ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF A PORTION OF THE EAST AND WEST BOUNDARIES,

AND A PORTION OF THE SUBDIVISIONAL LINES,

TOWNSHIP 31 NORTH, RANGE 18 EAST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

W. William Foster, Cadastral Surveyor

Under Special Instructions dated September 17, 2002, approved September 17, 2002, which provided for the surveys included under Group Number 896, and assignment instructions dated October 15, 2002.

Survey commenced October 23, 2002

Survey completed November 13, 2003

INDEX DIAGRAM

TOWNSHIP 31 NORTH

RANGE 18 EAST

	6	5	4	3	2	1
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T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the east and west boundaries and a portion of the subdivisional lines, Township 31 North, Range 18 East, Gila and Salt River Meridian, Arizona.

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

Sidney E. Blout surveyed the south boundary in 1909. Van L. White surveyed the east, west and north boundaries and the subdivisional lines in 1911. Shirley B. Hjellum, Kenneth A. Krenke, and Marvin T. Koppang resurveyed a portion of the east and west boundaries and a portion of the subdivisional lines and the survey of the Hopi-Navajo partition line, segment "C" in 1978-81. Geoffrey A. Graham resurveyed the south boundary under Group Number 887 in 2002.

The survey was executed in accordance with the specifications as set forth in the <u>Manual of Instructions for the Survey of the Public Lands of the United States, 1973</u>, and the Special Instructions dated September 17, 2002, for Group Number 896, 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 "NIEM 2 1964", as published by the National Geodetic Survey, NAD 83 (1992). The geographic position of the 1/4 corner of sections 31 and 36, on the east boundary of the township, is as follows:

Latitude: 36° 02' 55.37" N. Longitude: 110° 20' 57.23" W.

The mean magnetic declination is 12° E.

CHAINS

Restoring the survey executed by Van L. White, in 1911

Beginning at the 1/4 sec. cor. of secs. 31 and 36 T. 31 N., Rs. 18 and 19 E., monumented with an iron post, 1 in. diam., firmly set, but bent over, projecting 8 ins. above the ground with brass cap mkd. T31N R18E R19E S36 1/4 S31, from which the original bearing trees

- A forked juniper, 20 ins. diam., bears S. 51 3/4° E., 150 lks. dist., with scribe marks 31 BT visible on partially opened blaze.
- A juniper, 16 ins. diam., bears N. 9 3/4° W., 376 lks. dist., with scribe marks 1/4 S36 BT visible on partially opened blaze.

At the corner point

Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 25 ins. in the ground, with brass cap mkd.

T31N R18E R19E 1/4 S36 | S31 2002

Bury the iron post alongside the stainless steel post.

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

North, bet. secs. 31 and 36

Over level, land through sage brush and native grasses.

- 11.40 Power transmission line, 2 wire, bears, S. 65° E. and N. 65° W.
- 17.70 | Gravel road, 18 ft. wide, bears N. 10° E. and S. 10° W.
- The cor. of secs 25, 30, 31 and 36 monumented with an iron post, 3 ins. diam., firmly set, projecting 4 ins. above the ground, with brass cap mkd. T31N R18E R19E S25 S30 S31 S36 1911.

Add the marks 2002 to the brass cap.

CHAINS	T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona
	Restoring the survey executed by Van L. White, in 1911, and the resurvey executed by Hjellum, Krenke, and Koppang, in 1978-81
	From the cor. of secs. 1, 6, 31 and 36 on the S. bdy of the Tp., monumented with a galvanized iron post, 2 ½ ins. diam., firmly set, projecting 5 ins. above ground, and witnessed and mkd. as described under Group No. 887, Arizona, in 2002.
	N. 0°01' E., bet. secs. 31 and 36.
	Over level ground, through sage brush and native grasses.
40.01	The 1/4 sec. cor. of secs 31 and 36, monumented with an iron post, 1 in. diam., firmly set, but bent over, projecting 9 ins. above ground, with brass cap mkd. S36 1/4 S31 1911.
	At the corner point
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 25 ins. in the ground, with brass cap mkd.
*	T31N R17E R18E 1/4 S36 S31 2002
	Bury the iron post alongside the stainless steel post.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	N. 0°01' E., bet. secs. 31 and 36, beginning new measurement.
25.18	Barbed wire fence, 4 strand, bears N. 42° E. and S. 42° W.
40.05	The cor. of secs. 25, 30, 31 and 36, monumented with an iron post, 36 ins. long, 3 ins. diam., firmly set, projecting 8 ins. above ground, filled with concrete, with brass cap missing.
	At the corner point
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 25 ins. in the ground, with brass cap mkd.

