and brush
Timber, scattering scrub
cedar.

The line continues, along
the northern side of
Chromo Butte, but
gradually moving away
from the higher portion
of it.

The watershed is towards
the north until a point
is reached where a large
wash, about $\frac{1}{2}$ mile distant
flows towards the $S 81^{\circ} E$.

$N 45^{\circ} E$ on 3rd mile

$Ua 12^{\circ} 38' E$

Descend 220 ft

3280 Bed of Corral Gulch a

Amended West Boundary of the
Chains

stream, or creek containing
cottonwoods and sycamores
but dry on the surface
to a point about $\frac{1}{2}$ mile
to the NW Course $S40^{\circ}E$

33.20 Leave creek bottom and
ascend 250 ft

40.00 Top of ridge Course $S11^{\circ}W$.
Set a sandstone $20 \times 18 \times 10$ in
15 ins. in the ground for
the cor. to the $2\frac{1}{2}$ miles,
marked W.M.S. R. A W B $2\frac{1}{2}$ m.
on its S.E. face, and raised
a mound of stone 2 ft high
3 ft base alongside
Pit impracticable
About $\frac{1}{2}$ mile S of this
point, the eastern slope
of Chromo Butte, reaches

White Mt. Indian Reservation

hams

the general level of
the surrounding
country.

At this corner, I observed
Polaris at its western
elongation at 8^h 5^m P.M.,
and find its magnetic
bearing to be N 14° 08' W
N. end of needle N 14° 08' E,
The azimuth is N 1° 30' W
The difference is the
Variation N. 12° 38' E.

March 10, 1894.

N. 45° E.

Va 12° 38' E.

Descend gradually from
cor. about 75 ft

44.00

Cross a ravine 80 ft
dep 190 ft wide Course S

Amended West Boundary of the
Chains

- Ascend 70 ft
- 54.20 Top of ridge course N 4 S
which 300 yds S of line
turns to the E.
Descend 90 ft
- 61.40 Ravine course S 13° E
Ascend 100 ft
- 63.00 Top of ridge course S 11° E
Descend 40 ft
- 65.80 Ravine, course S 9° E
Ascend 70 ft
- 68.90 Top of ridge course S
Descend 80 ft
- 71.00 Ravine course S 12° W
Ascend 65 ft
- 76.00 Top of ridge course S 4° W
Descend 40
- 78.00 Ravine, course S 9° E
Ascend 70 ft

White Mt. Indian Reservation

BOOK 1969

0.00 Top of ridge, course $38^{\circ}E$
 Set a sandstone $21 \times 18 \times 9$ ins
 16 ins in the ground for
 the cor. to the 3 miles, mkd
 W.M. & R. A W B 3 M on its S.E.
 face and raised a mound
 of stone 3 ft high $4\frac{1}{2}$ ft base
 alongside

Pit impracticable

Land mountainous

Soil 4th rate, gravelly
 producing some grass
 timber, scattering cedar
 and a few cottonwoods
 in Corral Gulch.

The line

Having left the vicinity
 of Chromo Butte the
 land has become more
 rolling

BOOK 1969

Amended West Boundary of the
Chavis

but is still rough
and rocky; The rooms
and ridges fall in a
southerly direction to
a large wash less than
 $\frac{1}{2}$ mile distant which
runs easterly

About $\frac{1}{2}$ mile towards the
N is a castellated peak

N 45° E on 4th mile

Val $12^{\circ} 38'$ E

Descend 60 ft

3.00 Ravine, course S 30° E

Ascend 150 ft

9.20 Top of ridge, course S 30° E

Descend abruptly 350 ft

26.00 Bottom of large ravine
containing cottonwoods, and

White Mt. Indian Reservation

Chains

a spring of fresh water
about 100 yds S. of the line
Near this spring is the
cropping of a small
silver-bearing ledge

27.30 Leave bottom of ravine Course S.

Ascend 450 ft

40.00 Top of large ridge Course
S 40° E.

Set a sandstone 20x18x12 ins
16 ins. in the ground for
the cor. to the 3 1/2 miles,

Mkd. W.M.I.R. A.W.B. 3 1/2 M., on
its S.E. face, and raised a
mound of stone 3 1/2 ft high
4 1/2 ft base alongside
Pit impracticable

Descend 250 ft

51.00 Bottom of large ravine, Course S 11° E.

Amended West Boundary of the
 Charis

Ascend 150 ft

5300 Cross a ravine 40 ft
 deep 160 ft wide course $S 20^{\circ} W$
 Ascend 200 ft

5800 Top of ridge course SW
 Descend 190 ft

6500 Ravine, course SW .

Ascend 250 ft

8000 Top ridge, course $S 50^{\circ} W$

Set a slate stone $20 \times 18 \times 10$ ins

16 ins in the ground for the
 cor to the 4 miles, marked

W.M. I. R. A.W.B. 4.M. on its SE

face, and raised a mound
 of stone 3 ft high, 4 ft base
 alongside

Pat impracticable.

