

1972

52 R.

AMENDED SOUTH B'DY.  
WHITE MOUNTAIN INDIAN RESERVATION.  
Philip Cantzen.

1972

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1972

**FIELD NOTES**  
GENERAL LAND OFFICE.

1972

*Indexed, Book 1971.*

CONTINUOUS FROM BK 1971

Amended South boundary of the  
White Mountain Indian Reservation

Chains

- 59.70 Gulch, 2 lks. wide, course  
S. S. E.
- 61.00 Gulch, 2 lks. wide, course  
S. E.
- 61.53 Gulch 2 lks. wide, course  
S. E.
- 62.00 Ascend
- 63.00 Tops of ascent, bears  
N. and S.; descend
- 63.90 Foot of descent
- 64.00 Enter dry wash, course  
Easterly
- 67.50 Leave dry wash, course  
Easterly
- 70.00 Enter dry wash, course  
Easterly
- 71.03 Leave dry wash, course  
Easterly
- 71.50 Ascend



Amended South boundary of the  
Chains

82.00

Set a granite  
stone  $26 \times 10 \times 7$  ins.,  
19 ins. in the ground  
for 7 Mile cor. marked  
W. M. S. R. A. S. B. on  
N., 7 M. on E., and  
P. & P. on S. faces,  
and raise a mound  
of stone 5 ft. base,  $2\frac{1}{2}$  ft.  
high, 3 ft. N. of cor.,  
from which

A cedar 30 ins. diam.,  
bears  $N 87\frac{1}{2}^{\circ} E$ , 433 lks.  
dist.; marked W. M.

S. R. A. S. B. 7 M. B. F.

A cedar 28 ins. diam.,  
bears  $N 53^{\circ} E$ , 145 lks.  
dist.; marked W. M.

S. R. A. S. B. 7 M. B. F.

White Mountain Indian Reservation  
Chams

A cedar 12 ins. diam.  
bears  $S 45\frac{1}{2}^{\circ} E$ . 349  
lbs. dist. marked  
W. M. I. R. A. S. B.  
7 M. B. T.

A cedar 15 ins. diam.,  
bears  $N 81\frac{3}{4}^{\circ} W$ . 182 lbs.  
dist. marked W. M.  
I. R. A. S. B. 7 M. B. T.

Land rolling  
Soil gravelly loam,  
3rd rate

Timber, a few  
cedars, undergrowth  
scattering catsclaw and  
palo verde, oak and  
canatillo, coacti,  
mopal, mescal and  
spanish daga.

January 8. 1898

Amended South boundary of  
Chains

- N 79° 21' W, on a true  
line, on 8<sup>th</sup> Mile  
Over rolling land,  
ascending  
1.50 Top of ascent; and  
descend  
2.50 Foot of descent  
3.00 Ascend  
5.50 Top of ascent, bears  
N. and S. descend  
7.00 Foot of descent  
8.50 Enter dry wash,  
course N.E.  
10.20 Leave dry wash,  
course Easterly  
15.80 Dry wash, 10 lks. wide,  
course S.E.  
16.50 Ascend  
17.50 Top of ascent, bears N <sup>79</sup>/<sub>4</sub>



the White Mountain Indian Reservation

- Chambers and descend
- 18.00 Foot of descent
- 18.10 Gulch, 2 lks. wide, course  
N. N. E.
- 18.50 Ascend N. Slope of  
ridge
- 22.00 Top of ascent, 50 ft.  
high, bears N. and S.,  
and descend
- 23.25 Foot of descent,  
Gulch, 6 lks. wide,  
course N. N. E.
- 23.50 Ascend
- 24.50 Gulch, 2 lks. wide,  
course N. N. E.
- 25.50 Dry wash, 4 lks. wide,  
course N.
- 26.50 Top of ascent, bears  
N. and S.

Amended South boundary of the  
Chains

- 26.90 Foot of descent, gulch  
2 lks. wide, course N.
- 27.00 Ascend
- 29.00 Enter scattering  
pinion and canutillo,  
bears N. and S.
- 30.00 Top of ascent, bears  
N. and S.; descend
- 33.20 Leave pinion timber  
and canutillo undergrowth  
and enter dense  
oak undergrowth,  
bears N. and S.
- 34.00 Gulch, 2 lks. wide, course  
N.; and foot of descent
- 34.50 Ascend
- 36.50 Top of ascent, bears  
N. and S. and descend
- 40.00 Set a granite stone



White Mountain Indian Reservation

Chains

25 x 10 x 7 ins., 18 ins.  
 in the ground for  
 7½ Mile Cor., marked  
 W. M. I. R. A. S. B. on  
 N., 7½ M. on E., and  
 P. L. on S. faces;  
 and raise a mound  
 of stone 5 ft. base,  
 2½ ft. high, 3 ft.  
 N. of cor.; from which  
 A pinion 7 ins. diam.  
 bears N37° E., 13 lbs.  
 dist.; marked  
 W. M. I. R. A. S. B. 7½ M. B. S.  
 A pinion 4 ins. diam.  
 bears S19¼° E., 20 lbs.  
 dist. marked W. M.  
 I. R. A. S. B. 7½ M. B. S.  
 A pinion 5 ins., diam.

Amended South boundary of  
Chains

bears  $S 71 \frac{3}{4}^{\circ} W$ , 40 lks  
 dist. marked W. M.  
 E. R. A. S. B.  $7 \frac{1}{2}$  M.  
 B. T.

