

N3600-W8200/15
NORTH CAROLINA-TENNESSEE

Nos. 122, 123, 124, 125, 126 Tenn.
TOECANE QUADRANGLE

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Bull. 646, pg. 51 Third-order Leveling S.L.D. 1929
Revised: 6/18/54 jmr

FROM HUNTDAL E EAST TO ROCK CREEK NEAR RED HILL

Herrell, 1.7 mi. SW. of, 200 ft. S. of Widow Street's house, 25 ft. from right bank of Rock Creek, on top of boulder; chiseled circle 2293.67

FROM RED HILL NORTH UP ROCK CREEK TO MAGNETIC CITY

Magnetic City, 0.35 mi. N. of, in side of boulder fronting rd.; aluminum tablet stamped (plug, formerly stem of) "2805 ASH" 2804.740

FROM BAKERSVILLE EAST ALONG HIGHWAY TO SPEAR

Bakersville, 8.4 mi. E. of, 30 ft. E. of point where rd. crosses top of Cane Creek Mountain, in root of large chestnut tree; nail 4162.03

Spear, mouth of Henson Creek, in rock ledge; standard tablet stamped (plug, formerly stem of) "2840 ASH" 2839.573

FROM BULADEAN ALONG HIGHWAYS SOUTH TO RED HILL THENCE EAST BY WAY OF BAKERSVILLE TO SPEAR (by R. P. Willingham, 1934; Book B5327)

Third-order leveling; supplementary to second-order levels by U.S.C. & G.S.)

Buladean (formerly Magnetic City), 0.35 mi. N. of, 275 ft. SW. of highway, at SW. edge of old rd., 150 ft. SW. of Spring Creek, in side of boulder fronting rd.; aluminum plug, formerly stem of tablet stamped "2805 ASH" 2804.740

Reference mark, 50 ft. N. of plug, on large boulder; chiseled square 2804.09

Buladean, 0.8 mi. S. of, 150 ft. N. of small drain crossing, 10 ft. SE. of rd., in root on N. side of 16-in. buckeye tree; copper nail and washer, painted "USBM 2718.4" 2719.08

TOECANE QUADRANGLE

NORTH CAROLINA-TENNESSEE

Bk. B5327

by R.P. Willingham, 1934

S.L.D. of 1929

Recopied: 6/18/54 jmr

(Cont'd. P. 2)

- Buladean, 2.0 mi. S. of, 6 ft. S. of SW. corner of private garage, E. of rd., on N. edge of boulder; chiseled square, painted "USBM 2538.8" 2539.45
- Buladean, 3.3 mi. S. of, 130 ft. SE. of mouth of Bean Creek, 100 ft. W. of T-rd. fork, 15 ft. E. of NE. corner of bridge over Rock Creek, 10 ft. N. of T-rd., top of concrete post; standard tablet stamped "RPW 1 1934 2385", painted "USPBM 2384.5" 2385.204
- Reference mark, 180 ft. S. of tablet, 30 ft. W. of rd., on boulder; chiseled square 2386.00
- Buladean, 4.0 mi. S. of, 40 ft. NW. of intersection of T-rd. SE., 15 ft. N. of rd., 80 ft. N. of bridge over small stream, in root on NE. side of 12-in. locust tree; copper nail and washer, painted "USBM 2375.4" 2376.10
- Buladean, 5.8 mi. S. of, 0.6 mi. S. of Honeycutt Post Office, on E. end of S. concrete abutment of iron bridge over Rock Creek; chiseled square, painted "USBM 2291.8" 2292.36
- Buladean, 6.7 mi. S. of, 0.9 mi. N. of Red Hill, 80 ft. N. of intersection of old field rd. NE, at point of sharp curve in main rd., in top of large boulder; standard tablet stamped "RPW 2 1934 2510", painted "PBM 2510.4" 2510.926
- Reference mark, 90 ft. SE. of tablet, in root on SW. side of 6-in. beech tree; copper nail and washer 2506.72
- Red Hill, 0.3 mi. SE. of, 2700 ft. N. of SW. end of bridge over small stream at entrance to barnyard, 30 ft. S. of rd., on NE. part of rock outcrop; chiseled square, painted "USBM 2420.5" 2421.016
- Red Hill, 1.6 mi. SE. of, 4.3 mi. W. of Bakersville, 0.5 mi. NW. of rd. to Buladean and rd. to Toecane, 40 ft. SW. of rd., top and about in center of rock ledge; chiseled square, painted "USBM 2445.2" 2445.69
- Bakersville, 2.8 mi. W. of, 170 ft. SE. of concrete bridge over Cane Creek, 80 ft. SE. of rd. fork, E. end of residence, top of concrete post; standard tablet stamped "RPW 3 1934 2327", painted "PBM 2327.4" (Tied to C&GS 1936) 2327.651
- Reference mark, 180 ft. NW. of tablet, on N. corner of NE. concrete abutment of bridge over Cane Creek; chiseled square 2327.52

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(Cont'd. P. 3)

Bakersville, 2.1 mi. W. of, 60 ft. SE. of front entrance to George's Cash Store, on SW. concrete wing wall of concrete bridge; chiseled square, painted "USBM 2372.2"	2372.67
Bakersville, 0.6 mi. W. of, 20 ft. SE. of rd. fork, on NW. corner of SW. head wall of concrete culvert; chiseled square, painted "USBM 2429.3"	2429.68
Bakersville, about 100 ft. S. of street intersection, on NW. corner of N. concrete abutment of bridge over Cane Creek; chiseled square, painted "USBM 2459.6"	2459.96
Bakersville, 275 ft. SW. of school building, 100 ft. SE. of SE. corner of school storage garage, in S. portion of school grounds, top of concrete post; standard tablet stamped "Magnetic Station 1931" (U.S.C. & G.S. Magnetic Station, no description was furnished for this mark, this one written in field)	2490.986
Reference mark, 100 ft. NW. of tablet, on concrete pillar at SE. corner of school storage garage	2487.12
Bakersville, 0.9 mi. E. of, on NE. concrete abutment of iron bridge over Cane Creek; chiseled square, painted "USBM 2487.2"	2487.56
Bakersville, 1.9 mi. E. of, 80 ft. N. of crossroads, SW. fork leading to mill site, 40 ft. NW. of rd., in root on E. side of 14-in. locust tree; copper nail and washer, painted "USBM 2529.6"	2529.96
Bakersville, 2.9 mi. E. of, 60 ft. N. of NE. corner of Clarrissa Post Office, 35 ft. SE. of rd. intersection, top of concrete post; standard tablet stamped "RPW 6 1934 2602", painted "PBM 2601.8"	2602.111
Reference mark, 110 ft. NW. of tablet, on center of rock ledge; chiseled square	2602.99
Bakersville, 4.0 mi. E. of, 0.7 mi. W. of Hawk, at NW. edge of rd., on S. corner of sharp rock; chiseled square, painted "USBM 2709.9"	2710.20
Hawk, 0.3 mi. NE. of, 80 ft. E. of Cane Creek Baptist Church, 40 ft. SE. of rd., in root on SE. side of large twin poplar tree; copper nail and washer, painted "USBM 2820.4"	2820.72

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by R.P. Willingham, 1934

S.L.D. of 1929

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(Cont'd. P. 4)

- Hawk, 1.5 mi. NE. of, 90 ft. SE. of intersection of T-rd. S., 40 ft. NE. of T-rd., top of and about center of large boulder; standard tablet stamped "RPW 7 1934 3115", painted "USPBM 3114.8" 3115.090
- Reference mark, 50 ft. N. of tablet, on SE. edge of rock ledge; chiseled square 3113.57
- Hawk, 3.0 mi. NE. of, at E. edge of rd., on lower part of rock outcrop; chiseled square, painted "USBM 3752.4" 3752.66
- Hawk, 4.0 mi. NE. of, 5.9 mi. NW. of Spear, 15 ft. SE. of point where rd. crosses top of Cane Creek Mtn., near center of rock ledge; chiseled square, painted "USBM 4159.7" 4159.96
- Spear, 3.6 mi. NW. of, on rd. over Cane Creek Mtn., at N. edge of gate, W. edge of rd., on NE. part of rock boulder; chiseled square, painted "USBM 3616.2" 3616.39
- Spear, 2.8 mi. NW. of, 2.8 mi. NW. of mouth of Henson Creek, on SW. side of rd., set in top of large boulder; standard tablet stamped "RPW 1934 3316", painted "USPBM 3316.3" 3316.528
- Reference mark, 20 ft. W. of tablet, top of large boulder; chiseled square 3315.93
- Spear, 1.8 mi. NW. of, 10 ft. NE. of N. side of Henson Creek Baptist Church, about midway between second and third windows, on rock; chiseled square, painted "USBM 3115.6" 3115.80
- Spear, 0.6 mi. W. of, 130 ft. SE. of rd. fork N., 30 ft. SW. of rd., on highest point of NE. edge of rock; chiseled square, painted "USBM 2905.9" 2906.06
- Spear, mouth of Henson Creek, projecting 0.02 ft. above surfaced rock ledge; standard plug with cross on top (former stem of standard tablet stamped "2840 ASH" (estimated 0.038 ft. lower than former tablet surface) 2839.573
- Reference mark, on SE. corner of concrete abutment of bridge over Henson Creek; chiseled square 2841.38

