

State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH

Certifies

LAI00033


RI ANALYTICAL LABORATORIES
41 ILLINOIS AVENUE
WARWICK RI 02888
Laboratory Director: ANTHONY E PERROTTI

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 -

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.


David R. Gifford, MD, MPH
Director of Health

Expires: 12/30/2009

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



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
RI Analytical Laboratories

APPENDIX TO ANALYTICAL LABORATORY CERTIFICATE NO. LAI0033

Expiration Date: December 30, 2009

Date Revised: January 1, 2009

Potable Water - Microbiology

Fecal Coliform	SM9221E
Total Coliform	SM9223B
E. Coli	SM9223B
Total Coliform	SM9221B
Total Coliform	SM9222B
Fecal/E. coli Coliforms	SM9222D
Fecal/E. Coli Coliforms MPN	SM9223B Coliert
Heterotrophic Plate Count	SM9215B

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
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

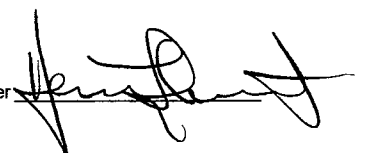
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1,1-Dichloroethane	EPA Method 524.2
1,3-Dichloropropane	EPA Method 524.2
2,2-Dichloropropane	EPA Method 524.2
1,1-Dichloropropene	EPA Method 524.2
cis-1,3-Dichloropropene	EPA Method 524.2
trans-1,3-Dichloropropene	EPA Method 524.2
Hexachlorobutadiene	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
p-Isopropyltoluene	EPA Method 524.2
sec-Butylbenzene	EPA Method 524.2
tert-Butylbenzene	EPA Method 524.2
1,2,3-Trichlorobenzene	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 504.1
1,2,3-Trichloropropane	EPA Method 524.2
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
THM's	EPA Method 524.2
EDB (Ethylene dibromide)	EPA Method 504.1
DBCP (Dibromochloropropane)	EPA Method 504.1
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
Alachlor	EPA Method 508
Chlordane (technical)	EPA Method 508
Endrin	EPA Method 508
Heptachlor	EPA Method 508
Heptachlor epoxide	EPA Method 508
Lindane	EPA Method 508
Methoxychlor	EPA Method 508
Toxaphene	EPA Method 508
PCB-1016	EPA Method 508
PCB-1221	EPA Method 508
PCB-1232	EPA Method 508
PCB-1242	EPA Method 508
PCB-1248	EPA Method 508
PCB-1254	EPA Method 508
PCB-1260	EPA Method 508
Aldrin	EPA Method 508
Dieldrin	EPA Method 508



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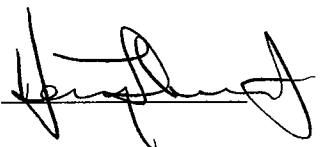
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Potable Water - Inorganic Chemistry

Alkalinity	SM 2320B
Aluminum	EPA Method 200.7
Aluminum	EPA Method 200.8
Antimony	EPA Method 200.8
Antimony	EPA Method 200.9
Arsenic	EPA Method 200.7
Arsenic	EPA Method 200.8
Arsenic	EPA Method 200.9
Barium	EPA Method 200.7
Barium	EPA Method 200.8
Beryllium	EPA Method 200.7
Beryllium	EPA Method 200.8
Beryllium	EPA Method 200.9
Boron	EPA Method 200.7
Boron	EPA Method 200.8
Cadmium	EPA Method 200.7
Cadmium	EPA Method 200.8
Cadmium	EPA Method 200.9
Calcium	EPA Method 200.7
Chloride	SM4500CIB
Chloride	EPA Methods 300.0
Chromium	EPA Method 200.7
Chromium	EPA Method 200.8
Chromium	EPA Method 200.9
Conductivity	SM 2510B
Copper	EPA Method 200.7
Copper	EPA Method 200.8
Copper	EPA Method 200.9
Cyanide	SM 4500CNE
Fluoride	EPA Method 300.0
Fluoride	SM4500FB
Total Hardness as CaCO ₃	EPA Method 200.7
Calcium Hardness as CaCO ₃	EPA Method 200.7
Iron	EPA Method 200.7
Iron	EPA Method 200.8
Lead	EPA Method 200.8
Lead	EPA Method 200.9
Magnesium	EPA Method 200.7
Manganese	EPA Method 200.7
Manganese	EPA Method 200.8
MBAS	SM 5540C
MBAS	EPA Method 425.1
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	EPA Method 300.0
Nitrate	SM4500NO ₃