Land, rolling ridges
 and rocky ravines

5th Mile

17

BOOK 1969

White Mt. Indian Reservation

Soil, 4th rate, gravelly
but good grazing.

Timber, scattering cedar
and cottonwoods in
some of the ravines
The watershed is
southerly in direction

N 45° E on 5th mile

✓ Va. N 12° 38' E

Ascend 180 ft

4.40 Top of ridge course N 48° W

Descend 190 ft

9.12 Ravine, course N 70° W

Ascend 80 ft

9.60 Top of ridge course N 40° W

Descend. 90 ft

3.00 Ravine course N

Ascend 100 ft

Amended West & Boundary of the

Chains	
16.00	Top of rocky hill Descend 110 ft.
22.00	Ravine Course N 10° W Ascend 80 ft
34.00	Top of ridge Course N 20° W Descend 110 ft
36.00	Ravine Course N 17° W Ascend 20 ft
40.00	Set a sandstone 18x16x6 ins 14 ins in the ground, for the cor. to the 4½ miles, marked W.M. I.R. A.W.B. 4½ M., on its S.E. face, and raised a mound of stone 2½ ft high, 3½ ft base alongside Pit impracticable Ascend 90 ft
43.10	Top of ridge course N. 50° W. Descend 80 ft

White Mt Indian Reservation

BOOK 1969

chains

52.11

Ravine course $S 6^{\circ} W$.

54.00

Ascend side of stony, pointed hill 300 ft

6.00

Set a syenite stone

22x18x6 ins, 17 ins. in the

ground, for the corner to the 5 miles, marked W.M. & R.A.W.

B. 5 M on its S.E. face,

A cedar 20 ins. in diam.

bears $N 43^{\circ} E$, 150 lbs distant,marked W.M. & R.A.W. B. 5 M. B.T.

No other trees within limit

Raised a mound of stone

3 ft high, 4 ft base, alongside

Pits impracticable

Land, high stony rolling hills, and deep ravines

Soil 4th rate producing good grass

BOOK 1969

Amended West Boundary of the
Chains

Timber scattering cedar
and pinon

The ravines run in
a general NW direction -
into a large ravine $\frac{1}{2}$ to 1^m
distant which runs SW
and crosses this line
near to the point of
beginning of this mile

Three high pointed hills
lie $\frac{1}{4} m$, $\frac{3}{4} m$, and $1\frac{1}{2} m$, S.E.

✓ N $45^\circ E$ on 6th mile

Va. N $12^\circ 38' E$

Ascend 15 ft

1.55 Descend 600 ft down a
rocky ravine which runs
N $47^\circ E$

18.00 Bed of Seven Mile Water Creek

White Mt Indian Reservation

- Course S 70° E
- This is a stream of clear running water; the San Carlos and McMullanville wagon road follows the course of its bed.
- 0.40 Begin abrupt ascent
Ascend 400 ft
- 8.00 Top of ridge course S.
Descend 40 ft
- 10.10 Ravine Course S
Ascend 60 ft
- 13.00 Top of ridge course S
Descend 160 ft
- 14.50 Set a granite stone 22 x 20 x 10 ins
16 ins in the ground, for
the cor. to the 5 1/2 miles, mhd.
W.N. & R.A.W.B. 5 1/2 M., on its S.E. face
and raised a mound of stone
2 ft high 3 ft base, alongside

Annexed West Boundary of the
chains

Pit impracticable

Ascend 100 ft

46.00 Top of rocky ridge Course $S 10^{\circ} E$

50.10 Cross small ravine 20 ft deep -
80 ft wide Course $S 8^{\circ} E$

Ascend 60 ft

55.30 Top of ridge Course S

Descend 90 ft

60.20 Ravine Course $S 10^{\circ} W$

Ascend 180 ft

71.00 Top of ridge Course $S 20^{\circ} W$

Descend 250 ft into deep wash

80.00 Set a sandstone 20 x 16 x 8 ins

16 ins in the ground, for
the cor. to the 6 mile, marked
W.M. & R. A.W.B.M., on its S.E. face
from which

A hackberry 6 ins in diam
bears $N 65^{\circ} E$, 40 lbs distant

BOOK 1969

White Mt Indian Reservation

hains

marked W.M.I.R.A.W.B. 6 M.B.T.