TOECANE QUADRANGLE

NORTH CAROLINA-TENNESSEE

Bk. B5327

By R.P. Willingham, 1934

S.L.D. of 1929

Recopied; 6/18/54 jmr

(Cont'd. P. 5)

FROM BULADEAN (MAGNETIC CITY) NORTHEAST ALONG ROAD INTO TENNESSEE

- Buladean, 0.7 mi. NE. of, 70 ft. N. and 20 ft. W. of Y-rd. forks, at NE. edge of rd. bearing N., on NE. corner of boulder; chiseled square, painted "USBM 2868.2" 2868.88
- Buladean, 1.5 mi. NE. of, 30 ft. NE. of stream crossing, 60 ft. W. and 20 ft. N. of Y-rd. forks, 10 ft. N. of rd., on highest point of boulder; chiseled square, painted "USBM 2980.3" 2980.96
- Buladean, 2.5 mi. NE. of, 1.8 mi. W. of Hughes Gap, 70 ft. NE. of intersection of T-rd. N., 75 ft. NE. of small stream crossing, 60 ft. N. of rd., top of boulder; standard tablet stamped "RPW 10 1934", painted "USPBM 3204.4" 3205.061
- Reference mark, 75 ft. E. and 10 ft. S. of tablet, on top of boulder; chiseled square 3204.80
- Buladean, 4.2 mi. NE. of, 175 ft. E. of point where rd. crosses Hughes Gap, at N. edge of rd., in root on S. side of buckeye tree; copper nail and washer, painted "USBM 4039.8" 4040.47
- FROM POINT 4 MILES SOUTH OF BULADEAN NORTHEAST ALONG HIGHWAY TO GRASSY RIDGE (Partially double run line)
- Buladean, 4.0 mi. S. of, 40 ft. NW. of intersection of T-rd. SE., 15 ft. N. of rd., 80 ft. N. of bridge over small stream, in root on NE. side of 12-in. locust tree; copper nail and washer, painted "USBM 2375.4" 2376.10
- Glen Ayre, 6.6 mi. W. of, 5.0 mi. S. and E. of Buladean, at W. edge of rd., in root on NE. side of $S\frac{1}{2}$ of double red oak tree; copper nail and washer, painted "USBM 2586.6" 2587.18
- Piney Branch School, 1.3 mi. W. of, 6.3 mi. S. and E. of Buladean, 10 ft. N. of second-class rd. N., 100 ft. W. of old sawmill, 8 ft. W. of corner fence post, near center of boulder; chiseled square, painted "USBM 2730.9" 2731.53
- Piney Branch School, 150 ft. S. and directly in front of school building, 30 ft. N. of rd., in concrete post; standard tablet stamped "RPW 4 1934 2805", painted "PBM 2808.6" 2809.310
- Reference mark, 30 ft. W. of tablet, in root on S. side of 30-in. oak tree; copper nail and washer 2806.96

TOECANE QUADRANGLE

NORTH CAROLINA-TENNESSEE

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by R.P. Willingham, 1934

S.L.D. of 1929

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Piney Branch School, 1.0 mi. E. of, 2.8 mi. SW. of Glen Ayre, 60 ft. S. and 10 ft. E. of intersection of T-rd. S. to Bakersville, on NE. corner of NE. concrete wing wall of iron bridge over Little Rock Creek; chiseled square, painted "USBM 2917.4"	2918.04
Glen Ayre, 1.7 mi. SW. of, 55 ft. SE. of Young's Store, 30 ft. S. of rd., in NW. portion of large rock outcrop; top of boulder; chiseled square, painted "USBM 3048.3"	3048.95
Glen Ayre School, 110 ft. SE. of SE. entrance of school building, 60 ft. N. of rd., in SE. corner of school ground, on highest point of large boulder; chiseled square, painted "USBM 3170.2"	3170.86
Glen Ayre, 75 ft. S. of rd. intersection, 50 ft. SE. of front entrance of Little Rock Creek Baptist Church, top of concrete post; standard tablet stamped "RPW 5 1934 3175", painted "USPBM 3178.1"	3178.748
Reference mark, 60 ft. NW. of tablet, on boulder; chiseled square	3182.17
Glen Ayre, 0.9 mi. NE. of, 25 ft. NW. of Rock Creek, 10 ft. NW. of rd., in root on SE. side of lone locust tree; copper nail and washer, painted "USBM 3353.4"	3354.20
Glen Ayre, 2.1 mi. NE. of, 130 ft. SE. of bridge over small stream, midway between residence and private garage, 40 ft. S. of rd., on NW. corner of large boulder; chiseled square, painted "USBM 3786.0"	3786.76
Glen Ayre, 3.3 mi. NE. of, 50 ft. NE. of gate across rd., at N. edge of rd., top of rock; chiseled square, painted "USBM 4483.3"	4487.36
Grassy Ridge, 4.2 mi. NE. of Glen Ayre, 3.7 mi. W. of Valley Post Office, 150 ft. NE. of rd. and trail intersection, 20 ft. W. of N.-S. fence line, in rock outcrop; standard tablet stamped "GL 3 1934", painted "4852.5"	4852.961
Reference mark, 25 ft. SE. of tablet, in root on NW. side of small maple tree; copper nail and washer	4851.80

NGVD 29
Elevations

NGVD 29
Elevations

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NORTH CAROLINA-TENNESSEE

Bk. B5327

S.L.D. of 1929

by R.P. Willingham, 1934

Recopied: 6/18/54 jmr

(Cont'd. P. 7)

FROM MAGNETIC CITY NORTHWEST ALONG ROAD TO IRON MOUNTAIN GAP
(on N.C.-Tenn. Boundary)

Buladean, 1.3 mi. NW. of, 20 ft. W. of rd., on rock ledge; chiseled square, painted "USBM 2919.1"	2919.53
Buladean, 2.1 mi. NW. of, 30 ft. SW. of intersection of rd. forks, in fence corner, top of rock ledge; chiseled square, painted "USBM 3014.8"	3015.29
Buladean, 3.1 mi. NW. of, on NW. corner of N. end of concrete culvert over small drain; chiseled square, painted USBM 3264.4	3264.85
Iron Mountain Gap, 4.3 mi. NW. of Buladean, 4.4 mi. SE. of Limestone Cove, 40 ft. SW. of rd., 10 ft. W. of a T-rd. S., on N.C.-Tenn. State line, top of concrete post; standard tablet stamped "RPW 11 1934 3723", painted "USPBM 3723.0"	3723.486
Reference mark, 50 ft. NW. of tablet, in root on NE. side of 14-in. apple tree; copper nail and washer	3718.22
FROM POINT 2.1 MILES NORTHEAST OF GLEN AYRE NORTHWEST ALONG ROAD TO CARVERS GAP (N.C.-Tenn. boundary)	
Glen Ayre, 2.1 mi. NE. of, 130 ft. SE. of bridge over small stream, midway between residence and private garage, 40 ft. S. of rd., on NW. corner of large boulder; chiseled square, painted "USBM 3786.0"	3786.758
Carvers Gap, 2.9 mi. S. of, 6 ft. W. of NW. corner of wooden bridge over small stream, on SW. corner of boulder; chiseled square, painted "USBM 4160.8"	4161.54
Carvers Gap, 1.7 mi. S. of, 30 ft. N. of rd., opposite 60 ft. "crossway", on highest point of second boulder from rd.; chiseled square, painted "USBM 4663.2"	4663.79
Carvers Gap, 0.5 mi. S. of, 30 ft. W. of rd., 220 ft. S. of logging trail W., 10 ft. NW. of lone beech tree at W. edge of rd., top of rock; chiseled square, painted "USBM 5227.6"	5228.24
Carvers Gap, 50 ft. NW. of rd. intersection, 40 ft. W. of rd. to Burbank, set in flat rock; standard tablet stamped "RPW 9 1934 5512" painted "USPBM 5512.0"	5512.555
Reference mark, 12 ft. N. of tablet, on N. corner of boulder; chiseled square	5511.88

