

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FIELD NOTES  
OF THE

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SURVEY OF

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THE NINTH STANDARD PARALLEL NORTH,

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(SOUTH BOUNDARY),

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THE EAST BOUNDARY,

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AND

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A PORTION OF THE

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SUBDIVISIONAL LINES,

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TOWNSHIP 37 NORTH, RANGE 19 EAST,

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Of the Gila and Salt River Meridian,  
In the State of Arizona

EXECUTED BY

Jones Curtiss, Cadastral Surveyor

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Under Special Instructions dated and approved June 6, 1996 and Amended Special Instructions dated and approved August 13, 1997, which provided for the surveys included under Group Number 802 and assignment instructions dated June 6, 1996.

Survey Commenced June 9, 1997  
Survey Completed March 31, 1998

## INDEX DIAGRAM

TOWNSHIP 37 NORTH, RANGE 19 EAST,

GILA AND SALT RIVER MERIDIAN, ARIZONA

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## T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

## CHAINS

The following field notes describe the survey of the Ninth Standard Parallel North, (south boundary), the east boundary, and a portion of the subdivisional lines, Township 37 North, Range 19 East, Gila and Salt River Meridian, Arizona.

The standard corner of Tps. 37 N., Rs. 18 and 19 E. was established, and the west boundary surveyed, by Jones Curtiss in 1996-97, concurrently under this same group.

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, the Special Instructions dated June 6, 1996, and Amended Special Instructions dated August 13, 1997, for Group No. 802, Arizona.

The directions of all lines were determined by the technique of differential positioning using the Ashtech M-Series Geodetic Positioning System and direct hour angle observations on the sun, and refer to the true meridian. Distances and angles were measured with Sokkia SET2BII and Topcon GTS3B total station instruments.

The geographic position of the southeast corner of the township was determined by the technique of differential positioning using the Ashtech M-Series Geodetic Positioning System. First order National Geodetic Survey triangulation stations "COAL MINE 1951" and "KAYENTA 1951" were used as control stations. The geographic position is as follows:

Lat.: 36°33'48.870" N. Long.: 110°14'09.194" W. NAD83 (1992)

The mean magnetic declination is 12 1/2° E.

Survey of the Ninth Standard Parallel North, (South Boundary),  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Beginning at the stan. cor. of Tps. 37 N., Rs. 18 and 19 E., monumented with a stainless steel post, 2 1/2 ins. diam., with brass cap, set, and mkd. as described in the field notes of the survey of the Ninth Standard Parallel North, (south boundary), T. 37 N., R. 18 E., executed concurrently under this same group.</p> <p>Cor. is located 80 lks. W. of a graded road, 15 ft. wide, bears NE and SW.</p> <p>East, on the S. bdy. of sec. 31.</p> <p>Over rolling and broken land.</p>
4.80	Coal Mine Wash, 100 ft. wide, 10 ft. deep, drains S.; thence ascend from Coal Mine Canyon.
40.00	<p>Point for the stan. 1/4 sec. cor. of sec. 31.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>SC</p> <p>T37N R19E</p> <p>1/4 S31</p> <hr style="width: 50%; margin: auto;"/> <p>1997</p> </div> <p>from which</p> <p style="padding-left: 40px;">A piñon, 6 ins. diam., bears N. 38 3/4° E., 41 1/2 lks. dist., mkd. 1/4 S31 SC BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p>
80.00	<p>Point for the stan. cor. of secs. 31 and 32.</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> <div style="text-align: center;"> <p>SC</p> <p>T37N R19E</p> <p>S31   S32</p> <hr style="width: 50%; margin: auto;"/> <p>1997</p> </div> <p>from which</p> <p style="padding-left: 40px;">The mks. X B0, chiseled on the face of a sandstone ledge, bear N. 51 3/4° E., 94 lks. dist.</p>