CHAINS	
	T31N R17E R18E S25 S30 S36 S31
	2002
·	Bury the iron post alongside the stainless steel post.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	N. 0°01' W., bet. secs. 25 and 30.
	Over level land, through dense sage brush and native grasses.
1.50	Left bank of the Oraibi Wash, bears N. 65° E. and S. 60° W.
2.90	Right bank of the Oraibi wash, bears N. 75° E. and S. 65° W.
40.03	The 1/4 sec. cor. secs 25 and 30, monumented with an iron post, 1 in. diam., firmly set, projecting 4 ins. above ground, with brass cap mkd. S25 1/4 S30 1911.
	Add the marks. T31N R18E 2002 to the brass cap.
·	North, beginning new measurement.
40.00	The cor. of secs. 19, 24, 25 and 30, monumented with an iron post, 3 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T31N R17E R18E S24 S19 S25 S30 1911.
	Add the marks 2002 to the brass cap.
	N. 0°01' E., bet. secs. 19 and 24.
	Over level land, through sparse sage brush and dense native grasses.
24.50	Gravel road, 35 ft. wide, bears N. 65° E. and S. 65° W.
40.03	Point for the 1/4 sec. cor. of secs 19 and 24, at proportionate dist.; there is no remaining evidence of the original cor.
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 26 ins. in the ground, with brass cap mkd.

CHAINS	
	T31N R17E R18E 1/4 S24 S19 2002
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
80.06	The cor. of secs. 13, 18, 19 and 24, monumented with an iron post, 3 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd. T31N R17E R18E S13 S18 S24 S19 1978 1911.
	Add the marks 2002 to the brass cap.
	Cor. is located next to a green fence post.
	N. 0°07' W., beginning new measurement.
	Over rolling land, through medium growth sage brush and native grasses.
39.97	Point for the 1/4 sec. corner of secs. 13 and 18, determined from the bearing tree established in 1978
	A dead and downed juniper, 13 ins. diam., bears N. 68° W., 109 ½ lks. dist., with scribe marks 1/4 S13 BT visible on partially opened blaze.
	At the corner point
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 12 ins. in the ground, in a mound of stone, 4 ft. base, to top, with brass cap mkd.
	T31N R17W R18E 1/4 S13 S18 2003
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	N. 0°04' E., beginning new measurement.

CHAINS	
40.05	The cor. of secs. 7 , 12, 13 and 18, identical with AP C-265, on the 1978 Navajo-Hopi partition line, monumented with an iron post, 3 ins. diam., firmly set, projecting 6 ins. above ground, with brass cap marked T31N R17E R18E NAVAJO S7 S12 S18 S13 HOPI 1911 1978.
·	from which
	A forked juniper, 20 ins. diam., bears N. 34 1/2° E., 141 lks. dist., with scribe marks T31N R18E S7 BT visible on partially opened blaze.
	Add the marks 2003 to the cap.
	Corner is located in a barbed wire fence, bears E. and W.
	Dependent Resurvey of a Portion of the Subdivisional Lines, T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona
	Restoring the survey executed by
	Van L. White, in 1911, Krenke, Hjellum and Koppang, in 1978-81.
	From the cor. of secs 25, 30, 31 and 36, on the E. bdy. of the Tp., hereinbefore described.
	West, bet. secs 25 and 36.
	Over rolling to broken land, through scattering juniper.
39.98	The 1/4 sec. cor. of secs 25 and 36, monumented with a wood post, 3 X 3 X 35 ins., firmly set, 31 ins. in the ground, with no visible marks, from which the remaining original bearing tree.
	A juniper, 34 ins. diam., bears N. 21° E., 83 lks. dist., with marks BT visible through partially healed blaze.
	At the corner point
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.
	T31N R18E
	S25 1/4 ——
	s36
	2002

