

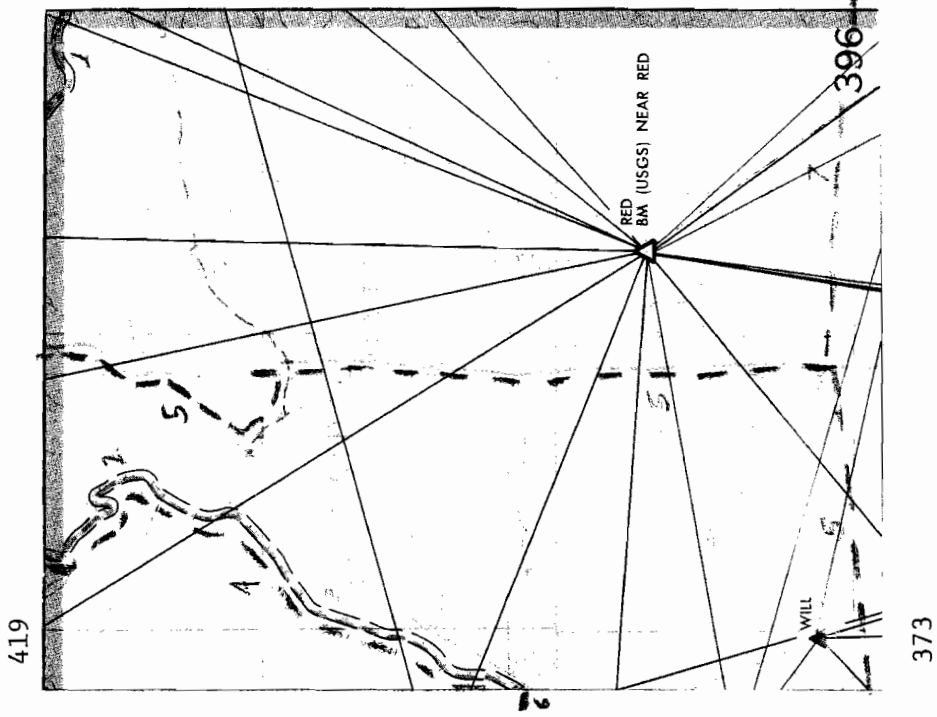
RED BUTTE

Lat. 35°45'
Long. 112°00'

ARIZONA 396

C&GS 35 112 1

- | | | | |
|-----|---------------|---------|--------|
| (1) | J. T. Stewart | 1902-03 | 9462 |
| (2) | J. T. Stewart | 1902-03 | 9462 |
| (3) | M. S. Bright | 1904 | 5085 |
| (4) | B. K. Coker | 1974 | PV 930 |
| (5) | B. K. Coker | 1974 | PV 930 |
| (6) | B. K. Coker | 1974 | PV 930 |
| (7) | B. K. Coker | 1974 | PV 930 |

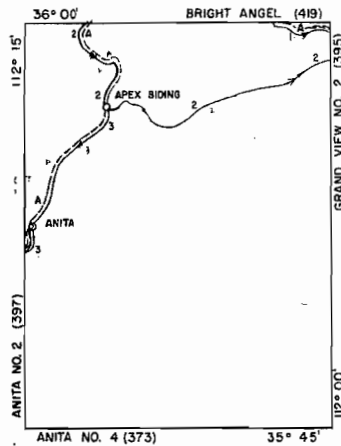


THIRD-ORDER LEVELING
Sea Level Datum of 1929

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RED BUTTE QUADRANGLE
ARIZONA 396
N3545-W11200/15

Coconino County
Edition of 1/2/57
Only the standard
tablets are listed
for lines run more
than 25 years be-
fore the above
edition date



USC&GS Level Line

A. Williams to Cameron, Arizona (No. 61) Second order

Feet

FILE COPY

LINE 1.