A pinion, 6 ins.  
 diam., bears  $N 89 \frac{1}{4}^{\circ} W$   
 43 lks. dist. marked  
 W. M. E. R. A. S. B.  $7 \frac{1}{2}$  M.  
 B. T.

42.70 Foot of descent,  
 200 ft. below  $7 \frac{1}{2}$   
 Mile Cor.

44.00 Dry wash, 95 lks.  
 wide, course N.

45.00 Ascend

53.00 Top of ascent 100 ft.  
 high, bears  $N 79^{\circ} W$ .  
 and  $S 79^{\circ} E$ . and descend

55.00 Indications of

the White Mountain Indian Reservation

Chains

- gold and copper
- 58.50 Foot of descent
- 60.00 Leave dense oak  
undergrowth, bears  
N. and S.
- 63.00 Descend along N.  
Slope of ridge
- 66.00 Foot of slope, and  
ascend 300 ft to
- 79.50 Top of ridge, bears  
N. W. and S. E.
- 80.00 Set granite stone  
26x10x7 ins., 19 ins.  
in the ground for  
8 Mile Cor., marked  
W. M. I. R. A. S. B. on  
N., 8 M. on E., and  
P. L. on S. faces,  
and raise a mound



Amended South boundary of the  
Chains

of stone 5 ft. base,  
2½ ft. high, <sup>3ft</sup> N. of cor.,  
from which

A cedar 16 ins. diam.,  
bears  $S 37\frac{1}{2}^{\circ} E$ , 139  
lks. dist., marked  
W. M. S. R. A. S. B. S. M.  
B. T.

A Cedar 16 ins. diam.,  
bears  $S 61\frac{1}{4}^{\circ} E$ , 21 lks  
dist., marked W. M.  
S. R. A. S. B. S. M. B. T.

A cedar 20 ins. diam.,  
bears  $S 20^{\circ} E$ , 76 lks.  
dist. marked W. M.  
S. R. A. S. B. S. M. B. T.

A cedar 15 ins. diam.,  
bears  $N 84\frac{1}{2}^{\circ} E$ , 164  
lks. dist., marked

## White Mountain Indian Reservation

Chains

W. M. P. R. A. S. B.

S. M. B. T.

Land rolling and  
mountainousSoil, gravelly loam,  
3<sup>rd</sup> rateTimber, cedar and  
pinion, under-  
growth pinion,  
oak, and canutillo.Cacti, nopal, spanish  
daga and acotillo.N79°21'W. on a true  
line on 9<sup>th</sup> MileOver mountainous  
land.10 Descend along  
S. Slope of ridge

Amended South Boundary of the  
Chains

- |       |                                      |
|-------|--------------------------------------|
| 3.00  | Gulch 4 lks. wide, course<br>S.      |
| 3.20  | Descend abruptly to                  |
| 3.80  | Gulch 10 lks. wide, course<br>S. E.  |
| 4.10  | Ascend                               |
| 5.00  | Gulch 3 lks. wide, course<br>S. E.   |
| 7.00  | Top of ascent, bears N. E. 1/4 S.    |
| 7.50  | Descend 15 ft. to                    |
| 8.00  | Gulch, 10 lks. wide,<br>course S.    |
| 8.50  | Ascend spur                          |
| 10.00 | Top of spur bears N. W.<br>and S. E. |
| 10.50 | Descend to                           |
| 10.60 | Gulch 10 lks. wide, course S. E.     |
| 10.90 | Ascend                               |
| 12.00 | Top of spur, bears N. E. 1/4 S.      |



## White Mountain Indian Reservation

## Chains

- 12.10 Gulch, 3 lks. wide, course S.
- 13.20 Gulch, 3 lks. wide, course S.
- 14.00 Descend 150 ft.
- 15.70 Foot of descent, and  
gulch 80 lks. wide, course S.E.
- 16.50 Ascend
- 18.00 Gulch 3 lks. wide, course N.E.
- 23.00 Top of ascent, bears  
N.W. and S.E.
- 28.30 Descend to
- 28.50 Cañon, course S. Entirely
- 30.50 Leave cañon and  
along S bank
- 32.50 Bluff, 10 ft. high
- 34.30 Bluff, 18 ft high
- 37.00 Leave S bank of  
cañon and ascend  
to Spur, bearing S.
- 40.00 Set a sand stone

Amended South Boundary of the  
Chains

24 x 16 x 7 ins., 18 ins.  
in the ground for  
8½ Mile Cor., marked  
W. M. S. R. A. S. B. on  
N, 8½ M. on E. and  
P. S. on S. faces,  
and raise a mound  
of stone 5 ft. base, 2½  
ft. high, 3 ft. N. of cor.,  
from which

A piñon 6 ins. diam,  
bears  $S 82^{\circ} 4' E$ . 170 lks  
dist, marked W. M.

S. R. A. S. B. 8½ M. B. S.

A cedar 25 ins. diam,  
bears  $N 5^{\circ} W$ . 186 lks  
dist, marked W. M.

