

OFFICE COPY HOLD

THIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

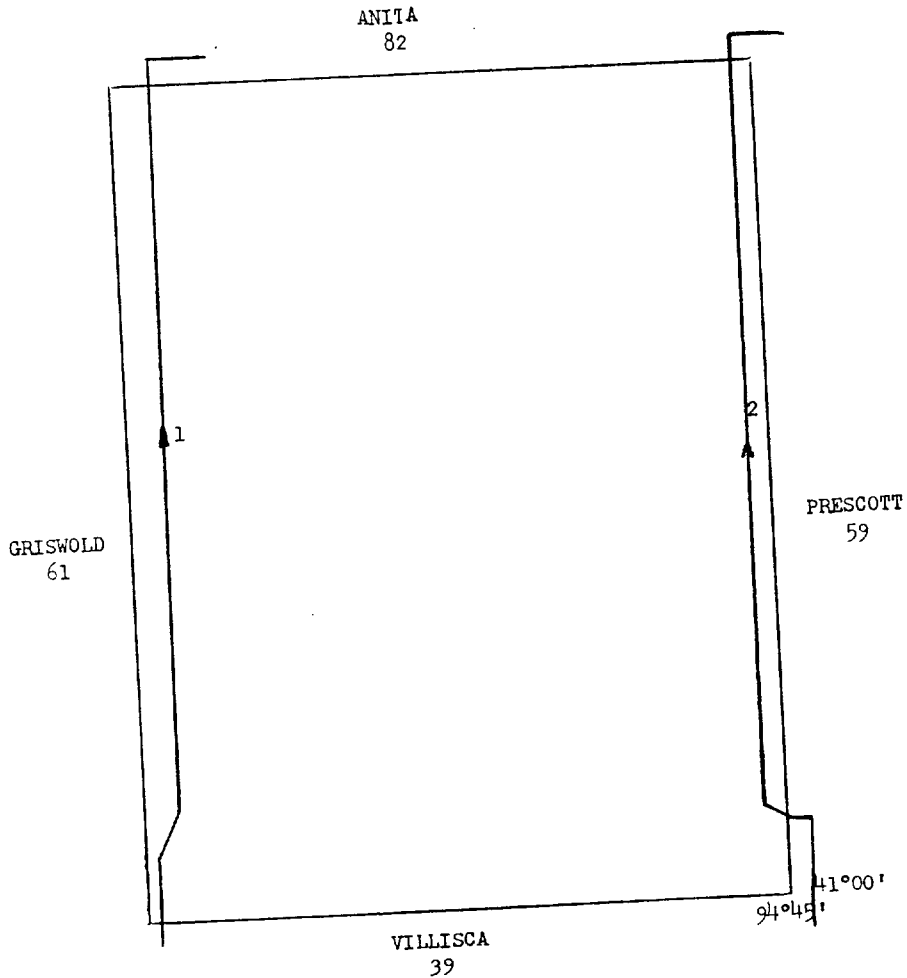
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

41-094-33
CARBON QUADRANGLE
60 - IOWA
N4100-W9445/15
DIAGRAM NK 15-7
OMAHA

Cass, Montgomery and Adams Counties

Edition of: 3-29-78

PR: ADP/LB/cb



60 C

FEET

LINE 1

VILLISCA QUAD. 39

D.N. Burgeson, 1976; Book CV-3342

- 7 19 5.8 UE 4 DNB A, Villisca, 5 mi N. of; along U.S. Hwy. 71; 10 mi S. of Grant; T. 72 N., R. 36 W., near E. sixteenth cor. secs. 28 and 33; 100 ft E. and 5.3 ft lower than road at fence E.; at right-of-way marker at T-fence E.; top of iron right-of-way post projecting 1.5 ft above ground 1059.15

