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BOOK 5329

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### FIELD NOTES

OF THE

DEPENDENT RESURVEY OF A PORTION OF THE ARIZONA-NEW MEXICO STATE LINE		
BETWEEN THE 84 MILE POST AND ASTRONOMICAL STATION NO. 3 AND TRACT 37,		
THE SURVEY OF THE NORTH BOUNDARY, SUBDIVISIONAL LINES, CERTAIN PARTITION LINES		
IN SECTION 17 AND A PORTION OF THE MEDIAN LINE OF BLACK CREEK IN		
SECTION 17, AND INFORMATIVE TRAVERSES OF PORTIONS OF THE RIGHT AND LEFT BANKS OF		
BLACK CREEK IN SECTION 17, OF TOWNSHIP 27 NORTH, RANGE 31 EAST		
Of theGila and Salt River Meridian,		
In the State of Arizona		
EXECUTED BY		
Kevin R. DeRossett and Olian T. Shockley, Cadastral Surveyors		

Under special instructions dated <u>November 27, 1987</u>, approved <u>November 30, 1987</u> and supplemental special instructions dated and approved <u>March 26, 1990</u>, which provided for the surveys included under Group Number <u>699</u> and assignment instructions dated <u>March 28, 1988</u> and <u>April 10, 1989</u>.

Survey commenced April 12 , 1988 Survey completed August 21 , 1990

### INDEX DIAGRAM

84 MILE POST TO ASTRONOMICAL STATION NO. 3 on the ARIZONA-NEW MEXICO STATE LINE AND

TOWNSHIP 27 NORTH, RANGE 31 EAST GILA AND SALT RIVER MERIDIAN, ARIZONA

				84M
10		11		4
6	37	5	35	85M
36		34		6
7	33	8	35 6 —	86M ASTRO. STA. NO.3
32		29		
18	27	17	31	
26		23		
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Tract 37 Certain Partition Lines in Section 17 Median Line of Black Creek, Section 17 Informative Traverses of Banks of Black Creek, Section 17

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T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes are those of the dependent resurvey of a portion of the Arizona-New Mexico state line between the 84 Mile Post and Astronomical Station No. 3 and Tract 37, the survey of the north boundary, subdivisional lines, certain partition lines in section 17 and a portion of the median line of Black Creek in section 17, and informative traverses of portions of the right and left banks of Black Creek in section 17, of Township 27 North, Range 31 East, Gila and Salt River Meridian, Arizona.

The Navajo Special Base Line and the east boundary and subdivisional lines of Township 1 North, Range 6 West were surveyed by Ehud N. Darling in 1869. The Arizona-New Mexico State Line was surveyed by Chandler Robbins in 1875. The Navajo Base Line was retraced from the Fort Defiance Astronomical Station to the State Line by Sidney E. Blout in 1921. The Arizona-New Mexico State Line was retraced from the 86 Mile Post to the 87 Mile Post by Sidney E. Blout in 1921. Tract No. 37 of unsurveyed Township 27 North, Range 31 East, was surveyed by Sidney E. Blout in 1921. The Arizona-New Mexico State Line from Astronomical Station No. 3 to the 91 Mile Post was dependently resurveyed by Richard S. Kaiser and James L. Werdel in 1984. The west boundary was surveyed concurrently under this same group.

The survey was executed in accordance with the specifications as set forth in the <u>Manual of Surveying Instructions</u>, 1973, the Special Instructions dated November 27, 1987, and the Supplemental Special Instructions dated March 26, 1990, for Group No. 699, 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 directions of all lines were determined by hour angle observations on the sun and celestial observations and refer to the true meridian. The angles and distances were measured electronically with a Topcon GTS-3B total station.

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### T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

**CHAINS** 

The geographic position of the southeast corner of the township, determined by using the Motorola Eagle GPS units utilizing U.S.C.& G.S. 1st. order triangulation stations, "CRAFTON and GANADO", is as follows:

NAD 27 Latitude: 35°41'32.35" N. Longitude: 109°02'44.33" W.

The mean magnetic declination is  $12\ 1/2^\circ$  E. as taken from the magnetic declination map published in 1988 by the U.S. Geological Survey.

Dependent Resurvey of a Portion of the Arizona-New Mexico State Line
Between the 84 Mile Post and Astronomical Station No. 3

Restoring the survey executed by Chandler Robbins, in 1875

Beginning at the point for the 84 Mile Post on the Arizona-New Mexico State Line, determined at record bearing and distance from the original witness cor. for the 84 Mile Post.

At the cor. point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 20 ins. in the ground, and in a mound of stone, 2 ft. base, to top, with brass cap mkd.

84M AZ | NM 1988

Deposit a magnet in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

Dependent Resurvey of a Portion of the Arizona-New Mexico State Line Between the 84 Mile Post and Astronomical Station No. 3

CHAINS

From this cor. point, the original witness cor. for the 84 Mile Post on the Arizona-New Mexico State Line, monumented with a sandstone,  $26 \times 8 \times 8$  ins., (Record:  $18 \times 10 \times 8$ ), mkd. 83 WC on the N. face, NM on the E. face, 32 WL on the S. face, ARIZ on the W. face, and X on top, loosely set, 3 ins. in the ground, and in a scattered mound of stone, 4 ft. diam., bears West, 14.00 chs. dist.

At the cor. point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, and in a mound of stone, 3 ft. base, to top, with brass cap mkd.

WC AZ 84M 1988

Deposit a magnet in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

Bury the original stone alongside the stainless steel post.

S. 2°17' E., on the 85th mile of the Arizona-New Mexico State Line.

- 35.09 The closing cor. of Tps. 27 and 28 N., R. 31 E., hereinafter described.
- 75.10 The 1/4 sec. cor. of sec. 5 only, T. 27 N., R. 31 E., hereinafter described.
- 78.05 The 85 Mile Post, monumented with a sandstone, 30 x 8 x 8 ins., (Record: 32 x 8 x 8), laying atop ground, mkd. with AR on one face, SL on the opposite face, NM on another face. and 32 WL on another face, and is accepted as the best available evidence of the position of the original cor.

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.

