MUPP Xlinks Sediment Sample Chemistry Results

Comparison to CEFAS Action Levels

| Heavy & Trace Metals | Unit | Action Level 1 (mg/kg) | Action Level 2 (mg/kg) | UK_01 | UK_02 | UK_03 | UK_04 | UK_05 | UK_06 | UK_07 | UK_09 | UK_10 | UK_11 | UK_13 | UK_14 | UK_15 | UK_16 | UK_17 | UK_18 | UK_19 | UK_20 | UK_21 | UK_23 | UK_24 | UK_27 | UK_30 | UK_31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) | mg/kg | 20 | 100 | 5.5 | 5.5 | 6.7 | 7.1 | 4.2 | 3.5 | 3.2 | 2.4 | 3.1 | 2.1 | 4.6 | 2.6 | 2.5 | 5.1 | 5.9 | 4.3 | 2.4 | 4.5 | 17.8 | 9.5 | 8.7 | 18.5 | 9.3 | 12.6 |
| Cadmium (Cd) | mg/kg | 0.4 | 5 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| Chromium (Cr) | mg/kg | 40 | 400 | 5.2 | 8.0 | 10.6 | 10.7 | 8.5 | 8.7 | 6.3 | 7.7 | 9.0 | 7.5 | 9.1 | 9.3 | 8.2 | 5.7 | 8.2 | 6.6 | 8.1 | 7.9 | 6.4 | 5.8 | 7.6 | 5.8 | 4.4 | 6.5 |
| Copper (Cu) | mg/kg | 40 | 400 | 1.9 | 1.2 | 1.4 | 1.4 | 1.7 | 2.3 | 1.4 | 2.4 | 2.3 | 2.6 | 2.8 | 7.1 | 2.7 | 1.1 | 1.5 | 1.7 | 4.3 | 2.4 | 1.5 | 1.3 | 2.5 | 1.4 | 1.1 | 2.1 |
| Mercury (Hg) | mg/kg | 0.3 | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nickel (Ni) | mg/kg | 20 | 200 | 4.0 | 4.5 | 5.7 | 5.6 | 5.1 | 5.5 | 4.3 | 5.6 | 5.6 | 5.6 | 7.0 | 7.2 | 6.5 | 4.3 | 5.1 | 5.4 | 10.8 | 6.1 | 6.6 | 4.3 | 7.3 | 5.1 | 4.1 | 5.7 |
| Lead (Pb) | mg/kg | 50 | 500 | 4.4 | 4.6 | 7.8 | 5.3 | 4.8 | 5.3 | 4.2 | 4.9 | 4.5 | 3.8 | 6.9 | 5.3 | 4.8 | 3.4 | 5.5 | 5.8 | 6.1 | 6.1 | 13.9 | 9.8 | 5.5 | 11.5 | 7.1 | 10.6 |

| Heavy & Trace Metals | Unit | Action Level 1 (mg/kg) | Action Level 2 (mg/kg) | UK_33 | UK_34 | UK_35 | UK_36 | UK_37 | UK_38 | UK_39 | UK_40 | UK_41 | UK_42 | UK_43 | UK_44 | UK_45 | UK_46 | UK_51 | UK_52 | UK_53 | UK_54 | UK_55 | UK_56 | UK_57 | UK_58 | UK_59 | UK_61 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) | mg/kg | 20 | 100 | 17.2 | 12.2 | 10.9 | 9.4 | 15.0 | 9.3 | 10.0 | 11.5 | 14.0 | 16.6 | 19.1 | 20.6 | 18.7 | 38.7 | 23.2 | 23.1 | 40.0 | 40.6 | 34.4 | 24.2 | 12.6 | 13.8 | 17.2 | 16.4 |
| Cadmium (Cd) | mg/kg | 0.4 | 5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Chromium (Cr) | mg/kg | 40 | 400 | 5.9 | 9.4 | 5.4 | 5.4 | 10.1 | 6.1 | 5.9 | 6.7 | 8.1 | 7.3 | 8.5 | 7.2 | 6.8 | 6.9 | 7.1 | 13.5 | 8.4 | 9.7 | 10.2 | 10.6 | 12.9 | 12.8 | 13.2 | 13.4 |
| Copper (Cu) | mg/kg | 40 | 400 | 2.3 | 3.8 | 1.3 | 1.8 | 4.1 | 1.7 | 1.1 | 1.5 | 1.5 | 1.8 | 2.3 | 2.2 | 2.6 | 3.0 | 4.6 | 9.0 | 3.9 | 4.9 | 4.4 | 4.2 | 7.0 | 7.8 | 7.9 | 6.5 |
| Mercury (Hg) | mg/kg | 0.3 | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Nickel (Ni) | mg/kg | 20 | 200 | 10.7 | 12.7 | 5.0 | 5.1 | 9.8 | 4.1 | 4.0 | 5.1 | 4.6 | 5.7 | 7.4 | 5.9 | 5.6 | 10.0 | 11.4 | 16.8 | 12.7 | 14.8 | 14.4 | 14.4 | 14.9 | 15.6 | 17.8 | 18.3 |
| Lead (Pb) | mg/kg | 50 | 500 | 10.1 | 7.1 | 5.4 | 6.3 | 6.0 | 5.8 | 4.4 | 6.2 | 7.0 | 8.1 | 9.1 | 10.7 | 11.8 | 12.5 | 15.8 | 13.3 | 19.0 | 19.2 | 17.9 | 17.8 | 18.5 | 19.7 | 19.3 | 18.0 |

| PAH | Unit | Action Level 1 (mg/kg) | Action Level 2 (mg/kg) | UK_01 | UK_02 | UK_03 | UK_04 | UK_05 | UK_06 | UK_07 | UK_09 | UK_10 | UK_11 | UK_13 | UK_14 | UK_15 | UK_16 | UK_17 | UK_18 | UK_19 | UK_20 | UK_21 | UK_23 | UK_24 | UK_27 | UK_30 | UK_31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 3.0 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Acenaphthylene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Anthracene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.7 | <0.001 | <0.001 | <0.001 | <0.001 | 3.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Benz(a)anthracene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | 2.9 | <0.001 | <0.001 | 3.5 | <0.001 | 3.8 | 1.7 | 3.0 | 4.5 | <0.001 | <0.001 | <0.001 | 9.6 | 3.4 | <0.001 | <0.001 | 2.2 | <0.001 | <0.001 | <0.001 |