No other trees within the limits

Raised a mound of stone
3 ft high, 4 ft. base alongside
Pit impracticable.

Land, rolling hills and
ridges, and deep ravines

Soil, 4th rate stony

Timber, scattering cedar
and pinon, and in the bed
of Seven mile Water Creek, are
Cottonwoods willow Walnuts

N. 45° E. on 7th mile

Pa. 12° 38' E.

- 1.40 Leave bottom of wash
Ascend 300 ft
- 11.00 Top of ridge course S.
Descend 350 ft
- 22.40 Ravine course S 10° W

Amended West Boundary of the
Chamo

Ascend 450 ft

39.20 Top ridge course $S45^{\circ}W$

40.00 Set a sandstone $30 \times 30 \times 10$ ins
23 ins. in the ground
for the corner to the $6\frac{1}{2}$ m.
marked W.M. & R. & W.B. $6\frac{1}{2}$ m. on its
S.E. face, and raised a mound
of stone $2\frac{1}{2}$ ft high, $3\frac{1}{2}$ ft base
alongside

Pit impracticable

Ascend gradually 20 ft ~~40~~

44.00 Rocky Spur 400 ft

Ascend 20 ft

62.13 Top of small hill.

Descend 200 ft along the
N side of a large ridge
course $S43^{\circ}W$

80.00 Bed of dry ravine course
 $S55^{\circ}W$.

White Mt Indian Reservation
 ham

BOOK 1969

Set a sandstone 20x20x4 ins
 16 ins. in the ground for the
 cor. to the 7 mile, marked
 W.M. I.R. A.W. B 7M. on its S.E. face
 and raised a mound of
 stone 4 1/2 ft high, 6 ft base
 alongside, Pib impracticable
 Land, mountainous

Soil stony, gravel 4th rate
 producing excellent grass
 timber, scattering cedar
 and oak.

The ravines on each
 side of the line run in
 all directions, but the
 water shed is generally
 towards the S.W. March 11, 1894

N 45° E. on 8th mile

BOOK 1969

Amended West Boundary of the

Chains

Va. $N 12^{\circ} 38' E$

2.30

Leave bed of ravine

Ascend 250 ft over rocky

S. slope of a high hill

Ascend 100 ft over rock
slides of slate and quartzite

40.00

Set a sandstone $20 \times 20 \times 8$ ins16 ins. in the ground, for
the cor. to the $7\frac{1}{2}$ mile,marked W.N. & R.A.N.B. $7\frac{1}{2}$ M.

on its S.E. face, and raised

a mound of stone 3 ft high

4 ft base alongside

Pit impracticable

Descend 60 ft

45.30

Bed of creek course $S 12^{\circ} W$

50 yds to the N is a small

spring of fresh water

46.00

Leave creek bed

White Mt Indian Reservation

1.00 Begin ascent of high mountain

Ascend 550ft through granite boulders, over decomposed granite

0.00 A granite rock in place $21 \times 18 \times 8$ ft above ground which I mkd for the cor to the S mile, with a cross (X) at the exact cor. point, and also marked W.M. & R.A.W.B. S.M. on its S face, raised a mound of stone $2\frac{1}{2}$ ft high 3 ft base on the top of this granite rock

Pits impracticable
Land mountainous

Amended West. Boundary of the
Chains

and raised a mound of
stone $2\frac{1}{3}$ ft high, 3 ft base
on top of the rock in
place

Pits impracticable
Land, mountainous
Soil 4th rate, producing
fair grass

Timber, scattering cedar
The mountain crossed
by this line runs N and S
and has many castellated
peaks on its western side

✓ N 45° E one 10th mile

✓ Va. N $12^{\circ} 38'$ E

Descent 250 ft over small
ravines, course E; and
granite boulders

White Mt Indian Reservation

- 940 Enter small flat, covered with brush
- Descend gradually 20 ft
- 10.00 Set a syenite stone 18x17x12 ins, 14 ins in the ground for the cor. to 9 1/2 miles, marked W.M. & R.A.W.B. 9 1/2 M on its S.E. face and raised a mound of stone 3 1/2 ft high, 4 1/2 ft base, alongside Pit impracticable
- 14.40 Ravine 40 ft deep 120 ft wide Course S 72° E
- Ascend 90 ft
- 53.80 Top of syenite ridge Course S 84° E
- Descend 160 ft

BOOK 1969

Amended West Boundary of the

Chains

57.00

Enter a flat covered with a thick growth of pine cedar, oak, and cottonwood. About 200 yds S.E. of the line, a large spring of fresh water bubbled out and flows down a ravine course $S 82^{\circ} E$.

