



A Waters Company

**Denise MacDuff**  
**SGS Galson Laboratories**  
**6601 Kirkville Road**  
**East Syracuse, NY 13057**  
**USA**



# Air and Emissions Proficiency Testing

**Air and Emissions Study**

**Open Date: 01/30/17**

**Close Date: 03/16/17**

**Report Issued Date: 03/20/17**



A Waters Company

March 20, 2017

Denise MacDuff  
SGS Galson Laboratories  
6601 Kirkville Road  
East Syracuse, NY 13057

Enclosed is your final report for ERA's AE-39 Air and Emissions Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

All analytes in ERA's AE-39 Air and Emissions Proficiency Testing (PT) study have been evaluated using the following tiered approach: ERA has gathered proficiency testing data for air and emissions across many national and international studies. Where available, the acceptance criteria have been calculated using these studies' data. Where appropriate, ERA has based the acceptance criteria on the study means and study standard deviations. If the analyte is on the TNI FoPT table, it has been evaluated by comparing your results to the acceptance limits and evaluation criteria contained in the current TNI FoPT tables. Where these data were not available, the reported results have been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 730002268).

Corrective Action Help: 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 your routine data quality. Our laboratory and technical staff have many years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be useful in helping you work through your technical issues.

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.

Thank you for your participation in ERA's AE-39 Air and Emissions Proficiency Testing (PT) study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink that reads "Patrick Larson". The signature is written in a cursive, flowing style.

Patrick Larson  
Quality Officer

attachments



A Waters Company

<b>Report Recipient</b>	<b>Contact/Phone Number</b>	<b>Reporting Type</b>	<b>Evaluation Type</b>
Louisiana	Paul Bergeron / 225-219-3185	All Analytes	2009 TNI
New Jersey	Rachel Ellis / 609-777-1749	All Analytes	2009 TNI



# AE-39 Definitions & Study Discussion

**Study Dates: 01/30/17 - 03/16/17**

**Report Issued: 03/20/17**

## AE Study Definitions

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

The Assigned Values for ERA's Air and Emissions Proficiency Testing (PT) Standards are equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation as applicable. 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 2009 TNI Standards criteria 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.

## AE Study Discussion

ERA's AE-39 Air and Emissions Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) tables.

ERA's AE-39 Air and Emissions 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 most current TNI 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.

ERA's AE-39 Air and Emissions study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

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

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





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# AE-39 Laboratory Exception Report

**Denise MacDuff**  
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6601 Kirkville Road  
East Syracuse, NY 13057  
(315) 671-3933

**EPA ID:**  
**ERA Customer Number:**  
**Report Issued:**  
**Study Dates:**

**NY00056**  
**G052601**  
**03/20/17**  
**01/30/17 - 03/16/17**

## 2009 TNI Evaluation Checks

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.





# Final Report Results For Laboratory SGS Galson Laboratories



## 2009 TNI Evaluation Report

Study: **AE-39**

ERA Customer Number: **G052601**

Laboratory Name: **SGS Galson  
Laboratories**

### Inorganic Results



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# AE-39 2009 TNI Evaluation Final Complete Report

Denise MacDuff  
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(315) 671-3933

EPA ID:  
ERA Customer Number:  
Report Issued:  
Study Dates:

NY00056  
G052601  
03/20/17  
01/30/17 - 03/16/17

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
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**AE Hexavalent Chromium in Impinger Solution (cat# 1032, lot# E039-1132)**

1045	Hexavalent Chromium	µg/L	790	777	685 - 855	Acceptable	IC-SOP-15 v.18	2/24/2017	1.27	767	18.4	
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**AE Particulate Matter on Filter Paper (cat# 1050, lot# E039-1150)**

3915	Particulate matter	mg/filter	136	133	114 - 152	Acceptable	modified NIOSH 0500 2	2/17/2017	-0.139	136	2.59	
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## 2009 TNI Evaluation Report

Study: **AE-39**

ERA Customer Number: **G052601**

Laboratory Name: **SGS Galson  
Laboratories**

### Organic Results



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# AE-39 2009 TNI Evaluation Final Complete Report

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**AE Volatiles in Gas Cylinder (cat# 1000, lot# E039-1100)**

