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(1)

BOOK 3320

4-679

Book "A"

FIELD NOTES

OF THE ^{re} SURVEY OF THE

Fractional Western Boundary

of

The White Mountain (or San Carlos) Indian

Reservation

from Chromo Butte to Salt River

0-mile cor. to 21½-mile cor. and 27.80 chs.

in Ts. 2 and 3 N., R. 16 E., and Ts. 3, 4 and 5 N., R. 17 E.,

(Unsurveyed)

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

ROY J. GILL, U.S. Surveyor.

~~In the capacity of U. S. Surveyor~~, under Special Instructions dated June 7th, 1916, issued by the United States Surveyor General to govern surveys included in Group No. 76, which were approved by the Commissioner of the General Land Office, June 17th, 1916, and Assignment Instructions dated Dec. 18, 1916.

Re Survey commenced Jan. 11, 1917

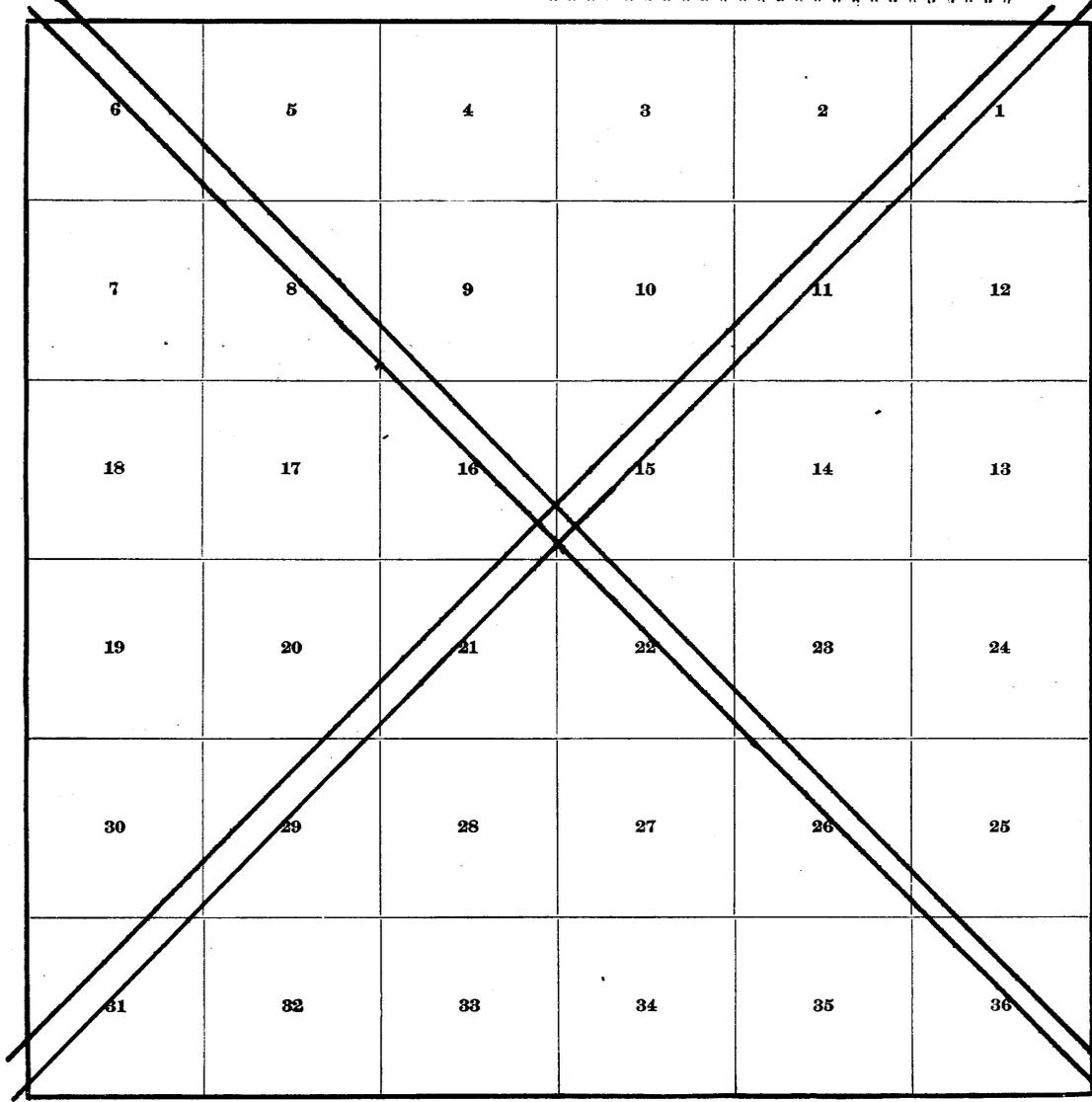
Re Survey completed Feb. 3, 1917

3320

See "Special" Index Diagram on page 1.

~~###INDEX###DIAGRAM###~~

~~Transit#####Range#####~~



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1A

BOOK 3320

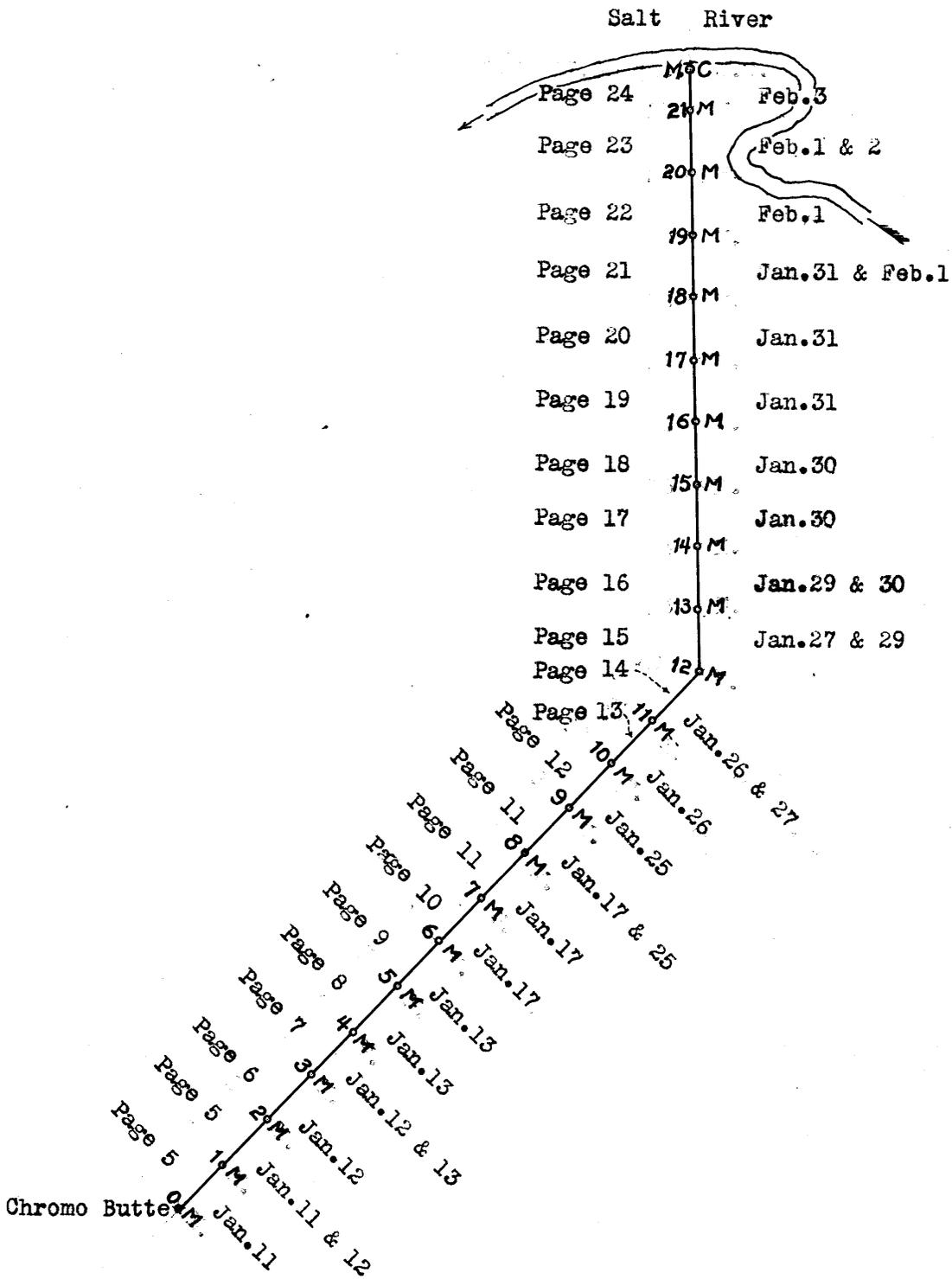
Resurvey of Part of W. Bdy. of White Mountain or San Carlos Indian Reservation

Group 76, Arizona

Book "A"

INDEX AND DATE DIAGRAM

Note: All dates are in 1917.
All lines surveyed by Roy J. Gill, U.S.S.



part of
 Resurvey of the W. Bdy. of the White Mountain
 or San Carlos
 Indian Reservation.

Chains. Resurvey commenced Jan. 11, 1917, and executed with a Buff and Buff light mountain transit No. 7732, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. Examine the adjustments of the transit and correct the level and collimation errors.

Dates of survey shown on page 1 hereof.

On the date of commencement of this survey, the cloudy weather made it impossible to test or use the solar. In order to avoid delay, I determined the azimuth at the starting point from Baldwin's line (bearing N.45°E.) This azimuth was checked by direct solar observation at a point N.45°E., 4 miles and 35 chs. from the starting point. The line was also checked at a point 12 miles and 70 chs. and again at 17 miles and 45 chs. from the starting point. A record of these observations appears below. The line was projected by means of carefully measured angles and fore and back sights.

1st. Altitude observation on the sun for meridian.

Station, at the 0 mile cor. on the summit of Chromo Butte.
 Latitude, 33°30' North.
 Longitude 110°41½' West.
 Declination, 21°30'S.
 Date, Jan. 13, 1917.
 Reference point, assumed N.45°E.