S. R. A. S. B. 8½ M. B. S.

No other trees within

## White Mountain Indian Reservation

Trains

limits

41.00 Top of spur, 300 ft high, bears S, and descend

44.00 Foot of descent, and gulch 10 lks. wide, course S.

44.20 Ascend Spur

44.70 Top of spur, bears S.E., and descend

46.00 Foot of descent, and gulch 10 lks. wide, course S.E.

46.50 Ascend

52.80 Top of ascent, <sup>near N.W. 4 S. P.</sup> 200 ft. high, and descend

67.25 Gulch, 10 lks. wide, course S.E.

67.50 Ascend



Amended South boundary of the  
Chains

- 68.50 Dry wash, 1/2 lks. wide,  
course E.
- 69.00 Top of ascent; and  
descend
- 70.80 Foot of descent; gulch  
1/2 lks. wide, course E. <sup>2nd</sup>  
ascend
- 71.10 Top of ascent
- 74.40 Gulch, 3 lks. wide, course  
S. E.
- 75.70 Gulch, 3 lks. wide, course  
S. E.; and ascend
- 76.50 Top of ascent, bears  
N. W. and S. E.; <sup>2nd</sup> descend
- 78.50 Foot of descent and  
gulch, 20 lks. wide,  
course E.
- 79.00 Ascend
- 79.35 Piñon 8 ins. diam.,

White Mountain Indian Reservation  
 Chains

marked with 2 notches  
 on E. and W. sides

88.00 Set a porphyry stone  
 26 x 12 x 12 ins., 19 ins.  
 in the ground for  
 9 Mile Cor., marked  
 W. M. S. R. A. S. B. on  
 W. & 9 M. on E.  
 and P. S. on S. faces,  
 and raise a mound  
 of stone 5 ft. base,  
 2½ ft. high, 3 ft.  
 N. of cor., from which  
 A pinion, 6 ins. diam.  
 bears N 64° E., 30 lks.  
 dist. marked W. M.  
 S. R. A. S. B. 9 M. B.S.  
 A pinion, 5 ins. diam  
 bears S 33° E., 53 lks.

Amended South boundary of the  
Chains

dist. marked W. M.  
S. R. A. S. B. & M. B. F.

A pinion 10 ins. diam.,  
bears  $S 56^{\circ} W$ . 64 lks.  
dist. marked W. M.

S. R. A. S. B. & M. B. F.  
Cedar 18 ins. diam., bears

$N 21^{\circ} W$ , 37 lks. dist.  
marked W. M. S. R.  
A. S. B. & M. B. F.

Land mountainous  
Soil, gravelly loam,  
3<sup>rd</sup> and 4<sup>th</sup> rate

Timber, pinion, and  
cedar; under growth,  
oak and manzanita.

Cacti, yucca, and  
mescal.

January 9, 1898



## White Mountain Indian Reservation

Chains	
	N 79° 21' W. on a true line on 10 <sup>th</sup> Mile
	Over mountainous land, ascending
2.00	Top of spur, bears S. E.
3.50	Descend
5.50	Foot of descent, gulch 3 lks. wide, course E.
6.00	Ascend
10.00	Top of ascent bears N. W. and S. E., and ascend higher
10.60	Gulch, 4 lks. wide, course S.
12.60	Gulch, 4 lks. wide, course S. E.
14.20	Gulch, 4 lks. wide,

Amended South boundary of the  
Chains

course S. E.

- 15.50 Top of ascent, bears  
 N. W. and S. E., and  
 descend
- 16.50 Foot of descent and  
 canon, 20 lks. wide,  
 course S. E.
- 16.70 Ascend over bluff  
 25 ft. high
- 29.00 Top of ascent,  
 350 ft. high, bears  
 N. and S., and  
 descend
- 32.70 Foot of descent;  
 gulch 10 lks. wide,  
 course S. E.
- 33.00 Ascend. 40 ft
- 35.00 Top of ascent, bears  
 N. and S., and descend

## White Mountain Indian Reservation

Chains

- 37.00 Foot of descent;  
bears N. and S.  
gulch, 8 lks. wide,  
course S. E.
- 37.50 Ascend
- 40.00 Set a porphyry  
stone  $26 \times 16 \times 8$  ins.,  
19 ins. in the ground  
for  $9\frac{1}{2}$  Mile Cor.,  
marked W. M. I.  
R. A. S. B. on N.,  
 $9\frac{1}{2}$  M. on E., and  
P. & D. on S. faces,  
and raise a mound  
of stone 5 ft. base,  
 $2\frac{1}{2}$  ft. high, 3 ft. N.  
of cor., from which  
A pinion 8 ins. diam  
bears  $S 39\frac{1}{2}^{\circ} E.$  131 lks.



Amended South boundary  
Chains

dist. marked W.M.  
S.R.A. S.B.  $9\frac{1}{2}$  M. B.F.  
A cedar 20 ins. diam  
bears  $N78^{\circ}E$ , 122 lks.  
dist. marked W.M.  
S.R.A. S.B.  $9\frac{1}{2}$  M.  
B.F.

A pinian 10 ins. diam  
bears  $N27^{\circ}W$ , 530 lks.  
dist. marked W.M.  
S.R.A. S.B.  $9\frac{1}{2}$  M.  
B.F.

No other trees within  
limits

44.00 Gulch, 3 lks. wide,  
course S.E.

49.00 Top of ascent; bears  
N.W. and S.E., and  
descend along

## of the White Mountain Indian Reservoir

Chains	
	S. Slope of ridge
51.50	Gulch, 3 lks. wide, course S. E.
52.70	Gulch, 4 lks. wide, course S. E.
54.50	Gulch, 2 lks. wide, course S. E.
56.50	Gulch, 10 lks. wide, course S.
58.50	Descend abruptly 80%
61.00	Foot of descent
61.50	Ascend
67.50	Top of ridge, bears N63°E and S63°W and descend
68.00	Enter dense manzana nita and oak under- growth, bears N63°E and S63°W
76.20	Foot of slope, and

Amended South boundary  
Chains

gulch 4 lks. wide,  
course N.