CARBON QUAD. 60

- 21 6.7 Reference mark, 86 ft E. of tablet; 150 ft N. of milepost 32; 35 ft N., 43 ft E. and 2.1 ft lower than road at entrance E.; at center of E. concrete headwall; brass plug stamped "I. H. C. BM" 1067.27
- 22 6.7 Villisca, 6 mi N. of along U.S. Hwy. 71; 9 mi S. of Grant; T. 72 N., R. 36 W., near quarter cor. secs. 21 and 28; 655 ft S. of T-rd. W.; (Jct. U.S. Hwy. 71 and State Hwy. H-34), 150 ft N. of milepost 32; 35 ft N., 43 ft W. and 1.2 ft lower than road at entrance E.; at center of W. concrete headwall; standard tablet stamped "5 DNB 1976" 1066.295
- 25 7.6 UE 5 DNB A, Villisca, 7 mi N. of along U.S. Hwy. 71; 8 mi S. of Grant; T. 72 N., R. 36 W., in NE $\frac{1}{4}$ sec. 21; at the SE. cor. and 1.4 ft higher than center of bridge No. 6904 chiseled square, 7.5 ft N. of S. end of concrete bridge guard 1069.18
- 27 8.6 UE 5 DNB B, Grant, 7.3 mi S. of along U.S. Hwy. 71, 7.7 mi N. of Villisca; T. 72 N., R. 36 W. near quarter cor. sec. 15 and 16, at the NE. end of bridge No. 6905; 8.1 ft S. of concrete guard rail 0.25 ft higher than centerline of bridge; chiseled square 1077.48
- 28 8.9 UE 5 DNB C, Grant, 7.0 mi S. of along U.S. Hwy. 71; 8 mi N. of Villisca, T. 72 N., R. 36 W., near cor. secs. 9, 10, 15 and 16; at culvert at sec. line fence W.; ft E. and 0.9 ft lower than road at culvert; center of E. concrete headwall brass plug stamped "I.H.C. BM" 1073.88
- 30 9.9 Reference mark, 100 ft NE. of tablet; 115 ft N., 44 ft E. and level with crossroads; at center E. concrete headwall; brass plug stamped "I.H.C. BM" 1085.27
- 31 10.0 Grant, 6 mi S. of along U.S. Hwy. 71; 9 mi N. of Villisca, T. 72 N., R. 36 W., near cor. secs. 3, 4, 9 and 10; 63 ft N., 42 ft W. and 0.9 ft lower than crossroad; at center of W. concrete headwall, standard tablet stamped "6 DNB 1976" 1084.278
- 35 10.9 UE 6 DNB A, Grant, 5 mi S. of along U.S. Hwy. 71; 10 mi N. of Villisca; T. 72 and 73 N., R. 36 W., near cor. of secs. 33, 34, 3 and 4, 130 ft N., 170 ft W. and 11.4 ft lower than road at entrance W.; 130 ft N. of fence corner; 13.5 ft W. of right-of-way fence; at the S. post of two concrete right-of-way posts 7 ft apart; top of rebar projecting 1 in. above concrete post and 0.7 ft above the ground bolt stamped "U" 1111.34
- 36 11.5 UE 6 DNB B, Grant, 4.5 mi S. of along U.S. Hwy. 71; 10.5 mi N. of Villisca; T. 73 N., R. 36 W., near quarter cor. sec. 33 and 34; at Mortons Mill, 6.1 ft from the NW. end and 0.8 ft higher than the centerline of bridge No. 6906; brass plug 1090.59
- 37 11.9 UE 6 DNB C, Grant, 4 mi S. of along U.S. Hwy. 71; 11 mi N. of Villisca; T. 73 N., R. 36 W., at cor. secs. 27, 28, 33 and 34; 71 ft S., 120 ft E. of road at E.-W. fence, 10.3 ft N.E. of white right-of-way post No. 420; concrete right-of-way post with steel rebar projecting 0.5 ft above ground 1106.60
- 39 12.9 Reference mark 1, 220 ft N. of tablet, 300 ft S. and 98 ft E. of crossroads; 258 ft N. of milepost 38, on right-of-way fence, top of RR. iron right-of-way post projecting 1 ft above the ground stamped "RM" 1097.49

CARBON QUAD. - 60

FEET

LINE 1 (Cont'd)

