



# CERTIFICATE OF ACCREDITATION

## ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

**Empirical Laboratories, LLC**  
**621 Mainstream Drive, Suite 270**  
**Nashville, TN 37228**

has been assessed by ANAB  
and meets the requirements of international standard

**ISO/IEC 17025:2005**

**and DoD Quality Systems Manual for Environmental  
Laboratories (DoD QSM V 5.1)**

while demonstrating technical competence in the fields of

**TESTING**

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations and/or tests to which this accreditation applies.

L2226  
Certificate Number

  
ANAB Approval

Certificate Valid: 04/06/2018-11/30/2018  
Version No. 002 Issued: 04/06/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005 AND DOD  
QUALITY SYSTEMS MAUAL FOR ENVIRONMENTAL  
LABORATORIES (DOD QSM V5.1)

**Empirical Laboratories, LLC**

621 Mainstream Drive, Suite 270

Nashville, TN 37228

Marcia K. McGinnity

877-345-1113

**TESTING**

Valid to: **November 30, 2018**

Certificate Number: **L2226**

**Environmental**

<b>Non-Potable Water</b>		
<b>Technology</b>	<b>Method</b>	<b>Analyte</b>
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	NEtFOSAA (N-ethyl-perfluorooctanesulfonamidoacetic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	NMeFOSAA (N-methylperfluorooctanesulfonamidoacetic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFBS (Perfluorobutanesulfonate)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFDA (Perfluorodecanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFDoA (Perfluorododecanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFHpA (Perfluoroheptanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFHxA (Perfluorohexanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFHxS (Perfluorohexanesulfonate)



Non-Potable Water		
Technology	Method	Analyte
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFNA (Perfluorononanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFOA (Perfluorooctanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFOS (Perfluorooctanesulfonate)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFTA (Perfluorotetradecanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFTrA (Perfluorotridecanoic acid)
LC/MS/MS	PFAS by LCMSMS Compliant with QSM 5.1 Table B-15	PFUnA (Perfluoroundecanoic acid)
GC/MS	EPA 8260B/C	1,1,1,2-Tetrachloroethane
GC/MS	EPA 8260B/C; EPA 624.1	1,1,1-Trichloroethane (1,1,1-TCA)
GC/MS	EPA 8260B/C; EPA 624.1	1,1,2,2-Tetrachloroethane
GC/MS	EPA 8260B/C;	1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113; Freon 113)
GC/MS	EPA 8260B/C; EPA 624.1	1,1,2-Trichloroethane
GC/MS	EPA 8260B/C; EPA 624.1	1,1-Dichloroethane (1,1-DCA)
GC/MS	EPA 8260B/C; EPA 624.1	1,1-Dichloroethene (1,1-DCE)
GC/MS	EPA 8260B/C;	1,1-Dichloropropene
GC/MS	EPA 8260B/C	1,2,3-Trichlorobenzene
GC/MS	EPA 8260B/C	1,2,3-Trichloropropane
GC/MS	EPA 8260B/C	1,2,4-Trichlorobenzene
GC/MS	EPA 8260B/C	1,2,4-Trimethylbenzene
GC/MS	EPA 8260B/C	1,2-Dibromo-3-chloropropane (DBCP)
GC/MS	EPA 8260B/C	1,2-Dibromoethane (EDB)
GC/MS	EPA 8260B/C; EPA 624.1	1,2-Dichlorobenzene
GC/MS	EPA 8260B/C; EPA 624.1	1,2-Dichloroethane (EDC)



Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8260B/C; EPA 624.1	1,2-Dichloropropane
GC/MS	EPA 8260B/C	1,3,5- Trichlorobenzene
GC/MS	EPA 8260B/C	1,3,5-Trimethylbenzene
GC/MS	EPA 8260B/C; EPA 624.1	1,3-Dichlorobenzene
GC/MS	EPA 8260B/C	1,3-Dichloropropane
GC/MS	EPA 8260B/C; EPA 624.1	1,4-Dichlorobenzene
GC/MS	EPA 8260B/C	1,4-Dioxane
GC/MS	EPA 8260B/C	1-Chlorohexane
GC/MS	EPA 8260B/C	2,2-Dichloropropane
GC/MS	EPA 8260B/C	2-Butanone (Methyl ethyl ketone; MEK)
GC/MS	EPA 8260B/C; EPA 624.1	2-Chloroethyl vinyl ether
GC/MS	EPA 8260B/C	2-Chlorotoluene
GC/MS	EPA 8260B/C	2-Hexanone (Methyl butyl ketone; MBK)
GC/MS	EPA 8260B/C	4-Chlorotoluene
GC/MS	EPA 8260B/C	4-Methyl-2-pentanone (Methyl isobutyl ketone; MBK)
GC/MS	EPA 8260B/C	Acetone
GC/MS	EPA 8260B/C	Acetonitrile
GC/MS	EPA 8260B/C; EPA 624.1	Acrolein
GC/MS	EPA 8260B/C; EPA 624.1	Acrylonitrile
GC/MS	EPA 8260B/C	Allyl chloride
GC/MS	EPA 8260B/C; EPA 624.1	Benzene
GC/MS	EPA 8260B/C	Bromobenzene
GC/MS	EPA 8260B/C	Bromochloromethane
GC/MS	EPA 8260B/C; EPA 624.1	Bromodichloromethane
GC/MS	EPA 8260B/C; EPA 624.1	Bromoform
GC/MS	EPA 8260B/C; EPA 624.1	Bromomethane
GC/MS	EPA 8260B/C	Carbon Disulfide



Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8260B/C; EPA 624.1	Carbon Tetrachloride
GC/MS	EPA 8260B/C; EPA 624.1	Chlorobenzene
GC/MS	EPA 8260B/C; EPA 624.1	Chloroethane
GC/MS	EPA 8260B/C; EPA 624.1	Chloroform
GC/MS	EPA 8260B/C; EPA 624.1	Chloromethane
GC/MS	EPA 8260B/C	Chloroprene
GC/MS	EPA 8260B/C	cis-1,2-Dichloroethene (cis-1,2-DCE)
GC/MS	EPA 8260B/C; EPA 624.1	cis-1,3-Dichloropropene
GC/MS	EPA 8260B/C	cis-1,4-Dichloro-2-butene
GC/MS	EPA 8260B/C	Cyclohexane
GC/MS	EPA 8260B/C; EPA 624.1	Dibromochloromethane
GC/MS	EPA 8260B/C	Dibromomethane
GC/MS	EPA 8260B/C	Dichlorodifluoromethane (CFC-12)
GC/MS	EPA 8260B/C	Diethyl ether
GC/MS	EPA 8260B/C	Di-isopropyl ether
GC/MS	EPA 8260B/C	Ethyl tert-butyl ether (ETBE)
GC/MS	EPA 8260B/C	Ethyl methacrylate
GC/MS	EPA 8260B/C; EPA 624.1	Ethylbenzene
GC/MS	EPA 8260B/C	Hexachlorobutadiene
GC/MS	EPA 8260B/C	Hexane
GC/MS	EPA 8260B/C	Iodomethane
GC/MS	EPA 8260B/C	Isobutyl alcohol
GC/MS	EPA 8260B/C	Isopropylbenzene (Cumene)
GC/MS	EPA 8260B/C	m,p-Xylenes
GC/MS	EPA 8260B/C	Methacrylonitrile
GC/MS	EPA 8260B/C	Methyl Acetate
GC/MS	EPA 8260B/C	Methyl methacrylate



Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8260B/C	Methyl tert-Butyl Ether (MTBE)
GC/MS	EPA 8260B/C	Methylcyclohexane
GC/MS	EPA 8260B/C; EPA 624.1	Methylene Chloride, or Dichloromethane
GC/MS	EPA 8260B/C	Naphthalene
GC/MS	EPA 8260B/C	n-Butylbenzene
GC/MS	EPA 8260B/C	n-Propylbenzene
GC/MS	EPA 8260B/C	o-Xylene
GC/MS	EPA 8260B/C	p-Isopropyltoluene
GC/MS	EPA 8260B/C	Propionitrile
GC/MS	EPA 8260B/C	sec-Butylbenzene
GC/MS	EPA 8260B/C	Styrene
GC/MS	EPA 8260B/C	tert-Amyl alcohol
GC/MS	EPA 8260B/C	tert-Amyl ethyl ether
GC/MS	EPA 8260B/C	tert-Butyl alcohol
GC/MS	EPA 8260B/C	tert-Amyl methyl ether
GC/MS	EPA 8260B/C	tert-Butylbenzene
GC/MS	EPA 8260B/C; EPA 624.1	Tetrachloroethene (PCE; PERC)
GC/MS	EPA 8260B/C	Tetrahydrofuran
GC/MS	EPA 8260B/C; EPA 624.1	Toluene
GC/MS	EPA 8260B/C; EPA 624.1	trans-1,2-Dichloroethene (trans-1,2-DCE)
GC/MS	EPA 8260B/C; EPA 624.1	trans-1,3-Dichloropropene
GC/MS	EPA 8260B/C	trans-1,4-Dichloro-2-butene
GC/MS	EPA 8260B/C; EPA 624.1	Trichloroethene (TCE)
GC/MS	EPA 8260B/C	Trichlorofluoromethane (CFC-11)
GC/MS	EPA 8260B/C	Vinyl acetate
GC/MS	EPA 8260B/C; EPA 624.1	Vinyl Chloride (VC)
GC/MS	EPA 8260B/C	Xylenes (Total)



Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8270D	1,1'-Biphenyl
GC/MS	EPA 8270D	1,2,4,5-Tetrachlorobenzene
GC/MS	EPA 8270D; EPA 625.1	1,2,4-Trichlorobenzene
GC/MS	EPA 8270D	1,2-Dichlorobenzene
GC/MS	EPA 8270D	1,2-Diphenylhydrazine
GC/MS	EPA 8270D	1,3-Dichlorobenzene
GC/MS	EPA 8270D	1,4-Dichlorobenzene
GC/MS	EPA 8270D	1,4-Dioxane
GC/MS	EPA 8270D	1-Methylnaphthalene
GC/MS	EPA 8270D	2,3,4,6-Tetrachlorophenol
GC/MS	EPA 8270D	2,4,5-Trichlorophenol
GC/MS	EPA 8270D; EPA 625.1	2,4,6-Trichlorophenol (TCP)
GC/MS	EPA 8270D; EPA 625.1	2,4-Dichlorophenol (DCP)
GC/MS	EPA 8270D; EPA 625.1	2,4-Dimethylphenol
GC/MS	EPA 8270D; EPA 625.1	2,4-Dinitrophenol
GC/MS	EPA 8270D; EPA 625.1	2,4-Dinitrotoluene (DNT)
GC/MS	EPA 8270D	2,6-Dichlorophenol
GC/MS	EPA 8270D; EPA 625.1	2,6-Dinitrotoluene
GC/MS	EPA 8270D; EPA 625.1	2-Chloronaphthalene
GC/MS	EPA 8270D; EPA 625.1	2-Chlorophenol
GC/MS	EPA 8270D	2-Methylnaphthalene
GC/MS	EPA 8270D	2-Methylphenol (o-Cresol)
GC/MS	EPA 8270D	2-Nitroaniline
GC/MS	EPA 8270D; EPA 625.1	2-Nitrophenol (ONP)
GC/MS	EPA 8270D; EPA 625.1	3,3'-Dichlorobenzidine (DCB)
GC/MS	EPA 8270D	3-Methylphenol/4-Methylphenol
GC/MS	EPA 8270D	3-Nitroaniline



Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8270D; EPA 625.1	4,6-Dinitro-2-methylphenol (DNOC)
GC/MS	EPA 8270D; EPA 625.1	4-Bromophenyl phenyl ether
GC/MS	EPA 8270D; EPA 625.1	4-Chloro-3-methylphenol
GC/MS	EPA 8270D	4-Chloroaniline
GC/MS	EPA 8270D; EPA 625.1	4-Chlorophenyl phenyl ether
GC/MS	EPA 8270D	4-Methylphenol (p-Cresol)
GC/MS	EPA 8270D	4-Nitroaniline (PNA)
GC/MS	EPA 8270D; EPA 625.1	4-Nitrophenol (PNP)
GC/MS	EPA 8270D; EPA 625.1	Acenaphthene
GC/MS	EPA 8270D; EPA 625.1	Acenaphthylene
GC/MS	EPA 8270D	Acetophenone
GC/MS	EPA 8270D	Aniline
GC/MS	EPA 8270D; EPA 625.1	Anthracene
GC/MS	EPA 8270D	Atrazine
GC/MS	EPA 8270D	Benzaldehyde
GC/MS	EPA 8270D; EPA 625.1	Benzidine
GC/MS	EPA 8270D; EPA 625.1	Benzo(a)anthracene
GC/MS	EPA 8270D; EPA 625.1	Benzo(a)pyrene
GC/MS	EPA 8270D; EPA 625.1	Benzo(b)fluoranthene
GC/MS	EPA 8270D; EPA 625.1	Benzo(g,h,i)perylene
GC/MS	EPA 8270D; EPA 625.1	Benzo(k)fluoranthene
GC/MS	EPA 8270D	Benzoic Acid
GC/MS	EPA 8270D	Benzyl Alcohol
GC/MS	EPA 8270D; EPA 625.1	bis(2-Chloroethoxy)methane
GC/MS	EPA 8270D	bis(2-Chloroethyl)ether (BCEE)
GC/MS	EPA 8270D; EPA 625.1	2,2 -Oxybis(1-chloropropane), or bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether)





Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8270D; EPA 625.1	bis(2-Ethylhexyl)phthalate (BEHP)
GC/MS	EPA 8270D; EPA 625.1	Butyl benzyl phthalate (BBP)
GC/MS	EPA 8270D	Caprolactam
GC/MS	EPA 8270D	Carbazole
GC/MS	EPA 8270D; EPA 625.1	Chrysene
GC/MS	EPA 8270D; EPA 625.1	Dibenz(a,c)anthracene
GC/MS	EPA 8270D; EPA 625.1	Dibenz(a,h)anthracene
GC/MS	EPA 8270D	Dibenzofuran (DBF)
GC/MS	EPA 8270D; EPA 625.1	Diethyl phthalate (DEP)
GC/MS	EPA 8270D; EPA 625.1	Dimethyl phthalate (DMP)
GC/MS	EPA 8270D; EPA 625.1	Di-n-butyl phthalate (DBP)
GC/MS	EPA 8270D; EPA 625.1	Di-n-octyl phthalate (DNOP)
GC/MS	EPA 8270D; EPA 625.1	Fluoranthene
GC/MS	EPA 8270D; 625.1	Fluorene
GC/MS	EPA 8270D; EPA 625.1	Hexachlorobenzene (HCB)
GC/MS	EPA 8270D; EPA 625.1	Hexachlorobutadiene (HCBd)
GC/MS	EPA 8270D	Hexachlorocyclopentadiene (HCCPD)
GC/MS	EPA 8270D; EPA 625.1	Hexachloroethane (HCE)
GC/MS	EPA 8270D; EPA 625.1	Indeno(1,2,3-cd)pyrene
GC/MS	EPA 8270D; EPA 625.1	Isophorone
GC/MS	EPA 8270D; EPA 625.1	Naphthalene
GC/MS	EPA 8270D; EPA 625.1	Nitrobenzene
GC/MS	EPA 8270D	N-Nitrosodimethylamine
GC/MS	EPA 8270D; EPA 625.1	N-Nitroso-di-n-propylamine (NDPA)
GC/MS	EPA 8270D	N-nitrosodiphenylamine (NDPHA)
GC/MS	EPA 8270D; EPA 625.1	Pentachlorophenol
GC/MS	EPA 8270D; EPA 625.1	Phenanthrene



