

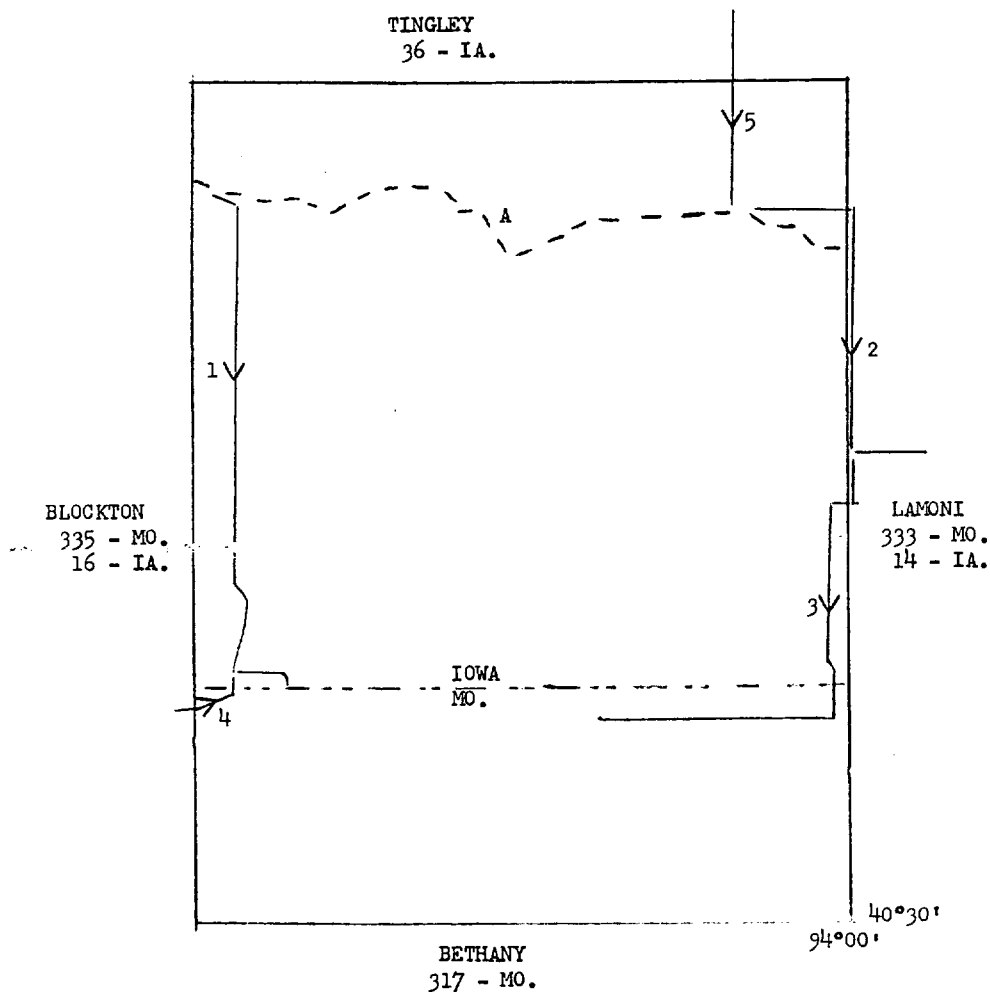
Harrison and Worth Counties

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

40-094-12
MOUNT AYR QUADRANGLE
15 - IOWA
334 - MISSOURI
N4030-W9400/15
DIAGRAM NK 15-10
NEBRASKA CITY

Edition of: 5-5-79

PR: ADP/cb



N.G.S. (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle No. 400941

15 C

LINE 1

FEET

R.R. Barrett, 1978; Book CV-3436

MOUNT AYR QUAD. - 15 IA. - 334 MO.

