



Emily Lloyd
Commissioner

Pamela Elardo, P.E.
Deputy Commissioner

Bureau of Wastewater Treatment
96-05 Horace Harding
Expressway – 2nd Floor
Corona, NY 11368

Tel. (718) 595-6924
Fax (718) 595-4084

July 29, 2016

Tom Gentile
Bureau of Air Quality Analysis and Research
Division of Air Resources
NYSDEC
625 Broadway
Albany, NY 12233

Margaret Valis
Bureau of Stationary Sources
Division of Air Resources
NYSDEC
625 Broadway
Albany, NY 12233

Re: North River Wastewater Treatment Plant Order on Consent
DEC Case Nos.: R2-20010713-146 and R2-3669-91-05
Formaldehyde Monitoring Report for the Second Quarter of 2016

Dear Mr. Gentile and Ms. Valis:

The New York City Department of Environmental Protection (“DEP”) is submitting to the New York State Department of Environmental Conservation (“DEC”) the North River Wastewater Treatment Plant (“WWTP”) Quarterly Formaldehyde Monitoring Report for the Second Quarter of 2016 (the “Report”). This Report is submitted pursuant to Section III.C of the above referenced North River WWTP Order on Consent (the “Order”), dated July 31, 2012.

This Report includes the laboratory certification and results of the formaldehyde monitoring performed from April through June of 2016 in accordance with the DEP Formaldehyde Monitoring Plan, approved by DEC on May 26, 2015. The data information contained in this Report, up to June 15, 2016, was previously sent to DEC on July 14, 2016.

If you have any questions or require any additional information, please feel free to contact Leslie Lipton, Chief of Division of Pollution Control and Monitoring at (718) 595-4730.

Sincerely,



Pam Elardo, P.E.
Deputy Commissioner

Attachment

North River Wastewater Treatment Plant

Quarterly Formaldehyde Monitoring Report for Second Quarter of 2016

Submitted by:

New York City Department of Environmental Protection

96-05 Horace Harding Expressway, 2nd floor
Corona, New York 11368

Prepared by:

The Louis Berger Group, Inc.

48 Wall Street 16th Floor
New York, NY 10005



On Behalf of:

New York City Department of Environmental Protection

July 15, 2016

2nd Quarter 2016

Project No. 2001285.06.02

Contents

SECTION 1	INTRODUCTION.....	3
SECTION 2	LOCATION	3
SECTION 3	TEST METHODS.....	3
SECTION 4	RESULTS.....	3
4.1	MET Tower Data	3
4.2	Electronic Data.....	3
	LIST OF APPENDICES.....	4

SECTION 1 INTRODUCTION

Pursuant to Section III.A.(ii) of the 2012 Administrative Order on Consent (Order), R2 20010713 146, between the New York City Department of Environmental Protection (DEP) and the New York State Department of Environmental Conservation (DEC), DEP conducted a dispersion modeling analysis for the North River Wastewater Treatment Plant (WWTP) to evaluate potential offsite impacts of emissions from the WWTP. Based upon the results of that analysis and pursuant to the Order, DEP submitted a Standard Operating Procedure (SOP) to the DEC for review and approval. The SOP was approved by DEC in May 2015.

This Standard Operation Procedure (SOP) document presents SOPs for conducting one year of formaldehyde monitoring every six (6) days at the existing North River H₂S Air Quality Monitoring Network's Station 5 within the Riverbank State Park on the roof of the WWTP.

This quarterly monitoring report presents laboratory results with respect to formaldehyde monitoring from April 1, 2016 through June 30, 2016.

SECTION 2 LOCATION

The formaldehyde monitoring location is at the existing DEC approved North River WWTP H₂S Air Quality Monitoring Network's Station 5. Ambient air samples are collected for formaldehyde monitoring once every 6 days, for two consecutive 12-hour periods at this location. The samples were analyzed by Eurofins Air Toxics, Inc. laboratory located in Folsom, CA and their accreditation is presented in Appendix D.

SECTION 3 TEST METHODS

EPA Method TO-11A is a method for the determination of formaldehyde in ambient air utilizing a coated-solid adsorbent followed by high performance liquid chromatographic detection. Method TO-11A has the sensitivity needed to reach health-based detection limits (10^{-6} risk level).

SECTION 4 RESULTS

The Formaldehyde concentrations averaged $16.5\mu\text{g}/\text{m}^3$ for the first 12 hours (0600-1800) and $18.7\mu\text{g}/\text{m}^3$ for the second 12 hours (1815-0615) for the quarter. The laboratory results and Chain-of-Custody are compiled in Appendix A.

4.1 MET Tower Data

Meteorological Tower Data is presented in Appendix B for each sampling event.

4.2 Electronic Data

Information about the flow rates and sample volumes are included in Appendix C.

LIST OF APPENDICES

Appendix A: Laboratory Results and Chain-of-Custody

Appendix B: Met Tower Data

Appendix C: Flow Rate and Volume

Appendix D: Laboratory Accreditation

APPENDIX A

Laboratory Results and Chain-of-Custody

4/20/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1604131

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 4/7/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1604131

Work Order Summary

CLIENT:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960	BILL TO:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960
PHONE:	973-407-1000	P.O. #	2001285.06.02
FAX:		PROJECT #	North River WWTP
DATE RECEIVED:	04/07/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	04/20/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-040416	Modified TO-11A
02A	Formaldehyde-002-040416	Modified TO-11A
03A	Formaldehyde-003-040416	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: 

 Technical Director

DATE: 04/20/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1604131

Three TO-11 Cartridge samples were received on April 07, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD \leq 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was not included with the shipment. Temperature was measured on a representative sample and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

The Chain of Custody (COC) was not relinquished properly. A signature/date were not provided by the field sampler.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-040416 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-040416

Lab ID#: 1604131-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.5	6.2

Client Sample ID: Formaldehyde-002-040416

Lab ID#: 1604131-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.7	5.2

Client Sample ID: Formaldehyde-003-040416

Lab ID#: 1604131-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-040416

Lab ID#: 1604131-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420008	Date of Collection:	4/4/16
Dil. Factor:	1.00	Date of Analysis:	4/20/16 01:03 PM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.5	6.2

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-040416

Lab ID#: 1604131-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420009	Date of Collection:	4/4/16
Dil. Factor:	1.00	Date of Analysis:	4/20/16 01:29 PM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.7	5.2

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-040416

Lab ID#: 1604131-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420006	Date of Collection:	4/4/16
Dil. Factor:	1.00	Date of Analysis:	4/20/16 12:11 PM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1604131-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 11:45 AM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1604131-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 10:54 AM
		Date of Extraction:	4/18/16

Compound	%Recovery	Method Limits
Formaldehyde	106	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1604131-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 11:19 AM
		Date of Extraction:	4/18/16

Compound	%Recovery	Method Limits
Formaldehyde	110	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

SORBENT SAMPLE COLLECTION



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
 Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Airtoxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Airtoxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4822.

180 BLUE RAVINE ROAD, SUITE B
 FOLSOM, CA 95630
 (916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Collected by: (Print and Sign) Rhine Almondach
 Company Loius Berger Email rdammann@loiusberger.com
 Address 48 Wall St 14th Floor New York State NY 10038
 Phone 973-418-1267 Fax _____

Project Info:
 Project # _____
 Project # _____
 Project Name Work River WWTTP

Turn Around Time: Normal Push
 Circle Reporting Units: ug/m3 ppbv ppmv mg/m3

Lab ID	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested	
01A	Fornaldelhyde-001-040416	channel 1	4/4/16	9:15	21:15	12h	713.2	TD-11A Fornaldelhyde	
02A	Fornaldelhyde-002-040416	channel 2	4/4/16	21:30	9:30	12h	712.9	↓	
03A	Fornaldelhyde-003-040416	Blank	4/4/16	-	-	-	-	-	
Relinquished by: (signature) _____ Date/Time _____		Received by: (signature) <u>Rhine Almondach</u> Date/Time <u>4-7-16</u>		Pump Calibration Information		Pre-test Flow Rate: _____			
Relinquished by: (signature) _____ Date/Time _____		Received by: (signature) _____ Date/Time _____		Post-test Flow Rate: _____		Average Flow Rate: _____			
Relinquished by: (signature) _____ Date/Time _____		Received by: (signature) _____ Date/Time _____		Notes: _____		Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None			

Lab Use Only
 Shipper Name WPS
 Air Bill # _____
 Temp (C) 17.0°C
 Condition SAR

Work Order # 1604131

4/23/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #: 2001285.06.02

Workorder #: 1604207

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 4/12/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1604207

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

FAX:

DATE RECEIVED: 04/12/2016

DATE COMPLETED: 04/23/2016

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

P.O. # 2001285.06.02

PROJECT # 2001285.06.02 North River WWTP

CONTACT: Ausha Scott

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-041016	Modified TO-11A
02A	Formaldehyde001-041016	Modified TO-11A
03A	Formaldehyde001-041016	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: _____



Technical Director

DATE: 04/23/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1604207

Three TO-11 Cartridge samples were received on April 12, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde001-041016 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde001-041016

Lab ID#: 1604207-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.1	7.2

Client Sample ID: Formaldehyde001-041016

Lab ID#: 1604207-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	7.6	11

Client Sample ID: Formaldehyde001-041016

Lab ID#: 1604207-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde001-041016

Lab ID#: 1604207-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420010	Date of Collection:	4/10/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	4/20/16 01:55 PM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.1	7.2

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde001-041016

Lab ID#: 1604207-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420011	Date of Collection:	4/10/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	4/20/16 02:21 PM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	7.6	11

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde001-041016

Lab ID#: 1604207-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420007	Date of Collection:	4/10/16
Dil. Factor:	1.00	Date of Analysis:	4/20/16 12:37 PM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1604207-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 11:45 AM
		Date of Extraction:	4/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1604207-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 10:54 AM
		Date of Extraction:	4/18/16

Compound	%Recovery	Method Limits
Formaldehyde	106	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1604207-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 11:19 AM
		Date of Extraction:	4/18/16

Compound	%Recovery	Method Limits
Formaldehyde	110	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

4/23/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name:
Project #: 2001.285.06.02
Workorder #: 1604401

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 4/20/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott
Project Manager

WORK ORDER #: 1604401

Work Order Summary

CLIENT:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960	BILL TO:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960
PHONE:	973-407-1000	P.O. #	2001285.06.02
FAX:		PROJECT #	2001.285.06.02
DATE RECEIVED:	04/20/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	04/23/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-041616	Modified TO-11A
02A	Formaldehyde 002-041616	Modified TO-11A
03A	Formaldehyde 003-041616	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: 

DATE: 04/23/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1604401

Three TO-11 Cartridge samples were received on April 20, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-041616 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde 001-041616

Lab ID#: 1604401-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	9.9	14

Client Sample ID: Formaldehyde 002-041616

Lab ID#: 1604401-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	10	14

Client Sample ID: Formaldehyde 003-041616

Lab ID#: 1604401-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde 001-041616

Lab ID#: 1604401-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420019	Date of Collection:	4/16/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	4/20/16 07:42 PM
		Date of Extraction:	4/20/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	9.9	14

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 002-041616

Lab ID#: 1604401-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420020	Date of Collection:	4/16/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	4/20/16 08:08 PM
		Date of Extraction:	4/20/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	10	14

Air Sample Volume(L): 712

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 003-041616

Lab ID#: 1604401-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420021	Date of Collection:	4/16/16
Dil. Factor:	1.00	Date of Analysis:	4/20/16 08:34 PM
		Date of Extraction:	4/20/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1604401-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420016	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 06:25 PM
		Date of Extraction:	4/20/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1604401-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420014	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 05:33 PM
		Date of Extraction:	4/20/16

Compound	%Recovery	Method Limits
Formaldehyde	100	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1604401-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0420015	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/16 05:59 PM
		Date of Extraction:	4/20/16

Compound	%Recovery	Method Limits
Formaldehyde	104	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

5/7/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #: 2001.285.06.02

Workorder #: 1604518

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 4/26/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1604518

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

FAX:

DATE RECEIVED: 04/26/2016

DATE COMPLETED: 05/07/2016

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

P.O. # 2001285.06.02

PROJECT # 2001.285.06.02 North River WWTP

CONTACT: Ausha Scott

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-042216	Modified TO-11A
02A	Formaldehyde 002-042216	Modified TO-11A
03A	Formaldehyde 003-042216	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: _____



Technical Director

DATE: 05/07/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1604518

Three TO-11 Cartridge samples were received on April 26, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of ice/blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-042216 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde 001-042216

Lab ID#: 1604518-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	18	24

Client Sample ID: Formaldehyde 002-042216

Lab ID#: 1604518-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	17	24

Client Sample ID: Formaldehyde 003-042216

Lab ID#: 1604518-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde 001-042216

Lab ID#: 1604518-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0429059	Date of Collection:	4/22/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	4/30/16 08:48 AM
		Date of Extraction:	4/29/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	18	24

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 002-042216

Lab ID#: 1604518-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0429060	Date of Collection:	4/22/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	4/30/16 09:14 AM
		Date of Extraction:	4/29/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	17	24

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 003-042216

Lab ID#: 1604518-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0429058	Date of Collection:	4/22/16
Dil. Factor:	1.00	Date of Analysis:	4/30/16 08:22 AM
		Date of Extraction:	4/29/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1604518-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0429057	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/30/16 07:56 AM
		Date of Extraction:	4/29/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1604518-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0429055	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/30/16 07:04 AM
		Date of Extraction:	4/29/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1604518-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0429056	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/30/16 07:30 AM
		Date of Extraction:	4/29/16

Compound	%Recovery	Method Limits
Formaldehyde	94	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

SORBENT SAMPLE COLLECTION



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and International laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Rhine Amoracy
 Collected by: (Print and Sign) Rhine Amoracy
 Company Louis BSR LLC Email _____
 Address 48 Wall St 12th Fl New York State NY Zip 10005
 Phone 212-612-7951 Fax _____

Project Info:
 P.O. # _____
 Project # 2001-285-0602
 Project Name North R. + S. RWYTP

Turn Around Time: Normal Rush
 Circle Reporting Units: ppbv ppmv
 $\mu\text{g}/\text{m}^3$ mg/m^3
specify

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
01a	Formaldehyde 001-002216	04/22/16	0600	1800	720	713.0	70-11A Formaldehyde	
02a	Formaldehyde 002-002216	1815	0615	720	712.7	70-11A Formaldehyde		
03a	Formaldehyde 003-002216	0920	0920	0920	0920	0920	0920	
Relinquished by: (signature) _____ Date/Time <u>4/25/16 1700</u> Received by: (signature) <u>Andrew Martin</u> Date/Time <u>0920</u> Relinquished by: (signature) _____ Date/Time _____ Received by: (signature) _____ Date/Time _____								
Relinquished by: (signature) _____ Date/Time _____ Received by: (signature) _____ Date/Time _____								
Average Flow Rate: _____ Post-test Flow Rate: _____ Notes: _____								
Pump Calibration Information Pre-test Flow Rate: _____ Post-test Flow Rate: _____								
Lab Use Only Shipper Name <u>WFS</u> Air Bill # _____ Temp (°C) <u>16.2</u> Condition <u>Good SDR</u> Custody Seals Intact? <u>Yes</u> No <u>None</u> Work Order # <u>1604518</u>								

5/18/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1605008

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 5/2/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1605008

Work Order Summary

CLIENT:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960	BILL TO:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960
PHONE:	973-407-1000	P.O. #	2001285.06.02
FAX:		PROJECT #	North River WWTP
DATE RECEIVED:	05/02/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	05/18/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-042816	Modified TO-11A
02A	Formaldehyde 002-042816	Modified TO-11A
03A	Formaldehyde 003-042816	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: 

 Technical Director

DATE: 05/18/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1605008

Three TO-11 Cartridge samples were received on May 02, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of ice/blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-042816 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde 001-042816

Lab ID#: 1605008-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	8.3	12

Client Sample ID: Formaldehyde 002-042816

Lab ID#: 1605008-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	9.2	13

Client Sample ID: Formaldehyde 003-042816

Lab ID#: 1605008-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde 001-042816

Lab ID#: 1605008-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0517007	Date of Collection:	4/28/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	5/17/16 04:06 PM
		Date of Extraction:	5/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	8.3	12

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 002-042816

Lab ID#: 1605008-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0517008	Date of Collection:	4/28/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	5/17/16 04:32 PM
		Date of Extraction:	5/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	9.2	13

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 003-042816

Lab ID#: 1605008-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0517006	Date of Collection:	4/28/16
Dil. Factor:	1.00	Date of Analysis:	5/17/16 03:40 PM
		Date of Extraction:	5/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1605008-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0517005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/17/16 03:14 PM
		Date of Extraction:	5/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1605008-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0517003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/17/16 02:23 PM
		Date of Extraction:	5/12/16

Compound	%Recovery	Method Limits
Formaldehyde	96	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1605008-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0517004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/17/16 02:48 PM
		Date of Extraction:	5/12/16

Compound	%Recovery	Method Limits
Formaldehyde	93	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

SORBENT SAMPLE COLLECTION



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
 Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE PAVINE ROAD, SUITE B
 FOLSOM, CA 95630
 (916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Rhine Almonay
 Collected by: (Print and Sign) Chen Liang
 Company Lewis Berger Email ralmonay@louisberger.com
 Address 48 Wall St 14th Fl City New York State NY zip 10005
 Phone 973-418-1267 Fax _____

Project Info:		Turn Around Time:		Circle Reporting Units:	
P.O. # _____	Project # _____	<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Rush	ppbv	ppmv
Project Name <u>North River WWTTP</u>		specify _____		<u>ug/m³</u>	mg/m ³

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
01a	Formaldehyde 001 - 042816		4/28/16	6:00	18:00	12h	713.0	To-11A Formaldehyde
02a	Formaldehyde 002 - 042816		4/28/16	18:15	6:15	12h	712.7	To-11A Formaldehyde
03a	Formaldehyde 003 - 042816		4/28/16	N/A	N/A	N/A	N/A	To-11A Formaldehyde

Relinquished by: (signature) <u>Chen Liang</u>	Date/Time <u>4/29/16 11:22</u>	Received by: (signature) <u>Richard Bernati</u>	Date/Time <u>5/2/16 10:15</u>	Pump Calibration Information	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Pre-test Flow Rate:	Post-test Flow Rate:
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Average Flow Rate:	Notes:

Lab Use Only	Shipper Name <u>WDS</u>	Air Bill #	Temp (°C) <u>19.8°C</u>	Condition <u>SDR</u>	Custody Seals Intact? <u>Yes</u> <u>No</u> <u>None</u>	Work Order # <u>1605003</u>
--------------	-------------------------	------------	-------------------------	----------------------	--	-----------------------------

5/26/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1605142

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 5/6/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1605142

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 05/06/2016

CONTACT: Ausha Scott

DATE COMPLETED: 05/26/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formeldehyde-001-050416	Modified TO-11A
02A	Formeldehyde-002-050416	Modified TO-11A
03A	Formeldehyde-003-050416	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 05/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1605142

Three TO-11 Cartridge samples were received on May 06, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of ice/blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-050416 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formeldehyde-001-050416

Lab ID#: 1605142-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.7	8.0

Client Sample ID: Formeldehyde-002-050416

Lab ID#: 1605142-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.8	8.1

Client Sample ID: Formeldehyde-003-050416

Lab ID#: 1605142-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formeldehyde-001-050416

Lab ID#: 1605142-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525010	Date of Collection:	5/4/16 10:15:00 PM
Dil. Factor:	1.00	Date of Analysis:	5/25/16 06:48 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.7	8.0

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formeldehyde-002-050416

Lab ID#: 1605142-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525011	Date of Collection:	5/4/16 10:30:00 AM
Dil. Factor:	1.00	Date of Analysis:	5/25/16 07:14 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.8	8.1

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formeldehyde-003-050416

Lab ID#: 1605142-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525008	Date of Collection:	5/4/16
Dil. Factor:	1.00	Date of Analysis:	5/25/16 05:56 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1605142-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525007	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/25/16 05:31 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1605142-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/25/16 04:39 PM
		Date of Extraction: 5/18/16

Compound	%Recovery	Method Limits
Formaldehyde	92	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1605142-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525006	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/25/16 05:05 PM
		Date of Extraction:	5/18/16

Compound	%Recovery	Method Limits
Formaldehyde	91	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

5/26/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1605236

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 5/12/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1605236

Work Order Summary

CLIENT:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960	BILL TO:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960
PHONE:	973-407-1000	P.O. #	2001285.06.02
FAX:		PROJECT #	North River WWTP
DATE RECEIVED:	05/12/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	05/26/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-051016	Modified TO-11A
02A	Formaldehyde-002-051016	Modified TO-11A
03A	Formaldehyde-003-051016	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: 

 Technical Director

DATE: 05/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1605236

Three TO-11 Cartridge samples were received on May 12, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-051016 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-051016

Lab ID#: 1605236-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	15

Client Sample ID: Formaldehyde-002-051016

Lab ID#: 1605236-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	16

Client Sample ID: Formaldehyde-003-051016

Lab ID#: 1605236-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-051016

Lab ID#: 1605236-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525012	Date of Collection:	5/10/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	5/25/16 07:40 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	15

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-051016

Lab ID#: 1605236-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525013	Date of Collection:	5/10/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	5/25/16 08:06 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	16

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-051016

Lab ID#: 1605236-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525009	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/25/16 06:22 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1605236-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525007	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/25/16 05:31 PM
		Date of Extraction:	5/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1605236-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/25/16 04:39 PM
		Date of Extraction:	5/18/16

Compound	%Recovery	Method Limits
Formaldehyde	92	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1605236-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0525006	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/25/16 05:05 PM
		Date of Extraction:	5/18/16

Compound	%Recovery	Method Limits
Formaldehyde	91	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

6/2/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1605391

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 5/19/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1605391

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 05/19/2016

CONTACT: Ausha Scott

DATE COMPLETED: 06/02/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-051616	Modified TO-11A
02A	Formaldehyde-002-051616	Modified TO-11A
03A	Formaldehyde-003-051616	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 06/02/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1605391

Three TO-11 Cartridge samples were received on May 19, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-051616 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-051616

Lab ID#: 1605391-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	10	14

Client Sample ID: Formaldehyde-002-051616

Lab ID#: 1605391-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	15

Client Sample ID: Formaldehyde-003-051616

Lab ID#: 1605391-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-051616

Lab ID#: 1605391-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527008	Date of Collection:	5/16/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	5/27/16 02:38 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	10	14

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-051616

Lab ID#: 1605391-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527009	Date of Collection:	5/16/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	5/27/16 03:04 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	15

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-051616

Lab ID#: 1605391-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527006	Date of Collection:	5/16/16
Dil. Factor:	1.00	Date of Analysis:	5/27/16 01:46 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1605391-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 01:20 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1605391-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 12:28 PM
		Date of Extraction:	5/27/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1605391-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 12:54 PM
		Date of Extraction:	5/27/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

6/7/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1605460

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 5/24/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1605460

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 05/24/2016

CONTACT: Ausha Scott

DATE COMPLETED: 06/07/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-052216	Modified TO-11A
02A	Formaldehyde-002-052216	Modified TO-11A
03A	Formaldehyde-003-052216	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 06/07/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1605460

Three TO-11 Cartridge samples were received on May 24, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of ice/blue ice was present. Analysis proceeded.

Sample collection date was not provided on the Chain of Custody for samples Formaldehyde-001-052216, Formaldehyde-002-052216 and Formaldehyde-003-052216.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 1170 L was used to report sample Formaldehyde-003-052216 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates

as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-052216

Lab ID#: 1605460-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	13	18

Client Sample ID: Formaldehyde-002-052216

Lab ID#: 1605460-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.043	23	20

Client Sample ID: Formaldehyde-003-052216

Lab ID#: 1605460-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-052216

Lab ID#: 1605460-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527010	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 03:30 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	13	18

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-052216

Lab ID#: 1605460-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527011	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 03:56 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.043	23	20

Air Sample Volume(L): 1170

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-052216

Lab ID#: 1605460-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527007	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 02:12 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.043	Not Detected	Not Detected

Air Sample Volume(L): 1170

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1605460-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 01:20 PM
		Date of Extraction:	5/27/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.043	Not Detected	Not Detected

Air Sample Volume(L): 1170

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1605460-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 12:28 PM
		Date of Extraction:	5/27/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1605460-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0527004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/27/16 12:54 PM
		Date of Extraction:	5/27/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

6/14/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1606006

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 6/1/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1606006

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 06/01/2016

CONTACT: Ausha Scott

DATE COMPLETED: 06/14/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-052816	Modified TO-11A
02A	Formaldehyde-002-052816	Modified TO-11A
03A	Formaldehyde-003-052816	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: _____



Technical Director

DATE: 06/14/16 _____

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1606006

Three TO-11 Cartridge samples were received on June 01, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-052816 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-052816

Lab ID#: 1606006-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	15	21

Client Sample ID: Formaldehyde-002-052816

Lab ID#: 1606006-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	16	22

Client Sample ID: Formaldehyde-003-052816

Lab ID#: 1606006-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-052816

Lab ID#: 1606006-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0609007	Date of Collection:	5/28/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	6/9/16 07:32 PM
		Date of Extraction:	6/9/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	15	21

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-052816

Lab ID#: 1606006-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0609008	Date of Collection:	5/28/16 6:00:00 AM
Dil. Factor:	1.00	Date of Analysis:	6/9/16 07:58 PM
		Date of Extraction:	6/9/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	16	22

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-052816

Lab ID#: 1606006-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0609006	Date of Collection:	5/28/16
Dil. Factor:	1.00	Date of Analysis:	6/9/16 07:06 PM
		Date of Extraction:	6/9/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606006-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0609005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/9/16 06:40 PM
		Date of Extraction:	6/9/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1606006-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0609003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/9/16 05:48 PM
		Date of Extraction:	6/9/16

Compound	%Recovery	Method Limits
Formaldehyde	89	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1606006-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0609004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/9/16 06:14 PM
		Date of Extraction:	6/9/16

Compound	%Recovery	Method Limits
Formaldehyde	89	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

6/21/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1606166

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 6/8/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1606166

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 06/08/2016

CONTACT: Ausha Scott

DATE COMPLETED: 06/21/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-060316	Modified TO-11A
02A	Formaldehyde 002-060316	Modified TO-11A
03A	Formaldehyde 003-060316	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 06/21/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1606166

Three TO-11 Cartridge samples were received on June 08, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-060316 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde 001-060316

Lab ID#: 1606166-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	15	21

Client Sample ID: Formaldehyde 002-060316

Lab ID#: 1606166-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	14	20

Client Sample ID: Formaldehyde 003-060316

Lab ID#: 1606166-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde 001-060316

Lab ID#: 1606166-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0617027	Date of Collection:	6/3/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	6/18/16 02:25 AM
		Date of Extraction:	6/17/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	15	21

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 002-060316

Lab ID#: 1606166-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0617028	Date of Collection:	6/3/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	6/18/16 02:51 AM
		Date of Extraction:	6/17/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	14	20

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 003-060316

Lab ID#: 1606166-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0617026	Date of Collection:	6/3/16
Dil. Factor:	1.00	Date of Analysis:	6/18/16 01:59 AM
		Date of Extraction:	6/17/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606166-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0617025	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/18/16 01:33 AM
		Date of Extraction:	6/17/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1606166-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0617023	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/18/16 12:41 AM
		Date of Extraction:	6/17/16

Compound	%Recovery	Method Limits
Formaldehyde	87	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1606166-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0617024	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/18/16 01:07 AM
		Date of Extraction:	6/17/16

Compound	%Recovery	Method Limits
Formaldehyde	89	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

6/27/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1606253

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 6/13/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1606253

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 06/13/2016

CONTACT: Ausha Scott

DATE COMPLETED: 06/27/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-060916	Modified TO-11A
02A	Formaldehyde 002-060916	Modified TO-11A
03A	Formaldehyde 003-060916	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: _____



Technical Director

DATE: 06/27/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1606253

Three TO-11 Cartridge samples were received on June 13, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-060916 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde 001-060916

Lab ID#: 1606253-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	16

Client Sample ID: Formaldehyde 002-060916

Lab ID#: 1606253-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	14	20

Client Sample ID: Formaldehyde 003-060916

Lab ID#: 1606253-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde 001-060916

Lab ID#: 1606253-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623008	Date of Collection:	6/9/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	6/23/16 06:42 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	11	16

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 002-060916

Lab ID#: 1606253-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623009	Date of Collection:	6/9/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	6/23/16 07:08 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	14	20

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde 003-060916

Lab ID#: 1606253-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623006	Date of Collection:	6/9/16
Dil. Factor:	1.00	Date of Analysis:	6/23/16 05:51 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606253-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/16 05:25 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1606253-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/16 04:33 PM
		Date of Extraction: 6/22/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1606253-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/16 04:59 PM
		Date of Extraction:	6/22/16

Compound	%Recovery	Method Limits
Formaldehyde	96	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

6/30/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1606367

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 6/17/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1606367

Work Order Summary

CLIENT:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960	BILL TO:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960
PHONE:	973-407-1000	P.O. #	2001285.06.02
FAX:		PROJECT #	North River WWTP
DATE RECEIVED:	06/17/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	06/30/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-061516	Modified TO-11A
02A	Formaldehyde-002-061516	Modified TO-11A
03A	Formaldehyde-003-061516	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: 

DATE: 06/30/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1606367

Three TO-11 Cartridge samples were received on June 17, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-061516 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-061516

Lab ID#: 1606367-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	17	23

Client Sample ID: Formaldehyde-002-061516

Lab ID#: 1606367-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	26	36

Client Sample ID: Formaldehyde-003-061516

Lab ID#: 1606367-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-061516

Lab ID#: 1606367-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623010	Date of Collection:	6/15/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	6/23/16 07:34 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	17	23

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-061516

Lab ID#: 1606367-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623011	Date of Collection:	6/15/16 6:00:00 AM
Dil. Factor:	1.00	Date of Analysis:	6/23/16 08:00 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	26	36

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-061516

Lab ID#: 1606367-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623007	Date of Collection:	6/15/16
Dil. Factor:	1.00	Date of Analysis:	6/23/16 06:17 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606367-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/16 05:25 PM
		Date of Extraction:	6/22/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1606367-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/16 04:33 PM
		Date of Extraction:	6/22/16

Compound	%Recovery	Method Limits
Formaldehyde	90	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1606367-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0623004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/16 04:59 PM
		Date of Extraction:	6/22/16

Compound	%Recovery	Method Limits
Formaldehyde	96	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

7/25/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1606568

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 6/28/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1606568

Work Order Summary

CLIENT: Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

BILL TO: Accounts Payable
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown, NJ 07960

PHONE: 973-407-1000

P.O. # 2001285.06.02

FAX:

PROJECT # North River WWTP

DATE RECEIVED: 06/28/2016

CONTACT: Ausha Scott

DATE COMPLETED: 07/25/2016

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-062116	Modified TO-11A
02A	Formaldehyde-002-062116	Modified TO-11A
03A	Formaldehyde-003-062116	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 07/25/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1606568

Three TO-11 Cartridge samples were received on June 28, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-062116 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-062116

Lab ID#: 1606568-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	19	26

Client Sample ID: Formaldehyde-002-062116

Lab ID#: 1606568-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	21	29

Client Sample ID: Formaldehyde-003-062116

Lab ID#: 1606568-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-062116

Lab ID#: 1606568-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722010	Date of Collection:	6/21/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	7/22/16 06:30 PM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	19	26

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-062116

Lab ID#: 1606568-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722011	Date of Collection:	6/21/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	7/22/16 06:56 PM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	21	29

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-062116

Lab ID#: 1606568-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0725007	Date of Collection:	6/21/16
Dil. Factor:	1.00	Date of Analysis:	7/25/16 10:24 AM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606568-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0725006	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/25/16 09:58 AM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1606568-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/22/16 03:29 PM
		Date of Extraction:	7/5/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1606568-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/22/16 03:55 PM
		Date of Extraction:	7/5/16

Compound	%Recovery	Method Limits
Formaldehyde	98	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

7/25/2016

Mr. Rhine Almonacy
The Louis Berger Group, Inc.
412 Mount Kemble Avenue
5th Floor
Morristown NJ 07960

Project Name: North River WWTP

Project #:

Workorder #: 1606614

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 6/30/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-11A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1606614

Work Order Summary

CLIENT:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960	BILL TO:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960
PHONE:	973-407-1000	P.O. #	2001285.06.02
FAX:		PROJECT #	North River WWTP
DATE RECEIVED:	06/30/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	07/25/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-062716	Modified TO-11A
02A	Formaldehyde-002-062716	Modified TO-11A
03A	Formaldehyde-003-062716	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY: 

 Technical Director

DATE: 07/25/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1606614

Three TO-11 Cartridge samples were received on June 30, 2016. The laboratory performed analysis via modified Method TO-11A using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. The method involves eluting the sorbent tubes with acetonitrile using a gravity feed technique. Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-11A</i>	<i>ATL Modifications</i>
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; $r^2 > 0.999$	Multi-point using average Response Factor; % RSD ≤ 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde-003-062716 and the Laboratory Blank.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
 AMBIENT AIR: EPA METHOD TO-11A HPLC**

Client Sample ID: Formaldehyde-001-062716

Lab ID#: 1606614-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	16	23

Client Sample ID: Formaldehyde-002-062716

Lab ID#: 1606614-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	19	27

Client Sample ID: Formaldehyde-003-062716

Lab ID#: 1606614-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde-001-062716

Lab ID#: 1606614-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722012	Date of Collection:	6/27/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	7/22/16 07:22 PM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	16	23

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-062716

Lab ID#: 1606614-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722013	Date of Collection:	6/27/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	7/22/16 07:48 PM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	19	27

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-003-062716

Lab ID#: 1606614-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722007	Date of Collection:	6/27/16
Dil. Factor:	1.00	Date of Analysis:	7/22/16 05:13 PM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606614-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0725006	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/25/16 09:58 AM
		Date of Extraction:	7/5/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1606614-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/22/16 03:29 PM
		Date of Extraction:	7/5/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1606614-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0722004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/22/16 03:55 PM
		Date of Extraction:	7/5/16

Compound	%Recovery	Method Limits
Formaldehyde	98	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

APPENDIX B

Met Tower Data

Met Tower Data Summary Report



Company: New York City D. E. P.
 North River Wastewater Treatment Plant
 New York, NY 10031

Data Group: Valid Met Tower Data on Formaldehyde Sampling Date
Report Name: 2nd Quarter 2016

Date & Time	WS	WD
	mph	Deg
04/04/2016 00:00	4.4	78.5
04/04/2016 01:00	5.4	101.5
04/04/2016 02:00	5.1	98.6
04/04/2016 03:00	5.2	94.2
04/04/2016 04:00	4.8	83.5
04/04/2016 05:00	3.2	68.5
04/04/2016 06:00	3.6	63.5
04/04/2016 07:00	4.1	70.3
04/04/2016 08:00	3.3	74
04/04/2016 09:00	2.3	45.5
04/04/2016 10:00	2.4	33.9
04/04/2016 11:00	2.1	41.8
04/04/2016 12:00	2.4	28.6
04/04/2016 13:00	3.1	16.9
04/04/2016 14:00	2.1	52.7
04/04/2016 15:00	4	59.9
04/04/2016 16:00	5.7	36.6
04/04/2016 17:00	6.3	23
04/04/2016 18:00	6.4	27.9
04/04/2016 19:00	6.4	31.3
04/04/2016 20:00	6.2	21
04/04/2016 21:00	6.4	14.2
04/04/2016 22:00	6.4	13.8
04/04/2016 23:00	6.6	11.3
05/04/2016 00:00	6.6	12.4
05/04/2016 01:00	6.5	14.9
05/04/2016 02:00	7.4	14.3
05/04/2016 03:00	8.3	15.4
05/04/2016 04:00	6.2	14.6
05/04/2016 05:00	6.4	5
05/04/2016 06:00	8.1	11.7
05/04/2016 07:00	7.8	14.2
05/04/2016 08:00	7.8	24.8
05/04/2016 09:00	7.7	20.7
05/04/2016 10:00	6.2	19.6
05/04/2016 11:00	7.3	13.8
05/04/2016 12:00	5.6	20.3
05/04/2016 13:00	4.5	11.7
05/04/2016 14:00	4.9	13.6
05/04/2016 15:00	4.5	21.6
05/04/2016 16:00	4.1	4.7
05/04/2016 17:00	4.1	338

Date & Time	WS	WD
	mph	Deg
05/04/2016 18:00	4.3	354.7
05/04/2016 19:00	3.5	1.5
05/04/2016 20:00	3.5	16.3
05/04/2016 21:00	3	8
05/04/2016 22:00	3.4	349.9
05/04/2016 23:00	3.4	11.7
10/04/2016 00:00	5.7	344.9
10/04/2016 01:00	5.3	358.4
10/04/2016 02:00	4.4	8.7
10/04/2016 03:00	4.2	14.6
10/04/2016 04:00	4.1	25.8
10/04/2016 05:00	6	177.6
10/04/2016 06:00	3.2	10.5
10/04/2016 07:00	3.4	348.2
10/04/2016 08:00	2.9	354
10/04/2016 09:00	2.7	324.5
10/04/2016 10:00	3.2	309.8
10/04/2016 11:00	10	299.6
10/04/2016 12:00	13	2.2
10/04/2016 13:00	10	43.1
10/04/2016 14:00	6.5	221.9
10/04/2016 15:00	8.4	249.4
10/04/2016 16:00	6.7	214.3
10/04/2016 17:00	3.3	164.3
10/04/2016 18:00	3.7	130.6
10/04/2016 19:00	4.6	188.5
10/04/2016 20:00	6.8	211.4
10/04/2016 21:00	25.4	43.3
10/04/2016 22:00	7.3	216.2
10/04/2016 23:00	8	214.1
11/04/2016 00:00	11.6	201
11/04/2016 01:00	15.1	48.9
11/04/2016 02:00	4.6	186.3
11/04/2016 03:00	8.5	174.1
11/04/2016 04:00	9.8	177.5
11/04/2016 05:00	3.6	183.6
11/04/2016 06:00	5.6	178.2
11/04/2016 07:00	8.7	166.4
11/04/2016 08:00	10.1	200.2
11/04/2016 09:00	6.4	199.9
11/04/2016 10:00	7.1	217.9
11/04/2016 11:00	6.5	217.7
11/04/2016 12:00	8.5	215.2
11/04/2016 13:00	6.4	165.3
11/04/2016 14:00	3.5	130.6
11/04/2016 15:00	4.1	134.5
11/04/2016 16:00	3.5	135.1
11/04/2016 17:00	2.6	121.8
11/04/2016 18:00	2.8	121.5

Date & Time	WS	WD
	mph	Deg
11/04/2016 19:00	2.5	128.9
11/04/2016 20:00	2.5	140.4
11/04/2016 21:00	2.8	134.6
11/04/2016 22:00	3.1	130.9
11/04/2016 23:00	2.9	131.6
16/04/2016 00:00	7.8	195.4
16/04/2016 01:00	1.9	14.3
16/04/2016 02:00	4.5	80.5
16/04/2016 03:00	5	82.8
16/04/2016 04:00	2.7	57.9
16/04/2016 05:00	3.5	41
16/04/2016 06:00	3.3	28.5
16/04/2016 07:00	2.9	23.7
16/04/2016 08:00	3.4	27.6
16/04/2016 09:00	3.5	13.3
16/04/2016 10:00	3.3	13.2
16/04/2016 11:00	4	17.1
16/04/2016 12:00	3.3	20.2
16/04/2016 13:00	3.1	15.6
16/04/2016 14:00	2.2	353.2
16/04/2016 15:00	2.5	24
16/04/2016 16:00	3.1	104.5
16/04/2016 17:00	3.4	102.1
16/04/2016 18:00	3.5	122.6
16/04/2016 19:00	4.1	129.8
16/04/2016 20:00	3.2	133.8
16/04/2016 21:00	2.8	120.4
16/04/2016 22:00	1.6	104.7
16/04/2016 23:00	1.7	292.3
17/04/2016 00:00	3	267.9
17/04/2016 01:00	8.5	307.1
17/04/2016 02:00	1.9	336.6
17/04/2016 03:00	1.9	39.6
17/04/2016 04:00	1.7	28.4
17/04/2016 05:00	1.4	27
17/04/2016 06:00	1.1	352.8
17/04/2016 07:00	1.4	358.8
17/04/2016 08:00	1.8	20.2
17/04/2016 09:00	1.6	340.6
17/04/2016 10:00	1.4	338.9
17/04/2016 11:00	2.2	282
17/04/2016 12:00	5.5	204.6
17/04/2016 13:00	4	278.1
17/04/2016 14:00	1.1	289.3
17/04/2016 15:00	8.2	287
17/04/2016 16:00	15	211.6
17/04/2016 17:00	14.2	194.5
17/04/2016 18:00	3	145.1
17/04/2016 19:00	2.9	124.6

Date & Time	WS	WD
	mph	Deg
17/04/2016 20:00	3.1	116.3
17/04/2016 21:00	3.5	111.9
17/04/2016 22:00	3.3	108.5
17/04/2016 23:00	2.7	104.4
22/04/2016 00:00	7.7	221.1
22/04/2016 01:00	11.7	47.6
22/04/2016 02:00	5.9	198.3
22/04/2016 03:00	6.5	206.4
22/04/2016 04:00	4	215.2
22/04/2016 05:00	11.1	218.7
22/04/2016 06:00	10.6	208
22/04/2016 07:00	10.6	208.3
22/04/2016 08:00	5.8	212.8
22/04/2016 09:00	7.5	212.2
22/04/2016 10:00	5.2	217.8
22/04/2016 11:00	25	56.5
22/04/2016 12:00	36.1	45.2
22/04/2016 13:00	6.3	214.2
22/04/2016 14:00	5.4	216.1
22/04/2016 15:00	7.8	216.6
22/04/2016 16:00	11.8	40.9
22/04/2016 17:00	11.4	197.5
22/04/2016 18:00	27.1	45.1
22/04/2016 19:00	18.9	197.3
22/04/2016 20:00	17.2	212.6
22/04/2016 21:00	19.4	45.8
22/04/2016 22:00	8	218.2
22/04/2016 23:00	11.3	226.1
23/04/2016 00:00	6.6	214.3
23/04/2016 01:00	9.4	213
23/04/2016 02:00	15.9	16.2
23/04/2016 03:00	7.2	3.5
23/04/2016 04:00	2.5	22.5
23/04/2016 05:00	2.8	19.9
23/04/2016 06:00	2.2	14
23/04/2016 07:00	2.3	12.7
23/04/2016 08:00	3	14.4
23/04/2016 09:00	4.1	5.3
23/04/2016 10:00	5.7	10.3
23/04/2016 11:00	4.6	13
23/04/2016 12:00	4.6	14.2
23/04/2016 13:00	4.1	18.2
23/04/2016 14:00	5.8	21.2
23/04/2016 15:00	6.1	22.4
23/04/2016 16:00	6.2	23.1
23/04/2016 17:00	5.9	20.9
23/04/2016 18:00	5.1	22.2
23/04/2016 19:00	4	20.5
23/04/2016 20:00	3.1	16.1

Date & Time	WS	WD
	mph	Deg
23/04/2016 21:00	4.8	10.4
23/04/2016 22:00	5.9	7.3
23/04/2016 23:00	5.5	18.9
28/04/2016 00:00	6.3	323.9
28/04/2016 01:00	2.8	295
28/04/2016 02:00	3.8	21.3
28/04/2016 03:00	3.7	33.9
28/04/2016 04:00	3.7	40.9
28/04/2016 05:00	3.8	41.6
28/04/2016 06:00	3.6	39.6
28/04/2016 07:00	3.6	23
28/04/2016 08:00	3.5	9.5
28/04/2016 09:00	3.7	2.7
28/04/2016 10:00	2.2	333.9
28/04/2016 11:00	1.9	128.1
28/04/2016 12:00	2.4	109.4
28/04/2016 13:00	3.5	140
28/04/2016 14:00	3.3	145.7
28/04/2016 15:00	2.9	138.7
28/04/2016 16:00	2.5	142.8
28/04/2016 17:00	17.5	98.4
28/04/2016 18:00	14.9	165.3
28/04/2016 19:00	3.4	153.6
28/04/2016 20:00	2	130.3
28/04/2016 21:00	4.4	134.6
28/04/2016 22:00	8.1	258
28/04/2016 23:00	8.3	263.6
29/04/2016 00:00	1.2	308.1
29/04/2016 01:00	2	55
29/04/2016 02:00	3.4	96.8
29/04/2016 03:00	3.3	87.1
29/04/2016 04:00	4.2	80.5
29/04/2016 05:00	4.5	80.8
29/04/2016 06:00	3.7	67.1
29/04/2016 07:00	4.3	83.2
29/04/2016 08:00	3.7	78.8
29/04/2016 09:00	3.6	71.4
29/04/2016 10:00	4	75.5
29/04/2016 11:00	4.5	78.3
29/04/2016 12:00	3.6	54
29/04/2016 13:00	3.2	44.5
29/04/2016 14:00	3.1	54.8
29/04/2016 15:00	3.1	48.7
29/04/2016 16:00	3	49.1
29/04/2016 17:00	2.3	54.9
29/04/2016 18:00	2.6	73
29/04/2016 19:00	3	68.2
29/04/2016 20:00	2.3	78.2
29/04/2016 21:00	3	74.8

Date & Time	WS	WD
	mph	Deg
29/04/2016 22:00	3.7	107.3
29/04/2016 23:00	1.9	18.4
04/05/2016 00:00	3.2	243.9
04/05/2016 01:00	3.3	229.3
04/05/2016 02:00	3.1	91.4
04/05/2016 03:00	2.9	84.3
04/05/2016 04:00	2.4	61.3
04/05/2016 05:00	4.4	84.5
04/05/2016 06:00	3.5	78.6
04/05/2016 07:00	3.3	59
04/05/2016 08:00	3.9	64.3
04/05/2016 09:00	4.2	65.6
04/05/2016 10:00	5.2	71.7
04/05/2016 11:00	5.3	62.8
04/05/2016 12:00	4.2	50.4
04/05/2016 13:00	3.9	48.5
04/05/2016 14:00	3.3	57.8
04/05/2016 15:00	3.5	51.4
04/05/2016 16:00	3.1	49.3
04/05/2016 17:00	2.5	41.9
04/05/2016 18:00	3	39.9
04/05/2016 19:00	4.3	39.9
04/05/2016 20:00	4.7	40.1
04/05/2016 21:00	4.3	38.5
04/05/2016 22:00	4.2	37.9
04/05/2016 23:00	3.4	43.7
05/05/2016 00:00	4.5	35.5
05/05/2016 01:00	2.9	35.1
05/05/2016 02:00	3	20.9
05/05/2016 03:00	3.5	22.6
05/05/2016 04:00	4.1	25.6
05/05/2016 05:00	4.4	27.8
05/05/2016 06:00	4.3	22.9
05/05/2016 07:00	3.9	23
05/05/2016 08:00	4	28.9
05/05/2016 09:00	4.2	24.6
05/05/2016 10:00	4.1	22.6
05/05/2016 11:00	3.8	32.1
05/05/2016 12:00	4	35.1
05/05/2016 13:00	4.6	34.7
05/05/2016 14:00	4.8	35.4
05/05/2016 15:00	5.4	38.7
05/05/2016 16:00	4.5	26
05/05/2016 17:00	4.6	30.3
05/05/2016 18:00	5.5	38.3
05/05/2016 19:00	4.4	38
05/05/2016 20:00	3.9	36.8
05/05/2016 21:00	3.6	37.4
05/05/2016 22:00	4.1	32.8

