

FIELD NOTES

OF THE SURVEY OF THE

West Boundary of T. 3 S., R. 18 E.

North " " T. 3 S., R. 18 E.

East " " T. 3 S., R. 18 E. (portion)

North " " T. 3 S., R. 19 E. (portion)

Within the White Mountain (or San Carlos) Indian Reservation

2819

Of the Gila & Salt River Base & Meridian,

In the State of Arizona

EXECUTED BY

H. L. Baldwin, Topographer

In the capacity of U. S. Surveyor, under instructions dated October 28, 1915,

Commissioner of the General Land Office to A. F. Dunnington,
issued by the ~~United States Surveyor General to govern surveys included in~~
Topographer in Charge of Indian Surveys

~~Group No. ---, which were approved by the Commissioner of the General Land~~

~~Office, ---, 191--, pursuant to authority contained in the Act of~~

~~Congress dated ---, 191--~~

Survey commenced November 19, 1915

Survey completed December 2, 1915

INDEX DIAGRAM.

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*Plat in T. Exterior
SE. division.*

Chains

The SW. Cor. of T. 3 S., R. 18 E. is in Lat. 33° 07' N., Long. 110° 31' 40" W.

Survey commenced November 19, 1915, by H. L. Baldwin, Topographer, and executed with a Buff & Buff transit with solar attachment, No. 9207, the horizontal limb having two double verniers placed opposite each other and reading to minutes of arc.

Before beginning work the instrument was tested and all adjustments corrected wherever necessary.

The iron posts used in this survey are 3 ft. long, set 26 ins. in the ground, filled with cement and fitted with brass caps. The posts at $\frac{1}{4}$ sec. cors. are 1 inch in dia., and those at township, section and meander cors. 3 ins. dia.

After considerable search, I find the SW. cor. of T. 3 S., R. 18 E., same being nearly one-half mile distant from the point described in the bearings given to the terminal corner of the amended south boundary of the White Mountain Indian Reservation, at the junction of Gila and Hawk Canyons. This bearing was given as S. 1° 8' W., 168.55 chs. dist. from the cor. of the township above described. This corner was found to be marked and witnessed as described in notes of the survey of E. bdy. of T. 4 S., R. 18 E. North of and alongside the old stone which is a granite 8x12x10 ins. above ground, I set an iron post 3 ins. dia., stamped in cap

T 3 S in N.
R 18 E S 31 in NE.
S 6 in SE.
S 1 in SW.
R 17 E S 36 in NW.
T 4 S 1915 in S., from which

A palo verde 6 ins. dia. brs. S. 14° E., 191 lks. dist. (Properly marked, as described)

A cedar 10 ins. dia. brs. N. 61 $\frac{1}{2}$ ° W., 224 lks. dist. (properly marked, as described).

The old mound of stone 4 ft. base, 3 ft. high, was reconstructed S. of the corner. Mt. Turnbull brs. S. 79° 16' E. instead of S. 79 $\frac{1}{2}$ ° E. as described.

Nov. 20, 1915, At 3 p.m., l.m.t., I set off 33° 07' N. on the lat. arc, 19° 35' S. on the decl. arc, and determine a meridian with the solar.

Thence I run

North bet. secs. 31 and 36.

Ascending slightly, over SW. slope.

2.00 Ridge, brs. SE. and NW.

Descend N. slope.

9.00 Wash, course NW., 20 lks. wide.

Ascend SW. slope.

16.00 Spur, brs. W., 6.00 chs.

Descend NW. slope.

21.50 Draw, course W.

Ascend.

Survey of the West boundary of T. 3 S., R. 18 E.

Chains

- 38.30 Descend N. slope.
- 40.00 Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36, stamped in cap
 - $\frac{1}{4}$ in N.
 - S 31 in E.
 - S 36 in W.
 - 1915 in S., from which
 - A cedar 28 ins. dia. brs. S. 34° W., 134 lks. dist.
 - Mkd. $\frac{1}{4}$ S 36 B T.
 - A cedar 30 ins. dia. brs. N. 76° E., 242 lks. dist.
 - Mkd. $\frac{1}{4}$ S 31 B T.

Cor. falls on S. edge of high water of wash, 1.00 ch. wide, course E., but which soon turns to the N.
- 40.75 Wash, course E., 30 lks. wide.
 - Ascend SE. slope.
- 46.00 Spur, brs. E.,
 - Descend N. slope.
- 49.40 Wash, course E., 20 lks. wide.
 - Ascend S. slope.
- 52.50 Slope, changes to SE.
- 56.60 Spur, brs. SE.
 - Descend NE. slope.
- 63.60 Wash, course SE., 20 lks. wide.
 - Ascend SW. slope.
- 80.00 Set an iron post 3 ins. dia. for cor. of secs. 25, 30, 31 and 36, stamped in cap
 - T 3 S in N.
 - R 18 E S 30 in NE.
 - S 31 in SE.
 - S 36 in SW.
 - R 17 E S 25 in NW.
 - 1915 in S., from which
 - A palo verde 6 ins. dia. brs. S. $48\frac{1}{2}^{\circ}$ W., 33 lks. dist.
 - Mkd. T 3 S R 17 E S 31 B T.
 - on 14 inch cedar tree
 - A cedar limb 5 ins. dia. brs, N. 11° E., 19 lks. dist.
 - Mkd. T 3 S R 18 E S 30 B T.

Raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Cor. falls on limestone hill 5 ft. below the summit which is 1.00 ch. E. of this point.

