



May 4, 2016

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

Emily Lloyd
Commissioner

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

John G. Petito, P.E.
*Acting
Deputy Commissioner*

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

Tel. (718) 595-5046
Fax (718) 595-6950

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 First Quarter of 2016

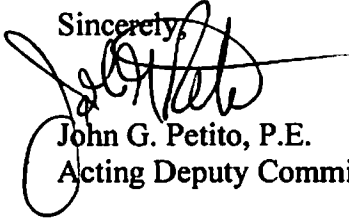
Dear Mr. Gentile and Ms. Valis:

The New York City Department of Environmental Protection (“DEP”) is submitting to the New York State Department of Environmental Conservation’s (“DEC”) the North River Wastewater Treatment Plant (“WWTP”) Quarterly Formaldehyde Monitoring Report for the First Quarter of 2016 (the “Report”). The 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 January through March of 2016 in accordance with the DEP Formaldehyde Monitoring Plan, approved by DEC on May 26, 2015. The data contained in this Report was previously sent to DEC on April 20, 2016.

DEP acknowledges that this report was due by April 30, 2016. However, DEP needed additional time to collect and verify information.

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,

John G. Petito, P.E.
Acting Deputy Commissioner

Attachment

Cc: Steven Zahn, Acting Regional Director, NYSDEC Region II
Samuel Lieblich, Air Pollution Control Engineer, NYSDEC Region II
Thomas John, Environmental Engineer, NYSDEC Region II
Robert Bolt, Environmental Engineer, NYSDEC Region II
Paresh Shah, Environmental Engineer, NYSDEC Region II
Karen Mintzer, Regional Attorney, NYSDEC Region II

Elissa Stein Cushman, Robin Levine, Marcella Eckels, Christy Bitet (BLA)

Vincent Sapienza (BEDC)

Diane Hammerman, Arthur Spangel, Leslie Lipton, Wayne Kuang, Ming Shen, Jiye Zhang (BWT)

Keith Cataldo, Courtney Anderson (BWT NR WWTP)

Gail Saunders, Senior Counsel, NYC Law Department

North River Wastewater Treatment Plant

Quarterly Formaldehyde Monitoring Report for First 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



Louis Berger

On Behalf of:

New York City Department of Environmental Protection

Apr 18, 2016

1st Quarter 2016

Project No. 3000524.00

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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 January 1, 2016 through March 31, 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 10.0 $\mu\text{g}/\text{m}^3$ for the first 12 hours (0600-1800) and 7.8 $\mu\text{g}/\text{m}^3$ 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

1/27/2016

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

Project Name: North River WWTP
Project #: 2001285
Workorder #: 1601084A

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 1/9/2016 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 #: 1601084A

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 #	2001285 North River WWTP
DATE RECEIVED:	01/09/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	01/22/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-010716	Modified TO-11A
02A	Formaldehyde 002-010716	Modified TO-11A
03A	Formaldehyde 003-010716	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 01/22/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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 - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1601084A

Three TO-11 Cartridge samples were received on January 09, 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

There were no receiving discrepancies.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-010716 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 001-010716

Lab ID#: 1601084A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.8	6.8

Client Sample ID: Formaldehyde 002-010716

Lab ID#: 1601084A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.0	5.6

Client Sample ID: Formaldehyde 003-010716

Lab ID#: 1601084A-03A

No Detections Were Found.

Client Sample ID: Formaldehyde 001-010716

Lab ID#: 1601084A-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0114008	Date of Collection: 1/7/16 6:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 1/14/16 01:25 PM
		Date of Extraction: 1/14/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.8	6.8

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde 002-010716

Lab ID#: 1601084A-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0114009	Date of Collection: 1/7/16 6:15:00 PM
Dil. Factor:	1.00	Date of Analysis: 1/14/16 01:51 PM
		Date of Extraction: 1/14/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.0	5.6

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde 003-010716

Lab ID#: 1601084A-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0114006	Date of Collection: 1/7/16
Dil. Factor:	1.00	Date of Analysis: 1/14/16 12:33 PM
		Date of Extraction: 1/14/16

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

Client Sample ID: Lab Blank

Lab ID#: 1601084A-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0114005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	1/14/16 12:07 PM
		Date of Extraction:	1/14/16

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

Client Sample ID: LCS

Lab ID#: 1601084A-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0114003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/14/16 11:15 AM
		Date of Extraction: 1/14/16

Compound	%Recovery	Method Limits
Formaldehyde	96	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1601084A-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0114004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/14/16 11:41 AM
		Date of Extraction: 1/14/16

Compound	%Recovery	Method Limits
Formaldehyde	102	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

**Air
Toxics Ltd.**

Sample Transportation Notice

**180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-10200**

Page 1 of 1

Project Manager Rhine Almonacy

Collected by: (Print and Sign)

Company LOUIS BBE & Co Email louis@bbecorp.com

Address 48 Wall St 6th Fl City Albany State NY Zip 12205

Phone 212-612-7951 Fax _____

Project Info:	Turn Around Time:	Circle Reporting Units:
P.O. # _____	☒ Normal	ppbv
Project # <u>2001285</u>	☐ Rush	ppmv
Project Name <u>Alaska Ave UNIT 6</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
OIA	Formaldehyde 001-010716		01/07/16	0600	1800	720	713.2	Tox-A Formaldehyde
CBA	Formaldehyde 002-010716		01/07/16	1815	0615	720	719.8	J
CBA	Formaldehyde 003-010716		01/07/16	N/A	N/A	N/A	N/A	

1/27/2016

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

Project Name: North River WWTP
Project #: 20012155
Workorder #: 1601137B

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 1/13/2016 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 #: 1601137B

Work Order Summary

CLIENT: PHONE: FAX: DATE RECEIVED: DATE COMPLETED:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 973-407-1000 01/13/2016 01/26/2016	BILL TO: P.O. # PROJECT # CONTACT:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 2001285.06.02 20012155 North River WWTP Ausha Scott
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<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-011116	Modified TO-11A
02A	Formaldehyde002-011116	Modified TO-11A
03A	Formaldehyde003-011116	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 01/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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 - 9563
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1601137B

Three TO-11 Cartridge samples were received on January 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

There were no receiving discrepancies.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde003-011116 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: MODIFIED EPA METHOD TO-11A HPLC

Client Sample ID: Formaldehyde001-011116

Lab ID#: 1601137B-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.4	6.2
Acetaldehyde	0.10	0.14	0.98	1.4
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.35	0.33	0.46

Client Sample ID: Formaldehyde002-011116

Lab ID#: 1601137B-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.8	5.3
Acetaldehyde	0.10	0.14	1.0	1.4
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.35	0.32	0.45

Client Sample ID: Formaldehyde003-011116

Lab ID#: 1601137B-03A

No Detections Were Found.



Air Toxics

Client Sample ID: Formaldehyde001-011116

Lab ID#: 1601137B-01A

AMBIENT AIR: MODIFIED EPA METHOD TO-11A HPLC

File Name:	f0114010a	Date of Collection:	1/11/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis:	1/14/16 02:17 PM
		Date of Extraction:	1/14/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.4	6.2
Acetaldehyde	0.10	0.14	0.98	1.4
Crotonaldehyde	0.25	0.35	Not Detected	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.35	0.33	0.46
Benzaldehyde	0.25	0.35	Not Detected	Not Detected
o-Tolualdehyde	0.25	0.35	Not Detected	Not Detected
m,p-Tolualdehyde	0.25	0.35	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde002-011116

Lab ID#: 1601137B-02A

AMBIENT AIR: MODIFIED EPA METHOD TO-11A HPLC

File Name:	f0114011a	Date of Collection: 1/11/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 1/14/16 02:43 PM
		Date of Extraction: 1/14/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.8	5.3
Acetaldehyde	0.10	0.14	1.0	1.4
Crotonaldehyde	0.25	0.35	Not Detected	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.35	0.32	0.45
Benzaldehyde	0.25	0.35	Not Detected	Not Detected
o-Tolualdehyde	0.25	0.35	Not Detected	Not Detected
m,p-Tolualdehyde	0.25	0.35	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde003-011116

Lab ID#: 1601137B-03A

AMBIENT AIR: MODIFIED EPA METHOD TO-11A HPLC

File Name:	f0114007a	Date of Collection:	1/11/16
Dil. Factor:	1.00	Date of Analysis:	1/14/16 12:59 PM
		Date of Extraction:	1/14/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected
Acetaldehyde	0.10	0.14	Not Detected	Not Detected
Crotonaldehyde	0.25	0.35	Not Detected	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.35	Not Detected	Not Detected
Benzaldehyde	0.25	0.35	Not Detected	Not Detected
o-Tolualdehyde	0.25	0.35	Not Detected	Not Detected
m,p-Tolualdehyde	0.25	0.35	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1601137B-04A

AMBIENT AIR: MODIFIED EPA METHOD TO-11A HPLC

File Name:	f0114005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/14/16 12:07 PM
		Date of Extraction: 1/14/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	Not Detected	Not Detected
Acetaldehyde	0.10	0.14	Not Detected	Not Detected
Crotonaldehyde	0.25	0.35	Not Detected	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.35	Not Detected	Not Detected
Benzaldehyde	0.25	0.35	Not Detected	Not Detected
o-Tolualdehyde	0.25	0.35	Not Detected	Not Detected
m,p-Tolualdehyde	0.25	0.35	Not Detected	Not Detected

Air Sample Volume(L): 713

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 1601137B-05A

AMBIENT AIR: MODIFIED EPA METHOD TO-11A HPLC

File Name:	f0114003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/14/16 11:15 AM
		Date of Extraction: 1/14/16

Compound	%Recovery	Method Limits
Formaldehyde	96	85-115
Acetaldehyde	95	85-115
Crotonaldehyde	100	85-115
Methyl Ethyl Ketone/Butyraldehydes	98	85-115
Benzaldehyde	100	85-115
o-Tolualdehyde	102	85-115
m,p-Tolualdehyde	98	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1601137B-05AA

AMBIENT AIR: MODIFIED EPA METHOD TO-11A HPLC

File Name:	f0114004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/14/16 11:41 AM
		Date of Extraction: 1/14/16

Compound	%Recovery	Method Limits
Formaldehyde	102	85-115
Acetaldehyde	99	85-115
Crotonaldehyde	103	85-115
Methyl Ethyl Ketone/Butyraldehydes	101	85-115
Benzaldehyde	102	85-115
o-Tolualdehyde	105	85-115
m,p-Tolualdehyde	102	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 20013 BEE STR Email _____
Address 4500 81st St City New York State NY Zip 10005
Phone _____ Fax _____

Project Info:		Turn Around Time:		Circle Reporting Units:	
P.O. # _____		☒ Normal		ppbv ppmv	
Project # <u>2001265</u>		☐ Rush		<u>ug/m3</u> mg/m3	
Project Name <u>Montclair NJ</u>		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 001-011116		01/11/16	0600	1800	720	713.2	TD-114 Formaldehyde
02A	Formaldehyde 002-011116		01/11/16	1815	0615	720	712.9	
03A	Formaldehyde 003-011116		01/11/16	N/A	N/A	N/A	N/A	
Relinquished by: (signature) <u>[Signature]</u>		Date/Time	Received by: (signature) <u>[Signature]</u>		Date/Time	Pump Calibration Information Pre-test Flow Rate: Post-test Flow Rate: Average Flow Rate: Notes:		
Relinquished by: (signature) <u>[Signature]</u>		Date/Time	Received by: (signature) <u>[Signature]</u>		Date/Time			
Relinquished by: (signature)		Date/Time	Received by: (signature)		Date/Time			
Relinquished by: (signature)		Date/Time	Received by: (signature)		Date/Time			
Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #		
	<u>WPS</u>		<u>1.8°C</u>	<u>Good</u>	<u>Yes</u> <u>No</u> <u>(None)</u>	<u>1601137</u>		

2/3/2016

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

Project Name: North River WWTP
Project #:
Workorder #: 1601260A

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 1/21/2016 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 #: 1601260A

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:	01/21/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	02/03/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde 001-011716	Modified TO-11A
02A	Formaldehyde 002-011716	Modified TO-11A
03A	Formaldehyde 003-011716	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 02/03/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1601260A

Three TO-11 Cartridge samples were received on January 21, 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

There were no receiving discrepancies.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde 003-011716 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 001-011716

Lab ID#: 1601260A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.4	6.2

Client Sample ID: Formaldehyde 002-011716

Lab ID#: 1601260A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.9	5.5

Client Sample ID: Formaldehyde 003-011716

Lab ID#: 1601260A-03A

No Detections Were Found.

Client Sample ID: Formaldehyde 001-011716

Lab ID#: 1601260A-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0125035	Date of Collection: 1/17/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 1/26/16 05:24 AM
		Date of Extraction: 1/25/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.4	6.2

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde 002-011716

Lab ID#: 1601260A-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0125036	Date of Collection: 1/17/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 1/26/16 05:50 AM
		Date of Extraction: 1/25/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.9	5.5

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde 003-011716

Lab ID#: 1601260A-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0125034	Date of Collection: 1/17/16
Dil. Factor:	1.00	Date of Analysis: 1/26/16 04:58 AM
		Date of Extraction: 1/25/16

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

Client Sample ID: Lab Blank

Lab ID#: 1601260A-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0125033	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/26/16 04:32 AM
		Date of Extraction: 1/25/16

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

Client Sample ID: LCS

Lab ID#: 1601260A-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0125029	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/26/16 02:49 AM
		Date of Extraction: 1/25/16

Compound	%Recovery	Method Limits
Formaldehyde	107	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1601260A-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0125030
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 1/26/16 03:15 AM
Date of Extraction: 1/25/16

Compound	%Recovery	Method Limits
Formaldehyde	101	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Air Toxics Ltd.

Sample Transportation Notice

Reinfrquishing 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. Reinfrquishing 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

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FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020**

Page 1 of 1

Zinn Pharmacy

Phone: 411-1111

100513602624 Email

City Dayton State NY Zip 10001

25075

Fax

P.O.#

Project #

Project Name North Everett

Turn Around Time:

 Normal

 Push

specify

Circle Reporting Units:

11/11/11

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
01A	Formaldehyde 001-011716		6/17/16	0600	1800	720	713.1	Formaldehyde
01A	Formaldehyde 002-011716			1815	0615	720	712.8	
01A	Formaldehyde 003-011716			N/A	N/A	N/A	N/A	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Pump Calibration Information				
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Pre-test Flow Rate:				
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Post-test Flow Rate:				
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Average Flow Rate:				
Notes:								
Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #		
	UPS		48°C	Good	Yes No (None)	1601260		

2/6/2016

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

Project Name: North River WWTP
Project #:
Workorder #: 1601350A

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 1/27/2016 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 #: 1601350A

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:	01/27/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	02/06/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-012316	Modified TO-11A
02A	Formaldehyde002-012316	Modified TO-11A
03A	Formaldehyde003-012316	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 02/06/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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**LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1601350A**

Three TO-11 Cartridge samples were received on January 27, 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

There were no receiving discrepancies.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde003-012316 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: Formaldehyde001-012316

Lab ID#: 1601350A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.2	7.2

Client Sample ID: Formaldehyde002-012316

Lab ID#: 1601350A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	2.8	3.9

Client Sample ID: Formaldehyde003-012316

Lab ID#: 1601350A-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-012316

Lab ID#: 1601350A-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0129010	Date of Collection: 1/23/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 1/29/16 06:49 PM
		Date of Extraction: 1/29/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.2	7.2

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-012316

Lab ID#: 1601350A-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0129011	Date of Collection: 1/23/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 1/29/16 07:15 PM
		Date of Extraction: 1/29/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	2.8	3.9

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde003-012316

Lab ID#: 1601350A-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0129009	Date of Collection:	1/23/16
Dil. Factor:	1.00	Date of Analysis:	1/29/16 06:23 PM
		Date of Extraction:	1/29/16

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

Client Sample ID: Lab Blank

Lab ID#: 1601350A-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0129008	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/29/16 05:57 PM
		Date of Extraction: 1/29/16

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

Client Sample ID: LCS

Lab ID#: 1601350A-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0129004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/29/16 04:13 PM
		Date of Extraction: 1/29/16

Compound	%Recovery	Method Limits
Formaldehyde	104	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1601350A-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0129005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/29/16 04:39 PM
		Date of Extraction: 1/29/16

Compound	%Recovery	Method Limits
Formaldehyde	102	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.

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FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Rhine Adams

Collected by: (Print and Sign) Rhine Adams

Company LOUIS BUCKLE Email _____

Address 16111 81st Ave City Northridge State CA Zip 91325

Phone 214-612-7851 Fax _____

Project Info:

P.O. # _____

Project # _____

Project Name Northridge WWT

Turn Around Time:

☒ Normal

☐ Rush

Circle Reporting Units:

ppbv ppmv

ug/m³ mg/m³

Field Sample I.D. (Location)

Tube # / Cartridge

Date of Collection

Start Time

End Time

Duration

Final Volume

Analysis Requested

01A Formaldehyde 001-012316

02A Formaldehyde 002-012316

03A Formaldehyde 003-012316

012316

1515

1515

0600

0615

0615

1800

0615

0615

720

720

720

713.1

713.1

713.1

750-11A Formaldehyde

713.1

713.1

Relinquished by: (signature) _____ Date/Time _____

Relinquished by: (signature) _____ Date/Time _____

Relinquished by: (signature) _____ Date/Time _____

Received by: (signature) _____ Date/Time _____

Received by: (signature) _____ Date/Time _____

Received by: (signature) _____ Date/Time _____

Pump Calibration Information

Pre-test Flow Rate:

Post-test Flow Rate:

Average Flow Rate:

Notes:

Shipper Name

Air Bill #

Temp (°C)

Condition

Custody Seals Intact?

Work Order #

Lab Use Only

UPS

0.6°C

Good

Yes No None

1601350

2/26/2016

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

Project Name: North River WWTP

Project #: 2001285.05.02

Workorder #: 1602026A

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 2/2/2016 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 #: 1602026A

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 #	2001285.05.02 North River WWTP
DATE RECEIVED:	02/02/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	02/26/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-012916	Modified TO-11A
02A	Formaldehyde002-012916	Modified TO-11A
03A	Formaldehyde003-012916	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 02/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1602026A

Three TO-11 Cartridge samples were received on February 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

There were no receiving discrepancies.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 713 L was used to report sample Formaldehyde003-012916 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: Formaldehyde001-012916

Lab ID#: 1602026A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.3	8.8

Client Sample ID: Formaldehyde002-012916

Lab ID#: 1602026A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.0	7.0

Client Sample ID: Formaldehyde003-012916

Lab ID#: 1602026A-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-012916

Lab ID#: 1602026A-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224026	Date of Collection: 1/29/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 2/24/16 10:39 PM
		Date of Extraction: 2/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.3	8.8

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-012916

Lab ID#: 1602026A-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224027	Date of Collection: 1/29/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 2/24/16 11:05 PM
		Date of Extraction: 2/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	5.0	7.0

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde003-012916

Lab ID#: 1602026A-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224023	Date of Collection:	1/29/16
Dil. Factor:	1.00	Date of Analysis:	2/24/16 09:21 PM
		Date of Extraction:	2/12/16

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

Client Sample ID: Lab Blank

Lab ID#: 1602026A-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224022	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 08:55 PM
		Date of Extraction: 2/12/16

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

Client Sample ID: LCS

Lab ID#: 1602026A-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0224020

Dil. Factor: 1.00

Date of Collection: NA

Date of Analysis: 2/24/16 08:03 PM

Date of Extraction: 2/12/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1602026A-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0224021
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 2/24/16 08:29 PM
Date of Extraction: 2/12/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

CHAIN-OF-CUSTODY RECORD

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Page 1 of 1

Circle Reporting Units

ppbv

5

(

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
OIA	Farm/delhi0001-012916		1/29/16	0600	1800	720	713.1	70-11A Farm/delhi0001
MH	Farm/delhi0002-012916		L	1815	0615	720	712.8	
DIX	Farm/delhi0003-012916		N/A	N/A	N/A	N/A	N/A	

2/26/2016

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

Project Name:
Project #: 2001285.06.02
Workorder #: 1602149A

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 2/9/2016 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

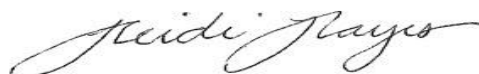
WORK ORDER #: 1602149A

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 #	2001285.06.02
DATE RECEIVED:	02/09/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	02/26/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-020416	Modified TO-11A
02A	Formaldehyde002-020416	Modified TO-11A
03A	Formaldehyde003-020416	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 02/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1602149A

Three TO-11 Cartridge samples were received on February 09, 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 Formaldehyde003-020416 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: Formaldehyde001-020416

Lab ID#: 1602149A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	12	17

Client Sample ID: Formaldehyde002-020416

Lab ID#: 1602149A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.3	8.8

Client Sample ID: Formaldehyde003-020416

Lab ID#: 1602149A-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-020416

Lab ID#: 1602149A-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224028	Date of Collection: 2/4/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 2/24/16 11:31 PM
		Date of Extraction: 2/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	12	17

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-020416

Lab ID#: 1602149A-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224029	Date of Collection: 2/4/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 2/24/16 11:57 PM
		Date of Extraction: 2/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.3	8.8

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde003-020416

Lab ID#: 1602149A-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224024	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 09:47 PM
		Date of Extraction: 2/12/16

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

Client Sample ID: Lab Blank

Lab ID#: 1602149A-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224022	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 08:55 PM
		Date of Extraction: 2/12/16

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

Client Sample ID: LCS

Lab ID#: 1602149A-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224020	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 08:03 PM
		Date of Extraction: 2/12/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1602149A-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224021	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 08:29 PM
		Date of Extraction: 2/12/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Air Toxics Ltd.

Sample Transportation Notice

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Page 4 of 7

Project Manager Kline Film Energy

Collected by: (Print and Sign) Chino Moreno

Company ADAMS Email 3456

Address 48 Wad St City New York State NY Zip 10003

Phone _____ Fax _____

Project info

PO#

Project # 20012854682

Project Name

Turn Around Time:

**Circle Reporting
Units:**

☒ Normal

ppbv

ppmv

Specify

4/9/73

mg/m³[illegible]

2/26/2016

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

Project Name: North River WWTP

Project #: 2001285.06.02

Workorder #: 1602238

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 2/12/2016 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

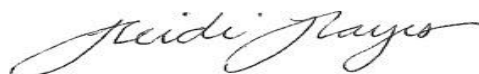
WORK ORDER #: 1602238

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 #	2001285.06.02 North River WWTP
DATE RECEIVED:	02/12/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	02/26/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-021016	Modified TO-11A
02A	Formaldehyde002-021016	Modified TO-11A
03A	Formaldehyde003-021016	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 02/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1602238

Three TO-11 Cartridge samples were received on February 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 Formaldehyde003-021016 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: Formaldehyde001-021016

Lab ID#: 1602238-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.4	4.8

Client Sample ID: Formaldehyde002-021016

Lab ID#: 1602238-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.2	5.9

Client Sample ID: Formaldehyde003-021016

Lab ID#: 1602238-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-021016

Lab ID#: 1602238-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224030	Date of Collection: 2/10/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 2/25/16 12:23 AM
		Date of Extraction: 2/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.4	4.8

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-021016

Lab ID#: 1602238-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224031	Date of Collection: 2/10/16 6:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 2/25/16 12:49 AM
		Date of Extraction: 2/12/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.2	5.9

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde003-021016

Lab ID#: 1602238-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224025	Date of Collection: 2/10/16
Dil. Factor:	1.00	Date of Analysis: 2/24/16 10:13 PM
		Date of Extraction: 2/12/16

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

Client Sample ID: Lab Blank

Lab ID#: 1602238-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224022	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 08:55 PM
		Date of Extraction: 2/12/16

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

Client Sample ID: LCS

Lab ID#: 1602238-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224020	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/24/16 08:03 PM
		Date of Extraction: 2/12/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1602238-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0224021

Dil. Factor: 1.00

Date of Collection: NA

Date of Analysis: 2/24/16 08:29 PM

Date of Extraction: 2/12/16

Compound	%Recovery	Method Limits
Formaldehyde	95	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

**Air
Toxics Ltd.**

Sample Transportation Notice

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Page 1 of 1

Phone 212-612-7951 Fax 212-612-7951

Project Name Windy Ave NWITP

specify

5)

[illegible]

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Average Flow Rate:

Notes:

Condition

Custody Seals Intact?

Work Order #

15

106

20

Yes No None

16023

2/26/2016

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

Project Name: North River WWTP
Project #: 2001.285.06.02
Workorder #: 1602376

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 2/19/2016 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 #: 1602376

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 North River WWTP
DATE RECEIVED:	02/19/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	02/26/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-021616	Modified TO-11A
02A	Formaldehyde002-021616	Modified TO-11A
03A	Formaldehyde003-021616	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 02/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1602376

Three TO-11 Cartridge samples were received on February 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 Formaldehyde003-021616 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: Formaldehyde001-021616

Lab ID#: 1602376-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.8	9.6

Client Sample ID: Formaldehyde002-021616

Lab ID#: 1602376-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.2	5.9

Client Sample ID: Formaldehyde003-021616

Lab ID#: 1602376-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-021616

Lab ID#: 1602376-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224038	Date of Collection: 2/16/16 10:30:00 PM
Dil. Factor:	1.00	Date of Analysis: 2/25/16 03:50 AM
		Date of Extraction: 2/23/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.8	9.6

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-021616

Lab ID#: 1602376-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224037	Date of Collection: 2/16/16 10:45:00 AM
Dil. Factor:	1.00	Date of Analysis: 2/25/16 03:24 AM
		Date of Extraction: 2/23/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.2	5.9

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde003-021616

Lab ID#: 1602376-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224036	Date of Collection: 2/16/16
Dil. Factor:	1.00	Date of Analysis: 2/25/16 02:58 AM
		Date of Extraction: 2/23/16

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

Client Sample ID: Lab Blank

Lab ID#: 1602376-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0224035	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/25/16 02:32 AM
		Date of Extraction: 2/23/16

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

Client Sample ID: LCS

Lab ID#: 1602376-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0224033
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 2/25/16 01:40 AM
Date of Extraction: 2/23/16

Compound	%Recovery	Method Limits
Formaldehyde	103	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1602376-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0224034

Dil. Factor: 1.00

Date of Collection: NA

Date of Analysis: 2/25/16 02:06 AM

Date of Extraction: 2/23/16

Compound	%Recovery	Method Limits
Formaldehyde	100	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Page 1 of 1

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[illegible]

3/7/2016

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

Project Name: North River WWTP

Project #:

Workorder #: 1602469

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 2/25/2016 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 #: 1602469

Work Order Summary

CLIENT: PHONE: FAX: DATE RECEIVED: DATE COMPLETED:	Mr. Rhine Almonacy The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 973-407-1000 02/25/2016 03/07/2016	BILL TO: P.O. # PROJECT # CONTACT:	Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 2001285.06.02 North River WWTP Ausha Scott
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<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde01-022216	Modified TO-11A
02A	Formaldehyde02-022216	Modified TO-11A
03A	Formaldehyde03-022216	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 03/07/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1602469

Three TO-11 Cartridge samples were received on February 25, 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

Sample identification for sample Formaldehyde03-022216 was not provided on the Chain of Custody. The information on the sample tag was used to process and report the sample.

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 Formaldehyde03-022216 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: Formaldehyde01-022216

Lab ID#: 1602469-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.5	4.9

Client Sample ID: Formaldehyde02-022216

Lab ID#: 1602469-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.4	6.2

Client Sample ID: Formaldehyde03-022216

Lab ID#: 1602469-03A

No Detections Were Found.

Client Sample ID: Formaldehyde01-022216

Lab ID#: 1602469-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303015	Date of Collection: 2/22/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 3/3/16 03:44 PM
		Date of Extraction: 3/3/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	3.5	4.9

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde02-022216

Lab ID#: 1602469-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303016	Date of Collection: 2/22/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 3/3/16 04:09 PM
		Date of Extraction: 3/3/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	4.4	6.2

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde03-022216

Lab ID#: 1602469-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303014	Date of Collection: 2/22/16
Dil. Factor:	1.00	Date of Analysis: 3/3/16 03:18 PM
		Date of Extraction: 3/3/16

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

Client Sample ID: Lab Blank

Lab ID#: 1602469-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/3/16 11:24 AM
		Date of Extraction: 3/3/16

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

Client Sample ID: LCS

Lab ID#: 1602469-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/3/16 10:32 AM
		Date of Extraction: 3/3/16

Compound	%Recovery	Method Limits
Formaldehyde	98	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1602469-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/3/16 10:58 AM
		Date of Extraction: 3/3/16

Compound	%Recovery	Method Limits
Formaldehyde	99	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Air Toxics Ltd.

Sample Transportation Notice

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

Page 7 of 1

Project info

P.O. #

1

Phone _____ F_____

Project Name Navy Liaison

Turn Around Time:	Circle Reporting Units:
☒ Normal ☐ Rush	ppbv ppmv <u>ug/m³</u> mg/m ³
specify	

[illegible]

3/12/2016

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

Project Name: North River WWTP
Project #:
Workorder #: 1603011

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 3/1/2016 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

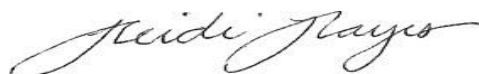
WORK ORDER #: 1603011

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: 03/01/2016 DATE COMPLETED: 03/12/2016	BILL TO: Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 P.O. # 2001285.06.02 PROJECT # North River WWTP CONTACT: Ausha Scott
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<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-022816	Modified TO-11A
02A	Formaldehyde002-022816	Modified TO-11A
03A	Lab Blank	Modified TO-11A
04A	LCS	Modified TO-11A
04AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 03/12/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1603011

Two TO-11 Cartridge samples were received on March 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 1420 L was used to report sample Formaldehyde002-022816 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: Formaldehyde001-022816

Lab ID#: 1603011-01A

No Detections Were Found.

Client Sample ID: Formaldehyde002-022816

Lab ID#: 1603011-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	21	15

Client Sample ID: Formaldehyde001-022816

Lab ID#: 1603011-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303013	Date of Collection: 2/28/16 6:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 3/3/16 02:52 PM
		Date of Extraction: 3/3/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	Not Detected	Not Detected

Air Sample Volume(L): 1420

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-022816

Lab ID#: 1603011-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303017	Date of Collection: 2/28/16
Dil. Factor:	1.00	Date of Analysis: 3/3/16 04:35 PM
		Date of Extraction: 3/3/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	21	15

Air Sample Volume(L): 1420

Container Type: TO-11 Cartridge

Client Sample ID: Lab Blank

Lab ID#: 1603011-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/3/16 11:24 AM
		Date of Extraction: 3/3/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	Not Detected	Not Detected

Air Sample Volume(L): 1420

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 1603011-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/3/16 10:32 AM
		Date of Extraction: 3/3/16

Compound	%Recovery	Method Limits
Formaldehyde	98	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1603011-04AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0303004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/3/16 10:58 AM
		Date of Extraction: 3/3/16

Compound	%Recovery	Method Limits
Formaldehyde	99	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

**Air
Toxics Ltd.**

CHAIN-OF-CUSTODY RECORD

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) 985-10200**

Page 7 of 10

Project Manager Alina H. Hinojosa

Collected by: (Print and Sign)

Company ADUS/STK BOK

Email:

Address 45 Wells / 6th St

City Albany State NY Zip 12202

Phone 712-418-1261 Fax _____

Project Info: P.O. # _____ Project # _____ Project Name <u>Winnipeg River NWTP</u>		Turn Around Time: ☒ Normal ☐ Rush specify _____		Circle Reporting Units: ppbv $\mu\text{g}/\text{m}^3$ ppmv mg/m^3	
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[illegible]

4/18/2016

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

Project Name: North River WWTP
Project #: 2001285.06.02
Workorder #: 1603127

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 3/8/2016 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 #: 1603127

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 #	2001285.06.02 North River WWTP
DATE RECEIVED:	03/08/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	04/04/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-030516	Modified TO-11A
02A	Formaldehyde002-030516	Modified TO-11A
03A	Lab Blank	Modified TO-11A
04A	LCS	Modified TO-11A
04AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 04/04/16

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

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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# 1603127

Two TO-11 Cartridge samples were received on March 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 1420 L was used to report sample Formaldehyde002-030516 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: Formaldehyde001-030516

Lab ID#: 1603127-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	7.0	4.9

Client Sample ID: Formaldehyde002-030516

Lab ID#: 1603127-02A

No Detections Were Found.

Client Sample ID: Formaldehyde001-030516

Lab ID#: 1603127-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325007	Date of Collection: 3/5/16 6:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 3/25/16 04:08 PM
		Date of Extraction: 3/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	7.0	4.9

Air Sample Volume(L): 1420

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-030516

Lab ID#: 1603127-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325006	Date of Collection: 3/5/16
Dil. Factor:	1.00	Date of Analysis: 3/25/16 03:42 PM
		Date of Extraction: 3/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	Not Detected	Not Detected

Air Sample Volume(L): 1420

Container Type: TO-11 Cartridge

Client Sample ID: Lab Blank

Lab ID#: 1603127-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/25/16 03:16 PM
		Date of Extraction: 3/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.035	Not Detected	Not Detected

Air Sample Volume(L): 1420

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 1603127-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/25/16 02:24 PM
		Date of Extraction: 3/18/16

Compound	%Recovery	Method Limits
Formaldehyde	100	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1603127-04AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0325004

Dil. Factor: 1.00

Date of Collection: NA

Date of Analysis: 3/25/16 02:50 PM

Date of Extraction: 3/18/16

Compound	%Recovery	Method Limits
Formaldehyde	101	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

**Air
Toxics Ltd.**

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) 467-4822.

