**Constant Discharge Aquifer Test**
**Pumping Bore: Antonio**

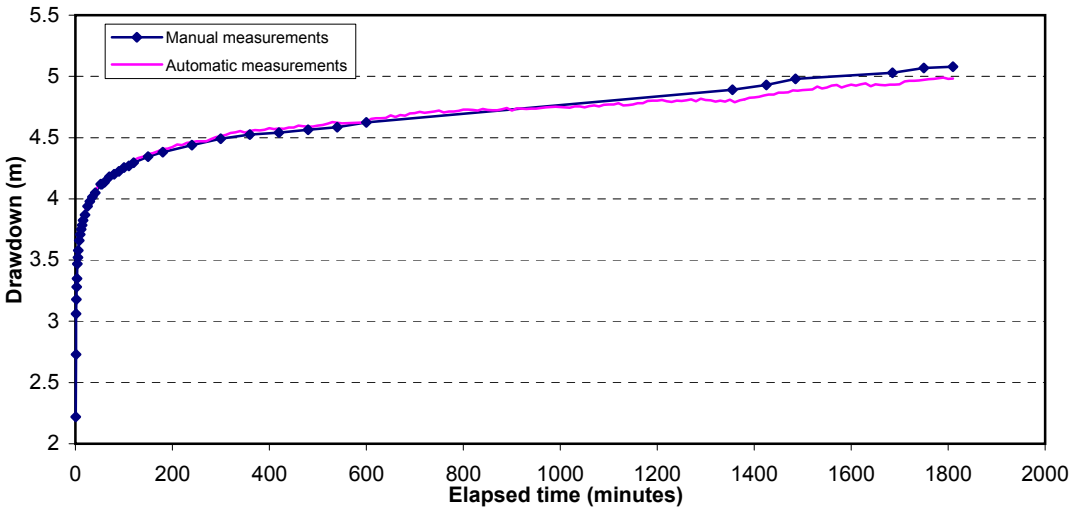



**Figure D-1. Time-Drawdown Plot for Antonio Pumping Bore.**

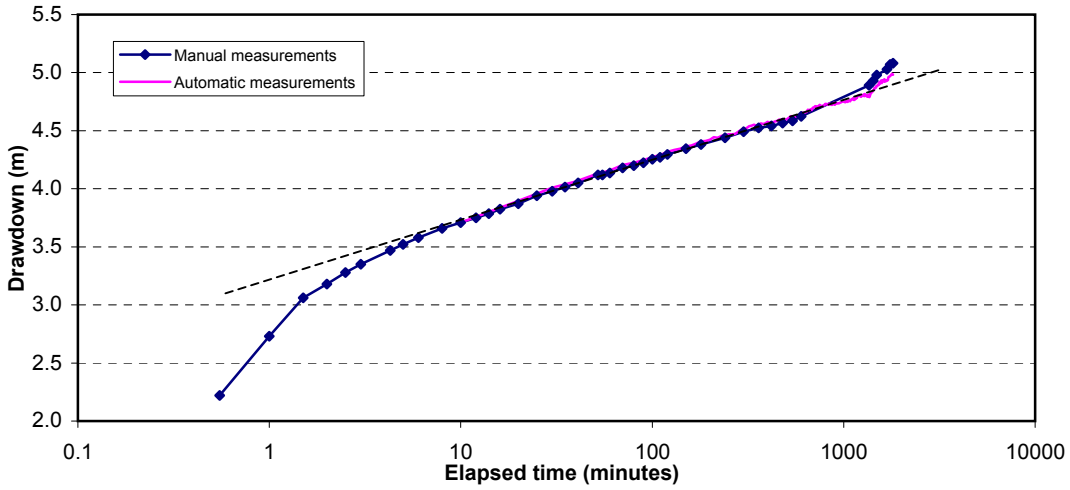


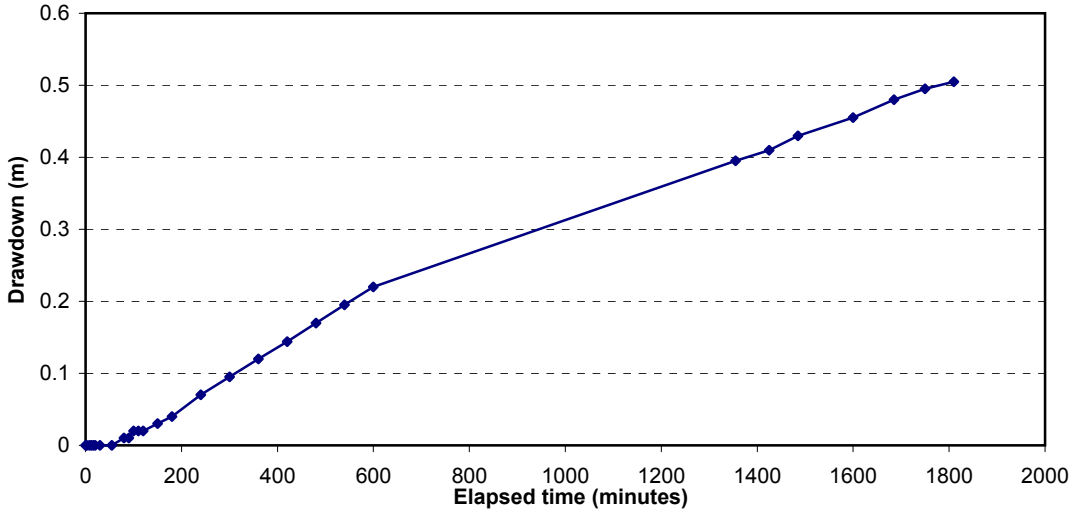

**Figure D-2. Jacob Plot for Antonio Pumping Bore.**

$T = 2.3Q/4\pi\Delta s$
$K = T/D$

$Q = 86.4\ m^3/day$
$\Delta s = 0.545$ log cycle
$T = 29.0\ m^2/day$
$D = 3.0$ m
$K = 9.7$ m/day

| Time (min) | Draw-down (m) |
|---|---|
| 0 | 0 |
| 0.55 | 3.66 |
| 1 | 4.17 |
| 1.5 | 4.5 |
| 2 | 4.62 |
| 2.5 | 4.72 |
| 3 | 4.79 |
| 4.28 | 4.91 |
| 5 | 4.96 |
| 6 | 5.02 |
| 8 | 5.1 |
| 10 | 5.15 |
| 12 | 5.19 |
| 14 | 5.225 |
| 16 | 5.265 |
| 20 | 5.31 |
| 25 | 5.38 |
| 30 | 5.42 |
| 35 | 5.455 |
| 41 | 5.49 |
| 52 | 5.56 |
| 55 | 5.56 |
| 60 | 5.575 |
| 70 | 5.62 |
| 80 | 5.64 |