Survey of the Ninth Standard Parallel North, (South Boundary),  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling and broken. Soil, sandy and rocky clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p>
40.00	<p>East, on the S. bdy. of sec. 32.</p> <p>Over rolling and broken land.</p> <p>Point for the stan. 1/4 sec. cor. of sec. 32.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">SC T37N R19E 1/4 S32 ----- 1997</p>
80.00	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Raise a mound of stone, 3 ft. base, 1 ft. high, N. of cor.</p> <p>Point for the stan. cor. of secs. 32 and 33.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">SC T37N R19E S32   S33 ----- 1997</p>
	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling and broken. Soil, sandy and rocky clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p> <p>East, on the S. bdy. of sec. 33.</p> <p>Over rolling and broken land.</p>

Survey of the Ninth Standard Parallel North, (South Boundary),  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	<p>40.00 Point for the stan. 1/4 sec. cor. of sec. 33.</p> <p>Set a brass tablet, 3 1/4 ins. diam., 2 1/2 ins. stem, cemented in place, in a drill hole, atop a sandstone boulder, 9 x 8 x 6 ft., with top mkd.</p> <div style="text-align: center;"> <p>SC T37N R19E 1/4 S33</p> <hr/> <p>1997</p> </div> <p>from which</p> <p style="padding-left: 40px;">A Douglas fir, 16 ins. diam., bears N. 84° E., 43 1/2 lks. dist., mkd. 1/4 S33 SC BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case in the drill hole beneath the brass tablet.</p> <p>Cor. is located in a wash, 40 ft. wide, 15 ft. deep, drains WNW.</p>
80.00	<p>Point for the stan. cor. of secs. 33 and 34.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>SC T37N R19E S33   S34</p> <hr/> <p>1997</p> </div> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling and broken. Soil, sandy and rocky clay with rock outcrops. Timber, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p>
40.00	<p>East, on the S. bdy. of sec. 34.</p> <p>Over rolling and broken land.</p> <p>Point for the stan. 1/4 sec. cor. of sec. 34.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>

Survey of the Ninth Standard Parallel North, (South Boundary),  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p style="text-align: center;">SC T37N R19E 1/4 S34</p> <hr style="width: 10%; margin: auto;"/> <p style="text-align: center;">1997</p> <p>from which</p> <p style="padding-left: 40px;">A juniper, 7 ins. diam., bears N. 73° W., 19 1/2 lks. dist., mkd. 1/4 S34 SC BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p>
80.00	<p>Point for the stan. cor. of secs. 34 and 35.</p> <p>Set a brass tablet, 3 1/4 ins. diam., 2 1/2 ins. stem, cemented in place, in a drill hole, in sandstone bedrock, with top mkd.</p> <p style="text-align: center;">SC T37N R19E S34   S35</p> <hr style="width: 10%; margin: auto;"/> <p style="text-align: center;">1997</p> <p>from which</p> <p style="padding-left: 40px;">A piñon, 15 ins. diam., bears N. 50° E., 1.27 chs. dist., mkd. T37N R19E S35 SC BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case in the drill hole beneath the brass tablet.</p> <p>Cor. is located 30 lks. E. of E. rim of a canyon, atop small cliff, bears N. and S.</p> <p>Land, rolling and broken. Soil, sandy and rocky clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p>
40.00	<p>East, on the S. bdy. of sec. 35.</p> <p>Over rolling and broken land.</p> <p>Point for the stan. 1/4 sec. cor. of sec. 35.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 14 ins. in the ground, to bedrock, supported in a mound of stone, 3 ft. base, to top, with brass cap mkd.</p>

Survey of the Ninth Standard Parallel North, (South Boundary),  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
80.00	<p style="text-align: center;">SC T37N R19E 1/4 S35 ----- 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Point for the stan. cor. of secs. 35 and 36.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">SC T37N R19E S35   S36 ----- 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon, juniper and ponderosa pine; undergrowth, brush and native grasses.</p>
40.00	<p>East, on the S. bdy. of sec. 36.</p> <p>Over broken land.</p> <p>Point for the stan. 1/4 sec. cor. of sec. 36.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, to bedrock, in a mound of stone, 3 ft. base, to top, with brass cap mkd.</p> <p style="text-align: center;">SC T37N R19E 1/4 S36 ----- 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Thence descend into Moenkopi Canyon.</p>

