

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Original

# FIELD NOTES

of the

Resurvey of a Portion of the East Boundary,

a Portion of the South Boundary,

and the

Survey of a Portion of the West Boundary

and a

Portion of the Subdivision

of

Township 4 South, Range 22 East

Of the Gila and Salt River Meridian,

In the State of Arizona

### EXECUTED BY

Donald E. Harding - Cartographer-Cadastral

Under special instructions dated November 10, 1954, which provided  
for the surveys included under Group No. 297, approved November 10, 1954  
and assignment instructions dated November 17, 1954

Survey commenced November 29, 1954

Survey completed February 10, 1955

4485

4485

4485

1A

BOOK 4485

# INDEX DIAGRAM

Township 4 South, Range 22 East

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

Partial Subdivision of T. 4 S., R. 22 E.

Chains

The south boundary of sec. 36 and a portion of the south boundary of sec. 35 were surveyed by C. H. Wallace in 1888. The balance of the south boundary was surveyed by Philip Contzen in 1900. The east boundary was originally surveyed by T. F. White in 1875 and partially resurveyed by L. D. Chillson in 1894 and partially by Ty White in 1951. Portions of the boundary of the San Carlos Indian Reservation (formerly White Mountain) was surveyed by Philip Contzen in 1898 and H. L. Baldwin in 1915. Special instructions provide for the surveys in which the State of Arizona has vested rights.

The survey was executed with light mountain solar transits made by Buff and Buff, Serial No. 16724 and W. and L. E. Gurley, Serial No. 461263, constructed in accordance with standard instrumental specifications of the Bureau of Land Management. Horizontal circle is  $4\frac{1}{2}$  inches in diameter with two double opposite verniers reading to single minutes. Vertical circle is 4 inches in diameter with one double vernier reading to single minutes. The instrument is equipped with an improved telescopic solar attachment, radii of latitude arc 3 inches and of declination arc  $3\frac{1}{2}$  inches with vernier reading to single minutes. The instruments were in good condition and were placed in proper adjustment prior to the beginning of the survey.

The direction of all lines was determined by the direct solar method, solar method, and from Coast and Geodetic Triangulation Stations, and the measurements made by a Lufkin steel tape, 5 chains in length, graduated every one tenth link for the first 10 links, every link for the next 90 links, and every 10 links for the balance. The tape was tested by comparison with a standard tape and found correct. Measurements were made on the slope, and the vertical angle of each interval was ascertained by a clinometer in good adjustment. The horizontal equivalents only are entered in this field note record.

The transits were checked from time to time on the camp meridian which was established from Thomas Coast and Geodetic Triangulation Station, and the azimuth of the lines was checked by direct solar method as the survey progressed. The geographic position of the southeast corner of the township is latitude  $33^{\circ}02'10''$  N. and longitude  $110^{\circ}02'05''$  W. The magnetic declination is  $14^{\circ}15'$  E.

Resurvey of a Portion of the East Boundary

From the cor. of secs. 1, 6, 7, and 12, on the east boundary of the township, set and marked as described in the official record.

N.  $0^{\circ}09'$  W., bet. secs. 1 and 6.

Asc. 54 ft. over S. slope.

33.70 Wash, 30 lks. wide, 3 ft. deep, course SW.; asc. 29 ft. over SW. slope.

39.91 The  $\frac{1}{4}$  sec. cor. of secs. 1 and 6, which is marked with a conglomerate stone, 18x10x8 ins., properly marked and set as described in the official record.

At the cor. point.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 14 ins. in the ground, and in a mound of stone to top, with brass cap mkd.

$\frac{1}{4}$   
S 1 | S 6

1954

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, W. of cor.

Resurvey of the East Boundary, T. 4 S., R. 22 E.

Chains

N. 0° 09' W., beginning new measurement.

Asc. 46 ft. over S. slope.

7.20 Ridge, bears NE. and SW.; over W. slope.

20.00 Wash, 20 lks. wide, 6 ft. deep, course SSW.

27.10 Fence, bears NNE. and SSW.

37.10 Wash, 20 lks. wide, 3 ft. deep, course SW.; asc. 29 ft. over SE. slope.

39.94 The cor. of secs. 1, 6, 31, and 36, Ts. 3 and 4 S., Rs. 22 and 23 E., monumented with a granite stone, 16x10x6 ins., properly marked and set as described in the official record. At the cor. point.

Set an iron post, 28 ins. long, 2 1/2 ins. diam., 10 ins. in the ground, and in a mound of stone to top, with brass cap marked

T3S	
R22E	R23E
S36	S31
S1	S6
T4S	
1954	

Land, rolling.  
Soil, sandy and rocky clay.  
Timber, none.  
Undergrowth, greasewood, cacti, and grass.