| 90 | 5.665 |
| 100 | 5.695 |
| 110 | 5.71 |
| 120 | 5.735 |
| 150 | 5.785 |
| 180 | 5.82 |
| 240 | 5.88 |
| 300 | 5.93 |
| 360 | 5.965 |
| 420 | 5.98 |
| 480 | 6.005 |
| 540 | 6.025 |
| 600 | 6.065 |
| 1355 | 6.33 |
| 1425 | 6.37 |
| 1485 | 6.42 |
| 1685 | 6.47 |
| 1750 | 6.51 |
| 1810 | 6.52 |

**Constant Discharge Aquifer Test**
**Pumping Bore: Antonio**




| Time (min) | Draw-down (m) |
|---|---|
| 0 | 0 |
| 3 | 0 |
| 8 | 0 |
| 12 | 0 |
| 16 | 0 |
| 20 | 0 |
| 30 | 0 |
| 55 | 0 |
| 80 | 0.01 |
| 90 | 0.01 |
| 100 | 0.02 |
| 110 | 0.02 |
| 120 | 0.02 |
| 150 | 0.03 |
| 180 | 0.04 |
| 240 | 0.07 |
| 300 | 0.095 |
| 360 | 0.12 |
| 420 | 0.144 |
| 480 | 0.17 |
| 540 | 0.195 |
| 600 | 0.22 |
| 1355 | 0.395 |
| 1425 | 0.41 |
| 1485 | 0.43 |
| 1600 | 0.455 |
| 1685 | 0.48 |
| 1750 | 0.495 |
| 1810 | 0.505 |

