Arizona

32 109 34 E.E. Harris, 1937

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 7327

Latitude 32°15' Longitude 109°45'

(1) FROM NEAR THE SOUTHWEST CORNER OF SECTION 29 T12S R24E NORTH AND WEST INTO THE NORTHEAST CORNER OF WINCHESTER MTS QUADRANGLE (67) (By E.E. Harris, 1937; Book: B 7327)

T12S, R24E, near southwest corner section 29; 70 ft N. and 30 ft E. of X-rd. W.; 1 ft W. of fence line; in concrete post; standard tablet stamped "1937 H 26 4237" (Revised 1942 by R.E. Skinner) (Destroyed)

4236.786

Reference mark, 215 ft SW. of tablet; in crotch of mesquite tree; copper nail and washer

SI=NI= 179

T12S, R24E, near southwest corner section 20; 120 ft N. and 110 ft E. of dim X-rds.; near center of top face of north wall of concrete DEST179 box watering trough; chiseled square 4246.78

T12S, R24E, near southwest corner section 17; 80 ft N. and 30 ft E. of jct. of T-rd. W.; 1 ft SW. of fence line; in concrete post; standard tablet stamped "1937 H 27 4255"

4255:072

T12S, R24E, near southeast corner section 7; 4.5 mi S. of Crookeson 3ENF 679 Ranch; 180 ft N. and 100 ft W. of jct. of T-rd. W.; near center of top face of east wall of concrete box watering trough; chiseled 4265.67 square

T12S, R23E, near southeast corner section 12; 30 ft N. of center of rd.; 1 ft S. and 58 ft W. of T-angle in fence line; in concrete 4268.901 post; standard tablet stamped "1937 H 28 4269" (Destroyed)

5 =NF 179 Reference mark, 300 ft SE. of tablet; on south side of rd.; in 4267.75 crotch of mesquite tree; copper nail and washer

SENF 119 T12S, R23E; near southeast corner section 11; on west edge of rd.; 4275.4Q0 80 ft N. of X-rds.; in 4-inch hub; copper nail and washer

Destroyed 179 T12S, R23E, near southwest corner section 1; 85 ft N. and 28 ft E. of jct. of T-rd. W.; 1 ft W. of fence line; in concrete post; 4286.178 standard tablet stamped "1937 H 29 4286"

SENF 79 Reference mark, 155 ft SW. of tablet; on west edge of rd.; 1 ft E. 4286 - 31 of fence line; in 4-inch hub; copper nail and washer

Top of iron pipe with GLO cap stamped "TPS 11 & 12S R23E 36 1 2 1913"

Not Found 79 4292.882

WEST OF GREASSWOOD MTN

GREASSWOOD MTN

SRUARS MTN

Page 1 of

WILLOX NORTH

Page 1 of 2

5/12/76 dld

32 109 34 E.E. Harris, 1937

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 7327

(1) T11S, R23E, near southwest corner section 35; 23 ft W. of center Not Found 79 of rd.; 60 ft N. of E.-W. fence line; 1 ft E. of fence line; in concrete post; standard tablet stamped "1937 H 30 4305" 4304.902 Reference mark, 50 ft S. and 153 ft W. of tablet; iron pipe with GLO cap stamped "T11N R23E SECS 34 35 2 3 1913" (Designated SULPHUR Triangulation Station by Hankin, 1940 or 1941) 4304.830 Iron pipe with GLO cap stamped "T11S R23E 1/4 COR SECS 34 35 1913" Iron pipe with GLO cap stamped "T11S R23E SECS 26 27 34 35 1913" T11S, R23E, near southwest corner section 23; 31 ft E. of center of rd.; 102 ft N. of T-angle in fence line; in concrete post; standard 4324.019 tablet stamped "1937 H 31 4324" (Destroyed) Not Found 79 Reference mark, 147 ft SW. of tablet; iron pipe with GLO cap

erroneously stamped "T11S R23E 34 33 4 3 1913"

4324.460

Iron pipe with GLO cap stamped "T11S R23E 1/4 COR 22 23 1913"

Not Found 179 4335.562

T11S, R23E, near northwest corner section 23; on east edge of rd.; 80 ft S. of center of E.-W. rd.; 1 ft W. of fence line; in 4-inch hub; copper nail and washer

4345.78

T11S, R23E, near southeast corner section 16; about 3.7 mi SE. of Hooker Ranch; 70 ft W. of rd. at prominent angle from W. to NW.; 91 ft S. of cattleguard; 175 ft N. of corner fencepost; in concrete post; standard tablet stamped "1937 H 32 4344"

4343.616

Reference mark, 260 ft SE. of tablet; cap on iron pipe stamped T11S R23E"

9FNF 179 4342.776.

WILLCOX (66) 32 109 34
WILLCOX (66) Arizona E.E. Harris, 1939

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 8347

Latitude 32°15' Longitude 109°45'

(2) FROM POINT 8 MILES SOUTH OF BONITA NORTH ALONG ROAD INTO MT. GRAHAM QUADRANGLE (90) (By E.E. Harris, 1939; Book: B 8347)

Bonita, 8 mi S. of; iron pipe with GLO cap stamped "1/4 COR SECS 14 15 1913" 4359.184

Bonita, 7.5 mi S. of; near southwest corner section 11, T11S, R23E; 38 ft E. of center of hwy.; 93 ft N. and 1 ft W. of T-angle in fence line; in concrete post; standard tablet stamped "1939 H 3 Not Found 79 4372."

