**Boonoo Boonoo Monitioring Point 4**

| Analyte | Unit | PQL | Date Sampled | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/12/2013 | 3/3/2014 | 25/07/2014 | 9/9/2014 | 4/12/2014 | 10/03/2015 | 23/06/2015 | 15/09/2015 | 8/12/2015 | 15/03/2016 | 21/06/2016 | 8/11/2016 | 5/12/2016 | 28/03/2017 | 8/06/2017 | 7/09/2017 | 13/12/2017 | 3/04/2018 | 15/06/2018 | 28/09/2018 | 26/10/2018 | 19/06/2019 | 13/12/2019 | 1/04/2020 | Min Since 10/12/13 | Mean Since 10/12/2013 | Max Since 10/12/2013 |
| | | | Sample no. 13/2166 | Sample No. 14/0376 | Sample No. 14/1200 | Sample No. 14/1552 | Sample No. 14/2042 | Sample No. 15/0422 | Sample No. 15/0997-2 | Sample No. 15/1497 | Sample No. 15/1980 | Sample No. 16/0424 | Sample No. 16/0996 | Sample No. 16/1802 | Sample No. 16/1969 | Sample No. 17/0521 | Sample No. 17/0935 | Sample No. 17/1480 | Sample No. 17/2051 | Sample No. 18/0542 | Sample No. 18/0940 | Sample No. 18/1489 | Sample No. 18/1650 | Sample No. 19/1019 | Sample No. 19/2129 | Sample No. 20/0583 | | | |
| **Water Level#** | m | 0.1 | | | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | [NT] | Full | Full | 0.7 | NA | | | 1.3 | | | |
| **Temperature - field** | Deg. C | 0.1 | 20 | 19.3 | 9 | 12 | 18.7 | 21 | 9 | 13.7 | 19.6 | 20.2 | 9.3 | 17.2 | 23 | 20.4 | 7.3 | 12 | 24 | 17.8 | 10.5 | 12.4 | 25 | 13.3 | 22.8 | 19.6 | 7.3 | 16.257 | 25 |
| **Dissolved Oxygen** | mg/L | 0.2 | 7.2 | 3.7 | 3.24 | 7.84 | 6.3 | 4.1 | 4.7 | 4 | 7.1 | 5.8 | 5.7 | 3.6 | 6.7 | 7 | 8.1 | 9.93 | 7.6 | 5.8 | 7.4 | 8.9 | 5.6 | 7.4 | 2.2 | 7.7 | 3.24 | 6.205 | 9.93 |
| **Alkalinity (as CaCO3)** | mg/L | 20 | 427 | 410 | 510 | 415 | 322 | 272 | 653 | 468 | 387 | 421 | 502 | 516 | 452 | 390 | <20 | 535 | 434 | 459 | 579 | 540 | 498 | 723 | 930 | <20 | 272 | 459.500 | 653 |
| **Aluminium (Dissolved)** | mg/L | 0.005 | 1.581 | 0.075 | 0.468 | 0.92 | 0.82 | 1.74 | 0.27 | 0.098 | 1.56 | 0.69 | 0.66 | 1.41 | 0.41 | 1.17 | 0.34 | 0.16 | 1.32 | 0.37 | 0.074 | 0.28 | 0.93 | 0.064 | 0.18 | 0.005 | 0.074 | 0.731 | 1.74 |
| **Ammonia-N** | mg/L | 0.01 | 15.3 | 13.6 | 29.15 | 16.58 | <0.01 | 2.6 | 61.2 | 18 | 3.8 | 4.6 | 31 | 2 | 4.1 | 15 | <0.01 | 31 | 5.6 | 2.3 | 17 | 5.9 | 23 | 22 | 14 | 0.07 | 2 | 15.881 | 61.2 |