85M AZ | NM 1990

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Dependent Resurvey of a Portion of the Arizona-New Mexico State Line
Between the 84 Mile Post and Astronomical Station No. 3

CHAINS	Demonit a magnet in a 1 u 1 u 2 5/0 in white plantic game
	Deposit a magnet in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Bury the original stone alongside the stainless steel post.
	S. 0°22' W., on the 86th mile of the Arizona-New Mexico State Line.
37.05	The closing cor. of secs. 5 and 8, T. 27 N., R 31 E., hereinafter described.
77.05	The 1/4 sec. cor. of sec. 8 only, hereinafter described.
79.95	Point for the 86 Mile Post, at proportionate dist., using 1875 survey record, as the 1921 retracement record is irreconcilable with the 1875 record and existing conditions; there is no remaining evidence of the original cor.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	86M
	AZ   NM 1990
	Deposit a magnet in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	S. 0°22' W., on the 87th mile of the Arizona-New Mexico State Line.
0.87	North right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
2.27	Center of Navajo Route 7, asphalt surfaced, 55 lks. wide, bears SE and NW.
3.70	South right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
6.59	West right of way fence of Navajo Route 12, barbed wire, 5 strand, parallels highway.
8.41	Center of Navajo Route 12, asphalt surfaced, 55 lks. wide, bears NE and SW.
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Dependent Resurvey of a Portion of the Arizona-New Mexico State Line
Between the 84 Mile Post and Astronomical Station No. 3

CHAINS	
10.23	East right-of-way fence of Navajo Route 12, barbed wire, 5 strand, parallels highway.
13.65	Astronomical Station No. 3, on the 87th mile of the Arizona-New Mexico State Line, a sandstone monument, set, mkd. and witnessed as described in the official record of the 1984 dependent resurvey of a portion of the Arizona-New Mexico State Line bet.  Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel.
	Dependent Resurvey of Tract 37, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona
	Restoring the survey executed by Sidney E. Blout, in 1921
	From A.P. 1 of Tract 37, monumented with an iron post, 1 in. diam., firmly set, projecting 13 ins. above ground, with brass cap mkd.
	T27N R31E  1 MTR 37 1921
	Cor. is located in a barbed wire fence, 4 strand, extends N. and S., and 2 1/2 lks. E. of a wooden power pole.
	S. 3°13' E., along line 1-2 of Tract 37.
	Over descent, along west edge of hill.
9.91	A.P. 2 of Tract 37, monumented with an iron pipe, 36 ins. long, 1 1/4 ins. diam., firmly set, projecting 24 ins. above ground, of unknown origin, and is accepted as a careful and faithful perpetuation of the original cor. position.
	At the cor. point
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, to bedrock, and in a mound of stone, 4 ft. base, to top, with brass cap mkd.

# Dependent Resurvey of Tract 37, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

CHAINS	
	T27N
	R31E   TR37
	S18 AP2
	1989
	from which
	The stone cross atop the Episcopal Cemetery gate, bears N. 49° E., 361 1/2 lks. dist.
	The southwest corner of the Episcopal church, a stone structure, bears N. 89 3/4° E., 245 1/2 lks. dist.
	A concrete nail, set in the southwest cor. of the stone wall surrounding the Episcopal Cemetery, bears S. 76° E., 63 1/2 lks. dist.
	Deposit broken glass from a brown colored bottle and a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
	Bury the iron pipe alongside the stainless steel post.
	Cor. is located 2 1/2 lks. W. of a wooden post serving as cor. of abandoned barbed wire fences, 4 strand, extending N. and ESE.
	S. 73°43' E., along line 2-3 of Tract 37.
	Over descent, through developed area.
4.15	Paved road, bears NNE and SSW.
31.53	The crossing closing cor. of secs. 17 and 18, T. 27 N., R. 31 E., hereinafter described.
	From this cor. point, the 1/4 sec. cor. of secs. 17 and 18, bears N. 0°01, E., 10.73 chs. dist., hereinafter described.
34.85	A.P. 3 of Tract 37, monumented with an iron reinforcing rod, 24 ins. long, 5/8 in. diam., firmly set, in a concrete cylinder, 13 ins. diam., 6 ins. below the surface of the ground, with aluminum cap marked 3355 PC, of unknown origin, and is accepted as a careful and faithful perpetuation of the original corposition.
	At the cor. point

### Dependent Resurvey of Tract 37, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

CHAINS	
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 6 ins. below the surface of the ground, with brass cap mkd.
	TR37 T27N AP3 R31E S17 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Bury the iron rod in concrete cylinder alongside the stainless steel post.
	Cor. is located 7 1/2 lks. SSE of a wooden power pole.
	N. 9°41' W., along line 3-4 of Tract 37.
	Over level ground, near the right bank of Black Creek.
13.13	Right bank of Black Creek, bears SSE and NNW.
15.82	Point for A.P. 4 of Tract 37, determined at record distance on a projection of a fence line extending S. 82°35' E. from A.P. 1; there is no remaining evidence of the original cor. The corpoint falls in Black Creek, course SSE, and it is impracticable to establish a permanent monument.
	N. 82°35' W., along line 4-1 of Tract 37.
	Over the bed of Black Creek.
0.46	Point for an auxiliary meander cor., at intersection with the right bank of Black Creek, bears SSE and NNW. Not monumented.
	Thence over gradual ascent.
0.53	The crossing closing cor. of secs. 17 and 18, T. 27 N., R. 31 E., hereinafter described.
	From this cor. point, the 1/4 sec. cor. of secs. 17 and 18, bears S. 0°01' W., 4.00 chs. dist., hereinafter described.
0.71	Cor. of chain link fences, extending SSE and WNW.
	Thence along chain link and barbed wire fence lines.
31.61	A.P. 1 of Tract 37.
	,

# Survey of the North Boundary, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

CHAINS	
	From the cor. of Tps. 27 and 28 N., Rs. 30 and 31 E., 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 of T. 27 N., R. 30 E., executed concurrently under this group.
	East, bet. secs. 6 and 31.
	Over descent, through dense timber.
2.98	West right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
4.52	Center of Navajo Route 7, asphalt surfaced, 68 lks. wide, bears SSE and NNW.
6.09	East right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
25.00	Wash, 50 lks. wide, drains SSE.
40.00	Point for the 1/4 sec. cor. of secs. 6 and 31.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 12 ins. in the ground, to bedrock, and in a mound of stone, 4 ft. base, to top, with brass cap mkd.
	T28N R31E
	331 1/4 —
	S 6 T27N
	1989
	from which
	A piñon, 16 ins. diam., bears N. 76 1/4° E., 179 lks. dist., mkd. BT 1/4 S31.
	A piñon, 6 ins. diam., bears S. 32 1/4° W., 142 1/2 lks. dist., mkd. X BT.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
80.00	Point for the cor. of secs. 5, 6, 31, and 32.