Reference mark, 155 ft SW. of tablet; iron pipe with GLO cap 3FNF 119 stamped "T11S, R23E SECS 10 11 14 15" 4372.324

Bonita, 6.5 mi S. of; iron pipe with GLO cap stamped "T11S R23E SECS 2 3 10 11 1913" 4398.382

WILLCOX (66)

Arizona

W.A.E. Hult, 1907 W.A. Allen, 1940 B.K. Coker, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: A 6659, B 8852, PV 912

Latitude 32°15' Longitude 109°45'

(3) FROM THE WEST SIDE OF LUZENA QUADRANGLE (65) SOUTHWEST ALONG I-HIGHWAY 10 (BUSINESS) INTO THE NORTH EDGE OF COCHISE QUADRANGLE (46) (By W.A.E. Hult, 1907; W.A. Allen, 1940; B.K. Coker, 1974; Books: A 6659, B 8852, PV 912)

BM "B 324 1952" (NGS Quad 32 109 3, line 101)

4371.118

B 324 by NGS

4370.969 (1952 Elev.)

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 7.0 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; 100 ft NW. of centerline of westbound traffic lanes, 0.5 ft SE. of right-of-way fence; set in 12-inch square concrete post projecting 0.2 ft; standard NGS reference mark disk stamped "NASH NO 1 1960" (NGS "NASH NOW, NO.3 Quad 32 109 3, line 103)

94165 4356.536

NO 1 by NGS 4356.254 (1962 Elev.)

NASH TRIANGULATION STATION (NGS): Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 7.0 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; 96 ft NW. of centerline of westbound traffic lanes, 4.5 ft SE. of fence; set in top of concrete post flush with ground; standard NGS disk stamped "NASH 1960" (NGS Quad 32 109 3, line 103)

9-1165 4356.360

NASH by NGS

4356.094 (1962 Elev.)

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 7.0 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; 99 ft NW. of centerline of westbound traffic lanes, 0.7 ft SE. of fence; set in 9-1165 concrete post projecting 2 inches; standard NGS reference mark disk stamped "NASH NO 2 1960" (NGS Quad 32 109 3, line 103) 4356.455

NO 2 by NGS

4356.176 (1962 Elev.)

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 6.2 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; at point where frontage rd. on north side of hwy. ends; 30 ft W. of gate in rightof-way fence, 28 ft NW. of centerline of north frontage rd., 3 ft W. of white angle-iron post with "S.L. 2408+92.25" painted on it, 2.5 ft E. of angle point in fence line; in right-of-way fence line; set in concrete post; ASHD disk, unstamped

Het Found 79 Chit 4326.055

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 5.7 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; about 0.1 mi NW. across field from USGS BM "129 H 1907"; 20 ft SE. of centerline of eastbound traffic lanes, level with hwy.; set in center of southeast concrete bridge headwall; ASHD disk stamped "2383+85 4315.28

Not Found 1/14 4314.909

ASHD by NGS

1938" (NGS Quad 32 109 3, 1ine 101)

4314.680 (1952 Elev.)

WILLCOX (66)

Arizona

W.A.E. Hult, 1907 W.A. Allen, 1940 B.K. Coker, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: A 6659, B 8852, PV 912

(3) BM "129 H 1907" (NGS Quad 32 109 3, line 101)

4320.182

129 H by NGS

4320.129 (1952 Elev.)

OHIO TRIANGULATION STATION (NGS): Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 5.3 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; 95 ft NW. of centerline of westbound traffic lanes, 14 ft SE. of right-of-way fence; set in concrete post flush with ground; NGS disk stamped "OHIO 1960" (NGS Quad 32 109 3, line 103)

9-1165 4305.034

OHIO by NGS

4304.821 (1962 Elev.)

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 5.3 mi NE. along I-Hwy. 10 (Business) and I-Hwy. 10; 98 ft W. of centerline of westbound traffic lanes, 11 ft SE. of right-of-way fence; set in concrete post projecting 0.2 ft; standard NGS reference mark disk stamped "OHIO NO 2 1960" (NGS Quad 32 109 3, line 103)

9-1165

4305.074

NO 2 by NGS

4304.860 (1962 Elev.)

DRURY TRIANGULATION STATION (NGS): Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 4.0 mi NE. along I-Hwy. 10 (Business) to Stewart Rd. overpass; 83 ft NW. of centerline of median for I-Hwy. 10 (Business); 122 ft WNW. of intersection, 12 ft SE. of fence; set in concrete post projecting 0.4 ft; standard NGS triangulation tablet stamped "DRURY 1945" (NGS Quad 32 109 3, line 101) (Also in line 11)

4246,303

DRURY by NGS

4246.173 (1952 Elev.)

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 4.0 mi NE. along I-Hwy. 10 (Business) to Stewart Rd. overpass; 112 ft N. of flashing warning light, 95 ft NW. of centerline of I-Hwy. 10 (Business), 5 ft SE. of fence; set in concrete post; standard NGS reference mark disk stamped "DRURY NO 2 1945" (NGS Quad 32 109 3, line 101)

4245.359

NO 2 by NGS

4245.231 (1952 Elev.)

Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 3.1 mi NE. along I-Hwy. 10 (Business); about 0.3 mi NE. of Fifth Wheel Service Station and Cafe; 18 ft SE. of centerline of hwy.; set in center of southeast concrete bridge headwall; ASHD disk stamped "2246+00 4201.91 1938" (NGS Quad 32 109 3, line 101)

4201.359

ASHD by NGS

4201.514 (1952 Elev.)

