

ORIGINAL

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

FIELD NOTES
OF THE
DEPENDENT RESURVEY OF
A PORTION OF THE SUBDIVISIONAL LINES
AND
THE METES-AND-BOUNDS SURVEY OF THE
WARM SPRINGS WILDERNESS AREA BOUNDARY

TOWNSHIP 16 NORTH, RANGE 19 WEST,
OF THE GILA AND SALT RIVER MERIDIAN,
IN THE STATE OF ARIZONA.

EXECUTED BY

W. William Foster, Cadastral Surveyor

Under Special Instructions dated March 31, 2004, approved March 31, 2004, which provided for the surveys included under Group No. 933, and assignment instructions dated March 31, 2004.

Survey commenced September 8, 2004

Survey completed October 14, 2004

INDEX DIAGRAM

TOWNSHIP 16 NORTH RANGE 19 WEST
 GILA AND SALT RIVER MERIDIAN, ARIZONA

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Metes-and-Bounds Survey of the Warm Springs Wilderness Area Boundary
 in Section 3 Pages 9-10

T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the subdivisional lines and the metes-and-bounds survey of the Warm Springs Wilderness Area Boundary, Township 16 North, Range 19 West, Gila and Salt River Meridian, Arizona.

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

Albert Smith Jr. and Ray D. Armstrong surveyed the east, south, north and west boundaries and the subdivisional lines in 1916.

The survey was executed in accordance with the specifications as set forth in the Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and the Special Instructions dated March 31, 2004, for Group No. 933, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Topcon Hyper Plus model receivers.

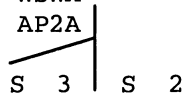
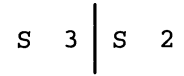
Preliminary to the resurvey, the lines of the prior surveys were retraced and search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from a tie to "A" order United States Geological Survey triangulation station "B-391 1961", as published by the National Geodetic Survey, NAD 83 (1992). The geographic position of the 1/4 section corner of sections 2 and 3, is as follows:

Latitude: 34°45'24.05" N. Longitude: 114°13'44.31" W.

The mean magnetic declination is 12 3/4° E.

**Dependent Resurvey of a Portion of the Subdivisional Lines,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
	<p style="text-align: center;">Restoring the survey executed by Albert Smith Jr. and Ray D. Armstrong, in 1916</p> <hr style="width: 20%; margin: auto;"/> <p>Beginning at the 1/4 sec. cor. of secs. 2 and 3, monumented with an iron post, 1 in. diam., firmly set, projecting 7 ins. above the ground, with brass cap mkd. 1/4 S3 S2 1916, with a scattered accessory mound of stone, 2 ft. base, W. of cor.</p> <p>Add the marks T16N R19W 2004 to the brass cap.</p> <p>From this cor. point, U.S.C. & G.S. triangulation station (bench mark) "B-391 1961", bears N. 55°59' E. (forward bearing), 329.99 chs. dist., a brass disc, 3 ins. diam., cemented in a rock outcrop, 8 X 3 ft., with top mkd. B391 + 1961.</p> <p>N. 0°13' W., bet. secs. 2 and 3.</p> <p>Over rolling land, through scattered greasewood and Palo Verde trees.</p> <p>5.50 Center line of railroad, east bound track, bears N. 57° E. and S. 57° W.</p> <p>7.32 Point for AP 2A, secs. 2 and 3, at intersection with the Burlington Northern Santa Fe (B.N.S.F.) railroad right-of-way.</p> <p>Set an aluminum drive rod, 30 ins. long, 3/4 in. diam., 27 ins. in the ground, with aluminum cap mkd.</p> <div style="text-align: center;"> <p>T 16 N R 19 W</p> <p>WSWA AP2A</p>  <p>2004</p> </div> <p>26.29 Point for a witness point on line bet. secs. 2 and 3.</p> <p>Set an aluminum drive rod, 30 ins. long, 3/4 in. diam., 23 ins. in the ground, to bedrock, in a supporting mound of stone, 2 ft. base, to top, with aluminum cap mkd.</p> <div style="text-align: center;"> <p>WP</p> <p>T 16 N R 19 W</p>  <p>2004</p> </div>

