# APPENDIX E

*This page is intentionally left blank*

**TABLE E-1**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 237A Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 85.4 | 126.0 | | 102.0 | 39 | 39 | 100% | | | | | | | |
| pH (pH units) | 6.8 | 7.8 | | 7.40 | 39 | 39 | 100% | | | | | | | |
| TSS (mg/L) | 0.26 | 16.30 | 3.33 | 2.20 | 34 | 39 | 87% | 0.26 | 7.56 | 3.47 | 1.04 | 0.56 | 4.45 | 2.20 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | *0.23* | 6.11 | 1.43 | 0.91 | 16 | 38 | 42% | 0.34 | 3.10 | 1.35 | 0.94 | 0.22 | 1.88 | 0.99 |
| Mercury | *0.025* | 0.196 | 0.031 | *0.025* | 3 | 38 | 8% | 0.025 | 0.025 | 0.028 | 0.911 | 0.005 | 0.041 | 0.022 |
| Zinc | 1.6 | 27.0 | 9.7 | 9.4 | 36 | 37 | 97% | 5.26 | 14.06 | 4.58 | 0.47 | 0.75 | 11.24 | 8.19 |
| Dissolved Lead | *0.08* | *4.50* | *0.96* | *0.68* | 8 | 38 | 21% | 0.13 | 1.90 | 0.92 | 0.95 | 0.15 | 1.27 | 0.66 |
| Dissolved Mercury | *0.025* | 0.135 | 0.029 | *0.025* | 2 | 37 | 5% | 0.025 | 0.025 | 0.019 | 0.645 | 0.003 | 0.035 | 0.023 |
| Dissolved Zinc | 2.30 | 12.2 | 7.88 | 7.51 | 36 | 37 | 97% | 4.30 | 11.60 | 2.84 | 0.36 | 0.47 | 8.82 | 6.93 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | 2.100 | 0.069 | *0.005* | 10 | 39 | 26% | 0.002 | 0.021 | 0.338 | 4.872 | 0.054 | 0.179 | -0.040 |
| Acenaphthene | *0.002* | 0.031 | 0.005 | *0.005* | 2 | 39 | 5% | 0.002 | 0.005 | 0.005 | 0.938 | 0.001 | 0.007 | 0.003 |
| Acenaphthylene | *0.002* | 0.016 | 0.004 | *0.005* | 1 | 39 | 3% | 0.002 | 0.005 | 0.002 | 0.544 | 0.000 | 0.005 | 0.004 |
| Anthracene | *0.002* | *0.005* | *0.004* | *0.005* | 0 | 39 | 0% | 0.002 | 0.005 | 0.001 | 0.310 | 0.000 | 0.005 | 0.004 |
| Fluorene | *0.002* | 0.086 | 0.007 | *0.005* | 5 | 39 | 13% | 0.002 | 0.005 | 0.013 | 1.912 | 0.002 | 0.011 | 0.003 |
| Naphthalene | *0.002* | 3.000 | 0.097 | 0.011 | 22 | 39 | 56% | 0.005 | 0.038 | 0.479 | 4.946 | 0.077 | 0.252 | -0.058 |
| Phenanthrene | *0.002* | 0.149 | 0.012 | *0.005* | 15 | 39 | 38% | 0.004 | 0.016 | 0.024 | 1.992 | 0.004 | 0.020 | 0.004 |
| *Total LPAHs[1] | *0.010* | 3.276 | 0.130 | 0.035 | | | | 0.015 | 0.078 | 0.520 | 4.007 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.022 | 0.006 | *0.005* | 10 | 39 | 26% | 0.002 | 0.014 | 0.005 | 0.723 | 0.001 | 0.008 | 0.005 |
| Benzo(a)pyrene | *0.001* | 0.020 | 0.006 | *0.005* | 7 | 39 | 18% | 0.002 | 0.011 | 0.004 | 0.753 | 0.001 | 0.007 | 0.004 |
| Benzo(g,h,i)perylene | *0.002* | 0.022 | 0.007 | *0.005* | 8 | 39 | 21% | 0.004 | 0.014 | 0.005 | 0.706 | 0.001 | 0.008 | 0.005 |
| Benzo(b,k)fluoranthene | *0.002* | 0.047 | 0.011 | *0.005* | 17 | 39 | 44% | 0.003 | 0.028 | 0.012 | 1.021 | 0.002 | 0.015 | 0.008 |
| Chrysene | *0.002* | 0.026 | 0.007 | *0.005* | 10 | 39 | 26% | 0.002 | 0.016 | 0.006 | 0.918 | 0.001 | 0.009 | 0.005 |
| Dibenz(a,h)anthracene | *0.003* | 0.010 | *0.005* | *0.005* | 1 | 39 | 3% | 0.004 | 0.005 | 0.001 | 0.229 | 0.000 | 0.005 | 0.004 |
| Fluoranthene | *0.003* | 0.046 | 0.011 | 0.005 | 16 | 39 | 41% | 0.003 | 0.028 | 0.011 | 0.997 | 0.002 | 0.015 | 0.007 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.018 | 0.006 | *0.005* | 6 | 39 | 15% | 0.004 | 0.011 | 0.004 | 0.616 | 0.001 | 0.007 | 0.005 |
| Pyrene | *0.002* | 0.056 | 0.014 | 0.006 | 23 | 39 | 59% | 0.003 | 0.033 | 0.014 | 0.981 | 0.002 | 0.018 | 0.009 |
| *Total HPAHs[2] | *0.012* | 0.249 | 0.071 | 0.048 | | | | 0.021 | 0.172 | 0.058 | 0.825 | | | |
| *Total PAHs[3] | *0.023* | 3.464 | 0.201 | 0.094 | | | | 0.041 | 0.274 | 0.543 | 2.707 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.163 | 0.022 | 0.010 | 5 | 16 | 31% | 0.005 | 0.047 | 0.040 | 1.801 | 0.010 | 0.044 | 0.001 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.2* | 1.6 | 0.6 | *0.5* | 12 | 38 | 32% | 0.5 | 1.1 | 0.3 | 0.5 | 0.0 | 0.7 | 0.5 |
| Butylbenzyl phthalate | 0.05 | *0.5* | *0.4* | *0.5* | 3 | 39 | 8% | 0.1 | 0.5 | 0.2 | 0.5 | 0.0 | 0.4 | 0.3 |
| Diethyl phthalate | 0.035 | 32.0 | 2.2 | *0.5* | 12 | 39 | 31% | 0.1 | 1.3 | 6.3 | 2.9 | 1.0 | 4.2 | 0.1 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 0 | 39 | 0% | 0.0 | 0.5 | 0.2 | 0.6 | 0.0 | 0.4 | 0.3 |
| Di-n-butyl phthalate | *0.05* | *0.5* | *0.4* | *0.5* | 6 | 39 | 15% | 0.2 | 0.5 | 0.1 | 0.3 | 0.0 | 0.5 | 0.4 |
| Di-n-octyl phthalate | *0.042* | *0.5* | *0.4* | *0.5* | 0 | 39 | 0% | 0.0 | 0.5 | 0.2 | 0.5 | 0.0 | 0.4 | 0.3 |
| *Total Phthalates[4] | | 32.0 | | | | | | | | | | | | |

**TABLE E-1 (Cont'd)**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 237ANew Water Years 2006-2010

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 95.3 | 116.0 | | 110.0 | 21 | 21 | 100% | | | | | | | |
| pH (pH units) | 6.5 | 7.7 | | 7.30 | 21 | 21 | 100% | | | | | | | |
| TSS (mg/L) | *0.26* | 26.80 | 3.41 | 1.80 | 18 | 21 | 86% | 0.26 | 5.41 | 5.78 | 1.69 | 1.26 | 6.04 | 0.78 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | *0.14* | 4.60 | 1.46 | 1.30 | 7 | 18 | 39% | 0.30 | 3.10 | 1.21 | 0.83 | 0.28 | 2.06 | 0.86 |
| Mercury | *0.025* | 0.025 | 0.025 | *0.025* | 0 | 21 | 0% | 0.025 | 0.025 | 0.000 | 0.000 | 0.000 | 0.025 | 0.025 |
| Zinc | 3.24 | 26.60 | 10.24 | 9.70 | 19 | 19 | 100% | 4.17 | 16.48 | 5.63 | 0.55 | 1.29 | 12.95 | 7.52 |
| Dissolved Lead | *0.01* | 3.20 | 0.98 | *0.75* | 5 | 18 | 28% | 0.10 | 2.83 | 0.99 | 1.01 | 0.23 | 1.47 | 0.49 |
| Dissolved Mercury | *0.025* | *0.078* | *0.028* | *0.025* | 1 | 20 | 5% | 0.025 | 0.025 | 0.012 | 0.429 | 0.003 | 0.033 | 0.022 |
| Dissolved Zinc | 3.14 | 31.20 | 8.87 | 7.60 | 19 | 19 | 100% | 3.93 | 14.52 | 6.38 | 0.72 | 1.46 | 11.95 | 5.80 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | *0.022* | *0.005* | *0.005* | 5 | 21 | 24% | 0.002 | 0.005 | 0.004 | 0.869 | 0.001 | 0.007 | 0.003 |
| Acenaphthene | *0.002* | *0.005* | *0.004* | *0.005* | 1 | 21 | 5% | 0.002 | 0.005 | 0.002 | 0.478 | 0.000 | 0.004 | 0.003 |
| Acenaphthylene | *0.002* | *0.005* | *0.003* | *0.004* | 0 | 21 | 0% | 0.002 | 0.005 | 0.002 | 0.504 | 0.000 | 0.004 | 0.003 |
| Anthracene | *0.002* | *0.005* | *0.004* | *0.005* | 1 | 21 | 5% | 0.002 | 0.005 | 0.001 | 0.401 | 0.000 | 0.004 | 0.003 |
| Fluorene | *0.002* | *0.005* | *0.004* | *0.005* | 2 | 21 | 10% | 0.002 | 0.005 | 0.002 | 0.446 | 0.000 | 0.004 | 0.003 |
| Naphthalene | *0.002* | 0.017 | 0.007 | 0.005 | 9 | 21 | 43% | 0.003 | 0.014 | 0.004 | 0.605 | 0.001 | 0.009 | 0.005 |
| Phenanthrene | *0.002* | 0.031 | 0.006 | *0.005* | 8 | 21 | 38% | 0.002 | 0.011 | 0.006 | 0.980 | 0.001 | 0.009 | 0.004 |
| *Total LPAHs[1] | *0.010* | 0.065 | 0.028 | 0.030 | | | | 0.011 | 0.042 | 0.013 | 0.479 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.019 | 0.005 | *0.005* | 2 | 21 | 10% | 0.001 | 0.005 | 0.004 | 0.864 | 0.001 | 0.006 | 0.003 |
| Benzo(a)pyrene | *0.002* | 0.036 | 0.006 | *0.005* | 4 | 21 | 19% | 0.002 | 0.009 | 0.008 | 1.277 | 0.002 | 0.010 | 0.003 |
| Benzo(g,h,i)perylene | *0.003* | 0.024 | 0.006 | *0.005* | 3 | 21 | 14% | 0.004 | 0.008 | 0.005 | 0.776 | 0.001 | 0.008 | 0.004 |
| Benzo(b,k)fluoranthene | *0.002* | 0.058 | 0.009 | *0.005* | 7 | 21 | 33% | 0.002 | 0.017 | 0.012 | 1.343 | 0.003 | 0.015 | 0.004 |
| Chrysene | *0.002* | 0.029 | 0.005 | *0.005* | 4 | 21 | 19% | 0.002 | 0.009 | 0.006 | 1.124 | 0.001 | 0.008 | 0.003 |
| Dibenz(a,h)anthracene | *0.003* | 0.008 | *0.005* | *0.005* | 1 | 21 | 5% | 0.004 | 0.005 | 0.001 | 0.243 | 0.000 | 0.005 | 0.004 |
| Fluoranthene | *0.002* | 0.043 | 0.008 | *0.005* | 6 | 21 | 29% | 0.003 | 0.019 | 0.010 | 1.167 | 0.002 | 0.013 | 0.004 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.035 | 0.006 | *0.005* | 3 | 21 | 14% | 0.003 | 0.010 | 0.007 | 1.150 | 0.002 | 0.010 | 0.003 |
| Pyrene | *0.002* | 0.163 | 0.014 | 0.005 | 9 | 21 | 43% | 0.002 | 0.017 | 0.034 | 2.398 | 0.008 | 0.030 | -0.001 |
| *Total HPAHs[2] | *0.022* | 0.383 | 0.065 | 0.045 | | | | 0.022 | 0.089 | 0.079 | 1.217 | | | |
| *Total PAHs[3] | *0.032* | 0.448 | 0.093 | 0.075 | | | | 0.033 | 0.121 | 0.090 | 0.966 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | | | | | | | | | | | | | | |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.3* | *0.7* | *0.5* | *0.5* | 6 | 21 | 29% | 0.4 | 0.5 | 0.1 | 0.2 | 0.0 | 0.5 | 0.4 |
| Butylbenzyl phthalate | *0.045* | *0.5* | *0.3* | *0.2* | 2 | 21 | 10% | 0.1 | 0.5 | 0.2 | 0.7 | 0.0 | 0.4 | 0.2 |
| Diethyl phthalate | *0.04* | 1.9 | 0.4 | *0.5* | 4 | 21 | 19% | 0.1 | 0.5 | 0.5 | 1.1 | 0.1 | 0.7 | 0.2 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.3* | *0.1* | 0 | 21 | 0% | 0.0 | 0.5 | 0.2 | 1.0 | 0.1 | 0.4 | 0.1 |
| Di-n-butyl phthalate | *0.05* | *0.5* | *0.3* | *0.5* | 5 | 21 | 24% | 0.1 | 0.5 | 0.2 | 0.5 | 0.0 | 0.4 | 0.3 |
| Di-n-octyl phthalate | *0.042* | 1.0 | 0.3 | *0.3* | 0 | 21 | 0% | 0.0 | 0.5 | 0.3 | 0.9 | 0.1 | 0.4 | 0.2 |
| *Total Phthalates[4] | | 1.8 | | | | | | | | | | | | |

**TABLE E-2**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 237B Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 61.0 | 129 | | 113.0 | 39 | 39 | | | | | | | | |
| pH (pH units) | 5.9 | 7.8 | | 7.2 | 39 | 39 | | | | | | | | |
| TSS (mg/L) | 0.26 | 16.90 | 2.52 | 1.28 | 36 | 39 | 92% | 0.55 | 3.86 | 3.68 | 1.46 | 0.59 | 3.71 | 1.32 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | *0.07* | 6.60 | 0.99 | 0.63 | 10 | 38 | 26% | 0.15 | 1.65 | 1.23 | 1.24 | 0.20 | 1.40 | 0.59 |
| Mercury | *0.025* | *0.025* | *0.025* | *0.025* | 5 | 38 | 13% | 0.025 | 0.025 | 0.000 | 0.000 | 0.000 | 0.025 | 0.025 |
| Zinc | 1.05 | 14.20 | 4.47 | 3.90 | 24 | 39 | 62% | 2.07 | 6.96 | 2.47 | 0.55 | 0.40 | 5.27 | 3.67 |
| Dissolved Lead | *0.02* | 4.00 | 0.96 | *0.65* | 14 | 38 | 37% | 0.12 | 1.93 | 0.95 | 0.99 | 0.15 | 1.28 | 0.65 |
| Dissolved Mercury | *0.025* | *0.025* | *0.025* | *0.025* | 0 | 38 | 0% | 0.025 | 0.025 | 0.000 | 0.000 | 0.000 | 0.025 | 0.025 |
| Dissolved Zinc | *0.60* | 14.30 | 4.71 | 3.79 | 26 | 39 | 67% | 1.89 | 8.59 | 3.07 | 0.65 | 0.49 | 5.71 | 3.71 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | 0.019 | 0.005 | *0.005* | 4 | 39 | 10% | 0.002 | 0.005 | 0.003 | 0.639 | 0.001 | 0.006 | 0.004 |
| Acenaphthene | *0.002* | *0.005* | *0.004* | *0.005* | 2 | 39 | 5% | 0.002 | 0.005 | 0.001 | 0.324 | 0.000 | 0.005 | 0.004 |
| Acenaphthylene | *0.002* | *0.005* | *0.004* | *0.005* | 0 | 39 | 0% | 0.002 | 0.005 | 0.001 | 0.358 | 0.000 | 0.005 | 0.004 |
| Anthracene | *0.002* | *0.005* | *0.004* | *0.005* | 0 | 39 | 0% | 0.002 | 0.005 | 0.001 | 0.310 | 0.000 | 0.005 | 0.004 |
| Fluorene | *0.002* | *0.005* | *0.004* | *0.005* | 0 | 39 | 0% | 0.002 | 0.005 | 0.001 | 0.356 | 0.000 | 0.005 | 0.004 |
| Naphthalene | *0.002* | 0.025 | 0.008 | *0.005* | 13 | 39 | 33% | 0.004 | 0.013 | 0.005 | 0.611 | 0.001 | 0.009 | 0.006 |
| Phenanthrene | *0.002* | *0.005* | *0.004* | *0.005* | 3 | 39 | 8% | 0.002 | 0.005 | 0.001 | 0.291 | 0.000 | 0.005 | 0.004 |
| *Total LPAHs[1] | *0.008* | 0.050 | 0.028 | *0.030* | | | | 0.013 | 0.037 | 0.010 | 0.342 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.045 | 0.005 | *0.005* | 4 | 39 | 10% | 0.001 | 0.005 | 0.007 | 1.229 | 0.001 | 0.008 | 0.003 |
| Benzo(a)pyrene | *0.002* | 0.041 | 0.005 | *0.005* | 2 | 39 | 5% | 0.002 | 0.005 | 0.006 | 1.154 | 0.001 | 0.007 | 0.003 |
| Benzo(g,h,i)perylene | *0.003* | 0.044 | 0.006 | *0.005* | 2 | 39 | 5% | 0.004 | 0.005 | 0.006 | 1.095 | 0.001 | 0.008 | 0.004 |
| Benzo(b,k)fluoranthene | *0.002* | 0.107 | 0.008 | *0.005* | 7 | 39 | 18% | 0.002 | 0.011 | 0.017 | 2.068 | 0.003 | 0.013 | 0.003 |
| Chrysene | *0.002* | 0.060 | 0.006 | *0.005* | 2 | 39 | 5% | 0.002 | 0.005 | 0.009 | 1.628 | 0.001 | 0.009 | 0.003 |
| Dibenz(a,h)anthracene | *0.003* | 0.011 | *0.005* | *0.005* | 1 | 39 | 3% | 0.004 | 0.005 | 0.001 | 0.255 | 0.000 | 0.005 | 0.004 |
| Fluoranthene | *0.003* | 0.088 | 0.007 | *0.005* | 4 | 39 | 10% | 0.003 | 0.005 | 0.014 | 1.943 | 0.002 | 0.011 | 0.003 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.039 | 0.005 | *0.005* | 1 | 39 | 3% | 0.004 | 0.005 | 0.006 | 1.041 | 0.001 | 0.007 | 0.004 |
| Pyrene | *0.002* | 0.078 | 0.008 | *0.005* | 11 | 39 | 28% | 0.003 | 0.011 | 0.012 | 1.577 | 0.002 | 0.011 | 0.004 |
| *Total HPAHs[2] | *0.011* | 0.513 | 0.054 | *0.045* | | | | 0.024 | 0.056 | 0.076 | 1.421 | | | |
| *Total PAHs[3] | *0.020* | 0.543 | 0.082 | 0.075 | | | | 0.035 | 0.093 | 0.079 | 0.956 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.104 | 0.012 | *0.005* | 2 | 16 | 13% | 0.005 | 0.008 | 0.025 | 2.148 | 0.006 | 0.025 | -0.002 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.3* | *0.8* | *0.5* | *0.5* | 6 | 38 | 16% | 0.4 | 0.5 | 0.1 | 0.2 | 0.0 | 0.5 | 0.5 |
| Butylbenzyl phthalate | *0.05* | *0.5* | *0.4* | *0.5* | 1 | 39 | 3% | 0.1 | 0.5 | 0.2 | 0.5 | 0.0 | 0.4 | 0.3 |
| Diethyl phthalate | *0.04* | 17.0 | 1.1 | *0.5* | 9 | 39 | 23% | 0.1 | 1.3 | 2.8 | 2.6 | 0.4 | 2.0 | 0.2 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 0 | 39 | 0% | 0.0 | 0.5 | 0.2 | 0.6 | 0.0 | 0.4 | 0.3 |
| Di-n-butyl phthalate | *0.05* | *0.5* | *0.4* | *0.5* | 6 | 39 | 15% | 0.1 | 0.5 | 0.2 | 0.4 | 0.0 | 0.5 | 0.4 |
| Di-n-octyl phthalate | *0.042* | *0.5* | *0.4* | *0.5* | 0 | 39 | 0% | 0.0 | 0.5 | 0.2 | 0.5 | 0.0 | 0.4 | 0.3 |
| *Total Phthalates[4] | | 17.0 | | | | | | | | | | | | |

**TABLE E-3**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 230 Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 27.9 | 249 | | 142.0 | 38 | 38 | 100% | | | | | | | |
| pH (pH units) | 7.1 | 9.0 | | 7.7 | 38 | 38 | 100% | | | | | | | |
| TSS (mg/L) | 0.90 | 319.00 | 16.44 | 5.95 | 38 | 38 | 100% | 1.52 | 20.21 | 51.07 | 3.11 | 8.28 | 33.23 | -0.34 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | 0.99 | 29.80 | 5.81 | 4.36 | 28 | 38 | 74% | 1.61 | 10.31 | 5.85 | 1.01 | 0.95 | 7.73 | 3.89 |
| Mercury | *0.025* | 0.083 | 0.031 | *0.025* | 6 | 38 | 16% | 0.025 | 0.056 | 0.015 | 0.477 | 0.002 | 0.036 | 0.026 |
| Zinc | 19.3 | 101.0 | 46.0 | 34.0 | 37 | 37 | 100% | 22.70 | 82.20 | 24.16 | 0.52 | 3.97 | 54.08 | 37.97 |
| Dissolved Lead | *0.14* | 5.50 | 1.72 | 1.40 | 16 | 38 | 42% | 0.46 | 3.20 | 1.27 | 0.74 | 0.21 | 2.14 | 1.30 |
| Dissolved Mercury | *0.025* | 0.059 | 0.026 | *0.025* | 1 | 38 | 3% | 0.025 | 0.025 | 0.006 | 0.213 | 0.001 | 0.028 | 0.024 |
| Dissolved Zinc | 6.4 | 95.0 | 28.8 | 23.7 | 37 | 37 | 100% | 10.70 | 46.52 | 19.33 | 0.67 | 3.18 | 35.27 | 22.38 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | 0.122 | 0.015 | 0.005 | 19 | 38 | 50% | 0.003 | 0.032 | 0.023 | 1.534 | 0.004 | 0.022 | 0.007 |
| Acenaphthene | *0.002* | 0.013 | 0.005 | *0.005* | 5 | 38 | 13% | 0.002 | 0.006 | 0.003 | 0.506 | 0.000 | 0.006 | 0.004 |
| Acenaphthylene | *0.002* | *0.005* | *0.004* | *0.005* | 0 | 38 | 0% | 0.002 | 0.005 | 0.001 | 0.341 | 0.000 | 0.005 | 0.004 |
| Anthracene | *0.002* | 0.012 | 0.004 | *0.005* | 1 | 38 | 3% | 0.002 | 0.005 | 0.002 | 0.400 | 0.000 | 0.005 | 0.004 |
| Fluorene | 0.002 | 0.012 | 0.005 | *0.005* | 5 | 38 | 13% | 0.003 | 0.005 | 0.002 | 0.358 | 0.000 | 0.005 | 0.004 |
| Naphthalene | *0.005* | 0.228 | 0.027 | 0.013 | 27 | 38 | 71% | 0.005 | 0.073 | 0.042 | 1.555 | 0.007 | 0.040 | 0.013 |
| Phenanthrene | *0.002* | 0.084 | 0.014 | 0.011 | 25 | 38 | 66% | 0.005 | 0.022 | 0.015 | 1.118 | 0.003 | 0.019 | 0.009 |
| *Total LPAHs[1] | 0.016 | 0.270 | 0.059 | 0.045 | | | | 0.025 | 0.111 | 0.052 | 0.869 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.066 | 0.008 | *0.005* | 8 | 38 | 21% | 0.001 | 0.013 | 0.011 | 1.407 | 0.002 | 0.011 | 0.004 |
| Benzo(a)pyrene | *0.002* | 0.057 | 0.007 | *0.005* | 6 | 38 | 16% | 0.002 | 0.012 | 0.009 | 1.340 | 0.001 | 0.010 | 0.004 |
| Benzo(g,h,i)perylene | *0.004* | 0.036 | 0.008 | *0.005* | 12 | 38 | 32% | 0.004 | 0.015 | 0.007 | 0.828 | 0.001 | 0.010 | 0.006 |
| Benzo(b,k)fluoranthene | *0.002* | 0.113 | 0.014 | 0.008 | 19 | 38 | 50% | 0.002 | 0.025 | 0.019 | 1.365 | 0.003 | 0.020 | 0.008 |
| Chrysene | *0.002* | 0.087 | 0.010 | *0.005* | 17 | 38 | 45% | 0.002 | 0.018 | 0.014 | 1.374 | 0.002 | 0.015 | 0.006 |
| Dibenz(a,h)anthracene | *0.003* | 0.014 | 0.005 | *0.005* | 5 | 38 | 13% | 0.004 | 0.007 | 0.002 | 0.419 | 0.000 | 0.006 | 0.005 |
| Fluoranthene | *0.003* | 0.133 | 0.017 | 0.012 | 26 | 38 | 68% | 0.005 | 0.028 | 0.022 | 1.295 | 0.004 | 0.025 | 0.010 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.033 | 0.006 | *0.005* | 4 | 38 | 11% | 0.004 | 0.007 | 0.006 | 0.908 | 0.001 | 0.008 | 0.004 |
| Pyrene | *0.004* | 0.173 | 0.022 | 0.015 | 35 | 38 | 92% | 0.005 | 0.032 | 0.027 | 1.266 | 0.004 | 0.031 | 0.013 |
| *Total HPAHs[2] | 0.025 | 0.712 | 0.097 | 0.061 | | | | 0.034 | 0.146 | 0.113 | 1.170 | | | |
| *Total PAHs[3] | 0.041 | 0.923 | 0.157 | 0.135 | | | | 0.062 | 0.232 | 0.144 | 0.920 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.115 | 0.024 | 0.008 | 1 | 16 | 6% | 0.005 | 0.058 | 0.031 | 1.276 | 0.008 | 0.040 | 0.008 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.3* | 33.0 | 1.6 | *0.5* | 14 | 37 | 38% | 0.4 | 1.7 | 5.3 | 3.3 | 0.9 | 3.4 | -0.2 |
| Butylbenzyl phthalate | *0.09* | *0.7* | *0.4* | *0.5* | 3 | 38 | 8% | 0.1 | 0.5 | 0.2 | 0.4 | 0.0 | 0.5 | 0.4 |
| Diethyl phthalate | *0.070* | 8.4 | 0.7 | *0.5* | 8 | 38 | 21% | 0.2 | 0.5 | 1.4 | 1.9 | 0.2 | 1.2 | 0.3 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 0 | 38 | 0% | 0.0 | 0.5 | 0.2 | 0.6 | 0.0 | 0.4 | 0.3 |
| Di-n-butyl phthalate | *0.1* | *0.5* | *0.4* | *0.5* | 6 | 38 | 16% | 0.1 | 0.5 | 0.1 | 0.3 | 0.0 | 0.5 | 0.4 |
| Di-n-octyl phthalate | *0.042* | *2.0* | *0.4* | *0.5* | 2 | 38 | 5% | 0.0 | 0.5 | 0.3 | 0.7 | 0.1 | 0.5 | 0.3 |
| *Total Phthalates[4] | | 33.0 | | | | | | | | | | | | |

**TABLE E-4**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 235 Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 123.0 | 199.0 | | 148.0 | 38 | 38 | 100% | | | | | | | |
| pH (pH units) | 7.1 | 8.0 | | 7.7 | 38 | 38 | 100% | | | | | | | |
| TSS (mg/L) | 1.00 | 258 | 27.81 | 7.37 | 38 | 38 | 100% | 1.49 | 79.03 | 58.43 | 2.10 | 9.48 | 47.01 | 8.60 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | 1.64 | 112 | 15.04 | 6.85 | 32 | 38 | 84% | 3.15 | 30.38 | 24.37 | 1.62 | 3.95 | 23.05 | 7.03 |
| Mercury | *0.025* | 0.380 | 0.043 | *0.025* | 4 | 37 | 11% | 0.025 | 0.080 | 0.062 | 1.454 | 0.010 | 0.064 | 0.022 |
| Zinc | 7.40 | 355.0 | 44.67 | 17.20 | 35 | 35 | 100% | 10.48 | 73.60 | 80.96 | 1.81 | 13.69 | 72.48 | 16.85 |
| Dissolved Lead | *0.24* | 6.00 | 1.64 | 1.23 | 16 | 38 | 42% | 0.54 | 3.53 | 1.37 | 0.83 | 0.22 | 2.09 | 1.19 |
| Dissolved Mercury | *0.025* | *0.025* | *0.025* | *0.025* | 3 | 36 | 8% | 0.025 | 0.025 | 0.000 | 0.000 | 0.000 | 0.025 | 0.025 |
| Dissolved Zinc | 3.80 | 28.50 | 10.65 | 9.60 | 35 | 35 | 100% | 6.35 | 15.60 | 5.15 | 0.48 | 0.87 | 12.42 | 8.88 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | 0.040 | 0.007 | *0.005* | 7 | 38 | 18% | 0.002 | 0.011 | 0.007 | 1.083 | 0.001 | 0.009 | 0.004 |
| Acenaphthene | *0.002* | 0.032 | 0.011 | 0.012 | 28 | 38 | 74% | 0.005 | 0.018 | 0.006 | 0.569 | 0.001 | 0.013 | 0.009 |
| Acenaphthylene | *0.002* | *0.005* | *0.004* | *0.005* | 0 | 38 | 0% | 0.002 | 0.005 | 0.001 | 0.341 | 0.000 | 0.005 | 0.004 |
| Anthracene | *0.002* | 0.031 | 0.006 | *0.005* | 5 | 38 | 13% | 0.002 | 0.009 | 0.005 | 0.872 | 0.001 | 0.008 | 0.004 |
| Fluorene | *0.002* | 0.043 | 0.008 | *0.005* | 14 | 38 | 37% | 0.002 | 0.014 | 0.007 | 0.939 | 0.001 | 0.010 | 0.005 |
| Naphthalene | *0.003* | 0.056 | 0.013 | 0.011 | 23 | 38 | 61% | 0.004 | 0.021 | 0.012 | 0.936 | 0.002 | 0.017 | 0.009 |
| Phenanthrene | *0.002* | 0.115 | 0.015 | 0.005 | 15 | 38 | 39% | 0.002 | 0.031 | 0.025 | 1.608 | 0.004 | 0.024 | 0.007 |
| *Total LPAHs[1] | *0.013* | 0.240 | 0.058 | 0.0465 | | | | 0.022 | 0.096 | 0.048 | 0.829 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.114 | 0.014 | *0.005* | 11 | 38 | 29% | 0.001 | 0.022 | 0.024 | 1.766 | 0.004 | 0.022 | 0.006 |
| Benzo(a)pyrene | *0.002* | 0.142 | 0.014 | *0.005* | 8 | 38 | 21% | 0.002 | 0.023 | 0.030 | 2.127 | 0.005 | 0.024 | 0.004 |
| Benzo(g,h,i)perylene | *0.002* | 0.166 | 0.013 | *0.005* | 11 | 38 | 29% | 0.004 | 0.027 | 0.027 | 2.101 | 0.004 | 0.022 | 0.004 |
| Benzo(b,k)fluoranthene | *0.002* | 0.344 | 0.029 | 0.008 | 21 | 38 | 55% | 0.004 | 0.055 | 0.070 | 2.402 | 0.011 | 0.052 | 0.006 |
| Chrysene | *0.002* | 0.199 | 0.020 | *0.005* | 11 | 38 | 29% | 0.002 | 0.036 | 0.044 | 2.234 | 0.007 | 0.035 | 0.005 |
| Dibenz(a,h)anthracene | *0.003* | 0.028 | 0.006 | *0.005* | 4 | 38 | 11% | 0.004 | 0.006 | 0.004 | 0.716 | 0.001 | 0.007 | 0.004 |
| Fluoranthene | *0.003* | 0.295 | 0.031 | 0.012 | 29 | 38 | 76% | 0.005 | 0.054 | 0.060 | 1.926 | 0.010 | 0.051 | 0.011 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.115 | 0.009 | *0.005* | 8 | 38 | 21% | 0.004 | 0.018 | 0.018 | 1.959 | 0.003 | 0.015 | 0.003 |
| Pyrene | *0.004* | 0.253 | 0.036 | 0.018 | 34 | 38 | 89% | 0.005 | 0.067 | 0.057 | 1.575 | 0.009 | 0.055 | 0.017 |
| *Total HPAHs[2] | *0.025* | 1.639 | 0.173 | 0.0705 | | | | 0.041 | 0.299 | 0.320 | 1.854 | | | |
| *Total PAHs[3] | *0.038* | 1.845 | 0.231 | 0.124 | | | | 0.062 | 0.383 | 0.358 | 1.554 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.055 | 0.016 | *0.005* | 4 | 16 | 25% | 0.005 | 0.045 | 0.018 | 1.178 | 0.005 | 0.025 | 0.006 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.4* | 21.3 | 2.1 | 1.2 | 22 | 37 | 59% | 0.5 | 3.3 | 3.6 | 1.7 | 0.6 | 3.3 | 0.9 |
| Butylbenzyl phthalate | 0.09 | 1.6 | *0.4* | *0.5* | 5 | 38 | 13% | 0.1 | 0.5 | 0.3 | 0.6 | 0.0 | 0.5 | 0.3 |
| Diethyl phthalate | *0.04* | 15.0 | 1.0 | *0.5* | 9 | 38 | 24% | 0.1 | 1.7 | 2.4 | 2.4 | 0.4 | 1.8 | 0.2 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 0 | 38 | 0% | 0.0 | 0.5 | 0.2 | 0.6 | 0.0 | 0.4 | 0.3 |
| Di-n-butyl phthalate | *0.05* | *0.5* | *0.4* | *0.5* | 4 | 38 | 11% | 0.2 | 0.5 | 0.1 | 0.3 | 0.0 | 0.5 | 0.4 |
| Di-n-octyl phthalate | *0.042* | 3.9 | 0.5 | *0.5* | 1 | 38 | 3% | 0.0 | 0.5 | 0.6 | 1.2 | 0.1 | 0.7 | 0.3 |
| *Total Phthalates[4] | | 22.9 | | | | | | | | | | | | |

**TABLE E-5**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 243 Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 463 | 2,310 | | 1,325 | 38 | 38 | 100% | | | | | | | |
| pH (pH units) | 6.6 | 7.8 | | 7.0 | 37 | 37 | 100% | | | | | | | |
| TSS (mg/L) | 1.5 | 42.7 | 14.2 | 10.8 | 37 | 37 | 100% | 3.36 | 32.88 | 11.60 | 0.82 | 1.91 | 18.04 | 10.30 |
| Metals in ug/L | | | | | 15 | | | | | | | | | |
| Lead | *0.39* | 43.9 | 7.9 | 4.5 | 22 | 36 | 61% | 1.90 | 24.00 | 9.61 | 1.22 | 1.60 | 11.16 | 4.65 |
| Mercury | *0.025* | 0.065 | 0.028 | *0.025* | 0 | 38 | 0% | 0.025 | 0.025 | 0.010 | 0.352 | 0.002 | 0.031 | 0.025 |
| Zinc | 5.3 | 73.6 | 22.4 | 15.4 | 34 | 36 | 94% | 8.84 | 37.55 | 16.24 | 0.73 | 2.71 | 27.85 | 16.86 |
| Dissolved Lead | 0.01 | 35.60 | 5.78 | 2.88 | 18 | 36 | 50% | 0.10 | 15.25 | 8.06 | 1.40 | 1.34 | 8.51 | 3.05 |
| Dissolved Mercury | *0.025* | 0.193 | 0.030 | *0.025* | 0 | 38 | 0% | 0.025 | 0.025 | 0.027 | 0.912 | 0.004 | 0.039 | 0.021 |
| Dissolved Zinc | *0.13* | 45.80 | 12.29 | 8.90 | 29 | 36 | 81% | 4.10 | 23.55 | 9.34 | 0.76 | 1.56 | 15.45 | 9.13 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | *0.006* | *0.004* | *0.005* | 3 | 38 | 8% | 0.002 | 0.005 | 0.001 | 0.291 | 0.000 | 0.005 | 0.004 |
| Acenaphthene | *0.005* | 0.069 | 0.031 | 0.031 | 37 | 38 | 97% | 0.012 | 0.054 | 0.017 | 0.533 | 0.003 | 0.036 | 0.026 |
| Acenaphthylene | *0.002* | *0.005* | *0.004* | *0.005* | 4 | 38 | 11% | 0.002 | 0.005 | 0.001 | 0.302 | 0.000 | 0.005 | 0.004 |
| Anthracene | *0.002* | 0.022 | 0.007 | *0.005* | 11 | 38 | 29% | 0.003 | 0.013 | 0.005 | 0.697 | 0.001 | 0.008 | 0.005 |
| Fluorene | *0.002* | 0.013 | 0.005 | *0.005* | 11 | 38 | 29% | 0.003 | 0.010 | 0.003 | 0.501 | 0.000 | 0.006 | 0.004 |
| Naphthalene | *0.001* | 0.017 | 0.008 | *0.005* | 17 | 38 | 45% | 0.005 | 0.015 | 0.004 | 0.527 | 0.001 | 0.009 | 0.007 |
| Phenanthrene | 0.002 | 0.057 | 0.011 | *0.005* | 19 | 38 | 50% | 0.004 | 0.023 | 0.013 | 1.197 | 0.002 | 0.015 | 0.007 |
| *Total LPAHs[1] | *0.025* | 0.151 | 0.066 | 0.061 | | | | 0.038 | 0.103 | 0.028 | 0.426 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.055 | 0.009 | *0.005* | 12 | 38 | 32% | 0.001 | 0.015 | 0.010 | 1.179 | 0.002 | 0.012 | 0.005 |
| Benzo(a)pyrene | *0.002* | 0.042 | 0.007 | *0.005* | 4 | 38 | 11% | 0.002 | 0.010 | 0.008 | 1.204 | 0.001 | 0.009 | 0.004 |
| Benzo(g,h,i)perylene | *0.004* | 0.046 | 0.008 | *0.005* | 7 | 38 | 18% | 0.004 | 0.013 | 0.009 | 1.108 | 0.001 | 0.011 | 0.005 |
| Benzo(b,k)fluoranthene | 0.002 | 0.105 | 0.014 | *0.005* | 16 | 38 | 42% | 0.005 | 0.025 | 0.023 | 1.636 | 0.004 | 0.022 | 0.007 |
| Chrysene | *0.002* | 0.098 | 0.012 | *0.005* | 11 | 38 | 29% | 0.003 | 0.028 | 0.021 | 1.728 | 0.003 | 0.019 | 0.005 |
| Dibenz(a,h)anthracene | *0.003* | 0.012 | *0.005* | *0.005* | 0 | 38 | 0% | 0.004 | 0.005 | 0.001 | 0.281 | 0.000 | 0.005 | 0.004 |
| Fluoranthene | *0.003* | 0.133 | 0.023 | 0.016 | 32 | 38 | 84% | 0.005 | 0.044 | 0.025 | 1.093 | 0.004 | 0.031 | 0.015 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.034 | 0.006 | *0.005* | 3 | 38 | 8% | 0.004 | 0.005 | 0.006 | 1.022 | 0.001 | 0.008 | 0.004 |
| Pyrene | *0.005* | 0.116 | 0.032 | 0.022 | 37 | 38 | 97% | 0.014 | 0.063 | 0.027 | 0.846 | 0.004 | 0.041 | 0.023 |
| *Total HPAHs[2] | 0.031 | 0.606 | 0.115 | 0.074 | | | | 0.053 | 0.199 | 0.123 | 1.068 | | | |
| *Total PAHs[3] | 0.055 | 0.757 | 0.182 | 0.133 | | | | 0.092 | 0.298 | 0.143 | 0.789 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.099 | 0.014 | *0.005* | 6 | 16 | 38% | 0.005 | 0.017 | 0.023 | 1.695 | 0.006 | 0.026 | 0.001 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.4* | 16.0 | 1.1 | *0.5* | 9 | 37 | 24% | 0.5 | 1.0 | 2.6 | 2.4 | 0.4 | 2.0 | 0.2 |
| Butylbenzyl phthalate | *0.085* | *1.8* | *0.4* | *0.5* | 3 | 38 | 8% | 0.1 | 0.5 | 0.3 | 0.6 | 0.0 | 0.5 | 0.4 |
| Diethyl phthalate | *0.05* | 10.0 | 0.8 | *0.5* | 9 | 38 | 24% | 0.1 | 1.1 | 1.6 | 2.1 | 0.3 | 1.3 | 0.2 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 1 | 38 | 3% | 0.0 | 0.5 | 0.2 | 0.5 | 0.0 | 0.5 | 0.3 |
| Di-n-butyl phthalate | *0.05* | 4.3 | *0.6* | *0.5* | 8 | 38 | 21% | 0.3 | 0.5 | 0.6 | 1.1 | 0.1 | 0.8 | 0.4 |
| Di-n-octyl phthalate | *0.042* | *0.5* | *0.4* | *0.5* | 2 | 38 | 5% | 0.0 | 0.5 | 0.2 | 0.5 | 0.0 | 0.5 | 0.3 |
| *Total Phthalates[4] | | 22.9 | | | | | | | | | | | | |

**TABLE E-6**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 245 Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 136 | 2,880 | 909.23 | 891.00 | 39 | 39 | 100% | 382.40 | 1468.00 | 524.51 | 0.58 | 83.99 | 1079.26 | 739.20 |
| pH (pH units) | 7.1 | 8.0 | | 7.3 | 39 | 39 | 100% | | | | | | | |
| TSS (mg/L) | 0.26 | 78.90 | 9.89 | 6.90 | 38 | 39 | 97% | 2.16 | 19.60 | 13.16 | 1.33 | 2.11 | 14.16 | 5.63 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | *0.14* | 18.20 | 4.08 | 2.58 | 18 | 37 | 49% | 0.38 | 11.94 | 4.63 | 1.13 | 0.76 | 5.63 | 2.54 |
| Mercury | *0.025* | *0.125* | *0.030* | *0.025* | 5 | 38 | 13% | 0.025 | 0.025 | 0.020 | 0.671 | 0.003 | 0.036 | 0.023 |
| Zinc | 11.8 | 1950 | 180 | 52 | 39 | 39 | 100% | 16.80 | 235.40 | 386.46 | 2.15 | 61.88 | 305.28 | 54.73 |
| Dissolved Lead | *0.02* | 18.90 | 3.15 | 1.60 | 19 | 37 | 51% | 0.05 | 6.99 | 3.97 | 1.26 | 0.65 | 4.47 | 1.82 |
| Dissolved Mercury | *0.025* | *0.125* | *0.029* | *0.025* | 3 | 37 | 8% | 0.025 | 0.025 | 0.018 | 0.619 | 0.003 | 0.035 | 0.023 |
| Dissolved Zinc | 0.60 | 1220.00 | 94.43 | 24.10 | 37 | 39 | 95% | 4.85 | 113.92 | 237.53 | 2.52 | 38.03 | 171.42 | 17.43 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | *0.002* | 0.018 | 0.006 | *0.005* | 9 | 39 | 23% | 0.002 | 0.011 | 0.004 | 0.636 | 0.001 | 0.007 | 0.005 |
| Acenaphthene | *0.002* | 0.103 | 0.033 | 0.026 | 34 | 39 | 87% | 0.005 | 0.068 | 0.023 | 0.698 | 0.004 | 0.040 | 0.025 |
| Acenaphthylene | *0.002* | *0.008* | *0.004* | *0.005* | 1 | 39 | 3% | 0.002 | 0.005 | 0.002 | 0.358 | 0.000 | 0.005 | 0.004 |
| Anthracene | *0.002* | 0.014 | 0.006 | *0.005* | 9 | 39 | 23% | 0.002 | 0.011 | 0.003 | 0.527 | 0.000 | 0.007 | 0.005 |
| Fluorene | *0.002* | 0.017 | 0.006 | *0.005* | 14 | 39 | 36% | 0.003 | 0.012 | 0.004 | 0.613 | 0.001 | 0.008 | 0.005 |
| Naphthalene | *0.004* | 0.057 | 0.011 | 0.010 | 22 | 39 | 56% | 0.005 | 0.019 | 0.010 | 0.842 | 0.002 | 0.014 | 0.008 |
| Phenanthrene | *0.002* | 0.027 | 0.011 | 0.008 | 23 | 39 | 59% | 0.005 | 0.022 | 0.007 | 0.682 | 0.001 | 0.013 | 0.008 |
| *Total LPAHs[1] | 0.013 | 0.181 | 0.072 | 0.066 | | | | 0.030 | 0.123 | 0.037 | 0.522 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 0.021 | 0.006 | *0.005* | 8 | 39 | 21% | 0.001 | 0.012 | 0.004 | 0.658 | 0.001 | 0.008 | 0.005 |
| Benzo(a)pyrene | *0.002* | 0.048 | 0.006 | *0.005* | 4 | 39 | 10% | 0.002 | 0.005 | 0.007 | 1.239 | 0.001 | 0.008 | 0.003 |
| Benzo(g,h,i)perylene | *0.003* | 0.033 | 0.006 | *0.005* | 3 | 39 | 8% | 0.004 | 0.006 | 0.005 | 0.824 | 0.001 | 0.008 | 0.004 |
| Benzo(b,k)fluoranthene | *0.002* | 0.062 | 0.010 | *0.005* | 17 | 39 | 44% | 0.005 | 0.015 | 0.010 | 1.061 | 0.002 | 0.013 | 0.006 |
| Chrysene | *0.002* | 0.063 | 0.008 | *0.005* | 12 | 39 | 31% | 0.003 | 0.017 | 0.010 | 1.236 | 0.002 | 0.012 | 0.005 |
| Dibenz(a,h)anthracene | *0.003* | 0.013 | *0.005* | *0.005* | 1 | 39 | 3% | 0.004 | 0.005 | 0.002 | 0.332 | 0.000 | 0.005 | 0.004 |
| Fluoranthene | *0.003* | 0.046 | 0.014 | 0.012 | 27 | 39 | 69% | 0.005 | 0.033 | 0.011 | 0.775 | 0.002 | 0.018 | 0.011 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.018 | 0.005 | *0.005* | 3 | 39 | 8% | 0.004 | 0.005 | 0.003 | 0.526 | 0.000 | 0.006 | 0.004 |
| Pyrene | 0.004 | 0.081 | 0.025 | 0.024 | 37 | 39 | 95% | 0.010 | 0.041 | 0.015 | 0.594 | 0.002 | 0.030 | 0.020 |
| *Total HPAHs[2] | 0.029 | 0.368 | 0.086 | 0.074 | | | | 0.045 | 0.126 | 0.056 | 0.654 | | | |
| *Total PAHs[3] | 0.042 | 0.436 | 0.157 | 0.144 | | | | 0.082 | 0.237 | 0.074 | 0.468 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.093 | 0.028 | 0.015 | 10 | 16 | 63% | 0.005 | 0.062 | 0.028 | 0.972 | 0.007 | 0.043 | 0.014 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.4* | 3.3 | 0.7 | *0.5* | 9 | 38 | 24% | 0.5 | 1.2 | 0.6 | 0.8 | 0.1 | 0.9 | 0.5 |
| Butylbenzyl phthalate | *0.09* | 16.0 | 1.6 | *0.5* | 10 | 39 | 26% | 0.1 | 3.3 | 3.4 | 2.1 | 0.5 | 2.7 | 0.5 |
| Diethyl phthalate | 0.04 | 4.4 | 0.7 | *0.5* | 11 | 39 | 28% | 0.1 | 1.4 | 1.0 | 1.3 | 0.2 | 1.1 | 0.4 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 0 | 39 | 0% | 0.0 | 0.5 | 0.2 | 0.6 | 0.0 | 0.4 | 0.3 |
| Di-n-butyl phthalate | 0.16 | *1.3* | *0.5* | *0.5* | 10 | 39 | 26% | 0.3 | 0.5 | 0.2 | 0.4 | 0.0 | 0.5 | 0.4 |
| Di-n-octyl phthalate | *0.042* | *0.5* | *0.4* | *0.5* | 0 | 39 | 0% | 0.0 | 0.5 | 0.2 | 0.5 | 0.0 | 0.5 | 0.3 |
| *Total Phthalates[4] | 0.44 | 18.7 | | | | | | | | | | | | |