32 109 34 W.A.E. Hult, 1907 W.A. Allen, 1940

B.K. Coker, 1974

Arizona

WILLCOX (66)

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: A 6659, B 8852, PV 912

(3) Willcox Post Office, 0.1 mi E. of to I-Hwy. 10 (Business), thence 2.9 mi NE. along I-Hwy. 10 (Business); at Fifth Wheel Cafe and Service Station; 294 ft E. of southeast corner of cafe, 20 ft S. of centerline of hwy.; set in center of concrete bridge headwall; AHD tablet stamped "2235+97.9 4196.48 1938" (NGS Quad 32 109 3, line 101)

4195.852

AHD by NGS

4196.110 (1952 Elev.)

Willcox Post Office, 0.1 mi E. of, thence 2.0 mi NE. along I-Hwy. 10 (Business); 98 ft SE. of centerline of hwy., 83 ft S. of southeast end of culvert, 2 ft NW. of fence; set on copper-coated steel rod encased in 6-inch white pipe; standard tablet stamped "1 BKC 1974"

4175.155

Willcox, 1.7 mi NE. along RR. from station; 0.4 mi NE. of milepost 1076 and rd. X-ing.; on northwest side of track; standard iron post with bronze cap stamped "133 H 1907" (NGS tie) (Not found, 1974)

9 = 10 = 179 4173.407

Willcox Post Office, 0.1 mi E. of, thence 1.0 mi NE. along I-Hwy. 10 (Business); 0.25 mi NE. of intersection of Rex Allen Avenue, 20 ft SE. of centerline of hwy.; 18 ft SW. of milepost 341; set in concrete bridge headwall, level with centerline of hwy.; ASHD tablet stamped "2134+0025 4173.60" (NGS Quad 32 109 3, line 101)

4172.999

ASHD by NGS

4173.171 (1952 Elev.)

Willcox, 0.58 mi NE. of along State Hwy. 86; on top of southeast guardrail of concrete culvert; ASHD tablet stamped "STA 2111+99.7 4171.40" (Destroyed)

DEST 179 4170.933

Willcox, 100 ft SE. of Southern Pacific RR. Station; in front of site of U.S. Weather Bureau Station; standard iron post with bronze cap stamped "134 1/2 H 1907" (Reported disturbed and new elevation, "179 1940)

4166.980

Willcox, 100 ft S. of Southern Pacific RR. Station; 55 ft SW. of BM "134 1/2 H 1907"; 27 ft SE. at same elevation as main eastbound track; in concrete post; standard tablet stamped "9 WA 1940" (Destroyed)

0557, 109 4166.994

Willcox Post Office, 0.1 mi E. of, thence 0.6 mi NE. along I-Hwy. 10 (Business); 59 ft NE. of Wood Street, 40 ft E. of centerline of I-Hwy. 10 (Business); set in center of southeast concrete bridge headwall; ASHD disk stamped "2111+98 4172.72"

4171.001

ASHD by NGS

4170.933 (1952 Elev.)

WILLCOX (66)

Arizona

32 109 34

W.A.E. Hult, 1907

W.A. Allen, 1940

B.K. Coker, 1976

Trunk Line Adjusted Elevations

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: A 6659, B 8852, PV 912

(3) Willcox Post Office, 0.1 mi E. of, thence 0.4 mi NE. along I-Hwy. 10 (Business); 92 ft N. of Wee Blue Inn Motel sign, 39 ft SE. of centerline of hwy.; in center of concrete headwall; ASHD tablet stamped "2103+75 4171.44" (NGS Quad 32 109 3, line 101)

4169.701

ASHD by NGS

4169.585 (1952 Elev.)

Arizona

32 109 34 W.A. Allen, 1940 B.K. Coker, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: B 8852, PV 912

Latitude 32°15' Longitude 109°45'

(4) FROM A POINT ABOUT 2 MILES SOUTHWEST OF WILLCOX THENCE WEST ALONG THE AIRPORT ROAD THENCE SOUTH INTO THE NORTH EDGE OF COCHISE QUADRANGLE (46) (By W.A. Allen, 1940, B.K. Coker, 1974; Books: B 8852, PV 912)

"POWELL NO 1 1960" (NGS Quad 32 109 3, line 103)[1974 USGS ELEVATION] (This mark is in Cochise Quad 46) 4171,622

BM "Y 261 1945" (NGS Quad 32 109 3, line 101-Spur line to Cochise County Airport) (Note: This mark was not leveled on forward run) Willcox Post Office, 0.1 mi N. of, thence 0.5 mi W. along Maley Street, thence 0.05 mi S. along Bisbee Ave., thence 0.6 mi W. on Airport Rd.; 25 ft S. of centerline of driveway at south side of overpass, 22 ft E. of centerline of gate, 1.5 ft S. of fence; set in concrete post; standard NGS disk stamped "Y 261 1946"

4171.860

Willcox Post Office, 0.1 mi N. of; thence 0.5 mi W. along Maley Street, thence 0.05 mi S. along Bisbee Ave., thence 1.2 mi W. along Airport Rd.; 31 ft N. of centerline of rd., 6.5 ft W. of fence, 5.8 ft N. of E.-W. fence; in concrete post projecting 0.5 ft above ground; standard tablet stamped "4177 WA 10 1940" (NGS Quad 32 109 3, line 101, designated 4177)

4176.169

4177 by NGS

4176.117 (1952 Elev.)