Survey of the Ninth Standard Parallel North, (South Boundary),  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	<p>80.00 Point for the stan. cor. of Tps. 37 N., Rs. 19 and 20 E.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>SC T37N R19E   R20E S36   S31</p> <hr style="width: 50%; margin: auto;"/> <p>1997</p> </div> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located in Moenkopi Canyon, 2.10 chs. W. of a graded road, 15 ft. wide, and 2.30 chs. W. of a power line, both bear NE and SW.</p> <p>Land, broken. Soil, sandy and rocky clay with rock outcrops. Timber, piñon, juniper and ponderosa pine; undergrowth, brush and native grasses.</p>
	<p>Survey of the East Boundary, T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona</p>
40.00	<p>From the stan. cor. of Tps. 37 N., Rs. 19 and 20 E., on the Ninth Standard Parallel North, hereinbefore described.</p> <p>North, bet. secs. 31 and 36.</p> <p>Over broken land on ascent from Moenkopi Canyon.</p> <p>Point for the 1/4 sec. cor. of secs. 31 and 36.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T37N R19E R20E 1/4 S36   S31 1997</p> </div>

Survey of the East Boundary,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS											
	<p>from which</p> <p style="padding-left: 40px;">A piñon, 11 ins. diam., bears N. 72° W., 19 lks. dist., mkd. 1/4 S36 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located atop high mesa W. of Moenkopi Wash; thence over rolling and broken land atop a mesa.</p>										
80.00	<p>Point for the cor. of secs. 25, 30, 31, and 36.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center; margin: 20px 0;"> <table style="border-collapse: collapse; margin: auto;"> <tr> <td colspan="2" style="padding: 0 10px;">T37N</td> </tr> <tr> <td style="padding: 0 5px;">R19E</td> <td style="border-left: 1px solid black; padding: 0 5px;">R20E</td> </tr> <tr> <td style="padding: 0 5px;">S25</td> <td style="border-left: 1px solid black; padding: 0 5px;">S30</td> </tr> <tr> <td style="border-top: 1px solid black; padding: 0 5px;">S36</td> <td style="border-left: 1px solid black; border-top: 1px solid black; padding: 0 5px;">S31</td> </tr> <tr> <td colspan="2" style="padding: 0 10px;">1997</td> </tr> </table> </div> <p>from which</p> <p style="padding-left: 40px;">A ponderosa pine, 13 ins. diam., bears S. 53° W., 26 1/2 lks. dist., mkd. T37N R19E S36 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located atop high mesa.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, ponderosa pine, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p>	T37N		R19E	R20E	S25	S30	S36	S31	1997	
T37N											
R19E	R20E										
S25	S30										
S36	S31										
1997											
40.00	<p>North, bet. secs. 25 and 30.</p> <p>Over broken land on descent into a canyon.</p> <p>Point for the 1/4 sec. cor. of secs. 25 and 30.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>										