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FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020**

Page 1 of 1

Project Info:

PO. #

100

Project Name Alaska Native Youth

Turn Around Time:	Circle Reporting Units:
☒ Normal ☐ Rush _____ <i>specify</i>	ppbv ppmv <u>ug/m³</u> mg/m ³

[illegible]

4/18/2016

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

Project Name: North River WWTP
Project #: 2001.285.06.02
Workorder #: 1603277

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 3/15/2016 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 #: 1603277

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 North River WWTP
DATE RECEIVED:	03/15/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	04/05/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-031116	Modified TO-11A
02A	Formaldehyde002-031116	Modified TO-11A
03A	Formaldehyde003-031116	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 04/05/16

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# 1603277

Three TO-11 Cartridge samples were received on March 15, 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 Formaldehyde003-031116 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: Formaldehyde001-031116

Lab ID#: 1603277-01A

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

Client Sample ID: Formaldehyde002-031116

Lab ID#: 1603277-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.7	9.4

Client Sample ID: Formaldehyde003-031116

Lab ID#: 1603277-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-031116

Lab ID#: 1603277-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325011	Date of Collection: 3/11/16 11:30:00 PM
Dil. Factor:	1.00	Date of Analysis: 3/25/16 05:51 PM
		Date of Extraction: 3/18/16

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

Client Sample ID: Formaldehyde002-031116

Lab ID#: 1603277-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325012	Date of Collection: 3/11/16 11:45:00 AM
Dil. Factor:	1.00	Date of Analysis: 3/25/16 06:17 PM
		Date of Extraction: 3/18/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	6.7	9.4

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde003-031116

Lab ID#: 1603277-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325013	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/25/16 06:43 PM
		Date of Extraction: 3/18/16

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

Client Sample ID: Lab Blank

Lab ID#: 1603277-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/25/16 03:16 PM
		Date of Extraction: 3/18/16

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

Client Sample ID: LCS

Lab ID#: 1603277-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0325003
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/25/16 02:24 PM
Date of Extraction: 3/18/16

Compound	%Recovery	Method Limits
Formaldehyde	100	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1603277-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0325004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/25/16 02:50 PM
		Date of Extraction: 3/18/16

Compound	%Recovery	Method Limits
Formaldehyde	101	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

SORBENT SAMPLE COLLECTION



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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Page 1 of 1

Project Manager Rhine Almonacy

Collected by: (Print and Sign)

Rhine Almonacy

Company LOUIS BELLER Email

Address 48 Wall St 16th Fl City New York State NY Zip 10005

Phone 212-612-7951 Fax

Project Info:

P.O. #

Project # 2001, 285.06.02

Project Name North River WTP

Turn Around Time:

☒ Normal

☐ Rush

specify

Circle Reporting Units:

ppbv

ppmv

ug/m3

mg/m3

Lab I.D. Field Sample I.D. (Location)

Tube # / Cartridge #

Date of Collection

Start Time

End Time

Duration

Final Volume

Analysis Requested

01A	Formaldehyde 001-031116	03/11/16	1130	2330	720	713.2	70-1A Formaldehyde
08A	Formaldehyde 002-031116	↓	2345	1145	720	712.9	↓
09A	Formaldehyde 003-031116	✓	all	all	all	all	↓
12							

Relinquished by: (signature) 3/14/16 1500

Received by: (signature) all E472 3-15-16

Pump Calibration Information

Relinquished by: (signature)

Received by: (signature)

Pre-test Flow Rate:

Relinquished by: (signature)

Received by: (signature)

Post-test Flow Rate:

Relinquished by: (signature)

Received by: (signature)

Average Flow Rate:

Notes:

Lab Use Only

Shipper Name

Air Bill #

Temp (°C)

Condition

Custody Seals Intact?

Work Order #

Use Only

WPS

13.4°C

SDP

Yes No None

1603277

4/18/2016

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

Project Name: North River WWTP
Project #:
Workorder #: 1603387

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 3/21/2016 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 #: 1603387

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: 03/21/2016 DATE COMPLETED: 04/12/2016	BILL TO: Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 P.O. # 2001285.06.02 PROJECT # North River WWTP CONTACT: Ausha Scott
--	---

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-031716	Modified TO-11A
02A	Formaldehyde-002-031716	Modified TO-11A
03A	Formaldehyde-003-031716	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 04/12/16

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1603387

Three TO-11 Cartridge samples were received on March 21, 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-003-031716 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-001-031716

Lab ID#: 1603387-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	14	19

Client Sample ID: Formaldehyde-002-031716

Lab ID#: 1603387-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	8.6	12

Client Sample ID: Formaldehyde-003-031716

Lab ID#: 1603387-03A

No Detections Were Found.

Client Sample ID: Formaldehyde-001-031716

Lab ID#: 1603387-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407014	Date of Collection: 3/17/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 4/7/16 07:48 PM
		Date of Extraction: 3/31/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	14	19

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde-002-031716

Lab ID#: 1603387-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407015	Date of Collection: 3/17/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 4/7/16 08:14 PM
		Date of Extraction: 3/31/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	8.6	12

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde-003-031716

Lab ID#: 1603387-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407016	Date of Collection: 3/17/16
Dil. Factor:	1.00	Date of Analysis: 4/7/16 08:40 PM
		Date of Extraction: 3/31/16

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

Client Sample ID: Lab Blank

Lab ID#: 1603387-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407010	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/7/16 06:05 PM
		Date of Extraction: 3/31/16

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

Client Sample ID: LCS

Lab ID#: 1603387-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407008	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/7/16 05:13 PM
		Date of Extraction: 3/31/16

Compound	%Recovery	Method Limits
Formaldehyde	104	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1603387-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0407009
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 4/7/16 05:39 PM
Date of Extraction: 3/31/16

Compound	%Recovery	Method Limits
Formaldehyde	107	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

**Air
TOXICS LTD.**

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.

Page 1 of 1

Phone 973-418-1267 Fax _____

specify

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Pump Calibration Information Pre-test Flow Rate: Post-test Flow Rate: Average Flow Rate: Notes:
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	VPS		15.4	SDR	Yes No <u>(None)</u>	1603387

4/18/2016

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

Project Name: North River WWTP
Project #: 2001.285.06.02
Workorder #: 1603486

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 3/25/2016 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 #: 1603486

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 North River WWTP
DATE RECEIVED:	03/25/2016	CONTACT:	Ausha Scott
DATE COMPLETED:	04/12/2016		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde001-032316	Modified TO-11A
02A	Formaldehyde002-032316	Modified TO-11A
03A	Formaldehyde003-032316	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 04/12/16

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

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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# 1603486

Three TO-11 Cartridge samples were received on March 25, 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 003-032316 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: Formaldehyde001-032316

Lab ID#: 1603486-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	7.5	10

Client Sample ID: Formaldehyde002-032316

Lab ID#: 1603486-02A

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

Client Sample ID: Formaldehyde003-032316

Lab ID#: 1603486-03A

No Detections Were Found.

Client Sample ID: Formaldehyde001-032316

Lab ID#: 1603486-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407017	Date of Collection: 3/23/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 4/7/16 09:06 PM
		Date of Extraction: 3/31/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	7.5	10

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde002-032316

Lab ID#: 1603486-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407018	Date of Collection: 3/23/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 4/7/16 09:32 PM
		Date of Extraction: 3/31/16

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

Client Sample ID: Formaldehyde003-032316

Lab ID#: 1603486-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407019	Date of Collection:	3/23/16
Dil. Factor:	1.00	Date of Analysis:	4/7/16 09:58 PM
		Date of Extraction:	3/31/16

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

Client Sample ID: Lab Blank

Lab ID#: 1603486-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407010	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/7/16 06:05 PM
		Date of Extraction: 3/31/16

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

Client Sample ID: LCS

Lab ID#: 1603486-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407008	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/7/16 05:13 PM
		Date of Extraction: 3/31/16

Compound	%Recovery	Method Limits
Formaldehyde	104	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1603486-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0407009
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 4/7/16 05:39 PM
Date of Extraction: 3/31/16

Compound	%Recovery	Method Limits
Formaldehyde	107	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

CHAIN-OF-CUSTODY RECORD

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.

Page 7 of 7

Phone 212-612-1931

Project Name Ant-Layer Work

Specificity

 mg/m^3 [illegible]

4/18/2016

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

Project Name: North River WWTP
Project #:
Workorder #: 1603592

Dear Mr. Rhine Almonacy

The following report includes the data for the above referenced project for sample(s) received on 3/31/2016 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 #: 1603592

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: 03/31/2016 DATE COMPLETED: 04/12/2016	BILL TO: Accounts Payable The Louis Berger Group, Inc. 412 Mount Kemble Avenue 5th Floor Morristown, NJ 07960 P.O. # 2001285.06.02 PROJECT # North River WWTP CONTACT: Ausha Scott
--	---

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Formaldehyde-001-032916	Modified TO-11A
02A	Formaldehyde-002-032916	Modified TO-11A
03A	Formaldehyde-003-032916	Modified TO-11A
04A	Lab Blank	Modified TO-11A
05A	LCS	Modified TO-11A
05AA	LCSD	Modified TO-11A

CERTIFIED BY:



Technical Director

DATE: 04/12/16

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

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LABORATORY NARRATIVE
Modified TO-11A
The Louis Berger Group, Inc.
Workorder# 1603592

Three TO-11 Cartridge samples were received on March 31, 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-003-032916 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-001-032916

Lab ID#: 1603592-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	10	15

Client Sample ID: Formaldehyde-002-032916

Lab ID#: 1603592-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	7.8	11

Client Sample ID: Formaldehyde-003-032916

Lab ID#: 1603592-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	0.11	0.15

Client Sample ID: Formaldehyde-001-032916

Lab ID#: 1603592-01A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0411004	Date of Collection: 3/29/16 6:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 4/11/16 10:18 AM
		Date of Extraction: 3/31/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	10	15

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge



Air Toxics

Client Sample ID: Formaldehyde-002-032916

Lab ID#: 1603592-02A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407012	Date of Collection:	3/29/16 6:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	4/7/16 06:56 PM
		Date of Extraction:	3/31/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	7.8	11

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Formaldehyde-003-032916

Lab ID#: 1603592-03A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407013	Date of Collection:	3/29/16
Dil. Factor:	1.00	Date of Analysis:	4/7/16 07:22 PM
		Date of Extraction:	3/31/16

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Formaldehyde	0.050	0.070	0.11	0.15

Air Sample Volume(L): 713

Container Type: TO-11 Cartridge

Client Sample ID: Lab Blank

Lab ID#: 1603592-04A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407010	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/7/16 06:05 PM
		Date of Extraction: 3/31/16

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

Client Sample ID: LCS

Lab ID#: 1603592-05A

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name:	f0407008	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/7/16 05:13 PM
		Date of Extraction: 3/31/16

Compound	%Recovery	Method Limits
Formaldehyde	104	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1603592-05AA

AMBIENT AIR: EPA METHOD TO-11A HPLC

File Name: f0407009
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 4/7/16 05:39 PM
Date of Extraction: 3/31/16

Compound	%Recovery	Method Limits
Formaldehyde	107	85-115

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

**Air
Toxics Ltd.**

Sample Transportation Notice

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

Page 1 of 1

Project Info:

P.O.# _____

Up, com

Project Name North River WWT

specify

Turn Around Time

Circle Reporting Units:

☒ Normal

ppbv

ppmv

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
01a	Formaldehyde - DD1-032916	channel 1	3/29/16	6:00	18:00	12h	713.2	T0-11A Formaldehyde ↓
02a	Formaldehyde - DD2-032916	channel 2	3/29/16	18:15	6:15	12h	712.8	
03a	Formaldehyde - DD3-032916	Blank	3/29/16	-	-	-	-	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Pump Calibration Information				
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Pre-test Flow Rate:				
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Post-test Flow Rate:				
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Average Flow Rate:				
Notes:								
Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #		
	WPS		15.8°C	SDR	Yes No None	1603592		

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:

1st Quarter 2016

Date & Time	WS	WD
	mph	Deg
07/01/2016 00:00	14	52
07/01/2016 01:00	11.2	30.4
07/01/2016 02:00	17.3	45.1
07/01/2016 03:00	19	55
07/01/2016 04:00	11.1	197.4
07/01/2016 05:00	13.9	19
07/01/2016 06:00	2	17.8
07/01/2016 07:00	3.9	61.3
07/01/2016 08:00	11.3	179.4
07/01/2016 09:00	0.7	310
07/01/2016 10:00	1.2	310.1
07/01/2016 11:00	1.7	347.1
07/01/2016 12:00	1.8	1.6
07/01/2016 13:00	2.1	4.7
07/01/2016 14:00	1.8	8.2
07/01/2016 15:00	1.5	12.7
07/01/2016 16:00	1.2	7.8
07/01/2016 17:00	1.3	10.6
07/01/2016 18:00	1.2	2.9
07/01/2016 19:00	2.2	20
07/01/2016 20:00	2.3	26.9
07/01/2016 21:00	2.6	23.8
07/01/2016 22:00	2.9	23.3
07/01/2016 23:00	3.4	23.4
11/01/2016 00:00	9.9	268.4
11/01/2016 01:00	10.3	269.1
11/01/2016 02:00	10.5	263.2
11/01/2016 03:00	15.2	272.3
11/01/2016 04:00	9.5	264.5
11/01/2016 05:00	9.1	275.9
11/01/2016 06:00	8.9	263.2
11/01/2016 07:00	11	271
11/01/2016 08:00	10.6	268.2
11/01/2016 09:00	13.1	269.4
11/01/2016 10:00	9.5	273.3
11/01/2016 11:00	10.1	270.8
11/01/2016 12:00	9.3	276.3
11/01/2016 13:00	11	273.5
11/01/2016 14:00	8.1	277.7
11/01/2016 15:00	8.8	231.5

Date & Time	WS	WD
	mph	Deg
11/01/2016 16:00	16	265
11/01/2016 17:00	11.8	271.4
11/01/2016 18:00	11	274.9
11/01/2016 19:00	13.8	271.8
11/01/2016 20:00	13.7	261.2
11/01/2016 21:00	8.9	280.9
11/01/2016 22:00	3.1	326
11/01/2016 23:00	5.5	332.7
17/01/2016 00:00	11	251.6
17/01/2016 01:00	4.2	304.3
17/01/2016 02:00	3.2	330.1
17/01/2016 03:00	4.9	349
17/01/2016 04:00	4.7	356
17/01/2016 05:00	4.1	354.1
17/01/2016 06:00	3.5	359.1
17/01/2016 07:00	3.9	9.4
17/01/2016 08:00	3.3	14
17/01/2016 09:00	3.5	17.5
17/01/2016 10:00	3.8	23.1
17/01/2016 11:00	3.2	15.8
17/01/2016 12:00	3.6	14
17/01/2016 13:00	3.5	13.6
17/01/2016 14:00	3	16.8
17/01/2016 15:00	3.4	10.4
17/01/2016 16:00	6.2	352.7
17/01/2016 17:00	3.1	0.9
17/01/2016 18:00	3	14.8
17/01/2016 19:00	2.2	349.4
17/01/2016 20:00	4	297.1
17/01/2016 21:00	4.5	290.2
17/01/2016 22:00	4.7	280.2
17/01/2016 23:00	11.8	286.1
23/01/2016 00:00	6.1	47.3
23/01/2016 01:00	6.6	44.8
23/01/2016 02:00	7	44.5
23/01/2016 03:00	7	42.9
23/01/2016 04:00	7	40.5
23/01/2016 05:00	7.1	42.2
23/01/2016 06:00	7.5	41.2
23/01/2016 07:00	8.7	42.7
23/01/2016 08:00	8.6	39.7
23/01/2016 09:00	8.1	37.6
23/01/2016 10:00	8.9	28.4
23/01/2016 11:00	8.9	28.6
23/01/2016 12:00	9.6	26.6
23/01/2016 13:00	9.1	25.8
23/01/2016 14:00	9.1	25.7

Date & Time	WS	WD
	mph	Deg
23/01/2016 15:00	10.3	26.4
23/01/2016 16:00	9.9	26.6
23/01/2016 17:00	9.7	23.5
23/01/2016 18:00	10.2	20.1
23/01/2016 19:00	9.5	14
23/01/2016 20:00	10.9	10.3
23/01/2016 21:00	9.1	13
23/01/2016 22:00	8.6	16.2
23/01/2016 23:00	8.7	13.2
29/01/2016 00:00	17.9	50.6
29/01/2016 01:00	8.4	195
29/01/2016 02:00	15.3	49.1
29/01/2016 03:00	9.2	184.4
29/01/2016 04:00	6.7	216.6
29/01/2016 05:00	7.2	291.8
29/01/2016 06:00	8.9	13.1
29/01/2016 07:00	13.2	46.6
29/01/2016 08:00	8.8	257.8
29/01/2016 09:00	10.6	285.3
29/01/2016 10:00	8.6	277.4
29/01/2016 11:00	7.2	282.2
29/01/2016 12:00	9.8	302.3
29/01/2016 13:00	5.8	306.7
29/01/2016 14:00	5.1	309.9
29/01/2016 15:00	6.2	290.8
29/01/2016 16:00	6.2	304.7
29/01/2016 17:00	7	285.8
29/01/2016 18:00	6.6	300.9
29/01/2016 19:00	5.7	322.6
29/01/2016 20:00	5.8	316
29/01/2016 21:00	4.6	325.3
29/01/2016 22:00	5.8	309.2
29/01/2016 23:00	13.5	280.4
04/02/2016 00:00	10	128.6
04/02/2016 01:00	9.1	201.7
04/02/2016 02:00	12.2	208.8
04/02/2016 03:00	7.8	199.1
04/02/2016 04:00	4.7	215.2
04/02/2016 05:00	7.9	214.9
04/02/2016 06:00	15.1	28.4
04/02/2016 07:00	20.5	96.7
04/02/2016 08:00	15.7	142.2
04/02/2016 09:00	3.6	328.3
04/02/2016 10:00	4.3	331.2
04/02/2016 11:00	4	312.5
04/02/2016 12:00	8.1	16.5
04/02/2016 13:00	3.7	311.3

Date & Time	WS	WD
	mph	Deg
04/02/2016 14:00	3	339.2
04/02/2016 15:00	3.3	353.1
04/02/2016 16:00	2.3	338
04/02/2016 17:00	2	343.6
04/02/2016 18:00	2.2	324.1
04/02/2016 19:00	2.5	10.4
04/02/2016 20:00	4.8	20.3
04/02/2016 21:00	4.7	21.6
04/02/2016 22:00	4.8	23.3
04/02/2016 23:00	5.1	21.2
10/02/2016 00:00	2.2	294.7
10/02/2016 01:00	4.8	279.5
10/02/2016 02:00	11.2	45.4
10/02/2016 03:00	12.9	51.6
10/02/2016 04:00	13.9	13.7
10/02/2016 05:00	20.1	42.4
10/02/2016 06:00	16.2	33.8
10/02/2016 07:00	13.7	17.3
10/02/2016 08:00	12.9	299.4
10/02/2016 09:00	14.1	297.4
10/02/2016 10:00	16.1	294.1
10/02/2016 11:00	8.9	269.4
10/02/2016 12:00	12.3	238.8
10/02/2016 13:00	8.8	278
10/02/2016 14:00	12	269.6
10/02/2016 15:00	9.8	267.4
10/02/2016 16:00	15	277.5
10/02/2016 17:00	13.9	311.5
10/02/2016 18:00	11.2	265.5
10/02/2016 19:00	10.8	259.7
10/02/2016 20:00	8.4	278.2
10/02/2016 21:00	9.2	281.4
10/02/2016 22:00	18.6	301
10/02/2016 23:00	7.2	273.2
16/02/2016 00:00	4.5	314.8
16/02/2016 01:00	4.7	318.8
16/02/2016 02:00	4.6	320.1
16/02/2016 03:00	3.5	15.9
16/02/2016 04:00	3.9	153.7
16/02/2016 05:00	2.7	145.9
16/02/2016 06:00	3.3	144.4
16/02/2016 07:00	6.8	153.8
16/02/2016 08:00	5.8	152.7
16/02/2016 09:00	5.8	145.5
16/02/2016 10:00	4.6	153.1
16/02/2016 11:00	7.4	142.8
16/02/2016 12:00	12.1	161.2

Date & Time	WS	WD
	mph	Deg
16/02/2016 13:00	7.4	142.7
16/02/2016 14:00	8.1	167.7
16/02/2016 15:00	6.1	207.2
16/02/2016 16:00	9.2	211.3
16/02/2016 17:00	9.2	221.1
16/02/2016 18:00	11.4	258.9
16/02/2016 19:00	14.9	279.8
16/02/2016 20:00	7.5	279.2
16/02/2016 21:00	4.8	298.2
16/02/2016 22:00	4.1	305.4
16/02/2016 23:00	4.5	297.5
22/02/2016 00:00	3.4	28.1
22/02/2016 01:00	4	21.6
22/02/2016 02:00	4.2	23.7
22/02/2016 03:00	3.1	27.1
22/02/2016 04:00	2.8	27
22/02/2016 05:00	2.9	28.7
22/02/2016 06:00	3	22.7
22/02/2016 07:00	3	29.1
22/02/2016 08:00	2.3	22.3
22/02/2016 09:00	2.5	11.2
22/02/2016 10:00	2	10.4
22/02/2016 11:00	1.3	344.6
22/02/2016 12:00	2.5	281.2
22/02/2016 13:00	4.4	347.4
22/02/2016 14:00	2.1	5.7
22/02/2016 15:00	1.8	2.5
22/02/2016 16:00	2.5	12.5
22/02/2016 17:00	1.9	4.2
22/02/2016 18:00	2.8	26.7
22/02/2016 19:00	13.7	204.4
22/02/2016 20:00	10.8	28.4
22/02/2016 21:00	3.5	49
22/02/2016 22:00	4.4	50.9
22/02/2016 23:00	4.6	55.1
28/02/2016 00:00	12.2	232.1
28/02/2016 01:00	14.1	265.9
28/02/2016 02:00	13.1	226.3
28/02/2016 03:00	11	224.7
28/02/2016 04:00	11.6	224.3
28/02/2016 05:00	15.2	29.6
28/02/2016 06:00	12.8	223.9
28/02/2016 07:00	13.5	221.9
28/02/2016 08:00	18.4	215.9
28/02/2016 09:00	6.3	217.3
28/02/2016 10:00	6.7	214
28/02/2016 11:00	11.8	214.2

Date & Time	WS	WD
	mph	Deg
28/02/2016 12:00	9.3	221.3
28/02/2016 13:00	7.5	213
28/02/2016 14:00	7.9	212
28/02/2016 15:00	8.3	209.4
28/02/2016 16:00	7.8	211.4
28/02/2016 17:00	7.8	209.3
28/02/2016 18:00	6.5	211
28/02/2016 19:00	6.7	213.9
28/02/2016 20:00	8.9	212.1
28/02/2016 21:00	7	213
28/02/2016 22:00	6.5	213.7
28/02/2016 23:00	6.4	212
05/03/2016 00:00	4.5	359
05/03/2016 01:00	5.3	8.9
05/03/2016 02:00	4.6	349.2
05/03/2016 03:00	4.3	333.9
05/03/2016 04:00	4.4	351.3
05/03/2016 05:00	4.5	44
05/03/2016 06:00	5	1.4
05/03/2016 07:00	4.7	349.1
05/03/2016 08:00	4.4	347.3
05/03/2016 09:00	4.1	8.4
05/03/2016 10:00	3.2	32.9
05/03/2016 11:00	3.3	33.2
05/03/2016 12:00	3.2	36.4
05/03/2016 13:00	2.8	26.9
05/03/2016 14:00	2.7	19
05/03/2016 15:00	2.4	18.5
05/03/2016 16:00	2.4	28.8
05/03/2016 17:00	3.9	28.9
05/03/2016 18:00	3.8	54.5
05/03/2016 19:00	4	94
05/03/2016 20:00	3.9	73.4
05/03/2016 21:00	2.3	44.3
05/03/2016 22:00	4	165.1
05/03/2016 23:00	3.3	140.7
11/03/2016 00:00	8.9	235.7
11/03/2016 01:00	5	338.2
11/03/2016 02:00	3.8	20.7
11/03/2016 03:00	2.7	20.5
11/03/2016 04:00	0.9	1.6
11/03/2016 05:00	5.4	290.4
11/03/2016 06:00	14.6	27.7
11/03/2016 07:00	11	295.7
11/03/2016 08:00	5.5	318.8
11/03/2016 09:00	8.7	153.4
11/03/2016 10:00	4.5	328.9

Date & Time	WS	WD
	mph	Deg
11/03/2016 11:00	4.3	335
11/03/2016 12:00	4.8	308
11/03/2016 13:00	3.9	305.2
11/03/2016 14:00	3.9	337.2
11/03/2016 15:00	4.9	330.3
11/03/2016 16:00	4.8	328.2
11/03/2016 17:00	4.7	324.9
11/03/2016 18:00	6.8	218.1
11/03/2016 19:00	3.4	321.8
11/03/2016 20:00	3.3	327.3
11/03/2016 21:00	3.2	328.8
11/03/2016 22:00	2.9	337.7
11/03/2016 23:00	2	355.3
17/03/2016 00:00	3.7	76.1
17/03/2016 01:00	3.1	75
17/03/2016 02:00	2.6	105.7
17/03/2016 03:00	1.7	103
17/03/2016 04:00	2	306.2
17/03/2016 05:00	9.6	294.4
17/03/2016 06:00	14.6	10
17/03/2016 07:00	7.9	218.1
17/03/2016 08:00	28.9	47.3
17/03/2016 09:00	9.9	212.2
17/03/2016 10:00	5.1	216.6
17/03/2016 11:00	13.1	72.6
17/03/2016 12:00	8.3	297.5
17/03/2016 13:00	8.7	282.2
17/03/2016 14:00	11.9	263.5
17/03/2016 15:00	7.4	302.7
17/03/2016 16:00	8.1	302.7
17/03/2016 17:00	5	253.9
17/03/2016 18:00	14.6	41.3
17/03/2016 19:00	14.4	22.6
17/03/2016 20:00	6.1	341.7
17/03/2016 21:00	7.8	268.6
17/03/2016 22:00	12.1	34.4
17/03/2016 23:00	12.4	32.2
23/03/2016 00:00	11	231.7
23/03/2016 01:00	13.5	253.3
23/03/2016 02:00	7.2	215.7
23/03/2016 03:00	12.1	249.8
23/03/2016 04:00	8.4	222.8
23/03/2016 05:00	10.7	228.2
23/03/2016 06:00	11.2	253.1
23/03/2016 07:00	14.3	275.8
23/03/2016 08:00	11.7	234.2
23/03/2016 09:00	11.9	273.9

Date & Time	WS	WD
	mph	Deg
23/03/2016 10:00	9.9	263.2
23/03/2016 11:00	12.9	296.6
23/03/2016 12:00	10.6	264.5
23/03/2016 13:00	8.5	266
23/03/2016 14:00	13.4	288.2
23/03/2016 15:00	8.5	269.5
23/03/2016 16:00	10.4	261.4
23/03/2016 17:00	14.2	346.1
23/03/2016 18:00	10.3	182.5
23/03/2016 19:00	5.7	149.9
23/03/2016 20:00	0.9	200.9
23/03/2016 21:00	5.8	23.6
23/03/2016 22:00	5.2	22.1
23/03/2016 23:00	4.4	20.6
29/03/2016 00:00	11.4	291.5
29/03/2016 01:00	11.1	293.3
29/03/2016 02:00	9.9	294.2
29/03/2016 03:00	8.1	290.7
29/03/2016 04:00	7.8	292.2
29/03/2016 05:00	8.5	295.8
29/03/2016 06:00	7.9	293.7
29/03/2016 07:00	8.4	295.1
29/03/2016 08:00	9.6	291.9
29/03/2016 09:00	10.1	289.8
29/03/2016 10:00	9.3	294.5
29/03/2016 11:00	8.9	300.7
29/03/2016 12:00	7.9	308.2
29/03/2016 13:00	7.5	316
29/03/2016 14:00	6.9	309.9
29/03/2016 15:00	8.2	310.8
29/03/2016 16:00	6.9	313.8
29/03/2016 17:00	6.1	312.4
29/03/2016 18:00	5.5	318.5
29/03/2016 19:00	5.1	317.7
29/03/2016 20:00	7.5	307.1
29/03/2016 21:00	5.4	341.7
29/03/2016 22:00	5.2	351.8
29/03/2016 23:00	3.6	358.8

APPENDIX C

Flow Rate and Volume

aqms5

formaldehyde001

Ch. 1 Cartridge Started Thursday, January 07, 2016 6:00:00

Flow Rate Set Point 1.00 l/min

Stopped Thursday, January 07, 2016 18:00:24

Total Volume 713.16 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate -0.004 l/min

Ending Leak Rate -0.005 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
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Thursday, January 07, 2016 6:00:27	0.076	0.23	50.0
Thursday, January 07, 2016 6:05:28	0.991	5.20	49.7
Thursday, January 07, 2016 6:10:28	0.991	10.15	50.2
Thursday, January 07, 2016 6:15:29	0.991	15.12	50.1
Thursday, January 07, 2016 6:20:29	0.991	20.08	50.1
Thursday, January 07, 2016 6:25:29	0.991	25.03	50.2
Thursday, January 07, 2016 6:30:30	0.991	30.00	50.2
Thursday, January 07, 2016 6:35:30	0.991	34.95	50.1
Thursday, January 07, 2016 6:40:31	0.991	39.92	50.0
Thursday, January 07, 2016 6:45:31	0.991	44.88	50.1
Thursday, January 07, 2016 6:50:31	0.991	49.83	49.7
Thursday, January 07, 2016 6:55:32	0.991	54.80	50.2
Thursday, January 07, 2016 7:00:32	0.991	59.75	50.3
Thursday, January 07, 2016 7:05:33	0.991	64.72	50.1
Thursday, January 07, 2016 7:10:33	0.991	69.68	50.0
Thursday, January 07, 2016 7:15:33	0.991	74.63	49.6
Thursday, January 07, 2016 7:20:34	0.991	79.60	50.2
Thursday, January 07, 2016 7:25:34	0.991	84.56	50.1
Thursday, January 07, 2016 7:30:35	0.991	89.53	50.3
Thursday, January 07, 2016 7:35:35	0.991	94.48	50.0
Thursday, January 07, 2016 7:40:35	0.991	99.43	49.9
Thursday, January 07, 2016 7:45:36	0.991	104.40	50.1
Thursday, January 07, 2016 7:50:36	0.991	109.36	50.1
Thursday, January 07, 2016 7:55:37	0.991	114.33	50.1
Thursday, January 07, 2016 8:00:37	0.991	119.28	50.1
Thursday, January 07, 2016 8:05:37	0.991	124.23	49.8
Thursday, January 07, 2016 8:10:38	0.991	129.20	50.1
Thursday, January 07, 2016 8:15:38	0.991	134.16	50.0
Thursday, January 07, 2016 8:20:39	0.991	139.13	49.7
Thursday, January 07, 2016 8:25:39	0.991	144.08	50.2
Thursday, January 07, 2016 8:30:40	0.991	149.05	50.1
Thursday, January 07, 2016 8:35:40	0.991	154.00	50.2
Thursday, January 07, 2016 8:40:40	0.991	158.96	49.9

Thursday, January 07, 2016 8:45:41 0.991	163.93	49.7
Thursday, January 07, 2016 8:50:41 0.991	168.88	50.1
Thursday, January 07, 2016 8:55:42 0.991	173.85	50.1
Thursday, January 07, 2016 9:00:42 0.991	178.81	50.1
Thursday, January 07, 2016 9:05:43 0.991	183.78	50.1
Thursday, January 07, 2016 9:10:43 0.991	188.73	49.8
Thursday, January 07, 2016 9:15:43 0.991	193.68	50.3
Thursday, January 07, 2016 9:20:44 0.991	198.65	50.3
Thursday, January 07, 2016 9:25:44 0.991	203.61	49.5
Thursday, January 07, 2016 9:30:45 0.991	208.58	50.2
Thursday, January 07, 2016 9:35:45 0.991	213.53	49.6
Thursday, January 07, 2016 9:40:45 0.991	218.48	50.1
Thursday, January 07, 2016 9:45:46 0.991	223.45	50.2
Thursday, January 07, 2016 9:50:46 0.991	228.41	49.3
Thursday, January 07, 2016 9:55:47 0.991	233.38	50.1
Thursday, January 07, 2016 10:00:47 0.991	238.33	50.2
Thursday, January 07, 2016 10:05:47 0.991	243.29	49.3
Thursday, January 07, 2016 10:10:48 0.991	248.26	50.0
Thursday, January 07, 2016 10:15:48 0.991	253.21	50.1
Thursday, January 07, 2016 10:20:49 0.991	258.18	50.0
Thursday, January 07, 2016 10:25:49 0.991	263.13	50.1
Thursday, January 07, 2016 10:30:49 0.991	268.09	49.8
Thursday, January 07, 2016 10:35:50 0.991	273.06	49.3
Thursday, January 07, 2016 10:40:50 0.991	278.01	50.2
Thursday, January 07, 2016 10:45:51 0.991	282.98	50.1
Thursday, January 07, 2016 10:50:51 0.991	287.94	50.1
Thursday, January 07, 2016 10:55:52 0.991	292.91	50.2
Thursday, January 07, 2016 11:00:52 0.991	297.86	50.2
Thursday, January 07, 2016 11:05:52 0.991	302.82	50.2
Thursday, January 07, 2016 11:10:53 0.991	307.79	50.0
Thursday, January 07, 2016 11:15:53 0.991	312.74	50.3
Thursday, January 07, 2016 11:20:54 0.991	317.71	50.1
Thursday, January 07, 2016 11:25:54 0.991	322.66	50.1
Thursday, January 07, 2016 11:30:55 0.991	327.63	49.4
Thursday, January 07, 2016 11:35:55 0.991	332.59	50.1
Thursday, January 07, 2016 11:40:55 0.991	337.54	49.7
Thursday, January 07, 2016 11:45:56 0.991	342.51	50.2
Thursday, January 07, 2016 11:50:56 0.991	347.47	50.0
Thursday, January 07, 2016 11:55:57 0.991	352.44	50.0
Thursday, January 07, 2016 12:00:57 0.991	357.39	50.2
Thursday, January 07, 2016 12:05:57 0.991	362.34	50.1
Thursday, January 07, 2016 12:10:58 0.991	367.31	50.1
Thursday, January 07, 2016 12:15:58 0.991	372.27	50.1
Thursday, January 07, 2016 12:20:59 0.991	377.24	49.4
Thursday, January 07, 2016 12:25:59 0.991	382.19	50.1
Thursday, January 07, 2016 12:31:00 0.991	387.16	50.1
Thursday, January 07, 2016 12:36:00 0.991	392.12	50.3
Thursday, January 07, 2016 12:41:00 0.991	397.07	50.1
Thursday, January 07, 2016 12:46:01 0.991	402.04	50.1
Thursday, January 07, 2016 12:51:01 0.991	406.99	50.1
Thursday, January 07, 2016 12:56:02 0.991	411.96	50.1
Thursday, January 07, 2016 13:01:02 0.991	416.92	50.1
Thursday, January 07, 2016 13:06:03 0.991	421.89	50.4
Thursday, January 07, 2016 13:11:03 0.991	426.84	50.3