Date & Time	WS	WD
	mph	Deg
05/05/2016 23:00	4.3	27.2
10/05/2016 00:00	4.6	24.3
10/05/2016 01:00	3.5	27
10/05/2016 02:00	3.6	27.6
10/05/2016 03:00	3.4	23.8
10/05/2016 04:00	2.7	24.8
10/05/2016 05:00	2	9.7
10/05/2016 06:00	1.8	341.4
10/05/2016 07:00	1.4	320.8
10/05/2016 08:00	1.7	333.9
10/05/2016 09:00	2.7	309.7
10/05/2016 10:00	14.5	160.2
10/05/2016 11:00	5.9	215.5
10/05/2016 12:00	7.4	214.1
10/05/2016 13:00	7.8	214.5
10/05/2016 14:00	9.1	224.8
10/05/2016 15:00	10.5	235.3
10/05/2016 16:00	12.3	272.4
10/05/2016 17:00	10.4	263.8
10/05/2016 18:00	15.3	8
10/05/2016 19:00	13.7	40.3
10/05/2016 20:00	12.4	333.5
10/05/2016 21:00	12.2	287.7
10/05/2016 22:00	10.7	232.3
10/05/2016 23:00	15.4	30
11/05/2016 00:00	14	20.3
11/05/2016 01:00	11.8	300.9
11/05/2016 02:00	4.6	294.5
11/05/2016 03:00	4.9	294
11/05/2016 04:00	1.8	313.6
11/05/2016 05:00	1.9	14.9
11/05/2016 06:00	1.9	355.3
11/05/2016 07:00	3	16.1
11/05/2016 08:00	3.3	15.1
11/05/2016 09:00	1.6	1.8
11/05/2016 10:00	1.5	306.1
11/05/2016 11:00	11.2	194.4
11/05/2016 12:00	7	247.9
11/05/2016 13:00	7.9	215
11/05/2016 14:00	34.9	54.1
11/05/2016 15:00	48.1	44.9
11/05/2016 16:00	47.8	45.1
11/05/2016 17:00	6.3	216.1
11/05/2016 18:00	7.9	215.5
11/05/2016 19:00	9.9	207.6
11/05/2016 20:00	9.2	214.7
11/05/2016 21:00	13.3	81.4
11/05/2016 22:00	4.6	209.5
11/05/2016 23:00	0.5	245.1

Date & Time	WS	WD
	mph	Deg
16/05/2016 00:00	8.9	263
16/05/2016 01:00	14.1	292.8
16/05/2016 02:00	12.1	283.5
16/05/2016 03:00	11.8	261.4
16/05/2016 04:00	9.3	255.4
16/05/2016 05:00	10.7	266.8
16/05/2016 06:00	11.5	266
16/05/2016 07:00	10	278.7
16/05/2016 08:00	8.5	285.8
16/05/2016 09:00	10.8	279.5
16/05/2016 10:00	9.1	281.9
16/05/2016 11:00	9.5	285.6
16/05/2016 12:00	8.8	287.5
16/05/2016 13:00	12.6	241.2
16/05/2016 14:00	9.6	290.3
16/05/2016 15:00	9.5	290.6
16/05/2016 16:00	9.2	286.5
16/05/2016 17:00	7.6	280.6
16/05/2016 18:00	6.5	290.1
16/05/2016 19:00	7.1	280.8
16/05/2016 20:00	12.5	13.1
16/05/2016 21:00	15.4	30.1
16/05/2016 22:00	12.4	346.4
16/05/2016 23:00	8.9	226.6
17/05/2016 00:00	10.2	237.1
17/05/2016 01:00	11.5	266
17/05/2016 02:00	11.3	240
17/05/2016 03:00	12.1	254.4
17/05/2016 04:00	13	309.8
17/05/2016 05:00	11.5	317.2
17/05/2016 06:00	9.8	243.4
17/05/2016 07:00	8.8	230.3
17/05/2016 08:00	12	237.1
17/05/2016 09:00	10.5	222.7
17/05/2016 10:00	26.7	46.6
17/05/2016 11:00	5.9	216.1
17/05/2016 12:00	10.8	227.2
17/05/2016 13:00	10.4	251.9
17/05/2016 14:00	8.2	216.4
17/05/2016 15:00	7.1	214.3
17/05/2016 16:00	6.6	214
17/05/2016 17:00	6.6	215.1
17/05/2016 18:00	6.4	214
17/05/2016 19:00	20.5	45.8
17/05/2016 20:00	13.1	288
17/05/2016 21:00	14.5	22.4
17/05/2016 22:00	15.1	38.3
17/05/2016 23:00	11.4	75.3

Date & Time	WS	WD
	mph	Deg
22/05/2016 00:00	3.3	16.3
22/05/2016 01:00	3.4	2.6
22/05/2016 02:00	3.3	13.7
22/05/2016 03:00	2.8	22.1
22/05/2016 04:00	2.4	16.2
22/05/2016 05:00	3	2.6
22/05/2016 06:00	2.5	7
22/05/2016 07:00	1.9	3.5
22/05/2016 08:00	2.2	16.3
22/05/2016 09:00	2	10.6
22/05/2016 10:00	3	4.1
22/05/2016 11:00	2.1	356.9
22/05/2016 12:00	2	50.2
22/05/2016 13:00	2.2	132.2
22/05/2016 14:00	2.1	117.5
22/05/2016 15:00	2.4	104
22/05/2016 16:00	6	80.3
22/05/2016 17:00	7.2	215.6
22/05/2016 18:00	6.4	216.5
22/05/2016 19:00	11.9	96.7
22/05/2016 20:00	9.2	194.8
22/05/2016 21:00	6	131.8
22/05/2016 22:00	2.5	145.2
22/05/2016 23:00	13.1	48.7
23/05/2016 00:00	5.9	208.5
23/05/2016 01:00	3.2	200.2
23/05/2016 02:00	4.3	261.5
23/05/2016 03:00	1.4	322.2
23/05/2016 04:00	1.4	13.1
23/05/2016 05:00	1.9	5.5
23/05/2016 06:00	1.4	346
23/05/2016 07:00	1.3	335.3
23/05/2016 08:00	2.1	4.9
23/05/2016 09:00	2.3	9.2
23/05/2016 10:00	1.8	61.3
23/05/2016 11:00	3.4	296.7
23/05/2016 12:00	2.1	3.1
23/05/2016 13:00	2.7	87.7
23/05/2016 14:00	3.2	151.9
23/05/2016 15:00	25.7	43.3
23/05/2016 16:00	7	126.6
23/05/2016 17:00	5.1	186.1
23/05/2016 18:00	3.9	178.4
23/05/2016 19:00	3.7	141.3
23/05/2016 20:00	8.3	99.7
23/05/2016 21:00	11	200.1
23/05/2016 22:00	7.5	221.4
23/05/2016 23:00	10.1	211.5
28/05/2016 00:00	8.4	216.5

Date & Time	WS	WD
	mph	Deg
28/05/2016 01:00	5.8	216.8
28/05/2016 02:00	5.8	215.7
28/05/2016 03:00	5.2	213.6
28/05/2016 04:00	7.5	211
28/05/2016 05:00	7.9	215.2
28/05/2016 06:00	11.2	205.1
28/05/2016 07:00	7.8	217.3
28/05/2016 08:00	9.6	218.9
28/05/2016 09:00	7.6	218.2
28/05/2016 10:00	14.8	201.2
28/05/2016 11:00	4.8	218.9
28/05/2016 12:00	6.4	216.6
28/05/2016 13:00	7.1	216.3
28/05/2016 14:00	9	152.2
28/05/2016 15:00	10.9	203.8
28/05/2016 16:00	11	350.8
28/05/2016 17:00	3.3	17.2
28/05/2016 18:00	2	22.4
28/05/2016 19:00	1.9	24.4
28/05/2016 20:00	1.2	31.5
28/05/2016 21:00	6.7	348
28/05/2016 22:00	6.1	218.1
28/05/2016 23:00	4.7	211.8
29/05/2016 00:00	4.8	214.5
29/05/2016 01:00	8.6	209.1
29/05/2016 02:00	4.7	213.2
29/05/2016 03:00	4.6	212.5
29/05/2016 04:00	6.5	211.8
29/05/2016 05:00	11.6	202.6
29/05/2016 06:00	9.1	195
29/05/2016 07:00	11.3	197
29/05/2016 08:00	5.6	218.2
29/05/2016 09:00	5.6	219.8
29/05/2016 10:00	3.6	340.3
29/05/2016 11:00	5.5	219.7
29/05/2016 12:00	7.9	207.6
29/05/2016 13:00	4	133.7
29/05/2016 14:00	4.3	130.1
29/05/2016 15:00	5	139.4
29/05/2016 16:00	4.6	132.4
29/05/2016 17:00	3.1	132.9
29/05/2016 18:00	3.2	134
29/05/2016 19:00	2.7	132.3
29/05/2016 20:00	2.8	133
29/05/2016 21:00	3.8	119.9
29/05/2016 22:00	3.4	117.7
29/05/2016 23:00	2.5	112.2
03/06/2016 00:00	2.5	103.3
03/06/2016 01:00	2.2	96.8

Date & Time	WS	WD
	mph	Deg
03/06/2016 02:00	1.7	105.6
03/06/2016 03:00	1.6	91.4
03/06/2016 04:00	2.3	94
03/06/2016 05:00	1.9	85.3
03/06/2016 06:00	2	67.4
03/06/2016 07:00	2.7	88.2
03/06/2016 08:00	1.9	98.2
03/06/2016 09:00	1.3	61.2
03/06/2016 10:00	5.7	352.8
03/06/2016 11:00	18.2	43
03/06/2016 12:00	12.3	357.7
03/06/2016 13:00	16.5	55.5
03/06/2016 14:00	15.3	209.5
03/06/2016 15:00	10.5	226.9
03/06/2016 16:00	7.5	215.1
03/06/2016 17:00	12.1	51.3
03/06/2016 18:00	11.9	37.7
03/06/2016 19:00	20	45.2
03/06/2016 20:00	8.3	220.4
03/06/2016 21:00	7.8	206.9
03/06/2016 22:00	15.1	113.6
03/06/2016 23:00	9.9	217.2
04/06/2016 00:00	8.7	188.9
04/06/2016 01:00	13.3	198.5
04/06/2016 02:00	5.7	217.2
04/06/2016 03:00	6.7	210
04/06/2016 04:00	12.7	44.3
04/06/2016 05:00	5.5	218.8
04/06/2016 06:00	4.4	215.3
04/06/2016 07:00	11.3	207.7
04/06/2016 08:00	12.6	256.3
04/06/2016 09:00	10.3	216
04/06/2016 10:00	13.5	220.8
04/06/2016 11:00	6.2	235.3
04/06/2016 12:00	17	230.8
04/06/2016 13:00	8.7	318.3
04/06/2016 14:00	9.2	217.9
04/06/2016 15:00	5.6	138.8
04/06/2016 16:00	3.2	133.8
04/06/2016 17:00	2.9	137.4
04/06/2016 18:00	3.3	138.3
04/06/2016 19:00	2.9	130.3
04/06/2016 20:00	2.3	71.7
04/06/2016 21:00	3.6	91.7
04/06/2016 22:00	2.6	111.4
04/06/2016 23:00	2.7	117.9
09/06/2016 00:00	8.8	205.7
09/06/2016 01:00	5.8	288.8
09/06/2016 02:00	12	261.5

Date & Time	WS	WD
	mph	Deg
09/06/2016 03:00	9.9	279.6
09/06/2016 04:00	13.2	290.7
09/06/2016 05:00	14.3	268
09/06/2016 06:00	7.7	289.2
09/06/2016 07:00	9	292.4
09/06/2016 08:00	8.7	292.9
09/06/2016 09:00	7.1	298
09/06/2016 10:00	7.2	299.8
09/06/2016 11:00	9.4	285.8
09/06/2016 12:00	8.6	295.1
09/06/2016 13:00	9.2	289
09/06/2016 14:00	9.3	287.4
09/06/2016 15:00	8.6	288.6
09/06/2016 16:00	7.8	294.7
09/06/2016 17:00	8	287.5
09/06/2016 18:00	7.8	296.3
09/06/2016 19:00	6.9	269.1
09/06/2016 20:00	4.3	314.9
09/06/2016 21:00	3.9	300.1
09/06/2016 22:00	13	139.6
09/06/2016 23:00	6.7	289.5
10/06/2016 00:00	13.5	283.1
10/06/2016 01:00	18	352.9
10/06/2016 02:00	24.2	148.4
10/06/2016 03:00	18.3	180.4
10/06/2016 04:00	13.4	204.6
10/06/2016 05:00	8.9	266.4
10/06/2016 06:00	6.5	285.6
10/06/2016 07:00	4.3	307.3
10/06/2016 08:00	5	326.3
10/06/2016 09:00	5.2	329.1
10/06/2016 10:00	9.5	289.1
10/06/2016 11:00	5	317.4
10/06/2016 12:00	4.7	310.1
10/06/2016 13:00	6.9	327.5
10/06/2016 14:00	4.8	302.9
10/06/2016 15:00	3.8	317.4
10/06/2016 16:00	4	318.4
10/06/2016 17:00	6.6	179.4
10/06/2016 18:00	6.2	307.1
10/06/2016 19:00	4.6	309.5
10/06/2016 20:00	2.6	314.6
10/06/2016 21:00	12.3	149.1
10/06/2016 22:00	2.8	331.2
10/06/2016 23:00	1.1	5.6
15/06/2016 00:00	4.9	334.7
15/06/2016 01:00	1.2	4.8
15/06/2016 02:00	1.9	327
15/06/2016 03:00	1.8	315.5

Date & Time	WS	WD
	mph	Deg
15/06/2016 04:00	2.6	303.7
15/06/2016 05:00	7	295.6
15/06/2016 06:00	7.1	265.5
15/06/2016 07:00	6.8	275.7
15/06/2016 08:00	0.9	246.9
15/06/2016 09:00	1.1	297.7
15/06/2016 10:00	2.3	231.7
15/06/2016 11:00	18.1	12.1
15/06/2016 12:00	6.6	217.9
15/06/2016 13:00	16.9	66
15/06/2016 14:00	8.8	234.4
15/06/2016 15:00	8.2	222.1
15/06/2016 16:00	7.3	215.9
15/06/2016 17:00	15.4	42.7
15/06/2016 18:00	5.7	163.6
15/06/2016 19:00	2.7	141.9
15/06/2016 20:00	8.2	95.9
15/06/2016 21:00	9.5	221.5
15/06/2016 22:00	13.9	270
15/06/2016 23:00	14.4	221.8
16/06/2016 00:00	15.4	235
16/06/2016 01:00	16.7	238.1
16/06/2016 02:00	17.3	196.2
16/06/2016 03:00	2.7	213.5
16/06/2016 04:00	7.4	10.8
16/06/2016 05:00	8.2	220.2
16/06/2016 06:00	1	2.7
16/06/2016 07:00	2	53.1
16/06/2016 08:00	1.8	103.7
16/06/2016 09:00	2.6	9.2
16/06/2016 10:00	2.2	15.7
16/06/2016 11:00	1.3	108.5
16/06/2016 12:00	9.6	137.4
16/06/2016 13:00	3.9	143.9
16/06/2016 14:00	13.6	230.3
16/06/2016 15:00	1.3	302.3
16/06/2016 16:00	1.1	347
16/06/2016 17:00	1.2	354.8
16/06/2016 18:00	1.1	349.6
16/06/2016 19:00	0.7	13.7
16/06/2016 20:00	1.9	21.6
16/06/2016 21:00	2	24.9
16/06/2016 22:00	1.8	18.8
16/06/2016 23:00	1.4	20.6
21/06/2016 00:00	9.9	255.1
21/06/2016 01:00	10.6	349.6
21/06/2016 02:00	16.9	326.2
21/06/2016 03:00	12.3	271.6
21/06/2016 04:00	9.8	259.5

Date & Time	WS	WD
	mph	Deg
21/06/2016 05:00	9.5	283.6
21/06/2016 06:00	5.7	329.4
21/06/2016 07:00	4.5	292.2
21/06/2016 08:00	4	311.7
21/06/2016 09:00	3.7	312.1
21/06/2016 10:00	4	322
21/06/2016 11:00	10.5	248.9
21/06/2016 12:00	12.1	247.9
21/06/2016 13:00	10.7	279.4
21/06/2016 14:00	9.2	220.5
21/06/2016 15:00	6.5	278.9
21/06/2016 16:00	7	220.1
21/06/2016 17:00	6.1	216.2
21/06/2016 18:00	9.5	213.9
21/06/2016 19:00	2.8	355.9
21/06/2016 20:00	2.8	21.8
21/06/2016 21:00	2.1	19
21/06/2016 22:00	1.5	17.1
21/06/2016 23:00	1.1	13.2
22/06/2016 00:00	1.5	24.5
22/06/2016 01:00	1.6	28.3
22/06/2016 02:00	2	18.1
22/06/2016 03:00	1.4	56.7
22/06/2016 04:00	1.9	14.1
22/06/2016 05:00	3	16.6
22/06/2016 06:00	2.6	11.9
22/06/2016 07:00	2.2	8.4
22/06/2016 08:00	9.7	249.8
22/06/2016 09:00	13.7	230.6
22/06/2016 10:00	12	249.7
22/06/2016 11:00	12.6	156.7
22/06/2016 12:00	6.9	279.6
22/06/2016 13:00	6.2	307.9
22/06/2016 14:00	10.5	298.2
22/06/2016 15:00	4.2	332.5
22/06/2016 16:00	8.1	260
22/06/2016 17:00	4.3	303.2
22/06/2016 18:00	6.5	316.6
22/06/2016 19:00	2.1	354.5
22/06/2016 20:00	1.5	356.2
22/06/2016 21:00	0.9	328.8
22/06/2016 22:00	0.8	4.2
22/06/2016 23:00	1.3	21.7
27/06/2016 00:00	7	220.3
27/06/2016 01:00	7.7	212
27/06/2016 02:00	8	215.7
27/06/2016 03:00	6.2	221.2
27/06/2016 04:00	5.7	218.5
27/06/2016 05:00	10.7	218.4

Date & Time	WS	WD
	mph	Deg
27/06/2016 06:00	5.9	220.1
27/06/2016 07:00	4.8	214.5
27/06/2016 08:00	5.6	215.8
27/06/2016 09:00	10.2	226.1
27/06/2016 10:00	16.1	39.7
27/06/2016 11:00	9.5	226.3
27/06/2016 12:00	6.1	213.8
27/06/2016 13:00	5	99.5
27/06/2016 14:00	4.4	143.3
27/06/2016 15:00	4	137.7
27/06/2016 16:00	4.1	136.7
27/06/2016 17:00	3.7	135.6
27/06/2016 18:00	3	154.3
27/06/2016 19:00	3.4	169.8
27/06/2016 20:00	2.9	188.9
27/06/2016 21:00	8.7	158.9
27/06/2016 22:00	11.8	209.2
27/06/2016 23:00	4.8	213.1
28/06/2016 00:00	7.7	99.3
28/06/2016 01:00	2.1	175.8
28/06/2016 02:00	6.6	188.3
28/06/2016 03:00	4.7	217.2
28/06/2016 04:00	9.9	214.9
28/06/2016 05:00	7.5	117.1
28/06/2016 06:00	2.8	135.3
28/06/2016 07:00	3.2	135.7
28/06/2016 08:00	2.7	134.8
28/06/2016 09:00	2.6	135.3
28/06/2016 10:00	2.6	135.6
28/06/2016 11:00	2.9	133.8
28/06/2016 12:00	2.7	137.6
28/06/2016 13:00	2.8	141.3
28/06/2016 14:00	2.7	137.3
28/06/2016 15:00	3.2	137.7
28/06/2016 16:00	3.3	139.7
28/06/2016 17:00	8.7	132.8
28/06/2016 18:00	2.9	137.3
28/06/2016 19:00	2.7	139.3
28/06/2016 20:00	2.3	128.9
28/06/2016 21:00	3.3	106.2
28/06/2016 22:00	1.5	349
28/06/2016 23:00	1.2	290.2

APPENDIX C

Flow Rate and Volume

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, April 04, 2016 21:30:00

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, April 05, 2016 9:30:26

Total Volume 712.87 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.000 l/min

Ending Leak Rate -0.007 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Monday, April 04, 2016 21:30:27	0.079	0.22	50.5
Monday, April 04, 2016 21:35:28	0.990	5.19	49.5
Monday, April 04, 2016 21:40:29	0.990	10.16	50.5
Monday, April 04, 2016 21:45:29	0.990	15.11	50.6
Monday, April 04, 2016 21:50:30	0.990	20.08	50.2
Monday, April 04, 2016 21:55:30	0.990	25.03	50.3
Monday, April 04, 2016 22:00:31	0.990	30.00	50.2
Monday, April 04, 2016 22:05:31	0.990	34.95	50.6
Monday, April 04, 2016 22:10:32	0.990	39.92	50.8
Monday, April 04, 2016 22:15:33	0.990	44.88	50.2
Monday, April 04, 2016 22:20:33	0.990	49.84	49.9
Monday, April 04, 2016 22:25:34	0.990	54.80	50.7
Monday, April 04, 2016 22:30:34	0.990	59.75	50.4
Monday, April 04, 2016 22:35:35	0.990	64.72	49.7
Monday, April 04, 2016 22:40:36	0.990	69.69	50.5
Monday, April 04, 2016 22:45:36	0.990	74.64	49.7
Monday, April 04, 2016 22:50:37	0.990	79.61	49.8
Monday, April 04, 2016 22:55:37	0.990	84.56	50.3
Monday, April 04, 2016 23:00:38	0.990	89.53	50.3
Monday, April 04, 2016 23:05:39	0.990	94.50	50.5
Monday, April 04, 2016 23:10:39	0.990	99.45	50.5
Monday, April 04, 2016 23:15:40	0.990	104.42	50.6
Monday, April 04, 2016 23:20:40	0.990	109.37	49.9
Monday, April 04, 2016 23:25:41	0.990	114.33	50.7
Monday, April 04, 2016 23:30:41	0.990	119.29	50.1
Monday, April 04, 2016 23:35:42	0.990	124.25	50.1
Monday, April 04, 2016 23:40:43	0.990	129.22	50.1
Monday, April 04, 2016 23:45:43	0.990	134.17	50.7
Monday, April 04, 2016 23:50:44	0.990	139.14	49.3
Monday, April 04, 2016 23:55:44	0.990	144.09	50.1
Tuesday, April 05, 2016 0:00:45	0.990	149.06	50.2
Tuesday, April 05, 2016 0:05:46	0.990	154.03	50.3
Tuesday, April 05, 2016 0:10:46	0.990	158.98	50.6

Tuesday, April 05, 2016 0:15:47 0.990	163.95	50.9
Tuesday, April 05, 2016 0:20:47 0.990	168.90	50.2
Tuesday, April 05, 2016 0:25:48 0.990	173.87	50.4
Tuesday, April 05, 2016 0:30:49 0.990	178.83	50.5
Tuesday, April 05, 2016 0:35:49 0.990	183.79	49.8
Tuesday, April 05, 2016 0:40:50 0.990	188.75	50.1
Tuesday, April 05, 2016 0:45:50 0.990	193.70	49.4
Tuesday, April 05, 2016 0:50:51 0.990	198.67	50.3
Tuesday, April 05, 2016 0:55:52 0.990	203.64	50.6
Tuesday, April 05, 2016 1:00:52 0.990	208.59	50.5
Tuesday, April 05, 2016 1:05:53 0.990	213.56	49.7
Tuesday, April 05, 2016 1:10:53 0.990	218.51	49.8
Tuesday, April 05, 2016 1:15:54 0.990	223.48	50.6
Tuesday, April 05, 2016 1:20:54 0.990	228.43	49.7
Tuesday, April 05, 2016 1:25:55 0.990	233.40	50.3
Tuesday, April 05, 2016 1:30:56 0.990	238.37	50.2
Tuesday, April 05, 2016 1:35:56 0.990	243.32	50.1
Tuesday, April 05, 2016 1:40:57 0.990	248.29	50.2
Tuesday, April 05, 2016 1:45:57 0.990	253.24	49.9
Tuesday, April 05, 2016 1:50:58 0.990	258.20	50.5
Tuesday, April 05, 2016 1:55:59 0.990	263.17	50.6
Tuesday, April 05, 2016 2:00:59 0.990	268.12	50.5
Tuesday, April 05, 2016 2:06:00 0.990	273.09	50.0
Tuesday, April 05, 2016 2:11:00 0.990	278.04	50.5
Tuesday, April 05, 2016 2:16:01 0.990	283.01	50.0
Tuesday, April 05, 2016 2:21:02 0.990	287.98	49.7
Tuesday, April 05, 2016 2:26:02 0.990	292.93	49.8
Tuesday, April 05, 2016 2:31:03 0.990	297.90	50.3
Tuesday, April 05, 2016 2:36:03 0.990	302.85	50.1
Tuesday, April 05, 2016 2:41:04 0.990	307.82	50.5
Tuesday, April 05, 2016 2:46:04 0.990	312.77	50.2
Tuesday, April 05, 2016 2:51:05 0.990	317.73	50.6
Tuesday, April 05, 2016 2:56:06 0.990	322.70	50.2
Tuesday, April 05, 2016 3:01:06 0.990	327.65	49.8
Tuesday, April 05, 2016 3:06:07 0.990	332.62	49.7
Tuesday, April 05, 2016 3:11:07 0.990	337.57	50.5
Tuesday, April 05, 2016 3:16:08 0.990	342.54	50.4
Tuesday, April 05, 2016 3:21:09 0.990	347.51	49.8
Tuesday, April 05, 2016 3:26:09 0.990	352.46	50.4
Tuesday, April 05, 2016 3:31:10 0.990	357.43	50.6
Tuesday, April 05, 2016 3:36:10 0.990	362.38	50.2
Tuesday, April 05, 2016 3:41:11 0.990	367.35	50.2
Tuesday, April 05, 2016 3:46:11 0.990	372.30	50.0
Tuesday, April 05, 2016 3:51:12 0.990	377.27	50.6
Tuesday, April 05, 2016 3:56:13 0.990	382.23	50.6
Tuesday, April 05, 2016 4:01:13 0.990	387.19	50.2
Tuesday, April 05, 2016 4:06:14 0.990	392.15	50.4
Tuesday, April 05, 2016 4:11:14 0.990	397.10	50.6
Tuesday, April 05, 2016 4:16:15 0.990	402.07	50.2
Tuesday, April 05, 2016 4:21:16 0.990	407.04	50.4
Tuesday, April 05, 2016 4:26:16 0.990	411.99	50.6
Tuesday, April 05, 2016 4:31:17 0.990	416.96	50.2
Tuesday, April 05, 2016 4:36:17 0.990	421.91	50.2
Tuesday, April 05, 2016 4:41:18 0.990	426.88	50.5

Tuesday, April 05, 2016 4:46:18 0.990	431.83	50.5
Tuesday, April 05, 2016 4:51:19 0.990	436.80	50.6
Tuesday, April 05, 2016 4:56:20 0.990	441.76	50.2
Tuesday, April 05, 2016 5:01:20 0.990	446.72	50.5
Tuesday, April 05, 2016 5:06:21 0.990	451.68	50.2
Tuesday, April 05, 2016 5:11:21 0.990	456.63	50.4
Tuesday, April 05, 2016 5:16:22 0.990	461.60	50.4
Tuesday, April 05, 2016 5:21:23 0.990	466.57	50.2
Tuesday, April 05, 2016 5:26:23 0.990	471.52	50.2
Tuesday, April 05, 2016 5:31:24 0.990	476.49	50.5
Tuesday, April 05, 2016 5:36:24 0.990	481.44	50.4
Tuesday, April 05, 2016 5:41:25 0.990	486.41	50.5
Tuesday, April 05, 2016 5:46:25 0.990	491.36	50.0
Tuesday, April 05, 2016 5:51:26 0.990	496.33	50.0
Tuesday, April 05, 2016 5:56:27 0.990	501.29	50.1
Tuesday, April 05, 2016 6:01:27 0.990	506.25	50.9
Tuesday, April 05, 2016 6:06:28 0.990	511.21	50.4
Tuesday, April 05, 2016 6:11:28 0.990	516.17	50.4
Tuesday, April 05, 2016 6:16:29 0.990	521.13	49.4
Tuesday, April 05, 2016 6:21:29 0.990	526.09	50.2
Tuesday, April 05, 2016 6:26:30 0.990	531.05	50.5
Tuesday, April 05, 2016 6:31:31 0.990	536.02	50.1
Tuesday, April 05, 2016 6:36:31 0.990	540.97	50.2
Tuesday, April 05, 2016 6:41:32 0.990	545.94	50.5
Tuesday, April 05, 2016 6:46:32 0.990	550.89	50.6
Tuesday, April 05, 2016 6:51:33 0.990	555.86	49.8
Tuesday, April 05, 2016 6:56:34 0.990	560.83	50.2
Tuesday, April 05, 2016 7:01:34 0.990	565.78	49.4
Tuesday, April 05, 2016 7:06:35 0.990	570.75	49.7
Tuesday, April 05, 2016 7:11:35 0.990	575.70	50.5
Tuesday, April 05, 2016 7:16:36 0.990	580.67	50.5
Tuesday, April 05, 2016 7:21:37 0.990	585.64	50.1
Tuesday, April 05, 2016 7:26:37 0.990	590.59	50.4
Tuesday, April 05, 2016 7:31:38 0.990	595.56	50.1
Tuesday, April 05, 2016 7:36:38 0.990	600.51	50.2
Tuesday, April 05, 2016 7:41:39 0.990	605.48	50.6
Tuesday, April 05, 2016 7:46:40 0.990	610.45	50.4
Tuesday, April 05, 2016 7:51:40 0.990	615.40	50.3
Tuesday, April 05, 2016 7:56:41 0.990	620.37	49.6
Tuesday, April 05, 2016 8:01:41 0.990	625.32	50.6
Tuesday, April 05, 2016 8:06:42 0.990	630.29	50.5
Tuesday, April 05, 2016 8:11:42 0.990	635.24	50.1
Tuesday, April 05, 2016 8:16:43 0.990	640.21	50.2
Tuesday, April 05, 2016 8:21:44 0.990	645.18	49.6
Tuesday, April 05, 2016 8:26:44 0.990	650.13	50.6
Tuesday, April 05, 2016 8:31:45 0.990	655.10	50.3
Tuesday, April 05, 2016 8:36:45 0.990	660.05	50.0
Tuesday, April 05, 2016 8:41:46 0.990	665.02	50.1
Tuesday, April 05, 2016 8:46:47 0.990	669.99	50.1
Tuesday, April 05, 2016 8:51:47 0.990	674.94	50.5
Tuesday, April 05, 2016 8:56:48 0.990	679.91	50.1
Tuesday, April 05, 2016 9:01:48 0.990	684.86	50.4
Tuesday, April 05, 2016 9:06:49 0.990	689.83	50.0
Tuesday, April 05, 2016 9:11:50 0.990	694.80	50.4

Tuesday, April 05, 2016 9:16:50	0.990	699.75	50.1
Tuesday, April 05, 2016 9:21:51	0.990	704.72	49.8
Tuesday, April 05, 2016 9:26:51	0.990	709.67	50.5
Tuesday, April 05, 2016 9:30:05	0.990	712.87	50.5

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, April 04, 2016 21:30:00

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, April 05, 2016 9:30:26

Total Volume 712.87 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.000 l/min

Ending Leak Rate -0.007 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Monday, April 04, 2016 21:30:27	0.079	0.22	50.5
Monday, April 04, 2016 21:35:28	0.990	5.19	49.5
Monday, April 04, 2016 21:40:29	0.990	10.16	50.5
Monday, April 04, 2016 21:45:29	0.990	15.11	50.6
Monday, April 04, 2016 21:50:30	0.990	20.08	50.2
Monday, April 04, 2016 21:55:30	0.990	25.03	50.3
Monday, April 04, 2016 22:00:31	0.990	30.00	50.2
Monday, April 04, 2016 22:05:31	0.990	34.95	50.6
Monday, April 04, 2016 22:10:32	0.990	39.92	50.8
Monday, April 04, 2016 22:15:33	0.990	44.88	50.2
Monday, April 04, 2016 22:20:33	0.990	49.84	49.9
Monday, April 04, 2016 22:25:34	0.990	54.80	50.7
Monday, April 04, 2016 22:30:34	0.990	59.75	50.4
Monday, April 04, 2016 22:35:35	0.990	64.72	49.7
Monday, April 04, 2016 22:40:36	0.990	69.69	50.5
Monday, April 04, 2016 22:45:36	0.990	74.64	49.7
Monday, April 04, 2016 22:50:37	0.990	79.61	49.8
Monday, April 04, 2016 22:55:37	0.990	84.56	50.3
Monday, April 04, 2016 23:00:38	0.990	89.53	50.3
Monday, April 04, 2016 23:05:39	0.990	94.50	50.5
Monday, April 04, 2016 23:10:39	0.990	99.45	50.5
Monday, April 04, 2016 23:15:40	0.990	104.42	50.6
Monday, April 04, 2016 23:20:40	0.990	109.37	49.9
Monday, April 04, 2016 23:25:41	0.990	114.33	50.7
Monday, April 04, 2016 23:30:41	0.990	119.29	50.1
Monday, April 04, 2016 23:35:42	0.990	124.25	50.1
Monday, April 04, 2016 23:40:43	0.990	129.22	50.1
Monday, April 04, 2016 23:45:43	0.990	134.17	50.7
Monday, April 04, 2016 23:50:44	0.990	139.14	49.3
Monday, April 04, 2016 23:55:44	0.990	144.09	50.1
Tuesday, April 05, 2016 0:00:45	0.990	149.06	50.2
Tuesday, April 05, 2016 0:05:46	0.990	154.03	50.3
Tuesday, April 05, 2016 0:10:46	0.990	158.98	50.6

Tuesday, April 05, 2016 0:15:47 0.990	163.95	50.9
Tuesday, April 05, 2016 0:20:47 0.990	168.90	50.2
Tuesday, April 05, 2016 0:25:48 0.990	173.87	50.4
Tuesday, April 05, 2016 0:30:49 0.990	178.83	50.5
Tuesday, April 05, 2016 0:35:49 0.990	183.79	49.8
Tuesday, April 05, 2016 0:40:50 0.990	188.75	50.1
Tuesday, April 05, 2016 0:45:50 0.990	193.70	49.4
Tuesday, April 05, 2016 0:50:51 0.990	198.67	50.3
Tuesday, April 05, 2016 0:55:52 0.990	203.64	50.6
Tuesday, April 05, 2016 1:00:52 0.990	208.59	50.5
Tuesday, April 05, 2016 1:05:53 0.990	213.56	49.7
Tuesday, April 05, 2016 1:10:53 0.990	218.51	49.8
Tuesday, April 05, 2016 1:15:54 0.990	223.48	50.6
Tuesday, April 05, 2016 1:20:54 0.990	228.43	49.7
Tuesday, April 05, 2016 1:25:55 0.990	233.40	50.3
Tuesday, April 05, 2016 1:30:56 0.990	238.37	50.2
Tuesday, April 05, 2016 1:35:56 0.990	243.32	50.1
Tuesday, April 05, 2016 1:40:57 0.990	248.29	50.2
Tuesday, April 05, 2016 1:45:57 0.990	253.24	49.9
Tuesday, April 05, 2016 1:50:58 0.990	258.20	50.5
Tuesday, April 05, 2016 1:55:59 0.990	263.17	50.6
Tuesday, April 05, 2016 2:00:59 0.990	268.12	50.5
Tuesday, April 05, 2016 2:06:00 0.990	273.09	50.0
Tuesday, April 05, 2016 2:11:00 0.990	278.04	50.5
Tuesday, April 05, 2016 2:16:01 0.990	283.01	50.0
Tuesday, April 05, 2016 2:21:02 0.990	287.98	49.7
Tuesday, April 05, 2016 2:26:02 0.990	292.93	49.8
Tuesday, April 05, 2016 2:31:03 0.990	297.90	50.3
Tuesday, April 05, 2016 2:36:03 0.990	302.85	50.1
Tuesday, April 05, 2016 2:41:04 0.990	307.82	50.5
Tuesday, April 05, 2016 2:46:04 0.990	312.77	50.2
Tuesday, April 05, 2016 2:51:05 0.990	317.73	50.6
Tuesday, April 05, 2016 2:56:06 0.990	322.70	50.2
Tuesday, April 05, 2016 3:01:06 0.990	327.65	49.8
Tuesday, April 05, 2016 3:06:07 0.990	332.62	49.7
Tuesday, April 05, 2016 3:11:07 0.990	337.57	50.5
Tuesday, April 05, 2016 3:16:08 0.990	342.54	50.4
Tuesday, April 05, 2016 3:21:09 0.990	347.51	49.8
Tuesday, April 05, 2016 3:26:09 0.990	352.46	50.4
Tuesday, April 05, 2016 3:31:10 0.990	357.43	50.6
Tuesday, April 05, 2016 3:36:10 0.990	362.38	50.2
Tuesday, April 05, 2016 3:41:11 0.990	367.35	50.2
Tuesday, April 05, 2016 3:46:11 0.990	372.30	50.0
Tuesday, April 05, 2016 3:51:12 0.990	377.27	50.6
Tuesday, April 05, 2016 3:56:13 0.990	382.23	50.6
Tuesday, April 05, 2016 4:01:13 0.990	387.19	50.2
Tuesday, April 05, 2016 4:06:14 0.990	392.15	50.4
Tuesday, April 05, 2016 4:11:14 0.990	397.10	50.6
Tuesday, April 05, 2016 4:16:15 0.990	402.07	50.2
Tuesday, April 05, 2016 4:21:16 0.990	407.04	50.4
Tuesday, April 05, 2016 4:26:16 0.990	411.99	50.6
Tuesday, April 05, 2016 4:31:17 0.990	416.96	50.2
Tuesday, April 05, 2016 4:36:17 0.990	421.91	50.2
Tuesday, April 05, 2016 4:41:18 0.990	426.88	50.5

Tuesday, April 05, 2016 4:46:18 0.990	431.83	50.5
Tuesday, April 05, 2016 4:51:19 0.990	436.80	50.6
Tuesday, April 05, 2016 4:56:20 0.990	441.76	50.2
Tuesday, April 05, 2016 5:01:20 0.990	446.72	50.5
Tuesday, April 05, 2016 5:06:21 0.990	451.68	50.2
Tuesday, April 05, 2016 5:11:21 0.990	456.63	50.4
Tuesday, April 05, 2016 5:16:22 0.990	461.60	50.4
Tuesday, April 05, 2016 5:21:23 0.990	466.57	50.2
Tuesday, April 05, 2016 5:26:23 0.990	471.52	50.2
Tuesday, April 05, 2016 5:31:24 0.990	476.49	50.5
Tuesday, April 05, 2016 5:36:24 0.990	481.44	50.4
Tuesday, April 05, 2016 5:41:25 0.990	486.41	50.5
Tuesday, April 05, 2016 5:46:25 0.990	491.36	50.0
Tuesday, April 05, 2016 5:51:26 0.990	496.33	50.0
Tuesday, April 05, 2016 5:56:27 0.990	501.29	50.1
Tuesday, April 05, 2016 6:01:27 0.990	506.25	50.9
Tuesday, April 05, 2016 6:06:28 0.990	511.21	50.4
Tuesday, April 05, 2016 6:11:28 0.990	516.17	50.4
Tuesday, April 05, 2016 6:16:29 0.990	521.13	49.4
Tuesday, April 05, 2016 6:21:29 0.990	526.09	50.2
Tuesday, April 05, 2016 6:26:30 0.990	531.05	50.5
Tuesday, April 05, 2016 6:31:31 0.990	536.02	50.1
Tuesday, April 05, 2016 6:36:31 0.990	540.97	50.2
Tuesday, April 05, 2016 6:41:32 0.990	545.94	50.5
Tuesday, April 05, 2016 6:46:32 0.990	550.89	50.6
Tuesday, April 05, 2016 6:51:33 0.990	555.86	49.8
Tuesday, April 05, 2016 6:56:34 0.990	560.83	50.2
Tuesday, April 05, 2016 7:01:34 0.990	565.78	49.4
Tuesday, April 05, 2016 7:06:35 0.990	570.75	49.7
Tuesday, April 05, 2016 7:11:35 0.990	575.70	50.5
Tuesday, April 05, 2016 7:16:36 0.990	580.67	50.5
Tuesday, April 05, 2016 7:21:37 0.990	585.64	50.1
Tuesday, April 05, 2016 7:26:37 0.990	590.59	50.4
Tuesday, April 05, 2016 7:31:38 0.990	595.56	50.1
Tuesday, April 05, 2016 7:36:38 0.990	600.51	50.2
Tuesday, April 05, 2016 7:41:39 0.990	605.48	50.6
Tuesday, April 05, 2016 7:46:40 0.990	610.45	50.4
Tuesday, April 05, 2016 7:51:40 0.990	615.40	50.3
Tuesday, April 05, 2016 7:56:41 0.990	620.37	49.6
Tuesday, April 05, 2016 8:01:41 0.990	625.32	50.6
Tuesday, April 05, 2016 8:06:42 0.990	630.29	50.5
Tuesday, April 05, 2016 8:11:42 0.990	635.24	50.1
Tuesday, April 05, 2016 8:16:43 0.990	640.21	50.2
Tuesday, April 05, 2016 8:21:44 0.990	645.18	49.6
Tuesday, April 05, 2016 8:26:44 0.990	650.13	50.6
Tuesday, April 05, 2016 8:31:45 0.990	655.10	50.3
Tuesday, April 05, 2016 8:36:45 0.990	660.05	50.0
Tuesday, April 05, 2016 8:41:46 0.990	665.02	50.1
Tuesday, April 05, 2016 8:46:47 0.990	669.99	50.1
Tuesday, April 05, 2016 8:51:47 0.990	674.94	50.5
Tuesday, April 05, 2016 8:56:48 0.990	679.91	50.1
Tuesday, April 05, 2016 9:01:48 0.990	684.86	50.4
Tuesday, April 05, 2016 9:06:49 0.990	689.83	50.0
Tuesday, April 05, 2016 9:11:50 0.990	694.80	50.4

Tuesday, April 05, 2016 9:16:50	0.990	699.75	50.1
Tuesday, April 05, 2016 9:21:51	0.990	704.72	49.8
Tuesday, April 05, 2016 9:26:51	0.990	709.67	50.5
Tuesday, April 05, 2016 9:30:05	0.990	712.87	50.5

aqms5

formaldehyde002

Ch. 2 Cartridge Started Sunday, April 10, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Monday, April 11, 2016 6:15:25

Total Volume 712.85 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.006 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
------	-----------	--------	------

Sunday, April 10, 2016 18:15:30	0.081	0.22	50.0
Sunday, April 10, 2016 18:20:31	0.990	5.19	50.5
Sunday, April 10, 2016 18:25:32	0.990	10.16	50.6
Sunday, April 10, 2016 18:30:32	0.990	15.11	51.0
Sunday, April 10, 2016 18:35:33	0.990	20.08	50.9
Sunday, April 10, 2016 18:40:34	0.990	25.05	50.1
Sunday, April 10, 2016 18:45:34	0.990	30.00	50.1
Sunday, April 10, 2016 18:50:35	0.990	34.97	50.7
Sunday, April 10, 2016 18:55:36	0.990	39.94	50.8
Sunday, April 10, 2016 19:00:37	0.990	44.90	50.3
Sunday, April 10, 2016 19:05:37	0.990	49.86	50.8
Sunday, April 10, 2016 19:10:38	0.990	54.82	50.3
Sunday, April 10, 2016 19:15:39	0.990	59.79	50.1
Sunday, April 10, 2016 19:20:40	0.990	64.76	50.4
Sunday, April 10, 2016 19:25:40	0.990	69.71	50.2
Sunday, April 10, 2016 19:30:41	0.990	74.68	50.9
Sunday, April 10, 2016 19:35:42	0.990	79.65	49.8
Sunday, April 10, 2016 19:40:42	0.990	84.60	50.5
Sunday, April 10, 2016 19:45:43	0.990	89.57	50.7
Sunday, April 10, 2016 19:50:44	0.990	94.53	50.4
Sunday, April 10, 2016 19:55:45	0.990	99.50	49.7
Sunday, April 10, 2016 20:00:45	0.990	104.45	50.9
Sunday, April 10, 2016 20:05:46	0.990	109.42	51.1
Sunday, April 10, 2016 20:10:47	0.990	114.39	50.5
Sunday, April 10, 2016 20:15:48	0.990	119.36	50.4
Sunday, April 10, 2016 20:20:48	0.990	124.31	50.4
Sunday, April 10, 2016 20:25:49	0.990	129.28	50.5
Sunday, April 10, 2016 20:30:50	0.990	134.25	50.5
Sunday, April 10, 2016 20:35:50	0.990	139.20	50.9
Sunday, April 10, 2016 20:40:51	0.990	144.17	51.0
Sunday, April 10, 2016 20:45:52	0.990	149.13	50.6
Sunday, April 10, 2016 20:50:53	0.990	154.10	50.9
Sunday, April 10, 2016 20:55:53	0.990	159.05	50.3

