

DESCRIPTION

32 111 13

Supplementary Horizontal Control Station

Station 7-1088 A County Pinal State AZ Quad No. 96
 Project PH 988 Year 1967
 Surveyed by checked (x) or unchecked () methods

Description:

Located about 20 mi S. of Florence, about 18 mi SE. of Coolidge, about 10 mi E. of Eloy, about 2 mi NE. of Newman Peak.

To reach from jct. of State Hwy. 84 and 87, drive E. 4.1 mi to end of rd.; turn right 1.1 mi to fence corner and gate, pass through gate and keep right 0.6 mi to Y-rd., keep right 0.5 mi to reverse-Y; turn sharp right 1.5 mi to rd. in wash; turn right up wash 1.2 mi to end of rd. and end of truck travel. Top with station is visible from here. Pack up wash and second ridge to right to high point and station.

Station mark: Chiseled cross on bedrock.

THIRD ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE		UTM ZONE 12
X COORDINATE	663716.13	464005.75
Y COORDINATE	634726.35	3622764.84
MAPPING ANGLE	+0 17 17	-0 12 28

ELEVATION	3517.6 FEET	1072.2 METERS
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7-1088 A	LAT 32 44 37.831	LONG 111 23 3.106
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STATION NAME	OBSERVED DIRECTION	DISTANCE	A-O	A-O FT
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STATIONS OBSERVED BY THIRD ORDER METHODS FROM COSM PH 988 A 1963				
PEAK 2	111 53 46.3	41919.8	13.2	
PEAK USGS	189 29 0.3	40378.0	-10.5	
TREADWAY	216 7 46.2	37012.4	-3.5	

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DESCRIPTION 32 111 13

Supplementary Horizontal Control Station

Station BM X-292 County Pima State AZ Quad No. 96

Project PH 596 Year 1958

Surveyed by checked (x) or unchecked () methods

Description:

Described in NGS Level Line 104.

Located about 9.5 mi NW. of Marana, 6.0 mi SW. of Red Rock; in fence corner 3.4 ft SW. of GLO section corner T10S CC S1 S6 R9E R10E T11S 1911 on iron pipe.

Station mark: NGS BM "X-292 1951".

THIRD ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE

UTM ZONE 12

X COORDINATE 667960.28

465067.05

Y COORDINATE 546498.68

3595871.33

MAPPING ANGLE +0 17 34

-0 11 59

ELEVATION 1857.985 FEET

566.315 METERS

BMX 292 PH 595 A 1958

LAT 32 30 4.570 LONG 111 22 18.710

STATION NAME

OBSERVED DIRECTION

DISTANCE

A-O

A-O FT

STATIONS OBSERVED BY THIRD ORDER METHODS

SILVER BELL

53 29 2.1

51089.3

0.3

SASCO

116 10 1.3

18247.6

-0.8

NAD 83 VALUES AVAILABLE

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APR 20 1978

DESCRIPTION

32 111 13

Supplementary Horizontal Control Station

Station 1/8S/10E (8) County Pinal State AZ Quad No. 96

Project PH 596 Year 1958

Surveyed by checked (x) or unchecked () methods

Description:

Located about 13 mi NNE. of Red Rock, 11 mi N. of station RED ROCK; along fence line that crosses Red Rock-Midway Rd. at north end of Red Rock Mtn. and runs due N.

Station may be reached by driving along this fence.

Station reached by helicopter.

Station mark: USGLO pipe stamped "S1 S12", projecting 1.6 ft above ground.

THIRD ORDER

NGS QUAD 32 111 13

	ARIZONA CENTRAL ZONE	UTM ZONE 12
X COORDINATE	702162.26	475724.49
Y COORDINATE	636474.29	3623196.04
MAPPING ANGLE	+0 21 21	-0 8 24

ELEVATION	2121.9 FEET	646.8 METERS
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SC 1/8S/10E (8) LAT 32 44 52.990 LONG 111 15 32.850

STATION NAME	OBSERVED DIRECTION	DISTANCE	A-O	A-O FT
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STATIONS OBSERVED BY THIRD ORDER METHODS FROM ECC PH 595 A 1958				
ELMER USGS	281 55 13.8	R 33873.5	-4.4	0.6
NORTH HILL	270 16 48.4	R 35046.3	4.3	

NAD 83 VALUES AVAILABLE

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DESCRIPTION

32 111 13

Supplementary Horizontal Control Station

Station "7" BM ADS 19 County Pinal State AZ Quad No. 96

Project PH 596 Year 1958

Surveyed by checked () or unchecked (x) methods

Description:

Described in USGS Level Line 9 as follows:

Red Rock Post Office, 1.4 mi NW. along Hwy. 84, thence 6.2 mi NE. from along pipe line rd.; 300 ft SW. of gate, 22 ft SE. of center of rd.; in concrete post; standard tablet stamped "ADS 19 2110 1946".