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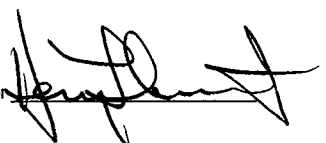
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Nitrate/Nitrite as N	SM4500NO3
Nitrate/Nitrite as N	EPA Method 300.0
Nitrite	EPA Method 300.0
Nitrite	SM4500NO2B
Orthophosphate	SM4500PE
Orthophosphate	EPA Method 300.0
pH	EPA Method 150.1
pH	SM4500H+B
Potassium	EPA Method 200.7
Selenium	EPA Method 200.8
Selenium	EPA Method 200.9
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
Sulfate	SM4500SO4E
Thallium	EPA Method 200.8
Thallium	EPA Method 200.9
Total Dissolved Solids	SM 2540C
Total Dissolved Solids	EPA 160.1
Total Organic Carbon	EPA Method 415.1
Total Organic Carbon	SM 5310B
Turbidity	EPA Method 180.1
Turbidity	SM2130B
Vanadium	EPA Method 200.7
Vanadium	EPA Method 200.8
Zinc	EPA Method 200.7
Zinc	EPA Method 200.8
Free Residual Chlorine	SM 4500Cl-G
Total Residual Chlorine	SM 4500Cl-G

Non-Potable Water - Microbiology

Total Coliform MF	SM9222B M endo
Total Coliform MPN	SM9221B LTB
Fecal Coliform -E. coli MPN	SM9221E EC
Fecal Coliform - E. coli MF	SM9222D m FC
Enterococci	Enterolert IDEXX



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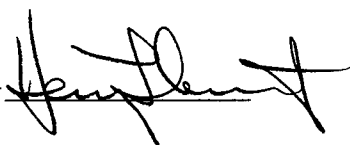
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Non-Potable Water - Organic Chemistry

Acetone	EPA Method 624
Acetonitrile	EPA Method 624
Acrolein	EPA Method 624
Acrylonitrile	EPA Method 624
Benzene	EPA Method 624
Bromomethane	EPA Method 624
Bromoform	EPA Method 624
2-Butanone	EPA Method 624
Carbon Disulfide	EPA Method 624
Carbon Tetrachloride	EPA Method 624
Chlorobenzene	EPA Method 624
Chlorodibromomethane	EPA Method 624
Chloroethane	EPA Method 624
Chloromethane	EPA Method 624
2-Chloroethylvinyl Ether	EPA Method 624
Chloroform	EPA Method 624
cis-1,3-Dichloroethene	EPA Method 624
1,2-Dibromoethane (EDB)	EPA Method 624
1,2-Dibromo-3-chloropropane (DBCP)	EPA Method 624
Dibromomethane	EPA Method 624
1,2-Dichlorobenzene	EPA Method 624
1,3-Dichlorobenzene	EPA Method 624
1,4-Dichlorobenzene	EPA Method 624
Dichlorobromomethane	EPA Method 624
Dichlorodifluoromethane	EPA Method 624
1,1-Dichloroethane	EPA Method 624
1,2-Dichloroethane	EPA Method 624
1,1-Dichloroethene	EPA Method 624
1,2-Dichloropropane	EPA Method 624
cis-1,3-Dichloropropene	EPA Method 624
trans-1,3-Dichloropropene	EPA Method 624
Ethylbenzene	EPA Method 624
Hexachlorobutadiene	EPA Method 624
2-Hexanone	EPA Method 624
Methylene Chloride	EPA Method 624
MTBE	EPA Method 624
4-Methyl-2-pentanone	EPA Method 624
Naphthalene	EPA Method 624
Styrene	EPA Method 624
1,1,1,2-Tetrachloroethane	EPA Method 624
1,1,1,2-Tetrachloroethane	EPA Method 624
Tetrachloroethene	EPA Method 624
Toluene	EPA Method 624