80.00

Set a syenite stone $22 \times 16 \times 8$ ins¹⁶ ins in the ground, for the cor. to the 10 mile, mkd. W.M.D.R. A.W.B. 10 M. on its S.E. face from which

A Cottonwood 16 ins in diam. bears $N 9^{\circ} E$, 94 lks dist. marked W.M.D.R. A.W.B. 10 M. B.T. An oak 13 ins. in diam bears $N 41^{\circ} E$ 60 lks dist. mkd.

BOOK 1969

White Mt Indian Reservation

hains

W.M. I.R. A.W.B. 10 M. B.T.

An oak 5 in in diam. bears
N 34° W., 32 lks dist mkd

W.M. I.R. A.W.B. 10 M B.T.

Raised a mound of stone
2½ ft high 3 ft base
alongside

Pits impracticable

Land mountainous

Soil 4th rate. producing
fair grass

Timber: oak pinon, cedar

Wild China, pine and
cottonwoodThe ravines run in
a general southerly
course from high
rolling hills 1 mile N.W.
of the line

BOOK 1969

Amended West Boundary of the

Chains

N 45° E. on 11th mile✓ Va ~~N~~ 12° 38' E.

1.10 Leave flat

Ascend 450 ft

33.00 Top of ridge course S 3° W

Descend 450 ft

over broken ground

40.00 Set a sandstone 20 x 18 x 10 ins. 8

15 ins in the ground, for
the cor. to the 10 1/2 mile,
marked W.M. & P.A.W.B. 10 1/2 ^{M. on}S.E. face, raised a mound of
stone 3 ft high, 4 ft base
along side

Pit impracticable

Descend 90 ft

46.00 Ravine, Course E.

Ascend 100 ft over side
of hill which lies N of line

White Mt Indian Reservation

- 1.90 Descend 70 ft.
Spring of fresh water
which flows S 78° E.
Descend 30 ft.
- 2.00 Bed of dry timbered creek
course S 8° W.
Ascend 300 ft.
- 2.00 Set a granite stone
34 x 29 x 12 ins 25 in in
the ground for the
cor. to the 11 mile, marked
W.M.I.R. A.W.B. 11 M. on its S.E.
face and raised a mound
of stone 3 1/2 ft high, 4 ft
base alongside.
Pit impracticable
Land, mountainous
Timber, scattering scrub
oak and cedar

Amended West Boundary of the
Chains

Soil, 4th rate, producing
good grass

The watershed is
southerly, and easterly
High rolling hills on
all sides.

✓ N. 45° E. on 12th mile

To 12° 38' E

Descend 200 ft

5.00 Ravine course S 81° E

Ascend 200 ft

10.20 Top of ridge course S 82° E

Descend 180 ft

13.10 Ravine course E

Ascend 300 ft over S.E.
side of a high hill

20.80 Top of ascent

Descend 300 ft

White Mt Indian Reservation

- 10.00 Set a syenite stone 20x16x14 ins
15 ins in the ground for
the cor. to the 11 1/2 mile
marked W.M. I.R. A.N.B. 11 1/2 M.,
on its S.E. face, and
raised a mound of
stone 2 1/2 ft high, 3 1/2 ft
base alongside
Pit impracticable
Descent 100 ft
- 47.00 Enter small timbered flat
- 51.00 Leave flat, course
Ascend 500 ft E
- 13.00 Top of ridge, course S 85° E
Descent 300 ft
- 0.00 On the N.E. slope of a
high granite hill I
Set a granite stone
27x26x20 ins, 20 in in

Amended West B. Boundary of the
Chams

the ground for the cor
to the 12 mile which is
an Δ station, marked
W.M. & R.A.W.B. 12 M. Δ on
the S.E. and W.M. & R.A.W.B.
12 M. Δ on its east face
from which

A cedar 13 ins in diam.
bears $S 2^{\circ} 55' W$, 296 lks
dist. marked W.M. & R.A.
W.B. 12 M. Δ B.T.