Local Mean Time	Horizontal Angles	Vertical Angles
0 8h 42m	86°20'	16°56' (1)
0 8h 48m	86°02'	18°23' (6)

0 8h 54m	87°10'	17°08' (2)
0 8h 57m	87°17½'	18°15' (5)

0 9h 03m	86°48'	17°19' (8)
0 9h 06m	87°39'	18°05' (4)

The mean azimuth of the sun, deduced from the above series, (the first set discarded) is 47°47'E. of S., which gives for the bearing of the reference point N.45°03½'E. Make the correction of 3½ minutes in the bearing.

The magnetic bearing of the true meridian at the point of beginning is N.14°45'W. The angle thus determined gives the magnetic decl. 14°45'E.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Chains 2nd. altitude observation on the sun for azimuth.

Station, at a point 12 miles and 70 chs. from initial pt.
Latitude, $33^{\circ}38\frac{1}{2}'$
Longitude, $110^{\circ}33'W$.
Declination, $18^{\circ}25\frac{1}{2}'S$.
Date, Jan. 27, 1917.
Reference point, assumed $N.45^{\circ}E$.

Local Mean Time	Horizontal angles	Vertical Angles
$\frac{0}{ }$ 2h 24m	$36^{\circ}35'$	$29^{\circ}06'$ (1)
$\frac{0}{ }$ 2h 28m	$38^{\circ}11'$	$28^{\circ}04'$ (6)

$\frac{0}{ }$	$37^{\circ}24\frac{1}{2}'$	$29^{\circ}00'$ (2)
$\frac{0}{ }$	$37^{\circ}27'$	$28^{\circ}08\frac{1}{2}'$ (5)

$\frac{0}{ }$	$36^{\circ}56'$	$28^{\circ}54'$ (3)
$\frac{0}{ }$	$37^{\circ}54'$	$28^{\circ}14\frac{1}{2}'$ (4)

The mean azimuth of the sun deduced from the above series is $S.37^{\circ}25'45''W$., which gives for the bearing of the reference point $N.45^{\circ}00'23''E$.

3d. altitude observation on the sun for azimuth.

Station, a point 17 miles and 45 chs. from initial pt.
Latitude, $33^{\circ}43\frac{3}{4}'N$.
Longitude, $110^{\circ}33'W$.
Declination, $17^{\circ}20'S$.
Date, Jan. 31, 1917.
Reference point, assumed North.

Local Mean Time	Horizontal Angles	Vertical Angles
$\frac{0}{ }$ 3h 10m	$47^{\circ}19\frac{1}{2}'$	$23^{\circ}21'$ (1)
$\frac{0}{ }$ 3h 14m	$48^{\circ}45'$	$22^{\circ}14\frac{1}{2}'$ (6)

$\frac{0}{ }$	$48^{\circ}05'$	$23^{\circ}13'$ (2)
$\frac{0}{ }$	$48^{\circ}02'$	$22^{\circ}21'$ (5)

$\frac{0}{ }$	$47^{\circ}38\frac{1}{2}'$	$23^{\circ}07'$ (3)
$\frac{0}{ }$	$48^{\circ}26'$	$22^{\circ}27\frac{1}{2}'$ (4)

The mean azimuth of the sun deduced from this series, is $S.48^{\circ}03'W$., which gives for the bearing of the reference point, $N.20''E$.

Retracement for Resurvey

Chains	Description
	<p>1 Begin at the corner on Chromo Butte, which is a Malapa rock, 14" x 12" x 9. ins. above ground, loosely set and marked WMIR BCP Δ, also PL 20.39 R on SE., and 55.79 M on top, with a mound of stone 4 ft. base, 4 ft. high E. of cor. Alongside of stone is set an iron post, 3 ins. dia., in a rock mound, with brass cap marked</p> <p style="text-align: center;">55.79 M AP WMIR WB CHROMO PK 1915 in SE. and PL in NW.</p> <p>A Juniper, 3 ft. dia., partly cut and marks obliterated, bears N.54°E. 322 lks. dist., instead of N.62°E. 268 lks.</p> <p>A juniper stump, 30 ins. dia., bears S.71°E. 440 lks. dist. instead of S.83°E. 443 lks. All marks obliterated.</p> <p>A double juniper stump, 30 ins. dia., bears S.80°E. 436 lks. dist., instead of N.75°E. 440 lks. All marks obliterated.</p> <p>A juniper stump, 30 ins. dia., bears S.73°E., 287 lks. dist. instead of S.74°E. 281 lks. dist. All marks obliterated.</p> <p>Haystack Peak, bears N.12°12'E. about 10 chs. A Castellated Peak, (No. 1), bears N.34°35'E. A Castellated Peak, (No. 2), bears N.40°33'E. Mt. Turnbull, bears S.40°18'E. Pinal Mountain, bears S.29°31'W. Apache Peak, bears N.51°15'W. The center stack (tallest) at Miami, bears S.56°06'W. Cor. stands on extreme SW. end of Chromo Butte. (The iron post was set by Baldwin in 1915) Chromo Butte is a prominent peak in the Apache Mountains.</p>
40.06	<p>Thence N.45°00'E. on a random line on 1st mile (1st half). Fall 87 lks. N.45°W. of the original $\frac{1}{2}$-mile cor., as set by Chas. E. Perkins; in his survey of 1894. This cor. as described by H.L. Baldwin is a basalt stone 20 x 14 x 10 ins. lying on the ground on the SE. side of a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, and faintly marked WMIRAWB $\frac{1}{2}$ M. A stone 10 x 8 x 6 ins. with same marks is lying on the ground on W. side of mound. Marks on both stones destroyed by Baldwin. True course and dist. are N.46°15'E., 40.07 chs.</p>
40.00	<p>Thence N.45°00'E. on a random line on 1st mile (2nd half). Find no evidence of the original 1-mile cor. Set temp. cor. and continue measurement on 2nd mile (1st half).</p>
80.87	<p>Fall 93 lks. N.45°W. of the original Perkins $\frac{1}{2}$-mile cor. described by Baldwin as a basalt stone 30 x 18 x 14 ins. above ground, marked WMIRAWB on S. face, with a mound of stone on N. Marks destroyed by Baldwin. True course and dist. are N.45°40'E., 80.88 chs.</p>
40.00	<p>Thence N.45°00'E. on a random line on 2nd mile (2nd half). Find no evidence of the original 2-mile cor. Set temp. cor. and continue measurement on 3rd mile (1st $\frac{1}{2}$).</p>
69.66	<p>Fall 206 lks. S.45°E. of the original $2\frac{1}{2}$-mile cor. of the Perkins survey, described by Baldwin as a white quartzite stone 18 x 14 x 8 ins. lying on ground, marked $2\frac{1}{2}$ M WMIR AW on E. face, with mound of stone W. of cor. Marks destroyed by Baldwin. True course and dist. are N.43°18'E., 69.69 chs.</p>
49.79	<p>Thence N.45°00'E. on a random line on 3rd mile (2nd half). Fall 62 lks. N.45°W. of the original Perkins cor., described by Baldwin as a sandstone 18 x 12 x 7 ins. lying on ground, marked WMIRAWB 3 M on SE. face, with mound of stone NW. of cor. Marks on stone destroyed by Baldwin. True course and dist. are N.45°43'E., 49.79 chs.</p>

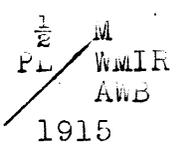
Note: All the corners set by H.L. Baldwin, Topographer, on the new boundary surveyed by him in 1915, were destroyed and the iron posts were used for the corresponding corners of this resurvey.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Resurvey

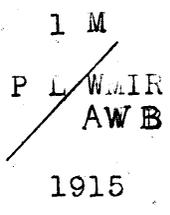
Chains

From 10-mile cor. hereinbefore described, N. 46° 15' E., on true line on 1st mile. (1st half), over rolling mesa, thru scat. timber & undergrowth.
3.10 Desc. a rough broken N. slope 710 ft. to
37.00 Wash, 30 lks. wide, course N.W.
40.07 The original 1/2-mile cor., hereinbefore described.
Alongside of old stone, set an iron post, 3 ft. long, 1 in. dia., 18 ins. in the ground to bedrock, in rock mound, for 1/2-mile cor., with brass cap marked



; raise a mound of stone, 2 1/2 ft. base, 1 1/2 ft. high alongside.

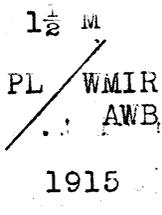
Thence N. 45° 40' E. on a true line, on 1st mile (2nd half).
Along a broken NW. slope.
13.90 Wash, 15 lks. wide, 3 ft. deep, course NW.
21.00 Asc. a gradual W. slope.
30.00 Along a NW. slope.
31.40 Trail, bears N. and S.
40.44 (At proportionate distance) set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for the 1-mile cor. with brass cap marked



; raise a mound of stone, 3 ft. base, 1 1/2 ft. high S.E. of cor.

Land; mountainous.
Soil; rocky, 3d. rate.
Timber; scattered scrub cedar.
Undergrowth; dense catclaw, scrub oak, mesquite, and cactus.

Thence N. 45° 40' E. on a true line on 2nd. mile (1st half).
Asc. a gradual W. slope, thru undergrowth.
17.36 Spur, slopes NW.
20.26 Desc. a NE. slope.
32.56 Ravine, drains N., thence along NW. slope.
40.44 The old 1/2-mile cor., hereinbefore described,
Alongside of which, set an iron post, 3 ft. long, 1 in. dia., 18 ins. in the ground to bedrock, in a rock mound, for 1/2-mile cor., with brass cap marked

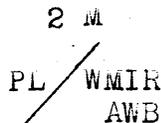


; raise a mound of stone, 2 1/2 ft. base, 2 ft. high, SE. of cor.

Thence N. 43° 18' E. on a true line on 2nd. mile. (2nd half).
Along a rocky, broken NW. slope.
9.00 Desc. a rough; broken N. slope.
28.60 Fence, bears N. and S.
31.00 Ravine, 75 lks. wide, 10 ft. deep, course N.
34.84 1/2 (At proportionate distance) set an iron post, 3 ft. long,

Resurvey

Chains 3 ins. dia., 24 ins. in the ground, for the reestablishment of 2-mile cor., with brass cap marked



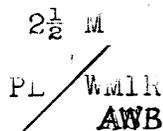
1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE. of cor.