**Dependent Resurvey of a Portion of the Subdivisional Lines,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
39.99	<p>The cor. of secs. 2, 3, 34 and 35, on the N. bdy. of the Tp., monumented with an iron post, 3 ins. diam., set, mkd., and witnessed as described in the 2004 dependent resurvey of T. 16 1/2 N., R. 19 W. executed concurrently under this same group.</p> <hr/> <p>From the cor. of secs. 2, 3, 10 and 11, monumented with an iron post, 2 ins. diam., firmly set, projecting 5 ins. above the ground, with brass cap mkd. T16N R19W S3 S2 S10 S11 1916, with an accessory mound of stone, 3 ft. base, 1 1/2 ft. high, N. of cor.</p> <p>Add the marks 2004 to the brass cap.</p> <p>N. 89°52' W., bet. secs. 3 and 10.</p> <p>Over rolling land, across a wide expanse of the Sacramento Wash through scattered Palo Verde.</p>
40.10	<p>Point for the 1/4 sec. cor. of secs. 3 and 10, at proportionate dist., there is no remaining evidence of the orig. cor.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 40 ins. in the ground, with aluminum cap mkd.</p> <div style="text-align: center;"> <p>T 16 N R 19 W</p> <p>S 3</p> <p>1/4 ———</p> <p>S 10</p> <p>2004</p> </div>
56.25	<p>Center line of railroad, east bound track, bears N. 46° E. and S. 46° W.</p>
58.44	<p>Point for AP 1A, secs. 3 and 10, at intersection with the B.N.S.F. railroad right-of-way.</p> <p>Set an aluminum drive rod, 30 ins. long, 3/4 in. diam., 24 ins. in the ground, with aluminum cap mkd.</p> <div style="text-align: center;"> <p>T 16 N R 19 W</p> <p>WSWA</p> <p>AP1A / S 3</p> <p>—————</p> <p>S 10</p> <p>2004</p> </div>

**Dependent Resurvey of a Portion of the Subdivisional Lines,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
66.71	<p>Point for a witness point on line bet. secs. 3 and 10.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 37 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 3 <hr/> S 10 2004 </p>
80.20	<p>The cor. of secs. 3, 4, 9 and 10, monumented with an iron post, 2 ins. diam., firmly set, projecting 13 ins. above the ground, in a supporting mound of stone, 3 ft. base, to top, with brass cap mkd. T16N R19W S4 S3 S9 S10 1916.</p> <p>Add the marks 2004 to the brass cap.</p> <hr/> <p>N. 89°52' W., bet. secs. 4 and 9.</p> <p>Over rolling land, through scattered creosote bush and various cacti.</p>
5.11	<p>Point for a witness point on line bet. secs. 4 and 9.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 39 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 4 <hr/> S 9 2004 </p>
12.86	<p>Point for a witness point on line bet. secs. 4 and 9.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 37 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 4 <hr/> S 9 2004 </p>

**Dependent Resurvey of a Portion of the Subdivisional Lines,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
28.25	<p>Point for a witness point on line bet. secs. 4 and 9.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 38 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 4 <hr/> S 9 2004 </p>
40.22	<p>The 1/4 sec. cor. of secs. 4 and 9, monumented with an iron post, 1 in. diam., firmly set, projecting 9 ins. above the ground, in a collar of stone, with brass cap mkd. 1/4 S4 S9 1916.</p> <p>Add the marks T16N R19W 2004 to the brass cap.</p> <p align="center"> <hr/> S. 89°57' W., beginning new measurement. </p> <p>Over rolling land, through scattered creosote bush and various cacti.</p>
10.54	<p>Point for a witness point on line bet. secs. 4 and 9.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 39 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 4 <hr/> S 9 2004 </p>
27.09	<p>Point for a witness point on line bet. secs. 4 and 9.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 38 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 4 <hr/> S 9 2004 </p>