Land, rough and mountainous.
 Soil, decomposed granite, 2nd and 3rd rate.
 Slopes are too steep for agricultural use;
 Poor grazing land.
 Dense undergrowth of oak brush, mesquite, palo verde, and cactus.
 Scattered cedar, pinon, and palo verde timber.

Survey of the West boundary of T. 3 S., R. 18 E.

Chains

Nov. 20, 1915. At this cor., in lat. $33^{\circ} 08'$ N., and long., $110^{\circ} 31' 40''$ W., I observe Polaris at 5h 8.4m and 5h 11.3m, p.m., l.m.t., with telescope direct and reversed and mark the points on the ground north of cor. The bearing of Polaris at these instants of time is $75.2'$ and $74.8'$ respectively, east of north. From the mean of these two points I lay off $1^{\circ} 15'$ W. and the true meridian thus obtained agrees with that brought forward to this point.

Close work Nov. 20, 1915.

North bet. secs. 25 and 30.

Ascending SW. slope.

1.50 Ridge hrs. SE. and W.

Descend N. slope.

8.00 Wash, course E., 10 lks. wide.

Ascend SE. slope.

10.25 Spur hrs. E., 2.00 chs.

Descend NE. slope.

13.25 Wash, course SE., 20 lks. wide.

Ascend S. slope.

18.90 Ridge, hrs. SE. and NW.

Descend NE. slope.

27.90 Wash, course E., 20 lks. wide.

Ascend SE. slope.

34.50 Spur, hrs. E., 5.00 chs.

Descend NE. slope.

37.60 Wash, course E., 10 lks. wide.

Ascend SE. slope.

39.50 Spur, hrs. E., 5.00 chs.

Descend NE. slope.

40.00 Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. of secs. 25 and 30, stamped in cap

$\frac{1}{4}$ in N.
S 30 in E.
S 25 in W.
1915 in S., from which

A cedar 16 ins. dia. hrs. N. 76° E., 51 lks. dist.
mkd. $\frac{1}{4}$ S 30 B T.

A cedar 20 ins. dia. hrs. N. $17\frac{1}{2}^{\circ}$ W., 63 lks. dist.
mkd. $\frac{1}{4}$ S 25 B T.

Survey of the West boundary of T. 3 S., R. 18 E.

Chains

Cor. falls on very steep NE. slope, 125 ft. above bed of Hawk Canyon. Thence very steep descent.

48.10 Foot of slope.

Enter Hawk Canyon, course NW.

54.15 S. edge of wash, in Hawk Canyon, course NW., 1.00 ch. wide.

61.00 Leave Hawk Canyon,

Ascend SW. slope.

65.10 Enter level mesa, bearing SE. and NW.

64.60 Wire fence, brs. SE. and NW.

80.00 Set an iron post 3 ins. dia., for cor. of secs. 19, 24, 25 and 30, stamped in cap

T 3 S in N
R 18 E S 19 in NE
S 30 in SE
S 25 in SW
R 17 E S 24 in NW
1915 in S

Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.

Cor. falls on flat.

Land, mountainous and heavy rolling.
Soil, 4th and 1st rate.
Dense undergrowth of scattered mesquite, cactus, buck brush and palo verde.
No timber.



North bet. secs. 19 and 24.

Over flat mesa country.

6.70 Seeing that the true point for C. C. bet. secs. 19 and 24, on the White Mountain Indian Reservation boundary will fall in unsafe place for cor., at this point

Set an iron post 3 ins. dia. for W. C. to C. C. of secs. 19 and 24, stamped in cap

T 3 S W C C C M C in N
R 18 E S 19 in E
R 17 E S 24 in W
1915 in S

As two of the boundaries of the White Mountain Indian Reservation coincide at this point, and as the land lying north of this line is public land, and south of this line is also public land, I do not mark W M I R on post.

8.08 Intersect the amended south boundaries of the White Mountain Indian Reservation, which coincide at this point, at a point 280 lks. N. 68° 04' W., of the 96½ mile cor. of the amended south bdy. of the White Mountain Indian Reservation, established by me Sept. 18, 1915; and 12.25 chs. N. 68° 04' W. of the 30 mile cor. of amended South bdy. of White Mountain Indian Reservation, established by P. Coutzen, February, 1898, which is a

Survey of the West boundary of T. 3 S., R. 18 E.

Chains

malpais stone 20x10x7 ins. above ground, marked W M I R
A S E on N., 30 M on E., and P L on S. face, with
mound of stone 3 ft. base, 2 ft. high, N. of cor.

Descend steep N. slope to Gila River.

10.15 S. edge of water of Gila River, course W., 180 lks. wide.

14.15 Leave river bottom. Ascend gradually.

15.00 At high water mark, set an iron post 3 ins. dia. for M.C.
bet. secs. 19 and 24, on N. bank of Gila River,
stamped in cap

T 3 S in N.
R 18 E S 19 in NE.
R 17 E S 24 in NW.
M C 1915 in S., from which

A mesquite 7 ins. dia. brs. S. 41 $\frac{1}{2}$ ° E., 63 lks. dist.
Mkd. T 3 S R 18 E S 19 M C B T.

A mesquite 8 ins. dia. brs. S. 73 $\frac{1}{2}$ ° W., 32 lks. dist.
Mkd. T 3 S R 17 E S 24 M C B T.

21.60 Ascend SW. slope.

35.50 Slope changes to SE.

39.00 Wash, course SE, 10 lks. wide.

40.00 Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. bet. secs.
19 and 24, with cap stamped

$\frac{1}{4}$ in N.
S 19 in E.
S 24 in W.
1915 in S.