TOECANE QUADRANGLE
Bk. B5327 & B5321
by R.P. Willingham, 1934 &
R. W. Goebel, 1934
Recopied: 6/18/54 jmr

NORTH CAROLINA-TENNESSEE
S.L.D. OF 1929

(Cont'd. P. 8)

FROM CARVERS GAP WEST TO ROAN HIGH KNOB (N.C.-Tenn. Boundary)
(double run spur in both State lists)

Carvers Gap, 1.1 mi. W. of, on rd. to Roan High Knob,
10 ft. SW. of trail intersection at point of sharp
curve in rd., on boulder; chiseled square, painted
"USBM 6029.7" 6030.24

Roan High Knob, set in top of Sunrise Rock; standard
tablet stamped "Roan High Knob, RPW 12 1934 6285",
painted "USPBM 6285.0" (see description of triangulation
sta. 1934) 6285.584

Reference mark, 20 ft. N. of tablet, on lower portion of
Sunrise Rock; square cut, $\frac{1}{4}$ in. deep over drill hole 6283.04

FROM BANNER ELK QUADRANGLE NORTHWEST ALONG ROADS TO LITTLE
YELLOW GAP (by R. W. Goebel, 1934; Book B5321)

Frank, 0.9 mi. N. of post office, 22 ft. E. of C.L. of
N.C. Highway 69, 18 ft. N. of Devils Race Branch,
16 ft. N. of NE. wing wall of hwy. bridge, on large
boulder projecting 3 ft. above the ground; standard
tablet stamped "GL 1 1934 3097" 3097.098

Reference mark, 400 ft. S. 10° W. of tablet, on NE.
head wall of concrete culvert; chiseled square 3076.70

Frank, 0.9 mi. SW. of, 300 ft. W. of present post office,
1.7 mi. NE. of Senia, on N. head wall of culvert;
square cut, painted "BM 3135.2" 3134.88

Frank, 2.0 mi. S. of, 0.6 mi. NE. of Senia, 21 ft. E. of
centerline of N.C. Hwy. 69, on rock outcrop; square
cut, painted "BM 3004.8" 3004.46

Senia, 300 ft. NW. of concrete hwy. bridge, 40 ft. N. of
N. bank of Roaring Creek, on white flint rock; chiseled
square, painted "BM 2973.4" 2973.00

Valley, 1.0 mi. SE. of, 1.1 mi. NW. of Senia, 115 ft. N.
of intersection of Fall Branch and Roaring Creek, 20 ft.
E. of E. bank of Fall Branch, on rock outcrop; square
cut, painted "BM 3094.8" 3094.54

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Bull. 646, pg. 51 Third-order Leveling S.L.D. 1929 Recopied: 6/18/54 jmr

- FROM HUNTDAL EAS T TO ROCK CREEK NEAR RED HILL Herrell, 1.7 mi. SW. of, 200 ft. S. of Widow Street's house, 25 ft. from right bank of Rock Creek, on top of boulder; chiseled circle 2293.67 FROM RED HILL NORTH UP ROCK CREEK TO MAGNETIC CITY Magnetic City, 0.35 mi. N. of, in side of boulder fronting rd.; aluminum tablet stamped (plug, formerly stem of) "2805 ASH" 2804.740 FROM BAKERSVILLE EAST ALONG HIGHWAY TO SPEAR Bakersville, 8.4 mi. E. of, 30 ft. E. of point where rd. crosses top of Cane Creek Mountain, in root of large chestnut tree; nail 4162.03 Spear, mouth of Henson Creek, in rock ledge; standard tablet stamped (plug, formerly stem of) "2840 ASH" 2839.573 FROM BULADEAN ALONG HIGHWAYS SOUTH TO RED HILL THENCE EAST BY WAY OF BAKERSVILLE TO SPEAR (by R. P. Willingham, 1934; Book B5327) Third order leveling; supplementary to second order levels by U.S.C. & G.S.) Buladean (formerly Magnetic City), 0.35 mi. N. of, 275 ft. SW. of highway, at SW. edge of old rd., 150 ft. SW. of Spring Creek, in side of boulder fronting rd.; aluminum plug, formerly stem of tablet stamped "2805 ASH" 2804.740 Reference mark, 50 ft. N. of plug, on large boulder; chiseled square 2804.09 Buladean, 0.8 mi. S. of, 150 ft. N. of small drain crossing, 10 ft. SE. of rd., in root on N. side of 16-in. buckeye tree; copper nail and washer, painted "USEM 2716.4" 2719.08

- Buladean, 2.0 mi. S. of, 6 ft. S. of SW. corner of private garage, E. of rd., on N. edge of boulder; chiseled square, painted "USEM 2536.8" 2539.45 Buladean, 3.3 mi. S. of, 130 ft. SE. of mouth of Bean Creek, 100 ft. W. of T-rd. fork, 15 ft. E. of NE. corner of bridge over Rock Creek, 10 ft. N. of T-rd., top of concrete post; standard tablet stamped "RPW 1 1934 2385", painted "USFPM 2384.5" 2385.204 Reference mark, 180 ft. S. of tablet, 30 ft. W. of rd., on boulder; chiseled square 2386.00 Buladean, 4.0 mi. S. of, 40 ft. NW. of intersection of T-rd. SE., 15 ft. N. of rd., 80 ft. N. of bridge over small stream, in root on NE. side of 12-in. locust tree; copper nail and washer, painted "USEM 2375.4" 2376.10 Buladean, 5.8 mi. S. of, 0.6 mi. S. of Honeycutt Post Office, on E. end of S. concrete abutment of iron bridge over Rock Creek; chiseled square, painted "USEM 2291.8" 2292.36 Buladean, 6.7 mi. S. of, 0.9 mi. N. of Red Hill, 80 ft. N. of intersection of old field rd. NE, at point of sharp curve in main rd., in top of large boulder; standard tablet stamped "RPW 2 1934 2510", painted "FPM 2510.4" 2510.926 Reference mark, 90 ft. SE. of tablet, in root on SW. side of 6-in. beech tree; copper nail and washer 2506.72 Red Hill, 0.3 mi. SE. of, 2700 ft. N. of SW. end of bridge over small stream at entrance to barnyard, 30 ft. S. of rd., on NE. part of rock outcrop; chiseled square, painted "USEM 2420.5" 2421.016 Red Hill, 1.6 mi. SE. of, 4.3 mi. W. of Bakersville, 0.5 mi. NW. of rd. to Buladean and rd. to Toecane, 40 ft. SW. of rd., top and about in center of rock ledge; chiseled square, painted "USEM 2445.2" 2445.69 Bakersville, 2.8 mi. W. of, 170 ft. SE. of concrete bridge over Cane Creek, 80 ft. SE. of rd. fork, E. end of residence, top of concrete post; standard tablet stamped "RPW 3 1934 2327", painted "FPM 2327.4" (Tied to C&S 1936) 2327.631 Reference mark, 180 ft. NW. of tablet, on N. corner of NE. concrete abutment of bridge over Cane Creek; chiseled square 2327.52