FROM BRIGHT ANGEL QUADRANGLE (419) SOUTHEAST ACROSS
NORTHEAST CORNER OF QUADRANGLE INTO GRAND VIEW NO.2
QUADRANGLE (395) (by J. T. Stewart, 1902-1903; Book
9462)

Grand Canyon, 10.7 mi. SE. of El Tovar Hotel along
State Highway 64; at E. end of curve; 29 ft. S. of
center of hwy.; iron post with bronze cap stamped
"7475 CANYON" (Recovered and redescribed by USC&GS,
1934) 7469.175

LINE 2.

FROM BRIGHT ANGEL QUADRANGLE (419) SOUTHEAST AND
SOUTH ALONG ATCHISON, TOPEKA AND SANTA FE RAIL-
ROAD TO APEX SIDING THENCE NORTHEAST INTO GRAND VIEW
NO. 2 QUADRANGLE (395) (by J. T. Stewart, 1902-1903,
Book 9462)

Coconino Siding, 1.5 mi. SE. of; 130 ft. NE. of mile-
board 56, 75 ft. N. of track; in limestone ledge;
standard aluminum tablet stamped "6401 CANYON"
(Recovered by USC&GS, 1934) 6395.463

Apex Siding, 0.5 mi. N. of; 50 ft. SE. of crossing of
track by wagon rd.; 40 ft. E. of track; iron post
with bronze cap stamped "6564 CANYON" (Recovered
by USC&GS, 1934) 6558.540

Rain Tank, 0.5 mi. E. of; 150 ft. E. of rd. fork; in
top of limestone ledge; aluminum tablet stamped
"6580 CANYON" New Desc. '74 6574.261

Rain Tank, 3.7 mi. NE. of; 50 ft. SE. of rd. near big
pine tree; iron post with bronze cap stamped
"6702 CANYON" New Desc. '74 6696.015

Rain Tank, 7 mi. E. of; 4.5 mi. W. of Grandview Hotel;
at S. side of rd.; iron post with bronze cap stamped
"6881 CANYON" New Desc. '74 6874.737

Grandview Hotel, 2.2 mi. SW. of; 20 ft. E. of rd. at
forks; iron post with bronze cap stamped "7300
CANYON" New Desc. '74 7293.720

SEE LINE 5

Out of Limits 0.861 in 13.1 mi.

LINE 3.

FROM APEX SIDING SOUTHWEST ALONG ATCHISON, TOPEKA AND
SANTA FE RAILROAD INTO ANITA NO. 2 QUADRANGLE (397)
(by M. S. Bright, 1904; Book 5085)

Apex Siding, 0.5 mi. N. of; iron post with bronze
cap stamped "6564 CANYON" (Described in Line 2) 6558.540

Apex Siding, 3.0 mi. S. of; 320 ft. N. of milepost
49; 40 ft. W. of track; at S. end of cut; 4 ft.
S. of telephone pole; in limestone outcrop;
standard aluminum tablet stamped "6397 CANYON" 6391.548

Anita, 0.2 mi. N. of water tank; at E. point of ridge;
200 ft. W. of water-car siding; in limestone out-
crop; standard aluminum tablet stamped "5982
CANYON" Not Found '77 5977.074

FILE COPY

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page Quads. Miles State Adj. By Date
Blk. — Page

Page	Quads.	Miles	State	Adj.	By	Date	Altitude by Field Book
d/24			Arizona		B. K. Coker,	1974	
			RED BUTTE (396)				
			Third Order				
			Book: PV 930				
			Latitude 35°45' Longitude 112°00'				
			(4) FROM THE SOUTH EDGE OF BRIGHT ANGEL QUADRANGLE (419)				
			SOUTH TO ALONG RAILROAD TO ANITA				
			10.96 RV 259 (NGS Quad 35 112 1 line 101)				6425.013
			RV 259 by NGS 6424.626				
			RV 259 this run 6425.013				
			Difference = +0.387				
			12.05 BM "N 61 1934" (NGS Quad 35 112 1 line 101)				6475.339
			N 61 by NGS 6474.944				
			N 61 this run 6475.339				
			Difference = +0.395				
			13.04 RV 258 (NGS Quad 35 112 1 line 101)				6518.877
			RV 258 by NGS 6518.474				
			RV 258 this run 6518.877				
			Difference = +0.403				
			14.18 BM "6564 CANYON" (NGS Quad 35 112 1 line 101)				6558.973
			6564 by NGS 6558.540				
			6564 this run 6558.973				
			Difference = +0.433				
			15.36 RV 257 (NGS Quad 35 112 1 line 101)				6509.637
			RV 257 by NGS 6509.239				
			RV 257 this run 6509.637				
			Difference = +0.398				
			16.53 BM "M 61 1934" (NGS Quad 35 112 1 line 101)				6446.854
			M 61 by NGS 6446.483				
			M 61 this run 6446.854				
			Difference = +0.371				
			18.09 BM "L 61 1934" (NGS Quad 35 112 1 line 101)				6331.860
			L 61 by NGS 6331.523				
			L 61 this run 6331.860				
			Difference = +0.337				