**TABLE E-7**
SUMMARY STATISTICS FOR BASEFLOW AT
OUTFALL 254 Water Years 2002-2011

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Hardness (mg/L as CaCO3) | 386 | 4,410 | | 3,020 | 38 | 38 | 100% | | | | | | | |
| pH (pH units) | 6.7 | 7.6 | | 7.2 | 38 | 38 | 100% | | | | | | | |
| TSS (mg/L) | 1.8 | 140.0 | 17.2 | 9.2 | 38 | 38 | 100% | 3.16 | 30.80 | 23.41 | 1.36 | 3.80 | 24.89 | 9.50 |
| Metals in ug/L | | | | | | | | | | | | | | |
| Lead | *0.06* | 39.00 | 6.48 | 3.10 | 18 | 37 | 49% | 0.44 | 16.82 | 8.73 | 1.35 | 1.43 | 9.39 | 3.57 |
| Mercury | *0.025* | *0.055* | *0.026* | *0.025* | 0 | 38 | 0% | 0.025 | 0.025 | 0.006 | 0.236 | 0.001 | 0.029 | 0.024 |
| Zinc | 7.24 | 95.20 | 28.78 | 23.90 | 36 | 36 | 100% | 11.45 | 52.35 | 19.33 | 0.67 | 3.22 | 35.32 | 22.24 |
| Dissolved Lead | *0.01* | 47.20 | 8.07 | 2.65 | 20 | 37 | 54% | 0.23 | 19.14 | 10.65 | 1.32 | 1.75 | 11.62 | 4.52 |
| Dissolved Mercury | *0.025* | 0.114 | 0.028 | *0.025* | 1 | 37 | 3% | 0.025 | 0.025 | 0.015 | 0.537 | 0.002 | 0.033 | 0.023 |
| Dissolved Zinc | *0.33* | 54.70 | 22.08 | 19.45 | 30 | 36 | 83% | 2.10 | 45.90 | 15.82 | 0.72 | 2.64 | 27.43 | 16.73 |
| PAH in ug/L | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | 0.002 | 0.034 | 0.006 | *0.005* | 8 | 38 | 21% | 0.003 | 0.012 | 0.006 | 0.942 | 0.001 | 0.008 | 0.004 |
| Acenaphthene | *0.002* | 0.096 | 0.014 | *0.005* | 10 | 38 | 26% | 0.002 | 0.039 | 0.020 | 1.477 | 0.003 | 0.020 | 0.007 |
| Acenaphthylene | *0.002* | 0.019 | 0.005 | *0.005* | 3 | 38 | 8% | 0.002 | 0.005 | 0.003 | 0.646 | 0.001 | 0.006 | 0.004 |
| Anthracene | *0.002* | 0.077 | 0.008 | *0.005* | 7 | 38 | 18% | 0.002 | 0.016 | 0.013 | 1.564 | 0.002 | 0.013 | 0.004 |
| Fluorene | *0.002* | 0.060 | 0.009 | *0.005* | 9 | 38 | 24% | 0.002 | 0.025 | 0.012 | 1.323 | 0.002 | 0.013 | 0.005 |
| Naphthalene | *0.002* | 0.029 | 0.008 | *0.005* | 10 | 38 | 26% | 0.004 | 0.020 | 0.007 | 0.856 | 0.001 | 0.011 | 0.006 |
| Phenanthrene | *0.002* | 0.684 | 0.030 | 0.007 | 20 | 38 | 53% | 0.002 | 0.033 | 0.110 | 3.613 | 0.018 | 0.067 | -0.006 |
| *Total LPAHs[1] | 0.010 | 0.898 | 0.075 | 0.033 | | | | 0.014 | 0.143 | 0.148 | 1.965 | | | |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene | *0.001* | 1.110 | 0.047 | 0.005 | 16 | 38 | 42% | 0.001 | 0.037 | 0.183 | 3.873 | 0.030 | 0.107 | -0.013 |
| Benzo(a)pyrene | *0.002* | 0.131 | 0.011 | *0.005* | 10 | 38 | 26% | 0.002 | 0.020 | 0.022 | 1.929 | 0.004 | 0.018 | 0.004 |
| Benzo(g,h,i)perylene | *0.003* | 0.055 | 0.008 | *0.005* | 10 | 38 | 26% | 0.004 | 0.014 | 0.009 | 1.116 | 0.002 | 0.011 | 0.005 |
| Benzo(b,k)fluoranthene | *0.002* | 0.376 | 0.029 | 0.014 | 23 | 38 | 61% | 0.002 | 0.043 | 0.063 | 2.169 | 0.010 | 0.050 | 0.008 |
| Chrysene | *0.002* | 0.362 | 0.023 | 0.005 | 16 | 38 | 42% | 0.002 | 0.033 | 0.060 | 2.636 | 0.010 | 0.042 | 0.003 |
| Dibenz(a,h)anthracene | *0.003* | 0.017 | 0.005 | *0.005* | 3 | 38 | 8% | 0.004 | 0.005 | 0.003 | 0.507 | 0.000 | 0.006 | 0.004 |
| Fluoranthene | *0.003* | 1.140 | 0.065 | 0.019 | 30 | 38 | 79% | 0.003 | 0.093 | 0.188 | 2.875 | 0.030 | 0.127 | 0.004 |
| Indeno(1,2,3-c,d)pyrene | *0.003* | 0.053 | 0.008 | *0.005* | 8 | 38 | 21% | 0.004 | 0.012 | 0.009 | 1.187 | 0.001 | 0.010 | 0.005 |
| Pyrene | 0.002 | 0.879 | 0.057 | 0.025 | 35 | 38 | 92% | 0.006 | 0.066 | 0.144 | 2.519 | 0.023 | 0.104 | 0.010 |
| *Total HPAHs[2] | 0.024 | 3.287 | 0.254 | 0.093 | | | | 0.029 | 0.422 | 0.559 | 2.204 | | | |
| *Total PAHs[3] | 0.034 | 4.185 | 0.329 | 0.131 | | | | 0.043 | 0.547 | 0.697 | 2.118 | | | |
| Phenols in ug/L | | | | | | | | | | | | | | |
| 4-Methylphenol | *0.005* | 0.103 | 0.015 | *0.005* | 7 | 16 | 44% | 0.005 | 0.017 | 0.024 | 1.582 | 0.006 | 0.028 | 0.002 |
| Phthalates in ug/L | | | | | | | | | | | | | | |
| Bis(2-ethylhexyl) phthalate | *0.1* | 2.9 | 0.6 | *0.5* | 8 | 37 | 22% | 0.5 | 0.8 | 0.5 | 0.8 | 0.1 | 0.8 | 0.5 |
| Butylbenzyl phthalate | 0.09 | 1.4 | *0.4* | *0.5* | 4 | 38 | 11% | 0.1 | 0.5 | 0.2 | 0.5 | 0.0 | 0.5 | 0.4 |
| Diethyl phthalate | 0.04 | 3.8 | 0.5 | *0.5* | 9 | 38 | 24% | 0.1 | 0.5 | 0.6 | 1.2 | 0.1 | 0.7 | 0.3 |
| Dimethyl phthalate | *0.016* | *0.5* | *0.4* | *0.5* | 2 | 38 | 5% | 0.0 | 0.5 | 0.2 | 0.6 | 0.0 | 0.4 | 0.3 |
| Di-n-butyl phthalate | 0.05 | *0.5* | *0.4* | *0.5* | 9 | 38 | 24% | 0.2 | 0.5 | 0.1 | 0.3 | 0.0 | 0.5 | 0.4 |
| Di-n-octyl phthalate | *0.042* | *0.5* | *0.4* | *0.5* | 0 | 38 | 0% | 0.0 | 0.5 | 0.2 | 0.5 | 0.0 | 0.5 | 0.3 |
| *Total Phthalates[4] | | 3.9 | | | | | | | | | | | | |

# Table E-8
# Summary Statistics for Stormwater at OF230 Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.199 | 0.044 | 0.036 | 48 | 51 | 94% | 0.021 | 0.066 | 0.032 | 0.72 | 0.004 | 0.053 | 0.035 |
| BOD (mg/L) | 1.0 | 8.8 | 3.8 | 3.2 | 48 | 53 | 91% | 2.0 | 7.9 | 2.1 | 0.56 | 0.3 | 4.4 | 3.2 |
| Chloride (mg/L) | 0.82 | 551 | 17.6 | 4.16 | 53 | 54 | 98% | 1.35 | 17.41 | 74.4 | 4.22 | 10.1 | 37.9 | -2.7 |
| Conductivity (uS/cm) | 14.9 | 2260 | 117 | 56.1 | 135 | 135 | 100% | 32.0 | 133 | 291 | 2.49 | 25.0 | 166 | 67.4 |
| Hardness (mg CaCO3/L) | 8.7 | 206 | 20.6 | 15.9 | 199 | 199 | 100% | 11.4 | 26.3 | 22.9 | 1.11 | 1.6 | 23.8 | 17.4 |
| pH (pH units) | 5.0 | 10.6 | 6.9 | 7.0 | 199 | 199 | 100% | 6.3 | 7.4 | 0.6 | 0.08 | 0.0 | 7.0 | 6.9 |
| TSS (mg/L) | 4.8 | 322 | 49.0 | 30.8 | 193 | 193 | 100% | 12.9 | 102 | 51.8 | 1.06 | 3.7 | 56.4 | 41.7 |
| Turbidity (NTU) | 5.5 | 85.2 | 18.4 | 13.7 | 7 | 52 | 13% | 8.0 | 34.8 | 16.0 | 0.87 | 2.2 | 22.9 | 14.0 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.062 | 0.434 | 0.148 | 0.123 | 68 | 68 | 100% | 0.081 | 0.228 | 0.076 | 0.52 | 0.009 | 0.166 | 0.129 |
| Phosphate, Ortho (mg/L) | 0.042 | 0.688 | 0.124 | 0.084 | 68 | 68 | 100% | 0.054 | 0.251 | 0.118 | 0.95 | 0.014 | 0.153 | 0.096 |
| Phosphorus, Total (mg/L) | 0.004 | 0.098 | 0.028 | 0.023 | 74 | 74 | 100% | 0.013 | 0.046 | 0.016 | 0.58 | 0.002 | 0.032 | 0.024 |
| Total Nitrogen (mg/L) | 0.13 | 2.10 | 0.54 | 0.46 | 68 | 68 | 100% | 0.26 | 1.00 | 0.36 | 0.67 | 0.04 | 0.63 | 0.45 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 0.466 | 0.083 | 0.064 | 49 | 82 | 60% | 0.031 | 0.166 | 0.079 | 0.95 | 0.009 | 0.100 | 0.066 |
| Cadmium, Dissolved (ug/L) | 0.005 | 0.125 | 0.028 | 0.025 | 24 | 81 | 30% | 0.016 | 0.046 | 0.016 | 0.59 | 0.002 | 0.031 | 0.024 |
| Copper (ug/L) | 3.72 | 66.40 | 11.25 | 8.26 | 82 | 82 | 100% | 5.12 | 21.32 | 10.36 | 0.92 | 1.14 | 13.52 | 8.97 |
| Copper, Dissolved (ug/L) | 0.84 | 18.10 | 4.13 | 3.24 | 81 | 81 | 100% | 1.82 | 7.67 | 2.95 | 0.71 | 0.33 | 4.78 | 3.48 |
| Lead (ug/L) | 2.09 | 229 | 18.31 | 11.40 | 199 | 199 | 100% | 4.44 | 38.02 | 22.23 | 1.21 | 1.58 | 21.42 | 15.20 |
| Lead, Dissolved (ug/L) | 0.091 | 9.05 | 0.891 | 0.550 | 158 | 198 | 80% | 0.234 | 1.626 | 1.189 | 1.33 | 0.085 | 1.058 | 0.725 |
| Mercury (ug/L) | 0.0004 | 0.1300 | 0.0223 | 0.0250 | 79 | 199 | 40% | 0.0040 | 0.0530 | 0.0246 | 1.10 | 0.0017 | 0.0257 | 0.0188 |
| Mercury, Dissolved (ug/L) | 0.0009 | 0.1000 | 0.0152 | 0.0250 | 26 | 198 | 13% | 0.0009 | 0.0250 | 0.0131 | 0.86 | 0.0009 | 0.0170 | 0.0133 |
| Zinc (ug/L) | 31.8 | 721 | 108.4 | 81.0 | 199 | 199 | 100% | 49.7 | 176.6 | 87.3 | 0.81 | 6.2 | 120.6 | 96.2 |
| Zinc, Dissolved (ug/L) | 11.5 | 543 | 55.2 | 42.6 | 198 | 198 | 100% | 26.5 | 86.3 | 54.1 | 0.98 | 3.8 | 62.8 | 47.6 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 1.700 | 0.179 | 0.048 | 28 | 44 | 64% | 0.009 | 0.512 | 0.302 | 1.68 | 0.046 | 0.271 | 0.087 |
| Carbaryl (ug/L | 0.03 | 0.25 | 0.13 | 0.08 | 1 | 26 | 4% | 0.03 | 0.25 | 0.11 | 0.83 | 0.02 | 0.18 | 0.09 |
| Chlorpyrifos (ug/L) | 0.003 | 1.420 | 0.039 | 0.009 | 2 | 70 | 3% | 0.003 | 0.059 | 0.168 | 4.29 | 0.020 | 0.079 | -0.001 |
| Bifenthrin (ug/L) | 0.000 | 0.005 | 0.005 | 0.005 | 1 | 25 | 4% | 0.005 | 0.005 | 0.001 | 0.21 | 0.000 | 0.005 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.002 | 0.469 | 0.024 | 0.013 | 152 | 199 | 76% | 0.004 | 0.038 | 0.050 | 2.06 | 0.004 | 0.032 | 0.017 |
| Acenaphthene (ug/L) | 0.002 | 0.080 | 0.007 | 0.005 | 42 | 199 | 21% | 0.002 | 0.012 | 0.010 | 1.42 | 0.001 | 0.008 | 0.005 |
| Acenaphthylene (ug/L) | 0.002 | 0.060 | 0.006 | 0.005 | 45 | 199 | 23% | 0.003 | 0.010 | 0.006 | 1.01 | 0.000 | 0.006 | 0.005 |
| Anthracene (ug/L) | 0.002 | 0.122 | 0.010 | 0.006 | 74 | 199 | 37% | 0.003 | 0.022 | 0.015 | 1.40 | 0.001 | 0.012 | 0.008 |
| Fluorene (ug/L) | 0.002 | 0.246 | 0.012 | 0.005 | 98 | 199 | 49% | 0.003 | 0.023 | 0.021 | 1.78 | 0.001 | 0.014 | 0.009 |
| Naphthalene (ug/L) | 0.003 | 0.528 | 0.032 | 0.020 | 152 | 198 | 77% | 0.010 | 0.050 | 0.052 | 1.62 | 0.004 | 0.039 | 0.025 |
| Phenanthrene (ug/L) | 0.002 | 0.653 | 0.076 | 0.036 | 191 | 199 | 96% | 0.013 | 0.195 | 0.103 | 1.36 | 0.007 | 0.091 | 0.062 |
| **Total LPAHs[1]** | 0.008 | 0.923 | 0.134 | 0.075 | 199 | 198 | 101% | 0.032 | 0.297 | 0.156 | 1.17 | 0.011 | 0.156 | 0.112 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.439 | 0.046 | 0.017 | 150 | 199 | 75% | 0.003 | 0.118 | 0.070 | 1.51 | 0.005 | 0.056 | 0.037 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.563 | 0.055 | 0.022 | 146 | 199 | 73% | 0.003 | 0.152 | 0.084 | 1.52 | 0.006 | 0.067 | 0.044 |
| Benzo(b,k)fluoranthene (ug/L) | 0.002 | 1.396 | 0.152 | 0.053 | 168 | 199 | 84% | 0.006 | 0.416 | 0.226 | 1.48 | 0.016 | 0.184 | 0.121 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.457 | 0.063 | 0.028 | 178 | 199 | 89% | 0.005 | 0.156 | 0.080 | 1.29 | 0.006 | 0.074 | 0.051 |
| Chrysene (ug/L) | 0.002 | 0.860 | 0.101 | 0.032 | 180 | 199 | 90% | 0.005 | 0.271 | 0.152 | 1.51 | 0.011 | 0.122 | 0.080 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.088 | 0.013 | 0.005 | 100 | 199 | 50% | 0.002 | 0.034 | 0.017 | 1.25 | 0.001 | 0.016 | 0.011 |
| Fluoranthene (ug/L) | 0.003 | 1.687 | 0.156 | 0.053 | 196 | 199 | 98% | 0.013 | 0.423 | 0.244 | 1.56 | 0.017 | 0.190 | 0.122 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.346 | 0.048 | 0.021 | 158 | 199 | 79% | 0.003 | 0.130 | 0.063 | 1.32 | 0.004 | 0.057 | 0.039 |
| Pyrene (ug/L) | 0.005 | 1.200 | 0.146 | 0.056 | 193 | 199 | 97% | 0.016 | 0.384 | 0.203 | 1.40 | 0.014 | 0.174 | 0.117 |
| Retene (ug/L) | 0.003 | 0.026 | 0.009 | 0.008 | 198 | 24 | 825% | 0.003 | 0.018 | 0.006 | 0.69 | 0.001 | 0.012 | 0.007 |
| **Total HPAHs[2]** | 0.025 | 6.680 | 0.769 | 0.260 | 191 | 199 | 96% | 0.052 | 2.195 | 1.131 | 1.47 | 0.080 | 0.927 | 0.611 |
| **TOTAL PAHs** | 0.037 | 7.494 | 0.906 | 0.353 | 198 | 198 | 100% | 0.089 | 2.477 | 1.273 | 1.40 | 0.090 | 1.084 | 0.728 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.14 | 44.10 | 3.23 | 2.00 | 179 | 198 | 90% | 0.84 | 6.80 | 4.18 | 1.30 | 0.30 | 3.81 | 2.64 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 8.400 | 0.464 | 0.290 | 43 | 199 | 22% | 0.162 | 0.542 | 0.842 | 1.82 | 0.060 | 0.581 | 0.346 |
| Diethyl phthalate (ug/L) | 0.077 | 9.300 | 0.561 | 0.268 | 62 | 199 | 31% | 0.143 | 1.002 | 1.062 | 1.89 | 0.075 | 0.710 | 0.413 |
| Dimethyl phthalate (ug/L) | 0.016 | 4.700 | 0.303 | 0.174 | 16 | 199 | 8% | 0.046 | 0.500 | 0.471 | 1.55 | 0.033 | 0.369 | 0.238 |
| Di-n-butyl phthalate (ug/L) | 0.050 | 1.600 | 0.386 | 0.414 | 86 | 199 | 43% | 0.148 | 0.512 | 0.189 | 0.49 | 0.013 | 0.412 | 0.359 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 3.200 | 0.475 | 0.394 | 78 | 197 | 40% | 0.129 | 1.000 | 0.488 | 1.03 | 0.035 | 0.544 | 0.407 |
| ***Total Phthalates[4]** | 0.00 | 44.10 | 4.21 | 2.66 | 0 | 199 | 0% | 0.76 | 8.84 | 5.21 | 1.24 | 0.37 | 4.94 | 3.48 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.010 | 0.730 | 0.074 | 0.050 | 75 | 93 | 81% | 0.013 | 0.159 | 0.090 | 1.22 | 0.009 | 0.092 | 0.055 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.13 | 0.05 | 0.05 | 6 | 51 | 12% | 0.02 | 0.11 | 0.03 | 0.54 | 0.00 | 0.06 | 0.04 |
| NWTPH-Gasoline (mg/L) | 2.3 | 25.0 | 18.1 | 25.0 | 0 | 46 | 0% | 2.3 | 25.0 | 10.5 | 0.58 | 1.6 | 21.2 | 15.0 |
| NWTPH-Heavy Oil (mg/L) | 0.03 | 1.90 | 0.63 | 0.54 | 49 | 51 | 96% | 0.29 | 1.10 | 0.36 | 0.57 | 0.05 | 0.73 | 0.53 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 80 | 1300000 | 37092 | 3500 | 51 | 51 | 100% | 790 | 24000 | 182070 | 4.91 | 25495 | 88300 | -14116 |
| *E.coli* (CFU/100 ml) | 90 | 33000 | 11027 | 11000 | 7 | 7 | 100% | 1056 | 21000 | 11022 | 1.00 | 4166 | 21221 | 834 |
| *Enterococci* (CFU/100 ml) | 6200 | 210000 | 40543 | 9300 | 18 | 7 | 257% | 7100 | 99600 | 75038 | 1.85 | 28362 | 109941 | -28856 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 1.2 | 0.1 | 0.1 | 2 | 46 | 4% | 0.1 | 0.1 | 0.2 | 1.31 | 0.0 | 0.2 | 0.1 |
| Ethylbenzene (ug/L) | 0.1 | 0.4 | 0.1 | 0.1 | 4 | 46 | 9% | 0.1 | 0.1 | 0.1 | 0.47 | 0.0 | 0.1 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 1.1 | 0.2 | 0.2 | 4 | 46 | 9% | 0.2 | 0.2 | 0.2 | 0.68 | 0.0 | 0.3 | 0.2 |
| o-Xylene (ug/L) | 0.1 | 0.5 | 0.1 | 0.1 | 9 | 46 | 20% | 0.1 | 0.1 | 0.1 | 0.66 | 0.0 | 0.1 | 0.1 |
| Toluene (ug/L) | 0.1 | 1.2 | 0.2 | 0.1 | 52 | 46 | 113% | 0.1 | 0.3 | 0.2 | 1.24 | 0.0 | 0.2 | 0.1 |

# Table E-8 (Cont'd)
# Summary Statistics for Stormwater at OF230 WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.025 | 0.061 | 0.038 | 0.036 | 9 | 9 | 100% | 0.030 | 0.051 | 0.011 | 0.28 | 0.004 | 0.047 | 0.030 |
| BOD (mg/L) | 1.0 | 6.6 | 3.4 | 3.3 | 8 | 9 | 89% | 2.2 | 4.6 | 1.5 | 0.44 | 0.5 | 4.6 | 2.3 |
| Chloride (mg/L) | 1.32 | 21.30 | 8.75 | 9.20 | 9 | 9 | 100% | 1.98 | 13.70 | 6.14 | 0.70 | 2.05 | 13.47 | 4.03 |
| Conductivity (uS/cm) | 31.8 | 109.0 | 65.9 | 59.1 | 12 | 12 | 100% | 40.8 | 105.4 | 26.1 | 0.40 | 7.5 | 82.5 | 49.3 |
| Hardness (mg CaCO3/L) | 11.3 | 29.5 | 16.5 | 14.1 | 12 | 12 | 100% | 11.6 | 23.9 | 5.9 | 0.36 | 1.7 | 20.2 | 12.7 |
| pH (pH units) | 6.5 | 7.8 | 7.0 | 7.0 | 12 | 12 | 100% | 6.6 | 7.4 | 0.4 | 0.05 | 0.1 | 7.2 | 6.8 |
| TSS (mg/L) | 8.3 | 97.0 | 32.7 | 25.8 | 12 | 12 | 100% | 10.2 | 57.2 | 25.3 | 0.77 | 7.3 | 48.8 | 16.7 |
| Turbidity (NTU) | 6.8 | 26.0 | 14.5 | 14.6 | 9 | 9 | 100% | 7.4 | 19.8 | 6.1 | 0.42 | 2.0 | 19.1 | 9.8 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.098 | 0.379 | 0.159 | 0.123 | 11 | 11 | 100% | 0.107 | 0.218 | 0.082 | 0.51 | 0.025 | 0.214 | 0.104 |
| Phosphorus, Total (mg/L) | 0.067 | 0.127 | 0.097 | 0.095 | 11 | 11 | 100% | 0.077 | 0.123 | 0.021 | 0.22 | 0.006 | 0.111 | 0.083 |
| Phosphate, Ortho (mg/L) | 0.012 | 0.060 | 0.030 | 0.029 | 11 | 11 | 100% | 0.018 | 0.043 | 0.014 | 0.45 | 0.004 | 0.039 | 0.021 |
| Total Nitrogen (mg/L) | 0.33 | 0.64 | 0.50 | 0.49 | 11 | 11 | 100% | 0.40 | 0.64 | 0.10 | 0.21 | 0.03 | 0.57 | 0.43 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.032 | 0.176 | 0.061 | 0.050 | 3 | 12 | 25% | 0.033 | 0.070 | 0.038 | 0.63 | 0.011 | 0.085 | 0.036 |
| Cadmium, Dissolved (ug/L) | 0.020 | 0.125 | 0.030 | 0.023 | 1 | 12 | 8% | 0.020 | 0.023 | 0.030 | 0.99 | 0.009 | 0.049 | 0.011 |
| Copper (ug/L) | 3.84 | 14.70 | 8.05 | 8.35 | 12 | 12 | 100% | 4.85 | 10.92 | 2.92 | 0.36 | 0.84 | 9.90 | 6.19 |
| Copper, Dissolved (ug/L) | 1.96 | 7.66 | 3.62 | 3.27 | 12 | 12 | 100% | 2.34 | 4.66 | 1.55 | 0.43 | 0.45 | 4.61 | 2.63 |
| Lead (ug/L) | 2.09 | 16.50 | 6.89 | 6.27 | 12 | 12 | 100% | 2.35 | 9.30 | 3.95 | 0.57 | 1.14 | 9.39 | 4.38 |
| Lead, Dissolved (ug/L) | 0.208 | 3.740 | 0.636 | 0.333 | 12 | 12 | 100% | 0.223 | 0.602 | 0.986 | 1.55 | 0.285 | 1.262 | 0.010 |
| Mercury (ug/L) | 0.0040 | 0.0040 | 0.0040 | 0.0040 | 0 | 12 | 0% | 0.0040 | 0.0040 | 0.0000 | 0.00 | 0.0000 | 0.0040 | 0.0040 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 12 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 40.0 | 125.0 | 64.9 | 62.6 | 12 | 12 | 100% | 43.7 | 81.2 | 22.9 | 0.35 | 6.6 | 79.4 | 50.3 |
| Zinc, Dissolved (ug/L) | 28.2 | 74.5 | 36.0 | 32.5 | 12 | 12 | 100% | 28.7 | 40.4 | 12.6 | 0.35 | 3.6 | 44.0 | 28.0 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 12 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.469 | 0.049 | 0.013 | 8 | 12 | 67% | 0.005 | 0.019 | 0.132 | 2.68 | 0.038 | 0.133 | -0.035 |
| Acenaphthene (ug/L) | 0.005 | 0.011 | 0.005 | 0.005 | 1 | 12 | 8% | 0.005 | 0.005 | 0.002 | 0.33 | 0.001 | 0.007 | 0.004 |
| Acenaphthylene (ug/L) | 0.005 | 0.012 | 0.005 | 0.005 | 1 | 12 | 8% | 0.005 | 0.005 | 0.002 | 0.42 | 0.001 | 0.007 | 0.004 |
| Anthracene (ug/L) | 0.003 | 0.010 | 0.006 | 0.006 | 3 | 12 | 25% | 0.003 | 0.007 | 0.002 | 0.39 | 0.001 | 0.007 | 0.004 |
| Fluorene (ug/L) | 0.005 | 0.012 | 0.006 | 0.005 | 1 | 12 | 8% | 0.005 | 0.005 | 0.002 | 0.37 | 0.001 | 0.007 | 0.004 |
| Naphthalene (ug/L) | 0.013 | 0.528 | 0.066 | 0.017 | 7 | 11 | 64% | 0.013 | 0.038 | 0.154 | 2.33 | 0.046 | 0.169 | -0.037 |
| Phenanthrene (ug/L) | 0.004 | 0.128 | 0.043 | 0.035 | 11 | 12 | 92% | 0.018 | 0.066 | 0.031 | 0.74 | 0.009 | 0.063 | 0.023 |
| **Total LPAHs[1]** | 0.041 | 0.594 | 0.131 | 0.076 | 11 | 11 | 100% | 0.062 | 0.162 | 0.157 | 1.20 | 0.047 | 0.236 | 0.025 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.029 | 0.014 | 0.014 | 10 | 12 | 83% | 0.004 | 0.026 | 0.008 | 0.56 | 0.002 | 0.019 | 0.009 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.041 | 0.019 | 0.018 | 10 | 12 | 83% | 0.002 | 0.033 | 0.013 | 0.69 | 0.004 | 0.027 | 0.011 |
| Benzo(b,k)fluoranthene (ug/L) | 0.016 | 0.108 | 0.058 | 0.053 | 12 | 12 | 100% | 0.034 | 0.085 | 0.026 | 0.45 | 0.007 | 0.074 | 0.041 |
| Benzo(g,h,i)perylene (ug/L) | 0.009 | 0.053 | 0.028 | 0.029 | 12 | 12 | 100% | 0.016 | 0.041 | 0.012 | 0.44 | 0.004 | 0.036 | 0.020 |
| Chrysene (ug/L) | 0.009 | 0.061 | 0.030 | 0.027 | 12 | 12 | 100% | 0.015 | 0.058 | 0.016 | 0.54 | 0.005 | 0.040 | 0.020 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.003 | 0.003 | 0.003 | 0 | 12 | 0% | 0.003 | 0.003 | 0.000 | 0.00 | 0.000 | 0.003 | 0.003 |
| Fluoranthene (ug/L) | 0.016 | 0.141 | 0.057 | 0.048 | 12 | 12 | 100% | 0.024 | 0.094 | 0.035 | 0.61 | 0.010 | 0.079 | 0.035 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.039 | 0.019 | 0.021 | 9 | 12 | 75% | 0.003 | 0.033 | 0.012 | 0.64 | 0.004 | 0.027 | 0.011 |
| Pyrene (ug/L) | 0.018 | 0.106 | 0.061 | 0.057 | 12 | 12 | 100% | 0.026 | 0.102 | 0.029 | 0.47 | 0.008 | 0.079 | 0.043 |
| Retene (ug/L) | 0.003 | 0.026 | 0.010 | 0.009 | 10 | 12 | 83% | 0.003 | 0.014 | 0.006 | 0.64 | 0.002 | 0.014 | 0.006 |
| **Total HPAHs[2]** | 0.083 | 0.535 | 0.289 | 0.276 | 12 | 12 | 100% | 0.152 | 0.444 | 0.133 | 0.46 | 0.039 | 0.374 | 0.204 |
| **TOTAL PAHs** | 0.123 | 0.824 | 0.413 | 0.347 | 11 | 11 | 100% | 0.221 | 0.657 | 0.213 | 0.52 | 0.064 | 0.557 | 0.270 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.87 | 2.52 | 1.47 | 1.36 | 12 | 12 | 100% | 0.89 | 2.36 | 0.56 | 0.38 | 0.16 | 1.83 | 1.11 |
| Butyl benzyl phthalate (ug/L) | 0.201 | 0.602 | 0.237 | 0.205 | 1 | 12 | 8% | 0.201 | 0.206 | 0.115 | 0.48 | 0.033 | 0.310 | 0.164 |
| Diethyl phthalate (ug/L) | 0.156 | 0.667 | 0.258 | 0.160 | 4 | 12 | 33% | 0.158 | 0.398 | 0.165 | 0.64 | 0.047 | 0.363 | 0.154 |
| Dimethyl phthalate (ug/L) | 0.169 | 0.174 | 0.172 | 0.173 | 0 | 12 | 0% | 0.169 | 0.174 | 0.002 | 0.01 | 0.000 | 0.173 | 0.171 |
| Di-n-butyl phthalate (ug/L) | 0.147 | 0.558 | 0.308 | 0.334 | 7 | 12 | 58% | 0.149 | 0.454 | 0.152 | 0.49 | 0.044 | 0.405 | 0.212 |
| Di-n-Octyl phthalate (ug/L) | 0.179 | 0.185 | 0.183 | 0.183 | 0 | 12 | 0% | 0.180 | 0.184 | 0.002 | 0.01 | 0.001 | 0.184 | 0.181 |
| ***Total Phthalates[4]** | 0.98 | 3.30 | 1.92 | 1.85 | 12 | 12 | 100% | 1.04 | 2.75 | 0.71 | 0.37 | 0.20 | 2.37 | 1.47 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.012 | 0.124 | 0.048 | 0.035 | 11 | 11 | 100% | 0.014 | 0.069 | 0.033 | 0.69 | 0.010 | 0.070 | 0.026 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.05 | 0.05 | 0.05 | 0 | 4 | 0% | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 |
| NWTPH-Heavy Oil (mg/L) | 0.35 | 0.55 | 0.46 | 0.47 | 4 | 4 | 100% | 0.38 | 0.53 | 0.08 | 0.18 | 0.04 | 0.59 | 0.33 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 17000 | 33000 | 24500 | 24000 | 4 | 4 | 100% | 19100 | 30300 | 6557 | 0.27 | 3279 | 34934 | 14066 |
| E.coli (CFU/100 ml) | 11000 | 33000 | 17500 | 13000 | 4 | 4 | 100% | 11600 | 27000 | 10376 | 0.59 | 5188 | 34011 | 989 |
| Enterococci (CFU/100 ml) | 6200 | 26000 | 14200 | 12300 | 4 | 4 | 100% | 6920 | 23000 | 8904 | 0.63 | 4452 | 28368 | 32 |

# Table E-9
# Summary Statistics for Stormwater at OF235 Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.665 | 0.062 | 0.045 | 85 | 91 | 93% | 0.021 | 0.103 | 0.077 | 1.25 | 0.008 | 0.078 | 0.046 |
| BOD (mg/L) | 1.0 | 8.4 | 3.5 | 3.2 | 59 | 75 | 79% | 1.0 | 6.7 | 2.0 | 0.57 | 0.2 | 4.0 | 3.1 |
| Chloride (mg/L) | 0.82 | 114 | 10.40 | 4.44 | 83 | 84 | 99% | 2.34 | 23.78 | 17.63 | 1.69 | 1.92 | 14.23 | 6.58 |
| Conductivity (uS/cm) | 7.2 | 1590 | 128.2 | 81.8 | 164 | 164 | 100% | 51.8 | 214.2 | 169.3 | 1.32 | 13.2 | 154.3 | 102.1 |
| Hardness (mg CaCO3/L) | 9.8 | 63.9 | 30.0 | 28.0 | 230 | 230 | 100% | 19.4 | 42.5 | 9.9 | 0.33 | 0.7 | 31.3 | 28.7 |
| pH (pH units) | 5.4 | 8.6 | 7.0 | 7.1 | 230 | 230 | 100% | 6.4 | 7.5 | 0.5 | 0.07 | 0.0 | 7.1 | 7.0 |
| TSS (mg/L) | 5.6 | 441 | 56.2 | 39.4 | 225 | 225 | 100% | 14.6 | 110.2 | 54.3 | 0.97 | 3.6 | 63.3 | 49.1 |
| Turbidity (NTU) | 5.1 | 79.5 | 18.9 | 15.9 | 61 | 61 | 100% | 8.1 | 31.8 | 11.8 | 0.62 | 1.5 | 21.9 | 15.8 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.028 | 1.650 | 0.334 | 0.237 | 110 | 110 | 100% | 0.163 | 0.666 | 0.271 | 0.81 | 0.026 | 0.385 | 0.283 |
| Phosphorus, Total (mg/L) | 0.019 | 0.532 | 0.119 | 0.094 | 108 | 108 | 100% | 0.058 | 0.211 | 0.090 | 0.76 | 0.009 | 0.137 | 0.102 |
| Phosphate, Ortho (mg/L) | 0.004 | 0.097 | 0.027 | 0.024 | 110 | 110 | 100% | 0.013 | 0.043 | 0.015 | 0.56 | 0.001 | 0.030 | 0.024 |
| Total Nitrogen (mg/L) | 0.02 | 3.28 | 0.77 | 0.63 | 107 | 110 | 97% | 0.36 | 1.33 | 0.54 | 0.70 | 0.05 | 0.87 | 0.67 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 0.960 | 0.131 | 0.087 | 98 | 145 | 68% | 0.032 | 0.267 | 0.144 | 1.10 | 0.012 | 0.155 | 0.107 |
| Cadmium, Dissolved (ug/L) | 0.005 | 0.379 | 0.048 | 0.025 | 65 | 146 | 45% | 0.018 | 0.101 | 0.049 | 1.01 | 0.004 | 0.056 | 0.040 |
| Copper (ug/L) | 3.45 | 162 | 28.05 | 22.50 | 145 | 145 | 100% | 14.12 | 44.94 | 21.14 | 0.75 | 1.76 | 31.52 | 24.58 |
| Copper, Dissolved (ug/L) | 1.79 | 79.10 | 11.77 | 9.64 | 145 | 146 | 99% | 5.88 | 18.85 | 9.25 | 0.79 | 0.77 | 13.28 | 10.25 |
| Lead (ug/L) | 2.46 | 368 | 54.19 | 41.15 | 230 | 230 | 100% | 21.78 | 98.01 | 42.60 | 0.79 | 2.81 | 59.73 | 48.66 |
| Lead, Dissolved (ug/L) | 0.156 | 28.00 | 6.12 | 4.500 | 227 | 231 | 98% | 2.045 | 12.400 | 4.988 | 0.81 | 0.328 | 6.769 | 5.476 |
| Mercury (ug/L) | 0.0004 | 0.1900 | 0.0242 | 0.0250 | 88 | 231 | 38% | 0.0040 | 0.0550 | 0.0311 | 1.28 | 0.0020 | 0.0283 | 0.0202 |
| Mercury, Dissolved (ug/L) | 0.0000 | 0.1000 | 0.0153 | 0.0250 | 24 | 231 | 10% | 0.0009 | 0.0250 | 0.0124 | 0.81 | 0.0008 | 0.0169 | 0.0137 |
| Zinc (ug/L) | 34.3 | 598 | 110.6 | 86.5 | 229 | 229 | 100% | 46.8 | 189.2 | 78.8 | 0.71 | 5.2 | 120.9 | 100.4 |
| Zinc, Dissolved (ug/L) | 9.7 | 347 | 42.5 | 33.4 | 229 | 229 | 100% | 22.3 | 69.0 | 32.9 | 0.77 | 2.2 | 46.8 | 38.3 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 12.0 | 0.590 | 0.140 | 52 | 84 | 62% | 0.032 | 1.249 | 1.496 | 2.54 | 0.163 | 0.914 | 0.265 |
| Carbaryl (ug/L | 0.03 | 0.25 | 0.12 | 0.03 | 0 | 33 | 0% | 0.03 | 0.25 | 0.11 | 0.88 | 0.02 | 0.16 | 0.09 |
| Chlorpyrifos (ug/L) | 0.003 | 0.707 | 0.024 | 0.009 | 2 | 111 | 2% | 0.004 | 0.058 | 0.068 | 2.87 | 0.006 | 0.036 | 0.011 |
| Bifenthrin (ug/L) | 0.000 | 0.005 | 0.005 | 0.005 | 2 | 28 | 7% | 0.005 | 0.005 | 0.001 | 0.28 | 0.000 | 0.005 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.001 | 4.130 | 0.034 | 0.010 | 154 | 231 | 67% | 0.003 | 0.035 | 0.272 | 7.98 | 0.018 | 0.069 | -0.001 |
| Acenaphthene (ug/L) | 0.002 | 0.086 | 0.009 | 0.005 | 85 | 231 | 37% | 0.002 | 0.019 | 0.010 | 1.19 | 0.001 | 0.010 | 0.007 |
| Acenaphthylene (ug/L) | 0.001 | 0.060 | 0.006 | 0.005 | 62 | 231 | 27% | 0.002 | 0.013 | 0.007 | 1.04 | 0.000 | 0.007 | 0.005 |
| Anthracene (ug/L) | 0.002 | 0.138 | 0.014 | 0.006 | 117 | 231 | 51% | 0.003 | 0.030 | 0.017 | 1.25 | 0.001 | 0.016 | 0.011 |
| Fluorene (ug/L) | 0.001 | 0.083 | 0.011 | 0.005 | 109 | 231 | 47% | 0.003 | 0.025 | 0.014 | 1.22 | 0.001 | 0.013 | 0.009 |
| Naphthalene (ug/L) | 0.000 | 4.430 | 0.043 | 0.015 | 151 | 228 | 66% | 0.005 | 0.053 | 0.293 | 6.83 | 0.019 | 0.081 | 0.005 |
| Phenanthrene (ug/L) | 0.002 | 0.776 | 0.071 | 0.028 | 209 | 231 | 90% | 0.009 | 0.187 | 0.104 | 1.46 | 0.007 | 0.085 | 0.058 |
| **Total LPAHs[1]** | 0.009 | 4.930 | 0.148 | 0.066 | 231 | 230 | 100% | 0.024 | 0.315 | 0.353 | 2.38 | 0.023 | 0.194 | 0.102 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.555 | 0.043 | 0.018 | 191 | 231 | 83% | 0.003 | 0.121 | 0.066 | 1.54 | 0.004 | 0.051 | 0.034 |
| Benzo(a)pyrene (ug/L) | 0.001 | 0.498 | 0.045 | 0.020 | 180 | 231 | 78% | 0.004 | 0.122 | 0.067 | 1.49 | 0.004 | 0.054 | 0.036 |
| Benzo(b,k)fluoranthene (ug/L) | 0.002 | 1.199 | 0.113 | 0.053 | 205 | 231 | 89% | 0.008 | 0.330 | 0.159 | 1.40 | 0.010 | 0.134 | 0.092 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.410 | 0.052 | 0.027 | 209 | 231 | 90% | 0.006 | 0.142 | 0.063 | 1.21 | 0.004 | 0.061 | 0.044 |
| Chrysene (ug/L) | 0.002 | 0.678 | 0.085 | 0.034 | 219 | 231 | 95% | 0.009 | 0.240 | 0.117 | 1.37 | 0.008 | 0.101 | 0.070 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.154 | 0.010 | 0.004 | 99 | 231 | 43% | 0.002 | 0.027 | 0.015 | 1.46 | 0.001 | 0.012 | 0.008 |
| Fluoranthene (ug/L) | 0.002 | 1.550 | 0.143 | 0.054 | 228 | 231 | 99% | 0.024 | 0.391 | 0.197 | 1.38 | 0.013 | 0.169 | 0.117 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.338 | 0.035 | 0.019 | 187 | 231 | 81% | 0.003 | 0.096 | 0.046 | 1.30 | 0.003 | 0.041 | 0.029 |
| Pyrene (ug/L) | 0.002 | 1.164 | 0.146 | 0.066 | 229 | 231 | 99% | 0.026 | 0.382 | 0.184 | 1.26 | 0.012 | 0.169 | 0.122 |
| Retene (ug/L) | 0.003 | 0.115 | 0.014 | 0.009 | 23 | 26 | 88% | 0.005 | 0.018 | 0.021 | 1.48 | 0.004 | 0.023 | 0.006 |
| **Total HPAHs[2]** | 0.027 | 6.497 | 0.666 | 0.291 | 230 | 230 | 100% | 0.088 | 1.858 | 0.905 | 1.36 | 0.060 | 0.783 | 0.548 |
| **TOTAL PAHs** | 0.045 | 7.552 | 0.814 | 0.355 | 198 | 230 | 86% | 0.117 | 2.276 | 1.120 | 1.38 | 0.074 | 0.959 | 0.668 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.32 | 97.0 | 4.03 | 1.99 | 219 | 230 | 95% | 0.83 | 8.43 | 7.42 | 1.84 | 0.49 | 5.00 | 3.07 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 7.93 | 0.919 | 0.500 | 128 | 231 | 55% | 0.169 | 1.940 | 1.199 | 1.30 | 0.079 | 1.074 | 0.764 |
| Diethyl phthalate (ug/L) | 0.077 | 590 | 3.016 | 0.273 | 84 | 231 | 36% | 0.142 | 0.800 | 38.795 | 12.86 | 2.553 | 8.045 | -2.013 |
| Dimethyl phthalate (ug/L) | 0.016 | 2.4 | 0.257 | 0.174 | 17 | 229 | 7% | 0.046 | 0.500 | 0.253 | 0.99 | 0.017 | 0.290 | 0.224 |
| Di-n-butyl phthalate (ug/L) | 0.050 | 1.6 | 0.344 | 0.331 | 87 | 231 | 38% | 0.144 | 0.500 | 0.189 | 0.55 | 0.012 | 0.368 | 0.319 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 3.2 | 0.429 | 0.219 | 63 | 230 | 27% | 0.042 | 1.019 | 0.507 | 1.18 | 0.033 | 0.495 | 0.363 |
| ***Total Phthalates[4]** | 0.00 | 596.40 | 7.90 | 2.97 | 226 | 231 | 98% | 0.89 | 11.90 | 39.86 | 5.05 | 2.62 | 13.06 | 2.73 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 3.390 | 0.092 | 0.034 | 81 | 134 | 60% | 0.010 | 0.145 | 0.311 | 3.38 | 0.027 | 0.145 | 0.039 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.31 | 0.05 | 0.05 | 6 | 73 | 8% | 0.02 | 0.10 | 0.04 | 0.79 | 0.00 | 0.06 | 0.04 |
| NWTPH-Gasoline (mg/L) | 2.3 | 50.0 | 18.3 | 25.0 | 13 | 67 | 19% | 2.3 | 25.0 | 11.5 | 0.63 | 1.4 | 21.1 | 15.5 |
| NWTPH-Heavy Oil (mg/L) | 0.03 | 1.70 | 0.61 | 0.54 | 67 | 73 | 92% | 0.20 | 1.18 | 0.38 | 0.62 | 0.04 | 0.70 | 0.52 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 80 | 160000 | 11190 | 3500 | 68 | 68 | 100% | 703 | 16000 | 22888 | 2.05 | 2776 | 16730 | 5650 |
| *E.coli* (CFU/100 ml) | 1300 | 7900 | 4480 | 4900 | 5 | 5 | 100% | 2100 | 6740 | 2431 | 0.54 | 1087 | 7499 | 1461 |
| *Enterococci* (CFU/100 ml) | 3700 | 350000 | 78500 | 21500 | 6 | 6 | 100% | 4000 | 210000 | 135221 | 1.72 | 55204 | 220406 | -63406 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 1.2 | 0.3 | 0.1 | 17 | 46 | 37% | 0.1 | 0.7 | 0.3 | 1.08 | 0.0 | 0.3 | 0.2 |
| Ethylbenzene (ug/L) | 0.1 | 0.4 | 0.1 | 0.1 | 7 | 46 | 15% | 0.1 | 0.2 | 0.1 | 0.62 | 0.0 | 0.2 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 0.6 | 0.2 | 0.2 | 4 | 46 | 9% | 0.2 | 0.2 | 0.1 | 0.40 | 0.0 | 0.3 | 0.2 |
| o-Xylene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 46 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Toluene (ug/L) | 0.1 | 1.2 | 0.2 | 0.1 | 13 | 46 | 28% | 0.1 | 0.3 | 0.2 | 1.10 | 0.0 | 0.2 | 0.1 |