NGVD 29 Elevations

- Bakersville, 2.1 mi. W. of, 60 ft. SE. of front entrance to George's Cash Store, on SW. concrete wing wall of concrete bridge; chiseled square, painted "USEM 2372.2" 2372.67 Bakersville, 0.6 mi. W. of, 20 ft. SE. of rd. fork, on NW. corner of SW. head wall of concrete culvert; chiseled square, painted "USEM 2429.3" 2429.68 Bakersville, about 100 ft. S. of street intersection, on NW. corner of N. concrete abutment of bridge over Cane Creek; chiseled square, painted "USEM 2459.6" 2459.96 Bakersville, 275 ft. SW. of school building, 100 ft. SE. of SE. corner of school storage garage, in S. portion of school grounds, top of concrete post; standard tablet stamped "Magnetic Station 1931" (U.S.C. & G.S. Magnetic Station, no description was furnished for this mark, this one written in field) 2490.986 Reference mark, 100 ft. NW. of tablet, on concrete pillar at SE. corner of school storage garage 2487.12 Bakersville, 0.9 mi. E. of, on NE. concrete abutment of iron bridge over Cane Creek; chiseled square, painted "USEM 2487.2" 2487.56 Bakersville, 1.9 mi. E. of, 80 ft. N. of crossroads, SW. fork leading to mill site, 40 ft. NW. of rd., in root on E. side of 14-in. locust tree; copper nail and washer, painted "USEM 2529.6" 2529.96 Bakersville, 2.9 mi. E. of, 60 ft. N. of NE. corner of Clarrissa Post Office, 35 ft. SE. of rd. intersection, top of concrete post; standard tablet stamped "RPW 6 1934 2602", painted "FPM 2601.8" 2602.111 Reference mark, 110 ft. NW. of tablet, on center of rock ledge; chiseled square 2602.99 Bakersville, 4.0 mi. E. of, 0.7 mi. W. of Hawk, at NW. edge of rd., on S. corner of sharp rock; chiseled square, painted "USEM 2709.9" 2710.20 Hawk, 0.3 mi. NE. of, 80 ft. E. of Cane Creek Baptist church, 40 ft. SE. of rd., in root on SE. side of large twin poplar tree; copper nail and washer, painted "USEM 2820.4" 2820.72

- Hawk, 1.5 mi. NE. of, 90 ft. SE. of intersection of T-rd. S., 40 ft. NE. of T-rd., top of and about center of large boulder; standard tablet stamped "RPW 7 1934 3115", painted "USFPM 3114.8" 3115.090 Reference mark, 50 ft. N. of tablet, on SE. edge of rock ledge; chiseled square 3113.57 Hawk, 3.0 mi. NE. of, at E. edge of rd., on lower part of rock outcrop; chiseled square, painted "USEM 3752.4" 3752.66 Hawk, 4.0 mi. NE. of, 5.9 mi. NW. of Spear, 15 ft. SE. of point where rd. crosses top of Cane Creek Mtn., near center of rock ledge; chiseled square, painted "USEM 4159.7" 4159.96 Spear, 3.6 mi. NW. of, on rd. over Cane Creek Mtn., at N. edge of gate, W. edge of rd., on NE. part of rock boulder; chiseled square, painted "USEM 3616.2" 3616.39 Spear, 2.8 mi. NW. of, 2.8 mi. NW. of mouth of Henson Creek, on SW. side of rd., set in top of large boulder; standard tablet stamped "RPW 1934 3316", painted "USFPM 3316.3" 3316.528 Reference mark, 20 ft. W. of tablet, top of large boulder; chiseled square 3315.93 Spear, 1.8 mi. NW. of, 10 ft. NE. of N. side of Henson Creek Baptist Church, about midway between second and third windows, on rock; chiseled square, painted "USEM 3115.6" 3115.80 Spear, 0.6 mi. W. of, 130 ft. SE. of rd. fork N., 30 ft. SW. of rd., on highest point of NE. edge of rock; chiseled square, painted "USEM 2905.9" 2906.06 Spear, mouth of Henson Creek, projecting 0.02 ft. above surfaced rock ledge; standard plug with cross on top (former stem of standard tablet stamped "2840 ASH" (estimated 0.038 ft. lower than former tablet surface) 2839.573 Reference mark, on SE. corner of concrete abutment of bridge over Henson Creek; chiseled square 2841.38

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 S.L.D. of 1929
 by R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 5)

FROM BULADEAN (MAGNETIC CITY) NORTHEAST ALONG ROAD INTO TENNESSEE

Buladean, 0.7 mi. NE. of, 70 ft. N. and 20 ft. W. of Y-rd. forks, at NE. edge of rd. bearing N., on NE. corner of boulder; chiseled square, painted "USEM 2868.2"	2868.88
Buladean, 1.5 mi. NE. of, 30 ft. NE. of stream crossing, 60 ft. W. and 20 ft. N. of Y-rd. forks, 10 ft. N. of rd., on highest point of boulder; chiseled square, painted "USEM 2980.3"	2980.96
Buladean, 2.5 mi. NE. of, 1.8 mi. W. of Hughes Gap, 70 ft. NE. of intersection of T-rd. N., 75 ft. NE. of small stream crossing. 60 ft. N. of rd., top of boulder; standard tablet stamped "RPW 10 1934", painted "USPEM 3204.4"	3205.061
Reference mark, 75 ft. E. and 10 ft. S. of tablet, on top of boulder; chiseled square	3204.80
Buladean, 4.2 mi. NE. of, 175 ft. E. of point where rd. crosses Hughes Gap, at N. edge of rd., in root on S. side of buckeye tree; copper nail and washer, painted "USEM 4039.8"	4040.47

FROM POINT 4 MILES SOUTH OF BULADEAN NORTHEAST ALONG HIGHWAY TO GRASSY RIDGE (Partially double run line)

Buladean, 4.0 mi. S. of, 40 ft. NW. of intersection of T-rd. SE., 15 ft. N. of rd., 80 ft. N. of bridge over small stream, in root on NE. side of 12-in. locust tree; copper nail and washer, painted "USEM 2375.4"	2376.10
Glen Ayre, 6.6 mi. W. of, 5.0 mi. S. and E. of Buladean, at W. edge of rd., in root on NE. side of 8 1/2 of double red oak tree; copper nail and washer, painted "USEM 2586.6"	2587.18
Piney Branch School, 1.3 mi. W. of, 6.3 mi. S. and E. of Buladean, 10 ft. N. of second-class rd. N., 100 ft. W. of old sawmill, 8 ft. W. of corner fence post, near center of boulder; chiseled square, painted "USEM 2730.9"	2731.53
Piney Branch School, 150 ft. S. and directly in front of school building, 30 ft. N. of rd., in concrete post; standard tablet stamped "RPW 4 1934 2805", painted "BPM 2808.6"	2809.310
Reference mark, 30 ft. W. of tablet, in root on S. side of 30-in. oak tree; copper nail and washer	2806.96

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 S.L.D. of 1929
 by R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 6)

Piney Branch School, 1.0 mi. E. of, 2.8 mi. SW. of Glen Ayre, 60 ft. S. and 10 ft. E. of intersection of T-rd. S. to Bakersville, on NE. corner of NE. concrete wing wall of iron bridge over Little Rock Creek; chiseled square, painted "USEM 2917.4"	2918.01
Glen Ayre, 1.7 mi. SW. of, 55 ft. SE. of Young's Store, 30 ft. S. of rd., in NW. portion of large rock outcrop; top of boulder; chiseled square, painted "USEM 3048.3"	3048.95
Glen Ayre School, 110 ft. SE. of SE. entrance of school building, 60 ft. N. of rd., in SE. corner of school ground, on highest point of large boulder; chiseled square, painted "USEM 3170.2"	3170.86
Glen Ayre, 75 ft. S. of rd. intersection, 50 ft. SE. of front entrance of Little Rock Creek Baptist Church, top of concrete post; standard tablet stamped "RPW 5 1934 3175", painted "USPEM 3178.1"	3178.748
Reference mark, 60 ft. NW. of tablet, on boulder; chiseled square	3182.17
Glen Ayre, 0.9 mi. NE. of, 25 ft. NW. of Rock Creek, 10 ft. NW. of rd., in root on SE. side of lone locust tree; copper nail and washer, painted "USEM 3353.4"	3354.20
Glen Ayre, 2.1 mi. NE. of, 130 ft. SE. of bridge over small stream, midway between residence and private garage, 40 ft. S. of rd., on NW. corner of large boulder; chiseled square, painted "USEM 3786.0"	3786.76
Glen Ayre, 3.3 mi. NE. of, 50 ft. NE. of gate across rd., at N. edge of rd., top of rock; chiseled square, painted "USEM 4483.3"	4487.36
Grassy Ridge, 4.2 mi. NE. of Glen Ayre, 3.7 mi. W. of Valley Post Office, 150 ft. NE. of rd. and trail intersection, 20 ft. W. of N.-S. fence line, in rock outcrop; standard tablet stamped "GL 3 1934", painted "4852.5"	4852.961
Reference mark, 25 ft. SE. of tablet, in root on NW. side of small maple tree; copper nail and washer	4851.86

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 S.L.D. of 1929
 by R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 7)

FROM MAGNETIC CITY NORTHWEST ALONG ROAD TO IRON MOUNTAIN GAP (on N.C.-Tenn. Boundary)

