



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH

Certifies

LAI00033

RI ANALYTICAL LABORATORIES INC
41 ILLINOIS AVENUE
WARWICK RI 02888
Laboratory Director: Darlene Capuano

for the analysis of:

- Potable Water Microbiology - Potable Water Organic Chemistry - Potable Water Inorganic Chemistry
- Non-potable Water Microbiology - Non-potable Water Organic Chemistry - Non-potable Water Inorganic Chemistry - Environmental Lead

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.

Nicole Alexander-Scott, MD, MPH
Director of Health

Expires: 12/30/2020

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



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APPENDIX TO ANALYTICAL LABORATORY CERTIFICATE No. LAI00033

RI Analytical Laboratories
41 Illinois Avenue
Warwick, RI 02888
401 737-8500

Expiration Date: December 31, 2020

Date Issued: January 30, 2020

Potable Water - Microbiology

Total Coliform PA	SM9223B Coliart
E.Coli PA	SM9223B Coliart
Total Coliform	SM9223B Coliart-18
E.Coli	SM9223B Coliart-18
Total Coliform	SM9222B (M-Endo)+G NA MUG
Total Coliform MPN	SM9223B Coliart QT
E.Coli Coliforms	SM9223B Coliart QT
Total Coliform MPN	SM9223B Coliart-18 QT
E.Coli MPN	SM9223B Coliart-18 QT
Heterotrophic Plate Count	SM9215B MF PP
E.Coli	SM 9222B (M-Endo)+G NA MUG
Enterococci	Entereolert IDEXX PA

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
1,2,3-Trichlorobenzene	EPA Method 524.2
1,1,1-Trichloroethane	EPA Method 524.2
1,1,2-Trichloroethane	EPA Method 524.2



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Trichloroethene	EPA Method 524.2
Vinyl Chloride	EPA Method 524.2
Xylenes (total)	EPA Method 524.2
MTBE	EPA Method 524.2
Bromobenzene	EPA Method 524.2
Bromochloromethane	EPA Method 524.2
Bromomethane	EPA Method 524.2
Chloroethane	EPA Method 524.2
Chloromethane	EPA Method 524.2
2-Chlorotoluene	EPA Method 524.2
4-Chlorotoluene	EPA Method 524.2
Dibromomethane	EPA Method 524.2
1,3-Dichlorobenzene	EPA Method 524.2
Dichlorodifluoromethane	EPA Method 524.2
1,1-Dichloroethane	EPA Method 524.2
1,3-Dichloropropane	EPA Method 524.2
2,2-Dichloropropane	EPA Method 524.2
1,1-Dichloropropene	EPA Method 524.2
cis-1,3-Dichloropropene	EPA Method 524.2
trans-1,3-Dichloropropene	EPA Method 524.2
Hexachlorobutadiene	EPA Method 524.2
Isopropylbenzene	EPA Method 524.2
Naphthalene	EPA Method 524.2
n-Butylbenzene	EPA Method 524.2
n-Propylbenzene	EPA Method 524.2
4-Isopropyltoluene	EPA Method 524.2
sec-Butylbenzene	EPA Method 524.2
tert-Butylbenzene	EPA Method 524.2
1,1,1,2-Tetrachloroethane	EPA Method 524.2
1,1,2,2-Tetrachloroethane	EPA Method 524.2
Trichlorofluoromethane	EPA Method 524.2
1,2,3-Trichloropropane	EPA Method 524.2



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1,2,4-Trimethylbenzene	EPA Method 524.2
1,3,5-Trimethylbenzene	EPA Method 524.2
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
HAA5	EPA Method 552.2
Potable Water - Inorganic Chemistry	
Alkalinity	SM 2320B
Aluminum	EPA Method 200.7
Aluminum	EPA Method 200.8
Antimony	EPA Method 200.8
Arsenic	EPA Method 200.8
Barium	EPA Method 200.7
Barium	EPA Method 200.8
Beryllium	EPA Method 200.7
Beryllium	EPA Method 200.8
Boron	EPA Method 200.7
Cadmium	EPA Method 200.7
Cadmium	EPA Method 200.8
Calcium	EPA Method 200.7
Chlorite	EPA Methods 300.0
Chloride	EPA Methods 300.0
Chromium	EPA Method 200.7
Chromium	EPA Method 200.8
Conductivity	SM 2510B
Copper	EPA Method 200.7
Copper	EPA Method 200.8
Cyanide	SM 4500CNE
Fluoride	EPA Method 300.0
Total Hardness as CaCO ₃	EPA Method 200.7



