ERA
A Waters Company

Morgan Greenwald
Cascade Technical Services 3
Lab Three
1 Home Farm Way
Montpelier, VT 05602
USA

091517E Final Report

QuiK™ Response Proficiency Testing

Project # :091517E

ERA
A Waters Company

October 26, 2017

Morgan Greenwald
Cascade Technical Services 3
Lab Three
1 Home Farm Way
Montpelier, VT 05602

Enclosed is your final report for ERA's QuiK Response program. Your final report includes an evaluation of all results submitted by your laboratory to ERA. None of the assigned value(s) or acceptance limits were available to your laboratory at or before the time of reporting.

Please note the following changes to our final reports:

At the request of the TNI Accreditation Council, we have included a Laboratory Exception Report that includes a list of all analytes reported with less than qualifiers when the assigned value was greater than "0." In addition, because we have received many requests from laboratories, this report also includes a list of all analytes with "Not Acceptable" evaluations.

Some states have elected not to convert to the 2009 TNI Standards at this time. If you have released your results to a state that has retained the 2003 NELAC Evaluation Criteria, your final report will include a section that evaluates the results according to the 2003 Standard in addition to the 2009 TNI Standards.

As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a supplemental (QuiK Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting the quality of your routine data.

The data contained herein are confidential and intended for your use only.

If you are using this report for Corrective Action, please note the following: permittees must submit a copy of this report to your DMR-QA Coordinator, along with your corrective action documentation. Contract Laboratories should send a copy of this report to your permittees upon receipt.

Thank you for your participation in ERA's QuiK Response program. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

Pat Larson

Patrick Larson
Quality Officer

cc: Project File Number 091517E

ERA
A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type	Evaluation Type
PJLA	Tamara Norris / (248) 519-2603	All Analytes	2009 TNI

ERA
A Waters Company

091517E Laboratory Exception Report

Morgan Greenwald
Laboratory QA Manager
Cascade Technical Services 3
Lab Three
1 Home Farm Way
Montpelier, VT 05602
802-778-3007 x 2510

EPA ID: **VT00984**
ERA Customer Number: **C104095**

2009 TNI Evaluation Checks

There are no values reported with < where the assigned value was greater than 0.

2009 TNI Not Acceptable Evaluations

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
WS Per- & Polyfluoroalkyl Substances (PFAS) GW & SW (cat# 731, lot# 091517E) Study Dates: 09/15/17 - 10/26/17							
4847	N-methyl perfluorooctanesulfonamidoacetic acid	ng/L	88.1	224	134 - 314	Not Acceptable	EPA 537 1.1 2009

ERA
A Waters Company

Final Report Results For Laboratory Cascade Technical Services 3

ERA
A Waters Company

2009 TNI Evaluation Report

Project Number: **091517E**

ERA Customer Number: **C104095**

Laboratory Name: **Cascade Technical Services 3**

Organic Results

ERA
A Waters Company

091517E 2009 TNI Evaluation Final Complete Report

Morgan Greenwald
Laboratory QA Manager
Cascade Technical Services 3
Lab Three
1 Home Farm Way
Montpelier, VT 05602
802-778-3007 x 2510

EPA ID: VT00984
ERA Customer Number: C104095

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
WS Per- & Polyfluoroalkyl Substances (PFAS) GW & SW (cat# 731, lot# 091517E) Study Dates: 09/15/17 - 10/26/17												
4846	N-ethyl perfluorooctanesulfonamidoacetic acid	ng/L	< 8.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6461	Fluorotelomer sulfonate 8:2 (FtS 8:2)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
9437	Fluorotelomer sulfonate 4:2 (FtS 4:2)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6457	Fluorotelomer sulfonate 6:2 (FtS 6:2)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
4847	N-methyl perfluorooctanesulfonamidoacetic acid	ng/L	88.1	224	134 - 314	Not Acceptable	EPA 537 1.1 2009	10/5/2017	-3.50	227	39.8	Pat Borosky
6911	Perfluorobutanesulfonic acid (PFBS)	ng/L	< 8.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6915	Perfluorobutyric acid (PFBA)	ng/L	121	117	70.2 - 164	Acceptable	EPA 537 1.1 2009	10/5/2017	0.443	114	16.4	Pat Borosky
9562	Perfluorodecanesulfonate (PFDS)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6905	Perfluorodecanoic acid (PFDA)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6903	Perfluorododecanoic acid (PFDoA)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
9470	Perfluoroheptanesulfonate (PFHpS)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6908	Perfluoroheptanoic acid (PFHpA)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6910	Perfluorohexanesulfonic acid (PFHxS)	ng/L	140	145	87.0 - 203	Acceptable	EPA 537 1.1 2009	10/5/2017	-0.239	144	17.6	Pat Borosky
6913	Perfluorohexanoic acid (PFHxA)	ng/L	< 20.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
9464	Perfluorononanesulfonate (PFNS)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6906	Perfluorononanoic acid (PFNA)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6917	Perfluorooctanesulfonamide (PFOSA)	ng/L	< 4.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6909	Perfluorooctanesulfonic acid (PFOS)	ng/L	150	211	127 - 295	Acceptable	EPA 537 1.1 2009	10/5/2017	-3.20	218	21.4	Pat Borosky
6912	Perfluorooctanoic acid (PFOA)	ng/L	142	151	90.6 - 211	Acceptable	EPA 537 1.1 2009	10/5/2017	-0.779	160	23.4	Pat Borosky
6914	Perfluoropentanoic acid (PFPeA)	ng/L	< 4.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky

ERA
A Waters Company

091517E 2009 TNI Evaluation Final Complete Report

Morgan Greenwald
Laboratory QA Manager
Cascade Technical Services 3
Lab Three
1 Home Farm Way
Montpelier, VT 05602
802-778-3007 x 2510

EPA ID: VT00984
ERA Customer Number: C104095

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
WS Per- & Polyfluoroalkyl Substances (PFAS) GW & SW (cat# 731, lot# 091517E) Study Dates: 09/15/17 - 10/26/17 (Continued)												
9467	Perfluoropentansulfonate (PFPeS)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky
6902	Perfluorotetradecanoic acid (PFTA)	ng/L	104	154	92.4 - 216	Acceptable	EPA 537 1.1 2009	10/5/2017	-3.13	151	14.9	Pat Borosky
9563	Perfluorotridecanoic acid (PFTrDA)	ng/L	82.6	129	77.4 - 181	Acceptable	EPA 537 1.1 2009	10/5/2017	-2.25	125	18.7	Pat Borosky
6904	Perfluoroundecanoic acid (PFUnA)	ng/L	< 2.0	< 60.0	0.00 - 60.0	Acceptable	EPA 537 1.1 2009	10/5/2017				Pat Borosky