Resurvey of a Portion of the South Boundary

From the cor. of Ts. 4 and 5 S., Rs. 21 and 22 E., which is monumented with a granite stone, 16x8x8 ins., properly marked and set as described in the official record.

At the cor. point.

Set an iron post, 28 ins. long, 2 1/2 ins. diam., 20 ins. in the ground, with brass cap marked

T4S	
R21E	R22E
S36	S31
S1	S6
T5S	
1955	

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

N. 89° 59' E., bet. secs. 6 and 31.

Desc. over gentle E. slope.

16.00 Road, track, bears NE. and S. 87° W.

39.50 The 1/4 sec. cor. of secs. 6 and 31, which is monumented with a granite stone, 12x10x6 ins., properly marked and set as described in the official record.

At the cor. point.

Set an iron post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, with brass cap marked

## Resurvey of the South Boundary, T. 4 S., R. 22 E.

## Chains

$$\frac{1}{4} \frac{S \ 31}{S \ 6}$$

1955

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

N. 89° 43' E., beginning new measurement.

6.50 Road, track, bears NNE. and SSW.

6.80 Water well with pumpjack, bears south, 1.50 chs. dist.

31.30 Road, track, bears N. 85° E. and S. 85° W.

37.40 Small wash, course ENE.

40.16 The cor. of secs. 5, 6, 31; and 32, monumented with a granite stone, 14x8x6 ins., properly marked and set as described in the official record.

At the cor. point.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.

T4SR22E

S31 | S32

S6 | S5

T5S

1955

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, W. of cor.

Land, rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, greasewood, and grass.

N. 89° 46' E., bet. secs. 5 and 32.

Over rolling land, through scattered brush.

20.20 Road, track, bears NE. and SW.

40.00 The  $\frac{1}{4}$  sec. cor. of secs. 5 and 32, monumented with a granite stone, 12x8x6 ins., properly marked and set as described in the official record.

At the cor. point.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 18 ins. in the ground, with brass cap mkd.

$$\frac{1}{4} \frac{S \ 32}{S \ 5}$$

1955

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, N. of cor.

N. 89° 45' E., beginning new measurement.

## Resurvey of the South Boundary, T. 4 S., R. 22 E.

## Chains

Descending over gentle E. slope.

34.00 Road, track, bears SE. and NW.

40.01 Point for the cor. of secs. 4, 5, 32, and 33 at proportionate distance. There is no remaining evidence of original cor.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.

T4SR22E

S32 | S33

S5 | S4

T5S

1955

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, W. of cor.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, greasewood, and grass.

N.  $89^{\circ} 45'$  E., between secs. 4 and 33.

Over gravel bench.

3.80 Small wash, course SE.

40.01 The  $\frac{1}{4}$  sec. cor. of secs. 4 and 33, monumented with a granite stone, 14x14x10, properly marked and set as described in the official record.

At the cor. point.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 18 ins. in the ground, with brass cap mkd.

$\frac{1}{4}$  S 33

S 4

1955

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, N. of cor.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none; undergrowth, scattered mesquite, greasewood, and grass.

## Survey of the West Boundary, T. 4 S., R. 22 E.

From the cor. of Ts. 4 and 5 S., Rs. 21 and 22 E., heretofore described.

North, between secs. 31 and 36.

Over low rolling ridges, through scattered brush.

9.60 Wash, 20 lks. wide, 2 ft. deep, course E.

19.60 Wash, 10 lks. wide, 1 ft. deep, course ESE.

40.00 Point for the  $\frac{1}{4}$  sec. cor. of secs. 31 and 36.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.

## West Boundary, T. 4 S., R. 22 E.

Chains

 $\frac{1}{4}$ 

S36 | S31

1955

Deposit broken glass alongside the post, for witness.

42.50 Road, track, bears SE. and NW.

43.50 Wash, 10 lks. wide, 2 ft. deep, course NE.

76.80 Road, track, bears NE. and SW.

80.00 Point for the cor. of secs. 25, 30, 31, and 36.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.

T4S	
R21E	R22E
S25	S30
S36	S31
1955	

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, W. of cor.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, greasewood, and grass.

North, bet. secs. 25 and 30.

Over low rolling ridges, through scattered brush.

2.90 Road, track, bears NNE. and SSW.

9.10 Road, track, bears SE. and NW.

30.57 Intersect the south boundary of the San Carlos Indian Reservation.

Point for the closing cor. of secs. 25 and 30.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 18 ins. in the ground, with brass cap mkd.

S C I R	
S25	S30
R21E	R22E
C	C
T4S	
1955	

Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, S. of cor.