2	39	0.0	BM, At Mount Ayr, Ringgold County, at the county courthouse, in the top of the N. side of the concrete walk leading to the W. entrance, 2 ft N. of the entrance, and 1.5 ft above the ground, a standard USC&GS disk stamped "MT AYR 1934"	1236.182
40	0.5	UE Mount Ayr A, about 0.2 mi S. and 0.2 mi E. of tablet, at intersection State Hwy. 2 and County Hwy. P-46, 62.5 ft N., 24 ft E. and 5 ft lower than crossroad, in S. end of a corrugated metal culvert; punched hole	1201.41	
44	1.5	UE Mount Ayr B, about 0.2 mi E. and 1.2 mi S. of tablet, 80 ft S., 30 ft W. and 6.7 ft lower than T-rd. E., 13 ft N., 30 ft W. centerline of road, at entrance W., in N. end of a corrugated metal culvert; punched hole	1162.92	
47	2.5	UE Mount Ayr C, about 0.2 mi E. and 2.2 mi S. of tablet; 41 ft S., 26 ft W. and 5.2 ft lower than road at fence E.-W. (section line), 13 ft S., 26 ft W. centerline of road at entrance W., on S. end of corrugated metal culvert, a punched hole	1162.94	
50	3.4	Reference mark, 18 ft S., 41 ft E. and 3.4 ft lower than crossroad, on S. end of a corrugated metal culvert, punched hole	1163.63	
51	3.5	BM, Mount Ayr, 3 mi S. of, from the intersection of State Hwy. 2 and County Hwy. P 46 at, T. 68 N., R. 29 W. at quarter cor. between secs. 19 and 30, 26 ft S., 82 ft W. and level with crossroads, 1 ft N. of E.-W. fence and witness sign, standard tablet welded on 10 ft of copperweld rod, protected by a 5-in. drain tile stamped "6 RRB 1978"	1166.923	
55	4.5	UE 6 A, 1 mi S. of tablet, 27 ft N., 41 ft E. and 1.5 ft lower than crossroad, 27 ft N., 14 ft W. centerline of road at field entrance N., on W. end of corrugated metal culvert; punched hole	1183.81	
58	5.5	UE 6 B, 2 mi S. of tablet; 22 ft S., 23 ft W. and 2.3 ft lower than T-rd. W. (offset crossroad) on NW. cor. of SW. end of a large concrete box culvert, chiseled square	1141.01	
62	6.6	Mounty Ayr, 6.15 mi S. of, 0.15 mi S. of the quarter cor. between secs. 6, 7, T. 67 N. R. 29 W., 25 ft S. and 37 ft E. of centerline of N.-S. road at private drive E., 21 ft N. and 4 ft W. of telephone pole and witness sign, standard tablet welded on 10 ft of copper weld rod, protected by a 5-in. drain tile, set 0.2 ft below the ground and stamped "ET 10 JWO 1975"	1176.463	
65	7.5	UE ET 10 A, 0.85 mi S. of tablet; 17.5 ft N., 86 ft W. and 4.2 ft lower than crossroad, on N. end of concrete culvert, chiseled square	1088.07	
68	8.6	UE ET 10 B, 1.85 mi S. of tablet; 45 ft N., 18 ft E. and 2.4 ft lower than crossroad, on E. end of a corrugated metal culvert; punched hole	1070.72	
70	9.5	BM, Mount Ayr, about 9 mi S. of, from the intersection of State Hwy. 2, and County Hwy. P 46 at, T. 67 N., R. 29 W., about 450 ft N. of quarter cor. between secs. 19 and 30, at a concrete and steel bridge over East Fork Grand River, 102 ft N., 11 ft E. and 0.3 ft lower than centerline bridge, on NE. headwall, 7 ft S. of witness sign, a standard tablet stamped "7 RRB 1978"	997.674	
72	9.5	Reference mark, 204 ft S., 22.5 ft W. of BM, 102 ft S., 11.5 ft W., 3.7 ft higher than centerline bridge, on top of SW. wingwall; chiseled square	1001.65	
74	9.8	UE 7 A, 0.3 mi S. of tablet; 18 ft N., 138 ft E. and 0.6 ft lower than crossroads, on N. end of concrete culvert; chiseled square	1054.00	

FEET

2	77	11.0	UE	7 B, 0.3 mi S., and 1.1 mi E. of tablet, 19 ft N., 18 ft W. and 4.7 ft lower than T-rd. S., on N. end of concrete culvert; chiseled square	1141.23
	79	11.2	BM	T. 67 N., R. 29 W., N. cor. secs. 31 and 32, 3 ft S. and 17 ft E. from road at former fenceline E., on Iowa-Mo State line, on top of prominent hill, in concrete post; a standard tablet "842 1934 1130"	1130.658

MOUNT AYR QUAD. - 334 Mo. - 15 IA.