Land; rough and mountainous.
Soil; rocky, 2nd. and 4th rate.
Timber; scattered scrub cedar.
Undergrowth; dense scrub oak, catclaw, mesquite, and cactus.

Thence N.43°18'E. on a true line on 3d. mile. (1st half). Desc.

- 21.15 Foot of descent, in draw, of Corral Gulch, course E.
- 27.15 Wash, 50 lks. wide, 3 ft. deep, course E.
- 27.65 Asc. a SE. slope.
- 27.90 Fence, starts and follows along about 210 lks. NW. of line.
- 34.84½ The original Perkins cor., hereinafter described. Alongside of which, set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for the reestablished 2½-mile cor., with brass cap marked

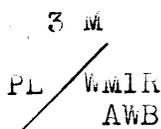


1915

; raise a mound of stone, 3 ft. base, 2½ ft. high SE. of cor.

Thence N.45°43'E. on a true line on 3d. mile. (2nd half). Along SE. slope. Fence follows nearly on line.

- 6.00 Ravine, 5 chs. wide, 50 ft. deep, course S.
- 14.00 Spur, slopes S.E.
- 24.00 Point of spur, slopes SE.
- 26.00 Asc. a SW. slope.
- 31.50 Ravine, 3 chs. wide, 40 ft. deep, course SE.
- 35.80 Spur, slopes SE.
- 40.50 Ravine, course SE.
- 44.00 Small spur, slopes SE.
- 48.30 Ravine, course SE.
- 49.79 The original Perkins 3-mile cor., hereinafter described. Alongside of which, set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for the reestablished 3-mile cor., with brass cap marked



1915

; raise a mound of stone, 3 ft. base, 2½ ft. high SE. of cor.

Land; rolling.
Soil; rocky, 3d. rate.
Timber; some cottonwood in creek bottom.
Undergrowth; scrub oak and catclaw in 1st. half.

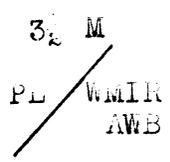
part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Retracement for resurvey

Chains From the reestablished 3-mile cor.,
N.45°00'E. on a random line on the 4th mile. (1st half).
58.94 Fall 87 lks. N.45°W. of the original Perkins 3½-mile cor.
described by Baldwin as a sandstone 18 x 12 x 6 ins.
marked WMIR 3½ AWB, lying on its side with marks face up,
like all others thus far found and with mound of stone
E. of cor. Marks destroyed by Baldwin.
True course and dist. are N.45°51'E., 58.95 chs.
46.89 Thence N.45°00'E. on a random line on the 4th. mile (2nd ½).
Fall 63 lks. N.45°W. of the original Perkins 4-mile cor.,
described by Baldwin as a slate stone 22 x 16 x 4 ins.
lying on its side, face upwards, on E. side of a mound
of stone and marked WMIR
AWB
4 M Marks destroyed by Baldwin.
True course and dist. are N.45°46'E., 46.89 chs.

Return to the Resurvey
From 3-mile cor., N.45°51'E., on true line on 4th mile (1st ½)

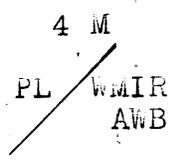
.50 Spur, slopes SE.
4.60 Ravine, course SE.
11.00 Spur, slopes SE., thence over rolling NE. slope.
20.50 Desc. a steep N. slope.
42.20 Creek, 40 lks. wide, 3 ft. deep, clear water, course SE.
42.60 Asc. a S. slope.
58.00 Spur, slopes SE., ends about 20 chs. SE.
58.95 The original 3½-mile cor., described above.
Alongside of which, set an iron post, 3 ft. long, 1 in.
dia., 18 ins. in the ground to bedrock, in rock mound,
for the reestablished 3½-mile cor., with brass cap marked



1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor.

Thence N.45°46'E. on a true line on the 4th mile. (2nd half).
Desc. a NE. slope., fence nearly follows line.
16.50 Wash, 30 lks. wide, 4 ft. deep, course SE.
26.00 Spur, slopes SE., ends in 6 chs.
32.70 Wash, 30 lks. wide, 6 ft. deep, course S.
44.00 Small spur, slopes W., ends in 5 chs.
46.89 The original 4-mile cor., described above.
Alongside of which, set an iron post, 3 ft. long, 3 ins.
dia., 24 ins. in the ground for the reestablished 4-mile
cor., with brass cap marked



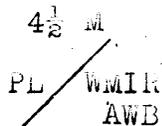
1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor.

Land; rolling.
Soil; rocky, 3d. rate.
Timber; scattering scrub cedar, some cottonwood in wash.
Good grazing.

Retracement of Resurvey

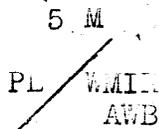
Chains From the reestablished 4-mile cor.,
 N.46°00'E, on a random line on the 5th. mile. (1st half).
 45.86 Intersect the original Perkins 4½-mile cor., described
 by Baldwin as a sandstone, 21 x 10 x 5 ins., marked
 WMIRAWB M 4½, with small mound of stone NW. of cor.
 Marks destroyed by Baldwin.
 True course and dist. are N.46°00'E., 45.86 chs.
 Thence N.46°00'E. on a random line on 5th. mile. (2nd ½).
 37.32 Intersect the original Perkins 5-mile cor., described by
 Baldwin as a syenite stone, 12 x 9 x 6 ins., lying on
 top of ground and marked WMIR
 AWB
 5 M ; from which
 A cedar limb on tree 24 ins. dia., bears N.39½°E., 147 lks.
 dist.
 True course and dist. are N.46°00'E., 37.32 chs.
 Resurvey.
 From 4-mi. cor., N.46°00'E., on true line on 5th mi. (1st ½).
 1.00 Ravine, drains W.
 7.30 Spur, slopes W. 10 chs. to end.
 14.40 Ravine, drains NW.
 20.00 Spur, slopes NW.
 25.60 Ravine, drains NW.
 38.50 Spur, slopes NW. and ends in about 20 chs.
 39.00 Desc. a NE. slope.
 43.70 Ravine, drains NW.
 45.86 The original 4½-mile cor., described above.
 Alongside of which, set an iron post, 3 ft. long, 1 in.
 dia., 16 ins. in the ground to bedrock, in rock mound,
 for the reestablished 4½-mile cor., with brass cap mark
 -ed



1915

; raise a mound of stone 3 ft. base, 2 ft. high SE. of
 cor.

Thence N.46°00'E. on a true line on the 5th. mile. (2nd ½).
 Over rough and broken land.
 2.00 Spur, slopes NW., drainage changes to E.
 8.00 Ravine, course E.
 12.70 Desc. E. slope.
 25.00 Foot of divide, bears E. and W. Asc. steep W. slope.
 37.32 The original 5-mile cor., described above.
 Alongside of which, set an iron post, 3 ft. long, 3 ins.
 dia., 12 ins. in the ground to bedrock, in rock mound,
 for reestablished 5-mile cor., with brass cap marked



1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
 of cor.

Land; mountainous.
 Soil; rocky, 3d. and 4th rate.
 Undergrowth; mesquite, cactus, catclaw.
 Timber; scattering cedar and scrub oak.

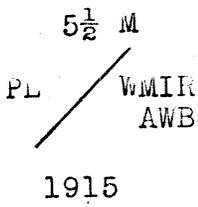
Resurvey of the W. Bdy. of the White Mountain
 Indian Reservation.
 San Carlos

Retracement for Resurvey

Chains From the reestablished 5-mile cor.,
 N.46°00'E. on a random line. on 6th mi. (1st 1/2).
 54.05 Fall 39 lks. N.44°W. of the original Perkins 5 1/2-mile cor.
 described by Baldwin as a granite stone 18 x 16 x 4 ins.
 marked WMIR AWB 5 1/2 M, with mound of stone NW. of cor.
 Marks defaced by Baldwin.
 True course and dist. are N.46°25'E., 54.05 chs.
 Thence N.46°00'E. on a random line. on 6th mi. (2nd 1/2).
 41.99 Fall 19 lks. S.44°E. of the original Perkins 6-mile cor.,
 described by Baldwin as a red sandstone 18 x 13 x 6 ins.
 above ground, set about 3 ins. in the ground, facing
 SE. and marked WMIR AWB 6 M, from which
 A hackberry, 6 ins. dia., bears S.43 1/2°E. 46 lks. dist.
 the blazed portion is partly rotted, but old marks
 visible. Marks on stone defaced by Baldwin.
 True course and dist. are N.45°44'E., 41.99 chs.

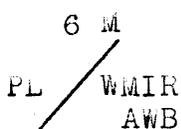
Resurvey

Return to the 5-mile cor.
 Thence N.46°25'E. on a true line on the 6th. mile. (1st 1/2).
 Asc. steep W. slope.
 1.70 Top of ascent.
 3.50 Desc. NE. slope into Seven Mile creek.
 24.30 Ravine, drains E. Asc.
 27.00 Small spur, slopes E., ends in about 5 chs, Desc. steep
 NE. slope. 2 lks. wide,
 31.00 Seven Mile Creek, a small stream of clear water, flows E.
 Road from McMillenville to San Carlos follows creek bed.
 32.60 Asc. S. slope. and Rice
 35.50 Fence, bears N. and S., thence over rough and broken SE.
 slope.
 46.00 Desc. E. slope.
 53.00 Ravine, drains S.
 54.05 The original 5 1/2-mile cor., described above.
 Alongside of which, set an iron post, 3 ft. long, 1 in.
 dia., 16 ins. in the ground to bedrock, in rock mound,
 for the reestablished 5 1/2-mile cor., with brass cap marked



and raise a mound of stone, 3 ft. base, 2 ft. high, SE.
 of cor. Corner stands near bottom of small ravine that
 heads about 1 1/2 chs. North.