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Iron	EPA Method 200.7
Lead	EPA Method 200.8
Magnesium	EPA Method 200.7
Manganese	EPA Method 200.7
Manganese	EPA Method 200.8
MBAS	SM 5540C
Mercury	EPA Method 245.1
Molybdenum	EPA Method 200.8
Nickel	EPA Method 200.7
Nickel	EPA Method 200.8
Nitrate	EPA Method 300.0
Nitrate/Nitrite as N	EPA Method 300.0
Nitrite	EPA Method 300.0
Orthophosphate	SM4500PE
pH	SM4500H+B
Potassium	EPA Method 200.7
Selenium	EPA Method 200.8
Silica	EPA Method 200.7
Silica	SM 4500 Si D
Silver	EPA Method 200.7
Silver	EPA Method 200.8
Sodium	EPA Method 200.7
Sulfate	EPA Method 300.0
Thallium	EPA Method 200.8
Total Dissolved Solids	SM 2540C
Turbidity	EPA Method 180.1
Vanadium	EPA Method 200.7
Vanadium	EPA Method 200.8
Zinc	EPA Method 200.7
Zinc	EPA Method 200.8
Free Residual Chlorine	SM 4500CI-G
Total Residual Chlorine	SM 4500CI-G



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Non-Potable Water - Microbiology

Total Coliform MF	SM9222B (M-Endo)+G(ECMUG)
Total Coliform MPN	SM9221B LTB + E(EC)
Fecal Coliform MPN	SM9221B + E
Fecal Coliform MF	SM9222D m FC
E. coli MF	SM9222B (M-Endo)+G(ECMUG)
E. coli MPN	SM9223B COLertQT
Enterococci MPN	Enterolert IDEXX

Non-Potable Water - Organic Chemistry

PCB-1016 in Oil	EPA Method 600/4-81-045
PCB-1221 in Oil	EPA Method 600/4-81
PCB-1232 in Oil	EPA Method 600/4-81
PCB-1242 in Oil	EPA Method 600/4-81-045
PCB-1248 in Oil	EPA Method 600/4-81-045
PCB-1254 in Oil	EPA Method 600/4-81-045
PCB-1260 in Oil	EPA Method 600/4-81-045
Acetone	EPA Method 624.1
Acrolein	EPA Method 624.1
Acrylonitrile	EPA Method 624.1
Benzene	EPA Method 624.1
Bromoform	EPA Method 624.1
Bromomethane	EPA Method 624.1
Bromochloromethane	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



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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
1,2-Dichloroethane	EPA Method 624.1
1,1-Dichloroethene	EPA Method 624.1
1,2-Dichloropropane	EPA Method 624.1
cis-1,3-Dichloropropene	EPA Method 624.1
trans-1,3-Dichloropropene	EPA Method 624.1
Ethylbenzene	EPA Method 624.1
Hexachlorobutadiene	EPA Method 624.1
2-Hexanone	EPA Method 624.1
4-Methyl-2-pentanone (MIBK)	EPA Method 624.1
Methyl tert-butyl ether (MTBE)	EPA Method 624.1
Methylene Chloride(Dichloromethane)	EPA Method 624.1
Naphthalene	EPA Method 624.1
Styrene	EPA Method 624.1
1,1,1,2-Tetrachloroethane	EPA Method 624.1
1,1,2,2-Tetrachloroethane	EPA Method 624.1
Tetrachloroethene	EPA Method 624.1
Toluene	EPA Method 624.1
cis-1,2-Dichloroethene	EPA Method 624.1
trans-1,2-Dichloroethene	EPA Method 624.1
1,1,1-Trichloroethane	EPA Method 624.1
1,1,2-Trichloroethane	EPA Method 624.1
Trichloroethene	EPA Method 624.1
Trichlorofluoromethane	EPA Method 624.1
1,2,3-Trichloropropane	EPA Method 624.1
Vinyl acetate	EPA Method 624.1