Willcox Post Office, 0.1 mi N. of, thence 0.5 mi W. along Maley Street, thence 0.05 mi S. along Bisbee Ave., thence 1.8 mi W. along Airport Rd.; 37 ft N. of centerline of rd., 5 ft N. of fence line, 2.2 ft S. of witness post; in concrete post; NGS bronze disk stamped "T 324 1952" (NGS Quad 32 109 3, line 101)

4178.586

T 324 by NGS

4178.847 (1952 Elev.)

Willcox Post Office, 0.1 mi N. of, thence 0.5 mi W. along Maley Street, thence 0.05 mi S. along Bisbee Ave., thence 2.5 mi W. along Airport Rd.; 37 ft S. of centerline of rd., 27 ft E. of east gatepost at entrance to airport, 1.5 ft S. of fence, 1.3 ft W. of witness post; in concrete post projecting 0.2 ft; standard NGS disk stamped "Z 261 1945" (NGS Quad 32 109 3, line 101) 4181.233

> Z 261 by NGS 4181.419 (1952 Elev.)

Willcox, 4.16 mi W. of along Cascabel Rd.; 0.47 mi W. of rd. inter-Not Found 79 section; 5 ft N. of fence; 55 ft N. of center of rd.; in concrete 4187.179 post; standard tablet stamped "11 WA 1940" 1940 Elev.

Arizona

32 109 34

W.A. Allen, 1940 B.K. Coker, 1974

Trunk Line Adjusted Elevations Based on National

Geodetic Vertical Datum of 1929

Books: B 8852, PV 912

(4) Willcox, 4.99 mi W. of along Cascabel Rd.; 175 ft N. of ranch house; 60 ft N. of center of rd.; on rock; chiseled square 1940 Elev. 4192.27

Willcox, 6.07 mi W. of along Cascabel Rd.; 45 ft N. of center of rd.; New Degc. '7; in concrete post; standard tablet stamped "12 WA 1940" 1940 Elev. 4263.565

WILLCOX (66)

Arizona

R.B. Steele, 1941

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 9494

Latitude 32°15' Longitude 109°45'

(5) FROM A POINT 6 MILES NORTH OF WILLCOX NORTH AND NORTHEAST ALONG ROAD AND TRAIL VIA PALMER RANCH AND O-BAR-O RANCH INTO MT. GRAHAM QUADRANGLE (90) (By R.B. Steele, 1941; Book: B 9494)

Standard USGS tablet stamped "1937 H 23 4243" (Described in line 9) 1974 Elev.

T12S, R24E, near northeast corner section 36, where telephone line crosses rd.; at base of telephone pole; on rock; chiseled square 4300.33

T12S, R24E, in northwest 1/4 section 25; 107 ft E. of steele cattleguard; 2 ft S. of fence line; in concrete post; standard tablet stamped "1 RS 1941 4357"

DESTI

4357.032

4243.309

Reference mark, 107 ft W. of tablet; at northwest corner of steel cattleguard; rail spike 4355.98

T12S, R24E; 1 mi SE. of Palmer Ranch house; in Y-rd. fork; 26 ft DEST NW. of rd. NE.; 25 ft E. of rd. N.; in boulder; chiseled square 4383.38

DEST. T12S, R24E; 500 ft SE. of 1/4 corner between sections 12 and 13; in northeast corner of yard of Palmer Ranch house; in concrete post; standard tablet stamped "2 RS 1941 4416" \BM has been moved 4416.418

Reference mark, 500 ft NW. of tablet; top of iron pipe with GLO cap stamped "1/4 COR S12 S13" 4420.301

Top of iron pipe with GLO cap stamped "T12S R24E R25E SECS 1 6 7 12" 4500.293

T12S, R24E, near north 1/4 corner section 1; 0.9 mi NW. along rd. from cattleguard; 41 ft NE. of centerline of rd.; in concrete post; standard tablet stamped "3 RS 1941 4527" 4526.640

Reference mark, 96 ft SE. of tablet; 59 ft NE. of center of rd.; 6 4527.26 ft W. of 5-prong yucca tree; on rock; chiseled square

T11S, R24E, in northeast 1/4 section 36; 68 ft SE. of center of rd.; 300 ft NE. of rd. fork; in west side of base of 4-inch mesquite SFNE 4520.58 tree; copper nail and washer

T11S, R24E, in section 25; 1 mi S. along rd. from cattleguard; 22 ft SW. of 3 small mesquite trees; 11 ft W. of center of rd.; in concrete post; standard tablet stamped "4 RS 1941 4573" 4572.639

SENF Reference mark, 318 ft NE. of tablet; 46 ft SE. of center of rd.; 4577.72 in base of 6-inch mesquite tree; copper nail and washer

Arizona

32 109 34 R.B. Steele, 1941

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 9494

(5) T11S, R24E; about 400 ft W. of center of section 24; at northwest corner of steel cattleguard; in top of post; copper nail and washer

DEST. 4671.02

Top of iron pipe with GLO cap stamped "T11S R24E R25E COR SECS 13 18 19 24"

4767.625

T11S, R25E; 0.36 mi N. of southwest corner section 18; 19 ft N. of steel cattleguard; 3 ft E. of FS boundary fence; in concrete post; standard tablet stamped "5 RS 1941 4781"

4780.463

Reference mark, 30 ft S. of tablet; on top of east end of south concrete retaining wall of steel cattleguard; chiseled square

4780.87

O-Bar-O Ranch, 0.5 mi SW. of, at old rd. fork; on northwest edge of main rd.; on top of concrete base of old gatepost; chiseled square

SFNF.