**Figure D-3. Time-Drawdown Plot for Antonio Observation Bore.**

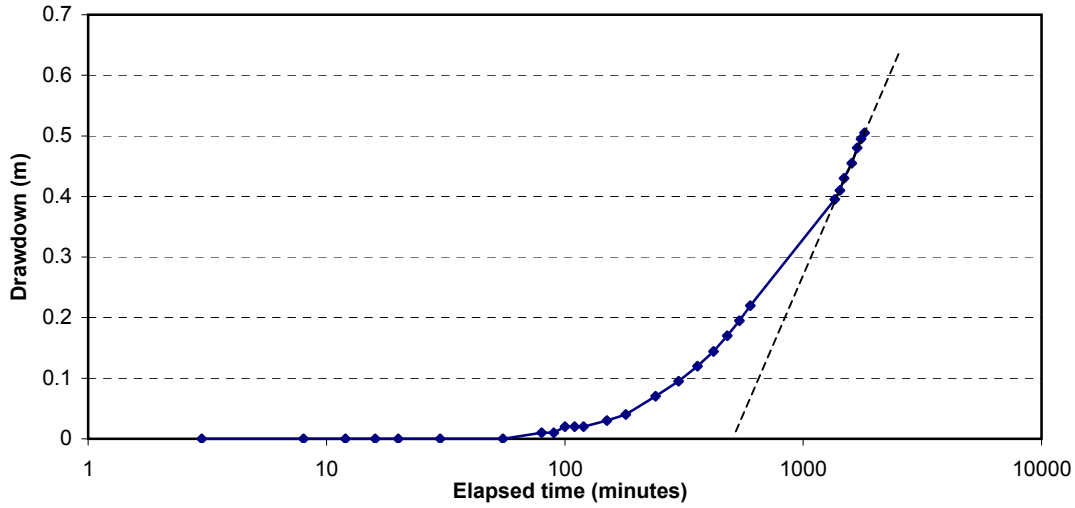



**Figure D-4. Jacob Plot for Antonio Observation Bore.**

$T = 2.3Q/4\pi\Delta s$
$K = T/D$
$S = 2.25Tt_0/r^2$

$Q = 86.4\ m^3/day$
$\Delta s = 0.88$ log cycle
$T = 18.0\ m^2/day$
$D = 3.0$ m
$K = 6.0$ m/day
$S = 0.1376$