| Benzo(a)pyrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 1.5 | 2.8 | 2.0 | <0.001 | 4.3 | 2.2 | 4.9 | 2.4 | 3.3 | 5.4 | <0.001 | <0.001 | <0.001 | 10.8 | 3.5 | <0.001 | <0.001 | 2.2 | <0.001 | <0.001 | <0.001 |
| Benzo(b)fluoranthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 1.7 | 3.7 | 5.5 | 1.9 | 11.8 | 7.1 | 13.3 | 8.9 | 11.1 | 13.2 | 2.9 | 1.6 | 2.0 | 25.0 | 8.2 | 2.1 | 2.2 | 4.5 | 2.3 | <0.001 | 2.3 |
| Benzo(g,h,i)perylene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | 2.3 | 4.7 | <0.001 | 9.6 | 6.2 | 11.3 | 7.5 | 8.8 | 11.0 | 2.0 | <0.001 | 1.8 | 18.3 | 6.0 | 1.4 | 1.6 | 3.0 | 1.6 | <0.001 | 1.6 |
| Benzo(e)pyrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 2.0 | 2.3 | 3.6 | <0.001 | 5.9 | 4.1 | 6.7 | 4.3 | 5.3 | 7.1 | 1.4 | <0.001 | <0.001 | 13.4 | 4.3 | <0.001 | <0.001 | 2.6 | 1.4 | <0.001 | <0.001 |
| Benzo(k)fluoranthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <1 | 3.0 | 3.5 | <0.001 | 9.0 | 5.3 | 9.3 | 6.5 | 7.5 | 10.4 | 2.0 | <0.001 | <0.001 | 17.4 | 5.9 | 1.5 | 1.5 | 3.2 | 1.6 | <0.001 | 1.5 |
| C1-Naphthalenes | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 3.2 | <0.001 | 2.6 | <0.001 | 6.8 | 4.1 | 7.6 | 5.4 | 31.9 | 8.1 | 2.5 | <0.001 | 1.6 | 22.6 | 6.0 | 2.2 | 2.6 | 4.6 | 3.0 | 1.6 | 4.2 |
| C1-178 | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 1.5 | 2.1 | 2.9 | <0.001 | 7.5 | 3.9 | 7.2 | 5.1 | 16.1 | 8.3 | 2.0 | <0.001 | <0.001 | 20.4 | 5.9 | 2.2 | 2.4 | 4.8 | 2.9 | <0.001 | 3.5 |
| C2-Naphthalenes | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 2.9 | <0.001 | 3.2 | <0.001 | 7.4 | 4.5 | 7.1 | 5.3 | 31.6 | 7.8 | 2.1 | <0.001 | <0.001 | 19.4 | 5.9 | 1.7 | 2.4 | 4.2 | 3.0 | 1.4 | 3.7 |
| C3-Naphthalenes | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 2.3 | <0.001 | 2.0 | <0.001 | 4.9 | 2.8 | 4.9 | 3.3 | 24.7 | 5.7 | 1.4 | <0.001 | <0.001 | 13.3 | 4.0 | <0.001 | 1.9 | 2.8 | 2.0 | <0.001 | 2.1 |
| Chrysene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | 3.4 | 2.5 | <0.001 | 5.5 | 2.8 | 5.9 | 3.3 | 4.6 | 6.3 | <0.001 | <0.001 | <0.001 | 15.3 | 5.0 | 1.7 | 1.3 | 3.4 | 1.5 | <0.001 | 1.7 |
| Dibenz(a,h)anthracene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <1 | <0.001 | 1.8 | <0.001 | 2.1 | <0.001 | 1.7 | 2.2 | <0.001 | <0.001 | <0.001 | 3.7 | 1.4 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Fluoranthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | 6.1 | 2.5 | <0.001 | 8.6 | 2.9 | 8.0 | 3.7 | 6.1 | 9.8 | 1.3 | 1.5 | <0.001 | 22.0 | 6.1 | 2.5 | 1.4 | 4.6 | 1.4 | <0.001 | 1.6 |
| Fluorene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.4 | 1.8 | <0.001 | <0.001 | <0.001 | 5.1 | 1.4 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Indeno(123-c,d)pyrene | µg/kg | 0.1 | - | 0.002 | <0.001 | <0.001 | <0.001 | 2.9 | 6.7 | 1.9 | 14.2 | 9.4 | 15.6 | 11.1 | 12.6 | 15.3 | 3.1 | 1.6 | 2.3 | 25.0 | 8.5 | 1.9 | 2.2 | 3.9 | 2.2 | <0.001 | 2.1 |
| Naphthalene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.8 | 1.8 | 3.4 | 2.3 | 6.7 | 3.3 | <0.001 | <0.001 | <0.001 | 10.8 | 2.9 | 1.5 | 1.3 | 2.6 | 1.5 | <0.001 | 2.0 |