76.50 Ascend

80.00 Set a granite  
stone 26 x 12 x 8 ins.,  
18 ins. in the ground,  
for 10 Mile Cor.,  
marked W. M. P. R.  
A. S. B. on N., 10 M.  
on E., and P. S. on  
S. faces; and raise  
a mound of stone  
5 ft. base, 2½ ft.  
high, 3 ft. N. of cor.  
No trees within  
limits

Land mountainous  
Soil, gravelly loam,  
3<sup>rd</sup> rate.



## of the White Mountain Indian Reservation

Chains

Timber, Cedar, piñon  
and oak; under-  
growth oak, manzanita  
yucca <sup>3</sup>blackunit  
January 10. 1898

N 79° 21' W. on a true  
line on 11<sup>th</sup> Mile.

Over mountainous  
land, through dense  
manzanita and oak  
undergrowth;  
ascending


4.00 Gulch 10 lks. wide,  
course N. E.

10.00 Top of ascent,  
bears N 25° E. <sup>2</sup> of S 25° W,  
and descend

14.00 Foot of descent; and  
Gulch 10 lks. wide, course

2

Amended South boundary of the  
Chains

- 14.20 Ascend  $\frac{1}{2}$  Slope  
of spur of Mount  
Turnbull
- 17.00 Top of  $\frac{1}{2}$  Slope;  
and descent of 70 ft
- 21.10 Foot of descent
- 21.50 Ascend spur
- 23.50 Top of spur, bears  
N. and S.; and descend
- 25.00 Foot of descent;  
gulch 20 lks. wide,  
course N. 
- 25.10 Ascend 75 ft
- 30.00 Top of ascent,  
bears  $N 37^{\circ} E$  and  $S 37^{\circ} W$
- 31.50 Gulch, 5 lks. wide,  
course N. E.
- 32.00 Ascend N. E. Slope  
of spur

## White Mountain Indian Reservations

Chains

37.00 Top of ascent,  
bears N. E. and S. W.,  
and descend

40.00 Set a granite  
stone 25 x 14 x 8 ins.,  
18 ins. in the ground  
for 10 1/2 Mile Cor.,  
marked W. M.  
S. R. A. S. B. on N.,  
10 1/2 M. on E., and  
P. Q. on S. faces,  
and raise a mound  
of stone 5 ft. base,  
2 1/2 ft. high, 3 ft.  
N. of cor., from which  
an oak 7 ins diam  
bears S. 41 1/4° E., 18 lbs.  
dist., marked  
W. M. S. R. A. S. B.



Amended South boundary of the  
Chains

10 1/2 M. B. T.

An oak 8 ins. diam.

bears S 81 1/4° E, 15 lks.  
dist. marked W. M.

S. R. A. S. B. 10 1/2 M. B. T.

An oak 7 ins. diam.

bears S 45 1/2° W, 13 1/2

lks. dist. marked

W. M. S. R. A. S. B. 10 1/2 M.

B. T.

An oak 3 ins. diam.

bears N 59° W, 23 lks.

dist. marked W. M.

S. R. A. S. B. 10 1/2 M.

B. T.

42.50 Foot of descent;  
gulch 10 lks. wide; course  
N. E.

43.00 Ascend 200 ft.

## White Mountain Indian Reservation

Chains

- 48.50 Top of ascent, bears  
 $N 30^{\circ} E$  and  $S 30^{\circ} W$ ;  
 descend
- 53.50 Foot of descent;  
 Gulch, 10 lks. wide,  
 course  $N. N. E.$
- 54.00 Ascend
- 56.00 Indications of  
 mineral
- 62.50 Top of spur,  
 bears  $N. E.$  and  $S. W.$ ;  
 and descend
- 70.80 Foot of spur;  
 gulch 10 lks. wide,  
 course  $N. N. E.$
- 71.50 Ascend 80 ft.
- 76.50 Top of spur,  
 bears  $N 37^{\circ} E$  and  $S. 37^{\circ} W.$ ;  
 and descend

Amended South boundary of the  
Chains

80.00 Foot of descent;  
Set a granite stone  
28 x 10 x 8 ins., 21 ins.  
in the ground for  
11 Mile Cor., marked  
W. M. S. R. A. S. B.  
on N., 11 M. on E.,  
and P. S. on S.  
faces, and raise  
a mound of stone  
5 ft. base, 2½ ft.  
high, 3 ft. N. of cor.,  
from which  
A wild cherry 5 ins.  
diam., bears N 46½° E  
45 lbs. dist., marked  
W. M. S. R. A. S. B.  
11 M. B. S.  
A juniper, 6 ins. diam.



## White Mountain Indian Reservation

Chains

bears  $S 21^{\circ} E$ , 120  
 lks. dist. marked  
 W. M. S. R. A. S. B.

|| M. B. T.

An oak 6 ins. diam.  
 bears  $S 16\frac{1}{2}^{\circ} W$ , 91 lks.  
 dist. marked W. M.  
 S. R. A. S. B. || M. B. T.

An oak 8 ins. diam.  
 bears  $N 55^{\circ} W$ , 63 lks.  
 dist. marked W. M.  
 S. R. A. S. B. || M. B. T.