Raise mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

44.00 Spur, brs. E., Descend NE. slope.

46.30 Wash, course SE., 20 lks. wide,

Ascend SE. slope.

51.35 Ridge, brs. E. and W.

Descend N. slope.

59.30 Wash, course SE., 60 lks. wide.

Ascend steep SW. slope.

62.80 Slope changes to S.

68.75 Ridge, brs. SE. and NW.

Ascend NE. slope.

72.75 Wash, course SE., 10 lks. wide.

Descend SW. slope.

80.00 Set an iron post 3 ins. dia. for cor. of secs. 13, 18,
19 and 24, stamped in cap

Survey of the West boundary of T. 3 S., R. 18 E.

Chains

T 3 S in N.
R 18 E S 18 in NE.
S 19 in SE.
S 24 in SW.
R 17 E S 13 in NW.
1915 in S.

Raise mound of stone 2 ft. base, 1½ ft. high, W. of cor.
Cor. falls on S. slope, 3.00 chs. NE. of a ravine, course SE.

Land, heavy rolling.
Soil, rocky and gravelly, 2nd, 3rd and 4th rate.
Dense undergrowth of mesquite, cactus, buck brush and palo verde.
No timber.

Close work Nov. 21, 1915.

I take no observation for meridian this evening because my line has been a transit line with good distant fore and back sights.

North bet. secs. 13 and 18.

Ascending SW. slope.

7.00 Slope changes to SE.

14.10 Rock spur brs. SE., 50 lks.

Descend NE. slope.

18.00 Canyon, course SE., 30 lks. wide in bottom.

Ascend steep S. slope.

27.21 Intersect amended south bdy. of the White Mountain Indian Reservation, 24.82 chs. E. of the 90½ mile cor. established by me Sept. 14, 1915, and which is an iron post 1 inch dia., set in a mound of stone, stamped in cap 90½ M A S B W M I R in N., P L in S., with mound of stone 3 ft. base, 2 ft. high, N. of cor.

At this intersection, set an iron post 3 ins. dia., in rocky ground, for C.C. of secs. 13 and 18, stamped in cap

W M I R T 3 S in N.
R 18 E S 18 in NE.
R 18 E S 18 in SE.
R 17 E S 13 in SW.
R 17 E S 13 in NW.
C C 1915 in S.

Raise mound of stone 4 ft. base, 3 ft. high, S. of cor.

This cor. falls in a small ravine course S., and about 3 ft. W. of the drain therein.

It is about 600 ft. below the top of ^{the} mountain and about 30 ft. E. of a long narrow strip of slide rock on mountain side bearing about N. and S. for 400 ft.

Continue ascent; up steep mountain side.

Survey of the West boundary of T. 3 S., R. 18 E.

Chains	
37.36	<p>Top of mountain brs. NW. and SE., 2000 ft. above Gila River. Highest point of mountain brs. about 2.00 chs. NW.</p> <p>MT. Turnbull, brs. S. 68° 25' E., about 20 miles.</p> <p>Church at San Carlos brs. N. 76° 04' E., about 8 miles.</p> <p>Triplett brs. N. 44° 34' E., about 20 miles.</p> <p>Descend NE. slope.</p>
40.00	<p>Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. of secs. 13 and 18, stamped in cap</p> <p style="padding-left: 40px;"> $\frac{1}{4}$ in N. S 18 in E. S 13 in W. 1915 in S. </p> <p>Raise a mound of stone 3 ft. base, 2 ft. high, W. of cor.</p>
48.53	<p>Church at San Carlos, brs. N. 77° 04' E.,</p> <p>Descend over precipice, 1200 ft.</p>
62.80	<p>Gulch course NE., 20 lks. wide in bottom.</p> <p>About 1.00 ch. E. of this point is a small spring of good water.</p> <p>Ascend SE. slope.</p>
65.00	<p>Top of spur, brs. NE., 3.00 chs.</p> <p>Descend NE. slope.</p>
71.20	<p>Wash, 30 lks. wide in canyon, course SE.</p> <p>Ascend 300 ft. - up SW. slope.</p>
80.00	<p>Set an iron post 3 ins. dia. for cor. of secs. 7, 12, 13 and 18, stamped in cap</p> <p style="padding-left: 40px;"> T 3 S in N. R 18 E S 7 in NE. S 18 in SE. S 13 in SW. R 17 E S 12 in NW. 1915 in S. </p> <p>Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.</p> <p>Land, very rough and mountainous. Soil, rocky, 4th rate. Dense undergrowth of mesquite, catclaw, palo verde, and cactus. No timber.</p> <p>Cor. falls on SW. slope, 100 ft. below ridge, which bears NW. and SE.</p>

	<p>North bet. secs. 7 and 12.</p>
	<p>Ascending SW. slope.</p>
7.40	<p>Ridge, brs. SE. and NW.</p>

Survey of the West boundary of T. 3 S., R. 18 E.