A cedar 13 ins in diameter
bears $N 24^{\circ} 10' E$, 412 lks
distant, mkd W.M. & R.A.W.
B. 12 M. Δ B.T.

A pinon 19 ins in diam. bears
 $N 10^{\circ} 5' W$, 396 lks dist mkd.
W.M. & R.A.W.B. 12 M. Δ B.T.

A pinon 11 ins. in diam.

White Mt Indian Reservation

hains

bears N 15° W, 334 lks dist

mkd W.M. J. P. A. W. B. 12 M. B. T

Castellated peak bears

S 50° E.

A high round hill bears

S. 72° 30' E

A Redgranite bluff bears

N 28° 30' E

A large hill bears N 46° 15' W

Raised a mound of stone
6 ft high, 8 ft base, alongside

Pits impracticable

Land, mountainous

Soil 4th rate, producing
good grass

Timber scrub oak cedar

and pinon

Rolling granite hills
on all sides.

Amended West Boundary of the
Chains

The watershed is towards the S.E. and about 1/3 of a mile S.E. of this point is a large spring of fresh water which flows down a ravine course $S 76^{\circ} E$.

At this corner I observed Polaris at its western elongation at $7^h 58^m$ P.M. and find its magnetic bearing to be $N 14^{\circ} 04' W$
N. end of needle $14^{\circ} 04' E$.

The azimuth is $1^{\circ} 30' W$
The difference is the $\Delta N. 12^{\circ} 34' E$
March 12, 1894

In accordance with my special instructions

White Mt Indian Reservation

- chains
- ✓ I now run North
 ✓ On $12^{\circ} 34' E$ on 13th mile
 Descend 300 ft
- 6.00 Ravine course $S 81^{\circ} E$.
- 3.00 Ascend 600 ft over
 decomposed granite
- 31.00 Apex of hill
 ✓ Descend 400 ft
- 40.00 Set a syenite stone
 18 X 17 X 14 ins. 13 ins in
 the ground, for the
 cor. to the 12 1/2 mile,
 Mkd. W.M. I. R. A.W.B. 12 1/2 M. on
 its E face and raised
 a mound of stone 3 ft
 high 4 ft. base, alongside
 Pat impracticable
- 41.90 Enter oak timber
 Ravine course $S 62^{\circ} E$.

Amended West Boundary of the

Chains

43.08 Leave oak timber

Ascend 300 ft

51.00 Top of granite ridge Course E.

Descend 400 ft

56.00 Bottom of rocky canon Course E.

Ascend 450 ft

67.00 Ridge course E

Descend 20 ft

67.80 Small Ravine Course E

Ascend 550 ft

80.00 Set a slate stone 26x21x9 ins

19 ins in the ground, for
the cor. to the 13 mile, mkd.

W.M. & R.A.W.B. 13 M. on its E

face, from which

A cedar 6 ins in diam

bears N 74° E 30 lks dist.

mkd. W.M. & R.A.W.B. 13 M. B.T.

A cedar 7 ins in diameter

14th mile

43

BOOK 1969

White Mt Indian Reservation

Lains

bears W., 81 lbs dist inked.

W.M.D. R. A. W.B. 13 M. B.T.

No other tree within limit.

Raised a mound of stone
3 ft high, 4 1/2 ft base
alongside

Pit impracticable.

Land mountainous

Soil 4th rate, produces
some grass

Timber. Live oak, cedar
pinon and pine

High mountains rise
towards the west + about
two miles distant

The water shed is
towards the east

N. on 14th mile

Amended West Boundary of the
Chains

- 1 Sta. ~~N~~ $12^{\circ}34'E$
Ascend 150 ft
- 3.00 Top of ridge. Course $N83^{\circ}E$.
Descend 350 ft
- 10.00 Enter grassy valley which
slopes gradually towards
the E. to a point about
 $\frac{1}{2}$ m. E of the line where
a spring of fresh water
flows down a ravine
towards the E.
- 21.40 Leave valley
Ascend over a spur of
the eastern slope of
Timber Camp Mountain
800 ft
- 40.00 Set a sandstone $25 \times 17 \times 11$ ins.
17 ins in the ground for the
cor. to the $13\frac{1}{2}$ mile mkd

White Mt Indian Reservation
hains

W.M. 2. R. A. W. B. 13 1/2 M. on its
E. face from which
An oak 12 ins in diameter
bears S 88° E., 76 lks dist
mkd W.M. 2. R. A. W. B. 13 1/2 M. B. T.