Thence N.45°44'E. on a true line on the 6th mile. (2nd 1/2)
 Asc. a SW. slope.
 5.40 Small spur, extends about 12 chs. SE. Desc.
 21.00 Ravine, drains S. Asc.
 30.40 Spur, bears S. Desc.
 37.20 Draw, course S.
 41.99 The original 6-mile cor., described above.
 Alongside of which, set an iron post, 3 ft. long, 3 ins.
 dia., 24 ins. in the ground, for the reestablished 6-
 mile cor., with brass cap marked

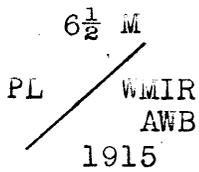


1915 ; raise a mound of stone
 3 ft. base, 2 ft. high SE. of cor.

Land; mountainous. Soil; rocky, 3d. and 4th. rate.
 Undergrowth; catclaw, scrub oak, mesquite, and cactus.
 Timber; some cedar with sycamore and cottonwood along
 Seven Mile creek.
 Good grazing.

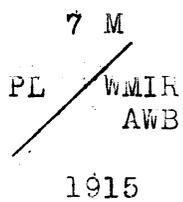
Retracement for Resurvey

Chains From the reestablished 6-mile cor.
 N.46°00'E. on a random line. on 7th mile (1st 1/2).
 43.86 Fall 20 lks. S.44°E. of the original 6 1/2-mile cor.,
 described by Baldwin as a red sandstone 24 x 18 x 10
 ins. on top of ground, marked WMIR AWB 6 1/2 M, with mound
 of stone NW. of cor.
 True course and dist. are N.45°44'E., 43.86 chs.
 Thence N.46°00'E. on a random line. on 7th mile (2nd 1/2).
 40.00 Find no evidence of the original 7-mile cor.
 Set temp. cor. and continue measurement on 8th mile (1st 1/2).
 83.78 Fall 4 lks. N.44°W. of the original 7 1/2-mile cor.,
 described by Baldwin as a malpais stone 18 x 12 x 10
 ins. marked WMIR AWB 7 1/2 M, and loosely set in a mound
 of stone. Marks destroyed by Baldwin.
 True course and dist. are N.46°02'E., 83.78 chs.
 Thence N.46°00'E. on a random line. on 8th mile (2nd 1/2).
 45.30 Fall 24 lks. S.44°E. of the original 8-mile cor.,
 described by Baldwin as a cross(X) cut on a granite
 boulder in place 10 x 9 x 6 ft. above ground, marked
 WMIR AWB 8 M, with small mound of stone on top of
 boulder. All marks destroyed by Baldwin.
 True course and dist. are N.45°42'E., 45.30 chs.
 Return to the 6-mile cor.
 Thence N.45°44'E. on a true line. on 7th mile (1st half).
 1.50 Wash, 50 ft. wide, 3 ft. deep, course S.
 2.00 Asc. rough and broken W. slope.
 7.80 Ravine, 3 chs. wide, 40 ft. deep, course S.
 17.10 Top of spur, slopes NW. Desc.
 26.20 Ravine, course SW.
 43.86 The original 6 1/2-mile cor., described above.
 Alongside of which, set an iron post, 3 ft. long, 1 in.
 dia., 18 ins. in the ground to bedrock, in rock mound,
 for the reestablished 6 1/2-mile cor., with brass cap mkd.



; raise a mound of stone, 2 1/2 ft. base, 2 ft. high SE.
 of cor.

Thence N.46°02'E. on a true line. on 7th mile (2nd half)
 Along side of hill sloping to the NW.
 17.30 Slope changes to NE.
 41.89 (At proportional dist.) set an iron post, 3 ft. long,
 3 ins. dia., 18 ins. in the ground to bedrock, in rock
 mound for the reestablished 7-mile cor., with brass cap
 marked



; raise a mound of stone, 3 ft. base, 2 ft. high SE.
 of cor.

Land; heavy rolling.
 Soil; rocky, 3d. rate.
 Timber; none.
 Good grazing.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Resurvey

Chains From the 7-mile cor., N.46°02'E. on a true line. on 8th mi. (1st half).
0.20 Sandy wash in ravine, 4 chs. wide, course W. Thence asc. over
34.60 Desc. along E. slope. over broken S. slope.
41.89 The 7½-mile cor., hereinafter described,
Alongside of which, set an iron post, 3 ft. long, 1 in.
dia., in a rock mound, on bedrock for the reestablished
7½-mile cor., with brass cap marked

7½ M
PL / WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor.

Thence N.45°42'E. on a true line. on 8th mi. (2nd half).
Desc. along a broken E. slope.
1.50 A spring, bears E. 5 chs. dist.
2.30 Fence, bears E. and W.
5.00 Ravine, 15 lks. wide, course SE., thence asc. along a broken
SW. slope.
45.30 The original 8-mile cor., hereinafter described,
Alongside of which, set an iron post, 3 ft. long, 3 ins.
dia., in a mound of stone, on bedrock, for the reestablish
-ed 8-mile cor., with brass cap marked

8 M
PL / WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor.

Land; heavy rolling and mountainous.
Soil; 2nd. and 4th. rate.
Very scattered cedar and scrub oak, no timber.
Good grazing.

Retracement for Resurvey

From the 8-mile cor.,
N.46°00'E. on a random line on the 9th mile. (1st half)
40.00 After diligent search, find no evidence of the original
8½-mile cor.
75.93 Set temp. cor. and continue measurement on 9th mi. (2nd ½).
Fall 102 lks. S.44°E. of the original 9-mile cor.,
described by Baldwin as a sandstone in place, 4½ x 6 x
2 ft. above ground, marked WMIR AWB 9 M. Marks destroyed
by Baldwin.
True course and dist. are N.45°14'E., 75.94 chs.,
Resurvey
Return to the 8-mile cor.
Thence N.45°14'E. on a true line, on the 9th mile. (1st ½).
Along steep SW. slope.
29.55 Ridge, bears SE. and NW. (Seven Mile Ridge, sloping SE. from
30.00 Desc. a steep broken E. slope. (Seven Mile Mtn. situated NW.
37.97 (At proportional dist.) set an iron post; 3 ft. long, 1
in. dia., 12 ins. in the ground to bedrock, in a mound
of stone, for the reestablished 8½-mile cor., with brass
cap marked

8½ M
PL / WMIR
AWB

1915

Resurvey

Chains ; raise a mound of stone, 3 ft. base, 2 ft. high SE. of cor.

50.00 Thence along a SE. slope.
57.40 Desc. a NE. slope.
62.40 Wash, 20 lks. wide, 4 ft. deep, course N.60°E., thence along a rough broken SE. slope.
75.94 The original 9-mile cor., hereinbefore described, alongside of which, set an iron post, 3 ft. long, 3 ins. dia., 18 ins. in the ground to bedrock, in a mound of stone, for the reestablished 9-mile cor., with brass cap marked

9 M
PL / WMIR
AWB

1915

Cor. stands on a SE. slope, about 5 chs. from and 100 ft. above the bottom of a ravine.

Land; mountainous.
Soil; decomposed granite, 3d. rate, scattering granite boulders.
Undergrowth; scrub oak and manzanita.

Retracement for Resurvey

51.58 From the 9-mile cor., N.46°00'E. on a random line on 10th mi. (1st half).
Fall 155 lks. N.44°W. of the original 9½-mile cor., described by Baldwin as a gray syenite stone, 15 x 15 x 10 ins., marked WM A WB 9½ M, other marks not legible, with a mound of stone W. of cor.
True course and dist. are N.47°43'E., 51.60 chs.

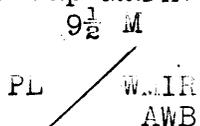
45.22 Thence N.46°00'E. on a random line on 10th mi. (2nd ½).
Fall 22 lks. N.44°W. of the original 10-mile cor., described by Baldwin as a syenite stone 22 x 12 x 4 ins. above ground, marked WMIR A WB, with mound of stone 4½ ft. base, 3 ft. high alongside. From which

A cottonwood, 8 ins. dia., bears N.7½°E. 94 lks. dist.
An oak, 20 ins. dia., bears N.37°E., 60 lks. dist.
An oak, 8 ins. in dia., bears N.35¼°W. 37 lks. dist.

All marks on stone and trees destroyed by Baldwin.
True course and dist. are N.46°17'E., 45.22 chs.

Resurvey

Return to the 9-mile cor.
Thence N.47°43'E. on a true line.
Along a rough broken SE. slope, thru dense scrub oak brush.
13.30 Desc. an E. slope.
19.00 Small ravine, course E.
30.00 Head of small ravine, course E.
37.40 Draw, with small stream of clear water, 1 lk. wide, course E.
46:00 Over gently rolling land, thru dense brush.
51.60 The original 9½-mile cor., described above.
Alongside of which, set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for the reestablished 9½-mile cor., with brass cap marked



1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE. of cor.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Resurvey

Chains Cor. stands in dense brush, in a small cove, which drains E.

Thence N.46°17'E. on a true line. on 10th mi. (2nd $\frac{1}{2}$).
Over gently rolling land, drains E. Small knoll about 6
3.70 Desc. into a ravine. \ chs. W.
6.00 Ravine, 6 ft. deep, course E., asc. a rocky S. slope.
13.60 Small ridge, bears E. and W.
19.50 Foot of descent, thence over level land, covered with
cottonwood, cedar, and oak.
22.50 Wash, 50 lks. wide, 5 ft. deep, course E.
39.70 Wash, 70 lks. wide, 2 ft. deep, course E.
45.22 The original 10-mile cor., hereinbefore described,
Alongside of which, set an iron post, 3 ft. long, 3 ins.
dia., 24 ins. in the ground for the reestablished 10-
mile cor., with brass cap marked

10 M

PL / WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor., from which
An oak, 8 ins dia., bears N.36°W. 35 lks. dist.
marked 10 M PL AWB BT
A cottonwood, 15 ins. dia., bears N.6°E. 95 lks. dist.
marked 10 M PL AWB BT
An oak, 14 ins. dia., bears N.35°E., 60 lks. dist.
marked 10 M PL AWB BT
An oak, 8 ins. dia., bears S.48°E., 54 lks. dist. 80
marked 10 M WMIR AWB BT
Cor. stands on the S. bank of a ravine, 150 lks. wide,
and 20 ft. deep. Stream in ravine, clear water, 1 lk. wide.
course SE; issues from spring about 15 chs. NW.

Land; rolling, and level.
Soil; 2nd. and 3d. rate.
Undergrowth; scrub oak.
Timber; cottonwood, cedar, and oak.