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Vinyl Chloride	EPA Method 624.1
Xylenes (total)	EPA Method 624.1
m+p-Xylene	EPA Method 624.1
o-Xylene	EPA Method 624.1
1,2-Dichlorobenzene	EPA Method 624.1
1,3-Dichlorobenzene	EPA Method 624.1
1,4-Dichlorobenzene	EPA Method 624.1
Aldrin	EPA Method 608.3
alpha-BHC	EPA Method 608.3
beta-BHC	EPA Method 608.3
gamma-BHC (Lindane)	EPA Method 608.3
delta-BHC	EPA Method 608.3
4,4'-DDT	EPA Method 608.3
4,4'-DDE	EPA Method 608.3
4,4'-DDD	EPA Method 608.3
Dieldrin	EPA Method 608.3
Endosulfan I	EPA Method 608.3
Endosulfan II	EPA Method 608.3
Endosulfan Sulfate	EPA Method 608.3
Endrin	EPA Method 608.3
Endrin Aldehyde	EPA Method 608.3
Endrin Ketone	EPA Method 608.3
Heptachlor	EPA Method 608.3
Heptachlor Epoxide	EPA Method 608.3
Methoxychlor	EPA Method 608.3
PCB-1016	EPA Method 608.3
PCB-1221	EPA Method 608.3
PCB-1232	EPA Method 608.3
PCB-1242	EPA Method 608.3
PCB-1248	EPA Method 608.3
PCB-1254	EPA Method 608.3
PCB-1260	EPA Method 608.3



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Toxaphene	EPA Method 608.3
Chlordane (technical)	EPA Method 608.3
Acenaphthene	EPA Method 625.1
Acenaphthylene	EPA Method 625.1
Aniline	EPA Method 625.1
Anthracene	EPA Method 625.1
Benzidine	EPA Method 625.1
Benzo(a)anthracene	EPA Method 625.1
Benzo(a)pyrene	EPA Method 625.1
Benzo(b)fluoranthene	EPA Method 625.1
Benzo(k)fluoranthene	EPA Method 625.1
Benzo(g,h,i)perylene	EPA Method 625.1
Bis(2-Chloroethoxy)Methane	EPA Method 625.1
Bis(2-chloroethyl)Ether	EPA Method 625.1
Bis(2-ethylhexyl) Phthalate(DEHP)	EPA Method 625.1
4-Bromophenyl Phenyl Ether	EPA Method 625.1
Butylbenzyl Phthalate	EPA Method 625.1
Carbazole	EPA Method 625.1
2-Chloronaphthalene	EPA Method 625.1
4-Chlorophenyl Phenyl Ether	EPA Method 625.1
4-Chloroaniline	EPA Method 625.1
Chrysene	EPA Method 625.1
Dibenzo[a,h]anthracene	EPA Method 625.1
Dibenzofuran	EPA Method 625.1
1,2-Dichlorobenzene	EPA Method 625.1
1,3-Dichlorobenzene	EPA Method 625.1
1,4-Dichlorobenzene	EPA Method 625.1
3,3'-Dichlorobenzidine	EPA Method 625.1
Diethyl Phthalate	EPA Method 625.1
Dimethyl Phthalate	EPA Method 625.1
Di-n-butyl Phthalate	EPA Method 625.1
2,4-Dinitrotoluene	EPA Method 625.1



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2,6-Dinitrotoluene	EPA Method 625.1
Di-n-octyl Phthalate	EPA Method 625.1
Fluoranthene	EPA Method 625.1
Fluorene	EPA Method 625.1
Hexachlorobenzene	EPA Method 625.1
Hexachlorobutadiene	EPA Method 625.1
Hexachlorocyclopentadiene	EPA Method 625.1
Hexachloroethane	EPA Method 625.1
Indeno[1,2,3-cd]pyrene	EPA Method 625.1
Isophorone	EPA Method 625.1
2-Methylnaphthalene	EPA Method 625.1
Naphthalene	EPA Method 625.1
2-Nitroaniline	EPA Method 625.1
3-Nitroaniline	EPA Method 625.1
4-Nitroaniline	EPA Method 625.1
Nitrobenzene	EPA Method 625.1
N-Nitrosodimethylamine	EPA Method 625.1
N-Nitrosodi-n-propylamine	EPA Method 625.1
N-Nitrosodiphenylamine	EPA Method 625.1
2,2'-Oxybis(1-Chloropropane)	EPA Method 625.1
Phenanthrene	EPA Method 625.1
Pyrene	EPA Method 625.1
Pyridine	EPA Method 625.1
1,2,4-Trichlorobenzene	EPA Method 625.1
2-Chlorophenol	EPA Method 625.1
2,4-Dichlorophenol	EPA Method 625.1
2,4-Dimethylphenol	EPA Method 625.1
2-Methyl-4,6-dinitrophenol	EPA Method 625.1
2,4-Dinitrophenol	EPA Method 625.1
2-Nitrophenol	EPA Method 625.1
4-Nitrophenol	EPA Method 625.1
Pentachlorophenol	EPA Method 625.1