END

Land mountainous  
 Soil, gravelly loam,  
 4<sup>th</sup> rate

Timber, oak, juniper  
 and piñon; under-  
 growth, dense man-  
 zanita and oak:

Amended South boundary of the  
Chains

Cacti, mesquite and yucca

N 79° 21' W on a true  
line on 12<sup>th</sup> Mile  
Over mountainous  
land

- 1.00 Ascend N. Slope  
of ridge
- 5.00 Top of ridge, bears  
N. N. E. and S. S. W;  
and descend.
- 7.00 Foot of descent,  
gully, 20 lks. wide,  
course N. E.
- 7.50 Ascend 400 ft
- 15.50 Top of ascent, bears  
N. E. and S. W.
- 18.00 Descend 190 ft
- 26.00 Foot of descent and

White Mountain Indian Reservation  
Chains

gulch, 2 lks. wide,  
 course N. E.

- 26.50 Ascend 500 ft  
 30.20 Enter large boulder  
 40.00 Set a sand  
 stone,  $27 \times 10 \times 5$  ins.  
 20 ins. in the ground  
 for  $11\frac{1}{2}$  Mile cor.,  
 marked W. M. I.  
 R. A. S. B. on N.,  
 $11\frac{1}{2}$  M. on E., and  
 P. I. on S. faces;  
 and raise a mound  
 of stone 5 ft. base,  
 $2\frac{1}{2}$  ft. high, 3 ft.  
 N. of cor., from  
 which  
 An oak 6 ins. diam.  
 bears  $S 76\frac{3}{4}^{\circ} E$  55 lks.



Amended South boundary of the  
Chains

dist. marked W. M.  
F. R. A. S. B.  $11\frac{1}{2}$  M.  
B. T.

A hackberry 4 ins.  
diam., bears  $N38^{\circ}40'W$   
17 lks. dist. marked  
W. M. F. R. A. S. B.  $11\frac{1}{2}$   
M. B. T.

✓ An oak 15 ins. <sup>diam</sup> bears  
 $S29^{\circ}W$ , 150 lks. dist.  
marked W. M. F. R.  
A. S. B.  $11\frac{1}{2}$  M. B. T.  
No other tree within  
limits.

44.50 Top of ridge,  
bears N. and S.

45.00 Descend along  
N. Slope of  
Mountain

White Mountain Indian Reservation

Chains

- 65.00 Foot of descent;  
and continue  
along N. Slope  
of mountain over  
heavy boulders  
and enter oak  
timber bears N and S.
- 78.00 Ascend
- 80.00 Set a granite  
stone,  $24 \times 12 \times 12$   
ins.; 18 ins. in the  
ground for 12  
Mile Cor., marked  
W. M. I. R. A. S. B.  
on N., 12 M. on E.  
and P. S. on S.  
faces, and raise  
a mound of stone  
5 ft. base,  $2\frac{1}{2}$  ft. high

Amended South boundary of the  
Chains

3 ft. N. of cor.;  
from which  
A white oak 6 ins.  
diam. bears  $N16^{\circ}E$ .  
23 lks. dist., marked  
W. M. S. R. A. S. B.  
12 M. B. T.

An oak 10 ins. diam  
bears  $S36\frac{3}{4}^{\circ}E$ , 34  
lks. dist., marked  
W. M. S. R. A. S. B. 12 M.  
B. T.

An oak 4 ins. diam.,  
bears  $S22\frac{3}{4}^{\circ}W$ ,  
39 lks. dist., marked  
W. M. S. R. A. S. B. 12 M.  
B. T.

A white oak 7 ins.  
diam. bears  $N37\frac{1}{2}^{\circ}W$ .



## White Mountain Indian Reservation

Chains

27 lks. dist., marked  
 W. M. I. R. G. S. B.  
 12 M. B. T.

Land mountainous  
 soil, gravelly loam; 3<sup>rd</sup> rate  
 timber, oak, juniper  
 cedar <sup>and</sup> spruce.

Undergrowth, oak  
 January 11, 1898

$N 79^{\circ} 21' W$  on a true  
 line on 13<sup>th</sup> Mile.

Over mountainous  
 land, ascending

4.00 Foot of bluff 300 ft.  
 high; at this point

I offset as follows  
 $S 10^{\circ} 39' W$  5 chs., then  
 on the offset line

$N 79^{\circ} 21' W$  5 chs., then

$N 10^{\circ} 39' E$  5 chs. to

# Amended South Boundary

## Chains

the true line and to  
 top of bluff, thence  
 continue  $N 79^{\circ} 21' W$   
 on the true line <sup>down</sup>  
 12.00 Foot of bluff,  
 100 ft. high Eastern  
 extremity of high  
 peak or Mount Turnbull  
 up which  
 I cannot chain to  
 determine the distance  
 to the top. I offset  
 $N 10^{\circ} 39' E$  4 chs. then  
 an offset line  $N 79^{\circ} 21' W$   
 4.50 chs to a point  
 from which the  
 flag on line on the  
 highest point on  
 Mount Turnbull

the White Mountain Indian Reservoir  
Chains

used as a foresight  
 from Initial monument  
 bears  $S 10^{\circ} 39' W.$ ;  
 therefore, 4.50 chs  
 is the distance of  
 the offset which  
 added to 12.00 chains  
 make 16.50 chs.

16.50 Top of high peak  
 on Mount Turnbull  
 a porphyry bluff,  
 about 100 ft. high,  
 accessible at one  
 point only and  
 is very difficult  
 to ascend. Top of  
 bluff is about 60 ft  
 E. and W. and about  
 40 ft. N. and S.



Amended South boundary of the  
Chains

Sloping to the south  
from western extremity.

I cut a triangle with

center

( $\Delta$ ) at the exact  
cor. point and mark

the bluff W. M. I. R.