Buladean, 1.3 mi. NW. of, 20 ft. W. of rd., on rock ledge; chiseled square, painted "USEM 2919.1"	2919.53
Buladean, 2.1 mi. NW. of, 30 ft. SW. of intersection of rd. forks, in fence corner, top of rock ledge; chiseled square, painted "USEM 3014.8"	3015.29
Buladean, 3.1 mi. NW. of, on NW. corner of N. end of concrete culvert over small drain; chiseled square, painted "USEM 3264.4"	3264.85
Iron Mountain Gap, 4.3 mi. NW. of Buladean, 4.4 mi. SE. of Limestone Cove, 40 ft. SW. of rd., 10 ft. W. of a T-rd. S., on N.C.-Tenn. State line, top of concrete post; standard tablet stamped "RPW 11 1934 3723", painted "USEM 3723.0"	3723.486
Reference mark, 50 ft. NW. of tablet, in root on NE. side of 14-in. apple tree; copper nail and washer	3718.22

FROM POINT 2.1 MILES NORTHEAST OF GLEN AYRE NORTHWEST ALONG ROAD TO CARVERS GAP (N.C.-Tenn. boundary)

Glen Ayre, 2.1 mi. NE. of, 130 ft. SE. of bridge over small stream, midway between residence and private garage, 40 ft. S. of rd., on NW. corner of large boulder; chiseled square, painted "USEM 3786.0"	3786.758
Carvers Gap, 2.9 mi. S. of, 6 ft. W. of NW. corner of wooden bridge over small stream, on SW. corner of boulder; chiseled square, painted "USEM 4160.8"	4161.54
Carvers Gap, 1.7 mi. S. of, 30 ft. N. of rd., opposite 60 ft. "crossway", on highest point of second boulder from rd.; chiseled square, painted "USEM 4663.2"	4663.79
Carvers Gap, 0.5 mi. S. of, 30 ft. W. of rd., 220 ft. S. of logging trail W., 10 ft. NW. of lone beech tree at W. edge of rd., top of rock; chiseled square, painted "USEM 5227.6"	5228.24
Carvers Gap, 50 ft. NW. of rd. intersection, 40 ft. W. of rd. to Burbank, set in flat rock; standard tablet stamped "RPW 9 1934 5512" painted "USPEM 5512.0"	5512.555
Reference mark, 12 ft. N. of tablet, on N. corner of boulder; chiseled square	5511.88

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 & B5321 S.L.D. of 1929
 by R.P. Willingham, 1934 &
 R. W. Goebel, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 8)

FROM CARVERS GAP WEST TO ROAN HIGH KNOB (N.C.-Tenn. Boundary) (double run spur in both State lists)

Carvers Gap, 1.1 mi. W. of, on rd. to Roan High Knob, 10 ft. SW. of trail intersection at point of sharp curve in rd., on boulder; chiseled square, painted "USEM 6029.7"	6030.24
Roan High Knob, set in top of Sunrise Rock; standard tablet stamped "Roan High Knob, RPW 12 1934 6285", painted "USPEM 6285.0" (see description of triangulation sta. 1934)	6285.584
Reference mark, 20 ft. N. of tablet, on lower portion of Sunrise Rock; square cut, 1/4 in. deep over drill hole	6283.04

FROM BANNER ELK QUADRANGLE NORTHWEST ALONG ROADS TO LITTLE YELLOW GAP (by R. W. Goebel, 1934; Book B5321)

Frank, 0.9 mi. N. of post office, 22 ft. E. of C.L. of N.C. Highway 69, 18 ft. N. of Devils Race Branch, 16 ft. N. of NE. wing wall of hwy. bridge, on large boulder projecting 3 ft. above the ground; standard tablet stamped "GL 1 1934 3097"	3097.098
Reference mark, 400 ft. S. 10° W. of tablet, on NE. head wall of concrete culvert; chiseled square	3076.70
Frank, 0.9 mi. SW. of, 300 ft. W. of present post office, 1.7 mi. NE. of Senia, on N. head wall of culvert; square cut, painted "EM 3135.2"	3134.88
Frank, 2.0 mi. S. of, 0.6 mi. NE. of Senia, 21 ft. E. of centerline of N.C. Hwy. 69, on rock outcrop; square cut, painted "EM 3004.8"	3004.46
Senia, 300 ft. NW. of concrete hwy. bridge, 40 ft. N. of N. bank of Roaring Creek, on white flint rock; chiseled square, painted "EM 2973.4"	2973.4
Valley, 1.0 mi. SE. of, 1.1 mi. NW. of Senia, 115 ft. N. of intersection of Fall Branch and Roaring Creek, 20 ft. E. of E. bank of Fall Branch, on rock outcrop; square cut, painted "EM 3094.8"	3094.54

TOECANE QUADRANGLE	NORTH CAROLINA-TENNESSEE
Bk. B5321 by R.W. Goebel, 1934 Recopied: 6/18/54 jmr	S.L.D. of 1929 (Cont'd. P. 9)
Valley, 350 ft. SE. of rd. intersection, 250 ft. NW. of intersection of Jerry Creek and Roaring Creek, 14 ft. E. of NE. corner of Baptist Church, in rock outcrop; standard tablet stamped "GL 2 1934"	3281.949
Reference mark, 125 ft. N. 50° W. of tablet, 75 ft. SW. of SW. corner of Baptist Church, on S. bank of Jerry creek; square cut	3286.04
Valley, 1.0 mi. N. of, 20 ft. N. of rd. intersection, on E. edge of rd., on boulder; square cut, painted "BM 3680.4"	3680.38
Valley, 2.0 mi. N. of, 115 ft. W. of stream crossing, 50 ft. N. of N. edge of rd.; square cut, painted "BM 4024.6"	4024.73
Little Yellow Gap (N.C.-Tenn. Boundary), 3.5 mi. N. of Valley Post Office, 6.6 mi. S. of Roan Mountain, Tenn., 300 ft. W. of property corner and gate, 20 ft. S. of fence, on rock outcrop; standard tablet stamped "GL 5 1934 4681", painted "USEM 4680.6"	4681.500
Reference mark, 595 ft. SE. of tablet, 20 ft. E. of E. edge of trail, on boulder; square cut	4678.17
FROM POINT NEAR VALLEY SOUTHWEST ALONG ROAD TO GRASSY GAP	
Valley, 0.7 mi. W. of post office, 140 ft. NE. of NE. corner of barn, 25 ft. SE. of center of rd., on boulder; square cut, painted "BM 3724.1"	3724.12
Valley, 2.7 mi. NW. of, 60 ft. W. of rd. intersection, top of Molley's Gap, in root of 6-in. buckeye; copper nail and washer, painted "BM 4306.7"	4306.96
Grassy Gap, 2 mi. E. of, in trunk of 12-in. beech tree, on E. side of rd.; copper nail and washer	4712.51
Grassy Gap, 3.7 mi. W. of Valley Post Office, 150 ft. NE. of rd. and trail intersection, 20 ft. W. of N. and S. fence, in rock outcrop; standard tablet stamped "GL 3 1934"	4852.961

NGVD 29
Elevations

TOECANE QUADRANGLE	NORTH CAROLINA-TENNESSEE
Bk. B5321 & B5307 by R. W. Goebel, 1934 L.A. Easterly, 1934 Recopied: 6/18/54 jmr	S.L.D. of 1929 (Cont'd. P. 10)
FROM SENIA SOUTH TO SPEAR	
Senia, 0.5 mi. S. of, 2.7 mi. NE. of Plumtree, 30 ft. W. of rd. intersection, on N. end of W. abutment of concrete highway bridge over Toe River; standard tablet stamped "GL 4 1934 2947"	2946.961
Senia, 1.6 mi. S. of, 1.7 mi. N. of Plumtree; 20 ft. E. of E. edge of rd., on rock outcrop; square cut, painted "EM 2926.7"	2926.38
Plumtree, 0.6 mi. N. of, 2.6 mi. S. of Senia, 5 ft. E. of E. edge of N.C. Hwy. 69, on rock ledge; square cut, painted "EM 2885.4"	2879.66
Plumtree, 0.5 mi. S. of, 0.8 mi. NE. of pear, on NW. head wall of Hwy. 69 culvert; square cut, painted "EM 2856.7"	2856.36
FROM SPEAR SOUTH ALONG ROAD INTO SEVENMILE RIDGE QUADRANGLE (by L. A. Easterly, Jr., 1934; Book B5307)	
Spear, 1.0 mi. S. of, W. of N. Toe River, 350 ft. N. of brown house, in E. head wall of drain pipe, under hwy.; chiseled cross, painted "EM 2846.6"	2847.14
FROM BAKERSVILLE SOUTHEAST ALONG ROAD INTO SEVENMILE RIDGE QUADRANGLE (double run line)	
Bakersville, 225 ft. SW. of school building, in S. portion of school ground, 110 ft. SE. of school storage garage, in concrete post; standard tablet stamped "1931" (U.S.C. & G.S. Magnetic Station)	2490.986
Reference mark, 100 ft. NW. of tablet, in concrete pillar of SE. corner of storage garage; chiseled square	2487.12
Bakersville, 0.5 mi. S. and 1.0 mi. E. of, on SW. side of rd., 25 ft. SW. of White Oak Creek, across rd., in front of M. A. Wilson's residence, on rock ledge; chiseled square with cross in center, painted white, painted "EM 2539.4"	2539.77