Station found as described.

Station mark: Standard BM tablet stamped "ADS 19 2110 1946", set in concrete post.

Distorted '77

Note: No check on this position. Not third order, 1 set T-2.

NOT THIRD ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE

UTM ZONE 12

X= 701993

475584

Y= 602913

3612971

ELEVATION 2110.247

FEET 640.157

METERS

LAT 32 39 20.909

LONG 111 15 37.268

NAD 83 VALUES AVAILABLE

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APR 20 1978

United States
Department of the Interior

Geological Survey
Form No. 9-322.3 Rev. 1977

Description
Horizontal Control Station

NGS Quad No. 32 111 13
USGS Quad No. 96

Station SASCO USGS

Diagram TUCSON

County PINAL

State AZ

THIRD order TRIANGULATION

Established By USGS

Year 1934

Project D3238-52

USGS UNADJUSTED 1983 coordinates

Latitude: N32 33 2.800

Longitude: W111 28 2.300

Unverified Elevation: 2425 Feet 739 Meters

UTM Zone 12(Meters): X: 456125.23 Y: 3601394.60

Mapping Angle: -0 15 5

AZ State Zone E(Feet): X: 99226.59 Y: 566527.68

Mapping Angle: -0 42 0

AZ State Zone C(Feet): X: 638459.80 Y: 564372.06

Mapping Angle: +0 14 30

LOCATED ABOUT 1.25 MI N. 58 DEGREES W. OF OLD SASCO SMELTER
STACK; ON HIGHEST POINT OF SMALL GROUP OF RED HILLS.

TO REACH FROM SASCO, GO ALONG RED ROCK-SILVER BELL RD. ABOUT 1.5
MI; GO 0.5 MI NW.

STATION MARK: STANDARD BRONZE TABLET STAMPED "SASCO K 1934", SET
IN CONCRETE FLUSH WITH GROUND.

RMS: NONE SET.

NAD 83 VALUES AVAILABLE

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UNITED STATES
 DEPARTMENT OF THE INTERIOR
 Geological Survey
 Form No. 9-322.3 Rev. 1968
 3rd Order

DESCRIPTION
HORIZONTAL CONTROL STATION

32 111 13
 DIAGRAM Tucson
 USGS QUAD NO. 96

Triangulation Electronic - Distance Traverse Intersected Object
 Station PICACHO USGS County Pinal State AZ
 Established by USGS Year 1903 Project 3096-97

Check one:

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

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
BLACK MTN				248°37'49.0"

Described in Bul. 245, page 174 as follows:

On the high prominent peak named Picacho, 1 mi S. of Wynola Siding on the Southern Pacific RR., 8 mi W. of Red Rock Station.

Station mark: Standard tablet centered under large rock monument.

RMs: None established.

USGS Adjusted 1954 Coordinates

FIRST ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE

UTM ZONE 12

X COORDINATE 659090.85

462492.22

Y COORDINATE 595136.47

3610714.23

MAPPING ANGLE +0 16 43

-0 12 56

ELEVATION

FEET

METERS

PICACHO USGS

LAT 32 38 6.3030 LONG 111 23 59.5180

NAD 83 VALUES AVAILABLE

FILE COPY
 APR 20 1978

DESCRIPTION
HORIZONTAL CONTROL STATION

32 111 13
 DIAGRAM Tucson
 USGS QUAD NO. 96

3rd Order

Triangulation

Electronic - Distance Traverse

Intersected Object

Station FIG USGS

County Pinal

State AZ

Established by USGS

Year 1934

Project D 3241

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by _____

Year _____

Project _____

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
SILVER BELL				43°25'30.0"

Highest point on most easterly ridge of black lava, SE. of old Sasco Smelter stack, S. of well derrick.

Station mark: Standard bronze tablet set in concrete.

RM's: None established.

USGS Adjusted 1958 Coordinates

THIRD ORDER

USGS QUAD 32 111 13

ARIZONA CENTRAL ZONE

UTM ZONE 12

X COORDINATE 660993.38

462958.95

Y COORDINATE 552097.63

3597595.55

MAPPING ANGLE +0 16 51

-0 12 43

ELEVATION

FEET

METERS

FIG USGS

LAT 32 31 0.320

LONG 111 23 39.740

NAD 83 VALUES AVAILABLE

APR 20 1978

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 Geological Survey
 Form No. 9-3223 Rev. 1968
 1st Order

DESCRIPTION
HORIZONTAL CONTROL STATION

32 111 13
 DIAGRAM Tucson
 USGS QUAD NO. 96

Triangulation Electronic - Distance Traverse Intersected Object
 Station SASCO County Pinal State AZ
 Established by NGS Year 1935 Project _____

Check one:
 New Station: Write full description below
 Recovery of Old Station: Recovered by USGS Year 1958 Project PH 596

Object	Bearing	Distance	
		Feet	Meters

Described in NGS Description List 32 111 1, station 1011. All marks in good condition.