| **Arsenic (Dissolved)** | mg/L | 0.005 | <0.005 | 0.013 | <0.005 | 0.034 | | <0.005 | 0.036 | 0.022 | <0.005 | 0.008 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.006 | 0.008 | <0.005 | 0.008 | 0.007 | 0.005 | 0.011 | <0.005 | <0.005 | 0.006 | 0.018 | 0.036 |
| **Cadmium (Dissolved)** | mg/L | 0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0 | <0.005 | <0.005 |
| **Calcium** | mg/L | 0.1 | 24.9 | 21.5 | 40.5 | 32.3 | 15.1 | 13.7 | 52.5 | 30.7 | 20.6 | 23.7 | 30.6 | 35.2 | 33 | 17.9 | 2.5 | 32.8 | 34.4 | 30.2 | 34.6 | 35.8 | 33.3 | 25.7 | 32.4 | 1.1 | 2.5 | 28.371 | 52.5 |
| **Chloride** | mg/L | 2 | 191.88 | 216.94 | 226.8 | 198 | 220 | 190 | 265 | 285 | 270 | 290 | 265 | 59 | 355 | 258 | 19 | 331 | 356 | 305 | 346 | 350 | 319 | 475 | 688 | 9 | 19 | 253.172 | 356 |
| **Chromium (Total)** | mg/L | 0.005 | 0.011 | 0.01 | 0.012 | 0.007 | <0.005 | 0.006 | 0.034 | 0.031 | 0.02 | 0.014 | 0.025 | 0.037 | 0.029 | 0.027 | <0.005 | 0.031 | 0.026 | 0.02 | 0.02 | 0.017 | 0.023 | 0.032 | 0.036 | <0.005 | 0.006 | 0.021 | 0.037 |
| **Cobalt (Dissolved)** | mg/L | 0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.006 | 0.007 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.006 | <0.005 | <0.005 |
| **Electrical Conductivity** | µS/cm | 1 | 1425 | 1558 | 1738 | 1475 | 1361 | 1227 | 2168 | 1888 | 1720 | 1856 | 1987 | 2090 | 2110 | 1650 | 95.4 | 2080 | 1890 | 1980 | 2240 | 2370 | 2140 | 3010 | 4210 | 60 | 95.4 | 1764.210 | 2370 |
| **Copper (Dissolved)** | mg/L | 0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0 | <0.005 | <0.005 |
| **Iron (Total)** | mg/L | 0.005 | 1.133 | 0.22 | 0.344 | 0.493 | 0.33 | 0.41 | 0.54 | 0.21 | 0.55 | 0.38 | 0.53 | 0.49 | 0.26 | 0.44 | 0.88 | 0.36 | 0.39 | 0.2 | 0.18 | 0.27 | 0.31 | 0.28 | 0.32 | 2.2 | 0.18 | 0.425 | 1.133 |
| **Lead (Dissolved)** | mg/L | 0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.006 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.22 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.006 | 0.113 | 0.22 |
| **Magnesium** | mg/L | 0.1 | 12.7 | 12.9 | 15.7 | 13.6 | 11 | 11 | 2.3 | 15 | 14 | 14 | 15 | 14.5 | 16.6 | 11.3 | 1.5 | 14.8 | 16.6 | 15.8 | 17.3 | 18.4 | 16.4 | 21.3 | 27.3 | 0.09 | 1.5 | 13.352 | 18.4 |
| **Manganese (Total)** | mg/L | 0.005 | 0.07 | 0.157 | 0.178 | 0.119 | 0.029 | 0.069 | 0.13 | 0.096 | 0.052 | 0.055 | 0.092 | 0.084 | 0.044 | 0.035 | 0.088 | 0.079 | 0.04 | 0.02 | 0.04 | 0.034 | 0.023 | 0.035 | 0.043 | 0.036 | 0.02 | 0.073 | 0.178 |