**Constant Discharge Aquifer Test**
**Pumping Bore: Flood**

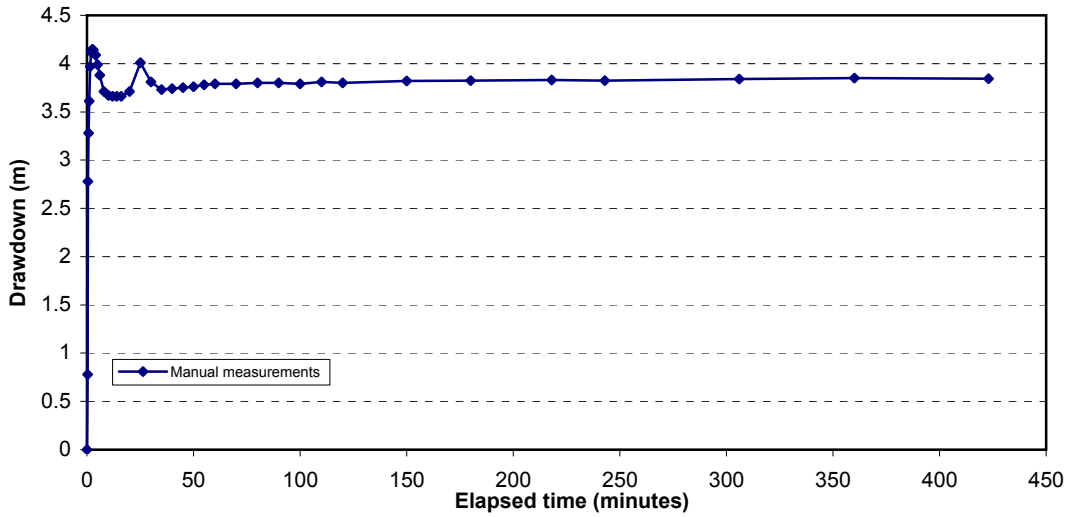



**Figure D-5. Time-Drawdown Plot for Flood Pumping Bore.**

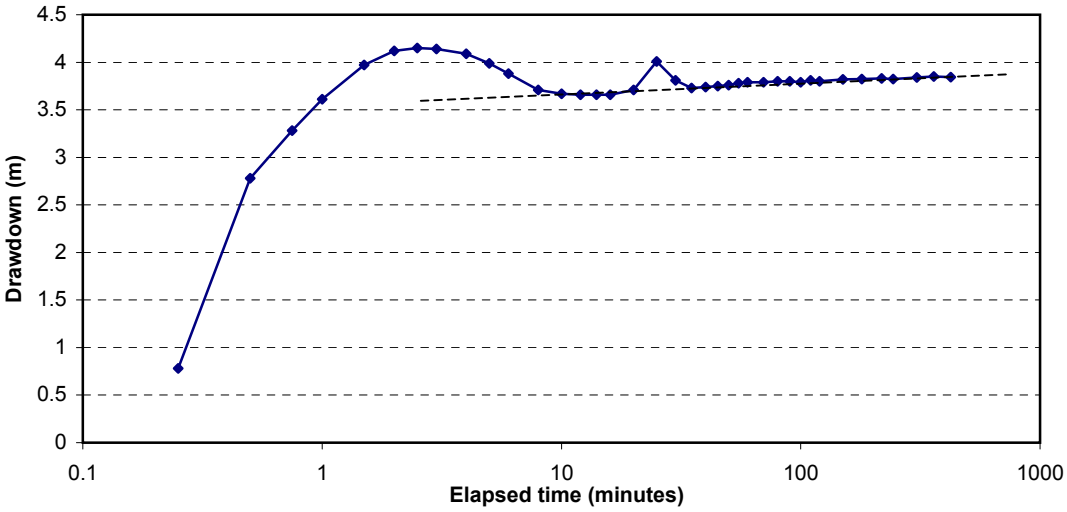


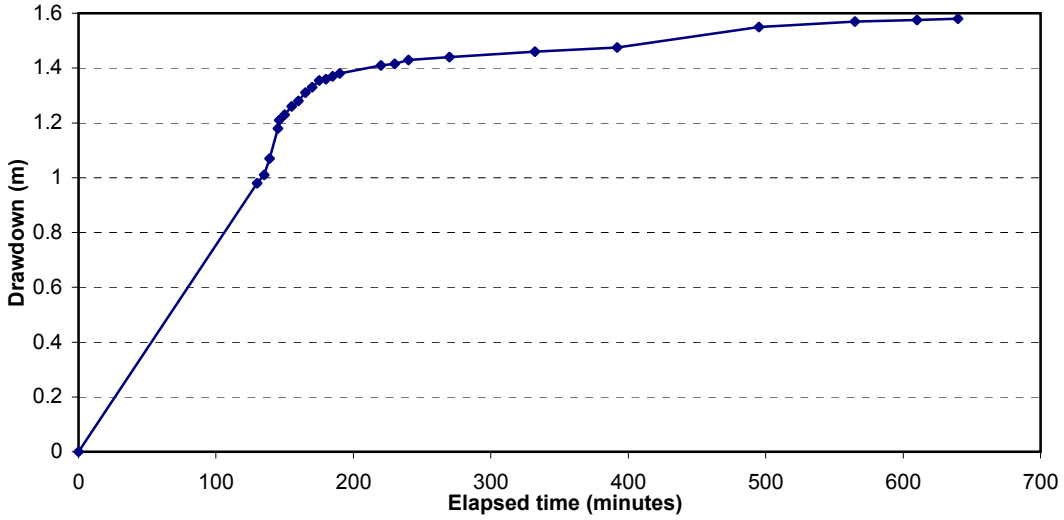

**Figure D-6. Jacob Plot for Flood Pumping Bore.**

| Time (min) | Draw-down (m) |
|---|---|
| 0 | 0 |
| 0.25 | 0.78 |
| 0.5 | 2.78 |
| 0.75 | 3.28 |
| 1 | 3.61 |
| 1.5 | 3.97 |
| 2 | 4.12 |
| 2.5 | 4.15 |
| 3 | 4.14 |
| 4 | 4.09 |
| 5 | 3.99 |
| 6 | 3.88 |
| 8 | 3.71 |
| 10 | 3.67 |
| 12 | 3.66 |
| 14 | 3.66 |
| 16 | 3.66 |
| 20 | 3.71 |
| 25 | 4.01 |
| 30 | 3.81 |
| 35 | 3.73 |
| 40 | 3.74 |
| 45 | 3.75 |
| 50 | 3.76 |
| 55 | 3.78 |
| 60 | 3.79 |
| 70 | 3.79 |
| 80 | 3.8 |
| 90 | 3.8 |
| 100 | 3.79 |
| 110 | 3.81 |
| 120 | 3.8 |
| 150 | 3.82 |
| 180 | 3.825 |
| 218 | 3.83 |
| 243 | 3.825 |
| 306 | 3.84 |
| 360 | 3.85 |
| 423 | 3.845 |