4909.17

O-Bar-O Ranch, at front door of ranch house; on top near center of bottom concrete step; standard tablet stamped "6 RS 1941 4957" 4

4956.863

Reference mark, 135 ft NE. of tablet; on north side of rd.; in base of large cottonwood tree; copper nail and washer 4959.34

O-Bar-O Ranch, 1 mi NE. of along O-Bar-O Jernigan Ranch Trail; 100 ft SW. of 12-inch ash tree in middle of wash; at jct. of big draw from S.; in base of liveoak tree which has long blaze with three hacks above southwesternmost of clump of four; copper nail and washer

S=N/= 3096.20

Arizona

32 109 34 R.B. Steele, 1941

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 9494

Latitude 32°15' Longitude 109°45'

(6) FROM LUZENA QUADRANGLE (65) 2 MILES SOUTH OF RASO NORTHWEST ALONG ROAD TO POINT 0.9 MILE NORTHEAST OF DRURY (By R.B. Steele, 1941; Book: B 9494)

Raso, 2.1 mi SE. of along desert rd.; 1 mi SE. of rd. crossing Southern Pacific RR. track; 103 ft NE. of cattleguard; 2 ft S. of fence line; in concrete post; standard tablet stamped "37 RS 1941 4477"

Reference mark, 175 ft W. of tablet; 55 ft SW. of center of rd.; 27 ft NW. of fence; in base of mesquite tree; copper nail and washer

4478.76

Raso, 1.1 mi SW. of along Southern Pacific RR. track; in southeast angle of rd. X-ing., on top of northeast corner of cattleguard; copper nail and washer

Arizona

32 109 34 G.W. Moore, 1942

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 9791

Latitude 32°15' Longitude 109° 45'

(7) FROM POINT 10 MILES SOUTH OF BONITA WEST ALONG ROAD INTO WINCHESTER MTS. QUADRANGLE (67)(By G.W. Moore, 1942; Book: B 9791)

Petite Hooker Ranch, 8.1 mi E. of, 27 ft S. of rd. from gate; 40 ft S. and 6 ft E. of fence corner; at center of E.-W. rd.; iron pipe with GLO cap stamped "1/4 SECS 34 3 1913"

3 = n = 179 4296.352

Reference mark, 179 ft E. of iron pipe; 28 ft S. of rd.; 64 ft S. 37-NF '79 of fence; iron pipe with GLO cap stamped "T12S R23E SECS 3 2 1913" 4294.644

Petite Hooker Ranch, 7.6 mi E. of; 6 ft S. of rd.; in rd., flush with ground; iron pipe with GLO cap stamped "T11S R23E SECS 33 34 T12S SECS 4 3 1913"

9/=11/= 129 4314.346

Reference mark, 113 ft NE. of iron pipe; 23 ft N. of rd. at flag; on buried boulder; chiseled square

Arizona

32 109 34 G.W. Moore, 1942

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: B 9791

Latitude 32°15' Longitude 109°45'

(8) FROM WINCHESTER MTS. QUADRANGLE (67) EAST ALONG ROAD TO POINT 12 MILES SOUTH OF BONITA (By G.W. Moore, 1942; Book: B 9791)

Ellis Ranch, 6.6 mi NE. of, at 1/4 corner between sections 3 and 10, T12S, R23E; 175 ft SW. of bent iron pipe with GLO cap stamped "T12S R23E SEC 3 4 TR 43 S3 TR 47 TR 44 1913", 25 ft S. of rd.; 3 ft NW. of corner fencepost; in concrete post; standard tablet stamped "24 GWM 1942 4295"

New Desc. 179

Reference mark, 30 ft N. of tablet; at north edge of rd.; on southeast corner of concrete base of Hookers iron gate; chiseled square

SI=NI= 199 4293.53

SFNF 179 4283.66

Ellis Ranch, 7.6 mi NE. of; 29 ft N. of iron pipe with GLO 1/4 corner cap stamped "T12S R23E SECS 2 3 TR 41 TR 47 12 TR 45 1913" in base of fencepost; rail spike

FILE COPY

WILLCOX (66)

Arizona

E.E. Harris, 1937 G.W. Moore, 1942 B.K. Coker, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: B 7327, B 9791, PV 912

Latitude 32°15' Longitude 109°45'

(9) FROM THE VICINITY OF WILLCOX NORTH AND WEST TO BM T12S R23E S35 THENCE WEST INTO WINCHESTER MTS. QUADRANGLE (67)(By E.E. Harris, 1937, G.W. Moore, 1942, B.K. Coker, 1974; Books: B 7327, B 9791, PV 912)

BM "K 358 1960" (NGS Quad 32 109 3, line 103)[1974 USGS ELEVATION]
(This mark is in Cochise Quad 46) 4175.531

T13S, R24E, near southeast corner section 24; 20 ft W. of center of rd.; 25 ft N. of gatepost; 2 ft E. of fence line; in concrete post; standard tablet stamped "1937 H 21 4184"

4183.895

H 21 adj. elev. 4184.253 (1937 Elev.)

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 0.1 mi N. of, thence 2.2 mi NNE. along Circle I Rd.; 95 ft N. and 44 ft E. of T-rd. W.; set on copper-coated rod encased in 6-inch white pipe; standard tablet stamped "72 BKC 1974 4189"

4188.828

T13S, R24E; near northeast corner section 13; 84 ft S. and 18 ft W. of X-rd.; 55 ft S. and 1.5 ft E. of corner fencepost; in concrete post; standard tablet stamped "1937 H 22 4194"

4193.825

H 22 adj. elev. 4194.138 (1937 Elev.)