A. S. B. on N., 12 M.

16.50 chs. on E., P. Q

on S. and M. T.

W. of triangle ( $\Delta$ );

and raise a mound

of stone 5 ft. base,

3 ft. high, 3 ft.

$79^{\circ}21'$  E. of cor.; from

which

Triplet peaks bears,

to wit: Peak A.

$N 16^{\circ}45' W$ . Peak B.

$N 15^{\circ}20' W$ ; Black

White Mountain Indian Reservation

Chains

Malpais hill, bears  
 $N 16^{\circ} 30' W.$  - Saddle  
 Mountain bears  
 $S 77^{\circ} 15' W.$  - Sharp  
 peak bears  $S 41^{\circ} 30' W.$   
 S.E. Cor. of school  
 building at San  
 Carlos bears  $N 49^{\circ}$   
 $W.$  -

January 12. 1898

January 12. 1898, I  
 proceed to San  
 Carlos Indian Agency  
 and on January  
 15. 1898. At  $9^{\text{h}} 36^{\text{m}}$   
 a. m., l. m. t., I  
 set off  $33^{\circ} 12'$  on the  
 lat. arc,  $21^{\circ} 1'$  S., on

Amended South boundary of the  
Chains

the decl. arc., and determine a true meridian with the solar at a point in the center of the doorway, and on line with the South side of the U. S. Indian Agency building proper at San Carlos. From this point Mount Turnbull bears  $S 49^{\circ} 28' E$ . and from this point in the doorway on the South side of said agency building I project a blank



White Mountain Indian Reservation  
chains

line  $S 16^{\circ} 19' E$  and  
line with the center  
and highest point  
of Stanley Butte  
and at 7 Miles or  
560 chs. from the  
doorway on the  
South side of said  
Agency building,  
I set a limestone  
 $25 \times 12 \times 8$  ins., 18 ins  
in the ground for  
angle monument  
No. 2, marked with  
triangle ( $\Delta$ ) and 2  
on top, W. M. I. R.  
A. S. B. on N., and  
P. L. on S. faces,  
and raise a mound

Amended South boundary of the  
Chains

of stone 7 ft. base,  
3 ft high, 4 ft W.  
of Angle Monument  
N<sup>o</sup> 2. ; I set a flag  
at this monument,  
thence <sup>run S 77° 48' E on a random line</sup> with flag  
on Mount Turnbull  
plainly in sight  
with two fore and  
two back sights  
at each station  
turning the horizontal  
limb of my transit  
180° in azimuth  
between observations,  
I continue S 77° 48' E  
setting flags at  
conspicuous points  
on line 646.40 chs.

White Mountain Indian Reservation  
Chains

to angle monument  
N<sup>o</sup>1 on top of Mount  
Turnbull and setting  
my transit over the  
angle point I observe  
a flag at the initial  
monument and de-  
flecting the line  
thus produced to  
the right intersect  
the flag on line  
with angle monu-  
ment N<sup>o</sup>2 and by  
two observations  
turning the horizontal  
limb of my transit  
180° in azimuth be-  
tween the observations  
I ascertain the angle



Amended South boundary of  
Chassis

thus produced to  
be  $1^{\circ} 33'$  and in  
addition to the marks  
already described  
in the notes, I mark  
the bluff, constituting  
the highest point  
on Mount Turnbull  
 $1^{\circ} 33'$  R. N. W. of  
triangle ( $\Delta$ ), thereby  
completing angle  
Monument No. 1 on  
Mount Turnbull

January 19. 1898

January 20. 1898 Thence  
with flag plainly  
in sight, I run  
on a true line

the White Mountain Indian Reservation

Chains

with Angle Monument <sup>402</sup>  
 N  $77^{\circ}48'W$  along  
 the top of Mount  
 Turnbull

1700 Edge of bluff 200  
 ft. high, down  
 which I cannot chain  
 and there being no  
 room to measure  
 a base on top, to  
 ascertain the distance  
 to the bottom of  
 descent, I set  
 a flag at this point  
 and cause a stake  
 to be driven on the  
 line below the bluff,  
 from which I measure  
 a base line N  $12^{\circ}12'E$ .

Amended South boundary  
Chains

5 chs. to a point,  
from which the flag  
on edge of bluff,  
bears  $S. 50^{\circ} 3' E$ , then  
tangent  $62^{\circ} 15'$  x base  
or  $190 \times 5$ , equals  
9.50 chs., which  
added to 17 chs.  
equals 26.50 chs.

26.50 Foot of bluff thence  
along North Slope  
of Turnbull ridge  
through oak timber  
and undergrowth

37.00 Descend

40.00 Set a malpais  
stone  $26 \times 18 \times 6$  ins.,  
21 ins. in the ground  
for  $12\frac{1}{2}$  Mile Cor.,



of the White Mountain Indian Reservation

Chains

marked W. M. S. R.  
A. S. B. on N.,  $12\frac{1}{2}$  M.  
on E., and P. P. on  
S. faces, and raise  
a mound of stone  
5 ft. base,  $2\frac{1}{2}$  ft. <sup>W</sup>, 3 ft.  
N. of cor. from which  
A locust, <sup>6 ins. diam.</sup> bears  $N 41\frac{1}{2}^{\circ} E$   
12 lks. dist., marked  
W. M. S. R. A. S. B.  $12\frac{1}{2}$   
M. B. F.