Retracement for Resurvey

From the 10-mile cor.,
N.46°00'E. on a random line. on 11th mi. (1st $\frac{1}{2}$).
48.12 Fall 28 lks. N.44°W. of the original 10 $\frac{1}{2}$ -mile cor.,
which is a sandstone marked and witnessed as described
by the U.S. Surveyor General.
True course and dist. are N.46°20'E., 48.12 chs.
Thence N.46°E. on a random line. on 11th mi. (2nd $\frac{1}{2}$).
46.41 Fall 27 lks. S.44°E. of the original 11-mile cor., which
is a granite stone 34 x 20 x 10 ins., marked 11 M, with-
out accessories.
True course and dist. are N.45°40'E., 46.41 chs.
Resurvey
Return to the 10-mile cor., (1st $\frac{1}{2}$)
Thence N.46°20'E. on a true line on the 11th mile. Over
rolling land, thru brush & cottonwood & oak timber. Wire
fence almost parallel with line about 6 or 7 chs. NW.
13.40 Asc. a SE. slope thru dense brush, Leave timber.
27.30 Ridge, bears SE. and NW.
29.20 Desc. a NE. slope.
36.50 Ravine; heads about 10 chs. NW., course SE.
38.80 Small spur, slopes SE. and ends in about 3 chs.
Wire fence, about 5 chs. NW. almost parallels line.
43.20 Ravine, course SE.
45.00 A pile of large granite boulders, bears W. about 2 chs.
48.12 The original 10 $\frac{1}{2}$ -mile cor., described above.
Alongside of which, set an iron post, 3 ft. long, 1 in.
dia., 12 ins. in the ground to bedrock, in a large mound
of stone, for the reestablished 10 $\frac{1}{2}$ -mile cor., with

Resurvey

Chains

brass cap marked

10 1/2 M

PL / WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor. From cor
A granite boulder 12 x 12 x 8 ft. bears E. about 60 lks.

Thence N.45°40'E. on a true line. on 11th mi. (2nd 1/2).

Along a broken SE. slope.

6.10

Desc. a broken NE. slope.

20.00

Creek bed, 20 lks. wide, 2 ft. deep, containing a small
stream of clear water, 2 lks. wide, course S.60°E. Scrub

31.90

Ravine, 5 chs. wide, 60 ft. deep, course SE. timber along
creek.

34.50

Desc. a NE. slope.

38.20

Ravine, course S. Asc. a SW. slope.

46.40

Small ridge, bears N. and S.

46.41

The original 11-mile cor., hereinafter described,
Alongside of which, set an iron post, 3 ft. long, 3 ins.
dia., 24 ins. in the ground for the reestablished 11-
mile cor., with brass cap marked

11 M

PL / WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high SE.
of cor.
A granite boulder 15 x 12 x 6 ft. above ground, bears N.
about 70 lks. dist.
Cor. stands on top of a small ridge.

Land; rough and hilly.

Soil; rocky, decomposed granite.

Undergrowth; scrub oak, manzanita, and catclaw.

Timber; cottenwood and oak.

Retracement for Resurvey

44.68 Thence N.46°00'E. on a random line. on 12th mi. (1st 1/2).
Fall 24 lks. N.44°W. of the original 11 1/2-mile cor.,
True course and dist. are N.46°18'E., 44.68 chs.

From the 11 1/2-mile cor.,
N.46°00'E. on a random line. on 12th mi. (2nd 1/2).

46.00 Fall 84 lks. S.44°E. of the original 12-mile cor.
True course and dist. are N.44°57'E., 46.01 chs.

Return to the 11-mile cor. Resurvey

Thence N.46°18'E. on a true line. on the 12th mi. (1st 1/2)
Desc. a NE. slope. Wire fence almost parallels line about
Ravine, course E. 5 or 6 chs. NW.

2.30 Small spur, bears E.

8.50 Ravine with small stream of water, 1 lk. wide, course E.

22.20 Granite cliff, bears NW. about 60 lks. dist.

31.00 The 11 1/2-mile cor., which is a granite stone, 18 x 15 x 10
ins. above ground, marked and witnessed as described
by the Surveyor General.

44.68 Alongside of which, set an iron post, 3 ft. long, 1 in.
dia., 20 ins. in the ground, to bedrock, in a mound of
stone, for the reestablished 11 1/2-mile cor., with brass
cap marked

11 1/2 M

PL / WMIR
AWB

1915

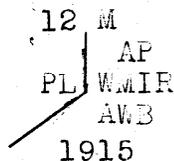
part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Resurvey

Chains ; raise a mound of stone, 3 ft. base, 2 ft. high SE. of cor.

Thence N.44°57'E. on a true line. on 12th mi. (2nd half).
Desc. NE. slope thru dense scrub oak and manzanita.
9.20 Wash, 20 lks. wide, 2 ft. deep, course SE.
12.80 Asc. a broken SW. slope.
37.00 Ridge, bears SE. and NW.
38.00 Desc. a NE. slope.

46.01 The original 12-mile cor., which is a granite stone 24 x 20 x 20 ins. above ground, properly marked, with mound of stone 6 ft. base, 4 ft. high SE. of cor.
Alongside of original stone, set an iron post, 3 ft. long, 3 ins. dia., 12 ins. in the ground to bedrock, in a mound of stone, for the reestablished 12-mile cor., with brass cap marked



; from which
A cedar, 24 ins. dia., bears N.35°10'E., 482 lks. dist. (old B.T.)
A cedar, 12 ins. dia., bears S.2°20'E. 261 lks. dist. (old B.T.)
A pinon, 20 ins. dia., bears N.11°30'W. 661 lks. dist. (old B.T.)
A pinon, 18 ins. dia., bears N.15°W. 558 lks. dist. (old B.T.)
A castellated peak (extreme W. edge) bears S.48°45'E.
A round hill, bears N.73°30'E.
A red granite bluff, bears N.28°30'E.
A cliff on side of round top hill, bears N.43°W.

Land; rolling.
Soil; rocky, 3d. rate.
Undergrowth; manzanita, scrub oak, and mesquite.
Timber; cedar and pinon.

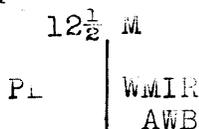
Retracement for Resurvey

From the 12-mile cor.,
North on a random line on the 13th mile. (1st 1/2).
47.63 Fall 40 lks. W. of the original 12 1/2-mile cor.
True course and dist. are N.0°29'E., 47.63 chs.

Thence from 12 1/2-mile cor.,
North on a random line on the 13th mile (2nd 1/2).
58.63 Fall 131 lks. W. of the original 13-mile cor.
True course and dist. are N.1°17'E., 58.64 chs.

Return to the 12-mile cor.
Thence N.0°29'E. on a true line on 13th mi. (1st half).
Desc. a NE. slope.

10.60 Foot of descent, draw, course E.
13.00 Asc. a SE. slope.
21.00 Enter dense undergrowth.
31.20 Top of ascent.
33.20 Desc. a steep NE. slope.
40.20 Fence, bears N.15°E.
46.40 Same fence, bears N.5°W.
47.63 The original 12 1/2-mile cor., which is a stone and mound of stone as described by the Surveyor General. Alongside of which, set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for the reestablished 12 1/2-mile cor., with brass cap marked



Resurvey of part of
West bdy. of White Mountain of San Carlos Indian Reservation, 16

Chains.

- raise a mound of stone 3 ft. base, 3 ft. high, E. of cor.
Thence,
N.1°17'E. on a true line, on 13th mile (2nd half).
..50 Draw, course S.70° E.
7.20 Ascend a broken S. slope; leave oak timber.
12.00 Enter scattering cedar and pinon, E. and W.
22.00 Ridge, brs. S.80°E. and N.80°W.
28.30 Canyon, course E. Small stream of clear water, 2 lks. wide
in bottom, course E.
33.50 Small spur, slopes E.
42.40 Ravine, course SE. Rice-Asbestos trail passes up this
ravine. (Old horse trail).
58.64 The original 13-mile cor., which is a stone, 14x12x10 ins.,
marked and witnessed as described by the Surveyor
General. Alongside of which, set an iron post, 3 ft.
long, 3 ins. in diam., 6 ins. in the ground to bed-
rock, in a mound of stone, for the reestablished 13-
mile cor., with brass cap, marked

13 M
P L | WMIR
AWB
1915

from which,

- A cedar, 10 ins. in diam., brs. N.82°W., 106 lks.
dist., marked 13 M PL BT. (tree used for
post at fence cor.)
A cedar, 8 ins. in diam., brs. N.68°E., 34 lks.
dist., marked 13 M WMIR BT

Land, broken.

Soil, rocky, 3rd and 4th rate.

Undergrowth, scrub oak, catclaw and manzanita.

Timber, scattering cedar, pinon and oak.

Retracement for Resurvey.

- From 13-mile cor.,
N.1°00' E. on a random line, on 14th mile (1st $\frac{1}{2}$).
45.67 Fall 120 lks. S.89°00'E. of the original 13 $\frac{1}{2}$ mile cor.
True course and dist. are N.0°30'W., 45.69 chs.
Thence from 13 $\frac{1}{2}$ mile cor.,
North, on random line, on 14th mile (2nd $\frac{1}{2}$).
57.81 Fall 123 lks. W. of the original 14 mile cor.
True course and dist. are N.1°13'E., 57.82 chs.

Resurvey:

- Return to the 13 mile cor.
Thence N.0°30'W., on a true line on the 14th mile (1st $\frac{1}{2}$).
.15 Fence brs. E. and W. Fence that has been following line
on W. side joins this fence 250 lks. W., then turns NW.
.60 Ridge, brs. E. and W. Descend N. slope.
10.00 Foot of descent, wash 20 lks. wide, 2 ft. deep, course E.
Thence over grassy land. Grassy valley to west.
15.30 Enter oak timber, E. and W.
34.30 Rock ledge 10 ft. high, brs. E and W.
45.69 The original 13 $\frac{1}{2}$ mile cor., which is a sandstone, 16x12
x8 ins. above ground, properly marked, with mound of
stone 3 ft. base, 2 ft. high, W. of cor. Alongside
of old cor., set an iron post, 3 ft. long, 1 in. in
diam., 15 ins. in the ground, in a mound of stone,
for the reestablished 13 $\frac{1}{2}$ mile cor., with brass cap,
marked

13 $\frac{1}{2}$ M
PL | WMIR
AWB
1915

from which,

Resurvey of Part of the
17. West boundary of the White Mountain or San Carlos Ind. Res.

