



CH2MHILL

Applied Sciences Laboratory

Clean-Trace Level Water Sample Collection and Analysis Services



CH2M HILL's Applied Science Laboratory offers customers clean-trace level sampling and analysis services to ensure reliable, high-quality data. Some chemical constituents are ubiquitous in nature and are present in naturally occurring concentrations that often approach regulated amounts. With our clean-trace level sampling and analysis services, we avoid the introduction of contaminants and chemical artifacts during sample collection, sample handling and lab analysis, or where naturally occurring (ambient) background conditions need to be reliably assessed.

From our network of offices located throughout North America and abroad, CH2M HILL's engineers, scientists, and lab staff are available to help customers achieve compliance with complex environmental challenges. This includes the resources for conducting both trace inorganic (typically heavy metals) and trace organic constituents in the environment that are regulated by EPA and state agencies under the Clean Water Act. It takes good planning, care and skill to unravel the issue of naturally occurring versus introduced concentrations for constituents that are regulated down to ultra low levels. To that end we provide customers with the following services:

Planning and Assistance

- Customized Sampling and Analysis Plan (SAP) development
- Quality Assurance Planning and Audits
- Data Validation, Assessment and Interpretation

Sample Collection/Sampling

- Clean Sampling Service – EPA Method 1669

Trace Metals Analysis

- EPA 200.8/1638 Low Level Metals by ICP/MS (Total or Dissolved) – call for reporting limits
- EPA 200.8 Collision Mode and/or Reaction Cell Mode – reporting limit in progress
- EPA 200.7 Metals by ICP (Total or Dissolved), call for reporting limits
- EPA 1631 Ultra Trace Level Mercury by Atomic Fluorescence (Total or Dissolved) - reporting limit 0.001 ng/L
- EPA 1630 Methyl Mercury - reporting limit in progress
- EPA 245.1 Mercury (Total or Dissolved) - reporting limit 0.1 µg/L



Other Trace Level Analyses of Interest (not all capabilities listed)

- Cyanide (Total, WAD and Free) by SM4500-CN E/I, ASTM 4282, EPA 335.4, SW9012 - reporting limit 5.0 µg/L and 0.5 µg/L for Free CN
- Hexavalent Chromium (CrVI) by SW7199, EPA 218.6 - reporting limit 0.2 µg/L
- Anions by IC (Cl, F, SO₄, NO₃) by EPA 300.0 – reporting limit 0.1 µg/L
- PCBs Congeners by Modified EPA 1668 – reporting limit 0.5 ng/L (0.1 µg/Kg)
- Organo chlorine pesticides by EPA 8081 / 8270 – reporting limit 0.005 µg/L
- Explosives by modified EPA 8095 – reporting limit varies by analyte
- VOC by EPA 8260 – reporting limit 0.5 µg/L
- AVS-SEM
- Total and Dissolved Organic Carbon (TOC) by EPA 415.1/SM5310B
- Taste & Odor Constituents VOC by SW8260



Contacts

For more information on this and other services CH2M HILL's ASL can provide, please contact:

General Customer Service Questions

(asl@ch2m.com)

541-768-3120



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