| **Mercury*** | ug/L | 0.05 | <0.05 | <0.05 | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NT | <0.05 | <0.05 | | <0.05 | <0.05 | | <0.05 | 0 | <0.05 | <0.05 |
| **Nickel (Dissolved)** | mg/L | 0.005 | 0.009 | 0.009 | 0.009 | 0.008 | 0.008 | 0.008 | <0.005 | 0 | 0 | 0 | 0 | 0.016 | 0.018 | 0.02 | <0.005 | 0.01 | 0.014 | <0.005 | 0.015 | 0.018 | 0.016 | 0.022 | 0.029 | <0.005 | 0 | 0.010 | 0.02 |
| **Nitrogen - Nitrate-N** | mg/L | 0.05 | 0.18 | <0.05 | <0.05 | 0.07 | <0.05 | <0.05 | 0.05 | <0.05 | 0.44 | 0.08 | 0.06 | <0.05 | 1.4 | <0.05 | 0.29 | <0.05 | 0.56 | 0.72 | <0.05 | 0.11 | 0.76 | <0.05 | <0.05 | <0.05 | 0.05 | 0.385 | 1.4 |
| **Nitrogen - Nitrite-N** | mg/L | 0.01 | 0.46 | 0.01 | <0.01 | 0.07 | 0.02 | 0.01 | <0.010 | <0.01 | 1 | 0.21 | 0.01 | <0.01 | 2.2 | 0.03 | <0.01 | 0.08 | 1.5 | 1.6 | 0.04 | 0.29 | 0.24 | 0.01 | 0.07 | <0.01 | 0.01 | 0.486 | 2.2 |
| **Nitrogen - Total Kjeldahl** | mg/L | 0.1 | 27.3 | 24.6 | 43.7 | 28.6 | 14 | 12 | 65 | 35 | 3.8 | 20 | 47 | 47 | 24 | 28 | 0.3 | 50 | 20 | 19 | 36 | 22 | 45 | 79.3 | 44 | 0.3 | 0.3 | 29.157 | 65 |
| **pH** | pH | 0.1 | 8.5 | 7.9 | 7.66 | 8.2 | 9.4 | 8.5 | 7.6 | 8.3 | 8.8 | 8.6 | 8 | 7.6 | 8.8 | 8.1 | 5.5 | 8.3 | 8.6 | 8 | 8.1 | 8.7 | 8.2 | 8.4 | 8.5 | 5.7 | 5.5 | 8.160 | 9.4 |
| **Potassium** | mg/L | 0.1 | 92.4 | 92.5 | 121 | 102 | 105 | 105 | 145 | 145 | 145 | 145 | 160 | 151 | 195 | 133 | 2.7 | 165 | 175 | 175 | 183 | 203 | 172 | 251 | 371 | 2 | 2.7 | 138.695 | 203 |
| **Redox Potential#** | mV | -500 | 174 | 235 | 93.8 | 202 | 121 | 106 | 142 | 203 | 92.8 | 210 | 178 | 147 | 171 | 338 | 276 | 157 | 164 | 153 | 124 | 81.7 | 153 | | | 298 | 81.7 | 167.729 | 338 |
| **Sodium** | mg/L | 0.15 | 164 | 167 | 227 | 186 | 186 | 205 | 234 | 238 | 233 | 250 | 254 | 259 | 318 | 217 | 12.3 | 268 | 279 | 287 | 296 | 339 | 282 | 407 | 598 | 8.8 | 12.3 | 233.395 | 339 |
| **Sulphate#** | mg/L | 2 | <2 | 15.37 | 25.61 | 24.6 | 23 | 28 | 65 | 65 | 65 | 48 | 42 | 89 | 20.2 | 35.9 | 4.2 | 4 | 38.9 | 42.4 | 7.2 | 29.9 | 43.6 | <1 | 111 | 4.6 | 4 | 35.844 | 89 |
| **Total Organic Carbon*** | mg/L | 1 | 73 | 61 | 80 | 62 | 53 | 58 | 93 | 92 | 89 | 89 | 86 | 97 | 150 | 79 | 18 | 230 | NT | 87 | 110 | 99 | 85 | 140 | 180 | 1 | 18 | 89.550 | 230 |