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page Quads. Miles State Adj. By Date
Blk. — Page

Page	Quads.	Miles	State	Adj.	By	Date	Altitude by Field Book
d/39			Arizona		B. K. Coker,	1974	
			RED BUTTE (396)				
			Third Order				
			Book: PV 930				
			18.57 RV 255 (NGS Quad 35 112 1 line 101)				6284.618
			RV 255 by NGS 6284.295				
			RV 255 this run 6284.618				
			Difference = +0.323				
			19.51 RV 254 (NGS Quad 35 112 1 line 101)				6151.503
			RV 254 by NGS 6151.221				
			RV 254 this run 6151.503				
			Difference = +0.282				
			20.16 RV 253 (NGS Quad 35 112 1 line 101)				6068.255
			RV 253 by NGS 6067.980				
			RV 253 this run 6068.255				
			Difference = +0.275				
			21.16 TP: Second spike (on inside) S. of second rail S. of switch; rail spike				5967.869
			21.82 BM "K 61 1934" (NGS Quad 35 112 1 line 101)				5919.754
			K 61 by NGS 5919.621				
			K 61 this run 5919.754				
			Closure = +0.133				

FILE COPY

MAR 17 1975

BENCH MARK DESCRIPTIONS, FIELD SUMMARY					35 112 11
Page	Quads.	State	By	Altitude by	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY P-112
Bk.—Page	Miles	Adj.	Date	Field Book	
		RED BUTTE (396)	Arizona	B.K. Coker, 1974	
		Third Order	Field Elevations		
		Book: PV 930	Latitude 35°45'	Longitude 112°00'	
(5)		FROM A POINT ABOUT 0.8 MILE SOUTH OF WILLAHA EAST ALONG THE POWER LINE TO U.S. HIGHWAY 180 THENCE NORTH INTO THE SOUTH EDGE OF BRIGHT ANGEL QUADRANGLE (419)			Quad 397
c/4	0.00	BM USGS "5806" (NGS Quad 35 112 1 line 101)		5801.721	
	1.11	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 2.1 mi E. along (steel tower) power line; at tower No. 226.2; set in concrete footing at southwest corner of tower; standard tablet stamped "125 BKC 1974"		5849.765	
	2.09	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 2.1 mi E. along (steel tower) power line; about 0.1 mi W. of fence line; at tower No. 225.2; in southwest concrete footing of tower; standard tablet stamped "126 BKC 1974"		5883.373	
	3.07	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 3.0 mi E. along (steel tower) power line; at tower No. 224.2; set in the southwest concrete footing of tower; a standard tablet stamped "127 BKC 1974"		5892.391	
	4.28	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 4.2 mi E. along a (steel tower) power line; at tower No. 223.1; set in the southwest concrete footing; standard tablet stamped "128 BKC 1974"		5954.762	
	5.21	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 5.2 mi E. along a (steel tower) power line; at tower No. 222.1; set in the southwest concrete footing of tower; standard tablet stamped "129 BKC 1974"		6057.862	
	6.23	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 6.2 mi E. along a (steel tower) power line; at tower No. 221.1; set in southeast concrete footing of tower; standard tablet stamped "130 BKC 1974"		6078.752	
		Page 1 of 4		2/25/75 d	

