

SAMPLE CONTAINER & PRESERVATION

| Analysis | Method(s) | Matrix | Sample Container(s) | Minimum Volume | Preservative(s) | Holding Time(s) |
|---|-----------------------------------|-----------------------|---|---------------------|---|-------------------------------------|
| 1,2-Dibromoethane (EDB) ③④ | EPA 504.1 / EPA 8011 | Water | 40mL vial (x3) | 1 vial | HCl, pH<2, ≤ 6°C | 14 Days |
| Dibromochloropropane (DBCP) ③④ | EPA 504.1 / EPA 8011 | Water | 40mL vial (x3) | 1 vial | HCl, pH<2, ≤ 6°C | 14 Days |
| Acidity | SM 2310B (4a) | Water | 250mL plastic | 50mL | Cool ≤ 6°C | 14 Days |
| Alkalinity as CaCO ₃ | EPA 310.2 / SM 2320B | Water | 250mL plastic | 50mL | Cool ≤ 6°C | 14 Days |
| Bacteria, Fecal Coliform | SM 9221B | Water | 120mL sterile | 120mL | Cool ≤ 6°C Na ₂ S ₂ O ₃ | 8 Hrs non-potable 30 Hrs potable |
| Bacteria, Total Coliform | SM 9223B | Water | 120mL sterile | 120mL | Cool ≤ 6°C Na ₂ S ₂ O ₃ | 8 Hrs non-potable 30 Hrs potable |
| Bacteria, Total Plate Count | SM 9215B | Water | 120mL sterile | 100mL | Cool ≤ 6°C Na ₂ S ₂ O ₃ | 24 Hrs non-potable 8 Hrs potable |
| Bacteroides | N/A | Water | 120mL sterile | 120mL | Cool ≤ 6°C Na ₂ S ₂ O ₃ | N/A |
| Biochemical Oxygen Demand (BOD) | SM 5210B | Water | 1L plastic | 1L | Cool ≤ 6°C | 48 Hours |
| Bromide | E300.0 | Water Solid | 250mL plastic 4oz glass | 10mL 5g | Cool ≤ 6°C | 28 Days |
| BTEX, MTBE, and/or Naphthalene | EPA 8021B / EPA 8260D | Water Solid | 40mL vial (x3) Terra Core Kit⑥ | 1 vial 1 kit | HCl, pH<2, ≤ 6°C Cool ≤ 6°C | 14 Days |
| Chemical Oxygen Demand (COD) | EPA 410.4 / SM 5220D | Water | 250mL plastic | 10mL | H ₂ SO ₄ , pH<2, ≤ 6°C Cool ≤ 6°C | 28 Days |
| Chloride | EPA 300.0 | Water Solid | 250mL plastic 4oz glass | 10mL 5g | Cool ≤ 6°C | 28 Days |
| Chlorine, Total and/or Free ⑦ | SM 4500 CL-G | Water | 40mL vial (x2) | 1 vial | Cool ≤ 6°C | Immediately |
| Chromium, Hexavalent | EPA 7196A / SM 3500 | Water Solid | 250mL plastic 4oz glass | 50mL 5g | Cool ≤ 6°C | 24 Hours 30 Days |
| Color | SM 2120C | Water | 250mL plastic | 50mL | Cool ≤ 6°C | 48 Hours |
| Cyanide, Total | EPA 9014 / SM4500CN E | Water Solid | 250mL plastic 4oz glass | 50mL 5g | N _a OH pH>12, ≤ 6°C Cool ≤ 6°C | 14 Days |
| Dioxins/Furans | EPA 8290 / 1613 | Water Solid | 1L amber (x2) 4oz glass | 1L 100g | Cool ≤ 6°C | 30 Days |
| Dissolved Gases (Methane, Ethane, Ethene, and/or Propane) | EPA 8015M | Air Water | Tedlar Bag 40mL vials (x3) | 1 bag 1 vial | N/A HCl, pH<2, ≤ 6°C | 48 Hours 14 Days |
| Dissolved Metals—Field Filtered | EPA 200.8 / EPA 6020B | Water | 250mL plastic | 50mL | HNO ₃ pH<2 | 6 Months |
| Dissolved Metals—Not Field Filtered ① | EPA 200.8 / EPA 6020B | Water | 250mL plastic | 50mL | N/A | 15 Minutes |
| Dissolved Mercury—Field Filtered | EPA 200.8 / EPA 245.1 / EPA 6020B | Water | 250mL plastic | 50mL | HNO ₃ pH<2 | 28 Days |
