**Appendix A. Summary of Blaine Aquifer system specific capacity data and hydraulic conductivity estimates**

| County | State well # | Well depth (ft) | Casing size (in) | Screen interval | Aquifer | Water level | Reported pumping rate (gpm) | Corresponding drawdown (ft) | Specific capacity (gpm/ft) | TWDB database remarks | Estimated transmissivity (gpd/ft) | Aquifer thickness tapped by well(ft) | Estimated hydraulic conductivity (ft/d) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Childress | 1223501 | 210 | 12 | 183-210 | 313BLIN | -44.25 | 700 | 35.75 | 19.6 | water level 80 ft while pumping 700 gpm | 26,250 | 166 | 21.2 |
| | 1224303 | 320 | 16 | 20-320 | 313BLIN | | 600 | 20 | 30.0 | water level 20 ft while pumping 600 gpm | 46,700 | 300 | 20.8 |
| | 1224305 | 317 | 14 | 92-317 | 313BLIN | -30 | 900 | 145 | 6.2 | water level 175 ft while pumping 900 gpm | 8,400 | 287 | 3.9 |
| | 1224607 | 120 | 16 | 70-120 | 313BLIN | -59.57 | 1,100 | 30 | 36.7 | 30 ft ddn while pumping 1100 gpm | 60,000 | 90 | 89.1 |
| | 1224810 | 226 | 16 | 119-226 | 313BLIN | -36.79 | 700 | 10 | 70.0 | 10 ft ddn while pumping 700 gpm for 4-5 hrs | 128,000 | 189 | 90.4 |
| | 1240404 | 270 | 16 | 30-270 | 313BLIN | *-80* | 1,100 | 72 | 15.3 | 72 ft ddn while pumping 1100 gpm | 28,500 | 190 | 20.1 |
| | 1240506 | 312 | 16 | 15-312 | 313BLIN | *-95* | 700 | 90 | 7.8 | 90 ft ddn while pumping 700 gpm for 2 days | 14,400 | 217 | 8.9 |
| | 1240509 | 297 | 14 | 128-297 | 313BLIN | -89.75 | 1,000 | 140 | 7.1 | 140 ft ddn after pumping 1000 gpm for several | 9,400 | 207 | 6.1 |
| | 1240605 | 120 | 18 | 50-120 | 313BLIN | -34.44 | 1,300 | 17 | 76.5 | 17 ft ddn after pumping 1300 gpm for one week | 165,000 | 86 | 257.8 |
| Collingsworth | 562419 | 130 | 16 | 0-90 | 313BLIN | -80 | 120 | 25 | 4.8 | 25 ft ddn after pumping 120 gpm for 4 hrs | 6,600 | 50 | 17.6 |
| | 562504 | 180 | 12 | 40-180 | 313BLIN | -44.3 | 500 | 30.7 | 16.3 | 30.7 ft ddn while pumping 500 gpm | 23,500 | 136 | 23.2 |
| | 562608 | 108 | 12 | | 313BLIN | -71 | 390 | 2 | 195.0 | 2 ft ddn while pumping 390 gpm | 357,000 | 37 | 1,289.8 |
| | 562616 | 113 | 7 | 53-113 | 313BLIN | -74 | 15 | 25 | 0.6 | 25 ft ddn after pumping 15 gpm for 2 hrs | 750 | 39 | 2.6 |
| | 562618 | 120 | 5 | 100-120 | 313BLIN | -73 | 8 | 7 | 1.1 | 7 ft ddn after pumping 8 gpm for 24 hrs | 1,900 | 47 | 5.4 |
| | 562705 | 183 | 4 | 155-183 | 313BLIN | -86.8 | 2 | 0.4 | 5.0 | 0.4 ft ddn while pumping 2 gpm | 7,350 | 96 | 10.2 |
| | 562803 | 143 | 12 | 93-143 | 313BLIN | -114.2 | 320 | 35 | 9.1 | 35 ft ddn while pumping 320 gpm | 12,300 | 29 | 57.1 |
| | 562804 | 157 | 12 | 107-157 | 313BLIN | -69.4 | 360 | 15 | 24.0 | 15 ft ddn while pumping 360 gpm | 16,700 | 88 | 25.5 |
| | 562810 | 220 | 14 | 100-220 | 313BLIN | -70.1 | 1,210 | 24 | 50.4 | 24 ft ddn while pumping 1,210 gpm | 79,500 | 150 | 70.9 |