R.R. Barrett, 1978; Book CV-3436

- | R.R. Barlett, 1978, 1980 | | | | |
|--------------------------|-----|-----|---|----------|
| 3 | 1 | 0.0 | BM, Atkellerton, Ringgold County, on the Chicago, Burlington & Quincy RR., just E. of the station, at the Main Street crossing, 30 ft W. of the centerline of the street, 26 ft S. of the centerline of the track, 2 ft S. of a powerline pole, and between the curb and sidewalk, a standard US&GS disk stamped "P 117 1935" and set in the top of a concrete post | 1199.630 |
| 1 | 0.0 | 0.0 | BM, Kellerton, at T. 68 N., R. 28 W., near W. sixteenth cor. between secs. 2 and 11, 3 ft N., 8 ft W. from NE. cor. of the post office; 27 ft S., 43 ft W. and ft than cross street, 3 ft W. of a metal flag pole, 17 ft S., 1 ft E. of a fire hydrant; standard tablet on 10 ft copperweld rod, protected by a 5-in. drain tile, stamped "8 RRB 1978" | 1203.639 |
| 6 | 0.9 | 0.9 | UE 8 A, 0.9 mi E. of tablet, 24 ft N., 14 ft E. and 2.5 ft lower than crossroads, on E. end of a corrugated metal culvert; punched hole | 1134.88 |
| 9 | 1.9 | 1.9 | UE 8 B, 1.9 mi E. of tablet, 32 ft S., 53 ft W. and 6.5 ft higher than T-rd. S., 1 ft SW. of a fence corner post, copperweld rod, projecting 7-in; painted white | 1140.59 |

LAMONI QUAD. - 333 Mo. - 14 IA.

- | | | | |
|----|-----|---|----------|
| 16 | 9.0 | BM, Kellerton, 3 mi E. and about 0.1 mi S. of, about 660 ft S. of cor. secs. 5, 6, 7 and 8, T. 68 N., R. 27 W., 30 ft S., 38 ft W. and 3 ft higher than entrance W. to farm buildings, 9 ft E. of the E. side of a steel grain bin, 1.8 W. of power pole and witness sign, standard tablet, on 10 ft copperweld rod; protected by a 0.5 ft drain tile, stamped "9 RRB 1978" | 1125.163 |
| 17 | 3.0 | Reference mark, 13.5 ft SSW. from BM, 42 ft S., 44 ft W. and 4.4 ft higher than entrance W.; on SE. cor. concrete foundation for a grain dryer fan; chiseled square | 1126.57 |
| 20 | 3.9 | UE 9 A, 0.9 mi S. of tablet; 23 ft S., 39 ft E., and 0.1 ft higher than crossroads, on S. end of corrugated metal culvert, punched hole | 1154.16 |
| 25 | 5.0 | UE 9 B, 2 mi S. of tablet; about 530 ft S. of crossroads; 11 ft N., 29 ft W., and 2.4 ft lower than road at field entrance W.; on N. end corrugated metal culvert; a punched hole | 1164.47 |
| 28 | 5.9 | BM, Kellerton, 3 mi E. and 3 mi S. from; 3 mi N. and 3 mi W. of Lamoni, T. 68 N., R. 27 W., near cor. secs. 19, 20, 29 and 30; 65 ft S., 42 ft E. and 1.7 ft lower than crossroads; 2 ft E. and 0.5 ft N. of fence corner; 4 ft E. of power pole, standard tablet, on 10 ft copperweld rod, protected by 5-in. drain tile, stamped "10 RRB 1978" | 1164.992 |
| 29 | 5.9 | Reference mark, 33 ft S., 127 ft W. and 3 ft lower than crossroad, 33 ft S., 14 ft E. of road, at drive S., on E. end of a corrugated metal culvert, punched hole | 1163.66 |
| 32 | 6.9 | UE 10 A, 1 mi S. of tablet; 41 ft S., 23 ft E., and 3.7 ft lower than crossroads, on E. end of corrugated metal culvert; punched hole | 1092.36 |
| 35 | 8.0 | UE 10 B, 2.1 mi S. of tablet, 456 ft S., 18 ft E., and 7.3 ft lower than crossroads, on E. end of metal culvert; punched hole | 1154.03 |

LINE 2 (Cont'd)

LAMONI QUAD. - 333 MO. - 14 LA.