Chains	
	Descend NE. slope.
16.35	Wash, course SE., 20 lks. wide. Ascend SW. slope.
21.19	Ridge brs. NE. and SW. Descend NE. slope.
23.20	Head of wash, course SE. Ascend S. slope.
24.60	Ridge, brs. SE. and NW. Descend N. slope.
27.90	Wash, course SE., 10 lks. wide.
29.34	Spur brs. SE. 4.00 chs. Mt. Turnbull brs. S. 65° 51' E.
32.00	Wash, course E., 10 lks. wide. Asc. S. slope.
35.34	Spur, brs. SE., 10 chs. Descend N. slope.
36.40	Enter wash, course SE.
40.00	Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. bet. secs. 7 and 12, stamped in cap <div style="text-align: center;"> $\frac{1}{4}$ in N S 7 in E S 12 in W 1915 in S </div> Raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
41.00	Leave wash, Ascend S. slope.
44.35	Thence along E. slope.
55.05	Descend NE. slope.
57.20	Wash, 10 lks. wide, in canyon, course SE. Ascend steep S. slope.
61.20	Slope changes to SW.
72.57	Spur, brs. W., 3.00 chs. Descend NW. slope.
79.50	Seeing that the true point for the cor. of secs. 1, 6, 7, and 12, will fall in unsafe place for cor., at this point, Set an iron post 3 ins. dia., for W. C. to the cor. of secs. 1, 6, 7 and 12, stamped in cap <div style="text-align: center;"> T 3 S W C in N R 18 E S 6 in NE S 7 in SE S 12 in SW R 17 E S 1 in NW 1915 in S from which </div>

Survey of the West boundary of T. 3 S., R. 18 E.

Chains

A palo verde 6 ins. dia. brs. N. 32 $\frac{1}{4}$ ° E., 36 lks. dist.
Mkd. T 3 S R 18 E S 6 W C B T.

A palo verde 8 ins. dia. brs. S. 65 $\frac{1}{4}$ ° E., 29 lks. dist.
Mkd. T 3 S R 18 E S 7 W C B T.

No other trees available.

Cut a cross on a rock boulder 4x4x4 ft. on W. side of
creek, which brs. N. 89 $\frac{1}{4}$ ° W., 70 lks. dist., and mark
same W C B O, with cross at correct point.

80.00 True point for cor. of secs. 1, 6, 7 and 12, falls in un-
safe place in wash, course SW,

Land, mountainous.
Soil, 4th rate.
Dense undergrowth of buck brush, cactus, mesquite and
palo verde,
Timber, scattered scrub cedar.

From true point for cor. of secs. 1, 6, 7 and 12, I run
North bet. secs. 1 and 6, leaving wash at this place, course
SW.

1.10 Same wash, course SE.

3.50 Same wash, course SW.

6.00 Same wash, course SE..

11.25 Same wash, course SW.

Ascend S. slope.

12.30 Spur, brs. E. 50 lks.

Descend NE. slope.

13.80 Same wash, course SE.

Ascend SW. slope.

25.30 Spur, brs. W., 1.00 ch.

Descend NW. slope.

30.00 Same wash, course SW.

Ascend S. slope.

36.00 Trail, brs. SE. and NW.

36.65 Ridge, brs. SE. and NW. Descend N. slope.

Church at San Carlos, brs. S. 88° 59' E.,

Mt. Turnbull brs. S. 62° 50' E.

39.75 Draw, course NE.

Ascend SE. slope.

40.00 Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. bet. secs.
1 and 6, stamped in cap

Survey of the West boundary of T. 3 S., R. 18 E. BOOK 2819

Chains

1/4 in N.
S 6 in E.
S 1 in W.
1915 in S.

Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.

40.96 Spur brs. E. 2.00 chs.

Descend N. slope.

43.40 Wash, course SE., 20 lks. wide.

Ascend SW. slope.

63.50 Thence along W. slope.

Nov. 22, 1915, At 5h 4.1m p.m., 1.m.t., and 5h 5.8m p.m., 1.m.t., I observe Polaris, with telescope direct and reversed and mark the points on the ground N. of my station. The bearing of Polaris at these instants of time is 1° 14 1/2' E., and 1° 14.2' E. of N. respectively. From this point I lay off an angle of 1° 14.3' W. and the line thus determined agrees with the line brought forward to this point.

Close work Nov. 22, 1915.

66.60 Descend NW. slope.

61.60 Slope changes to N.

65.00 Draw, course E.

Ascend SE. slope.

70.00 Slope changes to S.

72.16 Spur, brs. E., 2.00 chs.

Descend N. slope.

74.43 Enter wash, course SE.

78.43 Leave wash, course SE.

Ascend SW. slope.

80.00 Set an iron post 3 ins. dia., for cor. of Tps. 2 and 3 S., Rgs. 17 and 18 E., stamped in cap

T 2 S in N.
R 18 E S 31 in NE.
S 6 in SE.
S 1 in SW.
R 17 E S 36 in NW.
T 3 S 1915 in S.

Raise mound of stone 4 ft. base, 2 ft. high, S. of cor.

This cor. falls half way up bank from wash, course S. 70° E., 5.00 chs. wide; and one half mile south of a very prominent butte, with perpendicular ledges on S., E. and W. sides. A due north line from cor. will split butte with 2/3 of it east and one-third west of line.

Land, heavy rolling.
Soil, decomposed granite, 2nd rate. (Good grazing).

BOOK 6

Survey of the West Boundary of T. 3 S., R. 18 E.

Chains

Dense undergrowth of scrub oak, mesquite and catclaw, cactus and Spanish bayonet.

From the cor., a giant cactus 1 foot in diameter, with 6 branches from upright stem, brs. S. 52° W., 47 lks. dist., blazed towards corner.

November 23, 1915.

North Boundary of T. 3 S., R. 18 E.

At the secant point 3 lks. S. of the cor. of Tps. 2 and 3 S., Rgs. 17 and 18 E., I turn off an angle of 90° 1.7' from my backsight to the south, and run

N. 89° 58.3' E. along the secant, through sec. 31.

Ascending SW. slope.

1.50 Spur brs. S., 2.00 chs.

Descend E. slope.

3.00 Draw, course S., 10 lks. wide.

Ascend W. slope.