CHAINS	T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona
	from which a new bearing tree
	A juniper, 13 ins. diam., bears S. 49 3/4° W., 42 lks. dist., mkd. 1/4 S 36 BT.
	Bury the wood post alongside the stainless steel post.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	N. 89°57' W., beginning new measurement.
	Over flat land through sparse grass.
19.35	Graded road, 18 ft. wide, bears N. 38° E. and S. 38° W.
40.04	The cor. of secs. 25, 26, 35 and 36, monumented with an iron post, 2 ½ ins. diam., firmly set, projecting 5 ins. above ground, with brass cap erroneously marked T31N R19E S25 S26 S35 S36 1978, from which the original bearing trees
	A juniper, 10 ins. diam., bears N. 29 1/2° E., 160 lks. dist., with scribe marks T31N R18E S25 BT visible on opened blaze.
	A juniper, 12 ins. diam., bears S. 68 3/4° E., 258 lks. dist., with scribe marks T31N R18E visible on partially opened blaze.
	A pinon, 17 ins. diam., bears S. 23 1/4° W., 334 lks. dist., with scribe marks T31N R18E S35 BT visible on partially opened blaze.
	A juniper, 20 ins. diam., bears N. 72 1/2° W., 101 lks. dist., with scribe marks T31N R18E S26 BT visible on opened blaze.
·	Correct the brass cap to read
	T31N R18E S26 S25
	S35 S36 1978
	Add the marks 2002 to the brass cap.

CHAINS

39.94

From the 1/4 sec. cor. of secs. 34 and 35, monumented with an iron post, 2 ins. diam., firmly set, projecting 16 ins. above ground, in a supporting mound of stone, 3 ft. base, 1 ft. high, with brass cap mkd. T31N R18E S34 S35 1978, from which the remaining original bearing tree

A juniper, 20 ins. diam., bears N. 72 1/2° E., 76 lks. dist., with scribe marks 1/4 S35 BT visible on partially opened blaze.

Add the marks 1/4 and 2002 to the brass cap.

N. 0°01' W., bet. secs. 34 and 35.

Over rolling land, through scattering juniper and pinon trees.

The point for the cor. of secs. 26, 27, 34 and 35, determined from the original bearing trees

- A juniper, 16 ins. diam., bears N. 35 1/2° E., 191 lks. dist., with scribe marks T31N R18E S26 BT visible on partially opened blaze.
- A juniper stump, 12 ins. diam., bears S. 27 1/4° E., 199 lks. dist., with no visible blaze or marks.
- A cedar, 29 ins. diam., bears S. 39 1/2° W., 118 lks. dist., with scribe marks T31N R18E S34 BT visible on opened blaze.
- A pinon, 18 ins. diam., bears N. 71 3/4° W., 204 lks. dist., with scribe marks T31N R18E S27 visible on opened blaze.

True point for the cor. falls in a dry, sandy wash, 10 lks. wide, 6 ins. deep, drains N. 65° W., where it is impracticable to establish a permanent monument.

From this point, the point selected for a witness cor. to the cor. of secs. 26, 27, 34 and 35, bears N. 20°59' E., 39 lks. dist.

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

W	С
T31N	R18E
S27	S26
s34	s35
20	02

CHAINS	T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona
	With arrow pointing to the true point.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	From the cor. of secs. 25, 26, 35 and 36, hereinbefore described.
	S. 89°54' W., bet. secs. 26 and 35.
	Over rolling land through scattering juniper trees.
39.87	The 1/4 sec. cor. of secs. 26 and 35, determined from the original bearing tree
	A juniper, 16 ins. diam., bears N. 1 1/2° W., 52 lks. dist., with a healed blaze.
	At the corner point
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 20 ins. in the ground, in a collar of stone, with brass cap mkd.
	T31N R18E S26
	1/4 ——
	S35 2002
	from which a new bearing tree
	A pinon, 19 ins. diam., bears S. 15 1/2° W., 77 lks. dist., mkd. 1/4 S35 BT.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	S. 89°51' W., beginning new measurement.
39.98	The cor. of secs. 26, 27, 34 and 35.
	N. 89°50' W., bet. secs. 27 and 34.
39.93	The 1/4 sec. cor. of secs. 27 and 34, monumented with an iron post, 2 ½ ins. diam., firmly set, 6 ins. below ground, with brass cap mkd. T31N R18E S27 1/4 S34 1978.
	from which a new bearing tree