BENCH MARK DESCRIPTIONS, FIELD SUMMARY					35 112 11
Page	Quads.	State	By	Altitude by	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY P-112
Bk.—Page	Miles	Adj.	Date	Field Book	
		RED BUTTE (396)	Arizona	B.K. Coker, 1974	
		Third Order	Field Elevations		
		Book: PV 930			
c/33	14.49	Tusayan Ranger Station, 8.1 mi S. of, along U.S. Hwy. 180; at T-rd. W. to Anita; 96 ft W. of centerline of hwy., 11 ft N. of centerline of rd.; set in northeast corner of concrete cattleguard; standard tablet stamped "137 BKC 1974"		6382.965	
	15.32	Tusayan Ranger Station, 7.3 mi S. of, along U.S. Hwy. 180; 23 ft W. of centerline of rd.; in a concrete bridge headwall; USBPR brass cap stamped "711+25 6410.07 1953"		6404.275	
	16.58	Tusayan Ranger Station, 6.0 mi S. of, along U.S. Hwy. 180; at north end of rd. cut; 69 ft E. of centerline of hwy.; in rock outcrop; standard tablet stamped "138 BKC 1974"		6494.123	
	17.20	Tusayan Ranger Station, 5.4 mi S. of, along U.S. Hwy. 180; 26 ft E. of centerline of rd.; in center of bridge headwall; USDA brass cap stamped "613+30 6560.84"		6555.226	
	18.54	Tusayan Ranger Station, 4.1 mi S. of, along U.S. Hwy. 180; at north end of rest area; 98 ft E. of hwy.; 2 ft W. of fence; set on a copper-coated rod inside a black pipe; standard tablet stamped "139 BKC 1974"		6600.727	
	19.01	TP: At south entrance to Grand Canyon Airport; metal pin		6585.050	
		SPUR LINE TO USGS BM "140 BKC"			
	0.44	Tusayan Ranger Station, 3.2 mi S. of, along U.S. Hwy. 180; at entrance to Ten-X Campground; 97 ft E. of centerline of hwy., 10 ft S. of centerline of rd.; in southwest corner of cattleguard; standard tablet stamped "140 BKC 1974"		6607.131	
		RETURN TO MAIN LINE			
	19.01	TP: (as above)		6585.050	
	19.58	Tusayan Ranger Station, 3.6 mi S. of, along U.S. Hwy. 180, thence 0.6 mi NW, along a graded rd.; 94 ft SW. of centerline of rd.; set in a rock outcrop; standard tablet stamped "141 BKC 1974"		6599.386	
		Page 3 of 4		2/25/75 dld	