TOECANE QUADRANGLE	NORTH CAROLINA-TENNESSEE
Bk. B5307 by L. A. Easterly, 1934 Recopied: 6/18/54 jmr	S.L.D. of 1929 (Cont'd. P. 11)
FROM SEVENMILE RIDGE QUADRANGLE NORTH ALONG ROAD TO RED HILL	
Dayton Bend School, 0.2 mi. NE. of, where Brush Creek empties into Toe River on N. pier of bridge over Brush creek, in E. end of pier; chiseled square with cross in center, painted "USEM 2166.2"	2168.87
Forbes, 0.2 mi. E. of, on concrete highway bridge over Toe River, 29 ft. S. of center of bridge, in W. curb; chiseled square, painted white, painted "EM 2185.7"	2188.42
Red Hill (Forbes, 1.0 mi. NE. of), 120 ft. NW. of junction of N.C. Highway 19 and 197, 15 ft. W. of W. bank of Red Hill Branch, in rock outcrop; standard tablet stamped "E 11 1934"	2369.489
Reference mark, 105 ft. S. 10° W. of tablet, 13 ft. W. of center line of N.C. Hwy. 197, on rock ledge; chiseled square	2367.46
Red Hill, 0.3 mi. SE. of, 27 ft. N. of SW. end of bridge over small stream at entrance to barnyard, 30 ft. S. of rd., on NE. part of rock outcrop; chiseled square, painted "USEM 2420.5"	2421.016
NEAR SHELL CREEK, NORTHWEST ALONG EAST TENNESSEE AND WESTERN NORTH CAROLINA RAILROAD TO JOHNSON CITY (Bull. 441, pg. 119)	1912 ADJ.
Elkpark, N.C., 2.46 mi. NW. of, at SE. end of railroad trestle; on coping	2961.57
Shell Creek, 0.5 mi. W. of, 40 ft. N. of W. end of railroad bridge over Wilson Creek, in ledge of rock; standard tablet stamped "2626 ASH"	2624.349
Roan Mountain, 0.2 mi. W. of, 60 ft. N. of railway, near white oak tree, in rock ledge; standard tablet stamped "2565 ASH"	2563.473

TOECANE QUADRANGLE	NORTH CAROLINA-TENNESSEE
Bk. B5313 J.P. Fish & R. P. Willingham, 1934 Recopied: 6/18/54 jmr	S.L.D. of 1929 (Cont'd. P. 12)
Supplementary to 1st and 2nd order leveling by USC&GS and bulletin 441 corrected	
FROM NEAR SHELL CREEK ALONG ROAD NORTHEAST AND NORTHWEST TO ODEMVILLE (double run line by J.P. Fish and R.P. Willingham, 1934)	
Shell Creek, 0.5 mi. W. by rail of, 478 yds. W. of milepost 27, 40 ft. N. of W. end of Eastern Tennessee and Western North Carolina Railroad bridge over Wilson Creek, 6 ft. below base of rail, in top of rock in side of mountain; standard tablet stamped "2626 ASH"	2625.198
Shell Creek, 1.0 mi. N. of, 13 ft. W. of center of Walnut Mountain Road, on rock outcrop, in side cut, chiseled square	2924.01
Shell Creek, 2.0 mi. NE. of, 116 ft. SE. of T-rd., running N., in NW. root of 20-in. chestnut tree; copper nail and washer	3470.30
Shell Creek, 3.0 mi. NE. of, 110 ft. S. of old cross-roads, 38 ft. W. of center of old rd. S., 3.5 ft. NW. of 12-in. chestnut tree painted "USEM 3439" set in top of small boulder; standard tablet stamped "3439 FH 1 1934"	3438.955
Shell Creek, 4.1 mi. NE. of, 140 ft. SE. of intersection of Hardin Jones Road N. to Walnut Mountain Road, in NW. root of 36-in. chestnut tree; copper nail and washer	3432.96
Shell Creek, 6.4 mi. NE. of, 19 ft. SW. of center of Walnut Mountain Road, in rock outcrop; standard tablet stamped "3659 FH 2 1934"	3659.132
Reference mark, 240 ft. NW. of tablet, 18 ft. N. of center of rd., on rock outcrop; chiseled square	3650.41
Shell Creek, 7.5 mi. NE. of, 16 ft. E. of center of Walnut Mountain Road, 32 ft. NE. of bronze disk stamped "U S Dept of Agriculture Forest Service 22 1925", in NW. root of 14-in. white oak tree; copper nail and washer	3526.10
Shell Creek, 8.6 mi. N. of, 100 ft. NE. of corner post of Forest Service marked "Cor 71 & 7 CHS", 11 ft. N. of center of rd., on rock outcrop; chiseled square	3529.47

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5313 S.L.D. of 1929
 by J. P. Fish & R. P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 13)

Reference mark, 40 ft. S. of tablet, at W. edge of rd., in NW. root of 10-in. apple tree; copper nail and washer 3503.28

Odemville, 200 ft. NE. of old Odemville Post Office, 17 ft. W. of center of Walnut Mountain Road, in top of concrete post projecting 4 in. above ground; standard tablet stamped "3506 FH 3 1934" 3506.497

Odemville, 1.0 mi. NW. of, 25 ft. SW. of center of rd. intersection on top of hill, in N. root of 20 in. chestnut tree; copper nail and washer 3544.09

FROM ODEMVILLE NORTHWEST ALONG TRAIL INTO ELIZABETHTON QUADRANGLE (by J. P. Fish, 1934) Note: an error of "825" has been corrected in 10 miles.

Odemville, 1.1 mi. NW. of by trail, 78 ft. W. of center of old railroad grade, in E. root of 14-in. hemlock tree; copper nail and washer 3259.48

Odemville, 2.0 mi. NW. of by trail, 50 ft. W. of center of Laurel Fork, on rock outcrop; painted high point 3176.71

Odemville, 2.6 mi. NW. of by trail, 25 ft. NE. of center of Laurel Fork, 7 ft. NE. of center of old railroad grade on rock outcrop; painted circle 3131.10

Odemville, 3.8 mi. NW. of by trail, 150 ft. S. of falls in stream, 10 ft. E. of center of Laurel Fork, in rock outcrop; standard tablet stamped "2978 FH 7 1934" 2977.992

Hampton, 8.5 mi. SE. of by trail, 50 ft. NE. of center of old railroad grade, on rock outcrop; chiseled square 2841.04

Hampton, 7.5 mi. SE. of by trail, 20 ft. NW. of center of Laurel Fork, in trail, on rock outcrop; chiseled square 2805.86

FROM ROAN MOUNTAIN ALONG HIGHWAYS WEST, SOUTHWEST AND NORTH INTO ELIZABETHTON QUADRANGLE (double run line by R. W. Goebel and R. P. Willingham, 1934; Book B5321)

Roan Mountain, 0.2 mi. W. of station, 600 yards E. of milepost 25, 858 ft. W. of Roan Mountain Inn, 75 ft. N. of center line of railway, 1 ft. above top of rail, in rock ledge, in side of mountain; standard tablet stamped "2565 ASH" (Bull. 441, pg. 119 Elev. 2563.473) (USC&GS tie) 2564.283

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5321 S.L.D. of 1929
 by R.W. Goebel and R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 14)

Roan Mountain, 1.0 mi. W. of Roan Mountain Inn, 140 ft. NW. of intersection of Hwy. U.S. 19E. and railway, 120 ft. N. of N. rail of concrete bridge, on rock ledge; chiseled square 2535.53