CHAINS	T. SI N., R. 16 E., GIIA and Sait River Meridian, Arizona
	A juniper, 13 ins. diam., bears N. 10 3/4° W., 20.5 lks. dist., mkd. 1/4 S34 BT.
	Add the marks 2002 to the brass cap.
	From the cor. of secs. 4, 5, 32 and 33 on the S. bdy of the Tp., monumented with an iron post, 3 ins. diam., firmly set, projecting 13 ins. above ground, with brass cap mkd. as described under Group No. 887, Arizona, in 2002.
	N. 0°03' W., bet. secs. 32 and 33
	Over level to rolling land, through sage brush and native grasses.
9.10	Power transmission line, triple 500Kv, bears E. and W.
40.05	Point for the 1/4 sec. cor. of secs. 32 and 33, at proportionate dist.; there is no remaining evidence of the original cor.
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 23 ins. in the ground, with brass cap mkd.
	T31N R18E
	1/4 s32 s33 2002
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
80.10	The cor. of secs. 28, 29, 32 and 33, monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T31N R18E S29 S28 S32 S33 1911.
	Add the marks 2002 to the brass cap.
	From the cor. of secs. 27, 28, 33 and 34, identical with AP C-252, on the 1978 Navajo-Hopi partition line, monumented with an iron post, 2 ins. diam, firmly set, projecting 4 ins. above the ground, with brass cap mkd. T31N R18E S28 S27 S33 S34 HOPI NAVAJO AP C-252 1978.
	Add the marks 2002 to the brass cap.
	N. 89°55' W., bet. secs. 28 and 33.

CHAINS	
	Over rolling to broken land, through native grasses and sparse sage brush.
39.98	The 1/4 sec. cor. of secs. 28 and 33, determined by the method of irregular boundary adjustment. A wood post, 3 x 3 x 36 ins., was found laying loosely on the surface of the ground in the vicinity. No evidence of the 1978 iron post and supporting mound of stone was recovered during the course of this resurvey.
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 18 ins. in the ground, in a mound of stone, 2½ ft. base, to top, with brass cap mkd.
	T31N R18E
	Bury the wood post alongside the stainless steel post.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	N. 89°56' W., beginning new measurement.
40.00	The cor. of secs. 28, 29, 32 and 33, hereinbefore described.
	N. 0°02' W., bet. secs. 28 and 29.
	Over rolling land, through sparse sage brush and native grasses.
40.01	The 1/4 sec. cor. of secs. 28 and 29, monumented with a wood post, 4 X 4 X 31 ins., firmly set, 17 ins. in the ground, mkd. with 1/4 S29 on the W. face, S2 on the E. face, and with a scattered mound of stone to the W.
	At the corner point
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 24 ins. in the ground, with brass cap mkd.
	T31N R18E 1/4 S29 S28 2002
	from which
	1

CHAINS	T. 31 N., R. 18 E., GIIA AND SAIL RIVER MERIDIAN, ARIZONA
	A point on a sandstone outcropping, 15 X 10 X 8 ft. high, bears S. 9 1/2° W., 139 lks. dist., mkd X BO.
	Rebuild mound of stone, 3 ft. base, 2 ft. high, to the W.
	Bury the wood post alongside the stainless steel post.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	North, beginning new measurement.
40.05	The cor. of secs. 20, 21, 28 and 29, identical with AP C-256, on the Navajo-Hopi partition line, monumented with an iron post, 2 ins. diam., firmly set, projecting 11 ins. above ground, with brass cap mkd. NAVAJO T31N R18E S20 S21 S28 S29 HOPI AP C-256 78 1911.
	Add the marks 2002 to the brass cap.
	Cor. is located in a 5 strand barbed wire fence, bears E. and W.
	N. 0°01' W., bet. secs. 20 and 21.
	Over level land, through sparse sage brush and native grasses.
40.02	Point for the 1/4 sec. cor. of secs. 20 and 21, at proportionate dist.; there is no remaining evidence of the original cor.
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 27 ins. in the ground, with brass cap mkd.
·	T31N R18E
	1/4 s20 s21 2002
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
80.04	The cor. of secs. 16, 17, 20 and 21, monumented with an iron post, 2 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd. T31N R18E S16 S17 S20 S21 78 1911.
	Add the marks 2002 to the brass cap.