FEET

3	38	0.1	UE 10 C, 2 mi S. and 1 mi E. of tablet; 27 ft N., 18 ft E., and 1.1 ft lower than T-rd. N. on E. end of metal culvert; punched hole	1148.86
	40	9.6	UE 10 D, 2 mi S. and 2.5 mi E. of tablet, at bridge over Shane Creek, 18 ft S., 12 ft W. and 0.1 ft lower than centerline bridge; a rail spike driven vertically in piling	1107.29
	43	10.7	BM, 1.3 mi NW. along the Chicago, Burlington & Quincy RR. from the station at Lamoni, Decatur County, at a road crossing, 48 ft E. of the centerline of the track, 33 ft N. of the centerline of the road, 8 ft N. of a fence corner, 1 ft W. of the fence line, and about 2 ft lower than the track, a standard USC&GS disk set in concrete post and stamped "T 117 1935"	1152.596

LINE 3

R.R. Barrett, 1978; Book CV-3496

LAMONI QUAD. - 14 IA., 333 MO.

4	1	0.0	UE 10 B, 2.1 mi S. of BM "10 RRB 1978", 456 ft S., 18 ft E. and 7.3 ft lower than crossroads, on E. end of metal culvert; punched hole	1154.03
---	---	-----	--	---------

MOUNT AYR QUAD. - 15 IA. - 334 MO.

3	1.2	Reference mark, 57 ft E. of BM, 63.5 ft N., 34 ft W. centerline of road at entrance N.; 0.8 ft S. of fence and witness tag	1146.01
4	1.2	BM, Lamoni, 3.3 mi W. of, about 0.3 mi W. of cor. secs. 5, 6, 7 and 8, T. 67 N., R. 27 W., on the top of a hill; 64 ft N., 91 ft W. and 2.7 ft higher than road at field entrance N., 110 ft W. of power pole, 1 ft S. of fence post and witness sign; standard tablet on 10 ft copperweld rod, protected by a 5-in. drain tile, stamped "11 RRB 1978"	1145.419
8	2.4	UE 11 A, 0.2 mi W. and 1 mi S. of tablet, 52 ft S., 20 ft E. and 2.7 ft lower than crossroad, on E. end of metal culvert; punched hole	1138.45
12	3.9	UE 11 B, 0.2 mi W. and 2.5 mi S. of tablet, 60 ft S., 20 ft E., and 1.8 ft lower than T-rd. E., on E. end of concrete culvert; chiseled square	1105.52
14	4.4	UE 11 C, 0.2 mi W. and 3 mi S. of tablet, 14 ft S., 23 ft E., and 2.6 ft lower than T-rd. W., on E. end of metal culvert; punched hole	1121.61
15	4.9	Reference mark, 65 ft NW. of BM, 16 ft N., 19 ft W. of centerline of road at field entrance W. on N. end of metal culvert, punched hole	1132.08
16	4.9	BM, Lamoni, 3.5 mi NW. and 3.5 mi S. of; T. 67 N., R. 27 W., at NW. cor. sec. 31, 203 ft S. of Ia.-Mo. State line (E.-W. fence) on MO.-Co. Hwy. KK, 19 ft S., 34.5 ft E. and 0.3 ft lower than road field entrance W., 1 ft W. of fence, 6 ft E. of a power pole and witness sign; opposite a small group of trees E., standard tablet on 10 ft copperweld rod, protected by a 5-in. drain tile, stamped "12 RRB 1978"	1133.749
20	5.9	UE 12 A, 1 mi S. of tablet, 22 ft S., 15 ft E. and 2.1 ft lower than crossroads, on E. end of metal culvert, punched hole	1082.31
24	6.9	BM, T. 66 N., 28 ft W., near N. cor. secs. 1 and 2, 20 ft N. of T-rd. S., 75 ft SE. of SE. cor. of dwelling owned by W.A. Gruenwolf, in concrete post; standard tablet stamped "855 1934 1109"	1108.809
26	7.5	UE 855 A, 0.6 mi W. of tablet, at bridge over W. Fork Big Creek, 7 ft S. (normal) and bridge and 0.1 ft higher, top of a steel bolt, painted white	998.43
29	8.4	UE 855 B, 2 mi W. of tablet, 48 ft S., 16 ft E., and 3 ft lower than T-rd. S., on E. end of metal culvert; punched hole	1089.31

