**Water Samples**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameters** | | **Container** | | **Preservation** | **Water Max Holding Time** | | **Sample Methods** | | **Notes** |
| **Inorganics** | |  | |  | | |  | |  |
| Acidity | | 250-mL Plastic | | Cool, <6° C None | 14 days | | SM2310B | |  |
| Alkalinity | | 250-mL Plastic | | Cool, <6° C None | 14 days | | SM2310B | |  |
| Ammonia | | 250-mL Plastic | | Cool, <6° C Sulfuric Acid pH<2 | 28 days | | E350.1  SM4500NH3 | |  |
| BOD (Biochemical Oxygen Demand) | | 1-L Plastic | | Cool, <6° C None | 48 hours | | SM5210B | |  |
| Bromide | | 250-mL Plastic | | None Required | 28 days | | E300.0  SM4110B | |  |
| CBOD (BOD Carbonaceous) | | 1-L Plastic | | Cool, <6° C None | 48 hours | | SM5210B | |  |
| COD (Chemical Oxygen Demand) | | 250-mL Plastic | | Cool, <6° C Sulfuric Acid pH<2 | 28 days | | E410.4  SM5220 | |  |
| Chloride | | 250-mL Plastic | | None Required | 28 days | | E300.0 | |  |
| Chlorine (total residual) | | 250-mL Plastic | | None Required | 15 minutes (field) | | SM4500Cl | |  |
| Color | | 250-mL Plastic | | Cool, <6° C None | 48 hours | | SM2120B | |  |
| Color – ADMI | | 250-mL Plastic | | Cool, <6° C None | 48 Hours | | SM2120F | |  |
| Cyanide - Total | | 250-mL Plastic | | Cool, <6° C NaOH pH>12 | 14 days | | E335.4  SM4500CN  SW9010C | |  |
| Cyanide – Available | | 250-mL Amber Plastic | | Cool, <6° C NaOH pH>12 | 14 days | | OIA-1677 | |  |
| Cyanide - Free | | 250-mL  Amber Plastic | | Cool, <6° C NaOH pH>12 | 14 days | | OIA-1677 | |  |
| Fluoride | | 250-mL Plastic | | None Required | 28 days | | E300.0  SM4110 | |  |
| Hardness | | 250-mL Plastic | | Nitric Acid pH<2 | 6 months | | SM2340 | |  |
| pH (Hydrogen Ion) | | 250-mL Plastic | | None Required | 15 minutes (field) | | E150.2  SM4500H+B | |  |
| TKN (Kjeldahl and Organic Nitrogen) | | 250-mL Plastic | | Cool, <6° C Sulfuric Acid pH<2 | 28 days | | E350.1  SM4500Norg | |  |
| Nitrate | | 250-mL Plastic | | Cool, <6° C None | 48 hours | | E300.0  SM4500NO3 | |  |
| Nitrate-Nitrite | | 250-mL Plastic | | Cool, <6° C Sulfuric Acid pH<2 | 28 days | | E353.2  SM4500NO3 | |  |
| Nitrite | | 250-mL Plastic | | Cool, <6° C None | 48 hours | | E300.0  SM4500NO3 | |  |
| Oil and Grease | | 1-L Amber Glass | | Cool, <6° C HCl pH<2 | 28 days | | E1664 | |  |
| TOC (Total Organic Carbon) | | 40ml Clear Vial | | Cool, <6° C H3PO4 pH<2 | 28 days | | SM5310B | |  |
| Orthophosphate | | 250-mL Plastic | | Cool, <6° C None | Filter w/15 minutes; analyze 48 hours | | E365.1  SM4500P-F | |  |
| Odor | | 500-mL Plastic | | Cool, <6° C None | 48 Hours | | E140.1 | |  |
| DO (Dissolved Oxygen) | | 300-mL glass container | | None Required | 15 minutes (field) | | SM4500O | |  |
| Phenols | | 1-L Amber Glass | | Cool, <6° C Sulfuric Acid pH<2 | 28 days | | E420.1  E420.4  SM5530 | |  |
| Phosphorous (total) | | 250-mL Plastic | | Cool, <6° C Sulfuric Acid (H2SO4) or Nitric Acid (HNO3) pH<2 | 28 days | | E200.7 (HNO3)  E365.4 (H2SO4)  SM4500P (H2SO4) | |  |