CHAINS	T. 31 N., R. 18 E., Glia and Salt River Meridian, Arizona
	From the cor. of secs. 5, 6, 31 and 32 on the S. bdy of the Tp., monumented with an iron post, 3 ins. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. as described under Group No. 887, Arizona, in 2002.
	N. 0°01' W., bet. secs. 31 and 32.
	Over rolling land.
8.80	Power transmission line, triple 500Kv, bears, E. and W.
40.03	The 1/4 sec. cor. of secs. 31 and 32, monumented with a wood post, 3 X 3 X 32 ins., firmly set, 23 ins. in the ground, mkd. with 1/4 S31 on W. face and 1/4 S32 on E. face.
	At the corner point
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 24 ins. in the ground, with brass cap mkd.
	T31N R18E 1/4 S31 S32 2002
	Bury the wood post alongside the stainless steel post.
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	N. 0°01' W., beginning new measurement.
40.07	The cor. of secs. 29, 30, 31 and 32, monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T31N R18E S29 S30 S31 S32 1911.
	Add the marks 2002 to the brass cap.
	From the cor. of secs. 28, 29, 32 and 33, hereinbefore described.
	N. 89°58' W., bet. secs. 29 and 32.
	Over level to rolling land, through sage brush and native grasses.
39.98	The 1/4 sec. cor. of secs. 29 and 32, monumented with a wood post, 3 X 4 X 30 ins., firmly set, 16 ins. in the ground, mkd. with 1/4 S29 on N. face and S32 on S. face.

CHAINS	T. 31 N., R. 18 E., Gila and Sait River Meridian, Arizona					
	At the corner point					
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 26 ins. in the ground, with brass cap mkd.					
	T31N R18E S29 1/4 ———					
	S32 2002					
	Bury the wood post alongside the stainless steel post.					
	Deposit a magnet in a white plastic case at the base of the stainless steel post.					
	N. 89°58' W., beginning new measurement.					
39.95	The cor. of secs. 29, 30, 31 and 32.					
	S. 89°58' W., bet. secs. 30 and 31.					
	Over rolling land, through sage brush and native grasses.					
23.47	Barbed wire fence, 4 strand, bears. N. 33° E. and S. 33° W.					
40.06	The 1/4 sec. cor. of secs. 30 and 31, monumented with the remains of a wood post, 3 X 3 X 18 ins, firmly set, 14 ins. below the ground.					
	At the corner point					
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 25 ins. in the ground, with brass cap mkd.					
	T31N R18E S30					
	1/4 ————————————————————————————————————					
	Bury the wood post alongside the stainless steel post.					
	Deposit a magnet in a white plastic case at the base of the stainless steel post.					
	S. 89° 58' W., beginning new measurement					

CHAINS	T. 51 N., R. 16 E., Gila and Salt River Meridian, Arrzona						
38.59	The cor. of secs. 25, 30, 31 and 36, on the W. bdy. of the Tp. hereinbefore described.						
	From the cor. of secs. 29, 30, 31 and 32. North, bet. secs. 29 and 30.						
	Over rolling to level land, through sage brush and native grasses.						
27.25	Barbed wire fence, 4 strand, bears N. 33° E., S. 33° W.						
40.02	The 1/4 sec. cor. of secs. 29 and 30, monumented with a wood post, 3 X 4 X 30 ins., firmly set, 23 ins. in the ground, mkd. with faint scribe marks S29 on E. face and 1/4 on W. face, with scattered mound of stone to the W.						
	At the corner point						
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 25 ins. in the ground, with brass cap mkd.						
	T31N R18E						
	1/4 s30 s29 2002						
	Rebuild mound of stone, 2 ½ ft. base, 1 ½ ft. high, to the W.						
	Bury the wood post alongside the stainless steel post.						
	Deposit a magnet in a white plastic case at the base of the stainless steel post.						
	North, beginning new measurement.						
40.02	The cor. of secs. 19, 20, 29 and 30, monumented with an iron post, 2 ins. diam., firmly set, projecting 6 ins. above ground, with brass cap mkd. T31N R18E S19 S20 S29 S30 1911.						
	Add the marks 2002 to the brass cap.						
	From the 1/4 sec. cor. of secs. 20 and 29, monumented with an iron post, 2 ½ ins. diam., firmly set, projecting 3 ins above the ground, with brass cap mkd. T31N R18E 1/4 S20 S29 1978, with a steel fence post set firmly alongside.						
	Add the marks 2002 to the brass cap.						