### Survey of the North Boundary, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

CHAINS	
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 20 ins. in the ground, with brass cap mkd.
	T28N R31E S31   S32
	S 6 S 5 T27N 1989
	from which
	A piñon, 18 ins. diam., bears N. 25 3/4° E., 127 lks. dist., mkd. BT T28N R31E S32.
	A piñon, 13 ins. diam., bears N. 88 1/2° W., 53 lks. dist., mkd. BT T28N R31E S31.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Land, steeply sloping. Soil, sand and rocks. Timber, dense piñon and juniper; undergrowth, sparse native grasses.
	East, bet. secs. 5 and 32.
	Over descent, through dense timber.
29.40	Graded road, 41 lks. wide, bears NNE and SSW.
31.80	Power line, 1 strand, bears NE and SW.
33.80	Right bank of Black Creek, bears NNE and SSW.
37.20	Left bank of Black Creek, bears NNE and SSW.
40.00	Point for the 1/4 sec. cor. of secs. 5 and 32.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.

### Survey of the North Boundary, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

CHAINS	
	T28N R31E
	S32
	1/4 —
	s 5
	T27N
	1989
	1909
	Deposit a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
78.67	Point for the closing cor. of secs. 5 and 32, at intersection with the Arizona-New Mexico State Line.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	T28N R31E
	\$32
	cc
	S 5
	T27N
	1990
	from which
	A juniper, 9 ins. diam., bears N. 70° W., 13 lks. dist., mkd. T28N R31E S32 CC BT.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Set a steel fence post N. of the cor.
	Cor. is located 70 lks. E. of a stock fence, barbed wire and wire mesh, extends NE and SW.
	From this cor. point, the 84 Mile Post on the Arizona-New Mexico State Line, hereinbefore described, bears N. 2°17' W., 35.09 chs. dist.
	Land, steep to moderate sloping. Soil, sand and sandy loam. Timber, dense piñon and juniper; sparse sagebrush and native
	grasses.
	1

CHAINS	
	From the cor. of secs. 5, 6, 31, and 32, on the S. 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 official record of the 1984 survey of the north boundary of T. 26 N., R. 31 E., executed by Richard S. Kaiser and James L. Werdel.
	N. 0°01' E, bet. secs. 31 and 32.
	Over gradual ascent.
5.01	A right-of-way marker, an angle iron, firmly set, projecting 6 ins. above the ground, with affixed brass cap mkd. B.I.A. NAVAJO ROADS 19, bears West, 18 lks. dist.
8.37	East right-of-way fence of Navajo Route 12, barbed wire, 4 strand, parallels highway.
26.20	Center of Navajo Route 12, asphalt surfaced, 95 lks. wide, bears NNE and SSW.
40.00	Point for the 1/4 sec. cor. of secs. 31 and 32.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., flush with the surface of the ground, with brass cap mkd.
	T27N R31E
	1/4 S31   S32 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
	Cor. is located in the west track of a trail road, parallels highway.
42.40	West right-of-way fence of Navajo Route 12, barbed wire, 4 strand, parallels highway.
80.00	Point for the cor. of secs. 29, 30, 31, and 32.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.

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CHAINS	
	T27N R31E
	S30   S29
	S31 S32
	1989
	Deposit a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
	Land, gently rolling. Soil, sand and sandy loam. No timber; sparse rabbitbrush and native grasses.
}	East, bet. secs. 29 and 32.
	Over level ground.
4.03	West right-of-way fence of Navajo Route 12, barbed wire, 4 strand, parallels highway.
5.92	Center of Navajo Route 12, asphalt surfaced, 95 lks. wide, bears NNE and SSW.
7.05	East right-of-way fence of Navajo Route 12, barbed wire, 4 strand, parallels highway.
10.00	Power line, 4 strand, bears N. and S.
18.40	Power line, 9 strand, bears SSE and NNW.
35.10	Center of wash, 122 lks. wide, 10 ft. deep, drains N.
40.00	Point for the 1/4 sec. cor. of secs. 29 and 32.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E S29
1	1/4
	S32 1989

# B00K 5329

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

CHAINS

from which

A piñon, 28 ins. diam., bears N. 10 1/4° E., 56 lks. dist., mkd. 1/4 S29 BT.

A piñon, 21 ins. diam., bears N. 54 1/2° W., 117 lks. dist., mkd. X BT.

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

Thence over steep ascent to sandstone promontories.

80.62 Point for the closing cor. of secs. 29 and 32, at intersection with the Arizona-New Mexico State Line.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 10 ins. in the ground, to bedrock, and supported in a mound of stone, 4 ft. base, to top, with brass cap mkd.

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

From this cor. point, an unmarked sandstone of unknown origin,  $12 \times 8$  ins., loosely set, in a scattered mound of stone, projecting 18 ins. above ground, bears N.  $19 \ 1/2^{\circ}$  W.,  $109 \ lks$ . dist.

From this same cor. point, the 89 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line between Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears N. 0°03' W., 37.06 chs. dist.

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

#### **CHAINS**

From this same cor. point, the 90 Mile Post on the Arizona-New Mexico State Line, monumented with an aluminum post, 1 in. diam., with brass cap, set, mkd. and witnessed as described in the field notes of the 1984 dependent resurvey of the Arizona-New Mexico State Line between Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°03' E., 42.86 chs. dist.

Land, level to broken.

Soil, sand, sandy loam and exposed sandstone promontories. Timber, scattered piñon and juniper; sparse sagebrush and native grasses.

Point for the 1/4 sec. cor. of sec. 32 only, at midpoint on the E. bdy. of sec. 32, on the Arizona-New Mexico State Line.

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

T27N | R31E | S32 1/4 | 1989

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

Cor. is located 36 lks. S. of the south bank of a wash, 100 lks. wide, 25 ft. deep, drains ESE, and 32 lks. W. of the southwest bank of the same wash, drains SE.