Crabtree, 60 ft. S. of rd. intersection, 15 ft. E. of center line of Backwoods Road, on rock outcrop; chiseled square 2513.14

Crabtree, 0.8 mi. S. of, 55 ft. S. of rd. intersection, 20 ft. W. of W. bank of George Creek, on rock outcrop; standard tablet stamped "GL 1 1934 2690" 2689.586

Crabtree, 1.3 mi. SW. of, 50 ft. E. of rd. intersection, 8 ft. N. of N. edge of rd., on boulder; square cut 2995.00

Crabtree, 1.8 mi. SW. of, 35 ft. E. of rd. intersection, 8 ft. N. of center line of rd., on rock ledge; square cut 3273.04

Crabtree, 2.6 mi. SW. of, 2.8 mi. NE. of Backwoods, on top of gap, 18 ft. S. of center of rd., 30 ft. W. of rd. intersection, in root of a four trunk maple; copper nail and washer 3644.61

Backwoods, 1.7 mi. NE. of, 150 ft. W. of small stream and rd. intersection, 200 ft. W. of mills of T. A. Arnett, on rock outcrop; standard tablet stamped "GL 2 1934 3520" 3519.963

Reference mark, 0.1 mi. N. of tablet, 75 ft. W. of rd. intersection, 30 ft. NW. of N. edge of rd., on boulder; square cut 3522.89

Backwoods, 0.6 mi. NE. of, 45 ft. N. of NW. corner of Backwoods School, 50 ft. S. of S. edge of rd., on 24-in. white pine; copper nail and washer 3542.54

Backwoods, 200 ft. W. of residence of Capt. Nelson, in root of 10-in. maple tree; copper nail and washer 3568.37

Backwoods, 0.8 mi. S. of, 465 ft. S. of gap, 8 ft. E. of E. edge of rd., on rock ledge; square cut 3653.25

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5321 S.L.D. of 1929
 by R.W. Goebel and R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 15)

Backwoods, 1.5 mi. W. of, 75 ft. SE. of rd. intersection, 22 ft. S. of S. edge of rd., on concrete post projecting 6 in. above ground; standard tablet stamped "GL 3 1934 3332" 3331.186

Reference mark, N. 40° E. 155 ft., 110 ft. N. of N. edge of rd., 25 ft. S. of S. bank of Tiger creek, on boulder; square cut 3325.63

Backwoods, 2.6 mi. W. of, 10 ft. N. of N. edge of rd., on rock ledge; square cut 3097.21

Backwoods, 3.4 mi. W. of, 150 ft. NE. of bridge, 50 ft. E. of E. edge of rd., on W. bank of Tiger Creek, on rock outcrop; square cut 2872.56

Backwoods, 4.0 mi. NW. of, 0.3 mi. S. of Tiger Creek School, 10 ft. E. of E. edge of rd., on large boulder; square cut 2722.02

Backwoods, 4.5 mi. NW. of, 115 ft. NE. of NE. corner of Tiger Creek School, 20 ft. E. of E. edge of rd., on large rock outcrop; standard tablet stamped "GL 4 1934 2638" 2637.708

Backwoods, 5.4 mi. NW. of, 310 ft. NE. of rd. intersection, 45 ft. E. of E. edge of rd., on boulder; square cut 2534.94

Backwoods, 6.3 mi. NW. of, 300 ft. SW. of intersection of Tiger Creek and Shields Branch, 100 ft. W. of W. edge of rd., on W. bank of Tiger Creek, on rock ledge; square cut 2281.98

Backwoods, 6.9 mi. NW. of, 130 ft. SE. of intersection of Tiger Creek and Gouge Branch, 100 ft. W. of intersection of Tiger Creek Road (Backwood Road) and U.S. Highway 19E, on rock outcrop; standard tablet stamped "GL 5 1934 2143" 2142.650

Reference mark, 140 ft. N. 30° W. of tablet, 45 ft. of center line of U.S. Hwy. 19E, 4 ft. below surface of rd., at intersection of Tiger Creek and Gouge Branch, on large boulder; square cut 2129.74

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5313 and B5321 S.L.D. of 1929
 by R.W. Goebel and R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 16)

Hampton, 4.6 mi. S. of, 7.6 mi. NW. of Backwoods, 30 ft. W. of C.L. of U.S. Hwy. 19E, at intersection of hwy. and Limestone Cove Road, on rock outcrop; square cut 2021.22

Hampton, 3.5 mi. S. of, 13 ft. E. of center line of U.S. Hwy. 19E, 30 ft. E. of E. bank of Tiger Creek, at rd. intersection and bridge, on rock ledge; square cut 1944.77

FROM ROAN MOUNTAIN SOUTH ALONG ROAD TO LITTLE YELLOW GAP (N.C.-TENN. STATE LINE)

Roan Mountain, 858 ft. NW. of Roan Mountain Inn; standard tablet stamped "2565 ASH" 2564.283

Roan Mountain, 0.9 mi. S. of, 18 ft. S. of center line of rd., on rock outcrop; square cut 2608.24

Roan Mountain, 1.9 mi. S. of, 12 ft. E. of center line of rd., on rock ledge; square cut 2754.87

Roan Mountain, 2.8 mi. S. of, 33 ft. NE. of SE. abutment of wooden bridge over Hampton Creek, on rock ledge, on N. bank of creek; square cut 2618.44

Roan Mountain, 3.2 mi. S. of, 75 ft. S. of rd. intersection, 20 ft. E. of center line of rd., 30 ft. W. of W. bank of Hampton Creek, on rock outcrop; standard tablet stamped "GL 7 1934 2874" 2873.922

Roan Mountain, 4.2 mi. S. of, about 700 ft. S. of rd., intersection, 30 ft. E. of center line of rd., on boulder; square cut 3056.39

Roan Mountain, 5.0 mi. S. of, 80 ft. E. of center line of trail, on rock outcrop; square cut 3567.16

FROM HUGHES GAP (N.C. & TENN. STATE LINE) EAST TO BURBANK (by R. P. Willingham, 1934; Book B5327)

Buladean, 4.2 mi. NE. of, 175 ft. E. of point where rd. crosses Hughes Gap, at N. edge of rd., in S. root of buckeye tree; copper nail and washer 4040.47

Burbank, 2.1 mi. W. of, 1.1 mi. E. of Hughes Gap, 40 ft. SW. of rd., at point of sharp curve, in W. base of walnut tree; copper nail and washer 3473.61

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 S.L.D. of 1929
 by R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 17)

Burbank, 0.8 mi. W. of, at E. end of gate of W. entrance to residence S. of rd., 10 ft. S. of center of rd., on highest point of boulder; chiseled square 3161.43

Burbank, 125 ft. SW. of intersection of T-rd. W., 20 ft. SE. of E. end of bridge over Doe River, 20 ft. E. of stream, 20 ft. S. of rd., in concrete post; standard tablet stamped "RPW 4 1934 2984" 2984.407

Reference mark, 210 ft. NW. of rd. intersection, 120 ft. NW. of bridge, 60 ft. W. of W. bank of Doe River, on large boulder, in fence line; square cut 2985.90

FROM BURBANK NORTHEAST ALONG ROAD TO ROAN MOUNTAIN (double run line by Goebel and Willingham, 1934)

Burbank, 0.9 mi. N. of, 5.0 mi. SW. of Roan Mountain, 45 ft. E. of center line of Cloudland Highway, on rock outcrop; square cut 2933.46

Burbank, 1.8 mi. N. of, 190 ft. SW. of rd. intersection, 100 ft. W. of center line of Cloudland Highway, 7 ft. above surface of rd., on boulder; square cut 2813.39

Roan Mountain, 3.2 mi. S. of, 800 ft. NW. of rd. intersection, 75 ft. N. of center line and 7 ft. above surface of Cloudland Highway, on rock ledge; standard tablet stamped "GL 8 1934 2736" 2736.119

Reference mark, 60 ft. E. of tablet, 60 ft. N. of center of Cloudland Highway, on rock outcrop; square cut 2734.13

Roan Mountain, 2.0 mi. S. of, 115 ft. N. of intersection of Cloudland Highway and Smith Branch Road, 22 ft. W. of center line of hwy., on rock ledge; 4.5 ft. above surface of rd.; square cut 2645.45

Roan Mountain, 0.2 mi. W. of station, 600 yards E. of milepost No. 25, 856 ft. NW. of Roan Mountain Inn, 75 ft. N. of center line of railroad, 1 ft. above top of rail, in rock ledge in side of mountain; standard tablet stamped "2565 ASH" (bull. 441, pg. 119) 2564.283

