1

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF
A PORTION OF THE SUBDIVISIONAL LINES AND
A PORTION OF THE U.S. CUSTOMS AND IMMIGRATION RESERVE,
THE SUBDIVISION OF THE SOUTHEAST QUARTER OF SECTION 6
AND A METES-AND-BOUNDS SURVEY,
IN SECTION 6
FRACTIONAL TOWNSHIP 18 SOUTH, RANGE 5 WEST
Of the Gila and Salt River Meridian, In the State of Arizona
EXECUTED BY Gordon R. Bubel, Cadastral Surveyor

Under Special Instructions dated <u>February 25, 1998</u>, approved <u>February 25, 1998</u>, which provided for the surveys included under Group Number <u>825</u> and assignment instructions dated <u>February 25, 1998</u>.

Survey commenced <u>March 2, 1998</u>
Survey completed <u>March 13, 1998</u>

INDEX DIAGRAM

TOWNSHIP 18 SOUTH , RANGE 5 WEST

6	5	4	3	2	1
7	8	9	10 UNITED	11 STATES	12
		MEXICO		14	13

Dep. Res. U.S. Customs and Immigration Reserve Subdivision of SE 1/4 sec. 6

Metes-and-Bounds survey in sec. 6

pp. 7-9

pp. 9-12

pp. 13

T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the subdivisional lines and a portion of the U.S. Customs and Immigration Reserve, the subdivision of the southeast quarter of section 6, and a metes-and-bounds survey in section 6, fractional Township 18 South, Range 5 West, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this resurvey is as follows: In 1931, Benjamin J. Kinsey retraced a portion of the International Boundary between the United States and the Republic of Mexico from the 164 to 167 monuments, surveyed the subdivisional lines and the U.S. Customs and Immigration Reserve. In 1972, Gilbert V. Olson retraced a portion of the International Boundary from the 166 to the 167 monuments. In 1990, Gary D. Knoff dependently resurveyed a portion of the subdivisional lines and the U.S. Customs Immigration Reserve, subdivided section 6, surveyed certain lots, and executed a metes-and-bounds survey in section 6 and 7.

The survey was executed in accordance with the specifications as set forth in the <u>Manual of Surveying Instructions</u>, 1973, and the Special Instructions dated February 25, 1998, for Group No. 825, Arizona.

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

The distance and directions of all lines were determined by NAVSTAR GPS, using the real time kinematic techniques, and refer to horizontal distances and the true meridian. Trimble model 4400 GPS receivers were utilized to obtain the observables.

The geographic position of the closing corner of secs. 7 and 8 was determined by NAVSTAR GPS, using the technique of real time kinematic positioning. U.S. Coast and Geodetic Survey triangulation station "SHACK 1936" was used as the control station. The coordinates refer to the top of the monument.

Latitude 31°52'41.90" N. Longitude 112°48'42.57" W. NAD83(1992)

The mean magnetic declination of $12 \, 1/4^{\circ}$ E. was derived from the U.S. Geological Survey computer program MAGPOINT, utilizing the Regional Magnetic Field Model for Epoch 1995 for the dates of the survey.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS

Restoring the survey executed by Benjamin J. Kinsey in 1931

Beginning at the cor. of secs. 5, 6, 7 and 8, monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T18S R5W S6 S5 S7 S8 1931.

Add the marks 1998 to the brass cap.

South bet. secs. 7 and 8.

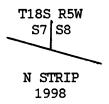
Over nearly level land.

15.20

The N. Strip cor., established at intersection with the International Boundary Reserve, determined at the center of an embedded mound of stone, containing pieces of iron and concrete.

At the cor. point

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



Deposit a magnet in a $1 \times 1 \times 2$ ins. white plastic case beneath the stainless steel post.

Found lying loose nearby; an iron post, 36 ins. long, 1 in. diam., with brass cap mkd. T18S R5W S7 S8 N STRIP 1972 1931.

Remove original monument from area, impracticable to bury.

From this cor. point, the closing cor. of secs. 7 and 8, established at intersection with the International Boundary between the United States and the Republic of Mexico, bears South, 0.96 chs. dist., monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap. mkd. T18S R5W S7 S8 CC INT. BDY 1972 1931

Restoring the resurvey executed by Gary D. Knoff in 1990.