$T = 2.3Q/4\pi\Delta s$
$K = T/D$

$Q = 86.4\ m^3/day$
$\Delta s = 0.12$ log cycle
$T = 131.8\ m^2/day$
$D = 6.0$ m
$K = 22.0$ m/day

**Constant Discharge Aquifer Test**
**Pumping Bore: Wallace**




| Time (min) | Draw-down (m) |
|---|---|
| 0 | 0 |
| 130 | 0.98 |
| 135 | 1.01 |
| 139 | 1.07 |
| 145 | 1.18 |
| 146 | 1.21 |
| 150 | 1.23 |
| 155 | 1.26 |
| 160 | 1.28 |
| 165 | 1.31 |
| 170 | 1.33 |
| 175 | 1.355 |
| 180 | 1.36 |
| 185 | 1.37 |
| 190 | 1.38 |
| 220 | 1.41 |
| 230 | 1.415 |
| 240 | 1.43 |
| 270 | 1.44 |
| 332 | 1.46 |
| 392 | 1.475 |
| 495 | 1.55 |
| 565 | 1.57 |
| 610 | 1.575 |
| 640 | 1.58 |

**Figure D-7. Time-Drawdown Plot for Wallace Pumping Bore.**

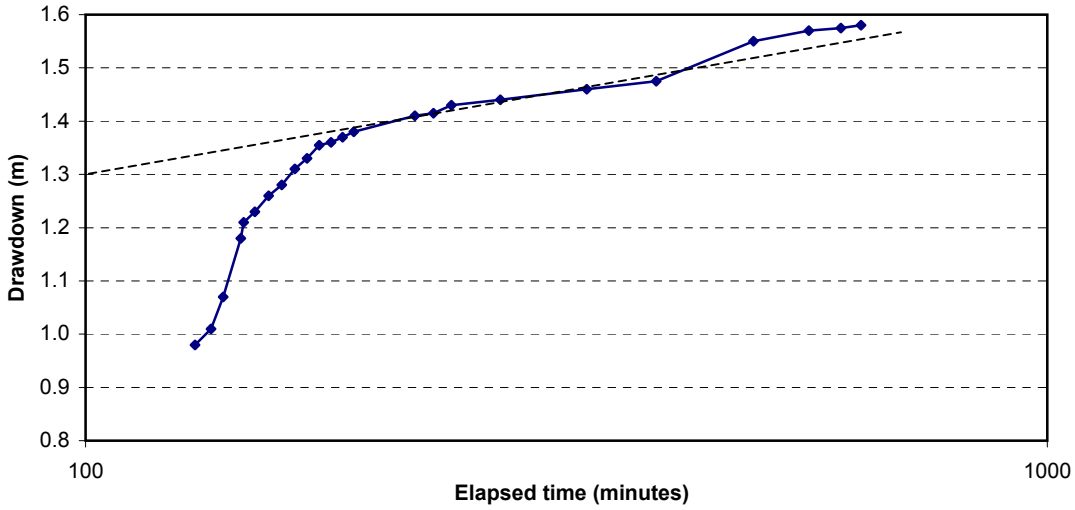



**Figure D-8. Jacob Plot for Wallace Pumping Bore.**

$T = 2.3Q/4\pi\Delta s$
$K = T/D$

$Q = 24.2\ m^3/day$
$\Delta s = 0.32$ log cycle
$T = 13.8\ m^2/day$
$D = 3.0$ m (estimated)
$K = 4.6$ m/day