| Solids - Total (TS) | | 250-mL Plastic | | Cool, <6° C None | 7 days | | SM2540B | |  |
| Solids - Dissolved (TDS) | | 250-mL Plastic | | Cool, <6° C None | 7 days | | SM2540C | |  |
| Solids - Total Suspended (TSS) | | 250-mL Plastic | | Cool, <6° C None | 7 days | | SM2540D | |  |
| Solids - Settleable (SS) | | 1-L Plastic | | Cool, <6° C None | 48 hours | | SM2540F | |  |
| Solids - Volatile (TVS) | | 250-mL Plastic | | Cool, <6° C None | 7 days | | SM2540E | |  |
| Specific Conductance (Conductivity) | | 250-mL Plastic | | Cool, <6° C None | 28 days | | E120.1  SM2510B  SW9050A | |  |
| Sulfate | | 250-mL Plastic | | Cool, <6° C None | 28 days | | E300.0  SM4500SO4 -F or G | |  |
| Sulfide | | 250-mL Plastic | | Cool, <6° C Zinc Acetate  plus Sodium Hydroxide to  pH>9 | 7 days | | SM4500S2 | |  |
| Sulfite | | 250-mL Plastic | | None Required | 15 minutes (field) | | SM4500SO3 | |  |
| Surfactants (MBAS) | | 250-mL Plastic | | Cool, <6° C None | 48 hours | | SM5540C | |  |
| Temperature | | 250-mL Plastic | | None Required | 15 minutes (field) | | SM2550B | |  |
| Turbidity | | 250-mL Plastic | | Cool, <6° C None | 48 hours | | E180.1  SM2130B | |  |
| **Metals 7** | |  |  | |  | |  |  |
| Hex Chrome (Hexavalent Chromium) | | 250-mL Plastic | Cool, <6° C Buffer | | 24 hours | | SM3500Cr |  |
| Mercury | | 250-mL Plastic | Cool, <6° C Nitric Acid pH<2 | | 28 days | | E245.1  SW7470 |  |
| Mercury (Low Level) | | \*\*\*\* | Cool, <6° C | | 90 days | | E1631 | \*\*Contact LRS for container type\*\* |
| Metals (except CrX, Hg) | | 250-mL Plastic | Cool, <6° C Nitric Acid pH<2 | | 6 months | | E200.7/200.8  SW6010/6020 |  |
| **Organics** | |  | |  | | |  | |  |
| Volatile Organics (VOCs) | | 40ml Vial | | Cool, <6° C HCl pH<2 | 14 / 14 days | | E 624.1  SW8260/5030 | |  |
| Semi-Volatile Organics (SVOCs) | | 1-L Amber Glass | | Cool, <6° C None, | 14 Days | | E625.1  SW8270 | |  |
| PAHs | | \*\*\*\* | | Cool, <6° C None | 7 / 14 days | | E625.1  SW8270 | | \*\*Contact LRS for container type\*\* |
| PAHs (SIM LVI or SIM) | | \*\*\*\*\* | | Cool, <6° C None | 7 / 14 days | | SW8270- SIM | | \*\*Contact LRS for container type\*\* |
| Pesticides | | 1-L Amber Glass | | Cool, <6° C None | 7 / 14 days | | E608  SW8081B | |  |
| TPH (GRO) | |  | |  | 14 days | | SW8015B | |  |
| TPH (DRO/ORO) | | 1-Liter Amber Glass | | Cool, <6° C None | 7 / 14 days | | SW8015B | |  |
| PCBs | | 1-Liter Amber Glass | | Cool, <6° C None | 7 days | | E608  SW8082 | |  |

**Hazardous Waste Characterization**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TCLP - Metals | | Liter | Cool, <6° C None | | 14 days | | SW1311/6010/7470 | | |  | |
| TCLP – VOCs | | Liter | Cool, <6° C None | | 14 days | | SW1311-ZHE/8260 | | |  | |
| TCLP – SVOCs | | Liter | Cool, <6° C None | | 14 days | | SW1311/8270 | | |  | |
| TCLP Pesticides | | Liter | Cool, <6° C None | | 14 days | | SW1311/8081 | | |  | |
| TCLP Herbicides | | Liter | Cool, <6° C None | | 14 days | | SW1311/8051 | | |  | |
| **Bacteriological Tests** | | | | | | | | | | | |