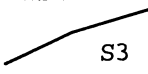
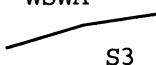
**Dependent Resurvey of a Portion of the Subdivisional Lines,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
40.04	<p>The cor. of secs. 4, 5, 8 and 9, monumented with an iron post, 2 ins. diam., firmly set, projecting 9 ins. above the ground, with brass cap mkd. T16N R19W S5 S4 S8 S9 1916.</p> <p>Add the marks 2004 to the brass cap.</p> <p>From this cor. point, a power pole, #28692, bears S. 36° W., 9 lks. dist.</p> <p>Cor. is located N. 50° E., 2 lks. dist., from a fence cor., with fences bearing N. and E.</p> <hr/> <p>N. 0°06' E., bet. secs. 4 and 5.</p> <p>Over rolling land through scattered creosote bush.</p>
18.39	<p>Point for a witness point on line bet. secs. 4 and 5.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 38 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 5 S 4 2004 </p>
30.93	<p>Point for a witness point on line bet. secs. 4 and 5.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 38 ins. in the ground, with aluminum cap mkd.</p> <p align="center"> WP T 16 N R 19 W S 5 S 4 2004 </p>
40.00	<p>The 1/4 sec. cor. of secs. 4 and 5, monumented with an iron post, 1 in. diam., firmly set, projecting 10 ins. above the ground, with brass cap mkd. 1/4 S5 S4 1916, with an accessory mound of stone, 4 ft. base, 2 1/2 ft. high, W. of cor.</p> <p>Add the marks T16N R19W 2004 to the brass cap.</p> <hr/> <p>N. 0°03' E., beginning new measurement.</p> <p>Over rolling land through scattered creosote bush.</p>

**Dependent Resurvey of a Portion of the Subdivisional Lines,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
18.51	<p>Point for a witness point on line bet. secs. 4 and 5.</p> <p>Set an aluminum drive rod, 30 ins. long, 3/4 in. diam., 24 ins. in the ground, with aluminum cap mkd.</p> <p style="text-align: center;"> WP T 16 N R 19 W S 5 S 4 2004 </p>
29.88	<p>Point for a witness point on line bet. secs. 4 and 5.</p> <p>Set an aluminum drive rod, 42 ins. long, 3/4 in. diam., 38 ins. in the ground, with aluminum cap mkd.</p> <p style="text-align: center;"> WP T 16 N R 19 W S 5 S 4 2004 </p>
39.81	<p>The cor. of secs. 4, 5, 32 and 33, on the N. bdy. of the Tp., monumented with an iron post, 3 ins. diam., set, mkd., and witnessed as described in the 2004 dependent resurvey of T. 16 1/2 N., R. 19 W. executed concurrently under this same group.</p>
<hr/> <p>Metes-and-Bounds Survey of the Warm Springs Wilderness Area Boundary in Section 3, T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona</p> <hr/>	
	<p>From AP 1A, on the line bet. secs. 3 and 10, at intersection with the B.N.S.F. railroad right-of-way, hereinbefore described.</p> <p>N. 46°01' E., on line AP 1A-AP 1, sec. 3, along the B.N.S.F. railroad right-of-way.</p>
	<p>Over rolling land, through scattered creosote.</p>
27.18	<p>Point for AP 1, sec. 3, the point of curvature.</p> <p>Set an aluminum drive rod, 30 ins. long, 3/4 in. diam., flush with the ground, with aluminum cap mkd.</p>

**Metes-and-Bounds Survey of the Warm Springs
Wilderness Area Boundary in Section 3,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS	
	<p>T 16 N R 19 W</p> <p>AP1 WSWA</p>  <p>S3</p> <p>2004</p>
25.13	<p>Thence along a circular to the right, having a central angle of 10°35', a radius of 8979.57 ft., the chord of said arc bears N. 51°20' E., 25.09 chs. dist.</p> <p>Point for AP 2, point of tangency.</p> <p>Set an aluminum drive rod, 30 ins. long, 3/4 in. diam., 24 ins. in the ground, with aluminum cap mkd.</p>
	<p>T 16 N R 19 W</p> <p>AP2 WSWA</p>  <p>S3</p> <p>2004</p>
22.90	<p>N. 56°36' E., on line AP 2-AP 2A.</p> <p>AP 2A, on the line bet. secs. 2 and 3, hereinbefore described.</p> <hr/>

T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona

CHAINS

GENERAL DESCRIPTION

The Warm Springs Wilderness Area is located approximately 35 miles southwesterly of Kingman, AZ. Access is by way of I-40, and various trail roads in sections 3, 4, and 5. The B.N.S.F. railroad runs in the southeasterly portion of the section 3.