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trans-1,2-Dichloroethene	EPA Method 624
1,1,1-Trichloroethane	EPA Method 624
1,1,2-Trichloroethane	EPA Method 624
Trichloroethene	EPA Method 624
Trichlorofluoromethane	EPA Method 624
1,2,3-Trichloropropane	EPA Method 624
Vinyl Acetate	EPA Method 624
Vinyl Chloride	EPA Method 624
Xylenes (total)	EPA Method 624
Acenaphthene	EPA Method 625
Acenaphthylene	EPA Method 625
Aniline	EPA Method 625
Anthracene	EPA Method 625
Benzo(a)anthracene	EPA Method 625
Benzo(a)pyrene	EPA Method 625
Benzo(b)fluoranthene	EPA Method 625
Benzo(k)fluoranthene	EPA Method 625
Benzo(g,h,i)perylene	EPA Method 625
Bis(2-Chloroethoxy)Methane	EPA Method 625
Bis(2-chloroethyl)Ether	EPA Method 625
Bis(2-chloroisopropyl) Ether	EPA Method 625
Bis(2-ethylhexyl) Phthalate	EPA Method 625
4-Bromophenyl Phenyl Ether	EPA Method 625
Butylbenzyl Phthalate	EPA Method 625
Carbazole	EPA Method 625
4-Chloroaniline	EPA Method 625
2-Chloronaphthalene	EPA Method 625
4-Chlorophenyl Phenyl Ether	EPA Method 625
Chrysene	EPA Method 625
Dibenz[a,h]anthracene	EPA Method 625
Dibenzofuran	EPA Method 625
1,2-Dichlorobenzene	EPA Method 625
1,3-Dichlorobenzene	EPA Method 625
1,4-Dichlorobenzene	EPA Method 625
3,3'-Dichlorobenzidine	EPA Method 625
Diethyl Phthalate	EPA Method 625
Dimethyl Phthalate	EPA Method 625
Di-n-butyl Phthalate	EPA Method 625
2,4-Dinitrotoluene	EPA Method 625
2,6-Dinitrotoluene	EPA Method 625
Di-n-octyl Phthalate	EPA Method 625
Fluoranthene	EPA Method 625
Fluorene	EPA Method 625
Hexachlorobenzene	EPA Method 625
Hexachlorobutadiene	EPA Method 625
Hexachlorocyclopentadiene	EPA Method 625
Hexachloroethane	EPA Method 625



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Indeno[1,2,3-cd]pyrene	EPA Method 625
Isophorone	EPA Method 625
2-Methylnaphthalene	EPA Method 625
Naphthalene	EPA Method 625
2-Nitroaniline	EPA Method 625
3-Nitroaniline	EPA Method 625
4-Nitroaniline	EPA Method 625
Nitrobenzene	EPA Method 625
N-Nitrosodimethylamine	EPA Method 625
N-Nitrosodi-n-propylamine	EPA Method 625
N-Nitrosodiphenylamine	EPA Method 625
Phenanthrene	EPA Method 625
Pyrene	EPA Method 625
Pyridine	EPA Method 625
1,2,4-Trichlorobenzene	EPA Method 625
2-Chlorophenol	EPA Method 625
2,4-Dichlorophenol	EPA Method 625
2,4-Dimethylphenol	EPA Method 625
2-Methyl-4,6-dinitrophenol	EPA Method 625
2,4-Dinitrophenol	EPA Method 625
2-Nitrophenol	EPA Method 625
4-Nitrophenol	EPA Method 625
4-Chloro-3-methylphenol	EPA Method 625
Pentachlorophenol	EPA Method 625
Phenol	EPA Method 625
2,4,5-Trichlorophenol	EPA Method 625
2,4,6-Trichlorophenol	EPA Method 625
Aldrin	EPA Method 608
alpha-BHC	EPA Method 608
beta-BHC	EPA Method 608
gamma-BHC (Lindane)	EPA Method 608
delta-BHC	EPA Method 608
alpha-Chlordane	EPA Method 608
gamma-Chlordane	EPA Method 608
Chlordane (technical)	EPA Method 608
4,4'-DDT	EPA Method 608
4,4'-DDE	EPA Method 608
4,4'-DDD	EPA Method 608
Dieldrin	EPA Method 608
Endosulfan I	EPA Method 608
Endosulfan II	EPA Method 608
Endosulfan Sulfate	EPA Method 608
Endrin	EPA Method 608
Endrin Aldehyde	EPA Method 608
Endrin Ketone	EPA Method 608
Heptachlor	EPA Method 608
Heptachlor Epoxide	EPA Method 608
Methoxychlor	EPA Method 608