Thursday, January 07, 2016 13:16:04 0.991	431.81	50.1
Thursday, January 07, 2016 13:21:04 0.991	436.76	50.1
Thursday, January 07, 2016 13:26:04 0.991	441.72	50.3
Thursday, January 07, 2016 13:31:05 0.991	446.69	50.2
Thursday, January 07, 2016 13:36:05 0.991	451.64	50.2
Thursday, January 07, 2016 13:41:06 0.991	456.61	49.4
Thursday, January 07, 2016 13:46:06 0.991	461.57	50.3
Thursday, January 07, 2016 13:51:07 0.991	466.54	49.8
Thursday, January 07, 2016 13:56:07 0.991	471.49	50.0
Thursday, January 07, 2016 14:01:07 0.991	476.44	50.1
Thursday, January 07, 2016 14:06:08 0.991	481.41	50.2
Thursday, January 07, 2016 14:11:08 0.991	486.37	49.7
Thursday, January 07, 2016 14:16:09 0.991	491.34	49.9
Thursday, January 07, 2016 14:21:09 0.991	496.29	49.8
Thursday, January 07, 2016 14:26:10 0.991	501.26	49.1
Thursday, January 07, 2016 14:31:10 0.991	506.22	50.1
Thursday, January 07, 2016 14:36:10 0.991	511.17	50.2
Thursday, January 07, 2016 14:41:11 0.991	516.14	50.2
Thursday, January 07, 2016 14:46:11 0.991	521.09	50.4
Thursday, January 07, 2016 14:51:12 0.991	526.06	50.3
Thursday, January 07, 2016 14:56:12 0.991	531.02	49.7
Thursday, January 07, 2016 15:01:13 0.991	535.99	49.8
Thursday, January 07, 2016 15:06:13 0.991	540.94	50.0
Thursday, January 07, 2016 15:11:14 0.991	545.91	49.6
Thursday, January 07, 2016 15:16:14 0.991	550.86	50.1
Thursday, January 07, 2016 15:21:14 0.991	555.82	50.1
Thursday, January 07, 2016 15:26:15 0.991	560.78	50.4
Thursday, January 07, 2016 15:31:15 0.991	565.74	50.3
Thursday, January 07, 2016 15:36:16 0.991	570.71	49.9
Thursday, January 07, 2016 15:41:16 0.991	575.66	50.1
Thursday, January 07, 2016 15:46:17 0.991	580.63	50.2
Thursday, January 07, 2016 15:51:17 0.991	585.58	50.2
Thursday, January 07, 2016 15:56:18 0.991	590.55	49.4
Thursday, January 07, 2016 16:01:18 0.991	595.51	50.1
Thursday, January 07, 2016 16:06:19 0.991	600.48	50.2
Thursday, January 07, 2016 16:11:19 0.991	605.43	50.3
Thursday, January 07, 2016 16:16:19 0.991	610.38	49.7
Thursday, January 07, 2016 16:21:20 0.991	615.35	49.4
Thursday, January 07, 2016 16:26:20 0.991	620.31	50.2
Thursday, January 07, 2016 16:31:21 0.991	625.28	49.8
Thursday, January 07, 2016 16:36:21 0.991	630.23	50.2
Thursday, January 07, 2016 16:41:22 0.991	635.20	49.8
Thursday, January 07, 2016 16:46:22 0.991	640.15	50.5
Thursday, January 07, 2016 16:51:22 0.991	645.11	49.8
Thursday, January 07, 2016 16:56:23 0.991	650.08	50.2
Thursday, January 07, 2016 17:01:23 0.991	655.03	50.0
Thursday, January 07, 2016 17:06:24 0.991	660.00	50.0
Thursday, January 07, 2016 17:11:24 0.991	664.95	49.9
Thursday, January 07, 2016 17:16:25 0.991	669.92	50.0
Thursday, January 07, 2016 17:21:25 0.991	674.88	49.8
Thursday, January 07, 2016 17:26:25 0.991	679.83	50.1
Thursday, January 07, 2016 17:31:26 0.991	684.80	49.7
Thursday, January 07, 2016 17:36:26 0.991	689.75	50.3
Thursday, January 07, 2016 17:41:27 0.991	694.72	50.1

Thursday, January 07, 2016 17:46:27	0.991	699.68	50.1
Thursday, January 07, 2016 17:51:28	0.991	704.65	50.6
Thursday, January 07, 2016 17:56:28	0.991	709.60	50.0
Thursday, January 07, 2016 18:00:03	0.991	713.15	50.3

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, January 07, 2016 18:15:05

Flow Rate Set Point 1.00 l/min

Stopped Friday, January 08, 2016 6:15:24

Total Volume 712.77 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.015 l/min

Ending Leak Rate 0.009 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Thursday, January 07, 2016 18:15:32	0.091	0.22	50.1
Thursday, January 07, 2016 18:20:32	0.991	5.18	50.3
Thursday, January 07, 2016 18:25:33	0.990	10.14	50.3
Thursday, January 07, 2016 18:30:33	0.990	15.10	50.1
Thursday, January 07, 2016 18:35:34	0.990	20.06	50.1
Thursday, January 07, 2016 18:40:34	0.990	25.02	50.2
Thursday, January 07, 2016 18:45:34	0.990	29.97	50.2
Thursday, January 07, 2016 18:50:35	0.990	34.93	50.0
Thursday, January 07, 2016 18:55:35	0.990	39.88	50.1
Thursday, January 07, 2016 19:00:36	0.990	44.85	50.3
Thursday, January 07, 2016 19:05:36	0.990	49.80	50.3
Thursday, January 07, 2016 19:10:37	0.990	54.77	49.8
Thursday, January 07, 2016 19:15:37	0.990	59.72	49.7
Thursday, January 07, 2016 19:20:38	0.990	64.69	50.4
Thursday, January 07, 2016 19:25:38	0.990	69.64	49.4
Thursday, January 07, 2016 19:30:38	0.990	74.59	50.0
Thursday, January 07, 2016 19:35:39	0.990	79.56	50.4
Thursday, January 07, 2016 19:40:39	0.990	84.51	50.2
Thursday, January 07, 2016 19:45:40	0.990	89.48	50.4
Thursday, January 07, 2016 19:50:40	0.990	94.43	50.3
Thursday, January 07, 2016 19:55:41	0.990	99.40	50.0
Thursday, January 07, 2016 20:00:41	0.990	104.35	50.4
Thursday, January 07, 2016 20:05:42	0.990	109.32	50.1
Thursday, January 07, 2016 20:10:42	0.990	114.27	50.1
Thursday, January 07, 2016 20:15:42	0.990	119.22	50.4
Thursday, January 07, 2016 20:20:43	0.990	124.19	50.3
Thursday, January 07, 2016 20:25:43	0.990	129.14	49.9
Thursday, January 07, 2016 20:30:44	0.990	134.11	50.3
Thursday, January 07, 2016 20:35:44	0.990	139.06	50.3
Thursday, January 07, 2016 20:40:45	0.990	144.03	50.3
Thursday, January 07, 2016 20:45:45	0.990	148.98	50.2
Thursday, January 07, 2016 20:50:46	0.990	153.95	49.9
Thursday, January 07, 2016 20:55:46	0.990	158.90	50.1

Thursday, January 07, 2016 21:00:46 0.990	163.85	50.4
Thursday, January 07, 2016 21:05:47 0.990	168.82	50.3
Thursday, January 07, 2016 21:10:47 0.990	173.77	50.1
Thursday, January 07, 2016 21:15:48 0.990	178.73	50.1
Thursday, January 07, 2016 21:20:48 0.990	183.69	49.7
Thursday, January 07, 2016 21:25:49 0.990	188.65	50.2
Thursday, January 07, 2016 21:30:49 0.990	193.61	50.1
Thursday, January 07, 2016 21:35:49 0.990	198.56	50.3
Thursday, January 07, 2016 21:40:50 0.990	203.52	50.2
Thursday, January 07, 2016 21:45:50 0.990	208.48	50.1
Thursday, January 07, 2016 21:50:51 0.990	213.44	50.2
Thursday, January 07, 2016 21:55:51 0.990	218.39	49.9
Thursday, January 07, 2016 22:00:52 0.990	223.36	49.9
Thursday, January 07, 2016 22:05:52 0.990	228.31	50.1
Thursday, January 07, 2016 22:10:53 0.990	233.28	50.3
Thursday, January 07, 2016 22:15:53 0.990	238.23	49.9
Thursday, January 07, 2016 22:20:53 0.990	243.18	49.7
Thursday, January 07, 2016 22:25:54 0.990	248.15	50.2
Thursday, January 07, 2016 22:30:54 0.990	253.10	50.3
Thursday, January 07, 2016 22:35:55 0.990	258.07	50.1
Thursday, January 07, 2016 22:40:55 0.990	263.02	49.9
Thursday, January 07, 2016 22:45:56 0.990	267.99	50.3
Thursday, January 07, 2016 22:50:56 0.990	272.94	49.6
Thursday, January 07, 2016 22:55:56 0.990	277.89	49.8
Thursday, January 07, 2016 23:00:57 0.990	282.86	50.0
Thursday, January 07, 2016 23:05:57 0.990	287.81	50.3
Thursday, January 07, 2016 23:10:58 0.990	292.78	50.3
Thursday, January 07, 2016 23:15:58 0.990	297.73	50.0
Thursday, January 07, 2016 23:20:59 0.990	302.70	49.7
Thursday, January 07, 2016 23:25:59 0.990	307.65	49.7
Thursday, January 07, 2016 23:31:00 0.990	312.62	50.1
Thursday, January 07, 2016 23:36:00 0.990	317.57	50.1
Thursday, January 07, 2016 23:41:00 0.990	322.52	50.0
Thursday, January 07, 2016 23:46:01 0.990	327.49	50.1
Thursday, January 07, 2016 23:51:01 0.990	332.44	50.2
Thursday, January 07, 2016 23:56:02 0.990	337.41	50.3
Friday, January 08, 2016 0:01:02 0.990	342.36	49.8
Friday, January 08, 2016 0:06:03 0.990	347.33	50.3
Friday, January 08, 2016 0:11:03 0.990	352.28	50.1
Friday, January 08, 2016 0:16:04 0.990	357.25	50.1
Friday, January 08, 2016 0:21:04 0.990	362.20	50.4
Friday, January 08, 2016 0:26:04 0.990	367.15	49.7
Friday, January 08, 2016 0:31:05 0.990	372.12	49.7
Friday, January 08, 2016 0:36:05 0.990	377.07	49.7
Friday, January 08, 2016 0:41:06 0.990	382.04	50.1
Friday, January 08, 2016 0:46:06 0.990	386.99	49.9
Friday, January 08, 2016 0:51:07 0.990	391.96	50.2
Friday, January 08, 2016 0:56:07 0.990	396.91	50.1
Friday, January 08, 2016 1:01:07 0.990	401.86	50.0
Friday, January 08, 2016 1:06:08 0.990	406.83	50.1
Friday, January 08, 2016 1:11:08 0.990	411.78	50.1
Friday, January 08, 2016 1:16:09 0.990	416.75	50.1
Friday, January 08, 2016 1:21:09 0.990	421.70	50.0
Friday, January 08, 2016 1:26:09 0.990	426.65	50.1

Friday, January 08, 2016 1:31:10 0.990	431.62	50.3
Friday, January 08, 2016 1:36:10 0.990	436.57	50.1
Friday, January 08, 2016 1:41:11 0.990	441.54	50.0
Friday, January 08, 2016 1:46:11 0.990	446.49	50.3
Friday, January 08, 2016 1:51:12 0.990	451.46	50.1
Friday, January 08, 2016 1:56:12 0.990	456.41	49.9
Friday, January 08, 2016 2:01:12 0.990	461.36	49.7
Friday, January 08, 2016 2:06:13 0.990	466.33	49.7
Friday, January 08, 2016 2:11:13 0.990	471.28	49.8
Friday, January 08, 2016 2:16:14 0.990	476.25	50.1
Friday, January 08, 2016 2:21:14 0.990	481.20	49.8
Friday, January 08, 2016 2:26:14 0.990	486.15	50.1
Friday, January 08, 2016 2:31:15 0.990	491.12	50.2
Friday, January 08, 2016 2:36:15 0.990	496.07	49.8
Friday, January 08, 2016 2:41:16 0.990	501.04	50.1
Friday, January 08, 2016 2:46:16 0.990	505.99	50.3
Friday, January 08, 2016 2:51:17 0.990	510.95	50.3
Friday, January 08, 2016 2:56:17 0.990	515.91	50.1
Friday, January 08, 2016 3:01:17 0.990	520.86	50.0
Friday, January 08, 2016 3:06:18 0.990	525.83	50.1
Friday, January 08, 2016 3:11:18 0.990	530.78	49.7
Friday, January 08, 2016 3:16:19 0.990	535.75	50.1
Friday, January 08, 2016 3:21:19 0.990	540.70	50.1
Friday, January 08, 2016 3:26:19 0.990	545.65	50.1
Friday, January 08, 2016 3:31:20 0.990	550.62	50.1
Friday, January 08, 2016 3:36:20 0.990	555.57	50.2
Friday, January 08, 2016 3:41:21 0.990	560.54	50.2
Friday, January 08, 2016 3:46:21 0.990	565.49	49.7
Friday, January 08, 2016 3:51:22 0.990	570.46	50.1
Friday, January 08, 2016 3:56:22 0.990	575.41	50.1
Friday, January 08, 2016 4:01:22 0.990	580.36	50.2
Friday, January 08, 2016 4:06:23 0.990	585.33	49.7
Friday, January 08, 2016 4:11:23 0.990	590.28	49.7
Friday, January 08, 2016 4:16:24 0.990	595.25	50.0
Friday, January 08, 2016 4:21:24 0.990	600.20	50.0
Friday, January 08, 2016 4:26:25 0.990	605.17	50.2
Friday, January 08, 2016 4:31:25 0.990	610.12	50.1
Friday, January 08, 2016 4:36:25 0.990	615.08	49.7
Friday, January 08, 2016 4:41:26 0.990	620.04	50.0
Friday, January 08, 2016 4:46:26 0.990	625.00	50.2
Friday, January 08, 2016 4:51:27 0.990	629.96	50.2
Friday, January 08, 2016 4:56:27 0.990	634.92	49.7
Friday, January 08, 2016 5:01:28 0.990	639.88	49.8
Friday, January 08, 2016 5:06:28 0.990	644.84	50.0
Friday, January 08, 2016 5:11:28 0.990	649.79	50.1
Friday, January 08, 2016 5:16:29 0.990	654.76	50.1
Friday, January 08, 2016 5:21:29 0.990	659.71	50.1
Friday, January 08, 2016 5:26:30 0.990	664.68	50.3
Friday, January 08, 2016 5:31:30 0.990	669.63	50.2
Friday, January 08, 2016 5:36:30 0.990	674.58	50.0
Friday, January 08, 2016 5:41:31 0.990	679.55	50.1
Friday, January 08, 2016 5:46:31 0.990	684.50	50.1
Friday, January 08, 2016 5:51:32 0.990	689.47	50.1
Friday, January 08, 2016 5:56:32 0.990	694.42	50.2

Friday, January 08, 2016 6:01:32	0.990	699.37	50.1
Friday, January 08, 2016 6:06:33	0.990	704.34	50.2
Friday, January 08, 2016 6:11:33	0.990	709.29	50.0
Friday, January 08, 2016 6:15:03	0.990	712.76	50.1

aqms5

formaldehyde001

Ch. 1 Cartridge Started Monday, January 11, 2016 6:00:02

Flow Rate Set Point 1.00 l/min

Stopped Monday, January 11, 2016 18:00:24

Total Volume 713.15 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate -0.003 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, January 11, 2016 6:00:29	0.078	0.23	50.1
Monday, January 11, 2016 6:05:30	0.991	5.20	50.1
Monday, January 11, 2016 6:10:30	0.991	10.15	50.2
Monday, January 11, 2016 6:15:30	0.991	15.11	49.9
Monday, January 11, 2016 6:20:31	0.991	20.08	50.2
Monday, January 11, 2016 6:25:31	0.991	25.03	49.7
Monday, January 11, 2016 6:30:32	0.991	30.00	50.2
Monday, January 11, 2016 6:35:32	0.991	34.95	50.1
Monday, January 11, 2016 6:40:33	0.991	39.92	50.1
Monday, January 11, 2016 6:45:33	0.991	44.88	49.8
Monday, January 11, 2016 6:50:34	0.991	49.85	49.8
Monday, January 11, 2016 6:55:34	0.991	54.80	50.2
Monday, January 11, 2016 7:00:34	0.991	59.76	50.0
Monday, January 11, 2016 7:05:35	0.991	64.73	50.1
Monday, January 11, 2016 7:10:35	0.991	69.68	50.4
Monday, January 11, 2016 7:15:36	0.991	74.65	49.7
Monday, January 11, 2016 7:20:36	0.991	79.60	50.0
Monday, January 11, 2016 7:25:37	0.991	84.57	50.2
Monday, January 11, 2016 7:30:37	0.991	89.53	50.2
Monday, January 11, 2016 7:35:38	0.991	94.50	50.0
Monday, January 11, 2016 7:40:38	0.991	99.45	50.0
Monday, January 11, 2016 7:45:38	0.991	104.41	50.1
Monday, January 11, 2016 7:50:39	0.991	109.38	50.1
Monday, January 11, 2016 7:55:39	0.991	114.33	50.0
Monday, January 11, 2016 8:00:40	0.991	119.30	50.4
Monday, January 11, 2016 8:05:40	0.991	124.25	50.2
Monday, January 11, 2016 8:10:41	0.991	129.23	49.7
Monday, January 11, 2016 8:15:41	0.991	134.18	50.4
Monday, January 11, 2016 8:20:42	0.991	139.15	50.1
Monday, January 11, 2016 8:25:42	0.991	144.10	50.2
Monday, January 11, 2016 8:30:42	0.991	149.06	50.1
Monday, January 11, 2016 8:35:43	0.991	154.03	50.0
Monday, January 11, 2016 8:40:43	0.991	158.98	50.0

Monday, January 11, 2016 8:45:44 0.991	163.95	50.1
Monday, January 11, 2016 8:50:44 0.991	168.91	49.6
Monday, January 11, 2016 8:55:45 0.991	173.88	49.9
Monday, January 11, 2016 9:00:45 0.991	178.83	50.1
Monday, January 11, 2016 9:05:46 0.991	183.80	50.1
Monday, January 11, 2016 9:10:46 0.991	188.75	50.1
Monday, January 11, 2016 9:15:46 0.991	193.71	49.9
Monday, January 11, 2016 9:20:47 0.991	198.68	49.5
Monday, January 11, 2016 9:25:47 0.991	203.63	49.7
Monday, January 11, 2016 9:30:48 0.991	208.60	49.8
Monday, January 11, 2016 9:35:48 0.991	213.56	49.8
Monday, January 11, 2016 9:40:49 0.991	218.53	49.9
Monday, January 11, 2016 9:45:49 0.991	223.48	50.0
Monday, January 11, 2016 9:50:49 0.991	228.43	50.1
Monday, January 11, 2016 9:55:50 0.991	233.41	50.1
Monday, January 11, 2016 10:00:50 0.991	238.36	50.2
Monday, January 11, 2016 10:05:51 0.991	243.33	50.2
Monday, January 11, 2016 10:10:51 0.991	248.28	50.1
Monday, January 11, 2016 10:15:52 0.991	253.25	50.4
Monday, January 11, 2016 10:20:52 0.991	258.21	50.2
Monday, January 11, 2016 10:25:53 0.991	263.18	49.3
Monday, January 11, 2016 10:30:53 0.991	268.13	49.7
Monday, January 11, 2016 10:35:53 0.991	273.09	50.1
Monday, January 11, 2016 10:40:54 0.991	278.06	50.1
Monday, January 11, 2016 10:45:54 0.991	283.01	50.0
Monday, January 11, 2016 10:50:55 0.991	287.98	50.1
Monday, January 11, 2016 10:55:55 0.991	292.94	50.1
Monday, January 11, 2016 11:00:56 0.991	297.91	50.0
Monday, January 11, 2016 11:05:56 0.991	302.86	50.0
Monday, January 11, 2016 11:10:56 0.991	307.81	50.1
Monday, January 11, 2016 11:15:57 0.991	312.78	50.1
Monday, January 11, 2016 11:20:57 0.991	317.74	50.2
Monday, January 11, 2016 11:25:58 0.991	322.71	50.1
Monday, January 11, 2016 11:30:58 0.991	327.66	50.2
Monday, January 11, 2016 11:35:59 0.991	332.63	50.1
Monday, January 11, 2016 11:40:59 0.991	337.59	50.2
Monday, January 11, 2016 11:46:00 0.991	342.56	50.1
Monday, January 11, 2016 11:51:00 0.991	347.51	50.4
Monday, January 11, 2016 11:56:01 0.991	352.48	50.1
Monday, January 11, 2016 12:01:01 0.991	357.44	50.1
Monday, January 11, 2016 12:06:01 0.991	362.39	49.8
Monday, January 11, 2016 12:11:02 0.991	367.36	50.2
Monday, January 11, 2016 12:16:02 0.991	372.32	50.2
Monday, January 11, 2016 12:21:03 0.991	377.29	50.2
Monday, January 11, 2016 12:26:03 0.991	382.24	49.7
Monday, January 11, 2016 12:31:04 0.991	387.21	50.1
Monday, January 11, 2016 12:36:04 0.991	392.16	50.0
Monday, January 11, 2016 12:41:05 0.991	397.13	50.0
Monday, January 11, 2016 12:46:05 0.991	402.09	49.8
Monday, January 11, 2016 12:51:06 0.991	407.06	50.0
Monday, January 11, 2016 12:56:06 0.991	412.01	49.7
Monday, January 11, 2016 13:01:06 0.991	416.97	49.8
Monday, January 11, 2016 13:06:07 0.991	421.94	50.1
Monday, January 11, 2016 13:11:07 0.991	426.89	50.1

Monday, January 11, 2016 13:16:08 0.991	431.86	50.1
Monday, January 11, 2016 13:21:08 0.991	436.81	49.8
Monday, January 11, 2016 13:26:09 0.991	441.79	49.7
Monday, January 11, 2016 13:31:09 0.991	446.74	49.7
Monday, January 11, 2016 13:36:10 0.991	451.71	50.2
Monday, January 11, 2016 13:41:10 0.991	456.66	50.1
Monday, January 11, 2016 13:46:10 0.991	461.62	50.0
Monday, January 11, 2016 13:51:11 0.991	466.59	49.8
Monday, January 11, 2016 13:56:11 0.991	471.54	50.2
Monday, January 11, 2016 14:01:12 0.991	476.51	50.1
Monday, January 11, 2016 14:06:12 0.991	481.47	49.8
Monday, January 11, 2016 14:11:13 0.991	486.44	49.7
Monday, January 11, 2016 14:16:13 0.991	491.39	50.6
Monday, January 11, 2016 14:21:14 0.991	496.36	50.0
Monday, January 11, 2016 14:26:14 0.991	501.31	50.1
Monday, January 11, 2016 14:31:15 0.991	506.28	50.0
Monday, January 11, 2016 14:36:15 0.991	511.24	50.2
Monday, January 11, 2016 14:41:15 0.991	516.19	50.3
Monday, January 11, 2016 14:46:16 0.991	521.16	50.0
Monday, January 11, 2016 14:51:16 0.991	526.12	50.1
Monday, January 11, 2016 14:56:17 0.991	531.09	50.2
Monday, January 11, 2016 15:01:17 0.991	536.04	50.3
Monday, January 11, 2016 15:06:18 0.991	541.01	49.9
Monday, January 11, 2016 15:11:18 0.991	545.96	50.2
Monday, January 11, 2016 15:16:19 0.991	550.93	50.1
Monday, January 11, 2016 15:21:19 0.991	555.89	50.1
Monday, January 11, 2016 15:26:20 0.991	560.86	50.1
Monday, January 11, 2016 15:31:20 0.991	565.81	50.3
Monday, January 11, 2016 15:36:21 0.991	570.78	49.6
Monday, January 11, 2016 15:41:21 0.991	575.73	50.3
Monday, January 11, 2016 15:46:21 0.991	580.69	49.9
Monday, January 11, 2016 15:51:22 0.991	585.66	50.2
Monday, January 11, 2016 15:56:22 0.991	590.61	49.9
Monday, January 11, 2016 16:01:23 0.991	595.58	50.1
Monday, January 11, 2016 16:06:23 0.991	600.53	49.7
Monday, January 11, 2016 16:11:24 0.991	605.50	50.0
Monday, January 11, 2016 16:16:24 0.991	610.46	50.3
Monday, January 11, 2016 16:21:25 0.991	615.43	50.3
Monday, January 11, 2016 16:26:25 0.991	620.38	50.3
Monday, January 11, 2016 16:31:26 0.991	625.35	49.8
Monday, January 11, 2016 16:36:26 0.991	630.30	50.5
Monday, January 11, 2016 16:41:27 0.991	635.27	49.7
Monday, January 11, 2016 16:46:27 0.991	640.23	50.0
Monday, January 11, 2016 16:51:27 0.991	645.18	49.9
Monday, January 11, 2016 16:56:28 0.991	650.15	49.8
Monday, January 11, 2016 17:01:28 0.991	655.10	50.2
Monday, January 11, 2016 17:06:29 0.991	660.07	50.3
Monday, January 11, 2016 17:11:29 0.991	665.03	50.2
Monday, January 11, 2016 17:16:30 0.991	670.00	50.3
Monday, January 11, 2016 17:21:30 0.991	674.95	49.7
Monday, January 11, 2016 17:26:31 0.991	679.92	50.3
Monday, January 11, 2016 17:31:31 0.991	684.87	50.3
Monday, January 11, 2016 17:36:32 0.991	689.84	50.2
Monday, January 11, 2016 17:41:32 0.991	694.80	50.3

Monday, January 11, 2016 17:46:33	0.991	699.77	50.1
Monday, January 11, 2016 17:51:33	0.991	704.72	50.2
Monday, January 11, 2016 17:56:33	0.991	709.68	50.1
Monday, January 11, 2016 18:00:03	0.991	713.14	50.1

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, January 11, 2016 18:15:00

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, January 12, 2016 6:15:23

Total Volume 712.86 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.002 l/min

Ending Leak Rate -0.004 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Monday, January 11, 2016 18:15:27	0.079	0.22	50.0
Monday, January 11, 2016 18:20:27	0.991	5.18	50.2
Monday, January 11, 2016 18:25:28	0.990	10.14	50.1
Monday, January 11, 2016 18:30:28	0.990	15.10	50.1
Monday, January 11, 2016 18:35:29	0.990	20.06	50.3
Monday, January 11, 2016 18:40:29	0.990	25.01	50.4
Monday, January 11, 2016 18:45:29	0.990	29.97	50.2
Monday, January 11, 2016 18:50:30	0.990	34.93	50.2
Monday, January 11, 2016 18:55:30	0.990	39.89	50.0
Monday, January 11, 2016 19:00:31	0.990	44.85	50.1
Monday, January 11, 2016 19:05:31	0.990	49.81	50.1
Monday, January 11, 2016 19:10:32	0.990	54.77	50.1
Monday, January 11, 2016 19:15:32	0.990	59.72	50.0
Monday, January 11, 2016 19:20:33	0.990	64.69	50.0
Monday, January 11, 2016 19:25:33	0.990	69.64	50.1
Monday, January 11, 2016 19:30:34	0.990	74.61	50.4
Monday, January 11, 2016 19:35:34	0.990	79.56	50.2
Monday, January 11, 2016 19:40:34	0.990	84.51	50.0
Monday, January 11, 2016 19:45:35	0.990	89.48	50.1
Monday, January 11, 2016 19:50:35	0.990	94.43	50.0
Monday, January 11, 2016 19:55:36	0.990	99.40	50.1
Monday, January 11, 2016 20:00:36	0.990	104.35	50.2
Monday, January 11, 2016 20:05:37	0.990	109.32	49.7
Monday, January 11, 2016 20:10:37	0.990	114.27	50.1
Monday, January 11, 2016 20:15:38	0.990	119.24	49.4
Monday, January 11, 2016 20:20:38	0.990	124.19	50.3
Monday, January 11, 2016 20:25:39	0.990	129.16	50.2
Monday, January 11, 2016 20:30:39	0.990	134.11	50.1
Monday, January 11, 2016 20:35:40	0.990	139.08	50.1
Monday, January 11, 2016 20:40:40	0.990	144.03	49.8
Monday, January 11, 2016 20:45:41	0.990	149.00	49.6
Monday, January 11, 2016 20:50:41	0.990	153.95	50.0
Monday, January 11, 2016 20:55:41	0.990	158.90	50.2

Monday, January 11, 2016 21:00:42 0.990	163.87	50.0
Monday, January 11, 2016 21:05:42 0.990	168.82	50.1
Monday, January 11, 2016 21:10:43 0.990	173.79	50.1
Monday, January 11, 2016 21:15:43 0.990	178.74	50.1
Monday, January 11, 2016 21:20:44 0.990	183.71	50.1
Monday, January 11, 2016 21:25:44 0.990	188.66	49.8
Monday, January 11, 2016 21:30:45 0.990	193.63	50.4
Monday, January 11, 2016 21:35:45 0.990	198.58	49.7
Monday, January 11, 2016 21:40:46 0.990	203.55	50.1
Monday, January 11, 2016 21:45:46 0.990	208.50	50.1
Monday, January 11, 2016 21:50:47 0.990	213.47	50.1
Monday, January 11, 2016 21:55:47 0.990	218.42	50.2
Monday, January 11, 2016 22:00:47 0.990	223.37	50.1
Monday, January 11, 2016 22:05:48 0.990	228.34	50.3
Monday, January 11, 2016 22:10:48 0.990	233.29	50.2
Monday, January 11, 2016 22:15:49 0.990	238.26	50.1
Monday, January 11, 2016 22:20:49 0.990	243.21	49.9
Monday, January 11, 2016 22:25:50 0.990	248.18	50.1
Monday, January 11, 2016 22:30:50 0.990	253.13	50.1
Monday, January 11, 2016 22:35:51 0.990	258.10	50.1
Monday, January 11, 2016 22:40:51 0.990	263.05	50.1
Monday, January 11, 2016 22:45:52 0.990	268.02	50.2
Monday, January 11, 2016 22:50:52 0.990	272.97	49.8
Monday, January 11, 2016 22:55:53 0.990	277.94	50.0
Monday, January 11, 2016 23:00:53 0.990	282.89	50.0
Monday, January 11, 2016 23:05:53 0.990	287.84	50.2
Monday, January 11, 2016 23:10:54 0.990	292.81	50.1
Monday, January 11, 2016 23:15:54 0.990	297.76	50.2
Monday, January 11, 2016 23:20:55 0.990	302.73	50.0
Monday, January 11, 2016 23:25:55 0.990	307.68	50.3
Monday, January 11, 2016 23:30:56 0.990	312.65	50.0
Monday, January 11, 2016 23:35:56 0.990	317.60	49.4
Monday, January 11, 2016 23:40:57 0.990	322.57	49.9
Monday, January 11, 2016 23:45:57 0.990	327.52	49.3
Monday, January 11, 2016 23:50:58 0.990	332.49	50.1
Monday, January 11, 2016 23:55:58 0.990	337.44	49.7
Tuesday, January 12, 2016 0:00:59 0.990	342.41	50.1
Tuesday, January 12, 2016 0:05:59 0.990	347.36	50.1
Tuesday, January 12, 2016 0:10:59 0.990	352.31	49.7
Tuesday, January 12, 2016 0:16:00 0.990	357.28	50.3
Tuesday, January 12, 2016 0:21:00 0.990	362.23	50.0
Tuesday, January 12, 2016 0:26:01 0.990	367.20	50.1
Tuesday, January 12, 2016 0:31:01 0.990	372.15	49.8
Tuesday, January 12, 2016 0:36:02 0.990	377.12	50.1
Tuesday, January 12, 2016 0:41:02 0.990	382.07	50.1
Tuesday, January 12, 2016 0:46:03 0.990	387.04	50.0
Tuesday, January 12, 2016 0:51:03 0.990	391.99	49.7
Tuesday, January 12, 2016 0:56:03 0.990	396.94	49.8
Tuesday, January 12, 2016 1:01:04 0.990	401.91	49.4
Tuesday, January 12, 2016 1:06:04 0.990	406.86	50.1
Tuesday, January 12, 2016 1:11:05 0.990	411.83	50.2
Tuesday, January 12, 2016 1:16:05 0.990	416.78	50.0
Tuesday, January 12, 2016 1:21:06 0.990	421.75	49.7
Tuesday, January 12, 2016 1:26:06 0.990	426.70	49.7