| Dissolved Mercury—Not Field Filtered ① | EPA 200.8 / EPA 245.1 / EPA 6020B | Water | 250mL plastic | 50mL | N/A | 15 Minutes |
| Flashpoint | EPA 1020A | Water Solid Oil | 250mL plastic 4oz glass 20mL vial | 15mL 15g 20mL | Cool ≤ 6°C | 14 Days |

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| Fluoride | EPA 300.0 | Water Solid | 250mL plastic 4oz glass | 10mL 5g | Cool ≤ 6°C | 28 Days |
| Glycols— <i>Propylene and/or Ethylene</i> | EPA 8015 Modified | Water Solid | 250mL amber 4oz glass | 100mL 20g | Cool ≤ 6°C | 14 Days |
| Hardness, Total | SM 2340B | Water | 250mL plastic | 50mL | HNO ₃ pH<2 | 6 Months |
| Herbicides, Chlorinated | EPA 8151A ② EPA 8151A | Water Solid | 1L amber 4oz glass | 1L 50g | Cool ≤ 6°C | 7 Days 14 Days |
| Mercury, Total | EPA 200.8 / 6020B / 245.1 EPA 6020B / EPA 7141A | Water Solid | 250mL plastic 4oz glass | 50mL 5g | HNO ₃ pH<2 Cool ≤ 6°C | 28 Days |
| Metals, Total (<i>except mercury</i>) | EPA 200.8 / 6020B EPA 6020B | Water Solid | 250mL plastic 4oz glass | 50mL 5g | HNO ₃ pH<2 N/A | 6 Months |
| Moisture Content | SM2540G | Solid | 4oz glass | 20g | Cool ≤ 6°C | 28 Days |
| Nitrogen, Ammonia (<i>NH₃</i>) | SM4500-NH3F | Water Solid | 250mL plastic 4oz glass | 50mL 5g | H ₂ SO ₄ , pH<2, ≤ 6°C Cool ≤ 6°C | 28 Days |
| Nitrogen, Nitrate (<i>as N</i>) | EPA 300.0 | Water Solid | 250mL plastic 4oz glass | 10mL 5g | Cool ≤ 6°C | 48 Hours 28 Days |
| Nitrogen, Nitrite (<i>as N</i>) | EPA 300.0 | Water Solid | 250mL plastic 4oz glass | 10mL 5g | Cool ≤ 6°C | 48 Hours 28 Days |
| Nitrogen, Total Kjeldahl (<i>TKN</i>) | HACH 10242 | Water Solid | 250mL plastic 4oz glass | 50mL 10g | H ₂ SO ₄ , pH<2, ≤ 6°C Cool ≤ 6°C | 28 Days |
| Nitrogen, Organic (<i>Calculation</i>) | Ammonia—TKN | N/A | N/A | N/A | N/A | N/A |
| Nitrogen, Total (<i>Calculation</i>) | NO ₂ + NO ₃ + TKN | N/A | N/A | N/A | N/A | N/A |
| Odor | SM 2150B | Water | 1L wide mouth glass | 1L | Cool ≤ 6°C | 24 Hours |
| Oil & Grease (HEM) | E1664B ② E1664B Modified/9071BM | Water Solid | 1L wide mouth glass 4oz glass | 1L 50g | H ₂ SO ₄ , pH<2, ≤ 6°C Cool ≤ 6°C | 28 Days |
| Perchlorate | EPA 314.1 | Water | 250mL glass/plastic | 50mL | Cool ≤ 6°C | 28 Days |
| Pesticides (<i>Organophosphorus</i>) | EPA 8141 ② EPA 8141 | Water Solid | 1L amber 4oz glass | 1L 50g | Cool ≤ 6°C | 7 Days 14 Days |
| Pesticides (<i>Organochlorine</i>) | EPA 8151 ②③ EPA 8151 | Water Solid | 1L amber 4oz glass | 1L 50g | Cool ≤ 6°C | 7 Days 14 Days |
| PCBs | EPA 8082A / 608.3 ② EPA 8082A EPA 8082A | Water Solid Oil | 1L amber 4oz glass 20mL vial | 1L 50g 20mL | Cool ≤ 6°C | None |
| PCB Congeners | EPA 1668 | Water | 1L amber (x2) | 2L | Cool ≤ 6°C | 1 Year |

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| pH (<i>Corrosivity</i>) | SM 4500H+B ⑦ SW9045D | Water Solid | 250mL plastic 4oz glass | 20mL 20g | Cool ≤ 6°C | Immediately |
