**Water Samples**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 | E350.1SM4500NH3 |  |
| BOD (Biochemical Oxygen Demand) | 1-L Plastic | Cool, <6° C None | 48 hours | SM5210B |  |
| Bromide | 250-mL Plastic | None Required | 28 days | E300.0SM4110B |  |
| 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 | E410.4SM5220 |  |
| 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 | E335.4SM4500CNSW9010C |  |
| 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 | E300.0SM4110 |  |
| Hardness | 250-mL Plastic | Nitric Acid pH<2 | 6 months | SM2340 |  |
| pH (Hydrogen Ion) | 250-mL Plastic | None Required | 15 minutes (field) | E150.2SM4500H+B |  |
| TKN (Kjeldahl and Organic Nitrogen) | 250-mL Plastic | Cool, <6° C Sulfuric Acid pH<2 | 28 days | E350.1SM4500Norg |  |
| Nitrate | 250-mL Plastic | Cool, <6° C None | 48 hours | E300.0SM4500NO3 |  |
| Nitrate-Nitrite | 250-mL Plastic | Cool, <6° C Sulfuric Acid pH<2 | 28 days | E353.2SM4500NO3 |  |
| Nitrite | 250-mL Plastic | Cool, <6° C None | 48 hours | E300.0SM4500NO3 |  |
| 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 | E365.1SM4500P-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 | E420.1E420.4SM5530 |  |
| 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 | E120.1SM2510BSW9050A |  |
| Sulfate | 250-mL Plastic | Cool, <6° C None | 28 days | E300.0SM4500SO4 -F or G |  |
| Sulfide | 250-mL Plastic | Cool, <6° C Zinc Acetateplus Sodium Hydroxide topH>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 | E180.1SM2130B |  |
| **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 | E245.1SW7470 |  |
| 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 | E200.7/200.8SW6010/6020 |  |
| **Organics**  |  |  |  |  |
| Volatile Organics (VOCs) | 40ml Vial | Cool, <6° C HCl pH<2 | 14 / 14 days | E 624.1SW8260/5030 |  |
| Semi-Volatile Organics (SVOCs) | 1-L Amber Glass | Cool, <6° C None, | 14 Days | E625.1SW8270 |  |
| PAHs | \*\*\*\* | Cool, <6° C None | 7 / 14 days | E625.1SW8270 | \*\*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 | E608SW8081B |  |
| 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 | E608SW8082 |  |

**Hazardous Waste Characterization**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 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 | SM9215BSM9215E | \*\*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.pE1001.0 – C.d. | \*\*Please contact LRS to schedule\*\* |

**Soil / Solid Samples**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 | SW6010SW6020 |  |
| 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 |  |