Survey of the East Boundary,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	<p style="text-align: center;">T37N R19E R20E 1/4 S25   S30 1997</p> <p>from which</p> <p style="padding-left: 40px;">A juniper, 13 ins. diam., bears S. 39 1/2° W., 25 1/2 lks. dist., mkd. 1/4 S25 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located in a canyon, drains SSE; thence ascend along E. slope of canyon.</p> <p>80.00 Point for the cor. of secs. 19, 24, 25, and 30.</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;">T37N R19E   R20E S24   S19 ----- S25   S30 1998</p> <p>from which</p> <p style="padding-left: 40px;">A ponderosa pine, 12 ins. diam., bears S. 80° W., 1.85 chs. dist., mkd. T37N R19E S25 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located at base of a sandstone ledge on W. slope of a canyon, drains S.</p> <p>Land, broken. Soil, rocky and sandy clay with rock outcrops. Timber, ponderosa pine, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p> <hr/> <p>North, bet. secs. 19 and 24.</p> <p>Over rugged land atop high mesa.</p>
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Survey of the East Boundary,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
14.70	N. rim of Black Mesa, atop high cliff, bears SE and NW; thence descend over rugged land along E. slope of Black Mesa.
40.00	<p>Point for the 1/4 sec. cor. of secs. 19 and 24.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 15 ins. in the ground, to bedrock, in a mound of stone, 3 ft. base, to top, with brass cap mkd.</p> <div style="text-align: center;"> <p>T37N R19E R20E 1/4 S24   S19 1997</p> </div> <p>from which</p> <p style="padding-left: 40px;">The mks. X B0, chiseled on the face of a sandstone cliff, bear N. 18 1/4° E., 39 1/2 lks. dist.</p> <p style="padding-left: 40px;">A piñon, 9 ins. diam., bears N. 70 3/4° E., 14 1/2 lks. dist., mkd. 1/4 S19 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located on rugged E. slope of Black Mesa, atop a ledge, bears N. and S.</p> <p>Thence continue over rugged land on gradual descent along E. slope of Black Mesa.</p>
80.00	<p>Point for the cor. of secs. 13, 18, 19, and 24.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T37N R19E   R20E S13   S18 ----- S24   S19 1997</p> </div> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located on E. slope of Black Mesa.</p>

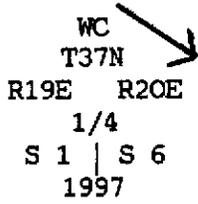
Survey of the East Boundary,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
40.00	<p>Land, rugged. Soil, rocky clay with sandstone outcrops. Timber, ponderosa pine, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p> <hr/> <p>North, bet. secs. 13 and 18.</p> <p>Over broken land along E. slope of Black Mesa.</p> <p>Point for the 1/4 sec. cor. of secs. 13 and 18.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T37N R19E R20E 1/4 S13   S18 1997</p> </div> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located on E. slope of Black Mesa.</p>
80.00	<p>Point for the cor. of secs. 7, 12, 13, and 18.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T37N R19E   R20E S12   S 7 ----- S13   S18 1997</p> </div> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p> <hr/> <p>North, bet. secs. 7 and 12.</p> <p>Over broken land across spur ridges on NE slope of Black Mesa.</p>

Survey of the East Boundary,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS 40.00	<p>Point for the 1/4 sec. cor. of secs. 7 and 12.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E R20E 1/4 S12   S 7 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p>
80.00	<p>Point for the cor. of secs. 1, 6, 7, and 12.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E   R20E S 1   S 6 ----- S12   S 7 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p>
40.00	<p>North, bet. secs. 1 and 6.</p> <p>Over broken land across canyons and spur ridges.</p> <p>True point for the 1/4 sec. cor. of secs. 1 and 6, falls on steep W. face of a sandstone boulder, 15 x 12 x 10 ft., where it is impracticable to establish a monument.</p> <p>From this cor. point, the point selected for the witness cor. to the 1/4 sec. cor. of secs. 1 and 6, bears N. 45°00' W., 0.24 ch. dist.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>

Survey of the East Boundary,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
80.00	<div style="text-align: center;">  <p>WC T37N R19E R20E 1/4 S 1   S 6 1997</p> </div> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Point for the cor. of Tps. 37 and 38 N., Rs. 19 and 20 E.</p> <p>Set a magnet in a 1 x 1 x 2 ins. white colored plastic case, 24 ins. below the surface of the ground.</p> <p>from which</p> <p>A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 26 ins. in the ground, for a reference monument, bears N. 45°00' E., 40.0 ft. dist., with brass cap mkd. T38N R20E S31 RM 40.0 FT. TO COR. 1997 and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 26 ins. in the ground, for a reference monument, bears S. 45°00' W., 40.0 ft. dist., with brass cap mkd. T37N R19E S1 RM 40.0 FT. TO COR. 1997 and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located in a wash, 5 ft. wide, 2 ft. deep, drains S.</p> <p>Land, broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p>
	<p style="text-align: center;">Survey of a Portion of the Subdivisional Lines, T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona</p>
40.00	<p>From the stan. cor. of secs. 32 and 33, on the S. bdy. of the Tp., hereinbefore described.</p> <p>N. 0°03' W., bet. secs. 32 and 33.</p> <p>Over rolling and broken land.</p> <p>Point for the 1/4 sec. cor. of secs. 32 and 33.</p>

