

ORIGINAL

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

FIELD NOTES
OF THE
CORRECTIVE RESURVEY OF PORTIONS OF THE
NORTH BOUNDARY,
A PORTION OF THE SUBDIVISIONAL LINES,
AND
SUBDIVISION OF SECTIONS 1 AND 12
TOWNSHIP 21 NORTH, RANGE 29 EAST,
OF THE GILA AND SALT RIVER MERIDIAN,
IN THE STATE OF ARIZONA.

EXECUTED BY

Fabian Yazzie, Cadastral Surveyor

Under Special Instructions dated April 29, 2005, approved April 29, 2005, and Supplemental Special Instructions dated March 10, 2015, approved March 10, 2015, and Supplemental Special Instructions dated July 10, 2015, approved July 10, 2015, which provided for the surveys included under Group No. 957; and assignment instructions dated March 10, 2015.

Survey commenced July 23, 2015

Survey completed July 28, 2015

INDEX DIAGRAM

TOWNSHIP 21 NORTH RANGE 29 EAST
GILA & SALT RIVER MERIDIAN, ARIZONA

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

Subdivision of Section 1 Pages 9 - 10
 Subdivision of Section 12 Pages 10 - 12

T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of portions of the north boundary, the subdivisional lines, and subdivision of sections 1 and 12, Township 21 N., Range 29 E., Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

The Fifth Standard Parallel North (south boundary), the Seventh Auxiliary Guide Meridian East (west boundary), the north and east boundaries, and the subdivisional lines, were surveyed by W.R. Fitzgerald surveyed in 1882. A portion of the Fifth Standard Parallel North (south boundary), and a portion of the Seventh Auxiliary Guide Meridian East (west boundary), was dependently resurveyed by William Stover in 1910. Indian Allotments were surveyed by William Peterson, Special Allotting Agent, United States Indian Service in 1909-10. The east boundary was dependently resurveyed by Stephen J. Malloy in 1987-93. William P. Carpenter, Stephen J. Malloy, and Kenneth W. Bays dependently resurveyed the Fifth Standard Parallel North (south boundary), the Seventh Auxiliary Guide Meridian East (west boundary), and a portion of the subdivisional lines, subdivided sections 7, 17, and 22, and a metes-and-bounds survey in section 7, in 1987-93. Adrien J. Rodriguez dependently resurveyed the north boundary and executed metes-and-bounds surveys in 2004-05. Gordon R. Bubel, dependently resurveyed a portion of the subdivisional lines, the subdivision of certain sections, and metes-and-bounds surveys in 2008-09.

Existing monuments were recovered, and are clearly relied upon by the residents of the area. Research conclusively identifies these monuments to be the result of surveys conducted by the Indian Service, under the federal authority of the ACT of February 8, 1887. No records of the actual surveys have been recovered. This research is specified in a letter to this group file, dated September 23, 2015.

The survey was executed in accordance with the specifications as set forth in the Manual of Surveying Instructions, 2009, and the Special Instructions dated April 29, 2005, and Supplemental Special Instructions dated March 10, 2015, and July 10, 2015, for Group Number 957, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation R8 model receivers.

Preliminary to the resurvey, the lines of the prior surveys were retraced and search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Due to the differences between the General Land Office records and the recovered monuments of the Indian Service surveys, lost corners were reestablished and remonumented at positions independent of the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona

CHAINS

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) AI0265 AZCN AZTEC CORS, AI7443 FST1 FLAGSTAFF 1 CORS, AF9512 PIE1 PIETOWN CORS, and DE6386 ZAB1 ALBUQUERQUE 1 CORS. The NAD 83 (2011) (EPOCH: 2010), geographic position of the corner of Townships 21 and 22 North, Range 29 East, is as follows:

Latitude: 35°15'15.276" N. Longitude: 109°12'38.583" W.

The geographic position of the cor. of secs. 11, 12, 13, and 14, is as follows:

Latitude: 35°13'30.867" N. Longitude: 109°13'38.132" W.

The mean magnetic declination is 10° E.