An oak 13 ins in diameter
bears S 28° E., 86 lks dist
mkd W.M. 2. R. A. W. B. 13 1/2 M. B. T.

An oak 14 ins in diam. bears
S 10° E., 84 lks dist mkd
W.M. 2. R. A. W. B. 13 1/2 M. B. T.

And raised a mound of
stone 2 1/2 ft high 3 1/2 ft base
alongside

Pis impracticable

Ca and gradually 100 ft
over broken land
covered with scattering
oak + cedar

Amended West Boundary of the

chains	
48.00	Summit of slope Course E.
	Descend abruptly 400 ft
68.00	Canon, Course S 85° E.
75.00	Ascend 500 ft
80.00	On edge of rocky slate bluff I

Set a sandstone 20 x 17 x 15 ins in the ground for the cor to the 14 mile, marked W.M. & P.A.W.B. 14 M. on its E face, from which a pinon 14 ins in diam. bears S 7° W. 37 lks dist marked W.M. & P.A.W.B. 14 M. B.T.

An oak 5 in in diam. bears N 6° E, 14 lks dist. mkd W.M. & P.A.W.B. 14 M. B.T.

no other tree within limit

15th mile

BOOK 1969

47

White Mt Indian Reservation

hains

Raised a mound of
stone 2 1/2 ft high 3 1/2 ft
base alongside

Pits impracticable

Land, mountainous

Soil 3rd and 4th rate

covered with good

grass

timber, oak, cedar

and pine

Watershed easterly to

a valley 2 miles distant

North on 15th mile

✓ Va. $\times 12^{\circ} 34' E$.

Ascend 160 ft

11.12 Top of ridge course $S 70^{\circ} E$.

Descend 250 ft

8.50 Bottom of Canon Course E

Amundsen West V. Boundary of the
 Chapp

Ascend 350

40.00 On the side of a malapois
 bluff

Set a malapois stone
 24 X 14 X 6 ins. 18 ins in
 the ground, for the
 cor to 14 1/2 mile, marked
 W.M. I.R. AW.B. 14 1/2 M. on
 its E face, from which
 A cedar 16 ins in diam
 bears S 80° W., 44 lks dist.
 marked W.M. I.R. AW.B
 14 1/2 M. B.T.

A cedar 29 ins in diam.
 bears S 78° E., 68 lks dist
 mkd W.M. I.R. AW.B. 14 1/2 M B.T.

A cedar 13 ins. in diam
 bears S 52° E., 52 lks dist
 Mkd. W.M. I.R. AW.B 14 1/2 M B.T.

White Mt Indian Reservation

- Raised a mound of stone
 4 ft high 5 ft base
 alongside
 Pit impracticable
 Ascend 120 ft
 17.00 Top of broad stony ridge
 covered with good grass Course E
 Descend 150 ft
 12.00 Enter live oak timber
 8.00 Leave timber
 0.00 Set a sandstone 26x12x6 in
 18 in in the ground for the
 cor. to the 15 mile, mkd
 W.M.I.R. A.W.B. 15M on its
 E face, from which
 A cedar 14 ins in diam,
 bears S 26° W, 102 lbs dist.
 mkd W.M.I.R. A.W.B. 15M. P.T.
 An oak 13 ins in diam

BOOK 1969

Amended West Boundary of the
Chains

bears S 5° E, 112 lks dist.

mkd W.M. 2 R. A W. B. 15 N. B. T.

A cedar 19 ins in diam,

bears N 25° E, 162 lks dist.

mkd W.M. 2 R. A W. B. 15 N. B. T.

Raised a mound of stone

3 ft high 4 ft base

alongside

Pit impracticable

Land mountainous

Soil 4th rate producing

good grass

timber oak cedar

and pinon.

North on 16th mile

Va. N 12° 34' E

Descend gradually 80 ft
over a flat valley

BOOK 1969

White Mt Indian Reservation
Chains

with soil of 2nd rate
covered with excellent
grass.

4000 Enter the rocky bed
of a dry creek, which
is heavily timbered with
oak and large pine.
one fourth of a mile
towards the E a
stream of fresh
water rises to the
surface.