Sunday, April 10, 2016 21:00:54 0.990	164.02	50.2
Sunday, April 10, 2016 21:05:55 0.990	168.99	50.3
Sunday, April 10, 2016 21:10:56 0.990	173.96	50.2
Sunday, April 10, 2016 21:15:56 0.990	178.91	49.8
Sunday, April 10, 2016 21:20:57 0.990	183.88	50.1
Sunday, April 10, 2016 21:25:58 0.990	188.85	50.9
Sunday, April 10, 2016 21:30:59 0.990	193.82	50.7
Sunday, April 10, 2016 21:35:59 0.990	198.77	50.8
Sunday, April 10, 2016 21:41:00 0.990	203.74	49.8
Sunday, April 10, 2016 21:46:01 0.990	208.70	50.3
Sunday, April 10, 2016 21:51:02 0.990	213.67	50.5
Sunday, April 10, 2016 21:56:02 0.990	218.62	50.3
Sunday, April 10, 2016 22:01:03 0.990	223.59	50.1
Sunday, April 10, 2016 22:06:04 0.990	228.56	50.4
Sunday, April 10, 2016 22:11:05 0.990	233.53	50.6
Sunday, April 10, 2016 22:16:05 0.990	238.48	50.1
Sunday, April 10, 2016 22:21:06 0.990	243.45	50.9
Sunday, April 10, 2016 22:26:07 0.990	248.42	50.2
Sunday, April 10, 2016 22:31:08 0.990	253.38	50.2
Sunday, April 10, 2016 22:36:08 0.990	258.34	50.1
Sunday, April 10, 2016 22:41:09 0.990	263.30	50.4
Sunday, April 10, 2016 22:46:10 0.990	268.27	50.4
Sunday, April 10, 2016 22:51:11 0.990	273.24	50.2
Sunday, April 10, 2016 22:56:11 0.990	278.19	50.4
Sunday, April 10, 2016 23:01:12 0.990	283.16	50.6
Sunday, April 10, 2016 23:06:13 0.990	288.13	50.4
Sunday, April 10, 2016 23:11:14 0.990	293.10	50.4
Sunday, April 10, 2016 23:16:14 0.990	298.05	50.4
Sunday, April 10, 2016 23:21:15 0.990	303.02	50.0
Sunday, April 10, 2016 23:26:16 0.990	307.99	50.9
Sunday, April 10, 2016 23:31:16 0.990	312.94	50.2
Sunday, April 10, 2016 23:36:17 0.990	317.91	49.8
Sunday, April 10, 2016 23:41:18 0.990	322.87	50.5
Sunday, April 10, 2016 23:46:19 0.990	327.84	50.9
Sunday, April 10, 2016 23:51:19 0.990	332.79	49.7
Sunday, April 10, 2016 23:56:20 0.990	337.76	50.3
Monday, April 11, 2016 0:01:21 0.990	342.73	50.1
Monday, April 11, 2016 0:06:22 0.990	347.70	50.5
Monday, April 11, 2016 0:11:22 0.990	352.65	50.4
Monday, April 11, 2016 0:16:23 0.990	357.62	50.1
Monday, April 11, 2016 0:21:24 0.990	362.59	50.4
Monday, April 11, 2016 0:26:24 0.990	367.54	50.3
Monday, April 11, 2016 0:31:25 0.990	372.51	50.8
Monday, April 11, 2016 0:36:26 0.990	377.48	50.1
Monday, April 11, 2016 0:41:26 0.990	382.43	50.4
Monday, April 11, 2016 0:46:27 0.990	387.40	49.6
Monday, April 11, 2016 0:51:28 0.990	392.36	50.4
Monday, April 11, 2016 0:56:29 0.990	397.33	50.5
Monday, April 11, 2016 1:01:29 0.990	402.28	50.6
Monday, April 11, 2016 1:06:30 0.990	407.25	50.9
Monday, April 11, 2016 1:11:31 0.990	412.22	50.5
Monday, April 11, 2016 1:16:31 0.990	417.17	49.8
Monday, April 11, 2016 1:21:32 0.990	422.14	50.0
Monday, April 11, 2016 1:26:33 0.990	427.11	51.0

Monday, April 11, 2016 1:31:33 0.990	432.06	50.7
Monday, April 11, 2016 1:36:34 0.990	437.03	50.2
Monday, April 11, 2016 1:41:35 0.990	442.00	50.5
Monday, April 11, 2016 1:46:36 0.990	446.96	50.4
Monday, April 11, 2016 1:51:36 0.990	451.92	49.6
Monday, April 11, 2016 1:56:37 0.990	456.88	51.0
Monday, April 11, 2016 2:01:38 0.990	461.85	50.0
Monday, April 11, 2016 2:06:38 0.990	466.80	50.8
Monday, April 11, 2016 2:11:39 0.990	471.77	50.1
Monday, April 11, 2016 2:16:40 0.990	476.74	49.8
Monday, April 11, 2016 2:21:40 0.990	481.69	50.5
Monday, April 11, 2016 2:26:41 0.990	486.66	50.5
Monday, April 11, 2016 2:31:42 0.990	491.63	50.4
Monday, April 11, 2016 2:36:42 0.990	496.58	50.2
Monday, April 11, 2016 2:41:43 0.990	501.55	50.5
Monday, April 11, 2016 2:46:44 0.990	506.52	50.3
Monday, April 11, 2016 2:51:45 0.990	511.48	50.0
Monday, April 11, 2016 2:56:45 0.990	516.44	50.2
Monday, April 11, 2016 3:01:46 0.990	521.41	50.0
Monday, April 11, 2016 3:06:47 0.990	526.37	50.2
Monday, April 11, 2016 3:11:47 0.990	531.33	50.6
Monday, April 11, 2016 3:16:48 0.990	536.29	50.6
Monday, April 11, 2016 3:21:49 0.990	541.26	49.7
Monday, April 11, 2016 3:26:49 0.990	546.21	50.7
Monday, April 11, 2016 3:31:50 0.990	551.18	51.1
Monday, April 11, 2016 3:36:51 0.990	556.15	50.5
Monday, April 11, 2016 3:41:51 0.990	561.10	49.8
Monday, April 11, 2016 3:46:52 0.990	566.07	50.5
Monday, April 11, 2016 3:51:53 0.990	571.04	50.6
Monday, April 11, 2016 3:56:54 0.990	576.01	50.7
Monday, April 11, 2016 4:01:54 0.990	580.96	50.5
Monday, April 11, 2016 4:06:55 0.990	585.93	49.8
Monday, April 11, 2016 4:11:56 0.990	590.90	50.5
Monday, April 11, 2016 4:16:56 0.990	595.85	50.8
Monday, April 11, 2016 4:21:57 0.990	600.82	50.8
Monday, April 11, 2016 4:26:58 0.990	605.79	50.4
Monday, April 11, 2016 4:31:58 0.990	610.74	50.0
Monday, April 11, 2016 4:36:59 0.990	615.71	50.6
Monday, April 11, 2016 4:42:00 0.990	620.67	50.6
Monday, April 11, 2016 4:47:01 0.990	625.64	50.5
Monday, April 11, 2016 4:52:01 0.990	630.59	51.1
Monday, April 11, 2016 4:57:02 0.990	635.56	50.1
Monday, April 11, 2016 5:02:03 0.990	640.53	50.5
Monday, April 11, 2016 5:07:03 0.990	645.48	50.0
Monday, April 11, 2016 5:12:04 0.990	650.45	50.4
Monday, April 11, 2016 5:17:05 0.990	655.42	50.5
Monday, April 11, 2016 5:22:05 0.990	660.37	50.4
Monday, April 11, 2016 5:27:06 0.990	665.34	50.4
Monday, April 11, 2016 5:32:07 0.990	670.31	50.4
Monday, April 11, 2016 5:37:07 0.990	675.26	50.5
Monday, April 11, 2016 5:42:08 0.990	680.23	50.8
Monday, April 11, 2016 5:47:09 0.990	685.20	49.7
Monday, April 11, 2016 5:52:09 0.990	690.15	50.7
Monday, April 11, 2016 5:57:10 0.990	695.12	50.9

Monday, April 11, 2016 6:02:11	0.990	700.09	50.8
Monday, April 11, 2016 6:07:11	0.990	705.04	50.7
Monday, April 11, 2016 6:12:12	0.990	710.01	50.7
Monday, April 11, 2016 6:15:04	0.990	712.84	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Sunday, April 10, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Monday, April 11, 2016 6:15:25

Total Volume 712.85 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.006 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
------	-----------	--------	------

Sunday, April 10, 2016 18:15:30	0.081	0.22	50.0
Sunday, April 10, 2016 18:20:31	0.990	5.19	50.5
Sunday, April 10, 2016 18:25:32	0.990	10.16	50.6
Sunday, April 10, 2016 18:30:32	0.990	15.11	51.0
Sunday, April 10, 2016 18:35:33	0.990	20.08	50.9
Sunday, April 10, 2016 18:40:34	0.990	25.05	50.1
Sunday, April 10, 2016 18:45:34	0.990	30.00	50.1
Sunday, April 10, 2016 18:50:35	0.990	34.97	50.7
Sunday, April 10, 2016 18:55:36	0.990	39.94	50.8
Sunday, April 10, 2016 19:00:37	0.990	44.90	50.3
Sunday, April 10, 2016 19:05:37	0.990	49.86	50.8
Sunday, April 10, 2016 19:10:38	0.990	54.82	50.3
Sunday, April 10, 2016 19:15:39	0.990	59.79	50.1
Sunday, April 10, 2016 19:20:40	0.990	64.76	50.4
Sunday, April 10, 2016 19:25:40	0.990	69.71	50.2
Sunday, April 10, 2016 19:30:41	0.990	74.68	50.9
Sunday, April 10, 2016 19:35:42	0.990	79.65	49.8
Sunday, April 10, 2016 19:40:42	0.990	84.60	50.5
Sunday, April 10, 2016 19:45:43	0.990	89.57	50.7
Sunday, April 10, 2016 19:50:44	0.990	94.53	50.4
Sunday, April 10, 2016 19:55:45	0.990	99.50	49.7
Sunday, April 10, 2016 20:00:45	0.990	104.45	50.9
Sunday, April 10, 2016 20:05:46	0.990	109.42	51.1
Sunday, April 10, 2016 20:10:47	0.990	114.39	50.5
Sunday, April 10, 2016 20:15:48	0.990	119.36	50.4
Sunday, April 10, 2016 20:20:48	0.990	124.31	50.4
Sunday, April 10, 2016 20:25:49	0.990	129.28	50.5
Sunday, April 10, 2016 20:30:50	0.990	134.25	50.5
Sunday, April 10, 2016 20:35:50	0.990	139.20	50.9
Sunday, April 10, 2016 20:40:51	0.990	144.17	51.0
Sunday, April 10, 2016 20:45:52	0.990	149.13	50.6
Sunday, April 10, 2016 20:50:53	0.990	154.10	50.9
Sunday, April 10, 2016 20:55:53	0.990	159.05	50.3

Sunday, April 10, 2016 21:00:54 0.990	164.02	50.2
Sunday, April 10, 2016 21:05:55 0.990	168.99	50.3
Sunday, April 10, 2016 21:10:56 0.990	173.96	50.2
Sunday, April 10, 2016 21:15:56 0.990	178.91	49.8
Sunday, April 10, 2016 21:20:57 0.990	183.88	50.1
Sunday, April 10, 2016 21:25:58 0.990	188.85	50.9
Sunday, April 10, 2016 21:30:59 0.990	193.82	50.7
Sunday, April 10, 2016 21:35:59 0.990	198.77	50.8
Sunday, April 10, 2016 21:41:00 0.990	203.74	49.8
Sunday, April 10, 2016 21:46:01 0.990	208.70	50.3
Sunday, April 10, 2016 21:51:02 0.990	213.67	50.5
Sunday, April 10, 2016 21:56:02 0.990	218.62	50.3
Sunday, April 10, 2016 22:01:03 0.990	223.59	50.1
Sunday, April 10, 2016 22:06:04 0.990	228.56	50.4
Sunday, April 10, 2016 22:11:05 0.990	233.53	50.6
Sunday, April 10, 2016 22:16:05 0.990	238.48	50.1
Sunday, April 10, 2016 22:21:06 0.990	243.45	50.9
Sunday, April 10, 2016 22:26:07 0.990	248.42	50.2
Sunday, April 10, 2016 22:31:08 0.990	253.38	50.2
Sunday, April 10, 2016 22:36:08 0.990	258.34	50.1
Sunday, April 10, 2016 22:41:09 0.990	263.30	50.4
Sunday, April 10, 2016 22:46:10 0.990	268.27	50.4
Sunday, April 10, 2016 22:51:11 0.990	273.24	50.2
Sunday, April 10, 2016 22:56:11 0.990	278.19	50.4
Sunday, April 10, 2016 23:01:12 0.990	283.16	50.6
Sunday, April 10, 2016 23:06:13 0.990	288.13	50.4
Sunday, April 10, 2016 23:11:14 0.990	293.10	50.4
Sunday, April 10, 2016 23:16:14 0.990	298.05	50.4
Sunday, April 10, 2016 23:21:15 0.990	303.02	50.0
Sunday, April 10, 2016 23:26:16 0.990	307.99	50.9
Sunday, April 10, 2016 23:31:16 0.990	312.94	50.2
Sunday, April 10, 2016 23:36:17 0.990	317.91	49.8
Sunday, April 10, 2016 23:41:18 0.990	322.87	50.5
Sunday, April 10, 2016 23:46:19 0.990	327.84	50.9
Sunday, April 10, 2016 23:51:19 0.990	332.79	49.7
Sunday, April 10, 2016 23:56:20 0.990	337.76	50.3
Monday, April 11, 2016 0:01:21 0.990	342.73	50.1
Monday, April 11, 2016 0:06:22 0.990	347.70	50.5
Monday, April 11, 2016 0:11:22 0.990	352.65	50.4
Monday, April 11, 2016 0:16:23 0.990	357.62	50.1
Monday, April 11, 2016 0:21:24 0.990	362.59	50.4
Monday, April 11, 2016 0:26:24 0.990	367.54	50.3
Monday, April 11, 2016 0:31:25 0.990	372.51	50.8
Monday, April 11, 2016 0:36:26 0.990	377.48	50.1
Monday, April 11, 2016 0:41:26 0.990	382.43	50.4
Monday, April 11, 2016 0:46:27 0.990	387.40	49.6
Monday, April 11, 2016 0:51:28 0.990	392.36	50.4
Monday, April 11, 2016 0:56:29 0.990	397.33	50.5
Monday, April 11, 2016 1:01:29 0.990	402.28	50.6
Monday, April 11, 2016 1:06:30 0.990	407.25	50.9
Monday, April 11, 2016 1:11:31 0.990	412.22	50.5
Monday, April 11, 2016 1:16:31 0.990	417.17	49.8
Monday, April 11, 2016 1:21:32 0.990	422.14	50.0
Monday, April 11, 2016 1:26:33 0.990	427.11	51.0

Monday, April 11, 2016 1:31:33 0.990	432.06	50.7
Monday, April 11, 2016 1:36:34 0.990	437.03	50.2
Monday, April 11, 2016 1:41:35 0.990	442.00	50.5
Monday, April 11, 2016 1:46:36 0.990	446.96	50.4
Monday, April 11, 2016 1:51:36 0.990	451.92	49.6
Monday, April 11, 2016 1:56:37 0.990	456.88	51.0
Monday, April 11, 2016 2:01:38 0.990	461.85	50.0
Monday, April 11, 2016 2:06:38 0.990	466.80	50.8
Monday, April 11, 2016 2:11:39 0.990	471.77	50.1
Monday, April 11, 2016 2:16:40 0.990	476.74	49.8
Monday, April 11, 2016 2:21:40 0.990	481.69	50.5
Monday, April 11, 2016 2:26:41 0.990	486.66	50.5
Monday, April 11, 2016 2:31:42 0.990	491.63	50.4
Monday, April 11, 2016 2:36:42 0.990	496.58	50.2
Monday, April 11, 2016 2:41:43 0.990	501.55	50.5
Monday, April 11, 2016 2:46:44 0.990	506.52	50.3
Monday, April 11, 2016 2:51:45 0.990	511.48	50.0
Monday, April 11, 2016 2:56:45 0.990	516.44	50.2
Monday, April 11, 2016 3:01:46 0.990	521.41	50.0
Monday, April 11, 2016 3:06:47 0.990	526.37	50.2
Monday, April 11, 2016 3:11:47 0.990	531.33	50.6
Monday, April 11, 2016 3:16:48 0.990	536.29	50.6
Monday, April 11, 2016 3:21:49 0.990	541.26	49.7
Monday, April 11, 2016 3:26:49 0.990	546.21	50.7
Monday, April 11, 2016 3:31:50 0.990	551.18	51.1
Monday, April 11, 2016 3:36:51 0.990	556.15	50.5
Monday, April 11, 2016 3:41:51 0.990	561.10	49.8
Monday, April 11, 2016 3:46:52 0.990	566.07	50.5
Monday, April 11, 2016 3:51:53 0.990	571.04	50.6
Monday, April 11, 2016 3:56:54 0.990	576.01	50.7
Monday, April 11, 2016 4:01:54 0.990	580.96	50.5
Monday, April 11, 2016 4:06:55 0.990	585.93	49.8
Monday, April 11, 2016 4:11:56 0.990	590.90	50.5
Monday, April 11, 2016 4:16:56 0.990	595.85	50.8
Monday, April 11, 2016 4:21:57 0.990	600.82	50.8
Monday, April 11, 2016 4:26:58 0.990	605.79	50.4
Monday, April 11, 2016 4:31:58 0.990	610.74	50.0
Monday, April 11, 2016 4:36:59 0.990	615.71	50.6
Monday, April 11, 2016 4:42:00 0.990	620.67	50.6
Monday, April 11, 2016 4:47:01 0.990	625.64	50.5
Monday, April 11, 2016 4:52:01 0.990	630.59	51.1
Monday, April 11, 2016 4:57:02 0.990	635.56	50.1
Monday, April 11, 2016 5:02:03 0.990	640.53	50.5
Monday, April 11, 2016 5:07:03 0.990	645.48	50.0
Monday, April 11, 2016 5:12:04 0.990	650.45	50.4
Monday, April 11, 2016 5:17:05 0.990	655.42	50.5
Monday, April 11, 2016 5:22:05 0.990	660.37	50.4
Monday, April 11, 2016 5:27:06 0.990	665.34	50.4
Monday, April 11, 2016 5:32:07 0.990	670.31	50.4
Monday, April 11, 2016 5:37:07 0.990	675.26	50.5
Monday, April 11, 2016 5:42:08 0.990	680.23	50.8
Monday, April 11, 2016 5:47:09 0.990	685.20	49.7
Monday, April 11, 2016 5:52:09 0.990	690.15	50.7
Monday, April 11, 2016 5:57:10 0.990	695.12	50.9

Monday, April 11, 2016 6:02:11	0.990	700.09	50.8
Monday, April 11, 2016 6:07:11	0.990	705.04	50.7
Monday, April 11, 2016 6:12:12	0.990	710.01	50.7
Monday, April 11, 2016 6:15:04	0.990	712.84	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Saturday, April 16, 2016 18:15:00

Flow Rate Set Point 1.00 l/min

Stopped Sunday, April 17, 2016 6:15:25

Total Volume 712.89 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.002 l/min

Ending Leak Rate -0.005 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Saturday, April 16, 2016 18:15:27	0.082	0.22	50.4
Saturday, April 16, 2016 18:20:28	0.990	5.19	49.9
Saturday, April 16, 2016 18:25:28	0.990	10.15	50.6
Saturday, April 16, 2016 18:30:29	0.990	15.11	50.6
Saturday, April 16, 2016 18:35:29	0.990	20.07	50.5
Saturday, April 16, 2016 18:40:30	0.990	25.03	50.3
Saturday, April 16, 2016 18:45:30	0.990	29.99	50.5
Saturday, April 16, 2016 18:50:31	0.990	34.95	50.4
Saturday, April 16, 2016 18:55:31	0.990	39.90	50.5
Saturday, April 16, 2016 19:00:32	0.990	44.87	50.2
Saturday, April 16, 2016 19:05:32	0.990	49.82	50.7
Saturday, April 16, 2016 19:10:33	0.990	54.79	50.5
Saturday, April 16, 2016 19:15:34	0.990	59.76	50.3
Saturday, April 16, 2016 19:20:34	0.990	64.71	50.7
Saturday, April 16, 2016 19:25:35	0.990	69.68	50.9
Saturday, April 16, 2016 19:30:35	0.990	74.63	49.7
Saturday, April 16, 2016 19:35:36	0.990	79.60	50.1
Saturday, April 16, 2016 19:40:37	0.990	84.57	50.8
Saturday, April 16, 2016 19:45:37	0.990	89.52	50.1
Saturday, April 16, 2016 19:50:38	0.990	94.49	51.1
Saturday, April 16, 2016 19:55:38	0.990	99.44	50.1
Saturday, April 16, 2016 20:00:39	0.990	104.41	50.9
Saturday, April 16, 2016 20:05:40	0.990	109.38	50.9
Saturday, April 16, 2016 20:10:40	0.990	114.33	50.6
Saturday, April 16, 2016 20:15:41	0.990	119.30	49.8
Saturday, April 16, 2016 20:20:42	0.990	124.26	50.5
Saturday, April 16, 2016 20:25:42	0.990	129.22	50.3
Saturday, April 16, 2016 20:30:43	0.990	134.18	49.9
Saturday, April 16, 2016 20:35:43	0.990	139.14	50.8
Saturday, April 16, 2016 20:40:44	0.990	144.10	50.0
Saturday, April 16, 2016 20:45:45	0.990	149.07	50.6
Saturday, April 16, 2016 20:50:45	0.990	154.02	51.0
Saturday, April 16, 2016 20:55:46	0.990	158.99	50.5

Saturday, April 16, 2016 21:00:47 0.990	163.96	50.4
Saturday, April 16, 2016 21:05:47 0.990	168.91	50.5
Saturday, April 16, 2016 21:10:48 0.990	173.88	50.2
Saturday, April 16, 2016 21:15:49 0.990	178.85	50.6
Saturday, April 16, 2016 21:20:49 0.990	183.80	50.5
Saturday, April 16, 2016 21:25:50 0.990	188.77	50.2
Saturday, April 16, 2016 21:30:50 0.990	193.72	50.4
Saturday, April 16, 2016 21:35:51 0.990	198.69	50.5
Saturday, April 16, 2016 21:40:52 0.990	203.66	50.7
Saturday, April 16, 2016 21:45:52 0.990	208.61	50.9
Saturday, April 16, 2016 21:50:53 0.990	213.58	50.9
Saturday, April 16, 2016 21:55:54 0.990	218.54	50.6
Saturday, April 16, 2016 22:00:54 0.990	223.50	50.2
Saturday, April 16, 2016 22:05:55 0.990	228.46	49.7
Saturday, April 16, 2016 22:10:56 0.990	233.43	50.1
Saturday, April 16, 2016 22:15:56 0.990	238.38	50.9
Saturday, April 16, 2016 22:20:57 0.990	243.35	50.5
Saturday, April 16, 2016 22:25:58 0.990	248.32	51.1
Saturday, April 16, 2016 22:30:58 0.990	253.27	50.5
Saturday, April 16, 2016 22:35:59 0.990	258.24	50.5
Saturday, April 16, 2016 22:40:59 0.990	263.19	50.0
Saturday, April 16, 2016 22:46:00 0.990	268.16	50.6
Saturday, April 16, 2016 22:51:01 0.990	273.13	50.1
Saturday, April 16, 2016 22:56:01 0.990	278.08	51.1
Saturday, April 16, 2016 23:01:02 0.990	283.05	50.5
Saturday, April 16, 2016 23:06:03 0.990	288.02	50.5
Saturday, April 16, 2016 23:11:03 0.990	292.97	50.7
Saturday, April 16, 2016 23:16:04 0.990	297.94	50.9
Saturday, April 16, 2016 23:21:04 0.990	302.89	50.8
Saturday, April 16, 2016 23:26:05 0.990	307.86	50.6
Saturday, April 16, 2016 23:31:06 0.990	312.82	50.2
Saturday, April 16, 2016 23:36:06 0.990	317.78	49.7
Saturday, April 16, 2016 23:41:07 0.990	322.74	50.8
Saturday, April 16, 2016 23:46:08 0.990	327.71	50.2
Saturday, April 16, 2016 23:51:08 0.990	332.66	50.5
Saturday, April 16, 2016 23:56:09 0.990	337.63	50.8
Sunday, April 17, 2016 0:01:09 0.990	342.58	50.4
Sunday, April 17, 2016 0:06:10 0.990	347.55	49.7
Sunday, April 17, 2016 0:11:11 0.990	352.52	50.0
Sunday, April 17, 2016 0:16:11 0.990	357.47	50.4
Sunday, April 17, 2016 0:21:12 0.990	362.44	50.7
Sunday, April 17, 2016 0:26:13 0.990	367.41	50.6
Sunday, April 17, 2016 0:31:13 0.990	372.36	50.6
Sunday, April 17, 2016 0:36:14 0.990	377.33	51.0
Sunday, April 17, 2016 0:41:14 0.990	382.28	51.0
Sunday, April 17, 2016 0:46:15 0.990	387.25	50.2
Sunday, April 17, 2016 0:51:16 0.990	392.22	50.6
Sunday, April 17, 2016 0:56:16 0.990	397.17	50.5
Sunday, April 17, 2016 1:01:17 0.990	402.14	50.3
Sunday, April 17, 2016 1:06:18 0.990	407.10	51.0
Sunday, April 17, 2016 1:11:18 0.990	412.06	50.5
Sunday, April 17, 2016 1:16:19 0.990	417.02	50.8
Sunday, April 17, 2016 1:21:19 0.990	421.98	50.4
Sunday, April 17, 2016 1:26:20 0.990	426.95	50.8

Sunday, April 17, 2016 1:31:21 0.990	431.91	50.0
Sunday, April 17, 2016 1:36:21 0.990	436.86	50.2
Sunday, April 17, 2016 1:41:22 0.990	441.83	50.8
Sunday, April 17, 2016 1:46:22 0.990	446.79	50.5
Sunday, April 17, 2016 1:51:23 0.990	451.75	50.1
Sunday, April 17, 2016 1:56:24 0.990	456.72	50.5
Sunday, April 17, 2016 2:01:24 0.990	461.67	50.6
Sunday, April 17, 2016 2:06:25 0.990	466.64	50.5
Sunday, April 17, 2016 2:11:26 0.990	471.61	50.9
Sunday, April 17, 2016 2:16:26 0.990	476.56	50.5
Sunday, April 17, 2016 2:21:27 0.990	481.53	49.8
Sunday, April 17, 2016 2:26:27 0.990	486.48	50.8
Sunday, April 17, 2016 2:31:28 0.990	491.45	49.8
Sunday, April 17, 2016 2:36:29 0.990	496.42	50.7
Sunday, April 17, 2016 2:41:29 0.990	501.37	50.5
Sunday, April 17, 2016 2:46:30 0.990	506.34	50.3
Sunday, April 17, 2016 2:51:31 0.990	511.31	50.3
Sunday, April 17, 2016 2:56:31 0.990	516.26	50.1
Sunday, April 17, 2016 3:01:32 0.990	521.23	50.5
Sunday, April 17, 2016 3:06:32 0.990	526.18	50.6
Sunday, April 17, 2016 3:11:33 0.990	531.15	49.7
Sunday, April 17, 2016 3:16:34 0.990	536.12	50.4
Sunday, April 17, 2016 3:21:34 0.990	541.07	50.9
Sunday, April 17, 2016 3:26:35 0.990	546.04	50.2
Sunday, April 17, 2016 3:31:35 0.990	550.99	50.1
Sunday, April 17, 2016 3:36:36 0.990	555.96	50.5
Sunday, April 17, 2016 3:41:37 0.990	560.92	50.5
Sunday, April 17, 2016 3:46:37 0.990	565.88	50.5
Sunday, April 17, 2016 3:51:38 0.990	570.85	49.7
Sunday, April 17, 2016 3:56:38 0.990	575.80	50.5
Sunday, April 17, 2016 4:01:39 0.990	580.77	49.9
Sunday, April 17, 2016 4:06:40 0.990	585.73	50.4
Sunday, April 17, 2016 4:11:40 0.990	590.69	50.6
Sunday, April 17, 2016 4:16:41 0.990	595.65	50.4
Sunday, April 17, 2016 4:21:42 0.990	600.62	50.1
Sunday, April 17, 2016 4:26:42 0.990	605.57	50.9
Sunday, April 17, 2016 4:31:43 0.990	610.54	50.0
Sunday, April 17, 2016 4:36:43 0.990	615.49	50.1
Sunday, April 17, 2016 4:41:44 0.990	620.46	50.6
Sunday, April 17, 2016 4:46:45 0.990	625.43	50.3
Sunday, April 17, 2016 4:51:45 0.990	630.38	49.6
Sunday, April 17, 2016 4:56:46 0.990	635.35	50.5
Sunday, April 17, 2016 5:01:47 0.990	640.32	50.3
Sunday, April 17, 2016 5:06:47 0.990	645.27	50.3
Sunday, April 17, 2016 5:11:48 0.990	650.24	50.5
Sunday, April 17, 2016 5:16:48 0.990	655.19	50.8
Sunday, April 17, 2016 5:21:49 0.990	660.16	50.1
Sunday, April 17, 2016 5:26:50 0.990	665.13	50.1
Sunday, April 17, 2016 5:31:50 0.990	670.08	51.0
Sunday, April 17, 2016 5:36:51 0.990	675.05	49.8
Sunday, April 17, 2016 5:41:52 0.990	680.02	50.6
Sunday, April 17, 2016 5:46:52 0.990	684.97	50.4
Sunday, April 17, 2016 5:51:53 0.990	689.94	50.8
Sunday, April 17, 2016 5:56:53 0.990	694.89	50.3

Sunday, April 17, 2016 6:01:54	0.990	699.86	50.8
Sunday, April 17, 2016 6:06:55	0.990	704.83	50.2
Sunday, April 17, 2016 6:11:55	0.990	709.78	50.4
Sunday, April 17, 2016 6:15:03	0.990	712.88	51.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Saturday, April 16, 2016 18:15:00

Flow Rate Set Point 1.00 l/min

Stopped Sunday, April 17, 2016 6:15:25

Total Volume 712.89 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.002 l/min

Ending Leak Rate -0.005 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Saturday, April 16, 2016 18:15:27	0.082	0.22	50.4
Saturday, April 16, 2016 18:20:28	0.990	5.19	49.9
Saturday, April 16, 2016 18:25:28	0.990	10.15	50.6
Saturday, April 16, 2016 18:30:29	0.990	15.11	50.6
Saturday, April 16, 2016 18:35:29	0.990	20.07	50.5
Saturday, April 16, 2016 18:40:30	0.990	25.03	50.3
Saturday, April 16, 2016 18:45:30	0.990	29.99	50.5
Saturday, April 16, 2016 18:50:31	0.990	34.95	50.4
Saturday, April 16, 2016 18:55:31	0.990	39.90	50.5
Saturday, April 16, 2016 19:00:32	0.990	44.87	50.2
Saturday, April 16, 2016 19:05:32	0.990	49.82	50.7
Saturday, April 16, 2016 19:10:33	0.990	54.79	50.5
Saturday, April 16, 2016 19:15:34	0.990	59.76	50.3
Saturday, April 16, 2016 19:20:34	0.990	64.71	50.7
Saturday, April 16, 2016 19:25:35	0.990	69.68	50.9
Saturday, April 16, 2016 19:30:35	0.990	74.63	49.7
Saturday, April 16, 2016 19:35:36	0.990	79.60	50.1
Saturday, April 16, 2016 19:40:37	0.990	84.57	50.8
Saturday, April 16, 2016 19:45:37	0.990	89.52	50.1
Saturday, April 16, 2016 19:50:38	0.990	94.49	51.1
Saturday, April 16, 2016 19:55:38	0.990	99.44	50.1
Saturday, April 16, 2016 20:00:39	0.990	104.41	50.9
Saturday, April 16, 2016 20:05:40	0.990	109.38	50.9
Saturday, April 16, 2016 20:10:40	0.990	114.33	50.6
Saturday, April 16, 2016 20:15:41	0.990	119.30	49.8
Saturday, April 16, 2016 20:20:42	0.990	124.26	50.5
Saturday, April 16, 2016 20:25:42	0.990	129.22	50.3
Saturday, April 16, 2016 20:30:43	0.990	134.18	49.9
Saturday, April 16, 2016 20:35:43	0.990	139.14	50.8
Saturday, April 16, 2016 20:40:44	0.990	144.10	50.0
Saturday, April 16, 2016 20:45:45	0.990	149.07	50.6
Saturday, April 16, 2016 20:50:45	0.990	154.02	51.0
Saturday, April 16, 2016 20:55:46	0.990	158.99	50.5

Saturday, April 16, 2016 21:00:47 0.990	163.96	50.4
Saturday, April 16, 2016 21:05:47 0.990	168.91	50.5
Saturday, April 16, 2016 21:10:48 0.990	173.88	50.2
Saturday, April 16, 2016 21:15:49 0.990	178.85	50.6
Saturday, April 16, 2016 21:20:49 0.990	183.80	50.5
Saturday, April 16, 2016 21:25:50 0.990	188.77	50.2
Saturday, April 16, 2016 21:30:50 0.990	193.72	50.4
Saturday, April 16, 2016 21:35:51 0.990	198.69	50.5
Saturday, April 16, 2016 21:40:52 0.990	203.66	50.7
Saturday, April 16, 2016 21:45:52 0.990	208.61	50.9
Saturday, April 16, 2016 21:50:53 0.990	213.58	50.9
Saturday, April 16, 2016 21:55:54 0.990	218.54	50.6
Saturday, April 16, 2016 22:00:54 0.990	223.50	50.2
Saturday, April 16, 2016 22:05:55 0.990	228.46	49.7
Saturday, April 16, 2016 22:10:56 0.990	233.43	50.1
Saturday, April 16, 2016 22:15:56 0.990	238.38	50.9
Saturday, April 16, 2016 22:20:57 0.990	243.35	50.5
Saturday, April 16, 2016 22:25:58 0.990	248.32	51.1
Saturday, April 16, 2016 22:30:58 0.990	253.27	50.5
Saturday, April 16, 2016 22:35:59 0.990	258.24	50.5
Saturday, April 16, 2016 22:40:59 0.990	263.19	50.0
Saturday, April 16, 2016 22:46:00 0.990	268.16	50.6
Saturday, April 16, 2016 22:51:01 0.990	273.13	50.1
Saturday, April 16, 2016 22:56:01 0.990	278.08	51.1
Saturday, April 16, 2016 23:01:02 0.990	283.05	50.5
Saturday, April 16, 2016 23:06:03 0.990	288.02	50.5
Saturday, April 16, 2016 23:11:03 0.990	292.97	50.7
Saturday, April 16, 2016 23:16:04 0.990	297.94	50.9
Saturday, April 16, 2016 23:21:04 0.990	302.89	50.8
Saturday, April 16, 2016 23:26:05 0.990	307.86	50.6
Saturday, April 16, 2016 23:31:06 0.990	312.82	50.2
Saturday, April 16, 2016 23:36:06 0.990	317.78	49.7
Saturday, April 16, 2016 23:41:07 0.990	322.74	50.8
Saturday, April 16, 2016 23:46:08 0.990	327.71	50.2
Saturday, April 16, 2016 23:51:08 0.990	332.66	50.5
Saturday, April 16, 2016 23:56:09 0.990	337.63	50.8
Sunday, April 17, 2016 0:01:09 0.990	342.58	50.4
Sunday, April 17, 2016 0:06:10 0.990	347.55	49.7
Sunday, April 17, 2016 0:11:11 0.990	352.52	50.0
Sunday, April 17, 2016 0:16:11 0.990	357.47	50.4
Sunday, April 17, 2016 0:21:12 0.990	362.44	50.7
Sunday, April 17, 2016 0:26:13 0.990	367.41	50.6
Sunday, April 17, 2016 0:31:13 0.990	372.36	50.6
Sunday, April 17, 2016 0:36:14 0.990	377.33	51.0
Sunday, April 17, 2016 0:41:14 0.990	382.28	51.0
Sunday, April 17, 2016 0:46:15 0.990	387.25	50.2
Sunday, April 17, 2016 0:51:16 0.990	392.22	50.6
Sunday, April 17, 2016 0:56:16 0.990	397.17	50.5
Sunday, April 17, 2016 1:01:17 0.990	402.14	50.3
Sunday, April 17, 2016 1:06:18 0.990	407.10	51.0
Sunday, April 17, 2016 1:11:18 0.990	412.06	50.5
Sunday, April 17, 2016 1:16:19 0.990	417.02	50.8
Sunday, April 17, 2016 1:21:19 0.990	421.98	50.4
Sunday, April 17, 2016 1:26:20 0.990	426.95	50.8

Sunday, April 17, 2016 1:31:21 0.990	431.91	50.0
Sunday, April 17, 2016 1:36:21 0.990	436.86	50.2
Sunday, April 17, 2016 1:41:22 0.990	441.83	50.8
Sunday, April 17, 2016 1:46:22 0.990	446.79	50.5
Sunday, April 17, 2016 1:51:23 0.990	451.75	50.1
Sunday, April 17, 2016 1:56:24 0.990	456.72	50.5
Sunday, April 17, 2016 2:01:24 0.990	461.67	50.6
Sunday, April 17, 2016 2:06:25 0.990	466.64	50.5
Sunday, April 17, 2016 2:11:26 0.990	471.61	50.9
Sunday, April 17, 2016 2:16:26 0.990	476.56	50.5
Sunday, April 17, 2016 2:21:27 0.990	481.53	49.8
Sunday, April 17, 2016 2:26:27 0.990	486.48	50.8
Sunday, April 17, 2016 2:31:28 0.990	491.45	49.8
Sunday, April 17, 2016 2:36:29 0.990	496.42	50.7
Sunday, April 17, 2016 2:41:29 0.990	501.37	50.5
Sunday, April 17, 2016 2:46:30 0.990	506.34	50.3
Sunday, April 17, 2016 2:51:31 0.990	511.31	50.3
Sunday, April 17, 2016 2:56:31 0.990	516.26	50.1
Sunday, April 17, 2016 3:01:32 0.990	521.23	50.5
Sunday, April 17, 2016 3:06:32 0.990	526.18	50.6
Sunday, April 17, 2016 3:11:33 0.990	531.15	49.7
Sunday, April 17, 2016 3:16:34 0.990	536.12	50.4
Sunday, April 17, 2016 3:21:34 0.990	541.07	50.9
Sunday, April 17, 2016 3:26:35 0.990	546.04	50.2
Sunday, April 17, 2016 3:31:35 0.990	550.99	50.1
Sunday, April 17, 2016 3:36:36 0.990	555.96	50.5
Sunday, April 17, 2016 3:41:37 0.990	560.92	50.5
Sunday, April 17, 2016 3:46:37 0.990	565.88	50.5
Sunday, April 17, 2016 3:51:38 0.990	570.85	49.7
Sunday, April 17, 2016 3:56:38 0.990	575.80	50.5
Sunday, April 17, 2016 4:01:39 0.990	580.77	49.9
Sunday, April 17, 2016 4:06:40 0.990	585.73	50.4
Sunday, April 17, 2016 4:11:40 0.990	590.69	50.6
Sunday, April 17, 2016 4:16:41 0.990	595.65	50.4
Sunday, April 17, 2016 4:21:42 0.990	600.62	50.1
Sunday, April 17, 2016 4:26:42 0.990	605.57	50.9
Sunday, April 17, 2016 4:31:43 0.990	610.54	50.0
Sunday, April 17, 2016 4:36:43 0.990	615.49	50.1
Sunday, April 17, 2016 4:41:44 0.990	620.46	50.6
Sunday, April 17, 2016 4:46:45 0.990	625.43	50.3
Sunday, April 17, 2016 4:51:45 0.990	630.38	49.6
Sunday, April 17, 2016 4:56:46 0.990	635.35	50.5
Sunday, April 17, 2016 5:01:47 0.990	640.32	50.3
Sunday, April 17, 2016 5:06:47 0.990	645.27	50.3
Sunday, April 17, 2016 5:11:48 0.990	650.24	50.5
Sunday, April 17, 2016 5:16:48 0.990	655.19	50.8
Sunday, April 17, 2016 5:21:49 0.990	660.16	50.1
Sunday, April 17, 2016 5:26:50 0.990	665.13	50.1
Sunday, April 17, 2016 5:31:50 0.990	670.08	51.0
Sunday, April 17, 2016 5:36:51 0.990	675.05	49.8
Sunday, April 17, 2016 5:41:52 0.990	680.02	50.6
Sunday, April 17, 2016 5:46:52 0.990	684.97	50.4
Sunday, April 17, 2016 5:51:53 0.990	689.94	50.8
Sunday, April 17, 2016 5:56:53 0.990	694.89	50.3

Sunday, April 17, 2016 6:01:54	0.990	699.86	50.8
Sunday, April 17, 2016 6:06:55	0.990	704.83	50.2
Sunday, April 17, 2016 6:11:55	0.990	709.78	50.4
Sunday, April 17, 2016 6:15:03	0.990	712.88	51.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Friday, April 22, 2016 18:15:04

Flow Rate Set Point 1.00 l/min

Stopped Saturday, April 23, 2016 6:15:26

Total Volume 712.70 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.003 l/min

Ending Leak Rate -0.003 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Friday, April 22, 2016 18:15:31	0.082	0.22	50.0
Friday, April 22, 2016 18:20:31	0.990	5.17	50.2
Friday, April 22, 2016 18:25:32	0.990	10.14	50.4
Friday, April 22, 2016 18:30:32	0.990	15.09	50.6
Friday, April 22, 2016 18:35:33	0.990	20.06	50.5
Friday, April 22, 2016 18:40:34	0.990	25.03	50.8
Friday, April 22, 2016 18:45:34	0.990	29.98	50.5
Friday, April 22, 2016 18:50:35	0.990	34.94	50.4
Friday, April 22, 2016 18:55:36	0.990	39.91	50.6
Friday, April 22, 2016 19:00:36	0.990	44.86	50.7
Friday, April 22, 2016 19:05:37	0.990	49.83	50.6
Friday, April 22, 2016 19:10:37	0.990	54.78	50.5
Friday, April 22, 2016 19:15:38	0.990	59.75	50.2
Friday, April 22, 2016 19:20:39	0.990	64.71	50.4
Friday, April 22, 2016 19:25:39	0.990	69.66	49.9
Friday, April 22, 2016 19:30:40	0.990	74.63	50.8
Friday, April 22, 2016 19:35:41	0.990	79.60	50.6
Friday, April 22, 2016 19:40:41	0.990	84.55	50.2
Friday, April 22, 2016 19:45:42	0.990	89.51	50.6
Friday, April 22, 2016 19:50:42	0.990	94.46	50.8
Friday, April 22, 2016 19:55:43	0.990	99.43	50.5
Friday, April 22, 2016 20:00:44	0.990	104.40	50.1
Friday, April 22, 2016 20:05:44	0.990	109.35	50.5
Friday, April 22, 2016 20:10:45	0.990	114.32	50.9
Friday, April 22, 2016 20:15:46	0.990	119.28	50.3
Friday, April 22, 2016 20:20:46	0.990	124.23	50.1
Friday, April 22, 2016 20:25:47	0.990	129.20	50.6
Friday, April 22, 2016 20:30:48	0.990	134.17	50.2
Friday, April 22, 2016 20:35:48	0.990	139.12	50.6
Friday, April 22, 2016 20:40:49	0.990	144.09	50.6
Friday, April 22, 2016 20:45:50	0.990	149.05	50.4
Friday, April 22, 2016 20:50:50	0.990	154.00	50.8
Friday, April 22, 2016 20:55:51	0.990	158.97	50.6

Friday, April 22, 2016 21:00:52 0.990	163.94	50.1
Friday, April 22, 2016 21:05:52 0.990	168.89	50.1
Friday, April 22, 2016 21:10:53 0.990	173.86	50.2
Friday, April 22, 2016 21:15:53 0.990	178.81	50.1
Friday, April 22, 2016 21:20:54 0.990	183.77	50.8
Friday, April 22, 2016 21:25:55 0.990	188.74	50.6
Friday, April 22, 2016 21:30:55 0.990	193.69	50.3
Friday, April 22, 2016 21:35:56 0.990	198.66	49.8
Friday, April 22, 2016 21:40:57 0.990	203.63	50.6
Friday, April 22, 2016 21:45:57 0.990	208.58	49.6
Friday, April 22, 2016 21:50:58 0.990	213.54	50.6
Friday, April 22, 2016 21:55:59 0.990	218.51	50.1
Friday, April 22, 2016 22:00:59 0.990	223.46	50.2
Friday, April 22, 2016 22:06:00 0.990	228.43	50.4
Friday, April 22, 2016 22:11:01 0.990	233.40	50.1
Friday, April 22, 2016 22:16:01 0.990	238.35	50.4
Friday, April 22, 2016 22:21:02 0.990	243.31	50.5
Friday, April 22, 2016 22:26:02 0.990	248.26	50.9
Friday, April 22, 2016 22:31:03 0.990	253.23	50.1
Friday, April 22, 2016 22:36:04 0.990	258.20	50.2
Friday, April 22, 2016 22:41:04 0.990	263.15	50.6
Friday, April 22, 2016 22:46:05 0.990	268.12	50.2
Friday, April 22, 2016 22:51:06 0.990	273.08	50.3
Friday, April 22, 2016 22:56:06 0.990	278.03	50.6
Friday, April 22, 2016 23:01:07 0.990	283.00	50.3
Friday, April 22, 2016 23:06:08 0.990	287.97	51.2
Friday, April 22, 2016 23:11:08 0.990	292.92	50.4
Friday, April 22, 2016 23:16:09 0.990	297.89	50.6
Friday, April 22, 2016 23:21:10 0.990	302.85	50.8
Friday, April 22, 2016 23:26:10 0.990	307.80	50.0
Friday, April 22, 2016 23:31:11 0.990	312.77	50.3
Friday, April 22, 2016 23:36:12 0.990	317.74	50.5
Friday, April 22, 2016 23:41:12 0.990	322.69	50.3
Friday, April 22, 2016 23:46:13 0.990	327.66	49.3
Friday, April 22, 2016 23:51:14 0.990	332.62	50.5
Friday, April 22, 2016 23:56:14 0.990	337.57	50.5
Saturday, April 23, 2016 0:01:15 0.990	342.54	50.6
Saturday, April 23, 2016 0:06:15 0.990	347.49	51.1
Saturday, April 23, 2016 0:11:16 0.990	352.46	50.4
Saturday, April 23, 2016 0:16:17 0.990	357.43	50.6
Saturday, April 23, 2016 0:21:17 0.990	362.38	50.9
Saturday, April 23, 2016 0:26:18 0.990	367.34	50.6
Saturday, April 23, 2016 0:31:19 0.990	372.31	50.2
Saturday, April 23, 2016 0:36:19 0.990	377.26	50.9
Saturday, April 23, 2016 0:41:20 0.990	382.23	49.8
Saturday, April 23, 2016 0:46:21 0.990	387.20	50.2
Saturday, April 23, 2016 0:51:21 0.990	392.15	50.7
Saturday, April 23, 2016 0:56:22 0.990	397.11	50.8
Saturday, April 23, 2016 1:01:22 0.990	402.06	50.1
Saturday, April 23, 2016 1:06:23 0.990	407.03	50.3
Saturday, April 23, 2016 1:11:24 0.990	412.00	50.8
Saturday, April 23, 2016 1:16:24 0.990	416.95	50.6
Saturday, April 23, 2016 1:21:25 0.990	421.92	50.5
Saturday, April 23, 2016 1:26:26 0.990	426.88	49.5

