ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY

OF A PORTION OF THE NORTH BOUNDARY

AND

A PORTION OF THE SUBDIVISIONAL LINES

TOWNSHIP 9 SOUTH, RANGE 16 WEST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

Geoffrey A. Graham, Cadastral Surveyor

Under Special Instructions dated May 1, 2006, approved May 1, 2006, which provided for the surveys included under Group No. 994, and assignment instructions dated May 1, 2006.

Survey commenced October 18, 2006

Survey completed August 15, 2007

INDEX DIAGRAM

TOWNSHIP 9 SOUTH RANGE 16 WEST GILA AND SALT RIVER MERIDIAN, ARIZONA

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

T. 9 S., R. 16 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the north boundary and a portion of the subdivisional lines, Township 9 South, Range 16 West, Gila and Salt River Meridian, Arizona.

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

John L. Harris surveyed the exteriors and subdivided the township in 1878. In 1930 Francis E. Joy resurveyed the east boundary. Records at the Yuma Area Office of the Bureau of Reclamation indicate the U. S. Reclamation Service performed substantial resurveys and cor. perpetuations in the course of their projects between 1912 and 1915. These surveys are the source of some of the redwood posts recovered during the course of this survey.

The survey was executed in accordance with the specifications as set forth in the $\underline{\text{Manual of Instructions for the Survey of the}}$ $\underline{\text{Public Lands of the United States, 1973}}$, and the Special Instructions dated May 1, 2006, for Group No. 994, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 5700 and 5800 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 Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS), JACUMBAAP_CS2004 CORS ARP, MARICOPA CORS ARP and COT1 TUCSON CORS ARP. The NAD 83 (CORS96) (EPOCH:2002), geographic position of the cor. of sections 1, 6, 31 and 36, the northeast corner of the township, is as follows:

Latitude: 32°40'45.69" N. Longitude: 113°50'59.54" W.

The mean magnetic declination is 12° E.

Dependent Resurvey of a Portion of the North Boundary, T. 9 S., R. 16 W., Gila and Salt River Meridian, Arizona

CHAINS	
	Restoring the survey executed by John L. Harris, in 1878 ——————————————————————————————————
	Beginning at the cor. of Tps. 8 and 9 S., Rs. 15 and 16 W. monumented with a General Land Office iron post, 3 ins. diam., firmly set flush with the ground, with a brass cap mkd. T8S R16W R15W S36 S31 S1 S6 T9S 1930.
	Add the marks 2006 to the brass cap.
	Post a Bureau of Land Management, standard sign S-201, nearby.
	S. 89°47' W., on the N. bdy. of sec. 1, over nearly level desert.
39.70	Point for the 1/4 sec. cor. of secs. 1 and 36, at proportionate distance there is no remaining evidence of the orig. cor.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.
	т 8 S R 16 W S 36
	S 36 1/4 ——
	S 1
	Т 9 S
	2006
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	Post a Bureau of Land Management, standard sign S-201, nearby.
79.40	The cor. of secs. 1, 2, 35 and 36, monumented with a Bureau of Reclamation iron post, 2 in. diam., firmly set, projecting 11 ins. above the ground, with brass cap mkd. T8S R16W S35 S36 S2 S1 T9S R16W 1941.
	Reset iron post to project 3 ins. above the ground. Recovered remains of redwood post as recorded on Page 3, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, this is accepted as the best available evidence of the orig. cor. position.
	Post a Bureau of Land Management, standard sign S-201, nearby.
	S. 89°47' W., on the N. bdy. of sec. 2, over nearly level desert.
40.07	Point for the $1/4$ sec. cor. of secs. 2 and 35, at proportionate distance there is no remaining evidence of the orig. cor.

Dependent Resurvey of a Portion of the North Boundary, T. 9 S., R. 16 W., Gila and Salt River Meridian, Arizona

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

2006

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

Post a Bureau of Land Management, standard sign S-201, nearby.

Cor. is located at the SE. cor. of dirt roads, 30 ft. wide, extending N. and W., along perimeter of an old jojoba field, and 58 lks. W. of the left bank of a wash, 2 ft. deep, 50 ft. wide, drains N. from S. 50° E.