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 0.1 mi N. of, along Ft. Grant Rd., thence 4.2 mi NNE. along Circle I Rd.; 25 ft S. of and 51 ft E. of T-rd. E.; 4 ft E. of power pole, 3 ft W. of fence corner; set on copper-coated rod; standard tablet stamped "73 BKC 1974 4209"

4208.880

T12S, R24E, near southeast corner section 36; 26 ft N. of center-line of rd.; 52 ft W. of centerline of cattleguard; at angle in hwy. from N. to W.; 1 ft S. of fence line; in concrete post; standard tablet stamped "1937 H 23 4243" (Also in line 5)

4243.309

H 23 adj. elev. 4243.445 (1937 Elev.)

SPUR LINE TO BM "4330"

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 0.1 mi N. of, thence 5.8 mi NNE. along Circle I Rd.; 0.1 mi E. of rd.; set in solid rock outcrop; USGS National Earthquake Research tablet stamped "4330 1974"

4330.207

RETURN TO MAIN LINE

32° 20.873'

Also see "RED" (cylzoz) nearby

Fille Gor

WILLCOX (66)

Arizona

E.E. Harris, 1937 G.W. Moore, 1942 B.K. Coker, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: B 7327, B 9791, PV 912

(9) Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 0.1 mi N. of, along Ft. Grant Rd., thence 5.2 mi NNE. along Circle I Rd., thence 0.6 mi W. along gravel rd.; 35 ft W. of driveway and 33 ft S. of centerline of rd., 1 ft N. of fence; set on copper-coated rod encased in 6-inch white pipe; standard tablet stamped "74 BKC 1974 New Dasc. 79 4230"

4230.278

UE: 0.93 mi W. of BM "74 BKC 1974"; at water well S. of rd.; at northeast side of well, level with ground, on casing; metal tab

GFNE 4228.61

T12S, R24E; southeast corner section 34; 43 ft N. and 110 ft W. of jct. of T-rd. S.; 1 ft S. of fence line; 48 ft W. of private rd. NW. through gate; in concrete post; standard tablet stamped "1937 H 24 4225" (Destroyed)

DEST. 79 4224.956

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 0.1 mi NW., thence 5.2 mi N. along Circle I Rd., thence 2.0 mi W. along grave1 rd. to X-rd.; Ft. Grant Overpass at I-Hwy. 10, 6.8 mi NW. along Ft. Grant Rd. at poine where rd. turns W.; 33 ft N. of and 45 ft W. of X-rd., 8 ft W. of power pole; set on copper-coated rod encased in 6-inch white pipe; standard tablet stamped "75 BKC 1974 4223"

4223.733

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 7.8 mi NNW. of, along Ft. Grant Rd.; at southeast corner of enclosure fence for substation; 37 ft N. of and 97 ft E. of X-rd., 2 ft E. of fence corner; set on copper-coated rod encased in 6-inch white pipe; standard tablet stamped "76 BKC 1974 4221"

Not Found 79 4220.964

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 8.8 mi NNW. of, along Ft. Grant Rd.; 0.8 mi E. of Farmers' Market; at X-rd.; 40 ft N. of and 31 ft W. of X-rd., 2 ft E. of power pole; in concrete post; standard tablet stamped "H 25 1937 4227 RESET 1974"

Not Found 4223.410

Ellis Ranch, 6.2 mi E. of, near northeast corner section 6, T13S, R24E; 15 ft S. and 41 ft W. of X-rd.; 6 ft N. and 11 ft W. of fence corner; in concrete post; standard tablet stamped "14 GWM 1942 4231"

4225.636

14 GWM adj. elev. 4231.088 (1937 Elev.)

Willcox, (at overpass of Ft. Grant Rd. at I-Hwy. 10), 9.8 mi NNW. of, along Ft. Grant Rd., thence 1.0 mi W. along dirt rd.; 19 ft N. of and 54 ft W. of T-rd. N., 1 ft S. of fence; set on coppercoated rod encased in 6-inch white pipe; standard tablet stamped "77 BKC 1974 4235"

WILLCOX (66) Arizona E.E. Harris, 1937

G.W. Moore, 1942 B.K. Coker, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Books: B 7327, B 9791, PV 912

(9) Ellis Ranch, 5.2 mi E. of; 20 ft N. of rd.; 9 ft SE. of fence corner at fence line N.; in concrete post; standard tablet stamped DEST. "15 GWM 1942 4238" (Destroyed)

4237.510

UE: Surface at cattleguard

4251.12

Ellis Ranch, 4.2 mi E. of; 9 ft S. of rd.; 35 ft W. of fence N.; iron pipe with GLO cap stamped "T12S R23E SECS 35 36 T13S SECS 1 2 1913"

Sec Cor adj. elev. 4279.599 (1937 Elev.)

Ellis Ranch, 3.7 mi E. of; 42 ft SW. of south 1/4 corner section 35; 38 ft S. of rd.; in concrete post; standard tablet stamped "16 Destroyed 74GWM 1942 4315" 4315.247

16 GWM adj. elev. 4315.099 (1937 Elev.)

Reference mark, 42 ft NE. of tablet; 8 ft S. of rd.; iron pipe with SFNF GLO cap stamped "1/4 SEC 35 2 1913" 1942 Elev. 4315.027

Ellis Ranch, 3.2 mi E. of; 12 ft S. of rd.; at east edge of wash; iron pipe with GLO cap stamped "T12S R23E SECS 34 35 T13S SEC 2 3 1913" (Note: Post leaning, elevation is highest point, not center of cap.)