LINE 3 (Cont'd)

MOUNT AYR QUAD. - 15 IA. - 334 MO.

FEET

- | | | | | |
|----|------|-----|---|----------|
| 4 | 35 | 9.5 | UE 855 C, 2.6 mi W. of tablet, at Lone Rock Church, 100 ft N. centerline of road, on SE. cor. bottom concrete step, chiseled square | 1109.57 |
| 40 | 10.3 | | BM, T. 66 N., R. 28 W., 0.2 mi W. of N. cor. secs. 4 and 5, 60 ft SW. of dwelling of P.J. Kinder, 40 ft N. of road, in concrete post; standard tablet stamped "856 1934 1058" | 1058.082 |

LINE 4

R.R. Barrett, 1978; Book CV-3435

BLOCKTON QUAD. - 16 IA. - 335 MO.

- | | | | | |
|---|----|-----|--|---------|
| 5 | 11 | 0.0 | BM, Allendale, 5.5 mi N., 1.5 mi E. of Redding, 2.5 mi S., 7 mi E. of, T. 67 N., R. 30 W., at center of sec. 25, 15 ft S., 65 ft S., of old road bed, 1 ft S. of a fence corner and witness post; in a concrete post projecting 0.4 ft, a standard tablet stamped "2 H 1936 994" | 994.058 |
|---|----|-----|--|---------|

MOUNT AYR QUAD. - 15 IA. - 334 MO.

- | | | | |
|----|-----|---|---------|
| 15 | 1.6 | UE 2 H A, about 1.3 mi E. and 0.3 mi N. of tablet, on County Hwy. "O", about 0.5 mi S. of IA-MO state line, 49 ft NE. (normal) 18 ft E. and 2.5 ft lower than centerline of hwy. at a gravel road leading S. on E. end of metal culvert; punched hole | 1119.39 |
| 18 | 2.5 | UE 7 A, 0.3 mi S. of tablet; 18 ft N., 138 ft E. and 0.6 ft lower than crossroads, on N. end of concrete culvert; chiseled square | 1054.00 |

LINE 5

R.R. Barrett, 1978; Book CV-3436

TINGLEY QUAD. - 36 IA.

- | | | | | |
|---|----|------|---|----------|
| 8 | 14 | 25.4 | BM, Beaconsfield, 4 mi S. and 0.25 mi E. of; 3 mi N. and 0.5 mi E. of Kellerton; T. 69 N., R. 28 W., about 300 ft S. of quarter cor. between secs. 23 and 26, on the crest of a hill, 16 ft N., 30 ft E. and 0.2 ft lower than road at entrance E.; 7 ft N. of the N. fence corner post at a wire gate, 0.6 ft W. of the fence, 1 ft S. of a witness sign, standard tablet on copperweld rod, protected by a 5-in. clay tile, stamped "13 RRB 1978" | 1114.109 |
|---|----|------|---|----------|

MOUNT AYR QUAD. - 334 IA.