**Corrective Resurvey of a Portion of the North Boundary,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona**

Restoring and amending the resurvey executed by
Gordon R. Bubel, in August 2008

Beginning at the cor. of secs. 1, 2, 35, and 36, on the N. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above ground, with brass cap mkd. T22N R29E S35 S36 S2 S1 T21N 2004 2008. Add the marks 2015 to the brass cap.

Cor. is located at the base of wood fence cor. post of barbed wire fences, 4 strand, bears N. and W.

East, on the N. bdy. of the Tp.

Over gently rolling land, through dense juniper.

37.34 Point for the 1/4 sec. cor. of secs. 1 and 36, determined at midpoint between the cors. of secs. 1, 2, 35, and 36 and the E. bdy. of the Tp.

Set the stainless steel post, 28 ins. long, 2 1/2 ins. diam., 21 ins. in the ground, with brass cap mkd.

T 22 N R 29 E
S 36
1/4 ———
S 1
T 21 N

2015

**Corrective Resurvey of a Portion of the North Boundary,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona**

CHAINS

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

From this point, 2004 1/4 sec. cor., bears N. 00°03' E., 1.97 chs. dist. All evidence of this cor. is removed.

East, beginning new measurement.

Over rolling land, through dense juniper.

37.34 Point for the cor. of Tps. 21 and 22 N., R. 29 E., at intersection with the E. bdy. of the Tp.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.

| | |
|--------|--------|
| T 22 N | |
| R 29 E | T 21 N |
| S 36 | R 30 E |
| | S 6 |
| S 1 | |
| T 21 N | |

2015

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Cor. is located in barbed wire fence, 5 strand, bears N. and S.

From this cor. point, the cor. of Tps. 21 and 22 N., R. 30 E., bears N. 0°03' E., 3.93 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above ground, with brass cap mkd. T22N R29E T22N R30E S36 S31 S6 T21N 2004 1993 2015.

From this same cor. point, the 1/4 sec. cor. of sec. 6 only, T. 21 N., R. 30 E., bears S. 0°3' W., 36.23 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above ground, with brass cap mkd. T21N R29E R30E 1/4 S6 2015.

**Corrective Resurvey of a Portion of the Subdivisional Lines,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona**

From the cor. of secs. 12 and 13 only, T. 21 N., R. 29 E., on the E. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above ground, with brass cap mkd. T21N R29E R30E S12 S18 S13 2015.

Corrective Resurvey of a Portion of the Subdivisional Lines,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona

| CHAINS | |
|--------|--|
| | <p>Cor. is located at the corner of barbed wire fences, 5 strand, extending S. and W.</p> <p>From this cor. point, the cor. of secs. 7 and 18 only, T. 21 N., R. 30 E., bears N. 2°20' W., 2.05 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above ground, with brass cap mkd. T21N R29E T21N R30E S12 S7 S18 2015.</p> <p>From this same cor. point, the 1/4 sec. cor. of sec. 18 only, T. 21 N., R. 30 E., bears South, 37.63 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above ground, with brass cap mkd. T21N R29E R30E 1/4 S18 2015.</p> <p>S. 88°45' W., bet. secs. 12 and 13.</p> <p>Over gently rolling open land.</p> |
| 17.37 | <p>From this point, the 1993 witness point, bears N., 2.23 chs. dist., all evidence of this cor. is removed.</p> |
| 39.12 | <p>Point for the 1/4 sec. cor. of secs. 12 and 13, determined at midpoint between the cor. of secs. 12 and 13 only and the cor. of secs. 11, 12, 13, and 14.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T 21 N R 29 E S 12 1/4 ——— S 13 2015</p> <p>Deposit a magnet, in a white plastic case, at the base of the stainless steel post.</p> <p>From this point, 1993 cor., bears N. 30°00' W., 1.60 chs. dist. All evidence of this cor. is removed.</p> <p>Cor. is located 60 lks. S. of barbed wire fence, 5 strand, bears E. and W.</p> |
| 78.25 | <p>The cor. of secs. 11, 12, 13, and 14, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 in. above ground, with a steel fence post, E. of cor., with brass cap mkd. T21N R29E S11 S12 S14 S13 2008 1993. Add the marks 2015 to the brass cap.</p> <p>from which the 1993 bearing trees</p> |