Saturday, April 23, 2016 1:31:26 0.990	431.83	50.2
Saturday, April 23, 2016 1:36:27 0.990	436.80	51.0
Saturday, April 23, 2016 1:41:28 0.990	441.77	50.8
Saturday, April 23, 2016 1:46:28 0.990	446.72	50.7
Saturday, April 23, 2016 1:51:29 0.990	451.69	49.7
Saturday, April 23, 2016 1:56:30 0.990	456.65	50.9
Saturday, April 23, 2016 2:01:30 0.990	461.60	50.6
Saturday, April 23, 2016 2:06:31 0.990	466.57	50.6
Saturday, April 23, 2016 2:11:31 0.990	471.52	50.2
Saturday, April 23, 2016 2:16:32 0.990	476.49	50.1
Saturday, April 23, 2016 2:21:33 0.990	481.46	50.2
Saturday, April 23, 2016 2:26:33 0.990	486.41	51.0
Saturday, April 23, 2016 2:31:34 0.990	491.37	51.2
Saturday, April 23, 2016 2:36:35 0.990	496.34	50.3
Saturday, April 23, 2016 2:41:35 0.990	501.29	50.5
Saturday, April 23, 2016 2:46:36 0.990	506.26	49.8
Saturday, April 23, 2016 2:51:37 0.990	511.23	50.8
Saturday, April 23, 2016 2:56:37 0.990	516.18	50.8
Saturday, April 23, 2016 3:01:38 0.990	521.14	50.9
Saturday, April 23, 2016 3:06:38 0.990	526.09	50.0
Saturday, April 23, 2016 3:11:39 0.990	531.06	50.6
Saturday, April 23, 2016 3:16:40 0.990	536.03	49.8
Saturday, April 23, 2016 3:21:40 0.990	540.98	50.0
Saturday, April 23, 2016 3:26:41 0.990	545.95	50.5
Saturday, April 23, 2016 3:31:42 0.990	550.91	50.0
Saturday, April 23, 2016 3:36:42 0.990	555.87	50.4
Saturday, April 23, 2016 3:41:43 0.990	560.83	50.9
Saturday, April 23, 2016 3:46:44 0.990	565.80	50.8
Saturday, April 23, 2016 3:51:44 0.990	570.75	50.6
Saturday, April 23, 2016 3:56:45 0.990	575.72	50.2
Saturday, April 23, 2016 4:01:46 0.990	580.69	50.6
Saturday, April 23, 2016 4:06:46 0.990	585.64	50.6
Saturday, April 23, 2016 4:11:47 0.990	590.60	49.7
Saturday, April 23, 2016 4:16:48 0.990	595.57	50.6
Saturday, April 23, 2016 4:21:48 0.990	600.52	50.5
Saturday, April 23, 2016 4:26:49 0.990	605.49	50.1
Saturday, April 23, 2016 4:31:49 0.990	610.44	50.5
Saturday, April 23, 2016 4:36:50 0.990	615.41	49.8
Saturday, April 23, 2016 4:41:51 0.990	620.37	50.6
Saturday, April 23, 2016 4:46:51 0.990	625.33	50.2
Saturday, April 23, 2016 4:51:52 0.990	630.29	50.5
Saturday, April 23, 2016 4:56:53 0.990	635.26	51.0
Saturday, April 23, 2016 5:01:53 0.990	640.21	50.5
Saturday, April 23, 2016 5:06:54 0.990	645.18	50.6
Saturday, April 23, 2016 5:11:55 0.990	650.15	50.1
Saturday, April 23, 2016 5:16:55 0.990	655.10	50.5
Saturday, April 23, 2016 5:21:56 0.990	660.06	49.3
Saturday, April 23, 2016 5:26:56 0.990	665.01	50.2
Saturday, April 23, 2016 5:31:57 0.990	669.98	49.8
Saturday, April 23, 2016 5:36:58 0.990	674.95	50.3
Saturday, April 23, 2016 5:41:58 0.990	679.90	50.2
Saturday, April 23, 2016 5:46:59 0.990	684.87	50.5
Saturday, April 23, 2016 5:52:00 0.990	689.83	50.7
Saturday, April 23, 2016 5:57:00 0.990	694.79	50.5

Saturday, April 23, 2016 6:02:01	0.990	699.75	50.1
Saturday, April 23, 2016 6:07:01	0.990	704.70	50.4
Saturday, April 23, 2016 6:12:02	0.990	709.67	50.2
Saturday, April 23, 2016 6:15:05	0.990	712.69	50.4

aqms5

formaldehyde002

Ch. 2 Cartridge Started Friday, April 22, 2016 18:15:04

Flow Rate Set Point 1.00 l/min

Stopped Saturday, April 23, 2016 6:15:26

Total Volume 712.70 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.003 l/min

Ending Leak Rate -0.003 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Friday, April 22, 2016 18:15:31	0.082	0.22	50.0
Friday, April 22, 2016 18:20:31	0.990	5.17	50.2
Friday, April 22, 2016 18:25:32	0.990	10.14	50.4
Friday, April 22, 2016 18:30:32	0.990	15.09	50.6
Friday, April 22, 2016 18:35:33	0.990	20.06	50.5
Friday, April 22, 2016 18:40:34	0.990	25.03	50.8
Friday, April 22, 2016 18:45:34	0.990	29.98	50.5
Friday, April 22, 2016 18:50:35	0.990	34.94	50.4
Friday, April 22, 2016 18:55:36	0.990	39.91	50.6
Friday, April 22, 2016 19:00:36	0.990	44.86	50.7
Friday, April 22, 2016 19:05:37	0.990	49.83	50.6
Friday, April 22, 2016 19:10:37	0.990	54.78	50.5
Friday, April 22, 2016 19:15:38	0.990	59.75	50.2
Friday, April 22, 2016 19:20:39	0.990	64.71	50.4
Friday, April 22, 2016 19:25:39	0.990	69.66	49.9
Friday, April 22, 2016 19:30:40	0.990	74.63	50.8
Friday, April 22, 2016 19:35:41	0.990	79.60	50.6
Friday, April 22, 2016 19:40:41	0.990	84.55	50.2
Friday, April 22, 2016 19:45:42	0.990	89.51	50.6
Friday, April 22, 2016 19:50:42	0.990	94.46	50.8
Friday, April 22, 2016 19:55:43	0.990	99.43	50.5
Friday, April 22, 2016 20:00:44	0.990	104.40	50.1
Friday, April 22, 2016 20:05:44	0.990	109.35	50.5
Friday, April 22, 2016 20:10:45	0.990	114.32	50.9
Friday, April 22, 2016 20:15:46	0.990	119.28	50.3
Friday, April 22, 2016 20:20:46	0.990	124.23	50.1
Friday, April 22, 2016 20:25:47	0.990	129.20	50.6
Friday, April 22, 2016 20:30:48	0.990	134.17	50.2
Friday, April 22, 2016 20:35:48	0.990	139.12	50.6
Friday, April 22, 2016 20:40:49	0.990	144.09	50.6
Friday, April 22, 2016 20:45:50	0.990	149.05	50.4
Friday, April 22, 2016 20:50:50	0.990	154.00	50.8
Friday, April 22, 2016 20:55:51	0.990	158.97	50.6

Friday, April 22, 2016 21:00:52 0.990	163.94	50.1
Friday, April 22, 2016 21:05:52 0.990	168.89	50.1
Friday, April 22, 2016 21:10:53 0.990	173.86	50.2
Friday, April 22, 2016 21:15:53 0.990	178.81	50.1
Friday, April 22, 2016 21:20:54 0.990	183.77	50.8
Friday, April 22, 2016 21:25:55 0.990	188.74	50.6
Friday, April 22, 2016 21:30:55 0.990	193.69	50.3
Friday, April 22, 2016 21:35:56 0.990	198.66	49.8
Friday, April 22, 2016 21:40:57 0.990	203.63	50.6
Friday, April 22, 2016 21:45:57 0.990	208.58	49.6
Friday, April 22, 2016 21:50:58 0.990	213.54	50.6
Friday, April 22, 2016 21:55:59 0.990	218.51	50.1
Friday, April 22, 2016 22:00:59 0.990	223.46	50.2
Friday, April 22, 2016 22:06:00 0.990	228.43	50.4
Friday, April 22, 2016 22:11:01 0.990	233.40	50.1
Friday, April 22, 2016 22:16:01 0.990	238.35	50.4
Friday, April 22, 2016 22:21:02 0.990	243.31	50.5
Friday, April 22, 2016 22:26:02 0.990	248.26	50.9
Friday, April 22, 2016 22:31:03 0.990	253.23	50.1
Friday, April 22, 2016 22:36:04 0.990	258.20	50.2
Friday, April 22, 2016 22:41:04 0.990	263.15	50.6
Friday, April 22, 2016 22:46:05 0.990	268.12	50.2
Friday, April 22, 2016 22:51:06 0.990	273.08	50.3
Friday, April 22, 2016 22:56:06 0.990	278.03	50.6
Friday, April 22, 2016 23:01:07 0.990	283.00	50.3
Friday, April 22, 2016 23:06:08 0.990	287.97	51.2
Friday, April 22, 2016 23:11:08 0.990	292.92	50.4
Friday, April 22, 2016 23:16:09 0.990	297.89	50.6
Friday, April 22, 2016 23:21:10 0.990	302.85	50.8
Friday, April 22, 2016 23:26:10 0.990	307.80	50.0
Friday, April 22, 2016 23:31:11 0.990	312.77	50.3
Friday, April 22, 2016 23:36:12 0.990	317.74	50.5
Friday, April 22, 2016 23:41:12 0.990	322.69	50.3
Friday, April 22, 2016 23:46:13 0.990	327.66	49.3
Friday, April 22, 2016 23:51:14 0.990	332.62	50.5
Friday, April 22, 2016 23:56:14 0.990	337.57	50.5
Saturday, April 23, 2016 0:01:15 0.990	342.54	50.6
Saturday, April 23, 2016 0:06:15 0.990	347.49	51.1
Saturday, April 23, 2016 0:11:16 0.990	352.46	50.4
Saturday, April 23, 2016 0:16:17 0.990	357.43	50.6
Saturday, April 23, 2016 0:21:17 0.990	362.38	50.9
Saturday, April 23, 2016 0:26:18 0.990	367.34	50.6
Saturday, April 23, 2016 0:31:19 0.990	372.31	50.2
Saturday, April 23, 2016 0:36:19 0.990	377.26	50.9
Saturday, April 23, 2016 0:41:20 0.990	382.23	49.8
Saturday, April 23, 2016 0:46:21 0.990	387.20	50.2
Saturday, April 23, 2016 0:51:21 0.990	392.15	50.7
Saturday, April 23, 2016 0:56:22 0.990	397.11	50.8
Saturday, April 23, 2016 1:01:22 0.990	402.06	50.1
Saturday, April 23, 2016 1:06:23 0.990	407.03	50.3
Saturday, April 23, 2016 1:11:24 0.990	412.00	50.8
Saturday, April 23, 2016 1:16:24 0.990	416.95	50.6
Saturday, April 23, 2016 1:21:25 0.990	421.92	50.5
Saturday, April 23, 2016 1:26:26 0.990	426.88	49.5

Saturday, April 23, 2016 1:31:26 0.990	431.83	50.2
Saturday, April 23, 2016 1:36:27 0.990	436.80	51.0
Saturday, April 23, 2016 1:41:28 0.990	441.77	50.8
Saturday, April 23, 2016 1:46:28 0.990	446.72	50.7
Saturday, April 23, 2016 1:51:29 0.990	451.69	49.7
Saturday, April 23, 2016 1:56:30 0.990	456.65	50.9
Saturday, April 23, 2016 2:01:30 0.990	461.60	50.6
Saturday, April 23, 2016 2:06:31 0.990	466.57	50.6
Saturday, April 23, 2016 2:11:31 0.990	471.52	50.2
Saturday, April 23, 2016 2:16:32 0.990	476.49	50.1
Saturday, April 23, 2016 2:21:33 0.990	481.46	50.2
Saturday, April 23, 2016 2:26:33 0.990	486.41	51.0
Saturday, April 23, 2016 2:31:34 0.990	491.37	51.2
Saturday, April 23, 2016 2:36:35 0.990	496.34	50.3
Saturday, April 23, 2016 2:41:35 0.990	501.29	50.5
Saturday, April 23, 2016 2:46:36 0.990	506.26	49.8
Saturday, April 23, 2016 2:51:37 0.990	511.23	50.8
Saturday, April 23, 2016 2:56:37 0.990	516.18	50.8
Saturday, April 23, 2016 3:01:38 0.990	521.14	50.9
Saturday, April 23, 2016 3:06:38 0.990	526.09	50.0
Saturday, April 23, 2016 3:11:39 0.990	531.06	50.6
Saturday, April 23, 2016 3:16:40 0.990	536.03	49.8
Saturday, April 23, 2016 3:21:40 0.990	540.98	50.0
Saturday, April 23, 2016 3:26:41 0.990	545.95	50.5
Saturday, April 23, 2016 3:31:42 0.990	550.91	50.0
Saturday, April 23, 2016 3:36:42 0.990	555.87	50.4
Saturday, April 23, 2016 3:41:43 0.990	560.83	50.9
Saturday, April 23, 2016 3:46:44 0.990	565.80	50.8
Saturday, April 23, 2016 3:51:44 0.990	570.75	50.6
Saturday, April 23, 2016 3:56:45 0.990	575.72	50.2
Saturday, April 23, 2016 4:01:46 0.990	580.69	50.6
Saturday, April 23, 2016 4:06:46 0.990	585.64	50.6
Saturday, April 23, 2016 4:11:47 0.990	590.60	49.7
Saturday, April 23, 2016 4:16:48 0.990	595.57	50.6
Saturday, April 23, 2016 4:21:48 0.990	600.52	50.5
Saturday, April 23, 2016 4:26:49 0.990	605.49	50.1
Saturday, April 23, 2016 4:31:49 0.990	610.44	50.5
Saturday, April 23, 2016 4:36:50 0.990	615.41	49.8
Saturday, April 23, 2016 4:41:51 0.990	620.37	50.6
Saturday, April 23, 2016 4:46:51 0.990	625.33	50.2
Saturday, April 23, 2016 4:51:52 0.990	630.29	50.5
Saturday, April 23, 2016 4:56:53 0.990	635.26	51.0
Saturday, April 23, 2016 5:01:53 0.990	640.21	50.5
Saturday, April 23, 2016 5:06:54 0.990	645.18	50.6
Saturday, April 23, 2016 5:11:55 0.990	650.15	50.1
Saturday, April 23, 2016 5:16:55 0.990	655.10	50.5
Saturday, April 23, 2016 5:21:56 0.990	660.06	49.3
Saturday, April 23, 2016 5:26:56 0.990	665.01	50.2
Saturday, April 23, 2016 5:31:57 0.990	669.98	49.8
Saturday, April 23, 2016 5:36:58 0.990	674.95	50.3
Saturday, April 23, 2016 5:41:58 0.990	679.90	50.2
Saturday, April 23, 2016 5:46:59 0.990	684.87	50.5
Saturday, April 23, 2016 5:52:00 0.990	689.83	50.7
Saturday, April 23, 2016 5:57:00 0.990	694.79	50.5

Saturday, April 23, 2016 6:02:01	0.990	699.75	50.1
Saturday, April 23, 2016 6:07:01	0.990	704.70	50.4
Saturday, April 23, 2016 6:12:02	0.990	709.67	50.2
Saturday, April 23, 2016 6:15:05	0.990	712.69	50.4

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, April 28, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Friday, April 29, 2016 6:15:25

Total Volume 712.73 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.100 l/min

Ending Leak Rate 0.091 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Thursday, April 28, 2016 18:15:30	0.172	0.22	50.2
Thursday, April 28, 2016 18:20:30	0.990	5.18	50.1
Thursday, April 28, 2016 18:25:31	0.990	10.14	50.1
Thursday, April 28, 2016 18:30:32	0.990	15.11	50.3
Thursday, April 28, 2016 18:35:32	0.990	20.06	50.7
Thursday, April 28, 2016 18:40:33	0.990	25.03	50.5
Thursday, April 28, 2016 18:45:34	0.990	29.99	51.0
Thursday, April 28, 2016 18:50:34	0.990	34.94	50.4
Thursday, April 28, 2016 18:55:35	0.990	39.91	50.1
Thursday, April 28, 2016 19:00:35	0.990	44.86	50.8
Thursday, April 28, 2016 19:05:36	0.990	49.83	50.5
Thursday, April 28, 2016 19:10:37	0.990	54.79	50.5
Thursday, April 28, 2016 19:15:37	0.990	59.74	50.1
Thursday, April 28, 2016 19:20:38	0.990	64.71	50.2
Thursday, April 28, 2016 19:25:39	0.990	69.68	51.0
Thursday, April 28, 2016 19:30:39	0.990	74.63	50.8
Thursday, April 28, 2016 19:35:40	0.990	79.60	50.7
Thursday, April 28, 2016 19:40:40	0.990	84.55	50.5
Thursday, April 28, 2016 19:45:41	0.990	89.51	50.9
Thursday, April 28, 2016 19:50:42	0.990	94.48	50.9
Thursday, April 28, 2016 19:55:42	0.990	99.43	51.1
Thursday, April 28, 2016 20:00:43	0.990	104.40	50.3
Thursday, April 28, 2016 20:05:44	0.990	109.37	50.8
Thursday, April 28, 2016 20:10:44	0.990	114.32	50.8
Thursday, April 28, 2016 20:15:45	0.990	119.28	50.5
Thursday, April 28, 2016 20:20:45	0.990	124.23	50.4
Thursday, April 28, 2016 20:25:46	0.990	129.20	50.4
Thursday, April 28, 2016 20:30:47	0.990	134.17	50.1
Thursday, April 28, 2016 20:35:47	0.990	139.12	50.4
Thursday, April 28, 2016 20:40:48	0.990	144.09	50.6
Thursday, April 28, 2016 20:45:49	0.990	149.05	50.1
Thursday, April 28, 2016 20:50:49	0.990	154.00	50.8

Thursday, April 28, 2016 20:55:50 0.990	158.97	50.2
Thursday, April 28, 2016 21:00:50 0.990	163.92	50.8
Thursday, April 28, 2016 21:05:51 0.990	168.89	50.4
Thursday, April 28, 2016 21:10:52 0.990	173.85	50.1
Thursday, April 28, 2016 21:15:52 0.990	178.81	50.5
Thursday, April 28, 2016 21:20:53 0.990	183.77	50.3
Thursday, April 28, 2016 21:25:54 0.990	188.74	50.8
Thursday, April 28, 2016 21:30:54 0.990	193.69	50.9
Thursday, April 28, 2016 21:35:55 0.990	198.66	50.6
Thursday, April 28, 2016 21:40:55 0.990	203.61	50.8
Thursday, April 28, 2016 21:45:56 0.990	208.57	50.1
Thursday, April 28, 2016 21:50:57 0.990	213.54	50.2
Thursday, April 28, 2016 21:55:57 0.990	218.49	50.6
Thursday, April 28, 2016 22:00:58 0.990	223.46	50.5
Thursday, April 28, 2016 22:05:59 0.990	228.43	50.3
Thursday, April 28, 2016 22:10:59 0.990	233.38	50.4
Thursday, April 28, 2016 22:16:00 0.990	238.34	50.8
Thursday, April 28, 2016 22:21:01 0.990	243.31	49.7
Thursday, April 28, 2016 22:26:01 0.990	248.26	50.1
Thursday, April 28, 2016 22:31:02 0.990	253.23	50.6
Thursday, April 28, 2016 22:36:03 0.990	258.20	50.6
Thursday, April 28, 2016 22:41:03 0.990	263.15	50.8
Thursday, April 28, 2016 22:46:04 0.990	268.11	50.3
Thursday, April 28, 2016 22:51:05 0.990	273.08	50.4
Thursday, April 28, 2016 22:56:05 0.990	278.03	50.1
Thursday, April 28, 2016 23:01:06 0.990	283.00	50.6
Thursday, April 28, 2016 23:06:07 0.990	287.97	51.1
Thursday, April 28, 2016 23:11:07 0.990	292.92	50.6
Thursday, April 28, 2016 23:16:08 0.990	297.88	50.8
Thursday, April 28, 2016 23:21:09 0.990	302.85	50.0
Thursday, April 28, 2016 23:26:09 0.990	307.80	50.2
Thursday, April 28, 2016 23:31:10 0.990	312.77	50.4
Thursday, April 28, 2016 23:36:11 0.990	317.74	50.4
Thursday, April 28, 2016 23:41:11 0.990	322.69	49.9
Thursday, April 28, 2016 23:46:12 0.990	327.65	49.9
Thursday, April 28, 2016 23:51:12 0.990	332.60	50.1
Thursday, April 28, 2016 23:56:13 0.990	337.57	50.5
Friday, April 29, 2016 0:01:14 0.990	342.54	50.2
Friday, April 29, 2016 0:06:14 0.990	347.49	50.4
Friday, April 29, 2016 0:11:15 0.990	352.46	50.8
Friday, April 29, 2016 0:16:16 0.990	357.42	50.9
Friday, April 29, 2016 0:21:16 0.990	362.37	50.2
Friday, April 29, 2016 0:26:17 0.990	367.34	50.8
Friday, April 29, 2016 0:31:18 0.990	372.31	50.4
Friday, April 29, 2016 0:36:18 0.990	377.26	50.7
Friday, April 29, 2016 0:41:19 0.990	382.23	50.8
Friday, April 29, 2016 0:46:20 0.990	387.19	50.8
Friday, April 29, 2016 0:51:20 0.990	392.14	50.5
Friday, April 29, 2016 0:56:21 0.990	397.11	49.7
Friday, April 29, 2016 1:01:21 0.990	402.06	50.1
Friday, April 29, 2016 1:06:22 0.990	407.03	50.5
Friday, April 29, 2016 1:11:23 0.990	412.00	50.1
Friday, April 29, 2016 1:16:23 0.990	416.95	50.2
Friday, April 29, 2016 1:21:24 0.990	421.91	50.1

Friday, April 29, 2016 1:26:25 0.990	426.88	50.6
Friday, April 29, 2016 1:31:25 0.990	431.83	50.9
Friday, April 29, 2016 1:36:26 0.990	436.80	50.3
Friday, April 29, 2016 1:41:27 0.990	441.77	50.1
Friday, April 29, 2016 1:46:27 0.990	446.72	50.2
Friday, April 29, 2016 1:51:28 0.990	451.68	50.1
Friday, April 29, 2016 1:56:29 0.990	456.65	50.9
Friday, April 29, 2016 2:01:29 0.990	461.60	50.8
Friday, April 29, 2016 2:06:30 0.990	466.57	50.5
Friday, April 29, 2016 2:11:31 0.990	471.54	50.5
Friday, April 29, 2016 2:16:31 0.990	476.49	50.5
Friday, April 29, 2016 2:21:32 0.990	481.45	50.1
Friday, April 29, 2016 2:26:32 0.990	486.40	50.1
Friday, April 29, 2016 2:31:33 0.990	491.37	49.4
Friday, April 29, 2016 2:36:34 0.990	496.34	49.7
Friday, April 29, 2016 2:41:34 0.990	501.29	50.1
Friday, April 29, 2016 2:46:35 0.990	506.26	50.5
Friday, April 29, 2016 2:51:36 0.990	511.22	50.4
Friday, April 29, 2016 2:56:36 0.990	516.17	50.4
Friday, April 29, 2016 3:01:37 0.990	521.14	50.5
Friday, April 29, 2016 3:06:38 0.990	526.11	50.5
Friday, April 29, 2016 3:11:38 0.990	531.06	50.2
Friday, April 29, 2016 3:16:39 0.990	536.03	50.4
Friday, April 29, 2016 3:21:39 0.990	540.98	49.8
Friday, April 29, 2016 3:26:40 0.990	545.95	50.5
Friday, April 29, 2016 3:31:41 0.990	550.91	50.6
Friday, April 29, 2016 3:36:41 0.990	555.86	49.5
Friday, April 29, 2016 3:41:42 0.990	560.83	50.1
Friday, April 29, 2016 3:46:43 0.990	565.80	50.7
Friday, April 29, 2016 3:51:43 0.990	570.75	50.5
Friday, April 29, 2016 3:56:44 0.990	575.72	50.3
Friday, April 29, 2016 4:01:45 0.990	580.69	50.8
Friday, April 29, 2016 4:06:45 0.990	585.64	50.1
Friday, April 29, 2016 4:11:46 0.990	590.60	49.9
Friday, April 29, 2016 4:16:47 0.990	595.57	50.4
Friday, April 29, 2016 4:21:47 0.990	600.52	50.2
Friday, April 29, 2016 4:26:48 0.990	605.49	50.3
Friday, April 29, 2016 4:31:48 0.990	610.44	50.3
Friday, April 29, 2016 4:36:49 0.990	615.41	50.3
Friday, April 29, 2016 4:41:50 0.990	620.38	50.6
Friday, April 29, 2016 4:46:50 0.990	625.33	50.9
Friday, April 29, 2016 4:51:51 0.990	630.29	50.2
Friday, April 29, 2016 4:56:52 0.990	635.26	50.9
Friday, April 29, 2016 5:01:52 0.990	640.21	50.4
Friday, April 29, 2016 5:06:53 0.990	645.18	50.2
Friday, April 29, 2016 5:11:54 0.990	650.15	51.0
Friday, April 29, 2016 5:16:54 0.990	655.10	50.4
Friday, April 29, 2016 5:21:55 0.990	660.07	50.6
Friday, April 29, 2016 5:26:55 0.990	665.02	50.1
Friday, April 29, 2016 5:31:56 0.990	669.98	50.2
Friday, April 29, 2016 5:36:57 0.990	674.95	50.2
Friday, April 29, 2016 5:41:57 0.990	679.90	49.8
Friday, April 29, 2016 5:46:58 0.990	684.87	50.8
Friday, April 29, 2016 5:51:59 0.990	689.84	50.6

Friday, April 29, 2016 5:56:59	0.990	694.79	50.3
Friday, April 29, 2016 6:02:00	0.990	699.75	50.8
Friday, April 29, 2016 6:07:01	0.990	704.72	50.5
Friday, April 29, 2016 6:12:01	0.990	709.67	50.2
Friday, April 29, 2016 6:15:04	0.990	712.69	51.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, April 28, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Friday, April 29, 2016 6:15:25

Total Volume 712.73 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.100 l/min

Ending Leak Rate 0.091 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Thursday, April 28, 2016 18:15:30	0.172	0.22	50.2
Thursday, April 28, 2016 18:20:30	0.990	5.18	50.1
Thursday, April 28, 2016 18:25:31	0.990	10.14	50.1
Thursday, April 28, 2016 18:30:32	0.990	15.11	50.3
Thursday, April 28, 2016 18:35:32	0.990	20.06	50.7
Thursday, April 28, 2016 18:40:33	0.990	25.03	50.5
Thursday, April 28, 2016 18:45:34	0.990	29.99	51.0
Thursday, April 28, 2016 18:50:34	0.990	34.94	50.4
Thursday, April 28, 2016 18:55:35	0.990	39.91	50.1
Thursday, April 28, 2016 19:00:35	0.990	44.86	50.8
Thursday, April 28, 2016 19:05:36	0.990	49.83	50.5
Thursday, April 28, 2016 19:10:37	0.990	54.79	50.5
Thursday, April 28, 2016 19:15:37	0.990	59.74	50.1
Thursday, April 28, 2016 19:20:38	0.990	64.71	50.2
Thursday, April 28, 2016 19:25:39	0.990	69.68	51.0
Thursday, April 28, 2016 19:30:39	0.990	74.63	50.8
Thursday, April 28, 2016 19:35:40	0.990	79.60	50.7
Thursday, April 28, 2016 19:40:40	0.990	84.55	50.5
Thursday, April 28, 2016 19:45:41	0.990	89.51	50.9
Thursday, April 28, 2016 19:50:42	0.990	94.48	50.9
Thursday, April 28, 2016 19:55:42	0.990	99.43	51.1
Thursday, April 28, 2016 20:00:43	0.990	104.40	50.3
Thursday, April 28, 2016 20:05:44	0.990	109.37	50.8
Thursday, April 28, 2016 20:10:44	0.990	114.32	50.8
Thursday, April 28, 2016 20:15:45	0.990	119.28	50.5
Thursday, April 28, 2016 20:20:45	0.990	124.23	50.4
Thursday, April 28, 2016 20:25:46	0.990	129.20	50.4
Thursday, April 28, 2016 20:30:47	0.990	134.17	50.1
Thursday, April 28, 2016 20:35:47	0.990	139.12	50.4
Thursday, April 28, 2016 20:40:48	0.990	144.09	50.6
Thursday, April 28, 2016 20:45:49	0.990	149.05	50.1
Thursday, April 28, 2016 20:50:49	0.990	154.00	50.8

Thursday, April 28, 2016 20:55:50 0.990	158.97	50.2
Thursday, April 28, 2016 21:00:50 0.990	163.92	50.8
Thursday, April 28, 2016 21:05:51 0.990	168.89	50.4
Thursday, April 28, 2016 21:10:52 0.990	173.85	50.1
Thursday, April 28, 2016 21:15:52 0.990	178.81	50.5
Thursday, April 28, 2016 21:20:53 0.990	183.77	50.3
Thursday, April 28, 2016 21:25:54 0.990	188.74	50.8
Thursday, April 28, 2016 21:30:54 0.990	193.69	50.9
Thursday, April 28, 2016 21:35:55 0.990	198.66	50.6
Thursday, April 28, 2016 21:40:55 0.990	203.61	50.8
Thursday, April 28, 2016 21:45:56 0.990	208.57	50.1
Thursday, April 28, 2016 21:50:57 0.990	213.54	50.2
Thursday, April 28, 2016 21:55:57 0.990	218.49	50.6
Thursday, April 28, 2016 22:00:58 0.990	223.46	50.5
Thursday, April 28, 2016 22:05:59 0.990	228.43	50.3
Thursday, April 28, 2016 22:10:59 0.990	233.38	50.4
Thursday, April 28, 2016 22:16:00 0.990	238.34	50.8
Thursday, April 28, 2016 22:21:01 0.990	243.31	49.7
Thursday, April 28, 2016 22:26:01 0.990	248.26	50.1
Thursday, April 28, 2016 22:31:02 0.990	253.23	50.6
Thursday, April 28, 2016 22:36:03 0.990	258.20	50.6
Thursday, April 28, 2016 22:41:03 0.990	263.15	50.8
Thursday, April 28, 2016 22:46:04 0.990	268.11	50.3
Thursday, April 28, 2016 22:51:05 0.990	273.08	50.4
Thursday, April 28, 2016 22:56:05 0.990	278.03	50.1
Thursday, April 28, 2016 23:01:06 0.990	283.00	50.6
Thursday, April 28, 2016 23:06:07 0.990	287.97	51.1
Thursday, April 28, 2016 23:11:07 0.990	292.92	50.6
Thursday, April 28, 2016 23:16:08 0.990	297.88	50.8
Thursday, April 28, 2016 23:21:09 0.990	302.85	50.0
Thursday, April 28, 2016 23:26:09 0.990	307.80	50.2
Thursday, April 28, 2016 23:31:10 0.990	312.77	50.4
Thursday, April 28, 2016 23:36:11 0.990	317.74	50.4
Thursday, April 28, 2016 23:41:11 0.990	322.69	49.9
Thursday, April 28, 2016 23:46:12 0.990	327.65	49.9
Thursday, April 28, 2016 23:51:12 0.990	332.60	50.1
Thursday, April 28, 2016 23:56:13 0.990	337.57	50.5
Friday, April 29, 2016 0:01:14 0.990	342.54	50.2
Friday, April 29, 2016 0:06:14 0.990	347.49	50.4
Friday, April 29, 2016 0:11:15 0.990	352.46	50.8
Friday, April 29, 2016 0:16:16 0.990	357.42	50.9
Friday, April 29, 2016 0:21:16 0.990	362.37	50.2
Friday, April 29, 2016 0:26:17 0.990	367.34	50.8
Friday, April 29, 2016 0:31:18 0.990	372.31	50.4
Friday, April 29, 2016 0:36:18 0.990	377.26	50.7
Friday, April 29, 2016 0:41:19 0.990	382.23	50.8
Friday, April 29, 2016 0:46:20 0.990	387.19	50.8
Friday, April 29, 2016 0:51:20 0.990	392.14	50.5
Friday, April 29, 2016 0:56:21 0.990	397.11	49.7
Friday, April 29, 2016 1:01:21 0.990	402.06	50.1
Friday, April 29, 2016 1:06:22 0.990	407.03	50.5
Friday, April 29, 2016 1:11:23 0.990	412.00	50.1
Friday, April 29, 2016 1:16:23 0.990	416.95	50.2
Friday, April 29, 2016 1:21:24 0.990	421.91	50.1

Friday, April 29, 2016 1:26:25 0.990	426.88	50.6
Friday, April 29, 2016 1:31:25 0.990	431.83	50.9
Friday, April 29, 2016 1:36:26 0.990	436.80	50.3
Friday, April 29, 2016 1:41:27 0.990	441.77	50.1
Friday, April 29, 2016 1:46:27 0.990	446.72	50.2
Friday, April 29, 2016 1:51:28 0.990	451.68	50.1
Friday, April 29, 2016 1:56:29 0.990	456.65	50.9
Friday, April 29, 2016 2:01:29 0.990	461.60	50.8
Friday, April 29, 2016 2:06:30 0.990	466.57	50.5
Friday, April 29, 2016 2:11:31 0.990	471.54	50.5
Friday, April 29, 2016 2:16:31 0.990	476.49	50.5
Friday, April 29, 2016 2:21:32 0.990	481.45	50.1
Friday, April 29, 2016 2:26:32 0.990	486.40	50.1
Friday, April 29, 2016 2:31:33 0.990	491.37	49.4
Friday, April 29, 2016 2:36:34 0.990	496.34	49.7
Friday, April 29, 2016 2:41:34 0.990	501.29	50.1
Friday, April 29, 2016 2:46:35 0.990	506.26	50.5
Friday, April 29, 2016 2:51:36 0.990	511.22	50.4
Friday, April 29, 2016 2:56:36 0.990	516.17	50.4
Friday, April 29, 2016 3:01:37 0.990	521.14	50.5
Friday, April 29, 2016 3:06:38 0.990	526.11	50.5
Friday, April 29, 2016 3:11:38 0.990	531.06	50.2
Friday, April 29, 2016 3:16:39 0.990	536.03	50.4
Friday, April 29, 2016 3:21:39 0.990	540.98	49.8
Friday, April 29, 2016 3:26:40 0.990	545.95	50.5
Friday, April 29, 2016 3:31:41 0.990	550.91	50.6
Friday, April 29, 2016 3:36:41 0.990	555.86	49.5
Friday, April 29, 2016 3:41:42 0.990	560.83	50.1
Friday, April 29, 2016 3:46:43 0.990	565.80	50.7
Friday, April 29, 2016 3:51:43 0.990	570.75	50.5
Friday, April 29, 2016 3:56:44 0.990	575.72	50.3
Friday, April 29, 2016 4:01:45 0.990	580.69	50.8
Friday, April 29, 2016 4:06:45 0.990	585.64	50.1
Friday, April 29, 2016 4:11:46 0.990	590.60	49.9
Friday, April 29, 2016 4:16:47 0.990	595.57	50.4
Friday, April 29, 2016 4:21:47 0.990	600.52	50.2
Friday, April 29, 2016 4:26:48 0.990	605.49	50.3
Friday, April 29, 2016 4:31:48 0.990	610.44	50.3
Friday, April 29, 2016 4:36:49 0.990	615.41	50.3
Friday, April 29, 2016 4:41:50 0.990	620.38	50.6
Friday, April 29, 2016 4:46:50 0.990	625.33	50.9
Friday, April 29, 2016 4:51:51 0.990	630.29	50.2
Friday, April 29, 2016 4:56:52 0.990	635.26	50.9
Friday, April 29, 2016 5:01:52 0.990	640.21	50.4
Friday, April 29, 2016 5:06:53 0.990	645.18	50.2
Friday, April 29, 2016 5:11:54 0.990	650.15	51.0
Friday, April 29, 2016 5:16:54 0.990	655.10	50.4
Friday, April 29, 2016 5:21:55 0.990	660.07	50.6
Friday, April 29, 2016 5:26:55 0.990	665.02	50.1
Friday, April 29, 2016 5:31:56 0.990	669.98	50.2
Friday, April 29, 2016 5:36:57 0.990	674.95	50.2
Friday, April 29, 2016 5:41:57 0.990	679.90	49.8
Friday, April 29, 2016 5:46:58 0.990	684.87	50.8
Friday, April 29, 2016 5:51:59 0.990	689.84	50.6

Friday, April 29, 2016 5:56:59	0.990	694.79	50.3
Friday, April 29, 2016 6:02:00	0.990	699.75	50.8
Friday, April 29, 2016 6:07:01	0.990	704.72	50.5
Friday, April 29, 2016 6:12:01	0.990	709.67	50.2
Friday, April 29, 2016 6:15:04	0.990	712.69	51.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, April 28, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Friday, April 29, 2016 6:15:25

Total Volume 712.73 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.100 l/min

Ending Leak Rate 0.091 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Thursday, April 28, 2016 18:15:30	0.172	0.22	50.2
Thursday, April 28, 2016 18:20:30	0.990	5.18	50.1
Thursday, April 28, 2016 18:25:31	0.990	10.14	50.1
Thursday, April 28, 2016 18:30:32	0.990	15.11	50.3
Thursday, April 28, 2016 18:35:32	0.990	20.06	50.7
Thursday, April 28, 2016 18:40:33	0.990	25.03	50.5
Thursday, April 28, 2016 18:45:34	0.990	29.99	51.0
Thursday, April 28, 2016 18:50:34	0.990	34.94	50.4
Thursday, April 28, 2016 18:55:35	0.990	39.91	50.1
Thursday, April 28, 2016 19:00:35	0.990	44.86	50.8
Thursday, April 28, 2016 19:05:36	0.990	49.83	50.5
Thursday, April 28, 2016 19:10:37	0.990	54.79	50.5
Thursday, April 28, 2016 19:15:37	0.990	59.74	50.1
Thursday, April 28, 2016 19:20:38	0.990	64.71	50.2
Thursday, April 28, 2016 19:25:39	0.990	69.68	51.0
Thursday, April 28, 2016 19:30:39	0.990	74.63	50.8
Thursday, April 28, 2016 19:35:40	0.990	79.60	50.7
Thursday, April 28, 2016 19:40:40	0.990	84.55	50.5
Thursday, April 28, 2016 19:45:41	0.990	89.51	50.9
Thursday, April 28, 2016 19:50:42	0.990	94.48	50.9
Thursday, April 28, 2016 19:55:42	0.990	99.43	51.1
Thursday, April 28, 2016 20:00:43	0.990	104.40	50.3
Thursday, April 28, 2016 20:05:44	0.990	109.37	50.8
Thursday, April 28, 2016 20:10:44	0.990	114.32	50.8
Thursday, April 28, 2016 20:15:45	0.990	119.28	50.5
Thursday, April 28, 2016 20:20:45	0.990	124.23	50.4
Thursday, April 28, 2016 20:25:46	0.990	129.20	50.4
Thursday, April 28, 2016 20:30:47	0.990	134.17	50.1
Thursday, April 28, 2016 20:35:47	0.990	139.12	50.4
Thursday, April 28, 2016 20:40:48	0.990	144.09	50.6
Thursday, April 28, 2016 20:45:49	0.990	149.05	50.1
Thursday, April 28, 2016 20:50:49	0.990	154.00	50.8

Thursday, April 28, 2016 20:55:50 0.990	158.97	50.2
Thursday, April 28, 2016 21:00:50 0.990	163.92	50.8
Thursday, April 28, 2016 21:05:51 0.990	168.89	50.4
Thursday, April 28, 2016 21:10:52 0.990	173.85	50.1
Thursday, April 28, 2016 21:15:52 0.990	178.81	50.5
Thursday, April 28, 2016 21:20:53 0.990	183.77	50.3
Thursday, April 28, 2016 21:25:54 0.990	188.74	50.8
Thursday, April 28, 2016 21:30:54 0.990	193.69	50.9
Thursday, April 28, 2016 21:35:55 0.990	198.66	50.6
Thursday, April 28, 2016 21:40:55 0.990	203.61	50.8
Thursday, April 28, 2016 21:45:56 0.990	208.57	50.1
Thursday, April 28, 2016 21:50:57 0.990	213.54	50.2
Thursday, April 28, 2016 21:55:57 0.990	218.49	50.6
Thursday, April 28, 2016 22:00:58 0.990	223.46	50.5
Thursday, April 28, 2016 22:05:59 0.990	228.43	50.3
Thursday, April 28, 2016 22:10:59 0.990	233.38	50.4
Thursday, April 28, 2016 22:16:00 0.990	238.34	50.8
Thursday, April 28, 2016 22:21:01 0.990	243.31	49.7
Thursday, April 28, 2016 22:26:01 0.990	248.26	50.1
Thursday, April 28, 2016 22:31:02 0.990	253.23	50.6
Thursday, April 28, 2016 22:36:03 0.990	258.20	50.6
Thursday, April 28, 2016 22:41:03 0.990	263.15	50.8
Thursday, April 28, 2016 22:46:04 0.990	268.11	50.3
Thursday, April 28, 2016 22:51:05 0.990	273.08	50.4
Thursday, April 28, 2016 22:56:05 0.990	278.03	50.1
Thursday, April 28, 2016 23:01:06 0.990	283.00	50.6
Thursday, April 28, 2016 23:06:07 0.990	287.97	51.1
Thursday, April 28, 2016 23:11:07 0.990	292.92	50.6
Thursday, April 28, 2016 23:16:08 0.990	297.88	50.8
Thursday, April 28, 2016 23:21:09 0.990	302.85	50.0
Thursday, April 28, 2016 23:26:09 0.990	307.80	50.2
Thursday, April 28, 2016 23:31:10 0.990	312.77	50.4
Thursday, April 28, 2016 23:36:11 0.990	317.74	50.4
Thursday, April 28, 2016 23:41:11 0.990	322.69	49.9
Thursday, April 28, 2016 23:46:12 0.990	327.65	49.9
Thursday, April 28, 2016 23:51:12 0.990	332.60	50.1
Thursday, April 28, 2016 23:56:13 0.990	337.57	50.5
Friday, April 29, 2016 0:01:14 0.990	342.54	50.2
Friday, April 29, 2016 0:06:14 0.990	347.49	50.4
Friday, April 29, 2016 0:11:15 0.990	352.46	50.8
Friday, April 29, 2016 0:16:16 0.990	357.42	50.9
Friday, April 29, 2016 0:21:16 0.990	362.37	50.2
Friday, April 29, 2016 0:26:17 0.990	367.34	50.8
Friday, April 29, 2016 0:31:18 0.990	372.31	50.4
Friday, April 29, 2016 0:36:18 0.990	377.26	50.7
Friday, April 29, 2016 0:41:19 0.990	382.23	50.8
Friday, April 29, 2016 0:46:20 0.990	387.19	50.8
Friday, April 29, 2016 0:51:20 0.990	392.14	50.5
Friday, April 29, 2016 0:56:21 0.990	397.11	49.7
Friday, April 29, 2016 1:01:21 0.990	402.06	50.1
Friday, April 29, 2016 1:06:22 0.990	407.03	50.5
Friday, April 29, 2016 1:11:23 0.990	412.00	50.1
Friday, April 29, 2016 1:16:23 0.990	416.95	50.2
Friday, April 29, 2016 1:21:24 0.990	421.91	50.1

Friday, April 29, 2016 1:26:25 0.990	426.88	50.6
Friday, April 29, 2016 1:31:25 0.990	431.83	50.9
Friday, April 29, 2016 1:36:26 0.990	436.80	50.3
Friday, April 29, 2016 1:41:27 0.990	441.77	50.1
Friday, April 29, 2016 1:46:27 0.990	446.72	50.2
Friday, April 29, 2016 1:51:28 0.990	451.68	50.1
Friday, April 29, 2016 1:56:29 0.990	456.65	50.9
Friday, April 29, 2016 2:01:29 0.990	461.60	50.8
Friday, April 29, 2016 2:06:30 0.990	466.57	50.5
Friday, April 29, 2016 2:11:31 0.990	471.54	50.5
Friday, April 29, 2016 2:16:31 0.990	476.49	50.5
Friday, April 29, 2016 2:21:32 0.990	481.45	50.1
Friday, April 29, 2016 2:26:32 0.990	486.40	50.1
Friday, April 29, 2016 2:31:33 0.990	491.37	49.4
Friday, April 29, 2016 2:36:34 0.990	496.34	49.7
Friday, April 29, 2016 2:41:34 0.990	501.29	50.1
Friday, April 29, 2016 2:46:35 0.990	506.26	50.5
Friday, April 29, 2016 2:51:36 0.990	511.22	50.4
Friday, April 29, 2016 2:56:36 0.990	516.17	50.4
Friday, April 29, 2016 3:01:37 0.990	521.14	50.5
Friday, April 29, 2016 3:06:38 0.990	526.11	50.5
Friday, April 29, 2016 3:11:38 0.990	531.06	50.2
Friday, April 29, 2016 3:16:39 0.990	536.03	50.4
Friday, April 29, 2016 3:21:39 0.990	540.98	49.8
Friday, April 29, 2016 3:26:40 0.990	545.95	50.5
Friday, April 29, 2016 3:31:41 0.990	550.91	50.6
Friday, April 29, 2016 3:36:41 0.990	555.86	49.5
Friday, April 29, 2016 3:41:42 0.990	560.83	50.1
Friday, April 29, 2016 3:46:43 0.990	565.80	50.7
Friday, April 29, 2016 3:51:43 0.990	570.75	50.5
Friday, April 29, 2016 3:56:44 0.990	575.72	50.3
Friday, April 29, 2016 4:01:45 0.990	580.69	50.8
Friday, April 29, 2016 4:06:45 0.990	585.64	50.1
Friday, April 29, 2016 4:11:46 0.990	590.60	49.9
Friday, April 29, 2016 4:16:47 0.990	595.57	50.4
Friday, April 29, 2016 4:21:47 0.990	600.52	50.2
Friday, April 29, 2016 4:26:48 0.990	605.49	50.3
Friday, April 29, 2016 4:31:48 0.990	610.44	50.3
Friday, April 29, 2016 4:36:49 0.990	615.41	50.3
Friday, April 29, 2016 4:41:50 0.990	620.38	50.6
Friday, April 29, 2016 4:46:50 0.990	625.33	50.9
Friday, April 29, 2016 4:51:51 0.990	630.29	50.2
Friday, April 29, 2016 4:56:52 0.990	635.26	50.9
Friday, April 29, 2016 5:01:52 0.990	640.21	50.4
Friday, April 29, 2016 5:06:53 0.990	645.18	50.2
Friday, April 29, 2016 5:11:54 0.990	650.15	51.0
Friday, April 29, 2016 5:16:54 0.990	655.10	50.4
Friday, April 29, 2016 5:21:55 0.990	660.07	50.6
Friday, April 29, 2016 5:26:55 0.990	665.02	50.1
Friday, April 29, 2016 5:31:56 0.990	669.98	50.2
Friday, April 29, 2016 5:36:57 0.990	674.95	50.2
Friday, April 29, 2016 5:41:57 0.990	679.90	49.8
Friday, April 29, 2016 5:46:58 0.990	684.87	50.8
Friday, April 29, 2016 5:51:59 0.990	689.84	50.6

