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

SUBDIVISION OF SECTION 4

TOWNSHIP 22 NORTH, RANGE 21 EAST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

Dale C. Wilson, Cadastral Surveyor

Under Special Instructions dated July 13, 2004, approved July 13, 2004, which provided for the surveys included under Group No. 939, and assignment instructions dated July 13, 2004.

Survey commenced July 19, 2004

Survey completed July 29, 2004

INDEX DIAGRAM

TOWNSHIP 22 NORTH RANGE 21 EAST GILA AND SALT RIVER MERIDIAN, ARIZONA

6	5 7	4 4	3	2	1
7	8	9	10	11	12
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 4 Pages 8-11

T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the subdivisional lines and the subdivision of section 4, Township 22 North, Range 21 East, Gila and Salt River Meridian, Arizona.

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

The subdivisional lines were surveyed by A. P. Johnson in 1883. The north boundary was dependently resurveyed by Dale C. Wilson in 2004.

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 July 13, 2004, for Group No. 939, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 4700 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 first order U. S. Geological Survey triangulation station COLISEUM 1966, as published by the National Geodetic Survey, NAD 83 (1992). The geographic position of the cor. of secs. 3, 4, 9 and 10, is as follows:

Latitude: 35°19'46.37" N. Longitude: 110°06'29.59" W.

The mean magnetic declination is 11 1/2° E.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona

Restoring the survey executed by A. P. Johnson in 1883

Beginning at the cor. of secs. 3, 4, 9 and 10, monumented with a lava stone, $16 \times 12 \times 10$ ins., with no marks visible, firmly set 10 ins. in the ground, in an embedded mound of stone, 3 ft. base, 1 ft. high.

At the corner point

CHAINS

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

2004

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

From this cor., a drill hole, with remnants of cement, 1 in. diam., 4 ins. deep, in cap rock on the highest point on top of a high mesa, bears N. 5°58' W., 250.82 chs. dist. This hole was determined to be the remains of the position of U. S. Geological Survey Triangulation Station "COLISEUM 1966"

N. 0°41' W., bet. secs. 3 and 4.

Over rolling terrain.

39.96

The 1/4 sec. cor. of secs. 3 and 4, monumented with an embedded mound of stone, 3 ft. base, 1/2 ft. high, no marked stone found.

At the corner point

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

2004

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

Rebuild the mound of stone, 1 1/2 ft. base, 1 ft. high, to the W.

N. 1°34' E., beginning new measurement.

Over steep, mountainous terrain.

	T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona
CHAINS	
39.65	The cor. of secs. 3, 4, 33 and 34 on the N. bdy. of the Tp., monumented with stainless steel post, 2 1/2 ins diam., firmly set, projecting 6 inches above ground, in a collar of stone, with brass cap mkd. T23N R21E S33 S34 S4 S3 T22N 2004.
	From the cor. of secs. 3, 4, 9 and 10.
	N. 89°49' W., bet. secs. 4 and 9.
	Over gently rolling terrain.
39.84	Point for the 1/4 sec. cor. of secs. 4 and 9, at proportionate dist., there is no remaining evidence of the orig. cor. position. Cor. point falls on the SW shoulder of a dirt trail road, bears S. 62° E., and N. 54° W., found a sandstone, 12 x 10 x 4 ins., marked 1/4 on a face, laying loose nearby, evidently bladed out of position during road maintenance.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., flush with the ground, in a flush collar of stone, with brass cap mkd.
	T 22 N R 21 E S 4 1/4 —— S 9
	2004
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.
	Set a steel fence post alongside the E. side of the trail road from the stainless steel post.
59.76	Point for the W. 1/16 sec. cor. of secs. 4 and 9.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T 22 N R 21 E S 4 W 1/16
	2004
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

CHAINS

79.68

True point for the cor. of secs. 4, 5, 8 and 9, at proportionate dist., there is no remaining evidence of the orig. cor., falls in steep ravine, 15 ft. wide, 5 ft. deep, drains S. 10° E., from N. 30° W., where it is impracticable to establish a permanent monument.

From this true point, the point selected for a witness cor. to the cor. of secs. 4, 5, 8 and 9, bears S. 89°59' E., 0.36 chs. dist.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.