6.40 Spur brs. S., 10 chs.

Descend E. slope.

10.70 Wash, course S. 10 lks. wide.

Ascend SW. slope.

22.13 Ridge, brs. SE. and NW. Ascend NE. slope.

Butte, north of cor., brs. N. 34° W.

38.58 Allowing for convergency, - 1 lk. N. of secant, -
At this point set an iron post 1 inch dia., for 1/4 sec.
cor., stamped in cap

1/4 in W.
S 31 in N.
S 6 1915 in S.

Raise a mound of stone 3 ft. base, 1 1/2 ft. high, N. of cor.

41.00 Enter wash, course E.

52.00 Leave wash, course SE. Ascend SW. slope.

57.60 Thence along S. slope.

59.70 Descend SE. slope.

66.40 Slope changes to N.

Survey of North boundary of T. 3 S., R. 18 E.

Chains	
70.50	Wash, course S., 20 lks. wide. Ascend SW. slope.
73.76	Spring of fresh water, 2.00 chs. S. of line.
74.23	Thence along S. slope.
78.58	Set an iron post 3 ins. dia., for cor. of secs. 5, 6,, 31 and 32, stamped in cap
	<p style="text-align: center;">T 2 S R 18 E in N. S 32 in NE. S 5 in SE. S 6 in SW. S 31 in NW. T 3 S 1915 in S.</p>
	Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.
	<p>Land, heavy rolling. Soil, decomposed granite, 3rd rate. Dense undergrowth of palo verde, ocatilla, mesquite, catclaw and cottonwood in ravines. Giant cactus and cacti. A few cottonwood trees, in ravine.</p>
	<p>Cor. falls on south slope, 100 ft. above or nearly half- way up to top of hill, north from middle of strip of cottonwood trees in ravine, which brs. S. 70° E.</p> <p>-----</p>
	N. 89° 59' E. along the secant, through sec. 32.
	Ascending slight SW. slope.
6.00	Spur ridge, brs. SE., 10.00 chs.
	Descend E. slope.
17.00	Wash, 20 lks. wide, in canyon, course S.
	Ascend steep W. slope.
29.60	Slope changes to SW.
35.40	Ridge, brs. N. and S.
	Descend E. slope.
40.00	1 lk. S. of secant, set an iron post 1 inch dia., for ¼ sec. cor. bet. secs. 5 and 32, stamped in cap
	<p style="text-align: center;">¼ in W. S 32 in N. S 5 1915 in S.</p>
	Raise mound of stone 3 ft. base, 1½ ft. high, N. of cor.
44.90	Draw, course S., 5.lks. wide.
	Ascend slight SW. slope.
46.90	Spur, brs. SE., 2.00 chs.
	Descend E. slope.
50.60	Seepage Spring begins, 30 lks. NW. of line, 1.00 ch. N. of cottonwood tree and soon becomes a good stream of water which could be developed easily into permanent water of considerable quantity, perhaps two gallons per minute.

Survey of North boundary of T. 3 S., R. 18 E.

BOOK 200

Chains

- 57.30 Ascend SE. slope.
Ridge, brs. SE. and NW.
Descend E. slope.
- 64.30 Wash, course SE., 10 lks. wide.
Ascend SW. slope.
- 67.68 Ridge, brs. SE. and NW.
Descend NE. slope.
- 77.00 Wash, course S., 20 lks. wide.
Ascend SW. slope.
- 80.00 2 lks. S. of secant, set an iron post 3 ins. dia.,
for cor. of secs. 4, 5, 32 and 33, stamped in cap

T 2 S R 18 E in N.
S 35 in NE.
S 5 in SE.
S 6 in SW.
S 32 in NW.
T 3 S 1915 in S.

Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.

Land, rolling.
Soil, rocky and gravel, 3rd rate (Poor grazing land).
Dense undergrowth of Spanish bayonet, mesquite, catclaw
and palo verde.
Cottonwood and hackberry timber by water in ravine.

N. 89° 59' E. along the secant, through sec. 33.
Ascending slight SW. slope.

- 1.80 Ridge, brs. SE. and NW.
Descend E. slope.
- 6.30 Wash, course SE., 10 lks. wide.
Ascend SW. slope.
- 10.60 Ridge, brs. SE. and NW.
Descend NE. slope.
- 25.50 Wash, course SE., 20 lks. wide.
Ascend slight SW. slope.
- 27.90 Narrow spur ridge, brs. S., 5.00 chs.
Descend slight E. slope.
- 33.00 Wash, course SW., 30 lks. wide.
Ascend W. slope.
- 34.80 Enter level mesa, brs. N. and S.
- 40.00 2 lks. S. of secant, set an iron post 1 inch dia.,
for 1/4 sec. cor. bet. secs. 4 and 33, stamped in cap

Survey of North boundary of T. 3 S., R. 18 E.

Chains

1/4 in W.
S 33 in N.
S 4 1915 in S.

Raise a mound of stone 3 ft. base, 2 ft. high, N. of cor.
Cor. falls on flat which has a very gentle slope to S.

47.70 Descend E. slope.

50.70 Wash, course S., 10 lks. wide.

Ascend W. slope.

52.70 Short narrow spur brs. S.,

Descend E. slope.

55.00 Wash, course S., 20 lks. wide.

Ascend SW. slope.

62.12 Enter level mesa brs. N. and S.

64.20 Descend E. slope.

71.00 Wash, course SE. Ascend SW. slope.

75.10 Ridge, brs. N. and S.

Descend E. slope.