| Coliform - Total | | Coliform - Sterilized | Cool, <10oC Sodium Thiosulfate | | 8 hours | | SM9222B | | | \*\*Please contact LRS to schedule\*\* | |
| Fecal Coliform | | Coliform - Sterilized | Cool, <10oC Sodium Thiosulfate | | 8 hours | | SM9222D | | | \*\*Please contact LRS to schedule\*\* | |
| E-Coli (Enterococci) | | Coliform - Sterilized | Cool, <10oC Sodium Thiosulfate | | 8 hours | | SM9221B.2 | | | \*\*Please contact LRS to schedule\*\* | |
| Heterotrophic Plate Count (HPC) | | Coliform – Sterilized | Cool, <10oC Sodium Thiosulfate | | 8 hours | | SM9215B  SM9215E | | | \*\*Please contact LRS to schedule\*\* | |
| **Aquatic Toxicity Tests** | | | | | | | | | | |
| Acute Toxicity | Gallon - Plastic | | | Cool, <6° C None | | 36 Hours | | E2000.0 – P.p.  E2002.0 – C.d. | \*\*Please contact LRS to schedule\*\* | |
| Chronic Toxicity | Gallon - Plastic | | | Cool, <6° C None | | 36 Hours | | E1000.0 – P.p  E1001.0 – C.d. | \*\*Please contact LRS to schedule\*\* | |

**Soil / Solid Samples**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameters** | | **Container** | | **Preservation** | | **Soil Max Holding Time** | | **Sample Method** | | **Notes** | |
| **Inorganics** | |  | |  | | | |  | |  | |
| Cyanide | | 4oz / 9oz Glass | | Cool, <6° C None | | 14 days | | SW9014 | |  | |
| HEM: Oil & Grease | | 4oz / 9oz Glass | | Cool, <6° C None | | 28 days | | SW9071B | |  | |
| pH | | 4oz / 9oz Glass | | Cool, <6° C None | | Analyze Immediately | | SW9045 | |  | |
| Sulfide | | 4oz / 9oz Glass | | Cool, <6° C Zinc Acetate | | 7 days | | SW9030 | |  | |
| TOC | | 4oz / 9oz Glass | | Cool, <6° C None | | 28 days | | SW9060 | |  | |
| **Metals** | |  | |  | |  | |  | | | |
| Hexavalent Chromium | | 4oz / 9oz Glass | | Cool, <6° C None | | 30 days to extraction  7 days from extraction to analysis | | 3060/7196 | |  | |
| Metals (except CrX, Hg) | | 4oz / 9oz Glass | | None | | 6 months | | SW6010  SW6020 | |  | |
| Mercury | | 4oz / 9oz Glass | | Cool, <6° C None | | 28 days | | SW7471 | |  | |
| **Organics** | |  | |  | |  | |  | |  | |
| Volatiles | | 4oz Glass | | Cool, <6° C None | | 48 hours / 14 days | | SW8260/5030 | |  | |
| Volatiles - 5035 Terra Cores | | Terra Cores | | Cool, <6° C | | 14 days | | SW8260/5035 | |  | |
| SVOC | | 4oz / 9oz Glass | | Cool, <6° C None | | 14 / 40 days | | SW8270 | |  | |
| Pesticides | | 4oz / 9oz Glass | | Cool, <6° C None | | 14 / 40 days | | SW8081 | |  | |
| PCBs | | 4oz / 9oz Glass | | Cool, <6° C None | | None | | SW8082 | |  | |
| Herbicides | | 4oz / 9oz Glass | | Cool, <6° C None | | 14 / 40 days | | SW8151 | |  | |
| **Hazardous Waste Characterization** | |  | |  | |  | |  | | | |
| TCLP - Metals | | 9oz / 16oz / 32oz Glass | | Cool, <6° C None | | 14 days | | SW1311/6010 | |  | |
| TCLP - VOCs | | 9oz / 16oz / 32oz Glass | | Cool, <6° C None | | 14 days | | SW1311-ZHE /8260 | |  | |
| TCLP - SVOCs | | 9oz / 16oz / 32oz Glass | | Cool, <6° C None | | 14 days | | SW1311/8270 | |  | |
| RCI - Solid | | 9oz Glass | | Cool, <6° C None | |  | | 9045/ ASTMD93-80 / SW-7.3.4 SW7.4.3 | |  | |