Friday, April 29, 2016 5:56:59	0.990	694.79	50.3
Friday, April 29, 2016 6:02:00	0.990	699.75	50.8
Friday, April 29, 2016 6:07:01	0.990	704.72	50.5
Friday, April 29, 2016 6:12:01	0.990	709.67	50.2
Friday, April 29, 2016 6:15:04	0.990	712.69	51.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, April 28, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Friday, April 29, 2016 6:15:25

Total Volume 712.73 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.100 l/min

Ending Leak Rate 0.091 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Thursday, April 28, 2016 18:15:30	0.172	0.22	50.2
Thursday, April 28, 2016 18:20:30	0.990	5.18	50.1
Thursday, April 28, 2016 18:25:31	0.990	10.14	50.1
Thursday, April 28, 2016 18:30:32	0.990	15.11	50.3
Thursday, April 28, 2016 18:35:32	0.990	20.06	50.7
Thursday, April 28, 2016 18:40:33	0.990	25.03	50.5
Thursday, April 28, 2016 18:45:34	0.990	29.99	51.0
Thursday, April 28, 2016 18:50:34	0.990	34.94	50.4
Thursday, April 28, 2016 18:55:35	0.990	39.91	50.1
Thursday, April 28, 2016 19:00:35	0.990	44.86	50.8
Thursday, April 28, 2016 19:05:36	0.990	49.83	50.5
Thursday, April 28, 2016 19:10:37	0.990	54.79	50.5
Thursday, April 28, 2016 19:15:37	0.990	59.74	50.1
Thursday, April 28, 2016 19:20:38	0.990	64.71	50.2
Thursday, April 28, 2016 19:25:39	0.990	69.68	51.0
Thursday, April 28, 2016 19:30:39	0.990	74.63	50.8
Thursday, April 28, 2016 19:35:40	0.990	79.60	50.7
Thursday, April 28, 2016 19:40:40	0.990	84.55	50.5
Thursday, April 28, 2016 19:45:41	0.990	89.51	50.9
Thursday, April 28, 2016 19:50:42	0.990	94.48	50.9
Thursday, April 28, 2016 19:55:42	0.990	99.43	51.1
Thursday, April 28, 2016 20:00:43	0.990	104.40	50.3
Thursday, April 28, 2016 20:05:44	0.990	109.37	50.8
Thursday, April 28, 2016 20:10:44	0.990	114.32	50.8
Thursday, April 28, 2016 20:15:45	0.990	119.28	50.5
Thursday, April 28, 2016 20:20:45	0.990	124.23	50.4
Thursday, April 28, 2016 20:25:46	0.990	129.20	50.4
Thursday, April 28, 2016 20:30:47	0.990	134.17	50.1
Thursday, April 28, 2016 20:35:47	0.990	139.12	50.4
Thursday, April 28, 2016 20:40:48	0.990	144.09	50.6
Thursday, April 28, 2016 20:45:49	0.990	149.05	50.1
Thursday, April 28, 2016 20:50:49	0.990	154.00	50.8

Thursday, April 28, 2016 20:55:50 0.990	158.97	50.2
Thursday, April 28, 2016 21:00:50 0.990	163.92	50.8
Thursday, April 28, 2016 21:05:51 0.990	168.89	50.4
Thursday, April 28, 2016 21:10:52 0.990	173.85	50.1
Thursday, April 28, 2016 21:15:52 0.990	178.81	50.5
Thursday, April 28, 2016 21:20:53 0.990	183.77	50.3
Thursday, April 28, 2016 21:25:54 0.990	188.74	50.8
Thursday, April 28, 2016 21:30:54 0.990	193.69	50.9
Thursday, April 28, 2016 21:35:55 0.990	198.66	50.6
Thursday, April 28, 2016 21:40:55 0.990	203.61	50.8
Thursday, April 28, 2016 21:45:56 0.990	208.57	50.1
Thursday, April 28, 2016 21:50:57 0.990	213.54	50.2
Thursday, April 28, 2016 21:55:57 0.990	218.49	50.6
Thursday, April 28, 2016 22:00:58 0.990	223.46	50.5
Thursday, April 28, 2016 22:05:59 0.990	228.43	50.3
Thursday, April 28, 2016 22:10:59 0.990	233.38	50.4
Thursday, April 28, 2016 22:16:00 0.990	238.34	50.8
Thursday, April 28, 2016 22:21:01 0.990	243.31	49.7
Thursday, April 28, 2016 22:26:01 0.990	248.26	50.1
Thursday, April 28, 2016 22:31:02 0.990	253.23	50.6
Thursday, April 28, 2016 22:36:03 0.990	258.20	50.6
Thursday, April 28, 2016 22:41:03 0.990	263.15	50.8
Thursday, April 28, 2016 22:46:04 0.990	268.11	50.3
Thursday, April 28, 2016 22:51:05 0.990	273.08	50.4
Thursday, April 28, 2016 22:56:05 0.990	278.03	50.1
Thursday, April 28, 2016 23:01:06 0.990	283.00	50.6
Thursday, April 28, 2016 23:06:07 0.990	287.97	51.1
Thursday, April 28, 2016 23:11:07 0.990	292.92	50.6
Thursday, April 28, 2016 23:16:08 0.990	297.88	50.8
Thursday, April 28, 2016 23:21:09 0.990	302.85	50.0
Thursday, April 28, 2016 23:26:09 0.990	307.80	50.2
Thursday, April 28, 2016 23:31:10 0.990	312.77	50.4
Thursday, April 28, 2016 23:36:11 0.990	317.74	50.4
Thursday, April 28, 2016 23:41:11 0.990	322.69	49.9
Thursday, April 28, 2016 23:46:12 0.990	327.65	49.9
Thursday, April 28, 2016 23:51:12 0.990	332.60	50.1
Thursday, April 28, 2016 23:56:13 0.990	337.57	50.5
Friday, April 29, 2016 0:01:14 0.990	342.54	50.2
Friday, April 29, 2016 0:06:14 0.990	347.49	50.4
Friday, April 29, 2016 0:11:15 0.990	352.46	50.8
Friday, April 29, 2016 0:16:16 0.990	357.42	50.9
Friday, April 29, 2016 0:21:16 0.990	362.37	50.2
Friday, April 29, 2016 0:26:17 0.990	367.34	50.8
Friday, April 29, 2016 0:31:18 0.990	372.31	50.4
Friday, April 29, 2016 0:36:18 0.990	377.26	50.7
Friday, April 29, 2016 0:41:19 0.990	382.23	50.8
Friday, April 29, 2016 0:46:20 0.990	387.19	50.8
Friday, April 29, 2016 0:51:20 0.990	392.14	50.5
Friday, April 29, 2016 0:56:21 0.990	397.11	49.7
Friday, April 29, 2016 1:01:21 0.990	402.06	50.1
Friday, April 29, 2016 1:06:22 0.990	407.03	50.5
Friday, April 29, 2016 1:11:23 0.990	412.00	50.1
Friday, April 29, 2016 1:16:23 0.990	416.95	50.2
Friday, April 29, 2016 1:21:24 0.990	421.91	50.1

Friday, April 29, 2016 1:26:25 0.990	426.88	50.6
Friday, April 29, 2016 1:31:25 0.990	431.83	50.9
Friday, April 29, 2016 1:36:26 0.990	436.80	50.3
Friday, April 29, 2016 1:41:27 0.990	441.77	50.1
Friday, April 29, 2016 1:46:27 0.990	446.72	50.2
Friday, April 29, 2016 1:51:28 0.990	451.68	50.1
Friday, April 29, 2016 1:56:29 0.990	456.65	50.9
Friday, April 29, 2016 2:01:29 0.990	461.60	50.8
Friday, April 29, 2016 2:06:30 0.990	466.57	50.5
Friday, April 29, 2016 2:11:31 0.990	471.54	50.5
Friday, April 29, 2016 2:16:31 0.990	476.49	50.5
Friday, April 29, 2016 2:21:32 0.990	481.45	50.1
Friday, April 29, 2016 2:26:32 0.990	486.40	50.1
Friday, April 29, 2016 2:31:33 0.990	491.37	49.4
Friday, April 29, 2016 2:36:34 0.990	496.34	49.7
Friday, April 29, 2016 2:41:34 0.990	501.29	50.1
Friday, April 29, 2016 2:46:35 0.990	506.26	50.5
Friday, April 29, 2016 2:51:36 0.990	511.22	50.4
Friday, April 29, 2016 2:56:36 0.990	516.17	50.4
Friday, April 29, 2016 3:01:37 0.990	521.14	50.5
Friday, April 29, 2016 3:06:38 0.990	526.11	50.5
Friday, April 29, 2016 3:11:38 0.990	531.06	50.2
Friday, April 29, 2016 3:16:39 0.990	536.03	50.4
Friday, April 29, 2016 3:21:39 0.990	540.98	49.8
Friday, April 29, 2016 3:26:40 0.990	545.95	50.5
Friday, April 29, 2016 3:31:41 0.990	550.91	50.6
Friday, April 29, 2016 3:36:41 0.990	555.86	49.5
Friday, April 29, 2016 3:41:42 0.990	560.83	50.1
Friday, April 29, 2016 3:46:43 0.990	565.80	50.7
Friday, April 29, 2016 3:51:43 0.990	570.75	50.5
Friday, April 29, 2016 3:56:44 0.990	575.72	50.3
Friday, April 29, 2016 4:01:45 0.990	580.69	50.8
Friday, April 29, 2016 4:06:45 0.990	585.64	50.1
Friday, April 29, 2016 4:11:46 0.990	590.60	49.9
Friday, April 29, 2016 4:16:47 0.990	595.57	50.4
Friday, April 29, 2016 4:21:47 0.990	600.52	50.2
Friday, April 29, 2016 4:26:48 0.990	605.49	50.3
Friday, April 29, 2016 4:31:48 0.990	610.44	50.3
Friday, April 29, 2016 4:36:49 0.990	615.41	50.3
Friday, April 29, 2016 4:41:50 0.990	620.38	50.6
Friday, April 29, 2016 4:46:50 0.990	625.33	50.9
Friday, April 29, 2016 4:51:51 0.990	630.29	50.2
Friday, April 29, 2016 4:56:52 0.990	635.26	50.9
Friday, April 29, 2016 5:01:52 0.990	640.21	50.4
Friday, April 29, 2016 5:06:53 0.990	645.18	50.2
Friday, April 29, 2016 5:11:54 0.990	650.15	51.0
Friday, April 29, 2016 5:16:54 0.990	655.10	50.4
Friday, April 29, 2016 5:21:55 0.990	660.07	50.6
Friday, April 29, 2016 5:26:55 0.990	665.02	50.1
Friday, April 29, 2016 5:31:56 0.990	669.98	50.2
Friday, April 29, 2016 5:36:57 0.990	674.95	50.2
Friday, April 29, 2016 5:41:57 0.990	679.90	49.8
Friday, April 29, 2016 5:46:58 0.990	684.87	50.8
Friday, April 29, 2016 5:51:59 0.990	689.84	50.6

Friday, April 29, 2016 5:56:59	0.990	694.79	50.3
Friday, April 29, 2016 6:02:00	0.990	699.75	50.8
Friday, April 29, 2016 6:07:01	0.990	704.72	50.5
Friday, April 29, 2016 6:12:01	0.990	709.67	50.2
Friday, April 29, 2016 6:15:04	0.990	712.69	51.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Tuesday, May 10, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, May 11, 2016 6:15:26

Total Volume 712.72 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.039 l/min

Ending Leak Rate 0.030 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Tuesday, May 10, 2016 18:15:30	0.116	0.22	50.4
Tuesday, May 10, 2016 18:20:31	0.990	5.19	50.9
Tuesday, May 10, 2016 18:25:32	0.990	10.16	50.4
Tuesday, May 10, 2016 18:30:32	0.990	15.11	50.7
Tuesday, May 10, 2016 18:35:33	0.990	20.08	49.5
Tuesday, May 10, 2016 18:40:33	0.990	25.03	50.1
Tuesday, May 10, 2016 18:45:34	0.990	29.99	50.6
Tuesday, May 10, 2016 18:50:35	0.990	34.96	50.1
Tuesday, May 10, 2016 18:55:35	0.990	39.91	50.5
Tuesday, May 10, 2016 19:00:36	0.990	44.88	50.8
Tuesday, May 10, 2016 19:05:36	0.990	49.83	49.7
Tuesday, May 10, 2016 19:10:37	0.990	54.79	50.3
Tuesday, May 10, 2016 19:15:38	0.990	59.76	50.1
Tuesday, May 10, 2016 19:20:38	0.990	64.71	50.6
Tuesday, May 10, 2016 19:25:39	0.990	69.68	50.5
Tuesday, May 10, 2016 19:30:39	0.990	74.63	50.9
Tuesday, May 10, 2016 19:35:40	0.990	79.60	50.5
Tuesday, May 10, 2016 19:40:41	0.990	84.56	50.5
Tuesday, May 10, 2016 19:45:41	0.990	89.51	49.9
Tuesday, May 10, 2016 19:50:42	0.990	94.48	50.1
Tuesday, May 10, 2016 19:55:42	0.990	99.43	50.5
Tuesday, May 10, 2016 20:00:43	0.990	104.40	50.5
Tuesday, May 10, 2016 20:05:44	0.990	109.37	50.5
Tuesday, May 10, 2016 20:10:44	0.990	114.32	50.5
Tuesday, May 10, 2016 20:15:45	0.990	119.28	51.0
Tuesday, May 10, 2016 20:20:45	0.990	124.23	50.5
Tuesday, May 10, 2016 20:25:46	0.990	129.20	50.9
Tuesday, May 10, 2016 20:30:47	0.990	134.17	50.1
Tuesday, May 10, 2016 20:35:47	0.990	139.12	50.2
Tuesday, May 10, 2016 20:40:48	0.990	144.09	50.2
Tuesday, May 10, 2016 20:45:48	0.990	149.04	50.4
Tuesday, May 10, 2016 20:50:49	0.990	154.00	50.6

Tuesday, May 10, 2016 20:55:50 0.990	158.97	50.5
Tuesday, May 10, 2016 21:00:50 0.990	163.92	50.2
Tuesday, May 10, 2016 21:05:51 0.990	168.89	50.8
Tuesday, May 10, 2016 21:10:51 0.990	173.84	50.8
Tuesday, May 10, 2016 21:15:52 0.990	178.80	50.4
Tuesday, May 10, 2016 21:20:53 0.990	183.77	50.5
Tuesday, May 10, 2016 21:25:53 0.990	188.72	50.9
Tuesday, May 10, 2016 21:30:54 0.990	193.69	50.8
Tuesday, May 10, 2016 21:35:54 0.990	198.64	51.0
Tuesday, May 10, 2016 21:40:55 0.990	203.61	50.1
Tuesday, May 10, 2016 21:45:56 0.990	208.57	50.8
Tuesday, May 10, 2016 21:50:56 0.990	213.52	50.9
Tuesday, May 10, 2016 21:55:57 0.990	218.49	50.0
Tuesday, May 10, 2016 22:00:58 0.990	223.46	50.1
Tuesday, May 10, 2016 22:05:58 0.990	228.41	50.9
Tuesday, May 10, 2016 22:10:59 0.990	233.38	50.6
Tuesday, May 10, 2016 22:15:59 0.990	238.33	50.5
Tuesday, May 10, 2016 22:21:00 0.990	243.29	50.9
Tuesday, May 10, 2016 22:26:01 0.990	248.26	50.1
Tuesday, May 10, 2016 22:31:01 0.990	253.21	50.2
Tuesday, May 10, 2016 22:36:02 0.990	258.18	50.5
Tuesday, May 10, 2016 22:41:02 0.990	263.13	50.2
Tuesday, May 10, 2016 22:46:03 0.990	268.10	50.9
Tuesday, May 10, 2016 22:51:04 0.990	273.06	50.6
Tuesday, May 10, 2016 22:56:04 0.990	278.01	50.5
Tuesday, May 10, 2016 23:01:05 0.990	282.98	50.5
Tuesday, May 10, 2016 23:06:05 0.990	287.93	50.8
Tuesday, May 10, 2016 23:11:06 0.990	292.90	50.3
Tuesday, May 10, 2016 23:16:07 0.990	297.87	51.0
Tuesday, May 10, 2016 23:21:07 0.990	302.82	50.2
Tuesday, May 10, 2016 23:26:08 0.990	307.78	50.4
Tuesday, May 10, 2016 23:31:08 0.990	312.73	50.5
Tuesday, May 10, 2016 23:36:09 0.990	317.70	50.8
Tuesday, May 10, 2016 23:41:10 0.990	322.67	50.2
Tuesday, May 10, 2016 23:46:10 0.990	327.62	50.3
Tuesday, May 10, 2016 23:51:11 0.990	332.59	50.3
Tuesday, May 10, 2016 23:56:11 0.990	337.54	49.8
Wednesday, May 11, 2016 0:01:12 0.990	342.50	50.1
Wednesday, May 11, 2016 0:06:13 0.990	347.47	49.8
Wednesday, May 11, 2016 0:11:13 0.990	352.42	50.8
Wednesday, May 11, 2016 0:16:14 0.990	357.39	50.4
Wednesday, May 11, 2016 0:21:14 0.990	362.34	50.8
Wednesday, May 11, 2016 0:26:15 0.990	367.31	50.9
Wednesday, May 11, 2016 0:31:16 0.990	372.27	50.5
Wednesday, May 11, 2016 0:36:16 0.990	377.22	50.5
Wednesday, May 11, 2016 0:41:17 0.990	382.19	50.6
Wednesday, May 11, 2016 0:46:17 0.990	387.14	50.8
Wednesday, May 11, 2016 0:51:18 0.990	392.11	51.0
Wednesday, May 11, 2016 0:56:19 0.990	397.08	50.6
Wednesday, May 11, 2016 1:01:19 0.990	402.03	49.8
Wednesday, May 11, 2016 1:06:20 0.990	406.99	50.5
Wednesday, May 11, 2016 1:11:20 0.990	411.94	50.2
Wednesday, May 11, 2016 1:16:21 0.990	416.91	50.8
Wednesday, May 11, 2016 1:21:22 0.990	421.88	50.7

Wednesday, May 11, 2016 1:26:22 0.990	426.83	50.5
Wednesday, May 11, 2016 1:31:23 0.990	431.80	50.1
Wednesday, May 11, 2016 1:36:23 0.990	436.75	50.0
Wednesday, May 11, 2016 1:41:24 0.990	441.71	50.3
Wednesday, May 11, 2016 1:46:25 0.990	446.68	50.5
Wednesday, May 11, 2016 1:51:25 0.990	451.63	50.5
Wednesday, May 11, 2016 1:56:26 0.990	456.60	50.8
Wednesday, May 11, 2016 2:01:26 0.990	461.55	50.5
Wednesday, May 11, 2016 2:06:27 0.990	466.52	50.8
Wednesday, May 11, 2016 2:11:28 0.990	471.48	50.9
Wednesday, May 11, 2016 2:16:28 0.990	476.43	50.4
Wednesday, May 11, 2016 2:21:29 0.990	481.40	50.2
Wednesday, May 11, 2016 2:26:29 0.990	486.35	50.5
Wednesday, May 11, 2016 2:31:30 0.990	491.32	49.7
Wednesday, May 11, 2016 2:36:31 0.990	496.29	51.0
Wednesday, May 11, 2016 2:41:31 0.990	501.24	51.1
Wednesday, May 11, 2016 2:46:32 0.990	506.20	50.1
Wednesday, May 11, 2016 2:51:32 0.990	511.16	50.1
Wednesday, May 11, 2016 2:56:33 0.990	516.12	49.9
Wednesday, May 11, 2016 3:01:34 0.990	521.09	50.3
Wednesday, May 11, 2016 3:06:34 0.990	526.04	50.5
Wednesday, May 11, 2016 3:11:35 0.990	531.01	51.1
Wednesday, May 11, 2016 3:16:35 0.990	535.96	50.0
Wednesday, May 11, 2016 3:21:36 0.990	540.93	50.1
Wednesday, May 11, 2016 3:26:37 0.990	545.89	50.5
Wednesday, May 11, 2016 3:31:37 0.990	550.85	50.7
Wednesday, May 11, 2016 3:36:38 0.990	555.81	50.0
Wednesday, May 11, 2016 3:41:39 0.990	560.78	50.5
Wednesday, May 11, 2016 3:46:39 0.990	565.73	50.9
Wednesday, May 11, 2016 3:51:40 0.990	570.70	50.6
Wednesday, May 11, 2016 3:56:40 0.990	575.65	50.4
Wednesday, May 11, 2016 4:01:41 0.990	580.62	50.2
Wednesday, May 11, 2016 4:06:42 0.990	585.58	50.1
Wednesday, May 11, 2016 4:11:42 0.990	590.54	50.3
Wednesday, May 11, 2016 4:16:43 0.990	595.50	50.2
Wednesday, May 11, 2016 4:21:43 0.990	600.45	50.1
Wednesday, May 11, 2016 4:26:44 0.990	605.42	50.8
Wednesday, May 11, 2016 4:31:45 0.990	610.39	50.4
Wednesday, May 11, 2016 4:36:45 0.990	615.34	50.5
Wednesday, May 11, 2016 4:41:46 0.990	620.31	50.8
Wednesday, May 11, 2016 4:46:46 0.990	625.26	50.8
Wednesday, May 11, 2016 4:51:47 0.990	630.22	50.1
Wednesday, May 11, 2016 4:56:48 0.990	635.19	49.9
Wednesday, May 11, 2016 5:01:48 0.990	640.14	50.1
Wednesday, May 11, 2016 5:06:49 0.990	645.11	50.4
Wednesday, May 11, 2016 5:11:50 0.990	650.08	50.8
Wednesday, May 11, 2016 5:16:50 0.990	655.03	51.0
Wednesday, May 11, 2016 5:21:51 0.990	660.00	50.2
Wednesday, May 11, 2016 5:26:51 0.990	664.95	49.4
Wednesday, May 11, 2016 5:31:52 0.990	669.91	49.9
Wednesday, May 11, 2016 5:36:53 0.990	674.88	49.7
Wednesday, May 11, 2016 5:41:53 0.990	679.83	50.9
Wednesday, May 11, 2016 5:46:54 0.990	684.80	50.8
Wednesday, May 11, 2016 5:51:54 0.990	689.75	50.4

Wednesday, May 11, 2016 5:56:55 0.990	694.72	51.0
Wednesday, May 11, 2016 6:01:56 0.990	699.69	50.4
Wednesday, May 11, 2016 6:06:56 0.990	704.64	50.3
Wednesday, May 11, 2016 6:11:57 0.990	709.60	50.3
Wednesday, May 11, 2016 6:15:05 0.990	712.71	50.6

aqms5

formaldehyde002

Ch. 2 Cartridge Started Tuesday, May 10, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, May 11, 2016 6:15:26

Total Volume 712.72 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.039 l/min

Ending Leak Rate 0.030 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Tuesday, May 10, 2016 18:15:30	0.116	0.22	50.4
Tuesday, May 10, 2016 18:20:31	0.990	5.19	50.9
Tuesday, May 10, 2016 18:25:32	0.990	10.16	50.4
Tuesday, May 10, 2016 18:30:32	0.990	15.11	50.7
Tuesday, May 10, 2016 18:35:33	0.990	20.08	49.5
Tuesday, May 10, 2016 18:40:33	0.990	25.03	50.1
Tuesday, May 10, 2016 18:45:34	0.990	29.99	50.6
Tuesday, May 10, 2016 18:50:35	0.990	34.96	50.1
Tuesday, May 10, 2016 18:55:35	0.990	39.91	50.5
Tuesday, May 10, 2016 19:00:36	0.990	44.88	50.8
Tuesday, May 10, 2016 19:05:36	0.990	49.83	49.7
Tuesday, May 10, 2016 19:10:37	0.990	54.79	50.3
Tuesday, May 10, 2016 19:15:38	0.990	59.76	50.1
Tuesday, May 10, 2016 19:20:38	0.990	64.71	50.6
Tuesday, May 10, 2016 19:25:39	0.990	69.68	50.5
Tuesday, May 10, 2016 19:30:39	0.990	74.63	50.9
Tuesday, May 10, 2016 19:35:40	0.990	79.60	50.5
Tuesday, May 10, 2016 19:40:41	0.990	84.56	50.5
Tuesday, May 10, 2016 19:45:41	0.990	89.51	49.9
Tuesday, May 10, 2016 19:50:42	0.990	94.48	50.1
Tuesday, May 10, 2016 19:55:42	0.990	99.43	50.5
Tuesday, May 10, 2016 20:00:43	0.990	104.40	50.5
Tuesday, May 10, 2016 20:05:44	0.990	109.37	50.5
Tuesday, May 10, 2016 20:10:44	0.990	114.32	50.5
Tuesday, May 10, 2016 20:15:45	0.990	119.28	51.0
Tuesday, May 10, 2016 20:20:45	0.990	124.23	50.5
Tuesday, May 10, 2016 20:25:46	0.990	129.20	50.9
Tuesday, May 10, 2016 20:30:47	0.990	134.17	50.1
Tuesday, May 10, 2016 20:35:47	0.990	139.12	50.2
Tuesday, May 10, 2016 20:40:48	0.990	144.09	50.2
Tuesday, May 10, 2016 20:45:48	0.990	149.04	50.4
Tuesday, May 10, 2016 20:50:49	0.990	154.00	50.6

Tuesday, May 10, 2016 20:55:50 0.990	158.97	50.5
Tuesday, May 10, 2016 21:00:50 0.990	163.92	50.2
Tuesday, May 10, 2016 21:05:51 0.990	168.89	50.8
Tuesday, May 10, 2016 21:10:51 0.990	173.84	50.8
Tuesday, May 10, 2016 21:15:52 0.990	178.80	50.4
Tuesday, May 10, 2016 21:20:53 0.990	183.77	50.5
Tuesday, May 10, 2016 21:25:53 0.990	188.72	50.9
Tuesday, May 10, 2016 21:30:54 0.990	193.69	50.8
Tuesday, May 10, 2016 21:35:54 0.990	198.64	51.0
Tuesday, May 10, 2016 21:40:55 0.990	203.61	50.1
Tuesday, May 10, 2016 21:45:56 0.990	208.57	50.8
Tuesday, May 10, 2016 21:50:56 0.990	213.52	50.9
Tuesday, May 10, 2016 21:55:57 0.990	218.49	50.0
Tuesday, May 10, 2016 22:00:58 0.990	223.46	50.1
Tuesday, May 10, 2016 22:05:58 0.990	228.41	50.9
Tuesday, May 10, 2016 22:10:59 0.990	233.38	50.6
Tuesday, May 10, 2016 22:15:59 0.990	238.33	50.5
Tuesday, May 10, 2016 22:21:00 0.990	243.29	50.9
Tuesday, May 10, 2016 22:26:01 0.990	248.26	50.1
Tuesday, May 10, 2016 22:31:01 0.990	253.21	50.2
Tuesday, May 10, 2016 22:36:02 0.990	258.18	50.5
Tuesday, May 10, 2016 22:41:02 0.990	263.13	50.2
Tuesday, May 10, 2016 22:46:03 0.990	268.10	50.9
Tuesday, May 10, 2016 22:51:04 0.990	273.06	50.6
Tuesday, May 10, 2016 22:56:04 0.990	278.01	50.5
Tuesday, May 10, 2016 23:01:05 0.990	282.98	50.5
Tuesday, May 10, 2016 23:06:05 0.990	287.93	50.8
Tuesday, May 10, 2016 23:11:06 0.990	292.90	50.3
Tuesday, May 10, 2016 23:16:07 0.990	297.87	51.0
Tuesday, May 10, 2016 23:21:07 0.990	302.82	50.2
Tuesday, May 10, 2016 23:26:08 0.990	307.78	50.4
Tuesday, May 10, 2016 23:31:08 0.990	312.73	50.5
Tuesday, May 10, 2016 23:36:09 0.990	317.70	50.8
Tuesday, May 10, 2016 23:41:10 0.990	322.67	50.2
Tuesday, May 10, 2016 23:46:10 0.990	327.62	50.3
Tuesday, May 10, 2016 23:51:11 0.990	332.59	50.3
Tuesday, May 10, 2016 23:56:11 0.990	337.54	49.8
Wednesday, May 11, 2016 0:01:12 0.990	342.50	50.1
Wednesday, May 11, 2016 0:06:13 0.990	347.47	49.8
Wednesday, May 11, 2016 0:11:13 0.990	352.42	50.8
Wednesday, May 11, 2016 0:16:14 0.990	357.39	50.4
Wednesday, May 11, 2016 0:21:14 0.990	362.34	50.8
Wednesday, May 11, 2016 0:26:15 0.990	367.31	50.9
Wednesday, May 11, 2016 0:31:16 0.990	372.27	50.5
Wednesday, May 11, 2016 0:36:16 0.990	377.22	50.5
Wednesday, May 11, 2016 0:41:17 0.990	382.19	50.6
Wednesday, May 11, 2016 0:46:17 0.990	387.14	50.8
Wednesday, May 11, 2016 0:51:18 0.990	392.11	51.0
Wednesday, May 11, 2016 0:56:19 0.990	397.08	50.6
Wednesday, May 11, 2016 1:01:19 0.990	402.03	49.8
Wednesday, May 11, 2016 1:06:20 0.990	406.99	50.5
Wednesday, May 11, 2016 1:11:20 0.990	411.94	50.2
Wednesday, May 11, 2016 1:16:21 0.990	416.91	50.8
Wednesday, May 11, 2016 1:21:22 0.990	421.88	50.7

Wednesday, May 11, 2016 1:26:22 0.990	426.83	50.5
Wednesday, May 11, 2016 1:31:23 0.990	431.80	50.1
Wednesday, May 11, 2016 1:36:23 0.990	436.75	50.0
Wednesday, May 11, 2016 1:41:24 0.990	441.71	50.3
Wednesday, May 11, 2016 1:46:25 0.990	446.68	50.5
Wednesday, May 11, 2016 1:51:25 0.990	451.63	50.5
Wednesday, May 11, 2016 1:56:26 0.990	456.60	50.8
Wednesday, May 11, 2016 2:01:26 0.990	461.55	50.5
Wednesday, May 11, 2016 2:06:27 0.990	466.52	50.8
Wednesday, May 11, 2016 2:11:28 0.990	471.48	50.9
Wednesday, May 11, 2016 2:16:28 0.990	476.43	50.4
Wednesday, May 11, 2016 2:21:29 0.990	481.40	50.2
Wednesday, May 11, 2016 2:26:29 0.990	486.35	50.5
Wednesday, May 11, 2016 2:31:30 0.990	491.32	49.7
Wednesday, May 11, 2016 2:36:31 0.990	496.29	51.0
Wednesday, May 11, 2016 2:41:31 0.990	501.24	51.1
Wednesday, May 11, 2016 2:46:32 0.990	506.20	50.1
Wednesday, May 11, 2016 2:51:32 0.990	511.16	50.1
Wednesday, May 11, 2016 2:56:33 0.990	516.12	49.9
Wednesday, May 11, 2016 3:01:34 0.990	521.09	50.3
Wednesday, May 11, 2016 3:06:34 0.990	526.04	50.5
Wednesday, May 11, 2016 3:11:35 0.990	531.01	51.1
Wednesday, May 11, 2016 3:16:35 0.990	535.96	50.0
Wednesday, May 11, 2016 3:21:36 0.990	540.93	50.1
Wednesday, May 11, 2016 3:26:37 0.990	545.89	50.5
Wednesday, May 11, 2016 3:31:37 0.990	550.85	50.7
Wednesday, May 11, 2016 3:36:38 0.990	555.81	50.0
Wednesday, May 11, 2016 3:41:39 0.990	560.78	50.5
Wednesday, May 11, 2016 3:46:39 0.990	565.73	50.9
Wednesday, May 11, 2016 3:51:40 0.990	570.70	50.6
Wednesday, May 11, 2016 3:56:40 0.990	575.65	50.4
Wednesday, May 11, 2016 4:01:41 0.990	580.62	50.2
Wednesday, May 11, 2016 4:06:42 0.990	585.58	50.1
Wednesday, May 11, 2016 4:11:42 0.990	590.54	50.3
Wednesday, May 11, 2016 4:16:43 0.990	595.50	50.2
Wednesday, May 11, 2016 4:21:43 0.990	600.45	50.1
Wednesday, May 11, 2016 4:26:44 0.990	605.42	50.8
Wednesday, May 11, 2016 4:31:45 0.990	610.39	50.4
Wednesday, May 11, 2016 4:36:45 0.990	615.34	50.5
Wednesday, May 11, 2016 4:41:46 0.990	620.31	50.8
Wednesday, May 11, 2016 4:46:46 0.990	625.26	50.8
Wednesday, May 11, 2016 4:51:47 0.990	630.22	50.1
Wednesday, May 11, 2016 4:56:48 0.990	635.19	49.9
Wednesday, May 11, 2016 5:01:48 0.990	640.14	50.1
Wednesday, May 11, 2016 5:06:49 0.990	645.11	50.4
Wednesday, May 11, 2016 5:11:50 0.990	650.08	50.8
Wednesday, May 11, 2016 5:16:50 0.990	655.03	51.0
Wednesday, May 11, 2016 5:21:51 0.990	660.00	50.2
Wednesday, May 11, 2016 5:26:51 0.990	664.95	49.4
Wednesday, May 11, 2016 5:31:52 0.990	669.91	49.9
Wednesday, May 11, 2016 5:36:53 0.990	674.88	49.7
Wednesday, May 11, 2016 5:41:53 0.990	679.83	50.9
Wednesday, May 11, 2016 5:46:54 0.990	684.80	50.8
Wednesday, May 11, 2016 5:51:54 0.990	689.75	50.4

Wednesday, May 11, 2016 5:56:55 0.990	694.72	51.0
Wednesday, May 11, 2016 6:01:56 0.990	699.69	50.4
Wednesday, May 11, 2016 6:06:56 0.990	704.64	50.3
Wednesday, May 11, 2016 6:11:57 0.990	709.60	50.3
Wednesday, May 11, 2016 6:15:05 0.990	712.71	50.6

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, May 16, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, May 17, 2016 6:15:25

Total Volume 712.70 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.042 l/min

Ending Leak Rate 0.034 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Monday, May 16, 2016 18:15:30	0.119	0.22	50.6
Monday, May 16, 2016 18:20:30	0.990	5.18	49.7
Monday, May 16, 2016 18:25:31	0.990	10.14	50.1
Monday, May 16, 2016 18:30:31	0.990	15.09	50.8
Monday, May 16, 2016 18:35:32	0.990	20.06	50.8
Monday, May 16, 2016 18:40:33	0.990	25.03	50.4
Monday, May 16, 2016 18:45:33	0.990	29.98	50.1
Monday, May 16, 2016 18:50:34	0.990	34.94	50.2
Monday, May 16, 2016 18:55:34	0.990	39.89	50.9
Monday, May 16, 2016 19:00:35	0.990	44.86	51.1
Monday, May 16, 2016 19:05:36	0.990	49.83	50.5
Monday, May 16, 2016 19:10:36	0.990	54.78	50.1
Monday, May 16, 2016 19:15:37	0.990	59.75	50.5
Monday, May 16, 2016 19:20:37	0.990	64.70	50.6
Monday, May 16, 2016 19:25:38	0.990	69.66	50.5
Monday, May 16, 2016 19:30:39	0.990	74.63	50.5
Monday, May 16, 2016 19:35:39	0.990	79.58	50.9
Monday, May 16, 2016 19:40:40	0.990	84.55	50.6
Monday, May 16, 2016 19:45:40	0.990	89.50	50.4
Monday, May 16, 2016 19:50:41	0.990	94.47	50.5
Monday, May 16, 2016 19:55:42	0.990	99.43	50.2
Monday, May 16, 2016 20:00:42	0.990	104.38	50.2
Monday, May 16, 2016 20:05:43	0.990	109.35	51.0
Monday, May 16, 2016 20:10:43	0.990	114.30	50.1
Monday, May 16, 2016 20:15:44	0.990	119.27	51.1
Monday, May 16, 2016 20:20:45	0.990	124.24	50.5
Monday, May 16, 2016 20:25:45	0.990	129.19	50.5
Monday, May 16, 2016 20:30:46	0.990	134.15	50.6
Monday, May 16, 2016 20:35:46	0.990	139.10	50.6
Monday, May 16, 2016 20:40:47	0.990	144.07	50.8
Monday, May 16, 2016 20:45:48	0.990	149.04	50.7
Monday, May 16, 2016 20:50:48	0.990	153.99	50.1

Monday, May 16, 2016 20:55:49 0.990	158.96	49.9
Monday, May 16, 2016 21:00:49 0.990	163.91	50.5
Monday, May 16, 2016 21:05:50 0.990	168.87	50.9
Monday, May 16, 2016 21:10:51 0.990	173.84	50.9
Monday, May 16, 2016 21:15:51 0.990	178.79	50.6
Monday, May 16, 2016 21:20:52 0.990	183.76	50.5
Monday, May 16, 2016 21:25:52 0.990	188.71	50.0
Monday, May 16, 2016 21:30:53 0.990	193.68	50.4
Monday, May 16, 2016 21:35:54 0.990	198.64	50.5
Monday, May 16, 2016 21:40:54 0.990	203.59	50.5
Monday, May 16, 2016 21:45:55 0.990	208.56	50.4
Monday, May 16, 2016 21:50:55 0.990	213.51	50.6
Monday, May 16, 2016 21:55:56 0.990	218.48	50.5
Monday, May 16, 2016 22:00:57 0.990	223.45	51.0
Monday, May 16, 2016 22:05:57 0.990	228.40	50.5
Monday, May 16, 2016 22:10:58 0.990	233.36	50.9
Monday, May 16, 2016 22:15:58 0.990	238.31	49.7
Monday, May 16, 2016 22:20:59 0.990	243.28	50.1
Monday, May 16, 2016 22:26:00 0.990	248.25	51.0
Monday, May 16, 2016 22:31:00 0.990	253.20	50.5
Monday, May 16, 2016 22:36:01 0.990	258.17	50.0
Monday, May 16, 2016 22:41:01 0.990	263.12	50.6
Monday, May 16, 2016 22:46:02 0.990	268.08	51.0
Monday, May 16, 2016 22:51:03 0.990	273.05	50.3
Monday, May 16, 2016 22:56:03 0.990	278.00	50.6
Monday, May 16, 2016 23:01:04 0.990	282.97	50.2
Monday, May 16, 2016 23:06:04 0.990	287.92	50.2
Monday, May 16, 2016 23:11:05 0.990	292.89	50.2
Monday, May 16, 2016 23:16:06 0.990	297.85	50.3
Monday, May 16, 2016 23:21:06 0.990	302.80	50.4
Monday, May 16, 2016 23:26:07 0.990	307.77	50.5
Monday, May 16, 2016 23:31:07 0.990	312.72	50.2
Monday, May 16, 2016 23:36:08 0.990	317.69	50.1
Monday, May 16, 2016 23:41:09 0.990	322.66	50.6
Monday, May 16, 2016 23:46:09 0.990	327.61	50.8
Monday, May 16, 2016 23:51:10 0.990	332.57	50.6
Monday, May 16, 2016 23:56:10 0.990	337.52	50.5
Tuesday, May 17, 2016 0:01:11 0.990	342.49	50.9
Tuesday, May 17, 2016 0:06:12 0.990	347.46	50.4
Tuesday, May 17, 2016 0:11:12 0.990	352.41	50.4
Tuesday, May 17, 2016 0:16:13 0.990	357.38	50.6
Tuesday, May 17, 2016 0:21:13 0.990	362.33	50.1
Tuesday, May 17, 2016 0:26:14 0.990	367.29	50.5
Tuesday, May 17, 2016 0:31:15 0.990	372.26	50.5
Tuesday, May 17, 2016 0:36:15 0.990	377.21	50.1
Tuesday, May 17, 2016 0:41:16 0.990	382.18	50.4
Tuesday, May 17, 2016 0:46:16 0.990	387.13	50.1
Tuesday, May 17, 2016 0:51:17 0.990	392.10	50.6
Tuesday, May 17, 2016 0:56:18 0.990	397.06	50.9
Tuesday, May 17, 2016 1:01:18 0.990	402.02	50.8
Tuesday, May 17, 2016 1:06:19 0.990	406.98	50.1
Tuesday, May 17, 2016 1:11:19 0.990	411.93	50.3
Tuesday, May 17, 2016 1:16:20 0.990	416.90	50.8
Tuesday, May 17, 2016 1:21:21 0.990	421.87	50.1

Tuesday, May 17, 2016 1:26:21 0.990	426.82	50.5
Tuesday, May 17, 2016 1:31:22 0.990	431.78	50.6
Tuesday, May 17, 2016 1:36:22 0.990	436.74	50.5
Tuesday, May 17, 2016 1:41:23 0.990	441.70	50.5
Tuesday, May 17, 2016 1:46:24 0.990	446.67	49.8
Tuesday, May 17, 2016 1:51:24 0.990	451.62	50.6
Tuesday, May 17, 2016 1:56:25 0.990	456.59	50.5
Tuesday, May 17, 2016 2:01:25 0.990	461.54	49.7
Tuesday, May 17, 2016 2:06:26 0.990	466.50	50.9
Tuesday, May 17, 2016 2:11:27 0.990	471.47	49.7
Tuesday, May 17, 2016 2:16:27 0.990	476.42	50.1
Tuesday, May 17, 2016 2:21:28 0.990	481.39	50.5
Tuesday, May 17, 2016 2:26:28 0.990	486.34	49.7
Tuesday, May 17, 2016 2:31:29 0.990	491.31	50.3
Tuesday, May 17, 2016 2:36:30 0.990	496.27	50.7
Tuesday, May 17, 2016 2:41:30 0.990	501.23	49.7
Tuesday, May 17, 2016 2:46:31 0.990	506.19	51.1
Tuesday, May 17, 2016 2:51:31 0.990	511.14	50.8
Tuesday, May 17, 2016 2:56:32 0.990	516.11	49.7
Tuesday, May 17, 2016 3:01:33 0.990	521.08	50.0
Tuesday, May 17, 2016 3:06:33 0.990	526.03	50.4
Tuesday, May 17, 2016 3:11:34 0.990	531.00	50.8
Tuesday, May 17, 2016 3:16:35 0.990	535.96	50.5
Tuesday, May 17, 2016 3:21:35 0.990	540.91	50.5
Tuesday, May 17, 2016 3:26:36 0.990	545.88	50.5
Tuesday, May 17, 2016 3:31:36 0.990	550.83	50.1
Tuesday, May 17, 2016 3:36:37 0.990	555.80	50.9
Tuesday, May 17, 2016 3:41:38 0.990	560.77	50.2
Tuesday, May 17, 2016 3:46:38 0.990	565.72	49.7
Tuesday, May 17, 2016 3:51:39 0.990	570.68	50.8
Tuesday, May 17, 2016 3:56:39 0.990	575.63	50.2
Tuesday, May 17, 2016 4:01:40 0.990	580.60	51.0
Tuesday, May 17, 2016 4:06:41 0.990	585.57	50.8
Tuesday, May 17, 2016 4:11:41 0.990	590.52	50.7
Tuesday, May 17, 2016 4:16:42 0.990	595.49	51.0
Tuesday, May 17, 2016 4:21:42 0.990	600.44	50.2
Tuesday, May 17, 2016 4:26:43 0.990	605.41	50.5
Tuesday, May 17, 2016 4:31:44 0.990	610.37	50.6
Tuesday, May 17, 2016 4:36:44 0.990	615.32	49.8
Tuesday, May 17, 2016 4:41:45 0.990	620.29	50.3
Tuesday, May 17, 2016 4:46:45 0.990	625.24	50.6
Tuesday, May 17, 2016 4:51:46 0.990	630.21	50.9
Tuesday, May 17, 2016 4:56:47 0.990	635.18	50.5
Tuesday, May 17, 2016 5:01:47 0.990	640.13	50.7
Tuesday, May 17, 2016 5:06:48 0.990	645.10	50.2
Tuesday, May 17, 2016 5:11:48 0.990	650.05	50.3
Tuesday, May 17, 2016 5:16:49 0.990	655.01	50.6
Tuesday, May 17, 2016 5:21:49 0.990	659.96	50.4
Tuesday, May 17, 2016 5:26:50 0.990	664.93	51.0
Tuesday, May 17, 2016 5:31:51 0.990	669.90	50.2
Tuesday, May 17, 2016 5:36:51 0.990	674.85	50.7
Tuesday, May 17, 2016 5:41:52 0.990	679.82	50.5
Tuesday, May 17, 2016 5:46:52 0.990	684.77	50.5
Tuesday, May 17, 2016 5:51:53 0.990	689.74	50.0

Tuesday, May 17, 2016 5:56:54	0.990	694.70	50.1
Tuesday, May 17, 2016 6:01:54	0.990	699.65	50.0
Tuesday, May 17, 2016 6:06:55	0.990	704.62	50.9
Tuesday, May 17, 2016 6:11:55	0.990	709.57	51.1
Tuesday, May 17, 2016 6:15:03	0.990	712.68	50.5

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, May 16, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, May 17, 2016 6:15:25

Total Volume 712.70 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.042 l/min