BENCH MARK DESCRIPTIONS, FIELD SUMMARY					35 112 11
Page	Quads.	State	By	Altitude by	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY P-112
Bk.—Page	Miles	Adj.	Date	Field Book	
		RED BUTTE (396)	Arizona	B.K. Coker, 1974	
		Third Order	Field Elevations		
		Book: PV 930			
c/17	7.48	Willaha Siding, 0.9 mi S. of, along Atchison, Topeka, and Santa Fe RR., thence 7.4 mi E. along a (steel tower) power line; set in the southeast concrete footing of tower; standard tablet stamped "131 BKC 1974"		6090.263	
	7.75	TP: West edge of hwy. at power line		6111.504	
	7.90	Willaha Siding, 0.9 mi S. of, along the Atchison, Topeka, and Santa Fe RR., thence 7.8 mi E. along a (steel tower) power line to U.S. Hwy. 180, thence 0.1 mi N. to T-rd. W.; 14.7 mi S. of Tusayan Ranger Station along U.S. Hwy. 180; 96 ft W. of centerline of hwy., 11 ft N. of centerline of graded rd.; set in northeast corner of concrete headwall to cattleguard; standard tablet stamped "132 BKC 1974"		6101.150	
		JUNCTION POINT			
	8.80	Tusayan Ranger Station, 13.8 mi S. of, along U.S. Hwy. 180; 97 ft E. of centerline of hwy.; USBPR brass cap; set on 1 1/2-inch iron pipe; stamped "1049+83.20 6097.39 1954"		6091.161	
	9.84	Tusayan Ranger Station, 12.8 mi S. of, along U.S. Hwy. 180; 99 ft E. of centerline of hwy., 1.5 ft W. of fence; set on a copper-coated rod inside a 6-inch black pipe; standard tablet stamped "133 BKC 1974"		6116.778	
	10.41	Tusayan Ranger Station, 12.2 mi S. of, along U.S. Hwy. 180; 184 ft S. and 95 ft E. of T-rd. E., 4 ft N. of fence corner; in concrete post; U.S. Bureau of Public Roads brass cap stamped "966+06.50 6158.83"		6152.587	
	11.43	Tusayan Ranger Station, 11.2 mi S. of, along U.S. Hwy. 180, 98 ft E. of centerline of hwy.; set on a 1 1/2-inch steel pipe; USBPR brass cap stamped "913+42.01 6262.58"		6256.396	
	12.38	Tusayan Ranger Station, 10.2 mi S. of, along U.S. Hwy. 180; 79 ft E. of centerline of hwy.; in rock outcrop; standard tablet stamped "135 BKC 1974"		6253.779	
	13.21	Tusayan Ranger Station, 9.4 mi S. of, along U.S. Hwy. 180 at T-rd. E.; 77 ft N. of gravel rd. and 69 ft E. of centerline of hwy.; set in a rock outcrop; standard tablet stamped "136 BKC 1974"		6264.533	
		Page 2 of 4		2/25/75 d	

BENCH MARK DESCRIPTIONS, FIELD SUMMARY					35 112 11
Page	Quads.	State	By	Altitude by	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY P-112
Bk.—Page	Miles	Adj.	Date	Field Book	
		RED BUTTE (396)	Arizona	B.K. Coker, 1974	
		Third Order	Field Elevations		
		Book: PV 930			
c/51	20.87	Tusayan Ranger Station, 3.6 mi S. of, along U.S. Hwy. 180, thence 1.9 mi NW, along a graded rd.; 150 ft E. of rd. fork, 12 ft N. of track rd.; in rock outcrop; standard tablet stamped "6580 CANYON"		6575.006	
		6580 prev. elev. 6574.261 6580 this run 6575.006 Difference = +0.745			
	21.27	Tusayan Ranger Station, 3.6 mi S. of, along U.S. Hwy. 180, thence 2.3 mi NW, along graded rd.; 1.8 mi SW. of the Grand Canyon Airport along graded rd.; about 300 ft SE. of the south end of east runway; at cattleguard, 9 ft W. of centerline of rd.; in concrete headwall; standard tablet stamped "142 BKC 1974"		6535.810	
	23.16	At Grand Canyon Airport; at north end of runway; 382 ft W. of northwest corner of Grand Canyon Airlines building, 5 ft W. of gas pump; set on a copper-coated rod inside a 6-inch black pipe; standard tablet stamped "143 BKC 1974"		6604.361	
	24.13	Grand Canyon Airport, 0.4 mi E. of to U.S. Hwy. 180, thence 0.6 mi N. along U.S. Hwy. 180; 0.8 mi S. of Tusayan Ranger Station along U.S. Hwy. 180, at concrete culvert, 24 ft E. of centerline of rd.; in center of concrete headwall; USBPR brass cap stamped "375+00 6622.97 1954"		6617.343	
	25.20	Tusayan Ranger Station, 0.3 mi N. of, along U.S. Hwy. 180; 83 ft W. of centerline of rd.; in rock outcrop; standard tablet stamped "144 BKC 1974"		6646.629	
		Tusayan Ranger Station, 1.2 mi N. of, along U.S. Hwy. 180; at the south entrance to Grand Canyon National Park; 53 ft SE. of entrance sign, 51 ft E. of centerline of hwy.; set in rock outcrop; standard tablet stamped "145 BKC 1974"		6732.526	
		FILE COPY			
		MAR 17 1975			
		Page 4 of 4		2/25/75 dld	