Chains. from which,
 An oak, 12 ins. diam., brs. S. 84°45'E., 96 lks. dist.,
 marked 13½ M WMIR BT.
 An oak, 14 ins. dia., brs. N. 82°15'W., 56 lks. dist.,
 marked 13½ M PL BT.
 Thence N. 1°13'E. on true line, on 14th mile (2nd ½).
 Over rocky SE. slope, thru dense oak, ascending spur from E.
 slope of Timber Camp Mountain.
 9.00 Top of ascent (High point of Timber Camp Mountains is about
 1¼ miles west.)
 14.00 Descend a NE. slope. Leave oak, and enter heavy growth of
 cedar and juniper.
 35.80 Descend a steep N. slope into canyon.
 47.50 Canyon, course N. 80°E.
 48.80 Ascend a SE. slope.
 57.10 Rock ledge, 15 ft. high, brs. N. 80°E. and S. 80°W.
 57.82 The original 14 mile cor., which is a sandstone, 18x14x6 ins.
 marked and witnessed as described by the surveyor gen-
 eral. Alongside of which, set an iron post 3 ft. long,
 3 ins. in diam., in a mound of stone, on bedrock, for the
 reestablished 14 mile cor., with brass cap marked

14 M
 PL | WMIR
 | AWB
 1915

raise a mound of stone, 3 ft. base, 2 ft. high, E. of cor.
 From cor.,
 An oak, 6 ins. in diam., brs. N. 35°E., 15 lks. dist.
 marked 14 M WMIR BT. (Old BT.)
 A pinon, 8 ins. in diam., brs. S. 70°30'W., 153 lks.
 dist., marked 14 M PL BT. (New BT).
 Land, rolling. Soil, rocky, 2nd and 3rd rate!
 Undergrowth, scrub oak.
 Timber, cedar, juniper, pinon and oak. Good grazing.

Retracement for Resurvey.

From 14-mile cor.,
 North, on a random line, on 15th mile (1st ½).
 56.82 Fall 49 lks. W. of the original 14½-mile cor.
 True course and dist. are N. 0°30'E., 56.82 chs.
 Thence from 14½ mile cor.,
 North on a random line, on 15th mile (2nd ½).
 45.29 Fall 155 lks. W. of the original 15-mile cor.
 True course and dist. are N. 1°58'E., 45.32 chs.
Resurvey.

Return to the 14-mile cor.,
 Thence N. 0° 30'E., on a true line, on the 15th mile cor.
 (1st half).
 Along SE. slope.
 11.20 Top of ascent; thence along gradual E. slope.
 16.40 Descend a gradual NE. slope.
 28.20 Wash, 20 lks. wide, 2 ft. deep, course S. 80°E. Ascend S.
 slope.
 34.00 Top of ascent.
 41.00 Descend a NE. slope.
 47.50 Ravine, course S. 70°E. Ascend a sl slope.
 56.40 Top of malpais ledge about 20 ft. high.
 56.82 the original 14½ mile cor., which is a malpais stone,
 marked and witnessed as described by the surveyor
 general. Alongside of which, set an iron post 3 ft.
 long, 1 in. in diam., 8 ins. in the ground, to bedrock,
 in a mound of stone, for the reestablished 14½ mile
 cor., with brass cap, marked

14½ M
 PL | WMIR
 | AWB
 1915

raise a mound of stone, 2½ ft. base, 2 ft. high, E. of cor.
 From cor., A juniper, 18 ins. in diam., brs. S. 78°E., 102 lks.
 dist., marked 14½ M WMIR BT.
 A juniper, 18 ins. in diam., brs. S. 54°E., 75 lks.
 dist.

Resurvey

Chains marked $14\frac{1}{2}$ M WMIR BT
A juniper, 24 ins. dia., bears N. 88° W., 41 lks. dist.
marked $14\frac{1}{2}$ M PL BT
Thence N. $1^\circ 58'$ E. on a true line on 15th mi. (2nd $\frac{1}{2}$).
Asc. a rocky S. slope.
9.00 Top of ascent, thence over nearly level land.
28.00 Desc. a NE. slope.
45.32 The original 15-mile cor., which is a malpais stone, 24
x 12 x 4 ins., above ground, properly marked. Alongside
of which, set an iron post, 3 ft. long, 3 ins. dia.,
24 ins. in the ground, for the reestablished 15-mile
cor., with brass cap marked

15 M
PL | WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high E. of
cor. From cor.,
A juniper, 36 ins. dia., bears N. $25\frac{3}{4}^\circ$ E. 333 lks. dist.
marked WMIR 15 M BT
A cedar, 18 ins. dia., bears S. $25\frac{3}{4}^\circ$ W. 214 lks. dist.
marked 15 M PL BT
Cor. stands in open near foot of slope.
Land; rolling.
Soil; adobe, 2nd. and 3d. rate.
Undergrowth; some scrub oak.
Timber; oak, juniper, cedar, and pinon.
Good grazing,

Retracement for Resurvey

From 15-mile cor.,
North on a random line on 16th mi. (1st $\frac{1}{2}$).
47.52 Fall 66 lks. W. of the original $15\frac{1}{2}$ -mile cor.
True course and dist. are N. $0^\circ 48'$ E., 47.52 chs.
Thence from $15\frac{1}{2}$ -mile cor.,
North on a random line on 16th mi. (2nd $\frac{1}{2}$).
46.42 Fall 88 lks. W. of the original 16-mile cor.
True course and dist. are N. $1^\circ 05'$ E., 46.44 chs.
Return to the 15-mile cor. Resurvey / N. slope.
Thence N. $0^\circ 48'$ E. on true line on 16th mi. (1st $\frac{1}{2}$). Over gradual
10.00 Over rolling land, grassy.
47.00 Wash, 25 lks. wide, 2 ft. deep, course E.
47.52 The original $15\frac{1}{2}$ -mile cor., which is a sandstone, properly
marked. Alongside of which, set an iron post, 3 ft.
long, 1 in. dia., 18 ins. in the ground to bedrock, in
in a mound of stone, for the reestablished $15\frac{1}{2}$ -mile
cor., with brass cap marked

$15\frac{1}{2}$ M
PL | WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high E. of
cor. From cor.
A pine, 10 ins. dia., bears W. 13 lks. dist.
marked $15\frac{1}{2}$ M PL BT
An oak, 16 ins. dia., bears N. $77\frac{1}{4}^\circ$ E., 72 lks. dist.
marked $15\frac{1}{2}$ M WMIR AWB BT
Thence N. $1^\circ 05'$ E. on a true line on 16th mi. (2nd $\frac{1}{2}$).
Over gently rolling land.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Resurvey

Chains

24.50 Enter scrub oak, E. and W. Desc. a rocky NE. slope.
30.50 Enter a level grassy bottom, scattering juniper.
41.75 Road, bears SE. to Rice and NW. to asbestos mines.
43.00 Wash, 16 lks. wide, 1 ft. deep, course E.
45.00 Asc. a S. slope.
46.44 The original 16-mile cor., which is a stone properly mkd.
Alongside of which, set an iron post, 3 ft. long, 3 ins.
dia., 20 ins. in the ground to bedrock, in a rock mound,
for the reestablished 16 $\frac{1}{2}$ -mile cor., with brass cap mkd.

16 $\frac{1}{2}$ M

PL	WMIR
	AWB

1915 ; raise a mound of stone
3 ft. base, 2 ft. high E. of cor. From cor.
An oak, 12 ins. dia., bears S. 80° E., 13 lks. dist.
marked 16 M WMIR AWB BT
An oak, 15 ins. dia., bears S. 85° W., 24 lks. dist.
marked 16 M PL BT

Land; rolling.
Soil; clay with sandy surface, 1st., 2nd., and 3d. rate.
Undergrowth; scrub oak.
Timber; pine, juniper, oak, and cedar.
Good grazing.

Retracement for Resurvey

From the 16-mile cor.,
North on a random line on 17th mi. (1st $\frac{1}{2}$).
46.32 Fall 107 lks. W. of the original 16 $\frac{1}{2}$ mile cor.
True course and dist. are N. 1° 19' E., 46.33 chs.
Thence from 16 $\frac{1}{2}$ -mile cor.,
N. 0° 00' E. on a random line on 17th mi. (2nd $\frac{1}{2}$).
56.56 Fall 21 lks. S. 89° 00' E. of the original 17-mile cor.
True course and dist. are N. 0° 47' E., 56.56 chs.
Return to the 16-mile cor.
Thence N. 1° 19' E. on a true line on the 17th mile (1st $\frac{1}{2}$).
Over rolling mesa land.
46.33 The original 16 $\frac{1}{2}$ -mile cor., which is a sandstone, properly
marked. Alongside of which, set an iron post, 3 ft.
long, 1 in. dia., 26 ins. in the ground for the reestab-
lished 16 $\frac{1}{2}$ -mile cor., with brass cap marked

16 $\frac{1}{2}$ M

PL	WMIR
	AWB

1915 ; raise a mound of stone,
2 ft. base, 2 ft. high E. of cor. From cor.,
A juniper, 40 ins. dia., bears S. 55 $\frac{1}{4}$ ° E., 75 lks. dist.
marked WMIR AWB 16 $\frac{1}{2}$ M BT (old B.T.)
A juniper, 20 ins. dia., bears S. 74 $\frac{1}{4}$ ° W., 192 lks. dist.
marked WMIR AWB 16 $\frac{1}{2}$ M BT (old B.T.)

Thence N. 00° 47' E. on a true line on the 17th mile (2nd $\frac{1}{2}$).
Over gently rolling land.