| **Zinc (Total)** | mg/L | 0.005 | 0.013 | 0.007 | 0.022 | <0.005 | <0.005 | 0.008 | 0.075 | 0.03 | 0.013 | 0.008 | 0.014 | 0.018 | 0.009 | 0.08 | 0.12 | 0.017 | 0.007 | <0.005 | 0.005 | 0.006 | 0.009 | <0.005 | 0.013 | 0.12 | 0.005 | 0.026 | 0.12 |
| **PAHs in water*** | µg/L | 1 | [ND] | [ND] | [ND] | <5 | [ND] | [ND] | [ND] | <5 | <5 | ND | ND | ND | ND | ND | ND | ND | NT | ND | ND | ND | ND | | | ND | <5 | ND | <5 |
| **TRH C10-C14*** | µg/L | 50 | 65 | | 160 | <50 | | | <50 | 64 | 79 | <50 | 60 | 140 | 53 | ND | 52 | ND | NT | ND | ND | ND | ND | | | ND | 52 | 84.125 | 160 |
| **TRH C15-C28*** | µg/L | 100 | <100 | | 270 | <100 | | | <100 | 290 | 310 | <100 | 280 | 140 | 210 | ND | 110 | ND | NT | ND | ND | ND | ND | | | ND | 110 | 230.000 | 310 |
| **TRH C29-C36*** | µg/L | 100 | <100 | | 130 | <100 | | [ND] | <100 | 150 | <100 | <100 | <100 | <100 | <100 | ND | <100 | ND | NT | ND | ND | ND | ND | | | ND | 130 | 140.000 | 150 |
| **TRH C10-C36*** | µg/L | 100 | | [ND] | | | 220 | | | | | | | | | | | | | | | | 190 | | | ND | 220 | 220.000 | 220 |
| **Suspended Solids** | mg/L | 1 | | | | | | | | | | | | | | | 192 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Alkalinity - Hydroxide** | mg/L | 0 | | | | 0 | | | | | | | | | | | | | | | | | | 0 | | | 0 | 0 | 0 |
| **Chromium (VI)** | mg/L | 0.05 | | | <0.05 | | | | | <0.05 | | | | | | | | | | | | | | | | | <0.05 | <0.05 | <0.05 |
| **Mercury (Dissolved)*** | µg/L | 0.05 | | | <0.05 | | | | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | | | | | | | | | | <0.05 | | | <0.05 | <0.05 | <0.05 |
| **OC/OP in Water*** | ug/L | 0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | | <0.2 | | | ND | <0.2 | <0.2 | <0.2 | | <0.2 | | <0.2 | | <0.2 | <0.2 | <0.2 | | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| | **Date Obtained** | | 11/12/2013 | 4/03/2014 | 28/07/2014 | 10/09/2014 | 4/12/2014 | 30/03/2015 | 6/07/2015 | 28/09/2015 | 8/12/5015 | 15/03/2016 | 21/06/2016 | 8/11/2016 | 12/05/2016 | 28/03/2017 | 8/06/2017 | 7/09/2017 | 13/12/2017 | 3/04/2018 | 15/06/2018 | 28/09/2018 | 26/10/2018 | 19/09/2019 | 13/12/2019 | 1/04/2020 | | | |
| | **Date Published** | | | | | 23/09/2014 | 6/01/2015 | 7/04/2015 | 8/08/2015 | 29/09/2015 | 21/12/2015 | 31/03/2016 | 5/07/2016 | 21/11/2016 | 20/12/2016 | 11/04/2017 | 26/06/2017 | 20/09/2017 | 22/12/2017 | 12/04/2018 | 29/06/2018 | 16/10/2018 | 9/11/2018 | 10/07/2019 | 8/01/2020 | 14/04/2020 | | | |