Ending Leak Rate 0.034 l/min

Flow Controller Zero -0.002 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Monday, May 16, 2016 18:15:30	0.119	0.22	50.6
Monday, May 16, 2016 18:20:30	0.990	5.18	49.7
Monday, May 16, 2016 18:25:31	0.990	10.14	50.1
Monday, May 16, 2016 18:30:31	0.990	15.09	50.8
Monday, May 16, 2016 18:35:32	0.990	20.06	50.8
Monday, May 16, 2016 18:40:33	0.990	25.03	50.4
Monday, May 16, 2016 18:45:33	0.990	29.98	50.1
Monday, May 16, 2016 18:50:34	0.990	34.94	50.2
Monday, May 16, 2016 18:55:34	0.990	39.89	50.9
Monday, May 16, 2016 19:00:35	0.990	44.86	51.1
Monday, May 16, 2016 19:05:36	0.990	49.83	50.5
Monday, May 16, 2016 19:10:36	0.990	54.78	50.1
Monday, May 16, 2016 19:15:37	0.990	59.75	50.5
Monday, May 16, 2016 19:20:37	0.990	64.70	50.6
Monday, May 16, 2016 19:25:38	0.990	69.66	50.5
Monday, May 16, 2016 19:30:39	0.990	74.63	50.5
Monday, May 16, 2016 19:35:39	0.990	79.58	50.9
Monday, May 16, 2016 19:40:40	0.990	84.55	50.6
Monday, May 16, 2016 19:45:40	0.990	89.50	50.4
Monday, May 16, 2016 19:50:41	0.990	94.47	50.5
Monday, May 16, 2016 19:55:42	0.990	99.43	50.2
Monday, May 16, 2016 20:00:42	0.990	104.38	50.2
Monday, May 16, 2016 20:05:43	0.990	109.35	51.0
Monday, May 16, 2016 20:10:43	0.990	114.30	50.1
Monday, May 16, 2016 20:15:44	0.990	119.27	51.1
Monday, May 16, 2016 20:20:45	0.990	124.24	50.5
Monday, May 16, 2016 20:25:45	0.990	129.19	50.5
Monday, May 16, 2016 20:30:46	0.990	134.15	50.6
Monday, May 16, 2016 20:35:46	0.990	139.10	50.6
Monday, May 16, 2016 20:40:47	0.990	144.07	50.8
Monday, May 16, 2016 20:45:48	0.990	149.04	50.7
Monday, May 16, 2016 20:50:48	0.990	153.99	50.1

Monday, May 16, 2016 20:55:49 0.990	158.96	49.9
Monday, May 16, 2016 21:00:49 0.990	163.91	50.5
Monday, May 16, 2016 21:05:50 0.990	168.87	50.9
Monday, May 16, 2016 21:10:51 0.990	173.84	50.9
Monday, May 16, 2016 21:15:51 0.990	178.79	50.6
Monday, May 16, 2016 21:20:52 0.990	183.76	50.5
Monday, May 16, 2016 21:25:52 0.990	188.71	50.0
Monday, May 16, 2016 21:30:53 0.990	193.68	50.4
Monday, May 16, 2016 21:35:54 0.990	198.64	50.5
Monday, May 16, 2016 21:40:54 0.990	203.59	50.5
Monday, May 16, 2016 21:45:55 0.990	208.56	50.4
Monday, May 16, 2016 21:50:55 0.990	213.51	50.6
Monday, May 16, 2016 21:55:56 0.990	218.48	50.5
Monday, May 16, 2016 22:00:57 0.990	223.45	51.0
Monday, May 16, 2016 22:05:57 0.990	228.40	50.5
Monday, May 16, 2016 22:10:58 0.990	233.36	50.9
Monday, May 16, 2016 22:15:58 0.990	238.31	49.7
Monday, May 16, 2016 22:20:59 0.990	243.28	50.1
Monday, May 16, 2016 22:26:00 0.990	248.25	51.0
Monday, May 16, 2016 22:31:00 0.990	253.20	50.5
Monday, May 16, 2016 22:36:01 0.990	258.17	50.0
Monday, May 16, 2016 22:41:01 0.990	263.12	50.6
Monday, May 16, 2016 22:46:02 0.990	268.08	51.0
Monday, May 16, 2016 22:51:03 0.990	273.05	50.3
Monday, May 16, 2016 22:56:03 0.990	278.00	50.6
Monday, May 16, 2016 23:01:04 0.990	282.97	50.2
Monday, May 16, 2016 23:06:04 0.990	287.92	50.2
Monday, May 16, 2016 23:11:05 0.990	292.89	50.2
Monday, May 16, 2016 23:16:06 0.990	297.85	50.3
Monday, May 16, 2016 23:21:06 0.990	302.80	50.4
Monday, May 16, 2016 23:26:07 0.990	307.77	50.5
Monday, May 16, 2016 23:31:07 0.990	312.72	50.2
Monday, May 16, 2016 23:36:08 0.990	317.69	50.1
Monday, May 16, 2016 23:41:09 0.990	322.66	50.6
Monday, May 16, 2016 23:46:09 0.990	327.61	50.8
Monday, May 16, 2016 23:51:10 0.990	332.57	50.6
Monday, May 16, 2016 23:56:10 0.990	337.52	50.5
Tuesday, May 17, 2016 0:01:11 0.990	342.49	50.9
Tuesday, May 17, 2016 0:06:12 0.990	347.46	50.4
Tuesday, May 17, 2016 0:11:12 0.990	352.41	50.4
Tuesday, May 17, 2016 0:16:13 0.990	357.38	50.6
Tuesday, May 17, 2016 0:21:13 0.990	362.33	50.1
Tuesday, May 17, 2016 0:26:14 0.990	367.29	50.5
Tuesday, May 17, 2016 0:31:15 0.990	372.26	50.5
Tuesday, May 17, 2016 0:36:15 0.990	377.21	50.1
Tuesday, May 17, 2016 0:41:16 0.990	382.18	50.4
Tuesday, May 17, 2016 0:46:16 0.990	387.13	50.1
Tuesday, May 17, 2016 0:51:17 0.990	392.10	50.6
Tuesday, May 17, 2016 0:56:18 0.990	397.06	50.9
Tuesday, May 17, 2016 1:01:18 0.990	402.02	50.8
Tuesday, May 17, 2016 1:06:19 0.990	406.98	50.1
Tuesday, May 17, 2016 1:11:19 0.990	411.93	50.3
Tuesday, May 17, 2016 1:16:20 0.990	416.90	50.8
Tuesday, May 17, 2016 1:21:21 0.990	421.87	50.1

Tuesday, May 17, 2016 1:26:21 0.990	426.82	50.5
Tuesday, May 17, 2016 1:31:22 0.990	431.78	50.6
Tuesday, May 17, 2016 1:36:22 0.990	436.74	50.5
Tuesday, May 17, 2016 1:41:23 0.990	441.70	50.5
Tuesday, May 17, 2016 1:46:24 0.990	446.67	49.8
Tuesday, May 17, 2016 1:51:24 0.990	451.62	50.6
Tuesday, May 17, 2016 1:56:25 0.990	456.59	50.5
Tuesday, May 17, 2016 2:01:25 0.990	461.54	49.7
Tuesday, May 17, 2016 2:06:26 0.990	466.50	50.9
Tuesday, May 17, 2016 2:11:27 0.990	471.47	49.7
Tuesday, May 17, 2016 2:16:27 0.990	476.42	50.1
Tuesday, May 17, 2016 2:21:28 0.990	481.39	50.5
Tuesday, May 17, 2016 2:26:28 0.990	486.34	49.7
Tuesday, May 17, 2016 2:31:29 0.990	491.31	50.3
Tuesday, May 17, 2016 2:36:30 0.990	496.27	50.7
Tuesday, May 17, 2016 2:41:30 0.990	501.23	49.7
Tuesday, May 17, 2016 2:46:31 0.990	506.19	51.1
Tuesday, May 17, 2016 2:51:31 0.990	511.14	50.8
Tuesday, May 17, 2016 2:56:32 0.990	516.11	49.7
Tuesday, May 17, 2016 3:01:33 0.990	521.08	50.0
Tuesday, May 17, 2016 3:06:33 0.990	526.03	50.4
Tuesday, May 17, 2016 3:11:34 0.990	531.00	50.8
Tuesday, May 17, 2016 3:16:35 0.990	535.96	50.5
Tuesday, May 17, 2016 3:21:35 0.990	540.91	50.5
Tuesday, May 17, 2016 3:26:36 0.990	545.88	50.5
Tuesday, May 17, 2016 3:31:36 0.990	550.83	50.1
Tuesday, May 17, 2016 3:36:37 0.990	555.80	50.9
Tuesday, May 17, 2016 3:41:38 0.990	560.77	50.2
Tuesday, May 17, 2016 3:46:38 0.990	565.72	49.7
Tuesday, May 17, 2016 3:51:39 0.990	570.68	50.8
Tuesday, May 17, 2016 3:56:39 0.990	575.63	50.2
Tuesday, May 17, 2016 4:01:40 0.990	580.60	51.0
Tuesday, May 17, 2016 4:06:41 0.990	585.57	50.8
Tuesday, May 17, 2016 4:11:41 0.990	590.52	50.7
Tuesday, May 17, 2016 4:16:42 0.990	595.49	51.0
Tuesday, May 17, 2016 4:21:42 0.990	600.44	50.2
Tuesday, May 17, 2016 4:26:43 0.990	605.41	50.5
Tuesday, May 17, 2016 4:31:44 0.990	610.37	50.6
Tuesday, May 17, 2016 4:36:44 0.990	615.32	49.8
Tuesday, May 17, 2016 4:41:45 0.990	620.29	50.3
Tuesday, May 17, 2016 4:46:45 0.990	625.24	50.6
Tuesday, May 17, 2016 4:51:46 0.990	630.21	50.9
Tuesday, May 17, 2016 4:56:47 0.990	635.18	50.5
Tuesday, May 17, 2016 5:01:47 0.990	640.13	50.7
Tuesday, May 17, 2016 5:06:48 0.990	645.10	50.2
Tuesday, May 17, 2016 5:11:48 0.990	650.05	50.3
Tuesday, May 17, 2016 5:16:49 0.990	655.01	50.6
Tuesday, May 17, 2016 5:21:49 0.990	659.96	50.4
Tuesday, May 17, 2016 5:26:50 0.990	664.93	51.0
Tuesday, May 17, 2016 5:31:51 0.990	669.90	50.2
Tuesday, May 17, 2016 5:36:51 0.990	674.85	50.7
Tuesday, May 17, 2016 5:41:52 0.990	679.82	50.5
Tuesday, May 17, 2016 5:46:52 0.990	684.77	50.5
Tuesday, May 17, 2016 5:51:53 0.990	689.74	50.0

Tuesday, May 17, 2016 5:56:54	0.990	694.70	50.1
Tuesday, May 17, 2016 6:01:54	0.990	699.65	50.0
Tuesday, May 17, 2016 6:06:55	0.990	704.62	50.9
Tuesday, May 17, 2016 6:11:55	0.990	709.57	51.1
Tuesday, May 17, 2016 6:15:03	0.990	712.68	50.5

aqms5
formaldehyde002

Ch. 2 Cartridge Started Friday, June 03, 2016 18:15:01

Flow Rate Set Point 1.00 l/min

Stopped Saturday, June 04, 2016 6:15:24

Total Volume 712.88 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.224 l/min

Ending Leak Rate 0.218 l/min

Flow Controller Zero -0.003 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Friday, June 03, 2016 18:15:27	0.285	0.21	50.3
Friday, June 03, 2016 18:20:28	0.990	5.18	50.4
Friday, June 03, 2016 18:25:28	0.990	10.14	50.4
Friday, June 03, 2016 18:30:29	0.990	15.10	50.5
Friday, June 03, 2016 18:35:29	0.990	20.06	50.2
Friday, June 03, 2016 18:40:30	0.990	25.02	50.3
Friday, June 03, 2016 18:45:30	0.990	29.97	50.1
Friday, June 03, 2016 18:50:30	0.990	34.92	49.9
Friday, June 03, 2016 18:55:31	0.990	39.89	49.8
Friday, June 03, 2016 19:00:31	0.990	44.84	50.5
Friday, June 03, 2016 19:05:32	0.990	49.81	50.0
Friday, June 03, 2016 19:10:32	0.990	54.76	50.1
Friday, June 03, 2016 19:15:33	0.990	59.73	50.4
Friday, June 03, 2016 19:20:33	0.990	64.68	50.5
Friday, June 03, 2016 19:25:33	0.990	69.63	49.7
Friday, June 03, 2016 19:30:34	0.990	74.60	50.1
Friday, June 03, 2016 19:35:34	0.990	79.55	49.8
Friday, June 03, 2016 19:40:35	0.990	84.52	50.4
Friday, June 03, 2016 19:45:35	0.990	89.47	49.7
Friday, June 03, 2016 19:50:36	0.990	94.44	50.0
Friday, June 03, 2016 19:55:36	0.990	99.39	50.4
Friday, June 03, 2016 20:00:36	0.990	104.34	50.3
Friday, June 03, 2016 20:05:37	0.990	109.31	50.5
Friday, June 03, 2016 20:10:37	0.990	114.26	50.1
Friday, June 03, 2016 20:15:38	0.990	119.22	49.9
Friday, June 03, 2016 20:20:38	0.990	124.18	50.0
Friday, June 03, 2016 20:25:39	0.990	129.14	50.0
Friday, June 03, 2016 20:30:39	0.990	134.09	50.1
Friday, June 03, 2016 20:35:39	0.990	139.05	50.4
Friday, June 03, 2016 20:40:40	0.990	144.01	50.3
Friday, June 03, 2016 20:45:40	0.990	148.96	50.2
Friday, June 03, 2016 20:50:41	0.990	153.93	50.4

Friday, June 03, 2016 20:55:41 0.990	158.88	50.4
Friday, June 03, 2016 21:00:41 0.990	163.83	50.4
Friday, June 03, 2016 21:05:42 0.990	168.80	50.1
Friday, June 03, 2016 21:10:42 0.990	173.75	50.0
Friday, June 03, 2016 21:15:42 0.990	178.70	50.5
Friday, June 03, 2016 21:20:43 0.990	183.67	50.4
Friday, June 03, 2016 21:25:43 0.990	188.62	50.1
Friday, June 03, 2016 21:30:43 0.990	193.57	50.1
Friday, June 03, 2016 21:35:44 0.990	198.54	50.3
Friday, June 03, 2016 21:40:44 0.990	203.49	49.9
Friday, June 03, 2016 21:45:45 0.990	208.46	50.1
Friday, June 03, 2016 21:50:45 0.990	213.41	50.3
Friday, June 03, 2016 21:55:45 0.990	218.36	49.8
Friday, June 03, 2016 22:00:46 0.990	223.33	49.7
Friday, June 03, 2016 22:05:46 0.990	228.28	50.0
Friday, June 03, 2016 22:10:47 0.990	233.25	50.2
Friday, June 03, 2016 22:15:47 0.990	238.20	50.3
Friday, June 03, 2016 22:20:47 0.990	243.15	50.4
Friday, June 03, 2016 22:25:48 0.990	248.12	50.0
Friday, June 03, 2016 22:30:48 0.990	253.07	50.2
Friday, June 03, 2016 22:35:48 0.990	258.02	50.1
Friday, June 03, 2016 22:40:49 0.990	262.99	50.4
Friday, June 03, 2016 22:45:49 0.990	267.94	50.1
Friday, June 03, 2016 22:50:49 0.990	272.89	50.1
Friday, June 03, 2016 22:55:50 0.990	277.86	50.4
Friday, June 03, 2016 23:00:50 0.990	282.81	50.0
Friday, June 03, 2016 23:05:51 0.990	287.78	50.3
Friday, June 03, 2016 23:10:51 0.990	292.73	50.3
Friday, June 03, 2016 23:15:51 0.990	297.68	50.2
Friday, June 03, 2016 23:20:52 0.990	302.65	49.8
Friday, June 03, 2016 23:25:52 0.990	307.60	50.4
Friday, June 03, 2016 23:30:53 0.990	312.57	50.1
Friday, June 03, 2016 23:35:53 0.990	317.52	50.2
Friday, June 03, 2016 23:40:53 0.990	322.47	50.2
Friday, June 03, 2016 23:45:54 0.990	327.43	50.2
Friday, June 03, 2016 23:50:54 0.990	332.39	49.7
Friday, June 03, 2016 23:55:55 0.990	337.35	50.2
Saturday, June 04, 2016 0:00:55 0.990	342.30	50.5
Saturday, June 04, 2016 0:05:55 0.990	347.26	50.2
Saturday, June 04, 2016 0:10:56 0.990	352.22	50.1
Saturday, June 04, 2016 0:15:56 0.990	357.17	49.7
Saturday, June 04, 2016 0:20:56 0.990	362.13	49.8
Saturday, June 04, 2016 0:25:57 0.990	367.09	50.3
Saturday, June 04, 2016 0:30:57 0.990	372.04	50.3
Saturday, June 04, 2016 0:35:57 0.990	377.00	50.2
Saturday, June 04, 2016 0:40:58 0.990	381.96	50.2
Saturday, June 04, 2016 0:45:58 0.990	386.91	50.3
Saturday, June 04, 2016 0:50:59 0.990	391.88	50.2
Saturday, June 04, 2016 0:55:59 0.990	396.83	50.1
Saturday, June 04, 2016 1:00:59 0.990	401.78	49.5
Saturday, June 04, 2016 1:06:00 0.990	406.75	49.8
Saturday, June 04, 2016 1:11:00 0.990	411.70	50.1
Saturday, June 04, 2016 1:16:01 0.990	416.67	49.9
Saturday, June 04, 2016 1:21:01 0.990	421.62	49.9

Saturday, June 04, 2016 1:26:01 0.990	426.57	50.1
Saturday, June 04, 2016 1:31:02 0.990	431.54	50.1
Saturday, June 04, 2016 1:36:02 0.990	436.49	49.7
Saturday, June 04, 2016 1:41:02 0.990	441.44	49.8
Saturday, June 04, 2016 1:46:03 0.990	446.41	50.3
Saturday, June 04, 2016 1:51:03 0.990	451.36	50.4
Saturday, June 04, 2016 1:56:03 0.990	456.31	50.0
Saturday, June 04, 2016 2:01:04 0.990	461.28	49.7
Saturday, June 04, 2016 2:06:04 0.990	466.23	50.3
Saturday, June 04, 2016 2:11:04 0.990	471.18	50.3
Saturday, June 04, 2016 2:16:05 0.990	476.15	49.7
Saturday, June 04, 2016 2:21:05 0.990	481.10	50.4
Saturday, June 04, 2016 2:26:06 0.990	486.07	50.2
Saturday, June 04, 2016 2:31:06 0.990	491.02	49.9
Saturday, June 04, 2016 2:36:06 0.990	495.97	49.7
Saturday, June 04, 2016 2:41:07 0.990	500.94	50.4
Saturday, June 04, 2016 2:46:07 0.990	505.89	50.1
Saturday, June 04, 2016 2:51:07 0.990	510.84	50.5
Saturday, June 04, 2016 2:56:08 0.990	515.81	50.1
Saturday, June 04, 2016 3:01:08 0.990	520.76	50.2
Saturday, June 04, 2016 3:06:09 0.990	525.73	50.1
Saturday, June 04, 2016 3:11:09 0.990	530.68	50.1
Saturday, June 04, 2016 3:16:09 0.990	535.63	49.8
Saturday, June 04, 2016 3:21:10 0.990	540.60	50.1
Saturday, June 04, 2016 3:26:10 0.990	545.55	49.3
Saturday, June 04, 2016 3:31:10 0.990	550.50	50.3
Saturday, June 04, 2016 3:36:11 0.990	555.47	50.1
Saturday, June 04, 2016 3:41:11 0.990	560.42	50.3
Saturday, June 04, 2016 3:46:12 0.990	565.39	49.9
Saturday, June 04, 2016 3:51:12 0.990	570.34	50.3
Saturday, June 04, 2016 3:56:12 0.990	575.30	50.4
Saturday, June 04, 2016 4:01:13 0.990	580.26	50.2
Saturday, June 04, 2016 4:06:13 0.990	585.22	50.1
Saturday, June 04, 2016 4:11:14 0.990	590.18	49.7
Saturday, June 04, 2016 4:16:14 0.990	595.14	50.2
Saturday, June 04, 2016 4:21:14 0.990	600.09	49.5
Saturday, June 04, 2016 4:26:15 0.990	605.06	50.0
Saturday, June 04, 2016 4:31:15 0.990	610.01	50.3
Saturday, June 04, 2016 4:36:15 0.990	614.96	50.2
Saturday, June 04, 2016 4:41:16 0.990	619.93	49.3
Saturday, June 04, 2016 4:46:16 0.990	624.88	50.1
Saturday, June 04, 2016 4:51:16 0.990	629.83	50.3
Saturday, June 04, 2016 4:56:17 0.990	634.80	50.4
Saturday, June 04, 2016 5:01:17 0.990	639.75	49.6
Saturday, June 04, 2016 5:06:17 0.990	644.70	49.9
Saturday, June 04, 2016 5:11:18 0.990	649.67	50.2
Saturday, June 04, 2016 5:16:18 0.990	654.62	50.1
Saturday, June 04, 2016 5:21:19 0.990	659.59	50.1
Saturday, June 04, 2016 5:26:19 0.990	664.54	50.1
Saturday, June 04, 2016 5:31:19 0.990	669.49	50.0
Saturday, June 04, 2016 5:36:20 0.990	674.46	50.3
Saturday, June 04, 2016 5:41:20 0.990	679.41	50.2
Saturday, June 04, 2016 5:46:20 0.990	684.37	50.3
Saturday, June 04, 2016 5:51:21 0.990	689.33	50.1

Saturday, June 04, 2016 5:56:21	0.990	694.29	50.3
Saturday, June 04, 2016 6:01:21	0.990	699.24	50.1
Saturday, June 04, 2016 6:06:22	0.990	704.21	50.2
Saturday, June 04, 2016 6:11:22	0.990	709.16	49.5
Saturday, June 04, 2016 6:15:02	0.990	712.79	50.2

aqms5
formaldehyde002

Ch. 2 Cartridge Started Friday, June 03, 2016 18:15:01

Flow Rate Set Point 1.00 l/min

Stopped Saturday, June 04, 2016 6:15:24

Total Volume 712.88 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.224 l/min

Ending Leak Rate 0.218 l/min

Flow Controller Zero -0.003 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Friday, June 03, 2016 18:15:27	0.285	0.21	50.3
Friday, June 03, 2016 18:20:28	0.990	5.18	50.4
Friday, June 03, 2016 18:25:28	0.990	10.14	50.4
Friday, June 03, 2016 18:30:29	0.990	15.10	50.5
Friday, June 03, 2016 18:35:29	0.990	20.06	50.2
Friday, June 03, 2016 18:40:30	0.990	25.02	50.3
Friday, June 03, 2016 18:45:30	0.990	29.97	50.1
Friday, June 03, 2016 18:50:30	0.990	34.92	49.9
Friday, June 03, 2016 18:55:31	0.990	39.89	49.8
Friday, June 03, 2016 19:00:31	0.990	44.84	50.5
Friday, June 03, 2016 19:05:32	0.990	49.81	50.0
Friday, June 03, 2016 19:10:32	0.990	54.76	50.1
Friday, June 03, 2016 19:15:33	0.990	59.73	50.4
Friday, June 03, 2016 19:20:33	0.990	64.68	50.5
Friday, June 03, 2016 19:25:33	0.990	69.63	49.7
Friday, June 03, 2016 19:30:34	0.990	74.60	50.1
Friday, June 03, 2016 19:35:34	0.990	79.55	49.8
Friday, June 03, 2016 19:40:35	0.990	84.52	50.4
Friday, June 03, 2016 19:45:35	0.990	89.47	49.7
Friday, June 03, 2016 19:50:36	0.990	94.44	50.0
Friday, June 03, 2016 19:55:36	0.990	99.39	50.4
Friday, June 03, 2016 20:00:36	0.990	104.34	50.3
Friday, June 03, 2016 20:05:37	0.990	109.31	50.5
Friday, June 03, 2016 20:10:37	0.990	114.26	50.1
Friday, June 03, 2016 20:15:38	0.990	119.22	49.9
Friday, June 03, 2016 20:20:38	0.990	124.18	50.0
Friday, June 03, 2016 20:25:39	0.990	129.14	50.0
Friday, June 03, 2016 20:30:39	0.990	134.09	50.1
Friday, June 03, 2016 20:35:39	0.990	139.05	50.4
Friday, June 03, 2016 20:40:40	0.990	144.01	50.3
Friday, June 03, 2016 20:45:40	0.990	148.96	50.2
Friday, June 03, 2016 20:50:41	0.990	153.93	50.4

Friday, June 03, 2016 20:55:41 0.990	158.88	50.4
Friday, June 03, 2016 21:00:41 0.990	163.83	50.4
Friday, June 03, 2016 21:05:42 0.990	168.80	50.1
Friday, June 03, 2016 21:10:42 0.990	173.75	50.0
Friday, June 03, 2016 21:15:42 0.990	178.70	50.5
Friday, June 03, 2016 21:20:43 0.990	183.67	50.4
Friday, June 03, 2016 21:25:43 0.990	188.62	50.1
Friday, June 03, 2016 21:30:43 0.990	193.57	50.1
Friday, June 03, 2016 21:35:44 0.990	198.54	50.3
Friday, June 03, 2016 21:40:44 0.990	203.49	49.9
Friday, June 03, 2016 21:45:45 0.990	208.46	50.1
Friday, June 03, 2016 21:50:45 0.990	213.41	50.3
Friday, June 03, 2016 21:55:45 0.990	218.36	49.8
Friday, June 03, 2016 22:00:46 0.990	223.33	49.7
Friday, June 03, 2016 22:05:46 0.990	228.28	50.0
Friday, June 03, 2016 22:10:47 0.990	233.25	50.2
Friday, June 03, 2016 22:15:47 0.990	238.20	50.3
Friday, June 03, 2016 22:20:47 0.990	243.15	50.4
Friday, June 03, 2016 22:25:48 0.990	248.12	50.0
Friday, June 03, 2016 22:30:48 0.990	253.07	50.2
Friday, June 03, 2016 22:35:48 0.990	258.02	50.1
Friday, June 03, 2016 22:40:49 0.990	262.99	50.4
Friday, June 03, 2016 22:45:49 0.990	267.94	50.1
Friday, June 03, 2016 22:50:49 0.990	272.89	50.1
Friday, June 03, 2016 22:55:50 0.990	277.86	50.4
Friday, June 03, 2016 23:00:50 0.990	282.81	50.0
Friday, June 03, 2016 23:05:51 0.990	287.78	50.3
Friday, June 03, 2016 23:10:51 0.990	292.73	50.3
Friday, June 03, 2016 23:15:51 0.990	297.68	50.2
Friday, June 03, 2016 23:20:52 0.990	302.65	49.8
Friday, June 03, 2016 23:25:52 0.990	307.60	50.4
Friday, June 03, 2016 23:30:53 0.990	312.57	50.1
Friday, June 03, 2016 23:35:53 0.990	317.52	50.2
Friday, June 03, 2016 23:40:53 0.990	322.47	50.2
Friday, June 03, 2016 23:45:54 0.990	327.43	50.2
Friday, June 03, 2016 23:50:54 0.990	332.39	49.7
Friday, June 03, 2016 23:55:55 0.990	337.35	50.2
Saturday, June 04, 2016 0:00:55 0.990	342.30	50.5
Saturday, June 04, 2016 0:05:55 0.990	347.26	50.2
Saturday, June 04, 2016 0:10:56 0.990	352.22	50.1
Saturday, June 04, 2016 0:15:56 0.990	357.17	49.7
Saturday, June 04, 2016 0:20:56 0.990	362.13	49.8
Saturday, June 04, 2016 0:25:57 0.990	367.09	50.3
Saturday, June 04, 2016 0:30:57 0.990	372.04	50.3
Saturday, June 04, 2016 0:35:57 0.990	377.00	50.2
Saturday, June 04, 2016 0:40:58 0.990	381.96	50.2
Saturday, June 04, 2016 0:45:58 0.990	386.91	50.3
Saturday, June 04, 2016 0:50:59 0.990	391.88	50.2
Saturday, June 04, 2016 0:55:59 0.990	396.83	50.1
Saturday, June 04, 2016 1:00:59 0.990	401.78	49.5
Saturday, June 04, 2016 1:06:00 0.990	406.75	49.8
Saturday, June 04, 2016 1:11:00 0.990	411.70	50.1
Saturday, June 04, 2016 1:16:01 0.990	416.67	49.9
Saturday, June 04, 2016 1:21:01 0.990	421.62	49.9

Saturday, June 04, 2016 1:26:01 0.990	426.57	50.1
Saturday, June 04, 2016 1:31:02 0.990	431.54	50.1
Saturday, June 04, 2016 1:36:02 0.990	436.49	49.7
Saturday, June 04, 2016 1:41:02 0.990	441.44	49.8
Saturday, June 04, 2016 1:46:03 0.990	446.41	50.3
Saturday, June 04, 2016 1:51:03 0.990	451.36	50.4
Saturday, June 04, 2016 1:56:03 0.990	456.31	50.0
Saturday, June 04, 2016 2:01:04 0.990	461.28	49.7
Saturday, June 04, 2016 2:06:04 0.990	466.23	50.3
Saturday, June 04, 2016 2:11:04 0.990	471.18	50.3
Saturday, June 04, 2016 2:16:05 0.990	476.15	49.7
Saturday, June 04, 2016 2:21:05 0.990	481.10	50.4
Saturday, June 04, 2016 2:26:06 0.990	486.07	50.2
Saturday, June 04, 2016 2:31:06 0.990	491.02	49.9
Saturday, June 04, 2016 2:36:06 0.990	495.97	49.7
Saturday, June 04, 2016 2:41:07 0.990	500.94	50.4
Saturday, June 04, 2016 2:46:07 0.990	505.89	50.1
Saturday, June 04, 2016 2:51:07 0.990	510.84	50.5
Saturday, June 04, 2016 2:56:08 0.990	515.81	50.1
Saturday, June 04, 2016 3:01:08 0.990	520.76	50.2
Saturday, June 04, 2016 3:06:09 0.990	525.73	50.1
Saturday, June 04, 2016 3:11:09 0.990	530.68	50.1
Saturday, June 04, 2016 3:16:09 0.990	535.63	49.8
Saturday, June 04, 2016 3:21:10 0.990	540.60	50.1
Saturday, June 04, 2016 3:26:10 0.990	545.55	49.3
Saturday, June 04, 2016 3:31:10 0.990	550.50	50.3
Saturday, June 04, 2016 3:36:11 0.990	555.47	50.1
Saturday, June 04, 2016 3:41:11 0.990	560.42	50.3
Saturday, June 04, 2016 3:46:12 0.990	565.39	49.9
Saturday, June 04, 2016 3:51:12 0.990	570.34	50.3
Saturday, June 04, 2016 3:56:12 0.990	575.30	50.4
Saturday, June 04, 2016 4:01:13 0.990	580.26	50.2
Saturday, June 04, 2016 4:06:13 0.990	585.22	50.1
Saturday, June 04, 2016 4:11:14 0.990	590.18	49.7
Saturday, June 04, 2016 4:16:14 0.990	595.14	50.2
Saturday, June 04, 2016 4:21:14 0.990	600.09	49.5
Saturday, June 04, 2016 4:26:15 0.990	605.06	50.0
Saturday, June 04, 2016 4:31:15 0.990	610.01	50.3
Saturday, June 04, 2016 4:36:15 0.990	614.96	50.2
Saturday, June 04, 2016 4:41:16 0.990	619.93	49.3
Saturday, June 04, 2016 4:46:16 0.990	624.88	50.1
Saturday, June 04, 2016 4:51:16 0.990	629.83	50.3
Saturday, June 04, 2016 4:56:17 0.990	634.80	50.4
Saturday, June 04, 2016 5:01:17 0.990	639.75	49.6
Saturday, June 04, 2016 5:06:17 0.990	644.70	49.9
Saturday, June 04, 2016 5:11:18 0.990	649.67	50.2
Saturday, June 04, 2016 5:16:18 0.990	654.62	50.1
Saturday, June 04, 2016 5:21:19 0.990	659.59	50.1
Saturday, June 04, 2016 5:26:19 0.990	664.54	50.1
Saturday, June 04, 2016 5:31:19 0.990	669.49	50.0
Saturday, June 04, 2016 5:36:20 0.990	674.46	50.3
Saturday, June 04, 2016 5:41:20 0.990	679.41	50.2
Saturday, June 04, 2016 5:46:20 0.990	684.37	50.3
Saturday, June 04, 2016 5:51:21 0.990	689.33	50.1

Saturday, June 04, 2016 5:56:21	0.990	694.29	50.3
Saturday, June 04, 2016 6:01:21	0.990	699.24	50.1
Saturday, June 04, 2016 6:06:22	0.990	704.21	50.2
Saturday, June 04, 2016 6:11:22	0.990	709.16	49.5
Saturday, June 04, 2016 6:15:02	0.990	712.79	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, June 09, 2016 18:15:02

Flow Rate Set Point 1.00 l/min

Stopped Friday, June 10, 2016 6:15:24

Total Volume 712.83 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.003 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Thursday, June 09, 2016 18:15:29	0.079	0.22	50.1
Thursday, June 09, 2016 18:20:29	0.991	5.18	50.1
Thursday, June 09, 2016 18:25:30	0.990	10.15	49.8
Thursday, June 09, 2016 18:30:30	0.990	15.10	50.2
Thursday, June 09, 2016 18:35:31	0.990	20.07	50.4
Thursday, June 09, 2016 18:40:31	0.990	25.02	50.1
Thursday, June 09, 2016 18:45:31	0.990	29.97	50.0
Thursday, June 09, 2016 18:50:32	0.990	34.94	49.9
Thursday, June 09, 2016 18:55:32	0.990	39.89	50.1
Thursday, June 09, 2016 19:00:32	0.990	44.84	49.9
Thursday, June 09, 2016 19:05:33	0.990	49.81	50.1
Thursday, June 09, 2016 19:10:33	0.990	54.76	50.1
Thursday, June 09, 2016 19:15:34	0.990	59.73	50.2
Thursday, June 09, 2016 19:20:34	0.990	64.68	50.2
Thursday, June 09, 2016 19:25:34	0.990	69.63	50.3
Thursday, June 09, 2016 19:30:35	0.990	74.60	49.9
Thursday, June 09, 2016 19:35:35	0.990	79.55	49.9
Thursday, June 09, 2016 19:40:36	0.990	84.52	50.2
Thursday, June 09, 2016 19:45:36	0.990	89.47	50.6
Thursday, June 09, 2016 19:50:36	0.990	94.42	50.3
Thursday, June 09, 2016 19:55:37	0.990	99.39	50.3
Thursday, June 09, 2016 20:00:37	0.990	104.34	50.3
Thursday, June 09, 2016 20:05:38	0.990	109.31	49.4
Thursday, June 09, 2016 20:10:38	0.990	114.26	50.2
Thursday, June 09, 2016 20:15:38	0.990	119.21	50.0
Thursday, June 09, 2016 20:20:39	0.990	124.18	50.1
Thursday, June 09, 2016 20:25:39	0.990	129.13	50.3
Thursday, June 09, 2016 20:30:39	0.990	134.08	50.1
Thursday, June 09, 2016 20:35:40	0.990	139.05	49.8
Thursday, June 09, 2016 20:40:40	0.990	144.00	49.7
Thursday, June 09, 2016 20:45:40	0.990	148.95	50.1
Thursday, June 09, 2016 20:50:41	0.990	153.92	50.2
Thursday, June 09, 2016 20:55:41	0.990	158.87	50.1

Thursday, June 09, 2016 21:00:42 0.990	163.84	50.0
Thursday, June 09, 2016 21:05:42 0.990	168.79	50.4
Thursday, June 09, 2016 21:10:42 0.990	173.74	50.2
Thursday, June 09, 2016 21:15:43 0.990	178.71	50.3
Thursday, June 09, 2016 21:20:43 0.990	183.66	50.1
Thursday, June 09, 2016 21:25:43 0.990	188.61	49.7
Thursday, June 09, 2016 21:30:44 0.990	193.58	50.0
Thursday, June 09, 2016 21:35:44 0.990	198.53	50.4
Thursday, June 09, 2016 21:40:45 0.990	203.50	50.3
Thursday, June 09, 2016 21:45:45 0.990	208.45	50.1
Thursday, June 09, 2016 21:50:45 0.990	213.40	49.8
Thursday, June 09, 2016 21:55:46 0.990	218.37	50.1
Thursday, June 09, 2016 22:00:46 0.990	223.32	49.8
Thursday, June 09, 2016 22:05:46 0.990	228.27	50.1
Thursday, June 09, 2016 22:10:47 0.990	233.24	50.1
Thursday, June 09, 2016 22:15:47 0.990	238.19	50.1
Thursday, June 09, 2016 22:20:48 0.990	243.16	50.2
Thursday, June 09, 2016 22:25:48 0.990	248.11	50.2
Thursday, June 09, 2016 22:30:48 0.990	253.07	50.1
Thursday, June 09, 2016 22:35:49 0.990	258.03	49.5
Thursday, June 09, 2016 22:40:49 0.990	262.99	49.7
Thursday, June 09, 2016 22:45:50 0.990	267.95	50.2
Thursday, June 09, 2016 22:50:50 0.990	272.91	50.3
Thursday, June 09, 2016 22:55:50 0.990	277.86	50.4
Thursday, June 09, 2016 23:00:51 0.990	282.82	50.2
Thursday, June 09, 2016 23:05:51 0.990	287.78	50.1
Thursday, June 09, 2016 23:10:51 0.990	292.73	50.1
Thursday, June 09, 2016 23:15:52 0.990	297.70	49.8
Thursday, June 09, 2016 23:20:52 0.990	302.65	49.8
Thursday, June 09, 2016 23:25:53 0.990	307.62	50.1
Thursday, June 09, 2016 23:30:53 0.990	312.57	49.7
Thursday, June 09, 2016 23:35:53 0.990	317.52	50.1
Thursday, June 09, 2016 23:40:54 0.990	322.49	49.9
Thursday, June 09, 2016 23:45:54 0.990	327.44	49.7
Thursday, June 09, 2016 23:50:54 0.990	332.39	49.9
Thursday, June 09, 2016 23:55:55 0.990	337.36	50.3
Friday, June 10, 2016 0:00:55 0.990	342.31	50.2
Friday, June 10, 2016 0:05:55 0.990	347.26	50.1
Friday, June 10, 2016 0:10:56 0.990	352.23	50.2
Friday, June 10, 2016 0:15:56 0.990	357.18	50.2
Friday, June 10, 2016 0:20:57 0.990	362.15	50.2
Friday, June 10, 2016 0:25:57 0.990	367.10	50.2
Friday, June 10, 2016 0:30:57 0.990	372.05	49.9
Friday, June 10, 2016 0:35:58 0.990	377.02	49.3
Friday, June 10, 2016 0:40:58 0.990	381.97	50.2
Friday, June 10, 2016 0:45:58 0.990	386.92	49.9
Friday, June 10, 2016 0:50:59 0.990	391.89	50.0
Friday, June 10, 2016 0:55:59 0.990	396.84	50.2
Friday, June 10, 2016 1:00:59 0.990	401.79	50.2
Friday, June 10, 2016 1:06:00 0.990	406.76	49.7
Friday, June 10, 2016 1:11:00 0.990	411.71	49.8
Friday, June 10, 2016 1:16:01 0.990	416.68	50.0
Friday, June 10, 2016 1:21:01 0.990	421.63	49.8
Friday, June 10, 2016 1:26:01 0.990	426.59	49.8

Friday, June 10, 2016 1:31:02 0.990	431.55	50.1
Friday, June 10, 2016 1:36:02 0.990	436.51	49.7
Friday, June 10, 2016 1:41:02 0.990	441.46	50.1
Friday, June 10, 2016 1:46:03 0.990	446.43	50.1
Friday, June 10, 2016 1:51:03 0.990	451.38	50.2
Friday, June 10, 2016 1:56:03 0.990	456.33	50.2
Friday, June 10, 2016 2:01:04 0.990	461.30	50.4
Friday, June 10, 2016 2:06:04 0.990	466.25	50.1
Friday, June 10, 2016 2:11:04 0.990	471.20	50.1
Friday, June 10, 2016 2:16:05 0.990	476.17	50.0
Friday, June 10, 2016 2:21:05 0.990	481.12	50.3
Friday, June 10, 2016 2:26:06 0.990	486.09	50.4
Friday, June 10, 2016 2:31:06 0.990	491.04	50.0
Friday, June 10, 2016 2:36:06 0.990	495.99	50.1
Friday, June 10, 2016 2:41:07 0.990	500.96	50.1
Friday, June 10, 2016 2:46:07 0.990	505.91	49.7
Friday, June 10, 2016 2:51:07 0.990	510.86	50.1
Friday, June 10, 2016 2:56:08 0.990	515.83	50.2
Friday, June 10, 2016 3:01:08 0.990	520.78	50.3
Friday, June 10, 2016 3:06:09 0.990	525.75	49.7
Friday, June 10, 2016 3:11:09 0.990	530.70	50.2
Friday, June 10, 2016 3:16:09 0.990	535.66	50.1
Friday, June 10, 2016 3:21:10 0.990	540.62	50.1
Friday, June 10, 2016 3:26:10 0.990	545.58	49.7
Friday, June 10, 2016 3:31:11 0.990	550.54	50.1
Friday, June 10, 2016 3:36:11 0.990	555.50	50.1
Friday, June 10, 2016 3:41:11 0.990	560.45	50.1
Friday, June 10, 2016 3:46:12 0.990	565.42	49.7
Friday, June 10, 2016 3:51:12 0.990	570.37	50.0
Friday, June 10, 2016 3:56:12 0.990	575.32	50.1
Friday, June 10, 2016 4:01:13 0.990	580.29	49.6
Friday, June 10, 2016 4:06:13 0.990	585.24	49.7
Friday, June 10, 2016 4:11:13 0.990	590.19	50.3
Friday, June 10, 2016 4:16:14 0.990	595.16	50.1
Friday, June 10, 2016 4:21:14 0.990	600.11	50.2
Friday, June 10, 2016 4:26:15 0.990	605.08	49.9
Friday, June 10, 2016 4:31:15 0.990	610.03	50.1
Friday, June 10, 2016 4:36:15 0.990	614.98	49.7
Friday, June 10, 2016 4:41:16 0.990	619.95	49.9
Friday, June 10, 2016 4:46:16 0.990	624.91	50.1
Friday, June 10, 2016 4:51:17 0.990	629.87	50.1
Friday, June 10, 2016 4:56:17 0.990	634.83	50.1
Friday, June 10, 2016 5:01:17 0.990	639.78	50.0
Friday, June 10, 2016 5:06:18 0.990	644.75	50.1
Friday, June 10, 2016 5:11:18 0.990	649.70	50.2
Friday, June 10, 2016 5:16:18 0.990	654.65	49.7
Friday, June 10, 2016 5:21:19 0.990	659.62	50.1
Friday, June 10, 2016 5:26:19 0.990	664.57	50.0
Friday, June 10, 2016 5:31:19 0.990	669.52	49.8
Friday, June 10, 2016 5:36:20 0.990	674.49	50.1
Friday, June 10, 2016 5:41:20 0.990	679.44	50.1
Friday, June 10, 2016 5:46:21 0.990	684.41	50.2
Friday, June 10, 2016 5:51:21 0.990	689.36	50.0
Friday, June 10, 2016 5:56:21 0.990	694.31	50.2

Friday, June 10, 2016 6:01:22	0.990	699.28	50.3
Friday, June 10, 2016 6:06:22	0.990	704.23	50.2
Friday, June 10, 2016 6:11:22	0.990	709.19	50.1
Friday, June 10, 2016 6:15:02	0.990	712.82	50.1

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, June 09, 2016 18:15:02

Flow Rate Set Point 1.00 l/min

Stopped Friday, June 10, 2016 6:15:24

Total Volume 712.83 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.003 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Thursday, June 09, 2016 18:15:29	0.079	0.22	50.1
Thursday, June 09, 2016 18:20:29	0.991	5.18	50.1
Thursday, June 09, 2016 18:25:30	0.990	10.15	49.8
Thursday, June 09, 2016 18:30:30	0.990	15.10	50.2
Thursday, June 09, 2016 18:35:31	0.990	20.07	50.4
Thursday, June 09, 2016 18:40:31	0.990	25.02	50.1
Thursday, June 09, 2016 18:45:31	0.990	29.97	50.0
Thursday, June 09, 2016 18:50:32	0.990	34.94	49.9
Thursday, June 09, 2016 18:55:32	0.990	39.89	50.1
Thursday, June 09, 2016 19:00:32	0.990	44.84	49.9
Thursday, June 09, 2016 19:05:33	0.990	49.81	50.1
Thursday, June 09, 2016 19:10:33	0.990	54.76	50.1
Thursday, June 09, 2016 19:15:34	0.990	59.73	50.2
Thursday, June 09, 2016 19:20:34	0.990	64.68	50.2
Thursday, June 09, 2016 19:25:34	0.990	69.63	50.3
Thursday, June 09, 2016 19:30:35	0.990	74.60	49.9
Thursday, June 09, 2016 19:35:35	0.990	79.55	49.9
Thursday, June 09, 2016 19:40:36	0.990	84.52	50.2
Thursday, June 09, 2016 19:45:36	0.990	89.47	50.6
Thursday, June 09, 2016 19:50:36	0.990	94.42	50.3
Thursday, June 09, 2016 19:55:37	0.990	99.39	50.3
Thursday, June 09, 2016 20:00:37	0.990	104.34	50.3
Thursday, June 09, 2016 20:05:38	0.990	109.31	49.4
Thursday, June 09, 2016 20:10:38	0.990	114.26	50.2
Thursday, June 09, 2016 20:15:38	0.990	119.21	50.0
Thursday, June 09, 2016 20:20:39	0.990	124.18	50.1
Thursday, June 09, 2016 20:25:39	0.990	129.13	50.3
Thursday, June 09, 2016 20:30:39	0.990	134.08	50.1
Thursday, June 09, 2016 20:35:40	0.990	139.05	49.8
Thursday, June 09, 2016 20:40:40	0.990	144.00	49.7
Thursday, June 09, 2016 20:45:40	0.990	148.95	50.1
Thursday, June 09, 2016 20:50:41	0.990	153.92	50.2
Thursday, June 09, 2016 20:55:41	0.990	158.87	50.1