- 7 40 12.9 Grant, 3 mi S. of along U.S. Hwy. 71 and 12 mi N. of Villisca; T. 73 N., R. 36 W., near the cor. of secs. 21, 22, 27 and 28, 331 ft S. and 100 ft E. of crossroad; 178 ft S. of the NW. fence corner, 1.5 ft W. of right-of-way fence, and witness post; standard tablet on a copper coated steel rod driven to a depth of 10 ft and encased in a 6-in. clay tile; stamped "7 DNB 1976" 1093.874
- 41 12.9 Reference mark 2, 155 ft N. of tablet; 80 ft S., 98 ft E. and 3.5 ft lower than crossroad; 21 ft S. of fence corner; 2.6 ft W. of fence; top of rebar in a concrete right-of-way marker post projecting 0.2 ft above the ground 1093.84
- 43 14.0 UE 7 DNB A, Grant, 2 mi S. of along U.S. Hwy. 71; 13 mi N. of Villisca; T. 73 N., R. 36 W., near cor. of secs. 15, 16, 21 and 22; 215 ft N. of a T-rd. E.; 42 ft E. and 2 ft lower than road at culvert; at the center of a 27 ft concrete box culvert through the hwy. a brass plug stamped "I.H.C. BM" 1098.43
- 45 14.9 UE 7 DNB B, Grant, 1 mi S. of along U.S. Hwy. 71, 14 mi N. of Villisca; T. 73 N., R. 36 W., near cor. secs. 9, 10, 15 and 16; 22 ft S., 43 ft E. and 0.2 ft lower than crossroad; at center of a 21 ft concrete headwall of culvert under hwy. brass bolt stamped "I.H.C. BM" 1107.29
- 48 15.9 Reference mark 1, 370 ft S. of tablet; 615 ft N. of crossroads; 36 ft E. of hwy. at end of cable anchor of guard rail; head of bolt; stamped "RM" 1168.14
- 49 16.0 Grant, at, on U.S. Hwy. 71, 985 ft N. of crossroads; 19 mi S. of Atlantic; T. 73 N., R. 36 W., in the SE 1/4 sec. 4; 45 ft N., 122 ft E. and 1.5 ft higher than road at E.-W. entrance; 15 ft W. of a fence line, 3 ft S. of a power pole standard tablet on a copper coated steel rod driven to a depth of 12 ft and stamped "8 DNB 1976" 1168.801
- 51 16.9 UE 8 DNB A, Grant, 1 mi N. of along U.S. Hwy. 71, 18 mi S. of Atlantic; T. 73 and 74 N., R. 36 W., near cor. secs. 3, 4, 33 and 34, 39 ft N., 99 ft E. and 0.3 ft lower than road at section line fence E. and W.; top of 1-in. rebar in concrete post projecting about 0.4 ft above ground 1197.15
- 53 17.8 UE 8 DNB B, Grant, 2 mi N. of along U.S. Hwy. 71; 17 mi S. of Atlantic; T. 74 N., R. 36 W., near cor. secs. 27, 28, 33 and 34; 75 ft S. and 68 ft E. of a crossroad; 35 ft NW. of a fence corner; chiseled square on E. end of a 4 ft concrete culvert 1214.89
- 56 18.7 Reference mark, 110 ft S. of tablet; 85 ft S., 100 ft E. of entrance E., 8.5 ft W. of fence line; top of right-of-way marker projecting 1 ft above ground 1199.28
- 57 18.7 Grant, 3 mi N. of along U.S. Hwy. 71; 16 mi S. of Atlantic, T. 74 N., R. 36 W., near cor. secs. 21, 22, 27 and 28; 615 ft S. of crossroad; 41 ft N. of milepost 44; 34 ft N., 100 ft E. and 6.3 ft lower than road at entrance E.; 3 ft S. of a power pole; 2.5 ft W. of fence line; standard tablet on a copper coated steel rod; driven to a depth of 10 ft and encased in a 6-in. clay tile stamped "9 DNB 1976" 1191.996
- 60 19.8 UE 9 DNB A, Grant, 4 mi N. of along U.S. Hwy. 71; 15 mi S. of Atlantic, T. 74 N., R. 36 W., near cor. secs. 15, 16, 21 and 22; at Nobel Methodist Church, 0.5 ft from the S. end of the first step of church; chiseled cross 1245.43
- 64 20.9 UE 9 DNB B, Grant, 5 mi N. of along U.S. Hwy. 71; 14 mi S. of Atlantic, T. 74 N., R. 36 W., near cor. secs. 9, 10, 15 and 16, 105 ft N. and 135 ft W. of crossroad; at the S. end of the first step of the United Church of Christ; chiseled cross 0.2 ft from end of step 1225.82
- 66 21.8 Reference mark 1, 300 ft SE. of tablet; 355 ft S. and 120 ft E. of crossroads, opposite road destination sign; 1.5 ft W. of fence line copper steel rod projecting 0.1 and encased in a 6-in. clay tile 1280.49