4315	Acetone	ppbv	< 5.00	< 5.00	0.00 - 5.00	Acceptable	EPA TO-15 1999	2/16/2017				
4375	Benzene	ppbv	11.5	13.1	9.82 - 15.4	Acceptable	EPA TO-15 1999	2/16/2017	-0.807	12.6	1.41	
5635	Benzyl chloride	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4395	Bromodichloromethane	ppbv	13.7	15.3	11.2 - 19.5	Acceptable	EPA TO-15 1999	2/16/2017	-0.790	15.3	2.08	
4400	Bromoform	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4950	Bromomethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
9318	1,3-Butadiene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4410	2-Butanone (MEK)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5000	tert-Butyl methyl ether (MTBE)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4450	Carbon disulfide	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4455	Carbon tetrachloride	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4475	Chlorobenzene	ppbv	9.38	10.6	7.46 - 11.9	Acceptable	EPA TO-15 1999	2/16/2017	-0.264	9.67	1.11	
4575	Chlorodibromomethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4485	Chloroethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4505	Chloroform	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4960	Chloromethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4555	Cyclohexane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4585	1,2-Dibromoethane (EDB)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4610	1,2-Dichlorobenzene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4615	1,3-Dichlorobenzene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				





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**AE Volatiles in Gas Cylinder (cat# 1000, lot# E039-1100) (Continued)**

4620	1,4-Dichlorobenzene	ppbv	17.2	21.2	13.4 - 27.0	Acceptable	EPA TO-15 1999	2/16/2017	-0.889	20.2	3.38	
4625	Dichlorodifluoromethane (Freon 12)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4630	1,1-Dichloroethane	ppbv	12.9	13.9	10.3 - 17.2	Acceptable	EPA TO-15 1999	2/16/2017	-0.492	13.8	1.74	
4635	1,2-Dichloroethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4640	1,1-Dichloroethylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4645	cis-1,2-Dichloroethylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4700	trans-1,2-Dichloroethylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4655	1,2-Dichloropropane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4680	cis-1,3-Dichloropropylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4685	trans-1,3-Dichloropropylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4695	1,2-Dichlorotetrafluoroethane (Freon 114)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4755	Ethyl acetate	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4765	Ethylbenzene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4542	p-Ethyltoluene	ppbv	24.3	26.1	15.9 - 35.0	Acceptable	EPA TO-15 1999	2/16/2017	-0.244	25.5	4.78	
4825	n-Heptane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4835	Hexachlorobutadiene	ppbv		< 5.00	0.00 - 5.00	Not Reported						
4855	n-Hexane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4860	2-Hexanone	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
4895	Isopropyl alcohol	ppbv	< 5.00	< 5.00	0.00 - 5.00	Acceptable	EPA TO-15 1999	2/16/2017				
4995	4-Methyl-2-pentanone (MIBK)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				





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**AE Volatiles in Gas Cylinder (cat# 1000, lot# E039-1100) (Continued)**

4975	Methylene chloride	ppbv	< 5.00	< 5.00	0.00 - 5.00	Acceptable	EPA TO-15 1999	2/16/2017				
4990	Methyl methacrylate	ppbv		< 2.00	0.00 - 2.00	Not Reported						
4836	Propylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5100	Styrene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5110	1,1,2,2-Tetrachloroethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5115	Tetrachloroethylene	ppbv	8.71	9.53	6.46 - 12.1	Acceptable	EPA TO-15 1999	2/16/2017	-0.392	9.26	1.40	
5140	Toluene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5155	1,2,4-Trichlorobenzene	ppbv		< 5.00	0.00 - 5.00	Not Reported						
5160	1,1,1-Trichloroethane	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5165	1,1,2-Trichloroethane	ppbv	16.8	19.9	14.3 - 22.5	Acceptable	EPA TO-15 1999	2/16/2017	-0.769	18.4	2.06	
5170	Trichloroethylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5175	Trichlorofluoromethane (Freon 11)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5185	Trichlorotrifluoroethane (Freon 113)	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5210	1,2,4-Trimethylbenzene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5215	1,3,5-Trimethylbenzene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5235	Vinyl chloride	ppbv	19.8	20.8	15.8 - 26.2	Acceptable	EPA TO-15 1999	2/16/2017	-0.471	21.0	2.59	
5240	m&p-Xylene	ppbv	20.7	21.9	11.1 - 29.7	Acceptable	EPA TO-15 1999	2/16/2017	0.0866	20.4	3.09	
5250	o-Xylene	ppbv	< 2.00	< 2.00	0.00 - 2.00	Acceptable	EPA TO-15 1999	2/16/2017				
5260	Xylenes, total	ppbv	20.7	21.9	14.2 - 26.6	Acceptable	EPA TO-15 1999	2/16/2017	0.0866	20.4	3.09	



# CERTIFICATE OF EXCELLENCE

In recognition of the quality of your laboratory in proficiency testing for

AE-39

SGS Galson Laboratories

is issued this certificate of achievement by ERA. This laboratory has been recognized as a Laboratory of Excellence for achieving 100% acceptable data in this study which included 77 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

Hexavalent Chromium in  
Impinger Solution

Particulate Matter on Filter  
Paper

Volatiles in Gas Cylinder



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Patrick Larson  
Quality Officer