ERA
A Waters Company

Kelley E. Keenan
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565

DMR-QA 32 Final Report

DMR-QA Proficiency Testing

DMR-QA Study

Open Date: 03/19/12

Close Date: 07/06/12

Report Issued Date: 07/27/12

ERA
A Waters Company

July 27, 2012

Kelley E. Keenan
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565

Enclosed is your final report for ERA's DMR-QA 32 Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's DMR-QA 32 Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the current TNI Fields of Proficiency Testing (FoPT) tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the current TNI FoPT tables. If the analyte is not included in the TNI FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

If you have any "Not Acceptable" evaluations for the DMR-QA 32 study, and these results have been reported by your permittees, a letter of corrective action and order form are attached for your convenience. If you have a "Not Acceptable" evaluation, but no letter of corrective action or order form, ERA recommends that you contact your permittees for the corrective action requirements that their state or regional DMR-QA Coordinator may require.

Thank you for your participation in ERA's DMR-QA 32 Proficiency Testing study. If you have any questions, please contact our proficiency testing department at 1-800-372-0122.

Sincerely,

Jay R. McBurney
Quality Program Manager

attachments
jrm

Report Recipient	Contact/Phone Number	Reporting Type	Evaluation Type
North Carolina (WP)	Dana Satterwhite / 919-733-3908 x 243	All Analytes	2009 TNI
South Carolina	Carol Smith / 803-896-0992	All Analytes	2003 NELAC

ERA
A Waters Company

DMRQA-32 Definitions & Study Discussion

Study Dates: 03/19/12 - 07/06/12 **Report Issued: 07/27/12**

DMRQA Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the current FoPT tables. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2009 TNI Standards. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current TNI FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable	= Reported Value falls within the Acceptance Limits.
Not Acceptable	= Reported Value falls outside the Acceptance Limits.
No Evaluation	= Reported Value cannot be evaluated.
Not Reported	= No Value reported.

The Method Description is the method the laboratory reported to ERA.

DMRQA Study Discussion

ERA's DMR-QA 32 Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standards and the criteria contained in the current TNI FoPT tables.

ERA's DMR-QA 32 study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2009 TNI PT Standard and the criteria contained in the current TNI Fields of Proficiency Testing (FoPT) tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

If you have any questions or concerns regarding your assessment in ERA's DMRQA Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.

DMR-QA 32 Laboratory Exception Report

Kelley E. Keenan
Supervisor
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565
828-350-9364

EPA ID: **NC01230**
ERA Customer Number: **E559701**
Report Issued: **07/27/12**
Study Dates: **03/19/12 - 07/06/12**

2009 TNI Evaluation Check: There are no values reported with < where the assigned value was greater than 0.

2009 TNI Not Acceptable Evaluations: There were no Not Acceptable evaluations for this study.

ERA

A Waters Company

Final Report Results For Laboratory Environmental Testing Solutions, Inc.

ERA
A Waters Company

2009 TNI Evaluation Report

Study: **DMR-QA 32**

ERA Customer Number: **E559701**

Laboratory Name: **Environmental Testing Solutions, Inc.**

WET Results

DMR-QA 32 2009 TNI Evaluation Final Complete Report

Kelley E. Keenan
Supervisor
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565
828-350-9364

EPA ID: NC01230
ERA Customer Number: E559701
Report Issued: 07/27/12
Study Dates: 03/19/12 - 07/06/12

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Fathead minnow (Test Code 13) (cat# WET002)											
48Hr., Acute, Non-Renewal, 25° C, MHSF											
Potassium chloride											
0754	LC50	45.1	45.6	23.9 - 67.4	Acceptable	EPA 2000 2002	5/9/2012	-0.0499	45.6	10.9	

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Fathead minnow (Test Code 15) (cat# WET004)											
7-day Short term Chronic, Daily Renewal, MHSF											
Potassium chloride											
0808	IC25 (ON) Growth	32.6	35.5	17.5 - 53.5	Acceptable	EPA 1000 2002	5/15/2012	-0.32	35.5	9.00	
0810	NOEC (ON) Growth	25	25.0	12.5 - 50.0	Acceptable	EPA 1000 2002	5/15/2012	0			
0756	NOEC Survival	25	25.0	12.5 - 50.0	Acceptable	EPA 1000 2002	5/15/2012	0			

