

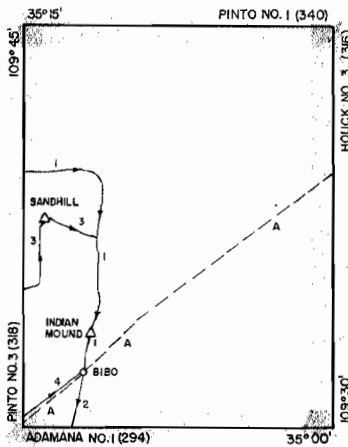
UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

THIRD-ORDER LEVELING Sea Level Datum of 1929

PINTO NO. 4 QUADRANGLE ARIZONA 317 N3500-W10930/15

FILE COPY

Apache County Edition of 1/11/57



USC&GS Level Line

A. Goffs, Calif. to Albuquerque New Mexico (Ariz. portion) (No. 18) First order

Feet

LINE 1.

FROM PINTO NO. 3 QUADRANGLE (318) EAST 3.0 MILES THENCE SOUTH VIA INDIAN MOUND TRIANGULATION STATION TO BIBO (formerly Billings) (by V. S. Seward, 1934; Book B5034)

- List of survey points with descriptions and elevations, including points like T. 20 N., R. 24 E., T. 19 N., R. 25 E., and Bibo.

LINE 2.

FROM BIBO (FORMERLY BILLINGS) SOUTHWEST ALONG ROAD INTO ADAMANA NO. 1 QUADRANGLE (294) (by V. S. Seward, 1934; Book B5034)

Bibo (formerly Billings), 80 ft. S. of foreman's house; standard tablet stamped "VS 28 1934 5404" (Described in Line 1) 5403.568

Bibo (formerly Billings), 0.6 mi. S. and 0.2 mi. W. of; 700 ft. SE. of Rio Puerco; 8 ft. NE. of gate; 1 ft. N. of fence; 6 in. above ground; top of 4-in. cedar post; copper nail and washer 5393.86

Bibo (formerly Billings), 1.5 mi. S. and 0.5 mi. W. of; on line between Bibo and W. end of westernmost of nearest group of badland hills; about 2,000 ft. W. of fence; 6 ft. S. of 4 ft. post; 6 in. above ground; in top of 4-in. cedar post; copper nail and washer 5387.60

Reference mark, 150 ft. W. and 60 ft. S. of tablet; 20 ft. N. of old rd.; on boulder; chiseled square 5416.46

Bibo (formerly Billings), 0.7 mi. W. and 0.5 mi. S. of; in Sec. 19, T. 19 N., R. 25 E.; 1,000 ft. N. of A. T. & S. F. RR.; at point where old rd. makes right-angle curve to N.; 120 ft. SE. of center of curve; 4 ft. W. of fence; on boulder; chiseled square 5386.74

Bibo (formerly Billings), 80 ft. S. of foreman's house; standard tablet stamped "VS 28 1934 5404" (Described in Line 1) 5403.568

LINE 3.

FROM PINTO NO. 3 QUADRANGLE (318) NORTHEAST ALONG U. S. HIGHWAY 66 1.0 MILE THENCE NORTH 3.8 MILES TO SANDHILL TRIANGULATION STATION, THENCE SOUTHEAST TO A POINT NEAR CENTER OF SECTION 16, T. 20 N., R. 25 E. (by V. S. Seward, 1934; Book B5035)

Painted Desert Park, 0.8 mi. N. and 1.7 mi. E. of; 2,000 ft. S. of new U. S. Highway 66; 230 ft. E. of S. drainage ditch; 160 ft. W. of another S. drainage; 45 ft. S. of present Highway 66; 3 ft. E. of telephone pole; in top of sandstone post 5 in. above ground; standard tablet stamped "VS 23 1934 5631" 5631.149

New Desc. 72

Reference mark, 150 ft. E. and 10 ft. N. of tablet; 10 ft. W. of S. drainage ditch; 2 ft. S. of telephone pole; 45 ft. S. of present U. S. Highway 66; on boulder; chiseled square 5630.71

Painted Desert Park, 1.7 mi. N. and 1.7 mi. E. of; 2.8 mi. S. of Sandhill Triangulation Station; 2,800 ft. N. of new U. S. Highway 66; 1,700 ft. N. of small stream; 5 ft. N. of lone post; in top of cedar post; 6 in. above ground; copper nail and washer 5673.60

Sandhill Triangulation Station, 2.3 mi. S. of; at E. end of grassy knoll; 4 ft. N. of 2-in. by 5 ft. iron pipe set in ground; in top of sandstone post 6 in. above ground; standard tablet stamped "VS 24 1934 5751" 5750.889

Reference mark, 55 ft. E. and 25 ft. N. of tablet; in top of cedar post 6 in. above ground; copper nail and washer 5748.71

Sandhill Triangulation Station, 1.4 mi. S. and 0.2 mi. W. of; 200 ft. N. of rd.; 30 ft. S. of S. rim of Painted Desert; 40 ft. W. of head of sharp erosion stream running 100 ft. N.-S.; 5 ft. N. of 4 ft. iron stake; in top of cedar post 6 in. above ground; copper nail and washer 5783.37