Tuesday, January 12, 2016 1:31:07 0.990	431.67	49.8
Tuesday, January 12, 2016 1:36:07 0.990	436.62	49.7
Tuesday, January 12, 2016 1:41:07 0.990	441.58	50.2
Tuesday, January 12, 2016 1:46:08 0.990	446.54	49.8
Tuesday, January 12, 2016 1:51:08 0.990	451.50	50.1
Tuesday, January 12, 2016 1:56:09 0.990	456.46	49.9
Tuesday, January 12, 2016 2:01:09 0.990	461.42	50.2
Tuesday, January 12, 2016 2:06:10 0.990	466.38	50.0
Tuesday, January 12, 2016 2:11:10 0.990	471.34	50.0
Tuesday, January 12, 2016 2:16:11 0.990	476.30	50.1
Tuesday, January 12, 2016 2:21:11 0.990	481.26	50.1
Tuesday, January 12, 2016 2:26:12 0.990	486.22	50.0
Tuesday, January 12, 2016 2:31:12 0.990	491.18	50.2
Tuesday, January 12, 2016 2:36:12 0.990	496.13	50.1
Tuesday, January 12, 2016 2:41:13 0.990	501.10	49.8
Tuesday, January 12, 2016 2:46:13 0.990	506.05	49.4
Tuesday, January 12, 2016 2:51:14 0.990	511.02	50.0
Tuesday, January 12, 2016 2:56:14 0.990	515.97	50.1
Tuesday, January 12, 2016 3:01:15 0.990	520.94	49.4
Tuesday, January 12, 2016 3:06:15 0.990	525.89	50.0
Tuesday, January 12, 2016 3:11:16 0.990	530.86	49.9
Tuesday, January 12, 2016 3:16:16 0.990	535.81	49.8
Tuesday, January 12, 2016 3:21:17 0.990	540.78	50.1
Tuesday, January 12, 2016 3:26:17 0.990	545.73	50.1
Tuesday, January 12, 2016 3:31:17 0.990	550.68	49.3
Tuesday, January 12, 2016 3:36:18 0.990	555.65	50.1
Tuesday, January 12, 2016 3:41:18 0.990	560.60	50.2
Tuesday, January 12, 2016 3:46:19 0.990	565.57	50.2
Tuesday, January 12, 2016 3:51:19 0.990	570.52	50.1
Tuesday, January 12, 2016 3:56:20 0.990	575.49	50.2
Tuesday, January 12, 2016 4:01:20 0.990	580.44	50.1
Tuesday, January 12, 2016 4:06:21 0.990	585.41	49.5
Tuesday, January 12, 2016 4:11:21 0.990	590.36	50.1
Tuesday, January 12, 2016 4:16:22 0.990	595.33	50.2
Tuesday, January 12, 2016 4:21:22 0.990	600.28	50.1
Tuesday, January 12, 2016 4:26:23 0.990	605.25	49.8
Tuesday, January 12, 2016 4:31:23 0.990	610.20	50.1
Tuesday, January 12, 2016 4:36:24 0.990	615.17	50.1
Tuesday, January 12, 2016 4:41:24 0.990	620.12	50.0
Tuesday, January 12, 2016 4:46:24 0.990	625.07	50.1
Tuesday, January 12, 2016 4:51:25 0.990	630.04	50.1
Tuesday, January 12, 2016 4:56:25 0.990	634.99	50.1
Tuesday, January 12, 2016 5:01:26 0.990	639.96	50.1
Tuesday, January 12, 2016 5:06:26 0.990	644.91	50.2
Tuesday, January 12, 2016 5:11:27 0.990	649.88	49.3
Tuesday, January 12, 2016 5:16:27 0.990	654.83	50.1
Tuesday, January 12, 2016 5:21:28 0.990	659.80	50.1
Tuesday, January 12, 2016 5:26:28 0.990	664.75	50.1
Tuesday, January 12, 2016 5:31:29 0.990	669.72	50.2
Tuesday, January 12, 2016 5:36:29 0.990	674.68	50.0
Tuesday, January 12, 2016 5:41:29 0.990	679.63	49.3
Tuesday, January 12, 2016 5:46:30 0.990	684.60	49.5
Tuesday, January 12, 2016 5:51:30 0.990	689.55	50.1
Tuesday, January 12, 2016 5:56:31 0.990	694.52	50.0

Tuesday, January 12, 2016 6:01:31	0.990	699.47	50.1
Tuesday, January 12, 2016 6:06:32	0.990	704.44	50.0
Tuesday, January 12, 2016 6:11:32	0.990	709.39	50.0
Tuesday, January 12, 2016 6:15:02	0.990	712.85	50.1

aqms5

formaldehyde001

Ch. 1 Cartridge Started Sunday, January 17, 2016 6:00:01

Flow Rate Set Point 1.00 l/min

Stopped Sunday, January 17, 2016 18:00:23

Total Volume 713.15 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate -0.002 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
Sunday, January 17, 2016 6:00:28	0.078	0.23	50.0
Sunday, January 17, 2016 6:05:29	0.991	5.20	49.7
Sunday, January 17, 2016 6:10:29	0.991	10.15	49.7
Sunday, January 17, 2016 6:15:29	0.991	15.11	50.1
Sunday, January 17, 2016 6:20:30	0.991	20.08	50.1
Sunday, January 17, 2016 6:25:30	0.991	25.03	50.1
Sunday, January 17, 2016 6:30:31	0.991	30.00	49.7
Sunday, January 17, 2016 6:35:31	0.991	34.95	50.1
Sunday, January 17, 2016 6:40:32	0.991	39.92	50.1
Sunday, January 17, 2016 6:45:32	0.991	44.88	50.3
Sunday, January 17, 2016 6:50:33	0.991	49.85	50.3
Sunday, January 17, 2016 6:55:33	0.991	54.80	50.2
Sunday, January 17, 2016 7:00:33	0.991	59.76	50.1
Sunday, January 17, 2016 7:05:34	0.991	64.73	50.2
Sunday, January 17, 2016 7:10:34	0.991	69.68	50.1
Sunday, January 17, 2016 7:15:35	0.991	74.65	50.1
Sunday, January 17, 2016 7:20:35	0.991	79.60	49.7
Sunday, January 17, 2016 7:25:36	0.991	84.58	50.1
Sunday, January 17, 2016 7:30:36	0.991	89.53	50.1
Sunday, January 17, 2016 7:35:36	0.991	94.48	49.7
Sunday, January 17, 2016 7:40:37	0.991	99.45	50.1
Sunday, January 17, 2016 7:45:37	0.991	104.41	50.1
Sunday, January 17, 2016 7:50:38	0.991	109.38	50.3
Sunday, January 17, 2016 7:55:38	0.991	114.33	50.2
Sunday, January 17, 2016 8:00:39	0.991	119.30	50.2
Sunday, January 17, 2016 8:05:39	0.991	124.26	50.1
Sunday, January 17, 2016 8:10:40	0.991	129.23	50.2
Sunday, January 17, 2016 8:15:40	0.991	134.18	49.9
Sunday, January 17, 2016 8:20:40	0.991	139.13	50.1
Sunday, January 17, 2016 8:25:41	0.991	144.10	49.9
Sunday, January 17, 2016 8:30:41	0.991	149.06	50.1
Sunday, January 17, 2016 8:35:42	0.991	154.03	50.1
Sunday, January 17, 2016 8:40:42	0.991	158.98	50.1

Sunday, January 17, 2016 8:45:43 0.991	163.95	50.2
Sunday, January 17, 2016 8:50:43 0.991	168.91	50.1
Sunday, January 17, 2016 8:55:44 0.991	173.88	50.2
Sunday, January 17, 2016 9:00:44 0.991	178.83	49.7
Sunday, January 17, 2016 9:05:44 0.991	183.78	50.1
Sunday, January 17, 2016 9:10:45 0.991	188.75	50.1
Sunday, January 17, 2016 9:15:45 0.991	193.71	49.6
Sunday, January 17, 2016 9:20:46 0.991	198.68	49.9
Sunday, January 17, 2016 9:25:46 0.991	203.63	50.1
Sunday, January 17, 2016 9:30:47 0.991	208.60	50.1
Sunday, January 17, 2016 9:35:47 0.991	213.56	50.2
Sunday, January 17, 2016 9:40:47 0.991	218.51	49.7
Sunday, January 17, 2016 9:45:48 0.991	223.48	49.8
Sunday, January 17, 2016 9:50:48 0.991	228.44	49.7
Sunday, January 17, 2016 9:55:49 0.991	233.41	49.6
Sunday, January 17, 2016 10:00:49 0.991	238.36	50.1
Sunday, January 17, 2016 10:05:50 0.991	243.33	50.1
Sunday, January 17, 2016 10:10:50 0.991	248.28	50.1
Sunday, January 17, 2016 10:15:51 0.991	253.25	50.1
Sunday, January 17, 2016 10:20:51 0.991	258.21	50.1
Sunday, January 17, 2016 10:25:51 0.991	263.16	50.2
Sunday, January 17, 2016 10:30:52 0.991	268.13	50.1
Sunday, January 17, 2016 10:35:52 0.991	273.09	50.1
Sunday, January 17, 2016 10:40:53 0.991	278.06	50.2
Sunday, January 17, 2016 10:45:53 0.991	283.01	50.3
Sunday, January 17, 2016 10:50:54 0.991	287.98	50.1
Sunday, January 17, 2016 10:55:54 0.991	292.93	50.1
Sunday, January 17, 2016 11:00:55 0.991	297.90	50.1
Sunday, January 17, 2016 11:05:55 0.991	302.86	50.1
Sunday, January 17, 2016 11:10:55 0.991	307.81	50.1
Sunday, January 17, 2016 11:15:56 0.991	312.78	49.9
Sunday, January 17, 2016 11:20:56 0.991	317.74	50.1
Sunday, January 17, 2016 11:25:57 0.991	322.71	50.0
Sunday, January 17, 2016 11:30:57 0.991	327.66	50.2
Sunday, January 17, 2016 11:35:58 0.991	332.63	49.7
Sunday, January 17, 2016 11:40:58 0.991	337.59	50.3
Sunday, January 17, 2016 11:45:59 0.991	342.56	50.1
Sunday, January 17, 2016 11:50:59 0.991	347.51	49.6
Sunday, January 17, 2016 11:55:59 0.991	352.46	50.1
Sunday, January 17, 2016 12:01:00 0.991	357.43	50.3
Sunday, January 17, 2016 12:06:00 0.991	362.39	50.2
Sunday, January 17, 2016 12:11:01 0.991	367.36	50.2
Sunday, January 17, 2016 12:16:01 0.991	372.31	50.1
Sunday, January 17, 2016 12:21:02 0.991	377.28	50.1
Sunday, January 17, 2016 12:26:02 0.991	382.24	50.1
Sunday, January 17, 2016 12:31:03 0.991	387.21	50.1
Sunday, January 17, 2016 12:36:03 0.991	392.16	50.1
Sunday, January 17, 2016 12:41:04 0.991	397.13	50.1
Sunday, January 17, 2016 12:46:04 0.991	402.09	49.7
Sunday, January 17, 2016 12:51:04 0.991	407.04	50.2
Sunday, January 17, 2016 12:56:05 0.991	412.01	50.1
Sunday, January 17, 2016 13:01:05 0.991	416.96	50.1
Sunday, January 17, 2016 13:06:06 0.991	421.93	50.2
Sunday, January 17, 2016 13:11:06 0.991	426.89	49.7

Sunday, January 17, 2016 13:16:07 0.991	431.86	50.0
Sunday, January 17, 2016 13:21:07 0.991	436.81	50.2
Sunday, January 17, 2016 13:26:08 0.991	441.78	50.1
Sunday, January 17, 2016 13:31:08 0.991	446.74	50.1
Sunday, January 17, 2016 13:36:09 0.991	451.71	50.3
Sunday, January 17, 2016 13:41:09 0.991	456.66	50.1
Sunday, January 17, 2016 13:46:09 0.991	461.61	50.2
Sunday, January 17, 2016 13:51:10 0.991	466.59	49.5
Sunday, January 17, 2016 13:56:10 0.991	471.54	50.5
Sunday, January 17, 2016 14:01:11 0.991	476.51	50.0
Sunday, January 17, 2016 14:06:11 0.991	481.46	49.2
Sunday, January 17, 2016 14:11:12 0.991	486.43	50.1
Sunday, January 17, 2016 14:16:12 0.991	491.39	49.4
Sunday, January 17, 2016 14:21:13 0.991	496.36	50.3
Sunday, January 17, 2016 14:26:13 0.991	501.31	50.1
Sunday, January 17, 2016 14:31:14 0.991	506.28	50.1
Sunday, January 17, 2016 14:36:14 0.991	511.24	50.1
Sunday, January 17, 2016 14:41:14 0.991	516.19	49.7
Sunday, January 17, 2016 14:46:15 0.991	521.16	50.3
Sunday, January 17, 2016 14:51:15 0.991	526.11	50.1
Sunday, January 17, 2016 14:56:16 0.991	531.08	50.2
Sunday, January 17, 2016 15:01:16 0.991	536.04	50.2
Sunday, January 17, 2016 15:06:17 0.991	541.01	50.1
Sunday, January 17, 2016 15:11:17 0.991	545.96	49.8
Sunday, January 17, 2016 15:16:18 0.991	550.93	50.3
Sunday, January 17, 2016 15:21:18 0.991	555.88	49.9
Sunday, January 17, 2016 15:26:19 0.991	560.85	49.8
Sunday, January 17, 2016 15:31:19 0.991	565.81	50.0
Sunday, January 17, 2016 15:36:20 0.991	570.78	50.0
Sunday, January 17, 2016 15:41:20 0.991	575.73	50.2
Sunday, January 17, 2016 15:46:20 0.991	580.68	50.1
Sunday, January 17, 2016 15:51:21 0.991	585.65	49.7
Sunday, January 17, 2016 15:56:21 0.991	590.61	49.6
Sunday, January 17, 2016 16:01:22 0.991	595.58	50.1
Sunday, January 17, 2016 16:06:22 0.991	600.53	50.0
Sunday, January 17, 2016 16:11:23 0.991	605.50	49.8
Sunday, January 17, 2016 16:16:23 0.991	610.45	50.3
Sunday, January 17, 2016 16:21:24 0.991	615.42	50.4
Sunday, January 17, 2016 16:26:24 0.991	620.38	50.1
Sunday, January 17, 2016 16:31:25 0.991	625.35	49.7
Sunday, January 17, 2016 16:36:25 0.991	630.30	50.4
Sunday, January 17, 2016 16:41:25 0.991	635.25	50.2
Sunday, January 17, 2016 16:46:26 0.991	640.23	49.8
Sunday, January 17, 2016 16:51:26 0.991	645.18	50.1
Sunday, January 17, 2016 16:56:27 0.991	650.15	50.2
Sunday, January 17, 2016 17:01:27 0.991	655.10	49.8
Sunday, January 17, 2016 17:06:28 0.991	660.07	50.1
Sunday, January 17, 2016 17:11:28 0.991	665.03	50.3
Sunday, January 17, 2016 17:16:29 0.991	670.00	50.1
Sunday, January 17, 2016 17:21:29 0.991	674.95	50.2
Sunday, January 17, 2016 17:26:29 0.991	679.90	49.3
Sunday, January 17, 2016 17:31:30 0.991	684.87	50.1
Sunday, January 17, 2016 17:36:30 0.991	689.83	50.1
Sunday, January 17, 2016 17:41:31 0.991	694.80	50.1

Sunday, January 17, 2016 17:46:31	0.991	699.75	50.1
Sunday, January 17, 2016 17:51:32	0.991	704.72	50.2
Sunday, January 17, 2016 17:56:32	0.991	709.67	49.7
Sunday, January 17, 2016 18:00:02	0.991	713.14	50.0

aqms5

formaldehyde002

Ch. 2 Cartridge Started Sunday, January 17, 2016 18:15:04

Flow Rate Set Point 1.00 l/min

Stopped Monday, January 18, 2016 6:15:22

Total Volume 712.75 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.002 l/min

Ending Leak Rate -0.003 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Sunday, January 17, 2016 18:15:31	0.078	0.22	49.6
Sunday, January 17, 2016 18:20:31	0.991	5.17	50.2
Sunday, January 17, 2016 18:25:32	0.990	10.14	50.1
Sunday, January 17, 2016 18:30:32	0.990	15.09	49.9
Sunday, January 17, 2016 18:35:33	0.990	20.06	50.1
Sunday, January 17, 2016 18:40:33	0.990	25.01	50.3
Sunday, January 17, 2016 18:45:34	0.990	29.98	50.1
Sunday, January 17, 2016 18:50:34	0.990	34.93	50.2
Sunday, January 17, 2016 18:55:34	0.990	39.88	49.9
Sunday, January 17, 2016 19:00:35	0.990	44.85	50.0
Sunday, January 17, 2016 19:05:35	0.990	49.80	50.1
Sunday, January 17, 2016 19:10:36	0.990	54.77	49.7
Sunday, January 17, 2016 19:15:36	0.990	59.72	49.8
Sunday, January 17, 2016 19:20:37	0.990	64.69	49.9
Sunday, January 17, 2016 19:25:37	0.990	69.64	50.0
Sunday, January 17, 2016 19:30:38	0.990	74.61	50.2
Sunday, January 17, 2016 19:35:38	0.990	79.56	49.6
Sunday, January 17, 2016 19:40:39	0.990	84.53	50.3
Sunday, January 17, 2016 19:45:39	0.990	89.48	49.7
Sunday, January 17, 2016 19:50:39	0.990	94.43	49.8
Sunday, January 17, 2016 19:55:40	0.990	99.40	50.2
Sunday, January 17, 2016 20:00:40	0.990	104.35	50.2
Sunday, January 17, 2016 20:05:41	0.990	109.32	50.1
Sunday, January 17, 2016 20:10:41	0.990	114.27	50.1
Sunday, January 17, 2016 20:15:42	0.990	119.24	50.1
Sunday, January 17, 2016 20:20:42	0.990	124.19	50.3
Sunday, January 17, 2016 20:25:43	0.990	129.16	50.2
Sunday, January 17, 2016 20:30:43	0.990	134.11	50.2
Sunday, January 17, 2016 20:35:43	0.990	139.06	50.2
Sunday, January 17, 2016 20:40:44	0.990	144.03	50.2
Sunday, January 17, 2016 20:45:44	0.990	148.98	49.5
Sunday, January 17, 2016 20:50:45	0.990	153.95	49.7
Sunday, January 17, 2016 20:55:45	0.990	158.90	50.3

Sunday, January 17, 2016 21:00:46 0.990	163.87	50.4
Sunday, January 17, 2016 21:05:46 0.990	168.82	50.1
Sunday, January 17, 2016 21:10:47 0.990	173.79	50.2
Sunday, January 17, 2016 21:15:47 0.990	178.74	50.2
Sunday, January 17, 2016 21:20:48 0.990	183.71	50.0
Sunday, January 17, 2016 21:25:48 0.990	188.66	49.6
Sunday, January 17, 2016 21:30:49 0.990	193.63	49.8
Sunday, January 17, 2016 21:35:49 0.990	198.58	49.7
Sunday, January 17, 2016 21:40:49 0.990	203.53	49.9
Sunday, January 17, 2016 21:45:50 0.990	208.50	49.7
Sunday, January 17, 2016 21:50:50 0.990	213.45	50.2
Sunday, January 17, 2016 21:55:51 0.990	218.42	50.0
Sunday, January 17, 2016 22:00:51 0.990	223.37	50.1
Sunday, January 17, 2016 22:05:52 0.990	228.34	49.8
Sunday, January 17, 2016 22:10:52 0.990	233.29	49.8
Sunday, January 17, 2016 22:15:53 0.990	238.26	49.7
Sunday, January 17, 2016 22:20:53 0.990	243.21	49.8
Sunday, January 17, 2016 22:25:54 0.990	248.18	50.0
Sunday, January 17, 2016 22:30:54 0.990	253.13	49.8
Sunday, January 17, 2016 22:35:55 0.990	258.10	49.7
Sunday, January 17, 2016 22:40:55 0.990	263.05	50.3
Sunday, January 17, 2016 22:45:55 0.990	268.00	50.4
Sunday, January 17, 2016 22:50:56 0.990	272.97	50.0
Sunday, January 17, 2016 22:55:56 0.990	277.92	49.9
Sunday, January 17, 2016 23:00:57 0.990	282.89	50.1
Sunday, January 17, 2016 23:05:57 0.990	287.84	49.9
Sunday, January 17, 2016 23:10:58 0.990	292.81	49.7
Sunday, January 17, 2016 23:15:58 0.990	297.76	50.1
Sunday, January 17, 2016 23:20:59 0.990	302.73	50.0
Sunday, January 17, 2016 23:25:59 0.990	307.68	50.2
Sunday, January 17, 2016 23:31:00 0.990	312.65	50.1
Sunday, January 17, 2016 23:36:00 0.990	317.60	49.8
Sunday, January 17, 2016 23:41:00 0.990	322.55	50.2
Sunday, January 17, 2016 23:46:01 0.990	327.52	49.7
Sunday, January 17, 2016 23:51:01 0.990	332.47	50.2
Sunday, January 17, 2016 23:56:02 0.990	337.44	49.6
Monday, January 18, 2016 0:01:02 0.990	342.39	49.7
Monday, January 18, 2016 0:06:03 0.990	347.36	49.8
Monday, January 18, 2016 0:11:03 0.990	352.31	50.2
Monday, January 18, 2016 0:16:04 0.990	357.28	49.7
Monday, January 18, 2016 0:21:04 0.990	362.23	50.0
Monday, January 18, 2016 0:26:05 0.990	367.20	49.7
Monday, January 18, 2016 0:31:05 0.990	372.15	50.0
Monday, January 18, 2016 0:36:06 0.990	377.12	49.7
Monday, January 18, 2016 0:41:06 0.990	382.07	50.0
Monday, January 18, 2016 0:46:06 0.990	387.02	50.1
Monday, January 18, 2016 0:51:07 0.990	391.99	50.1
Monday, January 18, 2016 0:56:07 0.990	396.94	49.8
Monday, January 18, 2016 1:01:08 0.990	401.91	50.3
Monday, January 18, 2016 1:06:08 0.990	406.86	50.1
Monday, January 18, 2016 1:11:09 0.990	411.82	50.1
Monday, January 18, 2016 1:16:09 0.990	416.78	50.1
Monday, January 18, 2016 1:21:10 0.990	421.74	50.1
Monday, January 18, 2016 1:26:10 0.990	426.70	49.8

Monday, January 18, 2016 1:31:11 0.990	431.66	49.9
Monday, January 18, 2016 1:36:11 0.990	436.61	49.9
Monday, January 18, 2016 1:41:12 0.990	441.58	50.2
Monday, January 18, 2016 1:46:12 0.990	446.53	50.1
Monday, January 18, 2016 1:51:12 0.990	451.49	49.8
Monday, January 18, 2016 1:56:13 0.990	456.45	49.7
Monday, January 18, 2016 2:01:13 0.990	461.40	49.8
Monday, January 18, 2016 2:06:14 0.990	466.37	49.8
Monday, January 18, 2016 2:11:14 0.990	471.32	49.4
Monday, January 18, 2016 2:16:15 0.990	476.29	50.1
Monday, January 18, 2016 2:21:15 0.990	481.24	50.0
Monday, January 18, 2016 2:26:16 0.990	486.21	50.2
Monday, January 18, 2016 2:31:16 0.990	491.16	50.1
Monday, January 18, 2016 2:36:17 0.990	496.13	49.8
Monday, January 18, 2016 2:41:17 0.990	501.08	49.4
Monday, January 18, 2016 2:46:18 0.990	506.05	49.4
Monday, January 18, 2016 2:51:18 0.990	511.00	49.8
Monday, January 18, 2016 2:56:19 0.990	515.95	49.3
Monday, January 18, 2016 3:01:19 0.990	520.92	49.4
Monday, January 18, 2016 3:06:19 0.990	525.87	50.2
Monday, January 18, 2016 3:11:20 0.990	530.84	49.7
Monday, January 18, 2016 3:16:20 0.990	535.79	49.8
Monday, January 18, 2016 3:21:21 0.990	540.76	50.2
Monday, January 18, 2016 3:26:21 0.990	545.72	50.1
Monday, January 18, 2016 3:31:22 0.990	550.68	49.3
Monday, January 18, 2016 3:36:22 0.990	555.64	50.2
Monday, January 18, 2016 3:41:23 0.990	560.60	50.2
Monday, January 18, 2016 3:46:23 0.990	565.56	50.0
Monday, January 18, 2016 3:51:24 0.990	570.52	50.2
Monday, January 18, 2016 3:56:24 0.990	575.48	49.4
Monday, January 18, 2016 4:01:25 0.990	580.44	50.2
Monday, January 18, 2016 4:06:25 0.990	585.40	50.0
Monday, January 18, 2016 4:11:25 0.990	590.35	50.1
Monday, January 18, 2016 4:16:26 0.990	595.32	50.0
Monday, January 18, 2016 4:21:26 0.990	600.27	50.3
Monday, January 18, 2016 4:26:27 0.990	605.24	50.2
Monday, January 18, 2016 4:31:27 0.990	610.19	50.3
Monday, January 18, 2016 4:36:28 0.990	615.16	50.1
Monday, January 18, 2016 4:41:28 0.990	620.11	49.9
Monday, January 18, 2016 4:46:29 0.990	625.08	50.1
Monday, January 18, 2016 4:51:29 0.990	630.03	50.1
Monday, January 18, 2016 4:56:30 0.990	635.00	50.2
Monday, January 18, 2016 5:01:30 0.990	639.95	49.7
Monday, January 18, 2016 5:06:30 0.990	644.90	50.2
Monday, January 18, 2016 5:11:31 0.990	649.87	49.7
Monday, January 18, 2016 5:16:31 0.990	654.82	50.0
Monday, January 18, 2016 5:21:32 0.990	659.79	50.0
Monday, January 18, 2016 5:26:32 0.990	664.74	50.3
Monday, January 18, 2016 5:31:33 0.990	669.71	50.1
Monday, January 18, 2016 5:36:33 0.990	674.66	50.1
Monday, January 18, 2016 5:41:34 0.990	679.63	50.1
Monday, January 18, 2016 5:46:34 0.990	684.58	50.1
Monday, January 18, 2016 5:51:35 0.990	689.55	50.1
Monday, January 18, 2016 5:56:35 0.990	694.50	49.8

Monday, January 18, 2016 6:01:36 0.990	699.47	49.6
Monday, January 18, 2016 6:06:36 0.990	704.42	50.1
Monday, January 18, 2016 6:11:36 0.990	709.37	50.2
Monday, January 18, 2016 6:15:00 0.990	712.74	50.1

aqms5

formaldehyde001

Ch. 1 Cartridge Started Saturday, January 23, 2016 6:00:00

Flow Rate Set Point 1.00 l/min

Stopped Saturday, January 23, 2016 18:00:22

Total Volume 713.10 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.004 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
Saturday, January 23, 2016 6:00:27	0.084	0.23	50.0
Saturday, January 23, 2016 6:05:27	0.991	5.18	50.3
Saturday, January 23, 2016 6:10:28	0.991	10.15	50.2
Saturday, January 23, 2016 6:15:28	0.991	15.10	50.2
Saturday, January 23, 2016 6:20:28	0.991	20.06	50.4
Saturday, January 23, 2016 6:25:29	0.991	25.03	50.3
Saturday, January 23, 2016 6:30:29	0.991	29.98	50.4
Saturday, January 23, 2016 6:35:30	0.991	34.95	49.8
Saturday, January 23, 2016 6:40:30	0.991	39.90	50.0
Saturday, January 23, 2016 6:45:31	0.991	44.87	49.9
Saturday, January 23, 2016 6:50:31	0.991	49.83	50.5
Saturday, January 23, 2016 6:55:32	0.991	54.80	49.8
Saturday, January 23, 2016 7:00:32	0.991	59.75	49.5
Saturday, January 23, 2016 7:05:33	0.991	64.72	50.3
Saturday, January 23, 2016 7:10:33	0.991	69.67	49.7
Saturday, January 23, 2016 7:15:34	0.991	74.64	50.3
Saturday, January 23, 2016 7:20:34	0.991	79.60	49.4
Saturday, January 23, 2016 7:25:35	0.991	84.57	50.1
Saturday, January 23, 2016 7:30:35	0.991	89.52	50.4
Saturday, January 23, 2016 7:35:36	0.991	94.49	49.7
Saturday, January 23, 2016 7:40:36	0.991	99.44	50.3
Saturday, January 23, 2016 7:45:37	0.991	104.41	50.2
Saturday, January 23, 2016 7:50:37	0.991	109.37	50.4
Saturday, January 23, 2016 7:55:38	0.991	114.34	50.0
Saturday, January 23, 2016 8:00:38	0.991	119.29	50.4
Saturday, January 23, 2016 8:05:39	0.991	124.26	50.5
Saturday, January 23, 2016 8:10:39	0.991	129.22	50.1
Saturday, January 23, 2016 8:15:40	0.991	134.19	50.3
Saturday, January 23, 2016 8:20:40	0.991	139.14	50.1
Saturday, January 23, 2016 8:25:41	0.991	144.11	49.8
Saturday, January 23, 2016 8:30:41	0.991	149.06	50.0
Saturday, January 23, 2016 8:35:42	0.991	154.03	50.1
Saturday, January 23, 2016 8:40:42	0.991	158.99	50.3

Saturday, January 23, 2016 8:45:43 0.991	163.96	50.1
Saturday, January 23, 2016 8:50:43 0.991	168.91	50.0
Saturday, January 23, 2016 8:55:44 0.991	173.88	49.8
Saturday, January 23, 2016 9:00:45 0.991	178.85	49.8
Saturday, January 23, 2016 9:05:45 0.991	183.80	50.1
Saturday, January 23, 2016 9:10:46 0.991	188.77	50.1
Saturday, January 23, 2016 9:15:46 0.991	193.73	50.5
Saturday, January 23, 2016 9:20:47 0.991	198.70	49.9
Saturday, January 23, 2016 9:25:47 0.991	203.65	50.1
Saturday, January 23, 2016 9:30:48 0.991	208.62	50.2
Saturday, January 23, 2016 9:35:48 0.991	213.57	50.2
Saturday, January 23, 2016 9:40:49 0.991	218.54	50.0
Saturday, January 23, 2016 9:45:49 0.991	223.50	50.1
Saturday, January 23, 2016 9:50:50 0.991	228.47	50.2
Saturday, January 23, 2016 9:55:50 0.991	233.42	50.6
Saturday, January 23, 2016 10:00:51 0.991	238.39	50.4
Saturday, January 23, 2016 10:05:51 0.991	243.34	50.1
Saturday, January 23, 2016 10:10:52 0.991	248.31	50.3
Saturday, January 23, 2016 10:15:53 0.991	253.28	50.3
Saturday, January 23, 2016 10:20:53 0.991	258.24	50.2
Saturday, January 23, 2016 10:25:54 0.991	263.21	49.9
Saturday, January 23, 2016 10:30:54 0.991	268.16	49.8
Saturday, January 23, 2016 10:35:55 0.991	273.13	49.3
Saturday, January 23, 2016 10:40:55 0.991	278.08	50.4
Saturday, January 23, 2016 10:45:56 0.991	283.05	50.4
Saturday, January 23, 2016 10:50:56 0.991	288.01	50.4
Saturday, January 23, 2016 10:55:57 0.991	292.98	49.7
Saturday, January 23, 2016 11:00:57 0.991	297.93	50.4
Saturday, January 23, 2016 11:05:58 0.991	302.90	50.1
Saturday, January 23, 2016 11:10:58 0.991	307.85	49.8
Saturday, January 23, 2016 11:15:59 0.991	312.82	49.1
Saturday, January 23, 2016 11:21:00 0.991	317.79	50.0
Saturday, January 23, 2016 11:26:00 0.991	322.75	50.3
Saturday, January 23, 2016 11:31:01 0.991	327.72	50.4
Saturday, January 23, 2016 11:36:01 0.991	332.67	50.1
Saturday, January 23, 2016 11:41:02 0.991	337.64	50.4
Saturday, January 23, 2016 11:46:02 0.991	342.60	50.2
Saturday, January 23, 2016 11:51:03 0.991	347.57	50.4
Saturday, January 23, 2016 11:56:03 0.991	352.52	50.1
Saturday, January 23, 2016 12:01:04 0.991	357.49	50.6
Saturday, January 23, 2016 12:06:04 0.991	362.44	50.2
Saturday, January 23, 2016 12:11:05 0.991	367.41	50.4
Saturday, January 23, 2016 12:16:06 0.991	372.38	49.9
Saturday, January 23, 2016 12:21:06 0.991	377.34	50.0
Saturday, January 23, 2016 12:26:07 0.991	382.31	49.9
Saturday, January 23, 2016 12:31:07 0.991	387.26	50.4
Saturday, January 23, 2016 12:36:08 0.991	392.23	49.9
Saturday, January 23, 2016 12:41:08 0.991	397.18	50.1
Saturday, January 23, 2016 12:46:09 0.991	402.15	50.1
Saturday, January 23, 2016 12:51:09 0.991	407.11	50.5
Saturday, January 23, 2016 12:56:10 0.991	412.08	49.8
Saturday, January 23, 2016 13:01:10 0.991	417.03	50.5
Saturday, January 23, 2016 13:06:11 0.991	422.00	50.2
Saturday, January 23, 2016 13:11:11 0.991	426.95	50.0

