

ORIGINAL

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

FIELD NOTES  
OF THE  
DEPENDENT RESURVEY OF A  
PORTION OF THE NORTH BOUNDARY  
OF  
THE TOHONO O'ODHAM NATION RESERVATION  
(A PORTION OF THE SOUTH BOUNDARY)  
**TOWNSHIP 7 SOUTH, RANGE 3 EAST,**  
OF THE GILA AND SALT RIVER MERIDIAN,  
IN THE STATE OF ARIZONA.

**EXECUTED BY**

**Blas J. Urena, Cadastral Surveyor**

Under Special Instructions dated December 8, 2016, approved December 8, 2016, which provided for the surveys included under Group No. 1165, and assignment instructions dated December 8, 2016.

**Survey commenced December 14, 2016**

**Survey completed December 29, 2016**

**INDEX DIAGRAM**

**TOWNSHIP 7 SOUTH                      RANGE 3 EAST**  
**GILA & SALT RIVER MERIDIAN, ARIZONA**

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## T. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona

## CHAINS

The following field notes describe the dependent resurvey of a portion of the North Boundary of the Tohono O'odham Nation Reservation (a portion of the South Boundary) Township 7 South, Range 3 East, Gila and Salt River Meridian, Arizona.

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

W. H. Thorn, U. S. Surveyor, and W. K. Kierulff, U. S. Transitman, surveyed a portion of the North Boundary of Township 8 South, Range 3 East (South Boundary Township 7 South, Range 3 East) in 1915 (book 2892).

The survey was executed in accordance with the specifications as set forth in the Manual of Surveying Instructions, 2009, and the Special Instructions dated December 8, 2016, for Group Number 1165, Arizona.

The true meridian direction and length of all lines were determined by static and real time kinematic Global Navigation Satellite System observations using Trimble Navigation R8-3 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. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

The survey was executed at the request of Bryan Bowker, Acting Regional Director, Bureau of Indian Affairs, Western Regional Office, in support of the Tohono O'odham Nation (TON) Reservation's boundary fencing project.

Geodetic control was derived from Global Navigation Satellite System (GNSS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations DL3063 AZTP TEMPE CORS ARP, DP1955 AZMP MARICOPA CORS ARP, DN4496 AZUP USERY MOUNTAIN PK CORS ARP. The NAD 83 (CORS2011) (EPOCH: 2010.0000), geographic position of the corner of the Townships 7 and 8 South, Ranges 3 and 4 East, is as follows:

Latitude: 32°46'04.126" N.                      Longitude: 111°59'52.809" W.

The NAD 83 (CORS2011) (EPOCH: 2010.0000), geographic position of the corner of sections 3, 4, 33, and 34, on the south boundary of the township, is as follows:

Latitude: 32°46'04.241" N.                      Longitude: 112°02'58.331" W.

The mean magnetic declination is 10 1/4° E.

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Dependent Resurvey of a portion of the South Boundary,  
T. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p style="text-align: center;">Restoring the survey executed by W. H. Thorn and W. K. Kierulff, in 1915</p> <hr style="width: 20%; margin: auto;"/> <p>Beginning at the cor. of Tps. 7 and 8 S., Rs. 3 and 4 E., (A portion of T. 8 S., R. 3 E. and T. 8 S., R. 4 E., being within the TON Reservation), monumented with an iron post, 3 ins. diam., firmly set, projecting 18 ins. above ground, in a scattered mound of stone 3 1/2 ft. base, with brass cap mkd. T7S R3E R4E S36 S31 P I R 1915.</p> <p>Add the marks 2016 to the brass cap.</p> <p>Rebuild the mound of stone to 4 1/2 ft. base, to top of brass cap.</p> <p>From this cor. a fence corner, barbed wire, 4 strand, bears N. 8°48' W., 0.8 lks., with fences extending S. 89°06' E., S. 89°12' W. and N. 0°10' W.</p> <p>N. 89°55' W., on the S. bdy. of sec. 36, N. bdy. of the TON Reservation.</p> <p>Over gently to rolling and rocky terrain, through greasewood brush, scattered palo verde and ironwood, on/or alongside barbed wire fence, 4 strand.</p>
22.70	From this point, the same barbed wire fence, bears South, 3 lks. from which the 3 top strands are cut. (+/- 10 ft.)
39.04	From this point, the same barbed wire fence, bears South, 5.2 lks., bears S. 89°31' E. and N. 89°31' W.
39.98	From this point, the same barbed wire fence, bears South, 4.8 lks., bears S. 89°31' E. and N. 89°46' W.
40.013	Point for the 1/4 sec. cor. of sec. 36 (unsurveyed sec. 1, T. 8 S., R. 3 E., being within the TON Reservation), determined at proportionate dist., there is no remaining evidence of the orig. cor.
	<p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 8 ins. in the ground, to bedrock, cemented in hole, in a supporting mound of stone, 5 ft. base, to top of brass cap mkd.</p> <p style="text-align: center;">T 7 S R 3 E</p> <p style="text-align: center;">1/4 S 36</p> <hr style="width: 10%; margin: auto;"/> <p style="text-align: center;">T O N</p> <p style="text-align: center;">2016</p>