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PCB-1016	EPA Method 608
PCB-1221	EPA Method 608
PCB-1232	EPA Method 608
PCB-1242	EPA Method 608
PCB-1248	EPA Method 608
PCB-1254	EPA Method 608
PCB-1260	EPA Method 608
Toxaphene	EPA Method 608
PCB-1016 in Oil	EPA Method 600/4-81-045
PCB-1242 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

Non-Potable Water - Inorganic Chemistry

Alkalinity	SM2320B
Aluminum	EPA Method 200.7
Aluminum	EPA Method 200.8
Aluminum	EPA Method 200.9
Ammonia	SM4500-NH ₃ C
Antimony	EPA Method 200.7
Antimony	EPA Method 200.8
Antimony	EPA Method 200.9
Arsenic	EPA Method 200.7
Arsenic	EPA Method 200.8
Arsenic	EPA Method 200.9
Barium	EPA Method 200.8
Barium	EPA Method 200.7
Beryllium	EPA Method 200.7
Beryllium	EPA Method 200.8
Beryllium	EPA Method 200.9
Boron	EPA Method 200.7
Boron	EPA Method 200.8
Cadmium	EPA Method 200.7
Cadmium	EPA Method 200.8
Cadmium	EPA Method 200.9
Calcium	EPA Method 200.7
Chloride	SM4500ClB.
Chloride	EPA Method 300.0
Chromium (total)	EPA Method 200.7
Chromium (total)	EPA Method 200.8
Chromium (total)	EPA Method 200.9
Hexavalent chromium	SM 3500-Cr-D
Cobalt	EPA Method 200.7
Cobalt	EPA Method 200.8
Copper	EPA Method 200.7
Copper	EPA Method 200.8
Copper	EPA Method 200.9



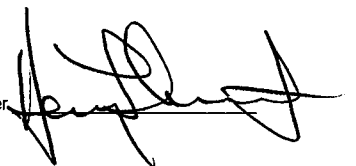
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Specific Conductance	SM2510B
Fluoride	EPA Method 300.0
Fluoride	SM4500-F-B D
Calcium Hardness as CaCO ₃	EPA Method 200.7
Total Hardness as CaCO ₃	EPA Method 200.7
Iron	EPA Method 200.7
Iron	EPA Method 200.8
Lead	EPA Method 200.7
Lead	EPA Method 200.8
Lead	EPA Method 200.9
Magnesium	EPA Method 200.7
Manganese	EPA Method 200.7
Manganese	EPA Method 200.8
MBAS	EPA Method 425.1
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 as N	SM4500NO ₃ E
Nitrate/Nitrite as N	EPA Method 300.0
Nitrite	EPA Method 300.0
Nitrite	SM4500NO ₂ B
Orthophosphate	SM4500 P E
Orthophosphate	EPA Method 300.0
Potassium	EPA Method 200.7
Selenium	EPA Method 200.7
Selenium	EPA Method 200.8
Selenium	EPA Method 200.9
Silver	EPA Method 200.7
Silver	EPA Method 200.8
Silver	EPA Method 200.9
Silica	EPA Method 200.7
Sodium	EPA Method 200.7
Sulfate	EPA Method 300.0
Sulfide	SM4500S ₂ D
Sulfide	SM4500S ₂ E
Thallium	EPA Method 200.7
Thallium	EPA Method 200.8
Thallium	EPA Method 200.9
Tin	EPA Method 200.7
Titanium	EPA Method 200.7
Vanadium	EPA Method 200.7
Vanadium	EPA Method 200.8
Zinc	EPA Method 200.7
Zinc	EPA Method 200.8
Total Cyanide	SM4500CN-C E
Kjeldahl Nitrogen	SM4500-NH ₃ C



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Oil & Grease	EPA Method 1664A
pH	SM4500-H ⁺ B
Phenols	EPA Method 420.1
5-Day BOD	SM5210B
oBOD	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 Organic Carbon	SM5310B
Total Residual Chlorine	SM4500ClG
Turbidity	EPA Method 180.1
Turbidity	SM2130B

Environmental Lead

Lead in paint
Lead in soil
Lead in dust wipes