# Table E-9 (Cont'd)
# Summary Statistics for Stormwater at OF235 WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.023 | 0.073 | 0.044 | 0.045 | 8 | 8 | 100% | 0.026 | 0.059 | 0.016 | 0.38 | 0.006 | 0.057 | 0.030 |
| BOD (mg/L) | 1.0 | 4.9 | 3.1 | 3.2 | 8 | 9 | 89% | 2.2 | 4.3 | 1.1 | 0.35 | 0.4 | 3.9 | 2.2 |
| Chloride (mg/L) | 1.27 | 13.50 | 5.18 | 4.45 | 8 | 8 | 100% | 2.15 | 8.49 | 3.82 | 0.74 | 1.35 | 8.38 | 1.99 |
| Conductivity (uS/cm) | 49.4 | 157.0 | 87.3 | 84.6 | 12 | 12 | 100% | 51.7 | 132.3 | 34.2 | 0.39 | 9.9 | 109.0 | 65.5 |
| Hardness (mg CaCO3/L) | 14.6 | 43.2 | 24.3 | 21.2 | 12 | 12 | 100% | 16.9 | 33.2 | 8.5 | 0.35 | 2.4 | 29.7 | 19.0 |
| pH (pH units) | 6.7 | 7.9 | 7.2 | 7.3 | 12 | 12 | 100% | 6.8 | 7.5 | 0.3 | 0.04 | 0.1 | 7.4 | 7.0 |
| TSS (mg/L) | 8.4 | 36.8 | 22.4 | 21.7 | 12 | 12 | 100% | 12.0 | 33.1 | 8.6 | 0.39 | 2.5 | 27.9 | 16.9 |
| Turbidity (NTU) | 7.1 | 33.5 | 16.1 | 14.9 | 8 | 8 | 100% | 7.3 | 23.7 | 8.3 | 0.52 | 2.9 | 23.0 | 9.2 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.177 | 0.319 | 0.220 | 0.205 | 10 | 10 | 100% | 0.177 | 0.286 | 0.048 | 0.22 | 0.015 | 0.254 | 0.186 |
| Phosphorus, Total (mg/L) | 0.061 | 0.148 | 0.100 | 0.095 | 10 | 10 | 100% | 0.066 | 0.135 | 0.028 | 0.28 | 0.009 | 0.120 | 0.080 |
| Phosphate, Ortho (mg/L) | 0.021 | 0.078 | 0.037 | 0.036 | 10 | 10 | 100% | 0.021 | 0.050 | 0.017 | 0.46 | 0.005 | 0.049 | 0.025 |
| Total Nitrogen (mg/L) | 0.42 | 0.65 | 0.54 | 0.56 | 10 | 10 | 100% | 0.42 | 0.65 | 0.09 | 0.16 | 0.03 | 0.60 | 0.48 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.050 | 0.173 | 0.114 | 0.101 | 10 | 11 | 91% | 0.071 | 0.167 | 0.041 | 0.36 | 0.012 | 0.141 | 0.086 |
| Cadmium, Dissolved (ug/L) | 0.020 | 0.111 | 0.050 | 0.041 | 6 | 11 | 55% | 0.020 | 0.096 | 0.032 | 0.64 | 0.010 | 0.071 | 0.028 |
| Copper (ug/L) | 4.11 | 25.20 | 17.20 | 18.20 | 12 | 12 | 100% | 13.76 | 21.23 | 5.24 | 0.30 | 1.51 | 20.53 | 13.87 |
| Copper, Dissolved (ug/L) | 2.00 | 11.70 | 7.93 | 9.00 | 12 | 12 | 100% | 3.07 | 10.75 | 3.14 | 0.40 | 0.91 | 9.93 | 5.94 |
| Lead (ug/L) | 2.46 | 32.70 | 22.87 | 24.25 | 12 | 12 | 100% | 18.79 | 28.73 | 7.53 | 0.33 | 2.17 | 27.65 | 18.09 |
| Lead, Dissolved (ug/L) | 0.412 | 11.100 | 4.174 | 3.745 | 12 | 12 | 100% | 1.404 | 5.647 | 2.757 | 0.66 | 0.796 | 5.926 | 2.423 |
| Mercury (ug/L) | 0.0040 | 0.0040 | 0.0040 | 0.0040 | 0 | 12 | 0% | 0.0040 | 0.0040 | 0.0000 | 0.00 | 0.0000 | 0.0040 | 0.0040 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 12 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 43.8 | 93.0 | 58.0 | 55.6 | 12 | 12 | 100% | 44.7 | 65.0 | 13.1 | 0.23 | 3.8 | 66.3 | 49.6 |
| Zinc, Dissolved (ug/L) | 9.7 | 33.4 | 25.3 | 25.6 | 12 | 12 | 100% | 22.0 | 32.4 | 6.1 | 0.24 | 1.8 | 29.2 | 21.4 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 12 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.037 | 0.018 | 0.017 | 8 | 12 | 67% | 0.005 | 0.034 | 0.012 | 0.67 | 0.003 | 0.026 | 0.010 |
| Acenaphthene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 12 | 0% | 0.005 | 0.005 | 0.000 | 0.04 | 0.000 | 0.005 | 0.005 |
| Acenaphthylene (ug/L) | 0.005 | 0.023 | 0.006 | 0.005 | 1 | 12 | 8% | 0.005 | 0.005 | 0.005 | 0.88 | 0.002 | 0.009 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.026 | 0.008 | 0.006 | 3 | 12 | 25% | 0.003 | 0.021 | 0.008 | 0.97 | 0.002 | 0.013 | 0.003 |
| Fluorene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 12 | 0% | 0.005 | 0.005 | 0.000 | 0.05 | 0.000 | 0.005 | 0.005 |
| Naphthalene (ug/L) | 0.008 | 0.047 | 0.021 | 0.013 | 5 | 11 | 45% | 0.008 | 0.036 | 0.013 | 0.60 | 0.004 | 0.030 | 0.013 |
| Phenanthrene (ug/L) | 0.009 | 0.036 | 0.025 | 0.024 | 11 | 12 | 92% | 0.017 | 0.036 | 0.008 | 0.32 | 0.002 | 0.030 | 0.020 |
| **Total LPAHs[1]** | 0.042 | 0.095 | 0.070 | 0.066 | 11 | 11 | 100% | 0.045 | 0.093 | 0.019 | 0.27 | 0.006 | 0.082 | 0.057 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.037 | 0.015 | 0.016 | 10 | 12 | 83% | 0.003 | 0.024 | 0.010 | 0.62 | 0.003 | 0.021 | 0.009 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.030 | 0.015 | 0.019 | 9 | 12 | 75% | 0.002 | 0.023 | 0.010 | 0.65 | 0.003 | 0.021 | 0.009 |
| Benzo(b,k)fluoranthene (ug/L) | 0.024 | 0.079 | 0.048 | 0.046 | 12 | 12 | 100% | 0.032 | 0.064 | 0.016 | 0.32 | 0.004 | 0.058 | 0.038 |
| Benzo(g,h,i)perylene (ug/L) | 0.015 | 0.038 | 0.024 | 0.023 | 12 | 12 | 100% | 0.017 | 0.034 | 0.007 | 0.29 | 0.002 | 0.029 | 0.020 |
| Chrysene (ug/L) | 0.015 | 0.052 | 0.027 | 0.025 | 12 | 12 | 100% | 0.016 | 0.038 | 0.012 | 0.43 | 0.003 | 0.035 | 0.020 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.003 | 0.003 | 0.003 | 0 | 12 | 0% | 0.003 | 0.003 | 0.000 | 0.00 | 0.000 | 0.003 | 0.003 |
| Fluoranthene (ug/L) | 0.024 | 0.074 | 0.044 | 0.042 | 12 | 12 | 100% | 0.028 | 0.061 | 0.014 | 0.33 | 0.004 | 0.053 | 0.035 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.022 | 0.016 | 0.018 | 11 | 12 | 92% | 0.011 | 0.021 | 0.005 | 0.33 | 0.002 | 0.020 | 0.013 |
| Pyrene (ug/L) | 0.030 | 0.096 | 0.061 | 0.055 | 12 | 12 | 100% | 0.033 | 0.087 | 0.021 | 0.35 | 0.006 | 0.074 | 0.047 |
| Retene (ug/L) | 0.003 | 0.115 | 0.019 | 0.011 | 11 | 12 | 92% | 0.007 | 0.017 | 0.030 | 1.57 | 0.009 | 0.039 | 0.000 |
| **Total HPAHs[2]** | 0.133 | 0.406 | 0.254 | 0.260 | 12 | 12 | 100% | 0.154 | 0.340 | 0.082 | 0.32 | 0.024 | 0.306 | 0.202 |
| **TOTAL PAHs** | 0.178 | 0.486 | 0.328 | 0.364 | 11 | 11 | 100% | 0.216 | 0.425 | 0.095 | 0.29 | 0.029 | 0.392 | 0.264 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.78 | 2.93 | 1.36 | 1.33 | 12 | 12 | 100% | 0.84 | 1.61 | 0.57 | 0.42 | 0.16 | 1.72 | 0.99 |
| Butyl benzyl phthalate (ug/L) | 0.204 | 1.910 | 0.729 | 0.542 | 8 | 12 | 67% | 0.204 | 1.675 | 0.592 | 0.81 | 0.171 | 1.105 | 0.353 |
| Diethyl phthalate (ug/L) | 0.158 | 0.549 | 0.311 | 0.351 | 7 | 12 | 58% | 0.159 | 0.495 | 0.147 | 0.47 | 0.042 | 0.404 | 0.218 |
| Dimethyl phthalate (ug/L) | 0.168 | 0.175 | 0.172 | 0.172 | 0 | 12 | 0% | 0.168 | 0.174 | 0.002 | 0.01 | 0.001 | 0.173 | 0.170 |
| Di-n-butyl phthalate (ug/L) | 0.148 | 0.559 | 0.334 | 0.347 | 7 | 12 | 58% | 0.149 | 0.525 | 0.175 | 0.52 | 0.051 | 0.445 | 0.223 |
| Di-n-Octyl phthalate (ug/L) | 0.178 | 0.185 | 0.182 | 0.182 | 0 | 12 | 0% | 0.178 | 0.184 | 0.002 | 0.01 | 0.001 | 0.183 | 0.180 |
| ***Total Phthalates[4]** | 0.83 | 4.99 | 2.53 | 2.12 | 12 | 12 | 100% | 1.12 | 4.50 | 1.38 | 0.55 | 0.40 | 3.41 | 1.65 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 0.320 | 0.067 | 0.034 | 10 | 11 | 91% | 0.012 | 0.116 | 0.090 | 1.34 | 0.027 | 0.127 | 0.007 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.05 | 0.05 | 0.05 | 0 | 4 | 0% | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 |
| NWTPH-Heavy Oil (mg/L) | 0.33 | 0.52 | 0.44 | 0.46 | 4 | 4 | 100% | 0.36 | 0.51 | 0.08 | 0.19 | 0.04 | 0.57 | 0.31 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 3300 | 24000 | 11733 | 7900 | 3 | 3 | 100% | 4220 | 20780 | 10869 | 0.93 | 6275 | 38734 | -15268 |
| E.coli (CFU/100 ml) | 3300 | 7900 | 5367 | 4900 | 3 | 3 | 100% | 3620 | 7300 | 2335 | 0.44 | 1348 | 11168 | -434 |
| Enterococci (CFU/100 ml) | 3700 | 350000 | 119333 | 4300 | 3 | 3 | 100% | 3820 | 280860 | 199763 | 1.67 | 115333 | 615573 | -376907 |

# Table E-10
# Summary Statistics for Stormwater at OF237A New Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.096 | 0.042 | 0.039 | 57 | 60 | 95% | 0.023 | 0.070 | 0.020 | 0.47 | 0.003 | 0.048 | 0.037 |
| BOD (mg/L) | 1.0 | 7.0 | 3.0 | 2.8 | 45 | 56 | 80% | 1.0 | 5.2 | 1.6 | 0.52 | 0.2 | 3.4 | 2.6 |
| Chloride (mg/L) | 1.79 | 154 | 12.66 | 7.04 | 58 | 60 | 97% | 3.56 | 21.83 | 20.41 | 1.61 | 2.64 | 17.93 | 7.39 |
| Conductivity (uS/cm) | 7.5 | 1190 | 114 | 88.4 | 135 | 135 | 100% | 54.2 | 160.6 | 120.5 | 1.06 | 10.4 | 134.3 | 93.3 |
| Hardness (mg CaCO3/L) | 14.5 | 68.8 | 30.1 | 28.3 | 198 | 198 | 100% | 20.5 | 41.3 | 9.7 | 0.32 | 0.7 | 31.5 | 28.8 |
| pH (pH units) | 5.3 | 8.3 | 6.9 | 6.9 | 197 | 197 | 100% | 6.3 | 7.4 | 0.5 | 0.07 | 0.0 | 6.9 | 6.8 |
| TSS (mg/L) | 3.5 | 668 | 49.1 | 33.9 | 197 | 197 | 100% | 16.3 | 86.3 | 62.7 | 1.28 | 4.5 | 57.9 | 40.3 |
| Turbidity (NTU) | 6.1 | 57.1 | 19.7 | 17.9 | 61 | 61 | 100% | 11.7 | 32.4 | 9.7 | 0.49 | 1.2 | 22.1 | 17.2 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.161 | 1.090 | 0.407 | 0.374 | 72 | 72 | 100% | 0.229 | 0.639 | 0.173 | 0.43 | 0.020 | 0.447 | 0.366 |
| Phosphorus, Total (mg/L) | 0.041 | 1.150 | 0.110 | 0.085 | 72 | 72 | 100% | 0.055 | 0.151 | 0.134 | 1.22 | 0.016 | 0.141 | 0.079 |
| Phosphate, Ortho (mg/L) | 0.009 | 0.054 | 0.023 | 0.021 | 72 | 72 | 100% | 0.012 | 0.039 | 0.010 | 0.46 | 0.001 | 0.025 | 0.020 |
| Total Nitrogen (mg/L) | 0.36 | 2.03 | 0.69 | 0.61 | 72 | 72 | 100% | 0.42 | 0.99 | 0.28 | 0.41 | 0.03 | 0.76 | 0.62 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 0.615 | 0.077 | 0.061 | 45 | 79 | 57% | 0.030 | 0.119 | 0.082 | 1.07 | 0.009 | 0.095 | 0.058 |
| Cadmium, Dissolved (ug/L) | 0.005 | 0.073 | 0.023 | 0.021 | 13 | 79 | 16% | 0.008 | 0.028 | 0.011 | 0.49 | 0.001 | 0.025 | 0.020 |
| Copper (ug/L) | 4.43 | 69.10 | 10.23 | 7.87 | 79 | 79 | 100% | 5.49 | 13.74 | 9.03 | 0.88 | 1.02 | 12.25 | 8.21 |
| Copper, Dissolved (ug/L) | 1.51 | 12.10 | 3.31 | 2.76 | 79 | 79 | 100% | 1.94 | 4.56 | 1.75 | 0.53 | 0.20 | 3.70 | 2.92 |
| Lead (ug/L) | 1.40 | 80.60 | 11.55 | 8.21 | 197 | 198 | 99% | 3.86 | 24.22 | 10.83 | 0.94 | 0.77 | 13.07 | 10.03 |
| Lead, Dissolved (ug/L) | 0.081 | 3.460 | 0.535 | 0.364 | 142 | 198 | 72% | 0.173 | 1.215 | 0.506 | 0.95 | 0.036 | 0.606 | 0.464 |
| Mercury (ug/L) | 0.0004 | 0.100 | 0.0175 | 0.0250 | 65 | 198 | 33% | 0.0040 | 0.0250 | 0.0146 | 0.84 | 0.0010 | 0.0196 | 0.0155 |
| Mercury, Dissolved (ug/L) | 0.0009 | 0.100 | 0.0154 | 0.0250 | 23 | 197 | 12% | 0.0009 | 0.0250 | 0.0132 | 0.86 | 0.0009 | 0.0172 | 0.0135 |
| Zinc (ug/L) | 30.6 | 361.0 | 91.8 | 72.8 | 198 | 198 | 100% | 44.4 | 158.6 | 58.1 | 0.63 | 4.1 | 99.9 | 83.6 |
| Zinc, Dissolved (ug/L) | 16.9 | 289.0 | 46.5 | 35.3 | 198 | 198 | 100% | 22.4 | 77.5 | 36.5 | 0.79 | 2.6 | 51.6 | 41.4 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 2.500 | 0.299 | 0.135 | 42 | 50 | 84% | 0.037 | 0.676 | 0.449 | 1.50 | 0.063 | 0.426 | 0.171 |
| Carbaryl (ug/L | 0.03 | 0.25 | 0.14 | 0.13 | 0 | 31 | 0% | 0.03 | 0.25 | 0.11 | 0.75 | 0.02 | 0.18 | 0.10 |
| Chlorpyrifos (ug/L) | 0.003 | 0.365 | 0.025 | 0.009 | 2 | 71 | 3% | 0.003 | 0.059 | 0.045 | 1.78 | 0.005 | 0.036 | 0.015 |
| Bifenthrin (ug/L) | 0.000 | 0.054 | 0.009 | 0.005 | 6 | 20 | 30% | 0.005 | 0.019 | 0.012 | 1.24 | 0.003 | 0.015 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.001 | 0.104 | 0.015 | 0.011 | 133 | 197 | 68% | 0.003 | 0.030 | 0.015 | 1.02 | 0.001 | 0.017 | 0.013 |
| Acenaphthene (ug/L) | 0.002 | 0.532 | 0.010 | 0.005 | 42 | 197 | 21% | 0.002 | 0.013 | 0.039 | 4.09 | 0.003 | 0.015 | 0.004 |
| Acenaphthylene (ug/L) | 0.001 | 0.061 | 0.005 | 0.005 | 37 | 197 | 19% | 0.002 | 0.010 | 0.006 | 1.04 | 0.000 | 0.006 | 0.005 |
| Anthracene (ug/L) | 0.002 | 0.207 | 0.011 | 0.005 | 77 | 197 | 39% | 0.003 | 0.022 | 0.019 | 1.74 | 0.001 | 0.014 | 0.008 |
| Fluorene (ug/L) | 0.001 | 0.110 | 0.010 | 0.005 | 90 | 197 | 46% | 0.003 | 0.023 | 0.011 | 1.17 | 0.001 | 0.011 | 0.008 |
| Naphthalene (ug/L) | 0.002 | 0.150 | 0.023 | 0.018 | 135 | 196 | 69% | 0.005 | 0.048 | 0.021 | 0.89 | 0.001 | 0.026 | 0.020 |
| Phenanthrene (ug/L) | 0.002 | 0.893 | 0.082 | 0.037 | 185 | 197 | 94% | 0.010 | 0.195 | 0.127 | 1.55 | 0.009 | 0.100 | 0.064 |
| **Total LPAHs[1]** | 0.003 | 1.087 | 0.134 | 0.075 | 196 | 196 | 100% | 0.023 | 0.296 | 0.173 | 1.28 | 0.012 | 0.159 | 0.110 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.902 | 0.063 | 0.022 | 166 | 197 | 84% | 0.003 | 0.146 | 0.117 | 1.86 | 0.008 | 0.079 | 0.047 |
| Benzo(a)pyrene (ug/L) | 0.001 | 0.865 | 0.071 | 0.029 | 155 | 197 | 79% | 0.004 | 0.172 | 0.115 | 1.62 | 0.008 | 0.087 | 0.055 |
| Benzo(b,k)fluoranthene (ug/L) | 0.005 | 2.430 | 0.217 | 0.088 | 180 | 197 | 91% | 0.012 | 0.483 | 0.341 | 1.57 | 0.024 | 0.265 | 0.169 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.794 | 0.080 | 0.039 | 182 | 197 | 92% | 0.007 | 0.190 | 0.107 | 1.34 | 0.008 | 0.094 | 0.065 |
| Chrysene (ug/L) | 0.002 | 1.490 | 0.133 | 0.052 | 187 | 197 | 95% | 0.010 | 0.344 | 0.199 | 1.50 | 0.014 | 0.161 | 0.105 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.305 | 0.018 | 0.005 | 101 | 197 | 51% | 0.002 | 0.041 | 0.032 | 1.78 | 0.002 | 0.023 | 0.014 |
| Fluoranthene (ug/L) | 0.003 | 2.640 | 0.217 | 0.080 | 196 | 197 | 99% | 0.019 | 0.561 | 0.363 | 1.67 | 0.026 | 0.268 | 0.166 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.680 | 0.069 | 0.032 | 172 | 197 | 87% | 0.004 | 0.175 | 0.100 | 1.45 | 0.007 | 0.083 | 0.055 |
| Pyrene (ug/L) | 0.005 | 2.930 | 0.199 | 0.085 | 195 | 197 | 99% | 0.021 | 0.493 | 0.327 | 1.64 | 0.023 | 0.245 | 0.153 |
| Retene (ug/L) | 0.003 | 0.222 | 0.026 | 0.012 | 17 | 19 | 89% | 0.005 | 0.036 | 0.049 | 1.89 | 0.011 | 0.049 | 0.002 |
| **Total HPAHs[2]** | 0.029 | 12.263 | 1.050 | 0.400 | 197 | 197 | 100% | 0.078 | 2.523 | 1.656 | 1.58 | 0.118 | 1.283 | 0.817 |
| **TOTAL PAHs** | 0.033 | 13.295 | 1.188 | 0.507 | 196 | 196 | 100% | 0.109 | 2.827 | 1.815 | 1.53 | 0.130 | 1.444 | 0.932 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.20 | 13.70 | 2.00 | 1.40 | 160 | 196 | 82% | 0.50 | 4.40 | 1.81 | 0.90 | 0.13 | 2.26 | 1.75 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 2.920 | 0.384 | 0.290 | 38 | 197 | 19% | 0.144 | 0.500 | 0.343 | 0.89 | 0.024 | 0.432 | 0.336 |
| Diethyl phthalate (ug/L) | 0.079 | 230 | 1.917 | 0.244 | 65 | 197 | 33% | 0.130 | 1.100 | 16.521 | 8.62 | 1.177 | 4.238 | -0.404 |
| Dimethyl phthalate (ug/L) | 0.016 | 0.500 | 0.245 | 0.172 | 11 | 196 | 6% | 0.040 | 0.500 | 0.178 | 0.73 | 0.013 | 0.270 | 0.220 |
| Di-n-butyl phthalate (ug/L) | 0.095 | 4.800 | 0.390 | 0.400 | 78 | 197 | 40% | 0.145 | 0.517 | 0.362 | 0.93 | 0.026 | 0.441 | 0.339 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 2.500 | 0.345 | 0.250 | 48 | 195 | 25% | 0.106 | 0.501 | 0.290 | 0.84 | 0.021 | 0.386 | 0.304 |
| ***Total Phthalates[4]** | 0.00 | 230 | 4.00 | 1.86 | 174 | 197 | 88% | 0.00 | 5.94 | 16.58 | 4.14 | 1.18 | 6.33 | 1.67 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.010 | 1.080 | 0.070 | 0.046 | 63 | 89 | 71% | 0.012 | 0.114 | 0.119 | 1.70 | 0.013 | 0.095 | 0.045 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.32 | 0.05 | 0.05 | 3 | 52 | 6% | 0.02 | 0.05 | 0.04 | 0.88 | 0.01 | 0.06 | 0.04 |
| NWTPH-Gasoline (mg/L) | 2.3 | 25.0 | 18.1 | 25.0 | 0 | 46 | 0% | 2.3 | 25.0 | 10.5 | 0.58 | 1.6 | 21.2 | 15.0 |
| NWTPH-Heavy Oil (mg/L) | 0.03 | 2.10 | 0.58 | 0.57 | 47 | 52 | 90% | 0.24 | 0.89 | 0.34 | 0.58 | 0.05 | 0.67 | 0.49 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 230 | 80000 | 5623 | 2200 | 51 | 51 | 100% | 500 | 14000 | 11762 | 2.09 | 1647 | 8932 | 2315 |
| *E.coli* (CFU/100 ml) | 1100 | 14000 | 4214 | 2800 | 7 | 7 | 100% | 1280 | 8540 | 4491 | 1.07 | 1697 | 8367 | 61 |
| *Enterococci* (CFU/100 ml) | 3400 | 110000 | 20714 | 4500 | 7 | 7 | 100% | 3760 | 49700 | 39451 | 1.90 | 14911 | 57201 | -15772 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 46 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Ethylbenzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 46 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 0.2 | 0.2 | 0.2 | 0 | 46 | 0% | 0.2 | 0.2 | 0.0 | 0.00 | 0.0 | 0.2 | 0.2 |
| o-Xylene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 46 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Toluene (ug/L) | 0.1 | 0.8 | 0.1 | 0.1 | 4 | 46 | 9% | 0.1 | 0.1 | 0.1 | 0.87 | 0.0 | 0.2 | 0.1 |

# Table E-10 (Cont'd)
# Summary Statistics for Stormwater at OF237A WY2021

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.023 | 0.077 | 0.045 | 0.049 | 7 | 7 | 100% | 0.025 | 0.062 | 0.018 | 0.40 | 0.007 | 0.062 | 0.029 |
| BOD (mg/L) | 2.5 | 4.4 | 3.4 | 3.2 | 7 | 7 | 100% | 2.9 | 4.2 | 0.6 | 0.19 | 0.2 | 4.0 | 2.8 |
| Chloride (mg/L) | 4.35 | 21.80 | 12.54 | 13.80 | 7 | 7 | 100% | 5.81 | 19.88 | 6.41 | 0.51 | 2.42 | 18.47 | 6.62 |
| Conductivity (uS/cm) | 63.0 | 177.0 | 110.6 | 98.8 | 8 | 8 | 100% | 70.2 | 162.3 | 39.4 | 0.36 | 13.9 | 143.6 | 77.6 |
| Hardness (mg CaCO3/L) | 21.5 | 54.5 | 31.2 | 27.1 | 8 | 8 | 100% | 21.8 | 45.3 | 11.8 | 0.38 | 4.2 | 41.1 | 21.3 |
| pH (pH units) | 7.0 | 7.4 | 7.1 | 7.1 | 8 | 8 | 100% | 7.0 | 7.3 | 0.2 | 0.02 | 0.1 | 7.3 | 7.0 |
| TSS (mg/L) | 11.7 | 74.1 | 31.2 | 32.5 | 8 | 8 | 100% | 12.7 | 46.5 | 19.9 | 0.64 | 7.0 | 47.9 | 14.6 |
| Turbidity (NTU) | 6.1 | 32.4 | 17.7 | 15.2 | 7 | 7 | 100% | 9.0 | 28.6 | 9.0 | 0.51 | 3.4 | 26.0 | 9.4 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.236 | 0.763 | 0.425 | 0.414 | 8 | 8 | 100% | 0.244 | 0.618 | 0.174 | 0.41 | 0.062 | 0.570 | 0.279 |
| Phosphorus, Total (mg/L) | 0.045 | 0.137 | 0.080 | 0.081 | 8 | 8 | 100% | 0.053 | 0.107 | 0.028 | 0.36 | 0.010 | 0.104 | 0.056 |
| Phosphate, Ortho (mg/L) | 0.009 | 0.024 | 0.015 | 0.015 | 8 | 8 | 100% | 0.009 | 0.020 | 0.005 | 0.33 | 0.002 | 0.019 | 0.011 |
| Total Nitrogen (mg/L) | 0.40 | 1.18 | 0.72 | 0.70 | 8 | 8 | 100% | 0.41 | 0.98 | 0.26 | 0.36 | 0.09 | 0.93 | 0.50 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.032 | 0.100 | 0.055 | 0.050 | 2 | 8 | 25% | 0.032 | 0.083 | 0.023 | 0.42 | 0.008 | 0.074 | 0.036 |
| Cadmium, Dissolved (ug/L) | 0.020 | 0.023 | 0.022 | 0.023 | 0 | 8 | 0% | 0.020 | 0.023 | 0.001 | 0.06 | 0.000 | 0.023 | 0.020 |
| Copper (ug/L) | 5.15 | 10.60 | 6.98 | 6.65 | 8 | 8 | 100% | 5.23 | 8.84 | 1.96 | 0.28 | 0.69 | 8.62 | 5.35 |
| Copper, Dissolved (ug/L) | 2.09 | 3.63 | 2.71 | 2.57 | 8 | 8 | 100% | 2.17 | 3.27 | 0.51 | 0.19 | 0.18 | 3.14 | 2.28 |
| Lead (ug/L) | 1.65 | 10.10 | 4.82 | 4.10 | 8 | 8 | 100% | 2.31 | 7.48 | 2.61 | 0.54 | 0.92 | 7.00 | 2.64 |
| Lead, Dissolved (ug/L) | 0.155 | 0.394 | 0.216 | 0.197 | 8 | 8 | 100% | 0.161 | 0.273 | 0.076 | 0.35 | 0.027 | 0.279 | 0.153 |
| Mercury (ug/L) | 0.0040 | 0.0110 | 0.0049 | 0.0040 | 1 | 8 | 13% | 0.0040 | 0.0061 | 0.0025 | 0.51 | 0.0009 | 0.0069 | 0.0028 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 8 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 33.4 | 69.7 | 48.8 | 46.3 | 8 | 8 | 100% | 38.4 | 61.5 | 11.0 | 0.23 | 3.9 | 58.1 | 39.6 |
| Zinc, Dissolved (ug/L) | 20.5 | 29.6 | 24.4 | 23.6 | 8 | 8 | 100% | 21.8 | 28.6 | 3.1 | 0.13 | 1.1 | 27.0 | 21.9 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.054 | 0.013 | 0.005 | 2 | 8 | 25% | 0.005 | 0.030 | 0.017 | 1.35 | 0.006 | 0.027 | -0.002 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.018 | 0.011 | 0.013 | 5 | 8 | 63% | 0.005 | 0.017 | 0.006 | 0.50 | 0.002 | 0.016 | 0.007 |
| Acenaphthene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 8 | 0% | 0.005 | 0.005 | 0.000 | 0.04 | 0.000 | 0.005 | 0.005 |
| Acenaphthylene (ug/L) | 0.005 | 0.017 | 0.007 | 0.005 | 2 | 8 | 25% | 0.005 | 0.016 | 0.005 | 0.73 | 0.002 | 0.012 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.006 | 0.005 | 0.006 | 0 | 8 | 0% | 0.003 | 0.006 | 0.002 | 0.39 | 0.001 | 0.006 | 0.003 |
| Fluorene (ug/L) | 0.005 | 0.025 | 0.007 | 0.005 | 1 | 8 | 13% | 0.005 | 0.011 | 0.007 | 0.98 | 0.003 | 0.013 | 0.001 |
| Naphthalene (ug/L) | 0.013 | 0.032 | 0.020 | 0.014 | 3 | 7 | 43% | 0.013 | 0.030 | 0.009 | 0.44 | 0.003 | 0.028 | 0.012 |
| Phenanthrene (ug/L) | 0.020 | 0.070 | 0.043 | 0.040 | 8 | 8 | 100% | 0.023 | 0.065 | 0.019 | 0.45 | 0.007 | 0.059 | 0.026 |
| **Total LPAHs[1]** | 0.054 | 0.147 | 0.087 | 0.083 | 7 | 7 | 100% | 0.056 | 0.122 | 0.032 | 0.36 | 0.012 | 0.117 | 0.058 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.070 | 0.026 | 0.021 | 7 | 8 | 88% | 0.008 | 0.048 | 0.022 | 0.83 | 0.008 | 0.044 | 0.008 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.076 | 0.040 | 0.047 | 7 | 8 | 88% | 0.011 | 0.062 | 0.025 | 0.64 | 0.009 | 0.061 | 0.018 |
| Benzo(b,k)fluoranthene (ug/L) | 0.032 | 1.140 | 0.226 | 0.118 | 8 | 8 | 100% | 0.046 | 0.441 | 0.372 | 1.64 | 0.131 | 0.537 | -0.085 |
| Benzo(g,h,i)perylene (ug/L) | 0.017 | 0.270 | 0.068 | 0.040 | 8 | 8 | 100% | 0.023 | 0.132 | 0.084 | 1.23 | 0.030 | 0.138 | -0.002 |
| Chrysene (ug/L) | 0.012 | 0.362 | 0.081 | 0.043 | 8 | 8 | 100% | 0.022 | 0.158 | 0.115 | 1.43 | 0.041 | 0.177 | -0.016 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.305 | 0.042 | 0.003 | 2 | 8 | 25% | 0.003 | 0.098 | 0.106 | 2.57 | 0.038 | 0.131 | -0.048 |
| Fluoranthene (ug/L) | 0.025 | 0.286 | 0.098 | 0.077 | 8 | 8 | 100% | 0.035 | 0.175 | 0.084 | 0.86 | 0.030 | 0.168 | 0.028 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.015 | 0.313 | 0.071 | 0.042 | 8 | 8 | 100% | 0.021 | 0.137 | 0.099 | 1.38 | 0.035 | 0.154 | -0.011 |
| Pyrene (ug/L) | 0.034 | 0.221 | 0.098 | 0.093 | 8 | 8 | 100% | 0.041 | 0.159 | 0.061 | 0.62 | 0.022 | 0.149 | 0.047 |
| Retene (ug/L) | 0.003 | 0.222 | 0.037 | 0.011 | 7 | 8 | 88% | 0.005 | 0.084 | 0.075 | 2.00 | 0.026 | 0.100 | -0.025 |
| **Total HPAHs[2]** | 0.163 | 3.043 | 0.749 | 0.486 | 8 | 8 | 100% | 0.220 | 1.402 | 0.946 | 1.26 | 0.334 | 1.540 | -0.041 |
| **TOTAL PAHs** | 0.217 | 3.190 | 0.866 | 0.511 | 7 | 7 | 100% | 0.278 | 1.758 | 1.046 | 1.21 | 0.396 | 1.834 | -0.102 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.84 | 1.86 | 1.26 | 1.34 | 8 | 8 | 100% | 0.85 | 1.59 | 0.36 | 0.28 | 0.13 | 1.56 | 0.96 |
| Butyl benzyl phthalate (ug/L) | 0.199 | 0.540 | 0.246 | 0.204 | 1 | 8 | 13% | 0.201 | 0.308 | 0.119 | 0.48 | 0.042 | 0.345 | 0.147 |
| Diethyl phthalate (ug/L) | 0.154 | 0.162 | 0.158 | 0.158 | 0 | 8 | 0% | 0.156 | 0.161 | 0.002 | 0.02 | 0.001 | 0.160 | 0.156 |
| Dimethyl phthalate (ug/L) | 0.168 | 0.176 | 0.172 | 0.172 | 0 | 8 | 0% | 0.170 | 0.175 | 0.003 | 0.02 | 0.001 | 0.174 | 0.170 |
| Di-n-butyl phthalate (ug/L) | 0.148 | 0.525 | 0.343 | 0.398 | 5 | 8 | 63% | 0.149 | 0.519 | 0.168 | 0.49 | 0.059 | 0.484 | 0.203 |
| Di-n-Octyl phthalate (ug/L) | 0.178 | 0.756 | 0.254 | 0.182 | 1 | 8 | 13% | 0.180 | 0.357 | 0.203 | 0.80 | 0.072 | 0.423 | 0.084 |
| ***Total Phthalates[4]** | 0.85 | 3.13 | 1.71 | 1.59 | 8 | 8 | 100% | 0.91 | 2.57 | 0.77 | 0.45 | 0.27 | 2.35 | 1.06 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.021 | 0.113 | 0.054 | 0.059 | 7 | 7 | 100% | 0.021 | 0.089 | 0.034 | 0.62 | 0.013 | 0.085 | 0.023 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.05 | 0.05 | 0.05 | 0 | 4 | 0% | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 |
| NWTPH-Heavy Oil (mg/L) | 0.24 | 0.62 | 0.47 | 0.52 | 4 | 4 | 100% | 0.32 | 0.59 | 0.16 | 0.35 | 0.08 | 0.73 | 0.21 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 1700 | 14000 | 6725 | 5600 | 4 | 4 | 100% | 2180 | 12170 | 5516 | 0.82 | 2758 | 15503 | -2053 |
| E.coli (CFU/100 ml) | 1100 | 14000 | 5575 | 3600 | 4 | 4 | 100% | 1460 | 11270 | 5836 | 1.05 | 2918 | 14862 | -3712 |
| Enterococci (CFU/100 ml) | 3400 | 9500 | 5450 | 4450 | 4 | 4 | 100% | 3700 | 8000 | 2745 | 0.50 | 1373 | 9818 | 1082 |

# Table E-11
# Summary Statistics for Stormwater at OF237B Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.357 | 0.051 | 0.039 | 76 | 85 | 89% | 0.018 | 0.074 | 0.050 | 0.99 | 0.005 | 0.061 | 0.040 |
| BOD (mg/L) | 1.0 | 8.5 | 3.0 | 2.7 | 55 | 70 | 79% | 1.0 | 5.3 | 1.8 | 0.59 | 0.2 | 3.4 | 2.6 |
| Chloride (mg/L) | 1.87 | 68.60 | 6.23 | 4.71 | 81 | 82 | 99% | 2.93 | 9.32 | 7.48 | 1.20 | 0.83 | 7.88 | 4.59 |
| Conductivity (uS/cm) | 39.5 | 708 | 133 | 123 | 145 | 145 | 100% | 81.5 | 184.0 | 67.8 | 0.51 | 5.6 | 144.2 | 121.9 |
| Hardness (mg CaCO3/L) | 20.7 | 1220 | 54.5 | 48.1 | 211 | 211 | 100% | 32.3 | 68.9 | 81.8 | 1.50 | 5.6 | 65.6 | 43.4 |
| pH (pH units) | 5.7 | 8.8 | 6.9 | 7.0 | 212 | 212 | 100% | 6.4 | 7.3 | 0.4 | 0.06 | 0.0 | 7.0 | 6.9 |
| TSS (mg/L) | 3.6 | 278 | 49.0 | 35.5 | 200 | 200 | 100% | 13.5 | 98.1 | 43.7 | 0.89 | 3.1 | 55.1 | 42.9 |
| Turbidity (NTU) | 7.2 | 50.2 | 19.8 | 18.5 | 57 | 57 | 100% | 10.9 | 32.0 | 9.4 | 0.47 | 1.2 | 22.3 | 17.4 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.190 | 2.720 | 1.179 | 1.110 | 107 | 107 | 100% | 0.728 | 1.764 | 0.417 | 0.35 | 0.040 | 1.259 | 1.099 |
| Phosphorus, Total (mg/L) | 0.017 | 0.564 | 0.105 | 0.088 | 105 | 106 | 99% | 0.054 | 0.173 | 0.065 | 0.62 | 0.006 | 0.117 | 0.092 |
| Phosphate, Ortho (mg/L) | 0.006 | 0.128 | 0.024 | 0.021 | 106 | 106 | 100% | 0.015 | 0.038 | 0.015 | 0.62 | 0.001 | 0.027 | 0.022 |
| Total Nitrogen (mg/L) | 0.13 | 3.19 | 1.28 | 1.23 | 106 | 107 | 99% | 0.71 | 1.96 | 0.52 | 0.41 | 0.05 | 1.38 | 1.18 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 0.455 | 0.086 | 0.063 | 72 | 122 | 59% | 0.030 | 0.179 | 0.076 | 0.88 | 0.007 | 0.099 | 0.072 |
| Cadmium, Dissolved (ug/L) | 0.005 | 0.106 | 0.034 | 0.025 | 42 | 123 | 34% | 0.017 | 0.075 | 0.024 | 0.71 | 0.002 | 0.038 | 0.029 |
| Copper (ug/L) | 2.93 | 27.90 | 7.89 | 6.47 | 120 | 120 | 100% | 4.03 | 12.60 | 4.37 | 0.55 | 0.40 | 8.68 | 7.10 |
| Copper, Dissolved (ug/L) | 0.75 | 8.06 | 2.61 | 2.22 | 116 | 117 | 99% | 1.60 | 3.84 | 1.21 | 0.47 | 0.11 | 2.83 | 2.38 |
| Lead (ug/L) | 1.40 | 64.20 | 10.10 | 6.70 | 208 | 210 | 99% | 2.44 | 22.82 | 9.79 | 0.97 | 0.68 | 11.43 | 8.77 |
| Lead, Dissolved (ug/L) | 0.003 | 11.400 | 0.541 | 0.280 | 141 | 212 | 67% | 0.162 | 0.886 | 0.998 | 1.84 | 0.069 | 0.676 | 0.406 |
| Mercury (ug/L) | 0.0004 | 0.2160 | 0.0200 | 0.0250 | 61 | 212 | 29% | 0.0040 | 0.0250 | 0.0266 | 1.33 | 0.0018 | 0.0236 | 0.0164 |
| Mercury, Dissolved (ug/L) | 0.0009 | 0.1000 | 0.0157 | 0.0250 | 19 | 212 | 9% | 0.0009 | 0.0250 | 0.0132 | 0.84 | 0.0009 | 0.0175 | 0.0140 |
| Zinc (ug/L) | 15.0 | 285.0 | 61.3 | 45.4 | 211 | 211 | 100% | 25.3 | 116.0 | 44.8 | 0.73 | 3.1 | 67.3 | 55.2 |
| Zinc, Dissolved (ug/L) | 6.3 | 260.0 | 24.7 | 19.1 | 211 | 212 | 100% | 12.5 | 40.5 | 23.5 | 0.95 | 1.6 | 27.9 | 21.5 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 2.100 | 0.344 | 0.170 | 45 | 72 | 63% | 0.029 | 0.675 | 0.445 | 1.29 | 0.052 | 0.448 | 0.239 |
| Carbaryl (ug/L | 0.03 | 0.25 | 0.13 | 0.13 | 0 | 26 | 0% | 0.03 | 0.25 | 0.11 | 0.80 | 0.02 | 0.18 | 0.09 |
| Chlorpyrifos (ug/L) | 0.003 | 0.061 | 0.019 | 0.009 | 1 | 94 | 1% | 0.004 | 0.059 | 0.018 | 0.97 | 0.002 | 0.023 | 0.015 |
| Bifenthrin (ug/L) | 0.000 | 0.005 | 0.005 | 0.005 | 2 | 25 | 8% | 0.005 | 0.005 | 0.001 | 0.22 | 0.000 | 0.005 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.002 | 0.250 | 0.012 | 0.006 | 122 | 212 | 58% | 0.004 | 0.022 | 0.020 | 1.69 | 0.001 | 0.015 | 0.009 |
| Acenaphthene (ug/L) | 0.002 | 0.063 | 0.006 | 0.005 | 37 | 212 | 17% | 0.002 | 0.011 | 0.006 | 1.02 | 0.000 | 0.006 | 0.005 |
| Acenaphthylene (ug/L) | 0.002 | 0.064 | 0.005 | 0.005 | 30 | 212 | 14% | 0.002 | 0.006 | 0.005 | 1.04 | 0.000 | 0.006 | 0.004 |
| Anthracene (ug/L) | 0.002 | 0.097 | 0.007 | 0.005 | 47 | 212 | 22% | 0.003 | 0.014 | 0.009 | 1.32 | 0.001 | 0.008 | 0.006 |
| Fluorene (ug/L) | 0.002 | 0.078 | 0.007 | 0.005 | 73 | 212 | 34% | 0.003 | 0.015 | 0.009 | 1.16 | 0.001 | 0.009 | 0.006 |
| Naphthalene (ug/L) | 0.003 | 0.130 | 0.017 | 0.013 | 134 | 210 | 64% | 0.005 | 0.030 | 0.014 | 0.83 | 0.001 | 0.018 | 0.015 |
| Phenanthrene (ug/L) | 0.002 | 0.838 | 0.045 | 0.021 | 186 | 212 | 88% | 0.009 | 0.112 | 0.076 | 1.67 | 0.005 | 0.056 | 0.035 |
| **Total LPAHs[1]** | 0.006 | 1.134 | 0.080 | 0.054 | 210 | 210 | 100% | 0.018 | 0.183 | 0.103 | 1.29 | 0.007 | 0.094 | 0.066 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.685 | 0.030 | 0.011 | 153 | 212 | 72% | 0.003 | 0.080 | 0.060 | 2.03 | 0.004 | 0.038 | 0.021 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.690 | 0.035 | 0.013 | 153 | 212 | 72% | 0.003 | 0.092 | 0.066 | 1.90 | 0.005 | 0.044 | 0.026 |
| Benzo(b,k)fluoranthene (ug/L) | 0.002 | 1.763 | 0.096 | 0.036 | 171 | 212 | 81% | 0.006 | 0.262 | 0.175 | 1.83 | 0.012 | 0.120 | 0.072 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.614 | 0.043 | 0.019 | 181 | 212 | 85% | 0.004 | 0.107 | 0.065 | 1.53 | 0.004 | 0.052 | 0.034 |
| Chrysene (ug/L) | 0.002 | 0.965 | 0.063 | 0.022 | 178 | 212 | 84% | 0.003 | 0.183 | 0.107 | 1.70 | 0.007 | 0.078 | 0.049 |
| Dibenz(a,h)anthracene (ug/L) | 0.001 | 0.143 | 0.009 | 0.004 | 75 | 212 | 35% | 0.002 | 0.021 | 0.013 | 1.54 | 0.001 | 0.010 | 0.007 |
| Fluoranthene (ug/L) | 0.003 | 1.835 | 0.095 | 0.036 | 208 | 212 | 98% | 0.010 | 0.255 | 0.174 | 1.83 | 0.012 | 0.119 | 0.072 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.546 | 0.031 | 0.014 | 159 | 212 | 75% | 0.003 | 0.075 | 0.052 | 1.69 | 0.004 | 0.038 | 0.024 |
| Pyrene (ug/L) | 0.002 | 1.493 | 0.098 | 0.041 | 203 | 212 | 96% | 0.012 | 0.273 | 0.157 | 1.60 | 0.011 | 0.119 | 0.077 |
| Retene (ug/L) | 0.003 | 0.022 | 0.007 | 0.007 | 15 | 23 | 65% | 0.003 | 0.012 | 0.005 | 0.66 | 0.001 | 0.009 | 0.005 |
| **Total HPAHs[2]** | 0.019 | 8.734 | 0.494 | 0.188 | 211 | 211 | 100% | 0.038 | 1.356 | 0.868 | 1.76 | 0.060 | 0.611 | 0.376 |
| **TOTAL PAHs** | 0.028 | 9.868 | 0.576 | 0.257 | 210 | 210 | 100% | 0.067 | 1.577 | 0.966 | 1.68 | 0.067 | 0.707 | 0.444 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.14 | 12.00 | 1.90 | 1.12 | 176 | 211 | 83% | 0.43 | 4.70 | 2.05 | 1.08 | 0.14 | 2.18 | 1.63 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 2.80 | 0.331 | 0.219 | 28 | 212 | 13% | 0.144 | 0.500 | 0.306 | 0.92 | 0.021 | 0.373 | 0.290 |
| Diethyl phthalate (ug/L) | 0.050 | 52.00 | 0.980 | 0.190 | 57 | 212 | 27% | 0.131 | 0.980 | 4.728 | 4.83 | 0.325 | 1.620 | 0.340 |
| Dimethyl phthalate (ug/L) | 0.016 | 0.550 | 0.245 | 0.174 | 6 | 211 | 3% | 0.038 | 0.500 | 0.178 | 0.72 | 0.012 | 0.269 | 0.221 |
| Di-n-butyl phthalate (ug/L) | 0.095 | 1.000 | 0.337 | 0.331 | 81 | 212 | 38% | 0.145 | 0.500 | 0.165 | 0.49 | 0.011 | 0.359 | 0.315 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 2.300 | 0.320 | 0.185 | 42 | 211 | 20% | 0.042 | 0.500 | 0.314 | 0.98 | 0.022 | 0.362 | 0.277 |
| ***Total Phthalates[4]** | 0.00 | 66.20 | 2.87 | 1.47 | 191 | 211 | 91% | 0.23 | 5.60 | 5.85 | 2.04 | 0.40 | 3.67 | 2.08 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.009 | 1.380 | 0.069 | 0.037 | 79 | 115 | 69% | 0.011 | 0.118 | 0.139 | 2.02 | 0.013 | 0.095 | 0.043 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.34 | 0.05 | 0.05 | 9 | 75 | 12% | 0.02 | 0.10 | 0.04 | 0.81 | 0.01 | 0.06 | 0.04 |
| NWTPH-Gasoline (mg/L) | 2.3 | 395.0 | 24.1 | 25.0 | 14 | 70 | 20% | 2.3 | 25.0 | 46.5 | 1.93 | 5.6 | 35.1 | 13.0 |
| NWTPH-Heavy Oil (mg/L) | 0.03 | 1.30 | 0.48 | 0.42 | 66 | 75 | 88% | 0.12 | 0.90 | 0.29 | 0.61 | 0.03 | 0.54 | 0.41 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 130 | 280000 | 8716 | 2400 | 72 | 72 | 100% | 300 | 16000 | 32877 | 3.77 | 3875 | 16442 | 991 |
| *E.coli* (CFU/100 ml) | 790 | 140000 | 25532 | 3150 | 6 | 6 | 100% | 945 | 72500 | 56111 | 2.20 | 22907 | 84417 | -33353 |
| *Enterococci* (CFU/100 ml) | 3100 | 220000 | 36429 | 6700 | 7 | 7 | 100% | 3340 | 94600 | 80996 | 2.22 | 30614 | 111338 | -38481 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 0.3 | 0.1 | 0.1 | 1 | 48 | 2% | 0.1 | 0.1 | 0.0 | 0.28 | 0.0 | 0.1 | 0.1 |
| Ethylbenzene (ug/L) | 0.1 | 0.8 | 0.1 | 0.1 | 1 | 48 | 2% | 0.1 | 0.1 | 0.1 | 0.88 | 0.0 | 0.1 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 3.5 | 0.3 | 0.2 | 1 | 48 | 2% | 0.2 | 0.2 | 0.5 | 1.77 | 0.1 | 0.4 | 0.1 |
| o-Xylene (ug/L) | 0.1 | 1.6 | 0.1 | 0.1 | 1 | 48 | 2% | 0.1 | 0.1 | 0.2 | 1.65 | 0.0 | 0.2 | 0.1 |
| Toluene (ug/L) | 0.1 | 4.0 | 0.2 | 0.1 | 2 | 48 | 4% | 0.1 | 0.1 | 0.6 | 3.07 | 0.1 | 0.3 | 0.0 |