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E 1/4 S32   S33 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located on steep SW slope of a canyon, 1.00 ch. S. of a wash, 15 ft. wide, 2 ft. deep, drains WNW.</p>
80.00	<p>Point for the cor. of secs. 28, 29, 32, and 33.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E S29   S28 ----- S32   S33 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Raise a mound of stone, 3 ft. base, 1 ft. high, W. of cor.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, ponderosa pine, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p>
28.30	<p>N. 0°03' W., bet. secs. 28 and 29.</p> <p>Over broken and rolling land on descent into Coal Mine Canyon.</p> <p>Coal Mine Wash, 35 ft. wide, 6 ft. deep, drains NW.</p>
40.00	<p>Point for the 1/4 sec. cor. of secs. 28 and 29.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
80.00	<p style="text-align: center;">T37N R19E 1/4 S29   S28 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Thence ascend N. slope of Coal Mine Canyon and across top of a mesa.</p> <p>Point for the cor. of secs. 20, 21, 28, and 29.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E S20   S21 ----- S29   S28 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>From this cor. point, a closed end iron pipe, 3 ins. diam., firmly set, projecting 33 ins. above ground, bears S. 88 1/2° E., 85 lks. dist., with top mkd. PEABODY COAL CO. COR. #14 NAVAJO.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, ponderosa pine, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p>
40.00	<p>From the stan. cor. of secs. 31 and 32, on the S. bdy. of the Tp., hereinbefore described.</p> <p>N. 0°03' W., bet. secs. 31 and 32.</p> <p>Over broken and rolling land across a mesa.</p> <p>Point for the 1/4 sec. cor. of secs. 31 and 32.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	<p style="text-align: center;">T37N R19E 1/4 S31   S32 1997</p> <p>from which</p> <p style="padding-left: 40px;">A piñon, 7 ins. diam., bears S. 16 1/2° E., 61 1/2 lks. dist., mkd. 1/4 S32 BT.</p> <p style="padding-left: 40px;">A piñon, 8 ins. diam., bears N. 83 1/2° W., 20 lks. dist., mkd. 1/4 S31 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>From this cor. point, a closed end iron pipe, 3 ins. diam., firmly set, projecting 13 ins. above ground, bears N. 82° E., 60 lks. dist., with top mkd. PEABODY COAL CO. COR. #16 NAVAJO.</p> <p>Thence across a canyon draining NNW into Coal Mine Canyon.</p> <p>80.00 Point for the cor. of secs. 29, 30, 31, and 32.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E S30   S29 ----- S31   S32 1997</p> <p>from which</p> <p style="padding-left: 40px;">A piñon, 7 ins. diam., bears N. 58 1/4° E., 62 lks. dist., mkd. T37N R19E S29 BT.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located on a spur ridge, bears ENE and WSW, on S. side of Coal Mine Canyon, 2.90 chs. E. of a graded road, 15 ft. wide, bears NE and SW.</p>
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Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
40.00	<p>Land, broken and rolling. Soil, rocky and sandy clay with rock outcrops. Timber, piñon, juniper and sparse Douglas fir; undergrowth, brush and native grasses.</p> <hr/> <p>From the cor. of secs. 28, 29, 32, and 33.</p> <p>West, bet. secs. 29 and 32.</p> <p>Over rolling and broken land atop a mesa.</p> <p>Point for the 1/4 sec. cor. of secs. 29 and 32.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E S29 1/4 — S32 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located near head of a small canyon, drains SW; thence over rolling and broken land along canyon draining westerly into Coal Mine Canyon.</p>
80.00	<p>The cor. of secs. 29, 30, 31, and 32.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon and juniper: undergrowth, brush and native grasses.</p>
12.40	<p>West, bet. secs. 30 and 31.</p> <p>Over rolling land across Coal Mine Canyon.</p> <p>Coal Mine Wash, 45 ft. wide, 5 ft. deep, drains WSW; thence over broken land on ascent of a mesa.</p>
40.00	<p>Point for the 1/4 sec. cor. of secs. 30 and 31.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p style="text-align: center;">T37N R19E S30 1/4 — S31 1997</p>
	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p>
	<p>Thence over broken land across a mesa and a canyon.</p>
79.91	<p>The cor. of secs. 25, 30, 31, and 36, on the W. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., with brass cap, set, mkd., and witnessed as described in the field notes of the survey of the east boundary, T. 37 N., R. 18 E., executed concurrently under this same group.</p>
	<p>Land, rolling to broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p>
	<p>From the cor. of secs. 29, 30, 31, and 32.</p>
	<p>N. 0°03' W., bet. secs. 29 and 30.</p>
	<p>Over rolling land across Coal Mine Canyon.</p>
4.90	<p>Graded road, 15 ft. wide, bears NNE and SSW.</p>
7.80	<p>Coal Mine Wash, 50 ft. wide, 5 ft. deep, drains SSW; thence along E. slope of a canyon draining southerly into Coal Mine Canyon.</p>
40.00	<p>Point for the 1/4 sec. cor. of secs. 29 and 30.</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>
	<p style="text-align: center;">T37N R19E 1/4 S30   S29 1997</p>
	<p>from which</p>
	<p style="text-align: center;">The mks. X B0, chiseled on a sandstone outcrop, bear S. 36 1/2° E., 33 lks. dist.</p>