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
9-1128

Page	Quads.	State	By	Altitude by
Bk.—Page	Miles	Adj.	Date	Field Book

	RED BUTTE (396)	Arizona	B.K. Coker, 1974	
	Third Order	Field Elevations		
	Book: PV 930	Latitude 35°45' Longitude 112°00'		
	(6) FROM ANITA STATION WEST INTO THE EAST SIDE OF ANITA NO. 2 QUADRANGLE (396)			
a/6	0.00	BM "K 61 1934" (NGS Quad 35 112 1 line 101)		5919.621

FILE COPY

MAR 17 1975

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page Quads. Bk.—Page Miles State Adj. By Date

RED BUTTE (396)	Arizona	B.K. Coker, 1974
Third Order	Field Elevations	
Book: PV 930	Latitude 35°45' Longitude 112°00'	
(17)	FROM A POINT ABOUT 15 MILES SOUTH OF TUSAYAN RANGER STATION ALONG U.S. HIGHWAY 180 THENCE SOUTHEAST ALONG POWER LINE INTO THE NORTHEAST ^S EDGE ^W OF VADIA ^{5 W} QUADRANGLE (395) (395)	
e/2	0.00 BM "132 BKC 1974" (Described in USGS line)	6101.150
	1.37 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 1.4 mi E. along (steel tower) power line; at tower No. 218.2; in southeast concrete footing of tower; standard tablet stamped "148 BKC 6196 1974"	6195.963
	2.36 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180 to a (steel tower) power line, thence 2.4 mi E. along power line to tower No. 217.2; set in concrete footing at northwest corner of tower; standard tablet stamped "149 BKC 1974 6112"	6111.510
	3.28 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 3.3 mi E. along a (steel tower) transmission line; at tower No. 216.3; set in concrete footing at southwest leg of tower; standard tablet stamped "150 BKC 1974 6114"	6113.622
	4.51 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 4.5 mi E. along a (steel tower) transmission line; at tower No. 215.2; in concrete footing at southwest corner of tower; standard tablet stamped "151 BKC 1974 6151"	6150.862
	5.49 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 5.5 mi E. along a (steel tower) transmission line; at tower No. 214.2; set in concrete footing at southwest corner of tower; standard tablet stamped "152 BKC 1974 6186"	6185.667
	6.44 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 6.0 mi E. along a (steel tower) transmission line, thence 0.5 mi S. along a dirt rd.; 34 ft W. of centerline of rd.; set on a copper-coated rod inside a 6-inch black pipe; standard tablet stamped "153 BKC 1974 6200"	6199.691
		2/27/75 d

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page Quads. Bk.—Page Miles State Adj. By Date

RED BUTTE (396)	Arizona	B.K. Coker, 1974
Third Order	Field Elevations	
Book: PV 930		
e/20	7.70 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 6.0 mi E. along a (steel tower) transmission line, thence 1.8 mi SSE. along a dirt rd.; 45 ft NE. of centerline of rd., 15 ft N. of centerline of drain; set in rock outcrop; standard tablet stamped "154 BKC 1974 6269"	6269.281
	8.53 Tusayan Ranger Station, 14.8 mi S. of, along U.S. Hwy. 180, thence 6.0 mi E. along (steel tower) transmission line, thence 2.6 mi SE. along a dirt rd.; 31 ft N. of centerline of rd.; set on copper-coated rod inside a 6-inch black pipe; standard tablet stamped "155 BKC 1974 6354"	6353.536
		2/27/75 d

FILE COPY

MAR 17 1975

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Arizona COUNTY Coconino QUADRANGLE Red Butte NE
QUOTE PRIMARY REFERENCE Rain Tank, 3.7 mi. E. of;
(Direction and distance)