Non-Potable Water		
Technology	Method	Analyte
GC/MS	EPA 8270D; EPA 625.1	Phenol
GC/MS	EPA 8270D; EPA 625.1	Perylene
GC/MS	EPA 8270D; EPA 625.1	Pyrene
GC/MS	EPA 8270D	Pyridine
GC/ECD	EPA 8081B	4,4'-DDD
GC/ECD	EPA 8081B	4,4'-DDE
GC/ECD	EPA 8081B	4,4'-DDT
GC/ECD	EPA 8081B	Aldrin
GC/ECD	EPA 8081B	alpha-BHC (alpha-HCH)
GC/ECD	EPA 8081B	alpha-Chlordane
GC/ECD	EPA 8081B	beta-BHC (beta-HCH)
GC/ECD	EPA 8081B	delta-BHC (delta-HCH)
GC/ECD	EPA 8081B	Dieldrin
GC/ECD	EPA 8081B	Endosulfan I
GC/ECD	EPA 8081B	Endosulfan II
GC/ECD	EPA 8081B	Endosulfan sulfate
GC/ECD	EPA 8081B	Endrin
GC/ECD	EPA 8081B	Endrin aldehyde
GC/ECD	EPA 8081B	Endrin ketone
GC/ECD	EPA 8081B	gamma-BHC (Lindane; gamma-HCH)
GC/ECD	EPA 8081B	gamma-Chlordane
GC/ECD	EPA 8081B	Heptachlor
GC/ECD	EPA 8081B	Heptachlor epoxide
GC/ECD	EPA 8081B	Methoxychlor
GC/ECD	EPA 8081B	Chlordane (n.o.s.)
GC/ECD	EPA 8081B	Toxaphene
GC/ECD	EPA 8082A	Aroclor-1016



Non-Potable Water		
Technology	Method	Analyte
GC/ECD	EPA 8082A	Aroclor-1221
GC/ECD	EPA 8082A	Aroclor-1232
GC/ECD	EPA 8082A	Aroclor-1242
GC/ECD	EPA 8082A	Aroclor-1248
GC/ECD	EPA 8082A	Aroclor-1254
GC/ECD	EPA 8082A	Aroclor-1260
GC/ECD	EPA 8082A	Aroclor-1262
GC/ECD	EPA 8082A	Aroclor-1268
GC/ECD	EPA 8151A	2,4,5-T
GC/ECD	EPA 8151A	2,4,5-TP (Silvex)
GC/ECD	EPA 8151A	2,4-D
GC/ECD	EPA 8151A	2,4-DB
GC/ECD	EPA 8151A	Dalapon
GC/ECD	EPA 8151A	Dicamba
GC/ECD	EPA 8151A	Dichlorprop
GC/ECD	EPA 8151A	Dinoseb
GC/ECD	EPA 8151A	MCPA
GC/ECD	EPA 8151A	MCPP (Mecoprop)
HPLC/UV	EPA 8330A/B	1,3,5-Trinitrobenzene
HPLC/UV	EPA 8330A/B	1,3-Dinitrobenzene
HPLC/UV	EPA 8330A/B	2,4,6-Trinitrophenylmethylnitramine (Tetryl)
HPLC/UV	EPA 8330A/B	2,4,6-Trinitrotoluene (TNT)
HPLC/UV	EPA 8330A/B	2,4-Dinitrotoluene (DNT)
HPLC/UV	EPA 8330A/B	2,6-Dinitrotoluene
HPLC/UV	EPA 8330A/B	2-Amino-4,6-dinitrotoluene
HPLC/UV	EPA 8330A/B	2-Nitrotoluene (ONT)
HPLC/UV	EPA 8330A/B	3,5-Dinitroaniline



Non-Potable Water		
Technology	Method	Analyte
HPLC/UV	EPA 8330A/B	3-Nitrotoluene
HPLC/UV	EPA 8330A/B	4-Amino-2,6-dinitrotoluene
HPLC/UV	EPA 8330A/B	4-Nitrotoluene (PNT)
HPLC/UV	EPA 8330A/B	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
HPLC/UV	EPA 8330A/B	Nitrobenzene
HPLC/UV	EPA 8330A/B	Nitroglycerin
HPLC/UV	EPA 8330A/B	Nitroguanidine
HPLC/UV	EPA 8330A/B	Octahydro-1,3,5,6-tetranitro-1,3,5,7-tetrazocine (HMX)
HPLC/UV	EPA 8330A/B	PETN
GC/FID	FL PRO	Petroleum Range Organics
GC/FID	EPA 8015C/D	TPH DRO
GC/FID	EPA 8015C/D	TPH ORO
GC/FID	EPA 8015C/D	TPH GRO
GC/FID	RSK-175	Methane
GC/FID	RSK-175	Ethane
GC/FID	RSK-175	Ethene
GC/ECD	EPA 8011	1,2-Dibromoethane (EDB)
GC/ECD	EPA 8011	1,2-Dibromo-3-chloropropane (DBCP)
HPLC/MS	EPA 6850	Perchlorate
ICP	EPA 6010C/D; EPA 200.7	Aluminum
ICP	EPA 6010C/D; EPA 200.7	Antimony
ICP	EPA 6010C/D; EPA 200.7	Arsenic
ICP	EPA 6010C/D; EPA 200.7	Barium
ICP	EPA 6010C/D; EPA 200.7	Beryllium
ICP	EPA 6010C/D; EPA 200.7	Boron
ICP	EPA 6010C/D; EPA 200.7	Cadmium
ICP	EPA 6010C/D; EPA 200.7	Calcium