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS											
80.00	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Raise a mound of stone, 3 ft. base, 1 ft. high, W. of cor.</p> <p>Cor. is located on steep E. slope of a canyon, drains S. into Coal Mine Canyon; thence over broken and rolling land onto a mesa.</p> <p>Point for the cor. of secs. 19, 20, 29, and 30.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <table data-bbox="865 701 1013 856" style="margin-left: auto; margin-right: auto;"> <tr> <td>T37N</td> <td>R19E</td> </tr> <tr> <td>S19</td> <td>S20</td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black;"></td> </tr> <tr> <td>S30</td> <td>S29</td> </tr> <tr> <td colspan="2" style="text-align: center;">1997</td> </tr> </table> <p>from which</p> <p style="padding-left: 40px;">The mks. X 80, chiseled on a sandstone outcrop, bear N. 1/4° E., 18 lks. dist.</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, piñon and juniper; undergrowth, brush and native grasses.</p>	T37N	R19E	S19	S20			S30	S29	1997	
T37N	R19E										
S19	S20										
S30	S29										
1997											
40.00	<p>From the cor. of secs. 20, 21, 28, and 29.</p> <p>West, bet. secs. 20 and 29.</p> <p>Over broken land on descent from a mesa into a canyon.</p> <p>Point for the 1/4 sec. cor. of secs. 20 and 29.</p> <p>Set a magnet in a 1 x 1 x 2 ins. white colored plastic case, 26 ins. below the surface of the ground.</p>										

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>from which</p> <p>A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 25 ins. in the ground, for a reference monument, bears N. 60°00' E., 160.0 ft. dist., with brass cap mkd. T37N R19E 1/4 S20 RM 160.0 FT. TO COR. 1997 and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 27 ins. in the ground, for a reference monument, bears N. 30°00' W., 50.0 ft. dist., with brass cap mkd. T37N R19E 1/4 S20 RM 50.0 FT. TO COR. 1997 and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located in a wash, 25 ft. wide, 5 ft. deep, drains SSW, below W. bank; thence over broken land on ascent of a mesa.</p>
80.00	<p>The cor. of secs. 19, 20, 29, and 30.</p> <p>Land, broken and rugged. Soil, rocky and sandy clay with rock outcrops Timber, piñon and juniper; undergrowth, brush and native grasses.</p>
	<p>West, bet. secs. 19 and 30.</p> <p>Over broken land across a canyon and a spur ridge.</p>
40.00	<p>Point for the 1/4 sec. cor. of secs. 19 and 30.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T37N R19E S19 1/4 — S30 1997</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Thence over rolling and broken land atop a mesa.</p>
46.00	<p>Graded road, 15 ft. wide, bears NE and SW.</p>