80.14

The cor. of secs. 2, 3, 34 and 35, monumented with a Bureau of Reclamation iron post, 2 ins. diam., loosely set, projecting 9 ins. above the ground, rusted off 6 ins. below ground, with a brass cap mkd. T8S R16W S34 S35 S3 S2 T9S R16W 1941. As recorded on Page 24, Book L-41 and Page 3, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, this is accepted as the best available evidence of the orig. cor. position.

At the corner point

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

2006

Deposit a magnet in a white plastic case at the base, and the remains of the iron post, 15 ins. long, inside of the stainless steel post.

A redwood post, 3 1/2 ins. square, firmly set, projecting 28 ins. above the ground, with no marks legible, is alongside, W. of the cor.

Post a Bureau of Land Management, standard sign S-201, nearby.

Dependent Resurvey of a Portion of the North Boundary, T. 9 S., R. 16 W., Gila and Salt River Meridian, Arizona

CHAINS

Cor. is located at the SW cor. of an old jojoba field, with perimeter roads $36\ \mathrm{ft.}$ wide, extending N. and E.

Dependent Resurvey of a portion of the Subdivisional Lines, T. 9 S., R. 18 W., Gila and Salt River Meridian, Arizona

Restoring the survey executed by John L. Harris, in 1878

From the cor. of secs. 2, 3, 10 and 11, monumented with a Bureau of Reclamation iron post, 2 ins. diam., loosely set, projecting 8 ins. above the ground, rusted off 8 ins. below ground, with a brass cap mkd. T9S R16W S3 S2 S10 S11 1941. As recorded on Page 25, Book L-41 and Page 6, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, this is accepted as the best available evidence of the orig. cor. position.

At the corner point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

2006

Deposit a magnet in a white plastic case at the base, and the remains of the iron post, 16 ins. long, inside of the stainless steel post.

A cottonwood post, 2 ins. square, 26 ins. long, with no marks visible lays loose, alongside the cor. (B.O.R. record: willow).

Post a Bureau of Land Management, standard sign S-201, nearby.

N. 0°02' W., bet. secs. 2 and 3, gently descending over nearly level desert.

39.97

Point for the 1/4 sec. cor. of secs. 2 and 3, at proportionate dist., there is no remaining evidence of the orig. cor.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

	T. 9 S., R. 16 W., Gila and Salt River Meridian, Arizona				
CHAINS					
	т 9 s к 16 W 1/4				
	s 3 s 2				
	2006				
	2000				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
	A cottonwood post, 4 ins. diam., 4 1/2 ft. long, with no marks visible lays loose, alongside the cor. (B.O.R. record: willow).				
	Post a Bureau of Land Management, standard sign S-201, nearby.				
79.90	The cor. of secs. 2, 3, 34 and 35 on the N. bdy. of the Tp.				
	From the cor. of secs. 2, 3, 10 and 11.				
	S. 89°52' W., bet. secs. 3 and 10, over nearly level terrain.				
40.15	Point for the 1/4 sec. cor. of secs. 3 and 10, at proportionate dist., there is no remaining evidence of the orig. cor.				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.				
	T 9 S R 16 W				
	S 3				
	1/4 ————————————————————————————————————				
	2006				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
	A cottonwood post, 4 ins. diam., 4 1/2 ft. long, with no marks visible lays loose, alongside the cor. (B.O.R. record: willow)				
	Post a Bureau of Land Management, standard sign S-201, nearby.				
80.30	The cor. of secs. 3, 4, 9 and 10, monumented with a Bureau of Reclamation iron post, 2 ins. diam., loosely set, projecting 17 ins. above the ground, rusted off 9 ins. below ground, with a brass cap mkd. T9S R16W S4 S3 S9 S10 1941, as recorded on Page 28, Book L-41 and Page 5, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, this is accepted as the best available evidence of the orig. cor. position.				
	At the corner point				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.				

CHAINS

2006

Deposit a magnet in a white plastic case at the base, and the remains of the iron post, 20 ins. long, inside of the stainless steel post.

Post a Bureau of Land Management, standard sign S-201, nearby.

From this cor. a pine post, 3 1/2 ins. square, firmly set, projecting 16 ins. above the ground, mkd. 67 on W. face, bears N. $44^{\circ}45'$ E., 71 lks. dist.