**Constant Discharge Aquifer Test**
**Pumping Bore: Town Supply Bore 2A (Cook Costello Ltd, 1987)**

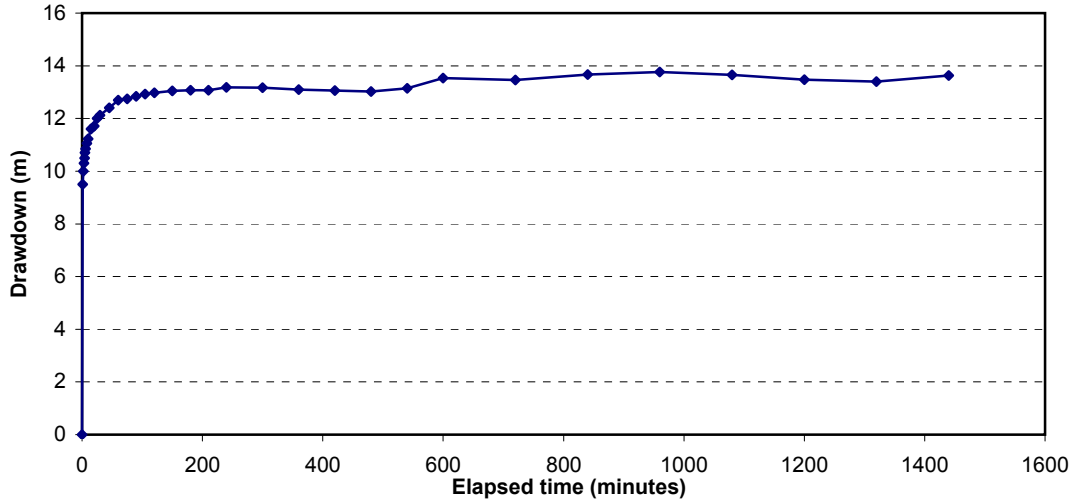



**Figure D-9. Time-Drawdown Plot for Town Supply Bore 2A.**

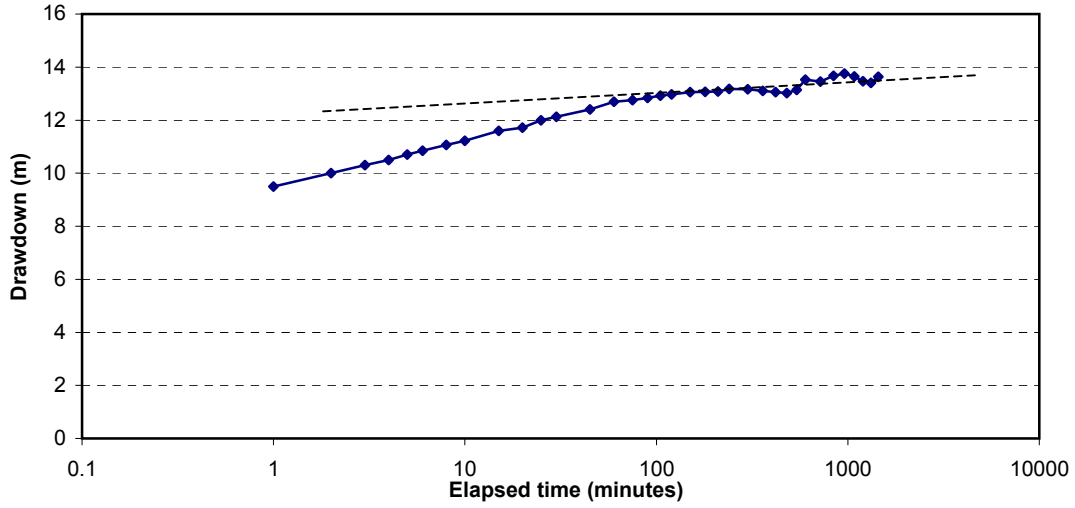



**Figure D-10. Jacob Plot for Town Supply Bore 2A.**

| Time (min) | Draw-down (m) |
|---|---|
| 0 | 0 |
| 1 | 9.5 |
| 2 | 10 |
| 3 | 10.3 |
| 4 | 10.5 |
| 5 | 10.705 |
| 6 | 10.85 |
| 8 | 11.06 |
| 10 | 11.22 |
| 15 | 11.6 |
| 20 | 11.715 |
| 25 | 12 |
| 30 | 12.13 |
| 45 | 12.4 |
| 60 | 12.695 |
| 75 | 12.75 |
| 90 | 12.84 |
| 105 | 12.925 |
| 120 | 12.97 |
| 150 | 13.05 |
| 180 | 13.07 |
| 210 | 13.075 |
| 240 | 13.18 |
| 300 | 13.17 |
| 360 | 13.1 |
| 420 | 13.06 |
| 480 | 13.02 |
| 540 | 13.14 |
| 600 | 13.53 |
| 720 | 13.46 |
| 840 | 13.67 |
| 960 | 13.76 |
| 1080 | 13.65 |
| 1200 | 13.47 |
| 1320 | 13.4 |
| 1440 | 13.63 |