From this cor. point, the closing cor. of secs. 29 and 32, on the Arizona-New Mexico State Line, bears N. 0°03' W., 39.99 chs. dist.

From this same cor. point, the 90 Mile Post on the Arizona-New Mexico State Line, monumented with an aluminum post, 1 in. diam., with brass cap, set, mkd. and witnessed as described in the field notes of the 1984 dependent resurvey of the Arizona-New Mexico State Line between Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°03' E., 2.87 chs. dist.

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CHAINS	
	From the cor. of secs. 29, 30, 31, and 32.
	West, bet. secs. 30 and 31.
	Over gradual ascent.
7.20	Top of ridge, bears NE and SW.
	Thence over steep descent to nearly level land.
17.30	Trail road, bears NE and SW.
20.81	Barbed wire fence, 4 strand, bears NE and SW.
40.00	Point for the 1/4 sec. cor. of secs. 30 and 31.
; [	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	T27N R31E
	1/4 <del></del>
	S31 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
40.68	Barbed wire fence, 5 strand, bears NE and SW.
49.80	Enter inhabited area.
53.90	Power line, 2 strand, bears NE and SW.
55.15	Power line, 1 strand, bears SSE and NNW.
56.50	Leave inhabited area.
80.00	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 and mkd. as described in the field notes of the survey of the east boundary of T. 27 N., R. 30 E., executed concurrently under this group.
	Land, rolling and nearly level. Soil, sand and sandy loam. No timber; sparse sagebrush, rabbitbrush and native grasses.

CHAINS	
	From the cor. of secs. 29, 30, 31, and 32.
	N. 0°01' E., bet. secs. 29 and 30.
}	Over gently rolling land.
11.10	Wash, 45 lks. wide, 10 ft. deep, drains W.
13.40	Graded road, 27 lks. wide, bears E. and W.
33.70	Wash, 60 lks. wide, 20 ft. deep, drains SW.
40.00	Point for the 1/4 sec. cor. of secs. 29 and 30.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E 1/4
	S30   S29 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located 68 lks. W. of a wash, 45 lks. wide, 7 ft. deep, drains SSW.
46.55	Power line, 3 strand, bears NE and SW.
50.85	Graded road, 30 lks. wide, bears NE and SW.
65.60	Power line, 6 strand, bears SSE and NNW.
80.00	Point for the cor. of secs. 19, 20, 29, and 30.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	T27N R31E S19   S20
	S30 S29
	1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

# 19

CHAINS	
	Cor. is located 48 lks. S. and 30 lks. E. of the left bank of a wash, 100 lks. wide, 25 ft. deep, drains SSW.
	Land, gently rolling. Soil, sand and sandy loam. No timber; sparse sagebrush, rabbitbrush and native grasses.
	East, bet. secs. 20 and 29.
	Over rolling land.
29.02	West right-of-way fence of Navajo Route 12, barbed wire, 5 strand, parallels highway.
30.88	Center of Navajo Route 12, asphalt surfaced, 95 lks. wide, bears NNE and SSW.
32.05	East right-of-way fence of Navajo Route 12, barbed wire, 5 strand, parallels highway.
33.93	West fence of the Navajo Military Cemetery, barbed wire, 4 strand, bears SSE and NNW.
37.24	Southeast fence of the Navajo Military Cemetery, barbed wire, 4 strand, bears NE and SW.
40.00	Point for the 1/4 sec. cor. of secs. 20 and 29.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E
	S20 1/4 ——
	S29
	1989
	Deposit a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
62.25	Brass cap, 3 1/2 ins. diam., set in a concrete collar, 6 ins. diam., firmly set, projecting 2 ins. above ground, mkd. NAVAJO CONTROL SYSTEM 47.93 WR L.A.S. 1959, bears North, 4.04 chs. dist.
80.53	Point for the closing cor. of secs. 20 and 29, at intersection with the Arizona-New Mexico State Line

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

**CHAINS** 

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

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

From this cor. point, the 88 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears N. 0°03' W., 37.00 chs. dist.

From this same cor. point, the 89 Mile Post. on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°03' E., 42.92 chs. dist.

Land, gently rolling.

Soil, sand and sandy loam with scattered sandstone outcrops. Timber, scattered piñon and juniper; sparse sagebrush and native grasses.

Point for the 1/4 sec. cor. of sec. 29 only, at midpoint on the E. bdy. of sec. 29, on the Arizona-New Mexico State Line.

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

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

CHAINS	
	From this cor. point, the closing cor. of secs. 20 and 29, on the Arizona-New Mexico State Line, bears N. 0°03' W., 39.99 chs. dist.
	From this same cor. point, the 89 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Monument No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°03' E., 2.93 chs. dist.
	From the cor. of secs. 19, 20, 29, and 30.
	S. 89°59' W., bet. secs. 19 and 30.
	Over gently rolling land.
39.29	Northeast cor. of frame house, 30 x 16 ft., bears North, 41 lks. dist., long side bears SSW.
39.995	Point for the 1/4 sec. cor. of secs. 19 and 30.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 1 in. below the surface of the ground, with brass cap mkd.
	T27N R31E S19
	1/4 —
	s30
	1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
79.99	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 of T. 27 N., R. 30 E., executed concurrently under this group.
	Land, gently rolling. Soil, sand and sandy loam. No timber; sparse sagebrush, rabbitbrush and native grasses.

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CHAINS	
	From the cor. of secs. 19, 20, 29, and 30.
	N. 0°01' E., bet. secs. 19 and 20.
	Over nearly level ground.
4.45	Easternmost cor. of cinder block house, 40 x 30 ft., bears West, 51 lks. dist., long side bears NW.
9.60	Graded road, 30 lks. wide, bears NE and SW.
10.20	Graded road, 23 lks. wide, bears ENE and WSW.
14.98	Southernmost cor. of house, 40 x 20 ft., bears West, 46 lks. dist., long side bears ENE.
24.22	Brass cap, 3 1/2 ins. diam., set in a concrete collar, firmly set, projecting 6 ins. above ground, mkd. NAVAJO CONTROL SYSTEM FD 53.24 L.A.S. 1959, bears West, 67 lks. dist.
39.70	Barbed wire fence, 5 strand, bears ENE and WSW.
40.00	Point for the 1/4 sec. cor. of secs. 19 and 20.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E
	1/4
	S19   S20 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
53.00	Enter inhabited area, Fort Defiance.
79.67	Center of residential road, asphalt surfaced, 45 lks. wide, bears NNE, in curve to the left.
80.00	Point for the cor. of secs. 17, 18, 19, and 20.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 8 ins. below the surface of the ground, with brass cap mkd.