| | 562905 | 150 | 16 | 70-150 | 313BLIN | -99.8 | 750 | 3 | 250.0 | 3 ft ddn while pumping 750 gpm | 445,000 | 50 | 1,185.0 |
| | 562907 | 220 | 12 | 160-220 | 313BLIN | -108 | 1,000 | 2 | 500.0 | 2 ft ddn while pumping 1000 gpm | 980,000 | 112 | 1,169.7 |
| | 562910 | 225 | 14 | | 313BLIN | -119.4 | 600 | 45 | 13.3 | 45 ft ddn while pumping 600 gpm | 18,200 | 106 | 23.0 |
| | 563907 | 93 | 12 | 72-93 | 313BLIN | -30 | 500 | 30 | 16.7 | 30 ft ddn while pumping 500 gpm | 24,000 | 63 | 50.9 |
| | 1205702 | 160 | | | 313WTRS | -116.7 | 3 | 3 | 1.0 | 3 ft ddn while pumping 3 gpm | 1,200 | 43 | 3.7 |
| | 1205703 | 152 | | | 313WTRS | -111.7 | 4 | 16.7 | 0.2 | 16.7 ft ddn while pumping 4 gpm | 200 | 40 | 0.7 |
| | 1206201 | 43 | | | 313BLIN | -15.7 | 1,180 | 14 | 84.3 | 14 ft ddn while pumping 1,180 gpm | 140,000 | 27 | 685.5 |
| | 1206811 | 212 | 16 | 162-202 | 313WTRS | -41.2 | 400 | 158 | 2.5 | 158 ft ddn after pumping 400 gpm for 24 hrs | 4,100 | 171 | 3.2 |
| | 1212303 | 160 | | | 313WTRS | -100.4 | 2 | 4 | 0.5 | 4 ft ddn while pumping 2 gpm | 800 | 60 | 1.8 |
| | 1213102 | 56 | | | 313WTRS | -24.8 | 2 | 4.7 | 0.4 | 4.7 ft ddn while pumping 2 gpm | 420 | 31 | 1.8 |
| | 1213202 | 71 | | | 313WTRS | -44.1 | 2 | 6.5 | 0.3 | 6.5 ft ddn while pumping 2 gpm | 300 | 27 | 1.5 |
| | 1213204 | 93 | | | 313WTRS | -70.4 | 2 | 14.4 | 0.1 | 14.4 ft ddn while pumping 2 gpm | 90 | 23 | 0.5 |
| | 1213502 | 100 | 6 | 70-100 | 313WTRS | -58.8 | 3 | 8.3 | 0.4 | 8.3 ft ddn while pumping 3 gpm | 430 | 41 | 1.4 |
| | 1213802 | 104 | | | 313WTRS | -96.8 | 2 | 3 | 0.7 | 3 ft ddn while pumping 2 gpm | 820 | 7 | 15.2 |
| | 1214302 | 150 | 6 | 135-150 | 313BLIN | -98.8 | 4 | 0.4 | 10.0 | 0.4 ft ddn while pumping 4 gpm | 16,000 | 51 | 41.8 |
| | 1214307 | 124 | | | 313BLIN | -95.7 | 3 | 1.4 | 2.1 | 1.4 ft ddn while pumping 3 gpm | 2,800 | 28 | 13.2 |
| | 1214413 | 100 | 5 | 80-100 | 313WTRS | -40 | 8 | 20 | 0.4 | 20 ft ddn after pumping 8 gpm for 8 hrs | 550 | 60 | 1.2 |
| | 1214706 | 210 | 5 | 190-210 | 313BLIN | -90 | 30 | 25 | 1.2 | 25 ft ddn after pumping 30 gpm for 6 hrs | 1,800 | 120 | 2.0 |
| | 1214801 | 90 | 6 | 50-90 | 313WTRS | -52.9 | 6 | 1 | 6.0 | 1 ft ddn while pumping 6 gpm | 9,000 | 37 | 32.4 |
| | 1214916 | 125 | 12 | 95-125 | 313BLIN | -87.5 | 600 | 10 | 60.0 | 10 ft ddn while pumping 600 gpm | 99,000 | 38 | 352.9 |
| | 1214923 | 177 | 12 | 97-177 | 313BLIN | -60.5 | 760 | 20 | 38.0 | 20 ft ddn while pumping 760 gpm | 60,000 | 117 | 68.8 |
| | 1214924 | 210 | 16 | 18-210 | 313WDCB | -72.5 | 1,000 | 14 | 71.4 | 14 ft ddn while pumping 1,000 gpm | 113,000 | 138 | 109.9 |
| | 1215108 | 90 | 6 | 70-90 | 313WTRS | -66.2 | 4 | 1.8 | 2.2 | 1.8 ft ddn while pumping 4 gpm | 2,500 | 24 | 14.0 |
| | 1215201 | 128 | 12 | 98-128 | 313WTRS | -31.63 | 600 | 49 | 12.2 | 49 ft ddn while pumping 600 gpm | 17,000 | 96 | 23.6 |