| Perylene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.3 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Phenanthrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | 3.9 | 2.2 | <0.001 | 8.3 | 2.8 | 5.7 | 3.7 | 12.4 | 7.2 | 1.5 | 1.4 | <0.001 | 21.6 | 4.8 | 2.9 | 1.9 | 4.9 | 2.1 | <0.001 | 2.7 |
| Pyrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | 4.5 | 1.6 | <0.001 | 6.0 | 1.6 | 5.2 | 2.1 | 3.7 | 6.7 | <0.001 | <0.001 | <0.001 | 15.6 | 3.9 | 2.0 | <0.001 | 3.3 | <0.001 | <0.001 | <0.001 |
| Total Hydrocarbon Content | µg/kg | 0.1 | - | 4018.56 | 1710.88 | 1127.15 | 2837.02 | 1803.29 | 5811.69 | 3208.07 | 8746.24 | 20161.06 | 9841.08 | 9264.03 | 8969.34 | 8978.56 | 2481.84 | 1338.61 | 1983.88 | 17361.57 | 6035.08 | 1507.85 | 970.34 | 1592.99 | 1032.15 | 887.60 | 2947.62 |

| PAH | Unit | Action Level 1 (mg/kg) | Action Level 2 (mg/kg) | UK_33 | UK_34 | UK_35 | UK_36 | UK_37 | UK_38 | UK_39 | UK_40 | UK_41 | UK_42 | UK_43 | UK_44 | UK_45 | UK_46 | UK_51 | UK_52 | UK_53 | UK_54 | UK_55 | UK_56 | UK_57 | UK_58 | UK_59 | UK_61 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.4 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | <0.001 | <0.001 | <0.001 | 12.5 | 12.1 | <0.001 | <0.001 |
| Acenaphthylene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 10.0 | <0.001 | <0.001 | 25.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 7.8 | 8.7 | <0.001 | <0.001 |
| Anthracene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 13.5 | <0.001 | 1.2 | 347.2 | <0.001 | 4.2 | <0.001 | <0.001 | 1.3 | 29.9 | 21.1 | <0.001 | <0.001 |
| Benz(a)anthracene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.1 | 13.1 | 1.5 | 3.8 | 569.8 | <0.001 | 8.5 | <0.001 | <0.001 | 4.1 | 97.1 | 63.6 | 3.6 | 2.0 |
| Benzo(a)pyrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.1 | 12.4 | 2.0 | 3.7 | 371.9 | <0.001 | 8.0 | <0.001 | <0.001 | 4.6 | 104.9 | 71.2 | 4.0 | 1.9 |
| Benzo(b)fluoranthene | µg/kg | 0.1 | - | <0.001 | 1.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.7 | <0.001 | 1.7 | 2.8 | 11.2 | 2.5 | 5.3 | 463.0 | 1.6 | 8.3 | 2.6 | 1.8 | 5.5 | 106.4 | 74.7 | 6.7 | 3.2 |
| Benzo(g,h,i)perylene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | 7.2 | 2.5 | 3.4 | 187.5 | <0.001 | 5.1 | 1.6 | <0.001 | 4.1 | 68.9 | 50.1 | 4.9 | 2.4 |
| Benzo(e)pyrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | 6.5 | 2.0 | 3.6 | 260.9 | <0.001 | 5.7 | 1.8 | <0.001 | 3.8 | 70.6 | 51.1 | 4.4 | 2.5 |
| Benzo(k)fluoranthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.5 | 2.3 | 12.7 | 2.2 | 3.8 | 324.4 | <0.001 | 7.2 | 1.6 | 1.5 | 4.6 | 86.1 | 61.2 | 4.8 | 2.8 |
| C1-Naphthalenes | µg/kg | 0.1 | - | 1.8 | 1.6 | <0.001 | 11.3 | <0.001 | <0.001 | <0.001 | 1.9 | <0.001 | 2.1 | 4.3 | 10.3 | 3.5 | 7.1 | 22.6 | 4.0 | 3.3 | <0.001 | <0.001 | 4.3 | 52.7 | 55.6 | 4.0 | 2.3 |
| C1-178 | µg/kg | 0.1 | - | 1.7 | 1.3 | <0.001 | 5.4 | <0.001 | <0.001 | <0.001 | 1.8 | <0.001 | 1.9 | 3.4 | 13.6 | 2.9 | 6.2 | 171.8 | 2.6 | 9.7 | 1.5 | <0.001 | 4.0 | 69.2 | 58.6 | 3.9 | 2.6 |
| C2-Naphthalenes | µg/kg | 0.1 | - | 1.6 | 1.6 | <0.001 | 7.1 | <0.001 | <0.001 | <0.001 | 1.8 | <0.001 | 1.6 | 3.6 | 7.8 | 3.0 | 5.7 | 15.1 | 2.7 | 3.0 | <0.001 | <0.001 | 3.9 | 46.5 | 47.4 | 3.3 | 2.0 |