Dependent Resurvey of a portion of the South Boundary,  
T. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona

CHAINS	
	Cement a magnet, without a plastic case, at the base of the stainless steel post.
	Found a scattered mound of stone, N. 21°46' E., 10 lks., utilized the stones in the supporting mound of stone.
	From this cor. the same barbed wire fence, bears South, 5.2 lks., bears S. 89°46' E. and N. 89°46' W.
40.79	From this point the same barbed wire fence, bears South, 4.6 lks., bears S. 89°46' E. and N. 89°46' W.
79.10	From this point the same barbed wire fence, bears North, 0.4 lks., bears S. 89°56' E. and N. 89°56' W.
80.026	The cor. of secs. 35 and 36 (unsurveyed secs. 1 and 2, T. 8 S., R. 3 E., being within the TON Reservation), monumented with an iron post, 3 ins. diam., firmly set, projecting 12 ins. above ground, in a scattered mound of stone, 2 ft. base, with brass cap mkd. T7S R3E S35 S36 P I R 1915.
	from which the original bearing trees
	A palo verde, 11 ins. diam., bears N. 36 1/2° E., 24.5 lks. dist., with no marks visible. (Record: 23 lks.)
	An ironwood, 11 ins. diam., bears N. 67° W., 67 lks. dist., with no marks visible.
	Add the marks 2016 to the brass cap.
	Rebuild the mound of stone to 3 ft. base, to top of brass cap.
	From this point the same barbed wire fence, bears South, 0.7 lks., bears S. 89°56' E. and N. 89°56' W.
	<hr/>
	N. 89°59' W., on the S. bdy. of sec. 35, N. bdy. of the TON Reservation.
	Over rolling terrain, through greasewood brush and scattered palo verde and ironwood, on/or alongside barbed wire fence, 4 strand.
0.82	From this point the same barbed wire fence, bears North, 0.7 lks., bears S. 89°56' E. and N. 89°56' W.
39.46	Wash, 60 ft. wide, 4 ft. deep, drains NE, from this point the same barbed wire fence, bears South, 1.6 lks., bears N. 89°40' E. and S. 89°40' W.

Dependent Resurvey of a portion of the South Boundary,  
T. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona

CHAINS	
40.02	<p>The 1/4 sec. cor. of sec. 35 (unsurveyed sec. 2, T. 8 S., R. 3 E., being within the TON Reservation), monumented with an iron post, 36 ins. long, 1 in. diam., filled with concrete, projecting 15 in. above ground and bent to S., with brass cap mkd. S35 1/4 P I R 1915.</p> <p>At the corner point</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, in a collar of stone, 4 ft. base, to top of brass cap mkd.</p> <p style="text-align: center;">T 7 S R 3 E</p> <p style="text-align: center;"><u>1/4 S 35</u></p> <p style="text-align: center;">T O N</p> <p style="text-align: center;">2016</p> <p>Deposit a magnet, in a white plastic case, at the base of the stainless steel post.</p> <p>Bury the iron post, horizontally, alongside the stainless steel post.</p> <p>From this point the same barbed wire fence, bears North, 2 lks., bears N. 89°40' E. and S. 89°40' W.</p> <hr style="width: 20%; margin: 10px auto;"/> <p>N. 89°59' W., beginning new measurement.</p>
0.93	<p>From this point the same barbed wire fence, bears North, 0.6 lks., bears N. 89°40' E. and S. 89°40' W.</p>
39.06	<p>From this point the same barbed wire fence, bears North, 0.2 lks., bears S. 89°51' E. and N. 89°51' W.</p>
39.98	<p>The cor. of secs. 34 and 35 (unsurveyed secs. 2 and 3, T. 8 S., R. 3 E., being within the TON Reservation), monumented with an iron post, 3 ins. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. T7S R3E S34 S35 P I R 1915.</p> <p>from which the remaining original bearing tree</p> <p style="padding-left: 40px;">An ironwood, 21 ins. diam., bears N. 13 3/4° W., 1.09 chs. dist., with some scribe marks visible but not legible, on a partially open blaze.</p> <p>Add the marks 2016 to the brass cap.</p> <p>Raise a mound of stone, 1 1/2 ft. base, to top of brass cap.</p>