| Phenolics | EPA 420.4 | Water | 250mL amber | 50mL | H ₂ SO ₄ , pH<2 Cool ≤ 6°C | 28 Days |
| Phosphorus ① (<i>Orthophosphate</i>) | EPA 365.1 / SM 4500 PE | Water | 250mL plastic | 50mL | Cool ≤ 6°C | 48 Hours |
| Phosphorus, Total | EPA 365.1 / SM 4500 PE | Water Solid | 250mL plastic 4oz glass | 50mL 10g | H ₂ SO ₄ , pH<2, ≤ 6°C Cool ≤ 6°C | 28 Days |
| PAHs (<i>Polynuclear Aromatic Hydrocarbons</i>) | EPA 625.1 / 8270E ② ③ EPA 8270E | Water Solid | 1L amber 4oz glass | 1L 30g | Cool ≤ 6°C | 7 Days 14 Days |
| Product ID | Various | Various | 4oz glass | Various | N/A | Various |
| Reactivity | Total Cyanide EPA 9014 Total Sulfide SM4500S2D | Solid | 4 oz glass | 10g | Cool ≤ 6°C | 14 Days |
| Salinity | SM 2520B | Water | 40mL vial (x2) | 1 vial | Cool ≤ 6°C | 6 Months |
| SVOCs (<i>Semivolatile Organics</i>) | EPA 625.1 / 8270E ② ③ EPA 8270E | Water Solid | 1L amber 4oz glass | 1L 30g | Cool ≤ 6°C | 7 Days 14 Days |
| Solids, Settable | SM 2540F | Water | 1L plastic | 1L | Cool ≤ 6°C | 48 Hours |
| Solids, Total | SM 2540B | Water | 250mL plastic | 100mL | Cool ≤ 6°C | 7 Days |
| Solids, Total Dissolved | SM 2540C | Water | 250mL plastic | 100mL | Cool ≤ 6°C | 7 Days |
| Solids, Total Suspended | SM 2540D | Water | 1L plastic | 100mL-1L | Cool ≤ 6°C | 7 Days |
| Solids, Total Volatile | SM 2540E | Water | 1L plastic | 100mL-1L | Cool ≤ 6°C | 7 Days |
| Specific Conductance | SM 2510B | Water | 250mL plastic | 20mL | Cool ≤ 6°C | 28 Days |
| Sulfate | EPA 300.0 | Water Solid | 250mL plastic 4oz glass | 10mL 5g | Cool ≤ 6°C | 28 Days |
| Sulfide, Total | SM 4500S2D EPA 9030 | Water Solid | 250 mL plastic 4oz glass | 20 mL 5g | NaOH Zn Acetate, pH>9, ≤ 6°C Cool ≤ 6°C | 7 Days 14 Days |
| Surfactants, CTAS | SM 5540D | Water | 500mL plastic | 100 mL | Cool ≤ 6°C | None |
| Surfactants, MBAS | SM 5540C | Water | 500mL plastic | 100 mL | Cool ≤ 6°C | 48 Hours |

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| TCLP (<i>Herbicides, Metals, Pesticides, SVOCs, and/or VOCs</i>) | EPA 1311 prep | Water | 1L amber, 250ml plastic, 40mL vial (x2) | 1500mL | Cool ≤ 6°C | 14 Days shortest |
| | Various | Solid | 4oz glass (x3) | 100g | | |
| TOC (<i>Total Organic Carbon</i>) | SM 5310 | Water | 40mL vial (x2) | 40mL | H ₂ SO ₄ , pH<2, ≤ 6°C | 28 Days |
| | Walkley Black / EPA 9060 | Solid | 4oz glass | 5g | Cool ≤ 6°C | |
| TOX (<i>Total Organic Halogens</i>) | EPA 9020B | Water | 250mL amber | 100mL | Cool ≤ 6°C | 28 Days |
| | EPA 9078 / 9023 | Solid | 4oz glass | 20g | | |
| | EPA 9078 | Oil | 20mL vial | 20mL | | |
| TPH (SGT-HEM) | E1664B ② | Water | 1L wide mouth glass | 1L | H ₂ SO ₄ , pH<2, ≤ 6°C | 28 Days |
| | E1664B Modified/9071BM | Solid | 4oz glass | 50g | Cool ≤ 6°C | |