CHAINS	
	T27N R31E S18   S17 
	1989
	from which
	A steel post serving as cor. of chain link fences, extending NE and NW, bears N. 58 1/2° E., 35 lks. dist.
	A steel post serving as cor. of chain link fences, extending SW and NW, bears S. 28° W., 17 lks. dist.
	The easternmost cor. of house no. 144, a stucco covered structure, bears N. 17 1/2° W., 43 1/2 lks. dist., sides bear SW and NW.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located adjacent to the west edge of the concrete driveway of house no. 144, bears SE and NW.
	Land, nearly level. Soil, sand and sandy loam. No timber; sparse sagebrush and native grasses.
	East, bet. secs. 17 and 20.
	Over nearly level ground, through inhabited area.
12.63	Center of Navajo Route 110, asphalt surfaced, 98 lks. wide, bears SE and NW.
27.73	Center of Navajo Route 12, asphalt surfaced, 120 lks. wide, bears NNE, in curve to the left.
40.00	Point for the 1/4 sec. cor. of secs. 17 and 20.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd.

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

	CIIAINS	
		T27N R31E
		S17
-		1/4
		S20
		1989
		Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

ESE and WNW, and 30 lks. N. of a barbed wire fence, 4 strand, parallels road.

Cor. is located 64 lks. S. of a paved road, 45 lks. wide, bears

79.61 Barbed wire fence, 4 strand, bears N. and S.

80.44 Point for the closing cor. of secs. 17 and 20, at intersection with the Arizona-New Mexico State Line.

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

from which

CHAING

A wooden power pole, 13 ins. diam., bears N. 65° W., 42 1/2 lks. dist.

Cor. of barbed wire fences, 4 strand, extending N., S. and W., bears N. 68 1/4° W., 46 lks. dist.

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

From this cor. point, the 87 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears N. 0°03' W., 36.92 chs. dist.

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

#### CHAINS

From this same cor. point, the 88 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°03' E., 43.00 chs. dist.

Land, nearly level. Soil, sand and sandy loam. No timber; sparse sagebrush and native grasses.

Point for the 1/4 sec. cor. of sec. 20 only, at midpoint on the E. bdy. of sec. 20, on the Arizona-New Mexico State Line.

Set a magnet enclosed in a  $1 \times 1 \times 2$  5/8 in. white plastic case, 30 ins. below the surface of the ground.

### from which

- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground, for a reference monument, bears S. 53°11' W., 51.2 ft. dist., with brass cap mkd. T27N R31E 1/4 S20 RM 51.2 FT TO COR 1989, and an arrow pointing to the cor. Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground, for a reference monument, bears N. 45°10' W., 50.1 ft. dist., with brass cap mkd. T27N R31E 1/4 S20 RM 50.1 FT TO COR 1989, and an arrow pointing to the cor. Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

Cor. is located in the center of a wash, 50 lks. wide, 6 ft. deep, drains W.

From this cor. point, the closing cor. of secs. 17 and 20, on the Arizona-New Mexico State Line, bears N. 0°03' W., 40.00 chs. dist.

	Gila and Salt River Meridian, Arizona
CHAINS	
	From this same cor. point, the 88 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°03' E., 3.00 chs. dist.
	From the cor. of secs. 17, 18, 19, and 20.
	S. 89°59' W., bet. secs. 18 and 19.
	Over nearly level ground, through inhabited area.
12.00	Black Creek, 83 lks. wide, 1 ft. deep, drains SW.
39.995	Point for the 1/4 sec. cor. of secs. 18 and 19.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., flush with the surface of the ground, with brass cap mkd.
	T27N R31E S18
	1/4 —
	<b>S19</b>
	1989
	from which
	A wooden power pole, 7 ins. diam., bears N. 29° E., 99 lks. dist.
	A cottonwood, 23 ins. diam., unmkd., bears S. 7° W., 325 lks. dist.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located 32 lks. S. of a graded road, 41 lks. wide, bears E. and W., and 8 lks. N. of a barbed wire fence, 4 strand, parallels road.
79.99	The cor. of secs. 13, 18, 19, and 24, 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 of T. 27 N., R. 30 E., executed concurrently under this group.

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	oria dia bare river recidiali, arizona
CHAINS	
	Land, nearly level. Soil, sand and sandy loam. Timber, scattered piñon and juniper; sparse sagebrush and native grasses.
	From the cor. of secs. 17, 18, 19, and 20.
	N. 0°01' E., bet. secs. 17 and 18.
ļ	Over nearly level ground, through inhabited area.
8.68	Center of Navajo Route 110, asphalt surfaced, 98 lks. wide, bears SE and NW, at center of bridge over Black Creek, drains SSW.
29.27	Point for the crossing closing cor. of secs. 17 and 18 at intersection with line 2-3 of Tract 37
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 6 ins. below the surface of the ground, with brass cap mkd.
	TR37
	S18   S17 T27N R31E CCC 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located in a fenced alley between the Window Rock Elementary School bus barn and the teachers housing area.
	From this cor. point, AP3 Tract 37, bears S. 73°43' E., 3.32 chs. dist., hereinbefore described.
40.00	Point for the 1/4 sec. cor. of secs. 17 and 18.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E 1/4 S18   S17 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

	·
CHAINS	
	Cor. is located 64 lks. W. of a 6 ft. high chain link fence surrounding the Window Rock Elementary School, fence bears SSE and NNW.
43.13	Chain link fence, 6 ft. high, surrounding Window Rock Elementary School, bears SSE and NNW.
44.00	Point for the crossing closing cor. of secs. 17 and 18 at intersection with line 4-1 of Tract 37.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	ccc
	T27N R31E
	S18   S17
	TR37 1989
	1909
	from which
	A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set flush with the surface of the ground, for a reference monument, bears S. 5°40' W., 36 ft. dist., with brass cap mkd. T27N R31E CCC TR37 RM 36 FT TO COR 1989, 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.
	A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 24 ins. in the ground, for a reference monument, bears N. 79°54' W., 45 ft. dist., with brass cap mkd. T27N R31E CCC S18 RM 45 FT TO COR 1989, 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.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located 7 lks. W. of the right bank of Black Creek, drains SSE.
	From this cor. point, AP 4 Tract 37, bears S. 82°35' E., 0.53 chs. dist., hereinbefore described.
80.00	Point for the cor. of secs. 7, 8, 17, and 18.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.