This creek flows E
Set a sandstone 20x20x4^{ins}
15 ins in the ground
for the cor. to the
15 $\frac{1}{2}$ mile, marked W.M. & R.
A.W.B. 15 $\frac{1}{2}$ M., on its E face
from which

Amended West Boundary of the
Chairs

An oak 15 ins in diam.
bears E., 47 lks dist.

Mkd. W.M. & R. A.W.B. 15 1/2 M.B.T.

A pine 6 ins in diam.
bears W., 13 lks dist. mkd

W.M. & R. A.W.B. 15 1/2 M.B.T.

An oak 17 ins in diam
bears S 17° W., 11 lks dist.

mkd W.M. & R. A.W.B. 15 1/2 M.B.T.

Raised a mound of stone
4 ft high, 5 ft base
alongside

North
Path impracticable

Ascend 20 ft

43.00 Leave crabs and timber

62.00 Over sandstone ledge
covered with pine timber

63.00 Leave timber

74.00 Enter dry wash and

White Mt Indian Reservation

Chains

pine timber course C.

48.90 As and 20 ft abruptly

20.00 Set a sandstone

19x16x6 ins., 14 ins in

the ground for the

cor. to the 16 mile,

mkd W.M. I.R. A W B 16 M

on its E. face, from which

An oak 8 ins. in diam.

bears S 88° E., 11 lks dist

mkd W.M. I.R. A W. B. 16 M B.T.

An oak 12 ins in diameter

bears W., 23 lks distant

mkd W.M. I.R. A W. B. 16 M. B.T.

An oak 13 in in diameter.

bears N 12° E., 33 lks dist

mkd W.M. I.R. A W. B. 16 M B.T.

Raised a mound of stone

2 ft high 2 1/2 ft base

Amended West E. Boundary of the
Chains

alongside.

Pit impracticable

Land mountainous

Soil 4th rate, gravelly
producing excellent
grass

Timber, oak, cedar and
pine, which increase
in size and quantity
towards the W. and
vice versa towards
the E.

March 13 1894

✓ North on 17th mile

Ca. 12° 34' E

Ascend 20 ft over
flat stony mesa

40.00 Set a sandstone

White Mt Indian Reservation

horns

18 X 16 X 17 ins. 14 ins in the ground, for the cor to the 16 1/2 miles, mhd W.M. I.R. A W.B. 16 1/2 M. on its E. face, from which a cedar 29 ins in diam. bears S 73° W., 173 lbs dist. mhd W.M. I.R. A W.B. 16 1/2 M. B.T.

A cedar 41 ins in diam, bears S 55° 30' E, 92 lbs dist, mhd W.M. I.R. A W.B. 16 1/2 M. B.T.
No other tree within limit.

Raised a mound of stone 3ft high, 4ft base alongside,

Dug pits 18 X 18 X 12 ins

Appended West Boundary of the
Chains

on the N. S. E and W sides
at $5\frac{1}{2}$ ft dist.

Ascend gradually 20 ft
over mesa

64.00 Cross an old trail,
called "Apache Trail"
course NE and SW
Descend 40 ft

67.00 Ravine course E
and turns to the NW
about $\frac{1}{4}$ mile E of line
Ascend 25 ft

73.00 Ridge course E and SW.

80.00 Set a sandstone
27 X X 23 X 4 ins, 22 ins in
the ground for the cor,
to the 17 mile, mkd
N.M. & R. A.W.B. 17M. on its
E face from which

White Mt Indian Reservation

chains

An oak 17 in in diam.
bears S 51° E., 63 lbs dist
mkd. W.M. I. R. A.W.B. 17 M. B.T.

An oak 13 ins in diam
bears S 63° E., 22 lbs dist
mkd. W.M. I. R. A.W.B. 17 M. B.T.

An oak 31 ins. in diam
bears N 33° E., 36 lbs dist
mkd. W.M. I. R. A.W.B. 17 M. B.T.

Raised a mound of
stone 3½ ft high 4½ ft
base, alongside

Pits impracticable
Land, rolling mesas
Soil, 4th rate, producing
good grass

Timber scattering
cedar oak and pine
Watershed, northeasterly

BOOK 1969

Amended West Boundary of the

Chains

✓ North on 18th mile

Ca. 12° 34' E.

Descend abruptly. 700 ft

26.11 Bottom of ravine

27.00 Enter timber

Ascend 650 ft over the western side of a rocky bluff.