An oak 5 ins. diam.  
bears  $S 52\frac{1}{2}^{\circ} E$  53 lks.  
dist., marked W. M.  
S. R. A. S. B.  $12\frac{1}{2}$  M. B. F.  
An oak 6 ins. diam. bears  
 $S 13\frac{3}{4}^{\circ} W$ . 22 lks. dist.  
marked W. M. S. R.  
A. S. B.  $12\frac{1}{2}$  M. B. F.

Amended South boundary of the  
Chains

- No other tree available
- 44.00 Foot of descent
- 48.00 Ascend steep bluff  
130 ft. high
- 49.80 Top of bluff, bears  
 $N42^{\circ}W$  and  $S42^{\circ}E$   
and descend bluff  
150 ft.
- 51.00 Foot of bluff,  
and continue descending
- 52.00 Enter dense oak  
and manzanita  
undergrowth, bears  
 $N.$  and  $S.$
- 67.50 Indications of  
gold
- 73.00 Large boulder  
 $20 \times 18$  ft, 18 ft high  
on line

## White Mountain Indian Reservation

Chains

80.00

Set a porphyry  
stone,  $26 \times 15 \times 12$  ins.,  
18 ins. in the ground  
for 13 Mile Cor.,  
marked W. M. I. R.  
A. S. B. on N., 13 M.  
on E., and P. & Q on  
S. faces; from  
which

A cedar 14 ins. diam.  
bears  $S 73^\circ E$ , 115 lks.  
dist. marked W.  
M. I. R. A. S. B. 13

M. B. T. - No other  
trees within limits.  
A porphyry boulder  
 $15 \times 15$  ft, 10 ft high,  
marked B. + O.,  
bears  $N 33\frac{1}{2}^\circ W$ , 67 lks.



Amended South boundary of the  
Chains

dist. I raise a  
mound of stone  
5 ft. base,  $2\frac{1}{2}$  ft.  
high, 3 ft. N. of  
Cor.

Land mountainous  
soil gravelly loam, 2<sup>nd</sup> and 4<sup>th</sup> miles  
Timber, Oak, cedar  
and pinion, under-  
growth dense oak  
and manzanita

January 20. 1898

N  $77^{\circ}48'$  W. on a true  
line on 14<sup>th</sup> Mile  
Over mountainous  
land; descending  
over large porphyry  
boulders

11.00 "S" cañon, 10 lks.  
wide, course N.W.

White Mountain Indian Reservation  
Chains

and ascend along  
S. bank of canon

14.50 Top of bank, bears  
N.W. and S.E. and  
continue ascending  
N. Slope of high  
ridge, running  
Easterly and Westerly

40.00 Set a granite  
stone  $24 \times 12 \times 7$  ins.,  
18 ins. in the ground  
for  $13\frac{1}{2}$  Mile Cor.  
marked W. M. I.  
R. A. S. B. on N.,  
 $13\frac{1}{2}$  M. on E., and  
P. Q. on S. faces;  
and raise a mound  
of stone 5 ft. base,  
 $2\frac{1}{2}$  ft. high, 3 ft. W.

Amended South boundary of the  
Chains

of cor., from which  
An oak 6 ins. diam.  
bears  $S 59\frac{1}{2}^{\circ} W. 134$  lks,  
dist.; marked  
W. M. S. R. A. S. B. 13 $\frac{1}{2}$   
M. B. T.

An oak 7 ins. diam.  
bears  $N 41\frac{1}{2}^{\circ} E. 86\frac{1}{2}$  lks  
dist.; marked  
W. M. S. R. A. S. B. 13 $\frac{1}{2}$   
M. B. T.

No other trees within  
limits.

48.30 Ravine, 5 lks. wide,  
course N.

52.00 Descend to

62.00 Canon, 8 lks. wide,  
course N. N. E. and  
ascend



White Mountain Indian Reservation

Chains

68.50 Top of ascent, bears  
N. W., and descend

75.00 Ravine 6 lks. wide,  
course N. W.

80.00 Set a porphyry  
stone, 30 x 20 x 10 ins.,  
22 ins. in the ground  
for 14 Mile Cor.,  
marked W. M. S. R.  
A. S. B. on N., 14 M.  
on E., and P. & L. on  
S. faces; and raise  
a mound of stone  
5 ft. base, 2½ ft.  
high, 3 ft. N. of cor.,  
from which  
An oak 10 ins. diam.,  
bears S 3° E. 47 lks.  
dist., marked W. M.

Amended South boundary of the  
Chains

S. R. A. S. B. 14 M. B. S.  
An oak 12 ins. diam.,  
bears  $N 65^{\circ} 4' W.$ , 57 lbs.  
dist. marked W. M.  
S. R. A. S. B. 14 M. B. S.  
No other trees avail-  
able.

Land mountainous  
Soil, gravelly loam  
and stony; 2<sup>nd</sup> and 3<sup>rd</sup> rate  
Timber oak, cedar  
and piñon; under-  
growth oak and  
manzanita

$N 77^{\circ} 48' W.$  on a true  
line on 15<sup>th</sup> Mile  
Over mountainous  
land; descending

White Mountain Indian Reservation

- Chains
- 1.00 Foot of descent;  
and gulch 60 lks. wide,  
course N. E.
- 1.70 Ascend slope
- 6.00 Top of <sup>slope</sup> bears N. E. <sup>2nd of S. W.</sup>,  
and descend
- 9.00 Foot of descent; gulch  
20 lks. wide, course S. E.
- 9.50 Ascend spur
- 18.50 Top of spur, bears N. E.;  
and descend
- 24.00 Foot of descent; gulch  
15 lks. wide, course N. W. E.
- 24.50 Ascend
- 27.00 Top of spur, 40 ft. high,  
bears N. W. E.; and descend  
60 ft.
- 30.00 Foot of descent; and  
gulch 10 lks. wide, course