From the cor. of secs. 5, 6, 7 and 8.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS	
CHAINS	N. 89°58' W., bet., secs. 6 and 7.
	Over nearly level land.
1.50	Center of Airstrip, 2 chs. wide, bears N. and S.
16.63	Point for the closing cor. of secs. 6 and 7, at intersection with line 2-3, U.S. Customs and Immigration Reserve, not monumented.
	From this point, Cor. 3, U.S. Customs and Immigration Reserve, bears S. 70°15' E., 2.43 chs. dist., hereinafter described.
16.64	The angle point on the line bet. secs. 6 and 7, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above ground, with brass cap mkd. AP T18S R5W LOT 9 S6 LOT 4 S7 1990.
	This corner, established in 1931 for the closing cor. of secs. 6 and 7, at the intersection with line 2-3, U.S. Customs and Immigration Reserve was remonumented and designated as an angle point in 1990.
	Add the marks 1998 to the brass cap.
	Cor. located in a dense oleander hedge, 1 lk. N. of a woven wire fence 6 ft. high, extends ESE and WNW.
	S. 89°55′ W., beginning new measurement.
3.40	Point for the E. 1/16 sec. cor. of secs. 6 and 7.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.
	T18S R5W
	S 6 E 1/16 —
	S 7 1998
	Deposit a magnet in a 1 \times 1 \times 2 ins. white plastic case beneath the stainless steel post.
4.00	Woven wire fence, 10 ft. high, extends N. and S.
5.03	Center of pavement, State Highway No. 85, 38 lks. wide, in curve, tangents bears NNE and SSW.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS	
8.95	The closing cor. of secs. 6 and 7, at intersection with line 1-2, U.S. Customs and Immigration Reserve, monumented with a stainless steel post, 2 1/2 ins. diam., set flush with the surface of the ground, with brass cap mkd. T18S R5W S6 LOT 8 CC LOT 3 S7 1990.
	From this cor. point, Cor. 1, U.S. Customs and Immigration Reserve, bears S. 35°23′ W., 6.85 chs. dist., monumented with a stainless steel post, firmly set, projecting 5 ins. above ground, with brass cap mkd. T18S R5W S7 COR 1 USR INT BDY 1990.
	From this same cor. point, the point for Cor. 2, U.S. Customs and Immigration Reserve, bears N. 35°23' E., 3.16 chs. dist., hereinafter described.
9.50	W. edge of parking lot, bears N. and S., enter native vegetation.
13.40	E. edge of wash, 3 ft. deep, course S.
13.42	Point for the W-E 1/64 sec. cor. of secs. 6 and 7.
	Set an aluminum drive rod, 36 ins. long, 3/4 in. diam., 34 ins. in the ground, with aluminum cap mkd.
	T18S R5W S 6 W-E 1/64 S 7 1998
	from which
	A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 32 ins. in the ground, for a reference monument, bears N. 68°27′ W., 94.2 ft. dist., with cap mkd. RM T18S R5W RM 94.2 FT TO COR 1998, and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
14.40	W. edge of wash, 3 ft. deep, course S.
23.44	The 1/4 sec. cor. of secs. 6 and 7, monumented with an iron post, firmly set, projecting 11 ins. above ground, with brass cap mkd. T18S R5W S6 COR 4 LOT 13 1/4 S7 1931 1990.
	Add the marks 1998 to the brass cap.
	From the cor. of secs. 5, 6, 7 and 8.
	N. O°O4' W., bet. secs. 5 and 6.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS	
	Over nearly level land.
20.01	The S. 1/16 sec. cor. of secs. 5 and 6, monumented with an open end iron pipe, 1 3/4 ins. diam., firmly set, projecting 5 ins. above ground, with a brass tablet, 3 1/4 ins. diam., cemented in the end of the iron pipe, with top mkd. T18S R5W S 1/16 S6 S5 1990.
	Add the marks 1998 to the brass cap.
	N. 0°04' W., beginning new measurement.
20.01	The 1/4 sec. cor. of secs. 5 and 6, monumented with an iron post, 1 in. diam., firmly set, projecting 11 ins. above ground, with a mound of stone 2 1/2 ft. base, 1 ft. high to the W., with brass cap mkd. 1/4 S6 S5 1931.
	from which a 1931 bearing tree
	A mesquite, 12 ins. diam., bears S. 25 1/2° E., 29 lks. dist., mkd. 1/4 S5 BT.
	Dependent Resurvey of a Portion of the U.S. Customs and Immigration Reserve, in Sections 6 and 7, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona
	Restoring the resurvey executed by Gary D. Knoff in 1990
	From the point for Cor. 2, U.S. Customs and Immigration Reserve, reestablished by the method of grant boundary adjustment; there is no remaining evidence of the original cor., not remonumented.
	From this point, Cor. 1, U.S. Customs and Immigration Reserve, bears S. 35°23′ W., 10.01 dist., hereinbefore described.
	S. 70°15' E., on line 2-3.
	Through commercial area.
0.165	Point selected for the witness cor. to AP 1, of the metes-and-bounds survey in sec. 6.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 32 ins. in the ground, with brass cap mkd.