**Corrective Resurvey of a Portion of the Subdivisional Lines,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona**

| CHAINS | |
|--------|--|
| | <p>A forked juniper, 36 ins. diam., at the base, bears N. 42 1/4° E., 1.16 chs. dist., mkd. T21NR29ES12BT on a 13 ins. diam. limb.</p> <p>A forked juniper, 24 ins. diam., at base, bears S. 55 1/2° E., 1.31 chs. dist., mkd. T21NR29ES13BT on a 11 ins. diam. limb.</p> <p>A forked juniper, 48 ins. diam., at the base, bears S. 9 1/4° W., 2.06 chs. dist., mkd. T21NR29ES14BT on a 12 ins. diam. limb.</p> <p>A juniper, 11 ins. diam., bears N. 65 1/4° W., 1.75 chs. dist., with scribe marks T21NR29ES11BT visible on an open blaze.</p> <p>Cor. is located 1.15 chs. S. of barbed wire fence, 5 strand, bears E. and W.</p> <hr/> |
| 40.00 | <p>N. 0°10' E., bet. secs. 11 and 12.</p> <p>Over rolling land, through scattered juniper.</p> <p>The 1/4 sec. cor. of secs. 11 and 12, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 in. above ground, with a steel fence post, W. of cor., with brass cap mkd. T21N R29E 1/4 S11 S12 2008. Add the marks 2015 to the brass cap.</p> <hr/> |
| 40.00 | <p>N. 0°10' E., beginning new measurement.</p> <p>Over gently rolling open land.</p> <p>The cor. of secs. 1, 2, 11, and 12, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 in. above ground, with a steel fence post, N. of cor., with brass cap mkd. T21N R29E S2 S1 S11 S12 2008 1993. Add the marks 2015 to the brass cap.</p> <hr/> |
| 37.39 | <p>East, bet. secs. 1 and 12.</p> <p>Over gently rolling land, through scattered juniper.</p> <p>Point for the 1/4 sec. cor. of secs. 1 and 12, determined at midpoint between the cor. of secs. 1, 2, 11, and 12 and of secs. 1 and 12 only.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.</p> |

Corrective Resurvey of a Portion of the Subdivisional Lines,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona

CHAINS

T 21 N R 29 E
S 1
1/4 ———
S 12

2015

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Set a steel fence post N. of cor.

From this point, the 2008 cor., bears N. 9°45' E., 2.13 chs. dist. All evidence of this cor. is removed.

74.79

The cor. of secs. 1 and 12 only, T. 21 N., R. 29 E., at intersection with the E. bdy. of the Tp.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.

| | |
|--------|--------|
| T 21 N | |
| R 29 E | T 21 N |
| S 1 | R 30 E |
| S 12 | S 7 |

2015

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Set a steel fence post W. of cor.

From this cor. point, the cor. of secs. 6 and 7 only, T. 21 N., R. 30 E., bears N. 2°20' W., 3.54 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, flush with the surface of the ground, with brass cap mkd. T21N R29E R30E S1 S6 S7 2015.

From this same cor. point, the 1/4 sec. cor. of sec. 7 only, T. 21 N., R. 30 E., bears S. 2°20' E., 36.39 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 3 ins. above ground, with brass cap mkd. T21N R29E R30E 1/4 S7 2015.

From the cor. of secs. 1, 2, 11, and 12.

N. 0°17' E., bet. secs. 1 and 2.

Over gently rolling land, through scattered juniper.