Dependent Resurvey of a portion of the South Boundary,  
T. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>The cor. is located alongside the same barbed wire fence, bears S. 89°51' E. and N. 89°51' W.</p> <hr/> <p>N. 89°58' W., on the S. bdy. of sec. 34, N. bdy. of the TON Reservation.</p> <p>Over rolling terrain, through greasewood brush and scattering palo verde and ironwood, on/or alongside barbed wire fence, 4 strand.</p>
0.85	From this point the same barbed wire fence, bears North, 0.6 lks., bears S. 89°51' E. and N. 89°51' W.
39.32	From this point the same barbed wire fence, bears North, 0.7 lks., bears N. 89°55' E. and S. 89°55' W.
39.99	<p>The 1/4 sec. cor. of sec. 34 (sec. 3 being inside the TON Reservation), monumented with an iron post, 1 in. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. S34 1/4 P I R 1915.</p> <p>Add the marks T7S R3E 2016 to the brass cap.</p> <p>Raise a mound of stone, 3 ft. base, to top of brass cap.</p> <p>From this cor. the same barbed wire fence, bears North, 0.7 lks., bears N. 89°55' E. and S. 89°55' W.</p> <hr/> <p>N. 89°59' W., beginning new measurement.</p>
0.94	From this point the same barbed wire fence, bears North, 0.4 lks., bears N. 89°55' E. and S. 89°55' W.
39.15	From this point the same barbed wire fence, bears North, 0.5 lks., bears S. 89°33' E. and N. 89°33' W.
40.02	<p>The cor. of secs. 4, 33, and 34 (unsurveyed sec. 3, T. 8 S., R. 3 E., being within the TON Reservation), monumented with an iron post, 3 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T7S R3E S33 S34 S4 P I R T8S 1915, witnessed by a scattered mound of stone, W. of cor.</p> <p>Add the marks 2016 to the brass cap.</p> <p>Rebuild the mound of stone to 3 ft. base, 2 ft. high.</p> <p>From this cor. a fence corner on the same fence, 4 strand, bears N. 52°46' E., 1.9 lks., with fences extending S. 89°33' E., S. 1°15' W. and N. 6°08' W.</p> <hr/>

## T. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona

CHAINS

## GENERAL DESCRIPTION

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The line resurveyed within T. 7 S., R. 3 E., is identical with a portion of the north boundary of the Tohono O'odham Nation Reservation, and is located approximately 17.3 miles S. 63° W., of Casa Grande, Arizona. The terrain varies from rolling to gently rolling to rolling. The elevation ranges from 1583 to 1790 ft. above sea level.

Access to the area resurveyed is provided by Interstate Highway No. 8 and Stanfield Road.

The mean magnetic declination of 10 1/4° E. was derived from the United States Geological Survey computer program GEOMAG, utilizing the World Magnetic Model for Epoch 2015 for the dates of survey.

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CERTIFICATE OF SURVEY

I, Blas J. Urena, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 8th day of December, 2016, I have dependently resurveyed a portion of the north boundary of the Tohono O'odham Nation Reservation (a portion of the south boundary) T. 7 S., R. 3 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.

10/11/2017  
(Date)

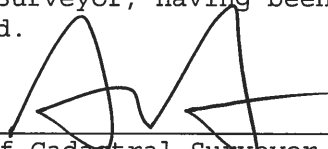
Blas J. Urena  
(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT  
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the north boundary of the Tohono O'odham Nation Reservation (a portion of the south boundary) T. 7 S., R. 3 E., Gila and Salt River Meridian, in the State of Arizona, executed by Blas J. Urena, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

11/29/2017  
(Date)

  
(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. 7 S., R. 3 E., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~\_\_\_\_\_  
(Date)~~

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(Chief Cadastral Surveyor of Arizona)~~