| | 1215225 | 104 | 8 | 20-104 | 313WTRS | -17.1 | 45 | 38 | 1.2 | 38 ft ddn while pumping 45 gpm | 1,400 | 87 | 2.2 |
| | 1215402 | 50 | | | 313WTRS | -26.3 | 2 | 0.7 | 2.9 | 0.7 ft ddn while pumping 2 gpm | 3,800 | 24 | 21.4 |
| | 1215509 | 205 | 16 | 0-205 | 313BLIN | -70.4 | 500 | 105 | 4.8 | 105 ft ddn while pumping 500 gpm | 5,600 | 135 | 5.6 |
| | 1215801 | 170 | 12 | 153-170 | 313BLIN | -40 | 700 | 80 | 8.8 | 80 ft ddn while pumping 700 gpm | 11,800 | 130 | 12.1 |
| | 1215803 | 311 | 12 | 190-311 | 313BLIN | -49.9 | 550 | 8 | 68.8 | 8 ft ddn while pumping 550 gpm | 115,000 | 261 | 58.9 |
| | 1215904 | 85 | | | 313WTRS | -66.5 | 3 | 11.7 | 0.3 | 11.7 ft ddn while pumping 3 gpm | 240 | 19 | 1.7 |
| | 1216503 | 125 | | | 313WTRS | -38.1 | 100 | 80 | 1.3 | 80 ft ddn while pumping 100 gpm | 1,350 | 87 | 2.1 |

**Appendix A. Summary of Blaine Aquifer system specific capacity data and hydraulic conductivity estimates**

| County | State well # | Well depth (ft) | Casing size (in) | Screen interval | Aquifer | Water level | Reported pumping rate (gpm) | Corresponding drawdown (ft) | Specific capacity (gpm/ft) | TWDB database remarks | Estimated transmissivity (gpd/ft) | Aquifer thickness tapped by well(ft) | Estimated hydraulic conductivity (ft/d) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Donely | 559903 | 147 | 5 | 127-147 | 313WTRS | -119.16 | 3 | 40 | 0.07 | 40 ft ddn after pumping 2.75 gpm for 1 hr | 5 | 27.84 | 0.02 |
| | 560802 | 206 | 5 | 186-206 | 313WTRS | -128.68 | 8 | 20 | 0.40 | 20 ft ddn while pumping 8 gpm | 25 | 77.32 | 0.04 |
| Fisher | 2931604 | 40 | 5 | 15-35 | 313BLIN | -7.23 | 5 | 35 | 0.14 | 35 ft/5 gpm (spec. capacity: 0.14 gpm/ft) | 125 | 32.77 | 0.51 |
| Hall | 1218707 | 200 | | | 313ARTS | -75 | 1,000 | 50 | 20.00 | 50 ft ddn while pumping 1,000 gpm | 29,500 | 125 | 31.55 |
| | 1236102 | 185 | | | 313ARTS | -173.4 | 20 | 20 | 1.00 | 20 ft ddn after pumping 20 gpm for 5 hrs | 1,250 | 11.6 | 14.41 |
| | 1244602 | 212 | | | 313ARTS | -115 | 15 | 80 | 0.19 | 80 ft ddn after bailing 15 gpm for 4 hrs | 180 | 97 | 0.25 |
| Hardeman | 1333202 | 210 | | | 313BLIN | -93 | 6 | 112 | 0.05 | 112 ft ddn after pumping 6 gpm for 2 hrs | 30 | 117 | 0.03 |
| | 1344907 | 46 | | | 313BLIN | -22 | 100 | 17 | 5.88 | 17 ft ddn after pumping 100 gpm for 36 hrs | 10,700 | 24 | 59.60 |
| King | 2214704 | 80 | 13 | 37-77 | 313BLIN | -37 | 20 | 40 | 0.50 | 40 ft ddn after pumping 20 gpm for 72 hrs | 750 | 43 | 2.33 |
| Wheeler | 546704 | 200 | 7 | 140-200 | 313BLIN | -118 | 20 | 22 | 0.91 | 22 ft ddn after pumping 20 gpm for 1 hr | 1,100 | 82 | 1.79 |
| | 547502 | 50 | 10 | 0-30 | 313WTRS | -8.7 | 250 | 36 | 6.94 | 36 ft ddn while pumping 250 gpm | 9,000 | 41.3 | 29.13 |

ft = feet
in = inches
gpm = gallons per minute
gpd = gallons per day
ft/d = feet per day
ddn = drawdown