| C3-Naphthalenes | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 3.9 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.5 | 4.7 | 1.9 | 3.5 | 15.5 | 1.9 | 2.4 | <0.001 | <0.001 | 2.8 | 36.0 | 34.2 | 2.2 | 1.4 |
| Chrysene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | 2.9 | 11.8 | 2.3 | 5.6 | 668.4 | 1.6 | 10.2 | 2.0 | <0.001 | 5.4 | 116.1 | 77.9 | 5.0 | 2.9 |
| Dibenz(a,h)anthracene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.6 | <0.001 | <0.001 | 58.8 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 15.3 | 11.3 | <0.001 | <0.001 |
| Fluoranthene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.0 | <0.001 | 2.7 | 3.8 | 35.5 | 2.7 | 5.4 | 1267.9 | 1.9 | 20.0 | 3.4 | 2.3 | 8.8 | 184.5 | 113.2 | 7.6 | 4.9 |
| Fluorene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.6 | 42.4 | <0.001 | 2.9 | <0.001 | <0.001 | 1.2 | 20.9 | 19.0 | <1 | <0.001 |
| Indeno(123-c,d)pyrene | µg/kg | 0.1 | - | <0.001 | 1.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.5 | <0.001 | <0.001 | 2.0 | 9.6 | 2.7 | 3.6 | 229.4 | 1.4 | 5.7 | 1.8 | <0.001 | 4.1 | 74.8 | 53.8 | 5.2 | 2.5 |
| Naphthalene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | 2.8 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.0 | 6.1 | 1.9 | 3.6 | 14.9 | 2.1 | 1.9 | <0.001 | <0.001 | 2.8 | 31.7 | 33.3 | 2.7 | 1.6 |
| Perylene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.6 | <0.001 | <0.001 | 104.0 | <0.001 | 1.7 | <0.001 | <0.001 | 1.2 | 24.6 | 17.4 | 1.5 | <0.001 |
| Phenanthrene | µg/kg | 0.1 | - | 1.3 | <0.001 | <0.001 | 4.2 | <0.001 | <0.001 | <0.001 | 1.6 | <0.001 | 2.4 | 3.3 | 37.1 | 2.6 | 5.4 | 374.9 | 2.6 | 19.2 | 2.2 | 1.5 | 5.3 | 100.1 | 71.4 | 4.2 | 2.9 |
| Pyrene | µg/kg | 0.1 | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.8 | <0.001 | 2.0 | 2.8 | 22.8 | 2.0 | 4.3 | 690.1 | 1.4 | 15.6 | 1.9 | 1.5 | 7.2 | 144.0 | 91.5 | 5.4 | 3.5 |
| Total Hydrocarbon Content | µg/kg | 0.1 | - | 751.60 | 1371.71 | 465.02 | 904.50 | 1076.25 | 627.67 | 525.56 | 1523.28 | 538.70 | 1508.27 | 1460.68 | 2878.19 | 2716.21 | 1548.60 | 18360.19 | 796.71 | 1185.61 | 1532.31 | 1743.68 | 16163.83 | 23234.75 | 22680.97 | 6496.89 | 4287.04 |

MUPP Xlinks Sediment Sample Chemistry Results

Comparison to CCME TEL/PEL levels

| Heavy & Trace Metals | Unit | ISQG/TEL (mg/kg) | PEL (mg/kg) | UK_01 | UK_02 | UK_03 | UK_04 | UK_05 | UK_06 | UK_07 | UK_09 | UK_10 | UK_11 | UK_13 | UK_14 | UK_15 | UK_16 | UK_17 | UK_18 | UK_19 | UK_20 | UK_21 | UK_23 | UK_24 | UK_27 | UK_30 | UK_31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) | mg/kg | 7.24 | 41.6 | 5.5 | 5.5 | 6.7 | 7.1 | 4.2 | 3.5 | 3.2 | 2.4 | 3.1 | 2.1 | 4.6 | 2.6 | 2.5 | 5.1 | 5.9 | 4.3 | 2.4 | 4.5 | 17.8 | 9.5 | 8.7 | 18.5 | 9.3 | 12.6 |
| Cadmium (Cd) | mg/kg | 0.7 | 4.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| Chromium (Cr) | mg/kg | 52.3 | 160 | 5.2 | 8.0 | 10.6 | 10.7 | 8.5 | 8.7 | 6.3 | 7.7 | 9.0 | 7.5 | 9.1 | 9.3 | 8.2 | 5.7 | 8.2 | 6.6 | 8.1 | 7.9 | 6.4 | 5.8 | 7.6 | 5.8 | 4.4 | 6.5 |
| Copper (Cu) | mg/kg | 18.7 | 108 | 1.9 | 1.2 | 1.4 | 1.4 | 1.7 | 2.3 | 1.4 | 2.4 | 2.3 | 2.6 | 2.8 | 7.1 | 2.7 | 1.1 | 1.5 | 1.7 | 4.3 | 2.4 | 1.5 | 1.3 | 2.5 | 1.4 | 1.1 | 2.1 |
| Mercury (Hg) | mg/kg | 0.13 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nickel (Ni) | mg/kg | 16 | 43 | 4.0 | 4.5 | 5.7 | 5.6 | 5.1 | 5.5 | 4.3 | 5.6 | 5.6 | 5.6 | 7.0 | 7.2 | 6.5 | 4.3 | 5.1 | 5.4 | 10.8 | 6.1 | 6.6 | 4.3 | 7.3 | 5.1 | 4.1 | 5.7 |