FROM CARVERS GAP (N.C.-TENN. STATE LINE) NORTH ALONG ROAD TO BURBANK (by R. P. Willingham, 1934)

Reference mark, 12 ft. N. of tablet, on N. corner of boulder; chiseled square 5511.88

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 S.L.D. of 1929
 by R. P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 18)

Carvers Gap, 50 ft. NW. of rd. intersection, 40 ft. W. of rd. to Burbank, set in flat rock; standard tablet stamped "RPW 9 1934 5512" 5512.555

Carvers Gap, 1.3 mi. N. of, 4.6 mi. S. of Burbank, 30 ft. S. of intersection of rds. at sawmill, 10 ft. W. of small stream crossing, on boulder; chiseled square 4912.68

Carvers Gap, 2.4 mi. N. of, 3.5 mi. S. of Burbank, at E. edge of rd., on SW. point of boulder, in lower part of rock outcrop; chiseled square 4478.48

Burbank, 2.3 mi. S. of, 0.4 mi. S. of Toll Gate, 20 ft. E. of rd., on E. corner of rock ledge; chiseled square 3889.06

Burbank, 1.8 mi. S. of, 220 ft. S. of Toll Gate on Cloudland Scenic Highway, 15 ft. S. of rd., at edge of small drain, on E. part of large boulder; standard tablet stamped "RPW 3 1934 3665" 3665.475

Reference mark, 50 ft. W. of tablet, at S. edge of rd., on highest point of boulder; chiseled square 3669.37

Burbank, 0.9 mi. S. of, 20 ft. SE. of intersection of private rd. E., 10 ft. E. of rd., on boulder; chiseled square 3252.30

FROM IRON MOUNTAIN GAP NORTHWEST ALONG ROAD INTO ERWIN QUADRANGLE

Limestone Cove, 2.0 mi. SE. of, 70 ft. SE. of intersection of old rd., 10 ft. W. of Birchlog Creek, 50 ft. E. of row of mail boxes, on boulder; chiseled square, painted "USBM 2641.3" 2641.63

Iron Mountain Gap, 4.3 mi. NW. of Buladean, 4.4 mi. SE. of Limestone Cove, 40 ft. SW. of rd., 10 ft. W. of a T-rd. S., on N.-C.-Tenn. State Line, in concrete post; standard tablet stamped "RPW 11 1934 3723" 3723.486

Reference mark, 50 ft. NW. of tablet, in NE. root of 14-in. apple tree; copper nail and washer 3718.22

Limestone Cove, 3.0 mi. SE. of, 40 ft. S. of small stream crossing, 80 ft. W. of cabin, 30 ft. SE. of rd., on boulder; chiseled circle 3066.09

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5327 S.L.D. of 1929
 by R.P. Willingham, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 19)

FROM ERWIN QUADRANGLE NORTHEAST ALONG ROAD INTO ELIZABETHTON QUADRANGLE

Limestone Cove, 1.2 mi. NE. of, 80 ft. NW. of intersection of T-rd. NW., at SW. edge of T-rd., on top of boulder; chiseled square 2428.09

Limestone Cove, 2.6 mi. NE. of, 3.8 mi. S. of Simley Store, 30 ft. NW. of intersection of T-rd. W., 20 ft. W. of rd., in concrete post; standard tablet stamped "RPW 2 1934 2474" 2474.510

Reference mark, 75 ft. E. of tablet, on top of boulder; chiseled square 2475.77

Limestone Cove, 3.6 mi. NE. of, 2.8 mi. S. of Simley Store, 180 ft. S. of stream crossing, 40 ft. SE. of rd., on SE. point of boulder; chiseled square 2394.26

Limestone Cove, 4.5 mi. N. of, 1.7 mi. S. of Simley Store, 30 ft. NE. of rd., on boulder; chiseled square 2183.72

Limestone Cove, 5.5 mi. N. of, 0.7 mi. S. of Simley Store, at S. edge of rd., on NE. portion of large boulder; chiseled square 2072.83

Simley Store, 0.7 mi. S. of, 30 ft. S. of rd, in top of boulder; U.S. Forest Service tablet stamped "243 1933" 2071.39

FROM CARVERS GAP TO ROAN HIGH KNOW ALONG N.C.-TENN. BOUNDARY (double run spur in both state lists)

Carvers Gap, 50 ft. NW. of rd. intersection, 40 ft. W. of rd. N. to Burbank, set in flat rock; standard tablet stamped "RPW 9 1934 5512" 5512.555

Reference mark, 12 ft. N. of tablet, on N. corner of boulder; chiseled square 5511.88

Carvers Gap, 1.1 mi. W. of, on rd. to Roan High Knob, 10 ft. SW. of trail intersection at point of sharp curve in rd., on boulder; chiseled square 6030.24

Roan High Knob, set in top of Sunrise Rock; standard tablet stamped "Roan High Knob, RPW 12 1934 6285" 6285.403

Reference mark, 20 ft. N. of tablet, in lower portion of Sunrise Rock; square cut $\frac{1}{4}$ -in. deep over drill hole 6283.04

TOECANE QUADRANGLE NORTH CAROLINA-TENNESSEE
 Bk. B5313 S.L.D. of 1929
 by J. P. Fish, 1934
 Recopied: 6/18/54 jmr (Cont'd. P. 20)

Shell Creek, 11.0 mi. NE. of, 7 ft. N. of center of Luncesford Branch Road, 25 ft. N. of center of Luncesford Branch at ford and intersection of small stream, on rock outcrop; chiseled square 2599.71

Shell Creek, 10.0 mi. NE. of, 7 ft. SE. of center of Walnut Mountain Road, in root of 16-in. black oak tree; nail and washer 2935.49

NGVD 29
 Elevations

Qd. #224

Station: HUMP County: Avery State: N.C.
 Observer: J. L. Williams Year: 1934 Datum: 1927 N.A.D. - Prelim.
 Description: Comp. Bk. TVA #2

Elk Park, 2.2 mi SW. of, on highest point of Hump Mountain near E. end of flat summit.

Station mark: Drill hole in triangle on boulder set in ground.

NOTE: Not to be confused with Forest Service station on same top, 119.5 ft NE. of USGS station.

NGVD 29 Elevations

[Latitude 36 08 24.30 Longitude 82 00 43.06]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Yellow	14	09	23.63	194	07	44.40	4.2417240	10.841
Roan High Knob	68	21	38.15	248	17	43.52	4.0297830	6.655
Fork	130	10	39.70	310	04	50.81	4.2856613	11.995
Buck Ridge	201	55	25.99	21	57	34.53	4.1628760	9.041
Beech	247	28	07.11	67	32	44.09	4.1037482	7.890
Sugar	277	57	24.28	98	02	11.30	4.0915045	7.671
Grandfather	284	01	55.73	104	08	37.32	4.2446482	10.915
Jonas	332	58	28.88	153	02	28.61	4.3515248	13.960

Qd. #224

Station: ROAN HIGH BLUFF County: Mitchell State: N. C.

Observer: USC&GS Year: 1930 Datum: 1927 N.A.D.

Description: Comp. Bk. TVA #2

Located on highest part of bluff which makes up extreme W. end of Roan Mountain. It is about 15 mi by rd. SW. of Roan Mountain and about same distance N. of Bakersville.

Station: Marked with standard disk

References:

OBJECT		DISTANCE	DIRECTION
Big Butt		meters	00° 00' 00.0"
Reference Mark No. 1	28.48 ft	8.680	268 46 03.0
Reference Mark No. 2	36.465 ft	8.067	347 50 09.1

NGVD 29
Elevations

[Latitude 36 05 35.02

Longitude 82 08 44.48]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Pig Pen Bluff	32	07	05.01	212	03	27.38	4.2415480	10.837
Unaka G.S.	110	07	03.02	290	01	58.25	4.1388869	8.555
Unaka F.S.	110	19	36.14	290	14	05.57	4.1613913	9.010
Fork	171	12	40.34	351	11	35.78	4.2521653	11.105
White Rocks F.T.	187	47	11.15	07	48	03.41	4.2127396	10.192
Roan High Knob	238	47	09.74	58	47	58.89	3.3873452	1.516
Wilson Knob	351	13	39.77	171	14	22.32	4.0749649	7.384
Peters	85	19	35.68	265	13	25.52	4.1980023	9.803
Beauty	98	52	42.80	278	46	05.94	4.2316566	10.593