CHAINS	
	T27N R31E
	S 7   S 8
	S18 S17
	1989
	from which
	A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground, for a reference monument, bears S. 65°44' W., 68.7 ft. dist., with brass cap mkd. T27N R31E S18 RM 68.7 FT TO COR 1989, 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. Set a steel fence post 3 lks. W. of the reference monument.
	A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground, for a reference monument, bears N. 18°13' W., 104.8 ft. dist., with brass cap mkd. T27N R31E S7 RM 104.8 FT TO COR 1989, 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. Set a steel fence post 3 lks. W. of the reference monument.
	Deposit broken glass from a clear bottle and a magnet enclosed in a $1 \times 1 \times 2$ 5/8 in. white plastic case beneath the stainless steel post.
	Set a steel fence post 3 lks. W. of the cor.
	Cor. is located on a sand bar on the right bank of Black Creek, drains S.
	Land, nearly level. Soil, sand and sandy loam. No timber; sparse sagebrush and native grasses.
	East, bet. secs. 8 and 17.
	Over rolling land.
26.80	Graded road, 18 lks. wide, bears SSE and NNW.
40.00	Point for the 1/4 sec. cor. of secs. 8 and 17.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., flush with the surface of the ground, with brass cap mkd.
	I

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CHAINS	
	T27N R31E
	S 8
	1/4 —— S17
	1989
	from which
	A wooden power pole, 12 ins. diam., bears N. 85 1/2° E., 136 lks. dist., in a power line, bears NE and SW.
	The westernmost corner of a stucco covered frame house, 40 x 25 ft., bears S. 25 1/4° E., 145 lks. dist., long side bears NE.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
55.35	West right-of-way fence of Navajo Route 12, barbed wire, 5 strand, parallels highway.
56.79	Center of Navajo Route 12, asphalt surfaced, 45 lks. wide, bears NE and SW.
57.89	East right-of-way fence of Navajo Route 12, barbed wire, 5 strand, parallels highway.
80.02	Point for the closing cor. of secs. 8 and 17, at intersection with the Arizona-New Mexico State Line.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, atop a steel fence post, with brass cap mkd.
	T27N
	S8
	CC
	R31E   1989
	from which
	A steel post serving as cor. of chain link fences extending S. and W., bears N. 1/2° W., 282 lks. dist.
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

#### CHAINS

Cor. is located 1/2 lk. E. of a chain link fence surrounding the Window Rock High School, bears N. and S., and 35 lks. W. of the center of a drainage canal, 50 lks. wide, 3 ft. deep, drains N.

From this cor. point, the southeast corner of the Window Rock High School Gymnasium, irregularly shaped exterior, bears S. 82 3/4° W., 714 lks. dist., short side bears N.

From this same cor. point, Astronomical Station No. 3, on the Arizona-New Mexico State Line, monumented with a sandstone monument, set, mkd. and witnessed as described in the field notes of the 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears N. 0°29' W., 23.45 chs. dist.

From this same cor. point, the 87 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°29' E., 43.06 chs. dist.

Land, rolling.
Soil, sand and sandy loam.
No timber; sparse sagebrush and native grasses.

Point for the 1/4 sec. cor. of sec. 17 only, at midpoint on the E. bdy. of sec. 17, on the Arizona-New Mexico State line.

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

T27N | R31E | S17 1/4 | 1989

Deposit a magnet enclosed in a  $1 \times 1 \times 2$  5/8 in. white plastic case beneath the stainless steel post.

From this cor. point, the closing cor. of secs. 8 and 17, on the Arizona-New Mexico State Line, bears N. 0°29' W., 39.99 chs. dist.

CHAINS	
	From this same cor. point, the 87 Mile Post on the Arizona-New Mexico State Line, 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 1984 dependent resurvey of the Arizona-New Mexico State Line bet. Astronomical Station No. 3 and the 100 Mile Post, executed by Richard S. Kaiser and James L. Werdel, bears S. 0°29' E., 3.07 chs. dist.
	From the cor. of secs. 7, 8, 17, and 18.
	S. 89°58' W., bet. secs. 7 and 18.
	Over rolling ground.
39.995	Point for the 1/4 sec. cor. of secs. 7 and 18.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E S 7
	1/4 —
	S18
	1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Thence enter inhabited area, Fort Defiance.
69.30	Ridge, 150 ft. high, bears NNE and SSW.
69.67	Center of a water storage tank, 51 ft. diam., bears South, 3.97 chs. dist.
79.99	The cor. of secs. 7, 12, 13, and 18, 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 of T. 27 N., R. 30 E., executed concurrently under this group.
	Land, rolling. Soil, sand and sandy loam, with rocky ridges. No timber; sparse sagebrush, rabbitbrush and native grasses.
	<u> </u>

CHAINS	
	From the cor. of secs. 7, 8, 17, and 18.
	N. 0°01' E., bet. secs. 7 and 8.
	Over nearly level ground, in the floodplain of Black Creek.
40.00	Point for the 1/4 sec. cor. of secs. 7 and 8.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E 1/4 S 7   S 8 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located 250 lks. E. of the left bank of Black Creek, 150 lks. wide, 6 ft. deep, drains SSE.
45.31	Barbed wire fence, 3 strand, bears SSE and NNW.
50.16	South right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
51.32	Center of Navajo Route 7, asphalt surfaced, 45 lks. wide, bears ESE and WNW.
52.47	North right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
80.00	Point for the cor. of secs. 5, 6, 7, and 8.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T27N R31E S 6   S 5
	S 7   S 8 1989
	Deposit broken glass from a clear bottle and a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

