

32°15'
110°45'

Index

<u>Station</u>	<u>Project</u>
BM BM 2305.61 <i>ASHO</i>	Davis Monthan, <i>Nogales</i>
Catalina 2 <i>USGS</i>	<i>Nogales</i>
Lita (USGS)	Davis Monthan, Tucson, <i>Nogales</i>
Pusch (USGS) (USGS)	Davis Monthan, <i>Nogales</i>
Sahuaro (USGS)	Davis Monthan, <i>Nogales</i>
<i>S</i> Sec Cor 3/12S/13E	Tucson, <i>Nogales</i>
Summerhaven (USGS)	Davis Monthan, <i>Nogales</i>
Stockman (USGS)	Tucson, <i>Nogales</i>
<i>S</i> S.W. Radio Tower	Silver Bell, <i>Nogales</i>
<i>S</i> 1-197 A	Tucson, <i>Nogales</i>
<i>S</i> 2 (INACTIVE FILE)	Silver Bell
<i>S</i> 2-109 A (Inactive)	Davis Monthan

Davis Monthan Project Master in ARIZONA 49 - Book: PH 446

Silver Bell Project Master in ARIZONA 72 - Book: PH 596

Tucson Project Master in ARIZONA 50 - Book: PH 1264

Nogales Project Master in AZ 8 - Book: PH 1778

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

2nd Order

Triangulation

Electronic - Distance Traverse

Intersected Object

Station CATALINA 2 USGS

County Pima

State AZ

Established by USGS

Year 1946

Project PH 6

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by _____ Year _____ Project _____

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
RICE				205°20'00.5"

Described in National Geodetic Survey Description List 32 110 3, station 1035.

Note by NGS, 1955: CATALINA 2 was destroyed and an antenna tower was to be centered over destroyed station mark. CATALINA 2 RESET was established by NGS and tied to CATALINA 2 USGS.

NGS Adjusted Coordinates

ARIZONA CENTRAL ZONE

X= 848180.01

Y= 526601.90

MAPPING ANGLE=+0 36 20

ELEV

QUAD 32 110 34

CATALINA 2 USGS

LAT 32 26 33.7095

LONG 110 47 16.9829

FILE COPY

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

2nd Order
Triangulation Electronic - Distance Traverse Intersected Object
Station LITA County Pima State AZ
Established by NGS Year 1936 Project _____

Check one:
 New Station: Write full description below USGS PH 446
 Recovery of Old Station: Recovered by USGS Year 1967 Project PH 1264

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
PUSCH USGS				343°46'20.0"

Described in National Geodetic Survey Description List 32 110 3, station 1031.

NGS Adjusted Coordinates

ARIZONA CENTRAL ZONE
X= 788242.89
Y= 546222.52
MAPPING ANGLE=+0 30 8

ELEV 3337.0 FT

QUAD 32 110 34

LITA LAT 32 29 53.5790 LONG 110 58 54.3130

FILE COPY

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

1st Order
 Triangulation Electronic - Distance Traverse Intersected Object
 Station PUSCH USGS County Pima State AZ
 Established by USGS Year 1903 Project 3096-3108
 Check one:
 New Station: Write full description below NGS 1935
 USGS
 Recovery of Old Station: Recovered by USGS Year 1956 Project D 3238-52
 PH 446

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
TORTOLITTAS USGS				152°21'04.6"

Described in National Geodetic Survey Description List 32 110 3, station 1047.

NGS Adjusted Coordinates

ARIZONA CENTRAL ZONE
 X= 802015.69
 Y= 500400.40
 MAPPING ANGLE=+0 31 26

ELEV 5361.0 FT
 QUAD 32 110 34

PUSCH USGS LAT 32 22 18.9600 LONG 110 56 18.4130

FILE COPY

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

1st Order
Triangulation Electronic - Distance Traverse Intersected Object
Station SAHUARO County Pima State AZ
Established by NGS Year 1935 Project _____

Check one:
 New Station: Write full description below
 Recovery of Old Station: Recovered by USGS Year 1956 Project PH 446

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
PUSCH USGS				140°10'26.9"

Described in National Geodetic Survey Description List 32 110 3, station 1048.