37.00 Croppings of silver ore

40.00 Set, on the side of the hill about, one hundred yards W. of the summit

A quartzite stone

23 x 17 x 11 ins 16 ins in the ground for the corner to 17 1/2 miles, marked

W.M. & R. A.W.B. 17 1/2 M. on

its E. face from which
A pine 5 ins in diam.

White Mt Indian Reservation

Chains

bears S 86° W., 17 lbs dist.,
 mkd W.M.I.R. A W B. 17 1/2 M
 B.T.

@ cedar 33 ins in diam.,
 bears S 23° E., 15 lbs dist
 mkd W.M.I.R. A W B. 17 1/2 ^M W B T

@ Pine 7 in in diam. bears
 S 86° W., 13 lbs dist. mkd
 W.M.I.R. A W B. 17 1/2 M. B.T.

Raised a mound of
 stone 2 1/2 ft high 3 1/2 ft
 base alongside

Pits impracticable

Ascend 100 ft

4400 Summit of bluff

Descend 900 ft

5700 Leave timber and
 Enter Cienega valley
 near its W. extremity

Amended West Boundary of the
chains

50.00

Set a sandstone 21x19x15
15 ins in the ground
for the cor to the
18 mile mkd W.M. & R.
A.W.B. 18M. on its E face
from which

An oak 9 in in diam
bears $S 61^{\circ} E$, 93 lks dist.
mkd W.M. & R. A.W.B. 18M. B.T.

A cedar 13 ins in diameter
bears $S 51^{\circ} E$, 102 lks dist
mkd W.M. & R. A.W.B. 18M. B.T.

An oak 12 ins in diam
bears $S 3^{\circ} E$, 89 lks dist.
mkd W.M. & R. A.W.B. 18M. B.T.

Raised a mound of
stone 2 ft high 3 ft base
alongside

Pat impracticable

White Mt Indian Reservation

Chams

Land mountainous

Soil 3rd and 4th

rate producing

excellent grass

Timber, oak cedar

pinon, and pine

Water shed towards

the N.E.

✓ The Cenega Valley lies adjoining to and E of this line, containing many springs of water impregnated with iron, with abundance of cottonwood and sycamore, but no agricultural land worthy of mention

Amended West Boundary of the
ChainsNorth on 19th mileBa. $12^{\circ} 34' E$

Ascend 30 ft

4.00 Top of ridge course E

Descend 100 ft gradually
over rolling mesa

40.00 Set a slate stone

22 x 17 x 9 ins., 17 ins in
the ground, for the
cor. to the 18 $\frac{1}{2}$ mile,
mkd. W.M. & R. A.W.B. 18 $\frac{1}{2}$ M.
on its E face from which
A cedar 17 ins in diam.
bears N $72^{\circ} E$., 122 lks,
dist. mkd. W.M. & R. A.W.B.
18 $\frac{1}{2}$ M. B.T.

A cedar, 8 ins in diam
bears S $7^{\circ} E$., 103 lks dist
mkd. W.M. & R. A.W.B. 18 $\frac{1}{2}$ M B.T.

White Mt Indian Reservation

Chains

A cedar 22 ins in diam.
 bears $S 83^{\circ} E$, 108 lbs dist
 mkd W.M. I.R. A.W. B. $18\frac{1}{2}$ M. B.T.

Raised a mound of
 stone $2\frac{1}{2}$ ft high $3\frac{1}{2}$ ft
 base alongside

Pits impracticable

Over rolling mesa
 which is covered with
 stones

61.00 Brink of canon

Descend abruptly 250 ft

64.00 Bottom of canon Course E.

68.00 Leave bottom of canon

Ascend 250 ft

71.00 Top of ridge Course E.

Descend 150 ft

80.00 In a canon Course

Set a sand stone

16 ins in the

Amended West Boundary of the
White Mt Indian Reservation
Chains

ground for the cor to
the 19 mile, marked
W.M. I. R. A W. B. 19 M. on its
east face, from which
A cedar 29 ins in diam.
bears N 19° E., 68 lks dist.
mkt W.M. I. R. A W. B. 19 M. B.T.

A cedar 8 ins in diam.
bears N 53° E., 54 lks dist.
mkt W.M. I. R. A W. B. 19 M. B.T.

A cedar 9 in in diam.
bears S 68° E., 23 lks dist.
mkt W.M. I. R. A W. B. 19 M. B.T.

Raised a mound of stone
2 ft high 4 ft base, alongside
Pit impracticable

Land, mountainous

Soil, 4th rate, producing good grass
Timber, oak, cedar and pine