CHAINS							
	West, bet. secs. 20 and 29.						
	Over level to rolling land, through medium growth sage brush and native grasses.						
39.96	The sec. cor. of secs 19, 20, 29 and 30.						
	S. 89°58' W., bet. secs. 19 and 30.						
	Over level land, through medium growth sage brush and native grasses.						
33.00	Right bank of Oraibi Wash, 40 ft. deep, bears N. 15° E. and S. 20° E.						
40.05	The 1/4 sec. cor. of secs. 19 and 30, monumented with a wood post, 3 X 3 X 24 ins., firmly set, 4 ins. below the ground, with no visible marks.						
	At the corner point						
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 25 ins. in the ground, with brass cap mkd.						
	T31N R18E S19						
	1/4						
	\$30 2002						
	2002						
	Bury the remains of wood post alongside the stainless steel post.						
	Deposit a magnet in a white plastic case at the base of the stainless steel post.						
	S. 89°57' W., beginning new measurement.						
38.60	The cor. of secs. 19, 24, 25 and 30 on the W. bdy. of the Tp.						
	From the cor. of secs. 19, 20, 29 and 30.						
	N. 0°05' W., bet. secs. 19 and 20.						
	Over level land, through dense sage brush.						
40.07	Point for the 1/4 sec. cor. of secs. 19 and 20, at proportionate dist.; there is no remaining evidence of the original cor.						

Dependent Pesumov of a Portion of the Subdivisional Lines

	T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona
CHAINS	
	At the corner point
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 25 ins. in the ground, with brass cap mkd.

T31N R18E 1/4 S19 | S20

from which

Casing for Well No.4M-89A, 8 ins. diam., projecting 14 ins. above the ground, bears N. 33°46' W., 5.49 chs. dist.

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

57.65 Graded road, 25 ft. wide, bears N. 50° E. and S. 50° W.

80.14 The cor. of secs. 17, 18, 19 and 20, monumented with an iron post, 2 ins. diam., firmly set, projecting 5 ins. above ground, with brass cap mkd. T31N R18E S18 S17 S19 S20 78 1911, with a steel fence post set firmly alongside.

Add the marks 2002 to the brass cap.

S. 89°56' W., bet. secs. 18 and 19.

Over rolling land, through dense sage brush.

The 1/4 sec. cor. of secs. 18 and 19, monumented with a wood post, 3 X 3 X 32 ins., firmly set, 18 ins. in the ground, mkd. with S18 plainly visible on the N. face and faint scribe marks on the S. face.

At the corner point

40.08

Set a stainless steel post, 28 ins. long, 2½ ins. diam., 26 ins. in the ground, with brass cap mkd.

> T31N R18E S18 1/4 -S19 2002

Bury the wood post alongside the stainless steel post.

Deposit a magnet in a white plastic case, a 6 ounce tuna can and an 8 ½ ounce peach can at the base of the stainless steel post.

CHAINS	T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona				
	S. 89°52' W., beginning new measurement.				
	Over rolling to broken land through sparse sage brush and dense native grasses.				
38.42	The cor. of secs. 13, 18, 19 and 24, on the W. bdy. of the Tp., hereinbefore described.				
	From the cor. of secs. 17, 18, 19 and 20.				
	N. 0°05' W., bet. secs 17 and 18.				
	Over level to rolling land, through natives grasses.				
40.05	Point for the 1/4 sec. cor. of secs 17 and 18, at proportionate dist.; there is no remaining evidence of the original cor.				
·	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 23 ins. in the ground, with brass cap mkd.				
	T31N R18E 1/4 s17 s18 2002				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
80.10	Point for the cor of secs. 7, 8, 17 and 18, identical with AP C-263, on the 1978 Navajo-Hopi partition line, at proportionate dist.; there is no remaining evidence of the original cor.				
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 27 ins. in the ground, with brass cap mkd.				
	T31N R18E S7 S8				
	S18 S17 2003				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
Cor. is located 12 lks. N. of 5 strand barbed wire fenc E. and W.					