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Phenol	EPA Method 625.1
2,4,5-Trichlorophenol	EPA Method 625.1
2,4,6-Trichlorophenol	EPA Method 625.1

Non-Potable Water - Inorganic Chemistry

Alkalinity	SM2320B
Aluminum	EPA Method 200.7
Aluminum	EPA Method 200.8
Ammonia	SM4500-NH ₃ H
Ammonia as N	EPA 350.1
Antimony	EPA Method 200.7
Antimony	EPA Method 200.8
Arsenic	EPA Method 200.7
Arsenic	EPA Method 200.8
Barium	EPA Method 200.7
Beryllium	EPA Method 200.7
Beryllium	EPA Method 200.8
Boron	EPA Method 200.7
Cadmium	EPA Method 200.7
Cadmium	EPA Method 200.8
Calcium	EPA Method 200.7
Chloride	EPA Method 300.0
Chromium (total)	EPA Method 200.7
Chromium (total)	EPA Method 200.8
Hexavalent chromium	SM 3500-Cr-B
Cobalt	EPA Method 200.7
Cobalt	EPA Method 200.8
Copper	EPA Method 200.7
Copper	EPA Method 200.8
Fluoride	EPA Method 300.0
Fluoride	SM4500-F D
Calcium Hardness as CaCO ₃	EPA Method 200.7
Total Hardness as CaCO ₃	EPA Method 200.7



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Iron	EPA Method 200.7
Lead	EPA Method 200.7
Lead	EPA Method 200.8
Magnesium	EPA Method 200.7
Manganese	EPA Method 200.7
Manganese	EPA Method 200.8
MBAS	SM5540 C
Mercury	EPA Method 245.1
Molybdenum	EPA Method 200.7
Molybdenum	EPA Method 200.8
Nickel	EPA Method 200.7
Nickel	EPA Method 200.8
Nitrate as N	EPA Method 300.0
Nitrate/Nitrite as N	EPA Method 300.0
Nitrite	EPA Method 300.0
Orthophosphate	SM4500 P E
Potassium	EPA Method 200.7
Selenium	EPA Method 200.7
Selenium	EPA Method 200.8
Silver	EPA Method 200.7
Silver	EPA Method 200.8
Silica	EPA Method 200.7
Silica	SM4500-SiO ₂ D
Sodium	EPA Method 200.7
Strontium	EPA Method 200.8
Sulfate	EPA Method 300.0
Sulfide	SM4500S ₂ F
Thallium	EPA Method 200.7
Thallium	EPA Method 200.8
Tin	EPA Method 200.7
Titanium	EPA Method 200.7
Vanadium	EPA Method 200.7



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Vanadium	EPA Method 200.8
Zinc	EPA Method 200.7
Zinc	EPA Method 200.8
Total Cyanide	SM4500CN-C E
Kjeldahl Nitrogen	SM4500 Norg D
Oil & Grease	EPA Method 1664A
pH	SM4500-H ⁺ B
Phenols	EPA Method 420.1
5-Day BOD	SM5210B
cBOD	SM5210B
COD	SM5220D
Specific Conductance	EPA Method 120.1
Total Phosphorous	SM4500P-E
Total Suspended Solids	SM2540D
Settleable Solids	SM2540F
Total Dissolved Solids	SM2540 C
Total Solids	SM2540 B
Total Organic Carbon	SM5310C
Total Residual Chlorine	SM4500CIG
Turbidity	EPA Method 180.1

Environmental Lead

Lead in paint	A2LA APPROVED
Lead in paint	AIHA APPROVED
Lead in dust wipes	A2LA APPROVED