| Lead (Pb) | mg/kg | 30.2 | 112 | 4.4 | 4.6 | 7.8 | 5.3 | 4.8 | 5.3 | 4.2 | 4.9 | 4.5 | 3.8 | 6.9 | 5.3 | 4.8 | 3.4 | 5.5 | 5.8 | 6.1 | 6.1 | 13.9 | 9.8 | 5.5 | 11.5 | 7.1 | 10.6 |

| Heavy & Trace Metals | Unit | ISQG/TEL (mg/kg) | PEL (mg/kg) | UK_33 | UK_34 | UK_35 | UK_36 | UK_37 | UK_38 | UK_39 | UK_40 | UK_41 | UK_42 | UK_43 | UK_44 | UK_45 | UK_46 | UK_51 | UK_52 | UK_53 | UK_54 | UK_55 | UK_56 | UK_57 | UK_58 | UK_59 | UK_61 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) | mg/kg | 7.24 | 41.6 | 17.2 | 12.2 | 10.9 | 9.4 | 15.0 | 9.3 | 10.0 | 11.5 | 14.0 | 16.6 | 19.1 | 20.6 | 18.7 | 38.7 | 23.2 | 23.1 | 40.0 | 40.6 | 34.4 | 24.2 | 12.6 | 13.8 | 17.2 | 16.4 |
| Cadmium (Cd) | mg/kg | 0.7 | 4.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Chromium (Cr) | mg/kg | 52.3 | 160 | 5.9 | 9.4 | 5.4 | 5.4 | 10.1 | 6.1 | 5.9 | 6.7 | 8.1 | 7.3 | 8.5 | 7.2 | 6.8 | 6.9 | 7.1 | 13.5 | 8.4 | 9.7 | 10.2 | 10.6 | 12.9 | 12.8 | 13.2 | 13.4 |
| Copper (Cu) | mg/kg | 18.7 | 108 | 2.3 | 3.8 | 1.3 | 1.8 | 4.1 | 1.7 | 1.1 | 1.5 | 1.5 | 1.8 | 2.3 | 2.2 | 2.6 | 3.0 | 4.6 | 9.0 | 3.9 | 4.9 | 4.4 | 4.2 | 7.0 | 7.8 | 7.9 | 6.5 |
| Mercury (Hg) | mg/kg | 0.13 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Nickel (Ni) | mg/kg | 16 | 43 | 10.7 | 12.7 | 5.0 | 5.1 | 9.8 | 4.1 | 4.0 | 5.1 | 4.6 | 5.7 | 7.4 | 5.9 | 5.6 | 10.0 | 11.4 | 16.8 | 12.7 | 14.8 | 14.4 | 14.4 | 14.9 | 15.6 | 17.8 | 18.3 |
| Lead (Pb) | mg/kg | 30.2 | 112 | 10.1 | 7.1 | 5.4 | 6.3 | 6.0 | 5.8 | 4.4 | 6.2 | 7.0 | 8.1 | 9.1 | 10.7 | 11.8 | 12.5 | 15.8 | 13.3 | 19.0 | 19.2 | 17.9 | 17.8 | 18.5 | 19.7 | 19.3 | 18.0 |

| PAH | Unit | ISQG/TEL (µg/kg) | PEL (µg/kg) | UK_01 | UK_02 | UK_03 | UK_04 | UK_05 | UK_06 | UK_07 | UK_09 | UK_10 | UK_11 | UK_13 | UK_14 | UK_15 | UK_16 | UK_17 | UK_18 | UK_19 | UK_20 | UK_21 | UK_23 | UK_24 | UK_27 | UK_30 | UK_31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | µg/kg | 6.71 | 88.9 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 3.0 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Acenaphthylene | µg/kg | 5.87 | 128 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Anthracene | µg/kg | 46.9 | 245 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.7 | <0.001 | <0.001 | <0.001 | <0.001 | 3.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Benz(a)anthracene | µg/kg | 74.8 | 693 | <0.001 | <0.001 | <0.001 | <0.001 | 2.9 | <0.001 | <0.001 | 3.5 | <0.001 | 3.8 | 1.7 | 3.0 | 4.5 | <0.001 | <0.001 | <0.001 | 9.6 | 3.4 | <0.001 | <0.001 | 2.2 | <0.001 | <0.001 | <0.001 |
| Benzo(a)pyrene | µg/kg | 88.8 | 763 | <0.001 | <0.001 | <0.001 | 1.5 | 2.8 | 2.0 | <0.001 | 4.3 | 2.2 | 4.9 | 2.4 | 3.3 | 5.4 | <0.001 | <0.001 | <0.001 | 10.8 | 3.5 | <0.001 | <0.001 | 2.2 | <0.001 | <0.001 | <0.001 |
| Benzo(b)fluoranthene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | 1.7 | 3.7 | 5.5 | 1.9 | 11.8 | 7.1 | 13.3 | 8.9 | 11.1 | 13.2 | 2.9 | 1.6 | 2.0 | 25.0 | 8.2 | 2.1 | 2.2 | 4.5 | 2.3 | <0.001 | 2.3 |
| Benzo(g,h,i)perylene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <0.001 | 2.3 | 4.7 | <0.001 | 9.6 | 6.2 | 11.3 | 7.5 | 8.8 | 11.0 | 2.0 | <0.001 | 1.8 | 18.3 | 6.0 | 1.4 | 1.6 | 3.0 | 1.6 | <0.001 | 1.6 |
| Benzo(e)pyrene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | 2.0 | 2.3 | 3.6 | <0.001 | 5.9 | 4.1 | 6.7 | 4.3 | 5.3 | 7.1 | 1.4 | <0.001 | <0.001 | 13.4 | 4.3 | <0.001 | <0.001 | 2.6 | 1.4 | <0.001 | <0.001 |