77.00 Enter level land.

80.00 3 lks. S. of the secant, set an iron post 3 ins. dia. for
cor. of secs. 3, 4, 33 and 34, stamped in cap

T 2 S R 18 E in N.
S 34 in NE.
S 3 in SE.
S 4 in SW.
S 33 in NW.
T 3 S 1915 in S.

Raise mound of earth and stone 3 ft. base, 2 ft. high, W.
of cor.

Land, rolling; out with washes, the general course being
S. 20° E.

Soil, 2nd and 3rd rate.
Scrub undergrowth of mesquite, Spanish bayonet, cactus,
catclaw and ocatilla.
No timber.

Cor. falls 25 lks. E. of heavy cattle trail, which brs.
N. and S., in a clump of mesquite, 1.00 ch. W. of a
wash, course S.

East along secant, through sec. 34.

Over rolling, broken S. slope.

1.40 Wash, course S., 20 lks. wide.

7.80 Ridge, brs. N. and S.

Survey of North boundary of T. 3 S., R. 18 E.

BOOK 2819

Chains	
22.00	Wash, course SE., 1.00 ch. wide, 50 ft. deep.
40.00	2 lks. S. of secant, set an iron post 1 inch dia., for <div style="margin-left: 40px;"> † sec. cor. bet. secs. 3 and 34, stamped in cap † in W. S 34 in N. S 3 1915 in S. </div>
	Raise mound of stone 3 ft. base, 2 ft. high, N. of cor.
	Close work Nov. 23, 1915.
49.00	Wash, course S., 50 lks. wide.
53.40	Ridge, brs. N. and S.
57.00	Wash, course S., 1.00 ch. wide.
60.00	Ridge, brs. N. and S.
64.50	Wash, course N., 10 lks. wide.
68.10	Ridge, brs. N. and S.
80.00	2 lks. S. of secant, set an iron post 3 ins. dia., for <div style="margin-left: 40px;"> cor. of secs. 2, 3, 34 and 35, stamped in cap T 2 S R 18 E in N. S 35 in NE. S 2 in SE. S 3 in SW. S 34 in NW. T 3 S 1915 in S. </div>
	Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.
	Land, gently rolling and level, cut by occasional washes and arroyos which drain S. 25° E. and are occasionally very deep with perpendicular sides.
	Dense undergrowth of mesquite, catclaw, palo verde and cacti.
	Soil, sandy and gravelly, 2nd and 3rd rate.
	No timber.
	Cor. falls on nearly flat prairie.

	S. 89° 59' E. along secant, through sec. 35.
	Over gently rolling land.
4.00	Wash, course S., 10 lks. wide.
7.80	Land becomes level.
14.38	Triplett brs. N. 39° 01' E. Mt. Turnbull brs. S. 54° 01' E. Butte north of Tp. cor. brs. N. 84° 38' W.
18.70	Wash, course S., 20 lks. wide.
21.50	Spur brs. S., 5.00 chs.
26.40	Wash, course S., 20 lks. wide.
34.90	Ridge brs. N. and S.

Survey of North Boundary of T. 3 S., R. 18 E.

Chains

- 38.75 Wash, course S., 10 lks. wide.
- 40.00 1 lk. S. of secant, set an iron post 1 inch dia., for
 $\frac{1}{4}$ sec. cor. bet. secs. 2 and 35, stamped in cap
- $\frac{1}{4}$ in W.
 S 35 in N.
 S 2 1915 in S.
- Raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- Cor. falls on W. slope, 40 ft. E. of drain, and 10 ft.
 above same; also 200 yards NW. of junction of drain.
- 41.90 Ridge, brs. N. and S.
- 47.30 Draw, course S.
- 53.43 Triplet brs. N. $37^{\circ} 10'$ E.
 Mt. Turnbull brs. S. $52^{\circ} 56'$ E.
 Descend steep E. slope.
- 58.10 Enter level land, brs. N. and S.
- 69.60 Wash, course SE., 50 lks. wide.
- 73.50 Wash, course SE., 50 lks. wide.
- 76.00 Wash, course S., 50 lks. wide.
- 78.13 Ascend W. slope. Enter rocky land.
- 80.00 Set an iron post 3 ins. dia., for cor. of secs. 1, 2,
 35 and 36, stamped in cap
- T 2 S R 18 E in N.
 S 36 in NE.
 S 1 in SE.
 S 2 in SW.
 S 35 in NW.
 T 3 S 1915 in S.
- Raise mound of stone 3 ft. base, 2 ft. high, W. of cor.
- Cor. falls in wide valley, ^{course S.} on E. side of wash,
- Land, rolling and cut by deep arroyos bearing $S.20^{\circ}E.$
 Soil, gravel and small boulders, 3rd rate.
 Dense catclaw, mesquite and cactus.
 No timber.
-
- S. $89^{\circ} 59'$ E. along secant through sec. 1.
- Over level land.
- 5.00 Ascend NW. slope.
- 10.00 Top of level mesa brs. N. and S.
- 16.00 Wash, course S., 10 lks. wide.
- 34.90 Descend E. slope.
- Enter rolling land.
- 39.00 Wash, course S., 15 lks. wide.

Survey of North boundary of T. 3 S., R. 18 E.

