

LAI00179

State of Rhode Island DEPARTMENT OF HEALTH

Certifies

ESS LABORATORY 185 FRANCES AVENUE CRANSTON RI 02910

Laboratory Director: LAUREL STODDARD

for the analysis of: Potable Water Organic Chemistry - Potable Water Inorganic Chemistry - Non-potable Water Organic Chemistry - Non-potable Water Inorganic Chemistry -

This certification, pursuant to Rhode Island General Laws 23-16.2 supersedes, all previous Rhode Island certificates issued to this laboratory. Certification is no guarantee of the validity of the laboratory results.

This certificate is valid only when accompanied by the latest dated Appendix which lists the analytes and methods for which certification has been granted. Contact the Laboratory Certification Officer to verify the current certification status of this laboratory.

Expires: 12/30/2025

THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY IN A LOCATION VISABLE TO THE PUBLIC

LAUREL STODDARD ESS LABORATORY 185 FRANCES AVENUE CRANSTON RI 02910

UNITED STATES



ESS Laboratory 185 Frances Avenue Cranston, RI 02910 401-461-7181

APPENDIX TO ANALYTICAL LABORATORY CERTIFICATE No. LAI00179

Expiration date: December 31, 2025

Date Issued: January 29, 2025

Potable Water - Organic Chemistry	
Benzene	EPA Method 524.2
1,2-Dichlorobenzene	EPA Method 524.2
1,4-Dichlorobenzene	EPA Method 524.2
1,1-Dichloroethene	EPA Method 524.2
1,2-Dichloroethane	EPA Method 524.2
1,2-Dichloroethene (cis)	EPA Method 524.2
1,2-Dichloroethene (trans)	EPA Method 524.2
1,2-Dichloropropane	EPA Method 524.2
Carbon Tetrachloride	EPA Method 524.2
Chlorobenzene	EPA Method 524.2
Ethylbenzene	EPA Method 524.2
Methylene Chloride	EPA Method 524.2
Styrene	EPA Method 524.2
Tetrachloroethene	EPA Method 524.2
Toluene	EPA Method 524.2
1,2,4-Trichlorobenzene	EPA Method 524.2
1,1,1-Trichloroethane	EPA Method 524.2
1,1,2-Trichloroethane	EPA Method 524.2
Trichloroethene	EPA Method 524.2
Vinyl Chloride	EPA Method 524.2
Xylenes (total)	EPA Method 524.2
m+p Xylene	EPA Method 524.2
o-Xylene	EPA Method 524.2
T-amylmethylether(TAME)	EPA Method 524.2
tert-Butyl alcohol	EPA Method 524.2
Ethyl-t-butylether (ETBE)	EPA Method 524.2
МТВЕ	EPA Method 524.2
Bromobenzene	EPA Method 524.2





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Bromochloromethane Bromomethane Chloroethane Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromomethane 1.3-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Hexachlorobutadiene Isopropylbenzene n-Butylbenzene n-Propylbenzene p-Isopropyltoluene sec-Butylbenzene tert-Butylbenzene 1,2,3-Trichlorobenzene 1,1,1,2-Tetrachloroethane Naphthalene 1,1,2,2-Tetrachloroethane Trichlorofluoromethane (Freon 11) Trichlorotrifluoroethane (Freon 113) Di-isopropylether (DIPE) 1,2,3-Trichloropropane(TCP)

Date Issued: January 29, 2025 EPA Method 524.2 EPA Method 524.2

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ate: December 31, 2025	Date Issued: January 29, 2025
1,2,3-Trichloropropane	EPA Method 504.1
1,2,4-Trimethylbenzene	EPA Method 524.2
1,3,5-Trimethylbenzene	EPA Method 524.2
Bromoform	EPA Method 524.2
Bromodichloromethane	EPA Method 524.2
Chloroform	EPA Method 524.2
Dibromochloromethane	EPA Method 524.2
TTHM'S	EPA Method 524.2
EDB (Ethylene dibromide)	EPA Method 504.1
DBCP (Dibromochloropropane)	EPA Method 504.1
Bromochloroacetic Acid	EPA Method 552.2
Dibromoacetic Acid	EPA Method 552.2
Dichloroacetic Acid	EPA Method 552.2
Monobromoacetic Acid	EPA Method 552.2
Monochloroacetic Acid	EPA Method 552.2
Trichloroacetic Acid	EPA Method 552.2
Total Haloacetic Acids	EPA Method 552.2
11-chloroeicosafluoro-3-oxaundecane-1- sulfonic acid (11CI-PF3OUdS)	EPA Method 537.1
9-chlorohexadecafluoro-3-oxanonane-1- sulfonic acid (9CI-PF3ONS)	EPA Method 537.1
4,8-dioxa-3H-perfluorononanoic acid (DONA)	EPA Method 537.1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	EPA Method 537.1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEfFOSAA)	EPA Method 537.1
N-methyl perfluoroocatacesulfanamidoacetic acid (NMeFOSAA)	EPA Method 537.1