# Table E-11 (Cont'd)
# Summary Statistics for Stormwater at OF237B WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.025 | 0.067 | 0.042 | 0.035 | 8 | 8 | 100% | 0.028 | 0.060 | 0.015 | 0.37 | 0.005 | 0.054 | 0.029 |
| BOD (mg/L) | 2.2 | 4.4 | 2.7 | 2.5 | 8 | 8 | 100% | 2.2 | 3.4 | 0.7 | 0.28 | 0.3 | 3.3 | 2.1 |
| Chloride (mg/L) | 3.64 | 7.58 | 5.50 | 5.05 | 8 | 8 | 100% | 4.30 | 7.27 | 1.39 | 0.25 | 0.49 | 6.66 | 4.34 |
| Conductivity (uS/cm) | 98.1 | 203.0 | 131.7 | 123.0 | 11 | 11 | 100% | 105.0 | 173.0 | 31.0 | 0.24 | 9.3 | 152.5 | 110.9 |
| Hardness (mg CaCO3/L) | 35.8 | 83.0 | 51.2 | 48.4 | 11 | 11 | 100% | 41.7 | 65.3 | 12.9 | 0.25 | 3.9 | 59.9 | 42.5 |
| pH (pH units) | 6.9 | 7.3 | 7.1 | 7.1 | 11 | 11 | 100% | 6.9 | 7.3 | 0.1 | 0.02 | 0.0 | 7.2 | 7.0 |
| TSS (mg/L) | 8.2 | 31.6 | 19.1 | 20.2 | 10 | 10 | 100% | 8.8 | 31.5 | 8.8 | 0.46 | 2.8 | 25.4 | 12.8 |
| Turbidity (NTU) | 10.8 | 24.8 | 16.8 | 16.7 | 8 | 8 | 100% | 11.1 | 23.5 | 5.3 | 0.32 | 1.9 | 21.2 | 12.3 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.902 | 1.850 | 1.131 | 1.045 | 10 | 10 | 100% | 0.957 | 1.283 | 0.273 | 0.24 | 0.086 | 1.327 | 0.936 |
| Phosphorus, Total (mg/L) | 0.047 | 0.102 | 0.076 | 0.074 | 10 | 10 | 100% | 0.048 | 0.101 | 0.020 | 0.26 | 0.006 | 0.089 | 0.062 |
| Phosphate, Ortho (mg/L) | 0.014 | 0.034 | 0.021 | 0.019 | 10 | 10 | 100% | 0.015 | 0.027 | 0.006 | 0.31 | 0.002 | 0.025 | 0.016 |
| Total Nitrogen (mg/L) | 0.97 | 2.28 | 1.33 | 1.24 | 10 | 10 | 100% | 1.02 | 1.53 | 0.37 | 0.28 | 0.12 | 1.59 | 1.06 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.032 | 0.050 | 0.042 | 0.050 | 0 | 11 | 0% | 0.032 | 0.050 | 0.010 | 0.23 | 0.003 | 0.048 | 0.035 |
| Cadmium, Dissolved (ug/L) | 0.020 | 0.023 | 0.021 | 0.023 | 0 | 11 | 0% | 0.020 | 0.023 | 0.001 | 0.06 | 0.000 | 0.022 | 0.020 |
| Copper (ug/L) | 3.10 | 6.57 | 4.90 | 5.06 | 11 | 11 | 100% | 3.75 | 6.18 | 1.03 | 0.21 | 0.31 | 5.59 | 4.20 |
| Copper, Dissolved (ug/L) | 1.61 | 2.66 | 2.08 | 2.03 | 11 | 11 | 100% | 1.72 | 2.57 | 0.36 | 0.17 | 0.11 | 2.33 | 1.84 |
| Lead (ug/L) | 1.40 | 4.60 | 3.09 | 3.15 | 11 | 11 | 100% | 1.79 | 4.37 | 1.11 | 0.36 | 0.33 | 3.83 | 2.34 |
| Lead, Dissolved (ug/L) | 0.059 | 0.315 | 0.228 | 0.245 | 11 | 11 | 100% | 0.180 | 0.279 | 0.067 | 0.29 | 0.020 | 0.273 | 0.183 |
| Mercury (ug/L) | 0.0040 | 0.0080 | 0.0044 | 0.0040 | 1 | 11 | 9% | 0.0040 | 0.0040 | 0.0012 | 0.28 | 0.0004 | 0.0052 | 0.0036 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 11 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 16.2 | 42.4 | 29.7 | 28.9 | 11 | 11 | 100% | 21.9 | 38.5 | 7.7 | 0.26 | 2.3 | 34.8 | 24.5 |
| Zinc, Dissolved (ug/L) | 8.2 | 24.2 | 15.0 | 14.3 | 11 | 11 | 100% | 10.9 | 20.8 | 4.6 | 0.30 | 1.4 | 18.1 | 12.0 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 11 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.045 | 0.010 | 0.005 | 4 | 11 | 36% | 0.005 | 0.012 | 0.012 | 1.14 | 0.004 | 0.018 | 0.002 |
| Acenaphthene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 11 | 0% | 0.005 | 0.005 | 0.000 | 0.04 | 0.000 | 0.005 | 0.005 |
| Acenaphthylene (ug/L) | 0.005 | 0.017 | 0.006 | 0.005 | 1 | 11 | 9% | 0.005 | 0.005 | 0.004 | 0.67 | 0.001 | 0.008 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.006 | 0.004 | 0.003 | 0 | 11 | 0% | 0.003 | 0.006 | 0.002 | 0.45 | 0.001 | 0.005 | 0.003 |
| Fluorene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 11 | 0% | 0.005 | 0.005 | 0.000 | 0.05 | 0.000 | 0.005 | 0.005 |
| Naphthalene (ug/L) | 0.008 | 0.041 | 0.017 | 0.013 | 4 | 10 | 40% | 0.008 | 0.026 | 0.010 | 0.58 | 0.003 | 0.024 | 0.010 |
| Phenanthrene (ug/L) | 0.004 | 0.021 | 0.013 | 0.012 | 6 | 11 | 55% | 0.009 | 0.021 | 0.006 | 0.46 | 0.002 | 0.016 | 0.009 |
| **Total LPAHs[1]** | 0.036 | 0.078 | 0.050 | 0.042 | 10 | 10 | 100% | 0.038 | 0.069 | 0.014 | 0.29 | 0.004 | 0.060 | 0.039 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.020 | 0.006 | 0.003 | 4 | 11 | 36% | 0.003 | 0.011 | 0.005 | 0.88 | 0.002 | 0.010 | 0.002 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.021 | 0.010 | 0.009 | 9 | 11 | 82% | 0.002 | 0.017 | 0.006 | 0.66 | 0.002 | 0.014 | 0.005 |
| Benzo(b,k)fluoranthene (ug/L) | 0.013 | 0.074 | 0.031 | 0.027 | 11 | 11 | 100% | 0.019 | 0.048 | 0.017 | 0.54 | 0.005 | 0.043 | 0.020 |
| Benzo(g,h,i)perylene (ug/L) | 0.008 | 0.030 | 0.014 | 0.014 | 11 | 11 | 100% | 0.008 | 0.019 | 0.006 | 0.43 | 0.002 | 0.019 | 0.010 |
| Chrysene (ug/L) | 0.004 | 0.031 | 0.014 | 0.012 | 8 | 11 | 73% | 0.004 | 0.022 | 0.008 | 0.62 | 0.003 | 0.019 | 0.008 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.016 | 0.004 | 0.003 | 1 | 11 | 9% | 0.003 | 0.003 | 0.004 | 0.94 | 0.001 | 0.007 | 0.002 |
| Fluoranthene (ug/L) | 0.013 | 0.043 | 0.024 | 0.023 | 11 | 11 | 100% | 0.014 | 0.038 | 0.010 | 0.41 | 0.003 | 0.030 | 0.017 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.029 | 0.011 | 0.011 | 9 | 11 | 82% | 0.003 | 0.016 | 0.007 | 0.67 | 0.002 | 0.016 | 0.006 |
| Pyrene (ug/L) | 0.017 | 0.046 | 0.031 | 0.032 | 11 | 11 | 100% | 0.020 | 0.046 | 0.011 | 0.34 | 0.003 | 0.039 | 0.024 |
| Retene (ug/L) | 0.003 | 0.008 | 0.006 | 0.007 | 7 | 11 | 64% | 0.003 | 0.008 | 0.003 | 0.45 | 0.001 | 0.007 | 0.004 |
| **Total HPAHs[2]** | 0.068 | 0.305 | 0.146 | 0.140 | 11 | 11 | 100% | 0.085 | 0.212 | 0.069 | 0.47 | 0.021 | 0.192 | 0.099 |
| **TOTAL PAHs** | 0.106 | 0.373 | 0.193 | 0.161 | 10 | 10 | 100% | 0.124 | 0.266 | 0.081 | 0.42 | 0.026 | 0.252 | 0.135 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.58 | 1.18 | 0.82 | 0.77 | 11 | 11 | 100% | 0.66 | 1.03 | 0.18 | 0.22 | 0.05 | 0.94 | 0.70 |
| Butyl benzyl phthalate (ug/L) | 0.199 | 0.209 | 0.204 | 0.205 | 0 | 11 | 0% | 0.201 | 0.206 | 0.003 | 0.01 | 0.001 | 0.206 | 0.202 |
| Diethyl phthalate (ug/L) | 0.154 | 0.162 | 0.158 | 0.159 | 0 | 11 | 0% | 0.155 | 0.160 | 0.002 | 0.01 | 0.001 | 0.160 | 0.157 |
| Dimethyl phthalate (ug/L) | 0.168 | 0.176 | 0.172 | 0.173 | 0 | 11 | 0% | 0.169 | 0.174 | 0.002 | 0.01 | 0.001 | 0.174 | 0.171 |
| Di-n-butyl phthalate (ug/L) | 0.149 | 0.487 | 0.283 | 0.321 | 7 | 11 | 64% | 0.150 | 0.361 | 0.115 | 0.41 | 0.035 | 0.361 | 0.206 |
| Di-n-Octyl phthalate (ug/L) | 0.178 | 0.187 | 0.182 | 0.183 | 0 | 11 | 0% | 0.179 | 0.184 | 0.002 | 0.01 | 0.001 | 0.184 | 0.181 |
| ***Total Phthalates[4]** | 0.89 | 1.24 | 1.05 | 1.03 | 11 | 11 | 100% | 0.93 | 1.22 | 0.12 | 0.11 | 0.04 | 1.13 | 0.97 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.012 | 0.106 | 0.048 | 0.038 | 10 | 10 | 100% | 0.017 | 0.092 | 0.031 | 0.65 | 0.010 | 0.070 | 0.025 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.05 | 0.05 | 0.05 | 0 | 4 | 0% | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 |
| NWTPH-Heavy Oil (mg/L) | 0.28 | 0.89 | 0.60 | 0.61 | 4 | 4 | 100% | 0.34 | 0.84 | 0.27 | 0.45 | 0.13 | 1.02 | 0.17 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 790 | 2400 | 1530 | 1400 | 3 | 3 | 100% | 912 | 2200 | 813 | 0.53 | 469 | 3549 | -489 |
| E.Coli (CFU/100 ml) | 790 | 1300 | 1063 | 1100 | 3 | 3 | 100% | 852 | 1260 | 257 | 0.24 | 148 | 1702 | 425 |
| Enterococci (CFU/100 ml) | 3100 | 11000 | 6200 | 5350 | 4 | 4 | 100% | 3220 | 9860 | 3694 | 0.60 | 1847 | 12078 | 322 |

# Table E-12
# Summary Statistics for Stormwater at OF243 Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.158 | 0.046 | 0.043 | 47 | 48 | 98% | 0.025 | 0.077 | 0.025 | 0.54 | 0.004 | 0.054 | 0.039 |
| BOD (mg/L) | 1.0 | 8.5 | 3.1 | 2.7 | 34 | 47 | 72% | 1.0 | 4.8 | 2.0 | 0.66 | 0.3 | 3.7 | 2.5 |
| Chloride (mg/L) | 261 | 25400 | 1968 | 1200 | 49 | 49 | 100% | 737 | 2606 | 3514 | 1.79 | 502 | 2977 | 959 |
| Conductivity (uS/cm) | 942 | 13300 | 5128 | 4210 | 91 | 91 | 100% | 2690 | 8490 | 2598 | 0.51 | 272 | 5669 | 4587 |
| Hardness (mg CaCO3/L) | 59.3 | 3150 | 517 | 430 | 137 | 137 | 100% | 229 | 873 | 358 | 0.69 | 30.6 | 578 | 457 |
| pH (pH units) | 6.1 | 7.8 | 7.0 | 7.1 | 137 | 137 | 100% | 6.7 | 7.3 | 0.3 | 0.04 | 0.0 | 7.1 | 7.0 |
| TSS (mg/L) | 4.4 | 300 | 64.2 | 41.8 | 134 | 134 | 100% | 15.3 | 153.6 | 58.9 | 0.92 | 5.1 | 74.2 | 54.1 |
| Turbidity (NTU) | 0.2 | 169 | 48.2 | 34.2 | 48 | 48 | 100% | 17.1 | 107.9 | 39.0 | 0.81 | 5.6 | 59.5 | 36.9 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.089 | 0.799 | 0.250 | 0.215 | 53 | 53 | 100% | 0.111 | 0.409 | 0.132 | 0.53 | 0.018 | 0.287 | 0.214 |
| Phosphorus, Total (mg/L) | 0.043 | 3.680 | 0.451 | 0.212 | 53 | 53 | 100% | 0.112 | 0.946 | 0.627 | 1.39 | 0.086 | 0.624 | 0.278 |
| Phosphate, Ortho (mg/L) | 0.009 | 0.138 | 0.034 | 0.031 | 53 | 53 | 100% | 0.016 | 0.047 | 0.021 | 0.63 | 0.003 | 0.040 | 0.028 |
| Total Nitrogen (mg/L) | 0.26 | 2.11 | 0.74 | 0.73 | 53 | 53 | 100% | 0.40 | 1.06 | 0.31 | 0.42 | 0.04 | 0.83 | 0.66 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 1.250 | 0.235 | 0.173 | 49 | 58 | 84% | 0.078 | 0.442 | 0.197 | 0.84 | 0.026 | 0.287 | 0.183 |
| Cadmium, Dissolved (ug/L) | 0.005 | 0.173 | 0.083 | 0.083 | 46 | 58 | 79% | 0.025 | 0.130 | 0.038 | 0.46 | 0.005 | 0.093 | 0.073 |
| Copper (ug/L) | 3.22 | 110.00 | 21.13 | 17.15 | 58 | 58 | 100% | 9.64 | 36.72 | 16.54 | 0.78 | 2.17 | 25.48 | 16.78 |
| Copper, Dissolved (ug/L) | 0.95 | 8.58 | 3.83 | 3.61 | 58 | 58 | 100% | 1.92 | 6.09 | 1.65 | 0.43 | 0.22 | 4.26 | 3.39 |
| Lead (ug/L) | 0.12 | 379 | 33.67 | 16.20 | 137 | 137 | 100% | 4.92 | 67.48 | 51.48 | 1.53 | 4.40 | 42.37 | 24.97 |
| Lead, Dissolved (ug/L) | 0.003 | 145.0 | 2.660 | 0.350 | 102 | 137 | 74% | 0.017 | 4.020 | 12.778 | 4.80 | 1.092 | 4.818 | 0.501 |
| Mercury (ug/L) | 0.0008 | 0.1880 | 0.0257 | 0.0250 | 50 | 137 | 36% | 0.0040 | 0.0582 | 0.0312 | 1.22 | 0.0027 | 0.0310 | 0.0204 |
| Mercury, Dissolved (ug/L) | 0.0009 | 0.5520 | 0.0187 | 0.0250 | 5 | 137 | 4% | 0.0009 | 0.0250 | 0.0472 | 2.52 | 0.0040 | 0.0267 | 0.0107 |
| Zinc (ug/L) | 12.3 | 1170 | 92.4 | 67.0 | 137 | 137 | 100% | 39.1 | 146.0 | 108.7 | 1.18 | 9.3 | 110.8 | 74.1 |
| Zinc, Dissolved (ug/L) | 5.6 | 910 | 34.2 | 22.7 | 137 | 137 | 100% | 12.8 | 47.5 | 77.6 | 2.27 | 6.6 | 47.3 | 21.1 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 0.190 | 0.049 | 0.037 | 19 | 33 | 58% | 0.009 | 0.104 | 0.042 | 0.86 | 0.007 | 0.064 | 0.034 |
| Carbaryl (ug/L | 0.03 | 0.25 | 0.18 | 0.25 | 0 | 18 | 0% | 0.03 | 0.25 | 0.10 | 0.56 | 0.02 | 0.23 | 0.13 |
| Chlorpyrifos (ug/L) | 0.003 | 0.443 | 0.030 | 0.019 | 1 | 50 | 2% | 0.005 | 0.059 | 0.062 | 2.05 | 0.009 | 0.048 | 0.013 |
| Bifenthrin (ug/L) | 0.000 | 0.005 | 0.005 | 0.005 | 1 | 17 | 6% | 0.005 | 0.005 | 0.001 | 0.26 | 0.000 | 0.005 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.002 | 0.136 | 0.012 | 0.009 | 90 | 137 | 66% | 0.003 | 0.024 | 0.015 | 1.20 | 0.001 | 0.015 | 0.010 |
| Acenaphthene (ug/L) | 0.002 | 0.105 | 0.021 | 0.018 | 119 | 137 | 87% | 0.005 | 0.037 | 0.015 | 0.72 | 0.001 | 0.023 | 0.018 |
| Acenaphthylene (ug/L) | 0.002 | 0.064 | 0.008 | 0.005 | 63 | 137 | 46% | 0.003 | 0.019 | 0.008 | 0.93 | 0.001 | 0.010 | 0.007 |
| Anthracene (ug/L) | 0.002 | 0.079 | 0.029 | 0.027 | 129 | 137 | 94% | 0.009 | 0.050 | 0.017 | 0.58 | 0.001 | 0.032 | 0.026 |
| Fluorene (ug/L) | 0.002 | 0.098 | 0.014 | 0.010 | 101 | 137 | 74% | 0.005 | 0.028 | 0.013 | 0.97 | 0.001 | 0.016 | 0.012 |
| Naphthalene (ug/L) | 0.003 | 0.135 | 0.022 | 0.018 | 97 | 136 | 71% | 0.005 | 0.037 | 0.019 | 0.85 | 0.002 | 0.025 | 0.019 |
| Phenanthrene (ug/L) | 0.002 | 0.221 | 0.049 | 0.032 | 133 | 137 | 97% | 0.013 | 0.124 | 0.045 | 0.91 | 0.004 | 0.057 | 0.042 |
| **Total LPAHs[1]** | 0.030 | 0.473 | 0.138 | 0.120 | 136 | 136 | 100% | 0.047 | 0.264 | 0.086 | 0.62 | 0.007 | 0.152 | 0.123 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.615 | 0.034 | 0.016 | 108 | 137 | 79% | 0.003 | 0.076 | 0.066 | 1.95 | 0.006 | 0.045 | 0.023 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.654 | 0.034 | 0.017 | 104 | 137 | 76% | 0.003 | 0.079 | 0.065 | 1.91 | 0.006 | 0.045 | 0.023 |
| Benzo(b,k)fluoranthene (ug/L) | 0.005 | 1.430 | 0.090 | 0.041 | 121 | 137 | 88% | 0.008 | 0.209 | 0.155 | 1.73 | 0.013 | 0.116 | 0.063 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.503 | 0.036 | 0.020 | 116 | 137 | 85% | 0.004 | 0.090 | 0.054 | 1.50 | 0.005 | 0.046 | 0.027 |
| Chrysene (ug/L) | 0.002 | 0.788 | 0.064 | 0.028 | 126 | 137 | 92% | 0.005 | 0.153 | 0.103 | 1.61 | 0.009 | 0.081 | 0.046 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.684 | 0.012 | 0.004 | 45 | 137 | 33% | 0.002 | 0.017 | 0.058 | 4.78 | 0.005 | 0.022 | 0.002 |
| Fluoranthene (ug/L) | 0.013 | 0.444 | 0.090 | 0.053 | 137 | 137 | 100% | 0.020 | 0.236 | 0.090 | 1.00 | 0.008 | 0.105 | 0.074 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.620 | 0.028 | 0.016 | 105 | 137 | 77% | 0.003 | 0.061 | 0.057 | 2.03 | 0.005 | 0.038 | 0.019 |
| Pyrene (ug/L) | 0.012 | 0.620 | 0.095 | 0.055 | 137 | 137 | 100% | 0.020 | 0.235 | 0.100 | 1.06 | 0.009 | 0.111 | 0.078 |
| Retene (ug/L) | 0.003 | 0.016 | 0.009 | 0.009 | 14 | 16 | 88% | 0.004 | 0.015 | 0.004 | 0.44 | 0.001 | 0.011 | 0.007 |
| **Total HPAHs[2]** | 0.031 | 5.835 | 0.472 | 0.247 | 137 | 137 | 100% | 0.069 | 1.205 | 0.690 | 1.46 | 0.059 | 0.589 | 0.355 |
| **TOTAL PAHs** | 0.065 | 6.048 | 0.613 | 0.374 | 136 | 136 | 100% | 0.125 | 1.429 | 0.747 | 1.22 | 0.064 | 0.739 | 0.486 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.18 | 41.00 | 1.88 | 0.93 | 111 | 136 | 82% | 0.34 | 4.03 | 3.74 | 1.99 | 0.32 | 2.51 | 1.24 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 9.200 | 0.812 | 0.220 | 32 | 137 | 23% | 0.138 | 1.920 | 1.584 | 1.95 | 0.135 | 1.080 | 0.545 |
| Diethyl phthalate (ug/L) | 0.070 | 7.600 | 0.436 | 0.216 | 42 | 137 | 31% | 0.119 | 0.640 | 0.733 | 1.68 | 0.063 | 0.560 | 0.313 |
| Dimethyl phthalate (ug/L) | 0.016 | 1.000 | 0.257 | 0.173 | 1 | 136 | 1% | 0.032 | 0.500 | 0.193 | 0.75 | 0.017 | 0.290 | 0.224 |
| Di-n-butyl phthalate (ug/L) | 0.050 | 1.270 | 0.340 | 0.278 | 41 | 137 | 30% | 0.142 | 0.500 | 0.209 | 0.62 | 0.018 | 0.375 | 0.304 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 1.490 | 0.303 | 0.185 | 14 | 135 | 10% | 0.042 | 0.500 | 0.243 | 0.80 | 0.021 | 0.345 | 0.262 |
| ***Total Phthalates[4]** | 0.00 | 41.00 | 2.75 | 1.30 | 123 | 137 | 90% | 0.00 | 6.91 | 4.47 | 1.63 | 0.38 | 3.50 | 1.99 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 0.046 | 0.019 | 0.012 | 17 | 65 | 26% | 0.010 | 0.038 | 0.012 | 0.63 | 0.001 | 0.022 | 0.016 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.19 | 0.05 | 0.05 | 3 | 40 | 8% | 0.02 | 0.05 | 0.03 | 0.63 | 0.01 | 0.06 | 0.04 |
| NWTPH-Gasoline (mg/L) | 2.3 | 25.0 | 19.8 | 25.0 | 0 | 35 | 0% | 2.3 | 25.0 | 9.7 | 0.49 | 1.6 | 23.1 | 16.5 |
| NWTPH-Heavy Oil (mg/L) | 0.02 | 0.83 | 0.33 | 0.33 | 32 | 40 | 80% | 0.09 | 0.56 | 0.20 | 0.60 | 0.03 | 0.39 | 0.26 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 170 | 49000 | 6725 | 2400 | 39 | 39 | 100% | 308 | 16000 | 9668 | 1.44 | 1548 | 9860 | 3591 |
| *E.coli* (CFU/100 ml) | 130 | 8000 | 2369 | 1300 | 7 | 7 | 100% | 202 | 5180 | 2765 | 1.17 | 1045 | 4926 | -189 |
| *Enterococci* (CFU/100 ml) | 3000 | 110000 | 23514 | 10000 | 7 | 7 | 100% | 3960 | 56000 | 38576 | 1.64 | 14580 | 59191 | -12163 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 35 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Ethylbenzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 35 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 0.6 | 0.2 | 0.2 | 1 | 35 | 3% | 0.2 | 0.2 | 0.1 | 0.32 | 0.0 | 0.2 | 0.2 |
| o-Xylene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 35 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Toluene (ug/L) | 0.1 | 0.5 | 0.1 | 0.1 | 4 | 35 | 11% | 0.1 | 0.2 | 0.1 | 0.69 | 0.0 | 0.2 | 0.1 |

# Table E-12 (Cont'd)
# Summary Statistics for Stormwater at OF243 WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.028 | 0.053 | 0.043 | 0.046 | 7 | 7 | 100% | 0.029 | 0.052 | 0.010 | 0.23 | 0.004 | 0.052 | 0.034 |
| BOD (mg/L) | 1.0 | 4.8 | 2.6 | 2.4 | 5 | 7 | 71% | 1.0 | 4.1 | 1.4 | 0.53 | 0.5 | 3.8 | 1.3 |
| Chloride (mg/L) | 627.00 | 2560.00 | 1492.14 | 1520.00 | 7 | 7 | 100% | 807.60 | 2092.00 | 619.54 | 0.42 | 234.16 | 2065.12 | 919.16 |
| Conductivity (uS/cm) | 2260.0 | 7870.0 | 5302.9 | 5280.0 | 7 | 7 | 100% | 3814.0 | 6874.0 | 1692.7 | 0.32 | 639.8 | 6868.3 | 3737.4 |
| Hardness (mg CaCO3/L) | 232.0 | 766.0 | 535.6 | 519.0 | 7 | 7 | 100% | 382.0 | 690.4 | 165.6 | 0.31 | 62.6 | 688.7 | 382.4 |
| pH (pH units) | 7.0 | 7.4 | 7.2 | 7.2 | 7 | 7 | 100% | 7.1 | 7.3 | 0.1 | 0.02 | 0.1 | 7.3 | 7.1 |
| TSS (mg/L) | 9.2 | 41.7 | 29.0 | 37.0 | 7 | 7 | 100% | 11.1 | 39.6 | 13.2 | 0.46 | 5.0 | 41.2 | 16.8 |
| Turbidity (NTU) | 11.4 | 47.2 | 30.3 | 33.9 | 7 | 7 | 100% | 15.4 | 40.2 | 11.9 | 0.39 | 4.5 | 41.3 | 19.3 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.160 | 0.395 | 0.225 | 0.198 | 7 | 7 | 100% | 0.175 | 0.293 | 0.078 | 0.35 | 0.029 | 0.297 | 0.153 |
| Phosphorus, Total (mg/L) | 0.107 | 0.583 | 0.244 | 0.179 | 7 | 7 | 100% | 0.129 | 0.401 | 0.161 | 0.66 | 0.061 | 0.393 | 0.096 |
| Phosphate, Ortho (mg/L) | 0.016 | 0.033 | 0.028 | 0.031 | 7 | 7 | 100% | 0.022 | 0.032 | 0.006 | 0.21 | 0.002 | 0.034 | 0.023 |
| Total Nitrogen (mg/L) | 0.40 | 1.30 | 0.65 | 0.55 | 7 | 7 | 100% | 0.40 | 1.01 | 0.32 | 0.50 | 0.12 | 0.95 | 0.35 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.097 | 0.346 | 0.209 | 0.179 | 7 | 7 | 100% | 0.132 | 0.315 | 0.087 | 0.41 | 0.033 | 0.289 | 0.129 |
| Cadmium, Dissolved (ug/L) | 0.050 | 0.091 | 0.070 | 0.070 | 6 | 7 | 86% | 0.054 | 0.088 | 0.015 | 0.21 | 0.006 | 0.083 | 0.056 |
| Copper (ug/L) | 6.86 | 20.20 | 14.04 | 13.50 | 7 | 7 | 100% | 8.98 | 18.40 | 4.54 | 0.32 | 1.71 | 18.23 | 9.84 |
| Copper, Dissolved (ug/L) | 2.98 | 4.57 | 4.02 | 4.33 | 7 | 7 | 100% | 3.11 | 4.53 | 0.65 | 0.16 | 0.25 | 4.62 | 3.41 |
| Lead (ug/L) | 2.41 | 14.50 | 8.77 | 9.27 | 7 | 7 | 100% | 3.18 | 13.36 | 4.38 | 0.50 | 1.66 | 12.82 | 4.72 |
| Lead, Dissolved (ug/L) | 0.124 | 0.411 | 0.291 | 0.282 | 7 | 7 | 100% | 0.169 | 0.409 | 0.105 | 0.36 | 0.040 | 0.388 | 0.193 |
| Mercury (ug/L) | 0.0040 | 0.0040 | 0.0040 | 0.0040 | 0 | 7 | 0% | 0.0040 | 0.0040 | 0.0000 | 0.00 | 0.0000 | 0.0040 | 0.0040 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 7 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 28.3 | 59.7 | 46.6 | 48.2 | 7 | 7 | 100% | 35.0 | 58.1 | 10.8 | 0.23 | 4.1 | 56.6 | 36.6 |
| Zinc, Dissolved (ug/L) | 16.3 | 23.7 | 19.4 | 18.4 | 7 | 7 | 100% | 17.3 | 22.1 | 2.5 | 0.13 | 0.9 | 21.7 | 17.1 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 7 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.022 | 0.011 | 0.011 | 4 | 7 | 57% | 0.005 | 0.018 | 0.006 | 0.59 | 0.002 | 0.017 | 0.005 |
| Acenaphthene (ug/L) | 0.005 | 0.039 | 0.015 | 0.005 | 3 | 7 | 43% | 0.005 | 0.031 | 0.014 | 0.90 | 0.005 | 0.028 | 0.003 |
| Acenaphthylene (ug/L) | 0.005 | 0.021 | 0.007 | 0.005 | 1 | 7 | 14% | 0.005 | 0.011 | 0.006 | 0.91 | 0.002 | 0.013 | 0.001 |
| Anthracene (ug/L) | 0.017 | 0.065 | 0.036 | 0.035 | 7 | 7 | 100% | 0.021 | 0.051 | 0.015 | 0.43 | 0.006 | 0.050 | 0.021 |
| Fluorene (ug/L) | 0.005 | 0.014 | 0.007 | 0.005 | 2 | 7 | 29% | 0.005 | 0.012 | 0.004 | 0.55 | 0.001 | 0.011 | 0.003 |
| Naphthalene (ug/L) | 0.013 | 0.029 | 0.019 | 0.016 | 3 | 6 | 50% | 0.013 | 0.027 | 0.007 | 0.38 | 0.003 | 0.026 | 0.011 |
| Phenanthrene (ug/L) | 0.012 | 0.037 | 0.024 | 0.024 | 7 | 7 | 100% | 0.016 | 0.033 | 0.008 | 0.35 | 0.003 | 0.032 | 0.016 |
| **Total LPAHs[1]** | 0.070 | 0.163 | 0.111 | 0.108 | 6 | 6 | 100% | 0.079 | 0.146 | 0.033 | 0.30 | 0.014 | 0.146 | 0.076 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.019 | 0.011 | 0.011 | 5 | 7 | 71% | 0.003 | 0.018 | 0.006 | 0.59 | 0.002 | 0.017 | 0.005 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.025 | 0.011 | 0.014 | 5 | 7 | 71% | 0.002 | 0.020 | 0.009 | 0.81 | 0.003 | 0.019 | 0.003 |
| Benzo(b,k)fluoranthene (ug/L) | 0.012 | 0.062 | 0.039 | 0.035 | 7 | 7 | 100% | 0.023 | 0.055 | 0.016 | 0.41 | 0.006 | 0.053 | 0.024 |
| Benzo(g,h,i)perylene (ug/L) | 0.006 | 0.018 | 0.013 | 0.015 | 7 | 7 | 100% | 0.008 | 0.017 | 0.005 | 0.34 | 0.002 | 0.018 | 0.009 |
| Chrysene (ug/L) | 0.004 | 0.032 | 0.018 | 0.019 | 6 | 7 | 86% | 0.009 | 0.027 | 0.009 | 0.48 | 0.003 | 0.027 | 0.010 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.003 | 0.003 | 0.003 | 0 | 7 | 0% | 0.003 | 0.003 | 0.000 | 0.00 | 0.000 | 0.003 | 0.003 |
| Fluoranthene (ug/L) | 0.017 | 0.051 | 0.035 | 0.036 | 7 | 7 | 100% | 0.023 | 0.047 | 0.011 | 0.33 | 0.004 | 0.045 | 0.024 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.020 | 0.013 | 0.014 | 6 | 7 | 86% | 0.007 | 0.019 | 0.006 | 0.43 | 0.002 | 0.019 | 0.008 |
| Pyrene (ug/L) | 0.023 | 0.052 | 0.040 | 0.039 | 7 | 7 | 100% | 0.029 | 0.051 | 0.010 | 0.26 | 0.004 | 0.050 | 0.031 |
| Retene (ug/L) | 0.003 | 0.014 | 0.009 | 0.009 | 6 | 7 | 86% | 0.005 | 0.012 | 0.003 | 0.40 | 0.001 | 0.012 | 0.005 |
| **Total HPAHs[2]** | 0.075 | 0.250 | 0.184 | 0.183 | 7 | 7 | 100% | 0.114 | 0.247 | 0.064 | 0.35 | 0.024 | 0.243 | 0.124 |
| **TOTAL PAHs** | 0.195 | 0.394 | 0.298 | 0.322 | 6 | 6 | 100% | 0.202 | 0.369 | 0.079 | 0.27 | 0.032 | 0.381 | 0.215 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.37 | 1.21 | 0.69 | 0.66 | 7 | 7 | 100% | 0.47 | 0.97 | 0.27 | 0.39 | 0.10 | 0.94 | 0.44 |
| Butyl benzyl phthalate (ug/L) | 0.202 | 0.207 | 0.204 | 0.204 | 0 | 7 | 0% | 0.202 | 0.207 | 0.002 | 0.01 | 0.001 | 0.206 | 0.203 |
| Diethyl phthalate (ug/L) | 0.377 | 1.100 | 0.632 | 0.516 | 7 | 7 | 100% | 0.447 | 0.903 | 0.243 | 0.39 | 0.092 | 0.857 | 0.407 |
| Dimethyl phthalate (ug/L) | 0.170 | 0.174 | 0.172 | 0.172 | 0 | 7 | 0% | 0.171 | 0.174 | 0.001 | 0.01 | 0.001 | 0.174 | 0.171 |
| Di-n-butyl phthalate (ug/L) | 0.147 | 0.351 | 0.204 | 0.151 | 2 | 7 | 29% | 0.148 | 0.338 | 0.093 | 0.46 | 0.035 | 0.290 | 0.117 |
| Di-n-Octyl phthalate (ug/L) | 0.180 | 0.185 | 0.182 | 0.182 | 0 | 7 | 0% | 0.181 | 0.185 | 0.002 | 0.01 | 0.001 | 0.184 | 0.181 |
| ***Total Phthalates[4]** | 0.92 | 1.91 | 1.42 | 1.51 | 7 | 7 | 100% | 1.05 | 1.79 | 0.35 | 0.25 | 0.13 | 1.75 | 1.09 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.010 | 0.031 | 0.014 | 0.011 | 4 | 6 | 67% | 0.010 | 0.023 | 0.008 | 0.58 | 0.003 | 0.023 | 0.006 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.05 | 0.05 | 0.05 | 0 | 4 | 0% | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 |
| NWTPH-Heavy Oil (mg/L) | 0.20 | 0.41 | 0.35 | 0.39 | 4 | 4 | 100% | 0.25 | 0.41 | 0.10 | 0.28 | 0.05 | 0.50 | 0.19 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 2400 | 49000 | 18075 | 10450 | 4 | 4 | 100% | 3150 | 39100 | 21447 | 1.19 | 10724 | 52202 | -16052 |
| E.coli (CFU/100 ml) | 130 | 3300 | 1245 | 775 | 4 | 4 | 100% | 166 | 2700 | 1467 | 1.18 | 734 | 3580 | -1090 |
| Enterococci (CFU/100 ml) | 3000 | 12000 | 6150 | 4800 | 4 | 4 | 100% | 3480 | 9900 | 3995 | 0.65 | 1997 | 12506 | -206 |