BOOK 2819

Chains	
40.00	<p>1 lk. N. of secant, set an iron post 1 inch in dia., for $\frac{1}{4}$ sec. cor. bet. secs. 1 and 36, stamped in cap</p> <p style="padding-left: 40px;">$\frac{1}{4}$ in W. S 36 in N. S 1 1915 in S.</p>
	<p>Raise mound of stone 3 ft. base, 2 ft. high, N. of cor.</p>
46.40	<p>Ridge, brs. N. and S.</p>
	<p>Descend NE. slope.</p>
51.80	<p>Slope changes to E.</p>
60.00	<p>Wash, course SW., 70 lks. wide.</p>
	<p>Ascend W. slope.</p>
66.50	<p>Thence along slight S. slope.</p>
76.50	<p>Descend E. slope.</p>
80.00	<p>3 lks. N. of secant, set an iron post 3 ins. dia., for cor. of Tps. 2 and 3 S., Rgs. 18 and 19 E., stamped in cap</p>
	<p style="padding-left: 40px;">T 2 S in N. R 19 E S 31 in NE. S 6 in SE. S 1 in SW. R 18 E S 36 in NW. T 3 S 1915 in S.</p>
	<p>Raise mound of stone 3 ft. base, 2 ft. high, S. of cor.</p>
	<p>Land, broken from washes and ravines, general course being S. 10° E.</p>
	<p>Soil, gravelly with small boulders, 3rd rate.</p>
	<p>Undergrowth of mesquite, cactus, and catclaw.</p>
	<p>No timber.</p>
	<p>Cor. falls near bottom of deep ravine on W. side thereof the course of which is S.</p>
	<p>-----</p>
	<p style="text-align: center;">East boundary of T. 3 S., R. 18 E.</p>
	<p>At the secant point south of the NE. cor. of T. 3 S., R. 18 E., I deflect from my backsight an angle of 90° 1.7' to the south, and run</p>
	<p>South bet. secs. 1 and 6.</p>
	<p>Along ravine, general course S.</p>
23.50	<p>Enter Gila River bottom, brs. E. and W.</p>
37.70	<p>Road, brs. N. 60° W. and S. 60° E.</p>
38.00	<p>Seeing that the true point for $\frac{1}{4}$ sec. cor. bet. secs. 1 and 6, will fall in unsafe place in Gila River bed, at this point, I set an iron post 1 inch dia., for W.C. to the $\frac{1}{4}$ sec. cor., also M.C., of secs. 1 and 6, stamped in cap</p>

Survey of East Boundary of T. 3 S., R. 18 E.

EC-11 8810

Chains

1/4 in N.
S 6 in E.
S 1 in W.
W C M C 1915 in S.

Dig pit 36x36x12 ins. 8 ft. N. of cor., and raise a mound of earth 4 ft. base, 2 ft. high, E. of cor.

- 40.00 True point for 1/4 sec. cor. falls in Gila River bed.
- 62.00 N. edge of water, course NW., 340 lks. wide.
- 65.40 Wagon road, brs. NE. and SW.
- 71.40 Leave river bed, brs. SE. and NW.
Enter nearly level land.
- 72.30 Set an iron post, 3 ins. dia., for M.C. of secs. 1 and 6, stamped in cap

M C in N.
R 19 E S 6 in SE.
R 18 E S 1 in SW.
T 3 S 1915 in S.

Raise mound of stone 3 ft. base, 2 ft. high, S. of cor.

- 80.00 Set an iron post 3 ins. dia., for cor. of secs. 1, 6, 7 and 12, stamped in cap

T 3 S in N.
R 19 E S 6 in NE.
S 7 in SE.
S 12 in SW.
R 18 E S 1 in NW.
1915 in S.

Raise mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.

As this line has been run solely for the purpose of locating the boundaries of secs. 5 and 6, of T. 3 S., R. 19 E., I do not carry this line any further south.

Land, broken and level.
Soil, 3rd and 1st rate.
Undergrowth of mesquite and catclaw.
No timber.

The above cor. is 200 yards west of north end of strip of cottonwood trees.

Close work Nov. 24, 1915.

Survey of a portion of North Boundary of T. 3 S., R. 19 E.

Chains

From the secant point 3 lks. S. of the NW. cor. of the Tp., I deflect an angle of 3' 27" from my backsight to W. and run

N. 89° 58.3' E., through sec. 6.

Along broken S. slope.

1.50 Wash, course S., 10 lks. wide.

Ascend.

11.00 Ridge brs. NE. and SW.

Descend SE. slope.

17.00 Wash, course SW., 20 lks. wide.

Ascend NW. slope.

24.70 Ridge, brs. NE. and SW.

Descend SE. slope.

29.60 Wash, course S., 5 lks. wide.

Ascend SW. slope.

34.30 Spur brs. S., 2.00 chs.

Descend SE. slope.

38.58 At theoretical distance, allowing for convergency, and 1 lk. N. of the secant, Set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. bet. secs. 6 and 31, stamped in cap

$\frac{1}{4}$ in W.
S 31 in N.
S 6 1915 in S.

Raise mound of stone 3 ft. base, 2 ft. high, N. of cor.

Cor. falls on East side of low spur to the S. from gravel ridge.

41.00 Wash, course S., 10 lks. wide.

Ascend W. slope.

45.65 Thence over level mesa brs. N. and S.

53.85 Descend SE. slope.

57.00 Wash, course S., 10 lks. wide.

Ascend SW. slope.

60.00 Spur, brs. S., 3.00 chs.

Descend SE. slope.

64.74 Wash, 50 lks. wide, in cañon, course SW.

Ascend W. slope.

69.47 Top of slope. Enter level mesa, brs. N. and S.

78.58 Set an iron post 3 ins. dia., for cor. of secs. 5, 6, 31 and 32, stamped in cap

Survey of a portion of North boundary of T. 3 S., R. 19 E.

