**GWDP**
**Q1 2020**

| PARAMETER | UNIT | Maximum Daily Limit for Downgradient Wells Only | QAL008A May 2020 05/04/20 (Downgradient) | Q | QAL008D May 2020 05/04/20 (Downgradient) | Q | QAL025D May 2020 05/05/20 | Q | QAL026A May 2020 05/04/20 | Q | QAL026D May 2020 05/04/20 | Q | QAL029A May 2020 05/04/20 | Q | QAL029D May 2020 05/04/20 | Q | QAL050A May 2020 05/05/20 (Downgradient) | Q | QAL051A May 2020 05/04/20 (Downgradient) | Q | QAL051D May 2020 05/04/20 (Downgradient) | Q | QAL052A May 2020 05/04/20 (Downgradient) | Q | QAL053A May 2020 05/05/20 | Q | QAL055A May 2020 05/04/20 | Q | QAL056A May 2020 05/04/20 | Q | QAL057A May 2020 05/04/20 (Downgradient) | Q | QAL057D May 2020 05/04/20 (Downgradient) | Q | QAL075A May 2020 05/05/20 (Downgradient) | Q | QAL075D May 2020 05/05/20 (Downgradient) | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Field | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D.O. | ppm | NA | 8.7 | | 6.5 | | 6.0 | | 13 | | 13 | | 12 | | 8.2 | | 10 | | 11 | | 7.6 | | 4.3 | | 5.4 | | 9.5 | | 10 | | 11 | | 9.6 | | 10 | | 0.7 | |
| ORP | mV | NA | 96 | | 93 | | 97 | | 269 | | 286 | | 265 | | 249 | | 207 | | 246 | | 172 | | 227 | | 183 | | 88 | | 99 | | 87 | | 81 | | 97 | | 93 | |
| pH | SU | 6.5-9.7 | 9.3 | | 8.7 | | 8.0 | | 6.5 | | 8.5 | | 7.1 | | 6.7 | | 8.4 | | 8.6 | | 8.4 | | 8.4 | | 8.3 | | 8.0 | | 9.2 | | 8.5 | | 8.0 | | 8.2 | | 7.9 | |
| Specific Conductance | µS/cm @ 25°C | NA | 83 | | 128 | | 96 | | 107 | | 55 | | 1764 | | 350 | | 123 | | 82 | | 93 | | 96 | | 96 | | 639 | | 79 | | 190 | | 342 | | 94 | | 128 | |
| Temperature | °C | NA | 13 | | 10 | | 7.1 | | 7.2 | | 7.2 | | 7.5 | | 6.8 | | 11 | | 7.8 | | 9 | | 8.6 | | 8.3 | | 9 | | 12 | | 11 | | 10 | | 9 | | 8 | |
| Turbidity | NTU | NA | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | <1 | | 1 | | <1 | | <1 | |
| Water Elevation | ft MSL | NA | 1393.79 | | 1354.53 | | 1412.65 | | 1416.27 | | 1409.41 | | 1413.74 | | 1406.67 | | 1365.58 | | 1366.56 | | 1366.48 | | 1353.22 | | 1386.30 | | 1367.01 | | 1394.77 | | 1364.50 | | 1365.43 | | 1349.12 | | 1350.60 | |
| Metals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | ug/L | 150 | <50.0 | | <50.0 | | <50.0 | | 121 | | <50.0 | | 52.5 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | |
| Antimony | ug/L | 5.0 | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Arsenic | ug/L | 6.0 | <1.0 | | 2.6 | | 3.2 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | 1.3 | | 5.5 | | 1.5 | | 7.7 | | <1.0 | | <1.0 | | <1.0 | | 1.7 | | 1.2 | | 2.2 | |
| Barium | ug/L | 1000 | <5.0 | | 8.1 | | 5.2 | | 9.3 | | <5.0 | | 264 | | 18.1 | | 8.3 | | 5.8 | | 14.3 | | 5.4 | | 7.9 | | 34.1 | | <5.0 | | 10.2 | | 15.6 | | 5.9 | | 5.5 | |
| Beryllium | ug/L | 3.0 | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Boron | ug/L | 285 | 33.8 | | <20.0 | | <20.0 | | <20.0 | | <20.0 | | <20.0 | | <20.0 | | <20.0 | | <20.0 | | 23.5 | | <20.0 | | 37.4 | | <20.0 | | <20.0 | | <20.0 | | 22.2 | | <20.0 | | 23.5 | |
| Cadmium | ug/L | 3.0 | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | |
| Chromium | ug/L | 52 | <1.0 | | 1.8 | | <1.0 | | 1.4 | | 1.1 | | <1.0 | | <1.0 | | 1.2 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | 5.0 | | <1.0 | | <1.0 | | 2.8 | | <1.0 | | <1.0 | |
| Cobalt | ug/L | 23 | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | | <15.0 | |
| Copper | ug/L | 10 | <1.0 | | 1.6 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Iron | ug/L | NA | <50.0 | | <50.0 | | <50.0 | | 220 | | <50.0 | | 57.8 | | <50.0 | | <50.0 | | 55.6 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | <50.0 | | 74.0 | | <50.0 | | <50.0 | | <50.0 | |
| Lead | ug/L | 3.0 | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Lithium | ug/L | 88 | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | | <8.0 | |
| Manganese | ug/L | 50 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | 7.3 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Mercury | ng/L | NA | <0.50 | | <0.50 | | <0.50 | | 0.620 | | <0.50 | | 1.69 | | 1.17 | | <0.50 | | 0.530 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | | <0.50 | |