| Benzo(k)fluoranthene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <1 | 3.0 | 3.5 | <0.001 | 9.0 | 5.3 | 9.3 | 6.5 | 7.5 | 10.4 | 2.0 | <0.001 | <0.001 | 17.4 | 5.9 | 1.5 | 1.5 | 3.2 | 1.6 | <0.001 | 1.5 |
| C1-Naphthalenes | µg/kg | 34.6 | 391 | <0.001 | <0.001 | <0.001 | 3.2 | <0.001 | 2.6 | <0.001 | 6.8 | 4.1 | 7.6 | 5.4 | 31.9 | 8.1 | 2.5 | <0.001 | 1.6 | 22.6 | 6.0 | 2.2 | 2.6 | 4.6 | 3.0 | 1.6 | 4.2 |
| C1-178 | µg/kg | - | - | <0.001 | <0.001 | <0.001 | 1.5 | 2.1 | 2.9 | <0.001 | 7.5 | 3.9 | 7.2 | 5.1 | 16.1 | 8.3 | 2.0 | <0.001 | <0.001 | 20.4 | 5.9 | 2.2 | 2.4 | 4.8 | 2.9 | <0.001 | 3.5 |
| C2-Naphthalenes | µg/kg | 34.6 | 391 | <0.001 | <0.001 | <0.001 | 2.9 | <0.001 | 3.2 | <0.001 | 7.4 | 4.5 | 7.1 | 5.3 | 31.6 | 7.8 | 2.1 | <0.001 | <0.001 | 19.4 | 5.9 | 1.7 | 2.4 | 4.2 | 3.0 | 1.4 | 3.7 |
| C3-Naphthalenes | µg/kg | 34.6 | 391 | <0.001 | <0.001 | <0.001 | 2.3 | <0.001 | 2.0 | <0.001 | 4.9 | 2.8 | 4.9 | 3.3 | 24.7 | 5.7 | 1.4 | <0.001 | <0.001 | 13.3 | 4.0 | <0.001 | 1.9 | 2.8 | 2.0 | <0.001 | 2.1 |
| Chrysene | µg/kg | 108 | 846 | <0.001 | <0.001 | <0.001 | <0.001 | 3.4 | 2.5 | <0.001 | 5.5 | 2.8 | 5.9 | 3.3 | 4.6 | 6.3 | <0.001 | <0.001 | <0.001 | 15.3 | 5.0 | 1.7 | 1.3 | 3.4 | 1.5 | <0.001 | 1.7 |
| Dibenz(a,h)anthracene | µg/kg | 6.22 | 135 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <1 | <0.001 | 1.8 | <0.001 | 2.1 | <0.001 | 1.7 | 2.2 | <0.001 | <0.001 | <0.001 | 3.7 | 1.4 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Fluoranthene | µg/kg | 113 | 1494 | <0.001 | <0.001 | <0.001 | <0.001 | 6.1 | 2.5 | <0.001 | 8.6 | 2.9 | 8.0 | 3.7 | 6.1 | 9.8 | 1.3 | 1.5 | <0.001 | 22.0 | 6.1 | 2.5 | 1.4 | 4.6 | 1.4 | <0.001 | 1.6 |
| Fluorene | µg/kg | 21.2 | 144 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.4 | 1.8 | <0.001 | <0.001 | <0.001 | 5.1 | 1.4 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Indeno(123-c,d)pyrene | µg/kg | - | - | 0.002 | <0.001 | <0.001 | <0.001 | 2.9 | 6.7 | 1.9 | 14.2 | 9.4 | 15.6 | 11.1 | 12.6 | 15.3 | 3.1 | 1.6 | 2.3 | 25.0 | 8.5 | 1.9 | 2.2 | 3.9 | 2.2 | <0.001 | 2.1 |
| Naphthalene | µg/kg | 34.6 | 391 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.8 | 1.8 | 3.4 | 2.3 | 6.7 | 3.3 | <0.001 | <0.001 | <0.001 | 10.8 | 2.9 | 1.5 | 1.3 | 2.6 | 1.5 | <0.001 | 2.0 |
| Perylene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.3 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Phenanthrene | µg/kg | 86.7 | 544 | <0.001 | <0.001 | <0.001 | <0.001 | 3.9 | 2.2 | <0.001 | 8.3 | 2.8 | 5.7 | 3.7 | 12.4 | 7.2 | 1.5 | 1.4 | <0.001 | 21.6 | 4.8 | 2.9 | 1.9 | 4.9 | 2.1 | <0.001 | 2.7 |
| Pyrene | µg/kg | 153 | 1398 | <0.001 | <0.001 | <0.001 | <0.001 | 4.5 | 1.6 | <0.001 | 6.0 | 1.6 | 5.2 | 2.1 | 3.7 | 6.7 | <0.001 | <0.001 | <0.001 | 15.6 | 3.9 | 2.0 | <0.001 | 3.3 | <0.001 | <0.001 | <0.001 |
| Total Hydrocarbon Content | µg/kg | - | - | 4018.56 | 1710.88 | 1127.15 | 2837.02 | 1803.29 | 5811.69 | 3208.07 | 8746.24 | 20161.06 | 9841.08 | 9264.03 | 8969.34 | 8978.56 | 2481.84 | 1338.61 | 1983.88 | 17361.57 | 6035.08 | 1507.85 | 970.34 | 1592.99 | 1032.15 | 887.60 | 2947.62 |