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Perfluorobutanesulfonic acid (PFBS) EPA Method 537.1 EPA Method 537.1 Perfluorodecanoic acid (PFDA) EPA Method 537.1 Perfluorododecanoic acid (PFDoA) EPA Method 537.1 Perfluoroheptanoic acid (PFHpA) EPA Method 537.1 Perfluorohexanesulfonic acid (PFHxS) EPA Method 537.1 Perflorohexanoic acid (PFHxA) EPA Method 537.1 Perfluorononanoic acid (PFNA) Perfluorooctanesulfonic acid (PFOS) EPA Method 537.1 EPA Method 537.1 Perfluorooctoanoic acid (PFOA) EPA Method 537.1 Perfluorotetradecanoic acid (PFTDA) EPA Method 537.1 Perfluorotridecanoic acid (PFTrDA) EPA Method 537.1 Perfluoroundecanoic acid (PFUnDA)

Potable Water - Inorganic Chemistry

Alkalinity Aluminum Aluminum Antimony Antimony Arsenic Arsenic Barium Barium Berylium Berylium Boron SM2320B EPA Method 200.7 EPA Method 200.8 EPA Method 200.8 EPA Method 200.8 EPA Method 200.9 EPA Method 200.9 EPA Method 200.7 EPA Method 200.7 EPA Method 200.7

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Expiration date: December 31, 2025	Date Issued: January 29, 2025
Cadmium	EPA Method 200.8
Cadmium	EPA Method 200.7
Calcium	EPA Method 200.8
Calcium	EPA Method 200.7
Chloride	EPA Method 300.0
Chromium	EPA Method 200.8
Chromium	EPA Method 200.7
Conductivity	SM 2510B
Conductivity	EPA Method 120.1
Copper	EPA Method 200.8
Copper	EPA Method 200.7
Cyanide	SM 4500CN-E
Fluoride	EPA Method 300.0
Calcium Hardness	EPA Method 200.7
Hardness total as CaCO	EPA Method 200.7
Hardness	SM 2340B
Iron	EPA Method 200.8
Iron	EPA Method 200.7
Lead	EPA Method 200.9 EPA Method 200.5
Lead Lead	EPA Method 200.3
Magnesium	EPA Method 200.7
Magnesium	EPA Method 200.8
Manganese	EPA Method 200.8
Manganese	EPA Method 200.7
Mercury	EPA Method 245.1
Molybdenum	EPA Method 200.7
Molybdenum	EPA Method 200.8
Nickel	EPA Method 200.8
Nickel	EPA Method 200.7



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Expiration date: December 31, 2025	Date Issued: January 29, 2025
Nitrate	EPA Method 353.2
Nitrate + Nitrite	EPA Method 353.2
Nitrite	EPA Method 353.2
Orthophosphate	EPA Method 365.1
pH	SM4500 H+ B
pH	EPA Method 150.1
Potassium	EPA Method 200.8
Potassium	EPA Method 200.7
Selenium	EPA Method 200.8
Selenium	EPA Method 200.9
Selenium	EPA Method 200.5
Silver	EPA Method 200.8
Silver	EPA Method 200.7
Sodium	EPA Method 200.8
Sodium	EPA Method 200.7
Sulfate	EPA Method 300.0
Sulfate	SM 4500SO4-E
Thallium	EPA Method 200.8
Total Dissolved Solids	SM 2540C
Total Organic Carbon	SM 5310B
Dissolved Organic Carbon (DOC)	SM 5310B
Turbidity	EPA Method 180.1
Vanadium	EPA Method 200.7
Zinc Zinc	EPA Method 200.8 EPA Method 200.7
Total Residual Chlorine	SM 4500CI-G
Free Residual Chlorine	SM 4500CI-G
Total Residual Chlorine	SM 4500CI-D
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Non-Potable Water - Organic Chemistry

Aldrin alpha-BHC beta-BHC gamma-BHC (Lindane) delta-BHC Chlordane (technical) gamma-chlordane alpha-chlordane 4.4'-DDT 4.4'-DDE 4,4'-DDD Dieldrin Endosulfan I Endosulfan II Endosulfan Sulfate Endrin Endrin Aldehyde Heptachlor Heptachlor Epoxide Methoxychlor PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260