# Table E-13
# Summary Statistics for Stormwater at OF245 Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.434 | 0.069 | 0.055 | 79 | 81 | 98% | 0.027 | 0.113 | 0.059 | 0.86 | 0.007 | 0.082 | 0.056 |
| BOD (mg/L) | 1.0 | 8.1 | 3.1 | 2.7 | 59 | 71 | 83% | 1.0 | 5.8 | 1.7 | 0.55 | 0.2 | 3.5 | 2.7 |
| Chloride (mg/L) | 0.63 | 1260 | 144.2 | 70.6 | 79 | 79 | 100% | 13.10 | 309 | 226 | 1.56 | 25.38 | 195 | 93.6 |
| Conductivity (uS/cm) | 46.8 | 6360 | 575 | 323 | 135 | 135 | 100% | 100.5 | 1246 | 801 | 1.39 | 69.0 | 712 | 439 |
| Hardness (mg CaCO3/L) | 14.0 | 626 | 73.8 | 51.9 | 199 | 199 | 100% | 26.2 | 145.2 | 73.2 | 0.99 | 5.2 | 84.1 | 63.6 |
| pH (pH units) | 5.6 | 8.4 | 7.0 | 7.0 | 199 | 199 | 100% | 6.4 | 7.4 | 0.4 | 0.06 | 0.0 | 7.0 | 6.9 |
| TSS (mg/L) | 6.2 | 296 | 60.7 | 51.0 | 192 | 192 | 100% | 18.2 | 114.2 | 44.4 | 0.73 | 3.2 | 67.1 | 54.4 |
| Turbidity (NTU) | 11.1 | 139.0 | 46.1 | 38.0 | 59 | 59 | 100% | 17.0 | 82.0 | 28.4 | 0.62 | 3.7 | 53.5 | 38.7 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.034 | 1.010 | 0.203 | 0.143 | 92 | 92 | 100% | 0.079 | 0.429 | 0.173 | 0.85 | 0.018 | 0.239 | 0.167 |
| Phosphorus, Total (mg/L) | 0.054 | 1.510 | 0.184 | 0.140 | 90 | 90 | 100% | 0.072 | 0.315 | 0.174 | 0.94 | 0.018 | 0.221 | 0.148 |
| Phosphate, Ortho (mg/L) | 0.002 | 0.689 | 0.042 | 0.026 | 93 | 97 | 96% | 0.012 | 0.073 | 0.072 | 1.71 | 0.007 | 0.056 | 0.027 |
| Total Nitrogen (mg/L) | 0.02 | 2.90 | 0.75 | 0.61 | 91 | 92 | 99% | 0.29 | 1.42 | 0.49 | 0.65 | 0.05 | 0.85 | 0.65 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 2.410 | 0.302 | 0.216 | 107 | 119 | 90% | 0.076 | 0.520 | 0.345 | 1.14 | 0.032 | 0.365 | 0.240 |
| Cadmium, Dissolved (ug/L) | 0.005 | 1.850 | 0.134 | 0.075 | 93 | 119 | 78% | 0.025 | 0.224 | 0.229 | 1.70 | 0.021 | 0.176 | 0.093 |
| Copper (ug/L) | 3.00 | 42.60 | 13.82 | 12.30 | 119 | 119 | 100% | 6.15 | 23.94 | 7.55 | 0.55 | 0.69 | 15.19 | 12.44 |
| Copper, Dissolved (ug/L) | 0.02 | 26.10 | 3.75 | 3.03 | 116 | 118 | 98% | 1.57 | 6.07 | 2.96 | 0.79 | 0.27 | 4.28 | 3.21 |
| Lead (ug/L) | 0.87 | 60.00 | 9.80 | 7.83 | 197 | 199 | 99% | 2.48 | 18.90 | 8.59 | 0.88 | 0.61 | 11.00 | 8.60 |
| Lead, Dissolved (ug/L) | 0.010 | 6.270 | 0.504 | 0.280 | 120 | 199 | 60% | 0.080 | 1.120 | 0.660 | 1.31 | 0.047 | 0.597 | 0.412 |
| Mercury (ug/L) | 0.0004 | 0.8700 | 0.0217 | 0.0250 | 55 | 199 | 28% | 0.0030 | 0.0250 | 0.0642 | 2.96 | 0.0045 | 0.0307 | 0.0127 |
| Mercury, Dissolved (ug/L) | 0.0009 | 0.1080 | 0.0158 | 0.0250 | 10 | 199 | 5% | 0.0009 | 0.0250 | 0.0141 | 0.89 | 0.0010 | 0.0178 | 0.0139 |
| Zinc (ug/L) | 27.7 | 585 | 133.2 | 105.5 | 198 | 198 | 100% | 48.6 | 234 | 97.3 | 0.73 | 6.9 | 146.8 | 119.6 |
| Zinc, Dissolved (ug/L) | 0.8 | 335 | 54.8 | 37.7 | 197 | 198 | 99% | 20.9 | 110.4 | 47.4 | 0.87 | 3.4 | 61.4 | 48.1 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 1.500 | 0.167 | 0.037 | 17 | 72 | 24% | 0.009 | 0.485 | 0.271 | 1.62 | 0.032 | 0.231 | 0.103 |
| Carbaryl | 0.03 | 0.25 | 0.14 | 0.25 | 0 | 27 | 0% | 0.03 | 0.25 | 0.11 | 0.79 | 0.02 | 0.19 | 0.10 |
| Chlorpyrifos (ug/L) | 0.003 | 0.754 | 0.026 | 0.009 | 3 | 92 | 3% | 0.003 | 0.056 | 0.079 | 3.04 | 0.008 | 0.042 | 0.010 |
| Bifenthrin (ug/L) | 0.000 | 0.005 | 0.005 | 0.005 | 1 | 24 | 4% | 0.005 | 0.005 | 0.001 | 0.21 | 0.000 | 0.005 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.001 | 1.143 | 0.027 | 0.011 | 134 | 196 | 68% | 0.004 | 0.039 | 0.096 | 3.58 | 0.007 | 0.040 | 0.013 |
| Acenaphthene (ug/L) | 0.002 | 0.855 | 0.017 | 0.009 | 124 | 197 | 63% | 0.004 | 0.026 | 0.061 | 3.68 | 0.004 | 0.025 | 0.008 |
| Acenaphthylene (ug/L) | 0.001 | 0.095 | 0.008 | 0.005 | 74 | 197 | 38% | 0.002 | 0.014 | 0.012 | 1.44 | 0.001 | 0.010 | 0.007 |
| Anthracene (ug/L) | 0.002 | 0.289 | 0.011 | 0.005 | 79 | 197 | 40% | 0.003 | 0.017 | 0.025 | 2.24 | 0.002 | 0.015 | 0.008 |
| Fluorene (ug/L) | 0.001 | 0.928 | 0.022 | 0.008 | 122 | 197 | 62% | 0.003 | 0.032 | 0.076 | 3.53 | 0.005 | 0.032 | 0.011 |
| Naphthalene (ug/L) | 0.002 | 0.795 | 0.035 | 0.021 | 146 | 194 | 75% | 0.007 | 0.060 | 0.068 | 1.97 | 0.005 | 0.044 | 0.025 |
| Phenanthrene (ug/L) | 0.002 | 1.650 | 0.061 | 0.034 | 188 | 197 | 95% | 0.013 | 0.119 | 0.131 | 2.13 | 0.009 | 0.080 | 0.043 |
| **Total LPAHs[1]** | 0.007 | 4.612 | 0.148 | 0.084 | 195 | 195 | 100% | 0.029 | 0.256 | 0.358 | 2.42 | 0.026 | 0.199 | 0.097 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.247 | 0.018 | 0.008 | 118 | 197 | 60% | 0.003 | 0.049 | 0.026 | 1.46 | 0.002 | 0.021 | 0.014 |
| Benzo(a)pyrene (ug/L) | 0.001 | 0.133 | 0.018 | 0.011 | 133 | 197 | 68% | 0.003 | 0.044 | 0.021 | 1.17 | 0.002 | 0.021 | 0.015 |
| Benzo(b,k)fluoranthene (ug/L) | 0.002 | 0.414 | 0.046 | 0.025 | 148 | 197 | 75% | 0.006 | 0.121 | 0.056 | 1.21 | 0.004 | 0.054 | 0.038 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.112 | 0.025 | 0.018 | 160 | 197 | 81% | 0.004 | 0.059 | 0.023 | 0.93 | 0.002 | 0.028 | 0.022 |
| Chrysene (ug/L) | 0.002 | 0.420 | 0.041 | 0.017 | 160 | 197 | 81% | 0.003 | 0.121 | 0.056 | 1.37 | 0.004 | 0.048 | 0.033 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.027 | 0.005 | 0.004 | 46 | 197 | 23% | 0.002 | 0.013 | 0.005 | 0.86 | 0.000 | 0.006 | 0.005 |
| Fluoranthene (ug/L) | 0.002 | 1.720 | 0.066 | 0.033 | 191 | 197 | 97% | 0.012 | 0.146 | 0.131 | 2.00 | 0.009 | 0.084 | 0.047 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.058 | 0.014 | 0.009 | 125 | 197 | 63% | 0.003 | 0.032 | 0.013 | 0.97 | 0.001 | 0.016 | 0.012 |
| Pyrene (ug/L) | 0.002 | 1.310 | 0.083 | 0.048 | 195 | 197 | 99% | 0.015 | 0.190 | 0.118 | 1.43 | 0.008 | 0.099 | 0.066 |
| Retene (ug/L) | 0.003 | 0.021 | 0.011 | 0.011 | 22 | 23 | 96% | 0.007 | 0.020 | 0.005 | 0.45 | 0.001 | 0.013 | 0.009 |
| **Total HPAHs[2]** | 0.011 | 4.393 | 0.306 | 0.173 | 197 | 197 | 100% | 0.041 | 0.751 | 0.422 | 1.38 | 0.030 | 0.365 | 0.247 |
| **TOTAL PAHs** | 0.020 | 9.005 | 0.455 | 0.266 | 195 | 195 | 100% | 0.079 | 1.023 | 0.748 | 1.65 | 0.054 | 0.561 | 0.349 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.20 | 31.00 | 2.33 | 1.34 | 169 | 195 | 87% | 0.52 | 4.58 | 3.52 | 1.51 | 0.25 | 2.83 | 1.84 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 290 | 9.186 | 0.270 | 83 | 197 | 42% | 0.14 | 19.40 | 31.56 | 3.44 | 2.249 | 13.62 | 4.751 |
| Diethyl phthalate (ug/L) | 0.077 | 430 | 2.542 | 0.214 | 50 | 197 | 25% | 0.130 | 0.500 | 30.6 | 12.04 | 2.181 | 6.844 | -1.759 |
| Dimethyl phthalate (ug/L) | 0.016 | 1.100 | 0.256 | 0.175 | 13 | 196 | 7% | 0.039 | 0.500 | 0.188 | 0.73 | 0.013 | 0.283 | 0.230 |
| Di-n-butyl phthalate (ug/L) | 0.104 | 1.650 | 0.471 | 0.500 | 97 | 197 | 49% | 0.148 | 0.776 | 0.304 | 0.64 | 0.022 | 0.514 | 0.429 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 4.100 | 0.299 | 0.182 | 15 | 197 | 8% | 0.042 | 0.500 | 0.369 | 1.23 | 0.026 | 0.351 | 0.247 |
| ***Total Phthalates[4]** | 0.00 | 593 | 13.89 | 1.83 | 190 | 197 | 96% | 0.62 | 22.84 | 52.81 | 3.80 | 3.76 | 21.31 | 6.47 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 0.167 | 0.028 | 0.021 | 54 | 113 | 48% | 0.010 | 0.047 | 0.026 | 0.92 | 0.002 | 0.033 | 0.023 |
| Total Petroleum Hydrocarbons | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.33 | 0.06 | 0.05 | 10 | 68 | 15% | 0.02 | 0.10 | 0.05 | 0.82 | 0.01 | 0.07 | 0.05 |
| NWTPH-Gasoline (mg/L) | 2.3 | 62.3 | 19.2 | 25.0 | 13 | 63 | 21% | 2.3 | 25.0 | 11.9 | 0.62 | 1.5 | 22.2 | 16.2 |
| NWTPH-Heavy Oil (mg/L) | 0.03 | 1.10 | 0.36 | 0.34 | 58 | 68 | 85% | 0.09 | 0.68 | 0.22 | 0.60 | 0.03 | 0.41 | 0.31 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 50 | 240000 | 14736.875 | 2300 | 64 | 64 | 100% | 272 | 20200 | 37599 | 2.55 | 4700 | 24129 | 5345 |
| *E.coli* (CFU/100 ml) | 5 | 240000 | 38606 | 3500 | 7 | 7 | 100% | 25 | 104400 | 88975 | 2.30 | 33629 | 120894 | -43682 |
| *Enterococci* (CFU/100 ml) | 1500 | 820000 | 171771 | 48000 | 7 | 7 | 100% | 2940 | 478000 | 298324 | 1.74 | 112756 | 447675 | -104133 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 42 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Ethylbenzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 42 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 0.2 | 0.2 | 0.2 | 0 | 42 | 0% | 0.2 | 0.2 | 0.0 | 0.00 | 0.0 | 0.2 | 0.2 |
| o-Xylene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 42 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Toluene (ug/L) | 0.1 | 0.5 | 0.1 | 0.1 | 3 | 42 | 7% | 0.1 | 0.1 | 0.1 | 0.60 | 0.0 | 0.1 | 0.1 |

# Table E-13 (Cont'd)
# Summary Statistics for Stormwater at OF245 WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.029 | 0.066 | 0.049 | 0.051 | 9 | 9 | 100% | 0.036 | 0.065 | 0.013 | 0.27 | 0.004 | 0.059 | 0.038 |
| BOD (mg/L) | 1.0 | 3.6 | 2.4 | 2.4 | 7 | 9 | 78% | 1.0 | 3.4 | 0.9 | 0.40 | 0.3 | 3.1 | 1.7 |
| Chloride (mg/L) | 12.60 | 210.00 | 102.10 | 99.10 | 9 | 9 | 100% | 35.24 | 182.00 | 61.45 | 0.60 | 20.48 | 149.34 | 54.86 |
| Conductivity (uS/cm) | 76.5 | 1530.0 | 530.2 | 417.0 | 11 | 11 | 100% | 201.0 | 913.0 | 404.4 | 0.76 | 121.9 | 801.9 | 258.6 |
| Hardness (mg CaCO3/L) | 14.6 | 174.0 | 64.3 | 52.0 | 11 | 11 | 100% | 33.6 | 109.0 | 43.8 | 0.68 | 13.2 | 93.7 | 34.8 |
| pH (pH units) | 6.6 | 8.0 | 7.2 | 7.1 | 11 | 11 | 100% | 6.7 | 7.6 | 0.4 | 0.06 | 0.1 | 7.4 | 6.9 |
| TSS (mg/L) | 10.5 | 41.2 | 23.0 | 20.5 | 10 | 10 | 100% | 13.4 | 34.5 | 9.7 | 0.42 | 3.1 | 30.0 | 16.1 |
| Turbidity (NTU) | 11.8 | 36.7 | 21.8 | 20.7 | 8 | 8 | 100% | 14.6 | 29.3 | 7.7 | 0.35 | 2.7 | 28.2 | 15.4 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.064 | 0.147 | 0.098 | 0.091 | 10 | 10 | 100% | 0.074 | 0.143 | 0.028 | 0.29 | 0.009 | 0.118 | 0.077 |
| Phosphorus, Total (mg/L) | 0.065 | 0.142 | 0.100 | 0.102 | 10 | 10 | 100% | 0.067 | 0.129 | 0.027 | 0.27 | 0.009 | 0.120 | 0.081 |
| Phosphate, Ortho (mg/L) | 0.002 | 0.043 | 0.025 | 0.025 | 9 | 10 | 90% | 0.018 | 0.036 | 0.011 | 0.44 | 0.004 | 0.033 | 0.017 |
| Total Nitrogen (mg/L) | 0.26 | 1.94 | 0.56 | 0.41 | 10 | 10 | 100% | 0.29 | 0.80 | 0.50 | 0.89 | 0.16 | 0.92 | 0.20 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.050 | 0.173 | 0.114 | 0.101 | 10 | 11 | 91% | 0.071 | 0.167 | 0.041 | 0.36 | 0.012 | 0.141 | 0.086 |
| Cadmium, Dissolved (ug/L) | 0.020 | 0.111 | 0.053 | 0.046 | 7 | 11 | 64% | 0.020 | 0.096 | 0.032 | 0.61 | 0.010 | 0.075 | 0.031 |
| Copper (ug/L) | 4.52 | 13.90 | 7.55 | 6.64 | 11 | 11 | 100% | 4.99 | 11.40 | 2.81 | 0.37 | 0.85 | 9.44 | 5.66 |
| Copper, Dissolved (ug/L) | 0.23 | 4.48 | 2.48 | 2.53 | 11 | 11 | 100% | 1.43 | 3.82 | 1.17 | 0.47 | 0.35 | 3.27 | 1.70 |
| Lead (ug/L) | 1.10 | 3.50 | 2.17 | 1.99 | 11 | 11 | 100% | 1.64 | 2.86 | 0.64 | 0.30 | 0.19 | 2.60 | 1.74 |
| Lead, Dissolved (ug/L) | 0.054 | 0.249 | 0.119 | 0.102 | 9 | 11 | 82% | 0.054 | 0.198 | 0.059 | 0.49 | 0.018 | 0.159 | 0.080 |
| Mercury (ug/L) | 0.0040 | 0.0040 | 0.0040 | 0.0040 | 0 | 11 | 0% | 0.0040 | 0.0040 | 0.0000 | 0.00 | 0.0000 | 0.0040 | 0.0040 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 11 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 35.8 | 58.8 | 47.0 | 46.4 | 11 | 11 | 100% | 36.0 | 56.1 | 8.0 | 0.17 | 2.4 | 52.4 | 41.6 |
| Zinc, Dissolved (ug/L) | 2.6 | 29.3 | 20.5 | 21.2 | 11 | 11 | 100% | 19.0 | 25.7 | 6.8 | 0.33 | 2.0 | 25.1 | 16.0 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 11 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.041 | 0.014 | 0.010 | 7 | 11 | 64% | 0.005 | 0.040 | 0.013 | 0.95 | 0.004 | 0.023 | 0.005 |
| Acenaphthene (ug/L) | 0.005 | 0.010 | 0.005 | 0.005 | 1 | 11 | 9% | 0.005 | 0.005 | 0.002 | 0.29 | 0.000 | 0.006 | 0.004 |
| Acenaphthylene (ug/L) | 0.005 | 0.014 | 0.005 | 0.005 | 1 | 11 | 9% | 0.005 | 0.005 | 0.003 | 0.53 | 0.001 | 0.007 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.011 | 0.005 | 0.006 | 1 | 11 | 9% | 0.003 | 0.006 | 0.003 | 0.50 | 0.001 | 0.007 | 0.003 |
| Fluorene (ug/L) | 0.005 | 0.011 | 0.006 | 0.005 | 2 | 11 | 18% | 0.005 | 0.010 | 0.002 | 0.41 | 0.001 | 0.007 | 0.004 |
| Naphthalene (ug/L) | 0.013 | 0.113 | 0.037 | 0.021 | 6 | 10 | 60% | 0.013 | 0.094 | 0.036 | 0.99 | 0.011 | 0.062 | 0.011 |
| Phenanthrene (ug/L) | 0.004 | 0.037 | 0.020 | 0.020 | 8 | 11 | 73% | 0.009 | 0.030 | 0.010 | 0.51 | 0.003 | 0.026 | 0.013 |
| **Total LPAHs[1]** | 0.041 | 0.163 | 0.078 | 0.068 | 10 | 10 | 100% | 0.041 | 0.130 | 0.038 | 0.49 | 0.012 | 0.106 | 0.051 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.015 | 0.004 | 0.003 | 0 | 11 | 0% | 0.003 | 0.003 | 0.003 | 0.86 | 0.001 | 0.006 | 0.002 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.033 | 0.008 | 0.005 | 8 | 11 | 73% | 0.002 | 0.012 | 0.009 | 1.20 | 0.003 | 0.014 | 0.001 |
| Benzo(b,k)fluoranthene (ug/L) | 0.006 | 0.027 | 0.017 | 0.015 | 9 | 11 | 82% | 0.012 | 0.027 | 0.006 | 0.37 | 0.002 | 0.022 | 0.013 |
| Benzo(g,h,i)perylene (ug/L) | 0.008 | 0.015 | 0.012 | 0.012 | 10 | 11 | 91% | 0.011 | 0.013 | 0.002 | 0.15 | 0.001 | 0.013 | 0.011 |
| Chrysene (ug/L) | 0.004 | 0.042 | 0.013 | 0.011 | 8 | 11 | 73% | 0.004 | 0.017 | 0.011 | 0.80 | 0.003 | 0.020 | 0.006 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.016 | 0.004 | 0.003 | 0 | 11 | 0% | 0.003 | 0.003 | 0.004 | 0.91 | 0.001 | 0.007 | 0.002 |
| Fluoranthene (ug/L) | 0.016 | 0.076 | 0.026 | 0.021 | 11 | 11 | 100% | 0.018 | 0.026 | 0.017 | 0.65 | 0.005 | 0.037 | 0.014 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.012 | 0.006 | 0.006 | 6 | 11 | 55% | 0.003 | 0.010 | 0.003 | 0.57 | 0.001 | 0.008 | 0.004 |
| Pyrene (ug/L) | 0.025 | 0.113 | 0.038 | 0.030 | 11 | 11 | 100% | 0.026 | 0.037 | 0.025 | 0.66 | 0.008 | 0.055 | 0.021 |
| Retene (ug/L) | 0.003 | 0.016 | 0.009 | 0.009 | 10 | 11 | 91% | 0.007 | 0.012 | 0.004 | 0.39 | 0.001 | 0.012 | 0.007 |
| **Total HPAHs[2]** | 0.075 | 0.345 | 0.125 | 0.110 | 11 | 11 | 100% | 0.084 | 0.140 | 0.075 | 0.60 | 0.023 | 0.176 | 0.075 |
| **TOTAL PAHs** | 0.135 | 0.415 | 0.205 | 0.183 | 10 | 10 | 100% | 0.140 | 0.275 | 0.083 | 0.41 | 0.026 | 0.264 | 0.145 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.74 | 1.41 | 1.01 | 0.95 | 11 | 11 | 100% | 0.79 | 1.30 | 0.21 | 0.21 | 0.06 | 1.15 | 0.87 |
| Butyl benzyl phthalate (ug/L) | 0.200 | 0.207 | 0.203 | 0.203 | 0 | 11 | 0% | 0.201 | 0.206 | 0.002 | 0.01 | 0.001 | 0.205 | 0.202 |
| Diethyl phthalate (ug/L) | 0.155 | 0.161 | 0.157 | 0.157 | 0 | 11 | 0% | 0.156 | 0.160 | 0.002 | 0.01 | 0.001 | 0.159 | 0.156 |
| Dimethyl phthalate (ug/L) | 0.168 | 0.349 | 0.188 | 0.172 | 1 | 11 | 9% | 0.169 | 0.175 | 0.054 | 0.29 | 0.016 | 0.224 | 0.152 |
| Di-n-butyl phthalate (ug/L) | 0.458 | 1.650 | 1.210 | 1.340 | 11 | 11 | 100% | 0.853 | 1.560 | 0.357 | 0.30 | 0.108 | 1.450 | 0.970 |
| Di-n-Octyl phthalate (ug/L) | 0.178 | 0.900 | 0.247 | 0.183 | 0 | 11 | 0% | 0.180 | 0.185 | 0.217 | 0.88 | 0.065 | 0.393 | 0.101 |
| ***Total Phthalates[4]** | 1.76 | 2.62 | 2.21 | 2.24 | 11 | 11 | 100% | 1.78 | 2.56 | 0.30 | 0.13 | 0.09 | 2.41 | 2.01 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 0.033 | 0.017 | 0.018 | 8 | 10 | 80% | 0.009 | 0.026 | 0.009 | 0.51 | 0.003 | 0.023 | 0.011 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.05 | 0.05 | 0.05 | 0 | 4 | 0% | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 |
| NWTPH-Heavy Oil (mg/L) | 0.20 | 0.36 | 0.30 | 0.32 | 4 | 4 | 100% | 0.23 | 0.36 | 0.07 | 0.24 | 0.04 | 0.42 | 0.18 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 5400 | 110000 | 35600 | 13500 | 4 | 4 | 100% | 7080 | 81800 | 49789 | 1.40 | 24894 | 114825 | -43625 |
| E.coli (CFU/100 ml) | 5 | 11000 | 4051 | 2600 | 4 | 4 | 100% | 514 | 8750 | 4847 | 1.20 | 2424 | 11764 | -3662 |
| Enterococci (CFU/100 ml) | 1500 | 49000 | 25600 | 25950 | 4 | 4 | 100% | 2220 | 48700 | 26464 | 1.03 | 13232 | 67710 | -16510 |

# Table E-14
# Summary Statistics for Stormwater at OF254 Water Years 2002-2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.006 | 0.175 | 0.066 | 0.054 | 53 | 54 | 98% | 0.031 | 0.120 | 0.038 | 0.57 | 0.005 | 0.077 | 0.056 |
| BOD (mg/L) | 1.0 | 69.0 | 3.8 | 2.4 | 34 | 48 | 71% | 1.0 | 4.1 | 9.7 | 2.55 | 1.4 | 6.6 | 1.0 |
| Chloride (mg/L) | 493 | 8000 | 2341 | 2220 | 55 | 55 | 100% | 941 | 3718 | 1357 | 0.58 | 183.0 | 2707 | 1974 |
| Conductivity (uS/cm) | 4.9 | 23000 | 6228 | 5505 | 106 | 106 | 100% | 2170 | 10750 | 3781 | 0.61 | 367.3 | 6956 | 5499 |
| Hardness (mg CaCO3/L) | 49.5 | 2380 | 587 | 495 | 165 | 165 | 100% | 214.6 | 1088 | 372 | 0.63 | 28.9 | 644 | 529 |
| pH (pH units) | 6.2 | 8.1 | 7.1 | 7.1 | 165 | 165 | 100% | 6.6 | 7.5 | 0.4 | 0.05 | 0.0 | 7.1 | 7.0 |
| TSS (mg/L) | 5.2 | 354 | 90.6 | 69.0 | 162 | 162 | 100% | 29.6 | 183.3 | 68.3 | 0.75 | 5.4 | 101.2 | 80.0 |
| Turbidity (NTU) | 0.5 | 216 | 70.8 | 57.0 | 54 | 54 | 100% | 21.4 | 135.0 | 49.9 | 0.70 | 6.8 | 84.4 | 57.2 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.036 | 0.287 | 0.142 | 0.132 | 61 | 61 | 100% | 0.078 | 0.223 | 0.062 | 0.43 | 0.008 | 0.158 | 0.126 |
| Phosphorus, Total (mg/L) | 0.068 | 1.090 | 0.167 | 0.120 | 61 | 61 | 100% | 0.085 | 0.287 | 0.155 | 0.93 | 0.020 | 0.207 | 0.128 |
| Phosphate, Ortho (mg/L) | 0.007 | 0.097 | 0.027 | 0.023 | 63 | 63 | 100% | 0.012 | 0.042 | 0.017 | 0.61 | 0.002 | 0.032 | 0.023 |
| Total Nitrogen (mg/L) | 0.03 | 1.95 | 0.59 | 0.49 | 60 | 61 | 98% | 0.30 | 1.08 | 0.33 | 0.57 | 0.04 | 0.67 | 0.50 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.053 | 0.543 | 0.189 | 0.160 | 53 | 65 | 82% | 0.091 | 0.314 | 0.102 | 0.54 | 0.013 | 0.214 | 0.164 |
| Cadmium, Dissolved (ug/L) | 0.005 | 0.273 | 0.095 | 0.089 | 55 | 64 | 86% | 0.044 | 0.161 | 0.048 | 0.50 | 0.006 | 0.107 | 0.083 |
| Copper (ug/L) | 5.81 | 56.30 | 16.21 | 12.90 | 65 | 65 | 100% | 7.94 | 29.44 | 10.11 | 0.62 | 1.25 | 18.72 | 13.71 |
| Copper, Dissolved (ug/L) | 0.53 | 11.30 | 2.95 | 2.23 | 65 | 65 | 100% | 0.98 | 5.84 | 2.20 | 0.74 | 0.27 | 3.50 | 2.41 |
| Lead (ug/L) | 1.40 | 68.0 | 15.00 | 10.80 | 161 | 165 | 98% | 4.00 | 32.64 | 12.50 | 0.83 | 0.97 | 16.92 | 13.08 |
| Lead, Dissolved (ug/L) | 0.012 | 12.20 | 1.003 | 0.253 | 110 | 164 | 67% | 0.051 | 2.500 | 1.999 | 1.99 | 0.156 | 1.311 | 0.694 |
| Mercury (ug/L) | 0.0004 | 0.3070 | 0.0265 | 0.0250 | 69 | 165 | 42% | 0.0040 | 0.0600 | 0.0324 | 1.22 | 0.0025 | 0.0315 | 0.0216 |
| Mercury, Dissolved (ug/L) | 0.0009 | 0.2110 | 0.0175 | 0.0250 | 5 | 165 | 3% | 0.0009 | 0.0250 | 0.0206 | 1.18 | 0.0016 | 0.0207 | 0.0143 |
| Zinc (ug/L) | 27.6 | 427 | 121.1 | 95.8 | 165 | 165 | 100% | 49.9 | 219.2 | 74.9 | 0.62 | 5.8 | 132.6 | 109.6 |
| Zinc, Dissolved (ug/L) | 5.1 | 239 | 44.5 | 31.8 | 165 | 165 | 100% | 22.1 | 86.0 | 33.5 | 0.75 | 2.6 | 49.6 | 39.3 |
| Insecticides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 1.000 | 0.091 | 0.029 | 20 | 40 | 50% | 0.009 | 0.174 | 0.184 | 2.03 | 0.029 | 0.150 | 0.032 |
| Carbaryl (ug/L | 0.03 | 0.25 | 0.18 | 0.25 | 0 | 23 | 0% | 0.03 | 0.25 | 0.10 | 0.54 | 0.02 | 0.22 | 0.14 |
| Chlorpyrifos (ug/L) | 0.003 | 0.320 | 0.027 | 0.009 | 2 | 53 | 4% | 0.003 | 0.059 | 0.045 | 1.67 | 0.006 | 0.040 | 0.015 |
| Bifenthrin (ug/L) | 0.000 | 0.005 | 0.005 | 0.005 | 1 | 20 | 5% | 0.005 | 0.005 | 0.001 | 0.24 | 0.000 | 0.005 | 0.004 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.001 | 0.435 | 0.022 | 0.012 | 128 | 164 | 78% | 0.004 | 0.037 | 0.044 | 2.02 | 0.003 | 0.029 | 0.015 |
| Acenaphthene (ug/L) | 0.002 | 0.352 | 0.016 | 0.008 | 96 | 164 | 59% | 0.003 | 0.029 | 0.033 | 2.02 | 0.003 | 0.021 | 0.011 |
| Acenaphthylene (ug/L) | 0.001 | 0.070 | 0.010 | 0.005 | 71 | 164 | 43% | 0.003 | 0.023 | 0.012 | 1.16 | 0.001 | 0.012 | 0.008 |
| Anthracene (ug/L) | 0.002 | 0.389 | 0.031 | 0.009 | 104 | 164 | 63% | 0.004 | 0.077 | 0.055 | 1.78 | 0.004 | 0.039 | 0.022 |
| Fluorene (ug/L) | 0.001 | 0.159 | 0.019 | 0.010 | 110 | 164 | 67% | 0.004 | 0.045 | 0.026 | 1.33 | 0.002 | 0.023 | 0.015 |
| Naphthalene (ug/L) | 0.002 | 0.126 | 0.025 | 0.020 | 120 | 163 | 74% | 0.008 | 0.046 | 0.020 | 0.82 | 0.002 | 0.028 | 0.022 |
| Phenanthrene (ug/L) | 0.002 | 0.657 | 0.079 | 0.044 | 159 | 164 | 97% | 0.017 | 0.183 | 0.093 | 1.19 | 0.007 | 0.093 | 0.064 |
| **Total LPAHs[1]** | 0.005 | 1.244 | 0.175 | 0.102 | 163 | 163 | 100% | 0.041 | 0.393 | 0.200 | 1.14 | 0.016 | 0.206 | 0.144 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.001 | 0.915 | 0.060 | 0.019 | 137 | 164 | 84% | 0.003 | 0.166 | 0.098 | 1.65 | 0.008 | 0.075 | 0.044 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.428 | 0.052 | 0.025 | 141 | 164 | 86% | 0.005 | 0.141 | 0.065 | 1.26 | 0.005 | 0.062 | 0.042 |
| Benzo(b,k)fluoranthene (ug/L) | 0.005 | 1.662 | 0.140 | 0.065 | 145 | 164 | 88% | 0.008 | 0.385 | 0.193 | 1.38 | 0.015 | 0.169 | 0.110 |
| Benzo(g,h,i)perylene (ug/L) | 0.002 | 0.253 | 0.046 | 0.030 | 147 | 164 | 90% | 0.006 | 0.121 | 0.045 | 0.98 | 0.004 | 0.053 | 0.039 |
| Chrysene (ug/L) | 0.002 | 1.906 | 0.124 | 0.046 | 153 | 164 | 93% | 0.009 | 0.323 | 0.199 | 1.61 | 0.016 | 0.155 | 0.093 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.071 | 0.011 | 0.005 | 76 | 164 | 46% | 0.002 | 0.028 | 0.011 | 1.07 | 0.001 | 0.012 | 0.009 |
| Fluoranthene (ug/L) | 0.003 | 3.964 | 0.213 | 0.078 | 161 | 164 | 98% | 0.019 | 0.533 | 0.389 | 1.83 | 0.030 | 0.273 | 0.153 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.002 | 0.239 | 0.031 | 0.019 | 135 | 164 | 82% | 0.003 | 0.078 | 0.035 | 1.12 | 0.003 | 0.037 | 0.026 |
| Pyrene (ug/L) | 0.002 | 4.120 | 0.216 | 0.084 | 161 | 164 | 98% | 0.025 | 0.558 | 0.386 | 1.79 | 0.030 | 0.275 | 0.156 |
| Retene (ug/L) | 0.008 | 0.027 | 0.015 | 0.014 | 19 | 19 | 100% | 0.009 | 0.025 | 0.006 | 0.40 | 0.001 | 0.018 | 0.012 |
| **Total HPAHs[2]** | 0.027 | 13.558 | 0.880 | 0.373 | 164 | 164 | 100% | 0.083 | 2.361 | 1.392 | 1.58 | 0.109 | 1.095 | 0.666 |
| **TOTAL PAHs** | 0.040 | 14.681 | 1.059 | 0.475 | 163 | 163 | 100% | 0.123 | 2.678 | 1.563 | 1.48 | 0.122 | 1.301 | 0.817 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.14 | 10.20 | 2.13 | 1.47 | 135 | 164 | 82% | 0.50 | 5.34 | 1.92 | 0.90 | 0.15 | 2.43 | 1.84 |
| Butyl benzyl phthalate (ug/L) | 0.085 | 6.10 | 0.427 | 0.236 | 32 | 164 | 20% | 0.144 | 0.501 | 0.580 | 1.36 | 0.045 | 0.516 | 0.338 |
| Diethyl phthalate (ug/L) | 0.070 | 120.0 | 1.227 | 0.198 | 35 | 164 | 21% | 0.128 | 0.500 | 9.454 | 7.71 | 0.738 | 2.685 | -0.231 |
| Dimethyl phthalate (ug/L) | 0.016 | 3.200 | 0.320 | 0.202 | 25 | 164 | 15% | 0.069 | 0.500 | 0.374 | 1.17 | 0.029 | 0.378 | 0.262 |
| Di-n-butyl phthalate (ug/L) | 0.100 | 1.300 | 0.405 | 0.455 | 73 | 164 | 45% | 0.151 | 0.505 | 0.164 | 0.41 | 0.013 | 0.431 | 0.380 |
| Di-n-Octyl phthalate (ug/L) | 0.042 | 4.500 | 0.370 | 0.218 | 29 | 162 | 18% | 0.042 | 0.500 | 0.460 | 1.24 | 0.036 | 0.441 | 0.298 |
| ***Total Phthalates[4]** | 0.00 | 123.20 | 3.56 | 1.82 | 155 | 163 | 95% | 0.31 | 7.38 | 9.86 | 2.77 | 0.77 | 5.08 | 2.03 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 0.263 | 0.031 | 0.020 | 22 | 71 | 31% | 0.010 | 0.046 | 0.042 | 1.38 | 0.005 | 0.041 | 0.021 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.02 | 0.16 | 0.07 | 0.05 | 19 | 49 | 39% | 0.02 | 0.14 | 0.04 | 0.58 | 0.01 | 0.09 | 0.06 |
| NWTPH-Gasoline (mg/L) | 2.3 | 25.0 | 18.3 | 25.0 | 0 | 44 | 0% | 2.3 | 25.0 | 10.5 | 0.57 | 1.6 | 21.5 | 15.1 |
| NWTPH-Heavy Oil (mg/L) | 0.03 | 4.20 | 0.75 | 0.55 | 46 | 49 | 94% | 0.32 | 1.30 | 0.70 | 0.93 | 0.10 | 0.96 | 0.55 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 220 | 170000 | 11972 | 3150 | 48 | 48 | 100% | 330 | 16000 | 27597 | 2.31 | 3983 | 19986 | 3959 |
| *E.coli* (CFU/100 ml) | 1 | 110000 | 22284 | 2500 | 5 | 6 | 83% | 850.5 | 63500 | 43420 | 1.95 | 17726 | 67850 | -23283 |
| *Enterococci* (CFU/100 ml) | 2200 | 410000 | 75643 | 13000 | 7 | 7 | 100% | 3280 | 204200 | 149139 | 1.97 | 56369 | 213574 | -62288 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 44 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Ethylbenzene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 44 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| m,p-Xylene (ug/L) | 0.2 | 0.2 | 0.2 | 0.2 | 0 | 44 | 0% | 0.2 | 0.2 | 0.0 | 0.00 | 0.0 | 0.2 | 0.2 |
| o-Xylene (ug/L) | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 44 | 0% | 0.1 | 0.1 | 0.0 | 0.00 | 0.0 | 0.1 | 0.1 |
| Toluene (ug/L) | 0.1 | 1.0 | 0.2 | 0.1 | 7 | 44 | 16% | 0.1 | 0.3 | 0.2 | 1.10 | 0.0 | 0.2 | 0.1 |

# Table E-14 (Cont'd)
# Summary Statistics for Stormwater at OF254 WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (mg/L) | 0.046 | 0.110 | 0.073 | 0.070 | 7 | 7 | 100% | 0.047 | 0.101 | 0.024 | 0.33 | 0.009 | 0.095 | 0.050 |
| BOD (mg/L) | 1.0 | 2.6 | 2.0 | 2.1 | 5 | 6 | 83% | 1.5 | 2.5 | 0.6 | 0.27 | 0.2 | 2.6 | 1.4 |
| Chloride (mg/L) | 705.00 | 8000.00 | 2649.29 | 1690.00 | 7 | 7 | 100% | 1146.00 | 5120.00 | 2473.79 | 0.93 | 935.00 | 4937.16 | 361.41 |
| Conductivity (uS/cm) | 2710.0 | 23000.0 | 8823.3 | 5530.0 | 9 | 9 | 100% | 4430.0 | 14200.0 | 6142.5 | 0.70 | 2047.5 | 13544.8 | 4101.8 |
| Hardness (mg CaCO3/L) | 258.0 | 2380.0 | 903.6 | 542.0 | 9 | 9 | 100% | 426.8 | 1564.0 | 657.5 | 0.73 | 219.2 | 1408.9 | 398.2 |
| pH (pH units) | 6.9 | 7.5 | 7.1 | 7.1 | 9 | 9 | 100% | 6.9 | 7.3 | 0.2 | 0.03 | 0.1 | 7.3 | 7.0 |
| TSS (mg/L) | 12.7 | 98.3 | 52.5 | 44.3 | 9 | 9 | 100% | 26.9 | 86.2 | 27.1 | 0.52 | 9.0 | 73.3 | 31.7 |
| Turbidity (NTU) | 22.3 | 135.0 | 60.1 | 52.9 | 7 | 7 | 100% | 27.2 | 98.9 | 37.6 | 0.63 | 14.2 | 94.9 | 25.3 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.078 | 0.173 | 0.105 | 0.096 | 7 | 7 | 100% | 0.084 | 0.137 | 0.032 | 0.30 | 0.012 | 0.135 | 0.076 |
| Phosphorus, Total (mg/L) | 0.073 | 0.150 | 0.106 | 0.098 | 7 | 7 | 100% | 0.080 | 0.133 | 0.026 | 0.24 | 0.010 | 0.129 | 0.082 |
| Phosphate, Ortho (mg/L) | 0.010 | 0.097 | 0.026 | 0.017 | 8 | 8 | 100% | 0.011 | 0.047 | 0.029 | 1.11 | 0.010 | 0.051 | 0.002 |
| Total Nitrogen (mg/L) | 0.25 | 0.65 | 0.38 | 0.31 | 7 | 7 | 100% | 0.28 | 0.53 | 0.14 | 0.36 | 0.05 | 0.51 | 0.25 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.077 | 0.192 | 0.124 | 0.130 | 8 | 9 | 89% | 0.086 | 0.165 | 0.036 | 0.29 | 0.012 | 0.151 | 0.096 |
| Cadmium, Dissolved (ug/L) | 0.048 | 0.090 | 0.066 | 0.062 | 8 | 8 | 100% | 0.053 | 0.088 | 0.015 | 0.23 | 0.005 | 0.079 | 0.053 |
| Copper (ug/L) | 7.80 | 41.50 | 17.64 | 13.70 | 9 | 9 | 100% | 8.74 | 37.10 | 12.41 | 0.70 | 4.14 | 27.18 | 8.10 |
| Copper, Dissolved (ug/L) | 1.68 | 3.79 | 2.58 | 2.22 | 9 | 9 | 100% | 1.79 | 3.30 | 0.71 | 0.28 | 0.24 | 3.13 | 2.03 |
| Lead (ug/L) | 1.40 | 7.00 | 4.55 | 4.45 | 9 | 9 | 100% | 2.34 | 6.59 | 1.92 | 0.42 | 0.64 | 6.02 | 3.08 |
| Lead, Dissolved (ug/L) | 0.108 | 2.040 | 0.526 | 0.164 | 8 | 8 | 100% | 0.122 | 1.246 | 0.674 | 1.28 | 0.238 | 1.089 | -0.037 |
| Mercury (ug/L) | 0.0040 | 0.0040 | 0.0040 | 0.0040 | 0 | 9 | 0% | 0.0040 | 0.0040 | 0.0000 | 0.00 | 0.0000 | 0.0040 | 0.0040 |
| Mercury, Dissolved (ug/L) | 0.0045 | 0.0045 | 0.0045 | 0.0045 | 0 | 9 | 0% | 0.0045 | 0.0045 | 0.0000 | 0.00 | 0.0000 | 0.0045 | 0.0045 |
| Zinc (ug/L) | 27.6 | 72.1 | 54.8 | 59.4 | 9 | 9 | 100% | 36.6 | 69.9 | 14.7 | 0.27 | 4.9 | 66.1 | 43.5 |
| Zinc, Dissolved (ug/L) | 22.6 | 29.7 | 25.9 | 25.2 | 9 | 9 | 100% | 24.0 | 29.6 | 2.4 | 0.09 | 0.8 | 27.7 | 24.0 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 9 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.045 | 0.019 | 0.015 | 7 | 9 | 78% | 0.005 | 0.043 | 0.015 | 0.76 | 0.005 | 0.030 | 0.008 |
| Acenaphthene (ug/L) | 0.005 | 0.014 | 0.006 | 0.005 | 1 | 9 | 11% | 0.005 | 0.007 | 0.003 | 0.50 | 0.001 | 0.008 | 0.004 |
| Acenaphthylene (ug/L) | 0.005 | 0.013 | 0.005 | 0.005 | 1 | 9 | 11% | 0.005 | 0.006 | 0.003 | 0.52 | 0.001 | 0.008 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.015 | 0.007 | 0.006 | 3 | 9 | 33% | 0.003 | 0.013 | 0.004 | 0.60 | 0.001 | 0.010 | 0.004 |
| Fluorene (ug/L) | 0.005 | 0.011 | 0.005 | 0.005 | 1 | 9 | 11% | 0.005 | 0.006 | 0.002 | 0.39 | 0.001 | 0.007 | 0.004 |
| Naphthalene (ug/L) | 0.013 | 0.047 | 0.024 | 0.018 | 4 | 8 | 50% | 0.013 | 0.039 | 0.013 | 0.55 | 0.005 | 0.035 | 0.013 |
| Phenanthrene (ug/L) | 0.009 | 0.050 | 0.029 | 0.032 | 7 | 9 | 78% | 0.009 | 0.043 | 0.014 | 0.49 | 0.005 | 0.040 | 0.018 |
| **Total LPAHs[1]** | 0.042 | 0.126 | 0.074 | 0.077 | 8 | 8 | 100% | 0.043 | 0.098 | 0.028 | 0.38 | 0.010 | 0.097 | 0.050 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.031 | 0.014 | 0.014 | 6 | 9 | 67% | 0.003 | 0.021 | 0.008 | 0.62 | 0.003 | 0.020 | 0.007 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.035 | 0.015 | 0.014 | 7 | 9 | 78% | 0.002 | 0.025 | 0.011 | 0.74 | 0.004 | 0.024 | 0.007 |
| Benzo(b,k)fluoranthene (ug/L) | 0.020 | 0.117 | 0.069 | 0.070 | 9 | 9 | 100% | 0.031 | 0.115 | 0.035 | 0.50 | 0.012 | 0.096 | 0.043 |
| Benzo(g,h,i)perylene (ug/L) | 0.010 | 0.058 | 0.026 | 0.023 | 9 | 9 | 100% | 0.017 | 0.036 | 0.013 | 0.51 | 0.004 | 0.037 | 0.016 |
| Chrysene (ug/L) | 0.009 | 0.065 | 0.032 | 0.031 | 9 | 9 | 100% | 0.011 | 0.063 | 0.020 | 0.62 | 0.007 | 0.048 | 0.017 |
| Dibenz(a,h)anthracene (ug/L) | 0.003 | 0.016 | 0.005 | 0.003 | 1 | 9 | 11% | 0.003 | 0.009 | 0.004 | 0.87 | 0.001 | 0.008 | 0.002 |
| Fluoranthene (ug/L) | 0.015 | 0.116 | 0.052 | 0.048 | 9 | 9 | 100% | 0.022 | 0.082 | 0.031 | 0.59 | 0.010 | 0.075 | 0.028 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.007 | 0.022 | 0.014 | 0.014 | 8 | 9 | 89% | 0.010 | 0.020 | 0.005 | 0.32 | 0.002 | 0.018 | 0.011 |
| Pyrene (ug/L) | 0.020 | 0.143 | 0.065 | 0.069 | 9 | 9 | 100% | 0.034 | 0.090 | 0.036 | 0.55 | 0.012 | 0.092 | 0.037 |
| Retene (ug/L) | 0.008 | 0.025 | 0.014 | 0.014 | 9 | 9 | 100% | 0.008 | 0.021 | 0.006 | 0.40 | 0.002 | 0.019 | 0.010 |
| **Total HPAHs[2]** | 0.093 | 0.560 | 0.292 | 0.291 | 9 | 9 | 100% | 0.163 | 0.402 | 0.133 | 0.46 | 0.044 | 0.394 | 0.190 |
| **TOTAL PAHs** | 0.136 | 0.449 | 0.332 | 0.332 | 8 | 8 | 100% | 0.218 | 0.442 | 0.109 | 0.33 | 0.038 | 0.423 | 0.241 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/L) | 0.37 | 1.55 | 0.96 | 1.01 | 9 | 9 | 100% | 0.64 | 1.29 | 0.34 | 0.36 | 0.11 | 1.23 | 0.70 |
| Butyl benzyl phthalate (ug/L) | 0.200 | 0.209 | 0.205 | 0.204 | 0 | 9 | 0% | 0.202 | 0.209 | 0.003 | 0.02 | 0.001 | 0.207 | 0.202 |
| Diethyl phthalate (ug/L) | 0.157 | 0.410 | 0.187 | 0.158 | 1 | 9 | 11% | 0.157 | 0.212 | 0.084 | 0.45 | 0.028 | 0.251 | 0.122 |
| Dimethyl phthalate (ug/L) | 0.169 | 0.176 | 0.172 | 0.172 | 0 | 9 | 0% | 0.170 | 0.176 | 0.003 | 0.02 | 0.001 | 0.175 | 0.170 |
| Di-n-butyl phthalate (ug/L) | 0.148 | 0.596 | 0.330 | 0.153 | 4 | 9 | 44% | 0.148 | 0.595 | 0.217 | 0.66 | 0.072 | 0.497 | 0.163 |
| Di-n-Octyl phthalate (ug/L) | 0.179 | 0.900 | 0.263 | 0.182 | 0 | 9 | 0% | 0.180 | 0.329 | 0.239 | 0.91 | 0.080 | 0.446 | 0.079 |
| ***Total Phthalates[4]** | 0.37 | 2.09 | 1.26 | 1.22 | 9 | 9 | 100% | 0.88 | 1.66 | 0.46 | 0.36 | 0.15 | 1.61 | 0.91 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 0.004 | 0.150 | 0.031 | 0.013 | 5 | 8 | 63% | 0.008 | 0.063 | 0.049 | 1.57 | 0.017 | 0.072 | -0.010 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.05 | 0.16 | 0.08 | 0.05 | 1 | 4 | 25% | 0.05 | 0.13 | 0.06 | 0.71 | 0.03 | 0.17 | -0.01 |
| NWTPH-Heavy Oil (mg/L) | 0.66 | 2.90 | 1.35 | 0.93 | 4 | 4 | 100% | 0.73 | 2.32 | 1.04 | 0.77 | 0.52 | 3.01 | -0.30 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 3300 | 79000 | 30175 | 19200 | 4 | 4 | 100% | 3930 | 65200 | 35251 | 1.17 | 17626 | 86267 | -25917 |
| E.coli (CFU/100 ml) | 1 | 17000 | 5500 | 2500 | 3 | 4 | 75% | 511 | 12890 | 7784 | 1.42 | 3892 | 17886 | -6886 |
| Enterococci (CFU/100 ml) | 2200 | 67000 | 27050 | 19500 | 4 | 4 | 100% | 5440 | 54700 | 28355 | 1.05 | 14178 | 72169 | -18069 |