4
41-094-33
CARBON QUADRANGLE
60 - IOWA

FEET

CARBON QUAD. - 60

LINE 1 (Cont'd)

- 7 67 21.9 BM, Grant, 6 mi N. of along U.S. Hwy. 71; 13 mi S. of Atlantic, T. 74 N., R. 36 W., near cor. of secs. 3, 4, 9 and 10; 257 ft S. and 108 ft W. of crossroads, 65 ft S. of a fence corner, 1.8 ft E. of a fence line and witness post; standard tablet on a copper coated steel rod driven to a depth of 15 ft and stamped "10 DNB 1976" 1277.578
- 68 22.0 Reference mark 2, 230 ft NE. of tablet; 30 ft S., 22 ft W. and 0.06 ft lower than centerline of crossroads; 1.4 ft from the S. point on a triangular concrete median; chiseled square 1271.31
- 71 23.3 UE 10 DNB A, Grant, 7.3 mi N. of along U.S. Hwy. 71; 11.7 mi S. of Atlantic; T. 75 N., R. 36 W., near S. sixteenth cor. between secs. 33 and 34; at the SW. cor. of bridge No. 1501, 7 ft N. of the S. end; chiseled square 1170.64

ANITA QUAD. - 82

- 72 23.8 UE 10 DNB B, Grant, 8 mi N. of along U.S. Hwy. 71, 11 mi S. of Atlantic, 145 ft N. and 45 ft E. of crossroad; (Jct. of U.S. Hwy. 71 and State Hwy. 92); at the center of the E. end of an 11 ft concrete box culvert brass plug stamped IHC BM 1170.62
- 78 25.3 Cumberland, 1 mi S. and 4.5 mi W. of; near quarter cor. between secs. 26 and 35; T. 75 N., R. 36 W., in the right-of-way of State Hwy. 92, 1.45 mi E. of its intersection with U.S. Hwy. 71; standard tablet stamped "LYMAN 1968" crimped on 10 ft length of copper coated rod, driven flush with ground and set in 6-in. tile filled with gravel 1319.394

LINE 2

LENOX QUAD. - 38

F.W. Krueger, 1977; Book CV-3392

- 1 3 0.0 BM, at Corning, near the intersection of Eighth and Main Streets, at the SE. cor. of the city park, 51 ft N. of the center of Eighth Street, 39 ft W. of the centerline of Main Street, 8 ft E. of a sidewalk, and about 1 ft higher than street, a standard USC&GS disk stamped "Z 108 1935" and set in the top of a concrete post. 1169.397

PRESCOTT QUAD. - 59

- 4 0.9 UE Z 108 A, 1 mi through town N., T. 72 N., R. 34 W., near quarter cor. between secs. 27 and 34; 183 ft S. and 42 ft W. of junction of State Hwy. 148 and Grove Avenue; 20 ft W. centerline Grove Avenue; on W. end of a 24-in. concrete culvert; chiseled square 1258.78
- 7 1.8 UE Z 108 B, 1.8 mi N. from disk; T. 72 N., R. 34 W., near quarter corner between secs. 22 and 27; 70 ft S. and 32 ft E. and 1.8 ft lower than the State Hwy. 148 at a I-rd. E.; on E. end of an E.-W. 24-in. concrete culvert; a chiseled square 1271.87
- 8 2.4 Reference mark, 110 ft NNE. from tablet; 75 ft N. from Hwy. at drain; 13.2 ft lower than road at drain; on N. end of a 24-in. concrete culvert; a chiseled square 1289.38
- 10 2.4 BM, Corning, 2.5 N. and 0.5 mi W. of; T. 72 N., R. 34 W., near E. center of sec. 22, 26 ft S., 24 ft E. and 1.8 ft lower than State Hwy. 148 at projected fence E., 26 ft S. of hwy. at drain; 4-in. E. of a BM; center of S. concrete headwall of culvert; a standard tablet 1300.794

5
41-094-33
CARBON QUADRANGLE
60 - IOWA

FEET

CARBON QUAD. - 60

LINE 2 (Cont'd)

