

SPIRIT CREEK WATERSHED MONITORING COMMITTEE

Wells sampled

-----OCT. 2002 (10 Wells)----- -----MAY 2003 (9 Wells)----- -----OCT. 2003 (10 Wells)----- -----MAY 2004 (9 Wells)-----

| Parameter | Range | Average | Median | Range | Average | Median | Range | Average | Median | Range | Average | Median |
|----------------------------------|--------------|---------|--------|--------------|---------|--------|--------------|---------|--------|--------------|---------|--------|
| Conductivity (uS/cm) | 390 to 2200 | 1079 | 1050 | 430 to 1296 | 864 | 874 | 437 to 1730 | 1014 | 1030 | 472 to 1760 | 909 | 764 |
| Nitrate (mg/L) | 0 to 293 | 62 | 29 | 4 to 63 | 14 | 12 | 4 to 198 | 51 | 25 | | | |
| Sulphate " | 0 to 897 | 243 | 192 | 0 to 477 | 194 | 149 | 0 to 541 | 206 | 155 | 4 to 678 | 229 | 178 |
| pH (pH units) | 6.9 to 7.4 | 7.2 | 7.15 | 7.4 to 7.7 | 7.6 | 7.6 | 7.6 to 7.9 | 7.8 | 7.75 | 7.6 to 7.9 | 7.8 | 7.8 |
| Total Alkalinity (mg/L) | 212 to 504 | 322 | 290 | 182 to 414 | 287 | 260 | 238 to 560 | 320 | 282 | 200 to 322 | 265 | 258 |
| Bicarbonate " | 259 to 615 | 393 | 354 | 222 to 505 | 350 | 317 | 290 to 683 | 391 | 344 | 244 to 393 | 323 | 315 |
| Sodium " | 2 to 104 | 23 | 13.5 | 2 to 28 | 13 | 15 | 3 to 76 | 19.1 | 13.5 | 2 to 64 | 17 | 12 |
| Magnesium " | 24 to 202 | 77.5 | 77 | 24 to 105 | 57 | 56 | 24 to 140 | 68 | 62 | 28 to 136 | 61 | 55 |
| Calcium " | 50 to 174 | 116.6 | 115 | 38 to 163 | 87 | 81 | 53 to 173 | 102.8 | 109.5 | 58 to 162 | 97 | 88 |
| Total Hardness " | 224 to 1266 | 610 | 574 | 194 to 761 | 458 | 437 | 231 to 934 | 536.3 | 529 | 260 to 965 | 492 | 401 |
| Chloride " | 0 to 81 | 16 | 8 | 0 to 21 | 6 | 3 | 0 to 70 | 9 | 0 | 0 to 28 | 7.7 | 6.3 |
| Potassium " | 2 to 22 | 7.1 | 5 | 2 to 17 | 7 | 7 | 2 to 13 | 6 | 5.5 | 2 to 12 | 5.9 | 6 |
| Turbidity (NTU) | 0.14 to 25.5 | 4.5 | 0.76 | 0.02 to 2.17 | 0.64 | 0.6 | 0 to 3 | 0.6 | 0.32 | 0.07 to 7.2 | 1.16 | 0.24 |
| Biochemical Oxygen Demand (mg/L) | 0.1 to 0.2 | 0.1 | 0.1 | 0.1 to 2.1 | 0.6 | 0.4 | 0.3 to 0.6 | 0.5 | 0.5 | 0 | 0 | 0 |
| Dissolved Organic Compounds " | 2 to 18 | 9 | 8 | 3 to 18 | 9 | 8 | 2 to 10 | 6.2 | 6 | 2.7 to 17.5 | 8.6 | 6.2 |
| Ammonia-N (mg/L) | 0 to 0.08 | 0.02 | 0 | 0 to 0.18 | 0.04 | 0 | 0 to 0.12 | 0.03 | 0.01 | 0 to 0.06 | 0.03 | 0.03 |
| Nitrate-N " | | | | | | | | | | 0.53 to 16.2 | 4.5 | 3.12 |
| Total Kjeldahl Nitrogen (mg/L) | 0 to 1.7 | 1 | 1.15 | 0.5 to 1.8 | 1.02 | 1.0 | 0.1 to 0.9 | 0.67 | 0.75 | 0 to 2.1 | 0.8 | 0.6 |
| Total Phosphorus " | 0.1 to 0.26 | 0.16 | 0.14 | 0.08 to 0.22 | 0.11 | 0.09 | 0.09 to 0.18 | 0.12 | 0.11 | 0.07 to 0.14 | 0.096 | 0.08 |
| Phosphorus (Ortho) " | 0.03 to 0.19 | 0.12 | 0.12 | 0.07 to 0.19 | 0.1 | 0.09 | 0.08 to 0.16 | 0.096 | 0.1 | 0.05 to 0.14 | 0.094 | 0.09 |
| Total Coliforms (org/100ml) | 0 to 210 | 32 | 0 | 0 to 170 | 21 | 0 | 0 to 490 | 79 | 20 | 1 to 10 | 1.1 | 0 |
| Fecal Coliforms " | 0 to 10 | 1.0 | 0 | 0 | 0 | 0 | 0 to 430 | 51 | 0 | 0 to 600 | 89 | 10 |
| Fecal Strep " | 0 to 1400 | 183 | 5 | 0 to 50 | 8 | 0 | 0 to 70 | 19 | 5 | 0 to 40 | 8 | 0 |
| Hetro. Plate Count (CFU/mL) | 68 to 1320 | 547 | 267 | 56 to 300000 | 120443 | 1190 | NA | NA | NA | NA | NA | NA |
| Lead (mg/L) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 to 0.001 | 0 | 0 |
| Manganese " | 0 to 0.67 | 0.13 | 0.02 | 0 to 0.15 | 0.036 | 0.01 | 0 to 0.31 | 0.085 | 0.035 | 0 to 0.1 | 0.03 | 0.02 |
| Iron " | 0 to 0.6 | 0.11 | 0 | 0 | 0 | 0 | 0 to 0.2 | 0.02 | 0 | 0 to 0.9 | 0.1 | 0 |
| Zinc " | 0 to 1.0 | 0.1 | 0 | 0 to 3.5 | 0.42 | 0.02 | 0 | 0 | 0 | 0 to 0.2 | 0.05 | 0 |
| Boron " | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barium " | 0.04 to 0.14 | 0.08 | 0.08 | 0.003 to 1.0 | 0.17 | 0.06 | 0.05 to 0.14 | 0.076 | 0.085 | 0.04 to 0.09 | 0.06 | 0.05 |
| Copper " | 0 to 0.1 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 to 0.1 | 0.01 | 0 |
| Aluminum " | 0 to 0.22 | 0.03 | 0 | 0 to 0.03 | 0.009 | 0 | 0 to 0.08 | 0.008 | 0 | 0.02 to 0.1 | 0.03 | 0.02 |
| Selenium " | 0 to 0.002 | 0.0004 | 0 | 0 to 0.002 | 0.0004 | 0 | 0 to 0.003 | 0.0007 | 0 | 0 to 0.003 | 0.0009 | 0 |
| Arsenic " | 0 to 0.001 | 0.0001 | 0 | 0 to 0.001 | 0.0001 | 0 | 0 to 0.001 | 0.0003 | 0 | 0 | 0 | 0 |
| Total Dissolved Solids (mg/L) | 343 to 2026 | 938 | 917 | 351 to 1153 | 734 | 724 | 377 to 1562 | 853 | 839 | 410 to 1474 | 745 | 604 |