2004

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

From the true point, the cor. of secs. 16, 17, 20 and 21, bears S. $0^{\circ}25'$ E., 160.08 chs. dist., monumented with an embedded mound of stone, 3 ft. base, flush with the surface, no mks. found.

At the corner point

Set a stainless steel post, 28 ins. long, $2 \frac{1}{2} \text{ ins.}$ diam., 24 ins. in the ground, encircled with a small collar of stone, with brass cap mkd.

2005

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

From this same true point, the point for the cor. of secs. 1, 6, 7 and 12, on the W. bdy. of the Tp., bears S. 89°18' W., 156.04 chs. dist., at proportionate dist., there is no remaining evidence of the orig. cor. position.

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

CHAINS

2005

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

Raise a mound of stone, 3 ft. base, 2 ft. high, to the W.

From this point the cor. of Tps. 22 and 23 N., Rs. 20 and 21 E., bears N. 1°47' W., 80.46 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set flush in a mound of stone, 3 ft. base, 1 1/2 ft. high, with brass cap mkd. T23N R20E R21E S36 S31 S1 S6 T22N 2004.

From this same point the cor. of secs. 13, 18, 19 and 24 on the W. bdy. of the Tp. bears S. 1°47' E., 160.92 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set flush in a mound of stone, 4 ft. base, 1 1/2 ft. high, with brass cap mkd. T22N R20E R21E S13 S18 S24 S19 2004.

N. 0°14' W., bet. secs. 4 and 5.

Over steep, broken terrain.

20.01

Point for the S. 1/16 sec. cor. of secs. 4 and 5.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 1 in. in the ground to bedrock, in a supporting mound of stone, 5 ft. base, to top, with brass cap mkd.

T22N R21E S 1/16 S 5 | S 4

2005

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

Cor. is located on N. aspect of slope, bears N. 75° E. and S. 75° W., halfway bet. drainage and top of ridge.

40.02

True point for the 1/4 sec. cor. of secs. 4 and 5, at proportionate dist., there is no remaining evidence of the orig. cor. position, falls on the N. face of a sandstone bluff, 75 ft. high, where it is impracticable to establish a permanent monument.

	Dependent Resurvey of a Portion of the Subdivisional Lines, T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona
CHAINS	
	From this point the point selected for a witness cor. to the 1/4 sec. cor. of secs. 5 and 6, bears S. 3°52' W., 0.29 chs dist., set a brass tablet, 3 1/4 ins. diam., 3 1/2 ins. stem, cemented in a drill hole in solid rock, with top mkd.
	WC T 22 N R 21 E 1/4 S 5 S 4
	2005
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	Point falls 12 lks. south of bluff edge, bears N. 70° E. and S. 65° W.
79.90	The cor. of secs. 4, 5, 32 and 33, on the N. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 14 ins. above ground, in a supporting mound of stone, 3 ft. base, to top, with brass cap mkd. T23N R21E S32 S33 S5 S4 T22N 2004.
	Subdivision of Section 4, T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona
	From the 1/4 sec. cor. of secs. 4 and 9.
	N. 1°02' W., on the N. and S. center line of sec. 4.
	Over steep broken terrain.
20.00	Point for the center S. 1/16 sec. cor. of sec. 4.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.
	T22N R21E C S 1/16 S 4 C
	2004
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	Set a steel fence post alongside the stainless steel post.

Subdivision of Section 4, T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona

	T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona		
CHAINS			
40.00	Point for the center 1/4 sec. cor. of sec. 4, at intersective with the E. and W. center line.		
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 12 ins. into solid sandstone, in a supporting mound of stone, 5 ft. base, to top, with brass cap mkd.		
	T 22 N R 21 E C 1/4 S 4		
	2004		
	Deposit a magnet in a white plastic case at the base of the stainless steel post.		
	Set a steel fence post alongside the stainless steel post.		
	From this cor. a mound of stone 3 ft. base, 2 ft. high, of unknown origin bears N. 30° W., 0.71 chs.		
80.26	The 1/4 sec. cor. of secs. 4 and 33, on the N. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 7 ins. above ground, in a small collar of stone, with brass cap mkd. T23N R21E 1/4 S33 S4 T22N 2004.		
	From the 1/4 sec. cor. of secs. 3 and 4.		
	N. 89°46' W., on the E. and W. center line of sec. 4.		
	Over rolling and broken terrain.		
40.08	The center 1/4 sec. cor. of sec. 4.		
59.72	Point for the center W. 1/16 sec. cor. of sec. 4.		
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.		
	T22N R21E W 1/16 C————————————————————————————————————		
	2004		
	Deposit a magnet in a white plastic case at the base of the stainless steel post.		
	Set a steel fence post alongside the stainless steel post.		
	Cor. is located on top of a sandy spur, bears S. 12° W. from N. 25° E.		