CHAINS	
	Raise a mound of stone, 4 ft. base, 1 ft. high, 3 lks. W. of cor.
	Land, nearly level. Soil, sand and sandy loam. Timber, scattered piñon and juniper; sparse sagebrush, rabbitbrush and native grasses.
	East, bet. secs. 5 and 8.
	Over rolling land.
12.80	Top of ridge, 100 ft. high, bears NE and SW.
15.89	Barbed wire fence, 3 strand, bears NE and SW.
40.00	Point for the 1/4 sec. cor. of secs. 5 and 8.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 20 ins. in the ground, with brass cap mkd.
	T27N R31E S 5 1/4 ——
	S 8 1989
	Deposit a magnet enclosed in a 1 x 1 x 2 $5/8$ in. white plastic case beneath the stainless steel post.
	Cor. is located 10 lks. E. of the left bank of a wash, 50 lks. wide, 4 ft. deep, drains SSW.
42.76	Barbed wire fence, 5 strand, bears NE and SW.
43.20	Graded road, 41 lks. wide, bears NE and SW.
43.62	Barbed wire fence, 5 strand, bears NE and SW.
49.30	Top of ridge, 60 ft. high, bears NNE and SSW.
74.70	Earthen dike, 9 lks. wide, 7 ft. high, bears SE and NW.
80.16	Point for the closing cor. of secs. 5 and 8, at intersection with the Arizona-New Mexico State Line.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

**CHAINS** 

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

From this cor. point, the 85 Mile Post, hereinbefore described, bears N.  $0^{\circ}22^{\circ}$  E., 37.05 chs. dist.

Land, rolling.

Soil, sand and sandy loam with rocky ridges.

Timber, scattered piñon and juniper; sparse sagebrush and native grasses.

Point for the 1/4 sec. cor. of sec. 8 only, at midpoint on the E. bdy. of sec. 8, on the Arizona-New Mexico State Line.

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

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.

From this cor. point, the closing cor. of secs. 5 and 8, on the Arizona-New Mexico State Line, bears N.  $0^{\circ}22'$  E., 40.00 chs. dist.

From this same cor. point, the 86 Mile Post on the Arizona-New Mexico State Line, hereinbefore described, bears S. 0°22' W., 2.90 chs. dist.

Point for the 1/4 sec. cor. of sec. 5 only, on the E. bdy. of sec. 5, 40.00 chs. in northing from the closing cor. of secs. 5 and 8, on the Arizona-New Mexico State Line.

Survey of the Subdivisional Lines, T. 27 N., R 31 E., Gila and Salt River Meridian, Arizona

CHAINS	

Set a brass tablet, 3 1/4 ins diam., 3 1/2 ins. stem, in a drill hole, cemented in place, in sandstone bedrock, flush with the surface of the bedrock, with top mkd.

T27N R31E S5 1/4 1990

from which

A forked juniper, 21 ins. diam. at base, bears S. 86 3/4° W., 234 lks. dist., mkd. 1/4 S5 BT.

Deposit a magnet enclosed in a  $1 \times 1 \times 2$  5/8 in. white plastic case in the drill hole beneath the brass tablet.

From this cor. point, the closing cor. of Tps. 27 and 28 N., on the Arizona-New Mexico State Line, hereinbefore described, bears N. 2°17' W., 40.01 chs. dist.

From this same cor. point, the 85 Mile Post on the Arizona-New Mexico State Line, hereinbefore described, bears S. 2°17' E., 2.95 chs. dist.

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

S. 89°59' W., bet. secs. 6 and 7.

Over level ground.

22.80 | Black Creek, 108 lks. wide, 3 ft. deep, drains S.

34.00 | Power line, 4 strand, bears NNE and SSW.

40.00 Point for the 1/4 sec. cor. of secs. 6 and 7.

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

T27N R31E S 6 1/4 — S 7 1989

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CHAINS	
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located 88 lks. S. of the right bank of a wash, 100 lks. wide, 20 ft. deep, drains ENE.
	Thence over steep ascent.
63.77	East right-of-way fence of Navajo Route 7, barbed wire, 5 strand, parallels highway.
65.41	Center of Navajo Route 7, asphalt surfaced, 68 lks. wide, bears SSE and NNW.
67.06	West right-of-way fence of Navajo Route 7, barbed wire, 5 strand, and power line, 6 strand, parallel highway.
70.18	A right-of-way monument, a brass cap, 3 ins. diam., set in a concrete collar, 5 ins. diam., firmly set, projecting 4 ins. above ground, mkd. B.I.A. ROADS 19, bears North, 3.00 chs. dist., and witnessed by an angle iron, 3 lks. N. of the brass cap.
80.00	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., with brass cap, set, mkd. and witnessed as described in the field notes of the survey of the east boundary of T. 27 N., R. 31 E., executed concurrently under this group.
	Land, level and steeply sloping. Soil, sand and sandy loam, transitioning to rocky. Timber, dense piñon and juniper; undergrowth, sparse sagebrush, rabbitbrush and native grasses.
	From the cor. of secs. 5, 6, 7, and 8.
	North, bet. secs. 5 and 6.
	Over level ground.
40.00	Point for the 1/4 sec. cor. of secs. 5 and 6.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, encircled with an embedded collar of stone, with brass cap mkd.

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	Deposit broken glass from a brown colored bottle and a magnet enclosed in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	Cor. is located 3.55 chs. W. of the right bank of Black Creek, 200 lks. wide, 12 ft. deep, drains SW.
41.30	Graded road, 33 lks. wide, bears ENE and WSW.
	Thence ascend steep slope.
41.75	Power line, 1 strand, bears NE and SW.
47.31	Power line, 7 strand, bears NE and SW.
79.98	The cor. of secs. 5, 6, 31, and 32, on the N. bdy. of the Tp., hereinbefore described.
	Land, level to steeply sloping. Soil, sand and sandy loam, transitioning to rocky. Timber, dense piñon and juniper; undergrowth, sparse sagebrush, rabbitbrush and native grasses.
	Survey of Certain Partition Lines in Section 17, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona
	From A.P. 3 of Tract 37, hereinbefore described.
	S. 73°43' E. on a extension of line 2-3 of Tract 37.
	Over level ground.
1.70	Point for an auxiliary meander cor. on the right bank of Black Creek, not monumented.
	Thence over bed of Black Creek.
2.94	Point for an auxiliary meander cor., at intersection with the median line of Black Creek, impracticable to monument.