NGS Adjusted Coordinates

ARIZONA CENTRAL ZONE
X= 830040.40
Y= 467467.90
MAPPING ANGLE=+0 34 13

ELEV 2788.0 FT

QUAD 32 110 34

SAHUARO

LAT 32 16 50.4540

LONG 110 50 55.5110

FILE COPY

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

2nd Order
Triangulation Electronic - Distance Traverse Intersected Object
Station SUMMERHAVEN Country Pima State AZ
Established by NGS Year 1936 Project _____

Check one:
 New Station: Write full description below
 Recovery of Old Station: Recovered by USGS Year 1956 Project PH 446

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	

Described in National Geodetic Survey Description List 32 110 3, station 1036.

NGS Adjusted Coordinates

ARIZONA CENTRAL ZONE FLEV 8077.0 FT
X= 858956.43
Y= 530622.70
MAPPING ANGLE=+0 37 28 QUAD 32 110 34

SUMMERHAVEN LAT 32 27 12.3473 LONG 110 45 10.7403

FILE COPY

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

2nd Order
Triangulation Electronic - Distance Traverse Intersected Object
Station STOCKMAN Country Pima State AZ
Established by NGS Year 1959 Project _____

Check one:
 New Station: Write full description below
 Recovery of Old Station: Recovered by USGS Year 1967 Project PH 1264

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
CAT MTN AGS				33°44'33.0"

Described in National Geodetic Survey Description List 32 110 3, station 1010. All marks in good condition.

NGS Adjusted Coordinates

ARIZONA CENTRAL ZONE
X= 783358.92 ELEV 2331.714 FT
Y= 459722.26
MAPPING ANGLE=+0 29 22 QUAD 32 110 34

STOCKMAN LAT 32 15 38.0832 LONG 110 59 59.9881

FILE COPY

DESCRIPTION
HORIZONTAL CONTROL STATION

32 110 34
DIAGRAM Tucson
USGS QUAD NO. 70

3rd Order
Triangulation AZHD Electronic - Distance Traverse Intersected Object
Station BM 2305.61 ASHD County Pima State AZ
Established by USGS Year 1957 Project PH 446

Check one:

New Station: Write full description below
 Recovery of Old Station: Recovered by _____ Year _____ Project _____

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
WARNER AGS				7°09'36.2"

Described by National Geodetic Survey in AZ Level Line 16 as follows:

5.3 mi N. along U.S. Hwy. 80 from post office at Tucson, 20 ft S. of south end of bridge over Rillito Creek, at FAP sign, in top of concrete base. An ASHD standard disk stamped "2305.61 199+90" (702.495 metres or 2,304.769 ft)

Note by USGS, 1956: Route of U.S. Hwy. changed. BM is now about 400 ft W. of U.S. Hwy. 80. The bridge on old rd. is destroyed but concrete base and fill is still in place. The BM was recovered in good condition.

USGS Adjusted 1957 Coordinates

ARIZONA CENTRAL ZONE
X= 789657.5 FLEV 2304.769 FT
Y= 471851.2
MAPPING ANGLE=+0 30 3 QUAD 32 110 34

BM 2305.61 ASHD LAT 32 17 37.562 LONG 110 58 45.409

NAD 83 VALUES AVAILABLE

FILE COPY

DESCRIPTION 32 110 34

Supplementary Horizontal Control Station

Station SC 3/12S/13E County Pima State AZ Quad No. 70

Project PH 1264 Year 1967

Surveyed by checked () or unchecked (X) methods

Description:

Located about 13 mi NNW. of Tucson; 8.5 mi E. of Rillito; 6.5 mi NE. of Cortaro; 50 ft NE. of T-rd.