**Corrective Resurvey of a Portion of the Subdivisional Lines,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona**

| CHAINS | |
|--------|--|
| 40.96 | <p>The 1/4 sec. cor. of secs. 1 and 2, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 5 in. above ground, with a steel fence post, W. of cor., with brass cap mkd. T21N R29E 1/4 S2 S1 2008. Add the marks 2015 to the brass cap.</p> <hr/> <p>N. 0°24' W., beginning new measurement.</p> <p>Over gently rolling land.</p> |
| 39.04 | <p>The cor. of secs. 1, 2, 35, and 36, on the N. bdy. of the Tp., hereinbefore described.</p> <hr/> <p align="center">Corrective Resurvey of Subdivision of Section 1, T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona</p> <hr/> <p>From the 1/4 sec. cor. of secs. 1 and 12.</p> <p>N. 0°5' W., on the N. and S. center line of sec. 1.</p> <p>Over gently rolling land.</p> |
| 40.48 | <p>Point for the center 1/4 sec. cor. of sec. 1, at intersection with the E. and W. center line sec. 1.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <p align="center">T 21 N R 29 E C 1/4 S 1</p> <p align="center">2015</p> <p>Deposit a magnet, in a white plastic case, at the base of the stainless steel post.</p> <p>Set a steel fence post N. of cor.</p> <p>From this point, 2008 cor., bears N. 5°02' E., 2.04 chs. dist. All evidence of this cor. is removed.</p> |
| 79.99 | <p>The 1/4 sec. cor. of secs. 1 and 36, on the N. bdy. of the Tp.</p> <hr/> <p>At the point for the 1/4 sec. cor. of sec. 1 only, T. 21 N., R. 29 E., determined latitudinally at proportionate distance between the cor. of secs. 1 and 12 only, T. 21 N., R. 29 E., and the cor. of Tps. 21 and 22 N., R. 29 E., established in this survey, and longitudinally on the E. bdy. of the Tp.</p> |

**Corrective Resurvey of Subdivision of Section 1,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona**

| CHAINS | |
|---|---|
| | <p>From this cor. point, the cor. of secs. 1 and 12 only, T. 21 N., R. 29 E., hereinbefore described, bears S. 0°16' E., 40 chs. dist.</p> <p>From this same cor. point, the newly established cor. of Tps. 21 and 22 N., R. 29 E., hereinbefore described, bears N. 0°02' E., 40 chs. dist.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T 21 N R 29 E R 30 E 1/4 S 1 </p> <p>2015</p> </div> <p>Deposit a magnet, in a white plastic case, at the base of the stainless steel post.</p> <p>Cor. is located on the E. side of remnants of a fence, composed of scrap juniper piles, bearing N. 5° E. and S. 5° W.</p> <p>From this cor. point, the 1/4 sec. cor. of sec. 6 only, T. 21 N., R. 30 E., bears N. 0°4' W., 3.77 chs. Dist.</p> <p>From this same cor. point, the cor. of secs. 6 and 7 only, T. 21 N., R. 30 E., bears S. 0°04' E., 36.46 chs. dist.</p> <p>From this cor., N. 89°15' W., on the E. and W. center line of sec. 1.</p> <p>Over gently rolling land.</p> |
| 37.26 | The center 1/4 sec. cor. of sec. 1. |
| 74.40 | The 1/4 sec. cor. of secs. 1 and 2. |
| <hr/> <p>Corrective Resurvey of Subdivision of Section 12, T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona</p> <hr/> | |
| 39.585 | <p>From the 1/4 sec. cor. of secs. 12 and 13.</p> <p>N. 1°04' W., on the N. and S. center line of sec. 12.</p> <p>Over gently rolling open land.</p> <p>Point for the center 1/4 sec. cor. of sec. 12, at intersection with the E. and W. center line sec. 12. From this point, 2008 cor., bears N. 7°13' W., 1.76 chs. dist. All evidence of this cor. is removed and reset at the true point.</p> |

Corrective Dependent Resurvey of Subdivision of Section 12,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam.,
24 ins. in the ground, with brass cap mkd.

T 21 N R 29 E
C 1/4 S 12

2015

Deposit a magnet, in a white plastic case, at the base of the
stainless steel post.

Set a steel fence post N. of cor.