Dependent Resurvey of A Portion of the U.S. Customs and Immigration Reserve, in Sections 6 and 7, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS	
	WC T18S,R5W S6 AP
	1998
	Deposit a magnet in a 1 \times 1 \times 2 ins. white plastic case beneath the stainless steel post.
0.185	True point for AP 1, of the metes-and-bounds survey in sec. 6, for the westerly right-of-way (200 ft.) of State Highway No. 85. Cor. position falls on a gasoline pipe line, where it is impracticable to establish a permanent monument.
0.265	Intersect the westerly end of concrete pad of gas station island, the NW cor. of concrete pad bears N. 36°08' E., 46 lks. dist., the SW cor. of concrete pad bears S. 36°08' W., 32 lks. dist., the long side bears S. 54°06' E. Thence across gas station island.
1.40	Intersect the easterly end of concrete pad of gas station island, the NE cor. of concrete pad bears N. 36°26′ E., 15 lks. dist., the SW cor. of concrete pad bears S. 36°26′ W., 64 lks. dist., the long side bears N. 54°06′ W. Leave gas station island.
2.55	The witness point for the westerly right-of-way (50 ft.) of State Highway No. 85, monumented with a stainless steel post, firmly set, flush with the ground, with brass cap mkd. WP T18S R5W S6 LOT 8 1990.
	Add the marks 1998 to the brass cap.
	S. 70°15' E., beginning new measurement.
0.755	The cor. of lots 8 and 9, sec. 6, monumented with a stainless steel post, set in concrete, 2 ins. below the pavement of State Highway No. 85, with brass cap mkd. T18S R5W S6 LOT 8 LOT 9 1990.
	S. 70°15' E., beginning new measurement.
0.03	A witness point for the center line of State Highway No. 85, monumented with a stainless steel post, set in concrete, 4 ins. below the highway pavement, with brass cap mkd. WP T18S R5W S6 LOT 9 1990.
	S. 70°15' E., beginning new measurement.

Dependent Resurvey of A Portion of the U.S. Customs and Immigration Reserve, in Sections 6 and 7, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS	
0.62	Intersect the N. and S. center line of the SE 1/4 of sec. 6, hereinafter described.
3.14	Point for AP 3, of the metes-and-bounds survey in sec. 6, for the easterly right-of-way (200 ft.) of State Highway No. 85.
	Set an aluminum drive rod, 36 ins. long, 3/4 in. diam., 35 ins. in the ground, with aluminum cap mkd.
	T18S R5W AP S6
	1998
	Cor. is located 1 lk. N., of a woven wire fence, 6 ft. high, extends S. 70° E. and N. 70° W and in a dense hedge of oleanders.
4.24	The point for the closing cor. of secs. 6 and 7, at intersection with the line bet. secs. 6 and 7, hereinbefore described.
	From this point, the cor. of secs. 5, 6, 7 and 8, bears S. 89°58' E., 16.63 chs. dist.
6.67	Cor. 3, U.S. Customs and Immigration Reserve, monumented with an iron post, 2 ins. diam., firmly set, projecting 12 ins. above ground, with brass cap mkd. T18S R5W S7 COR 3 USR LOT 4 1931 1990.
	Add the marks 1998 to the brass cap.
	Cor. is located 3 lks., ENE from the cor. of a woven wire fence, extending S. 35° W. and N. 70° W.
	Subdivision of the SE 1/4 of Section 6, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona
	From the 1/4 sec. cor. of secs. 6 and 7.
	N. 0°03' W., on the N. and S. center line of sec. 6.
	Over gently rolling land, through moderate creosote.
20.035	The center S. 1/16 sec. cor. of sec. 6, monumented with a stainless steel post, firmly set, projecting 3 ins. above ground, with brass cap mkd. T18S R5W C S 1/16 COR 1 LOT 13 S6 C 1990.
	Add the marks 1998 to the brass cap.