- 1 11 3.2 UE 1 A, 0.8 mi W. from tablet; T. 72 N., R. 34 W. in the NW $\frac{1}{4}$ sec. 22, 10 ft N., 8 ft E. and 0.1 higher than centerline of Y-rd. W. along N. edge of concrete pavement; center of the "6" in the number "265" embossed in the concrete 1864.93
- 14 4.3 UE 1 B, 1.2 mi N. and 0.8 mi W. from tablet along State Hwy. 148; T. 72 N., R. 34 W., near NW $\frac{1}{4}$ cor. between secs. 15 and 16, 15 ft S. and 24 ft W. of I-rd. W. (jct. state route 148 and 95) at the NE. cor. of small island and in the road surface, a chiseled square; 0.1 ft higher than I-rd. 1165.93
- 16 4.8 BM, Corning, 4.2 mi N. and 1 mi W. of; T. 72 N., R. 34 W., near S. sixteenth cor. between secs. 9 and 10; in the E. curb of bridge over Kemp Creek, 16 ft E. of centerline of bridge at drain; 2.2 ft above drain; countersunk, a standard tablet stamped "2 FWK 1977" 1149.175
- 17 4.8 Reference mark, 103 ft S. and 31 ft W. of tablet; 103 ft S. and 15 ft W. of centerline of bridge in the curb at the SW. cor. of bridge, a state hwy. BM a metal rivet, 0.4 ft higher than bridge at drain 1148.98
- 19 5.6 UE 2 A, 0.8 mi N. from tablet along State Hwy. 148; T. 72 N., R. 34 W., near cor. secs. 3, 4, 9 and 10; 26 ft S., 61 ft E. and 3.1 ft lower than I-rd. E., on S. end of a 24-in. concrete culvert; a chiseled square 1235.62
- 22 6.6 UE 2 B, 1.8 mi N. along State Hwy. 148 from tablet; Tsp. 72 and 73 N., R. 34 W., near cor. secs. 3, 4, 33 and 34, 32 ft S., 246 ft E. and 8 ft lower than Hwy. 148 at a I-rd. E., 32 ft S. of road at drain; on S. end of a N.-S. 24-in. iron pipe culvert; a punched hole 1244.73
- 24 7.6 UE 2 C, 2.8 mi N. along State Hwy. 148 from tablet; T. 73 N., R. 34 W., near cor. secs. 27, 28, 33 and 34, 43 ft S., 37 ft E. and 2.8 ft lower than crossroad; on E. end of a N.-S. 24-in. concrete culvert; a chiseled square 1182.63
- 26 8.4 BM, Corning, 7.5 mi N. and 1 mi W. of; T. 73 N., R. 34 W., near quarter cor. between secs. 27 and 28, 16 ft E. bridge over Middle Nodaway River; 0.6 ft higher than bridge; 33 ft above drain; center of E. concrete curb of bridge; standard tablet stamped "3 FWK 1977" 1120.766
- 27 8.4 Reference mark, 177 ft S. and 31 ft W. of tablet; 177 ft S., 15 ft W. and 0.4 ft higher than bridge over Middle Nodaway River; on S. end of W. concrete curb of bridge; state of Iowa BM; top of bolt and washer 1120.60
- 29 9.2 UE 3 A, 0.8 mi N. along State Hwy. 148 from tablet; T. 73 N., R. 34 W., near quarter cor. between secs. 21 and 22, 42 ft N., 50 ft E. and 9 ft lower than hwy. at I-rd. E., center of E. concrete headwall of E.-W. culvert; a chiseled square 1146.31

6
41-094-33
CARBON QUADRANGLE
60 - IOWA

FEET

CARBON QUAD. - 60

LINE 2 (Cont'd)