Note, 1958: Not occupied.

NGS Adjusted Coordinates

FIRST ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE		UTM ZONE 12
X COORDINATE	651543.09	460085.69
Y COORDINATE	554461.22	3598340.49
MAPPING ANGLE	+0 15 52	-0 13 42
ELEVATION	2687.6 FEET	819.2 METERS

SASCO

LAT 32 31 24.1540 LONG 111 25 29.9800

STATION NOT OCCUPIED

FILE COPY

APR 20 1978

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

DESCRIPTION

HORIZONTAL CONTROL STATION

32 111 13
DIAGRAM Tucson
USGS QUAD NO. 96

3rd Order

Triangulation

Electronic - Distance Traverse

Intersected Object

Station NEWMAN PEAK BEACON TOWER County Pinal State AZ
Established by NGS Year 1935 Project _____

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by USGS Year 1963 Project PH 988

Object	Bearing	Distance	
		Feet	Meters

Described in NGS Description List 32 111 1, station 1008.

Note, 1963: Not occupied.

NGS Adjusted Coordinates

THIRD ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE
X= 658945.26
Y= 625512.67
MAPPING ANGLE

UTM ZONE 12
462527.83
3619970.06
-0 12 58

ELEVATION

FEET

METERS

LAT 32 43 06.8931

LONG 111 23 59.4906

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APR 20 1978

DESCRIPTION
HORIZONTAL CONTROL STATION

32 111 13
 DIAGRAM Tucson
 USGS QUAD NO. 96

3rd Order

Triangulation

Electronic - Distance Traverse

Intersected Object

Station NAVISKA County Pinal State AZ
 Established by NGS Year 1935 Project _____

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by USGS Year 1958 Project PH 596

Object	Bearing	Distance		AZIMUTH
		Feet	Meters	
SASCO				98°36'53.2"

2 (111)

Described in NGS Description List 32 111 1, station 1001 and NGS AZ Level Line 107 as follows:

In Pinal County, 4.3 mi NW. along State Hwy. 84 from post office at Marana, Pima County, 0.1 mi NW. of Pinal-Pima County Line, at Southern Pacific Co. RR.RR. Station sign at Naviska, between the old and new State Hwy. 84; 61 ft SW. of centerline of old hwy.; 39 ft NE. of centerline of new hwy.; 44.5 ft SE. of point directly under middle wire of a power-transmission line which passes over the hwy.; 2.2 ft SE. of white wooden witness post and level with hwy., A standard triangulation station disk, stamped "NAVISKA 1935" set in top of a concrete post projecting 0.4 ft above ground.

Station mark: NGS disk stamped "NAVISKA 1935", set in top of concrete post projecting 0.4 ft above ground.

Note, 1958: RM 1 and RM 2 reported destroyed. It is believed this station was reset prior to 1951. Values listed are by USGS.

USGS Adjusted 1958 Coordinates

THIRD ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE

UTM ZONE 12

X COORDINATE 701571.72

475309.92

Y COORDINATE 547195.51

3595995.61

MAPPING ANGLE +0 21 5

-0 8 22

ELEVATION 1947.821 FEET

593.697 METERS

NAVISKA

LAT 32 30 9.596 LONG 111 15 46.196

FREE COPY

APR 20 1978

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

DESCRIPTION

HORIZONTAL CONTROL STATION

32 111 13
 DIAGRAM Tucson
 USGS QUAD NO. 96

2nd Order

Triangulation

Electronic - Distance Traverse

Intersected Object

Station DESERT USGS County Pinal State AZ
 Established by NGS Year 1960 Project _____

Check one:

New Station: Write full description below

Recovery of Old Station: Recovered by USGS Year 1921 Project C 5866-77

Object	Bearing	Distance		
		Feet	Meters	

Station is on highest point of Desert Mountain known locally as Picacho Peak. This is the highest peak in the vicinity and was located by NGS. There was no signal mentioned in Description List 32 111 1, station 1008.

The Indian Service Survey also used the same point used by the USGS.

Station mark; Standard tablet set in rock under center of cairn.

DESERT USGS 1921 was tied to NEUMAN. Previous write-ups of DESERT USGS indicate the station was occupied, but the field books do not show an occupation.

NGS Adjusted Coordinates

SECOND ORDER

NGS QUAD 32 111 13

ARIZONA CENTRAL ZONE
 X= 658946.69
 Y= 625537.80
 MAPPING ANGLE

UTM ZONE 12
 462528.33
 3619977.72
 -0 12 58

ELEVATION

FEET

METERS

LAT 32 43 07.1417

LONG 111 23 59.4724

FILE COPY

APR 20 1978