T. 20 N., Rs. 24 and 25 E., near SW. Cor. of Sec. 18; 700 ft. W. of E. end of dry lake; 700 ft. N. of W. end of same lake; 2 in. iron pipe 10 in. above ground; 5785.68

Sandhill Triangulation Station, 11.3 mi. N. and 5.1 mi. E. of Adamana; on top of prominent sandy knoll; (highest ground in this vicinity) on E. rim of Painted Desert; in boulder; standard tablet stamped "SANDHILL 1933 5903" Lat.: 35°08'34.274" Long.: 109°44'06.93" 5903.421

Reference mark 1, 19 ft. from tablet; in boulder; standard reference mark tablet stamped "NO 1" 5903.796

Reference mark 2, 23 ft. from tablet; in boulder; standard reference mark tablet stamped "NO 2" 5902.797

Sandhill Triangulation Station, 0.8 mi. E. and 0.3 mi. S. of; 1,500 ft. W. of stream forks; 75 ft. N. of stream at head of 20 ft. canyon; in 4-in. cedar post; 6 in. above ground; copper nail and washer 5761.06

Sandhill Triangulation Station, 1.7 mi. E. and 0.4 mi. S. of; 1,500 ft. S. of lone juniper bush; 20 ft. N. of prominent cow trail; 5 ft. S. of 4 ft. iron pin set in ground; in top of 4-in. cedar post 6 in. above ground; copper nail and washer 5761.14

T. 20 N., R. 25 E., near center of Sec. 16; standard tablet stamped "VS 19 1934 5754" (Described in Line 1) 5754.217

LINE 4.

FROM NORTHEAST CORNER OF PETRIFIED FOREST QUADRANGLE (295) NORTHEAST ALONG ATCHISON TOPEKA AND SANTA FE RAILROAD TO BIBO (FORMERLY BILLINGS) (by V. S. Seward, 1934; Book B5035)

Bibo (formerly Billings), 1.5 mi. W. and 1.1 mi. S. of; in Sec. 25, T. 19 N., R. 24 E.; at top of hill; at point where old rd. begins a tangent to a point about 500 ft. W. of Bibo; about 1,500 ft. N. of A. T. & S. F. RR.; 15 ft. S. of rd.; 4 ft. N. of lone post; in sandstone post; standard tablet stamped "VS 34 1934 5415" 5414.655

Not Found 72

FILE COPY

PINTO NO. 4 (317) Arizona D.O. Richardson, 1972

Trunk Line Adjusted Elevations Based on National
Geodetic Vertical Datum of 1929

Book: PV 858

Latitude 35°00' Longitude 109°30'

- (5) FROM NAVAJO SOUTH ALONG A ROAD INTO THE NORTHEAST EDGE OF ADAMANA NO. 1
QUADRANGLE (294) (By D.O. Richardson, 1972; Book: PV 858)
- BM "5665.93 STA 954 x 00 1955" (NGS Quad 35 109 3 line 102) 5666.025
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to a T-rd.
S.; 0.1 mi W. of a store; 264 ft S. of Interstate Hwy. 40, 16
ft E. of the rd.; in the center of the east concrete headwall of a cattleguard; a standard tablet stamped "78 DOR 1972 5676" Recovered 5675.589
- Navajo Post Office, 0.8 mi E. of, along Interstate Hwy. 40; in
the center of the north concrete headwall of a box culvert of
the north lane of Interstate Hwy. 40; an AHD tablet stamped
"5697.38 STA 103 x 00 1962" 5696.992
- BM "A 347 1959" (NGS Quad 35 109 3 line 102) 5725.103
- MARTY TRIANGULATION STATION (NGS): Navajo Post Office, 0.1 mi
W. of, along hwy. access rd. to a paved rd. S., thence 0.4 mi
S. to a X-rd., thence 0.3 mi E. along old Hwy. 66; 45 ft N. of
rd.; in a concrete post; standard NGS disk stamped "MARTY 1936"
Latitude 35°07'32.201" Longitude 109°32'00.480" Recovered 5661.466
- Reference mark, "MARTY NO 1 1936" 5662.254
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to a T-rd.
S., thence 0.5 mi S. to a 300-ft bridge; at the southwest side
of the northwest end of a concrete and steel bridge; in the
concrete headwall about 3 ft from the end; an AHD disk (not
stamped) 5630.401
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to a T-rd.
S., thence 0.5 mi S. to a 300-ft bridge; in northeast side of
southeast end of concrete headwall of bridge and about 3 ft
from end; an AHD tablet (not stamped) 5629.000
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to a T-rd.
S., thence 1.4 mi S. to cattleguard; 125 ft S. of cattleguard,
37 ft W. of rd., 1 ft E. of fence line; in concrete post projec-
ting 0.6 ft; standard tablet stamped "79 DOR 1972 5650" 5650.544

PINTO NO. 4 (317)