Survey of a Portion of the Subdivisional Lines,  
T. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona

CHAINS	
79.82	<p>The cor. of secs. 19, 24, 25, and 30, on the W. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., with brass cap, set, and mkd. as described in the field notes of the survey of the east boundary, T. 37 N., R. 18 E. executed concurrently under this same group.</p> <p>Land, rolling and broken. Soil, rocky and sandy clay with rock outcrops. Timber, ponderosa pine, piñon and juniper; undergrowth, brush and native grasses.</p>
	<p>GENERAL DESCRIPTION</p>
	<p>The area surveyed is within the Navajo Indian Reservation, approximately 11 miles south of the community of Kayenta. This area is mostly atop Black Mesa, with the east boundary descending the rugged, precipitous east slope. The terrain varies from rolling to broken and rugged. The drainage is southwesterly atop Black Mesa, and easterly on the east slope. Coal Mine Wash is the main drainage, which passes through sections 29, 30 and 31.</p> <p>The elevation varies from 6,000 at the northeast corner to 7,800 feet above sea level. The soil is mostly sandy and rocky clay with rock outcrops. The timber is primarily piñon and junipers, with some ponderosa pine and Douglas fir at the higher elevations. Undergrowth principally consists of sagebrush, greasewood, Gambel's oak and native grasses.</p> <p>Principal access to the surveyed portion of the township is provided by a graded road entering on the west boundary of section 30, another graded road entering on the south boundary of section 31, and a third graded road just east of the southeast corner of the township. Additional access is provided by a few trail roads. Much of the area is accessible only by hiking.</p> <p>Peabody Western Coal Company has a coal mining lease in sections 29, 30, 31, and 32, but there is no mining activity in this area. Much of the township is used for the grazing of livestock.</p> <p>The mean magnetic declination of 12 1/2° E. was derived from the United States Geological Survey computer program GEOMAGIX utilizing the Regional Magnetic Field Model for Epoch 1995 for the dates of survey.</p>

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## FIELD ASSISTANTS

NAMES	CAPACITY
William F. Olver	Cadastral Surveyor
Daniel Bryan	Engineering Technician
Wilfred Chee	Engineering Technician
Edward Clarke	Engineering Technician
Reuben Mason	Engineering Technician
Barney Woodie	Engineering Technician
Lonnie Bitsoi	Student Intern

## CERTIFICATE OF SURVEY

I, Jones Curtiss, Cadastral Surveyor, HEREBY CERTIFY upon honor that, in pursuance of Special Instructions bearing date of the 6th day of June, 1996, and Amended Special Instructions bearing date of the 13th day of August, 1997, I have surveyed the Ninth Standard Parallel North, (south boundary), the east boundary, and a portion of the subdivisional lines, Township 37 North, Range 19 East, 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; and that said survey has been made in strict conformity with said Special Instructions, Amended 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.

August 27, 1998  
(Date)

Jones Curtiss  
(Cadastral Surveyor)

## CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT  
Arizona State Office  
Phoenix, Arizona

The foregoing field notes of the survey of the Ninth Standard Parallel North, (south boundary), the east boundary, and a portion of the subdivisional lines, Township 37 North, Range 19 East, Gila and Salt River Meridian, Arizona, executed by Jones Curtiss, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

October 5, 1998  
(Date)

Kenny D. Ravnikar  
(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. 37 N., R. 19 E., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

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

~~\_\_\_\_\_~~  
(Chief Cadastral Surveyor of Arizona)