DESIGNATION { LISTED 6702 CANYON Quad. No. 396
STAMPED _____ TYPE OF MARK: BM TT _____ TRIANG. _____

Lat. _____ ° _____ ' _____ " CONDITION ESTABLISHED BY
Disturbed USGS USBR
Long. _____ ° _____ ' _____ " Destroyed USC&GS State GS
Elev. 6696.815 feet Not Found USNPS USNFS
USGLO } _____
USBLM } _____ (Other)

REMARKS OR REVISED DESCRIPTION:
From the intersection of Highway 64 and 180 and the entrance to the Tusayan Ranger Station go 4.4 miles south along the highway to the road to Ten-X Campground. Turn left and travel 0.3 miles to a road fork. Take the right fork and proceed 1.45 miles to BM on the left. BM is 31 feet N. of the centerline of the road, 87 feet NW of a large Ponderosa pine tree. A bronze cap stamped " 6702 CANYON " on an iron pipe projecting 0.8 feet above the ground.

SUBMITTED BY William Kranzler
TITLE Cartographic Tech. DATE 9/11/74
AGENCY US Geological Survey

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Ariz COUNTY Coconino QUADRANGLE Red Butte NW
QUOTE PRIMARY REFERENCE Rain Tank 0.5 mi. east of
(Direction and distance) line 2 USGS

DESIGNATION { LISTED 6580 Canyon
STAMPED 6580 Canyon TYPE OF MARK: BM TT _____ TRIANG. _____

Lat. _____ ° _____ ' _____ " CONDITION ESTABLISHED BY
Disturbed USGS USBR
Long. _____ ° _____ ' _____ " Destroyed USC&GS State GS
Elev. 6574.261 feet Not Found USNPS USNFS
USGLO } _____
USBLM } _____ (Other)

REMARKS OR REVISED DESCRIPTION:
From the entrance to the Tusayan Ranger Station and state hwy 64, go south 4.4 miles to road on right. Thence turn right and proceed 1.8 mi. to old rd. on right. thence turn right and proceed 130 feet to BM on the left. BM is 15 ft. north of and 4.5 ft higher than rd. BM is a aluminum tablet stamped 6580 CANYON

SUBMITTED BY S. L. Guthary
TITLE Carto Tech DATE 8/74
AGENCY USGS

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

FILE COPY

Please prepare in triplicate and send to nearest address shown on reverse side.

Please prepare in triplicate and send to nearest address shown on reverse side.

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Arizona COUNTY Coconino QUADRANGLE Red Butte NE
QUOTE PRIMARY REFERENCE Grandview Hotel, 2.2 mi. SW. of;
(Direction and distance)

DESIGNATION { LISTED 7300 CANYON Quad No. 396
STAMPED _____ TYPE OF MARK: BM X TT _____ TRIANG. _____

Lat. _____° _____' _____"	CONDITION	ESTABLISHED BY
Long. _____° _____' _____"	Disturbed <input type="checkbox"/>	USGS <input checked="" type="checkbox"/> USBR <input type="checkbox"/>
Elev. <u>7293.720</u> feet	Destroyed <input type="checkbox"/>	USC&GS <input type="checkbox"/> State GS <input type="checkbox"/>
	Not Found <input type="checkbox"/>	USNPS <input type="checkbox"/> USNFS <input type="checkbox"/>
		USGLO <input type="checkbox"/> _____ <input type="checkbox"/>
		USBLM } (Other)

REMARKS OR REVISED DESCRIPTION:

From the intersection of Highway 64 and 180 and the entrance to the Tusayan Ranger station go south along the highway 4.4 miles to the road to Ten-X camp-ground. Turn left and trave 0.3 miles to a road fork. Take right fork and travel 2.5 miles to the junction with Forest Srevice road 321. Turn right at the junction and go 0.6 milesto a road fork. Take left fork on Forest Service road 3303 and then proceed 0.3 miles to a fork. Take left fork and go 0.8 miles to a road fork. Take left fork and go 1.9 miles to a road intersection. Proceed

SUBMITTED BY W. Kranzler (continued) _____
TITLE Carto. Tech. DATE 9/11/74
AGENCY US Geological Survey