EPA Method 608.3 EPA Method 608.3

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Expiration date: December 31, 2025	Date Issued: January 29, 2025
Toxaphene	EPA Method 608.3
Acetone	EPA Method 624.1
Acrolein	EPA Method 624.1
Acrylonitrile	EPA Method 624.1
Benzene	EPA Method 624.1
Bromobenzene	EPA Method 624.1
Bromochloromethane	EPA Method 624.1
n-Butylbenzene	EPA Method 624.1
sec-Butylbenzene	EPA Method 624.1
tert-Butylbenzene	EPA Method 624.1
Hexachloroethane	EPA Method 624.1
Hexachlorobutadiene	EPA Method 624.1
Bromomethane(Methyl bromide)	EPA Method 624.1
Bromoform	EPA Method 624.1
2-Butanone	EPA Method 624.1
Carbon Disulfide	EPA Method 624.1
Carbon Tetrachloride	EPA Method 624.1
Chlorobenzene	EPA Method 624.1
Chlorodibromomethane	EPA Method 624.1
Chloroethane	EPA Method 624.1
Chloromethane(Methyl chloride)	EPA Method 624.1
2-Chloroethylvinyl Ether	EPA Method 624.1
Chloroform	EPA Method 624.1
1,2-Dibromo-3-chloropropane (DBCP)	EPA Method 624.1
1,2-Dibromoethane (EDB, Ethylene	EPA Method 624.1
Dibromomethane	EPA Method 624.1
Dichlorobromomethane	EPA Method 624.1
Dichlorodifluoromethane	EPA Method 624.1
1,1-Dichloroethane	EPA Method 624.1



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1,2-Dichloroethane 1,1-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Ethyl-t-butylether (ETBE) Di-isopropylether (DIPE) Freon 113 Ethylbenzene 2-Hexanone 2-Chlorotoluene 4-Chlorotoluene Isopropylbenzene 4-Isopropyltoluene 4-Methyl-2-pentanone (MIBK) Methyl tert-butyl ether (MTBE) Methylene Chloride(Dichloromethane) n-Propylbenzene Naphthalene Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,1,1-Trichloroethane

Date Issued: January 29, 2025 EPA Method 624.1 EPA Method 624.1



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1,1,2-Trichloroethane Trichloroethene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,3-Trichlorobenzene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene T-amylmethylether (TAME) tert-Butyl alcohol Vinyl acetate Vinyl Chloride Xylenes (total) m+p-Xylene o-Xylene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2,4-Trichlorobenzene Aniline Acenaphthene Acenaphthylene Anthracene Benzoic acid Benzidine Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzyl alcohol

Date Issued: January 29, 2025 EPA Method 624.1 EPA Method 625.1 EPA Method 625.1



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Expiration date: December 31, 2025 Bis(2-Chloroethoxy)Methane Bis(2-chloroethyl)Ether Bis(2-ethylhexyl) Phthalate(DEHP) 4-Bromophenyl Phenyl Ether Butylbenzyl Phthalate Carbazole 2-Chloronaphthalene 4-Chloroaniline 4-Chlorophenyl Phenyl Ether Chrysene Dibenzo[a,h]anthracene Dibenzofuran 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine Diethyl Phthalate **Dimethyl Phthalate** Di-n-butyl Phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene Di-n-octyl Phthalate Fluoranthene Fluorene Hexachlorobenzene **Hexachlorobutadiene** Hexachlorocyclopentadiene Hexachloroethane

Indeno[1,2,3-cd]pyrene

Isophorone

Date Issued: January 29, 2025 EPA Method 625.1 FPA Method 625.1 EPA Method 625.1



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2-Methylnaphthalene 2-Methylphenol(o-Cresol) 4-Methylphenol (p-Cresol) 1-Methylnaphthalene 3+4 Methylphenol(m+p-Cresol) Naphthalene Nitrobenzene 2-Nitroaniline 3-Nitroaniline 4-Nitroaniline N-Nitrosodimethylamine N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine 1-Chloropropane (2,2-Oxybis) Phenanthrene Pyridine Pyrene 1,2,4-Trichlorobenzene 2-Chlorophenol 2,4-Dichlorophenol 2,4-Dimethylphenol 2-Methyl-4,6-dinitrophenol 2.4-Dinitrophenol 2-Nitrophenol 4-Nitrophenol 4-Chlorophenol-3-methylphenol Pentachlorophenol Phenol 1,2,4,5-Tetrachlorobenzene 2,3,4,6-Tetrachlorophenol EPA Method 625.1