Saturday, January 23, 2016 13:16:12 0.991	431.93	49.9
Saturday, January 23, 2016 13:21:12 0.991	436.88	49.6
Saturday, January 23, 2016 13:26:13 0.991	441.85	50.1
Saturday, January 23, 2016 13:31:14 0.991	446.82	50.0
Saturday, January 23, 2016 13:36:14 0.991	451.77	50.1
Saturday, January 23, 2016 13:41:15 0.991	456.74	50.0
Saturday, January 23, 2016 13:46:15 0.991	461.70	50.3
Saturday, January 23, 2016 13:51:16 0.991	466.67	50.4
Saturday, January 23, 2016 13:56:16 0.991	471.62	50.5
Saturday, January 23, 2016 14:01:17 0.991	476.59	50.4
Saturday, January 23, 2016 14:06:17 0.991	481.54	50.0
Saturday, January 23, 2016 14:11:18 0.991	486.51	50.2
Saturday, January 23, 2016 14:16:18 0.991	491.47	50.4
Saturday, January 23, 2016 14:21:19 0.991	496.44	49.9
Saturday, January 23, 2016 14:26:19 0.991	501.39	50.3
Saturday, January 23, 2016 14:31:20 0.991	506.36	50.3
Saturday, January 23, 2016 14:36:21 0.991	511.33	50.0
Saturday, January 23, 2016 14:41:21 0.991	516.29	50.2
Saturday, January 23, 2016 14:46:22 0.991	521.25	50.0
Saturday, January 23, 2016 14:51:22 0.991	526.21	50.1
Saturday, January 23, 2016 14:56:23 0.991	531.18	49.7
Saturday, January 23, 2016 15:01:23 0.991	536.13	50.0
Saturday, January 23, 2016 15:06:24 0.991	541.10	50.1
Saturday, January 23, 2016 15:11:24 0.991	546.05	50.0
Saturday, January 23, 2016 15:16:25 0.991	551.02	50.0
Saturday, January 23, 2016 15:21:25 0.991	555.98	50.4
Saturday, January 23, 2016 15:26:26 0.991	560.95	50.1
Saturday, January 23, 2016 15:31:26 0.991	565.90	50.5
Saturday, January 23, 2016 15:36:27 0.991	570.87	49.8
Saturday, January 23, 2016 15:41:28 0.991	575.84	50.1
Saturday, January 23, 2016 15:46:28 0.991	580.79	50.4
Saturday, January 23, 2016 15:51:29 0.991	585.76	50.3
Saturday, January 23, 2016 15:56:29 0.991	590.72	50.0
Saturday, January 23, 2016 16:01:30 0.991	595.69	49.8
Saturday, January 23, 2016 16:06:30 0.991	600.64	50.0
Saturday, January 23, 2016 16:11:31 0.991	605.61	49.9
Saturday, January 23, 2016 16:16:31 0.991	610.56	50.5
Saturday, January 23, 2016 16:21:32 0.991	615.53	50.3
Saturday, January 23, 2016 16:26:32 0.991	620.49	50.1
Saturday, January 23, 2016 16:31:33 0.991	625.46	50.3
Saturday, January 23, 2016 16:36:33 0.991	630.41	50.4
Saturday, January 23, 2016 16:41:34 0.991	635.38	49.2
Saturday, January 23, 2016 16:46:34 0.991	640.33	50.4
Saturday, January 23, 2016 16:51:35 0.991	645.30	50.4
Saturday, January 23, 2016 16:56:35 0.991	650.25	50.5
Saturday, January 23, 2016 17:01:36 0.991	655.22	50.2
Saturday, January 23, 2016 17:06:36 0.991	660.18	49.7
Saturday, January 23, 2016 17:11:37 0.991	665.15	50.3
Saturday, January 23, 2016 17:16:38 0.991	670.12	49.0
Saturday, January 23, 2016 17:21:38 0.991	675.07	50.1
Saturday, January 23, 2016 17:26:39 0.991	680.04	50.2
Saturday, January 23, 2016 17:31:39 0.991	684.99	50.4
Saturday, January 23, 2016 17:36:40 0.991	689.96	50.4
Saturday, January 23, 2016 17:41:40 0.991	694.92	50.0

Saturday, January 23, 2016 17:46:41	0.991	699.89	50.3
Saturday, January 23, 2016 17:51:41	0.991	704.84	50.3
Saturday, January 23, 2016 17:56:42	0.991	709.81	50.4
Saturday, January 23, 2016 18:00:01	0.991	713.09	50.5

aqms5

formaldehyde002

Ch. 2 Cartridge Started Saturday, January 23, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Sunday, January 24, 2016 6:15:23

Total Volume 712.74 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.002 l/min

Ending Leak Rate -0.004 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Saturday, January 23, 2016 18:15:30	0.080	0.22	50.1
Saturday, January 23, 2016 18:20:30	0.991	5.18	50.4
Saturday, January 23, 2016 18:25:31	0.990	10.14	50.4
Saturday, January 23, 2016 18:30:31	0.990	15.09	50.3
Saturday, January 23, 2016 18:35:32	0.990	20.06	49.7
Saturday, January 23, 2016 18:40:32	0.990	25.01	50.3
Saturday, January 23, 2016 18:45:33	0.990	29.98	50.4
Saturday, January 23, 2016 18:50:33	0.990	34.93	50.4
Saturday, January 23, 2016 18:55:34	0.990	39.90	49.8
Saturday, January 23, 2016 19:00:34	0.990	44.85	50.0
Saturday, January 23, 2016 19:05:35	0.990	49.82	50.0
Saturday, January 23, 2016 19:10:35	0.990	54.77	49.5
Saturday, January 23, 2016 19:15:36	0.990	59.74	49.5
Saturday, January 23, 2016 19:20:36	0.990	64.69	50.1
Saturday, January 23, 2016 19:25:37	0.990	69.66	50.5
Saturday, January 23, 2016 19:30:37	0.990	74.61	50.0
Saturday, January 23, 2016 19:35:38	0.990	79.57	50.4
Saturday, January 23, 2016 19:40:38	0.990	84.52	50.0
Saturday, January 23, 2016 19:45:39	0.990	89.49	50.5
Saturday, January 23, 2016 19:50:39	0.990	94.44	50.1
Saturday, January 23, 2016 19:55:40	0.990	99.41	49.9
Saturday, January 23, 2016 20:00:40	0.990	104.36	50.4
Saturday, January 23, 2016 20:05:41	0.990	109.33	49.8
Saturday, January 23, 2016 20:10:41	0.990	114.28	49.7
Saturday, January 23, 2016 20:15:42	0.990	119.25	50.1
Saturday, January 23, 2016 20:20:42	0.990	124.20	50.0
Saturday, January 23, 2016 20:25:43	0.990	129.17	50.1
Saturday, January 23, 2016 20:30:43	0.990	134.12	50.5
Saturday, January 23, 2016 20:35:44	0.990	139.09	50.4
Saturday, January 23, 2016 20:40:44	0.990	144.04	50.4
Saturday, January 23, 2016 20:45:45	0.990	149.00	50.1
Saturday, January 23, 2016 20:50:45	0.990	153.96	50.4
Saturday, January 23, 2016 20:55:46	0.990	158.92	49.9

Saturday, January 23, 2016 21:00:46 0.990	163.87	50.4
Saturday, January 23, 2016 21:05:47 0.990	168.84	50.5
Saturday, January 23, 2016 21:10:47 0.990	173.79	50.1
Saturday, January 23, 2016 21:15:48 0.990	178.76	50.5
Saturday, January 23, 2016 21:20:48 0.990	183.71	50.0
Saturday, January 23, 2016 21:25:49 0.990	188.68	49.8
Saturday, January 23, 2016 21:30:49 0.990	193.63	50.4
Saturday, January 23, 2016 21:35:50 0.990	198.60	49.8
Saturday, January 23, 2016 21:40:50 0.990	203.55	50.3
Saturday, January 23, 2016 21:45:51 0.990	208.52	50.3
Saturday, January 23, 2016 21:50:51 0.990	213.47	50.0
Saturday, January 23, 2016 21:55:52 0.990	218.43	50.0
Saturday, January 23, 2016 22:00:52 0.990	223.39	50.1
Saturday, January 23, 2016 22:05:53 0.990	228.35	50.3
Saturday, January 23, 2016 22:10:53 0.990	233.30	50.1
Saturday, January 23, 2016 22:15:54 0.990	238.27	49.8
Saturday, January 23, 2016 22:20:54 0.990	243.22	50.0
Saturday, January 23, 2016 22:25:55 0.990	248.19	50.4
Saturday, January 23, 2016 22:30:56 0.990	253.16	49.7
Saturday, January 23, 2016 22:35:56 0.990	258.11	49.8
Saturday, January 23, 2016 22:40:57 0.990	263.08	50.1
Saturday, January 23, 2016 22:45:57 0.990	268.03	50.4
Saturday, January 23, 2016 22:50:58 0.990	273.00	49.9
Saturday, January 23, 2016 22:55:58 0.990	277.95	50.5
Saturday, January 23, 2016 23:00:59 0.990	282.91	49.6
Saturday, January 23, 2016 23:05:59 0.990	287.87	50.2
Saturday, January 23, 2016 23:11:00 0.990	292.83	50.4
Saturday, January 23, 2016 23:16:00 0.990	297.78	50.2
Saturday, January 23, 2016 23:21:01 0.990	302.75	49.6
Saturday, January 23, 2016 23:26:01 0.990	307.70	50.0
Saturday, January 23, 2016 23:31:02 0.990	312.67	50.3
Saturday, January 23, 2016 23:36:02 0.990	317.62	50.4
Saturday, January 23, 2016 23:41:03 0.990	322.59	50.1
Saturday, January 23, 2016 23:46:03 0.990	327.54	49.7
Saturday, January 23, 2016 23:51:04 0.990	332.51	50.1
Saturday, January 23, 2016 23:56:04 0.990	337.46	50.0
Sunday, January 24, 2016 0:01:05 0.990	342.43	49.9
Sunday, January 24, 2016 0:06:05 0.990	347.38	50.1
Sunday, January 24, 2016 0:11:06 0.990	352.34	49.8
Sunday, January 24, 2016 0:16:06 0.990	357.30	49.6
Sunday, January 24, 2016 0:21:07 0.990	362.26	49.6
Sunday, January 24, 2016 0:26:07 0.990	367.21	50.2
Sunday, January 24, 2016 0:31:08 0.990	372.18	50.4
Sunday, January 24, 2016 0:36:08 0.990	377.13	50.5
Sunday, January 24, 2016 0:41:09 0.990	382.10	50.1
Sunday, January 24, 2016 0:46:09 0.990	387.05	50.6
Sunday, January 24, 2016 0:51:10 0.990	392.02	50.3
Sunday, January 24, 2016 0:56:11 0.990	396.99	50.0
Sunday, January 24, 2016 1:01:11 0.990	401.94	50.5
Sunday, January 24, 2016 1:06:12 0.990	406.90	50.5
Sunday, January 24, 2016 1:11:12 0.990	411.86	50.4
Sunday, January 24, 2016 1:16:13 0.990	416.82	50.4
Sunday, January 24, 2016 1:21:13 0.990	421.77	49.7
Sunday, January 24, 2016 1:26:14 0.990	426.74	50.0

Sunday, January 24, 2016 1:31:14 0.990	431.69	50.3
Sunday, January 24, 2016 1:36:15 0.990	436.66	50.4
Sunday, January 24, 2016 1:41:15 0.990	441.61	50.0
Sunday, January 24, 2016 1:46:16 0.990	446.58	49.9
Sunday, January 24, 2016 1:51:16 0.990	451.53	50.4
Sunday, January 24, 2016 1:56:17 0.990	456.50	50.2
Sunday, January 24, 2016 2:01:17 0.990	461.45	50.3
Sunday, January 24, 2016 2:06:18 0.990	466.42	50.3
Sunday, January 24, 2016 2:11:18 0.990	471.37	49.7
Sunday, January 24, 2016 2:16:19 0.990	476.33	50.6
Sunday, January 24, 2016 2:21:19 0.990	481.29	50.4
Sunday, January 24, 2016 2:26:20 0.990	486.25	50.4
Sunday, January 24, 2016 2:31:20 0.990	491.20	50.1
Sunday, January 24, 2016 2:36:21 0.990	496.17	50.5
Sunday, January 24, 2016 2:41:21 0.990	501.12	50.0
Sunday, January 24, 2016 2:46:22 0.990	506.09	50.0
Sunday, January 24, 2016 2:51:22 0.990	511.04	50.1
Sunday, January 24, 2016 2:56:23 0.990	516.01	50.1
Sunday, January 24, 2016 3:01:23 0.990	520.96	50.5
Sunday, January 24, 2016 3:06:24 0.990	525.93	50.4
Sunday, January 24, 2016 3:11:24 0.990	530.88	50.3
Sunday, January 24, 2016 3:16:25 0.990	535.85	50.3
Sunday, January 24, 2016 3:21:25 0.990	540.80	50.4
Sunday, January 24, 2016 3:26:26 0.990	545.77	50.1
Sunday, January 24, 2016 3:31:26 0.990	550.72	50.4
Sunday, January 24, 2016 3:36:27 0.990	555.69	50.1
Sunday, January 24, 2016 3:41:27 0.990	560.64	50.2
Sunday, January 24, 2016 3:46:28 0.990	565.61	50.4
Sunday, January 24, 2016 3:51:29 0.990	570.58	50.2
Sunday, January 24, 2016 3:56:29 0.990	575.53	50.4
Sunday, January 24, 2016 4:01:30 0.990	580.50	49.6
Sunday, January 24, 2016 4:06:30 0.990	585.45	50.4
Sunday, January 24, 2016 4:11:31 0.990	590.42	50.5
Sunday, January 24, 2016 4:16:31 0.990	595.37	50.5
Sunday, January 24, 2016 4:21:32 0.990	600.34	50.3
Sunday, January 24, 2016 4:26:32 0.990	605.29	49.5
Sunday, January 24, 2016 4:31:33 0.990	610.26	50.0
Sunday, January 24, 2016 4:36:33 0.990	615.21	50.0
Sunday, January 24, 2016 4:41:34 0.990	620.18	50.3
Sunday, January 24, 2016 4:46:34 0.990	625.13	50.1
Sunday, January 24, 2016 4:51:35 0.990	630.10	50.3
Sunday, January 24, 2016 4:56:35 0.990	635.05	50.1
Sunday, January 24, 2016 5:01:36 0.990	640.01	50.3
Sunday, January 24, 2016 5:06:37 0.990	644.98	50.3
Sunday, January 24, 2016 5:11:37 0.990	649.93	50.3
Sunday, January 24, 2016 5:16:37 0.990	654.89	50.3
Sunday, January 24, 2016 5:21:38 0.990	659.85	50.2
Sunday, January 24, 2016 5:26:38 0.990	664.81	50.2
Sunday, January 24, 2016 5:31:39 0.990	669.77	49.6
Sunday, January 24, 2016 5:36:39 0.990	674.73	49.8
Sunday, January 24, 2016 5:41:40 0.990	679.69	50.4
Sunday, January 24, 2016 5:46:41 0.990	684.66	50.4
Sunday, January 24, 2016 5:51:41 0.990	689.61	50.3
Sunday, January 24, 2016 5:56:42 0.990	694.58	49.4

Sunday, January 24, 2016 6:01:42	0.990	699.53	50.3
Sunday, January 24, 2016 6:06:43	0.990	704.50	50.5
Sunday, January 24, 2016 6:11:43	0.990	709.45	50.3
Sunday, January 24, 2016 6:15:02	0.990	712.74	50.1

aqms5

formaldehyde001

Ch. 1 Cartridge Started Friday, January 29, 2016 6:00:04

Flow Rate Set Point 1.00 l/min

Stopped Friday, January 29, 2016 18:00:24

Total Volume 713.08 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate -0.003 l/min

Ending Leak Rate -0.005 l/min

Flow Controller Zero -0.004 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Friday, January 29, 2016 6:00:31	0.077	0.23	50.1
Friday, January 29, 2016 6:05:32	0.991	5.20	50.0
Friday, January 29, 2016 6:10:32	0.991	10.15	50.3
Friday, January 29, 2016 6:15:33	0.991	15.12	50.1
Friday, January 29, 2016 6:20:33	0.991	20.07	49.9
Friday, January 29, 2016 6:25:33	0.991	25.03	50.3
Friday, January 29, 2016 6:30:34	0.991	30.00	50.5
Friday, January 29, 2016 6:35:34	0.991	34.95	50.1
Friday, January 29, 2016 6:40:35	0.991	39.92	50.4
Friday, January 29, 2016 6:45:36	0.991	44.89	49.9
Friday, January 29, 2016 6:50:36	0.991	49.84	49.9
Friday, January 29, 2016 6:55:37	0.991	54.81	50.4
Friday, January 29, 2016 7:00:37	0.991	59.77	50.5
Friday, January 29, 2016 7:05:38	0.991	64.74	49.8
Friday, January 29, 2016 7:10:38	0.991	69.69	50.5
Friday, January 29, 2016 7:15:39	0.991	74.66	49.6
Friday, January 29, 2016 7:20:39	0.991	79.61	50.5
Friday, January 29, 2016 7:25:40	0.991	84.58	49.6
Friday, January 29, 2016 7:30:40	0.991	89.54	50.2
Friday, January 29, 2016 7:35:41	0.991	94.51	50.6
Friday, January 29, 2016 7:40:41	0.991	99.46	49.7
Friday, January 29, 2016 7:45:42	0.991	104.43	50.0
Friday, January 29, 2016 7:50:42	0.991	109.38	50.4
Friday, January 29, 2016 7:55:43	0.991	114.35	50.6
Friday, January 29, 2016 8:00:43	0.991	119.31	50.0
Friday, January 29, 2016 8:05:44	0.991	124.28	50.3
Friday, January 29, 2016 8:10:44	0.991	129.23	50.5
Friday, January 29, 2016 8:15:45	0.991	134.20	50.1
Friday, January 29, 2016 8:20:45	0.991	139.16	49.6
Friday, January 29, 2016 8:25:46	0.991	144.13	49.7
Friday, January 29, 2016 8:30:46	0.991	149.08	50.1
Friday, January 29, 2016 8:35:47	0.991	154.05	50.2
Friday, January 29, 2016 8:40:47	0.991	159.00	49.7

Friday, January 29, 2016 8:45:48 0.991	163.97	50.1
Friday, January 29, 2016 8:50:48 0.991	168.93	50.5
Friday, January 29, 2016 8:55:49 0.991	173.90	50.2
Friday, January 29, 2016 9:00:49 0.991	178.85	50.4
Friday, January 29, 2016 9:05:50 0.991	183.82	50.4
Friday, January 29, 2016 9:10:50 0.991	188.77	50.5
Friday, January 29, 2016 9:15:51 0.991	193.74	50.5
Friday, January 29, 2016 9:20:51 0.991	198.70	50.4
Friday, January 29, 2016 9:25:52 0.991	203.67	50.1
Friday, January 29, 2016 9:30:52 0.991	208.62	50.5
Friday, January 29, 2016 9:35:53 0.991	213.59	50.1
Friday, January 29, 2016 9:40:53 0.991	218.54	50.6
Friday, January 29, 2016 9:45:54 0.991	223.51	50.2
Friday, January 29, 2016 9:50:54 0.991	228.47	50.6
Friday, January 29, 2016 9:55:55 0.991	233.44	50.4
Friday, January 29, 2016 10:00:55 0.991	238.39	50.4
Friday, January 29, 2016 10:05:56 0.991	243.36	50.0
Friday, January 29, 2016 10:10:56 0.991	248.32	49.9
Friday, January 29, 2016 10:15:57 0.991	253.29	50.6
Friday, January 29, 2016 10:20:58 0.991	258.26	50.1
Friday, January 29, 2016 10:25:58 0.991	263.21	50.1
Friday, January 29, 2016 10:30:59 0.991	268.18	50.5
Friday, January 29, 2016 10:35:59 0.991	273.13	50.2
Friday, January 29, 2016 10:41:00 0.991	278.10	49.8
Friday, January 29, 2016 10:46:00 0.991	283.06	49.8
Friday, January 29, 2016 10:51:01 0.991	288.03	50.4
Friday, January 29, 2016 10:56:01 0.991	292.98	50.4
Friday, January 29, 2016 11:01:02 0.991	297.95	50.5
Friday, January 29, 2016 11:06:02 0.991	302.91	50.0
Friday, January 29, 2016 11:11:03 0.991	307.88	50.6
Friday, January 29, 2016 11:16:03 0.991	312.83	50.5
Friday, January 29, 2016 11:21:04 0.991	317.80	49.7
Friday, January 29, 2016 11:26:04 0.991	322.75	50.5
Friday, January 29, 2016 11:31:05 0.991	327.72	50.5
Friday, January 29, 2016 11:36:05 0.991	332.68	49.9
Friday, January 29, 2016 11:41:06 0.991	337.65	50.1
Friday, January 29, 2016 11:46:06 0.991	342.60	49.4
Friday, January 29, 2016 11:51:07 0.991	347.57	50.5
Friday, January 29, 2016 11:56:07 0.991	352.53	50.1
Friday, January 29, 2016 12:01:08 0.991	357.50	50.7
Friday, January 29, 2016 12:06:08 0.991	362.45	50.1
Friday, January 29, 2016 12:11:09 0.991	367.42	50.4
Friday, January 29, 2016 12:16:09 0.991	372.37	50.2
Friday, January 29, 2016 12:21:10 0.991	377.34	49.7
Friday, January 29, 2016 12:26:10 0.991	382.30	49.6
Friday, January 29, 2016 12:31:11 0.991	387.27	50.1
Friday, January 29, 2016 12:36:11 0.991	392.22	50.2
Friday, January 29, 2016 12:41:12 0.991	397.19	50.1
Friday, January 29, 2016 12:46:12 0.991	402.14	50.0
Friday, January 29, 2016 12:51:13 0.991	407.12	50.1
Friday, January 29, 2016 12:56:13 0.991	412.07	50.2
Friday, January 29, 2016 13:01:14 0.991	417.04	50.4
Friday, January 29, 2016 13:06:14 0.991	421.99	50.3
Friday, January 29, 2016 13:11:15 0.991	426.96	50.4

Friday, January 29, 2016 13:16:15 0.991	431.92	49.6
Friday, January 29, 2016 13:21:16 0.991	436.89	50.2
Friday, January 29, 2016 13:26:16 0.991	441.84	50.1
Friday, January 29, 2016 13:31:17 0.991	446.81	50.2
Friday, January 29, 2016 13:36:17 0.991	451.77	50.5
Friday, January 29, 2016 13:41:18 0.991	456.74	50.1
Friday, January 29, 2016 13:46:19 0.991	461.71	50.2
Friday, January 29, 2016 13:51:19 0.991	466.66	50.5
Friday, January 29, 2016 13:56:20 0.991	471.63	50.4
Friday, January 29, 2016 14:01:20 0.991	476.58	50.6
Friday, January 29, 2016 14:06:21 0.991	481.55	50.2
Friday, January 29, 2016 14:11:21 0.991	486.51	50.5
Friday, January 29, 2016 14:16:22 0.991	491.48	50.5
Friday, January 29, 2016 14:21:22 0.991	496.43	50.1
Friday, January 29, 2016 14:26:23 0.991	501.40	49.7
Friday, January 29, 2016 14:31:23 0.991	506.36	50.0
Friday, January 29, 2016 14:36:24 0.991	511.33	50.5
Friday, January 29, 2016 14:41:24 0.991	516.28	50.1
Friday, January 29, 2016 14:46:25 0.991	521.25	49.8
Friday, January 29, 2016 14:51:25 0.991	526.20	50.5
Friday, January 29, 2016 14:56:26 0.991	531.17	50.6
Friday, January 29, 2016 15:01:26 0.991	536.13	50.5
Friday, January 29, 2016 15:06:27 0.991	541.10	50.7
Friday, January 29, 2016 15:11:27 0.991	546.05	50.0
Friday, January 29, 2016 15:16:28 0.991	551.02	50.1
Friday, January 29, 2016 15:21:28 0.991	555.97	50.1
Friday, January 29, 2016 15:26:29 0.991	560.94	50.2
Friday, January 29, 2016 15:31:29 0.991	565.90	49.6
Friday, January 29, 2016 15:36:30 0.991	570.87	50.4
Friday, January 29, 2016 15:41:30 0.991	575.82	49.7
Friday, January 29, 2016 15:46:31 0.991	580.79	50.6
Friday, January 29, 2016 15:51:31 0.991	585.74	50.3
Friday, January 29, 2016 15:56:32 0.991	590.71	50.5
Friday, January 29, 2016 16:01:32 0.991	595.67	50.2
Friday, January 29, 2016 16:06:33 0.991	600.64	50.1
Friday, January 29, 2016 16:11:34 0.991	605.61	50.6
Friday, January 29, 2016 16:16:34 0.991	610.56	50.5
Friday, January 29, 2016 16:21:35 0.991	615.53	50.4
Friday, January 29, 2016 16:26:35 0.991	620.48	50.2
Friday, January 29, 2016 16:31:36 0.991	625.45	50.1
Friday, January 29, 2016 16:36:36 0.991	630.41	50.1
Friday, January 29, 2016 16:41:37 0.991	635.38	50.5
Friday, January 29, 2016 16:46:37 0.991	640.33	49.9
Friday, January 29, 2016 16:51:38 0.991	645.30	50.4
Friday, January 29, 2016 16:56:38 0.991	650.25	50.4
Friday, January 29, 2016 17:01:39 0.991	655.22	50.5
Friday, January 29, 2016 17:06:39 0.991	660.18	50.4
Friday, January 29, 2016 17:11:40 0.991	665.15	50.6
Friday, January 29, 2016 17:16:40 0.991	670.10	50.4
Friday, January 29, 2016 17:21:41 0.991	675.07	50.5
Friday, January 29, 2016 17:26:41 0.991	680.02	49.7
Friday, January 29, 2016 17:31:42 0.991	684.99	49.7
Friday, January 29, 2016 17:36:42 0.991	689.95	50.0
Friday, January 29, 2016 17:41:43 0.991	694.91	50.8

Friday, January 29, 2016 17:46:43	0.991	699.87	50.2
Friday, January 29, 2016 17:51:44	0.991	704.84	50.1
Friday, January 29, 2016 17:56:44	0.991	709.79	50.5
Friday, January 29, 2016 18:00:03	0.991	713.08	50.5

aqms5

formaldehyde002

Ch. 2 Cartridge Started Friday, January 29, 2016 18:15:00

Flow Rate Set Point 1.00 l/min

Stopped Saturday, January 30, 2016 6:15:25

Total Volume 712.81 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.002 l/min

Ending Leak Rate -0.005 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Friday, January 29, 2016 18:15:27	0.080	0.22	50.1
Friday, January 29, 2016 18:20:27	0.990	5.18	50.4
Friday, January 29, 2016 18:25:28	0.990	10.14	49.7
Friday, January 29, 2016 18:30:28	0.990	15.09	50.6
Friday, January 29, 2016 18:35:29	0.990	20.06	50.0
Friday, January 29, 2016 18:40:29	0.990	25.01	50.1
Friday, January 29, 2016 18:45:30	0.990	29.98	50.3
Friday, January 29, 2016 18:50:31	0.990	34.95	50.0
Friday, January 29, 2016 18:55:31	0.990	39.90	50.6
Friday, January 29, 2016 19:00:32	0.990	44.87	50.5
Friday, January 29, 2016 19:05:32	0.990	49.82	50.7
Friday, January 29, 2016 19:10:33	0.990	54.78	49.8
Friday, January 29, 2016 19:15:33	0.990	59.74	50.4
Friday, January 29, 2016 19:20:34	0.990	64.70	50.0
Friday, January 29, 2016 19:25:34	0.990	69.65	50.0
Friday, January 29, 2016 19:30:35	0.990	74.62	50.0
Friday, January 29, 2016 19:35:35	0.990	79.57	50.2
Friday, January 29, 2016 19:40:36	0.990	84.54	50.4
Friday, January 29, 2016 19:45:36	0.990	89.49	50.5
Friday, January 29, 2016 19:50:37	0.990	94.46	50.0
Friday, January 29, 2016 19:55:37	0.990	99.41	50.3
Friday, January 29, 2016 20:00:38	0.990	104.38	50.1
Friday, January 29, 2016 20:05:38	0.990	109.33	50.0
Friday, January 29, 2016 20:10:39	0.990	114.30	50.5
Friday, January 29, 2016 20:15:40	0.990	119.26	50.4
Friday, January 29, 2016 20:20:40	0.990	124.21	50.3
Friday, January 29, 2016 20:25:41	0.990	129.18	50.6
Friday, January 29, 2016 20:30:41	0.990	134.13	49.6
Friday, January 29, 2016 20:35:42	0.990	139.10	50.4
Friday, January 29, 2016 20:40:42	0.990	144.05	50.1
Friday, January 29, 2016 20:45:43	0.990	149.02	50.4
Friday, January 29, 2016 20:50:43	0.990	153.97	49.7
Friday, January 29, 2016 20:55:44	0.990	158.94	50.1

Friday, January 29, 2016 21:00:44 0.990	163.89	50.4
Friday, January 29, 2016 21:05:45 0.990	168.86	50.2
Friday, January 29, 2016 21:10:45 0.990	173.81	50.2
Friday, January 29, 2016 21:15:46 0.990	178.77	50.5
Friday, January 29, 2016 21:20:46 0.990	183.72	50.2
Friday, January 29, 2016 21:25:47 0.990	188.69	50.0
Friday, January 29, 2016 21:30:47 0.990	193.64	50.6
Friday, January 29, 2016 21:35:48 0.990	198.61	50.0
Friday, January 29, 2016 21:40:48 0.990	203.56	50.0
Friday, January 29, 2016 21:45:49 0.990	208.53	50.2
Friday, January 29, 2016 21:50:50 0.990	213.50	50.4
Friday, January 29, 2016 21:55:50 0.990	218.45	50.3
Friday, January 29, 2016 22:00:51 0.990	223.42	50.5
Friday, January 29, 2016 22:05:51 0.990	228.37	50.1
Friday, January 29, 2016 22:10:52 0.990	233.33	50.1
Friday, January 29, 2016 22:15:52 0.990	238.29	50.2
Friday, January 29, 2016 22:20:53 0.990	243.25	49.4
Friday, January 29, 2016 22:25:53 0.990	248.20	50.6
Friday, January 29, 2016 22:30:54 0.990	253.17	50.4
Friday, January 29, 2016 22:35:54 0.990	258.12	50.4
Friday, January 29, 2016 22:40:55 0.990	263.09	50.0
Friday, January 29, 2016 22:45:55 0.990	268.04	50.2
Friday, January 29, 2016 22:50:56 0.990	273.01	50.1
Friday, January 29, 2016 22:55:56 0.990	277.96	49.8
Friday, January 29, 2016 23:00:57 0.990	282.93	50.4
Friday, January 29, 2016 23:05:57 0.990	287.88	50.6
Friday, January 29, 2016 23:10:58 0.990	292.85	50.1
Friday, January 29, 2016 23:15:59 0.990	297.81	50.2
Friday, January 29, 2016 23:20:59 0.990	302.76	50.5
Friday, January 29, 2016 23:26:00 0.990	307.73	50.4
Friday, January 29, 2016 23:31:00 0.990	312.68	50.5
Friday, January 29, 2016 23:36:01 0.990	317.65	49.4
Friday, January 29, 2016 23:41:01 0.990	322.60	50.5
Friday, January 29, 2016 23:46:02 0.990	327.57	49.6
Friday, January 29, 2016 23:51:02 0.990	332.52	50.5
Friday, January 29, 2016 23:56:03 0.990	337.49	50.2
Saturday, January 30, 2016 0:01:04 0.990	342.45	50.6
Saturday, January 30, 2016 0:06:04 0.990	347.41	50.6
Saturday, January 30, 2016 0:11:05 0.990	352.37	49.7
Saturday, January 30, 2016 0:16:05 0.990	357.32	49.7
Saturday, January 30, 2016 0:21:06 0.990	362.29	50.1
Saturday, January 30, 2016 0:26:06 0.990	367.24	50.4
Saturday, January 30, 2016 0:31:07 0.990	372.21	49.6
Saturday, January 30, 2016 0:36:08 0.990	377.18	49.2
Saturday, January 30, 2016 0:41:08 0.990	382.13	50.1
Saturday, January 30, 2016 0:46:09 0.990	387.10	50.7
Saturday, January 30, 2016 0:51:09 0.990	392.05	50.4
Saturday, January 30, 2016 0:56:10 0.990	397.01	50.1
Saturday, January 30, 2016 1:01:10 0.990	401.96	49.7
Saturday, January 30, 2016 1:06:11 0.990	406.93	50.5
Saturday, January 30, 2016 1:11:12 0.990	411.90	50.4
Saturday, January 30, 2016 1:16:12 0.990	416.85	50.6
Saturday, January 30, 2016 1:21:13 0.990	421.82	50.0
Saturday, January 30, 2016 1:26:13 0.990	426.77	49.9

Saturday, January 30, 2016 1:31:14 0.990	431.74	50.2
Saturday, January 30, 2016 1:36:14 0.990	436.69	50.6
Saturday, January 30, 2016 1:41:15 0.990	441.66	49.7
Saturday, January 30, 2016 1:46:15 0.990	446.61	49.7
Saturday, January 30, 2016 1:51:16 0.990	451.57	49.5
Saturday, January 30, 2016 1:56:17 0.990	456.54	50.1
Saturday, January 30, 2016 2:01:17 0.990	461.49	50.0
Saturday, January 30, 2016 2:06:18 0.990	466.46	50.2
Saturday, January 30, 2016 2:11:18 0.990	471.41	50.4
Saturday, January 30, 2016 2:16:19 0.990	476.38	50.1
Saturday, January 30, 2016 2:21:19 0.990	481.33	50.0
Saturday, January 30, 2016 2:26:20 0.990	486.30	49.9
Saturday, January 30, 2016 2:31:20 0.990	491.25	50.3
Saturday, January 30, 2016 2:36:21 0.990	496.22	50.5
Saturday, January 30, 2016 2:41:21 0.990	501.17	50.2
Saturday, January 30, 2016 2:46:22 0.990	506.13	50.1
Saturday, January 30, 2016 2:51:23 0.990	511.10	49.9
Saturday, January 30, 2016 2:56:23 0.990	516.05	49.8
Saturday, January 30, 2016 3:01:24 0.990	521.02	50.6
Saturday, January 30, 2016 3:06:24 0.990	525.97	50.4
Saturday, January 30, 2016 3:11:25 0.990	530.94	50.1
Saturday, January 30, 2016 3:16:25 0.990	535.89	50.5
Saturday, January 30, 2016 3:21:26 0.990	540.86	49.7
Saturday, January 30, 2016 3:26:26 0.990	545.81	49.4
Saturday, January 30, 2016 3:31:27 0.990	550.78	50.3
Saturday, January 30, 2016 3:36:27 0.990	555.73	50.2
Saturday, January 30, 2016 3:41:28 0.990	560.70	49.8
Saturday, January 30, 2016 3:46:29 0.990	565.67	50.0
Saturday, January 30, 2016 3:51:29 0.990	570.62	50.2
Saturday, January 30, 2016 3:56:30 0.990	575.59	50.1
Saturday, January 30, 2016 4:01:30 0.990	580.54	50.5
Saturday, January 30, 2016 4:06:31 0.990	585.51	49.6
Saturday, January 30, 2016 4:11:31 0.990	590.46	50.0
Saturday, January 30, 2016 4:16:32 0.990	595.43	50.3
Saturday, January 30, 2016 4:21:32 0.990	600.38	50.2
Saturday, January 30, 2016 4:26:33 0.990	605.35	49.7
Saturday, January 30, 2016 4:31:33 0.990	610.30	50.4
Saturday, January 30, 2016 4:36:34 0.990	615.27	50.1
Saturday, January 30, 2016 4:41:35 0.990	620.24	49.4
Saturday, January 30, 2016 4:46:35 0.990	625.19	50.2
Saturday, January 30, 2016 4:51:36 0.990	630.16	50.4
Saturday, January 30, 2016 4:56:36 0.990	635.11	50.0
Saturday, January 30, 2016 5:01:37 0.990	640.08	50.1
Saturday, January 30, 2016 5:06:37 0.990	645.03	50.1
Saturday, January 30, 2016 5:11:38 0.990	650.00	49.3
Saturday, January 30, 2016 5:16:38 0.990	654.95	50.4
Saturday, January 30, 2016 5:21:39 0.990	659.92	50.0
Saturday, January 30, 2016 5:26:40 0.990	664.88	50.0
Saturday, January 30, 2016 5:31:40 0.990	669.84	50.3
Saturday, January 30, 2016 5:36:41 0.990	674.80	50.4
Saturday, January 30, 2016 5:41:41 0.990	679.76	50.1
Saturday, January 30, 2016 5:46:42 0.990	684.72	50.5
Saturday, January 30, 2016 5:51:42 0.990	689.67	50.1
Saturday, January 30, 2016 5:56:43 0.990	694.64	50.2