Survey of Certain Partition Lines in Section 17, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

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From the point for A.P. 4 of Tract 37, hereinbefore described.

S. 82°35' E., on an extension of line 1-4 of Tract 37.

Over bed of Black Creek.

1.47 Point for an auxiliary meander cor., at intersection with the median line of Black Creek, impracticable to monument.

Survey of a Portion of the Median Line of Black Creek in Section 17, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

From the point for the auxiliary meander cor. on the median line of Black Creek, on the extension of line 2-3 of Tract 37.

Thence upstream with the meanders of the median line of Black Creek.

N. 0°13' W., 3.97 chs.

N. 8°44' E., 2.35 chs.

N. 17°07' E., 3.14 chs.

N. 47°15' W., 4.54 chs.

N. 31°43' W., 3.13 chs.

N. 14°38' W., 1.23 chs.

The point for the auxiliary meander cor. on the median line of Black Creek, on the extension of line 1-4 of Tract 37.

Informative Traverse of a Portion of the Right Bank of Black Creek in Section 17, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

From the point for the auxiliary meander cor. on the right bank of Black Creek, on the extension of line 2-3 of Tract 37.

Thence upstream with an informative traverse of the right bank of Black Creek.

# Informative Traverse of a Portion of the Right Bank of Black Creek in Section 17,

T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

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N. 5°42' W., 3.72 chs.

N. 12°12' E., 4.14 chs.

N. 49°40' W., 4.47 chs.

N. 18°38' W., 2.92 chs.

Intersect line 3-4 of Tract 37.

5.78 chs.

The point for the auxiliary meander cor. on the right bank of Black Creek, on line 4-1 of Tract 37.

Informative Traverse of a Portion of the Left Bank of Black Creek in Section 17, T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

From a point on the left bank of Black Creek, not monumented, on an extension of line 2-3 of Tract 37, from which the point for the auxiliary meander cor. on the median line of Black Creek, on the extension of line 2-3 of Tract 37, bears N. 73°43' W., 1.17 chs. dist.

Thence upstream with an informative traverse of the left bank of Black Creek.

N. 5°15' E., 6.32 chs.

N. 22°03' E., 4.56 chs.

N. 44°49' W., 7.96 chs.

N. 10°39' W., 0.16 chs.

Intersect the extension of line 1-4 of Tract 37, from which the auxiliary meander cor. on the median line of Black Creek, on the extension of line 1-4 of Tract 37, bears N. 82°35' W., 1.82 chs. dist.

T. 27 N., R. 31 E., Gila and Salt River Meridian, Arizona

#### CHAINS

#### GENERAL DESCRIPTION

Township 27 North, Range 31 East is located in Apache County, Arizona and lies entirely within the boundaries of the Navajo Indian Reservation. The community of Fort Defiance, Arizona is located within the north half of the township. The east bdy. of the township is identical with the Arizona-New Mexico State Line. The elevation varies from 6700 to 7400 ft. above sea level. The soil is predominately sandy loam with exposed sandstone outcrops and formations.

The principal drainage is Black Creek, which drains southerly through the west half and eventually along the west edge of the township. Numerous secondary drainages flow into Black Creek. Vegetation is predominately native grasses and sagebrush with piñon and juniper at the higher elevations.

The terrain is varies from level to rolling; the exception is section 6, which is mountainous. Large dry lake beds exist in sections 5 and 31.

The community of Fort Defiance is primarily located in section 18. The principal land use is livestock grazing. There is no evidence of active mining.

Navajo Route 12 bears generally N. and S. through secs. 8, 17, 20, 29, 31 and 32. Navajo Route 7 bears generally E. and W. through secs. 7 and 8, and then N. and S. through secs. 6 and 7. In addition, access is provided throughout the township by numerous secondary and trail roads. Houses are located throughout the township.

The mean magnetic declination is  $12\ 1/2^{\circ}$  E., as taken from the magnetic declination map published in 1988 by the U.S. Geological Survey.

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# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### FIELD ASSISTANTS

FIELD ASSISTANTS	
NAMES	CAPACITY
Stephen K. Hansen	Surveying Technician
Wallace R. Ott, Jr.	Surveying Technician
Rebecca Ramirez	Surveying Technician
Jones Curtiss	Navajo Engineering Technician II
Andrew Murphy	Navajo Engineering Technician II
Barney Woodie	Navajo Engineering Technician II

#### CERTIFICATE OF SURVEY

We, Kevin R. DeRossett and Olian T. Shockley, Cadastral Surveyors, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 27th day of November, 1987, and supplemental special instructions bearing date of the 26th day of March, 1990, we have dependent resurveyed a portion of the Arizona-New Mexico State Line between the 84 Mile Post and Astronomical Station No. 3 and Tract 37, surveyed the north boundary, subdivisional lines, certain partition lines in section 17 and a portion of the median line of Black Creek in section 17, and executed informative traverses of portions of the right and left banks of Black Creek in section 17, of Township 27 North, Range 31 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 us and under our 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.

Kevin R. DeRossett is no longer assigned to this office and is not available for signature.

JULY 9, 1991	William F. alva
(Date)	(Chief, Navajo Cadastral Sec.)
JULY 11, 1991 (Date)	(Cadastral Surveyor)
	CERTIFICATE OF APPROVAL
	BUREAU OF LAND MANAGEMENT

Arizona State Office
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the Arizona-New Mexico State Line between the 84 Mile Post and Astronomical Station No. 3 and Tract 37, the survey of the north boundary, subdivisional lines, certain partition lines in section 17 and a portion of the median line of Black Creek in section 17, and informative traverses of portions of the right and left banks of Black Creek in section 17, of Township 27 North, Range 31 East, Gila and Salt River Meridian, Arizona, executed by Kevin R. DeRossett and Olian T. Shockley, Cadastral Surveyors, having been critically examined and found correct, are hereby approved.

JUL 3 0 1991 (Date)	Scring Sans Surveyor of Arizona)
	CERTIFICATE OF TRANSCRIPT
	transcript of the field notes of the above-described Gila and Salt River Meridian, Arizona is a true copy
(Date)	(Chief Cadastral Surveyor of Arizona)