# Table E-15
# Summary Statistics for Stormwater Sediment at OF230 FD3New WY2002-WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Total Organic Carbon (mg/Kg) | 2.64 | 14 | 7 | 6 | 21 | 21 | 100% | 3 | 11 | 3 | 0.46 | 1 | 8 | 5 |
| Total Solids (%) | 30.1 | 65 | 51 | 51 | 21 | 21 | 100% | 41 | 63 | 10 | 0.19 | 2 | 56 | 47 |
| Total Volatile Solids (%) | 6.1 | 22 | 13 | 11 | 8 | 8 | 100% | 7 | 22 | 6 | 0.47 | 2 | 18 | 8 |
| Nutrients | | | | | | | | | | | | | | |
| Phosphorus, Total (mg/Kg) | 543 | 1560 | 1034 | 1110 | 7 | 7 | 100% | 622 | 1512 | 402 | 0.39 | 152 | 1406 | 662 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (mg/Kg dry) | 0.286 | 0.926 | 0.535 | 0.502 | 7 | 7 | 100% | 0.355 | 0.733 | 0.203 | 0.38 | 0.077 | 0.723 | 0.347 |
| Copper (mg/Kg dry) | 48.2 | 132 | 79 | 81 | 7 | 7 | 100% | 54 | 105 | 27.7 | 0.35 | 10 | 105 | 53 |
| Lead (mg/Kg dry) | 56.9 | 1420.0 | 208.8 | 143.5 | 20 | 20 | 100% | 84.5 | 236 | 291 | 1.39 | 65.0 | 344.9 | 72.8 |
| Mercury (mg/Kg dry) | 0.0328 | 0.827 | 0.179 | 0.124 | 20 | 20 | 100% | 0.050 | 0.337 | 0.203 | 1.13 | 0.045 | 0.274 | 0.084 |
| Zinc (mg/Kg dry) | 225 | 3200 | 632 | 440 | 20 | 20 | 100% | 307 | 832 | 631 | 1.00 | 141 | 927 | 337 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/Kg) | 7.2 | 960 | 168 | 120 | 18 | 21 | 86% | 10.0 | 260 | 205 | 1.22 | 45 | 261 | 75 |
| NWTPH-Heavy Oil (mg/Kg) | 25 | 8300 | 3628 | 3300 | 21 | 21 | 100% | 1100 | 6100 | 2107 | 0.58 | 460 | 4587 | 2669 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/Kg) | 20.5 | 310 | 94 | 72 | 16 | 21 | 76% | 25 | 185 | 76 | 0.80 | 16 | 129 | 60 |
| Acenaphthene (ug/Kg) | 6.5 | 350 | 128 | 127 | 19 | 21 | 90% | 38 | 263 | 88 | 0.69 | 19 | 168 | 88 |
| Acenaphthylene (ug/Kg) | 14 | 93 | 44 | 40 | 11 | 21 | 52% | 19 | 82 | 23 | 0.52 | 5 | 54 | 34 |
| Anthracene (ug/Kg) | 26 | 640 | 298 | 320 | 20 | 21 | 95% | 59 | 450 | 163 | 0.55 | 36 | 372 | 223 |
| Fluorene (ug/Kg) | 24 | 577 | 178 | 170 | 20 | 21 | 95% | 45 | 310 | 126 | 0.71 | 28 | 235 | 121 |
| Naphthalene (ug/Kg) | 45 | 480 | 136 | 120 | 21 | 21 | 100% | 59 | 200 | 101 | 0.74 | 22 | 182 | 91 |
| Phenanthrene (ug/Kg) | 238 | 5400 | 2381 | 2400 | 21 | 21 | 100% | 615 | 4300 | 1333 | 0.56 | 291 | 2988 | 1774 |
| **Total LPAHs** | 406 | 6935 | 3166 | 3370 | 9 | 21 | 43% | 824 | 5390 | 1737 | 0.55 | 379 | 3957 | 2375 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/Kg) | 128 | 3400 | 1580 | 1700 | 21 | 21 | 100% | 255 | 2600 | 903 | 0.57 | 197 | 1991 | 1169 |
| Benzo(a)pyrene (ug/Kg) | 253 | 5870 | 1800 | 1600 | 21 | 21 | 100% | 293 | 2800 | 1257 | 0.70 | 274 | 2373 | 1228 |
| Benzo(b,k)fluoranthene (ug/Kg) | 78 | 3000 | 1431 | 1200 | 21 | 21 | 100% | 305 | 3000 | 968 | 0.68 | 211 | 1872 | 991 |
| Benzo(g,h,i)perylene (ug/Kg) | 641 | 17900 | 4810 | 4530 | 21 | 21 | 100% | 1060 | 7200 | 3765 | 0.78 | 822 | 6524 | 3096 |
| Chrysene (ug/Kg) | 283 | 5000 | 2302 | 2310 | 21 | 21 | 100% | 372 | 3600 | 1235 | 0.54 | 270 | 2864 | 1740 |
| Dibenz(a,h)anthracene (ug/Kg) | 22 | 2700 | 433 | 342 | 18 | 21 | 86% | 45 | 540 | 574 | 1.33 | 125 | 694 | 171 |
| Fluoranthene (ug/Kg) | 368 | 6800 | 3621 | 4000 | 21 | 21 | 100% | 767 | 5900 | 1907 | 0.53 | 416 | 4489 | 2753 |
| Indeno(1,2,3-c,d)pyrene (ug/Kg) | 122 | 4260 | 1399 | 1300 | 21 | 21 | 100% | 285 | 2500 | 1021 | 0.73 | 223 | 1864 | 934 |
| Pyrene (ug/Kg) | 388 | 9400 | 4172 | 4500 | 21 | 21 | 100% | 578 | 7200 | 2516 | 0.60 | 549 | 5317 | 3026 |
| Retene | 31 | 42 | 37 | 37 | 2 | 2 | 100% | 32 | 41 | 8 | 0 | 6 | 106 | -33 |
| **Total HPAHs** | 2625 | 45680 | 21547 | 21400 | 9 | 21 | 43% | 3488 | 36700 | 12162 | 0.56 | 2654 | 27083 | 16011 |
| **Total PAHs** | 3031 | 49053 | 24713 | 24780 | 21 | 21 | 100% | 4312 | 40500 | 13513 | 0.55 | 2949 | 30864 | 18562 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/Kg) | 3530 | 43000 | 16726 | 15300 | 21 | 21 | 100% | 4700 | 31000 | 11548 | 0.69 | 2520 | 21982 | 11469 |
| Butyl benzyl phthalate (ug/Kg) | 42 | 4700 | 1012 | 606 | 20 | 21 | 95% | 360 | 1500 | 1022 | 1.01 | 223 | 1477 | 547 |
| Diethyl phthalate (ug/Kg) | 17 | 170 | 46 | 46 | 7 | 21 | 33% | 19 | 50 | 33 | 0.72 | 7 | 60 | 31 |
| Dimethyl phthalate (ug/Kg) | 3 | 1200 | 138 | 50 | 13 | 21 | 62% | 9 | 199 | 258 | 1.87 | 56 | 256 | 20 |
| Di-n-butyl phthalate (ug/Kg) | 16 | 2400 | 437 | 250 | 20 | 21 | 95% | 57 | 1000 | 546 | 1.25 | 119 | 686 | 189 |
| Di-n-Octyl phthalate (ug/Kg) | 7 | 9290 | 1696 | 1000 | 17 | 21 | 81% | 17 | 3730 | 2119 | 1.25 | 462 | 2661 | 732 |
| **Total Phthalates** | 3603 | 48810 | 19977 | 17970 | 21 | 21 | 100% | 5626 | 36160 | 13937 | 0.70 | 3041 | 26321 | 13633 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/Kg) | 5 | 142 | 32 | 20 | 8 | 8 | 100% | 7 | 59 | 45 | 1.43 | 16 | 69 | -6 |
| PCBs | | | | | | | | | | | | | | |
| Aroclor-1016 (ug/Kg) | 0.32 | 40 | 8.1 | 4.50 | 1.00 | 21 | 5% | 1 | 25 | 11 | 1.35 | 2 | 13 | 3 |
| Aroclor-1221 (ug/Kg) | 0.32 | 49 | 9.5 | 4.50 | 2.00 | 21 | 10% | 1 | 31 | 14 | 1.43 | 3 | 16 | 3 |
| Aroclor-1232 (ug/Kg) | 0.32 | 74 | 10.7 | 4.50 | 2.00 | 21 | 10% | 1 | 31 | 18 | 1.66 | 4 | 19 | 3 |
| Aroclor-1242 (ug/Kg) | 0.32 | 40 | 8.2 | 3.00 | 1.00 | 21 | 5% | 0 | 25 | 11 | 1.36 | 2 | 13 | 3 |
| Aroclor-1248 (ug/Kg) | 0.32 | 40 | 8.8 | 4.35 | 1.00 | 21 | 5% | 0 | 25 | 11 | 1.25 | 2 | 14 | 4 |
| Aroclor-1254 (ug/Kg) | 0.40 | 581 | 193 | 119 | 13.0 | 21 | 62% | 1 | 510 | 198 | 1.02 | 43 | 283 | 103 |
| Aroclor-1260 (ug/Kg) | 0.32 | 910 | 87 | 10 | 6.0 | 21 | 29% | 1 | 220 | 208 | 2.39 | 45 | 182 | -8 |
| **TOTAL PCBs** | 0 | 910 | 276 | 220 | 15 | 21 | 71% | 0 | 581 | 270 | 0.98 | 59 | 399 | 154 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 21 | 33 | 27 | 27 | 2 | 2 | 100% | 22 | 32 | 8 | 0.31 | 6 | 103 | -49 |
| Phenolics | | | | | | | | | | | | | | |
| 2-Methylphenol (ug/Kg dry) | 3.50 | 19 | 11.3 | 11.25 | 1.00 | 2 | 50% | 5 | 17 | 11 | 0.97 | 8 | 110 | -87 |
| 4-Methylphenol (ug/Kg dry) | 85.00 | 2300 | 861.5 | 530.50 | 4.00 | 4 | 100% | 96 | 1892 | 1037 | 1.20 | 519 | 2512 | -789 |
| Pentachlorophenol (ug/Kg dry) | 149.00 | 830 | 489.5 | 489.50 | 2.00 | 2 | 100% | 217 | 762 | 482 | 0.98 | 341 | 4816 | -3837 |

NPDES Sediment Trap Locations

1 - Total LPAHs is the sum of the concentration or non-detected calculated value of the following compounds: Naphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthrene.

2 - Total HPAHs is the sum of the concentration of non-detected calculated value of the following compounds: Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene.

3 - Total PAHs is the sum of the LPAHs and HPAHs.

4 - Total value for PCBs is the sum of detected values only.

5- Total phthalates is the sum of detected values only.

6- The upline FD3A sediment trap was removed due to the construction of the new OF230A on 12/17/2021 and no sediment was analyzed for WY2022. The City is currently finishing up construction for this project and will re-evaluate possible locations with similar drainage areas and replace this upline trap in early 2023.

7- Due to insufficient sample size the silt and clay percentage is reported as combined.

Bold – The analyte was present in the sample.

U – The analyte was not detected at or above the reported value.

UJ – The analyte was not detected at or above the reported estimated value.

J – The analyte was positively identified. The associated value is an estimate.

NJ - There is evidence the analyte is present. The associated value is an estimate.

E - Estimated above the calibration curve.

# Table E-16
# Summary Statistics for Stormwater Sediment at OF235 FD6 WY2002-WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Total Organic Carbon (mg/Kg) | 3.45 | 8.37 | 5.63 | 5.59 | 21 | 21 | 100% | 4.02 | 7.58 | 1.37 | 0.24 | 0.30 | 6.26 | 5.00 |
| Total Solids (%) | 54.5 | 72.8 | 63.5 | 62.6 | 21 | 21 | 100% | 56.5 | 70.7 | 5.4 | 0.09 | 1.2 | 66.0 | 61.0 |
| Total Volatile Solids (%) | 10.4 | 14.7 | 12.7 | 12.6 | 8 | 8 | 100% | 11.0 | 14.5 | 1.5 | 0.12 | 0.5 | 13.9 | 11.4 |
| Nutrients | | | | | | | | | | | | | | |
| Phosphorus, Total (mg/Kg) | 549 | 1180 | 883 | 899 | 8 | 8 | 100% | 610 | 1173 | 238 | 0.27 | 84 | 1083 | 684 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (mg/Kg dry) | 0.057 | 0.819 | 0.465 | 0.575 | 10 | 10 | 100% | 0.064 | 0.733 | 0.283 | 0.61 | 0.089 | 0.667 | 0.262 |
| Copper (mg/Kg dry) | 84.4 | 173 | 127 | 131 | 10 | 10 | 100% | 91 | 151 | 26 | 0.21 | 8 | 146 | 108 |
| Lead (mg/Kg dry) | 88.2 | 286.0 | 151.5 | 144.0 | 21 | 21 | 100% | 96.4 | 202.0 | 44.5 | 0.29 | 9.7 | 171.7 | 131.2 |
| Mercury (mg/Kg dry) | 0.0479 | 1.350 | 0.142 | 0.078 | 21 | 21 | 100% | 0.051 | 0.109 | 0.279 | 1.97 | 0.061 | 0.269 | 0.015 |
| Zinc (mg/Kg dry) | 219 | 789 | 433 | 377 | 21 | 21 | 100% | 296 | 628 | 149 | 0.34 | 33 | 501 | 366 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/Kg) | 10 | 1000 | 166 | 130 | 18 | 21 | 86% | 41 | 230 | 203 | 1.22 | 44 | 258 | 74 |
| NWTPH-Heavy Oil (mg/Kg) | 1600 | 4700 | 3038 | 2600 | 21 | 21 | 100% | 2100 | 4500 | 966 | 0.32 | 211 | 3478 | 2599 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/Kg) | 25 | 150 | 74 | 65 | 15 | 21 | 71% | 38 | 119 | 35 | 0.47 | 7.5 | 89 | 58 |
| Acenaphthene (ug/Kg) | 18 | 270 | 68 | 50 | 15 | 21 | 71% | 22 | 120 | 57 | 0.84 | 12.4 | 94 | 42 |
| Acenaphthylene (ug/Kg) | 8.5 | 179 | 37 | 28 | 6 | 21 | 29% | 11 | 50 | 36 | 0.97 | 7.9 | 54 | 21 |
| Anthracene (ug/Kg) | 35 | 430 | 183 | 170 | 21 | 21 | 100% | 50 | 352 | 114 | 0.63 | 24.9 | 235 | 130 |
| Fluorene (ug/Kg) | 23 | 270 | 88 | 58 | 16 | 21 | 76% | 29 | 165 | 64 | 0.73 | 14.0 | 117 | 59 |
| Naphthalene (ug/Kg) | 25 | 251 | 89 | 79 | 15 | 21 | 71% | 48 | 130 | 50 | 0.56 | 11.0 | 112 | 66 |
| Phenanthrene (ug/Kg) | 263 | 2400 | 1056 | 966 | 21 | 21 | 100% | 319 | 1650 | 546 | 0.52 | 119.2 | 1305 | 808 |
| **Total LPAHs** | 477 | 3550 | 1539 | 1393 | 9 | 21 | 43% | 673 | 2330 | 760 | 0.49 | 166 | 1885 | 1193 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/Kg) | 120 | 1300 | 606 | 550 | 21 | 21 | 100% | 216 | 1050 | 320 | 0.53 | 70 | 751 | 460 |
| Benzo(a)pyrene (ug/Kg) | 184 | 1100 | 598 | 560 | 21 | 21 | 100% | 273 | 962 | 272 | 0.45 | 59 | 722 | 474 |
| Benzo(b,k)fluoranthene (ug/Kg) | 176 | 1600 | 514 | 343 | 21 | 21 | 100% | 205 | 1000 | 375 | 0.73 | 82 | 685 | 343 |
| Benzo(g,h,i)perylene (ug/Kg) | 439 | 2700 | 1354 | 1300 | 21 | 21 | 100% | 570 | 2400 | 666 | 0.49 | 145 | 1657 | 1051 |
| Chrysene (ug/Kg) | 297 | 1800 | 948 | 990 | 21 | 21 | 100% | 349 | 1660 | 455 | 0.48 | 99 | 1155 | 741 |
| Dibenz(a,h)anthracene (ug/Kg) | 15.5 | 900 | 125 | 75 | 16 | 21 | 76% | 33 | 202 | 187 | 1.49 | 41 | 210 | 40 |
| Fluoranthene (ug/Kg) | 432 | 2650 | 1359 | 1200 | 21 | 21 | 100% | 611 | 2330 | 639 | 0.47 | 139 | 1650 | 1068 |
| Indeno(1,2,3-c,d)pyrene (ug/Kg) | 87 | 930 | 361 | 315 | 20 | 21 | 95% | 170 | 622 | 201 | 0.56 | 44 | 452 | 269 |
| Pyrene (ug/Kg) | 560 | 4200 | 1862 | 1900 | 21 | 21 | 100% | 654 | 2900 | 1023 | 0.55 | 223 | 2328 | 1397 |
| Retene | 73 | 119 | 96 | 96 | 2 | 2 | 100% | 78 | 114 | 33 | 0.34 | 23 | 388 | -196 |
| **Total HPAHs** | 2914 | 14070 | 7846 | 7631 | 9 | 21 | 43% | 3818 | 11612 | 3305 | 0.42 | 721 | 9350 | 6341 |
| **Total PAHs** | 3390 | 17620 | 9385 | 9529 | 21 | 21 | 100% | 4491 | 13942 | 3995 | 0.43 | 872 | 11203 | 7566 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/Kg) | 1600 | 22000 | 12704 | 13000 | 21 | 21 | 100% | 6550 | 19000 | 5124 | 0.40 | 1118 | 15036 | 10372 |
| Butyl benzyl phthalate (ug/Kg) | 267 | 3800 | 1237 | 1200 | 21 | 21 | 100% | 550 | 2000 | 780 | 0.63 | 170 | 1592 | 882 |
| Diethyl phthalate (ug/Kg) | 14 | 89 | 39 | 35 | 5 | 21 | 24% | 15 | 82 | 24 | 0.62 | 5 | 50 | 28 |
| Dimethyl phthalate (ug/Kg) | 43 | 310 | 105 | 81 | 17 | 21 | 81% | 50 | 230 | 71 | 0.68 | 16 | 138 | 73 |
| Di-n-butyl phthalate (ug/Kg) | 41 | 370 | 187 | 170 | 20 | 21 | 95% | 55 | 310 | 99 | 0.53 | 22 | 232 | 141 |
| Di-n-Octyl phthalate (ug/Kg) | 14.5 | 2800 | 875 | 945 | 14 | 21 | 67% | 22 | 1890 | 870 | 0.99 | 190 | 1271 | 479 |
| **Total Phthalates** | 2960 | 28880 | 15095 | 16670 | 21 | 21 | 100% | 7237 | 20940 | 6006 | 0.40 | 1311 | 17829 | 12361 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/Kg) | 7 | 24 | 14 | 14 | 8 | 8 | 100% | 8 | 23 | 6 | 0.44 | 2 | 20 | 9 |
| PCBs | | | | | | | | | | | | | | |
| Aroclor-1016 (ug/Kg) | 0.32 | 40 | 8.4 | 4.50 | 1.00 | 21 | 5% | 1 | 24 | 11 | 1.29 | 2 | 13 | 3 |
| Aroclor-1221 (ug/Kg) | 0.32 | 40 | 8.6 | 4.75 | 1.00 | 21 | 5% | 1 | 24 | 11 | 1.25 | 2 | 14 | 4 |
| Aroclor-1232 (ug/Kg) | 0.32 | 40 | 8.6 | 4.75 | 1.00 | 21 | 5% | 1 | 24 | 11 | 1.26 | 2 | 13 | 4 |
| Aroclor-1242 (ug/Kg) | 0.32 | 420 | 28.4 | 4.40 | 2.00 | 21 | 10% | 1 | 33 | 90 | 3.19 | 20 | 70 | -13 |
| Aroclor-1248 (ug/Kg) | 0.32 | 40 | 8.9 | 4.40 | 1.00 | 21 | 5% | 1 | 24 | 11 | 1.23 | 2 | 14 | 4 |
| Aroclor-1254 (ug/Kg) | 0.50 | 280 | 36 | 19 | 9.0 | 21 | 43% | 1 | 53 | 62 | 1.70 | 13 | 64 | 8 |
| Aroclor-1260 (ug/Kg) | 0.32 | 44 | 12 | 6 | 3.0 | 21 | 14% | 1 | 40 | 15 | 1.22 | 3 | 19 | 5 |
| **TOTAL PCBs** | 0 | 420 | 54 | 0 | 9 | 21 | 43% | 0 | 110 | 106 | 1.97 | 23 | 102 | 6 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 6 | 41 | 24 | 24 | 2 | 2 | 100% | 10 | 38 | 25 | 1.05 | 18 | 246 | -199 |
| Phenolics | | | | | | | | | | | | | | |
| 2-Methylphenol (ug/Kg dry) | 19.00 | 67 | 32.6 | 25.00 | 2.00 | 5 | 40% | 19 | 53 | 20 | 0.62 | 9 | 58 | 8 |
| 4-Methylphenol (ug/Kg dry) | 44.00 | 440 | 215.1 | 175.00 | 8.00 | 8 | 100% | 83 | 389 | 144 | 0.67 | 51 | 336 | 94 |
| Pentachlorophenol (ug/Kg dry) | 5.50 | 17800 | 4497.0 | 91.25 | 2.00 | 4 | 50% | 12 | 12507 | 8869 | 1.97 | 4434 | 18609 | -9615 |
| NPDES Sediment Trap Locations | | | | | | | | | | | | | | |

1 - Total LPAHs is the sum of the concentration or non-detected calculated value of the following compounds: Naphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthrene.

2 - Total HPAHs is the sum of the concentration of non-detected calculated value of the following compounds: Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene.

3 - Total PAHs is the sum of the LPAHs and HPAHs.

4 - Total value for PCBs is the sum of detected values only.

5- Total phthalates is the sum of detected values only.

6- The upline FD3A sediment trap was removed due to the construction of the new OF230A on 12/17/2021 and no sediment was analyzed for WY2022. The City is currently finishing up construction for this project and will re-evaluate possible locations with similar drainage areas and replace this upline trap in early 2023.

7- Due to insufficient sample size the silt and clay percentage is reported as combined.

Bold – The analyte was present in the sample.

U – The analyte was not detected at or above the reported value.

UJ – The analyte was not detected at or above the reported estimated value.

J – The analyte was positively identified. The associated value is an estimate.

NJ - There is evidence the analyte is present. The associated value is an estimate.

E - Estimated above the calibration curve.

# Table E-17
# Summary Statistics for Stormwater Sediment at OF237A FD2 WY2002-WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Total Organic Carbon (mg/Kg) | 2.86 | 17.0 | 6.9 | 6.0 | 21 | 21 | 100% | 4.1 | 11.4 | 3.5 | 0.51 | 0.8 | 8.5 | 5.3 |
| Total Solids (%) | 48.6 | 91.7 | 61.6 | 61.0 | 21 | 21 | 100% | 54.0 | 66.4 | 8.6 | 0.14 | 1.9 | 65.5 | 57.6 |
| Total Volatile Solids (%) | 8.8 | 18.7 | 13.5 | 13.7 | 8 | 8 | 100% | 10.3 | 16.1 | 3.0 | 0.22 | 1.0 | 16.0 | 11.0 |
| Nutrients | | | | | | | | | | | | | | |
| Phosphorus, Total (mg/Kg) | 584 | 1880 | 1016 | 867 | 8 | 8 | 100% | 642 | 1467 | 427 | 0.42 | 151 | 1373 | 659 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (mg/Kg dry) | 0.399 | 0.853 | 0.577 | 0.538 | 9 | 9 | 100% | 0.405 | 0.772 | 0.162 | 0.280 | 0.054 | 0.701 | 0.452 |
| Copper (mg/Kg dry) | 57.7 | 100 | 79 | 70 | 9 | 9 | 100% | 63 | 100 | 16 | 0.20 | 5 | 91 | 66 |
| Lead (mg/Kg dry) | 50.9 | 114.0 | 83.4 | 80.8 | 21 | 21 | 100% | 64.6 | 104.0 | 18.0 | 0.22 | 3.9 | 91.6 | 75.2 |
| Mercury (mg/Kg dry) | 0.029 | 0.129 | 0.067 | 0.066 | 21 | 21 | 100% | 0.046 | 0.089 | 0.023 | 0.35 | 0.005 | 0.077 | 0.056 |
| Zinc (mg/Kg dry) | 220 | 492 | 348 | 327 | 21 | 21 | 100% | 267 | 473 | 78 | 0.22 | 17 | 383 | 312 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/Kg) | 9.5 | 780 | 143 | 130 | 19 | 21 | 90% | 42 | 170 | 154 | 1.08 | 34 | 213 | 73 |
| NWTPH-Heavy Oil (mg/Kg) | 1400 | 4300 | 2781 | 2500 | 21 | 21 | 100% | 2000 | 3900 | 861 | 0.31 | 188 | 3173 | 2389 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/Kg) | 2.5 | 184 | 72 | 54 | 14 | 21 | 67% | 34 | 140 | 44 | 0.61 | 10 | 92 | 52 |
| Acenaphthene (ug/Kg) | 11 | 300 | 94 | 66 | 19 | 21 | 90% | 23 | 190 | 73 | 0.77 | 16 | 127 | 61 |
| Acenaphthylene (ug/Kg) | 2.5 | 50 | 30 | 28 | 8 | 21 | 38% | 14 | 50 | 15 | 0.50 | 3 | 37 | 23 |
| Anthracene (ug/Kg) | 43 | 890 | 334 | 319 | 21 | 21 | 100% | 115 | 610 | 214 | 0.64 | 47 | 431 | 236 |
| Fluorene (ug/Kg) | 18 | 270 | 139 | 130 | 21 | 21 | 100% | 45 | 250 | 77 | 0.55 | 17 | 174 | 104 |
| Naphthalene (ug/Kg) | 13 | 220 | 103 | 110 | 19 | 21 | 90% | 34 | 140 | 48 | 0.46 | 10 | 124 | 81 |
| Phenanthrene (ug/Kg) | 247 | 4600 | 2241 | 2190 | 21 | 21 | 100% | 852 | 4100 | 1263 | 0.56 | 276 | 2816 | 1666 |
| **Total LPAHs** | 418 | 16513 | 3637 | 3040 | 9 | 21 | 43% | 1084 | 5850 | 3366 | 0.93 | 735 | 5169 | 2105 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/Kg) | 194 | 3700 | 1764 | 1600 | 21 | 21 | 100% | 447 | 3000 | 997 | 0.57 | 218 | 2217 | 1310 |
| Benzo(a)pyrene (ug/Kg) | 260 | 3300 | 1733 | 1710 | 21 | 21 | 100% | 357 | 3000 | 881 | 0.51 | 192 | 2134 | 1332 |
| Benzo(b,k)fluoranthene (ug/Kg) | 180 | 9300 | 1708 | 1400 | 21 | 21 | 100% | 291 | 2700 | 1929 | 1.13 | 421 | 2586 | 830 |
| Benzo(g,h,i)perylene (ug/Kg) | 721 | 8500 | 4338 | 4220 | 21 | 21 | 100% | 817 | 7800 | 2373 | 0.55 | 518 | 5419 | 3258 |
| Chrysene (ug/Kg) | 305 | 6900 | 2664 | 2500 | 21 | 21 | 100% | 659 | 4300 | 1602 | 0.60 | 350 | 3393 | 1934 |
| Dibenz(a,h)anthracene (ug/Kg) | 37 | 2800 | 480 | 360 | 20 | 21 | 95% | 72 | 728 | 592 | 1.23 | 129 | 750 | 211 |
| Fluoranthene (ug/Kg) | 671 | 7700 | 3638 | 3750 | 21 | 21 | 100% | 1270 | 5400 | 1713 | 0.47 | 374 | 4418 | 2858 |
| Indeno(1,2,3-c,d)pyrene (ug/Kg) | 205 | 2800 | 1297 | 1300 | 21 | 21 | 100% | 240 | 2100 | 686 | 0.53 | 150 | 1610 | 985 |
| Pyrene (ug/Kg) | 551 | 9500 | 4217 | 4150 | 21 | 21 | 100% | 1400 | 6300 | 2439 | 0.58 | 532 | 5327 | 3106 |
| Retene | 138 | 475 | 307 | 307 | 2 | 2 | 100% | 172 | 441 | 238 | 0.78 | 169 | 2447 | -1834 |
| **Total HPAHs** | 3305 | 40020 | 21568 | 21660 | 9 | 21 | 43% | 5372 | 35220 | 11259 | 0.52 | 2457 | 26693 | 16443 |
| **Total PAHs** | 3740 | 45870 | 25205 | 25345 | 21 | 21 | 100% | 6695 | 41110 | 12537 | 0.50 | 2736 | 30912 | 19498 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/Kg) | 1300 | 24000 | 9584 | 6900 | 21 | 21 | 100% | 3900 | 16000 | 5890 | 0.61 | 1285 | 12265 | 6903 |
| Butyl benzyl phthalate (ug/Kg) | 140 | 2200 | 790 | 650 | 21 | 21 | 100% | 280 | 1800 | 581 | 0.74 | 127 | 1054 | 525 |
| Diethyl phthalate (ug/Kg) | 4 | 250 | 51 | 42 | 6 | 21 | 29% | 18 | 60 | 57 | 1.12 | 12 | 76 | 25 |
| Dimethyl phthalate (ug/Kg) | 15 | 2200 | 232 | 109 | 16 | 21 | 76% | 33 | 440 | 468 | 2.02 | 102 | 445 | 19 |
| Di-n-butyl phthalate (ug/Kg) | 50 | 731 | 273 | 232 | 17 | 21 | 81% | 69 | 580 | 202 | 0.74 | 44 | 365 | 181 |
| Di-n-Octyl phthalate (ug/Kg) | 12 | 4800 | 966 | 920 | 16 | 21 | 76% | 26 | 1840 | 1094 | 1.13 | 239 | 1464 | 468 |
| **Total Phthalates** | 1664 | 31210 | 11836 | 10054 | 21 | 21 | 100% | 4595 | 18950 | 7342 | 0.62 | 1602 | 15178 | 8494 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/Kg) | 12 | 44 | 32 | 33 | 8 | 8 | 100% | 18 | 43 | 11 | 0.35 | 4 | 41 | 23 |
| PCBs | | | | | | | | | | | | | | |
| Aroclor-1016 (ug/Kg) | 0.5 | 40 | 8.5 | 4.00 | 1.00 | 21 | 5% | 1.0 | 24.0 | 11.8 | 1.39 | 2.6 | 13.8 | 3.1 |
| Aroclor-1221 (ug/Kg) | 0.5 | 40 | 8.9 | 4.80 | 1.00 | 21 | 5% | 1.0 | 24.0 | 11.6 | 1.31 | 2.5 | 14.2 | 3.6 |
| Aroclor-1232 (ug/Kg) | 0.5 | 49 | 9.8 | 4.50 | 1.00 | 21 | 5% | 1.0 | 39.5 | 14.3 | 1.45 | 3.1 | 16.3 | 3.3 |
| Aroclor-1242 (ug/Kg) | 0.4 | 40 | 8.5 | 4.00 | 1.00 | 21 | 5% | 0.5 | 24.0 | 12.0 | 1.40 | 2.6 | 14.0 | 3.1 |
| Aroclor-1248 (ug/Kg) | 0.4 | 40 | 9.1 | 4.35 | 1.00 | 21 | 5% | 0.5 | 24.0 | 11.9 | 1.30 | 2.6 | 14.5 | 3.7 |
| Aroclor-1254 (ug/Kg) | 0.4 | 390 | 50 | 10 | 7.0 | 21 | 33% | 1.0 | 110.0 | 90.8 | 1.81 | 19.8 | 91.5 | 8.8 |
| Aroclor-1260 (ug/Kg) | 0.5 | 150 | 43 | 19 | 9.0 | 21 | 43% | 1.5 | 110.0 | 46.4 | 1.07 | 10.1 | 64.4 | 22.1 |
| **TOTAL PCBs** | 0 | 390 | 81 | 64 | 13 | 21 | 62% | 0 | 180 | 95 | 1.18 | 21 | 124 | 38 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 19 | 25 | 22 | 22 | 2 | 2 | 100% | 20 | 24 | 4 | 0.19 | 3 | 60 | -16 |
| Phenolics | | | | | | | | | | | | | | |
| 2-Methylphenol (ug/Kg dry) | 19.00 | 19 | 19.0 | 19.00 | 1.00 | 2 | 50% | 19 | 19 | 0 | 0.00 | 0 | 19 | 19 |
| 4-Methylphenol (ug/Kg dry) | 56.00 | 4700 | 1391.4 | 691.00 | 5.00 | 5 | 100% | 118 | 3340 | 1912 | 1.37 | 855 | 3766 | -983 |
| Pentachlorophenol (ug/Kg dry) | 158.00 | 190 | 174.0 | 174.00 | 2.00 | 2 | 100% | 161 | 187 | 23 | 0.13 | 16 | 377 | -29 |

NPDES Sediment Trap Locations

1 - Total LPAHs is the sum of the concentration or non-detected calculated value of the following compounds: Naphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthrene.

2 - Total HPAHs is the sum of the concentration of non-detected calculated value of the following compounds: Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene.

3 - Total PAHs is the sum of the LPAHs and HPAHs.

4 - Total value for PCBs is the sum of detected values only.

5- Total phthalates is the sum of detected values only.

6- The upline FD3A sediment trap was removed due to the construction of the new OF230A on 12/17/2021 and no sediment was analyzed for WY2022. The City is currently finishing up construction for this project and will re-evaluate possible locations with similar drainage areas and replace this upline trap in early 2023.

7- Due to insufficient sample size the silt and clay percentage is reported as combined.

Bold – The analyte was present in the sample.

U – The analyte was not detected at or above the reported value.

UJ – The analyte was not detected at or above the reported estimated value.

J – The analyte was positively identified. The associated value is an estimate.

NJ - There is evidence the analyte is present. The associated value is an estimate.

E - Estimated above the calibration curve.

# Table E-18
## Summary Statistics for Stormwater Sediment at OF237B FD1 WY2002-WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Total Organic Carbon (mg/Kg) | 0.572 | 11 | 3.0 | 2.3 | 21 | 21 | 100% | 1.3 | 3.8 | 2.3 | 0.79 | 0.5 | 4.0 | 1.9 |
| Total Solids (%) | 56.6 | 82.8 | 70.7 | 71.0 | 21 | 21 | 100% | 65.0 | 77.4 | 6.1 | 0.09 | 1.3 | 73.5 | 67.9 |
| Total Volatile Solids (%) | 3.1 | 6.3 | 4.6 | 4.8 | 8 | 8 | 100% | 3.5 | 5.6 | 1.0 | 0.22 | 0.4 | 5.5 | 3.8 |
| Nutrients | | | | | | | | | | | | | | |
| Phosphorus, Total (mg/Kg) | 375 | 658 | 525 | 520 | 8 | 8 | 100% | 432 | 628 | 92 | 0.18 | 33 | 602 | 447 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (mg/Kg dry) | 0.034 | 2.030 | 0.518 | 0.363 | 10 | 10 | 100% | 0.210 | 0.787 | 0.558 | 1.08 | 0.176 | 0.917 | 0.119 |
| Copper (mg/Kg dry) | 30.9 | 64 | 43 | 40 | 10 | 10 | 100% | 33 | 64 | 12 | 0.27 | 4 | 52 | 35 |
| Lead (mg/Kg dry) | 20.6 | 129.0 | 47.7 | 41.7 | 21 | 21 | 100% | 27.6 | 72.3 | 24.1 | 0.51 | 5.3 | 58.7 | 36.8 |
| Mercury (mg/Kg dry) | 0.0155 | 0.162 | 0.046 | 0.040 | 20 | 21 | 95% | 0.018 | 0.070 | 0.033 | 0.71 | 0.007 | 0.061 | 0.031 |
| Zinc (mg/Kg dry) | 123 | 277 | 195 | 192 | 21 | 21 | 100% | 143 | 233 | 36 | 0.19 | 8 | 212 | 179 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/Kg) | 1.55 | 780 | 81.3 | 39 | 14 | 21 | 67% | 10 | 130 | 164 | 2.02 | 36 | 156 | 6 |
| NWTPH-Heavy Oil (mg/Kg) | 520 | 3000 | 1296 | 1200 | 21 | 21 | 100% | 750 | 1800 | 630 | 0.49 | 138 | 1583 | 1009 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/Kg) | 3.5 | 120 | 34 | 32 | 6 | 21 | 29% | 9.0 | 50 | 26 | 0.75 | 5.6 | 46 | 23 |
| Acenaphthene (ug/Kg) | 3.5 | 170 | 48 | 28 | 9 | 21 | 43% | 8.0 | 130 | 52 | 1.08 | 11.3 | 72 | 24 |
| Acenaphthylene (ug/Kg) | 4.5 | 50 | 26 | 17 | 3 | 21 | 14% | 8.0 | 50 | 17 | 0.68 | 3.8 | 33 | 18 |
| Anthracene (ug/Kg) | 7.5 | 500 | 123 | 39 | 15 | 21 | 71% | 9.5 | 370 | 147 | 1.20 | 32.0 | 190 | 56 |
| Fluorene (ug/Kg) | 4 | 240 | 63 | 29 | 10 | 21 | 48% | 9.0 | 190 | 72 | 1.14 | 15.6 | 95 | 30 |
| Naphthalene (ug/Kg) | 4 | 160 | 38 | 30 | 6 | 21 | 29% | 8.0 | 50 | 35 | 0.93 | 7.7 | 54 | 22 |
| Phenanthrene (ug/Kg) | 36 | 3500 | 927 | 559 | 21 | 21 | 100% | 107 | 2500 | 967 | 1.04 | 211 | 1367 | 486 |
| **Total LPAHs** | 82 | 4509 | 1224 | 802 | 8 | 21 | 38% | 151 | 3390 | 1262 | 1.03 | 275 | 1798 | 649 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/Kg) | 52 | 2200 | 579 | 357 | 21 | 21 | 100% | 81 | 1200 | 564 | 0.97 | 123 | 836 | 322 |
| Benzo(a)pyrene (ug/Kg) | 62 | 2200 | 561 | 328 | 21 | 21 | 100% | 103 | 1200 | 538 | 0.96 | 117 | 806 | 317 |
| Benzo(b,k)fluoranthene (ug/Kg) | 47 | 2900 | 697 | 260 | 21 | 21 | 100% | 119 | 1800 | 842 | 1.21 | 184 | 1080 | 313 |
| Benzo(g,h,i)perylene (ug/Kg) | 147 | 7300 | 1696 | 900 | 21 | 21 | 100% | 355 | 3900 | 1854 | 1.09 | 405 | 2540 | 852 |
| Chrysene (ug/Kg) | 68 | 3000 | 836 | 514 | 21 | 21 | 100% | 149 | 1700 | 782 | 0.93 | 171 | 1192 | 480 |
| Dibenz(a,h)anthracene (ug/Kg) | 5.5 | 410 | 126 | 64 | 18 | 21 | 86% | 25 | 230 | 117 | 0.92 | 26 | 180 | 73 |
| Fluoranthene (ug/Kg) | 77 | 4700 | 1396 | 1010 | 21 | 21 | 100% | 235 | 2700 | 1257 | 0.90 | 274 | 1968 | 824 |
| Indeno(1,2,3-c,d)pyrene (ug/Kg) | 65 | 1600 | 436 | 255 | 21 | 21 | 100% | 125 | 860 | 419 | 0.96 | 92 | 627 | 245 |
| Pyrene (ug/Kg) | 73 | 7400 | 1580 | 832 | 21 | 21 | 100% | 234 | 3300 | 1755 | 1.11 | 383 | 2379 | 781 |
| Retene | 16 | 22 | 19 | 19 | 1 | 2 | 50% | 17 | 21 | 4 | 0.22 | 3 | 57 | -19 |
| **Total HPAHs** | 636 | 28310 | 7907 | 4454 | 8 | 21 | 38% | 1357 | 17280 | 7540 | 0.95 | 1645 | 11339 | 4474 |
| **Total PAHs** | 718 | 32819 | 9131 | 5256 | 21 | 21 | 100% | 1473 | 19850 | 8746 | 0.96 | 1909 | 13112 | 5149 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/Kg) | 1360 | 17000 | 4193 | 3040 | 21 | 21 | 100% | 1540 | 6630 | 3527 | 0.84 | 770 | 5799 | 2588 |
| Butyl benzyl phthalate (ug/Kg) | 16 | 1700 | 296 | 149 | 20 | 21 | 95% | 44 | 730 | 383 | 1.29 | 84 | 470 | 122 |
| Diethyl phthalate (ug/Kg) | 7 | 190 | 39 | 26 | 5 | 21 | 24% | 16 | 50 | 38 | 0.97 | 8 | 57 | 22 |
| Dimethyl phthalate (ug/Kg) | 3 | 7200 | 387 | 24 | 6 | 21 | 29% | 9 | 78 | 1563 | 4.04 | 341 | 1099 | -324 |
| Di-n-butyl phthalate (ug/Kg) | 10 | 490 | 106 | 60 | 13 | 21 | 62% | 16 | 210 | 121 | 1.14 | 26 | 161 | 51 |
| Di-n-Octyl phthalate (ug/Kg) | 7 | 2000 | 518 | 594 | 14 | 21 | 67% | 17 | 880 | 515 | 0.99 | 112 | 753 | 284 |
| **Total Phthalates** | 1568 | 21060 | 5475 | 3713 | 21 | 21 | 100% | 1634 | 7840 | 5119 | 0.93 | 1117 | 7805 | 3145 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/Kg) | 2 | 21 | 9 | 7 | 8 | 8 | 100% | 3 | 18 | 7 | 0.72 | 2 | 15 | 4 |
| PCBs | | | | | | | | | | | | | | |
| Aroclor-1016 (ug/Kg) | 0.5 | 40 | 8.1 | 4 | 1 | 21 | 5% | 0.9 | 24.0 | 11.7 | 1.44 | 2.5 | 13.4 | 2.8 |
| Aroclor-1221 (ug/Kg) | 0.5 | 40 | 8.4 | 4.5 | 1 | 21 | 5% | 0.9 | 24.0 | 11.5 | 1.37 | 2.5 | 13.7 | 3.2 |
| Aroclor-1232 (ug/Kg) | 0.5 | 40 | 8.2 | 4 | 1 | 21 | 5% | 0.9 | 24.0 | 11.6 | 1.41 | 2.5 | 13.5 | 2.9 |
| Aroclor-1242 (ug/Kg) | 0.4 | 40 | 8.2 | 3 | 1 | 21 | 5% | 0.5 | 24.0 | 11.8 | 1.45 | 2.6 | 13.6 | 2.8 |
| Aroclor-1248 (ug/Kg) | 0.4 | 40 | 8.7 | 4 | 1 | 21 | 5% | 0.5 | 24.0 | 11.7 | 1.35 | 2.6 | 14.0 | 3.3 |
| Aroclor-1254 (ug/Kg) | 0.4 | 43 | 10.4 | 4 | 3 | 21 | 14% | 0.5 | 37.5 | 13.4 | 1.29 | 2.9 | 16.5 | 4.3 |
| Aroclor-1260 (ug/Kg) | 0.4 | 45 | 13.0 | 9.5 | 5 | 21 | 24% | 0.5 | 37.5 | 14.4 | 1.11 | 3.1 | 19.5 | 6.4 |
| **TOTAL PCBs** | 0 | 88 | 9 | 0 | 4 | 20 | 20% | 0.0 | 30.5 | 21.4 | 2.51 | 4.8 | 18.6 | -1.5 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 2 | 2 | 2 | 2 | 2 | 2 | 100% | 2 | 2 | 0 | 0.00 | 0 | 2 | 2 |
| Phenolics | | | | | | | | | | | | | | |
| 2-Methylphenol (ug/Kg dry) | 15.50 | 33 | 22.3 | 19.00 | 1.00 | 5 | 20% | 17 | 30 | 7 | 0.31 | 3 | 31 | 14 |
| 4-Methylphenol (ug/Kg dry) | 19.00 | 900 | 339.4 | 272.50 | 7.00 | 8 | 88% | 27 | 837 | 344 | 1.01 | 122 | 627 | 52 |
| Pentachlorophenol (ug/Kg dry) | 5.50 | 204 | 62.0 | 19.33 | 1.00 | 4 | 25% | 8 | 150 | 95 | 1.53 | 48 | 213 | -89 |

NPDES Sediment Trap Locations

1 - Total LPAHs is the sum of the concentration or non-detected calculated value of the following compounds: Naphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthrene.

2 - Total HPAHs is the sum of the concentration of non-detected calculated value of the following compounds: Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene.

3 - Total PAHs is the sum of the LPAHs and HPAHs.

4 - Total value for PCBs is the sum of detected values only.

5- Total phthalates is the sum of detected values only.

6- The upline FD3A sediment trap was removed due to the construction of the new OF230A on 12/17/2021 and no sediment was analyzed for WY2022. The City is currently finishing up construction for this project and will re-

7- Due to insufficient sample size the silt and clay percentage is reported as combined.

Bold – The analyte was present in the sample.

U – The analyte was not detected at or above the reported value.

UJ – The analyte was not detected at or above the reported estimated value.

J – The analyte was positively identified. The associated value is an estimate.

NJ - There is evidence the analyte is present. The associated value is an estimate.

E - Estimated above the calibration curve.