Saturday, January 30, 2016 6:01:44 0.990	699.61	50.7
Saturday, January 30, 2016 6:06:44 0.990	704.56	49.8
Saturday, January 30, 2016 6:11:45 0.990	709.53	50.1
Saturday, January 30, 2016 6:15:03 0.990	712.80	50.5

aqms5

formaldehyde001

Ch. 1 Cartridge Started Thursday, February 04, 2016 6:00:04

Flow Rate Set Point 1.00 l/min

Stopped Thursday, February 04, 2016 18:00:23

Total Volume 713.15 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate -0.003 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
Thursday, February 04, 2016 6:00:31	0.078	0.23	50.4
Thursday, February 04, 2016 6:05:31	0.991	5.18	50.4
Thursday, February 04, 2016 6:10:32	0.991	10.15	49.9
Thursday, February 04, 2016 6:15:32	0.991	15.10	50.5
Thursday, February 04, 2016 6:20:33	0.991	20.08	50.0
Thursday, February 04, 2016 6:25:33	0.991	25.03	50.5
Thursday, February 04, 2016 6:30:34	0.991	30.00	49.7
Thursday, February 04, 2016 6:35:34	0.991	34.95	50.3
Thursday, February 04, 2016 6:40:35	0.991	39.92	50.1
Thursday, February 04, 2016 6:45:36	0.991	44.89	50.1
Thursday, February 04, 2016 6:50:36	0.991	49.85	50.8
Thursday, February 04, 2016 6:55:37	0.991	54.82	50.7
Thursday, February 04, 2016 7:00:37	0.991	59.77	50.0
Thursday, February 04, 2016 7:05:38	0.991	64.74	50.8
Thursday, February 04, 2016 7:10:38	0.991	69.70	49.5
Thursday, February 04, 2016 7:15:39	0.991	74.67	50.9
Thursday, February 04, 2016 7:20:40	0.991	79.64	50.3
Thursday, February 04, 2016 7:25:40	0.991	84.59	50.1
Thursday, February 04, 2016 7:30:41	0.991	89.57	50.6
Thursday, February 04, 2016 7:35:41	0.991	94.52	50.1
Thursday, February 04, 2016 7:40:42	0.991	99.49	50.4
Thursday, February 04, 2016 7:45:43	0.991	104.46	50.2
Thursday, February 04, 2016 7:50:43	0.991	109.42	50.2
Thursday, February 04, 2016 7:55:44	0.991	114.39	50.5
Thursday, February 04, 2016 8:00:44	0.991	119.34	50.7
Thursday, February 04, 2016 8:05:45	0.991	124.31	50.0
Thursday, February 04, 2016 8:10:45	0.991	129.27	50.1
Thursday, February 04, 2016 8:15:46	0.991	134.24	50.1
Thursday, February 04, 2016 8:20:47	0.991	139.21	50.6
Thursday, February 04, 2016 8:25:47	0.991	144.16	49.8
Thursday, February 04, 2016 8:30:48	0.991	149.13	50.5
Thursday, February 04, 2016 8:35:49	0.991	154.10	50.2
Thursday, February 04, 2016 8:40:49	0.991	159.06	50.8

Thursday, February 04, 2016 8:45:50 0.991	164.03	51.1
Thursday, February 04, 2016 8:50:50 0.991	168.98	50.9
Thursday, February 04, 2016 8:55:51 0.991	173.95	50.3
Thursday, February 04, 2016 9:00:52 0.991	178.93	50.5
Thursday, February 04, 2016 9:05:52 0.991	183.88	50.6
Thursday, February 04, 2016 9:10:53 0.991	188.85	50.0
Thursday, February 04, 2016 9:15:53 0.991	193.81	49.4
Thursday, February 04, 2016 9:20:54 0.991	198.78	50.1
Thursday, February 04, 2016 9:25:55 0.991	203.75	51.0
Thursday, February 04, 2016 9:30:55 0.991	208.70	50.4
Thursday, February 04, 2016 9:35:56 0.991	213.67	50.7
Thursday, February 04, 2016 9:40:56 0.991	218.63	50.1
Thursday, February 04, 2016 9:45:57 0.991	223.60	50.4
Thursday, February 04, 2016 9:50:58 0.991	228.57	51.0
Thursday, February 04, 2016 9:55:58 0.991	233.52	50.4
Thursday, February 04, 2016 10:00:59 0.991	238.49	50.2
Thursday, February 04, 2016 10:05:59 0.991	243.45	50.4
Thursday, February 04, 2016 10:11:00 0.991	248.42	50.4
Thursday, February 04, 2016 10:16:00 0.991	253.37	49.8
Thursday, February 04, 2016 10:21:01 0.991	258.34	50.1
Thursday, February 04, 2016 10:26:02 0.991	263.31	50.6
Thursday, February 04, 2016 10:31:02 0.991	268.27	49.0
Thursday, February 04, 2016 10:36:03 0.991	273.24	50.0
Thursday, February 04, 2016 10:41:03 0.991	278.19	50.4
Thursday, February 04, 2016 10:46:04 0.991	283.16	50.7
Thursday, February 04, 2016 10:51:05 0.991	288.14	50.5
Thursday, February 04, 2016 10:56:05 0.991	293.09	50.7
Thursday, February 04, 2016 11:01:06 0.991	298.06	50.4
Thursday, February 04, 2016 11:06:06 0.991	303.01	50.1
Thursday, February 04, 2016 11:11:07 0.991	307.99	50.8
Thursday, February 04, 2016 11:16:08 0.991	312.96	51.0
Thursday, February 04, 2016 11:21:08 0.991	317.91	50.0
Thursday, February 04, 2016 11:26:09 0.991	322.88	50.4
Thursday, February 04, 2016 11:31:09 0.991	327.84	50.5
Thursday, February 04, 2016 11:36:10 0.991	332.81	50.1
Thursday, February 04, 2016 11:41:10 0.991	337.76	50.5
Thursday, February 04, 2016 11:46:11 0.991	342.73	50.9
Thursday, February 04, 2016 11:51:12 0.991	347.70	50.6
Thursday, February 04, 2016 11:56:12 0.991	352.66	50.8
Thursday, February 04, 2016 12:01:13 0.991	357.63	50.1
Thursday, February 04, 2016 12:06:13 0.991	362.58	50.4
Thursday, February 04, 2016 12:11:14 0.991	367.55	50.4
Thursday, February 04, 2016 12:16:15 0.991	372.52	50.0
Thursday, February 04, 2016 12:21:15 0.991	377.48	50.0
Thursday, February 04, 2016 12:26:16 0.991	382.45	50.1
Thursday, February 04, 2016 12:31:16 0.991	387.40	50.5
Thursday, February 04, 2016 12:36:17 0.991	392.37	50.3
Thursday, February 04, 2016 12:41:18 0.991	397.35	50.6
Thursday, February 04, 2016 12:46:18 0.991	402.30	50.1
Thursday, February 04, 2016 12:51:19 0.991	407.27	49.7
Thursday, February 04, 2016 12:56:19 0.991	412.22	49.8
Thursday, February 04, 2016 13:01:20 0.991	417.20	50.3
Thursday, February 04, 2016 13:06:21 0.991	422.17	50.2
Thursday, February 04, 2016 13:11:21 0.991	427.12	50.0

Thursday, February 04, 2016 13:16:22 0.991	432.09	50.1
Thursday, February 04, 2016 13:21:22 0.991	437.05	50.2
Thursday, February 04, 2016 13:26:23 0.991	442.02	50.1
Thursday, February 04, 2016 13:31:24 0.991	446.99	50.0
Thursday, February 04, 2016 13:36:24 0.991	451.94	49.4
Thursday, February 04, 2016 13:41:25 0.991	456.91	50.8
Thursday, February 04, 2016 13:46:25 0.991	461.87	50.7
Thursday, February 04, 2016 13:51:26 0.991	466.84	50.4
Thursday, February 04, 2016 13:56:27 0.991	471.81	50.8
Thursday, February 04, 2016 14:01:27 0.991	476.76	49.7
Thursday, February 04, 2016 14:06:28 0.991	481.73	50.8
Thursday, February 04, 2016 14:11:28 0.991	486.69	49.3
Thursday, February 04, 2016 14:16:29 0.991	491.66	50.2
Thursday, February 04, 2016 14:21:30 0.991	496.63	50.2
Thursday, February 04, 2016 14:26:30 0.991	501.58	50.5
Thursday, February 04, 2016 14:31:31 0.991	506.56	50.2
Thursday, February 04, 2016 14:36:31 0.991	511.51	50.5
Thursday, February 04, 2016 14:41:32 0.991	516.48	50.6
Thursday, February 04, 2016 14:46:33 0.991	521.45	49.9
Thursday, February 04, 2016 14:51:33 0.991	526.41	50.2
Thursday, February 04, 2016 14:56:34 0.991	531.38	50.3
Thursday, February 04, 2016 15:01:34 0.991	536.33	50.1
Thursday, February 04, 2016 15:06:35 0.991	541.30	50.1
Thursday, February 04, 2016 15:11:35 0.991	546.26	49.9
Thursday, February 04, 2016 15:16:36 0.991	551.23	49.7
Thursday, February 04, 2016 15:21:37 0.991	556.20	50.1
Thursday, February 04, 2016 15:26:37 0.991	561.16	49.4
Thursday, February 04, 2016 15:31:38 0.991	566.13	50.8
Thursday, February 04, 2016 15:36:38 0.991	571.08	50.0
Thursday, February 04, 2016 15:41:39 0.991	576.05	50.0
Thursday, February 04, 2016 15:46:40 0.991	581.02	50.8
Thursday, February 04, 2016 15:51:40 0.991	585.98	50.1
Thursday, February 04, 2016 15:56:41 0.991	590.95	49.5
Thursday, February 04, 2016 16:01:41 0.991	595.90	50.5
Thursday, February 04, 2016 16:06:42 0.991	600.87	50.1
Thursday, February 04, 2016 16:11:42 0.991	605.83	50.8
Thursday, February 04, 2016 16:16:43 0.991	610.80	49.9
Thursday, February 04, 2016 16:21:43 0.991	615.75	50.3
Thursday, February 04, 2016 16:26:44 0.991	620.72	50.2
Thursday, February 04, 2016 16:31:44 0.991	625.67	50.1
Thursday, February 04, 2016 16:36:45 0.991	630.64	50.5
Thursday, February 04, 2016 16:41:45 0.991	635.60	50.0
Thursday, February 04, 2016 16:46:46 0.991	640.57	50.0
Thursday, February 04, 2016 16:51:47 0.991	645.54	50.4
Thursday, February 04, 2016 16:56:47 0.991	650.49	49.8
Thursday, February 04, 2016 17:01:48 0.991	655.46	49.9
Thursday, February 04, 2016 17:06:48 0.991	660.42	50.5
Thursday, February 04, 2016 17:11:49 0.991	665.39	50.3
Thursday, February 04, 2016 17:16:49 0.991	670.34	50.5
Thursday, February 04, 2016 17:21:50 0.991	675.31	50.1
Thursday, February 04, 2016 17:26:50 0.991	680.26	50.6
Thursday, February 04, 2016 17:31:51 0.991	685.23	50.8
Thursday, February 04, 2016 17:36:51 0.991	690.19	50.2
Thursday, February 04, 2016 17:41:52 0.991	695.16	49.7

Thursday, February 04, 2016 17:46:52 0.991	700.11	50.1
Thursday, February 04, 2016 17:51:53 0.991	705.08	50.1
Thursday, February 04, 2016 17:56:53 0.991	710.04	50.2
Thursday, February 04, 2016 18:00:01 0.991	713.14	50.4

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, February 04, 2016 18:15:04

Flow Rate Set Point 1.00 l/min

Stopped Friday, February 05, 2016 6:15:26

Total Volume 712.77 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.003 l/min

Ending Leak Rate -0.004 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Thursday, February 04, 2016 18:15:31	0.080	0.22	50.2
Thursday, February 04, 2016 18:20:31	0.990	5.18	50.7
Thursday, February 04, 2016 18:25:32	0.990	10.14	49.9
Thursday, February 04, 2016 18:30:32	0.990	15.10	50.6
Thursday, February 04, 2016 18:35:33	0.990	20.06	49.6
Thursday, February 04, 2016 18:40:33	0.990	25.01	50.2
Thursday, February 04, 2016 18:45:34	0.990	29.98	50.4
Thursday, February 04, 2016 18:50:35	0.990	34.95	50.6
Thursday, February 04, 2016 18:55:35	0.990	39.90	49.7
Thursday, February 04, 2016 19:00:36	0.990	44.87	50.4
Thursday, February 04, 2016 19:05:36	0.990	49.82	50.3
Thursday, February 04, 2016 19:10:37	0.990	54.78	49.9
Thursday, February 04, 2016 19:15:37	0.990	59.74	50.4
Thursday, February 04, 2016 19:20:38	0.990	64.70	49.6
Thursday, February 04, 2016 19:25:38	0.990	69.65	49.5
Thursday, February 04, 2016 19:30:39	0.990	74.62	50.1
Thursday, February 04, 2016 19:35:39	0.990	79.57	49.7
Thursday, February 04, 2016 19:40:40	0.990	84.54	50.5
Thursday, February 04, 2016 19:45:40	0.990	89.49	50.2
Thursday, February 04, 2016 19:50:41	0.990	94.46	50.1
Thursday, February 04, 2016 19:55:42	0.990	99.43	49.3
Thursday, February 04, 2016 20:00:42	0.990	104.38	50.4
Thursday, February 04, 2016 20:05:43	0.990	109.35	50.1
Thursday, February 04, 2016 20:10:43	0.990	114.30	49.4
Thursday, February 04, 2016 20:15:44	0.990	119.26	50.3
Thursday, February 04, 2016 20:20:44	0.990	124.22	50.4
Thursday, February 04, 2016 20:25:45	0.990	129.18	50.3
Thursday, February 04, 2016 20:30:45	0.990	134.13	50.4
Thursday, February 04, 2016 20:35:46	0.990	139.10	50.3
Thursday, February 04, 2016 20:40:46	0.990	144.05	50.0
Thursday, February 04, 2016 20:45:47	0.990	149.02	50.9
Thursday, February 04, 2016 20:50:47	0.990	153.97	50.3
Thursday, February 04, 2016 20:55:48	0.990	158.94	50.4

Thursday, February 04, 2016 21:00:48 0.990	163.89	50.5
Thursday, February 04, 2016 21:05:49 0.990	168.86	50.3
Thursday, February 04, 2016 21:10:50 0.990	173.81	50.9
Thursday, February 04, 2016 21:15:50 0.990	178.78	50.7
Thursday, February 04, 2016 21:20:51 0.990	183.75	49.8
Thursday, February 04, 2016 21:25:51 0.990	188.70	50.7
Thursday, February 04, 2016 21:30:52 0.990	193.66	50.6
Thursday, February 04, 2016 21:35:52 0.990	198.62	50.7
Thursday, February 04, 2016 21:40:53 0.990	203.58	50.8
Thursday, February 04, 2016 21:45:53 0.990	208.53	50.4
Thursday, February 04, 2016 21:50:54 0.990	213.50	50.0
Thursday, February 04, 2016 21:55:54 0.990	218.45	49.9
Thursday, February 04, 2016 22:00:55 0.990	223.42	50.2
Thursday, February 04, 2016 22:05:55 0.990	228.37	50.5
Thursday, February 04, 2016 22:10:56 0.990	233.34	50.4
Thursday, February 04, 2016 22:15:57 0.990	238.31	49.9
Thursday, February 04, 2016 22:20:57 0.990	243.26	50.4
Thursday, February 04, 2016 22:25:58 0.990	248.23	49.9
Thursday, February 04, 2016 22:30:58 0.990	253.18	50.1
Thursday, February 04, 2016 22:35:59 0.990	258.15	49.9
Thursday, February 04, 2016 22:40:59 0.990	263.10	50.7
Thursday, February 04, 2016 22:46:00 0.990	268.06	49.9
Thursday, February 04, 2016 22:51:00 0.990	273.02	50.7
Thursday, February 04, 2016 22:56:01 0.990	277.98	50.7
Thursday, February 04, 2016 23:01:01 0.990	282.93	50.2
Thursday, February 04, 2016 23:06:02 0.990	287.90	49.9
Thursday, February 04, 2016 23:11:02 0.990	292.85	50.3
Thursday, February 04, 2016 23:16:03 0.990	297.82	49.9
Thursday, February 04, 2016 23:21:03 0.990	302.77	50.4
Thursday, February 04, 2016 23:26:04 0.990	307.74	50.6
Thursday, February 04, 2016 23:31:04 0.990	312.69	50.9
Thursday, February 04, 2016 23:36:05 0.990	317.66	50.5
Thursday, February 04, 2016 23:41:06 0.990	322.63	50.4
Thursday, February 04, 2016 23:46:06 0.990	327.58	50.1
Thursday, February 04, 2016 23:51:07 0.990	332.54	50.8
Thursday, February 04, 2016 23:56:07 0.990	337.50	50.3
Friday, February 05, 2016 0:01:08 0.990	342.46	50.4
Friday, February 05, 2016 0:06:08 0.990	347.41	50.5
Friday, February 05, 2016 0:11:09 0.990	352.38	50.6
Friday, February 05, 2016 0:16:09 0.990	357.33	50.2
Friday, February 05, 2016 0:21:10 0.990	362.30	50.6
Friday, February 05, 2016 0:26:10 0.990	367.25	50.6
Friday, February 05, 2016 0:31:11 0.990	372.22	51.0
Friday, February 05, 2016 0:36:11 0.990	377.17	50.8
Friday, February 05, 2016 0:41:12 0.990	382.14	50.5
Friday, February 05, 2016 0:46:12 0.990	387.09	50.2
Friday, February 05, 2016 0:51:13 0.990	392.06	50.4
Friday, February 05, 2016 0:56:13 0.990	397.01	50.0
Friday, February 05, 2016 1:01:14 0.990	401.98	50.1
Friday, February 05, 2016 1:06:14 0.990	406.93	50.2
Friday, February 05, 2016 1:11:15 0.990	411.89	50.8
Friday, February 05, 2016 1:16:16 0.990	416.86	50.6
Friday, February 05, 2016 1:21:16 0.990	421.81	50.2
Friday, February 05, 2016 1:26:17 0.990	426.78	50.6

Friday, February 05, 2016 1:31:17 0.990	431.73	50.1
Friday, February 05, 2016 1:36:18 0.990	436.70	49.8
Friday, February 05, 2016 1:41:18 0.990	441.65	50.7
Friday, February 05, 2016 1:46:19 0.990	446.62	49.8
Friday, February 05, 2016 1:51:19 0.990	451.57	50.5
Friday, February 05, 2016 1:56:20 0.990	456.54	50.7
Friday, February 05, 2016 2:01:20 0.990	461.49	50.6
Friday, February 05, 2016 2:06:21 0.990	466.45	50.2
Friday, February 05, 2016 2:11:21 0.990	471.41	50.1
Friday, February 05, 2016 2:16:22 0.990	476.37	50.1
Friday, February 05, 2016 2:21:22 0.990	481.32	50.5
Friday, February 05, 2016 2:26:23 0.990	486.29	49.0
Friday, February 05, 2016 2:31:23 0.990	491.24	50.4
Friday, February 05, 2016 2:36:24 0.990	496.21	50.3
Friday, February 05, 2016 2:41:24 0.990	501.16	50.4
Friday, February 05, 2016 2:46:25 0.990	506.13	50.3
Friday, February 05, 2016 2:51:25 0.990	511.08	49.7
Friday, February 05, 2016 2:56:26 0.990	516.05	50.4
Friday, February 05, 2016 3:01:26 0.990	521.00	49.6
Friday, February 05, 2016 3:06:27 0.990	525.97	49.8
Friday, February 05, 2016 3:11:27 0.990	530.92	50.0
Friday, February 05, 2016 3:16:28 0.990	535.89	50.8
Friday, February 05, 2016 3:21:28 0.990	540.84	50.4
Friday, February 05, 2016 3:26:29 0.990	545.81	50.4
Friday, February 05, 2016 3:31:30 0.990	550.78	50.4
Friday, February 05, 2016 3:36:30 0.990	555.73	50.6
Friday, February 05, 2016 3:41:31 0.990	560.70	50.5
Friday, February 05, 2016 3:46:31 0.990	565.65	50.5
Friday, February 05, 2016 3:51:32 0.990	570.62	50.3
Friday, February 05, 2016 3:56:32 0.990	575.57	50.0
Friday, February 05, 2016 4:01:33 0.990	580.54	50.1
Friday, February 05, 2016 4:06:33 0.990	585.49	50.1
Friday, February 05, 2016 4:11:34 0.990	590.46	49.6
Friday, February 05, 2016 4:16:34 0.990	595.41	50.4
Friday, February 05, 2016 4:21:35 0.990	600.38	50.5
Friday, February 05, 2016 4:26:35 0.990	605.33	50.5
Friday, February 05, 2016 4:31:36 0.990	610.30	50.5
Friday, February 05, 2016 4:36:36 0.990	615.25	49.8
Friday, February 05, 2016 4:41:37 0.990	620.22	49.7
Friday, February 05, 2016 4:46:37 0.990	625.17	49.4
Friday, February 05, 2016 4:51:38 0.990	630.14	50.2
Friday, February 05, 2016 4:56:38 0.990	635.09	50.5
Friday, February 05, 2016 5:01:39 0.990	640.06	50.1
Friday, February 05, 2016 5:06:39 0.990	645.01	50.6
Friday, February 05, 2016 5:11:40 0.990	649.98	50.1
Friday, February 05, 2016 5:16:40 0.990	654.93	50.0
Friday, February 05, 2016 5:21:41 0.990	659.90	50.1
Friday, February 05, 2016 5:26:41 0.990	664.85	50.7
Friday, February 05, 2016 5:31:42 0.990	669.82	50.4
Friday, February 05, 2016 5:36:42 0.990	674.77	50.5
Friday, February 05, 2016 5:41:43 0.990	679.74	50.4
Friday, February 05, 2016 5:46:43 0.990	684.69	50.1
Friday, February 05, 2016 5:51:44 0.990	689.66	50.5
Friday, February 05, 2016 5:56:44 0.990	694.61	50.4

Friday, February 05, 2016 6:01:45	0.990	699.58	50.6
Friday, February 05, 2016 6:06:45	0.990	704.53	50.1
Friday, February 05, 2016 6:11:46	0.990	709.50	50.0
Friday, February 05, 2016 6:15:04	0.990	712.76	50.5

aqms5

formaldehyde001

Ch. 1 Cartridge Started Wednesday, February 10, 2016 6:00:02

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, February 10, 2016 18:00:26

Total Volume 713.26 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.100 l/min

Ending Leak Rate 0.078 l/min

Flow Controller Zero -0.004 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Wednesday, February 10, 2016 6:00:29	0.172	0.23	50.0
Wednesday, February 10, 2016 6:05:29	0.991	5.18	50.5
Wednesday, February 10, 2016 6:10:30	0.991	10.15	49.9
Wednesday, February 10, 2016 6:15:30	0.991	15.10	50.4
Wednesday, February 10, 2016 6:20:31	0.991	20.07	50.4
Wednesday, February 10, 2016 6:25:31	0.991	25.03	50.1
Wednesday, February 10, 2016 6:30:32	0.991	30.00	50.5
Wednesday, February 10, 2016 6:35:32	0.991	34.95	50.6
Wednesday, February 10, 2016 6:40:33	0.991	39.92	50.5
Wednesday, February 10, 2016 6:45:33	0.991	44.88	50.4
Wednesday, February 10, 2016 6:50:34	0.991	49.85	50.4
Wednesday, February 10, 2016 6:55:34	0.991	54.80	50.4
Wednesday, February 10, 2016 7:00:35	0.991	59.77	50.4
Wednesday, February 10, 2016 7:05:35	0.991	64.72	50.5
Wednesday, February 10, 2016 7:10:36	0.991	69.69	49.7
Wednesday, February 10, 2016 7:15:36	0.991	74.65	50.3
Wednesday, February 10, 2016 7:20:37	0.991	79.62	50.6
Wednesday, February 10, 2016 7:25:37	0.991	84.57	50.2
Wednesday, February 10, 2016 7:30:38	0.991	89.54	50.7
Wednesday, February 10, 2016 7:35:38	0.991	94.50	50.4
Wednesday, February 10, 2016 7:40:39	0.991	99.47	50.5
Wednesday, February 10, 2016 7:45:40	0.991	104.44	49.9
Wednesday, February 10, 2016 7:50:40	0.991	109.39	50.4
Wednesday, February 10, 2016 7:55:41	0.991	114.36	50.6
Wednesday, February 10, 2016 8:00:41	0.991	119.32	50.6
Wednesday, February 10, 2016 8:05:42	0.991	124.29	50.5
Wednesday, February 10, 2016 8:10:42	0.991	129.24	50.4
Wednesday, February 10, 2016 8:15:43	0.991	134.21	50.5
Wednesday, February 10, 2016 8:20:43	0.991	139.17	50.4
Wednesday, February 10, 2016 8:25:44	0.991	144.14	50.3
Wednesday, February 10, 2016 8:30:44	0.991	149.09	50.4
Wednesday, February 10, 2016 8:35:45	0.991	154.06	50.7

Wednesday, February 10, 2016 8:40:45 0.991	159.01	50.9
Wednesday, February 10, 2016 8:45:46 0.991	163.99	49.5
Wednesday, February 10, 2016 8:50:46 0.991	168.94	49.8
Wednesday, February 10, 2016 8:55:47 0.991	173.91	50.7
Wednesday, February 10, 2016 9:00:47 0.991	178.86	50.6
Wednesday, February 10, 2016 9:05:48 0.991	183.83	50.8
Wednesday, February 10, 2016 9:10:48 0.991	188.79	50.3
Wednesday, February 10, 2016 9:15:49 0.991	193.76	50.4
Wednesday, February 10, 2016 9:20:50 0.991	198.73	50.1
Wednesday, February 10, 2016 9:25:50 0.991	203.68	49.9
Wednesday, February 10, 2016 9:30:51 0.991	208.66	50.5
Wednesday, February 10, 2016 9:35:51 0.991	213.61	50.8
Wednesday, February 10, 2016 9:40:52 0.991	218.58	50.4
Wednesday, February 10, 2016 9:45:52 0.991	223.53	50.1
Wednesday, February 10, 2016 9:50:53 0.991	228.50	50.1
Wednesday, February 10, 2016 9:55:53 0.991	233.46	50.4
Wednesday, February 10, 2016 10:00:54 0.991	238.43	50.8
Wednesday, February 10, 2016 10:05:54 0.991	243.38	50.4
Wednesday, February 10, 2016 10:10:55 0.991	248.35	50.5
Wednesday, February 10, 2016 10:15:55 0.991	253.31	50.2
Wednesday, February 10, 2016 10:20:56 0.991	258.28	50.5
Wednesday, February 10, 2016 10:25:56 0.991	263.23	50.4
Wednesday, February 10, 2016 10:30:57 0.991	268.20	50.6
Wednesday, February 10, 2016 10:35:57 0.991	273.16	49.8
Wednesday, February 10, 2016 10:40:58 0.991	278.13	50.1
Wednesday, February 10, 2016 10:45:59 0.991	283.10	50.4
Wednesday, February 10, 2016 10:50:59 0.991	288.05	50.3
Wednesday, February 10, 2016 10:56:00 0.991	293.02	50.4
Wednesday, February 10, 2016 11:01:00 0.991	297.98	49.8
Wednesday, February 10, 2016 11:06:01 0.991	302.95	50.0
Wednesday, February 10, 2016 11:11:01 0.991	307.90	49.6
Wednesday, February 10, 2016 11:16:02 0.991	312.87	50.0
Wednesday, February 10, 2016 11:21:02 0.991	317.83	50.1
Wednesday, February 10, 2016 11:26:03 0.991	322.80	50.4
Wednesday, February 10, 2016 11:31:04 0.991	327.77	50.6
Wednesday, February 10, 2016 11:36:04 0.991	332.72	50.2
Wednesday, February 10, 2016 11:41:05 0.991	337.69	49.8
Wednesday, February 10, 2016 11:46:05 0.991	342.65	50.7
Wednesday, February 10, 2016 11:51:06 0.991	347.62	50.4
Wednesday, February 10, 2016 11:56:06 0.991	352.57	50.4
Wednesday, February 10, 2016 12:01:07 0.991	357.54	50.3
Wednesday, February 10, 2016 12:06:07 0.991	362.50	49.9
Wednesday, February 10, 2016 12:11:08 0.991	367.47	49.9
Wednesday, February 10, 2016 12:16:08 0.991	372.42	50.3
Wednesday, February 10, 2016 12:21:09 0.991	377.39	50.9
Wednesday, February 10, 2016 12:26:09 0.991	382.35	50.1
Wednesday, February 10, 2016 12:31:10 0.991	387.32	50.1
Wednesday, February 10, 2016 12:36:11 0.991	392.29	50.8
Wednesday, February 10, 2016 12:41:11 0.991	397.24	50.1
Wednesday, February 10, 2016 12:46:12 0.991	402.21	50.5
Wednesday, February 10, 2016 12:51:12 0.991	407.17	50.8
Wednesday, February 10, 2016 12:56:13 0.991	412.14	50.0
Wednesday, February 10, 2016 13:01:13 0.991	417.09	50.4
Wednesday, February 10, 2016 13:06:14 0.991	422.06	50.4

Wednesday, February 10, 2016 13:11:14 0.991	427.02	50.5
Wednesday, February 10, 2016 13:16:15 0.991	431.99	50.0
Wednesday, February 10, 2016 13:21:15 0.991	436.94	50.1
Wednesday, February 10, 2016 13:26:16 0.991	441.91	50.3
Wednesday, February 10, 2016 13:31:16 0.991	446.87	50.4
Wednesday, February 10, 2016 13:36:17 0.991	451.84	50.6
Wednesday, February 10, 2016 13:41:18 0.991	456.81	50.8
Wednesday, February 10, 2016 13:46:18 0.991	461.76	50.0
Wednesday, February 10, 2016 13:51:19 0.991	466.73	50.3
Wednesday, February 10, 2016 13:56:19 0.991	471.69	50.3
Wednesday, February 10, 2016 14:01:20 0.991	476.66	50.0
Wednesday, February 10, 2016 14:06:20 0.991	481.61	50.5
Wednesday, February 10, 2016 14:11:21 0.991	486.59	50.5
Wednesday, February 10, 2016 14:16:21 0.991	491.54	49.8
Wednesday, February 10, 2016 14:21:22 0.991	496.51	50.5
Wednesday, February 10, 2016 14:26:22 0.991	501.46	49.4
Wednesday, February 10, 2016 14:31:23 0.991	506.44	50.3
Wednesday, February 10, 2016 14:36:24 0.991	511.41	50.7
Wednesday, February 10, 2016 14:41:24 0.991	516.36	49.8
Wednesday, February 10, 2016 14:46:25 0.991	521.33	50.4
Wednesday, February 10, 2016 14:51:25 0.991	526.29	50.0
Wednesday, February 10, 2016 14:56:26 0.991	531.26	49.8
Wednesday, February 10, 2016 15:01:26 0.991	536.21	50.0
Wednesday, February 10, 2016 15:06:27 0.991	541.18	50.1
Wednesday, February 10, 2016 15:11:27 0.991	546.14	49.4
Wednesday, February 10, 2016 15:16:28 0.991	551.11	50.5
Wednesday, February 10, 2016 15:21:29 0.991	556.08	50.4
Wednesday, February 10, 2016 15:26:29 0.991	561.04	50.1
Wednesday, February 10, 2016 15:31:30 0.991	566.01	50.6
Wednesday, February 10, 2016 15:36:30 0.991	570.96	50.4
Wednesday, February 10, 2016 15:41:31 0.991	575.93	50.4
Wednesday, February 10, 2016 15:46:31 0.991	580.89	50.0
Wednesday, February 10, 2016 15:51:32 0.991	585.86	50.4
Wednesday, February 10, 2016 15:56:32 0.991	590.81	49.8
Wednesday, February 10, 2016 16:01:33 0.991	595.79	50.2
Wednesday, February 10, 2016 16:06:34 0.991	600.76	50.5
Wednesday, February 10, 2016 16:11:34 0.991	605.71	50.9
Wednesday, February 10, 2016 16:16:35 0.991	610.68	50.8
Wednesday, February 10, 2016 16:21:35 0.991	615.64	51.0
Wednesday, February 10, 2016 16:26:36 0.991	620.61	50.2
Wednesday, February 10, 2016 16:31:36 0.991	625.56	50.5
Wednesday, February 10, 2016 16:36:37 0.991	630.53	50.2
Wednesday, February 10, 2016 16:41:37 0.991	635.49	50.9
Wednesday, February 10, 2016 16:46:38 0.991	640.46	50.9
Wednesday, February 10, 2016 16:51:38 0.991	645.41	50.8
Wednesday, February 10, 2016 16:56:39 0.991	650.38	50.5
Wednesday, February 10, 2016 17:01:40 0.991	655.35	50.4
Wednesday, February 10, 2016 17:06:40 0.991	660.31	50.7
Wednesday, February 10, 2016 17:11:41 0.991	665.28	49.6
Wednesday, February 10, 2016 17:16:41 0.991	670.23	50.3
Wednesday, February 10, 2016 17:21:42 0.991	675.20	50.3
Wednesday, February 10, 2016 17:26:42 0.991	680.16	50.4
Wednesday, February 10, 2016 17:31:43 0.991	685.13	50.3
Wednesday, February 10, 2016 17:36:43 0.991	690.08	50.8