From this point, the true point for the 5 mile cor. of the San Carlos Indian Reservation bears N.  $79^{\circ} 20'$  W., 13.86 chs. dist. Its witness cor. bears N.  $79^{\circ} 20'$  W., 2.00 chs. dist. from the true point and is monumented with a granite stone, 10x10x7 ins., above ground, marked and witnessed as described in the official record.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none; undergrowth, scattered mesquite, greasewood and grass.

## Partial Subdivision, T. 4 S., R. 22 E.

Chains	
	<p>From the cor. of secs. 1, 2, 11, and 12, which is monumented with an iron post, set and marked as described in the official record.</p> <p>N. 0° 19' W., bet. secs. 1 and 2.</p> <p>Over rolling hills, through scattered brush.</p> <p>Asc. 43 ft. over S. slope.</p>
13.00	Spur, slopes W.; desc. 19 ft. over NNW. slope.
16.10	Wash, 10 lks. wide, 3 ft. deep, course SSW.; asc. 111 ft. over SSW. slope.
40.00	<p>Point for the <math>\frac{1}{4}</math> sec. cor. of secs. 1 and 2.</p> <p>Set an iron post, 28 ins. long, <math>2\frac{1}{2}</math> ins. diam., 8 ins. in the ground, and in a mound of stone to top, with brass cap mkd.</p> <p style="text-align: center;"><math>\frac{1}{4}</math></p> <p style="text-align: center;">S2   S1</p> <p style="text-align: center;">1954</p>
40.50	Top of knoll; desc. 69 ft. over N. slope.
47.20	Road, track, bears NE. and SW.
57.00	Fence, bears E. and W.
65.00	Wash, 30 lks. wide, 3 ft. deep, course SSW.
77.40	Road, track, bears NNE. and SSW.
79.66	<p>The cor. of secs. 1, 2, 35, and 36, on the north boundary of the township.</p> <p>Land, rolling hills. Soil, sandy and gravelly clay. Timber, none. Undergrowth, scattered mesquite, greasewood, cacti, and grass.</p>
40.00	<p>From the cor. of secs. 4, 5, 32, and 33, on the south boundary of the township, heretofore described.</p> <p>N. 0° 02' W., bet. secs. 32 and 33.</p> <p>Over low rolling ridges, through scattered brush.</p> <p>Point for the <math>\frac{1}{4}</math> sec. cor. of secs. 32 and 33.</p> <p>Set an iron post, 28 ins. long, <math>2\frac{1}{2}</math> ins. diam., 18 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;"><math>\frac{1}{4}</math></p> <p style="text-align: center;">S32   S33</p> <p style="text-align: center;">1955</p>
68.70	<p>Deposit broken glass alongside the iron post, for witness.</p> <p>Wash, 20 lks. wide, 2 ft. deep, course SE.</p>



Partial Subdivision, T. 4 S., R. 22 E.

Chains

79.97

Fence, bears N. 79° 10' W. and S. 79° 10' E.

80.00

Point for the cor. of secs. 28, 29, 32, and 33.

Set an iron post, 28 ins. long, 2½ ins. diam., 20 ins. in the ground, with brass cap mkd.

T4SR22E  
S29 | S28  
S32 | S33  
1955

Deposit broken glass alongside the iron post, for witness.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, greasewood, and grass.

N. 0° 02' W., bet. secs. 28 and 29.

.14

Intersect the south boundary of the San Carlos Indian Reservation.

Point for the closing cor. of secs. 28 and 29.

Set an iron post, 28 ins. long, 2½ ins. diam., 20 ins. in the ground, with brass cap mkd.

S C I R  
S29 | S28  
C | C  
T4S  
1955

Deposit broken glass alongside the iron post, for witness.

From this point the 3 mile cor. of the San Carlos Indian Reservation bears N. 79° 21' W., 15.71 chs. dist., and is monumented with a granite stone, 18x8x6 ins., above ground, marked and witnessed as described in the official record.

From the cor. of secs. 5, 6, 31, and 32, on the south boundary of the township, heretofore described.

N. 0° 03' W., bet. secs. 31 and 32.

Over low rolling ridges, through scattered brush.

11.80

Wash, 20 lks. wide, 2 ft. deep, course NE.

40.00

Point for the ¼ sec. cor. of secs. 31 and 32.

Set an iron post, 28 ins. long, 2½ ins. diam., 18 ins. in the ground, with brass cap mkd.

¼  
S 31 | S 32  
1955

Raise a mound of stone, 3 ft. base, 2½ ft. high, W. of cor.