CHAINS	
	A steel fence post is set near the stainless steel post.
	N. 0°03' W., beginning new measurement.
20.035	The center 1/4 sec. cor. of sec. 6, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 7 ins. above ground, and in a mound of stone 3 ft. base, to top, with brass cap mkd. T18S R5W C1/4 S6 1990.
	Add the marks 1998 to the brass cap.
	from which the 1990 bearing object
	A power pole, 12 ins. diam., bears N. 13 1/4° W., 12 lks. dist.
	From the 1/4 sec. cor. of secs. 5 and 6.
	N. 89°58' W., on the E. and W. center line of sec. 6.
	Over nearly level land, through medium creosote.
4.12	Center of pavement, State Highway No. 85, 36 lks. wide, bears NNE and SSW.
20.035	Point for the center E. 1/16 sec. cor. of sec. 6.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.
	T18S R5W
	E1/16 CC
	S6 1998
	Deposit a magnet in a 1 \times 1 \times 2 ins. white plastic case beneath the stainless steel post.
40.07	The center 1/4 sec. cor. of sec. 6.
	From the E. 1/16 sec. cor. of secs. 6 and 7.
	N. 0°03' W., on the N. and S. center line of the SE 1/4 of sec.
0.75	Fence, woven wire, extends WNW and SSE.

	<u> </u>
CHAINS	
1.23	Intersect line 2-3, U.S. Customs and Immigration Reserve, not monumented.
	From this point, cor. No. 3, U.S. Customs and Immigration Reserve, bears S. 70°15′ E., 6.05 chs. dist., hereinbefore described.
2.265	Center line of State Highway No. 85.
7.76	Intersect the westerly right-of-way (200 ft.) of State Highway No. 85, hereinafter described.
20.01	Point for the SE 1/16 sec. cor. of sec. 16, occupied with an open end iron pipe, 1 3/4 ins. diam., firmly set, projecting 4 ins. above ground.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, over the iron pipe, with brass cap mkd.
	T18S R5W SE 1/16 S6 1998
	Deposit a magnet in a 1 \times 1 \times 2 ins. white plastic case beneath the stainless steel post.
40.02	The center E. 1/16 sec. cor. of sec. 6.
	From the S. 1/16 sec. cor. of secs. 5 and 6.
	West, on the E. and W. center line of the SE 1/4 of sec. 6.
0.05	E. edge of airstrip, bears N. and S.
1.90	W. edge of airstrip, bears N. and S.
6.98	Point for AP 4, of the metes-and-bounds survey in sec. 6, on the easterly right-of-way (200 ft.) of State Highway No. 85.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	T18S R5W S6
	
	AP / 1998

CHAINS	
	Deposit a magnet in a 1 \times 1 \times 2 ins. white plastic case beneath the stainless steel post.
7.70	Bladed road, 24 lks. wide, bears NNW and SSE.
10.05	East edge of pavement, State Highway No. 85.
10.26	Center line of State Highway No. 85.
10.47	West edge of pavement, State Highway No. 85.
13.56	Point for AP 2, of the metes-and-bounds survey in sec. 6, on the westerly right-of-way (200 ft.) of State Highway No. 85.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	T18S R5W
	S6
	/ AP 1998
	Deposit a magnet in a 1 \times 1 \times 2 ins. white plastic case beneath the stainless steel post.
20.04	The SE 1/16 sec. cor. of sec. 6.
30.06	Point for the C-W-SE 1/64 sec. cor. of sec. 6.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T18S R5W
	S6 C-W-SE
	1/64 1998
	Deposit a magnet in a $1 \times 1 \times 2$ ins. white plastic case beneath the stainless steel post.
40.08	The center S. 1/16 sec. cor. of sec. 6.
	From the W-E 1/64 sec. cor. of secs. 6 and 7.
	N. 0°03' W., on the N. and S. center line of the SW $1/4$ of the SE $1/4$ of sec. 6.