17.00 Desc. a N. slope.
33.20 Ravine, course NE. / bears NE. and SW.
41.30 Old Apache trail, on top of small spur bearing E. Trail.
44.00 Desc. A NW. slope
51.00 Enter timber, bears E. and W.
56.56 The original 17-mile cor., which is a stone, properly mkd.
Alongside of which, set an iron post, 3 ft. long, 3 ins.
dia., 24 ins. in the ground for the reestablished 17-
mile cor., with brass cap marked

17 M

PL	WMIR
	AWB

1915

Resurvey

Chains An oak, 14 ins. dia., bears S.70°E., 22 lks. dist.
marked 17 M WMIR AWB BT (old B.T.)
An oak, 6 ins. dia., bears S.31°30'E., 62 lks. dist.
marked 17 M WMIR AWB BT (new B.T.)
A juniper, 16 ins. dia., bears S.71°30'W., 80 lks. dist.
marked 17 M PL BT (new B.T.)
A cedar, 8 ins. dia., bears N.49°45'W., 134 lks. dist.,
marked 17 M PL BT (new B.T.)

Land; rolling.
Soil; sandy loam, clay subsoil, gravel surface.
Timber; juniper, cedar, and oak.
Good grazing.

Retracement for Resurvey

From the 17-mile cor.,
N.1°00'E. on a random line. on 18th mi. (1st 1/2).
55.50 Fall 278 lks. N.89°00'W. of the original 17 1/2-mile cor.
True course and dist. are N.3°52'E., 55.57 chs.

Thence from 17 1/2-mile cor.,
N.1°00'E. on a random line. on 18th mi. (2nd 1/2).
45.67 Fall 3 lks. N.89°00'W. of the original 18-mile cor.
True course and dist. are N.1°02'E., 45.67 chs.

Return to the 17-mile cor.
Thence N.3°52'E. on a true line on the 18th mile (1st 1/2).
Over NE. slope, thru oak and cedar.
1.70 Ravine, course NE. Turns N. about 3 chs. E.
18.40 Small spur, slopes E. 3 chs. to end.
28.40 Slope becomes steep and rocky.
41.30 Canyon, course N.15°W.
42.00 Wash, 30 lks. wide, 2 ft. deep, course N.15°W. (in canyon).
46.00 Asc. a SW. slope.
55.57 The original 17 1/2-mile cor., which is a stone, properly
marked with mound of stone alongside. Alongside of old
cor., set an iron post, 3 ft. long, 1 in. dia., 15 ins.
in the ground, in a mound of stone, for the reestablished
17 1/2-mile cor., with brass cap marked
17 1/2 M
WMIR
AWB
1915 ; raise a mound of stone,
3 ft. base, 2 ft. high E. of cor. From cor.,
A pine, 5 ins. dia., bears S.6°E., 14 lks. dist.
marked 17 1/2 M WMIR AWB BT
A juniper, 24 ins. dia., bears S.35°E., 15 lks. dist.
marked WMIR 17 1/2 M AWB BT
A pinon, 8 ins. dia., bears S.65°W., 6 lks. dist.
marked 17 1/2 M PL BT

Thence N.1°02'E. on a true line. on 18th mi. (2nd 1/2).
Asc. a SW. slope, thru dense juniper, oak, and pine.
8.70 Top of ascent, thence along W. slope. Top of hill is about
16.70 Desc. a steep broken N. slope. 5 chs. E.
39.70 Ravine, course NE., thence over rocky rolling land.
45.67 The original 18-mile cor., which is a stone, 20 x 10 x 4
ins. properly marked. Alongside of which, set an iron
post, 3 ft. long, 3 ins. dia., 24 ins. in the ground
for the reestablished 18-mile cor., with brass cap mkd.
18 M
PL | WMIR
AWB
1915 ; raise a mound of stone
3 ft. base, 3 ft. high E. of cor. From cor.,
A cedar, 10 ins. dia., bears S.55°E., 98 lks. dist.
marked WMIR 18 M AWB BT (old B.T.)
An oak, 8 ins. dia., bears S.67 1/2°W., 74 lks. dist.
marked 18 M PL BT (new B.T.)

Land; rolling hills. Soil; rocky, sandy loam.
Undergrowth; scrub oak.
Timber; oak, pine, and juniper.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

Retracement for Resurvey

Chains From the 18-mile cor.,
N.1°00'E. on a random line on the 19th mile. (1st 1/2).
47.12 Fall 29 lks. N.89°00'W. of the original 18 1/2-mile cor.
True course and dist. are N.1°21'E., 47.12 chs.
Thence from the 18 1/2-mile cor.,
N.1°00'E. on a random line on 19th mi. (2nd 1/2).
47.32 Fall 140 lks. S.89°00'E. of the original 19-mile cor.
True course and dist. are N.0°42'W., 47.34 chs.
Resurvey
Return to the 18-mile cor.
Thence N.1°21'E. on a true line on the 19th mile. (1st 1/2).
Asc. a gradual SE. slope.
3.50 Small spur, slopes E.
26.50 Wash, 20 lks. wide, 2 ft. deep, course NE. / nearly west.
32.50 Fence, bears NE. and SW. / About 150 lks. SW fence turns
47.12 The original 18 1/2-mile cor., which is a stone 20 x 16 x 8
ins. properly marked. Alongside of which, set an iron
post, 3 ft. long, 1 in. dia., in a large mound of stone,
on bedrock, for the reestablished 18 1/2-mile cor., with
brass cap marked

18 1/2 M
PL | WMIR
AWB

1915

- ; from which
- A cedar, 26 ins. dia., bears N.65°E., 120 lks. dist.
marked WMIR 18 1/2 M AWB BT (old B.T.)
- A cedar, 12 ins. dia., bears S.70°45'E., 120 lks. dist.
marked WMIR 18 1/2 M AWB BT (old B.T.)
- A cedar, 9 ins. dia., bears S.13°45'E., 100 lks. dist.
mark d WMIR 18 1/2 M AWB BT (old B.T.)
- A cedar, 8 ins. dia., bears N.85°W., 60 lks. dist.
marked 18 1/2 M PL BT (new B.T.)

Thence N.0°42'W. true line, on 19th mi. (2nd 1/2). Gently rolling.
(Western edge of Cienega Valley, which lies immediately E.
of line.)

20.60 Wash, 15 lks. wide, 2 ft. deep, course E.
26.50 Desc. into ravine.
33.50 Ravine, course E.
39.60 Small rocky spur, slopes E.
47.34 The original 19-mile cor., which is a stone properly mark-
ed. Alongside of which, set an iron post, 3 ft. long, 3
ins. dia., 24 ins. in the ground for the reestablished
19-mile cor., with brass cap marked

19 M

PL | WMIR
AWB

1915

- ; raise a mound of stone, 3 ft. base, 2 1/2 ft. base, E.
of cor. From cor.
- A cedar, 20 ins. dia., bears N.24 1/2°E., 76 lks. dist.
marked WMIR 19 M AWB BT (old B.T.)
- A cedar, 8 ins. dia., bears S.38°E., 82 lks. dist.
marked 19 M WMIR AWB BT (new B.T.)
- A juniper, 10 ins. dia., bears S.57°W., 31 lks. dist.
marked WMIR 19 M AWB BT (old B.T.)
- A cedar, 6 ins. dia., bears N.32 1/2°W., 95 lks. dist.
marked 19 M PL BT (new B.T.)

Land; rolling.
Soil; sandy loam, clay subsoil. 2nd. and 3d. rate.
Timber; oak, juniper, and cedar.
Some grazing.

part of
Resurvey of the W. Bdy. of the White Mountain
of San Carlos
Indian Reservation.

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BOOK
3320

Retracement for Resurvey

Chains From the 19-mile cor.,
N.1°00'E. on a random line. on 20th mi. (1st 1/2).
44.47 Fall 134 lks. N.89°00'W. of the original 19 1/2-mile cor.
True course and dist. are N.2°44'E., 44.49 chs.
Thence from the 19 1/2-mile cor.
N.1°00'E. on a random line. on 20th mi. (2nd 1/2).
51.78 Fall 12 lks. S.89°00'E. of the original 20-mile cor.
True course and dist. are N.0°52'E., 51.78 chs.
Return to the 19-mile Resurvey cor.
Thence N.2°44'E. on a true line on the 20th mile. (1st 1/2).
Over NE. slope, thru dense cedar.
.70 Ravine, course E. Asc. a S. slope.
10.00 Top of asc.
17.00 Desc. a NW. slope.
29.50 Ravine, course E. Asc. a SW. slope.
35.00 Top of ascent.
44.49 The original 19 1/2-mile cor., which is a stone, properly
marked, with mound of stone and bearing trees. Along-
side of original cor., set an iron post, 3 ft. long, 1
in. dia., 26 ins. in the ground for the reestablished
19 1/2-mile cor., with brass cap marked

19 1/2 M
PL WMIR
AWB

1915

; mound of stone 2 ft. base, 2 ft. high E. of cor.
A cedar, 24 ins. dia., bears N.1°E., 203 lks. dist.
marked 19 1/2 M WMIR AWB BT
A cedar, 15 ins. dia., bears S.67°45'W., 250 lks. dist.
marked 19 1/2 M PL BT.
A cedar, 15 ins. dia., bears N.12°W., 159 lks. dist.
marked 19 1/2 M PL BT

Thence N.0°52'E. on a true line on 20th mi. (2nd 1/2).
Over gently rolling land.
18.00 Small draw, near head, course NE.
22.00 Desc. a N. slope.
31.00 Enter dense cedar, E. and W.
42.00 Leave cedar, E. and W. thence along steep E. slope. Bot-
tom of canyon is about 15 chs. E.
46.00 Asc. a SE. slope.
51.78 The original 20-mile cor., which is stone, properly marked
with mound of stone and bearing trees. Alongside of
original cor., set an iron post, 3 ft. long, 3 ins. dia.
20 ins. in the ground, in a mound of stone, for the
reestablished 20-mile cor., with brass cap marked

PL WMIR
AWB

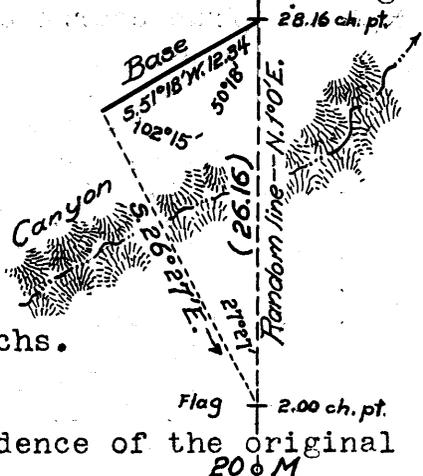
1915

; raise a mound of stone, 3 ft. base, 2 ft. high E. of
cor. From cor.,
A pinon, 8 ins. dia., bears N.47°30'W., 97 lks. dist.
marked 20 M PL BT
A pinon, ins. dia., bears N.79°W. 158 lks. dist.
marked 20 M PL BT
A cedar, 6 ins. dia., bears N.18°W., 14 lks. dist.
marked 20 M PL BT
Vertical shaft of stone, bears S.35°31'E. about 18 chs.
Cor. is on small spur, slopes E.
Land; rolling.
Soil; sandy loam to rocky.
Undergrowth; scrub oak. Timber; cedar and pinon..