Wednesday, February 10, 2016 17:41:44 0.991	695.05	49.6
Wednesday, February 10, 2016 17:46:44 0.991	700.01	50.9
Wednesday, February 10, 2016 17:51:45 0.991	704.98	50.0
Wednesday, February 10, 2016 17:56:46 0.991	709.95	50.4
Wednesday, February 10, 2016 18:00:04 0.991	713.22	50.6

aqms5

formaldehyde002

Ch. 2 Cartridge Started Wednesday, February 10, 2016 18:15:01

Flow Rate Set Point 1.00 l/min

Stopped Thursday, February 11, 2016 6:15:22

Total Volume 712.79 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.021 l/min

Ending Leak Rate 0.012 l/min

Flow Controller Zero -0.005 l/min

Error Code 2

Error Status Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Wednesday, February 10, 2016 18:15:28	0.097	0.22	50.4
Wednesday, February 10, 2016 18:20:29	0.990	5.19	49.5
Wednesday, February 10, 2016 18:25:29	0.990	10.14	50.4
Wednesday, February 10, 2016 18:30:30	0.990	15.11	50.1
Wednesday, February 10, 2016 18:35:30	0.990	20.06	50.8
Wednesday, February 10, 2016 18:40:31	0.990	25.03	50.4
Wednesday, February 10, 2016 18:45:31	0.990	29.98	50.1
Wednesday, February 10, 2016 18:50:32	0.990	34.95	50.3
Wednesday, February 10, 2016 18:55:32	0.990	39.90	50.1
Wednesday, February 10, 2016 19:00:33	0.990	44.87	50.4
Wednesday, February 10, 2016 19:05:33	0.990	49.82	50.2
Wednesday, February 10, 2016 19:10:34	0.990	54.79	50.4
Wednesday, February 10, 2016 19:15:35	0.990	59.76	50.1
Wednesday, February 10, 2016 19:20:35	0.990	64.71	49.8
Wednesday, February 10, 2016 19:25:36	0.990	69.67	49.7
Wednesday, February 10, 2016 19:30:36	0.990	74.63	49.4
Wednesday, February 10, 2016 19:35:37	0.990	79.59	50.4
Wednesday, February 10, 2016 19:40:37	0.990	84.55	50.0
Wednesday, February 10, 2016 19:45:38	0.990	89.51	50.5
Wednesday, February 10, 2016 19:50:38	0.990	94.46	50.1
Wednesday, February 10, 2016 19:55:39	0.990	99.43	49.5
Wednesday, February 10, 2016 20:00:40	0.990	104.40	50.7
Wednesday, February 10, 2016 20:05:40	0.990	109.35	50.9
Wednesday, February 10, 2016 20:10:41	0.990	114.32	50.0
Wednesday, February 10, 2016 20:15:41	0.990	119.27	50.5
Wednesday, February 10, 2016 20:20:42	0.990	124.24	50.4
Wednesday, February 10, 2016 20:25:42	0.990	129.19	50.4
Wednesday, February 10, 2016 20:30:43	0.990	134.16	50.0
Wednesday, February 10, 2016 20:35:44	0.990	139.13	50.6
Wednesday, February 10, 2016 20:40:44	0.990	144.08	50.5
Wednesday, February 10, 2016 20:45:45	0.990	149.05	50.1
Wednesday, February 10, 2016 20:50:45	0.990	154.00	49.6
Wednesday, February 10, 2016 20:55:46	0.990	158.96	50.7

Wednesday, February 10, 2016 21:00:46 0.990	163.92	50.0
Wednesday, February 10, 2016 21:05:47 0.990	168.88	50.8
Wednesday, February 10, 2016 21:10:48 0.990	173.85	50.6
Wednesday, February 10, 2016 21:15:48 0.990	178.80	49.7
Wednesday, February 10, 2016 21:20:49 0.990	183.77	50.6
Wednesday, February 10, 2016 21:25:49 0.990	188.72	50.4
Wednesday, February 10, 2016 21:30:50 0.990	193.69	50.2
Wednesday, February 10, 2016 21:35:50 0.990	198.64	50.8
Wednesday, February 10, 2016 21:40:51 0.990	203.61	50.5
Wednesday, February 10, 2016 21:45:52 0.990	208.58	50.8
Wednesday, February 10, 2016 21:50:52 0.990	213.53	50.6
Wednesday, February 10, 2016 21:55:53 0.990	218.50	49.7
Wednesday, February 10, 2016 22:00:53 0.990	223.45	50.5
Wednesday, February 10, 2016 22:05:54 0.990	228.42	50.1
Wednesday, February 10, 2016 22:10:54 0.990	233.37	50.1
Wednesday, February 10, 2016 22:15:55 0.990	238.34	50.5
Wednesday, February 10, 2016 22:20:56 0.990	243.30	49.7
Wednesday, February 10, 2016 22:25:56 0.990	248.26	49.7
Wednesday, February 10, 2016 22:30:57 0.990	253.22	50.2
Wednesday, February 10, 2016 22:35:57 0.990	258.17	50.1
Wednesday, February 10, 2016 22:40:58 0.990	263.14	50.4
Wednesday, February 10, 2016 22:45:58 0.990	268.09	50.1
Wednesday, February 10, 2016 22:50:59 0.990	273.06	50.0
Wednesday, February 10, 2016 22:55:59 0.990	278.01	50.9
Wednesday, February 10, 2016 23:01:00 0.990	282.98	50.8
Wednesday, February 10, 2016 23:06:01 0.990	287.95	50.5
Wednesday, February 10, 2016 23:11:01 0.990	292.90	50.5
Wednesday, February 10, 2016 23:16:02 0.990	297.87	50.5
Wednesday, February 10, 2016 23:21:02 0.990	302.82	50.5
Wednesday, February 10, 2016 23:26:03 0.990	307.79	50.2
Wednesday, February 10, 2016 23:31:04 0.990	312.75	49.7
Wednesday, February 10, 2016 23:36:04 0.990	317.71	50.6
Wednesday, February 10, 2016 23:41:05 0.990	322.67	50.1
Wednesday, February 10, 2016 23:46:05 0.990	327.63	50.2
Wednesday, February 10, 2016 23:51:06 0.990	332.59	50.1
Wednesday, February 10, 2016 23:56:06 0.990	337.55	50.1
Thursday, February 11, 2016 0:01:07 0.990	342.51	50.5
Thursday, February 11, 2016 0:06:08 0.990	347.48	50.4
Thursday, February 11, 2016 0:11:08 0.990	352.43	50.4
Thursday, February 11, 2016 0:16:09 0.990	357.40	50.6
Thursday, February 11, 2016 0:21:09 0.990	362.35	50.1
Thursday, February 11, 2016 0:26:10 0.990	367.32	50.6
Thursday, February 11, 2016 0:31:10 0.990	372.27	50.7
Thursday, February 11, 2016 0:36:11 0.990	377.24	50.3
Thursday, February 11, 2016 0:41:11 0.990	382.19	49.7
Thursday, February 11, 2016 0:46:12 0.990	387.16	50.0
Thursday, February 11, 2016 0:51:13 0.990	392.13	50.8
Thursday, February 11, 2016 0:56:13 0.990	397.08	50.1
Thursday, February 11, 2016 1:01:14 0.990	402.05	50.4
Thursday, February 11, 2016 1:06:14 0.990	407.00	50.8
Thursday, February 11, 2016 1:11:15 0.990	411.96	50.5
Thursday, February 11, 2016 1:16:15 0.990	416.92	50.8
Thursday, February 11, 2016 1:21:16 0.990	421.88	50.5
Thursday, February 11, 2016 1:26:16 0.990	426.83	50.7

Thursday, February 11, 2016 1:31:17 0.990	431.80	50.4
Thursday, February 11, 2016 1:36:17 0.990	436.75	50.8
Thursday, February 11, 2016 1:41:18 0.990	441.72	50.9
Thursday, February 11, 2016 1:46:18 0.990	446.67	50.2
Thursday, February 11, 2016 1:51:19 0.990	451.64	50.8
Thursday, February 11, 2016 1:56:20 0.990	456.61	51.0
Thursday, February 11, 2016 2:01:20 0.990	461.56	49.8
Thursday, February 11, 2016 2:06:21 0.990	466.53	50.2
Thursday, February 11, 2016 2:11:21 0.990	471.48	50.4
Thursday, February 11, 2016 2:16:22 0.990	476.45	50.4
Thursday, February 11, 2016 2:21:22 0.990	481.40	50.2
Thursday, February 11, 2016 2:26:23 0.990	486.37	50.5
Thursday, February 11, 2016 2:31:23 0.990	491.32	50.9
Thursday, February 11, 2016 2:36:24 0.990	496.29	49.8
Thursday, February 11, 2016 2:41:25 0.990	501.25	50.4
Thursday, February 11, 2016 2:46:25 0.990	506.21	50.8
Thursday, February 11, 2016 2:51:26 0.990	511.17	50.9
Thursday, February 11, 2016 2:56:26 0.990	516.12	50.5
Thursday, February 11, 2016 3:01:27 0.990	521.09	50.4
Thursday, February 11, 2016 3:06:27 0.990	526.04	50.3
Thursday, February 11, 2016 3:11:28 0.990	531.01	50.1
Thursday, February 11, 2016 3:16:28 0.990	535.96	50.8
Thursday, February 11, 2016 3:21:29 0.990	540.93	50.0
Thursday, February 11, 2016 3:26:29 0.990	545.89	50.8
Thursday, February 11, 2016 3:31:30 0.990	550.85	50.8
Thursday, February 11, 2016 3:36:30 0.990	555.81	50.5
Thursday, February 11, 2016 3:41:31 0.990	560.77	50.7
Thursday, February 11, 2016 3:46:32 0.990	565.74	50.3
Thursday, February 11, 2016 3:51:32 0.990	570.69	50.1
Thursday, February 11, 2016 3:56:33 0.990	575.66	49.6
Thursday, February 11, 2016 4:01:33 0.990	580.61	50.4
Thursday, February 11, 2016 4:06:34 0.990	585.58	50.9
Thursday, February 11, 2016 4:11:34 0.990	590.53	50.8
Thursday, February 11, 2016 4:16:35 0.990	595.50	50.3
Thursday, February 11, 2016 4:21:35 0.990	600.45	50.4
Thursday, February 11, 2016 4:26:36 0.990	605.42	50.5
Thursday, February 11, 2016 4:31:36 0.990	610.37	50.2
Thursday, February 11, 2016 4:36:37 0.990	615.34	50.6
Thursday, February 11, 2016 4:41:37 0.990	620.29	50.2
Thursday, February 11, 2016 4:46:38 0.990	625.26	49.8
Thursday, February 11, 2016 4:51:38 0.990	630.22	51.0
Thursday, February 11, 2016 4:56:39 0.990	635.18	49.5
Thursday, February 11, 2016 5:01:39 0.990	640.14	50.5
Thursday, February 11, 2016 5:06:40 0.990	645.10	50.8
Thursday, February 11, 2016 5:11:40 0.990	650.06	50.6
Thursday, February 11, 2016 5:16:41 0.990	655.02	50.5
Thursday, February 11, 2016 5:21:41 0.990	659.98	49.6
Thursday, February 11, 2016 5:26:42 0.990	664.94	50.9
Thursday, February 11, 2016 5:31:43 0.990	669.91	50.1
Thursday, February 11, 2016 5:36:43 0.990	674.86	50.4
Thursday, February 11, 2016 5:41:44 0.990	679.83	50.7
Thursday, February 11, 2016 5:46:44 0.990	684.78	50.2
Thursday, February 11, 2016 5:51:45 0.990	689.75	50.3
Thursday, February 11, 2016 5:56:45 0.990	694.70	50.1

Thursday, February 11, 2016 6:01:46 0.990	699.67	50.0
Thursday, February 11, 2016 6:06:46 0.990	704.63	50.7
Thursday, February 11, 2016 6:11:47 0.990	709.59	50.1
Thursday, February 11, 2016 6:15:00 0.990	712.78	49.9

aqms5

formaldehyde001

Ch. 1 Cartridge Started Monday, February 22, 2016 6:00:03

Flow Rate Set Point 1.00 l/min

Stopped Monday, February 22, 2016 18:00:22

Total Volume 713.31 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.445 l/min

Ending Leak Rate 0.441 l/min

Flow Controller Zero -0.004 l/min

Error Code 258

Error Status Leak Check Flow Limit Exceeded

Post Leak Check Flow Limit Exceeded

Time	Flow Rate	Volume	Temp
Monday, February 22, 2016 6:00:30	0.488	0.23	49.8
Monday, February 22, 2016 6:05:31	0.991	5.20	50.4
Monday, February 22, 2016 6:10:31	0.991	10.15	50.3
Monday, February 22, 2016 6:15:32	0.991	15.12	49.7
Monday, February 22, 2016 6:20:32	0.991	20.08	49.7
Monday, February 22, 2016 6:25:33	0.991	25.05	50.0
Monday, February 22, 2016 6:30:33	0.991	30.00	49.7
Monday, February 22, 2016 6:35:34	0.991	34.97	50.0
Monday, February 22, 2016 6:40:34	0.991	39.92	50.5
Monday, February 22, 2016 6:45:35	0.991	44.89	49.6
Monday, February 22, 2016 6:50:36	0.991	49.86	50.5
Monday, February 22, 2016 6:55:36	0.991	54.81	50.8
Monday, February 22, 2016 7:00:37	0.991	59.78	49.6
Monday, February 22, 2016 7:05:37	0.991	64.74	50.1
Monday, February 22, 2016 7:10:38	0.991	69.71	50.9
Monday, February 22, 2016 7:15:38	0.991	74.66	50.8
Monday, February 22, 2016 7:20:39	0.991	79.63	50.6
Monday, February 22, 2016 7:25:40	0.991	84.60	50.1
Monday, February 22, 2016 7:30:40	0.991	89.56	50.4
Monday, February 22, 2016 7:35:41	0.991	94.53	50.3
Monday, February 22, 2016 7:40:41	0.991	99.48	50.4
Monday, February 22, 2016 7:45:42	0.991	104.45	50.5
Monday, February 22, 2016 7:50:42	0.991	109.41	50.4
Monday, February 22, 2016 7:55:43	0.991	114.38	50.5
Monday, February 22, 2016 8:00:43	0.991	119.33	50.9
Monday, February 22, 2016 8:05:44	0.991	124.30	50.5
Monday, February 22, 2016 8:10:44	0.991	129.25	50.7
Monday, February 22, 2016 8:15:45	0.991	134.22	50.9
Monday, February 22, 2016 8:20:46	0.991	139.19	50.0
Monday, February 22, 2016 8:25:46	0.991	144.15	50.1
Monday, February 22, 2016 8:30:47	0.991	149.12	50.9
Monday, February 22, 2016 8:35:47	0.991	154.07	50.9

Monday, February 22, 2016 8:40:48 0.991	159.04	50.4
Monday, February 22, 2016 8:45:48 0.991	164.00	51.0
Monday, February 22, 2016 8:50:49 0.991	168.97	50.8
Monday, February 22, 2016 8:55:49 0.991	173.92	50.1
Monday, February 22, 2016 9:00:50 0.991	178.89	50.1
Monday, February 22, 2016 9:05:51 0.991	183.86	49.7
Monday, February 22, 2016 9:10:51 0.991	188.82	50.3
Monday, February 22, 2016 9:15:52 0.991	193.79	50.2
Monday, February 22, 2016 9:20:52 0.991	198.74	50.4
Monday, February 22, 2016 9:25:53 0.991	203.71	50.8
Monday, February 22, 2016 9:30:53 0.991	208.67	50.4
Monday, February 22, 2016 9:35:54 0.991	213.64	50.6
Monday, February 22, 2016 9:40:54 0.991	218.59	49.9
Monday, February 22, 2016 9:45:55 0.991	223.56	49.9
Monday, February 22, 2016 9:50:56 0.991	228.53	50.4
Monday, February 22, 2016 9:55:56 0.991	233.49	50.4
Monday, February 22, 2016 10:00:57 0.991	238.46	50.4
Monday, February 22, 2016 10:05:57 0.991	243.41	50.3
Monday, February 22, 2016 10:10:58 0.991	248.38	50.3
Monday, February 22, 2016 10:15:58 0.991	253.33	50.8
Monday, February 22, 2016 10:20:59 0.991	258.31	49.7
Monday, February 22, 2016 10:25:59 0.991	263.26	50.3
Monday, February 22, 2016 10:31:00 0.991	268.23	50.8
Monday, February 22, 2016 10:36:01 0.991	273.20	50.6
Monday, February 22, 2016 10:41:01 0.991	278.15	50.2
Monday, February 22, 2016 10:46:02 0.991	283.13	50.4
Monday, February 22, 2016 10:51:02 0.991	288.08	50.3
Monday, February 22, 2016 10:56:03 0.991	293.05	50.3
Monday, February 22, 2016 11:01:03 0.991	298.00	50.5
Monday, February 22, 2016 11:06:04 0.991	302.97	50.9
Monday, February 22, 2016 11:11:04 0.991	307.93	50.1
Monday, February 22, 2016 11:16:05 0.991	312.90	50.4
Monday, February 22, 2016 11:21:06 0.991	317.87	50.8
Monday, February 22, 2016 11:26:06 0.991	322.82	49.9
Monday, February 22, 2016 11:31:07 0.991	327.80	50.4
Monday, February 22, 2016 11:36:07 0.991	332.75	49.6
Monday, February 22, 2016 11:41:08 0.991	337.72	50.5
Monday, February 22, 2016 11:46:08 0.991	342.67	50.5
Monday, February 22, 2016 11:51:09 0.991	347.64	50.1
Monday, February 22, 2016 11:56:09 0.991	352.60	49.7
Monday, February 22, 2016 12:01:10 0.991	357.57	50.8
Monday, February 22, 2016 12:06:10 0.991	362.52	49.6
Monday, February 22, 2016 12:11:11 0.991	367.49	49.8
Monday, February 22, 2016 12:16:12 0.991	372.47	50.2
Monday, February 22, 2016 12:21:12 0.991	377.42	50.6
Monday, February 22, 2016 12:26:13 0.991	382.39	50.1
Monday, February 22, 2016 12:31:13 0.991	387.34	50.4
Monday, February 22, 2016 12:36:14 0.991	392.32	50.1
Monday, February 22, 2016 12:41:14 0.991	397.27	50.4
Monday, February 22, 2016 12:46:15 0.991	402.24	50.4
Monday, February 22, 2016 12:51:15 0.991	407.19	50.6
Monday, February 22, 2016 12:56:16 0.991	412.16	50.6
Monday, February 22, 2016 13:01:17 0.991	417.14	50.8
Monday, February 22, 2016 13:06:17 0.991	422.09	50.4

Monday, February 22, 2016 13:11:18 0.991	427.06	51.1
Monday, February 22, 2016 13:16:18 0.991	432.01	50.9
Monday, February 22, 2016 13:21:19 0.991	436.99	50.2
Monday, February 22, 2016 13:26:19 0.991	441.94	50.4
Monday, February 22, 2016 13:31:20 0.991	446.91	50.1
Monday, February 22, 2016 13:36:20 0.991	451.86	50.8
Monday, February 22, 2016 13:41:21 0.991	456.84	49.8
Monday, February 22, 2016 13:46:22 0.991	461.81	50.5
Monday, February 22, 2016 13:51:22 0.991	466.76	50.6
Monday, February 22, 2016 13:56:23 0.991	471.73	50.7
Monday, February 22, 2016 14:01:23 0.991	476.69	50.2
Monday, February 22, 2016 14:06:24 0.991	481.66	50.5
Monday, February 22, 2016 14:11:24 0.991	486.61	51.0
Monday, February 22, 2016 14:16:25 0.991	491.58	50.1
Monday, February 22, 2016 14:21:25 0.991	496.54	49.7
Monday, February 22, 2016 14:26:26 0.991	501.51	50.5
Monday, February 22, 2016 14:31:27 0.991	506.48	50.3
Monday, February 22, 2016 14:36:27 0.991	511.43	50.1
Monday, February 22, 2016 14:41:28 0.991	516.40	50.9
Monday, February 22, 2016 14:46:28 0.991	521.36	49.8
Monday, February 22, 2016 14:51:29 0.991	526.33	50.6
Monday, February 22, 2016 14:56:29 0.991	531.28	50.7
Monday, February 22, 2016 15:01:30 0.991	536.25	50.9
Monday, February 22, 2016 15:06:30 0.991	541.21	50.5
Monday, February 22, 2016 15:11:31 0.991	546.18	50.8
Monday, February 22, 2016 15:16:32 0.991	551.15	50.7
Monday, February 22, 2016 15:21:32 0.991	556.11	50.4
Monday, February 22, 2016 15:26:32 0.991	561.06	50.1
Monday, February 22, 2016 15:31:33 0.991	566.03	50.7
Monday, February 22, 2016 15:36:33 0.991	570.99	50.3
Monday, February 22, 2016 15:41:34 0.991	575.96	50.5
Monday, February 22, 2016 15:46:35 0.991	580.93	50.8
Monday, February 22, 2016 15:51:35 0.991	585.88	50.5
Monday, February 22, 2016 15:56:36 0.991	590.85	50.6
Monday, February 22, 2016 16:01:36 0.991	595.81	50.6
Monday, February 22, 2016 16:06:37 0.991	600.78	51.0
Monday, February 22, 2016 16:11:37 0.991	605.74	50.9
Monday, February 22, 2016 16:16:38 0.991	610.71	50.1
Monday, February 22, 2016 16:21:38 0.991	615.66	50.5
Monday, February 22, 2016 16:26:39 0.991	620.63	49.8
Monday, February 22, 2016 16:31:40 0.991	625.60	50.2
Monday, February 22, 2016 16:36:40 0.991	630.56	50.2
Monday, February 22, 2016 16:41:41 0.991	635.53	50.2
Monday, February 22, 2016 16:46:41 0.991	640.49	50.4
Monday, February 22, 2016 16:51:42 0.991	645.46	50.1
Monday, February 22, 2016 16:56:42 0.991	650.41	49.9
Monday, February 22, 2016 17:01:43 0.991	655.38	50.8
Monday, February 22, 2016 17:06:43 0.991	660.34	50.5
Monday, February 22, 2016 17:11:44 0.991	665.31	50.5
Monday, February 22, 2016 17:16:44 0.991	670.26	50.6
Monday, February 22, 2016 17:21:45 0.991	675.24	49.7
Monday, February 22, 2016 17:26:45 0.991	680.19	50.3
Monday, February 22, 2016 17:31:45 0.991	685.15	50.3
Monday, February 22, 2016 17:36:46 0.991	690.12	50.2

Monday, February 22, 2016 17:41:46 0.991	695.07	50.1
Monday, February 22, 2016 17:46:47 0.991	700.05	50.2
Monday, February 22, 2016 17:51:47 0.991	705.00	50.2
Monday, February 22, 2016 17:56:47 0.991	709.96	50.2
Monday, February 22, 2016 18:00:00 0.991	713.14	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Monday, February 22, 2016 18:05:02

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, February 23, 2016 6:05:23

Total Volume 712.80 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.000 l/min

Minimum Flow Rate 400.000 l/min

Maximum Flow Rate 0.000 l/min

Pre Start Leak Rate 0.003 l/min

Ending Leak Rate -0.005 l/min

Flow Controller Zero -0.005 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Monday, February 22, 2016 18:05:29	0.082	0.22	50.2
Monday, February 22, 2016 18:10:29	0.990	5.18	50.2
Monday, February 22, 2016 18:15:29	0.990	10.13	50.1
Monday, February 22, 2016 18:20:30	0.990	15.10	50.3
Monday, February 22, 2016 18:25:30	0.990	20.05	50.2
Monday, February 22, 2016 18:30:30	0.990	25.00	50.1
Monday, February 22, 2016 18:35:31	0.990	29.97	50.2
Monday, February 22, 2016 18:40:31	0.990	34.92	50.3
Monday, February 22, 2016 18:45:31	0.990	39.87	50.2
Monday, February 22, 2016 18:50:32	0.990	44.84	50.2
Monday, February 22, 2016 18:55:32	0.990	49.79	50.1
Monday, February 22, 2016 19:00:32	0.990	54.74	50.3
Monday, February 22, 2016 19:05:33	0.990	59.71	50.3
Monday, February 22, 2016 19:10:33	0.990	64.66	50.2
Monday, February 22, 2016 19:15:33	0.990	69.61	50.3
Monday, February 22, 2016 19:20:34	0.990	74.58	50.2
Monday, February 22, 2016 19:25:34	0.990	79.53	50.1
Monday, February 22, 2016 19:30:34	0.990	84.49	50.3
Monday, February 22, 2016 19:35:35	0.990	89.45	50.2
Monday, February 22, 2016 19:40:35	0.990	94.41	50.1
Monday, February 22, 2016 19:45:35	0.990	99.36	50.3
Monday, February 22, 2016 19:50:36	0.990	104.32	50.2
Monday, February 22, 2016 19:55:36	0.990	109.28	50.3
Monday, February 22, 2016 20:00:36	0.990	114.23	50.1
Monday, February 22, 2016 20:05:37	0.990	119.20	50.3
Monday, February 22, 2016 20:10:37	0.990	124.15	50.1
Monday, February 22, 2016 20:15:37	0.990	129.10	50.3
Monday, February 22, 2016 20:20:38	0.990	134.07	50.1
Monday, February 22, 2016 20:25:38	0.990	139.02	50.3
Monday, February 22, 2016 20:30:38	0.990	143.97	50.2
Monday, February 22, 2016 20:35:39	0.990	148.94	50.1
Monday, February 22, 2016 20:40:39	0.990	153.89	50.2
Monday, February 22, 2016 20:45:39	0.990	158.84	50.3

Monday, February 22, 2016 20:50:39 0.990	163.79	50.2
Monday, February 22, 2016 20:55:40 0.990	168.76	50.2
Monday, February 22, 2016 21:00:40 0.990	173.71	50.1
Monday, February 22, 2016 21:05:40 0.990	178.67	50.1
Monday, February 22, 2016 21:10:41 0.990	183.63	50.2
Monday, February 22, 2016 21:15:41 0.990	188.59	50.2
Monday, February 22, 2016 21:20:41 0.990	193.54	50.2
Monday, February 22, 2016 21:25:42 0.990	198.51	50.2
Monday, February 22, 2016 21:30:42 0.990	203.46	50.2
Monday, February 22, 2016 21:35:42 0.990	208.41	50.1
Monday, February 22, 2016 21:40:43 0.990	213.38	50.1
Monday, February 22, 2016 21:45:43 0.990	218.33	50.1
Monday, February 22, 2016 21:50:43 0.990	223.28	50.1
Monday, February 22, 2016 21:55:44 0.990	228.25	50.2
Monday, February 22, 2016 22:00:44 0.990	233.20	50.1
Monday, February 22, 2016 22:05:44 0.990	238.15	50.3
Monday, February 22, 2016 22:10:45 0.990	243.12	50.1
Monday, February 22, 2016 22:15:45 0.990	248.07	50.2
Monday, February 22, 2016 22:20:45 0.990	253.02	50.2
Monday, February 22, 2016 22:25:46 0.990	257.99	50.2
Monday, February 22, 2016 22:30:46 0.990	262.94	50.7
Monday, February 22, 2016 22:35:47 0.990	267.91	49.9
Monday, February 22, 2016 22:40:47 0.990	272.86	50.5
Monday, February 22, 2016 22:45:48 0.990	277.83	50.4
Monday, February 22, 2016 22:50:48 0.990	282.78	50.2
Monday, February 22, 2016 22:55:49 0.990	287.75	51.0
Monday, February 22, 2016 23:00:49 0.990	292.70	51.0
Monday, February 22, 2016 23:05:50 0.990	297.67	50.5
Monday, February 22, 2016 23:10:50 0.990	302.62	50.2
Monday, February 22, 2016 23:15:51 0.990	307.59	50.5
Monday, February 22, 2016 23:20:51 0.990	312.54	51.0
Monday, February 22, 2016 23:25:52 0.990	317.51	50.7
Monday, February 22, 2016 23:30:52 0.990	322.46	50.5
Monday, February 22, 2016 23:35:53 0.990	327.42	50.2
Monday, February 22, 2016 23:40:53 0.990	332.38	50.1
Monday, February 22, 2016 23:45:54 0.990	337.34	50.4
Monday, February 22, 2016 23:50:54 0.990	342.30	50.5
Monday, February 22, 2016 23:55:55 0.990	347.26	50.5
Tuesday, February 23, 2016 0:00:55 0.990	352.21	50.8
Tuesday, February 23, 2016 0:05:56 0.990	357.18	50.4
Tuesday, February 23, 2016 0:10:56 0.990	362.13	50.5
Tuesday, February 23, 2016 0:15:57 0.990	367.10	51.1
Tuesday, February 23, 2016 0:20:58 0.990	372.07	50.6
Tuesday, February 23, 2016 0:25:58 0.990	377.02	50.2
Tuesday, February 23, 2016 0:30:59 0.990	381.99	50.9
Tuesday, February 23, 2016 0:35:59 0.990	386.94	50.5
Tuesday, February 23, 2016 0:41:00 0.990	391.91	50.8
Tuesday, February 23, 2016 0:46:00 0.990	396.86	50.4
Tuesday, February 23, 2016 0:51:01 0.990	401.83	51.1
Tuesday, February 23, 2016 0:56:01 0.990	406.78	49.8
Tuesday, February 23, 2016 1:01:02 0.990	411.75	50.1
Tuesday, February 23, 2016 1:06:02 0.990	416.70	50.4
Tuesday, February 23, 2016 1:11:03 0.990	421.66	50.6
Tuesday, February 23, 2016 1:16:03 0.990	426.62	50.5

Tuesday, February 23, 2016 1:21:04 0.990	431.58	50.2
Tuesday, February 23, 2016 1:26:04 0.990	436.53	50.1
Tuesday, February 23, 2016 1:31:05 0.990	441.50	50.4
Tuesday, February 23, 2016 1:36:05 0.990	446.45	50.8
Tuesday, February 23, 2016 1:41:06 0.990	451.42	50.9
Tuesday, February 23, 2016 1:46:06 0.990	456.37	51.1
Tuesday, February 23, 2016 1:51:07 0.990	461.34	49.9
Tuesday, February 23, 2016 1:56:07 0.990	466.29	50.3
Tuesday, February 23, 2016 2:01:08 0.990	471.26	50.4
Tuesday, February 23, 2016 2:06:08 0.990	476.21	50.5
Tuesday, February 23, 2016 2:11:09 0.990	481.18	50.2
Tuesday, February 23, 2016 2:16:09 0.990	486.13	50.9
Tuesday, February 23, 2016 2:21:10 0.990	491.10	50.4
Tuesday, February 23, 2016 2:26:11 0.990	496.06	50.9
Tuesday, February 23, 2016 2:31:11 0.990	501.02	50.9
Tuesday, February 23, 2016 2:36:12 0.990	505.98	50.1
Tuesday, February 23, 2016 2:41:12 0.990	510.93	50.9
Tuesday, February 23, 2016 2:46:13 0.990	515.90	50.5
Tuesday, February 23, 2016 2:51:13 0.990	520.85	49.9
Tuesday, February 23, 2016 2:56:14 0.990	525.82	50.1
Tuesday, February 23, 2016 3:01:14 0.990	530.77	50.1
Tuesday, February 23, 2016 3:06:15 0.990	535.74	50.8
Tuesday, February 23, 2016 3:11:15 0.990	540.69	50.2
Tuesday, February 23, 2016 3:16:16 0.990	545.66	50.6
Tuesday, February 23, 2016 3:21:16 0.990	550.61	50.5
Tuesday, February 23, 2016 3:26:17 0.990	555.58	50.4
Tuesday, February 23, 2016 3:31:17 0.990	560.53	51.0
Tuesday, February 23, 2016 3:36:18 0.990	565.50	50.6
Tuesday, February 23, 2016 3:41:18 0.990	570.45	50.9
Tuesday, February 23, 2016 3:46:19 0.990	575.42	50.8
Tuesday, February 23, 2016 3:51:19 0.990	580.37	50.9
Tuesday, February 23, 2016 3:56:20 0.990	585.34	50.5
Tuesday, February 23, 2016 4:01:20 0.990	590.29	50.3
Tuesday, February 23, 2016 4:06:21 0.990	595.26	50.8
Tuesday, February 23, 2016 4:11:21 0.990	600.21	50.8
Tuesday, February 23, 2016 4:16:22 0.990	605.18	50.4
Tuesday, February 23, 2016 4:21:22 0.990	610.13	50.4
Tuesday, February 23, 2016 4:26:23 0.990	615.10	49.7
Tuesday, February 23, 2016 4:31:23 0.990	620.05	50.4
Tuesday, February 23, 2016 4:36:24 0.990	625.02	50.2
Tuesday, February 23, 2016 4:41:24 0.990	629.97	50.0
Tuesday, February 23, 2016 4:46:25 0.990	634.94	50.7
Tuesday, February 23, 2016 4:51:25 0.990	639.89	50.3
Tuesday, February 23, 2016 4:56:26 0.990	644.86	50.2
Tuesday, February 23, 2016 5:01:26 0.990	649.81	50.8
Tuesday, February 23, 2016 5:06:27 0.990	654.78	50.6
Tuesday, February 23, 2016 5:11:27 0.990	659.73	50.7
Tuesday, February 23, 2016 5:16:28 0.990	664.70	50.2
Tuesday, February 23, 2016 5:21:28 0.990	669.65	50.1
Tuesday, February 23, 2016 5:26:29 0.990	674.62	50.5
Tuesday, February 23, 2016 5:31:29 0.990	679.57	49.7
Tuesday, February 23, 2016 5:36:30 0.990	684.54	50.5
Tuesday, February 23, 2016 5:41:30 0.990	689.49	50.4
Tuesday, February 23, 2016 5:46:31 0.990	694.46	50.8