Subdivision of Section 4, T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona

	T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona			
CHAINS				
79.36	The 1/4 sec. cor. of secs. 4 and 5.			
SW 1/4, Section 4				
	From the W. 1/16 sec. cor. of secs. 4 and 9.			
	N. 0°38' W., on the N. and S. center line of the SW 1/4 of sec. 4.			
	Over heavily rolling and broken terrain.			
20.00	Point for the SW 1/16 sec. cor. of sec. 4, at intersection with the E. and W. center line of the SW 1/4.			
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, in a supporting mound of stone, 4 ft. base, to top, with brass cap mkd.			
	T22N R21E SW 1/16 S 4			
	2004			
	Deposit a magnet in a white plastic case at the base of the stainless steel post.			
	Set a steel fence post alongside the stainless steel post.			
	Cor. is located 12 ft. from base of cliff, 50 ft. high, bears N. 45° E. and S. 45° W.			
40.00 The center W. 1/16 sec. cor. of sec. 4.				
	From the center S. 1/16 sec. cor. of sec. 4.			
N. 89°48' W., on the E. and W. center line of the sec. 4.				
	Over heavily rolling and broken terrain.			
19.78	The SW 1/16 sec. cor. of sec. 4.			
22.38	From this point, a spring, designated Malpais Spring 2, bears North, 15.7 lks. dist.			
22.80	From this point, a spring, designated Malpais Spring 1, bears North, 57.6 lks. dist.			
22.87	From this point, a spring, designated Malpais Spring 3, bears North, 14.6 lks. dist.			

Subdivision of Section 4

	Subdivision of Section 4,
CHAINS	T. 22 N., R. 21 E., Gila and Salt River Meridian, Arizona
22.99	Intersect a spring, designated Malpais Spring 4.
39.56	The S. 1/16 sec. cor. of secs. 4 and 5.
	GENERAL DESCRIPTION
	The area encompassed by this survey is approximately 30 miles north of Holbrook, Arizona. The terrain is mostly steep, rugged rock slopes, on the southerly slopes of Malpais Mesa.
	The soil is mostly sandy loam in the flats and volcanic rock on the steeper slopes and mesa tops. The elevation varies from 5800 to 6200 feet above sea level. The vegetation ranges from open grass lands to scattered stands of juniper.
	The mean magnetic declination of 11 1/2° 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.
	·
	·
	·

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Geoffrey A. Graham	Land Surveyor
John J. Heintel	Surveying Technician
Nelson Kinsel	Surveying Technician
Mark R. Searles	Surveying Technician
-	

CERTIFICATE OF SURVEY

I, Dale C. Wilson, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 13th day of July, 2004, I have dependently resurveyed a portion of the subdivisional lines and subdivided section 4, T. 22 N., R. 21 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 Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

Dale C. Wilson is no longer assigned to this office and is unavailable for signature.

(Date)	(Cadastral Surveyor)
CERTIF	ICATE OF APPROVAL
	BUREAU OF LAND MANAGEMENT Phoenix, Arizona
subdivisional lines and the subd Gila and Salt River Meridian,	ne dependent resurvey of a portion of the ivision of section 4, T. 22 N., R. 21 E., in the State of Arizona, executed by r, having been critically examined and found
(Date)	Steplen K. Hansen (Chief Cadastral Surveyor of Arizona)
CERTIFI(CATE OF TRANSCRIPT
I CERTIFY That the foregoing tr described surveys in T. 22 N., Arizona, is a true copy of the art	anscript of the field notes of the above R. 21 E., Gila and Salt River Meridian, ginal field notes.

(Chief Cadastral Surveyor of Arizona)

(Date)