Non-Potable Water		
Technology	Method	Analyte
ICP	EPA 6010C/D; EPA 200.7	Chromium, total
ICP	EPA 6010C/D; EPA 200.7	Cobalt
ICP	EPA 6010C/D; EPA 200.7	Copper
ICP	EPA 6010C/D; EPA 200.7	Iron
ICP	EPA 6010C/D; EPA 200.7	Lead
ICP	EPA 6010C/D; EPA 200.7	Magnesium
ICP	EPA 6010C/D; EPA 200.7	Manganese
ICP	EPA 6010C/D; EPA 200.7	Molybdenum
ICP	EPA 6010C/D; EPA 200.7	Nickel
ICP	EPA 6010C/D; EPA 200.7	Potassium
ICP	EPA 6010C/D; EPA 200.7	Selenium
ICP	EPA 6010C/D; EPA 200.7	Silver
ICP	EPA 6010C/D; EPA 200.7	Sodium
ICP	EPA 6010C/D; EPA 200.7	Strontium
ICP	EPA 6010C/D; EPA 200.7	Thallium
ICP	EPA 6010C/D; EPA 200.7	Tin
ICP	EPA 6010C/D; EPA 200.7	Titanium
ICP	EPA 6010C/D; EPA 200.7	Vanadium
ICP	EPA 6010C/D; EPA 200.7	Zinc
ICP	EPA 6010C/D; EPA 200.7	Hardness
CVAA	EPA 7470A; EPA 245.1	Mercury
IC	EPA 300.0	Bromide
IC	EPA 300.0	Chloride
IC	EPA 300.0	Fluoride
IC	EPA 300.0	Nitrate
IC	EPA 300.0	Nitrite
IC	EPA 300.0	Sulfate



Non-Potable Water		
Technology	Method	Analyte
IC	EPA 9056A	Bromide
IC	EPA 9056A	Chloride
IC	EPA 9056A	Fluoride
IC	EPA 9056A	Nitrate
IC	EPA 9056A	Nitrite
IC	EPA 9056A	Sulfate
Titration	SM 2320B-2011	Alkalinity
Colorimetric	SM 4500-NH <sub>3</sub> G-2011	Ammonia
Probe	SM 5210B-2011	BOD
Probe	SM 5210B-2011	CBOD
Colorimetric	EPA 410.4	COD
Colorimetric	EPA 9012A/B SM 4500-CN N-2011	Cyanide
UV/Vis	EPA 7196A	Hexavalent Chromium
Physical	EPA 1010A	Ignitability / Flashpoint
Colorimetric	EPA 353.2	Nitrate/Nitrite
Colorimetric	EPA 353.2 MOD	Nitrocellulose
Colorimetric	SM 4500-NO <sub>2</sub> B-2011	Nitrite as N
Gravimetric	EPA 1664A/B	Oil and Grease
Probe	EPA 9040C SM 4500-H <sup>+</sup> B-2011	pH(Corrosivity)
Titration	Chap.7, Sect. 7.3.4 Mod.	Reactive Sulfide
Titration	SM 4500-S <sub>2</sub> F-2011	Sulfide
UV/Vis	SM 4500-P E-2011	Total Phosphorus (as P)
UV/Vis	SM 4500-P E-2011	Ortho-Phosphate (as P)
TOC	EPA 9060A; SM 5310C-2011	Total Organic Carbon
Gravimetric	SM 2540C-2011	TDS
Gravimetric	SM 2540D-2011	TSS



Non Potable Water		
Preparation	Method	Type
Preparation	EPA 1311	TCLP
Preparation	EPA 3005A	Metals digestion
Preparation	EPA 3010A	Metals digestion
Preparation	EPA 3510C	Organics Liquid Extraction
UV/Vis	SM 4500-PB 5-2011	Total Phosphorus (as P)
Preparation	EPA 5030A/B	Purge and Trap Water

Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8260B/C	1,1,1-Trichloroethane (1,1,1-TCA)
GC/MS	EPA 8260B/C	1,1,1,2-Tetrachloroethane
GC/MS	EPA 8260B/C	1,1,2,2-Tetrachloroethane
GC/MS	EPA 8260B/C	1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113; Freon 113)
GC/MS	EPA 8260B/C	1,1,2-Trichloroethane
GC/MS	EPA 8260B/C	1,1-Dichloroethane (1,1-DCA)
GC/MS	EPA 8260B/C	1,1-Dichloroethene (1,1-DCE)
GC/MS	EPA 8260B/C	1,1-Dichloropropene
GC/MS	EPA 8260B/C	1,2,3-Trichlorobenzene
GC/MS	EPA 8260B/C	1,2,3-Trichloropropane
GC/MS	EPA 8260B/C	1,2,4-Trichlorobenzene
GC/MS	EPA 8260B/C	1,2,4-Trimethylbenzene
GC/MS	EPA 8260B/C	1,2-Dibromo-3-chloropropane (DBCP)
GC/MS	EPA 8260B/C	1,2-Dibromoethane (EDB)
GC/MS	EPA 8260B/C	1,2-Dichlorobenzene
GC/MS	EPA 8260B/C	1,2-Dichloroethane (EDC)
GC/MS	EPA 8260B/C	1,2-Dichloropropane



Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8260B/C	1,3,5-Trichlorobenzene
GC/MS	EPA 8260B/C	1,3,5-Trimethylbenzene
GC/MS	EPA 8260B/C	1,3-Dichlorobenzene
GC/MS	EPA 8260B/C	1,3-Dichloropropane
GC/MS	EPA 8260B/C	1,4-Dichlorobenzene
GC/MS	EPA 8260B/C	1,4-Dioxane
GC/MS	EPA 8260B/C	1-Chlorohexane
GC/MS	EPA 8260B/C	2,2-Dichloropropane
GC/MS	EPA 8260B/C	2-Butanone (Methyl ethyl ketone; MEK)
GC/MS	EPA 8260B/C	2-Chloroethyl vinyl ether
GC/MS	EPA 8260B/C	2-Chlorotoluene
GC/MS	EPA 8260B/C	2-Hexanone (Methyl butyl ketone; MBK)
GC/MS	EPA 8260B/C	4-Chlorotoluene
GC/MS	EPA 8260B/C	4-Methyl-2-pentanone (Methyl isobutyl ketone; MIBK)
GC/MS	EPA 8260B/C	Acetone
GC/MS	EPA 8260B/C	Acetonitrile
GC/MS	EPA 8260B/C	Acrolein
GC/MS	EPA 8260B/C	Acrylonitrile
GC/MS	EPA 8260B/C	Allyl chloride
GC/MS	EPA 8260B/C	Benzene
GC/MS	EPA 8260B/C	Bromobenzene
GC/MS	EPA 8260B/C	Bromochloromethane
GC/MS	EPA 8260B/C	Bromodichloromethane
GC/MS	EPA 8260B/C	Bromoform
GC/MS	EPA 8260B/C	Bromomethane
GC/MS	EPA 8260B/C	Carbon Disulfide
GC/MS	EPA 8260B/C	Carbon Tetrachloride





Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8260B/C	Chlorobenzene
GC/MS	EPA 8260B/C	Chloroethane
GC/MS	EPA 8260B/C	Chloroform
GC/MS	EPA 8260B/C	Chloromethane
GC/MS	EPA 8260B/C	Chloroprene
GC/MS	EPA 8260B/C	cis-1,2-Dichloroethene (cis-1,2-DCE)
GC/MS	EPA 8260B/C	cis-1,3-Dichloropropene
GC/MS	EPA 8260B/C	cis-1,4-Dichloro-2-butene
GC/MS	EPA 8260B/C	Cyclohexane
GC/MS	EPA 8260B/C	Dibromochloromethane
GC/MS	EPA 8260B/C	Dibromomethane
GC/MS	EPA 8260B/C	Dichlorodifluoromethane (CFC-12)
GC/MS	EPA 8260B/C	Diethyl ether
GC/MS	EPA 8260B/C	Di-isopropyl ether
GC/MS	EPA 8260B/C	Ethyl methacrylate
GC/MS	EPA 8260B/C	Ethyl tert-butyl ether (ETBE)
GC/MS	EPA 8260B/C	Ethylbenzene
GC/MS	EPA 8260B/C	Hexachlorobutadiene
GC/MS	EPA 8260B/C	Hexane
GC/MS	EPA 8260B/C	Iodomethane
GC/MS	EPA 8260B/C	Isobutyl alcohol
GC/MS	EPA 8260B/C	Isopropylbenzene (Cumene)
GC/MS	EPA 8260B/C	m,p-Xylenes
GC/MS	EPA 8260B/C	Methacrylonitrile
GC/MS	EPA 8260B/C	Methyl Acetate
GC/MS	EPA 8260B/C	Methyl methacrylate
GC/MS	EPA 8260B/C	Methyl Tert-Butyl Ether (MTBE)



Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8260B/C	Methylcyclohexane
GC/MS	EPA 8260B/C	Methylene Chloride, or Dichloromethane
GC/MS	EPA 8260B/C	Naphthalene
GC/MS	EPA 8260B/C	n-Butylbenzene
GC/MS	EPA 8260B/C	n-Propylbenzene
GC/MS	EPA 8260B/C	o-Xylene
GC/MS	EPA 8260B/C	p-Isopropyltoluene
GC/MS	EPA 8260B/C	Propionitrile
GC/MS	EPA 8260B/C	sec-Butylbenzene
GC/MS	EPA 8260B/C	Styrene
GC/MS	EPA 8260B/C	tert-Amyl alcohol
GC/MS	EPA 8260B/C	Tert-Amyl ethyl ether
GC/MS	EPA 8260B/C	tert-Amyl methyl ether
GC/MS	EPA 8260B/C	tert-Butyl alcohol
GC/MS	EPA 8260B/C	tert-Butylbenzene
GC/MS	EPA 8260B/C	Tetrachloroethene (PCE; PERC)
GC/MS	EPA 8260B/C	Tetrahydrofuran
GC/MS	EPA 8260B/C	Toluene
GC/MS	EPA 8260B/C	trans-1,2-Dichloroethene (trans-1,2-DCE)
GC/MS	EPA 8260B/C	trans-1,3-Dichloropropene
GC/MS	EPA 8260B/C	trans-1,4-Dichloro-2-butene
GC/MS	EPA 8260B/C	Trichloroethene (TCE)
GC/MS	EPA 8260B/C	Trichlorofluoromethane (CFC-11)
GC/MS	EPA 8260B/C	Vinyl acetate
GC/MS	EPA 8260B/C	Vinyl Chloride (VC)
GC/MS	EPA 8260B/C	Xylenes (Total)
GC/MS	EPA 8270D	1,1'-Biphenyl



Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8270D	1,2,4,5-Tetrachlorobenzene
GC/MS	EPA 8270D	1,2,4-Trichlorobenzene
GC/MS	EPA 8270D	1,2-Dichlorobenzene
GC/MS	EPA 8270D	1,2-Diphenylhydrazine
GC/MS	EPA 8270D	1,3-Dichlorobenzene
GC/MS	EPA 8270D	1,4-Dichlorobenzene
GC/MS	EPA 8270D	1,4-Dioxane
GC/MS	EPA 8270D	1-Methylnaphthalene
GC/MS	EPA 8270D	2,3,4,6-Tetrachlorophenol
GC/MS	EPA 8270D	2,4,5-Trichlorophenol
GC/MS	EPA 8270D	2,4,6-Trichlorophenol (TCP)
GC/MS	EPA 8270D	2,4-Dichlorophenol (DCP)
GC/MS	EPA 8270D	2,4-Dimethylphenol
GC/MS	EPA 8270D	2,4-Dinitrophenol
GC/MS	EPA 8270D	2,4-Dinitrotoluene (DNT)
GC/MS	EPA 8270D	2,6-Dichlorophenol
GC/MS	EPA 8270D	2,6-Dinitrotoluene
GC/MS	EPA 8270D	2-Chloronaphthalene
GC/MS	EPA 8270D	2-Chlorophenol
GC/MS	EPA 8270D	2-Methylnaphthalene
GC/MS	EPA 8270D	2-Methylphenol (o-Cresol)
GC/MS	EPA 8270D	2-Nitroaniline
GC/MS	EPA 8270D	2-Nitrophenol (ONP)
GC/MS	EPA 8270D	3,3'-Dichlorobenzidine (DCB)
GC/MS	EPA 8270D	3-Methylphenol/4-Methylphenol
GC/MS	EPA 8270D	3-Nitroaniline
GC/MS	EPA 8270D	4,6-Dinitro-2-methylphenol (DNOC)



Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8270D	4-Bromophenyl phenyl ether
GC/MS	EPA 8270D	4-Chloro-3-methylphenol
GC/MS	EPA 8270D	4-Chloroaniline
GC/MS	EPA 8270D	4-Chlorophenyl phenyl ether
GC/MS	EPA 8270D	4-Methylphenol (p-Cresol)
GC/MS	EPA 8270D	4-Nitroaniline (PNA)
GC/MS	EPA 8270D	4-Nitrophenol (PNP)
GC/MS	EPA 8270D	Acenaphthene
GC/MS	EPA 8270D	Acenaphthylene
GC/MS	EPA 8270D	Acetophenone
GC/MS	EPA 8270D	Aniline
GC/MS	EPA 8270D	Anthracene
GC/MS	EPA 8270D	Atrazine
GC/MS	EPA 8270D	Benzaldehyde
GC/MS	EPA 8270D	Benzidine
GC/MS	EPA 8270D	Benzo(a)anthracene
GC/MS	EPA 8270D	Benzo(a)pyrene
GC/MS	EPA 8270D	Benzo(b)fluoranthene
GC/MS	EPA 8270D	Benzo(g,h,i)perylene
GC/MS	EPA 8270D	Benzo(k)fluoranthene
GC/MS	EPA 8270D	Benzoic Acid
GC/MS	EPA 8270D	Benyl alcohol
GC/MS	EPA 8270D	bis(2-Chloroethoxy)methane
GC/MS	EPA 8270D	bis(2-Chloroethyl)ether (BCEE)
GC/MS	EPA 8270D	2,2 -Oxybis(1-chloropropane), or bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether)
GC/MS	EPA 8270D	bis(2-Ethylhexyl)phthalate (BEHP)



Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8270D	Butyl benzyl phthalate (BBP)
GC/MS	EPA 8270D	Caprolactam
GC/MS	EPA 8270D	Carbazole
GC/MS	EPA 8270D	Chrysene
GC/MS	EPA 8270D	Dibenz(a,h)anthracene
GC/MS	EPA 8270D	Dibenzofuran (DBF)
GC/MS	EPA 8270D	Diethyl phthalate (DEP)
GC/MS	EPA 8270D	Dimethyl phthalate (DMP)
GC/MS	EPA 8270D	Di-n-butyl phthalate (DBP)
GC/MS	EPA 8270D	Di-n-octyl phthalate (DNOP)
GC/MS	EPA 8270D	Fluoranthene
GC/MS	EPA 8270D	Fluorene
GC/MS	EPA 8270D	Hexachlorobenzene (HCB)
GC/MS	EPA 8270D	Hexachlorobutadiene (HCBd)
GC/MS	EPA 8270D	Hexachlorocyclopentadiene (HCCPD)
GC/MS	EPA 8270D	Hexachloroethane (HCE)
GC/MS	EPA 8270D	Indeno(1,2,3-cd)pyrene
GC/MS	EPA 8270D	Isophorone
GC/MS	EPA 8270D	Naphthalene
GC/MS	EPA 8270D	Nitrobenzene
GC/MS	EPA 8270D	N-Nitrosodimethylamine
GC/MS	EPA 8270D	N-Nitroso-di-n-propylamine (NDPA)
GC/MS	EPA 8270D	N-nitrosodiphenylamine (NDPHA)
GC/MS	EPA 8270D	Pentachlorophenol
GC/MS	EPA 8270D	Phenanthrene
GC/MS	EPA 8270D	Phenol
GC/MS	EPA 8270D	Pyrene



Solid and Chemical Materials		
Technology	Method	Analyte
GC/MS	EPA 8270D	Pyridine
GC/ECD	EPA 8081B	4,4'-DDD
GC/ECD	EPA 8081B	4,4'-DDE
GC/ECD	EPA 8081B	4,4'-DDT
GC/ECD	EPA 8081B	Aldrin
GC/ECD	EPA 8081B	alpha-BHC (alpha-HCH)
GC/ECD	EPA 8081B	alpha-Chlordane
GC/ECD	EPA 8081B	beta-BHC (beta-HCH)
GC/ECD	EPA 8081B	delta-BHC (delta-HCH)
GC/ECD	EPA 8081B	Chlordane (n.o.s.)
GC/ECD	EPA 8081B	Dieldrin
GC/ECD	EPA 8081B	Endosulfan I
GC/ECD	EPA 8081B	Endosulfan II
GC/ECD	EPA 8081B	Endosulfan sulfate
GC/ECD	EPA 8081B	Endrin
GC/ECD	EPA 8081B	Endrin aldehyde
GC/ECD	EPA 8081B	Endrin ketone
GC/ECD	EPA 8081B	gamma-BHC (Lindane; gamma-HCH)
GC/ECD	EPA 8081B	gamma-Chlordane
GC/ECD	EPA 8081B	Heptachlor
GC/ECD	EPA 8081B	Heptachlor epoxide
GC/ECD	EPA 8081B	Methoxychlor
GC/ECD	EPA 8081B	Toxaphene
GC/ECD	EPA 8082A	Aroclor-1016
GC/ECD	EPA 8082A	Aroclor-1221
GC/ECD	EPA 8082A	Aroclor-1232
GC/ECD	EPA 8082A	Aroclor-1242