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Ceriodaphnia dubia (Test Code 19) (cat# WET008)											
48Hr., Acute Renewal, 25° C, MHSF											
Potassium chloride											
0764	LC50	25.9	34.2	17.9 - 50.4	Acceptable	EPA 2002 2002	4/11/2012	-1.02	34.2	8.10	

DMR-QA 32 2009 TNI Evaluation Final Complete Report

Kelley E. Keenan
Supervisor
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565
828-350-9364

EPA ID: NC01230
ERA Customer Number: E559701
Report Issued: 07/27/12
Study Dates: 03/19/12 - 07/06/12

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Ceriodaphnia dubia (Test Code 21) (cat# WET010)											
7-day Short term Chronic, Daily Renewal, MHSF											
Potassium chloride											
0767	IC25 Reproduction	29.5	25.9	12.3 - 39.5	Acceptable	EPA 1002 2002	4/10/2012	0.527	25.9	6.79	
0768	NOEC Reproduction	25	25.0	12.5 - 50.0	Acceptable	EPA 1002 2002	4/10/2012	0			
0766	NOEC Survival	25	25.0	12.5 - 50.0	Acceptable	EPA 1002 2002	4/10/2012	0			

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Mysid (Test Code 42) (cat# WET016)											
48Hr., Acute, Non-Renewal, 25° C, 40 FSW											
Potassium chloride											
0798	LC50	28.7	36.1	16.2 - 56.0	Acceptable	EPA 2007 2002	4/10/2012	-0.741	36.1	9.96	

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Mysid (Test Code 43) (cat# WET017)											
7-day Short term Chronic, Daily Renewal, 40 FSW											
Potassium chloride											
0816	IC25 (ON) Growth	28.0	28.5	15.4 - 41.7	Acceptable	EPA 1007 2002	4/11/2012	-0.0813	28.5	6.59	
0818	NOEC (ON) Growth	12.5	25.0	12.5 - 50.0	Acceptable	EPA 1007 2002	4/11/2012	0			
0799	NOEC Survival	25	25.0	12.5 - 50.0	Acceptable	EPA 1007 2002	4/11/2012	0			

DMR-QA 32 2009 TNI Evaluation Final Complete Report

Kelley E. Keenan
Supervisor
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565
828-350-9364

EPA ID: NC01230
ERA Customer Number: E559701
Report Issued: 07/27/12
Study Dates: 03/19/12 - 07/06/12

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Inland silverside (Test Code 44) (cat# WET018)											
48Hr., Acute, Non-Renewal, 25° C, 40 FSW											
Potassium chloride											
0803	LC50	61.6	69.8	60.2 - 79.4	Acceptable	EPA 2006 2002	5/12/2012	-1.71	69.8	4.80	

Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Inland Silverside (Test Code 45) (cat# WET013)											
7-day Short term Chronic, Daily Renewal, 40 FSW											
Potassium chloride											
0825	IC25 (ON) Growth	54.2	59.2	49.1 - 69.4	Acceptable	EPA 1006.0 2002	5/12/2012	-0.99	59.2	5.08	
0826	NOEC (ON) Growth	50	50.0	25.0 - 100	Acceptable	EPA 1006.0 2002	5/12/2012	0			
0824	NOEC Survival	50	50.0	25.0 - 100	Acceptable	EPA 1006.0 2002	5/12/2012	0			

ERA
A Waters Company

Final Report Results For Laboratory Environmental Testing Solutions, Inc.