| PAH | Unit | ISQG/TEL (µg/kg) | PEL (µg/kg) | UK_33 | UK_34 | UK_35 | UK_36 | UK_37 | UK_38 | UK_39 | UK_40 | UK_41 | UK_42 | UK_43 | UK_44 | UK_45 | UK_46 | UK_51 | UK_52 | UK_53 | UK_54 | UK_55 | UK_56 | UK_57 | UK_58 | UK_59 | UK_61 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | µg/kg | 6.71 | 88.9 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.4 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | <0.001 | <0.001 | <0.001 | 12.5 | 12.1 | <0.001 | <0.001 |
| Acenaphthylene | µg/kg | 5.87 | 128 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 10.0 | <0.001 | <0.001 | 25.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 7.8 | 8.7 | <0.001 | <0.001 |
| Anthracene | µg/kg | 46.9 | 245 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 13.5 | <0.001 | 1.2 | 347.2 | <0.001 | 4.2 | <0.001 | <0.001 | 1.3 | 29.9 | 21.1 | <0.001 | <0.001 |
| Benz(a)anthracene | µg/kg | 74.8 | 693 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.1 | 13.1 | 1.5 | 3.8 | 569.8 | <0.001 | 8.5 | <0.001 | <0.001 | 4.1 | 97.1 | 63.6 | 3.6 | 2.0 |
| Benzo(a)pyrene | µg/kg | 88.8 | 763 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.1 | 12.4 | 2.0 | 3.7 | 371.9 | <0.001 | 8.0 | <0.001 | <0.001 | 4.6 | 104.9 | 71.2 | 4.0 | 1.9 |
| Benzo(b)fluoranthene | µg/kg | - | - | <0.001 | 1.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.7 | <0.001 | 1.7 | 2.8 | 11.2 | 2.5 | 5.3 | 463.0 | 1.6 | 8.3 | 2.6 | 1.8 | 5.5 | 106.4 | 74.7 | 6.7 | 3.2 |
| Benzo(g,h,i)perylene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | 7.2 | 2.5 | 3.4 | 187.5 | <0.001 | 5.1 | 1.6 | <0.001 | 4.1 | 68.9 | 50.1 | 4.9 | 2.4 |
| Benzo(e)pyrene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | 6.5 | 2.0 | 3.6 | 260.9 | <0.001 | 5.7 | 1.8 | <0.001 | 3.8 | 70.6 | 51.1 | 4.4 | 2.5 |
| Benzo(k)fluoranthene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.5 | 2.3 | 12.7 | 2.2 | 3.8 | 324.4 | <0.001 | 7.2 | 1.6 | 1.5 | 4.6 | 86.1 | 61.2 | 4.8 | 2.8 |
| C1-Naphthalenes | µg/kg | 34.6 | 391 | 1.8 | 1.6 | <0.001 | 11.3 | <0.001 | <0.001 | <0.001 | 1.9 | <0.001 | 2.1 | 4.3 | 10.3 | 3.5 | 7.1 | 22.6 | 4.0 | 3.3 | <0.001 | <0.001 | 4.3 | 52.7 | 55.6 | 4.0 | 2.3 |
| C1-178 | µg/kg | - | - | 1.7 | 1.3 | <0.001 | 5.4 | <0.001 | <0.001 | <0.001 | 1.8 | <0.001 | 1.9 | 3.4 | 13.6 | 2.9 | 6.2 | 171.8 | 2.6 | 9.7 | 1.5 | <0.001 | 4.0 | 69.2 | 58.6 | 3.9 | 2.6 |
| C2-Naphthalenes | µg/kg | 34.6 | 391 | 1.6 | 1.6 | <0.001 | 7.1 | <0.001 | <0.001 | <0.001 | 1.8 | <0.001 | 1.6 | 3.6 | 7.8 | 3.0 | 5.7 | 15.1 | 2.7 | 3.0 | <0.001 | <0.001 | 3.9 | 46.5 | 47.4 | 3.3 | 2.0 |
| C3-Naphthalenes | µg/kg | 34.6 | 391 | <0.001 | <0.001 | <0.001 | 3.9 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.5 | 4.7 | 1.9 | 3.5 | 15.5 | 1.9 | 2.4 | <0.001 | <0.001 | 2.8 | 36.0 | 34.2 | 2.2 | 1.4 |
| Chrysene | µg/kg | 108 | 846 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.9 | 2.9 | 11.8 | 2.3 | 5.6 | 668.4 | 1.6 | 10.2 | 2.0 | <0.001 | 5.4 | 116.1 | 77.9 | 5.0 | 2.9 |
| Dibenz(a,h)anthracene | µg/kg | 6.22 | 135 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.6 | <0.001 | <0.001 | 58.8 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 15.3 | 11.3 | <0.001 | <0.001 |
| Fluoranthene | µg/kg | 113 | 1494 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.0 | <0.001 | 2.7 | 3.8 | 35.5 | 2.7 | 5.4 | 1267.9 | 1.9 | 20.0 | 3.4 | 2.3 | 8.8 | 184.5 | 113.2 | 7.6 | 4.9 |
| Fluorene | µg/kg | 21.2 | 144 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.6 | 42.4 | <0.001 | 2.9 | <0.001 | <0.001 | 1.2 | 20.9 | 19.0 | <1 | <0.001 |