| Molybdenum | ug/L | 22 | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | | <5.0 | |
| Nickel | ug/L | 57 | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | <2.0 | | 2.2 | | <2.0 | | <2.0 | | 3.2 | | <2.0 | | <2.0 | |
| Selenium | ug/L | 5.0 | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | 1.3 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Silver | ug/L | 0.40 | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | | <0.20 | |
| Strontium | ug/L | 2300 | 9.6 | | 46.1 | | 31.1 | | 34.7 | | 11.8 | | 483 | | 35.3 | | 35.2 | | 20.4 | | 86.3 | | 48.6 | | 77.3 | | 120 | | 11.0 | | 33.4 | | 153 | | 19.8 | | 53.2 | |
| Thallium | ug/L | 1.0 | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Uranium | ug/L | NA | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | |
| Vanadium | ug/L | 3.1 | 1.4 | | 2.1 | | 4.2 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | <1.0 | | 4.1 | | 3.5 | | 1.9 | | 1.5 | | <1.0 | | 1.0 | | <1.0 | | <1.0 | | 2.5 | | 1.4 | |
| Zinc | ug/L | 1200 | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | | <10.0 | |
| Major Anions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alkalinity, Bicarbonate | mg/L | NA | 32.9 | | 43.0 | | 39.4 | | 67.3 | | 30.4 | | 44.6 | | 88.1 | | 50.0 | | 31.4 | | 47.9 | | 49.7 | | 50.4 | | 71.0 | | 29.7 | | 52.3 | | 80.7 | | 38.2 | | 55.5 | |
| Chloride | mg/L | NA | 1.9 | | 9.5 | | 1.1 | | <1.0 | | <1.0 | | 604 | | 67.3 | | 11.0 | | 1.8 | | 1.3 | | 1.4 | | <1.0 | | 132 | | 1.9 | | 22.7 | | 52.1 | | <1.0 | | 1.0 | |
| Fluoride | mg/L | 1.0 | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | | <0.10 | |
| Nitrogen, Ammonia | mg/L | 10 | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e | <0.020 | e |
| Nitrogen, Nitrate | mg/L | 10 | 0.98 | a,e | 0.21 | a,e | 0.10 | a,e | <0.050 | e | 0.087 | a,e | 7.6 | a,e | 0.62 | a,e | 0.78 | a,e | 2.8 | a,e | 0.39 | a,e | 0.36 | a,e | <0.050 | e | 0.63 | a,e | 1.2 | a,e | 1.1 | a,e | 0.46 | a,e | 1.2 | a,e | 0.11 | a,e |
| Nitrogen, Nitrite | mg/L | NA | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.10 | | <0.050 | |
| Nitrogen, Total Inorganic | mg/L | 10 | 0.98 | a | 0.22 | a | 0.11 | a | <0.050 | | 0.093 | a | 7.6 | a | 0.62 | a | 0.78 | a | 2.8 | a | 0.39 | a | 0.36 | a | <0.050 | | 0.64 | a | 1.2 | a | 1.1 | a | 0.47 | a | 1.2 | a | 0.11 | a |
| Phosphorus, Total | mg/L | NA | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | | <0.050 | |
| Sulfate | mg/L | 250 | <1.0 | | 4.0 | | 4.8 | | 2.1 | | 1.8 | | 17.2 | | 7.3 | | 3.9 | | 1.4 | | 4.0 | | 4.4 | | 6.2 | | 8.6 | | <1.0 | | 1.2 | | 4.2 | | 1.4 | | 6.3 | |
| Major Cations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calcium | mg/L | NA | 7.3 | | 18.4 | | 11.8 | | 22.3 | | 11.0 | | 109 | | 12.9 | | 19.6 | | 14.0 | | 15.7 | | 17.0 | | 15.5 | | 44.9 | | 8.5 | | 26.0 | | 44.8 | | 13.4 | | 17.8 | |
| Magnesium | mg/L | NA | 1.0 | | 3.9 | | 2.7 | | 3.5 | | 1.6 | | 18.4 | | 5.0 | | 3.8 | | 2.7 | | 3.5 | | 4.0 | | 3.8 | | 11.6 | | 1.4 | | 5.0 | | 9.5 | | 2.6 | | 4.0 | |
| Potassium | mg/L | NA | 0.86 | | 0.95 | | 0.61 | | 1.2 | | <0.50 | | 7.0 | | 1.6 | | 0.90 | | 0.62 | | 1.2 | | 1.1 | | 1.1 | | 2.1 | | 0.91 | | 1.0 | | 1.8 | | 0.64 | | 1.0 | |
| Sodium | mg/L | NA | 8.5 | | 1.4 | | 3.1 | | 1.4 | | <1.0 | | 272 | | 68.5 | | 3.5 | | 1.4 | | 2.7 | | 1.7 | | 1.9 | | 62.3 | | 5.3 | | 5.2 | | 7.7 | | 1.4 | | 1.4 | |
| General | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hardness | | NA | 22 | | 62 | | 41 | | 70 | | 34 | | 348 | | 53 | | 65 | | 46 | | 54 | | 59 | | 54 | | 160 | | 27 | | 86 | | 151 | | 44 | | 61 | |

Notes:
e: estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
nm: not measured. ns: not sampled.
*The 3.1 ug/L MDL for vanadium does not apply to monitoring wells QAL008A and QAL051A.
Value is outside of maximum daily limit as stipulated in Permit GW1810162 for compliance monitoring locations.