Chains	
	<p>R 18 E S 32 in NE. S 5 in SE. S 6 in SW. T 2 S S 31 in NW. T 3 S 1915 in S.</p>
	<p>Raise a mound of stone 3 ft. base, 2 ft. high, W. of cor. Cor. falls on flat mesa. Land, broken and level. Soil, gravely, mixed with boulders, 3rd rate. Dense undergrowth of mesquite, catclaw and cactus. No timber.</p> <p>-----</p>
	<p>N. 89° 59' E. along secant, through sec. 32. Over level mesa.</p>
3.20	Descend E. slope.
7.00	Wash, course SW., 20 lks. wide in bottom. Ascend SW. slope.
10.80	Enter level mesa, brs. N. and S.
15.80	Descend E. slope of mesa.
20.65	Enter level flat, brs. N. and S.
32.50	Wagon road from Rice to San Carlos, brs. N. and S.
36.00	Road, brs. N. and S.
40.00	1 lk. S. of secant, set an iron post 1 inch dia., for $\frac{1}{4}$ sec. cor. bet. secs. 5 and 32, stamped in cap <p style="margin-left: 40px;"> $\frac{1}{4}$ in W. S 32 in N. S 5 1915 in S.</p>
	<p>Raise mound of stone 3 ft. base, 2 ft. high, N. of cor.</p>
40.80	Wagon road, brs. N. and S.
43.90	Wash, course S., 20 lks. wide.
54.00	Telephone line brs. NE. and SW.
54.75	Wagon road, brs. SE. and NW.
59.48	Wire fence, brs. N. and S.
63.30	Railroad right of way fence, brs. SE. and NW.
63.70	Irrigation ditch, 6 ft. wide and 3 ft. deep, brs. N. and S.
64.00	Switchtrack of Arizona-Eastern Ry., on curve, brs. N. 45° W. and S. 60° E.
64.31	Arizona-Eastern Railroad main track brs. N. 45° W. and S. 60° E.
64.65	Telegraph line parallel to railroad.

Survey of a portion of North boundary of T. 3 S., R.19 E.

Chains

64.30 Railroad right of way fence, parallel to railroad.
 2 lks. S. of secant,
 65.40 Set an iron post 3 ins. dia., for M.C. bet. secs. 5 and 32, stamped in cap

T 2 S R 19 E S 32 in NW.
 T 3 S S 5 in SW.
 M C in E.
 1915 in S., from which

A cottonwood 30 ins. dia. brs. N. 38° W., 290 lks. dist.
 Mkd. T 2 S R 19 E S 32 M C B T.

A willow 20 ins. dia. brs. N. 64½° E., 147 lks. dist.
 Mkd. T 2 S R 19 E S 32 M C B T.

No other trees available.

Note: Dig a pit 36x36x12 ins. 8 ft. W. of cor., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor. This cor. is also the W. C. to cor. of secs. 4, 5, 32 and 33. Thence through heavy cottonwood and willow timber, brs. N. 60° W. and S. 60° E.

80.00 2 lks. S. of secant, true point for cor. of secs. 4, 5, 32 and 33, falls in overflowed land, from San Carlos River.

Land, broken and level.
 Soil, 2nd and 3rd rate.
 Dense undergrowth of catclaw and mesquite,
 Cottonwood and willow timber in San Carlos River bottom.

 From true point for cor. of secs. 4, 5, 32 and 33, the San Carlos Railroad station brs. S. 15° W., about 10 chs. dist.

NOTE: I discontinue township line at this point as the only purpose for running it at this time is to form a base for the subdivision of secs. 5 and 6, of T. 3 S., R.19 E.

Close work Dec. 2, 1915.

H. L. Baldwin,
 Topographer

List of Assistants:

- S. H. Pollard, Chainman
- John Devera "
- Billie Kindelay, Moundman
- Frank Gasser "
- Herbert Forbes, Rodman
- Donald Mc Intosh, Moundman & Chainman
- Julian B. Downey, Jr., Chainman & Rodman

Denver, Colo., *April 10-1916*

I hereby certify that the survey of the foregoing exterior lines, with the White Mountain (or San Carlos) Indian Reservation, Arizona, was made under my direction and supervision, and to the best of my knowledge and belief the field work was executed in strict accordance with instructions given me dated Jan. 6 and Oct. 28, 1915, and the Manual of Surveying Instructions, and that these field notes are a correct representation thereof.

A. F. Huntington

Topographer in Charge of
Indian Surveys.

BOOK 2016

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, 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, surveyed all those parts or portions of _____

For final oath of H.L.Baldwin, Topographer, see Book "A".

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said 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 _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____



APPROVAL.

OFFICE OF THE COMMISSIONER OF THE GENERAL LAND OFFICE
OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Washington, D.C., June 12, 1916.

The foregoing field notes of the survey of the W. and N. bdys. of T. 3 S., R. 18 E., and portions of the E. bdy. of T. 3 S., R. 18 E. and N. bdys of T. 3 S., R. 19 E., within the White Mountain (or San Carlos) Indian Reservation, Arizona,

executed by **H.L.Baldwin, Topographer, under direction of A.F.Dunnington, Topographer in Charge of Indian Surveys,** Oct. 28, 1915, having been under his special instructions dated _____, 1915, critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

(Signed) *Clay Tallman*
Commissioner of the General Land Office

I certify that the foregoing transcript of the field notes of the above-described surveys in **White Mt. Ind. Res'n., Ariz.,** has been correctly copied from the original notes on file in this office.

[Signature]
U. S. Surveyor-General
Commissioner of the General Land Office