- | | | | |
|----|------|---|----------|
| 18 | 26.1 | UE 13 A, about 0.7 mi S. of tablet; 28 ft N., 19 ft W. and 2.2 ft lower than T-rd. W., on W. end of a concrete culvert; chiseled square | 1175.10 |
| 22 | 27.4 | UE 13 B, about 2 mi S. of tablet; 47 ft N., 31 ft W. and 4.5 ft lower than crossroad, 9 ft W. of fence corner, 3 ft N. of a power pole, 2 ft S. of a fence and witness tag, in 5-in. drain tile, the top of a copperweld rod | 1190.14 |
| 24 | 28.6 | At Kellerton, Ringgold County, on the Chicago, Burlington & Quincy RR. just E. of the station, at the Main Street crossing, 30 ft W. of the centerline of the street, 26 ft S. of the centerline of the track, 2 ft S. of a powerline pole and between the curb and the sidewalk, a standard USC&GS disk stamped "P 117 1935" and set in the top of a concrete post | 1199.630 |

ISOLATED BENCH MARKS

- | | |
|--|----------|
| T. 66 N., Rs. 29 and 30 W., 208 ft E. of cor. secs. 13, 18, 19 and 24 and Harrison-Worth County line, 21 ft N. of E.-W. road, in concrete post; standard tablet stamped "PRIM TRAV STA NO 63 JS 1923 MO" | 1118.842 |
| T. 66 N., R. 29 W., cor. secs. 5, 6, 7 and 8, 20 ft N. and 15 ft W. from stone at crossroads, 18 ft S. and 24 ft E. from Hermix Stone, in concrete post; standard tablet stamped "841 C W A 1934 998"
(Destroyed 9-78, RRB) | 998.199 |

ISOLATED BENCH MARKS (Cont'd)

	<u>FEET</u>
T. 66 N., R. 28 W., 155 ft W. of E. sixteenth cor. between secs. 21 and 28, 200 ft NE. of small frame house, 30 ft S. of road, in concrete post; standard tablet stamped "PRIM TRAV STA NO 66 J S 1923 MO 1095" (Not found 7-78, AJK)	1095.015
T. 66 N., R. 28 W., cor. secs. 20, 21, 28 and 29, 16 ft S. and 22 ft E. from crossroads, on concrete headwall; chiseled square	1074.30
T. 66 N., Rs. 28 and 29 W., cor. secs. 19, 24, 25 and 30, 5 ft S. and 17 ft W. of T-rd. E., in concrete post; standard tablet stamped "PRIM TRAV STA NO 65 J S 1923 MO 1130" (Not found 9-77, L.M.T.)	1130.441
T. 66 N., R. 29 W., cor. secs. 15, 16, 21 and 22, 36 ft N. and 24 ft W. from old crossroads, in concrete post; standard tablet stamped "PRIM TRAV STA NO 64 J S 1923 MO 1119"	1119.868
Tps. 66 and 67 N., Rs. 27 and 28 W., cor. of, 25 ft S. and 20 ft E. from crossroads, on concrete headwall; chiseled square	1083.92
T. 66 N., R. 28 W., near N. cor. secs. 1 and 2, 20 ft N. of T-rd. S., 75 ft SE. of SE. cor. of dwelling owned by W.A. Gruenwolf, in concrete post; standard tablet stamped "855 1934 1109" (Disturbed 9-78, RRB)	1109.218
T. 67 N., R. 28 W., near S. cor. secs. 33 and 34, 185 ft N. and 45 ft W. from T-rd. N., on SE. cor. of concrete porch of High Point School; chiseled square	1124.99
Tps. 66 and 67 N., R. 28 W., approximate quarter cor. between secs. 4 and 33, 120 ft N. of road, on SE. cor. of bottom step of church; chiseled square	1109.73
T. 66 N., R. 29 W., N. cor. secs. 1 and 2, 33 ft N. and 440 ft E. from T-rd. S., 110 ft S. of dwelling of F. Butler, 36 ft S. of gate, in concrete post; standard tablet stamped "857 1934 1163" (Reported destroyed 9-77, L.M.T.)	1163.399
T. 66 N., R. 29 W., 0.2 mi S. of N. cor. secs. 2 and 3, 50 ft N. of road cor. S.-NW., 100 ft NE. of dwelling of Walter Mathis, in concrete post; standard tablet stamped "858 1934 1141" (Not found 9-78, R.R.B)	1141.684
Turkey Grove School, 75 ft S. of SE. cor. of, near line between secs. 5 and 32, Tps. 66 and 67 N., R. 29 W., 45 ft N. of road, on NE. cor. of concrete base of pump; chiseled square	1108.93