Solid and Chemical Materials		
Technology	Method	Analyte
GC/ECD	EPA 8082A	Aroclor-1248
GC/ECD	EPA 8082A	Aroclor-1254
GC/ECD	EPA 8082A	Aroclor-1260
GC/ECD	EPA 8082A	Aroclor-1262
GC/ECD	EPA 8082A	Aroclor-1268
HPLC/UV	EPA 8330A/B	1,3,5-Trinitrobenzene
HPLC/UV	EPA 8330A/B	1,3-Dinitrobenzene
HPLC/UV	EPA 8330A/B	2,4,6-Trinitrophenylmethylnitramine (Tetryl)
HPLC/UV	EPA 8330A/B	2,4,6-Trinitrotoluene (TNT)
HPLC/UV	EPA 8330A/B	2,4-Dinitrotoluene (DNT)
HPLC/UV	EPA 8330A/B	2,6-Dinitrotoluene
HPLC/UV	EPA 8330A/B	2-Amino-4,6-dinitrotoluene
HPLC/UV	EPA 8330A/B	2-Nitrotoluene (ONT)
HPLC/UV	EPA 8330A/B	3-Nitrotoluene
HPLC/UV	EPA 8330A/B	3,5-Dinitroaniline
HPLC/UV	EPA 8330A/B	4-Amino-2,6-dinitrotoluene
HPLC/UV	EPA 8330A/B	4-Nitrotoluene (PNT)
HPLC/UV	EPA 8330A/B	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
HPLC/UV	EPA 8330A/B	Nitroglycerin
HPLC/UV	EPA 8330A/B	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)
HPLC/UV	EPA 8330A/B	Nitrobenzene
HPLC/UV	EPA 8330A/B	Nitroguanidine
HPLC/UV	EPA 8330A/B	PETN
GC/FID	FL PRO	Petroleum Range Organics
GC/FID	EPA 8015C/D	TPH DRO
GC/FID	EPA 8015C/D	TPH ORO
GC/FID	EPA 8015C/D	TPH GRO



Solid and Chemical Materials		
Technology	Method	Analyte
HPLC/MS	EPA 6850	Perchlorate
ICP	EPA 6010C/D	Aluminum
ICP	EPA 6010C/D	Antimony
ICP	EPA 6010C/D	Arsenic
ICP	EPA 6010C/D	Barium
ICP	EPA 6010C/D	Beryllium
ICP	EPA 6010C/D	Boron
ICP	EPA 6010C/D	Cadmium
ICP	EPA 6010C/D	Calcium
ICP	EPA 6010C/D	Chromium, total
ICP	EPA 6010C/D	Cobalt
ICP	EPA 6010C/D	Copper
ICP	EPA 6010C/D	Iron
ICP	EPA 6010C/D	Lead
ICP	EPA 6010C/D	Magnesium
ICP	EPA 6010C/D	Manganese
ICP	EPA 6010C/D	Molybdenum
ICP	EPA 6010C/D	Nickel
ICP	EPA 6010C/D	Potassium
ICP	EPA 6010C/D	Selenium
ICP	EPA 6010C/D	Silver
ICP	EPA 6010C/D	Sodium
ICP	EPA 6010C/D	Strontium
ICP	EPA 6010C/D	Tin
ICP	EPA 6010C/D	Titanium
ICP	EPA 6010C/D	Thallium
ICP	EPA 6010C/D	Vanadium





<b>Solid and Chemical Materials</b>		
<b>Technology</b>	<b>Method</b>	<b>Analyte</b>
ICP	EPA 6010C/D	Zinc
CVAA	EPA 7471B	Mercury
IC	EPA 9056A	Bromide
IC	EPA 9056A	Chloride
IC	EPA 9056A	Fluoride
IC	EPA 9056A	Nitrate
IC	EPA 9056A	Nitrite
IC	EPA 9056A	Sulfate
Colorimetric	EPA 9012A/B	Cyanide
UV/Vis	EPA 7196A	Hexavalent Chromium
Physical	EPA 1010A	Ignitability/Flashpoint
Colorimetric	EPA 353.2 MOD	Nitrocellulose
Probe	EPA 9045D	pH (Corrosivity)
Titration	Chap.7, Sect. 7.3.4 Mod.	Reactive Sulfide
<b>Preparation</b>	<b>Method</b>	<b>Type</b>
Preparation	EPA 1311	TCLP
Preparation	EPA 1312	SPLP
Preparation	EPA 3060A	Hexavalent Chromium
Preparation	EPA 3050B	Metals Digestion
Preparation	EPA 3546	Organics Microwave Extraction
Preparation	EPA 3550C	Organics Sonication
Preparation	SM 2540B-1997	Percent Solids (Percent Moisture)
Preparation	EPA 5035/A	Purge and Trap Solid

Note: 1. This scope is formatted as part of a single document including Certificate of Accreditation No L2226



Vice President