Cor. is located 20 lks. N. of dirt road, 9 ft. wide, bears E. and W., and 1 ch. W. of intersection of dirt roads, 9 ft. wide, bearing S. 35° E., W. and N. 35° W.

S. 89°19' W., bet. secs. 4 and 9, generally following dirt road, over nearly level desert.

40.27

Point for the 1/4 sec. cor. of secs. 4 and 9, at proportionate dist., there is no remaining evidence of the orig. cor.

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

2006

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

Post a Bureau of Land Management, standard sign S-201, nearby.

From this cor. the rusted remains of an iron pipe, 1 in. diam., firmly set, 6 ins. below ground, with a 5 ins. long portion laying loose alongside, bears N. $68^{\circ}57'$ E., 2 lks. dist. This was set by persons unknown in an unrecorded survey and is not utilized in the course of this survey.

Cor. is located 11 lks. N. of dirt road, 10 ft. wide, bears ${\tt E.}$ and ${\tt W.}$

80.54

Point for the cor. of secs. 4, 5, 8 and 9, at proportionate dist., there is no remaining evidence of the orig. cor.

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

2006

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

Post a Bureau of Land Management, standard sign S-201, nearby.

Note: These control lines were fully retraced and careful search was made for evidence of intervening corners, none of which was recovered.

From this cor. point, the cor. of secs. 8, 9, 16 and 17, monumented with a Bureau of Reclamation iron post, 2 ins. diam., firmly set, projecting 13 ins. above the ground, with a brass cap mkd. T9S R16W S8 S9 S17 S16 1941, bears S. 0°01' E., 80.13 chs. dist, as recorded on Page 16, Book L-46 and Page 8, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, this is accepted as the best available evidence of the orig. cor. position.

From this same cor. point, the cor. of secs. 4, 5, 32 and 33 on the N. bdy. of the Tp., monumented with a Bureau of Reclamation iron post, 2 ins. diam., firmly set, projecting 10 ins. above the ground, with a brass cap mkd. T8S R16W S32 S33 S5 S4 T9S R16W 1941, bears N. 0°39' W., 80.30 chs. dist., as recorded on Page 32, Book L-41 and Page 2, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office. The shattered remains of a redwood post, 3 ft. long, lays loose alongside. This is accepted as the best available evidence of the orig. cor. position.

From this same cor. point. a Bureau of Reclamation iron post, 2 ins. diam., firmly set, projecting 3 ins. above the ground, with brass cap mkd. T9S R16W S5 S4 S8 S9 1941, bears N. 70°54' E., 4.6 lks. dist. This cor. was established by improper procedure as recorded on Page 32, Book L-41 and Page 5, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, and is not utilized in the course of this resurvey.

Cor. is located 59 lks. N. of dirt road, 9 ft. wide, bears E. and W.

S. $89^{\circ}47'$ W., bet. secs. 5 and 8, generally following a dirt road, over nearly level terrain.

CHAINS 40.315

Point for the 1/4 sec. cor. of secs. 5 and 8, at proportionate dist., there is no remaining evidence of the orig. cor.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

2006

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

Post a Bureau of Land Management, standard sign S-201, nearby.

Cor. is located 1.15 chs. N. of dirt road, 12 ft. wide, bears ${\tt E.}$ and ${\tt W.}$

80.63

Point for the cor. of secs. 5, 6, 7 and 8, at proportionate dist., there is no remaining evidence of the orig. cor.

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

2006

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

Post a Bureau of Land Management, standard sign, S-201 nearby.

Note: These control lines were fully retraced and careful search was made for evidence of intervening corners, none of which was recovered.

From this cor. point, the Stan. cor. of secs. 31 and 32 on the S. bdy. of the Tp., monumented with a General Land Office galvanized iron post, 2 ins. diam., firmly set, projecting 10 ins. above the ground, with brass cap mkd. SC T9S R16W S31 S32 1937, bears S. $0^{\circ}23^{\circ}$ E., 401.87 chs. dist. Add the marks 2006 to the brass cap.