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

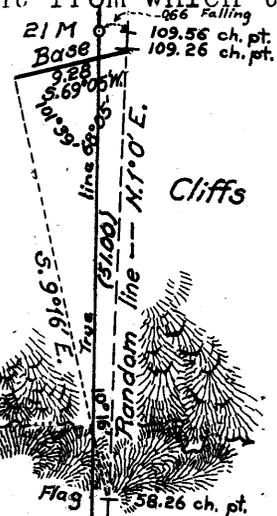
Retracement for Resurvey

Chains From the 20-mile cor.,
N. 1°00'E. on a random line. on 21st mi. (1st $\frac{1}{2}$).
2.00 Owing to a precipitous canyon in advance of this point,
triangulate as follows:
Set a flag at 2 ch. point, then proceed to the N. bank
of canyon to a point on line and lay off a base S. 51°
18'W. 12.34 chs. dist. to a point from which the flag
bears S. 26°27'E.



$$\text{Dist.} = \frac{12.34 \sin 102^\circ 15'}{\sin 27^\circ 27'} = 26.16 \text{ chs.}$$

28.16 Triangulation point.
40.00 After diligent search, find no evidence of the original
20 $\frac{1}{2}$ -mile cor.
Set temp. cor. & continue measurement on 21st mi. (2nd $\frac{1}{2}$).
58.26 To determine the distance across the canyon, triangulate,
as follows:
Set a flag at the 58.26 ch. point, then proceed to the
N. bank of the canyon to a point on line and lay off
a base S. 69°05'W. 9.28 chs. to a point from which the
flag bears S. 9°16'E.



$$\text{Dist.} = \frac{9.28 \sin 101^\circ 39'}{\sin 10^\circ 16'} = 51.00 \text{ chs.}$$

109.26 Triangulation point.
109.56 Fall 66 lks. S. 89°00'E. of the original 21-mile cor.
True course & dist. are N. 0°39'E., 109.56 chs.
Return to the 20-mile cor.
Thence N. 0°39'E. on a true line on 21st. mile. (2nd $\frac{1}{2}$).
Desc. a very steep, broken rocky N. slope.
2.00 Triangulation point. falls 1 lk. E.
18.00 (approx. dist. to canyon, course NE.
28.16 Triang. pt. falls 17 lks. E. Flat top of spur projecting NE.
31.30 Desc. a steep broken NE. slope. into canyon.
45.70 Canyon, empties into Salt river about 20 chs. E.
54.78 (At proportional dist.) Set an iron post, 3 ft. long, 1
in. dia., 26 ins. in the ground for the reestablished
20 $\frac{1}{2}$ -mile cor., with brass cap marked

20 $\frac{1}{2}$ M

PL | WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high E.
of cor.

55.37 Small rocky spur, slopes E.
At about 60 chs. is a ravine, course E., the land in ad-
vance is a series of cliffs, over which it would be

part of
Resurvey of the W. Bdy. of the White Mountain
Cor. San Carlos
Indian Reservation.

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BOOK 3320

Resurvey

Chains almost impossible to chain.
58.26 Triangulation point falls 35 lks. E.
70.00 (approx.) Canyon 150 ft. deep, course E. Thence asc. over
109.26 Triang. pt. falls 66 1/2 k. E. rough SE slope, broken by cliffs.
109.56 The original 21-mile cor., which is a stone in place, 3 1/2
x 3 1/2 x 2 ft. above ground, properly marked, with mound
of stone 3 ft. base, 1 ft. high alongside. Alongside
of old cor., set an iron post, 3 ft. long, 3 ins. dia.,
in a mound of stone 4 1/2 ft. base, 3 ft. high, for the
reestablished 21-mile cor., with brass cap marked

21 M

PL | WMIR
AWB

1915

; form cor.,
A cedar, 24 ins. dia., bears S. 10° E. 330 lks. dist.
marked 21 M WMIR AWB BT
North between 2 large rocks on high red peak on N. side
of Salt River bears N. 2° 53' E.
Dome on N. side of Salt River bears N. 27° 30' E.
Highest point on sky line, bears N. 79° E.
Junction of canyon with river, bears S. 34° E.
Falls on creek at head of canyon, bears S. 15° 40' E.

Land; mountainous.
Soil; rocky.
Timber; considerable pinon.

From the 21-mile cor.,
North on a true line on the 22nd. mile.
Along precipitous NE. and E. slope.
7.24 Canyon, 5 chs. wide, 50 ft. deep, course E.
20.17 Spur, slopes E.
33.03 Canyon, 5 chs. wide, 50 ft. deep, course E.
40.00 Set an iron post, 3 ft. long, 1 in. dia., 6 ins. in the
ground, in a mound of stone, for the 21 1/2-mile cor.,
with brass cap marked

21 1/2 M

PL | WMIR
AWB

1915

; raise a mound of stone, 3 ft. base, 2 ft. high E. of
COR.

43.65 Spur, slopes E. Desc. a NE. slope to river.
67.80 Set an iron post, 3 ft. long, 1 in. dia., 6 ins. in the
ground, in a large mound of stone for M.C., with brass
cap marked

M C

21 1/2 M | 27.80 chs.

PL | AWB
WMIR

1915

M.C. stands on ledge on top of cliff, which drops verti-
cally as a wall, 50 ft. to canyon of Salt River
River at this point is 8 chs. wide, in Salt River Canyon.
72.00 Center of Salt River; course N. 60° W.
Land; mountainous.. Soil; rocky.

part of
Resurvey of the W. Bdy. of the White Mountain
or San Carlos
Indian Reservation.

GENERAL DESCRIPTION

SURFACE: This portion of the west boundary of the White Mountain Indian Reservation varies from meadow thru rolling and heavily rolling to mountainous land cut by precipitous canyons. The roughest part of the line lies from the 20-Mile corner to the Salt River, where canyons and numerous cliffs are encountered; over one-third of this portion of the line had to be triangulated. Noted elevations along the line are Chromo Butte, Seven Mile Mountain and Timber Camp Mountain.

DRAINAGE AND WATER SUPPLY: The drainage as a rule is towards the east and southeast, converging to Sycamore Creek, which in turn empties into the Gila River. The line is crossed by several small creeks, and an occasional spring is situated near the boundary.

SOIL: From the Initial Monument to the 14-Mile corner the soil is mostly rocky, composed of decomposed granite; the soil is here 2nd, 3rd and 4th rate, with 3rd rate predominating. Some adobe is encountered on the 15th mile. From the 15-Mile to the 20-Mile corners the soil is principally a sandy loam over clay subsoil, with gravelly surface, and is 1st, 2nd and 3rd rate.

VEGETATION: There is grass in varying quantities from the 3-Mile to the 9-Mile corners and from the 13-Mile to the 20-Mile corners, generally sufficient for grazing. There is considerable pinyon in the canyons, and dense oak in patches on the eastern slopes of Timber Camp Mountain. Scattering scrub cedar and scrub oak are found commonly along the boundary, with some juniper from the 14-Mile corner on to the river. Cottonwood is found in Corral Gulch and along the creek bottoms, interspersed with some sycamore. From the 0-Mile to the 13-Mile corners, the undergrowth is composed of catclaw, scrub oak, mesquite, cactus, and manzanita.

MINERAL: Quite extensive operations in mining asbestos is carried on about two miles west of the the 18th mile.

IMPROVEMENTS: There are no settlers along the line. The town of McMillenville is situated about $1\frac{1}{2}$ miles NW. of the $3\frac{1}{2}$ -Mile corner. Wire stock fences approximately parallel most of the line up to the 13-Mile corner. A road crosses the line from McMillenville to Rice, and one from the asbestos mines to Rice. The old "Apache Trail" crosses the 18th mile, and several pack trails at different parts of the line.

CERTIFICATE OF UNITED STATES SURVEYOR.

I, Roy J. Gill, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group No. 76, Arizona, bearing date of the 7th day of June, 1916, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, ^{re-} surveyed all those parts or portions of the West boundary of
The White Mountain or San Carlos Indian Reservation
in Ts. 2 & 3 N., R.16 E., and Ts. 3, 4, & 5 N., R.17 E.
(Unsurveyed)
of the Gila and Salt
River Base & Meridian, in the State of Arizona, which are represented in the foregoing field notes ^{and by diagram on page 1, hereof,} as having been executed by me, and under my direction; and that all the corners of said ^{re-} survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General, for Group No. 76, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of ^{re-} such ^{re-} survey.

Roy J. Gill (deceased)
 U. S. Surveyor.
 by acfortney
 ASS't Supervisor of Surveys
 District No. 5
 APPROVAL

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
 Phoenix, Arizona, Dec. 8, 1919

The foregoing field notes of the ^{re} survey of the Fractional Western Boundary of
The White Mountain (or San Carlos) Indian Reservation
from Chromo Butte to Salt River, 0-Mile cor. to 21 1/2-Mile cor.,
and 27.80 chs.,
in Ts. 2 and 3 N., R.16 E., and Ts. 3, 4, and 5 N., R.17 E. (Unsurveyed)
of the Gila and Salt River Base and Meridian, in the State of Arizona,
 executed by Roy J. Gill, U.S. Surveyor,
 under his special instructions dated June 7th, 1916, for Group 76, Ariz; ###, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ^{re} surveys they describe, are hereby approved.

Francis D. Frost
 U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____
 _____, has been correctly copied from the original notes on file in this office.