The terrain varies from level and rolling in sections 3, 4 and 5, in T. 16 N., R. 19 W. The vegetation consists mostly of creosote and yucca bush, various cacti and native grasses.

There is mining activity N. of the Tp. There are several wild burros roaming in the area. There is some evidence of a large meteor having landed in section 4, T. 16 N., R. 19 W.

The mean magnetic declination of $12\ 3/4^\circ$ E. was derived from the United States Geological Survey computer program GEOMAG, utilizing the World Magnetic Model for Epoch 2000 for the dates of survey.

**Description of the Warm Springs Wilderness Area Boundary,
T. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona**

CHAINS

The following is for informational purposes only

Beginning at the cor. of secs. 4, 5, 32 and 33, on the N. bdy. of the Tp.
 thence, S. 0°03' W., 9.93 chs. dist., to a WP on line bet. secs. 4 and 5;
 thence, S. 0°03' W., 11.37 chs. dist., to a WP on line bet. secs. 4 and 5;
 thence, S. 0°03' W., 18.51 chs. dist., on line bet. secs. 4 and 5, to the 1/4 sec. cor. of secs. 4 and 5;
 thence, S. 0°06' W., 9.07 chs. dist., to a WP on line bet. secs. 4 and 5;
 thence, S. 0°06' W., 12.54 chs. dist., to a WP on line bet. secs. 4 and 5;
 thence, S. 0°06' W., 18.39 chs. dist., on line bet. secs. 4 and 5, to the cor. of secs. 4, 5, 8 and 9;
 thence, N. 89°57' E., 12.95 chs. dist., to a WP on line bet. secs. 4 and 9;
 thence, N. 89°57' E., 16.55 chs. dist., to a WP on line bet. secs. 4 and 9;
 thence, N. 89°57' E., 10.54 chs. dist., on line bet. secs. 4 and 9, to the 1/4 sec. cor. of secs. 4 and 9;
 thence, S. 89°52' E., 11.97 chs. dist., to a WP on line bet. secs. 4 and 9;
 thence, S. 89°52' E., 15.39 chs. dist., to a WP on line bet. secs. 4 and 9;
 thence, S. 89°52' E., 7.75 chs. dist., to a WP on line bet. secs. 4 and 9;
 thence, S. 89°52' E., 5.11 chs. dist., on line bet. secs. 4 and 9, to the cor. of secs. 3, 4, 9 and 10;
 thence, S. 89°52' E., 13.49 chs. dist., to a WP on line bet. secs. 3 and 10;
 thence, S. 89°52' E., 8.27 chs. dist., on line bet. secs. 3 and 10, to AP 1A, secs. 3 and 10;
 thence, N. 46°01' E., 27.18 chs. dist., to AP 1, sec. 3;
 thence, along a circular curve to the right, having a central angle of 10°35', a radius of 8979.57 ft., the chord of said arc bears N. 51°20' E., 25.09 chs. dist. and a length of 25.13 chs. dist., to AP 2, sec. 3;
 thence, N. 56°36' E., 22.90 chs. dist., to AP 2A, secs. 2 and 3;
 thence, N. 0°13' W., 18.97 chs. dist., to a WP on line bet. secs. 2 and 3;
 thence, N. 0°13' W., 13.70 chs. dist., on line bet. secs. 2 and 3, to the cor. of secs. 2, 3, 34 and 35, on the N. bdy. of the Tp.

CERTIFICATE OF SURVEY

I, W. William Foster, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 31st day of March, 2004, I have dependently resurveyed a portion of the subdivisional lines and the metes-and-bounds survey of the Warm Springs Wilderness Area Boundary, T. 16 N., R. 19 W., 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 Instructions for the Survey of the Public Lands of the United States, 1973 and in specific manner described in the foregoing field notes.

W. William Foster, is no longer assigned to this office and is unavailable for signature

(Date)

(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the subdivisional lines and the metes-and-bounds survey of the Warm Springs Wilderness Area Boundary, T. 16 N., R. 19 W., Gila and Salt River Meridian, in the State of Arizona, executed by W. William Foster, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

11/03/2006
(Date)

Stephen K. Hansen
(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. 16 N., R. 19 W., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~_____
(Date)~~

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