CHAINS			
	Over gently rolling land, through moderate undergrowth.		
20.02	The C-W-SE 1/64 sec. cor. of sec. 6.		
	MEMORANDUM		
	The following metes-and-bounds survey in sec. 6 is based upon a survey executed by Ray Lawrence, of the Pima County Highway Department in 1941, with plat entitled "Realignment of a Portion of State Highway No. 85 No. 131-A." On file and recorded on August 11, 1941, in Book 3, of the Book of Roads at page 114, Pima County Recorders Office.		
	From the true point for AP 1, on the westerly right-of-way (200 ft.) of State Highway No. 85, and on line 2-3, of the U.S. Customs and Immigration Reserve, hereinbefore described.		
	Thence, on line 1-2, along a circular curve to the left, having a central angle of 12°13'30", a radius of 6249.31 ft., on the westerly right-of-way (200 ft) of State Highway No. 85, the chord of said arc bears N. 29°45'30" E., 20.165 chs. dist.		
2.90	Woven wire fence, 6 ft. high extends S. 60° E., and N. 60° W.		
6.34	Intersect the N. and S. center line of the SE 1/4 sec. 6, not monumented.		
	From this point, the E. 1/16 sec. cor. of secs. 6 and 7, bears S. 0°03' E., 7.76 chs. dist., hereinbefore described.		
20.205	AP 2, on the E. and W. center line of the SE 1/4 of sec. 6, hereinbefore described.		
	From this cor. point, the SE 1/16 sec. cor. of sec. 6, bears West, 6.48 chs. dist., hereinbefore described.		
	From AP 3, on the easterly right-of-way (200 ft) of State Highway No. 85, and on line 2-3, of the U.S. Customs and Immigration Reserve, hereinbefore described.		
	Thence, on line 3-4, along a circular curve to the left, having a central angle of 12°43′52", a radius of 6649.31 ft., on the easterly right-of-way (200 ft) of State Highway No. 85, the chord of said arc bears N. 28°30′30" E., 22.340 chs. dist.		
22.385	AP 4, on the E. and W. center line of the SE 1/4, hereinbefore described.		

Metes-and-Bounds Survey in Section 6, T. 18 S., R. 5 W., Gila and Salt River Meridian, Arizona

CHAINS

From this cor. point, the S. 1/16 sec. cor. of secs. 6 and 7, bears East, 6.98 chs. dist., hereinbefore described.

GENERAL DESCRIPTION

The land encompassed in this survey is located in and around the settlement of Lukeville, Arizona. Elevations range from about 1400 to 1600 ft. above sea level. Numerous washes draining southerly into Mexico were noted. Vegetation outside Lukeville, is typical Upper Sonoran.

Access is by way of State Highway No. 85, which traverses through secs. 6 and 7, to the international boundary with Mexico.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Cheryl A. Hansen	Surveying Technician
Geoffrey A. Graham	Surveying Technician

CERTIFICATE OF SURVEY

I, Gordon R. Bubel, Cadastral Surveyor, HEREBY CERTIFY upon honor that, in pursuance of Special Instructions bearing date of the 25th day of February 1998, I have dependently resurveyed a portion of the subdivisional lines and a portion of the U.S. Customs and Immigration Reserve, subdivided the SE 1/4 of section 6 and executed a metes-and-bounds survey in section 6, fractional Township 18 South, Range 5 West, 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, 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.

JULY 13,1998

true copy of the original field notes.

(Date)

Mr R Bld

(Chief Cadastral Surveyor of Arizona)

(Date)	(Cadastral Surveyor)
	CERTIFICATE OF APPROVAL
	BUREAU OF LAND MANAGEMENT Arizona State Office Phoenix, Arizona
lines and a portion of the U.S. the SE 1/4 of section 6 and the Township 18 South, Range 5 West,	e dependent resurvey of a portion of the subdivisional Customs and Immigration Reserve, the subdivision of metes-and-bounds survey in section 6, fractional, Gila and Salt River Meridian, Arizona, executed by eyor, having been critically examined and found
7/13/98 (Date)	Kenny O Ravnikar (Chief Cadastral Surveyor of Arizona)
——————————————————————————————————————	ERTIFICATE OF TRANSCRIPT
	anscript of the field notes of the above-described R. 5 W., Gila and Salt River Meridian, Arizona, is a