CHAINS

From this same cor. point, the cor. of secs. 5, 6, 31 and 32 on the N. bdy. of the Tp., monumented with a Bureau of Reclamation iron post, 2 ins. diam., firmly set flush with the ground, with a brass cap mkd. T8S R16W S31 S32 S6 S5 T9S R16W 1941, bears N. 0°32' W., 80.44 chs. dist, as recorded on Page 36, Book L-41 and Page 2, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, this is accepted as the best available evidence of the orig. cor. position.

From this same cor. point, a Bureau of Reclamation iron post, 2 ins. diam., firmly set, projecting 2 ins. above the ground, with brass cap mkd. T9S R16W S6 S5 S7 S8 1941, bears N. 86°25' E., 8.6 lks. dist. This cor. was established by improper procedure as recorded on Page 37, Book L-41 and Page 5, Book L-86 in the Yuma Area Office of the Bureau of Reclamation Survey Office, and is not utilized in the course of this resurvey.

From this same cor. point, a galvanized iron pipe, 4 ins. diam., firmly set projecting 5.17 ft. above a concrete pad 3 ft. square, 4 ins. thick, bears N. 21°48' W., 1.59 chs. dist.

Cor. is located 14 lks. N. of dirt road, 13 ft. wide, bears ${\tt E.}$ and ${\tt W.}$

S. 89°58' W., bet. secs. 6 and 7, generally following dirt road, over nearly level desert.

40.29

Point for the 1/4 sec. cor. of secs. 6 and 7, at proportionate dist., there is no remaining evidence of the orig. cor.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

2006

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

Post a Bureau of Land Management, standard sign S-201, 18 lks. S. of the cor.

From this cor., a reinforcement rod, 1/2 in. diam., firmly set, projecting 3 ins. above the ground, with an aluminum tag mkd. AZ WS 171ASM 11-2-94, bears S. 73°01' E., 96 lks. dist.

Cor. is located in the middle of a dirt road, 16 ft. wide, bears E. and W.

CHAINS

79.76

The cor. of secs. 1, 6, 7 and 12 on the W. bdy. of the Tp., monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, with brass cap mkd. T9S R17W R16W S1 S6 S12 S7 2006, with a Bureau of Land Management standard sign S-201 posted nearby. This cor. was established during a concurrent survey under Group No. 993.

Cor. is located on an island formed by the intersection of dirt roads extending N., E. and SW.

GENERAL DESCRIPTION

The purpose of this survey was to identify the boundary of that portion of the Barry M. Goldwater Military Reservation, managed by the Marine Corps. This survey is located 2 miles S. of the community of Tacna, Arizona. Access to the W. half of the survey is along an unimproved dirt road roughly paralleling the boundary of the military reservation. The E. half is cross country access only.

Elevations for the area range between 360 and 620 ft. above sea level, with terrain consisting of nearly level desert of soft sand, broken by small washes. The vegetation is typical of the lower Sonoran Desert, with creosote and scattered grasses on the open ground and ironwood and mesquite along the drainages.

The mean magnetic declination of 12° E. was derived from the National Geophysical Data Center's magnetic declination calculator, GEOMAG v 6.0, utilizing the International Geomagnetic Reference Field model for years 2005 through 2010, for the dates of survey.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

TIEBS MODISTANTS				
NAMES	CAPACITY			
Daniel L. Maxey	Land Surveyor			
Paul L. Moss	Supervisory Land Surveyor			
				

CERTIFICATE OF SURVEY

I, Geoffrey A. Graham, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 1st day of May, 2006, I have dependently resurveyed a portion of the north boundary and a portion of the subdivisional lines, T. 9 S., R. 16 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.

8-16-07	Mathe A. All
(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 north boundary and a portion of the subdivisional lines, T. 9 S., R. 16 W., Gila and Salt River Meridian, in the State of Arizona, executed by Geoffrey A. Graham, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

9/13/07	Stephe K. Hanse
(Date)	(Chief Cadastral Surveyor of Arizona)
·	- CERTIFICATE OF TRANSCRIPT
described surveys in T.	going transcript of the field notes of the above 9 S., R. 16 W., Gila and Salt River Meridian, f the original field notes.
(Date)	(Chief Cadastral Surveyor of Arizona)