# Table E-19
## Summary Statistics for Stormwater Sediment at OF243 FD23 WY2002-WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Total Organic Carbon (mg/Kg) | 3.71 | 14 | 8 | 8 | 17 | 17 | 100% | 5.3 | 10.7 | 2.4 | 0.29 | 0.6 | 9.4 | 6.9 |
| Total Solids (%) | 18.6 | 47 | 32 | 31 | 21 | 21 | 100% | 23.9 | 40.5 | 7.0 | 0.22 | 1.5 | 35.0 | 28.6 |
| Total Volatile Solids (%) | 17.0 | 24.9 | 20.7 | 20.6 | 8 | 8 | 100% | 18.5 | 22.9 | 2.3 | 0.11 | 0.8 | 22.6 | 18.7 |
| Nutrients | | | | | | | | | | | | | | |
| Phosphorus, Total (mg/Kg) | 1900 | 13700 | 8892 | 9570 | 6 | 6 | 100% | 3605 | 13500 | 4610 | 0.52 | 1882 | 13729 | 4054 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (mg/Kg dry) | 1.79 | 5.55 | 3.27 | 2.87 | 9 | 9 | 100% | 1.90 | 4.66 | 1.25 | 0.38 | 0.42 | 4.23 | 2.31 |
| Copper (mg/Kg dry) | 174 | 288 | 225 | 224 | 9 | 9 | 100% | 192 | 254 | 32 | 0.14 | 11 | 250 | 200 |
| Lead (mg/Kg dry) | 343 | 913 | 516 | 433 | 17 | 17 | 100% | 377 | 755 | 172 | 0.33 | 42 | 604 | 428 |
| Mercury (mg/Kg dry) | 0.206 | 0.972 | 0.419 | 0.316 | 18 | 18 | 100% | 0.229 | 0.750 | 0.236 | 0.56 | 0.056 | 0.536 | 0.302 |
| Zinc (mg/Kg dry) | 440 | 936 | 759 | 764 | 17 | 17 | 100% | 648 | 909 | 127 | 0.17 | 31 | 824 | 693 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/Kg) | 10 | 670 | 231 | 200 | 18 | 20 | 90% | 64 | 423 | 175 | 0.76 | 39 | 312 | 149 |
| NWTPH-Heavy Oil (mg/Kg) | 1700 | 7400 | 4350 | 4100 | 20 | 20 | 100% | 2480 | 6660 | 1661 | 0.38 | 372 | 5128 | 3572 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/Kg) | 29 | 260 | 117 | 106 | 19 | 20 | 95% | 56 | 157 | 53 | 0.46 | 12 | 142 | 92 |
| Acenaphthene (ug/Kg) | 7 | 211 | 64 | 50 | 14 | 20 | 70% | 25 | 110 | 53 | 0.82 | 12 | 89 | 39 |
| Acenaphthylene (ug/Kg) | 16 | 130 | 64 | 50 | 13 | 20 | 65% | 25 | 130 | 35 | 0.54 | 8 | 81 | 48 |
| Anthracene (ug/Kg) | 40 | 1000 | 308 | 295 | 20 | 20 | 100% | 123 | 464 | 206 | 0.67 | 46 | 404 | 212 |
| Fluorene (ug/Kg) | 15 | 330 | 111 | 90 | 18 | 20 | 90% | 39 | 211 | 86 | 0.77 | 19 | 151 | 71 |
| Naphthalene (ug/Kg) | 52 | 393 | 183 | 170 | 20 | 20 | 100% | 104 | 287 | 85 | 0.47 | 19 | 223 | 143 |
| Phenanthrene (ug/Kg) | 134 | 2900 | 968 | 730 | 20 | 20 | 100% | 409 | 2034 | 731 | 0.76 | 164 | 1310 | 625 |
| **Total LPAHs** | 265 | 4830 | 1698 | 1359 | 9 | 20 | 45% | 698 | 3201 | 1112 | 0.65 | 249 | 2218 | 1178 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/Kg) | 91 | 1700 | 715 | 644 | 19 | 20 | 95% | 230 | 1113 | 395 | 0.55 | 88 | 900 | 530 |
| Benzo(a)pyrene (ug/Kg) | 112 | 1200 | 705 | 650 | 19 | 20 | 95% | 263 | 1110 | 318 | 0.45 | 71 | 854 | 556 |
| Benzo(b,k)fluoranthene (ug/Kg) | 157 | 2100 | 683 | 515 | 19 | 20 | 95% | 223 | 1320 | 501 | 0.73 | 112 | 917 | 449 |
| Benzo(g,h,i)perylene (ug/Kg) | 287 | 4200 | 1859 | 1810 | 20 | 20 | 100% | 635 | 2795 | 946 | 0.51 | 211 | 2301 | 1416 |
| Chrysene (ug/Kg) | 184 | 2400 | 1350 | 1300 | 20 | 20 | 100% | 496 | 2110 | 638 | 0.47 | 143 | 1649 | 1052 |
| Dibenz(a,h)anthracene (ug/Kg) | 23 | 1700 | 189 | 103 | 16 | 20 | 80% | 38 | 266 | 362 | 1.92 | 81 | 359 | 19 |
| Fluoranthene (ug/Kg) | 186 | 3770 | 1522 | 1450 | 20 | 20 | 100% | 644 | 2542 | 844 | 0.55 | 189 | 1917 | 1127 |
| Indeno(1,2,3-c,d)pyrene (ug/Kg) | 50 | 950 | 419 | 390 | 18 | 20 | 90% | 136 | 701 | 230 | 0.55 | 51 | 527 | 311 |
| Pyrene (ug/Kg) | 316 | 5700 | 2283 | 1865 | 20 | 20 | 100% | 841 | 3780 | 1443 | 0.63 | 323 | 2958 | 1608 |
| Retene | 70 | 154 | 112 | 112 | 2 | 2 | 100% | 78 | 146 | 59 | 0.53 | 42 | 646 | -422 |
| **Total HPAHs** | 1537 | 18206 | 9725 | 8750 | 9 | 20 | 45% | 3305 | 15863 | 4685 | 0.48 | 1048 | 11918 | 7532 |
| **Total PAHs** | 1802 | 20550 | 11423 | 11075 | 20 | 20 | 100% | 4003 | 19475 | 5460 | 0.48 | 1221 | 13978 | 8867 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/Kg) | 1830 | 41000 | 15565 | 13400 | 20 | 20 | 100% | 5103 | 29800 | 11388 | 0.73 | 2547 | 20895 | 10235 |
| Butyl benzyl phthalate (ug/Kg) | 150 | 51000 | 8308 | 3000 | 20 | 20 | 100% | 515 | 21600 | 13481 | 1.62 | 3014 | 14618 | 1999 |
| Diethyl phthalate (ug/Kg) | 10.5 | 269 | 63 | 40 | 7 | 20 | 35% | 17 | 117 | 65 | 1.03 | 15 | 94 | 33 |
| Dimethyl phthalate (ug/Kg) | 13 | 390 | 106 | 55 | 15 | 20 | 75% | 25 | 224 | 107 | 1.01 | 24 | 156 | 56 |
| Di-n-butyl phthalate (ug/Kg) | 16 | 725 | 233 | 186 | 19 | 20 | 95% | 67 | 456 | 184 | 0.79 | 41 | 319 | 146 |
| Di-n-Octyl phthalate (ug/Kg) | 7 | 4000 | 1105 | 733 | 15 | 20 | 75% | 26 | 3410 | 1220 | 1.10 | 273 | 1676 | 534 |
| **Total Phthalates** | 1993 | 96420 | 25314 | 19148 | 20 | 20 | 100% | 6951 | 48994 | 23020 | 0.91 | 5147 | 36088 | 14540 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/Kg) | 2 | 29 | 14 | 15 | 8 | 8 | 100% | 5 | 26 | 9 | 0.67 | 3 | 22 | 6 |
| PCBs | | | | | | | | | | | | | | |
| Aroclor-1016 (ug/Kg) | 0.5 | 80 | 11 | 3 | 1 | 16 | 6% | 1 | 27 | 21 | 1.82 | 5 | 22 | 0.4 |
| Aroclor-1221 (ug/Kg) | 0.5 | 80 | 11 | 3 | 1 | 16 | 6% | 1 | 27 | 21 | 1.82 | 5 | 22 | 0.4 |
| Aroclor-1232 (ug/Kg) | 0.5 | 80 | 11 | 3 | 1 | 16 | 6% | 1 | 27 | 21 | 1.82 | 5 | 22 | 0.4 |
| Aroclor-1242 (ug/Kg) | 0.4 | 80 | 11 | 3 | 1 | 16 | 6% | 0 | 28 | 21 | 1.81 | 5 | 23 | 0.4 |
| Aroclor-1248 (ug/Kg) | 0.4 | 80 | 12 | 3 | 1 | 16 | 6% | 0 | 28 | 21 | 1.75 | 5 | 23 | 0.8 |
| Aroclor-1254 (ug/Kg) | 0.4 | 220 | 48 | 7 | 5 | 16 | 31% | 0 | 155 | 72 | 1.50 | 18 | 87 | 9.7 |
| Aroclor-1260 (ug/Kg) | 0.4 | 96 | 16 | 4 | 2 | 16 | 13% | 0 | 50 | 29 | 1.79 | 7 | 31 | 0.7 |
| **TOTAL PCBs** | 0 | 220 | 49 | 0 | 4 | 15 | 27% | 0 | 188 | 86 | 1.75 | 22 | 97 | 1.6 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 2 | 6 | 4 | 4 | 2 | 2 | 100% | 2 | 6 | 3 | 0.71 | 2 | 29 | -21 |
| Phenolics | | | | | | | | | | | | | | |
| 2-Methylphenol (ug/Kg dry) | 19.00 | 19 | 19.0 | 19.00 | 1.00 | 2 | 50% | 19 | 19 | 0 | 0.00 | 0 | 19 | 19 |
| 4-Methylphenol (ug/Kg dry) | 14.00 | 5400 | 1161.2 | 100.00 | 4.00 | 5 | 80% | 47 | 3318 | 2370 | 2.04 | 1060 | 4104 | -1782 |
| Pentachlorophenol (ug/Kg dry) | 106.00 | 162 | 134.0 | 134.00 | 2.00 | 2 | 100% | 112 | 156 | 40 | 0.30 | 28 | 490 | -222 |

NPDES Sediment Trap Locations

1 - Total LPAHs is the sum of the concentration or non-detected calculated value of the following compounds: Naphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthre

2 - Total HPAHs is the sum of the concentration of non-detected calculated value of the following compounds: Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene.

3 - Total PAHs is the sum of the LPAHs and HPAHs.

4 - Total value for PCBs is the sum of detected values only.

5- Total phthalates is the sum of detected values only.

6- The upline FD3A sediment trap was removed due to the construction of the new OF230A on 12/17/2021 and no sediment was analyzed for WY2022. The City is currently finishing up

7- Due to insufficient sample size the silt and clay percentage is reported as combined.

Bold – The analyte was present in the sample.

U – The analyte was not detected at or above the reported value.

UJ – The analyte was not detected at or above the reported estimated value.

J – The analyte was positively identified. The associated value is an estimate.

NJ - There is evidence the analyte is present. The associated value is an estimate.

E - Estimated above the calibration curve.

# Table E-20
# Summary Statistics for Stormwater Sediment at OF245 MH390 WY2002-WY2022

| | Minimum | Maximum | Arithmetic Mean | Median | Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Total Organic Carbon (mg/Kg) | 0.933 | 14 | 4.9 | 4.1 | 22 | 22 | 100% | 1.2 | 10.7 | 3.6 | 0.74 | 0.8 | 6.5 | 3.3 |
| Total Solids (%) | 43.8 | 81 | 66.3 | 68.9 | 22 | 22 | 100% | 45.5 | 79.0 | 12.1 | 0.18 | 2.6 | 71.7 | 61.0 |
| Total Volatile Solids (%) | 3 | 30.9 | 13.6 | 11.5 | 8 | 8 | 100% | 5.0 | 27.0 | 9.8 | 0.72 | 3.5 | 21.8 | 5.4 |
| Nutrients | | | | | | | | | | | | | | |
| Phosphorus, Total (mg/Kg) | 587 | 3290 | 1280 | 967 | 8 | 8 | 100% | 612 | 2254 | 910 | 0.71 | 322 | 2041 | 518 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (mg/Kg dry) | 0.541 | 1.800 | 1.059 | 0.881 | 10 | 10 | 100% | 0.583 | 1.773 | 0.506 | 0.478 | 0.160 | 1.421 | 0.697 |
| Copper (mg/Kg dry) | 45.2 | 276 | 121 | 114 | 11 | 11 | 100% | 71 | 171 | 63 | 0.52 | 19 | 164 | 78.9 |
| Lead (mg/Kg dry) | 8.3 | 98.4 | 48.8 | 47.7 | 22 | 22 | 100% | 22.0 | 80.0 | 24.8 | 0.51 | 5.3 | 59.7 | 37.8 |
| Mercury (mg/Kg dry) | 0.0075 | 0.2110 | 0.0686 | 0.0535 | 21 | 22 | 95% | 0.025 | 0.150 | 0.054 | 0.780 | 0.011 | 0.092 | 0.045 |
| Zinc (mg/Kg dry) | 80.9 | 679 | 422 | 439 | 22 | 22 | 100% | 174 | 639 | 179 | 0.42 | 38 | 502 | 343 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/Kg) | 1.55 | 2400 | 348 | 155 | 15 | 22 | 68% | 12 | 740 | 537 | 1.54 | 114 | 585 | 110 |
| NWTPH-Heavy Oil (mg/Kg) | 230 | 10000 | 3177 | 2950 | 22 | 22 | 100% | 830 | 5440 | 2255 | 0.71 | 481 | 4177 | 2177 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/Kg) | 8.5 | 355 | 55 | 36 | 11 | 22 | 50% | 26 | 70 | 70 | 1.27 | 15.0 | 86 | 24.2 |
| Acenaphthene (ug/Kg) | 7 | 248 | 41 | 29 | 8 | 22 | 36% | 9 | 50 | 52 | 1.26 | 11.0 | 64 | 18.1 |
| Acenaphthylene (ug/Kg) | 7 | 115 | 30 | 21 | 6 | 22 | 27% | 11 | 50 | 24 | 0.82 | 5.1 | 40 | 18.8 |
| Anthracene (ug/Kg) | 7.5 | 1660 | 148 | 44 | 14 | 22 | 64% | 9.8 | 236 | 357 | 2.42 | 76.0 | 306 | -10.5 |
| Fluorene (ug/Kg) | 9.5 | 260 | 53 | 30 | 9 | 22 | 41% | 12 | 112 | 65 | 1.22 | 13.9 | 82 | 24.4 |
| Naphthalene (ug/Kg) | 9.5 | 150 | 61 | 51 | 11 | 22 | 50% | 26 | 114 | 37 | 0.60 | 7.8 | 77 | 44.5 |
| Phenanthrene (ug/Kg) | 8.5 | 1410 | 267 | 163 | 20 | 22 | 91% | 52 | 645 | 321 | 1.20 | 68.4 | 409 | 124 |
| **Total LPAHs** | 95 | 3726 | 601 | 329 | 9 | 22 | 41% | 190 | 1044 | 793 | 1.32 | 169 | 953 | 249 |
| HPAHs | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/Kg) | 12.5 | 3740 | 310 | 84 | 18 | 22 | 82% | 31 | 390 | 786 | 2.53 | 167 | 658 | -38 |
| Benzo(a)pyrene (ug/Kg) | 22 | 2240 | 225 | 102 | 17 | 22 | 77% | 28 | 330 | 466 | 2.08 | 99 | 432 | 18 |
| Benzo(b,k)fluoranthene (ug/Kg) | 34 | 1660 | 203 | 116 | 16 | 22 | 73% | 58 | 286 | 334 | 1.65 | 71 | 351 | 54 |
| Benzo(g,h,i)perylene (ug/Kg) | 50 | 1870 | 347 | 192 | 20 | 22 | 91% | 62 | 783 | 413 | 1.19 | 88 | 530 | 164 |
| Chrysene (ug/Kg) | 49.5 | 6490 | 533 | 175 | 21 | 22 | 95% | 55 | 585 | 1350 | 2.53 | 288 | 1132 | -66 |
| Dibenz(a,h)anthracene (ug/Kg) | 8.0 | 616 | 61 | 33 | 8 | 22 | 36% | 10 | 50 | 126 | 2.06 | 27 | 117 | 5 |
| Fluoranthene (ug/Kg) | 49.5 | 3840 | 441 | 210 | 21 | 22 | 95% | 96 | 769 | 795 | 1.80 | 170 | 793 | 88 |
| Indeno(1,2,3-c,d)pyrene (ug/Kg) | 23.5 | 608 | 94 | 50 | 13 | 22 | 59% | 32 | 138 | 124 | 1.31 | 26 | 149 | 40 |
| Pyrene (ug/Kg) | 49.5 | 12100 | 979 | 365 | 21 | 22 | 95% | 118 | 1175 | 2507 | 2.56 | 534 | 2090 | -132 |
| Retene | 22 | 34 | 28 | 28 | 2 | 2 | 100% | 23 | 33 | 8 | 0.30 | 6 | 104 | -48 |
| **Total HPAHs** | 420 | 33164 | 3193 | 1468 | 9 | 22 | 41% | 539 | 4565 | 6823 | 2.14 | 1455 | 6218 | 168 |
| **TOTAL PAHs** | 515 | 36890 | 3794 | 1827 | 22 | 22 | 100% | 746 | 5730 | 7576 | 2.00 | 1615 | 7153 | 435 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl) phthalate (ug/Kg) | 1150 | 34000 | 10220 | 4865 | 21 | 22 | 95% | 1321 | 32000 | 12007 | 1.17 | 2560 | 15544 | 4897 |
| Butyl benzyl phthalate (ug/Kg) | 2500 | 160000 | 25434 | 11000 | 22 | 22 | 100% | 3500 | 47900 | 35034 | 1.38 | 7469 | 40967 | 9901 |
| Diethyl phthalate (ug/Kg) | 7.5 | 820 | 77 | 30 | 5 | 22 | 23% | 17 | 112 | 169 | 2.20 | 36 | 152 | 2 |
| Dimethyl phthalate (ug/Kg) | 4.5 | 9810 | 505 | 50 | 11 | 22 | 50% | 15 | 164 | 2079 | 4.12 | 443 | 1426 | -417 |
| Di-n-butyl phthalate (ug/Kg) | 48.0 | 15000 | 1121 | 225 | 19 | 22 | 86% | 52 | 1475 | 3147 | 2.81 | 671 | 2516 | -274 |
| Di-n-Octyl phthalate (ug/Kg) | 14.5 | 4250 | 431 | 132 | 13 | 22 | 59% | 22 | 943 | 907 | 2.11 | 193 | 833 | 28 |
| **Total Phthalates** | 5333 | 207260 | 37648 | 14662 | 22 | 22 | 100% | 5834 | 81292 | 46761 | 1.24 | 9969 | 58380 | 16915 |
| Insecticides | | | | | | | | | | | | | | |
| Bifenthrin (ug/Kg) | 0 | 9 | 4 | 3 | 7 | 8 | 88% | 1 | 8 | 3 | 0.74 | 1 | 7 | 2 |
| PCBs | | | | | | | | | | | | | | |
| Aroclor-1016 (ug/Kg) | 0.5 | 17 | 4.1 | 3.0 | 1 | 20 | 5% | 1.0 | 6.4 | 3.8 | 0.93 | 0.8 | 5.8 | 2 |
| Aroclor-1221 (ug/Kg) | 0.5 | 17 | 4.7 | 4.7 | 1 | 20 | 5% | 1.0 | 10.0 | 4.0 | 0.84 | 0.9 | 6.6 | 3 |
| Aroclor-1232 (ug/Kg) | 0.5 | 17 | 4.3 | 3.0 | 1 | 20 | 5% | 1.0 | 8.2 | 3.9 | 0.89 | 0.9 | 6.1 | 3 |
| Aroclor-1242 (ug/Kg) | 0.4 | 120 | 9.9 | 3.0 | 2 | 20 | 10% | 0.5 | 10.7 | 26.2 | 2.65 | 5.9 | 22.2 | -2 |
| Aroclor-1248 (ug/Kg) | 0.4 | 17 | 4.7 | 3.0 | 1 | 20 | 5% | 0.5 | 10.6 | 4.5 | 0.94 | 1.0 | 6.8 | 3 |
| Aroclor-1254 (ug/Kg) | 0.4 | 140 | 20 | 7.5 | 7 | 20 | 35% | 0.5 | 64.6 | 34.6 | 1.72 | 7.7 | 36.3 | 4 |
| Aroclor-1260 (ug/Kg) | 0.5 | 180 | 21 | 5.0 | 2 | 19 | 11% | 0.9 | 39.2 | 48.1 | 2.28 | 11.0 | 44.3 | -2 |
| **TOTAL PCBs** | 0 | 440 | 41 | 0 | 7 | 19 | 37% | 0 | 82 | 103 | 2.52 | 24 | 90 | -9 |
| Herbicides | | | | | | | | | | | | | | |
| Dichlobenil (ug/L) | 10 | 18 | 14 | 14 | 2 | 2 | 100% | 11 | 17 | 6 | 0.40 | 4 | 65 | -37 |
| Phenolics | | | | | | | | | | | | | | |
| 2-Methylphenol (ug/Kg dry) | 15.50 | 119 | 39.5 | 19.00 | 2.00 | 5 | 40% | 17 | 81 | 45 | 1.13 | 20 | 95 | -16 |
| 4-Methylphenol (ug/Kg dry) | 10.00 | 115 | 47.3 | 36.50 | 2.00 | 8 | 25% | 11 | 105 | 40 | 0.85 | 14 | 81 | 14 |
| Pentachlorophenol (ug/Kg dry) | 5.50 | 111 | 48.1 | 37.88 | 2.00 | 4 | 50% | 12 | 93 | 46 | 0.95 | 23 | 121 | -25 |

NPDES Sediment Trap Locations

1 - Total LPAHs is the sum of the concentration or non-detected calculated value of the following compounds: Naphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthrene.

2 - Total HPAHs is the sum of the concentration of non-detected calculated value of the following compounds: Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene.

3 - Total PAHs is the sum of the LPAHs and HPAHs.

4 - Total value for PCBs is the sum of detected values only.

5- Total phthalates is the sum of detected values only.

6- The upline FD3A sediment trap was removed due to the construction of the new OF230A on 12/17/2021 and no sediment was analyzed for WY2022. The City is currently finishing up construction for this project and will

7- Due to insufficient sample size the silt and clay percentage is reported as combined.

Bold – The analyte was present in the sample.

U – The analyte was not detected at or above the reported value.

UJ – The analyte was not detected at or above the reported estimated value.

J – The analyte was positively identified. The associated value is an estimate.

NJ - There is evidence the analyte is present. The associated value is an estimate.

E - Estimated above the calibration curve.

# Table E-21
# Baseflow Data at Outfall 230 for WY2016 and WY2019

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (ug/L) | 0.013 | 0.0464 | 0.0 | 0.0327 | 4 | 5 | 80% | 0.0161 | 0.0429 | 0.0 | 0.443 | 0.006 | 0.0 | 0.0 |
| BOD (mg/L) | 1.0 | 4.9 | 1.8 | 1.0 | 1 | 5 | 20% | 1.0 | 3.3 | 1.7 | 0.980 | 0.780 | 3.9 | -0.4 |
| Chloride (mg/L) | 13.3 | 44.4 | 21.6 | 17.2 | 5 | 5 | 100% | 13.3 | 34.5 | 13.0 | 0.604 | 5.828 | 37.8 | 5.4 |
| Conductivity (uS/cm) | 126 | 20900 | 3201.9 | 248 | 7 | 7 | 100% | 154 | 8609 | 7805 | 2.438 | 2949.91 | 10420.0 | -4016.3 |
| Hardness (mg CaCO3/L) | 67 | 150 | 103.2 | 97.1 | 7 | 7 | 100% | 71.9 | 147 | 32.3 | 0.313 | 12.22 | 133.1 | 73.3 |
| pH (pH units) | 7.0 | 8.1 | 7.7 | 7.9 | 7 | 7 | 100% | 7.0 | 8.04 | 0.5 | 0.061 | 0.18 | 8.1 | 7.2 |
| TSS (mg/L) | 1.70 | 12.7 | 5.34 | 2.70 | 7 | 7 | 100% | 2.00 | 12.46 | 4.92 | 0.922 | 1.86 | 9.9 | 0.8 |
| Turbidity (NTU) | 1.84 | 15.5 | 6.51 | 5.39 | 5 | 5 | 100% | 2.26 | 12.076 | 5.41 | 0.831 | 2.42 | 13.2 | -0.2 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.513 | 1.570 | 0.998 | 0.934 | 6 | 6 | 100% | 0.659 | 1.400 | 0.365 | 0.37 | 0.149 | 1.381 | 0.614 |
| Phosphate, Ortho (mg/L) | 0.057 | 0.165 | 0.116 | 0.113 | 6 | 6 | 100% | 0.076 | 0.159 | 0.040 | 0.35 | 0.016 | 0.157 | 0.074 |
| Phosphorus, Total (mg/L) | 0.070 | 0.184 | 0.128 | 0.126 | 6 | 6 | 100% | 0.083 | 0.176 | 0.045 | 0.35 | 0.018 | 0.175 | 0.081 |
| Total Nitrogen (mg/L) | 0.600 | 2.000 | 1.093 | 1.060 | 6 | 6 | 100% | 0.605 | 1.615 | 0.522 | 0.48 | 0.213 | 1.642 | 0.545 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.017 | 0.062 | 0.036 | 0.031 | 2 | 7 | 29% | 0.019 | 0.058 | 0.017 | 0.472 | 0.006 | 0.052 | 0.020 |
| Cadmium, Dissolved (ug/L) | 0.013 | 0.040 | 0.024 | 0.025 | 2 | 7 | 29% | 0.013 | 0.032 | 0.009 | 0.386 | 0.003 | 0.032 | 0.015 |
| Copper (ug/L) | 2.89 | 10.100 | 5.003 | 4.04 | 7 | 7 | 100% | 3.232 | 7.622 | 2.445 | 0.489 | 0.924 | 7.264 | 2.741 |
| Copper, Dissolved (ug/L) | 1.78 | 7.06 | 3.19 | 2.68 | 7 | 7 | 100% | 2.07 | 4.67 | 1.77 | 0.554 | 0.668 | 4.825 | 1.555 |
| Lead (ug/L) | 0.380 | 3.55 | 1.25 | 0.748 | 7 | 7 | 100% | 0.46 | 2.39 | 1.11 | 0.888 | 0.420 | 2.280 | 0.224 |
| Lead, Dissolved (ug/L) | 0.010 | 0.386 | 0.202 | 0.232 | 6 | 7 | 86% | 0.068 | 0.324 | 0.128 | 0.632 | 0.048 | 0.321 | 0.084 |
| Mercury (ng/L) | 0.0008 | 0.004 | 0.002 | 0.001 | 5 | 7 | 71% | 0.00092 | 0.004 | 0.0014 | 0.705 | 0.0005 | 0.0033 | 0.0007 |
| Mercury, Dissolved (ng/L) | 0.0009 | 0.0045 | 0.0026 | 0.0025 | 1 | 7 | 14% | 0.0019 | 0.0034 | 0.0010 | 0.406 | 0.0004 | 0.0035 | 0.0016 |
| Zinc (ug/L) | 10.3 | 85.7 | 29.4 | 15.0 | 7 | 7 | 100% | 12.46 | 62.06 | 27.596 | 0.938 | 10.430 | 54.936 | 3.892 |
| Zinc, Dissolved (ug/L) | 6.47 | 34.2 | 14.3 | 11.3 | 7 | 7 | 100% | 7.73 | 23.3 | 9.28 | 0.646 | 3.51 | 22.9 | 5.77 |
| Insecticides | | | | | | | | | | | | | | |
| Carbaryl (ug/L) | 0.030 | 0.030 | 0.030 | 0.030 | 0 | 4 | 0% | 0.030 | 0.030 | 0 | 0 | 0 | 0.030 | 0.030 |
| Chlorpyrifos (ug/L) | 0.0255 | 0.0295 | 0.0268 | 0.0260 | 0 | 7 | 0% | 0.0255 | 0.0295 | 0.002 | 0.070 | 0.001 | 0.029 | 0.025 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.013 | 0.007 | 0.005 | 2 | 7 | 29% | 0.005 | 0.012 | 0.003 | 0.49 | 0.001 | 0.010 | 0.004 |
| Acenaphthene (ug/L) | 0.0025 | 0.007 | 0.005 | 0.005 | 1 | 7 | 14% | 0.004 | 0.006 | 0.001 | 0.26 | 0.000 | 0.006 | 0.004 |
| Acenaphthylene (ug/L) | 0.0015 | 0.005 | 0.004 | 0.005 | 1 | 7 | 14% | 0.003 | 0.005 | 0.001 | 0.30 | 0.000 | 0.006 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.008 | 0.005 | 0.005 | 1 | 7 | 14% | 0.003 | 0.006 | 0.002 | 0.35 | 0.001 | 0.006 | 0.003 |
| Fluorene (ug/L) | 0.004 | 0.007 | 0.006 | 0.005 | 3 | 7 | 43% | 0.005 | 0.007 | 0.001 | 0.20 | 0.000 | 0.007 | 0.005 |
| Naphthalene (ug/L) | 0.005 | 0.03 | 0.015 | 0.015 | 6 | 7 | 86% | 0.009 | 0.023 | 0.007 | 0.44 | 0.003 | 0.022 | 0.009 |
| Phenanthrene (ug/L) | 0.008 | 0.026 | 0.017 | 0.017 | 7 | 7 | 100% | 0.012 | 0.022 | 0.006 | 0.33 | 0.002 | 0.022 | 0.012 |
| **Total LPAHs** | 0.035 | 0.07 | 0.047 | 0.046 | 7 | 7 | 100% | 0.036 | 0.061 | 0.012 | 0.25 | 0.005 | 0.058 | 0.036 |
| HPAHs in ug/L | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.008 | 0.005 | 0.005 | 1 | 7 | 14% | 0.003 | 0.006 | 0.002 | 0.35 | 0.001 | 0.006 | 0.003 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.010 | 0.005 | 0.005 | 2 | 7 | 29% | 0.003 | 0.007 | 0.002 | 0.51 | 0.001 | 0.007 | 0.003 |
| Benzo(b,k)fluoranthenes (ug/L) | 0.005 | 0.026 | 0.011 | 0.010 | 1 | 7 | 14% | 0.005 | 0.017 | 0.007 | 0.63 | 0.003 | 0.018 | 0.005 |
| Benzo(g,h,i)perylene (ug/L) | 0.003 | 0.010 | 0.005 | 0.004 | 3 | 7 | 43% | 0.003 | 0.007 | 0.002 | 0.50 | 0.001 | 0.007 | 0.003 |
| Chrysene (ug/L) | 0.002 | 0.007 | 0.005 | 0.005 | 2 | 7 | 29% | 0.004 | 0.006 | 0.001 | 0.30 | 0.001 | 0.006 | 0.004 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.005 | 0.004 | 0.005 | 1 | 7 | 14% | 0.003 | 0.005 | 0.001 | 0.27 | 0.000 | 0.005 | 0.003 |
| Fluoranthene (ug/L) | 0.004 | 0.015 | 0.008 | 0.007 | 5 | 7 | 71% | 0.004 | 0.013 | 0.004 | 0.49 | 0.002 | 0.012 | 0.005 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.013 | 0.006 | 0.005 | 1 | 7 | 14% | 0.004 | 0.008 | 0.003 | 0.58 | 0.001 | 0.009 | 0.003 |
| Pyrene (ug/L) | 0.004 | 0.016 | 0.007 | 0.005 | 2 | 7 | 29% | 0.004 | 0.012 | 0.004 | 0.63 | 0.002 | 0.011 | 0.003 |
| **Total HPAHs** | 0.023 | 0.11 | 0.042 | 0.034 | 4 | 7 | 57% | 0.025 | 0.070 | 0.030 | 0.70 | 0.011 | 0.069 | 0.015 |
| **Total PAHs** | 0.061 | 0.14 | 0.089 | 0.084 | 7 | 7 | 100% | 0.062 | 0.118 | 0.029 | 0.33 | 0.011 | 0.116 | 0.062 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate (ug/L) | 0.188 | 0.8 | 0.48 | 0.52 | 2 | 7 | 29% | 0.190 | 0.71 | 0.229 | 0.473 | 0.087 | 0.696 | 0.272 |
| Butyl benzyl phthalate (ug/L) | 0.213 | 0.52 | 0.429 | 0.510 | 0 | 7 | 0% | 0.224 | 0.517 | 0.142 | 0.330 | 0.054 | 0.560 | 0.298 |
| Diethylphthalate (ug/L) | 0.139 | 1.20 | 0.600 | 0.520 | 3 | 7 | 43% | 0.162 | 1.140 | 0.412 | 0.69 | 0.156 | 0.981 | 0.219 |
| Dimethyl phthalate (ug/L) | 0.134 | 0.52 | 0.414 | 0.510 | 0 | 7 | 0% | 0.174 | 0.517 | 0.169 | 0.409 | 0.064 | 0.570 | 0.257 |
| Di-n-butylphthalate (ug/L) | 0.138 | 0.52 | 0.359 | 0.510 | 2 | 7 | 29% | 0.141 | 0.520 | 0.196 | 0.546 | 0.074 | 0.541 | 0.178 |
| Di-n-Octyl phthalate (ug/L) | 0.174 | 0.52 | 0.421 | 0.510 | 0 | 7 | 0% | 0.199 | 0.517 | 0.155 | 0.368 | 0.059 | 0.565 | 0.278 |
| **Total Phthalates** | -- | 2.3 | 0.72 | -- | 3 | 7 | 43% | 0.000 | 2.218 | 1.052 | 1.47 | 0.40 | 1.69 | -0.26 |
| Herbicides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.044 | 0.970 | 0.211 | 0.050 | 3 | 6 | 50% | 0.047 | 0.535 | 0.373 | 1.77 | 0.152 | 0.602 | -0.180 |
| Dichlobenil (ug/L) | 0.020 | 0.052 | 0.043 | 0.051 | 1 | 7 | 14% | 0.027 | 0.052 | 0.012 | 0.288 | 0.005 | 0.055 | 0.032 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.015 | 0.050 | 0.022 | 0.015 | 0 | 5 | 0% | 0.015 | 0.036 | 0.016 | 0.71 | 0.007 | 0.041 | 0.003 |
| NWTPH-Gasoline (ug/L) | 2.34 | 25.0 | 6.9 | 2.3 | 0 | 5 | 0% | 2.3 | 15.9 | 10.1 | 1.47 | 4.5 | 19.5 | -5.7 |
| NWTPH-Heavy Oil (mg/L) | 0.100 | 0.105 | 0.102 | 0.100 | 0 | 5 | 0% | 0.100 | 0.105 | 0.003 | 0.03 | 0.001 | 0.105 | 0.099 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 10 | 2,400 | 669 | 110 | 4 | 5 | 80% | 19 | 1,756 | 1,020 | 1.53 | 456 | 1,935 | -598 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Ethylbenzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| m,p-Xylene (ug/L) | 0.200 | 1.000 | 0.840 | 1.000 | 0 | 5 | 0% | 0.520 | 1.000 | 0.358 | 0.43 | 0.160 | 1.284 | 0.396 |
| o-Xylene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Toluene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |

# Table E-22
# Baseflow Data at Outfall 235 for WY2016 and WY2019

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (ug/L) | 0.0048 | 0.054 | 0.0 | 0.029 | 6 | 7 | 86% | 0.01378 | 0.0507 | 0.0 | 0.545 | 0.006 | 0.0 | 0.0 |
| BOD (mg/L) | 1 | 1 | 1.0 | 1 | 0 | 7 | 0% | 1 | 1 | 0.0 | 0.000 | 0.000 | 1.0 | 1.0 |
| Chloride (mg/L) | 15.8 | 50.4 | 27.3 | 22.25 | 6 | 6 | 100% | 16.65 | 43.05 | 13.3 | 0.487 | 5.429 | 41.3 | 13.4 |
| Conductivity (uS/cm) | 323 | 714 | 419.1 | 337 | 7 | 7 | 100% | 327.8 | 567 | 141.6 | 0.338 | 53.52 | 550.1 | 288.2 |
| Hardness (mg CaCO3/L) | 129 | 155 | 138.9 | 136 | 7 | 7 | 100% | 131.4 | 151.4 | 9.5 | 0.068 | 3.59 | 147.6 | 130.1 |
| pH (pH units) | 6.9 | 8.1 | 7.7 | 7.8 | 7 | 7 | 100% | 7.32 | 8.04 | 0.4 | 0.052 | 0.15 | 8.1 | 7.4 |
| TSS (mg/L) | 0.5 | 4.27 | 2.0 | 1.8 | 6 | 7 | 86% | 0.62 | 3.4 | 1.4 | 0.686 | 0.51 | 3.2 | 0.7 |
| Turbidity (NTU) | 0.8 | 9.53 | 3.2 | 1.74 | 7 | 7 | 100% | 1.04 | 7.034 | 3.2 | 1.007 | 1.21 | 6.1 | 0.2 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.980 | 1.280 | 1.160 | 1.210 | 7 | 7 | 100% | 0.998 | 1.280 | 0.129 | 0.11 | 0.049 | 1.279 | 1.041 |
| Phosphate, Ortho (mg/L) | 0.980 | 1.280 | 1.160 | 1.210 | 7 | 7 | 100% | 0.998 | 1.280 | 0.129 | 0.11 | 0.049 | 1.279 | 1.041 |
| Phosphorus, Total (mg/L) | 0.093 | 0.143 | 0.119 | 0.125 | 6 | 6 | 100% | 0.098 | 0.136 | 0.018 | 0.15 | 0.007 | 0.139 | 0.100 |
| Total Nitrogen (mg/L) | 1.080 | 1.630 | 1.337 | 1.350 | 7 | 7 | 100% | 1.176 | 1.516 | 0.172 | 0.13 | 0.065 | 1.496 | 1.178 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.0085 | 0.25 | 0.1 | 0.03 | 1 | 7 | 14% | 0.0 | 0 | 0.1 | 1.601 | 0.03 | 0.1 | 0.0 |
| Cadmium, Dissolved (ug/L) | 0.0 | 0.25 | 0.1 | 0.0 | 0 | 7 | 0% | 0.0 | 0 | 0.1 | 1.025 | 0.05 | 0.2 | 0.0 |
| Copper (ug/L) | 1.34 | 6.000 | 3.200 | 2.6 | 7 | 7 | 100% | 1.454 | 5.772 | 1.867 | 0.583 | 0.706 | 4.927 | 1.473 |
| Copper, Dissolved (ug/L) | 1.0 | 4.5 | 2.0 | 1.7 | 7 | 7 | 100% | 1.1 | 3 | 1.2 | 0.568 | 0.44 | 3.1 | 1.0 |
| Lead (ug/L) | 0.51 | 4.79 | 2 | 1.65 | 7 | 7 | 100% | 0.5 | 3 | 1.4 | 0.765 | 0.54 | 3.2 | 0.5 |
| Lead, Dissolved (ug/L) | 0.1 | 2.73 | 0.7 | 0.4 | 7 | 7 | 100% | 0.1 | 2 | 0.9 | 1.271 | 0.35 | 1.6 | -0.1 |
| Mercury (ng/L) | 0.0008 | 0.0 | 0.00 | 0.00 | 1 | 7 | 14% | 0.00182 | 0.004 | 0.00 | 0.403 | 0.000 | 0.00 | 0.00 |
| Mercury, Dissolved (ng/L) | 0.0 | 0.0045 | 0.0 | 0.0 | 0 | 7 | 0% | 0.0 | 0 | 0.0 | 0.448 | 0.00 | 0.0 | 0.0 |
| Zinc (ug/L) | 5 | 10.500 | 6.600 | 5.93 | 7 | 7 | 100% | 5.186 | 8.7 | 1.917 | 0.290 | 0.724 | 8.373 | 4.827 |
| Zinc, Dissolved (ug/L) | 3.6 | 5.38 | 4.3 | 4.1 | 7 | 7 | 100% | 3.7 | 5 | 0.7 | 0.157 | 0.25 | 4.9 | 3.7 |
| Insecticides | | | | | | | | | | | | | | |
| Carbaryl (ug/L) | 0.030 | 0.030 | 0.030 | 0.030 | 0 | 4 | 0% | 0.030 | 0.030 | 0.000 | 0.00 | 0.000 | 0.030 | 0.030 |
| Chlorpyrifos (ug/L) | 0.026 | 0.030 | 0.027 | 0.026 | 0 | 7 | 0% | 0.026 | 0.030 | 0.002 | 0.08 | 0.001 | 0.029 | 0.025 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.0015 | 0.015 | 0.006 | 0.005 | 1 | 7 | 14% | 0.004 | 0.009 | 0.004 | 0.71 | 0.002 | 0.010 | 0.002 |
| Acenaphthene (ug/L) | 0.0025 | 0.005 | 0.005 | 0.005 | 0 | 7 | 0% | 0.004 | 0.005 | 0.001 | 0.20 | 0.000 | 0.006 | 0.004 |
| Acenaphthylene (ug/L) | 0.0015 | 0.005 | 0.005 | 0.005 | 0 | 7 | 0% | 0.004 | 0.005 | 0.001 | 0.29 | 0.001 | 0.006 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.008 | 0.005 | 0.005 | 1 | 7 | 14% | 0.003 | 0.006 | 0.002 | 0.35 | 0.001 | 0.006 | 0.003 |
| Fluorene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.003 | 0.005 | 0.001 | 0.22 | 0.000 | 0.005 | 0.003 |
| Naphthalene (ug/L) | 0.005 | 0.02 | 0.008 | 0.005 | 1 | 7 | 14% | 0.005 | 0.014 | 0.006 | 0.74 | 0.002 | 0.013 | 0.003 |
| Phenanthrene (ug/L) | 0.005 | 0.020 | 0.008 | 0.005 | 2 | 7 | 29% | 0.005 | 0.014 | 0.006 | 0.73 | 0.002 | 0.013 | 0.003 |
| **Total LPAHs** | 0.012 | 0.06 | 0.027 | 0.019 | 2 | 7 | 29% | 0.016 | 0.048 | 0.017 | 0.62 | 0.006 | 0.042 | 0.011 |
| HPAHs in ug/L | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.003 | 0.005 | 0.001 | 0.25 | 0.000 | 0.005 | 0.003 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.003 | 0.005 | 0.001 | 0.28 | 0.000 | 0.005 | 0.003 |
| Benzo(b,k)fluoranthenes (ug/L) | 0.005 | 0.011 | 0.008 | 0.010 | 0 | 7 | 0% | 0.005 | 0.011 | 0.003 | 0.32 | 0.001 | 0.011 | 0.006 |
| Benzo(g,h,i)perylene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.003 | 0.005 | 0.001 | 0.26 | 0.000 | 0.005 | 0.003 |
| Chrysene (ug/L) | 0.002 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.002 | 0.005 | 0.002 | 0.43 | 0.001 | 0.005 | 0.002 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.003 | 0.005 | 0.001 | 0.28 | 0.000 | 0.005 | 0.003 |
| Fluoranthene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 7 | 0% | 0.003 | 0.005 | 0.001 | 0.21 | 0.000 | 0.005 | 0.003 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.005 | 0.005 | 0.005 | 0 | 7 | 0% | 0.004 | 0.005 | 0.001 | 0.20 | 0.000 | 0.005 | 0.004 |
| Pyrene (ug/L) | 0.003 | 0.011 | 0.005 | 0.005 | 1 | 7 | 14% | 0.003 | 0.007 | 0.003 | 0.49 | 0.001 | 0.008 | 0.003 |
| **Total HPAHs** | 0.022 | 0.04 | 0.027 | 0.024 | 1 | 7 | 14% | 0.022 | 0.035 | 0.007 | 0.27 | 0.003 | 0.033 | 0.020 |
| **Total PAHs** | 0.036 | 0.09 | 0.05 | 0.041 | 2 | 7 | 29% | 0.038 | 0.085 | 0.022 | 0.42 | 0.008 | 0.074 | 0.033 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate (ug/L) | 0.188 | 0.5 | 0.37 | 0.48 | 1 | 7 | 14% | 0.190 | 0.51 | 0.167 | 0.452 | 0.063 | 0.524 | 0.215 |
| Butyl benzyl phthalate (ug/L) | 0.213 | 0.52 | 0.390 | 0.505 | 0 | 7 | 0% | 0.223 | 0.517 | 0.153 | 0.394 | 0.058 | 0.532 | 0.248 |
| Diethylphthalate (ug/L) | 0.139 | 1 | 0.364 | 0.505 | 0 | 7 | 0% | 0.161 | 0.517 | 0.186 | 0.51 | 0.070 | 0.536 | 0.191 |
| Dimethyl phthalate (ug/L) | 0.134 | 0.52 | 0.370 | 0.505 | 0 | 7 | 0% | 0.174 | 0.517 | 0.179 | 0.485 | 0.068 | 0.536 | 0.204 |
| Di-n-butylphthalate (ug/L) | 0.140 | 0.52 | 0.374 | 0.505 | 1 | 7 | 14% | 0.142 | 0.517 | 0.179 | 0.480 | 0.068 | 0.540 | 0.208 |
| Di-n-Octyl phthalate (ug/L) | 0.174 | 0.52 | 0.380 | 0.505 | 0 | 7 | 0% | 0.199 | 0.517 | 0.166 | 0.438 | 0.063 | 0.534 | 0.226 |
| **Total Phthalates** | 0.000 | 0.5 | 0.11 | 0.000 | 2 | 7 | 29% | 0.000 | 0.363 | 0.196 | 1.79 | 0.07 | 0.29 | -0.07 |
| Herbicides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.017 | 0.061 | 0.044 | 0.050 | 3 | 7 | 43% | 0.023 | 0.054 | 0.016 | 0.36 | 0.006 | 0.058 | 0.029 |
| Dichlobenil (ug/L) | 0.010 | 0.052 | 0.039 | 0.046 | 1 | 7 | 14% | 0.016 | 0.051 | 0.017 | 0.43 | 0.006 | 0.055 | 0.023 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.015 | 0.050 | 0.022 | 0.015 | 0 | 5 | 0% | 0.015 | 0.036 | 0.016 | 0.71 | 0.007 | 0.041 | 0.003 |
| NWTPH-Gasoline (ug/L) | 2.3 | 25.0 | 6.9 | 2.3 | 0 | 5 | 0% | 2.3 | 15.9 | 10.1 | 1.47 | 4.5 | 19.5 | -5.7 |
| NWTPH-Heavy Oil (mg/L) | 0.100 | 0.105 | 0.102 | 0.100 | 0 | 5 | 0% | 0.100 | 0.105 | 0.003 | 0.03 | 0.001 | 0.105 | 0.099 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 110 | 16,000 | 5,062 | 2,400 | 5 | 5 | 100% | 626 | 11,760 | 6,418 | 1.27 | 2,870 | 13,031 | -2,907 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.500 | 1.000 | 0.740 | 0.700 | 5 | 5 | 100% | 0.580 | 0.920 | 0.182 | 0.25 | 0.081 | 0.966 | 0.514 |
| Ethylbenzene (ug/L) | 0.100 | 0.250 | 0.190 | 0.200 | 3 | 5 | 60% | 0.140 | 0.230 | 0.055 | 0.29 | 0.024 | 0.258 | 0.122 |
| m,p-Xylene (ug/L) | 0.200 | 1.000 | 0.720 | 1.000 | 1 | 5 | 20% | 0.280 | 1.000 | 0.390 | 0.54 | 0.174 | 1.204 | 0.236 |
| o-Xylene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Toluene (ug/L) | 0.100 | 0.250 | 0.190 | 0.200 | 3 | 5 | 60% | 0.140 | 0.230 | 0.055 | 0.29 | 0.024 | 0.258 | 0.122 |