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Arizona COUNTY Coconino QUADRANGLE Red Butte NE
QUOTE PRIMARY REFERENCE _____
(Direction and distance)

DESIGNATION { LISTED 7300 CANYON Quad No. 396
STAMPED _____ TYPE OF MARK: BM _____ TT _____ TRIANG. _____

Lat. _____° _____' _____"	CONDITION	ESTABLISHED BY
Long. _____° _____' _____"	Disturbed <input type="checkbox"/>	USGS <input type="checkbox"/> USBR <input type="checkbox"/>
Elev. _____ feet	Destroyed <input type="checkbox"/>	USC&GS <input type="checkbox"/> State GS <input type="checkbox"/>
	Not Found <input type="checkbox"/>	USNPS <input type="checkbox"/> USNFS <input type="checkbox"/>
		USGLO <input type="checkbox"/> _____ <input type="checkbox"/>
		USBLM } (Other)

REMARKS OR REVISED DESCRIPTION: continued:

straight ahead (slight jog) traveling east for 1.0 miles to the BM on the right. BM is 19.5 feet S. of the centerline of the road, 13 feet west of a small tree and 7 feet east of another small tree. A bronze cap stamped "7300 CANYON" on an iron post projecting 1.0 feet above the ground.

SUBMITTED BY W. Kranzler
TITLE Carto. Tech. DATE 9/11/74
AGENCY US Geological Survey

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

FILE COPY

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.

ARKAUNA 510
Line 2

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Arizona COUNTY Coconino QUADRANGLE Red Butte NE
QUOTE PRIMARY REFERENCE Rein Tank, 7 mi. NE. of;
(Direction and distance) Quad No. 396

DESIGNATION { LISTED 6881 CANYON
STAMPED _____ TYPE OF MARK: BM X TT _____ TRIANG. _____

Lat. _____° _____' _____" CONDITION Disturbed
Long. _____° _____' _____" Destroyed ESTABLISHED BY USGS USBR
Elev. 6874.737 feet Not Found USC&GS State GS
USNPS USNFS
USGLO { (Other)
USBLM }

REMARKS OR REVISED DESCRIPTION:
From the intersection of Highway 64 and 180 and the entrance to the
Tusayan Ranger station go 4.4 miles south along the Highway to the road to Ten-X
Campground. Turn left and travel 0.3 miles to a road fork. Take right fork and
proceed 2.5 miles to junction with Forest Service road 321. Turn right and go
0.6 miles to a road fork. Turn left on Forest Service road 303 and travel 0.3
miles to a road fork. Take left fork and proceed 0.8 miles to a road fork. Take
right fork and travel 1.4 miles to another fork. take left fork and travel 0.1
miles to a road fork. (continued)---

SUBMITTED BY M. Kranzler DATE 9/11/74
TITLE Carto Tech
AGENCY US Geological Survey

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

(OVER)

16-54252-4

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

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Arizona COUNTY Coconino QUADRANGLE Red Butte NE
QUOTE PRIMARY REFERENCE _____
(Direction and distance) Quad No. 396

DESIGNATION { LISTED 6881 CANYON ~~XXXXXX~~
STAMPED _____ TYPE OF MARK: BM _____ TT _____ TRIANG. _____

Lat. _____° _____' _____" CONDITION Disturbed
Long. _____° _____' _____" Destroyed ESTABLISHED BY USGS USBR
Elev. _____ feet Not Found USC&GS State GS
USNPS USNFS
USGLO { (Other)
USBLM }

REMARKS OR REVISED DESCRIPTION: Continued:
miles to the BM on the right. BM is 48 Feet S. of the centerline of the road,
32 feet SE of a large Ponderosa pine and 13 feet NE of a small pine tree. BM
is bronze cap stamped "6881 CANYON" on an iron pipe projecting 1.00 foot above
the ground.

SUBMITTED BY M. Kranzler DATE 9/11/74
TITLE Carto Tech
AGENCY US Geological Survey

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

(OVER)

16-54252-4

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

FILE COPY