Thursday, June 09, 2016 21:00:42 0.990	163.84	50.0
Thursday, June 09, 2016 21:05:42 0.990	168.79	50.4
Thursday, June 09, 2016 21:10:42 0.990	173.74	50.2
Thursday, June 09, 2016 21:15:43 0.990	178.71	50.3
Thursday, June 09, 2016 21:20:43 0.990	183.66	50.1
Thursday, June 09, 2016 21:25:43 0.990	188.61	49.7
Thursday, June 09, 2016 21:30:44 0.990	193.58	50.0
Thursday, June 09, 2016 21:35:44 0.990	198.53	50.4
Thursday, June 09, 2016 21:40:45 0.990	203.50	50.3
Thursday, June 09, 2016 21:45:45 0.990	208.45	50.1
Thursday, June 09, 2016 21:50:45 0.990	213.40	49.8
Thursday, June 09, 2016 21:55:46 0.990	218.37	50.1
Thursday, June 09, 2016 22:00:46 0.990	223.32	49.8
Thursday, June 09, 2016 22:05:46 0.990	228.27	50.1
Thursday, June 09, 2016 22:10:47 0.990	233.24	50.1
Thursday, June 09, 2016 22:15:47 0.990	238.19	50.1
Thursday, June 09, 2016 22:20:48 0.990	243.16	50.2
Thursday, June 09, 2016 22:25:48 0.990	248.11	50.2
Thursday, June 09, 2016 22:30:48 0.990	253.07	50.1
Thursday, June 09, 2016 22:35:49 0.990	258.03	49.5
Thursday, June 09, 2016 22:40:49 0.990	262.99	49.7
Thursday, June 09, 2016 22:45:50 0.990	267.95	50.2
Thursday, June 09, 2016 22:50:50 0.990	272.91	50.3
Thursday, June 09, 2016 22:55:50 0.990	277.86	50.4
Thursday, June 09, 2016 23:00:51 0.990	282.82	50.2
Thursday, June 09, 2016 23:05:51 0.990	287.78	50.1
Thursday, June 09, 2016 23:10:51 0.990	292.73	50.1
Thursday, June 09, 2016 23:15:52 0.990	297.70	49.8
Thursday, June 09, 2016 23:20:52 0.990	302.65	49.8
Thursday, June 09, 2016 23:25:53 0.990	307.62	50.1
Thursday, June 09, 2016 23:30:53 0.990	312.57	49.7
Thursday, June 09, 2016 23:35:53 0.990	317.52	50.1
Thursday, June 09, 2016 23:40:54 0.990	322.49	49.9
Thursday, June 09, 2016 23:45:54 0.990	327.44	49.7
Thursday, June 09, 2016 23:50:54 0.990	332.39	49.9
Thursday, June 09, 2016 23:55:55 0.990	337.36	50.3
Friday, June 10, 2016 0:00:55 0.990	342.31	50.2
Friday, June 10, 2016 0:05:55 0.990	347.26	50.1
Friday, June 10, 2016 0:10:56 0.990	352.23	50.2
Friday, June 10, 2016 0:15:56 0.990	357.18	50.2
Friday, June 10, 2016 0:20:57 0.990	362.15	50.2
Friday, June 10, 2016 0:25:57 0.990	367.10	50.2
Friday, June 10, 2016 0:30:57 0.990	372.05	49.9
Friday, June 10, 2016 0:35:58 0.990	377.02	49.3
Friday, June 10, 2016 0:40:58 0.990	381.97	50.2
Friday, June 10, 2016 0:45:58 0.990	386.92	49.9
Friday, June 10, 2016 0:50:59 0.990	391.89	50.0
Friday, June 10, 2016 0:55:59 0.990	396.84	50.2
Friday, June 10, 2016 1:00:59 0.990	401.79	50.2
Friday, June 10, 2016 1:06:00 0.990	406.76	49.7
Friday, June 10, 2016 1:11:00 0.990	411.71	49.8
Friday, June 10, 2016 1:16:01 0.990	416.68	50.0
Friday, June 10, 2016 1:21:01 0.990	421.63	49.8
Friday, June 10, 2016 1:26:01 0.990	426.59	49.8

Friday, June 10, 2016 1:31:02 0.990	431.55	50.1
Friday, June 10, 2016 1:36:02 0.990	436.51	49.7
Friday, June 10, 2016 1:41:02 0.990	441.46	50.1
Friday, June 10, 2016 1:46:03 0.990	446.43	50.1
Friday, June 10, 2016 1:51:03 0.990	451.38	50.2
Friday, June 10, 2016 1:56:03 0.990	456.33	50.2
Friday, June 10, 2016 2:01:04 0.990	461.30	50.4
Friday, June 10, 2016 2:06:04 0.990	466.25	50.1
Friday, June 10, 2016 2:11:04 0.990	471.20	50.1
Friday, June 10, 2016 2:16:05 0.990	476.17	50.0
Friday, June 10, 2016 2:21:05 0.990	481.12	50.3
Friday, June 10, 2016 2:26:06 0.990	486.09	50.4
Friday, June 10, 2016 2:31:06 0.990	491.04	50.0
Friday, June 10, 2016 2:36:06 0.990	495.99	50.1
Friday, June 10, 2016 2:41:07 0.990	500.96	50.1
Friday, June 10, 2016 2:46:07 0.990	505.91	49.7
Friday, June 10, 2016 2:51:07 0.990	510.86	50.1
Friday, June 10, 2016 2:56:08 0.990	515.83	50.2
Friday, June 10, 2016 3:01:08 0.990	520.78	50.3
Friday, June 10, 2016 3:06:09 0.990	525.75	49.7
Friday, June 10, 2016 3:11:09 0.990	530.70	50.2
Friday, June 10, 2016 3:16:09 0.990	535.66	50.1
Friday, June 10, 2016 3:21:10 0.990	540.62	50.1
Friday, June 10, 2016 3:26:10 0.990	545.58	49.7
Friday, June 10, 2016 3:31:11 0.990	550.54	50.1
Friday, June 10, 2016 3:36:11 0.990	555.50	50.1
Friday, June 10, 2016 3:41:11 0.990	560.45	50.1
Friday, June 10, 2016 3:46:12 0.990	565.42	49.7
Friday, June 10, 2016 3:51:12 0.990	570.37	50.0
Friday, June 10, 2016 3:56:12 0.990	575.32	50.1
Friday, June 10, 2016 4:01:13 0.990	580.29	49.6
Friday, June 10, 2016 4:06:13 0.990	585.24	49.7
Friday, June 10, 2016 4:11:13 0.990	590.19	50.3
Friday, June 10, 2016 4:16:14 0.990	595.16	50.1
Friday, June 10, 2016 4:21:14 0.990	600.11	50.2
Friday, June 10, 2016 4:26:15 0.990	605.08	49.9
Friday, June 10, 2016 4:31:15 0.990	610.03	50.1
Friday, June 10, 2016 4:36:15 0.990	614.98	49.7
Friday, June 10, 2016 4:41:16 0.990	619.95	49.9
Friday, June 10, 2016 4:46:16 0.990	624.91	50.1
Friday, June 10, 2016 4:51:17 0.990	629.87	50.1
Friday, June 10, 2016 4:56:17 0.990	634.83	50.1
Friday, June 10, 2016 5:01:17 0.990	639.78	50.0
Friday, June 10, 2016 5:06:18 0.990	644.75	50.1
Friday, June 10, 2016 5:11:18 0.990	649.70	50.2
Friday, June 10, 2016 5:16:18 0.990	654.65	49.7
Friday, June 10, 2016 5:21:19 0.990	659.62	50.1
Friday, June 10, 2016 5:26:19 0.990	664.57	50.0
Friday, June 10, 2016 5:31:19 0.990	669.52	49.8
Friday, June 10, 2016 5:36:20 0.990	674.49	50.1
Friday, June 10, 2016 5:41:20 0.990	679.44	50.1
Friday, June 10, 2016 5:46:21 0.990	684.41	50.2
Friday, June 10, 2016 5:51:21 0.990	689.36	50.0
Friday, June 10, 2016 5:56:21 0.990	694.31	50.2

Friday, June 10, 2016 6:01:22	0.990	699.28	50.3
Friday, June 10, 2016 6:06:22	0.990	704.23	50.2
Friday, June 10, 2016 6:11:22	0.990	709.19	50.1
Friday, June 10, 2016 6:15:02	0.990	712.82	50.1

aqms5

formaldehyde002

Ch. 2 Cartridge Started Wednesday, June 15, 2016 18:15:00

Flow Rate Set Point 1.00 l/min

Stopped Thursday, June 16, 2016 6:15:24

Total Volume 712.83 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.002 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Wednesday, June 15, 2016 18:15:27	0.079	0.22	50.3
Wednesday, June 15, 2016 18:20:27	0.991	5.18	49.4
Wednesday, June 15, 2016 18:25:28	0.990	10.14	50.0
Wednesday, June 15, 2016 18:30:28	0.990	15.10	50.0
Wednesday, June 15, 2016 18:35:29	0.990	20.06	50.2
Wednesday, June 15, 2016 18:40:29	0.990	25.01	49.7
Wednesday, June 15, 2016 18:45:30	0.990	29.98	50.4
Wednesday, June 15, 2016 18:50:30	0.990	34.93	50.5
Wednesday, June 15, 2016 18:55:31	0.990	39.90	50.0
Wednesday, June 15, 2016 19:00:31	0.990	44.85	50.4
Wednesday, June 15, 2016 19:05:31	0.990	49.80	50.0
Wednesday, June 15, 2016 19:10:32	0.990	54.77	50.5
Wednesday, June 15, 2016 19:15:32	0.990	59.72	49.9
Wednesday, June 15, 2016 19:20:33	0.990	64.69	50.2
Wednesday, June 15, 2016 19:25:33	0.990	69.64	50.5
Wednesday, June 15, 2016 19:30:34	0.990	74.61	50.3
Wednesday, June 15, 2016 19:35:34	0.990	79.56	50.2
Wednesday, June 15, 2016 19:40:35	0.990	84.53	50.6
Wednesday, June 15, 2016 19:45:35	0.990	89.48	49.2
Wednesday, June 15, 2016 19:50:36	0.990	94.45	50.5
Wednesday, June 15, 2016 19:55:36	0.990	99.40	50.5
Wednesday, June 15, 2016 20:00:37	0.990	104.36	50.7
Wednesday, June 15, 2016 20:05:37	0.990	109.32	50.4
Wednesday, June 15, 2016 20:10:38	0.990	114.28	50.5
Wednesday, June 15, 2016 20:15:38	0.990	119.23	50.5
Wednesday, June 15, 2016 20:20:39	0.990	124.20	50.7
Wednesday, June 15, 2016 20:25:39	0.990	129.15	50.6
Wednesday, June 15, 2016 20:30:40	0.990	134.12	50.6
Wednesday, June 15, 2016 20:35:40	0.990	139.07	50.5
Wednesday, June 15, 2016 20:40:41	0.990	144.04	50.8
Wednesday, June 15, 2016 20:45:41	0.990	148.99	50.6
Wednesday, June 15, 2016 20:50:42	0.990	153.96	50.0
Wednesday, June 15, 2016 20:55:42	0.990	158.91	50.6

Wednesday, June 15, 2016 21:00:43 0.990	163.88	50.2
Wednesday, June 15, 2016 21:05:43 0.990	168.83	50.6
Wednesday, June 15, 2016 21:10:44 0.990	173.80	49.7
Wednesday, June 15, 2016 21:15:44 0.990	178.75	50.5
Wednesday, June 15, 2016 21:20:44 0.990	183.70	50.5
Wednesday, June 15, 2016 21:25:45 0.990	188.67	50.1
Wednesday, June 15, 2016 21:30:45 0.990	193.62	50.5
Wednesday, June 15, 2016 21:35:46 0.990	198.59	50.3
Wednesday, June 15, 2016 21:40:47 0.990	203.55	50.0
Wednesday, June 15, 2016 21:45:47 0.990	208.50	50.3
Wednesday, June 15, 2016 21:50:48 0.990	213.47	50.1
Wednesday, June 15, 2016 21:55:48 0.990	218.42	50.7
Wednesday, June 15, 2016 22:00:49 0.990	223.39	50.1
Wednesday, June 15, 2016 22:05:49 0.990	228.34	50.4
Wednesday, June 15, 2016 22:10:50 0.990	233.31	50.5
Wednesday, June 15, 2016 22:15:50 0.990	238.26	50.5
Wednesday, June 15, 2016 22:20:50 0.990	243.21	50.2
Wednesday, June 15, 2016 22:25:51 0.990	248.18	50.5
Wednesday, June 15, 2016 22:30:51 0.990	253.13	50.1
Wednesday, June 15, 2016 22:35:52 0.990	258.10	50.1
Wednesday, June 15, 2016 22:40:52 0.990	263.05	50.3
Wednesday, June 15, 2016 22:45:53 0.990	268.02	50.0
Wednesday, June 15, 2016 22:50:53 0.990	272.97	50.5
Wednesday, June 15, 2016 22:55:54 0.990	277.94	50.0
Wednesday, June 15, 2016 23:00:54 0.990	282.89	49.9
Wednesday, June 15, 2016 23:05:55 0.990	287.86	50.4
Wednesday, June 15, 2016 23:10:55 0.990	292.81	50.4
Wednesday, June 15, 2016 23:15:56 0.990	297.77	49.9
Wednesday, June 15, 2016 23:20:56 0.990	302.73	50.1
Wednesday, June 15, 2016 23:25:57 0.990	307.69	50.0
Wednesday, June 15, 2016 23:30:57 0.990	312.64	49.6
Wednesday, June 15, 2016 23:35:58 0.990	317.61	50.1
Wednesday, June 15, 2016 23:40:58 0.990	322.56	50.4
Wednesday, June 15, 2016 23:45:59 0.990	327.53	50.4
Wednesday, June 15, 2016 23:50:59 0.990	332.48	49.9
Wednesday, June 15, 2016 23:55:59 0.990	337.43	50.3
Thursday, June 16, 2016 0:01:00 0.990	342.40	50.3
Thursday, June 16, 2016 0:06:00 0.990	347.35	50.5
Thursday, June 16, 2016 0:11:01 0.990	352.32	49.9
Thursday, June 16, 2016 0:16:01 0.990	357.27	50.4
Thursday, June 16, 2016 0:21:02 0.990	362.24	50.5
Thursday, June 16, 2016 0:26:02 0.990	367.19	50.3
Thursday, June 16, 2016 0:31:03 0.990	372.16	50.4
Thursday, June 16, 2016 0:36:03 0.990	377.11	50.3
Thursday, June 16, 2016 0:41:04 0.990	382.08	50.4
Thursday, June 16, 2016 0:46:04 0.990	387.03	50.2
Thursday, June 16, 2016 0:51:05 0.990	392.00	49.9
Thursday, June 16, 2016 0:56:05 0.990	396.95	50.3
Thursday, June 16, 2016 1:01:05 0.990	401.90	50.4
Thursday, June 16, 2016 1:06:06 0.990	406.87	50.5
Thursday, June 16, 2016 1:11:06 0.990	411.82	50.1
Thursday, June 16, 2016 1:16:07 0.990	416.79	50.4
Thursday, June 16, 2016 1:21:07 0.990	421.74	50.2
Thursday, June 16, 2016 1:26:08 0.990	426.70	49.7

Thursday, June 16, 2016 1:31:08 0.990	431.65	50.5
Thursday, June 16, 2016 1:36:09 0.990	436.62	50.5
Thursday, June 16, 2016 1:41:09 0.990	441.57	50.4
Thursday, June 16, 2016 1:46:09 0.990	446.52	50.1
Thursday, June 16, 2016 1:51:10 0.990	451.49	50.1
Thursday, June 16, 2016 1:56:10 0.990	456.44	50.6
Thursday, June 16, 2016 2:01:11 0.990	461.41	50.5
Thursday, June 16, 2016 2:06:11 0.990	466.36	50.2
Thursday, June 16, 2016 2:11:12 0.990	471.33	49.9
Thursday, June 16, 2016 2:16:12 0.990	476.28	50.2
Thursday, June 16, 2016 2:21:13 0.990	481.25	50.1
Thursday, June 16, 2016 2:26:13 0.990	486.20	50.3
Thursday, June 16, 2016 2:31:13 0.990	491.15	50.4
Thursday, June 16, 2016 2:36:14 0.990	496.12	50.3
Thursday, June 16, 2016 2:41:14 0.990	501.07	50.5
Thursday, June 16, 2016 2:46:15 0.990	506.04	49.7
Thursday, June 16, 2016 2:51:15 0.990	510.99	50.5
Thursday, June 16, 2016 2:56:16 0.990	515.96	50.3
Thursday, June 16, 2016 3:01:16 0.990	520.91	49.6
Thursday, June 16, 2016 3:06:17 0.990	525.88	50.4
Thursday, June 16, 2016 3:11:17 0.990	530.83	50.3
Thursday, June 16, 2016 3:16:18 0.990	535.80	50.4
Thursday, June 16, 2016 3:21:18 0.990	540.75	50.3
Thursday, June 16, 2016 3:26:19 0.990	545.72	50.4
Thursday, June 16, 2016 3:31:19 0.990	550.67	49.8
Thursday, June 16, 2016 3:36:19 0.990	555.62	49.3
Thursday, June 16, 2016 3:41:20 0.990	560.59	50.3
Thursday, June 16, 2016 3:46:20 0.990	565.54	50.3
Thursday, June 16, 2016 3:51:21 0.990	570.51	50.4
Thursday, June 16, 2016 3:56:21 0.990	575.46	50.0
Thursday, June 16, 2016 4:01:22 0.990	580.43	50.0
Thursday, June 16, 2016 4:06:22 0.990	585.38	50.5
Thursday, June 16, 2016 4:11:23 0.990	590.35	50.0
Thursday, June 16, 2016 4:16:23 0.990	595.30	50.5
Thursday, June 16, 2016 4:21:23 0.990	600.25	50.4
Thursday, June 16, 2016 4:26:24 0.990	605.22	49.9
Thursday, June 16, 2016 4:31:24 0.990	610.17	50.4
Thursday, June 16, 2016 4:36:25 0.990	615.14	49.9
Thursday, June 16, 2016 4:41:25 0.990	620.09	50.1
Thursday, June 16, 2016 4:46:26 0.990	625.06	50.3
Thursday, June 16, 2016 4:51:26 0.990	630.01	50.0
Thursday, June 16, 2016 4:56:26 0.990	634.97	50.3
Thursday, June 16, 2016 5:01:27 0.990	639.93	50.4
Thursday, June 16, 2016 5:06:27 0.990	644.89	49.6
Thursday, June 16, 2016 5:11:28 0.990	649.85	49.8
Thursday, June 16, 2016 5:16:28 0.990	654.81	49.8
Thursday, June 16, 2016 5:21:29 0.990	659.77	49.9
Thursday, June 16, 2016 5:26:29 0.990	664.73	50.3
Thursday, June 16, 2016 5:31:30 0.990	669.69	50.1
Thursday, June 16, 2016 5:36:30 0.990	674.65	50.0
Thursday, June 16, 2016 5:41:31 0.990	679.61	50.0
Thursday, June 16, 2016 5:46:31 0.990	684.57	50.5
Thursday, June 16, 2016 5:51:32 0.990	689.53	50.4
Thursday, June 16, 2016 5:56:32 0.990	694.49	50.1

Thursday, June 16, 2016 6:01:33 0.990	699.45	50.5
Thursday, June 16, 2016 6:06:33 0.990	704.41	50.6
Thursday, June 16, 2016 6:11:33 0.990	709.36	50.1
Thursday, June 16, 2016 6:15:03 0.990	712.82	49.8

aqms5

formaldehyde002

Ch. 2 Cartridge Started Wednesday, June 15, 2016 18:15:00

Flow Rate Set Point 1.00 l/min

Stopped Thursday, June 16, 2016 6:15:24

Total Volume 712.83 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.002 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Wednesday, June 15, 2016 18:15:27	0.079	0.22	50.3
Wednesday, June 15, 2016 18:20:27	0.991	5.18	49.4
Wednesday, June 15, 2016 18:25:28	0.990	10.14	50.0
Wednesday, June 15, 2016 18:30:28	0.990	15.10	50.0
Wednesday, June 15, 2016 18:35:29	0.990	20.06	50.2
Wednesday, June 15, 2016 18:40:29	0.990	25.01	49.7
Wednesday, June 15, 2016 18:45:30	0.990	29.98	50.4
Wednesday, June 15, 2016 18:50:30	0.990	34.93	50.5
Wednesday, June 15, 2016 18:55:31	0.990	39.90	50.0
Wednesday, June 15, 2016 19:00:31	0.990	44.85	50.4
Wednesday, June 15, 2016 19:05:31	0.990	49.80	50.0
Wednesday, June 15, 2016 19:10:32	0.990	54.77	50.5
Wednesday, June 15, 2016 19:15:32	0.990	59.72	49.9
Wednesday, June 15, 2016 19:20:33	0.990	64.69	50.2
Wednesday, June 15, 2016 19:25:33	0.990	69.64	50.5
Wednesday, June 15, 2016 19:30:34	0.990	74.61	50.3
Wednesday, June 15, 2016 19:35:34	0.990	79.56	50.2
Wednesday, June 15, 2016 19:40:35	0.990	84.53	50.6
Wednesday, June 15, 2016 19:45:35	0.990	89.48	49.2
Wednesday, June 15, 2016 19:50:36	0.990	94.45	50.5
Wednesday, June 15, 2016 19:55:36	0.990	99.40	50.5
Wednesday, June 15, 2016 20:00:37	0.990	104.36	50.7
Wednesday, June 15, 2016 20:05:37	0.990	109.32	50.4
Wednesday, June 15, 2016 20:10:38	0.990	114.28	50.5
Wednesday, June 15, 2016 20:15:38	0.990	119.23	50.5
Wednesday, June 15, 2016 20:20:39	0.990	124.20	50.7
Wednesday, June 15, 2016 20:25:39	0.990	129.15	50.6
Wednesday, June 15, 2016 20:30:40	0.990	134.12	50.6
Wednesday, June 15, 2016 20:35:40	0.990	139.07	50.5
Wednesday, June 15, 2016 20:40:41	0.990	144.04	50.8
Wednesday, June 15, 2016 20:45:41	0.990	148.99	50.6
Wednesday, June 15, 2016 20:50:42	0.990	153.96	50.0
Wednesday, June 15, 2016 20:55:42	0.990	158.91	50.6

Wednesday, June 15, 2016 21:00:43 0.990	163.88	50.2
Wednesday, June 15, 2016 21:05:43 0.990	168.83	50.6
Wednesday, June 15, 2016 21:10:44 0.990	173.80	49.7
Wednesday, June 15, 2016 21:15:44 0.990	178.75	50.5
Wednesday, June 15, 2016 21:20:44 0.990	183.70	50.5
Wednesday, June 15, 2016 21:25:45 0.990	188.67	50.1
Wednesday, June 15, 2016 21:30:45 0.990	193.62	50.5
Wednesday, June 15, 2016 21:35:46 0.990	198.59	50.3
Wednesday, June 15, 2016 21:40:47 0.990	203.55	50.0
Wednesday, June 15, 2016 21:45:47 0.990	208.50	50.3
Wednesday, June 15, 2016 21:50:48 0.990	213.47	50.1
Wednesday, June 15, 2016 21:55:48 0.990	218.42	50.7
Wednesday, June 15, 2016 22:00:49 0.990	223.39	50.1
Wednesday, June 15, 2016 22:05:49 0.990	228.34	50.4
Wednesday, June 15, 2016 22:10:50 0.990	233.31	50.5
Wednesday, June 15, 2016 22:15:50 0.990	238.26	50.5
Wednesday, June 15, 2016 22:20:50 0.990	243.21	50.2
Wednesday, June 15, 2016 22:25:51 0.990	248.18	50.5
Wednesday, June 15, 2016 22:30:51 0.990	253.13	50.1
Wednesday, June 15, 2016 22:35:52 0.990	258.10	50.1
Wednesday, June 15, 2016 22:40:52 0.990	263.05	50.3
Wednesday, June 15, 2016 22:45:53 0.990	268.02	50.0
Wednesday, June 15, 2016 22:50:53 0.990	272.97	50.5
Wednesday, June 15, 2016 22:55:54 0.990	277.94	50.0
Wednesday, June 15, 2016 23:00:54 0.990	282.89	49.9
Wednesday, June 15, 2016 23:05:55 0.990	287.86	50.4
Wednesday, June 15, 2016 23:10:55 0.990	292.81	50.4
Wednesday, June 15, 2016 23:15:56 0.990	297.77	49.9
Wednesday, June 15, 2016 23:20:56 0.990	302.73	50.1
Wednesday, June 15, 2016 23:25:57 0.990	307.69	50.0
Wednesday, June 15, 2016 23:30:57 0.990	312.64	49.6
Wednesday, June 15, 2016 23:35:58 0.990	317.61	50.1
Wednesday, June 15, 2016 23:40:58 0.990	322.56	50.4
Wednesday, June 15, 2016 23:45:59 0.990	327.53	50.4
Wednesday, June 15, 2016 23:50:59 0.990	332.48	49.9
Wednesday, June 15, 2016 23:55:59 0.990	337.43	50.3
Thursday, June 16, 2016 0:01:00 0.990	342.40	50.3
Thursday, June 16, 2016 0:06:00 0.990	347.35	50.5
Thursday, June 16, 2016 0:11:01 0.990	352.32	49.9
Thursday, June 16, 2016 0:16:01 0.990	357.27	50.4
Thursday, June 16, 2016 0:21:02 0.990	362.24	50.5
Thursday, June 16, 2016 0:26:02 0.990	367.19	50.3
Thursday, June 16, 2016 0:31:03 0.990	372.16	50.4
Thursday, June 16, 2016 0:36:03 0.990	377.11	50.3
Thursday, June 16, 2016 0:41:04 0.990	382.08	50.4
Thursday, June 16, 2016 0:46:04 0.990	387.03	50.2
Thursday, June 16, 2016 0:51:05 0.990	392.00	49.9
Thursday, June 16, 2016 0:56:05 0.990	396.95	50.3
Thursday, June 16, 2016 1:01:05 0.990	401.90	50.4
Thursday, June 16, 2016 1:06:06 0.990	406.87	50.5
Thursday, June 16, 2016 1:11:06 0.990	411.82	50.1
Thursday, June 16, 2016 1:16:07 0.990	416.79	50.4
Thursday, June 16, 2016 1:21:07 0.990	421.74	50.2
Thursday, June 16, 2016 1:26:08 0.990	426.70	49.7

Thursday, June 16, 2016 1:31:08 0.990	431.65	50.5
Thursday, June 16, 2016 1:36:09 0.990	436.62	50.5
Thursday, June 16, 2016 1:41:09 0.990	441.57	50.4
Thursday, June 16, 2016 1:46:09 0.990	446.52	50.1
Thursday, June 16, 2016 1:51:10 0.990	451.49	50.1
Thursday, June 16, 2016 1:56:10 0.990	456.44	50.6
Thursday, June 16, 2016 2:01:11 0.990	461.41	50.5
Thursday, June 16, 2016 2:06:11 0.990	466.36	50.2
Thursday, June 16, 2016 2:11:12 0.990	471.33	49.9
Thursday, June 16, 2016 2:16:12 0.990	476.28	50.2
Thursday, June 16, 2016 2:21:13 0.990	481.25	50.1
Thursday, June 16, 2016 2:26:13 0.990	486.20	50.3
Thursday, June 16, 2016 2:31:13 0.990	491.15	50.4
Thursday, June 16, 2016 2:36:14 0.990	496.12	50.3
Thursday, June 16, 2016 2:41:14 0.990	501.07	50.5
Thursday, June 16, 2016 2:46:15 0.990	506.04	49.7
Thursday, June 16, 2016 2:51:15 0.990	510.99	50.5
Thursday, June 16, 2016 2:56:16 0.990	515.96	50.3
Thursday, June 16, 2016 3:01:16 0.990	520.91	49.6
Thursday, June 16, 2016 3:06:17 0.990	525.88	50.4
Thursday, June 16, 2016 3:11:17 0.990	530.83	50.3
Thursday, June 16, 2016 3:16:18 0.990	535.80	50.4
Thursday, June 16, 2016 3:21:18 0.990	540.75	50.3
Thursday, June 16, 2016 3:26:19 0.990	545.72	50.4
Thursday, June 16, 2016 3:31:19 0.990	550.67	49.8
Thursday, June 16, 2016 3:36:19 0.990	555.62	49.3
Thursday, June 16, 2016 3:41:20 0.990	560.59	50.3
Thursday, June 16, 2016 3:46:20 0.990	565.54	50.3
Thursday, June 16, 2016 3:51:21 0.990	570.51	50.4
Thursday, June 16, 2016 3:56:21 0.990	575.46	50.0
Thursday, June 16, 2016 4:01:22 0.990	580.43	50.0
Thursday, June 16, 2016 4:06:22 0.990	585.38	50.5
Thursday, June 16, 2016 4:11:23 0.990	590.35	50.0
Thursday, June 16, 2016 4:16:23 0.990	595.30	50.5
Thursday, June 16, 2016 4:21:23 0.990	600.25	50.4
Thursday, June 16, 2016 4:26:24 0.990	605.22	49.9
Thursday, June 16, 2016 4:31:24 0.990	610.17	50.4
Thursday, June 16, 2016 4:36:25 0.990	615.14	49.9
Thursday, June 16, 2016 4:41:25 0.990	620.09	50.1
Thursday, June 16, 2016 4:46:26 0.990	625.06	50.3
Thursday, June 16, 2016 4:51:26 0.990	630.01	50.0
Thursday, June 16, 2016 4:56:26 0.990	634.97	50.3
Thursday, June 16, 2016 5:01:27 0.990	639.93	50.4
Thursday, June 16, 2016 5:06:27 0.990	644.89	49.6
Thursday, June 16, 2016 5:11:28 0.990	649.85	49.8
Thursday, June 16, 2016 5:16:28 0.990	654.81	49.8
Thursday, June 16, 2016 5:21:29 0.990	659.77	49.9
Thursday, June 16, 2016 5:26:29 0.990	664.73	50.3
Thursday, June 16, 2016 5:31:30 0.990	669.69	50.1
Thursday, June 16, 2016 5:36:30 0.990	674.65	50.0
Thursday, June 16, 2016 5:41:31 0.990	679.61	50.0
Thursday, June 16, 2016 5:46:31 0.990	684.57	50.5
Thursday, June 16, 2016 5:51:32 0.990	689.53	50.4
Thursday, June 16, 2016 5:56:32 0.990	694.49	50.1

Thursday, June 16, 2016 6:01:33 0.990	699.45	50.5
Thursday, June 16, 2016 6:06:33 0.990	704.41	50.6
Thursday, June 16, 2016 6:11:33 0.990	709.36	50.1
Thursday, June 16, 2016 6:15:03 0.990	712.82	49.8

aqms5

formaldehyde002

Ch. 2 Cartridge Started Tuesday, June 21, 2016 18:15:02

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, June 22, 2016 6:15:24

Total Volume 712.82 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.001 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Tuesday, June 21, 2016 18:15:28	0.079	0.21	49.9
Tuesday, June 21, 2016 18:20:29	0.990	5.18	50.3
Tuesday, June 21, 2016 18:25:29	0.990	10.14	49.7
Tuesday, June 21, 2016 18:30:30	0.990	15.10	49.9
Tuesday, June 21, 2016 18:35:30	0.990	20.05	50.1
Tuesday, June 21, 2016 18:40:31	0.990	25.02	50.1
Tuesday, June 21, 2016 18:45:31	0.990	29.97	49.7
Tuesday, June 21, 2016 18:50:32	0.990	34.94	50.4
Tuesday, June 21, 2016 18:55:32	0.990	39.89	49.7
Tuesday, June 21, 2016 19:00:33	0.990	44.86	50.0
Tuesday, June 21, 2016 19:05:33	0.990	49.81	50.4
Tuesday, June 21, 2016 19:10:34	0.990	54.78	50.0
Tuesday, June 21, 2016 19:15:34	0.990	59.73	50.5
Tuesday, June 21, 2016 19:20:35	0.990	64.70	50.2
Tuesday, June 21, 2016 19:25:35	0.990	69.65	50.2
Tuesday, June 21, 2016 19:30:36	0.990	74.62	49.7
Tuesday, June 21, 2016 19:35:36	0.990	79.57	50.4
Tuesday, June 21, 2016 19:40:37	0.990	84.54	50.1
Tuesday, June 21, 2016 19:45:37	0.990	89.49	50.5
Tuesday, June 21, 2016 19:50:38	0.990	94.46	50.0
Tuesday, June 21, 2016 19:55:38	0.990	99.41	49.7
Tuesday, June 21, 2016 20:00:39	0.990	104.38	50.3
Tuesday, June 21, 2016 20:05:39	0.990	109.33	50.4
Tuesday, June 21, 2016 20:10:40	0.990	114.29	50.5
Tuesday, June 21, 2016 20:15:40	0.990	119.25	49.9
Tuesday, June 21, 2016 20:20:41	0.990	124.21	49.8
Tuesday, June 21, 2016 20:25:41	0.990	129.16	50.4
Tuesday, June 21, 2016 20:30:42	0.990	134.13	50.4
Tuesday, June 21, 2016 20:35:42	0.990	139.08	50.3
Tuesday, June 21, 2016 20:40:43	0.990	144.05	50.0
Tuesday, June 21, 2016 20:45:43	0.990	149.00	50.5
Tuesday, June 21, 2016 20:50:44	0.990	153.97	50.5
Tuesday, June 21, 2016 20:55:44	0.990	158.92	50.4

Tuesday, June 21, 2016 21:00:45 0.990	163.89	50.1
Tuesday, June 21, 2016 21:05:45 0.990	168.84	50.0
Tuesday, June 21, 2016 21:10:46 0.990	173.81	50.4
Tuesday, June 21, 2016 21:15:46 0.990	178.76	50.0
Tuesday, June 21, 2016 21:20:46 0.990	183.71	50.1
Tuesday, June 21, 2016 21:25:47 0.990	188.68	50.3
Tuesday, June 21, 2016 21:30:47 0.990	193.63	49.7
Tuesday, June 21, 2016 21:35:48 0.990	198.60	50.5
Tuesday, June 21, 2016 21:40:48 0.990	203.55	50.2
Tuesday, June 21, 2016 21:45:49 0.990	208.52	50.4
Tuesday, June 21, 2016 21:50:49 0.990	213.47	50.4
Tuesday, June 21, 2016 21:55:50 0.990	218.44	50.2
Tuesday, June 21, 2016 22:00:50 0.990	223.39	49.8
Tuesday, June 21, 2016 22:05:51 0.990	228.36	50.6
Tuesday, June 21, 2016 22:10:52 0.990	233.32	50.4
Tuesday, June 21, 2016 22:15:52 0.990	238.27	50.4
Tuesday, June 21, 2016 22:20:53 0.990	243.24	50.9
Tuesday, June 21, 2016 22:25:53 0.990	248.19	50.5
Tuesday, June 21, 2016 22:30:54 0.990	253.16	50.5
Tuesday, June 21, 2016 22:35:54 0.990	258.11	50.4
Tuesday, June 21, 2016 22:40:55 0.990	263.08	50.2
Tuesday, June 21, 2016 22:45:55 0.990	268.03	50.5
Tuesday, June 21, 2016 22:50:56 0.990	273.00	50.1
Tuesday, June 21, 2016 22:55:56 0.990	277.95	50.2
Tuesday, June 21, 2016 23:00:57 0.990	282.92	50.8
Tuesday, June 21, 2016 23:05:57 0.990	287.87	49.5
Tuesday, June 21, 2016 23:10:58 0.990	292.84	50.1
Tuesday, June 21, 2016 23:15:58 0.990	297.79	49.4
Tuesday, June 21, 2016 23:20:59 0.990	302.76	50.4
Tuesday, June 21, 2016 23:25:59 0.990	307.71	50.2
Tuesday, June 21, 2016 23:31:00 0.990	312.68	50.0
Tuesday, June 21, 2016 23:36:00 0.990	317.63	50.3
Tuesday, June 21, 2016 23:41:01 0.990	322.59	50.0
Tuesday, June 21, 2016 23:46:01 0.990	327.55	50.4
Tuesday, June 21, 2016 23:51:02 0.990	332.51	50.0
Tuesday, June 21, 2016 23:56:02 0.990	337.46	50.4
Wednesday, June 22, 2016 0:01:03 0.990	342.43	50.0
Wednesday, June 22, 2016 0:06:03 0.990	347.38	50.1
Wednesday, June 22, 2016 0:11:04 0.990	352.35	50.4
Wednesday, June 22, 2016 0:16:04 0.990	357.30	50.5
Wednesday, June 22, 2016 0:21:05 0.990	362.27	50.5
Wednesday, June 22, 2016 0:26:05 0.990	367.22	50.4
Wednesday, June 22, 2016 0:31:06 0.990	372.19	50.4
Wednesday, June 22, 2016 0:36:06 0.990	377.14	49.8
Wednesday, June 22, 2016 0:41:07 0.990	382.11	50.5
Wednesday, June 22, 2016 0:46:07 0.990	387.06	49.8
Wednesday, June 22, 2016 0:51:08 0.990	392.03	50.0
Wednesday, June 22, 2016 0:56:08 0.990	396.98	49.7
Wednesday, June 22, 2016 1:01:09 0.990	401.95	50.3
Wednesday, June 22, 2016 1:06:09 0.990	406.90	50.3
Wednesday, June 22, 2016 1:11:10 0.990	411.87	50.4
Wednesday, June 22, 2016 1:16:10 0.990	416.82	50.3
Wednesday, June 22, 2016 1:21:11 0.990	421.79	49.3
Wednesday, June 22, 2016 1:26:11 0.990	426.74	50.1

Wednesday, June 22, 2016 1:31:12 0.990	431.71	49.8
Wednesday, June 22, 2016 1:36:12 0.990	436.66	49.8
Wednesday, June 22, 2016 1:41:13 0.990	441.62	49.5
Wednesday, June 22, 2016 1:46:13 0.990	446.58	50.3
Wednesday, June 22, 2016 1:51:14 0.990	451.54	50.2
Wednesday, June 22, 2016 1:56:14 0.990	456.50	50.1
Wednesday, June 22, 2016 2:01:15 0.990	461.46	50.0
Wednesday, June 22, 2016 2:06:15 0.990	466.41	50.4
Wednesday, June 22, 2016 2:11:16 0.990	471.38	50.4
Wednesday, June 22, 2016 2:16:16 0.990	476.33	50.2
Wednesday, June 22, 2016 2:21:17 0.990	481.30	50.4
Wednesday, June 22, 2016 2:26:17 0.990	486.25	50.5
Wednesday, June 22, 2016 2:31:18 0.990	491.22	50.3
Wednesday, June 22, 2016 2:36:18 0.990	496.17	50.0
Wednesday, June 22, 2016 2:41:19 0.990	501.14	50.5
Wednesday, June 22, 2016 2:46:19 0.990	506.09	50.3
Wednesday, June 22, 2016 2:51:20 0.990	511.06	50.4
Wednesday, June 22, 2016 2:56:20 0.990	516.01	50.6
Wednesday, June 22, 2016 3:01:21 0.990	520.98	50.4
Wednesday, June 22, 2016 3:06:21 0.990	525.93	50.1
Wednesday, June 22, 2016 3:11:22 0.990	530.90	50.3
Wednesday, June 22, 2016 3:16:22 0.990	535.85	50.1
Wednesday, June 22, 2016 3:21:23 0.990	540.82	50.1
Wednesday, June 22, 2016 3:26:23 0.990	545.77	50.2
Wednesday, June 22, 2016 3:31:24 0.990	550.74	50.0
Wednesday, June 22, 2016 3:36:24 0.990	555.69	50.4
Wednesday, June 22, 2016 3:41:25 0.990	560.66	50.1
Wednesday, June 22, 2016 3:46:25 0.990	565.61	50.4
Wednesday, June 22, 2016 3:51:26 0.990	570.58	50.0
Wednesday, June 22, 2016 3:56:26 0.990	575.53	50.2
Wednesday, June 22, 2016 4:01:27 0.990	580.50	50.1
Wednesday, June 22, 2016 4:06:27 0.990	585.45	50.1
Wednesday, June 22, 2016 4:11:28 0.990	590.42	49.5
Wednesday, June 22, 2016 4:16:28 0.990	595.37	50.2
Wednesday, June 22, 2016 4:21:29 0.990	600.34	50.1
Wednesday, June 22, 2016 4:26:29 0.990	605.29	50.3
Wednesday, June 22, 2016 4:31:30 0.990	610.26	50.3
Wednesday, June 22, 2016 4:36:30 0.990	615.21	50.2
Wednesday, June 22, 2016 4:41:30 0.990	620.16	50.2
Wednesday, June 22, 2016 4:46:31 0.990	625.13	50.0
Wednesday, June 22, 2016 4:51:32 0.990	630.10	49.8
Wednesday, June 22, 2016 4:56:32 0.990	635.05	50.3
Wednesday, June 22, 2016 5:01:32 0.990	640.00	49.9
Wednesday, June 22, 2016 5:06:33 0.990	644.97	50.1
Wednesday, June 22, 2016 5:11:33 0.990	649.92	50.2
Wednesday, June 22, 2016 5:16:34 0.990	654.89	50.4
Wednesday, June 22, 2016 5:21:34 0.990	659.84	49.9
Wednesday, June 22, 2016 5:26:35 0.990	664.81	50.3
Wednesday, June 22, 2016 5:31:35 0.990	669.76	50.2
Wednesday, June 22, 2016 5:36:36 0.990	674.73	50.3
Wednesday, June 22, 2016 5:41:36 0.990	679.68	49.9
Wednesday, June 22, 2016 5:46:37 0.990	684.65	50.3
Wednesday, June 22, 2016 5:51:37 0.990	689.60	49.9
Wednesday, June 22, 2016 5:56:38 0.990	694.57	49.6

Wednesday, June 22, 2016 6:01:38 0.990	699.53	49.3
Wednesday, June 22, 2016 6:06:38 0.990	704.48	50.2
Wednesday, June 22, 2016 6:11:39 0.990	709.45	50.3
Wednesday, June 22, 2016 6:15:03 0.990	712.81	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Tuesday, June 21, 2016 18:15:02

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, June 22, 2016 6:15:24

Total Volume 712.82 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.001 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Tuesday, June 21, 2016 18:15:28	0.079	0.21	49.9
Tuesday, June 21, 2016 18:20:29	0.990	5.18	50.3
Tuesday, June 21, 2016 18:25:29	0.990	10.14	49.7
Tuesday, June 21, 2016 18:30:30	0.990	15.10	49.9
Tuesday, June 21, 2016 18:35:30	0.990	20.05	50.1
Tuesday, June 21, 2016 18:40:31	0.990	25.02	50.1
Tuesday, June 21, 2016 18:45:31	0.990	29.97	49.7
Tuesday, June 21, 2016 18:50:32	0.990	34.94	50.4
Tuesday, June 21, 2016 18:55:32	0.990	39.89	49.7
Tuesday, June 21, 2016 19:00:33	0.990	44.86	50.0
Tuesday, June 21, 2016 19:05:33	0.990	49.81	50.4
Tuesday, June 21, 2016 19:10:34	0.990	54.78	50.0
Tuesday, June 21, 2016 19:15:34	0.990	59.73	50.5
Tuesday, June 21, 2016 19:20:35	0.990	64.70	50.2
Tuesday, June 21, 2016 19:25:35	0.990	69.65	50.2
Tuesday, June 21, 2016 19:30:36	0.990	74.62	49.7
Tuesday, June 21, 2016 19:35:36	0.990	79.57	50.4
Tuesday, June 21, 2016 19:40:37	0.990	84.54	50.1
Tuesday, June 21, 2016 19:45:37	0.990	89.49	50.5
Tuesday, June 21, 2016 19:50:38	0.990	94.46	50.0
Tuesday, June 21, 2016 19:55:38	0.990	99.41	49.7
Tuesday, June 21, 2016 20:00:39	0.990	104.38	50.3
Tuesday, June 21, 2016 20:05:39	0.990	109.33	50.4
Tuesday, June 21, 2016 20:10:40	0.990	114.29	50.5
Tuesday, June 21, 2016 20:15:40	0.990	119.25	49.9
Tuesday, June 21, 2016 20:20:41	0.990	124.21	49.8
Tuesday, June 21, 2016 20:25:41	0.990	129.16	50.4
Tuesday, June 21, 2016 20:30:42	0.990	134.13	50.4
Tuesday, June 21, 2016 20:35:42	0.990	139.08	50.3
Tuesday, June 21, 2016 20:40:43	0.990	144.05	50.0
Tuesday, June 21, 2016 20:45:43	0.990	149.00	50.5
Tuesday, June 21, 2016 20:50:44	0.990	153.97	50.5
Tuesday, June 21, 2016 20:55:44	0.990	158.92	50.4

Tuesday, June 21, 2016 21:00:45 0.990	163.89	50.1
Tuesday, June 21, 2016 21:05:45 0.990	168.84	50.0
Tuesday, June 21, 2016 21:10:46 0.990	173.81	50.4
Tuesday, June 21, 2016 21:15:46 0.990	178.76	50.0
Tuesday, June 21, 2016 21:20:46 0.990	183.71	50.1
Tuesday, June 21, 2016 21:25:47 0.990	188.68	50.3
Tuesday, June 21, 2016 21:30:47 0.990	193.63	49.7
Tuesday, June 21, 2016 21:35:48 0.990	198.60	50.5
Tuesday, June 21, 2016 21:40:48 0.990	203.55	50.2
Tuesday, June 21, 2016 21:45:49 0.990	208.52	50.4
Tuesday, June 21, 2016 21:50:49 0.990	213.47	50.4
Tuesday, June 21, 2016 21:55:50 0.990	218.44	50.2
Tuesday, June 21, 2016 22:00:50 0.990	223.39	49.8
Tuesday, June 21, 2016 22:05:51 0.990	228.36	50.6
Tuesday, June 21, 2016 22:10:52 0.990	233.32	50.4
Tuesday, June 21, 2016 22:15:52 0.990	238.27	50.4
Tuesday, June 21, 2016 22:20:53 0.990	243.24	50.9
Tuesday, June 21, 2016 22:25:53 0.990	248.19	50.5
Tuesday, June 21, 2016 22:30:54 0.990	253.16	50.5
Tuesday, June 21, 2016 22:35:54 0.990	258.11	50.4
Tuesday, June 21, 2016 22:40:55 0.990	263.08	50.2
Tuesday, June 21, 2016 22:45:55 0.990	268.03	50.5
Tuesday, June 21, 2016 22:50:56 0.990	273.00	50.1
Tuesday, June 21, 2016 22:55:56 0.990	277.95	50.2
Tuesday, June 21, 2016 23:00:57 0.990	282.92	50.8
Tuesday, June 21, 2016 23:05:57 0.990	287.87	49.5
Tuesday, June 21, 2016 23:10:58 0.990	292.84	50.1
Tuesday, June 21, 2016 23:15:58 0.990	297.79	49.4
Tuesday, June 21, 2016 23:20:59 0.990	302.76	50.4
Tuesday, June 21, 2016 23:25:59 0.990	307.71	50.2
Tuesday, June 21, 2016 23:31:00 0.990	312.68	50.0
Tuesday, June 21, 2016 23:36:00 0.990	317.63	50.3
Tuesday, June 21, 2016 23:41:01 0.990	322.59	50.0
Tuesday, June 21, 2016 23:46:01 0.990	327.55	50.4
Tuesday, June 21, 2016 23:51:02 0.990	332.51	50.0
Tuesday, June 21, 2016 23:56:02 0.990	337.46	50.4
Wednesday, June 22, 2016 0:01:03 0.990	342.43	50.0
Wednesday, June 22, 2016 0:06:03 0.990	347.38	50.1
Wednesday, June 22, 2016 0:11:04 0.990	352.35	50.4
Wednesday, June 22, 2016 0:16:04 0.990	357.30	50.5
Wednesday, June 22, 2016 0:21:05 0.990	362.27	50.5
Wednesday, June 22, 2016 0:26:05 0.990	367.22	50.4
Wednesday, June 22, 2016 0:31:06 0.990	372.19	50.4
Wednesday, June 22, 2016 0:36:06 0.990	377.14	49.8
Wednesday, June 22, 2016 0:41:07 0.990	382.11	50.5
Wednesday, June 22, 2016 0:46:07 0.990	387.06	49.8
Wednesday, June 22, 2016 0:51:08 0.990	392.03	50.0
Wednesday, June 22, 2016 0:56:08 0.990	396.98	49.7
Wednesday, June 22, 2016 1:01:09 0.990	401.95	50.3
Wednesday, June 22, 2016 1:06:09 0.990	406.90	50.3
Wednesday, June 22, 2016 1:11:10 0.990	411.87	50.4
Wednesday, June 22, 2016 1:16:10 0.990	416.82	50.3
Wednesday, June 22, 2016 1:21:11 0.990	421.79	49.3
Wednesday, June 22, 2016 1:26:11 0.990	426.74	50.1