Arizona

D.O. Richardson, 1972

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Book: PV 858

- (5) Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 2.4 mi S.; 0.5 mi N. of Kerr McGee Corp. National Gas pipe line sign "Helium"; 28 ft W. of rd., 1 ft E. of fence line; in concrete post projecting 0.1 ft; standard tablet stamped "80 DOR 1972 5645" 5645.140
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 3.3 mi S.; 0.3 mi S. of cattleguard; 71 ft W. of and 1 ft higher than rd., 32 ft W. of fence, 5 ft S. of small sandstone marker marked "1/4"; in concrete post projecting 0.5 ft; standard tablet stamped "81 DOR 1972 5672" 5672.026
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 4.3 mi S. to Y-rd. jct.; 36 ft W. of and 1 ft lower than rd., 8 ft S. of small sandstone marker marked "1/4", 6 ft S. of brass cap set on 1-1/4 inch pipe projecting 1.4 ft stamped "LS 5704 R26E R27E S1 S6 1/4 T19N 1972", 1 ft E. of fence line; in concrete post projecting 0.4 ft; standard tablet stamped "82 DOR 1972 5744" 5743.885
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 5.3 mi S. to T-fence W.; 48 ft W. of rd., 23 ft W. of fence line, 18 ft W. of 1/2-inch iron pipe, 1 ft S. of fence; in concrete post projecting 0.5 ft; standard tablet stamped "83 DOR 1972 5776" 5775.923
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 6.2 mi S.; 422 ft S. of cattleguard, 21 ft W. of and 1.5 ft higher than the rd., 8 ft S. of 1/2-inch iron pipe, 1 ft W. of fence; in concrete post projecting 0.2 ft; standard tablet stamped "84 DOR 1972 5806" 5805.884
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 7.3 mi S. to T-rd. W.; 140 ft NW. of Y-rd. jct., 64 ft N. of gate, 52 ft W. of rd., 1 ft E. of fence; in concrete post projecting 0.4 ft; standard tablet stamped "85 DOR 1972 6007" 6007.377
- Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd. S., thence 8.3 mi S.; 370 ft N. of top of slight rise, 25 ft W. of and 1.5 ft higher than rd., 1 ft E. of fence; in concrete post projecting 0.3 ft; standard tablet stamped "86 DOR 1972 6085" 6085.422

PINTO NO. 4 (317)

Arizona

D.O. Richardson, 1972

Trunk Line Adjusted Elevations Based on National
 Geodetic Vertical Datum of 1929

Book: PV 858

- (5) Navajo Post Office, 0.1 mi W. of, along Frontage Rd. to T-rd.
S., thence 8.7 mi S.; 0.2 mi N. of steel water tank; 27 ft W.
of rd., 15 ft S. of brass cap set on 1-inch iron pipe stamped
"LS 5704 T19N S25 S30 S36 S31 R26E R27 1972", 1 ft E. of fence;
in concrete post projecting 0.8 ft; standard tablet stamped
"87 DOR 1972 6071"

6070.842

FILE COPY

REPORT ON PERMANENT SURVEY MARK

35 109 32
AREA OFFICE

STATE Arizona COUNTY ~~Maricopa~~ Apache QUADRANGLE Pinto #4 NW (317)
QUOTE PRIMARY REFERENCE 1.6 mi. N. and 0.6 mi. E. Of Sandhill Triangulation Station
(Direction and distance)

DESIGNATION { LISTED VS 17
STAMPED VS 17 1934 5681 TYPE OF MARK: BM TT _____ TRIANG. _____

Lat. _____ ° _____ ' _____ " CONDITION X
Long. _____ ° _____ ' _____ " Disturbed X
Elev. 5680.878 feet Destroyed USC&GS State GS
Not Found USNPS USNFS
USGLO } (Other)
USBLM }

REMARKS OR REVISED DESCRIPTION:

This bench mark was found in a boulder that was sitting loose above the ground and this boulder could be picked up and carried away. The bench mark appears to be in its original position but is no good as a bench mark elevation.

SUBMITTED BY L.B. Spencer
TITLE Civil Engineer
AGENCY USGS

DATE April 14, 1972

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

LINE 3
REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Arizona COUNTY Apache QUADRANGLE Pinto # 4 SW
QUOTE PRIMARY REFERENCE Petrified Forest N.P., 3.5 mi. east of.
(Direction and distance)

DESIGNATION { LISTED VS 23 1934 5631
STAMPED _____ TYPE OF MARK: BM X TT _____ TRIANG. _____

Lat. _____ ° _____ ' _____ " CONDITION
Long. _____ ° _____ ' _____ " Disturbed X
Elev. 5631.149 feet Destroyed USC&GS State GS
Not Found USNPS USNFS
New Description USGLO } (Other)
USBLM }

REMARKS OR REVISED DESCRIPTION:

Petrified Forest N.P. toll gate, 0.4 mi. east of on park road to junction of old US Highway 66, now a service road, continue on service road east for 2.8 mi. to Nat. Park boundary fence. BM is south along boundary fence 0.5 mi. 520 ft. N. of S.C. 36/20N/24E and 35 ft. W. of fence. A standard tablet in top of sandstone post projecting 5 inches above ground.

SUBMITTED BY A.C. Stephens
TITLE Cart. Tech.
AGENCY USGS

DATE 3-10-72

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

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

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