| Indeno(123-c,d)pyrene | µg/kg | - | - | <0.001 | 1.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.5 | <0.001 | <0.001 | 2.0 | 9.6 | 2.7 | 3.6 | 229.4 | 1.4 | 5.7 | 1.8 | <0.001 | 4.1 | 74.8 | 53.8 | 5.2 | 2.5 |
| Naphthalene | µg/kg | 34.6 | 391 | <0.001 | <0.001 | <0.001 | 2.8 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.0 | 6.1 | 1.9 | 3.6 | 14.9 | 2.1 | 1.9 | <0.001 | <0.001 | 2.8 | 31.7 | 33.3 | 2.7 | 1.6 |
| Perylene | µg/kg | - | - | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 2.6 | <0.001 | <0.001 | 104.0 | <0.001 | 1.7 | <0.001 | <0.001 | 1.2 | 24.6 | 17.4 | 1.5 | <0.001 |
| Phenanthrene | µg/kg | 86.7 | 544 | 1.3 | <0.001 | <0.001 | 4.2 | <0.001 | <0.001 | <0.001 | 1.6 | <0.001 | 2.4 | 3.3 | 37.1 | 2.6 | 5.4 | 374.9 | 2.6 | 19.2 | 2.2 | 1.5 | 5.3 | 100.1 | 71.4 | 4.2 | 2.9 |
| Pyrene | µg/kg | 153 | 1398 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.8 | <0.001 | 2.0 | 2.8 | 22.8 | 2.0 | 4.3 | 690.1 | 1.4 | 15.6 | 1.9 | 1.5 | 7.2 | 144.0 | 91.5 | 5.4 | 3.5 |
| Total Hydrocarbon Content | µg/kg | - | - | 751.60 | 1371.71 | 465.02 | 904.50 | 1076.25 | 627.67 | 525.56 | 1523.28 | 538.70 | 1508.27 | 1460.68 | 2878.19 | 2716.21 | 1548.60 | 18360.19 | 796.71 | 1185.61 | 1532.31 | 1743.68 | 16163.83 | 23234.75 | 22680.97 | 6496.89 | 4287.04 |

MUPP Xlinks Sediment Sample Chemistry Results

| Organics & Nutrients | Unit | UK_01 | UK_02 | UK_03 | UK_04 | UK_05 | UK_06 | UK_07 | UK_09 | UK_10 | UK_11 | UK_13 | UK_14 | UK_15 | UK_16 | UK_17 | UK_18 | UK_19 | UK_20 | UK_21 | UK_23 | UK_24 | UK_27 | UK_30 | UK_31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Matter | % M/M | 2.6 | 1.8 | 1.7 | 1.8 | 2.5 | 3 | 2.2 | 3.7 | 3.4 | 4 | 3.9 | 4 | 3.2 | 2.3 | 2.6 | 3.1 | 6.2 | 3.2 | 3.8 | 2.6 | 2.3 | 2.3 | 2.4 | 2.8 |
| Total Organic Carbon | % M/M | 0.5 | 0.43 | 0.35 | 0.32 | 0.51 | 0.68 | 0.55 | 0.83 | 0.81 | 0.83 | 0.69 | 0.86 | 0.72 | 0.54 | 0.61 | 0.55 | 1.19 | 0.63 | 0.46 | 0.44 | 0.4 | 0.33 | 0.43 | 0.45 |
| Moisture Content | % M/M | 30.3 | 22.4 | 33.5 | 30.3 | 33.5 | 31.1 | 31.6 | 37.8 | 34 | 41.5 | 37.8 | 35.8 | 35.2 | 16 | 29.6 | 35.5 | 49 | 27.9 | 21.3 | 20 | 20.4 | 14.8 | 25.2 | 30.6 |
| Extractable Organic Halogens | mg/kg | 30.9 | 34 | <0.20 | <0.20 | <0.20 | 42.1 | 65.6 | 20.6 | 68 | 87.8 | 107 | <0.20 | 118 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 21.8 | 29.6 | <0.20 | <0.20 | <0.20 | <0.20 |
| Organics & Nutrients | Unit | UK_33 | UK_34 | UK_35 | UK_36 | UK_37 | UK_38 | UK_39 | UK_40 | UK_41 | UK_42 | UK_43 | UK_44 | UK_45 | UK_46 | UK_51 | UK_52 | UK_53 | UK_54 | UK_55 | UK_56 | UK_57 | UK_58 | UK_59 | UK_61 |
| Total Organic Matter | % M/M | 2.4 | 2.1 | 2.5 | 2.7 | 2 | 2.5 | 1.8 | 2.1 | 1.9 | 1.9 | 1.6 | 1.7 | 1.8 | 1.9 | 2.3 | 1.8 | 2.4 | 2.4 | 2.6 | 2.7 | 4.2 | 3.9 | 2.4 | 2.4 |
| Total Organic Carbon | % M/M | 0.4 | 0.26 | 0.41 | 0.53 | 0.33 | 0.49 | 0.38 | 0.42 | 0.34 | 0.38 | 0.29 | 0.3 | 0.27 | 0.27 | 0.44 | 0.32 | 0.4 | 0.42 | 0.41 | 0.45 | 0.96 | 0.85 | 0.35 | 0.37 |
| Moisture Content | % M/M | 13.6 | 14.8 | 27.7 | 32.6 | 19.2 | 26.3 | 24.2 | 31.6 | 28.9 | 30.2 | 30.3 | 20.6 | 24.5 | 13.9 | 27.8 | 22.4 | 25.5 | 27 | 29.3 | 29.3 | 33.1 | 31.5 | 28.9 | 28 |
| Extractable Organic Halogens | mg/kg | <0.20 | <0.20 | 31 | <0.20 | 21.4 | <0.20 | 25.3 | 21.4 | 22.2 | 24.1 | 26.2 | 26.2 | 24.4 | 115 | 42.4 | 94.4 | 96.4 | 27 | <0.20 | 107 | 30.9 | <0.20 | 33.8 | 67.9 |