- 1 31 10.3 UE 3 B, 1.8 mi N. along State Hwy. 148 from tablet; T. 73 N., R. 34 W., near quarter cor. between secs. 15 and 16, 32 ft S., 66 ft E. and 8.3 ft lower than I-rd. E.; on S. end of a 24-in. N.-S. concrete culvert; a chiseled square 1228.15
- 36 11.8 BM, Corning, 11 mi N. and 1 mi W. of; T. 73 N., R. 34 W., near cor. secs. 9, 10, 3 and 4, 150 ft N., 40 ft W. and 5.6 ft lower than State Hwy. 148 at E.-W. road, 40 ft W. of road at drain; center of W. concrete headwall of culvert; 6-in. S. of Iowa BM; standard tablet; stamped "4 FWK 1977" 1203.823
- 37 1.8 Reference mark, 102 ft S. and 30 ft W. of tablet; 48 ft N., 70 ft W. and 6.1 ft lower than State Hwy. 148 at E.-W. roads, 1 ft S. and 1 ft E. of a fence corner; top of bolt in a 4-in. by 4-in. concrete right-of-way marker 1203.30
- 39 12.8 UE 4 A, 1 mi N. along State Hwy. 148 from tablet; Ips. 73 and 74 N., R. 34 W., near cor. secs. 3, 4, 33 and 34, 50 ft S., 60 ft E. and 10.5 ft lower than hwy. at I-rd. on S. end of a N.-S. 24-in. concrete culvert; a chiseled square 1295.26
- 43 13.9 UE 4 B, 2 mi N. along State Hwy. 148 from tablet; T. 74 N., R. 34 W., near cor. secs. 27, 28, 33 and 34, 332 ft S., 30 ft E. and 3.6 ft lower than hwy. at E.-W. road center of E. concrete headwall of a small culvert; on Iowa BM, top of rivet 1269.62
- 44 15.0 BM, Corning, 14 mi N. and 1 mi W. of; T. 74 N., R. 34 W., near cor. secs. 21, 22, 27 and 28; 387 ft S., 28 ft W. and 9.6 ft lower than centerline of State Hwy. 148 at E.-W. road; 28 ft W. and 2.7 ft lower than road at drain; 14 ft above drain; center of W. concrete headwall of bridge; standard tablet stamped "5 FWK 1977" 1238.170
- 45 15.0 Reference mark, 30 ft N. and 54 ft E. from tablet, 357 ft S., 26 ft E. and 9.1 ft lower than centerline of hwy. 148 at crossroad; 2.2 ft lower than road at drain and 26 ft E. of road at drain; 16.2 ft above drain; on Iowa BM; top of rivet 1238.67
- 49 16.1 UE 5 A, 1 mi N. along State Hwy. 148 from tablet, T. 74 N., R. 34 W., near cor. secs. 15, 16, 21 and 22, 130 ft N., 110 ft W. and 5.8 ft higher than crossroad; on S. end of bottom concrete step to St. Peter's Church, a previously chiseled cross 1359.75
- 52 17.4 UE 5 B, 2.1 mi N. along State Hwy. 148 from tablet; T. 74 N., R. 34 W., near quarter cor. between secs. 9 and 10; 19 ft N., 30 ft E. and 5.1 ft lower than small bridge at drain; 15 ft above drain; center of E. concrete headwall of bridge; a chiseled square 1236.83
- 54 18.2 BM, Corning, 17 mi N. and 1 mi W. of; 1.5 mi S. and 0.7 mi E. of Massena; T. 74 N., R. 34 W., near cor. secs. 3, 4, 9 and 10; 310 ft S., 40 ft W. and 13.1 ft lower than crossroads, hwy. 148 at E.-W. road center of N.-W. concrete headwall of a NW.-SE. culvert; 4-in. S. of on Iowa BM, standard tablet stamped "6 FWK 1977" 1291.674

7
41-094-33
CARBON QUADRANGLE
60 - IOWA

2
LINE ~~X~~ (Cont'd)

CARBON QUAD. - 60

FEET

1 55 18.2 Reference mark, 288 ft N. and 99 ft E. of tablet; 22 ft S., 59 ft E. and 4.2 ft lower than centerline of State Hwy. 148 at E.-W. road; concrete culvert; a chiseled square 1300.59

58 19.3 UE 6 A, 1.1 mi N. along State Hwy. 148 from tablet; 0.1 mi N. and 16.7 ft lower than I-rd. E. near Ips. 74 and 75 N., R. 34 W., near cor. secs. 3, 4, 33 and 34, 80 ft N., 17 ft E. and 0.6 ft higher than bridge at drain; 26.3 ft above drain; on N. end of E. concrete curb of bridge; at a previously set chiseled square 1224.66

FONTANELLE QUAD. - 81

63 21.2 BM, Greenfield, Adair County, 15.9 mi W. along State Hwy. 92 from jct. with State Hwy. 25 at; I. 75 N., R. 34 W., at NE. cor. sec. 34, 94 ft S., 197.5 ft W. and 7.2 ft higher than crossroads; 9 ft S. and 118.5 ft W. of a power pole; painted "B.M.", 15 ft SE. and 1.5 ft NE. of a right-of-way fence corner W.-SE., 2.5 ft NW. of a witness sign; a standard tablet crimped to the top of a copper rod; stamped "19 PJH 1968" 1309.374