To reach from signal light at intersection of Prince and Flowing Wells Rd., at Flowing Wells Plaza on north side of Tucson, go due N. on Flowing Wells Rd. and La Canada Drive for 9.5 mi to T-jct. and station 50 ft NE. of centerline of intersection and 6 inches SE. of fence corner.

Flowing Wells 75

Station mark: GLO cap stamped "S3 S2 S10 S11 T12S R13E 1913", set in 2-inch pipe projecting 1.5 ft.

ARIZONA CENTRAL ZONE

X= 784403.0

Y= 514007.6

MAPPING ANGLE=+0 29 38

FLEV

QUAD 32 110 34

SC 3/12S/13E

LAT 32 24 35.149

LONG 110 59 42.391

STATION	OBSERVED DIRECTION	DISTANCE	A-D	A-D FT
---------	--------------------	----------	-----	--------

STATIONS OBSERVED BY THIRD ORDER METHODS FROM PH 1264 1967

WASSON	43 17 19.4	68221.3	-1.0	
TORTOLITTAS USGS	168 4 12.9	33533.3	-1.6	
PUSCH USGS	308 10 52.1	22256.8	5.5	

NAD 83 VALUES AVAILABLE

FILE COPY

DESCRIPTION

32 110 34

Supplementary Horizontal Control Station

Station S.W. RADIO TOWER County Pima State AZ Quad No. 70

Project PH 446 Year 1956

Surveyed by checked () or unchecked (X) methods

Description:

Located about 6.5 mi NE. of Tucson, 2.5 mi NNW. of Old Fort Lowell and 1 mi N. of Rillito Creek.

Station mark: Center of southwest one of three red and white radio towers. (Tower is 349.5 ft high)

Station intersected.

ARIZONA CENTRAL ZONE

X= 815726.8

Y= 471077.0

MAPPING ANGLE=+0 32 45

ELEV 2591. FT

QUAD 32 110 34

SW RADIO TOWER

LAT 32 17 27.545

LONG 110 53 41.820

NAD 83 VALUES AVAILABLE

FILE COPY

DESCRIPTION

32 110 34

Supplementary Horizontal Control Station

Station 1-197 A County Pima State AZ Quad No. 70

Project PH 1264 Year 1967

Surveyed by checked (X) or unchecked () methods

Description:

Located about 10.5 mi N. of Tucson; about 5.5 mi ENE. of Cortaro; about 0.75 mi S. of Canada Del Oro.

To reach from intersection of Prince and Flowing Wells Rds. near Flowing Wells Shopping Center in North Tucson, go 6.8 mi N. on N.-S. rd. to station on right (E.) about 35 ft E. of centerline of rd., about 100 ft NW. of double wooden power pole.

Station mark: 1-inch pipe set level with ground.

ARIZONA CENTRAL ZONE

X= 784519.2

Y= 500739.3

MAPPING ANGLE=+0 29 36

ELEV 2536.2 FT

QUAD 32 110 34

1-197 A

LAT 32 22 23.850

LONG 110 59 42.370

STATION	OBSERVED DIRECTION	DISTANCE	A-0	A-0 FT
---------	--------------------	----------	-----	--------

STATIONS OBSERVED BY THIRD ORDER METHODS FROM PH 1264 1967

WASSON	52 7 14.9	59266.6	-2.3	
RILLITO	101 40 12.9	47530.2	1.0	
TORTOLITTAS USGS	171 26 32.7	46596.7	-0.3	
WARNER AGS	358 57 41.4	59346.6	3.5	
CAT MTN AGS	16 17 0.1	71717.8	-1.1	
1-145X	83 2 1.2	62852.6	-2.5	
SC8/11S13E	165 13 52.2	40817.1	-0.6	
PIUSCH USGS	271 36 2.1	17499.8	8.7	

NAD 83 VALUES AVAILABLE

FILE COPY