ERA
A Waters Company

2003 NELAC Evaluation Report

Study: **DMR-QA 32**

ERA Customer Number: **E559701**

Laboratory Name: **Environmental Testing Solutions, Inc.**

WET Results

DMR-QA 32 2003 NELAC Evaluation Final Complete Report

Kelley E. Keenan
Supervisor
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565
828-350-9364

EPA ID: NC01230
ERA Customer Number: E559701
Report Issued: 07/27/12
Study Dates: 03/19/12 - 07/06/12

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Fathead minnow (Test Code 13) (cat# WET002)											
48Hr., Acute, Non-Renewal, 25° C, MHSF											
Potassium chloride											
3410	LC50	45.1	45.6	23.9 - 67.4	Acceptable	EPA 2000 2002	5/9/2012	-0.0499	45.6	10.9	

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Fathead minnow (Test Code 15) (cat# WET004)											
7-day Short term Chronic, Daily Renewal, MHSF											
Potassium chloride											
3410	IC25 (ON) Growth	32.6	35.5	17.5 - 53.5	Acceptable	EPA 1000 2002	5/15/2012	-0.32	35.5	9.00	
3410	NOEC (ON) Growth	25	25.0	12.5 - 50.0	Acceptable	EPA 1000 2002	5/15/2012	0			
3410	NOEC Survival	25	25.0	12.5 - 50.0	Acceptable	EPA 1000 2002	5/15/2012	0			

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Ceriodaphnia dubia (Test Code 19) (cat# WET008)											
48Hr., Acute Renewal, 25° C, MHSF											
Potassium chloride											
3315	LC50	25.9	34.2	17.9 - 50.4	Acceptable	EPA 2002 2002	4/11/2012	-1.02	34.2	8.10	

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Ceriodaphnia dubia (Test Code 21) (cat# WET010)											
7-day Short term Chronic, Daily Renewal, MHSF											
Potassium chloride											
3315	IC25 Reproduction	29.5	25.9	12.3 - 39.5	Acceptable	EPA 1002 2002	4/10/2012	0.527	25.9	6.79	
3315	NOEC Reproduction	25	25.0	12.5 - 50.0	Acceptable	EPA 1002 2002	4/10/2012	0			
3315	NOEC Survival	25	25.0	12.5 - 50.0	Acceptable	EPA 1002 2002	4/10/2012	0			

DMR-QA 32 2003 NELAC Evaluation Final Complete Report

Kelley E. Keenan
Supervisor
Environmental Testing Solutions, Inc.
PO Box 7565
Asheville, NC 28802-7565
828-350-9364

EPA ID: NC01230
ERA Customer Number: E559701
Report Issued: 07/27/12
Study Dates: 03/19/12 - 07/06/12

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Mysid (Test Code 42) (cat# WET016)											
48Hr., Acute, Non-Renewal, 25° C, 40 FSW											
Potassium chloride											
3395	LC50	28.7	36.1	16.2 - 56.0	Acceptable	EPA 2007 2002	4/10/2012	-0.741	36.1	9.96	

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Mysid (Test Code 43) (cat# WET017)											
7-day Short term Chronic, Daily Renewal, 40 FSW											
Potassium chloride											
3395	IC25 (ON) Growth	28.0	28.5	15.4 - 41.7	Acceptable	EPA 1007 2002	4/11/2012	-0.0813	28.5	6.59	
3395	NOEC (ON) Growth	12.5	25.0	12.5 - 50.0	Acceptable	EPA 1007 2002	4/11/2012	0			
3395	NOEC Survival	25	25.0	12.5 - 50.0	Acceptable	EPA 1007 2002	4/11/2012	0			

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Inland silverside (Test Code 44) (cat# WET018)											
48Hr., Acute, Non-Renewal, 25° C, 40 FSW											
Potassium chloride											
3380	LC50	61.6	69.8	60.2 - 79.4	Acceptable	EPA 2006 2002	5/12/2012	-1.71	69.8	4.80	

TNI Analyte Code	Test End Point	Reported Value	Assigned Value %	Acceptance Limits %	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
DMRQA Inland Silverside (Test Code 45) (cat# WET013)											
7-day Short term Chronic, Daily Renewal, 40 FSW											
Potassium chloride											
3380	IC25 (ON) Growth	54.2	59.2	49.1 - 69.4	Acceptable	EPA 1006.0 2002	5/12/2012	-0.99	59.2	5.08	
3380	NOEC (ON) Growth	50	50.0	25.0 - 100	Acceptable	EPA 1006.0 2002	5/12/2012	0			
3380	NOEC Survival	50	50.0	25.0 - 100	Acceptable	EPA 1006.0 2002	5/12/2012	0			