

*The Commonwealth of Massachusetts*



*Department of Environmental Protection  
Division of Environmental Analysis  
Senator William X. Wall Experiment Station*

*certifies*

M-RI002

ESS LABORATORY  
DIV OF THIELSCH ENGINEERING  
185 FRANCES AVE  
CRANSTON, RI 02910-0000

*Laboratory Director:* LAUREL STODDARD

*for the analysis of* NON POTABLE WATER (CHEMISTRY)  
POTABLE WATER (CHEMISTRY)

*pursuant to 310 CMR 42.00*

*This certificate supersedes all previous Massachusetts certificates issued to this laboratory. The laboratory is regulated by and shall be responsible for being in compliance with Massachusetts regulations at 310 CMR 42.00.*

*This certificate is valid only when accompanied by the latest dated Certified Parameter List as issued by the Massachusetts D.E.P. Contact the Division of Environmental Analysis to verify the current certification status of the laboratory.*

*Certification is no guarantee of the validity of the data. This certification is subject to unannounced laboratory inspections.*

*José C. Jacobe*

*Director, Division of Environmental Analysis*

*Issued:* 01 JUL 2010

*Expires:* 30 JUN 2011

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Certified Parameter List as of: 01 JUL 2010

M-RI002            ESS LABORATORY  
                         CRANSTON RI

NON POTABLE WATER (CHEMISTRY)            Effective Date            01 JUL 2010            Expiration Date            30 JUN 2011

| <u>Analytes</u>         | <u>Methods</u>         |
|-------------------------|------------------------|
| ALUMINUM                | EPA 200.7              |
| ANTIMONY                | EPA 200.7              |
| ANTIMONY                | SM 3113B               |
| ARSENIC                 | EPA 200.7              |
| ARSENIC                 | SM 3113B               |
| BERYLLIUM               | EPA 200.7              |
| CADMIUM                 | EPA 200.7              |
| CHROMIUM                | EPA 200.7              |
| COBALT                  | EPA 200.7              |
| COPPER                  | EPA 200.7              |
| IRON                    | EPA 200.7              |
| LEAD                    | EPA 200.7              |
| LEAD                    | SM 3113B               |
| MANGANESE               | EPA 200.7              |
| MERCURY                 | EPA 245.1              |
| MOLYBDENUM              | EPA 200.7              |
| NICKEL                  | EPA 200.7              |
| SELENIUM                | EPA 200.7              |
| SELENIUM                | SM 3113B               |
| SILVER                  | EPA 200.7              |
| THALLIUM                | EPA 200.7              |
| THALLIUM                | EPA 279.2              |
| TITANIUM                | EPA 200.7              |
| VANADIUM                | EPA 200.7              |
| ZINC                    | EPA 200.7              |
| PH                      | SM 4500-H-B            |
| SPECIFIC CONDUCTIVITY   | EPA 120.1              |
| TOTAL DISSOLVED SOLIDS  | SM 2540C               |
| HARDNESS (CaCO3), TOTAL | EPA 200.7              |
| CALCIUM                 | EPA 200.7              |
| MAGNESIUM               | EPA 200.7              |
| SODIUM                  | EPA 200.7              |
| POTASSIUM               | EPA 200.7              |
| ALKALINITY, TOTAL       | SM 2320B               |
| CHLORIDE                | SM 4500-CL-E           |
| CHLORIDE                | EPA 300.0              |
| FLUORIDE                | EPA 300.0              |
| SULFATE                 | EPA 300.0              |
| AMMONIA-N               | SM18-B,F/19,20-B,D-ELC |
| AMMONIA-N               | EPA 350.1              |
| NITRATE-N               | EPA 300.0              |
| NITRATE-N               | EPA 353.2              |
| KJELDAHL-N              | SM18-B,F/19,20-B,D-ELC |

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| <u>Analytes</u>                  | <u>Methods</u>   |
|----------------------------------|------------------|
| KJELDAHL-N                       | EPA 351.2        |
| ORTHOPHOSPHATE                   | EPA 365.1        |
| ORTHOPHOSPHATE                   | EPA 365.3        |
| ORTHOPHOSPHATE                   | EPA 300.0        |
| PHOSPHORUS, TOTAL                | EPA 365.3        |
| PHOSPHORUS, TOTAL                | EPA 365.1        |
| CHEMICAL OXYGEN DEMAND           | EPA 410.4        |
| BIOCHEMICAL OXYGEN DEMAND        | SM 5210B         |
| CYANIDE, TOTAL                   | SM 4500-CN-C,E   |
| CYANIDE, TOTAL                   | EPA 335.4        |
| NON-FILTERABLE RESIDUE           | SM 2540D         |
| CHLORINE, TOTAL RESIDUAL         | SM 4500-CL-D     |
| CHLORINE, TOTAL RESIDUAL         | SM 4500-CL-G     |
| OIL AND GREASE                   | EPA 1664         |
| PHENOLICS, TOTAL                 | EPA 420.1        |
| VOLATILE HALOCARBONS             | EPA 624          |
| VOLATILE AROMATICS               | EPA 624          |
| CHLORDANE                        | EPA 608          |
| ALDRIN                           | EPA 608          |
| DIELDRIN                         | EPA 608          |
| DDD                              | EPA 608          |
| DDE                              | EPA 608          |
| DDT                              | EPA 608          |
| HEPTACHLOR                       | EPA 608          |
| HEPTACHLOR EPOXIDE               | EPA 608          |
| SVOC-ACID EXTRACTABLES           | EPA 625          |
| SVOC-BASE/NEUTRAL EXTRACTABLES   | EPA 625          |
| POLYCHLORINATED BIPHENYLS (WATEF | EPA 608          |
| POLYCHLORINATED BIPHENYLS (OIL)  | EPA 600/4-81-045 |

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| <u>Analytes</u> | <u>Methods</u> |
|-----------------|----------------|
| ANTIMONY        | EPA 200.9      |
| ARSENIC         | EPA 200.9      |
| BARIUM          | EPA 200.7      |
| BERYLLIUM       | EPA 200.7      |
| CADMIUM         | EPA 200.7      |
| CHROMIUM        | EPA 200.7      |
| COPPER          | EPA 200.7      |
| LEAD            | EPA 200.9      |
| MERCURY         | EPA 245.1      |
| NICKEL          | EPA 200.7      |

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  Date

| <u>Analytes</u>             | <u>Methods</u> |
|-----------------------------|----------------|
| SELENIUM                    | EPA 200.9      |
| THALLIUM                    | EPA 200.9      |
| NITRATE-N                   | EPA 353.2      |
| NITRITE-N                   | EPA 353.2      |
| FLUORIDE                    | EPA 300.0      |
| SODIUM                      | EPA 200.7      |
| SULFATE                     | EPA 300.0      |
| CYANIDE, TOTAL              | SM 4500-CN-C,E |
| TURBIDITY                   | EPA 180.1      |
| CALCIUM                     | EPA 200.7      |
| ALKALINITY, TOTAL           | SM 2320B       |
| TOTAL DISSOLVED SOLIDS      | SM 2540C       |
| PH                          | EPA 150.1      |
| TRIHALOMETHANES             | EPA 524.2      |
| VOLATILE ORGANIC COMPOUNDS  | EPA 524.2      |
| 1,2-DIBROMOETHANE           | EPA 504.1      |
| 1,2-DIBROMO-3-CHLOROPROPANE | EPA 504.1      |
| HALOACETIC ACIDS            | EPA 552.2      |