4350.593

Sec Cor adj. elev. 4350.370 (1937 Elev.)

Ellis Ranch, 2.7 mi E. of; 14 ft S. of rd.; 1 ft W. of telephone pole; iron pipe with GLO cap stamped "1/4 SEC 34 3 1913" 1942 Elev.

4391.295

Ellis Ranch, 2.2 mi E. of; at corner sections 3,4,33 and 34; 20 ft N. of rd.; 33 ft E. of fence line N.; in concrete post; standard tablet stamped "17 GWM 1942 4454"

4453.705

Reference mark, 38 ft S. of tablet; 19 ft S. of rd.; 4 ft E. of fence line S.; 2 ft W. of pole; iron pipe with GLO cap stamped "T12S R23E SECS 33 34 T13S SECS 3 4 1913" 1942 Elev.

Arizona

M.D. Cummins, 1972

Third Order

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: PV 840

Latitude 32°15' Longitude 109°45'

(10) FROM MOUNT GRAHAM QUADRANGLE (90) SOUTH ALONG BONITA-WILLCOX HIGHWAY THENCE WEST INTO WINCHESTER MTS QUADRANGLE (67) (By M.D. Cummins, 1972; Book: PV 840)

Bonita, 7.8 mi S. of, along Bonita-Willcox Hwy.; 30 ft E. of centerline of rd., 25 ft N. of farm rd. E., 3 ft NW. of power pole, by witness sign; set in 8-inch cylindrical concrete post projecting 0.5 ft; ASHD brass cap stamped "P & M BM 850 P 1969" 4371.909

Bonita, 8.8 mi S. of, along Bonita-Willcox Hwy.; 180 ft NW. of intersection, 36 ft from southwest corner of Grain Co-Op of AZ Bonita Plant; set flush in southeast corner of truck scale; standard tablet stamped "1 MDC 1972"

4347.023

Bonita, 8.8 mi S. of, along Bonita-Willcox Hwy. to intersection, thence 1.0 mi W. to cattleguard just after rd. bend to NW.; in northeast corner of cattleguard; set flush in cattleguard; standard tablet stamped "2 MDC 1972"

WILLCOX (66)

Arizona

D.O. Richardson, 1974

Trunk Line

Adjusted Elevations Based on National Geodetic Vertical Datum of 1929

Book: PV 912

Latitude 32°15' Longitude 109°45'

(11) FROM A POINT ABOUT 3 MILES SOUTHWEST OF RASO SOUTHWEST ALONG I-HIGHWAY 10 INTO THE NORTH EDGE OF COCHISE QUADRANGLE (46) (BY D.O. Richardson, 1974; Book: PV 912)

DRURY TRIANGULATION STATION (NGS): Raso, 3 mi SW. of; standard tablet stamped "DRURY 1945" (USGS Elevation) (Also in line 3) 4246.303 WHEEL reference mark No. 1 (NGS Quad 32 109 3, line 103) 4194.953 RM 1 by NGS 4194.972 (1962 Elev.) WHEEL TRIANGULATION STATION (NGS): (NGS Quad 32 109 3, line 103) 4195.710 4195.723 (1962 Elev.) WHEEL by NGS WHEEL reference mark No. 2 (NGS Quad 32 109 3, line 103) 4195.254 RM 2 by NGS 4195.264 (1962 Elev.) BM "L 358 1960" (NGS Quad 32 109 3, line 103) 4178.489

L 358 by NGS 4178.640 (1962 Elev.)

32109 34

FORM 9-1165 (Rev. 3-60)	REPORT ON I	PERMANENT	SURVEY MA	RK	Area Office
STATE Arizon	a Cou	NTY Cochia	ge Qu	DRANGLE Wi	llcox SW
QUOTE PRIMARY REFERENCE DESIGNATION { LISTED STAMPED	from Willco	x (Direction and distanc	e) //N/E/	
Lat	65 feet	CONDITION Disturbed Destroyed Not Found	USG	ESTABLISE GS C&GS NPS GLO BLM	USBR
6.1 mi. W. along 10 and State Hwy tramce th Cochise 740 ft. E of a Ny stamped "12 WA 19 about 0.5 ft.	. 186 at Will e Co. Airport /S fence, 52	Eox, 2.9 mi, 0.6 mi. 1 ft. N of the	i. W along ; E of a shar; ne £ of the	graded roac p XXXXX bei road a sta	d from the en- nd in the road, andard tablet
SUBMITTED BY G: TITLE SI AGENCY US	uper. Cartog.		DATE .	02-15-79	

Marks found in good condition need not be reported.

riease prepare in triplicate and send to nearest (or indicated) address shown on reverse side.