Wednesday, June 22, 2016 1:31:12 0.990	431.71	49.8
Wednesday, June 22, 2016 1:36:12 0.990	436.66	49.8
Wednesday, June 22, 2016 1:41:13 0.990	441.62	49.5
Wednesday, June 22, 2016 1:46:13 0.990	446.58	50.3
Wednesday, June 22, 2016 1:51:14 0.990	451.54	50.2
Wednesday, June 22, 2016 1:56:14 0.990	456.50	50.1
Wednesday, June 22, 2016 2:01:15 0.990	461.46	50.0
Wednesday, June 22, 2016 2:06:15 0.990	466.41	50.4
Wednesday, June 22, 2016 2:11:16 0.990	471.38	50.4
Wednesday, June 22, 2016 2:16:16 0.990	476.33	50.2
Wednesday, June 22, 2016 2:21:17 0.990	481.30	50.4
Wednesday, June 22, 2016 2:26:17 0.990	486.25	50.5
Wednesday, June 22, 2016 2:31:18 0.990	491.22	50.3
Wednesday, June 22, 2016 2:36:18 0.990	496.17	50.0
Wednesday, June 22, 2016 2:41:19 0.990	501.14	50.5
Wednesday, June 22, 2016 2:46:19 0.990	506.09	50.3
Wednesday, June 22, 2016 2:51:20 0.990	511.06	50.4
Wednesday, June 22, 2016 2:56:20 0.990	516.01	50.6
Wednesday, June 22, 2016 3:01:21 0.990	520.98	50.4
Wednesday, June 22, 2016 3:06:21 0.990	525.93	50.1
Wednesday, June 22, 2016 3:11:22 0.990	530.90	50.3
Wednesday, June 22, 2016 3:16:22 0.990	535.85	50.1
Wednesday, June 22, 2016 3:21:23 0.990	540.82	50.1
Wednesday, June 22, 2016 3:26:23 0.990	545.77	50.2
Wednesday, June 22, 2016 3:31:24 0.990	550.74	50.0
Wednesday, June 22, 2016 3:36:24 0.990	555.69	50.4
Wednesday, June 22, 2016 3:41:25 0.990	560.66	50.1
Wednesday, June 22, 2016 3:46:25 0.990	565.61	50.4
Wednesday, June 22, 2016 3:51:26 0.990	570.58	50.0
Wednesday, June 22, 2016 3:56:26 0.990	575.53	50.2
Wednesday, June 22, 2016 4:01:27 0.990	580.50	50.1
Wednesday, June 22, 2016 4:06:27 0.990	585.45	50.1
Wednesday, June 22, 2016 4:11:28 0.990	590.42	49.5
Wednesday, June 22, 2016 4:16:28 0.990	595.37	50.2
Wednesday, June 22, 2016 4:21:29 0.990	600.34	50.1
Wednesday, June 22, 2016 4:26:29 0.990	605.29	50.3
Wednesday, June 22, 2016 4:31:30 0.990	610.26	50.3
Wednesday, June 22, 2016 4:36:30 0.990	615.21	50.2
Wednesday, June 22, 2016 4:41:30 0.990	620.16	50.2
Wednesday, June 22, 2016 4:46:31 0.990	625.13	50.0
Wednesday, June 22, 2016 4:51:32 0.990	630.10	49.8
Wednesday, June 22, 2016 4:56:32 0.990	635.05	50.3
Wednesday, June 22, 2016 5:01:32 0.990	640.00	49.9
Wednesday, June 22, 2016 5:06:33 0.990	644.97	50.1
Wednesday, June 22, 2016 5:11:33 0.990	649.92	50.2
Wednesday, June 22, 2016 5:16:34 0.990	654.89	50.4
Wednesday, June 22, 2016 5:21:34 0.990	659.84	49.9
Wednesday, June 22, 2016 5:26:35 0.990	664.81	50.3
Wednesday, June 22, 2016 5:31:35 0.990	669.76	50.2
Wednesday, June 22, 2016 5:36:36 0.990	674.73	50.3
Wednesday, June 22, 2016 5:41:36 0.990	679.68	49.9
Wednesday, June 22, 2016 5:46:37 0.990	684.65	50.3
Wednesday, June 22, 2016 5:51:37 0.990	689.60	49.9
Wednesday, June 22, 2016 5:56:38 0.990	694.57	49.6

Wednesday, June 22, 2016 6:01:38 0.990	699.53	49.3
Wednesday, June 22, 2016 6:06:38 0.990	704.48	50.2
Wednesday, June 22, 2016 6:11:39 0.990	709.45	50.3
Wednesday, June 22, 2016 6:15:03 0.990	712.81	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, June 27, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, June 28, 2016 6:15:24

Total Volume 712.81 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.004 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Monday, June 27, 2016 18:15:30	0.080	0.22	50.7
Monday, June 27, 2016 18:20:30	0.990	5.18	50.8
Monday, June 27, 2016 18:25:31	0.990	10.15	50.7
Monday, June 27, 2016 18:30:31	0.990	15.10	50.7
Monday, June 27, 2016 18:35:32	0.990	20.06	50.8
Monday, June 27, 2016 18:40:32	0.990	25.02	50.6
Monday, June 27, 2016 18:45:33	0.990	29.98	50.5
Monday, June 27, 2016 18:50:33	0.990	34.94	50.4
Monday, June 27, 2016 18:55:33	0.990	39.89	50.5
Monday, June 27, 2016 19:00:34	0.990	44.85	50.6
Monday, June 27, 2016 19:05:34	0.990	49.81	50.4
Monday, June 27, 2016 19:10:35	0.990	54.77	50.5
Monday, June 27, 2016 19:15:35	0.990	59.72	50.1
Monday, June 27, 2016 19:20:35	0.990	64.68	49.7
Monday, June 27, 2016 19:25:36	0.990	69.64	50.0
Monday, June 27, 2016 19:30:36	0.990	74.60	50.4
Monday, June 27, 2016 19:35:37	0.990	79.56	50.0
Monday, June 27, 2016 19:40:37	0.990	84.51	50.5
Monday, June 27, 2016 19:45:37	0.990	89.47	50.5
Monday, June 27, 2016 19:50:38	0.990	94.43	50.5
Monday, June 27, 2016 19:55:38	0.990	99.39	50.4
Monday, June 27, 2016 20:00:39	0.990	104.35	50.5
Monday, June 27, 2016 20:05:39	0.990	109.30	50.4
Monday, June 27, 2016 20:10:39	0.990	114.26	50.5
Monday, June 27, 2016 20:15:40	0.990	119.22	50.4
Monday, June 27, 2016 20:20:40	0.990	124.18	50.3
Monday, June 27, 2016 20:25:41	0.990	129.14	50.5
Monday, June 27, 2016 20:30:41	0.990	134.10	50.5
Monday, June 27, 2016 20:35:41	0.990	139.05	50.5
Monday, June 27, 2016 20:40:42	0.990	144.02	50.5
Monday, June 27, 2016 20:45:42	0.990	148.97	50.6
Monday, June 27, 2016 20:50:43	0.990	153.93	50.6
Monday, June 27, 2016 20:55:43	0.990	158.89	50.6

Monday, June 27, 2016 21:00:44 0.990	163.85	49.9
Monday, June 27, 2016 21:05:44 0.990	168.81	50.5
Monday, June 27, 2016 21:10:44 0.990	173.76	50.2
Monday, June 27, 2016 21:15:45 0.990	178.73	50.2
Monday, June 27, 2016 21:20:45 0.990	183.68	50.5
Monday, June 27, 2016 21:25:46 0.990	188.64	50.5
Monday, June 27, 2016 21:30:46 0.990	193.60	50.7
Monday, June 27, 2016 21:35:47 0.990	198.56	50.5
Monday, June 27, 2016 21:40:47 0.990	203.52	49.7
Monday, June 27, 2016 21:45:48 0.990	208.48	49.9
Monday, June 27, 2016 21:50:48 0.990	213.44	50.5
Monday, June 27, 2016 21:55:48 0.990	218.39	50.3
Monday, June 27, 2016 22:00:49 0.990	223.35	50.9
Monday, June 27, 2016 22:05:49 0.990	228.31	50.8
Monday, June 27, 2016 22:10:50 0.990	233.27	50.5
Monday, June 27, 2016 22:15:50 0.990	238.23	50.4
Monday, June 27, 2016 22:20:51 0.990	243.19	50.2
Monday, June 27, 2016 22:25:51 0.990	248.15	50.9
Monday, June 27, 2016 22:30:52 0.990	253.11	50.9
Monday, June 27, 2016 22:35:52 0.990	258.06	50.4
Monday, June 27, 2016 22:40:53 0.990	263.03	50.8
Monday, June 27, 2016 22:45:53 0.990	267.98	50.5
Monday, June 27, 2016 22:50:54 0.990	272.95	50.4
Monday, June 27, 2016 22:55:54 0.990	277.90	50.5
Monday, June 27, 2016 23:00:55 0.990	282.87	50.4
Monday, June 27, 2016 23:05:55 0.990	287.82	50.2
Monday, June 27, 2016 23:10:56 0.990	292.79	50.9
Monday, June 27, 2016 23:15:56 0.990	297.74	50.5
Monday, June 27, 2016 23:20:57 0.990	302.71	50.3
Monday, June 27, 2016 23:25:57 0.990	307.66	50.0
Monday, June 27, 2016 23:30:58 0.990	312.63	50.5
Monday, June 27, 2016 23:35:58 0.990	317.58	50.5
Monday, June 27, 2016 23:40:59 0.990	322.55	50.9
Monday, June 27, 2016 23:45:59 0.990	327.50	50.9
Monday, June 27, 2016 23:51:00 0.990	332.47	50.8
Monday, June 27, 2016 23:56:00 0.990	337.42	50.8
Tuesday, June 28, 2016 0:01:01 0.990	342.39	49.7
Tuesday, June 28, 2016 0:06:01 0.990	347.34	50.4
Tuesday, June 28, 2016 0:11:02 0.990	352.31	50.4
Tuesday, June 28, 2016 0:16:02 0.990	357.26	50.4
Tuesday, June 28, 2016 0:21:03 0.990	362.23	50.4
Tuesday, June 28, 2016 0:26:03 0.990	367.18	50.1
Tuesday, June 28, 2016 0:31:04 0.990	372.15	50.2
Tuesday, June 28, 2016 0:36:04 0.990	377.10	50.5
Tuesday, June 28, 2016 0:41:05 0.990	382.07	50.7
Tuesday, June 28, 2016 0:46:05 0.990	387.02	50.5
Tuesday, June 28, 2016 0:51:06 0.990	391.98	50.1
Tuesday, June 28, 2016 0:56:06 0.990	396.94	50.8
Tuesday, June 28, 2016 1:01:07 0.990	401.90	50.6
Tuesday, June 28, 2016 1:06:07 0.990	406.86	50.4
Tuesday, June 28, 2016 1:11:08 0.990	411.82	50.7
Tuesday, June 28, 2016 1:16:08 0.990	416.77	50.3
Tuesday, June 28, 2016 1:21:09 0.990	421.74	50.5
Tuesday, June 28, 2016 1:26:09 0.990	426.69	50.5

Tuesday, June 28, 2016 1:31:10 0.990	431.66	50.5
Tuesday, June 28, 2016 1:36:10 0.990	436.61	50.2
Tuesday, June 28, 2016 1:41:11 0.990	441.58	50.4
Tuesday, June 28, 2016 1:46:11 0.990	446.53	50.9
Tuesday, June 28, 2016 1:51:12 0.990	451.50	50.7
Tuesday, June 28, 2016 1:56:12 0.990	456.45	50.5
Tuesday, June 28, 2016 2:01:13 0.990	461.42	50.9
Tuesday, June 28, 2016 2:06:13 0.990	466.37	50.4
Tuesday, June 28, 2016 2:11:14 0.990	471.34	50.8
Tuesday, June 28, 2016 2:16:14 0.990	476.29	51.0
Tuesday, June 28, 2016 2:21:15 0.990	481.26	50.9
Tuesday, June 28, 2016 2:26:15 0.990	486.21	50.6
Tuesday, June 28, 2016 2:31:16 0.990	491.18	50.7
Tuesday, June 28, 2016 2:36:16 0.990	496.13	50.1
Tuesday, June 28, 2016 2:41:17 0.990	501.10	50.8
Tuesday, June 28, 2016 2:46:17 0.990	506.05	50.7
Tuesday, June 28, 2016 2:51:18 0.990	511.02	50.9
Tuesday, June 28, 2016 2:56:18 0.990	515.97	50.4
Tuesday, June 28, 2016 3:01:19 0.990	520.94	51.0
Tuesday, June 28, 2016 3:06:20 0.990	525.91	50.5
Tuesday, June 28, 2016 3:11:20 0.990	530.86	50.1
Tuesday, June 28, 2016 3:16:21 0.990	535.83	51.2
Tuesday, June 28, 2016 3:21:21 0.990	540.78	50.1
Tuesday, June 28, 2016 3:26:22 0.990	545.75	50.5
Tuesday, June 28, 2016 3:31:22 0.990	550.70	50.8
Tuesday, June 28, 2016 3:36:23 0.990	555.67	50.4
Tuesday, June 28, 2016 3:41:23 0.990	560.62	50.5
Tuesday, June 28, 2016 3:46:24 0.990	565.59	50.9
Tuesday, June 28, 2016 3:51:24 0.990	570.54	50.5
Tuesday, June 28, 2016 3:56:25 0.990	575.51	51.0
Tuesday, June 28, 2016 4:01:25 0.990	580.46	50.5
Tuesday, June 28, 2016 4:06:26 0.990	585.43	50.2
Tuesday, June 28, 2016 4:11:26 0.990	590.38	50.2
Tuesday, June 28, 2016 4:16:27 0.990	595.35	51.0
Tuesday, June 28, 2016 4:21:27 0.990	600.30	50.1
Tuesday, June 28, 2016 4:26:28 0.990	605.27	50.7
Tuesday, June 28, 2016 4:31:28 0.990	610.22	50.4
Tuesday, June 28, 2016 4:36:29 0.990	615.19	50.6
Tuesday, June 28, 2016 4:41:29 0.990	620.14	51.0
Tuesday, June 28, 2016 4:46:30 0.990	625.11	51.0
Tuesday, June 28, 2016 4:51:30 0.990	630.06	50.9
Tuesday, June 28, 2016 4:56:31 0.990	635.03	50.3
Tuesday, June 28, 2016 5:01:31 0.990	639.98	50.5
Tuesday, June 28, 2016 5:06:32 0.990	644.95	50.6
Tuesday, June 28, 2016 5:11:32 0.990	649.90	50.8
Tuesday, June 28, 2016 5:16:33 0.990	654.87	50.9
Tuesday, June 28, 2016 5:21:33 0.990	659.82	50.5
Tuesday, June 28, 2016 5:26:34 0.990	664.79	50.8
Tuesday, June 28, 2016 5:31:34 0.990	669.74	50.1
Tuesday, June 28, 2016 5:36:35 0.990	674.71	50.8
Tuesday, June 28, 2016 5:41:35 0.990	679.66	49.7
Tuesday, June 28, 2016 5:46:36 0.990	684.63	49.9
Tuesday, June 28, 2016 5:51:36 0.990	689.58	51.0
Tuesday, June 28, 2016 5:56:37 0.990	694.55	51.0

Tuesday, June 28, 2016 6:01:38	0.990	699.52	50.2
Tuesday, June 28, 2016 6:06:38	0.990	704.47	50.9
Tuesday, June 28, 2016 6:11:39	0.990	709.44	50.6
Tuesday, June 28, 2016 6:15:03	0.990	712.81	50.1

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, June 27, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, June 28, 2016 6:15:24

Total Volume 712.81 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.990 l/min

Minimum Flow Rate 0.990 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.001 l/min

Ending Leak Rate -0.004 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Monday, June 27, 2016 18:15:30	0.080	0.22	50.7
Monday, June 27, 2016 18:20:30	0.990	5.18	50.8
Monday, June 27, 2016 18:25:31	0.990	10.15	50.7
Monday, June 27, 2016 18:30:31	0.990	15.10	50.7
Monday, June 27, 2016 18:35:32	0.990	20.06	50.8
Monday, June 27, 2016 18:40:32	0.990	25.02	50.6
Monday, June 27, 2016 18:45:33	0.990	29.98	50.5
Monday, June 27, 2016 18:50:33	0.990	34.94	50.4
Monday, June 27, 2016 18:55:33	0.990	39.89	50.5
Monday, June 27, 2016 19:00:34	0.990	44.85	50.6
Monday, June 27, 2016 19:05:34	0.990	49.81	50.4
Monday, June 27, 2016 19:10:35	0.990	54.77	50.5
Monday, June 27, 2016 19:15:35	0.990	59.72	50.1
Monday, June 27, 2016 19:20:35	0.990	64.68	49.7
Monday, June 27, 2016 19:25:36	0.990	69.64	50.0
Monday, June 27, 2016 19:30:36	0.990	74.60	50.4
Monday, June 27, 2016 19:35:37	0.990	79.56	50.0
Monday, June 27, 2016 19:40:37	0.990	84.51	50.5
Monday, June 27, 2016 19:45:37	0.990	89.47	50.5
Monday, June 27, 2016 19:50:38	0.990	94.43	50.5
Monday, June 27, 2016 19:55:38	0.990	99.39	50.4
Monday, June 27, 2016 20:00:39	0.990	104.35	50.5
Monday, June 27, 2016 20:05:39	0.990	109.30	50.4
Monday, June 27, 2016 20:10:39	0.990	114.26	50.5
Monday, June 27, 2016 20:15:40	0.990	119.22	50.4
Monday, June 27, 2016 20:20:40	0.990	124.18	50.3
Monday, June 27, 2016 20:25:41	0.990	129.14	50.5
Monday, June 27, 2016 20:30:41	0.990	134.10	50.5
Monday, June 27, 2016 20:35:41	0.990	139.05	50.5
Monday, June 27, 2016 20:40:42	0.990	144.02	50.5
Monday, June 27, 2016 20:45:42	0.990	148.97	50.6
Monday, June 27, 2016 20:50:43	0.990	153.93	50.6
Monday, June 27, 2016 20:55:43	0.990	158.89	50.6

Monday, June 27, 2016 21:00:44 0.990	163.85	49.9
Monday, June 27, 2016 21:05:44 0.990	168.81	50.5
Monday, June 27, 2016 21:10:44 0.990	173.76	50.2
Monday, June 27, 2016 21:15:45 0.990	178.73	50.2
Monday, June 27, 2016 21:20:45 0.990	183.68	50.5
Monday, June 27, 2016 21:25:46 0.990	188.64	50.5
Monday, June 27, 2016 21:30:46 0.990	193.60	50.7
Monday, June 27, 2016 21:35:47 0.990	198.56	50.5
Monday, June 27, 2016 21:40:47 0.990	203.52	49.7
Monday, June 27, 2016 21:45:48 0.990	208.48	49.9
Monday, June 27, 2016 21:50:48 0.990	213.44	50.5
Monday, June 27, 2016 21:55:48 0.990	218.39	50.3
Monday, June 27, 2016 22:00:49 0.990	223.35	50.9
Monday, June 27, 2016 22:05:49 0.990	228.31	50.8
Monday, June 27, 2016 22:10:50 0.990	233.27	50.5
Monday, June 27, 2016 22:15:50 0.990	238.23	50.4
Monday, June 27, 2016 22:20:51 0.990	243.19	50.2
Monday, June 27, 2016 22:25:51 0.990	248.15	50.9
Monday, June 27, 2016 22:30:52 0.990	253.11	50.9
Monday, June 27, 2016 22:35:52 0.990	258.06	50.4
Monday, June 27, 2016 22:40:53 0.990	263.03	50.8
Monday, June 27, 2016 22:45:53 0.990	267.98	50.5
Monday, June 27, 2016 22:50:54 0.990	272.95	50.4
Monday, June 27, 2016 22:55:54 0.990	277.90	50.5
Monday, June 27, 2016 23:00:55 0.990	282.87	50.4
Monday, June 27, 2016 23:05:55 0.990	287.82	50.2
Monday, June 27, 2016 23:10:56 0.990	292.79	50.9
Monday, June 27, 2016 23:15:56 0.990	297.74	50.5
Monday, June 27, 2016 23:20:57 0.990	302.71	50.3
Monday, June 27, 2016 23:25:57 0.990	307.66	50.0
Monday, June 27, 2016 23:30:58 0.990	312.63	50.5
Monday, June 27, 2016 23:35:58 0.990	317.58	50.5
Monday, June 27, 2016 23:40:59 0.990	322.55	50.9
Monday, June 27, 2016 23:45:59 0.990	327.50	50.9
Monday, June 27, 2016 23:51:00 0.990	332.47	50.8
Monday, June 27, 2016 23:56:00 0.990	337.42	50.8
Tuesday, June 28, 2016 0:01:01 0.990	342.39	49.7
Tuesday, June 28, 2016 0:06:01 0.990	347.34	50.4
Tuesday, June 28, 2016 0:11:02 0.990	352.31	50.4
Tuesday, June 28, 2016 0:16:02 0.990	357.26	50.4
Tuesday, June 28, 2016 0:21:03 0.990	362.23	50.4
Tuesday, June 28, 2016 0:26:03 0.990	367.18	50.1
Tuesday, June 28, 2016 0:31:04 0.990	372.15	50.2
Tuesday, June 28, 2016 0:36:04 0.990	377.10	50.5
Tuesday, June 28, 2016 0:41:05 0.990	382.07	50.7
Tuesday, June 28, 2016 0:46:05 0.990	387.02	50.5
Tuesday, June 28, 2016 0:51:06 0.990	391.98	50.1
Tuesday, June 28, 2016 0:56:06 0.990	396.94	50.8
Tuesday, June 28, 2016 1:01:07 0.990	401.90	50.6
Tuesday, June 28, 2016 1:06:07 0.990	406.86	50.4
Tuesday, June 28, 2016 1:11:08 0.990	411.82	50.7
Tuesday, June 28, 2016 1:16:08 0.990	416.77	50.3
Tuesday, June 28, 2016 1:21:09 0.990	421.74	50.5
Tuesday, June 28, 2016 1:26:09 0.990	426.69	50.5

Tuesday, June 28, 2016 1:31:10 0.990	431.66	50.5
Tuesday, June 28, 2016 1:36:10 0.990	436.61	50.2
Tuesday, June 28, 2016 1:41:11 0.990	441.58	50.4
Tuesday, June 28, 2016 1:46:11 0.990	446.53	50.9
Tuesday, June 28, 2016 1:51:12 0.990	451.50	50.7
Tuesday, June 28, 2016 1:56:12 0.990	456.45	50.5
Tuesday, June 28, 2016 2:01:13 0.990	461.42	50.9
Tuesday, June 28, 2016 2:06:13 0.990	466.37	50.4
Tuesday, June 28, 2016 2:11:14 0.990	471.34	50.8
Tuesday, June 28, 2016 2:16:14 0.990	476.29	51.0
Tuesday, June 28, 2016 2:21:15 0.990	481.26	50.9
Tuesday, June 28, 2016 2:26:15 0.990	486.21	50.6
Tuesday, June 28, 2016 2:31:16 0.990	491.18	50.7
Tuesday, June 28, 2016 2:36:16 0.990	496.13	50.1
Tuesday, June 28, 2016 2:41:17 0.990	501.10	50.8
Tuesday, June 28, 2016 2:46:17 0.990	506.05	50.7
Tuesday, June 28, 2016 2:51:18 0.990	511.02	50.9
Tuesday, June 28, 2016 2:56:18 0.990	515.97	50.4
Tuesday, June 28, 2016 3:01:19 0.990	520.94	51.0
Tuesday, June 28, 2016 3:06:20 0.990	525.91	50.5
Tuesday, June 28, 2016 3:11:20 0.990	530.86	50.1
Tuesday, June 28, 2016 3:16:21 0.990	535.83	51.2
Tuesday, June 28, 2016 3:21:21 0.990	540.78	50.1
Tuesday, June 28, 2016 3:26:22 0.990	545.75	50.5
Tuesday, June 28, 2016 3:31:22 0.990	550.70	50.8
Tuesday, June 28, 2016 3:36:23 0.990	555.67	50.4
Tuesday, June 28, 2016 3:41:23 0.990	560.62	50.5
Tuesday, June 28, 2016 3:46:24 0.990	565.59	50.9
Tuesday, June 28, 2016 3:51:24 0.990	570.54	50.5
Tuesday, June 28, 2016 3:56:25 0.990	575.51	51.0
Tuesday, June 28, 2016 4:01:25 0.990	580.46	50.5
Tuesday, June 28, 2016 4:06:26 0.990	585.43	50.2
Tuesday, June 28, 2016 4:11:26 0.990	590.38	50.2
Tuesday, June 28, 2016 4:16:27 0.990	595.35	51.0
Tuesday, June 28, 2016 4:21:27 0.990	600.30	50.1
Tuesday, June 28, 2016 4:26:28 0.990	605.27	50.7
Tuesday, June 28, 2016 4:31:28 0.990	610.22	50.4
Tuesday, June 28, 2016 4:36:29 0.990	615.19	50.6
Tuesday, June 28, 2016 4:41:29 0.990	620.14	51.0
Tuesday, June 28, 2016 4:46:30 0.990	625.11	51.0
Tuesday, June 28, 2016 4:51:30 0.990	630.06	50.9
Tuesday, June 28, 2016 4:56:31 0.990	635.03	50.3
Tuesday, June 28, 2016 5:01:31 0.990	639.98	50.5
Tuesday, June 28, 2016 5:06:32 0.990	644.95	50.6
Tuesday, June 28, 2016 5:11:32 0.990	649.90	50.8
Tuesday, June 28, 2016 5:16:33 0.990	654.87	50.9
Tuesday, June 28, 2016 5:21:33 0.990	659.82	50.5
Tuesday, June 28, 2016 5:26:34 0.990	664.79	50.8
Tuesday, June 28, 2016 5:31:34 0.990	669.74	50.1
Tuesday, June 28, 2016 5:36:35 0.990	674.71	50.8
Tuesday, June 28, 2016 5:41:35 0.990	679.66	49.7
Tuesday, June 28, 2016 5:46:36 0.990	684.63	49.9
Tuesday, June 28, 2016 5:51:36 0.990	689.58	51.0
Tuesday, June 28, 2016 5:56:37 0.990	694.55	51.0

Tuesday, June 28, 2016 6:01:38	0.990	699.52	50.2
Tuesday, June 28, 2016 6:06:38	0.990	704.47	50.9
Tuesday, June 28, 2016 6:11:39	0.990	709.44	50.6
Tuesday, June 28, 2016 6:15:03	0.990	712.81	50.1

APPENDIX D

Laboratory Accreditation



OREGON

Environmental Laboratory Accreditation Program



NELAP Recognized

Eurofins Air Toxics, Inc
CA300005

180 Blue Ravine Road, Ste. B
Folsom, CA 95630

IS GRANTED APPROVAL BY ORELAP UNDER THE 2009 TNI STANDARDS, TO PERFORM ANALYSES ON ENVIRONMENTAL SAMPLES IN MATRICES AS LISTED BELOW :

<i>Air</i>	<i>Drinking Water</i>	<i>Non Potable Water</i>	<i>Solids and Chem. Waste</i>	<i>Tissue</i>
Chemistry				

AND AS RECORDED IN THE LIST OF APPROVED ANALYTES, METHODS, ANALYTICAL TECHNIQUES, AND FIELDS OF TESTING ISSUED CONCURRENTLY WITH THIS CERTIFICATE AND REVISED AS NECESSARY.

ACCREDITED STATUS DEPENDS ON SUCCESSFUL ONGOING PARTICIPATION IN THE PROGRAM AND CONTINUED COMPLIANCE WITH THE STANDARDS.

CUSTOMERS ARE URGED TO VERIFY THE LABORATORY'S CURRENT ACCREDITATION STATUS IN OREGON.

Gary K. Ward MS
Oregon State Public Health Laboratory
ORELAP Administrator
3150 NW. 229th Ave, Suite 100
Hillsboro, OR 97124



ISSUE DATE: 10/18/2015
EXPIRATION DATE: 10/17/2016
Certificate No: CA300005 - 007



Oregon

Environmental Laboratory Accreditation Program



Department of Agriculture, Laboratory Division
Department of Environmental Quality, Laboratory Division
Oregon Health Authority, Public Health Division

NELAP Recognized

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015

Expiration Date: 10/17/2016

As of 10/18/2015 this list supercedes all previous lists for this certificate number. Customers. Please verify the current accreditation standing with ORELAP.

MATRIX : Air

Reference	Code	Description
ASTM D1945 03	30024443	Natural Gas by Gas Chromatography
Analyte Code	Analyte	
4938	2-Methylbutane (Isopentane)	
4942	2-methylpropane (Isobutane)	
4323	Acetylene	
3755	Carbon dioxide	
3780	Carbon monoxide	
4747	Ethane	
4752	Ethene	
1767	Helium	
1772	Hydrogen	
4926	Methane	
5007	n-Butane	
9511	Neopentane	
1843	Nitrogen	
5028	n-Pentane	
5029	n-Propane	
3895	Oxygen	
ASTM D1946-90	30024465	Reformed Gas by Gas Chromatography
Analyte Code	Analyte	
3755	Carbon dioxide	
3780	Carbon monoxide	
4747	Ethane	
4752	Ethene	
1767	Helium	
1772	Hydrogen	
4926	Methane	
1843	Nitrogen	
3895	Oxygen	
ASTM D5504 08	30032258	Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence
Analyte Code	Analyte	
4842	1-Propanethiol	
6113	2,5-Dimethylthiophene	
4544	2-Ethylthiophene	
4843	2-Propanethiol	
5783	3-Methylthiophene	
4450	Carbon disulfide	

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015

Expiration Date: 10/17/2016

As of 10/18/2015 **this list supercedes all previous lists for this certificate number.**
Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
7215	Carbonyl sulfide
6078	Diethyl Disulfide
6081	Diethyl Sulfide
4729	Dimethyl disulfide
6116	Dimethyl Sulfide
7506	Ethanethiol
3840	Hydrogen sulfide
3725	i-Butanethiol
7507	Methanethiol
9556	t-Butanethiol
9574	Tetrahydrothiophene
9578	Thiophene

EPA 325B 2013	10277437	Sorbent Tubes Coupled with Thermal Desorption and GC/MS
---------------	----------	---

Analyte Code	Analyte
4375	Benzene
4765	Ethylbenzene
5240	m+p-xylene
5250	o-Xylene
5100	Styrene
5140	Toluene

EPA TO-11A	10311805	Determination of Formaldehyde in Ambient Air Using Adsorbent Cartridge Followed by High Performance Liquid Chromatography (HPLC)
------------	----------	--

Analyte Code	Analyte
4300	Acetaldehyde
4315	Acetone
5570	Benzaldehyde
4430	Butylaldehyde (Butanal)
4545	Crotonaldehyde
4815	Formaldehyde
3825	Hexanaldehyde (Hexanal)
6330	Isovaleraldehyde
5125	m-Tolualdehyde (1,3-Tolualdehyde)
6755	o-Tolualdehyde (1,2-Tolualdehyde)
3965	Propionaldehyde (Propanal)
6760	p-Tolualdehyde (1,4-Tolualdehyde)
4040	Valeraldehyde (Pentanal, Pentanaldehyde)

EPA TO-12	10248201	Non-Methane Organic Compounds by GC/FID
-----------	----------	---

Analyte Code	Analyte
3860	Non-methane organics

EPA TO-13A	10248405	Polycyclic Aromatic Hydrocarbons in Ambient Air by GC/MS
------------	----------	--

Analyte Code	Analyte
5795	2-Chloronaphthalene
6385	2-Methylnaphthalene
5500	Acenaphthene
5505	Acenaphthylene
5555	Anthracene
5575	Benzo(a)anthracene
5580	Benzo(a)pyrene
5605	Benzo(e)pyrene
5590	Benzo(g,h,i)perylene
5600	Benzo(k)fluoranthene
5585	Benzo[b]fluoranthene
5855	Chrysene

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015 **Expiration Date:** 10/17/2016

As of 10/18/2015 this list supercedes all previous lists for this certificate number. Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
4705	cis & trans-1,2-Dichloroethene
4680	cis-1,3-Dichloropropene
4555	Cyclohexane
4625	Dichlorodifluoromethane (Freon-12)
4750	Ethanol
4765	Ethylbenzene
4835	Hexachlorobutadiene
4895	Isopropyl alcohol (2-Propanol, Isopropanol)
4950	Methyl bromide (Bromomethane)
4960	Methyl chloride (Chloromethane)
4975	Methylene chloride (Dichloromethane)
5005	Naphthalene
4825	n-Heptane
4855	n-Hexane
5090	n-Propylbenzene
5100	Styrene
5115	Tetrachloroethylene (Perchloroethylene)
5120	Tetrahydrofuran (THF)
5140	Toluene
4685	trans-1,3-Dichloropropylene
5170	Trichloroethene (Trichloroethylene)
5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)
5235	Vinyl chloride
5260	Xylene (total)

EPA TO-15

10248803

VOCs collected in Canisters by GC/MS

Analyte Code	Analyte
5160	1,1,1-Trichloroethane
5110	1,1,2,2-Tetrachloroethane
5195	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)
5165	1,1,2-Trichloroethane
4630	1,1-Dichloroethane
4640	1,1-Dichloroethylene
5182	1,2,3-Trimethylbenzene
5155	1,2,4-Trichlorobenzene
5210	1,2,4-Trimethylbenzene
4585	1,2-Dibromoethane (EDB, Ethylene dibromide)
4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)
4610	1,2-Dichlorobenzene
4635	1,2-Dichloroethane (Ethylene dichloride)
4655	1,2-Dichloropropane
5215	1,3,5-Trimethylbenzene
9318	1,3-Butadiene
4615	1,3-Dichlorobenzene
4676	1,3-Diethylbenzene
4620	1,4-Dichlorobenzene
4735	1,4-Dioxane (1,4- Diethyleneoxide)
4917	1-Butene
4833	1-Pentene
4836	1-Propene
5220	2,2,4-Trimethylpentane
4666	2,2-Dimethylbutane
4667	2,3,4-Trimethylpentane
4669	2,3-Dimethylbutane
4671	2,3-Dimethylpentane
4672	2,4-Dimethylpentane
4410	2-Butanone (Methyl ethyl ketone, MEK)
4538	2-Ethyltoluene
4860	2-Hexanone
4934	2-Methyl-2-Butene

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015 **Expiration Date:** 10/17/2016

As of 10/18/2015 this list supercedes all previous lists for this certificate number. Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
4937	2-Methylbutadiene (Isoprene)
4938	2-Methylbutane (Isopentane)
4939	2-Methylheptane
4946	2-Methylhexane
4941	2-Methylpentane (Isohexane)
4942	2-methylpropane (Isobutane)
4531	3-Ethyltoluene
4529	3-Methyl-1-Butene
4532	3-Methylheptane
4533	3-Methylhexane
4534	3-Methylpentane
4542	4-Ethyltoluene
4913	4-Methyl-1-Pentene
4995	4-Methyl-2-pentanone (MIBK)
4300	Acetaldehyde
4315	Acetone
4320	Acetonitrile
4323	Acetylene
4325	Acrolein (Propenal)
4340	Acrylonitrile
4355	Allyl chloride (3-Chloropropene)
4375	Benzene
5635	Benzyl chloride
4390	Bromochloromethane
4395	Bromodichloromethane
4400	Bromoform
4450	Carbon disulfide
4455	Carbon tetrachloride
4475	Chlorobenzene
4575	Chlorodibromomethane
4485	Chloroethane (Ethyl chloride)
4505	Chloroform
4525	Chloroprene (2-Chloro-1,3-butadiene)
4705	cis & trans-1,2-Dichloroethene
4680	cis-1,3-Dichloropropene
4602	cis-2-Butene
4603	cis-2-pentene
4555	Cyclohexane
4562	Cyclopentane
4563	Cyclopentene
4625	Dichlorodifluoromethane (Freon-12)
4627	Dichlorofluoromethane (Freon 21)
4747	Ethane
4750	Ethanol
4752	Ethene
4765	Ethylbenzene
4835	Hexachlorobutadiene
4895	Isopropyl alcohol (2-Propanol, Isopropanol)
4900	Isopropylbenzene
5240	m+p-xylene
4930	Methanol
4950	Methyl bromide (Bromomethane)
4960	Methyl chloride (Chloromethane)
5000	Methyl tert-butyl ether (MTBE)
4965	Methylcyclohexane
4966	Methylcyclopentane
4975	Methylene chloride (Dichloromethane)
5005	Naphthalene
5007	n-Butane
5875	n-Decane
4825	n-Heptane

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015

Expiration Date: 10/17/2016

As of 10/18/2015 **this list supercedes all previous lists for this certificate number.**
Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
4855	n-Hexane
5026	n-Nonane
5027	n-Octane
5028	n-Pentane
5029	n-Propane
5090	n-Propylbenzene
6747	n-Undecane
5250	o-Xylene
5253	p-Diethylbenzene
5100	Styrene
5115	Tetrachloroethylene (Perchloroethylene)
5120	Tetrahydrofuran (THF)
5140	Toluene
4685	trans-1,3-Dichloropropylene
4607	trans-2-Butene
4606	trans-2-Hexene
4608	trans-2-pentene
5170	Trichloroethene (Trichloroethylene)
5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)
5225	Vinyl acetate
5230	Vinyl bromide (Bromoethane)
5235	Vinyl chloride
5260	Xylene (total)

EPA TO-15 GC/MS SIM

10248858

VOCs collected in Canisters by GC/MS SIM

Analyte Code	Analyte
5160	1,1,1-Trichloroethane
5110	1,1,2,2-Tetrachloroethane
5165	1,1,2-Trichloroethane
4630	1,1-Dichloroethane
4640	1,1-Dichloroethylene
4585	1,2-Dibromoethane (EDB, Ethylene dibromide)
4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)
4635	1,2-Dichloroethane (Ethylene dichloride)
4620	1,4-Dichlorobenzene
4375	Benzene
4455	Carbon tetrachloride
4485	Chloroethane (Ethyl chloride)
4505	Chloroform
4645	cis-1,2-Dichloroethylene
4625	Dichlorodifluoromethane (Freon-12)
4765	Ethylbenzene
5240	m+p-xylene
4960	Methyl chloride (Chloromethane)
5000	Methyl tert-butyl ether (MTBE)
5005	Naphthalene
5250	o-Xylene
5115	Tetrachloroethylene (Perchloroethylene)
5140	Toluene
4700	trans-1,2-Dichloroethylene
5170	Trichloroethene (Trichloroethylene)
5235	Vinyl chloride

EPA TO-17

10312206

Determination of Volatile Organic Compounds in Ambient Air Using
Active Sampling Onto Sorbent Tubes

Analyte Code	Analyte
5160	1,1,1-Trichloroethane
5110	1,1,2,2-Tetrachloroethane
5195	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)
5165	1,1,2-Trichloroethane

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015

Expiration Date: 10/17/2016

As of 10/18/2015 **this list supercedes all previous lists for this certificate number.**
Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
4630	1,1-Dichloroethane
4640	1,1-Dichloroethylene
5155	1,2,4-Trichlorobenzene
5210	1,2,4-Trimethylbenzene
4695	1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)
4610	1,2-Dichlorobenzene
4635	1,2-Dichloroethane (Ethylene dichloride)
4655	1,2-Dichloropropane
5215	1,3,5-Trimethylbenzene
9318	1,3-Butadiene
4615	1,3-Dichlorobenzene
4620	1,4-Dichlorobenzene
4735	1,4-Dioxane (1,4- Diethyleneoxide)
6380	1-Methylnaphthalene
5220	2,2,4-Trimethylpentane
4410	2-Butanone (Methyl ethyl ketone, MEK)
4860	2-Hexanone (MBK)
4938	2-Methylbutane (Isopentane)
6385	2-Methylnaphthalene
4542	4-Ethyltoluene
5500	Acenaphthene
5505	Acenaphthylene
5555	Anthracene
4375	Benzene
4450	Carbon disulfide
4455	Carbon tetrachloride
4475	Chlorobenzene
4485	Chloroethane (Ethyl chloride)
4505	Chloroform
4645	cis-1,2-Dichloroethylene
4555	Cyclohexane
4765	Ethylbenzene
6265	Fluoranthene
6270	Fluorene
4835	Hexachlorobutadiene
4895	Isopropyl alcohol (2-Propanol, Isopropanol)
4900	Isopropylbenzene
5240	m+p-xylene
5000	Methyl tert-butyl ether (MTBE)
4965	Methylcyclohexane
4975	Methylene chloride (Dichloromethane)
5005	Naphthalene
4825	n-Heptane
4855	n-Hexane
5090	n-Propylbenzene
5250	o-Xylene
6615	Phenanthrene
6665	Pyrene
5100	Styrene
5115	Tetrachloroethylene (Perchloroethylene)
5140	Toluene
4700	trans-1,2-Dichloroethylene
5170	Trichloroethene (Trichloroethylene)
5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)
5235	Vinyl chloride
5260	Xylene (total)

EPA TO-17 Modified 2

10312217

Hydrocarbons in Ambient Air Using WMS Passive Sampling Tubes

Analyte Code	Analyte
5160	1,1,1-Trichloroethane

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015 Expiration Date: 10/17/2016

As of 10/18/2015 this list supercedes all previous lists for this certificate number.
Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
5110	1,1,2,2-Tetrachloroethane
5165	1,1,2-Trichloroethane
4630	1,1-Dichloroethane
4640	1,1-Dichloroethylene
5150	1,2,3-Trichlorobenzene
5155	1,2,4-Trichlorobenzene
5210	1,2,4-Trimethylbenzene
4610	1,2-Dichlorobenzene
4635	1,2-Dichloroethane (Ethylene dichloride)
5215	1,3,5-Trimethylbenzene
4615	1,3-Dichlorobenzene
4620	1,4-Dichlorobenzene
9546	1,4-Dithiane
4410	2-Butanone (Methyl ethyl ketone, MEK)
4995	4-Methyl-2-pentanone (MIBK)
4315	Acetone
6698	alpha-Pinene
4375	Benzene
4455	Carbon tetrachloride
4475	Chlorobenzene
4505	Chloroform
4645	cis-1,2-Dichloroethylene
4555	Cyclohexane
6208	d-Limonene
4750	Ethanol
4755	Ethyl acetate
4765	Ethylbenzene
6774	Halothane (2-Bromo-2-chloro-1,1,1-trifluoroethane)
5240	m+p-xylene
4960	Methyl chloride (Chloromethane)
4990	Methyl methacrylate
5000	Methyl tert-butyl ether (MTBE)
5005	Naphthalene
4825	n-Heptane
4855	n-Hexane
5090	n-Propylbenzene
5250	o-Xylene
5100	Styrene
5115	Tetrachloroethylene (Perchloroethylene)
5140	Toluene
4700	trans-1,2-Dichloroethylene
5170	Trichloroethene (Trichloroethylene)
5235	Vinyl chloride

EPA TO-3

10249000

Cryogenic Trapping

Analyte Code	Analyte
4375	Benzene
4765	Ethylbenzene
5140	Toluene
5260	Xylene (total)

Modified EPA TO-17 Passive RAD130 Tube 2 60032351

The Determination of Hydrocarbons in Air Via RAD130 RADIELLO
Passive Sample Tubes

Analyte Code	Analyte
5160	1,1,1-Trichloroethane
5110	1,1,2,2-Tetrachloroethane
5165	1,1,2-Trichloroethane
4630	1,1-Dichloroethane
4640	1,1-Dichloroethylene
5210	1,2,4-Trimethylbenzene

ORELAP Fields of Accreditation

ORELAP ID: CA300005

EPA CODE: CA00933

Certificate: CA300005 - 008

Eurofins Air Toxics, Inc

180 Blue Ravine Road, Ste. B
Folsom CA 95630

Issue Date: 10/18/2015

Expiration Date: 10/17/2016

As of 10/18/2015 this list supercedes all previous lists for this certificate number. Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
4610	1,2-Dichlorobenzene
4635	1,2-Dichloroethane (Ethylene dichloride)
5215	1,3,5-Trimethylbenzene
4615	1,3-Dichlorobenzene
4620	1,4-Dichlorobenzene
4410	2-Butanone (Methyl ethyl ketone, MEK)
4995	4-Methyl-2-pentanone (MIBK)
4315	Acetone
4375	Benzene
4455	Carbon tetrachloride
4475	Chlorobenzene
4505	Chloroform
4645	cis-1,2-Dichloroethylene
4555	Cyclohexane
4750	Ethanol
4755	Ethyl acetate
4765	Ethylbenzene
4895	Isopropyl alcohol (2-Propanol, Isopropanol)
5240	m+p-xylene
4960	Methyl chloride (Chloromethane)
5000	Methyl tert-butyl ether (MTBE)
5005	Naphthalene
4825	n-Heptane
4855	n-Hexane
5090	n-Propylbenzene
5250	o-Xylene
5100	Styrene
5115	Tetrachloroethylene (Perchloroethylene)
5140	Toluene
4700	trans-1,2-Dichloroethylene
5170	Trichloroethene (Trichloroethylene)
5235	Vinyl chloride