Date Issued: January 29, 2025 EPA Method 625.1 FPA Method 625.1 EPA Method 625.1



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2,4,5-Trichlorophenol 2,4,6-Trichlorophenol Date Issued: January 29, 2025 EPA Method 625.1 EPA Method 625.1

Non-Potable Water - Inorganic Chemistry

Alkalinity Aluminum Aluminum Ammonia Ammonia Antimony Antimony Arsenic Arsenic Arsenic Barium Barium Beryllium Beryllium Boron Bromide Cadmium Cadmium Calcium Calcium Chloride Chloride Chloride Chromium VI Chromium (total) Chromium (total) Cobalt

SM2320B EPA Method 200.8 EPA Method 200.7 EPA Method 350.1 SM4500NH3-D EPA Method 200.8 EPA Method 200.7 SM3113B EPA Method 200.8 EPA Method 200.7 EPA Method 200.8 EPA Method 200.7 EPA Method 200.8 EPA Method 200.7 EPA Method 200.7 EPA Method 300.0 EPA Method 200.8 EPA Method 200.7 EPA Method 200.7 EPA Method 200.8 SM 4500-CI- E EPA Method 300.0 EPA Method 9250 SM 3500-Cr-B EPA Method 200.8 EPA Method 200.7 EPA Method 200.8

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Cobalt	EPA Method 200.7
Copper	EPA Method 200.8
Copper	EPA Method 200.7
Fluoride	EPA 300.0
Total Hardness (as CaCO3)	EPA 200.7
Total Hardness (as CaCO3)	EPA Method SM2340-B
Iron	EPA Method 200.8
Iron	EPA Method 200.7
Lead	SM3113B
Lead	EPA Method 200.8
Lead	EPA Method 200.7
Magnesium	EPA Method 200.7
Magnesium	EPA Method 200.8
Manganese	EPA Method 200.8
Manganese	EPA Method 200.7
MBAS	SM5540C
Mercury	EPA Method 245.1
Molybdenum	EPA Method 200.7
Molybdenum	EPA Method 200.8
Nickel Nickel	EPA Method 200.8 EPA Method 200.7
Nitrate as N	EPA Method 353.2
Nitrate-Nitrite (as N)	EPA Method 353.2
Nitrite	SM4500NO2-B
Nitrite as N	EPA Method 353.2
Orthophosphate	EPA Methods 365.1
Orthophosphate	EPA Methods 365.3
Tin	EPA Method 200.7
Titanium	EPA Method 200.7
Total Phosphorous	EPA Method 365.1



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Total Phosphorous	EPA Method 365.3
Potassium	EPA Method 200.7 EPA Method 200.8
Potassium	
Selenium	EPA Method 200.8
Selenium	EPA Method 200.7
Selenium	SM3113B
Silver	EPA Method 200.8
Silver	EPA Method 200.7
Silica	SM 4500-SiO2 D
Sodium	EPA Method 200.7
Sodium	EPA Method 200.8
Strontium	EPA Method 200.7
Sulfate	EPA Method 300.0
Sulfate	SM4500 SO4-E
Sulfide	SM4500-S2-D
Thallium	EPA Method 200.8
Thallium	EPA Method 200.7
Vanadium	EPA Method 200.7
Zinc	EPA Method 200.8
Zinc	EPA Method 200.7
Total Cyanide	SM4500-CN ⁻ C, E
Kjeldahl Nitrogen	EPA Method 351.2
Kjeldahl Nitrogen	SM4500-NH3 D
Total Nitrogen	SM4500-Norg D
Oil and Grease	SM1664A
Oil and Grease	SM1664B
pH	SM4500-H+ B
Phenols	EPA Method 420.1
5-Day BOD	SM5210B
cBOD	SM5210B

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COD COD Specific Conductance Specific Conductance Total Residual Chlorine Total Residual Chlorine Volatile residue Volatile residue Settleable solids Total Suspended Solids Total Solids Total Dissolved Solids Total Organic Carbon Turbidity Date Issued: January 29, 2025 SM 5220D (HACH 8000) EPA Method 410.4 EPA Method 120.1 SM2510B SM4500-CI D SM4500-CI G SM2540-E EPA Method 160.4 SM2540-F SM 2540-F SM 2540-D SM2540B SM2540C SM5310B 20TH EPA Method 180.1

Certification Offic