Amended South boundary of the  
Chains

Easterly

30.50 Ascend ridge

37.50 Top of ridge, 80 ft. high,  
bears E. and W.

40.00 Set a porphyry  
stone  $24 \times 14 \times 7$  ins,  
18 ins. in the ground  
for  $14\frac{1}{2}$  Mile Cor.,  
marked W. M. S. R.  
A. S. B. on N.,  $14\frac{1}{2}$  M.  
on E., and P. S. on  
S faces; and raise  
a mound of stone  
5 ft. base,  $2\frac{1}{2}$  ft.  
high, 3 ft. N. of cor.,  
from which  
An oak 8 ins. diam.,  
bears  $N56\frac{1}{2}^{\circ}E. 124$  Ws  
dist. marked W. M.

White Mountain Indian Reservation

Chains

S. R. A. S. B.  $14\frac{1}{2}$  M. B. F.

An oak 4 ins. diam.

bears  $S 23\frac{1}{2}^{\circ} E$ , 74

lks. dist. marked

W. M. S. R. A. S. B.  $14\frac{1}{2}$  M. B. F.

An oak 5 ins. diam.

bears  $S 60^{\circ} E$ , 141 lks.

dist. marked W. M.

S. R. A. S. B.  $14\frac{1}{2}$  M. B. F.

An oak 10 ins. diam.

bears  $S 81\frac{1}{4}^{\circ} E$ , 127

lks. dist. marked

W. M. S. R. A. S. B.

 $14\frac{1}{2}$  M. B. F.41.50 Gulch, 10 lks. wide,  
course Easterly42.00 Gulch, 10 lks. wide,  
course Easterly

42.50 Ascend ridge

Amended South boundary of the  
Chain:

46.00 Top of ridge, bears  
 N.E. and S.W.; and  
 descend

46.50 Foot of descent,  
 gulch, 20 lks. wide,  
 course N.N.E.

47.00 Ascend ridge

50.00 Top of ascent, bears  
 E. and W.; and descend

51.50 Foot of descent, gulch  
 10 lks. wide, course E.

53.00 Ascend

54.00 Top of ascent, 40 ft  
 high, bears E. and W.;  
 Mineral Indications

58.00 Descend 20 ft.

58.50 Foot of descent,  
 gulch 20 lks. wide,  
 course Easterly



White Mountain Indian Reservation

Chains

- 59.00 Ascend 150 ft
- 70.50 Top of high ridge,  
2000 ft. above surrounding  
country, bears N.  $\frac{3}{4}$  S.,  
and descend over  
large boulders and  
through dense manzanita  
and oak under-  
growth, bears N.  $\frac{3}{4}$  S.
- 80.00 Set a quartzite  
stone  $28 \times 10 \times 7$  ins.,  
21 ins. in the ground  
for 15 Mile Cr., marker  
W. M. I. R. A. S. B. on N.,  
15 M. on E., and  
P. Q. on S. faces;  
and raise a mound  
of stone 5 ft. base  
 $2\frac{1}{2}$  ft. high, 3 ft.

Amended South boundary of  
Chains

N. of cor.; from which  
 An oak 14 ins. diam.  
 bears  $N 63 \frac{1}{2}^{\circ} E$ , 117 lks.  
 dist. marked W. M.  
 S. R. A. S. B. 15 M. B. T.  
 An oak 3 ins. diam.  
 bears  $S 25^{\circ} W$ , 17 lks.  
 dist. marked W. M.  
 S. R. A. S. B. 15 M. B. T.  
 An oak 8 ins. diam.  
 bears  $S 79 \frac{1}{4}^{\circ} W$ , 20 lks.  
 dist. marked W. M.  
 S. R. A. S. B. 15 M. B. T.  
 An oak 14 ins. diam.  
 bears  $N 12 \frac{1}{4}^{\circ} W$ , 91 lks.  
 dist.; marked W. M.  
 S. R. A. S. B. 15 M. B. T.  
 Tan of mountainous  
 Soil, gravelly loam;

the White Mountain Indian Reservation

Chains

3<sup>rd</sup> and 4<sup>th</sup> rate  
Timber, oak; under  
growth manzanita  
and oak.

January 21. 1897

N 77° 48' W. on a true  
line on 16<sup>th</sup> Mile  
Over mountainous  
land and through  
scattering oak timber  
and manzanita  
undergrowth, descend

25.00 Descend abruptly 60 ft.

35.50 Gulch 20 lbs. wide, course  
S. W.

36.00 Ascend spur

38.50 Top of spur 30 ft. high,  
bears S. W., and descend



Amended South boundary of the  
White Mountain Indian Reservation

Chains

40.00

Porphyry boulder  
12 x 10 ft., 3 ft. high,  
in place, mark  
a cross at the exact  
cor. point for 15½  
Mile Cor., marked  
M. M. S. R. A. S. B. on  
N. 15½ M. on E. and  
P. S. on S. sides;  
and raise a mound  
of stone 5 ft. base  
2½ ft. high, 3 ft.  
N. of cor., from which  
a cedar 20 ins. diam.  
bears N 71½° E, 15 M.  
dist. marked M. M.  
S. R. A. S. B. 15½ M.  
B. T.

A cedar 7 ins. diam.

Continued, Book 1973.  
Concluded, Book 1974.