$T = 2.3Q/4\pi\Delta s$
$K = T/D$

$Q = 300\ m^3/day$
$\Delta s = 0.5$ log cycle
$T = 109.8\ m^2/day$
$D = 6.0$ m
$K = 18.3$ m/day

## Constant Discharge Aquifer Test - Water Quality

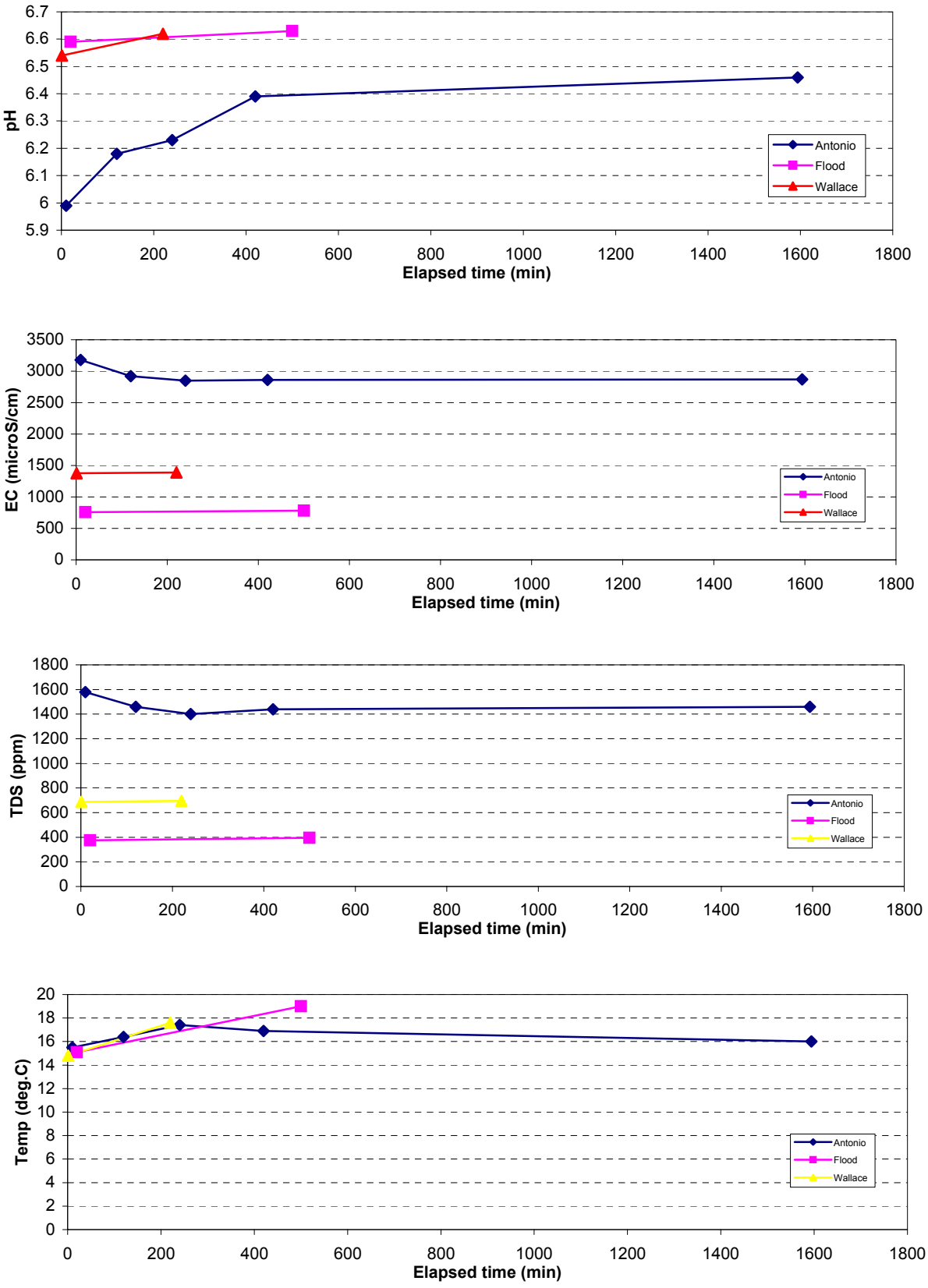



**Figure D-11. Water Quality Results Monitored During Aquifer Test Pumping.**