79.17 The 1/4 sec. cor. of secs. 1 and 12.

At the point for the 1/4 sec. cor. of sec. 12 only, T. 21 N., R.
29 E., determined latitudinally at midpoint between the cor. of
secs. 12 and 13 only, T. 21 N., R. 29 E., and the cor. of secs.
1 and 12 only, T. 21 N., R. 29 E., established in this survey,
and longitudinally on the E. bdy. of the Tp.

From this cor. point, the cor. of secs. 12 and 13 only,
T. 21 N., R. 29 E., hereinbefore described, bears S. 2°20' E.,
39.18 chs. dist.

From this same cor. point, the cor. of secs. 1 and 12 only, T.
21 N., R. 29 E., hereinbefore described, bears N. 2°20' E.,
39.18 chs. dist.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam.,
24 ins. in the ground, with brass cap mkd.

T 21 N
R 29 E | R 30 E
1/4 |
S 12 |

2015

Deposit a magnet, in a white plastic case, at the base of the
stainless steel post.

Set a steel fence post W. of cor.

From this cor. point, the 1/4 sec. cor. of sec. 7 only, T. 21
N., R. 30 E., bears N. 2°20' W., 2.795 chs. dist

From this cor. point, the cor. of secs. 7 and 18 only, T. 21 N.,
R. 30 E., bears S. 2°20' E., 37.13 chs. dist.

From this cor., S. 89°22' W., on the E. and W. center line of
sec. 12.

Corrective Dependent Resurvey of Subdivision of Section 12,
T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona

| | |
|--|---------------------------------------|
| CHAINS | Over gently rolling land. |
| 38.26 | The center 1/4 sec. cor. of sec. 12. |
| 76.51 | The 1/4 sec. cor. of secs. 11 and 12. |
| <hr/> GENERAL DESCRIPTION <hr/> | |
| <p>The area surveyed is within the Navajo Indian Reservation, 60 miles northeast of Holbrook, AZ, 7 miles east of Sanders, AZ, and 2 miles south of Houck, AZ. The Navajo Indian Reservation boundary is identical with a portion of the south and west boundaries of the township. Access is provided by numerous bladed dirt roads originating from Sanders, AZ, via Clay Mine Road or Apache County Road 7240. From I-40, Allentown Road to Apache County Road 7240 is an alternative access road into the township. A series of track roads provide access throughout the township from the bladed dirt roads. ATV's were required to access the majority of the areas within the township.</p> <p>The terrain consists of gently rolling land with areas of uprooted juniper trees, and scattered juvenile juniper, in the area surveyed within the township. The average elevation is 6100 feet above sea level. The vegetation consists of sage brush, rabbit brush, and native grasses, in sections 1 and 12 of township. There is presence of grazing cattle and horses in the area. The soil is mostly sandy loam. There are no major housing developments, there are two summer cabins in the southeast quarter of section 12.</p> <p>The mean magnetic declination of 10° E. was derived from the United States Geological Survey computer program GEOMAG, utilizing the World Magnetic Model for Epoch 2010-2015 for the dates of survey.</p> <hr/> | |

CERTIFICATE OF SURVEY

I, Fabian Yazzie, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of supplemental to the existing supplemental special instructions bearing date of the 10th day of July, 2015, I have corrective dependently resurveyed a portion of the north boundary, the subdivisional lines, and the subdivision of sections 1 and 12, T. 21 N., R. 29 E., of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Surveying Instructions, 2009, and in specific manner described in the foregoing field notes.

10/19/2015
(Date)

[Signature]
(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Phoenix, Arizona

The foregoing field notes of the corrective dependent resurvey of portions of the north boundary, the subdivisional lines, and the subdivision of sections 1 and 12, T. 21 N., R. 29 E., Gila and Salt River Meridian, in the State of Arizona, executed by Fabian Yazzie, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

11/17/2015
(Date)

[Signature]
(Chief Cadastral Surveyor of Arizona)

~~CERTIFICATE OF TRANSCRIPT~~

~~I CERTIFY that the foregoing transcript of the field notes of the above described surveys in T. 21 N., R. 29 E., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~_____~~
~~(Date)~~

~~_____~~
~~(Chief Cadastral Surveyor of Arizona)~~