CHAINS					
	From AP C-261, on the line bet. secs. 8 and 17, and on the 1978 Navajo-Hopi partition line, monumented with an iron post, 2 ins. diam., firmly set, projecting 5 ins. above the ground, in a concrete collar, with brass cap marked T31N R18E S8 NAVAJO AP C 261 HOPI 1978				
	Add the marks 2003 to the brass cap.				
	N. 89°54' W., bet secs. 8 and 17, on the 1978 partition line.				
	Over level ground.				
13.02	Point for the 1/4 sec. cor of secs 8 and 17, identical with AP C-262, on the 1978 Navajo-Hopi partition line, determined by the method of irregular boundary adjustment, there is no remaining evidence of the original cor.				
	At the corner point				
	Set a stainless steel post, 28 ins. long, 2½ ins. diam., 26 ins. in the ground, with brass cap mkd.				
	T31N R18E S8				
	1/4 ——				
	S17				
	2003				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
	Cor. is located in a 5 strand barbed wire fence, bears E. and W.				
	N. 89°49'W., beginning new measurement.				
39.96	The cor. of secs 7, 8, 17 and 18.				
	S. 89°49' W., bet secs 7 and 18, on the 1978 partition line.				
	Over rolling land.				
40.05	The 1/4 sec. cor of secs 7 and 18, identical with AP C-264, on the 1978 Navajo-Hopi partition line, monumented with an iron post, 2 ins. diam., firmly set, flush with the ground, with brass cap mkd. T31N R18E NAVAJO 1/4 S7 S18 AP C 264 HOPI 1978				
	Add the marks 2003 to the brass cap.				
	·				

CHAINS					
	S. 89°51' W., beginning new measurement.				
38.35	The cor. of secs 7, 12, 13 and 18, on the W, bdy. of the Tp. identical with AP C-265, on the 1978 Navajo-Hopi partition line, hereinbefore described.				
	From the cor. of secs. 7, 8, 17 and 18.				
	N. 0°08' W., bet secs 7 and 8.				
	Over rolling land, through native grasses.				
40.05	Point for the 1/4 sec. cor of secs 7 and 8, determined by the method of irregular boundary adjustment; there is no remaining evidence of the original cor.				
	At the corner point				
	Set a stainless steel post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.				
	T31N R18E				
1	1/4				
	s 7 s 8				
	2002				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
	from which				
	A power pole, 12 ins. diam., mkd. 42, bears S. 62 1/4° E., 103 lks. dist.				
	Deposit a magnet in a white plastic case at the base of the stainless steel post.				
	N. 0°03' W., beginning new measurement.				
40.01					
40.01	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. T31NR18E S5 S6 S7 S8 1911.				
	Add the marks 2003 to the cap.				

T. 31 N., R. 18 E., Gila and Salt River Meridian, Arizona

CHAINS

General Description

The land in the township varies from level to broken with the vegetation dominated by sage brush and native grasses. There is some scattering juniper in sections 35 and 36. The Oraibi Wash drains southerly through sections 19 and 30.

There is a major power transmission line that traverses the township through sections 31 through 36. The land is suitable for the grazing of cattle and sheep.

Access is by way of State Highway No. 87, Hopi Route 4 and Navajo - Hopi 8064.

The mean magnetic declination of 12° 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

11880 11881	. U I I I I I I I I I I I I I I I I I I
NAMES	CAPACITY
Mark R. Searles	Surveying Technician
Mike M. Barnett	Surveying Technician

CERTIFICATE OF SURVEY

I, W. William Foster, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 17th day of September, 2002, I have dependently resurveyed a portion of the east and west boundaries and a portion of the subdivisional lines, Township 31 North, Range 18 East, Gila and Salt River Meridian, 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.

4 5 04 (Date)

(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT Phoenix, Arizona

The foregoing field notes of the dependent resurvey of the east and west boundaries and a portion of the subdivisional lines, Township 31 North, Range 18 East, Gila and Salt River Meridian, Arizona, executed by W. William Foster, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

1/14/	05	· · · · · · · · · · · · · · · · · · ·	Stephen Chief Cadastr	. К.	Hans	en
(1	Date) A	CTING (Chief Cadastr	al Surv	eyor of A	rizona)
	——————————————————————————————————————	TIFICATE	OF TRANSCRIP	T -		
	That the foregoing surveys in T. 31 N					
	a true copy of					,
	Date		Chief Cadagtr	al Curu	ever of A	
	/ale/				-los or u	T TOUR