| TPH GRO (<i>Gasoline Range</i>) | EPA 8015C | Water | 40mL vial (x3) | 1 vial | HCl, pH<2, ≤ 6°C | 14 Days |
| | | Solid | Terra Core Kit⑥ | 1 kit | Cool ≤ 6°C | |
| TPH DRO (<i>Diesel Range</i>) | EPA 8015C ② | Water | 1L amber | 1L | Cool ≤ 6°C | 7 Days |
| | EPA 8015C | Solid | 4oz glass | 50g | | 14 Days |
| TPH ORO (<i>Oil Range</i>) | EPA 8015C ② | Water | 1L amber | 1L | Cool ≤ 6°C | 7 Days |
| | EPA 8015C | Solid | 4oz glass | 50g | | 14 Days |
| Turbidity | EPA 180.1 / SM 2130B | Water | 250mL plastic | 50mL | Cool ≤ 6°C | 48 Hours |
| VOCs (<i>Volatile Organics</i>) | TO-15 | AIR | 1.4L canister | Various | N/A | 28 Days |
| | EPA 524.2 ④ | DW | 40mL vial (x3) | 1 vial | HCl, pH<2, ≤ 4°C | 14 Days |
| | EPA 624.1 ③ | WW | 40mL vial (x3) | 1 vial | HCl, pH<2, ≤ 6°C | 14 Days |
| | EPA 624.1 ③⑤ | WW | E624 kit | 1 vial | Cool ≤ 6°C | 7 & 3 Days |
| | EPA 8260D | Solid | Terra Core Kit⑥ | 1 kit | Cool ≤ 6°C | 14 Days |

- ① Samples for dissolved metals and/or orthophosphorus should be filtered within 15 minutes of collection. Samples received that were not field filtered will include narration on the final report.
- ② The analysis of matrix spike/matrix spike duplicate (MS/MSD) quality control samples for each of the aqueous extractable analyses requires the collection of additional sample volume. Please contact the lab for further instruction.
- ③ Samples containing chlorine need to be dechlorinated with sodium thiosulfate for the analysis of pesticides by EPA 608.3, SVOC by EPA 625.1, and VOCs by EPA 624.1/EPA 504.1/8011. Prior to sampling, add 8 mg of sodium thiosulfate to each one liter amber, 10 mg to each 40mL vial for EPA 624.1, and 3 mg to each 40mL vial for EPA 504.1/8011.
- ④ Per method EPA 524.2 and 504.1, trip blanks are required. Please contact the laboratory before sampling to request kits with trip blanks. Reports for samples received without trip blanks will be narrated. Vials are provided with ascorbic acid to dechlorinate samples from chlorinated sources for analysis by EPA 524.2. Hydrochloric acid is provided separately to be added during sample collection.
- ⑤ If acrolein, acrylonitrile, and/or 2-chloroethyl vinyl ether are required a E624 kit is required. A E624 kit includes one 40mL vial preserved with HCL and two 40mL unpreserved vials. Acrolein and acrylonitrile have a 3 day holding time. 2-chloroethyl vinyl ether has a 7 day holding time.
- ⑥ Terra core kits are recommended for SW5035 prep method. Analysis using a 4oz glass jar for sample collection are prepared by SW5030 prep method and may not be suitable for compliance.
- ⑦ The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for drinking water and non-potable samples tested for compliance have a maximum holding time of 5 minutes. As such, all laboratory analyses for these analytes exceed holding times.