## Partial Subdivision, T. 4 S., R. 22 E.

## Chains

47.90 Wash, 10 lks. wide, 2 ft. deep; course E.

51.60 Ridge, low and flat, bears E. and W.

80.00 Point for the cor. of secs. 29, 30, 31, and 32.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 18 ins. in the ground, with brass cap mkd.

T4SR22E	
S30	S29
S31	S32
1955	

Deposit broken glass alongside the iron post, for witness.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, cacti, and grass.

From the cor. of secs. 28, 29, 32, and 33.

S. 89° 50' W., bet. secs. 29 and 32.

Over low rolling ridges, through scattered brush.

.20 Fence, bears ESE. and WNW.

12.50 Ridge, low and flat, bears NE. and SW.

16.40 Wash, 20 lks. wide, 1 ft. deep, course NE.

40.03 Point for the  $\frac{1}{4}$  sec. cor. of secs. 29 and 32.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.

$\frac{1}{4}$	S 29
*	S 32

1955

Deposit broken glass alongside the iron post, for witness.

80.06 The cor. of secs. 29, 30, 31, and 32.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, cacti, and grass.

S. 89° 50' W., bet. secs. 30 and 31.

Over rolling ridges, through scattered brush.

8.60 Wash, 20 lks. wide, 1 ft. deep, course NE.

15.00 Ridge, low and flat, bears NE. and SW.

40.00 Point for the  $\frac{1}{4}$  sec. cor. of secs. 30 and 31.

## BOOK 4485

## Partial Subdivision, T. 4 S., R. 22 E.

## Chains

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.

$$\frac{1}{4} \begin{array}{r} S 30 \\ S 31 \end{array}$$

1955

Deposit broken glass alongside the iron post, for witness.

79.28

The cor. of secs. 25, 30, 31, and 36, on the west boundary of the township, heretofore described.

Land, low and rolling.

Soil, sandy and gravelly clay.

Timber, none.

Undergrowth, scattered mesquite, cacti, and grass.

From the cor. of secs. 29, 30, 31, and 32.

N.  $0^{\circ} 03' W.$ , bet. secs. 29 and 30.

Over low rolling ridges, through scattered brush.

6.70

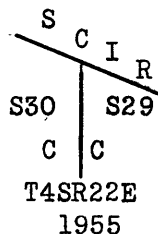
Wash, 10 lks. wide, 2 ft. deep, course E.

15.33

Intersect the south boundary of the San Carlos Indian Reservation.

Point for the closing cor. of secs. 29 and 30.

Set an iron post, 28 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.



Raise a mound of stone, 3 ft. base,  $2\frac{1}{2}$  ft. high, S. of cor.

From this point, the  $3\frac{1}{2}$  mile cor. of the San Carlos Indian Reservation bears S.  $79^{\circ} 21' E.$ , 25.76 chs. dist., and is monumented with a granite stone, 10x10x8 ins., above ground, marked and witnessed as described in the official record.

## General Description

The south part of this partial township is rolling ridges, with scattered brush and fair grass. Part of the east portion is good farming land, lying in the bottom of the Gila River Valley. The main crops are cotton, alfalfa, and small grains, irrigated either from the Gila River or by wells. They have a long growing season due to the low elevation, about 2800 ft. above sea level.

4-680  
(Feb., 1950)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
George M. Boofer	Instrument man
Donald A. Cannon	Note-keeper
Wade B. Betenson	Chairman
Maurice Hinton	Truck Driver
Thomas Judd	Flagman

CERTIFICATE OF CADASTRAL ENGINEER

I, Donald E. Harding, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 10th day of November, 1954, I have ~~surveyed~~ resurveyed a portion of the east boundary and a portion of the south boundary and surveyed a portion of the west boundary and a portion of the subdivision of Township 4 South, Range 22 East

of the G & S R Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in the specific manner described in the foregoing field notes.

Salt Lake City, Utah  
June 21, 1955

*Donald E. Harding*  
Donald E. Harding  
Cartographer-Cadastral

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT,

Washington, D. C., DEC 23 1955, 19

The foregoing field notes of the ~~survey of~~ resurvey of a portion of the east boundary and a portion of the south boundary, and the survey of the east boundary and a portion of the subdivision of Township 4 South, Range 22 East, Gila and Salt River Meridian, Arizona

executed by Donald E. Harding

having been critically examined and found correct, are hereby approved.

*Carl G. Harrington*  
Carl G. Harrington  
Chief, Division of Cadastral Engineering  
Cadastral Engineering Staff Officer

CERTIFICATE OF TRANSCRIPT

I CERTIFY that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, is a true copy of the original field notes.

\_\_\_\_\_  
Chief, Division of Cadastral Engineering