16---54252-4

FILL IN ALL AVAILABLE INFORMATION

(OVER)

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U. Š. G	DEPARTMENT OF THE INTERIOR FOLIOGICAL SURVEY REPORT ON PERMANENT SURVEY MARK FOR (Rev. 3-60) REPORT ON PERMANENT SURVEY MARK AREA OFFICE
	STATE ARIZONA COUNTY COCHISE QUADRANGLE WILLCOX (66) NW
	QUOTE PRIMARY REFERENCE Ellis Ranch, 6.6 mi. No of
_	(Direction and distance) LINES
dicated	Designation Stamped 24 GWM 1942 4295 Type of Mark: BM XXX TT Triang.
(cr in	CONDITION ESTABLISHED BY Lat USGS TUSBR
e e	Long
send to nearest (cr indicated) n reverse side.	Elev. 4294.778 feet Not Found USNPS USNFS GOOD XXX USGLO
l send on rev	USBLM (Other)
Please prepare in triplicate and address shown or	XEXAMENSION REVISED DESCRIPTION: Ellis Ranch, 6.6 mi. NE. of at 1/4 corner between sec. 3 & 10, Tl2S, R23E. 88 ft. North or road, 67 ft. N. along fence from fence corner; inconcrete post; standard tablet stamped "24 GWM 1942 4295"
lease p	Supermonder Steven D. Crosby
Δ.	Carto Teh
	USGS TOPO DIV
	AGENCI
	Marks found in good condition need not be reported. FILL IN ALL AVAILABLE INFORMATION
1	-54252-4 (OVER)
U. S.	DEPARTMENT OF THE INTERIOR
G	FORM 9-1165 (Rev. 3-60) REPORT ON PERMANENT SURVEY MARK AREA OFFICE
	STATE ARIZONA COUNTY COCHISE QUADRANGLE WILLCOX (66) SE
	QUOTE PRIMARY REFERENCE Willcox, O.1 mi. N. of the jce 5.2 mi. NNE of (Direction and distance)
	(Direction and distance) LINE 9
(peq	LISTED
lica	Designation Stamped 74 BKC 1974 4230 Type of Mark: BM XXX TT Triang.
ţ	CONDITION ESTABLISHED BY
<u>5</u>	Lat
rest de.	Long
nea e si	Elev. 4230.278
Please prepare in triplicate and send to nearest (or indicated) address shown on reverse side.	GOOD USGLO]
d se on 1	USBLM) USBLM
wn	MAKKAKKREVISED DESCRIPTION: Willcox, (at overpass of Ft. Grant Rd. at I-Hwy.10)
Sho	6.1 mi. N. of, along Ft. Grant Rd. thence 5.2 mi. N.N.E. along Circle I Rd.
ipli ess	thence 0.93 mi. W. along gravel rd.; 35 ft. West of driveway and 33 ft. S.
n tr ıddr	of centerline of main road., 1 ft. N. of R.O.W. fence; set on a copper-
re i	coated rod encased in a 6-inch white pipe; standard tablet stamped
ndə.	"74 BKC 1974 4230" located in T. 13 S. R. 25 E. near NW cor sec. 1.
e pr	
legs(Steven D. Croshy
Ā	Submitted by Steven D. Crosby

SUBMITTED BY	Steven D. Crosby	
	Carto, Tech.	DATE 02/05/79
	USGS TOPO DIV	

Marks found in good condition need not be reported.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
Form No. 9-3223 Rev. 1968

DESCRIPTION HORIZONTAL CONTROL STATION

DAGRAM Silver City
USGS QUAD NO 66

1st Order

Triangulation 🖸	Electronic - Distance Traverse	Intersected Object
Station RED USGS	County Cochis	e State Arizona
Established by USGS	County Cochis Year 1940 P	roject <u>D</u> 3884-85
Check one:		

Check one:

New Station: Write full description below

□ Reco	very of Old Stati	on: Recovered by	USC&GS	Yar _1945-46_	Project
				,	

	B	Distance			
Object .	Bearing -	Feet	Meters	AZIMUTH	
COCHISE				23°26'27.8"	
RM 1		22.75		270 47 03	
RM 2		32.85		18 17 13	

Described in U.S. Coast and Geodetic Survey description list 32 109 3-1046. All marks in good condition.

Note: USC&GS distances to reference mark 1 and reference mark 2 differ from USGS distances. USC&GS measurements made in 1945 agree with their 1946 measurements.

USC&GS Adjusted Coordinates

ARIZONA EAST ZONE				ELEV		
X= 602328.53						
Y= 492719°38			· 			
MAPPING ANGLE=+0 1	0 38			QUAD	32 1	09 34
•						
RED USGS	LAT	32 21	15.C410	LONG 109	50 7	<u>. 0320</u>

1927 N.A.D.

L. D. Hankins, 1940

Books: D 3884-85, D 3887-91

Located in Sulphur Springs Valley, 12 mi. N. by 9.0 mi. W. of Willcox, Arizona; about 150 s. W. of G. L. Monzingo's ranch house on the corner between Sec. 34,35,3,2 T. 11 S., R. 25 E.

To reach from Willcox follow the Sulphur Springs Valley rd. N. 6.4 mi., turn W., go 5.0 mi., turn N., go 4.0 mi., turn W., go 2.0 mi., turn N., go 2.0 mi., turn W., go 1.0 mi. to Monzingo Ranch (a stone house at corner of rd.) and station.

Station mark: General Land Office brass township and section line marker stamped S 34,35,3,2 T.11,12 S., R. 23 E.

Reference mark No. 1: Standard reference tablet, stamped "SULPHUR NO 1, 1940", set in stovepipe filled with concrete set on fence line, 17.43 ft. from station, in azimuth 37°50'.

Reference mark No. 2: Standard reference tablet, stamped "SULPHUR NO 2, 1940", set in stovepipe filled with concrete set on fence line, 25.35 ft. from station, in azimuth 303°33'.

Signal: 13-1/2 ft. quadripod (8 ft. square at bottom, 4 ft. square at top with black and white covering) centered over station mark.

Longitude: 109°58'40.426" Latitude: 32°25'38.241"





12/14/60 hd .ce

FILE COPY