# Table E-23
## Baseflow Data at Outfall 237A for WY2016 and WY2019

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (ug/L) | 0.00475 | 0.0466 | 0.0 | 0.0125 | 4 | 10 | 40% | 0.011725 | 0.03445 | 0.0 | 0.685 | 0.004 | 0.0 | 0.0 |
| BOD (mg/L) | 1 | 1 | 1.0 | 1 | 0 | 9 | 0% | 1 | 1 | 0.0 | 0.000 | 0.000 | 1.0 | 1.0 |
| Chloride (mg/L) | 11.5 | 21.3 | 16.3 | 15.95 | 10 | 10 | 100% | 12.04 | 19.95 | 3.4 | 0.206 | 1.062 | 18.7 | 13.9 |
| Conductivity (uS/cm) | 304 | 423 | 347.6 | 334.5 | 10 | 10 | 100% | 306.7 | 414.9 | 40.4 | 0.116 | 12.79 | 376.5 | 318.7 |
| Hardness (mg CaCO3/L) | 126 | 141 | 130.8 | 131 | 10 | 10 | 100% | 126.9 | 134.7 | 4.5 | 0.035 | 1.44 | 134.0 | 127.6 |
| pH (pH units) | 7.1 | 8.1 | 7.7 | 7.9 | 10 | 10 | 100% | 7.28 | 8.01 | 0.3 | 0.045 | 0.11 | 8.0 | 7.5 |
| TSS (mg/L) | 0.5 | 2.94 | 1.7 | 1.68 | 7 | 10 | 70% | 0.95 | 2.634 | 0.8 | 0.447 | 0.24 | 2.3 | 1.2 |
| Turbidity (NTU) | 0.53 | 2 | 1.1 | 1.01 | 10 | 10 | 100% | 0.548 | 1.649 | 0.5 | 0.452 | 0.15 | 1.4 | 0.7 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 2.160 | 2.560 | 2.369 | 2.395 | 10 | 10 | 100% | 2.178 | 2.524 | 0.139 | 0.06 | 0.044 | 2.468 | 2.270 |
| Phosphate, Ortho (mg/L) | 0.028 | 0.042 | 0.034 | 0.034 | 10 | 10 | 100% | 0.028 | 0.039 | 0.005 | 0.15 | 0.002 | 0.038 | 0.030 |
| Phosphorus, Total (mg/L) | 0.023 | 0.037 | 0.029 | 0.030 | 10 | 10 | 100% | 0.026 | 0.033 | 0.004 | 0.14 | 0.001 | 0.032 | 0.027 |
| Total Nitrogen (mg/L) | 2.180 | 2.450 | 2.299 | 2.270 | 10 | 10 | 100% | 2.189 | 2.450 | 0.108 | 0.05 | 0.034 | 2.377 | 2.221 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.0105 | 0.25 | 0.1 | 0.03 | 0 | 10 | 0% | 0.0 | 0 | 0.1 | 1.008 | 0.04 | 0.2 | 0.0 |
| Cadmium, Dissolved (ug/L) | 0.025 | 0.25 | 0.2 | 0.3 | 0 | 10 | 0% | 0.0 | 0 | 0.1 | 0.726 | 0.04 | 0.2 | 0.1 |
| Copper (ug/L) | 0.184 | 1.060 | 0.466 | 0.4455 | 7 | 10 | 70% | 0.2033 | 0.702 | 0.264 | 0.566 | 0.084 | 0.655 | 0.277 |
| Copper, Dissolved (ug/L) | 0.213 | 0.538 | 0.3 | 0.3 | 10 | 10 | 100% | 0.2 | 0 | 0.1 | 0.319 | 0.03 | 0.4 | 0.2 |
| Lead (ug/L) | 0.037 | 0.52 | 0 | 0.079 | 7 | 10 | 70% | 0.1 | 0 | 0.1 | 0.976 | 0.05 | 0.3 | 0.0 |
| Lead, Dissolved (ug/L) | 0.007 | 0.08 | 0.0 | 0.0 | 6 | 10 | 60% | 0.0 | 0 | 0.0 | 0.801 | 0.01 | 0.0 | 0.0 |
| Mercury (ng/L) | 0.0008 | 0.0 | 0.00 | 0.00 | 0 | 10 | 0% | 0.00233 | 0.004 | 0.00 | 0.357 | 0.000 | 0.00 | 0.00 |
| Mercury, Dissolved (ng/L) | 0.0 | 0.0045 | 0.0 | 0.0 | 0 | 10 | 0% | 0.0 | 0 | 0.0 | 0.403 | 0.00 | 0.0 | 0.0 |
| Zinc (ug/L) | 0.99 | 4.090 | 2.585 | 2.775 | 10 | 10 | 100% | 1.557 | 3.703 | 0.991 | 0.384 | 0.314 | 3.294 | 1.876 |
| Zinc, Dissolved (ug/L) | 0.72 | 3.39 | 1.9 | 2.0 | 10 | 10 | 100% | 1.2 | 2 | 0.7 | 0.374 | 0.23 | 2.5 | 1.4 |
| Insecticides | | | | | | | | | | | | | | |
| Carbaryl (ug/L) | 0.030 | 0.030 | 0.030 | 0.030 | 0 | 6 | 0% | 0.030 | 0.030 | 0.000 | 0.00 | 0.000 | 0.030 | 0.030 |
| Chlorpyrifos (ug/L) | 0.026 | 0.030 | 0.027 | 0.026 | 0 | 10 | 0% | 0.026 | 0.030 | 0.002 | 0.08 | 0.001 | 0.029 | 0.026 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.004 | 0.005 | 0.005 | 0.005 | 1 | 10 | 10% | 0.005 | 0.005 | 0.000 | 0.06 | 0.000 | 0.005 | 0.005 |
| Acenaphthene (ug/L) | 0.0025 | 0.005 | 0.005 | 0.005 | 0 | 10 | 0% | 0.005 | 0.005 | 0.001 | 0.17 | 0.000 | 0.005 | 0.004 |
| Acenaphthylene (ug/L) | 0.0015 | 0.005 | 0.005 | 0.005 | 0 | 10 | 0% | 0.005 | 0.005 | 0.001 | 0.24 | 0.000 | 0.005 | 0.004 |
| Anthracene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 10 | 0% | 0.003 | 0.005 | 0.001 | 0.25 | 0.000 | 0.005 | 0.003 |
| Fluorene (ug/L) | 0.003 | 0.005 | 0.005 | 0.005 | 0 | 10 | 0% | 0.004 | 0.005 | 0.001 | 0.18 | 0.000 | 0.005 | 0.004 |
| Naphthalene (ug/L) | 0.004 | 0.01 | 0.006 | 0.006 | 1 | 10 | 10% | 0.005 | 0.009 | 0.002 | 0.32 | 0.001 | 0.008 | 0.005 |
| Phenanthrene (ug/L) | 0.004 | 0.016 | 0.007 | 0.005 | 4 | 10 | 40% | 0.004 | 0.012 | 0.004 | 0.60 | 0.001 | 0.009 | 0.004 |
| **Total LPAHs** | 0.019 | 0.04 | 0.024 | 0.020 | 3 | 10 | 30% | 0.019 | 0.032 | 0.008 | 0.32 | 0.002 | 0.030 | 0.019 |
| HPAHs in ug/L | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.004 | 0.006 | 0.005 | 0.005 | 1 | 10 | 10% | 0.004 | 0.005 | 0.001 | 0.18 | 0.000 | 0.005 | 0.004 |
| Benzo(a)pyrene (ug/L) | 0.004 | 0.006 | 0.005 | 0.005 | 1 | 10 | 10% | 0.004 | 0.005 | 0.001 | 0.18 | 0.000 | 0.005 | 0.004 |
| Benzo(b,k)fluoranthenes (ug/L) | 0.006 | 0.011 | 0.009 | 0.010 | 1 | 10 | 10% | 0.006 | 0.011 | 0.002 | 0.23 | 0.001 | 0.010 | 0.007 |
| Benzo(g,h,i)perylene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 10 | 0% | 0.003 | 0.005 | 0.001 | 0.25 | 0.000 | 0.005 | 0.003 |
| Chrysene (ug/L) | 0.002 | 0.006 | 0.004 | 0.005 | 1 | 10 | 10% | 0.002 | 0.005 | 0.002 | 0.37 | 0.000 | 0.005 | 0.003 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.005 | 0.004 | 0.005 | 0 | 10 | 0% | 0.003 | 0.005 | 0.001 | 0.23 | 0.000 | 0.005 | 0.004 |
| Fluoranthene (ug/L) | 0.004 | 0.009 | 0.005 | 0.005 | 1 | 10 | 10% | 0.004 | 0.005 | 0.002 | 0.32 | 0.001 | 0.006 | 0.004 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.005 | 0.005 | 0.005 | 0 | 10 | 0% | 0.004 | 0.005 | 0.001 | 0.17 | 0.000 | 0.005 | 0.004 |
| Pyrene (ug/L) | 0.003 | 0.010 | 0.005 | 0.005 | 2 | 10 | 20% | 0.003 | 0.006 | 0.002 | 0.43 | 0.001 | 0.006 | 0.003 |
| **Total HPAHs** | 0.022 | 0.05 | 0.029 | 0.025 | 2 | 10 | 20% | 0.022 | 0.035 | 0.010 | 0.36 | 0.003 | 0.036 | 0.022 |
| **Total PAHs** | 0.040 | 0.08 | 0.05 | 0.045 | 3 | 10 | 30% | 0.040 | 0.075 | 0.016 | 0.30 | 0.005 | 0.065 | 0.042 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate (ug/L) | 0.189 | 0.5 | 0.37 | 0.47 | 2 | 10 | 20% | 0.193 | 0.51 | 0.157 | 0.420 | 0.050 | 0.487 | 0.262 |
| Butyl benzyl phthalate (ug/L) | 0.213 | 0.52 | 0.398 | 0.505 | 0 | 10 | 0% | 0.231 | 0.515 | 0.145 | 0.365 | 0.046 | 0.502 | 0.294 |
| Diethylphthalate (ug/L) | 0.265 | 1 | 0.430 | 0.488 | 6 | 10 | 60% | 0.279 | 0.521 | 0.115 | 0.27 | 0.036 | 0.512 | 0.348 |
| Dimethyl phthalate (ug/L) | 0.134 | 0.52 | 0.381 | 0.505 | 0 | 10 | 0% | 0.197 | 0.515 | 0.168 | 0.441 | 0.053 | 0.501 | 0.261 |
| Di-n-butylphthalate (ug/L) | 0.139 | 0.52 | 0.303 | 0.218 | 2 | 10 | 20% | 0.140 | 0.506 | 0.179 | 0.591 | 0.057 | 0.431 | 0.175 |
| Di-n-Octyl phthalate (ug/L) | 0.174 | 0.52 | 0.389 | 0.505 | 0 | 10 | 0% | 0.214 | 0.515 | 0.156 | 0.402 | 0.049 | 0.501 | 0.277 |
| ***Total Phthalates** | 0.000 | 1.0 | 0.36 | 0.334 | 6 | 10 | 60% | 0.000 | 0.937 | 0.383 | 1.05 | 0.12 | 0.64 | 0.09 |
| Herbicides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 0.093 | 0.048 | 0.050 | 2 | 9 | 22% | 0.023 | 0.059 | 0.023 | 0.48 | 0.008 | 0.065 | 0.030 |
| Dichlobenil (ug/L) | 0.020 | 0.052 | 0.046 | 0.051 | 0 | 10 | 0% | 0.043 | 0.052 | 0.010 | 0.21 | 0.003 | 0.053 | 0.039 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.015 | 0.050 | 0.022 | 0.015 | 0 | 5 | 0% | 0.015 | 0.036 | 0.016 | 0.71 | 0.007 | 0.041 | 0.003 |
| NWTPH-Gasoline (ug/L) | 2.3 | 25.0 | 6.9 | 2.3 | 0 | 5 | 0% | 2.3 | 15.9 | 10.1 | 1.47 | 4.5 | 19.5 | -5.7 |
| NWTPH-Heavy Oil (mg/L) | 0.095 | 0.105 | 0.101 | 0.100 | 0 | 5 | 0% | 0.097 | 0.105 | 0.004 | 0.04 | 0.002 | 0.106 | 0.096 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 40 | 490 | 257 | 220 | 5 | 5 | 100% | 42 | 490 | 225 | 0.87 | 100 | 536 | -22 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Ethylbenzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| m,p-Xylene (ug/L) | 0.200 | 1.000 | 0.840 | 1.000 | 0 | 5 | 0% | 0.520 | 1.000 | 0.358 | 0.43 | 0.160 | 1.284 | 0.396 |
| o-Xylene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Toluene (ug/L) | 0.100 | 0.250 | 0.210 | 0.250 | 1 | 5 | 20% | 0.140 | 0.250 | 0.065 | 0.31 | 0.029 | 0.291 | 0.129 |

# Table E-24
## Baseflow Data at Outfall 237B for WY2016 and WY2019

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (ug/L) | 0.0125 | 0.0299 | 0.0 | 0.0169 | 4 | 6 | 67% | 0.0125 | 0.0268 | 0.0 | 0.385 | 0.003 | 0.0 | 0.0 |
| BOD (mg/L) | 1 | 3.6 | 1.4 | 1 | 1 | 6 | 17% | 1 | 2.3 | 1.1 | 0.741 | 0.433 | 2.5 | 0.3 |
| Chloride (mg/L) | 8.6 | 90.6 | 25.3 | 9.13 | 5 | 5 | 100% | 8.63 | 58.072 | 36.5 | 1.446 | 16.337 | 70.6 | -20.1 |
| Conductivity (uS/cm) | 261 | 281 | 272.0 | 273 | 6 | 6 | 100% | 262.5 | 280.5 | 9.0 | 0.033 | 3.67 | 281.4 | 262.6 |
| Hardness (mg CaCO3/L) | 109 | 124 | 116.7 | 117.5 | 6 | 6 | 100% | 110.5 | 122 | 5.4 | 0.047 | 2.22 | 122.4 | 111.0 |
| pH (pH units) | 7.1 | 7.7 | 7.4 | 7.4 | 6 | 6 | 100% | 7.2 | 7.65 | 0.2 | 0.030 | 0.09 | 7.7 | 7.2 |
| TSS (mg/L) | 0.5 | 2.8 | 1.2 | 0.91 | 2 | 6 | 33% | 0.5 | 2.3 | 0.9 | 0.758 | 0.38 | 2.2 | 0.3 |
| Turbidity (NTU) | 0.74 | 2.49 | 1.3 | 1.23 | 6 | 6 | 100% | 0.825 | 1.99 | 0.6 | 0.465 | 0.26 | 2.0 | 0.7 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 2.900 | 3.480 | 3.107 | 3.060 | 6 | 6 | 100% | 2.910 | 3.350 | 0.220 | 0.07 | 0.090 | 3.337 | 2.876 |
| Phosphate, Ortho (mg/L) | 0.028 | 0.051 | 0.034 | 0.030 | 6 | 6 | 100% | 0.029 | 0.043 | 0.009 | 0.26 | 0.004 | 0.043 | 0.024 |
| Phosphorus, Total (mg/L) | 0.028 | 0.037 | 0.033 | 0.034 | 6 | 6 | 100% | 0.030 | 0.036 | 0.003 | 0.09 | 0.001 | 0.036 | 0.030 |
| Total Nitrogen (mg/L) | 2.940 | 3.150 | 3.042 | 3.035 | 6 | 6 | 100% | 2.965 | 3.125 | 0.080 | 0.03 | 0.033 | 3.126 | 2.957 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.007 | 0.25 | 0.1 | 0.03 | 0 | 6 | 0% | 0.0 | 0 | 0.1 | 1.175 | 0.05 | 0.2 | 0.0 |
| Cadmium, Dissolved (ug/L) | 0.0 | 0.25 | 0.1 | 0.0 | 0 | 6 | 0% | 0.0 | 0 | 0.1 | 1.630 | 0.04 | 0.2 | 0.0 |
| Copper (ug/L) | 0.1235 | 0.677 | 0.325 | 0.28075 | 3 | 6 | 50% | 0.1535 | 0.540 | 0.207 | 0.636 | 0.084 | 0.541 | 0.108 |
| Copper, Dissolved (ug/L) | 0.0 | 0.284 | 0.2 | 0.2 | 6 | 6 | 100% | 0.1 | 0 | 0.1 | 0.483 | 0.03 | 0.3 | 0.1 |
| Lead (ug/L) | 0.0135 | 0.092 | 0 | 0.039 | 2 | 6 | 33% | 0.0 | 0 | 0.0 | 0.622 | 0.01 | 0.1 | 0.0 |
| Lead, Dissolved (ug/L) | 0.0 | 0.07 | 0.0 | 0.0 | 4 | 6 | 67% | 0.0 | 0 | 0.0 | 0.806 | 0.01 | 0.1 | 0.0 |
| Mercury (ng/L) | 0.0008 | 0.0 | 0.00 | 0.00 | 0 | 6 | 0% | 0.00165 | 0.004 | 0.00 | 0.439 | 0.000 | 0.00 | 0.00 |
| Mercury, Dissolved (ng/L) | 0.0 | 0.0045 | 0.0 | 0.0 | 0 | 6 | 0% | 0.0 | 0 | 0.0 | 0.478 | 0.00 | 0.0 | 0.0 |
| Zinc (ug/L) | 0.9 | 2.760 | 1.635 | 1.545 | 6 | 6 | 100% | 1.045 | 2.315 | 0.646 | 0.395 | 0.264 | 2.312 | 0.958 |
| Zinc, Dissolved (ug/L) | 0.8 | 1.83 | 1.3 | 1.3 | 6 | 6 | 100% | 0.9 | 2 | 0.4 | 0.321 | 0.17 | 1.8 | 0.9 |
| Insecticides | | | | | | | | | | | | | | |
| Carbaryl (ug/L) | 0.030 | 0.030 | 0.030 | 0.030 | 0 | 3 | 0% | 0.030 | 0.030 | 0.000 | 0.00 | 0.000 | 0.030 | 0.030 |
| Chlorpyrifos (ug/L) | 0.026 | 0.030 | 0.028 | 0.028 | 0 | 6 | 0% | 0.026 | 0.030 | 0.002 | 0.08 | 0.001 | 0.030 | 0.025 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 1 | 6 | 17% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| Acenaphthene (ug/L) | 0.0025 | 0.023 | 0.008 | 0.005 | 2 | 6 | 33% | 0.004 | 0.015 | 0.008 | 0.98 | 0.003 | 0.016 | 0.000 |
| Acenaphthylene (ug/L) | 0.0015 | 0.005 | 0.004 | 0.005 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.32 | 0.001 | 0.006 | 0.003 |
| Anthracene (ug/L) | 0.003 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.27 | 0.000 | 0.005 | 0.003 |
| Fluorene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.23 | 0.000 | 0.005 | 0.003 |
| Naphthalene (ug/L) | 0.005 | 0.01 | 0.007 | 0.007 | 0 | 6 | 0% | 0.005 | 0.009 | 0.002 | 0.27 | 0.001 | 0.009 | 0.005 |
| Phenanthrene (ug/L) | 0.004 | 0.013 | 0.006 | 0.005 | 0 | 6 | 0% | 0.004 | 0.010 | 0.003 | 0.53 | 0.001 | 0.010 | 0.003 |
| **Total LPAHs** | 0.019 | 0.05 | 0.028 | 0.024 | 3 | 6 | 50% | 0.019 | 0.040 | 0.011 | 0.40 | 0.005 | 0.039 | 0.016 |
| HPAHs in ug/L | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.26 | 0.000 | 0.005 | 0.003 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.31 | 0.001 | 0.005 | 0.003 |
| Benzo(b,k)fluoranthenes (ug/L) | 0.005 | 0.011 | 0.008 | 0.008 | 0 | 6 | 0% | 0.005 | 0.010 | 0.003 | 0.33 | 0.001 | 0.011 | 0.005 |
| Benzo(g,h,i)perylene (ug/L) | 0.003 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.27 | 0.000 | 0.005 | 0.003 |
| Chrysene (ug/L) | 0.002 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.002 | 0.005 | 0.002 | 0.47 | 0.001 | 0.005 | 0.002 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.31 | 0.001 | 0.005 | 0.003 |
| Fluoranthene (ug/L) | 0.004 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.004 | 0.005 | 0.001 | 0.19 | 0.000 | 0.005 | 0.003 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 6 | 0% | 0.004 | 0.005 | 0.001 | 0.22 | 0.000 | 0.005 | 0.003 |
| Pyrene (ug/L) | 0.003 | 0.005 | 0.004 | 0.004 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.25 | 0.000 | 0.005 | 0.003 |
| **Total HPAHs** | 0.022 | 0.03 | 0.026 | 0.025 | 0 | 6 | 0% | 0.022 | 0.033 | 0.005 | 0.19 | 0.002 | 0.032 | 0.021 |
| **Total PAHs** | 0.041 | 0.08 | 0.05 | 0.047 | 3 | 6 | 50% | 0.043 | 0.073 | 0.015 | 0.29 | 0.006 | 0.070 | 0.038 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate (ug/L) | 0.190 | 0.5 | 0.35 | 0.35 | 0 | 6 | 0% | 0.191 | 0.51 | 0.175 | 0.498 | 0.072 | 0.536 | 0.168 |
| Butyl benzyl phthalate (ug/L) | 0.215 | 0.52 | 0.369 | 0.372 | 0 | 6 | 0% | 0.223 | 0.513 | 0.156 | 0.424 | 0.064 | 0.533 | 0.205 |
| Diethylphthalate (ug/L) | 0.140 | 1 | 0.328 | 0.315 | 1 | 6 | 17% | 0.159 | 0.510 | 0.180 | 0.55 | 0.074 | 0.517 | 0.139 |
| Dimethyl phthalate (ug/L) | 0.135 | 0.52 | 0.346 | 0.357 | 0 | 6 | 0% | 0.168 | 0.513 | 0.183 | 0.531 | 0.075 | 0.538 | 0.153 |
| Di-n-butylphthalate (ug/L) | 0.138 | 0.52 | 0.326 | 0.327 | 0 | 6 | 0% | 0.139 | 0.513 | 0.203 | 0.624 | 0.083 | 0.539 | 0.113 |
| Di-n-Octyl phthalate (ug/L) | 0.175 | 0.52 | 0.357 | 0.364 | 0 | 6 | 0% | 0.196 | 0.513 | 0.170 | 0.475 | 0.069 | 0.536 | 0.179 |
| ***Total Phthalates** | 0.000 | 0.5 | 0.08 | 0.000 | 1 | 6 | 17% | 0.000 | 0.226 | 0.185 | 2.45 | 0.08 | 0.27 | -0.12 |
| Herbicides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 0.050 | 0.031 | 0.034 | 1 | 6 | 17% | 0.009 | 0.050 | 0.021 | 0.69 | 0.009 | 0.053 | 0.009 |
| Dichlobenil (ug/L) | 0.020 | 0.052 | 0.044 | 0.048 | 0 | 6 | 0% | 0.033 | 0.051 | 0.012 | 0.27 | 0.005 | 0.057 | 0.031 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.015 | 0.050 | 0.022 | 0.015 | 0 | 5 | 0% | 0.015 | 0.036 | 0.016 | 0.71 | 0.007 | 0.041 | 0.003 |
| NWTPH-Gasoline (ug/L) | 2.3 | 25.0 | 6.9 | 2.3 | 0 | 5 | 0% | 2.3 | 15.9 | 10.1 | 1.47 | 4.5 | 19.5 | -5.7 |
| NWTPH-Heavy Oil (mg/L) | 0.100 | 0.105 | 0.101 | 0.100 | 0 | 5 | 0% | 0.100 | 0.103 | 0.002 | 0.02 | 0.001 | 0.104 | 0.098 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 10 | 68 | 31 | 20 | 4 | 5 | 80% | 11 | 59 | 25 | 0.79 | 11 | 62 | 0 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Ethylbenzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| m,p-Xylene (ug/L) | 0.200 | 1.000 | 0.840 | 1.000 | 0 | 5 | 0% | 0.520 | 1.000 | 0.358 | 0.43 | 0.160 | 1.284 | 0.396 |
| o-Xylene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Toluene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |

# Table E-25
## Baseflow Data at Outfall 243 for WY2016 and WY2019

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (ug/L) | 0.0267 | 0.0962 | 0.1 | 0.0586 | 7 | 7 | 100% | 0.03216 | 0.09566 | 0.0 | 0.445 | 0.010 | 0.1 | 0.0 |
| BOD (mg/L) | 1 | 1 | 1.0 | 1 | 0 | 7 | 0% | 1 | 1 | 0.0 | 0.000 | 0.000 | 1.0 | 1.0 |
| Chloride (mg/L) | 2490 | 13100 | 8143 | 8080 | 7 | 7 | 100% | 3510 | 11900 | 3791 | 0.466 | 1433 | 11649 | 4636 |
| Conductivity (uS/cm) | 8080 | 35300 | 22685 | 23200 | 8 | 8 | 100% | 12084 | 32990 | 9798 | 0.432 | 3464 | 30876 | 14494 |
| Hardness (mg CaCO3/L) | 808 | 3770 | 2214.8 | 1915 | 8 | 8 | 100% | 1117.4 | 3497 | 1110.3 | 0.501 | 392.53 | 3142.9 | 1286.6 |
| pH (pH units) | 7 | 7.5 | 7.3 | 7.3 | 8 | 8 | 100% | 7 | 7.43 | 0.2 | 0.025 | 0.07 | 7.4 | 7.1 |
| TSS (mg/L) | 4.92 | 21.8 | 13.7 | 14.9 | 8 | 8 | 100% | 7.972 | 18.72 | 5.5 | 0.398 | 1.93 | 18.3 | 9.2 |
| Turbidity (NTU) | 7.36 | 27.3 | 15.3 | 14.8 | 7 | 7 | 100% | 8.236 | 22.32 | 6.7 | 0.440 | 2.55 | 21.5 | 9.1 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.046 | 0.306 | 0.161 | 0.151 | 8 | 8 | 100% | 0.077 | 0.258 | 0.088 | 0.55 | 0.031 | 0.234 | 0.087 |
| Phosphate, Ortho (mg/L) | 0.003 | 0.139 | 0.070 | 0.063 | 6 | 7 | 86% | 0.023 | 0.120 | 0.048 | 0.69 | 0.018 | 0.115 | 0.025 |
| Phosphorus, Total (mg/L) | 0.181 | 0.566 | 0.310 | 0.267 | 7 | 7 | 100% | 0.186 | 0.471 | 0.144 | 0.46 | 0.054 | 0.444 | 0.177 |
| Total Nitrogen (mg/L) | 0.420 | 0.790 | 0.541 | 0.480 | 8 | 8 | 100% | 0.427 | 0.748 | 0.143 | 0.26 | 0.051 | 0.661 | 0.422 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.0215 | 2.5 | 0.4 | 0.0705 | 3 | 8 | 38% | 0.0 | 1 | 0.9 | 2.281 | 0.30 | 1.1 | -0.3 |
| Cadmium, Dissolved (ug/L) | 0.0 | 1.25 | 0.2 | 0.1 | 2 | 8 | 25% | 0.0 | 1 | 0.4 | 1.856 | 0.15 | 0.6 | -0.1 |
| Copper (ug/L) | 2.53 | 10.500 | 5.456 | 4.89 | 7 | 7 | 100% | 3.064 | 8.202 | 2.675 | 0.490 | 1.011 | 7.930 | 2.981 |
| Copper, Dissolved (ug/L) | 0.3 | 3.42 | 1.7 | 1.6 | 7 | 7 | 100% | 0.5 | 3 | 1.1 | 0.635 | 0.41 | 2.7 | 0.7 |
| Lead (ug/L) | 0.788 | 25.4 | 5 | 2.655 | 8 | 8 | 100% | 1.2 | 11 | 8.2 | 1.511 | 2.89 | 12.3 | -1.4 |
| Lead, Dissolved (ug/L) | 0.0 | 1.81 | 0.3 | 0.1 | 3 | 8 | 38% | 0.0 | 1 | 0.6 | 1.887 | 0.22 | 0.8 | -0.2 |
| Mercury (ng/L) | 0.001 | 0.0 | 0.00 | 0.00 | 6 | 8 | 75% | 0.001 | 0.00295 | 0.00 | 0.611 | 0.000 | 0.00 | 0.00 |
| Mercury, Dissolved (ng/L) | 0.0 | 0.0045 | 0.0 | 0.0 | 0 | 8 | 0% | 0.0 | 0 | 0.0 | 0.257 | 0.00 | 0.0 | 0.0 |
| Zinc (ug/L) | 4.33 | 30.300 | 14.839 | 13.4 | 7 | 7 | 100% | 7.336 | 23.1 | 8.220 | 0.554 | 3.107 | 22.441 | 7.236 |
| Zinc, Dissolved (ug/L) | 2.5 | 11.9 | 6.4 | 5.3 | 7 | 7 | 100% | 3.0 | 10 | 3.3 | 0.519 | 1.26 | 9.5 | 3.3 |
| Insecticides | | | | | | | | | | | | | | |
| Carbaryl (ug/L) | 0.030 | 0.030 | 0.030 | 0.030 | 0 | 7 | 0% | 0.030 | 0.030 | 0.000 | 0.00 | 0.000 | 0.030 | 0.030 |
| Chlorpyrifos (ug/L) | 0.026 | 0.031 | 0.026 | 0.026 | 0 | 8 | 0% | 0.026 | 0.027 | 0.002 | 0.06 | 0.001 | 0.028 | 0.025 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 0 | 8 | 0% | 0.005 | 0.005 | 0.000 | 0.00 | 0.000 | 0.005 | 0.005 |
| Acenaphthene (ug/L) | 0.005 | 0.132 | 0.032 | 0.00925 | 5 | 8 | 63% | 0.005 | 0.089 | 0.046 | 1.45 | 0.016 | 0.070 | -0.007 |
| Acenaphthylene (ug/L) | 0.005 | 0.007 | 0.005 | 0.005 | 1 | 8 | 13% | 0.005 | 0.006 | 0.001 | 0.13 | 0.000 | 0.006 | 0.005 |
| Anthracene (ug/L) | 0.005 | 0.053 | 0.019 | 0.013 | 6 | 8 | 75% | 0.006 | 0.041 | 0.017 | 0.88 | 0.006 | 0.033 | 0.005 |
| Fluorene (ug/L) | 0.005 | 0.005 | 0.005 | 0.005 | 1 | 8 | 13% | 0.005 | 0.005 | 0.000 | 0.04 | 0.000 | 0.005 | 0.005 |
| Naphthalene (ug/L) | 0.003 | 0.01 | 0.006 | 0.005 | 1 | 8 | 13% | 0.004 | 0.010 | 0.003 | 0.48 | 0.001 | 0.009 | 0.004 |
| Phenanthrene (ug/L) | 0.005 | 0.019 | 0.008 | 0.006 | 5 | 8 | 63% | 0.005 | 0.012 | 0.005 | 0.63 | 0.002 | 0.012 | 0.004 |
| **Total LPAHs** | 0.019 | 0.22 | 0.072 | 0.045 | 7 | 8 | 88% | 0.022 | 0.163 | 0.071 | 0.98 | 0.025 | 0.132 | 0.013 |
| HPAHs in ug/L | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.006 | 0.005 | 0.005 | 2 | 8 | 25% | 0.003 | 0.006 | 0.001 | 0.25 | 0.000 | 0.006 | 0.004 |
| Benzo(a)pyrene (ug/L) | 0.004 | 0.007 | 0.005 | 0.005 | 2 | 8 | 25% | 0.005 | 0.006 | 0.001 | 0.19 | 0.000 | 0.006 | 0.004 |
| Benzo(b,k)fluoranthenes (ug/L) | 0.006 | 0.018 | 0.011 | 0.010 | 1 | 8 | 13% | 0.009 | 0.013 | 0.003 | 0.31 | 0.001 | 0.013 | 0.008 |
| Benzo(g,h,i)perylene (ug/L) | 0.003 | 0.011 | 0.006 | 0.005 | 5 | 8 | 63% | 0.004 | 0.010 | 0.003 | 0.52 | 0.001 | 0.008 | 0.003 |
| Chrysene (ug/L) | 0.005 | 0.014 | 0.007 | 0.005 | 2 | 8 | 25% | 0.005 | 0.011 | 0.003 | 0.51 | 0.001 | 0.010 | 0.004 |
| Dibenz(a,h)anthracene (ug/L) | 0.004 | 0.005 | 0.005 | 0.005 | 0 | 8 | 0% | 0.005 | 0.005 | 0.000 | 0.07 | 0.000 | 0.005 | 0.005 |
| Fluoranthene (ug/L) | 0.008 | 0.032 | 0.013 | 0.009 | 8 | 8 | 100% | 0.008 | 0.022 | 0.008 | 0.65 | 0.003 | 0.020 | 0.006 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.005 | 0.008 | 0.005 | 0.005 | 1 | 8 | 13% | 0.005 | 0.006 | 0.001 | 0.21 | 0.000 | 0.006 | 0.004 |
| Pyrene (ug/L) | 0.007 | 0.053 | 0.018 | 0.012 | 8 | 8 | 100% | 0.009 | 0.031 | 0.015 | 0.85 | 0.005 | 0.030 | 0.005 |
| **Total HPAHs** | 0.036 | 0.13 | 0.060 | 0.044 | 8 | 8 | 100% | 0.037 | 0.109 | 0.035 | 0.59 | 0.012 | 0.089 | 0.030 |
| **Total PAHs** | 0.059 | 0.35 | 0.13 | 0.095 | 8 | 8 | 100% | 0.061 | 0.235 | 0.099 | 0.75 | 0.035 | 0.215 | 0.050 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate (ug/L) | 0.197 | 5.6 | 1.10 | 0.51 | 2 | 8 | 25% | 0.385 | 2.04 | 1.821 | 1.654 | 0.644 | 2.623 | -0.421 |
| Butyl benzyl phthalate (ug/L) | 0.238 | 0.53 | 0.478 | 0.510 | 0 | 8 | 0% | 0.425 | 0.518 | 0.097 | 0.204 | 0.034 | 0.559 | 0.396 |
| Diethylphthalate (ug/L) | 0.182 | 1 | 0.471 | 0.510 | 0 | 8 | 0% | 0.408 | 0.518 | 0.117 | 0.25 | 0.041 | 0.569 | 0.373 |
| Dimethyl phthalate (ug/L) | 0.207 | 0.53 | 0.474 | 0.510 | 0 | 8 | 0% | 0.416 | 0.518 | 0.108 | 0.228 | 0.038 | 0.564 | 0.384 |
| Di-n-butylphthalate (ug/L) | 0.142 | 0.52 | 0.352 | 0.365 | 3 | 8 | 38% | 0.181 | 0.512 | 0.171 | 0.485 | 0.060 | 0.495 | 0.209 |
| Di-n-Octyl phthalate (ug/L) | 0.222 | 0.53 | 0.476 | 0.510 | 0 | 8 | 0% | 0.420 | 0.518 | 0.103 | 0.216 | 0.036 | 0.562 | 0.390 |
| ***Total Phthalates** | 0.000 | 5.8 | 0.84 | 0.099 | 4 | 8 | 50% | 0.000 | 2.070 | 2.017 | 2.41 | 0.71 | 2.52 | -0.85 |
| Herbicides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 0.570 | 0.110 | 0.050 | 1 | 8 | 13% | 0.038 | 0.206 | 0.187 | 1.70 | 0.066 | 0.266 | -0.046 |
| Dichlobenil (ug/L) | 0.047 | 0.053 | 0.051 | 0.051 | 0 | 8 | 0% | 0.049 | 0.052 | 0.002 | 0.04 | 0.001 | 0.052 | 0.049 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.015 | 0.050 | 0.022 | 0.015 | 0 | 5 | 0% | 0.015 | 0.036 | 0.016 | 0.71 | 0.007 | 0.041 | 0.003 |
| NWTPH-Gasoline (ug/L) | 2.3 | 25.0 | 6.9 | 2.3 | 0 | 5 | 0% | 2.3 | 15.9 | 10.1 | 1.47 | 4.5 | 19.5 | -5.7 |
| NWTPH-Heavy Oil (mg/L) | 0.100 | 0.105 | 0.101 | 0.100 | 0 | 5 | 0% | 0.100 | 0.103 | 0.002 | 0.02 | 0.001 | 0.104 | 0.098 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 10 | 790 | 169 | 13 | 3 | 5 | 60% | 10 | 482 | 347 | 2.06 | 155 | 600 | -263 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Ethylbenzene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| m,p-Xylene (ug/L) | 0.200 | 1.000 | 0.840 | 1.000 | 0 | 5 | 0% | 0.520 | 1.000 | 0.358 | 0.43 | 0.160 | 1.284 | 0.396 |
| o-Xylene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |
| Toluene (ug/L) | 0.100 | 0.250 | 0.220 | 0.250 | 0 | 5 | 0% | 0.160 | 0.250 | 0.067 | 0.30 | 0.030 | 0.303 | 0.137 |

# Table E-26
## Baseflow Data at Outfall 245 and Outfall 254 WY2019

| | Minimum | Maximum | Arithmetic Mean | Median | # of Detects | Count | % Detects | 10th Per | 90th Per | Standard Deviation | Coefficient of Variation | Standard Error | 95% UCL | 95% LCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventionals | | | | | | | | | | | | | | |
| Anionic Surfactants - MBAS (ug/L) | 0.0251 | 0.0553 | 0.0 | 0.0468 | 5 | 5 | 100% | 0.03106 | 0.05222 | 0.0 | 0.264 | 0.005 | 0.1 | 0.0 |
| BOD (mg/L) | 1 | 6.2 | 2.0 | 1 | 1 | 5 | 20% | 1 | 4.12 | 2.3 | 1.140 | 1.040 | 4.9 | -0.8 |
| Chloride (mg/L) | 18.2 | 13900 | 4485 | 3980 | 5 | 5 | 100% | 21 | 10140 | 5673 | 1.265 | 2537 | 11529 | -2560 |
| Conductivity (uS/cm) | 6170 | 38100 | 22695 | 22950 | 6 | 6 | 100% | 9535 | 35600 | 13122 | 0.578 | 5357 | 36466 | 8924 |
| Hardness (mg CaCO3/L) | 728 | 4430 | 2581.3 | 2600 | 6 | 6 | 100% | 1094 | 4050 | 1492.6 | 0.578 | 609.34 | 4147.7 | 1015.0 |
| pH (pH units) | 7.3 | 7.6 | 7.5 | 7.45 | 6 | 6 | 100% | 7.35 | 7.6 | 0.1 | 0.016 | 0.05 | 7.6 | 7.3 |
| TSS (mg/L) | 2 | 20.8 | 8.4 | 7 | 6 | 6 | 100% | 2.205 | 15.95 | 7.4 | 0.880 | 3.01 | 16.1 | 0.6 |
| Turbidity (NTU) | 2.75 | 13.8 | 7.1 | 5.06 | 5 | 5 | 100% | 3.154 | 12.32 | 4.7 | 0.662 | 2.10 | 12.9 | 1.3 |
| Nutrients | | | | | | | | | | | | | | |
| Nitrate+Nitrite as N (mg/L) | 0.196 | 3.680 | 0.962 | 0.334 | 5 | 5 | 100% | 0.210 | 2.356 | 1.521 | 1.58 | 0.680 | 2.851 | -0.926 |
| Phosphate, Ortho (mg/L) | 0.037 | 0.176 | 0.096 | 0.097 | 5 | 5 | 100% | 0.051 | 0.145 | 0.051 | 0.53 | 0.023 | 0.160 | 0.032 |
| Phosphorus, Total (mg/L) | 0.080 | 0.595 | 0.254 | 0.171 | 4 | 4 | 100% | 0.104 | 0.471 | 0.231 | 0.91 | 0.116 | 0.622 | -0.114 |
| Total Nitrogen (mg/L) | 0.430 | 3.350 | 1.522 | 0.980 | 5 | 5 | 100% | 0.566 | 2.842 | 1.194 | 0.78 | 0.534 | 3.005 | 0.039 |
| Metals | | | | | | | | | | | | | | |
| Cadmium (ug/L) | 0.072 | 1.1 | 0.3 | 0.151 | 4 | 6 | 67% | 0.1 | 1 | 0.4 | 1.360 | 0.16 | 0.7 | -0.1 |
| Cadmium, Dissolved (ug/L) | 0.0 | 0.183 | 0.1 | 0.1 | 3 | 6 | 50% | 0.0 | 0 | 0.1 | 0.623 | 0.03 | 0.2 | 0.0 |
| Copper (ug/L) | 1.43 | 23.700 | 11.977 | 12.85 | 6 | 6 | 100% | 3.38 | 19.700 | 8.042 | 0.671 | 3.283 | 20.416 | 3.537 |
| Copper, Dissolved (ug/L) | 0.6 | 3.63 | 1.7 | 1.3 | 6 | 6 | 100% | 0.6 | 3 | 1.3 | 0.759 | 0.52 | 3.0 | 0.3 |
| Lead (ug/L) | 0.201 | 2.23 | 1 | 0.678 | 6 | 6 | 100% | 0.2 | 2 | 0.8 | 0.899 | 0.31 | 1.6 | 0.0 |
| Lead, Dissolved (ug/L) | 0.0 | 0.0825 | 0.1 | 0.1 | 0 | 6 | 0% | 0.0 | 0 | 0.0 | 0.563 | 0.01 | 0.1 | 0.0 |
| Mercury (ng/L) | 0.0008 | 0.0 | 0.00 | 0.00 | 0 | 6 | 0% | 0.0024 | 0.004 | 0.00 | 0.377 | 0.001 | 0.00 | 0.00 |
| Mercury, Dissolved (ng/L) | 0.0 | 0.0045 | 0.0 | 0.0 | 0 | 6 | 0% | 0.0 | 0 | 0.0 | 0.377 | 0.00 | 0.0 | 0.0 |
| Zinc (ug/L) | 9.39 | 125.000 | 50.448 | 28.7 | 6 | 6 | 100% | 15.345 | 107.3 | 46.221 | 0.916 | 18.869 | 98.954 | 1.943 |
| Zinc, Dissolved (ug/L) | 4.3 | 74.9 | 28.7 | 23.2 | 6 | 6 | 100% | 5.1 | 58 | 26.4 | 0.921 | 10.79 | 56.4 | 1.0 |
| Insecticides | | | | | | | | | | | | | | |
| Chlorpyrifos (ug/L) | 0.030 | 0.031 | 0.030 | 0.030 | 0 | 6 | 0% | 0.030 | 0.031 | 0.000 | 0.01 | 0.000 | 0.030 | 0.030 |
| PAHs | | | | | | | | | | | | | | |
| LPAHs | | | | | | | | | | | | | | |
| 2-Methylnaphthalene (ug/L) | 0.0015 | 0.029 | 0.008 | 0.005 | 2 | 6 | 33% | 0.003 | 0.017 | 0.010 | 1.21 | 0.004 | 0.019 | -0.002 |
| Acenaphthene (ug/L) | 0.0025 | 0.035 | 0.015 | 0.012 | 3 | 6 | 50% | 0.004 | 0.031 | 0.013 | 0.87 | 0.005 | 0.029 | 0.001 |
| Acenaphthylene (ug/L) | 0.0015 | 0.005 | 0.004 | 0.005 | 0 | 6 | 0% | 0.002 | 0.005 | 0.002 | 0.47 | 0.001 | 0.006 | 0.002 |
| Anthracene (ug/L) | 0.003 | 0.017 | 0.009 | 0.008 | 5 | 6 | 83% | 0.005 | 0.014 | 0.005 | 0.53 | 0.002 | 0.014 | 0.004 |
| Fluorene (ug/L) | 0.003 | 0.013 | 0.005 | 0.004 | 1 | 6 | 17% | 0.003 | 0.009 | 0.004 | 0.76 | 0.002 | 0.009 | 0.001 |
| Naphthalene (ug/L) | 0.006 | 0.02 | 0.010 | 0.009 | 1 | 6 | 17% | 0.006 | 0.016 | 0.006 | 0.59 | 0.002 | 0.016 | 0.004 |
| Phenanthrene (ug/L) | 0.004 | 0.037 | 0.016 | 0.012 | 5 | 6 | 83% | 0.007 | 0.029 | 0.012 | 0.76 | 0.005 | 0.028 | 0.003 |
| **Total LPAHs** | 0.026 | 0.12 | 0.057 | 0.049 | 6 | 6 | 100% | 0.033 | 0.090 | 0.034 | 0.59 | 0.014 | 0.093 | 0.022 |
| HPAHs in ug/L | | | | | | | | | | | | | | |
| Benzo(a)anthracene (ug/L) | 0.003 | 0.004 | 0.003 | 0.004 | 0 | 6 | 0% | 0.003 | 0.004 | 0.001 | 0.16 | 0.000 | 0.004 | 0.003 |
| Benzo(a)pyrene (ug/L) | 0.002 | 0.009 | 0.004 | 0.004 | 1 | 6 | 17% | 0.002 | 0.006 | 0.003 | 0.66 | 0.001 | 0.007 | 0.001 |
| Benzo(b,k)fluoranthenes (ug/L) | 0.005 | 0.019 | 0.008 | 0.006 | 1 | 6 | 17% | 0.005 | 0.013 | 0.006 | 0.73 | 0.002 | 0.014 | 0.002 |
| Benzo(g,h,i)perylene (ug/L) | 0.003 | 0.008 | 0.004 | 0.003 | 1 | 6 | 17% | 0.003 | 0.006 | 0.002 | 0.53 | 0.001 | 0.006 | 0.002 |
| Chrysene (ug/L) | 0.002 | 0.018 | 0.005 | 0.002 | 2 | 6 | 33% | 0.002 | 0.012 | 0.006 | 1.24 | 0.003 | 0.012 | -0.002 |
| Dibenz(a,h)anthracene (ug/L) | 0.002 | 0.004 | 0.003 | 0.004 | 0 | 6 | 0% | 0.002 | 0.004 | 0.001 | 0.29 | 0.000 | 0.004 | 0.002 |
| Fluoranthene (ug/L) | 0.004 | 0.020 | 0.007 | 0.004 | 2 | 6 | 33% | 0.004 | 0.014 | 0.007 | 0.95 | 0.003 | 0.014 | 0.000 |
| Indeno(1,2,3-cd)pyrene (ug/L) | 0.003 | 0.005 | 0.004 | 0.005 | 0 | 6 | 0% | 0.003 | 0.005 | 0.001 | 0.27 | 0.000 | 0.005 | 0.003 |
| Pyrene (ug/L) | 0.008 | 0.038 | 0.016 | 0.009 | 6 | 6 | 100% | 0.009 | 0.031 | 0.012 | 0.76 | 0.005 | 0.029 | 0.003 |
| **Total HPAHs** | 0.030 | 0.11 | 0.054 | 0.039 | 5 | 6 | 83% | 0.032 | 0.091 | 0.031 | 0.58 | 0.013 | 0.087 | 0.021 |
| **Total PAHs** | 0.060 | 0.19 | 0.11 | 0.092 | 6 | 6 | 100% | 0.069 | 0.173 | 0.051 | 0.46 | 0.021 | 0.165 | 0.058 |
| Phthalates | | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate (ug/L) | 0.189 | 2.8 | 0.63 | 0.19 | 1 | 6 | 17% | 0.190 | 1.51 | 1.072 | 1.700 | 0.438 | 1.756 | -0.495 |
| Butyl benzyl phthalate (ug/L) | 0.214 | 0.24 | 0.228 | 0.233 | 0 | 6 | 0% | 0.215 | 0.238 | 0.011 | 0.049 | 0.005 | 0.240 | 0.217 |
| Diethylphthalate (ug/L) | 0.140 | 0 | 0.167 | 0.178 | 0 | 6 | 0% | 0.140 | 0.182 | 0.021 | 0.13 | 0.009 | 0.189 | 0.145 |
| Dimethyl phthalate (ug/L) | 0.135 | 0.21 | 0.182 | 0.203 | 0 | 6 | 0% | 0.135 | 0.208 | 0.036 | 0.200 | 0.015 | 0.220 | 0.143 |
| Di-n-butylphthalate (ug/L) | 0.142 | 0.51 | 0.232 | 0.145 | 2 | 6 | 33% | 0.142 | 0.408 | 0.150 | 0.650 | 0.061 | 0.389 | 0.074 |
| Di-n-Octyl phthalate (ug/L) | 0.174 | 0.22 | 0.205 | 0.218 | 0 | 6 | 0% | 0.175 | 0.223 | 0.024 | 0.116 | 0.010 | 0.230 | 0.180 |
| ***Total Phthalates** | 0.000 | 3.1 | 0.61 | 0.000 | 2 | 6 | 33% | 0.000 | 1.818 | 1.253 | 2.07 | 0.51 | 1.92 | -0.71 |
| Herbicides | | | | | | | | | | | | | | |
| 2,4-D (ug/L) | 0.009 | 0.026 | 0.014 | 0.009 | 2 | 6 | 33% | 0.009 | 0.024 | 0.008 | 0.59 | 0.003 | 0.022 | 0.005 |
| Dichlobenil (ug/L) | 0.020 | 0.047 | 0.037 | 0.046 | 0 | 6 | 0% | 0.020 | 0.047 | 0.013 | 0.36 | 0.005 | 0.051 | 0.023 |
| TPH | | | | | | | | | | | | | | |
| NWTPH-Diesel (mg/L) | 0.050 | 0.050 | 0.050 | 0.050 | 0 | 2 | 0% | 0.050 | 0.050 | 0.000 | 0.00 | 0.000 | 0.050 | 0.050 |
| NWTPH-Gasoline (ug/L) | 25.0 | 25.0 | 25.0 | 25.0 | 0 | 2 | 0% | 25.0 | 25.0 | 0.0 | 0.00 | 0.0 | 25.0 | 25.0 |
| NWTPH-Heavy Oil (mg/L) | 0.100 | 0.100 | 0.100 | 0.100 | 0 | 2 | 0% | 0.100 | 0.100 | 0.000 | 0.00 | 0.000 | 0.100 | 0.100 |
| Bacteria | | | | | | | | | | | | | | |
| Coliform, Fecal (CFU/100 ml) | 20 | 45 | 33 | 33 | 2 | 2 | 100% | 23 | 43 | 18 | 0.54 | 13 | 191 | -126 |
| BTEX | | | | | | | | | | | | | | |
| Benzene (ug/L) | 0.100 | 0.100 | 0.100 | 0.100 | 0 | 2 | 0% | 0.100 | 0.100 | 0.000 | 0.00 | 0.000 | 0.100 | 0.100 |
| Ethylbenzene (ug/L) | 0.100 | 0.100 | 0.100 | 0.100 | 0 | 2 | 0% | 0.100 | 0.100 | 0.000 | 0.00 | 0.000 | 0.100 | 0.100 |
| m,p-Xylene (ug/L) | 0.200 | 0.200 | 0.200 | 0.200 | 0 | 2 | 0% | 0.200 | 0.200 | 0.000 | 0.00 | 0.000 | 0.200 | 0.200 |
| o-Xylene (ug/L) | 0.100 | 0.100 | 0.100 | 0.100 | 0 | 2 | 0% | 0.100 | 0.100 | 0.000 | 0.00 | 0.000 | 0.100 | 0.100 |
| Toluene (ug/L) | 0.100 | 0.100 | 0.100 | 0.100 | 0 | 2 | 0% | 0.100 | 0.100 | 0.000 | 0.00 | 0.000 | 0.100 | 0.100 |