Tuesday, February 23, 2016 5:51:31	0.990	699.41	50.9
Tuesday, February 23, 2016 5:56:32	0.990	704.38	50.4
Tuesday, February 23, 2016 6:01:32	0.990	709.33	50.4
Tuesday, February 23, 2016 6:05:02	0.990	712.80	50.8

aqms5

formaldehyde002

Ch. 2 Cartridge Started Saturday, March 05, 2016 6:00:03

Flow Rate Set Point 1.00 l/min

Stopped Sunday, March 06, 2016 6:00:23

Total Volume 1425.44 liters

Total Sample Time 24.00 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 -0.007 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Saturday, March 05, 2016 6:00:30	0.080	0.22	49.8
Saturday, March 05, 2016 6:05:31	0.990	5.19	50.5
Saturday, March 05, 2016 6:10:31	0.990	10.14	50.1
Saturday, March 05, 2016 6:15:31	0.990	15.09	50.1
Saturday, March 05, 2016 6:20:32	0.990	20.06	49.4
Saturday, March 05, 2016 6:25:32	0.990	25.01	50.5
Saturday, March 05, 2016 6:30:33	0.990	29.97	50.6
Saturday, March 05, 2016 6:35:33	0.990	34.92	50.4
Saturday, March 05, 2016 6:40:34	0.990	39.89	49.3
Saturday, March 05, 2016 6:45:34	0.990	44.84	49.9
Saturday, March 05, 2016 6:50:35	0.990	49.81	49.8
Saturday, March 05, 2016 6:55:35	0.990	54.76	50.1
Saturday, March 05, 2016 7:00:36	0.990	59.72	49.8
Saturday, March 05, 2016 7:05:36	0.990	64.67	50.6
Saturday, March 05, 2016 7:10:37	0.990	69.64	50.9
Saturday, March 05, 2016 7:15:37	0.990	74.59	50.6
Saturday, March 05, 2016 7:20:38	0.990	79.56	50.3
Saturday, March 05, 2016 7:25:38	0.990	84.51	50.5
Saturday, March 05, 2016 7:30:39	0.990	89.47	50.0
Saturday, March 05, 2016 7:35:39	0.990	94.42	49.5
Saturday, March 05, 2016 7:40:39	0.990	99.37	50.5
Saturday, March 05, 2016 7:45:40	0.990	104.34	50.9
Saturday, March 05, 2016 7:50:40	0.990	109.29	50.3
Saturday, March 05, 2016 7:55:41	0.990	114.26	50.6
Saturday, March 05, 2016 8:00:41	0.990	119.21	50.5
Saturday, March 05, 2016 8:05:42	0.990	124.17	50.4
Saturday, March 05, 2016 8:10:42	0.990	129.12	50.4
Saturday, March 05, 2016 8:15:43	0.990	134.09	50.8
Saturday, March 05, 2016 8:20:43	0.990	139.04	50.8
Saturday, March 05, 2016 8:25:44	0.990	144.01	50.6
Saturday, March 05, 2016 8:30:44	0.990	148.96	50.7
Saturday, March 05, 2016 8:35:44	0.990	153.91	50.1
Saturday, March 05, 2016 8:40:45	0.990	158.88	50.7

Saturday, March 05, 2016 8:45:45 0.990	163.83	50.7
Saturday, March 05, 2016 8:50:46 0.990	168.79	50.2
Saturday, March 05, 2016 8:55:46 0.990	173.74	50.4
Saturday, March 05, 2016 9:00:47 0.990	178.71	49.6
Saturday, March 05, 2016 9:05:47 0.990	183.66	50.9
Saturday, March 05, 2016 9:10:48 0.990	188.63	50.3
Saturday, March 05, 2016 9:15:48 0.990	193.58	50.0
Saturday, March 05, 2016 9:20:49 0.990	198.54	49.9
Saturday, March 05, 2016 9:25:49 0.990	203.49	50.8
Saturday, March 05, 2016 9:30:50 0.990	208.46	49.6
Saturday, March 05, 2016 9:35:50 0.990	213.41	50.1
Saturday, March 05, 2016 9:40:51 0.990	218.38	50.0
Saturday, March 05, 2016 9:45:51 0.990	223.33	50.5
Saturday, March 05, 2016 9:50:51 0.990	228.28	50.4
Saturday, March 05, 2016 9:55:52 0.990	233.24	50.8
Saturday, March 05, 2016 10:00:52 0.990	238.19	50.9
Saturday, March 05, 2016 10:05:53 0.990	243.16	50.1
Saturday, March 05, 2016 10:10:53 0.990	248.11	50.4
Saturday, March 05, 2016 10:15:54 0.990	253.08	50.4
Saturday, March 05, 2016 10:20:54 0.990	258.03	50.8
Saturday, March 05, 2016 10:25:55 0.990	263.00	50.1
Saturday, March 05, 2016 10:30:55 0.990	267.95	50.3
Saturday, March 05, 2016 10:35:56 0.990	272.91	50.8
Saturday, March 05, 2016 10:40:56 0.990	277.86	50.5
Saturday, March 05, 2016 10:45:57 0.990	282.83	50.1
Saturday, March 05, 2016 10:50:57 0.990	287.78	50.8
Saturday, March 05, 2016 10:55:58 0.990	292.75	50.2
Saturday, March 05, 2016 11:00:58 0.990	297.70	50.9
Saturday, March 05, 2016 11:05:59 0.990	302.66	50.6
Saturday, March 05, 2016 11:11:00 0.990	307.63	50.5
Saturday, March 05, 2016 11:16:00 0.990	312.58	50.4
Saturday, March 05, 2016 11:21:01 0.990	317.55	50.4
Saturday, March 05, 2016 11:26:01 0.990	322.50	50.3
Saturday, March 05, 2016 11:31:02 0.990	327.47	50.5
Saturday, March 05, 2016 11:36:02 0.990	332.42	50.1
Saturday, March 05, 2016 11:41:03 0.990	337.38	50.2
Saturday, March 05, 2016 11:46:03 0.990	342.33	50.1
Saturday, March 05, 2016 11:51:04 0.990	347.30	50.0
Saturday, March 05, 2016 11:56:04 0.990	352.25	50.2
Saturday, March 05, 2016 12:01:05 0.990	357.22	50.8
Saturday, March 05, 2016 12:06:05 0.990	362.17	50.4
Saturday, March 05, 2016 12:11:06 0.990	367.14	50.3
Saturday, March 05, 2016 12:16:06 0.990	372.09	50.3
Saturday, March 05, 2016 12:21:07 0.990	377.05	50.2
Saturday, March 05, 2016 12:26:07 0.990	382.00	50.4
Saturday, March 05, 2016 12:31:08 0.990	386.97	50.8
Saturday, March 05, 2016 12:36:08 0.990	391.92	50.2
Saturday, March 05, 2016 12:41:09 0.990	396.89	51.0
Saturday, March 05, 2016 12:46:09 0.990	401.84	50.0
Saturday, March 05, 2016 12:51:10 0.990	406.80	50.4
Saturday, March 05, 2016 12:56:10 0.990	411.76	50.4
Saturday, March 05, 2016 13:01:11 0.990	416.72	50.5
Saturday, March 05, 2016 13:06:11 0.990	421.67	50.6
Saturday, March 05, 2016 13:11:11 0.990	426.62	49.6

Saturday, March 05, 2016 13:16:12 0.990	431.59	50.3
Saturday, March 05, 2016 13:21:12 0.990	436.54	50.8
Saturday, March 05, 2016 13:26:13 0.990	441.51	50.5
Saturday, March 05, 2016 13:31:13 0.990	446.46	50.9
Saturday, March 05, 2016 13:36:14 0.990	451.42	50.0
Saturday, March 05, 2016 13:41:15 0.990	456.39	50.1
Saturday, March 05, 2016 13:46:15 0.990	461.34	50.1
Saturday, March 05, 2016 13:51:15 0.990	466.29	50.3
Saturday, March 05, 2016 13:56:16 0.990	471.26	51.0
Saturday, March 05, 2016 14:01:16 0.990	476.21	51.1
Saturday, March 05, 2016 14:06:17 0.990	481.18	50.1
Saturday, March 05, 2016 14:11:17 0.990	486.13	50.9
Saturday, March 05, 2016 14:16:18 0.990	491.09	50.6
Saturday, March 05, 2016 14:21:18 0.990	496.04	50.1
Saturday, March 05, 2016 14:26:19 0.990	501.01	50.9
Saturday, March 05, 2016 14:31:19 0.990	505.96	50.5
Saturday, March 05, 2016 14:36:20 0.990	510.93	50.8
Saturday, March 05, 2016 14:41:20 0.990	515.88	50.8
Saturday, March 05, 2016 14:46:21 0.990	520.85	50.1
Saturday, March 05, 2016 14:51:21 0.990	525.80	49.8
Saturday, March 05, 2016 14:56:22 0.990	530.76	50.2
Saturday, March 05, 2016 15:01:22 0.990	535.71	50.5
Saturday, March 05, 2016 15:06:23 0.990	540.68	50.9
Saturday, March 05, 2016 15:11:23 0.990	545.63	50.2
Saturday, March 05, 2016 15:16:23 0.990	550.58	50.7
Saturday, March 05, 2016 15:21:24 0.990	555.55	50.1
Saturday, March 05, 2016 15:26:24 0.990	560.50	50.4
Saturday, March 05, 2016 15:31:25 0.990	565.47	50.5
Saturday, March 05, 2016 15:36:25 0.990	570.42	50.6
Saturday, March 05, 2016 15:41:26 0.990	575.38	50.6
Saturday, March 05, 2016 15:46:26 0.990	580.34	50.1
Saturday, March 05, 2016 15:51:27 0.990	585.30	50.5
Saturday, March 05, 2016 15:56:27 0.990	590.25	50.6
Saturday, March 05, 2016 16:01:28 0.990	595.22	50.1
Saturday, March 05, 2016 16:06:28 0.990	600.17	50.3
Saturday, March 05, 2016 16:11:29 0.990	605.14	50.6
Saturday, March 05, 2016 16:16:29 0.990	610.09	49.8
Saturday, March 05, 2016 16:21:30 0.990	615.06	50.2
Saturday, March 05, 2016 16:26:30 0.990	620.01	50.2
Saturday, March 05, 2016 16:31:31 0.990	624.98	50.9
Saturday, March 05, 2016 16:36:31 0.990	629.93	50.5
Saturday, March 05, 2016 16:41:32 0.990	634.89	50.2
Saturday, March 05, 2016 16:46:32 0.990	639.84	50.5
Saturday, March 05, 2016 16:51:33 0.990	644.81	49.9
Saturday, March 05, 2016 16:56:33 0.990	649.76	50.4
Saturday, March 05, 2016 17:01:34 0.990	654.73	50.1
Saturday, March 05, 2016 17:06:34 0.990	659.68	50.8
Saturday, March 05, 2016 17:11:35 0.990	664.65	51.1
Saturday, March 05, 2016 17:16:35 0.990	669.60	50.5
Saturday, March 05, 2016 17:21:36 0.990	674.57	50.5
Saturday, March 05, 2016 17:26:36 0.990	679.52	50.0
Saturday, March 05, 2016 17:31:37 0.990	684.48	50.3
Saturday, March 05, 2016 17:36:37 0.990	689.44	50.4
Saturday, March 05, 2016 17:41:38 0.990	694.40	50.5

Saturday, March 05, 2016 17:46:38 0.990	699.35	50.7
Saturday, March 05, 2016 17:51:39 0.990	704.32	50.2
Saturday, March 05, 2016 17:56:39 0.990	709.27	50.5
Saturday, March 05, 2016 18:01:40 0.990	714.24	50.7
Saturday, March 05, 2016 18:06:40 0.990	719.19	50.8
Saturday, March 05, 2016 18:11:41 0.990	724.16	49.8
Saturday, March 05, 2016 18:16:41 0.990	729.11	50.7
Saturday, March 05, 2016 18:21:42 0.990	734.08	50.8
Saturday, March 05, 2016 18:26:42 0.990	739.03	50.5
Saturday, March 05, 2016 18:31:43 0.990	744.00	50.2
Saturday, March 05, 2016 18:36:43 0.990	748.95	50.4
Saturday, March 05, 2016 18:41:44 0.990	753.91	50.5
Saturday, March 05, 2016 18:46:44 0.990	758.86	50.5
Saturday, March 05, 2016 18:51:45 0.990	763.83	50.7
Saturday, March 05, 2016 18:56:45 0.990	768.78	50.6
Saturday, March 05, 2016 19:01:46 0.990	773.75	50.3
Saturday, March 05, 2016 19:06:46 0.990	778.70	50.2
Saturday, March 05, 2016 19:11:47 0.990	783.67	49.8
Saturday, March 05, 2016 19:16:47 0.990	788.62	50.5
Saturday, March 05, 2016 19:21:48 0.990	793.58	50.3
Saturday, March 05, 2016 19:26:48 0.990	798.54	50.5
Saturday, March 05, 2016 19:31:49 0.990	803.50	51.0
Saturday, March 05, 2016 19:36:49 0.990	808.45	50.9
Saturday, March 05, 2016 19:41:50 0.990	813.42	49.8
Saturday, March 05, 2016 19:46:50 0.990	818.37	50.0
Saturday, March 05, 2016 19:51:51 0.990	823.34	50.2
Saturday, March 05, 2016 19:56:51 0.990	828.29	50.5
Saturday, March 05, 2016 20:01:52 0.990	833.26	50.8
Saturday, March 05, 2016 20:06:52 0.990	838.21	50.8
Saturday, March 05, 2016 20:11:53 0.990	843.17	50.4
Saturday, March 05, 2016 20:16:53 0.990	848.13	50.2
Saturday, March 05, 2016 20:21:54 0.990	853.09	50.4
Saturday, March 05, 2016 20:26:54 0.990	858.04	50.6
Saturday, March 05, 2016 20:31:55 0.990	863.01	50.6
Saturday, March 05, 2016 20:36:55 0.990	867.96	50.3
Saturday, March 05, 2016 20:41:56 0.990	872.93	50.7
Saturday, March 05, 2016 20:46:56 0.990	877.88	50.5
Saturday, March 05, 2016 20:51:57 0.990	882.84	50.4
Saturday, March 05, 2016 20:56:57 0.990	887.80	50.7
Saturday, March 05, 2016 21:01:58 0.990	892.76	50.5
Saturday, March 05, 2016 21:06:58 0.990	897.71	50.6
Saturday, March 05, 2016 21:11:59 0.990	902.68	49.8
Saturday, March 05, 2016 21:16:59 0.990	907.63	50.4
Saturday, March 05, 2016 21:22:00 0.990	912.60	50.4
Saturday, March 05, 2016 21:27:00 0.990	917.55	51.1
Saturday, March 05, 2016 21:32:01 0.990	922.51	50.3
Saturday, March 05, 2016 21:37:01 0.990	927.46	50.8
Saturday, March 05, 2016 21:42:02 0.990	932.43	50.9
Saturday, March 05, 2016 21:47:02 0.990	937.38	50.4
Saturday, March 05, 2016 21:52:03 0.990	942.35	49.9
Saturday, March 05, 2016 21:57:03 0.990	947.30	50.6
Saturday, March 05, 2016 22:02:04 0.990	952.26	50.4
Saturday, March 05, 2016 22:07:04 0.990	957.21	50.7
Saturday, March 05, 2016 22:12:05 0.990	962.18	50.4

Saturday, March 05, 2016 22:17:05 0.990	967.13	50.1
Saturday, March 05, 2016 22:22:06 0.990	972.10	50.7
Saturday, March 05, 2016 22:27:06 0.990	977.05	50.9
Saturday, March 05, 2016 22:32:07 0.990	982.01	50.1
Saturday, March 05, 2016 22:37:07 0.990	986.96	50.4
Saturday, March 05, 2016 22:42:08 0.990	991.93	50.5
Saturday, March 05, 2016 22:47:08 0.990	996.88	50.6
Saturday, March 05, 2016 22:52:09 0.990	1001.85	50.1
Saturday, March 05, 2016 22:57:09 0.990	1006.80	50.8
Saturday, March 05, 2016 23:02:10 0.990	1011.77	49.7
Saturday, March 05, 2016 23:07:10 0.990	1016.72	50.7
Saturday, March 05, 2016 23:12:11 0.990	1021.68	50.5
Saturday, March 05, 2016 23:17:11 0.990	1026.63	50.5
Saturday, March 05, 2016 23:22:12 0.990	1031.60	50.7
Saturday, March 05, 2016 23:27:12 0.990	1036.55	50.2
Saturday, March 05, 2016 23:32:13 0.990	1041.51	50.8
Saturday, March 05, 2016 23:37:13 0.990	1046.46	50.5
Saturday, March 05, 2016 23:42:14 0.990	1051.43	50.6
Saturday, March 05, 2016 23:47:14 0.990	1056.38	50.2
Saturday, March 05, 2016 23:52:15 0.990	1061.35	50.5
Saturday, March 05, 2016 23:57:15 0.990	1066.30	50.4
Sunday, March 06, 2016 0:02:16 0.990	1071.26	50.5
Sunday, March 06, 2016 0:07:16 0.990	1076.21	50.2
Sunday, March 06, 2016 0:12:17 0.990	1081.18	49.9
Sunday, March 06, 2016 0:17:17 0.990	1086.13	50.4
Sunday, March 06, 2016 0:22:17 0.990	1091.08	50.0
Sunday, March 06, 2016 0:27:18 0.990	1096.04	49.4
Sunday, March 06, 2016 0:32:18 0.990	1100.99	50.0
Sunday, March 06, 2016 0:37:19 0.990	1105.96	50.5
Sunday, March 06, 2016 0:42:19 0.990	1110.91	50.8
Sunday, March 06, 2016 0:47:20 0.990	1115.88	50.1
Sunday, March 06, 2016 0:52:20 0.990	1120.83	50.2
Sunday, March 06, 2016 0:57:21 0.990	1125.79	50.0
Sunday, March 06, 2016 1:02:21 0.990	1130.74	50.7
Sunday, March 06, 2016 1:07:22 0.990	1135.71	50.8
Sunday, March 06, 2016 1:12:22 0.990	1140.66	50.9
Sunday, March 06, 2016 1:17:22 0.990	1145.61	50.7
Sunday, March 06, 2016 1:22:23 0.990	1150.57	50.8
Sunday, March 06, 2016 1:27:23 0.990	1155.52	50.7
Sunday, March 06, 2016 1:32:24 0.990	1160.49	50.4
Sunday, March 06, 2016 1:37:24 0.990	1165.44	50.0
Sunday, March 06, 2016 1:42:25 0.990	1170.41	49.3
Sunday, March 06, 2016 1:47:25 0.990	1175.35	50.4
Sunday, March 06, 2016 1:52:26 0.990	1180.32	50.2
Sunday, March 06, 2016 1:57:26 0.990	1185.27	50.7
Sunday, March 06, 2016 2:02:27 0.990	1190.24	50.0
Sunday, March 06, 2016 2:07:27 0.990	1195.19	49.9
Sunday, March 06, 2016 2:12:27 0.990	1200.14	50.8
Sunday, March 06, 2016 2:17:28 0.990	1205.10	50.8
Sunday, March 06, 2016 2:22:28 0.990	1210.05	49.1
Sunday, March 06, 2016 2:27:29 0.990	1215.02	50.1
Sunday, March 06, 2016 2:32:29 0.990	1219.97	50.7
Sunday, March 06, 2016 2:37:30 0.990	1224.93	50.0
Sunday, March 06, 2016 2:42:30 0.990	1229.88	50.1

Sunday, March 06, 2016 2:47:31 0.990	1234.85	50.1
Sunday, March 06, 2016 2:52:31 0.990	1239.80	50.7
Sunday, March 06, 2016 2:57:32 0.990	1244.77	50.5
Sunday, March 06, 2016 3:02:32 0.990	1249.72	50.8
Sunday, March 06, 2016 3:07:32 0.990	1254.67	50.4
Sunday, March 06, 2016 3:12:33 0.990	1259.63	50.2
Sunday, March 06, 2016 3:17:33 0.990	1264.58	49.9
Sunday, March 06, 2016 3:22:34 0.990	1269.55	50.1
Sunday, March 06, 2016 3:27:34 0.990	1274.50	50.1
Sunday, March 06, 2016 3:32:35 0.990	1279.46	50.2
Sunday, March 06, 2016 3:37:35 0.990	1284.41	50.9
Sunday, March 06, 2016 3:42:36 0.990	1289.38	50.4
Sunday, March 06, 2016 3:47:36 0.990	1294.33	50.0
Sunday, March 06, 2016 3:52:36 0.990	1299.28	50.1
Sunday, March 06, 2016 3:57:37 0.990	1304.25	50.5
Sunday, March 06, 2016 4:02:37 0.990	1309.20	50.8
Sunday, March 06, 2016 4:07:38 0.990	1314.16	51.0
Sunday, March 06, 2016 4:12:38 0.990	1319.11	50.1
Sunday, March 06, 2016 4:17:39 0.990	1324.08	50.3
Sunday, March 06, 2016 4:22:39 0.990	1329.03	50.1
Sunday, March 06, 2016 4:27:39 0.990	1333.98	50.7
Sunday, March 06, 2016 4:32:40 0.990	1338.94	50.5
Sunday, March 06, 2016 4:37:40 0.990	1343.89	50.5
Sunday, March 06, 2016 4:42:41 0.990	1348.86	50.1
Sunday, March 06, 2016 4:47:41 0.990	1353.81	50.1
Sunday, March 06, 2016 4:52:42 0.990	1358.78	50.4
Sunday, March 06, 2016 4:57:42 0.990	1363.73	50.4
Sunday, March 06, 2016 5:02:43 0.990	1368.69	50.1
Sunday, March 06, 2016 5:07:43 0.990	1373.64	49.9
Sunday, March 06, 2016 5:12:43 0.990	1378.59	50.2
Sunday, March 06, 2016 5:17:44 0.990	1383.56	50.1
Sunday, March 06, 2016 5:22:44 0.990	1388.51	50.6
Sunday, March 06, 2016 5:27:45 0.990	1393.47	50.9
Sunday, March 06, 2016 5:32:45 0.990	1398.42	50.0
Sunday, March 06, 2016 5:37:46 0.990	1403.39	50.0
Sunday, March 06, 2016 5:42:46 0.990	1408.34	50.6
Sunday, March 06, 2016 5:47:47 0.990	1413.30	50.0
Sunday, March 06, 2016 5:52:47 0.990	1418.25	49.8
Sunday, March 06, 2016 5:57:48 0.990	1423.22	50.2
Sunday, March 06, 2016 6:00:02 0.990	1425.43	50.3

aqms5

formaldehyde002

Ch. 2 Cartridge Started Saturday, March 05, 2016 6:00:03

Flow Rate Set Point 1.00 l/min

Stopped Sunday, March 06, 2016 6:00:23

Total Volume 1425.44 liters

Total Sample Time 24.00 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 -0.007 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Saturday, March 05, 2016 6:00:30	0.080	0.22	49.8
Saturday, March 05, 2016 6:05:31	0.990	5.19	50.5
Saturday, March 05, 2016 6:10:31	0.990	10.14	50.1
Saturday, March 05, 2016 6:15:31	0.990	15.09	50.1
Saturday, March 05, 2016 6:20:32	0.990	20.06	49.4
Saturday, March 05, 2016 6:25:32	0.990	25.01	50.5
Saturday, March 05, 2016 6:30:33	0.990	29.97	50.6
Saturday, March 05, 2016 6:35:33	0.990	34.92	50.4
Saturday, March 05, 2016 6:40:34	0.990	39.89	49.3
Saturday, March 05, 2016 6:45:34	0.990	44.84	49.9
Saturday, March 05, 2016 6:50:35	0.990	49.81	49.8
Saturday, March 05, 2016 6:55:35	0.990	54.76	50.1
Saturday, March 05, 2016 7:00:36	0.990	59.72	49.8
Saturday, March 05, 2016 7:05:36	0.990	64.67	50.6
Saturday, March 05, 2016 7:10:37	0.990	69.64	50.9
Saturday, March 05, 2016 7:15:37	0.990	74.59	50.6
Saturday, March 05, 2016 7:20:38	0.990	79.56	50.3
Saturday, March 05, 2016 7:25:38	0.990	84.51	50.5
Saturday, March 05, 2016 7:30:39	0.990	89.47	50.0
Saturday, March 05, 2016 7:35:39	0.990	94.42	49.5
Saturday, March 05, 2016 7:40:39	0.990	99.37	50.5
Saturday, March 05, 2016 7:45:40	0.990	104.34	50.9
Saturday, March 05, 2016 7:50:40	0.990	109.29	50.3
Saturday, March 05, 2016 7:55:41	0.990	114.26	50.6
Saturday, March 05, 2016 8:00:41	0.990	119.21	50.5
Saturday, March 05, 2016 8:05:42	0.990	124.17	50.4
Saturday, March 05, 2016 8:10:42	0.990	129.12	50.4
Saturday, March 05, 2016 8:15:43	0.990	134.09	50.8
Saturday, March 05, 2016 8:20:43	0.990	139.04	50.8
Saturday, March 05, 2016 8:25:44	0.990	144.01	50.6
Saturday, March 05, 2016 8:30:44	0.990	148.96	50.7
Saturday, March 05, 2016 8:35:44	0.990	153.91	50.1
Saturday, March 05, 2016 8:40:45	0.990	158.88	50.7

Saturday, March 05, 2016 8:45:45 0.990	163.83	50.7
Saturday, March 05, 2016 8:50:46 0.990	168.79	50.2
Saturday, March 05, 2016 8:55:46 0.990	173.74	50.4
Saturday, March 05, 2016 9:00:47 0.990	178.71	49.6
Saturday, March 05, 2016 9:05:47 0.990	183.66	50.9
Saturday, March 05, 2016 9:10:48 0.990	188.63	50.3
Saturday, March 05, 2016 9:15:48 0.990	193.58	50.0
Saturday, March 05, 2016 9:20:49 0.990	198.54	49.9
Saturday, March 05, 2016 9:25:49 0.990	203.49	50.8
Saturday, March 05, 2016 9:30:50 0.990	208.46	49.6
Saturday, March 05, 2016 9:35:50 0.990	213.41	50.1
Saturday, March 05, 2016 9:40:51 0.990	218.38	50.0
Saturday, March 05, 2016 9:45:51 0.990	223.33	50.5
Saturday, March 05, 2016 9:50:51 0.990	228.28	50.4
Saturday, March 05, 2016 9:55:52 0.990	233.24	50.8
Saturday, March 05, 2016 10:00:52 0.990	238.19	50.9
Saturday, March 05, 2016 10:05:53 0.990	243.16	50.1
Saturday, March 05, 2016 10:10:53 0.990	248.11	50.4
Saturday, March 05, 2016 10:15:54 0.990	253.08	50.4
Saturday, March 05, 2016 10:20:54 0.990	258.03	50.8
Saturday, March 05, 2016 10:25:55 0.990	263.00	50.1
Saturday, March 05, 2016 10:30:55 0.990	267.95	50.3
Saturday, March 05, 2016 10:35:56 0.990	272.91	50.8
Saturday, March 05, 2016 10:40:56 0.990	277.86	50.5
Saturday, March 05, 2016 10:45:57 0.990	282.83	50.1
Saturday, March 05, 2016 10:50:57 0.990	287.78	50.8
Saturday, March 05, 2016 10:55:58 0.990	292.75	50.2
Saturday, March 05, 2016 11:00:58 0.990	297.70	50.9
Saturday, March 05, 2016 11:05:59 0.990	302.66	50.6
Saturday, March 05, 2016 11:11:00 0.990	307.63	50.5
Saturday, March 05, 2016 11:16:00 0.990	312.58	50.4
Saturday, March 05, 2016 11:21:01 0.990	317.55	50.4
Saturday, March 05, 2016 11:26:01 0.990	322.50	50.3
Saturday, March 05, 2016 11:31:02 0.990	327.47	50.5
Saturday, March 05, 2016 11:36:02 0.990	332.42	50.1
Saturday, March 05, 2016 11:41:03 0.990	337.38	50.2
Saturday, March 05, 2016 11:46:03 0.990	342.33	50.1
Saturday, March 05, 2016 11:51:04 0.990	347.30	50.0
Saturday, March 05, 2016 11:56:04 0.990	352.25	50.2
Saturday, March 05, 2016 12:01:05 0.990	357.22	50.8
Saturday, March 05, 2016 12:06:05 0.990	362.17	50.4
Saturday, March 05, 2016 12:11:06 0.990	367.14	50.3
Saturday, March 05, 2016 12:16:06 0.990	372.09	50.3
Saturday, March 05, 2016 12:21:07 0.990	377.05	50.2
Saturday, March 05, 2016 12:26:07 0.990	382.00	50.4
Saturday, March 05, 2016 12:31:08 0.990	386.97	50.8
Saturday, March 05, 2016 12:36:08 0.990	391.92	50.2
Saturday, March 05, 2016 12:41:09 0.990	396.89	51.0
Saturday, March 05, 2016 12:46:09 0.990	401.84	50.0
Saturday, March 05, 2016 12:51:10 0.990	406.80	50.4
Saturday, March 05, 2016 12:56:10 0.990	411.76	50.4
Saturday, March 05, 2016 13:01:11 0.990	416.72	50.5
Saturday, March 05, 2016 13:06:11 0.990	421.67	50.6
Saturday, March 05, 2016 13:11:11 0.990	426.62	49.6

Saturday, March 05, 2016 13:16:12 0.990	431.59	50.3
Saturday, March 05, 2016 13:21:12 0.990	436.54	50.8
Saturday, March 05, 2016 13:26:13 0.990	441.51	50.5
Saturday, March 05, 2016 13:31:13 0.990	446.46	50.9
Saturday, March 05, 2016 13:36:14 0.990	451.42	50.0
Saturday, March 05, 2016 13:41:15 0.990	456.39	50.1
Saturday, March 05, 2016 13:46:15 0.990	461.34	50.1
Saturday, March 05, 2016 13:51:15 0.990	466.29	50.3
Saturday, March 05, 2016 13:56:16 0.990	471.26	51.0
Saturday, March 05, 2016 14:01:16 0.990	476.21	51.1
Saturday, March 05, 2016 14:06:17 0.990	481.18	50.1
Saturday, March 05, 2016 14:11:17 0.990	486.13	50.9
Saturday, March 05, 2016 14:16:18 0.990	491.09	50.6
Saturday, March 05, 2016 14:21:18 0.990	496.04	50.1
Saturday, March 05, 2016 14:26:19 0.990	501.01	50.9
Saturday, March 05, 2016 14:31:19 0.990	505.96	50.5
Saturday, March 05, 2016 14:36:20 0.990	510.93	50.8
Saturday, March 05, 2016 14:41:20 0.990	515.88	50.8
Saturday, March 05, 2016 14:46:21 0.990	520.85	50.1
Saturday, March 05, 2016 14:51:21 0.990	525.80	49.8
Saturday, March 05, 2016 14:56:22 0.990	530.76	50.2
Saturday, March 05, 2016 15:01:22 0.990	535.71	50.5
Saturday, March 05, 2016 15:06:23 0.990	540.68	50.9
Saturday, March 05, 2016 15:11:23 0.990	545.63	50.2
Saturday, March 05, 2016 15:16:23 0.990	550.58	50.7
Saturday, March 05, 2016 15:21:24 0.990	555.55	50.1
Saturday, March 05, 2016 15:26:24 0.990	560.50	50.4
Saturday, March 05, 2016 15:31:25 0.990	565.47	50.5
Saturday, March 05, 2016 15:36:25 0.990	570.42	50.6
Saturday, March 05, 2016 15:41:26 0.990	575.38	50.6
Saturday, March 05, 2016 15:46:26 0.990	580.34	50.1
Saturday, March 05, 2016 15:51:27 0.990	585.30	50.5
Saturday, March 05, 2016 15:56:27 0.990	590.25	50.6
Saturday, March 05, 2016 16:01:28 0.990	595.22	50.1
Saturday, March 05, 2016 16:06:28 0.990	600.17	50.3
Saturday, March 05, 2016 16:11:29 0.990	605.14	50.6
Saturday, March 05, 2016 16:16:29 0.990	610.09	49.8
Saturday, March 05, 2016 16:21:30 0.990	615.06	50.2
Saturday, March 05, 2016 16:26:30 0.990	620.01	50.2
Saturday, March 05, 2016 16:31:31 0.990	624.98	50.9
Saturday, March 05, 2016 16:36:31 0.990	629.93	50.5
Saturday, March 05, 2016 16:41:32 0.990	634.89	50.2
Saturday, March 05, 2016 16:46:32 0.990	639.84	50.5
Saturday, March 05, 2016 16:51:33 0.990	644.81	49.9
Saturday, March 05, 2016 16:56:33 0.990	649.76	50.4
Saturday, March 05, 2016 17:01:34 0.990	654.73	50.1
Saturday, March 05, 2016 17:06:34 0.990	659.68	50.8
Saturday, March 05, 2016 17:11:35 0.990	664.65	51.1
Saturday, March 05, 2016 17:16:35 0.990	669.60	50.5
Saturday, March 05, 2016 17:21:36 0.990	674.57	50.5
Saturday, March 05, 2016 17:26:36 0.990	679.52	50.0
Saturday, March 05, 2016 17:31:37 0.990	684.48	50.3
Saturday, March 05, 2016 17:36:37 0.990	689.44	50.4
Saturday, March 05, 2016 17:41:38 0.990	694.40	50.5

Saturday, March 05, 2016 17:46:38 0.990	699.35	50.7
Saturday, March 05, 2016 17:51:39 0.990	704.32	50.2
Saturday, March 05, 2016 17:56:39 0.990	709.27	50.5
Saturday, March 05, 2016 18:01:40 0.990	714.24	50.7
Saturday, March 05, 2016 18:06:40 0.990	719.19	50.8
Saturday, March 05, 2016 18:11:41 0.990	724.16	49.8
Saturday, March 05, 2016 18:16:41 0.990	729.11	50.7
Saturday, March 05, 2016 18:21:42 0.990	734.08	50.8
Saturday, March 05, 2016 18:26:42 0.990	739.03	50.5
Saturday, March 05, 2016 18:31:43 0.990	744.00	50.2
Saturday, March 05, 2016 18:36:43 0.990	748.95	50.4
Saturday, March 05, 2016 18:41:44 0.990	753.91	50.5
Saturday, March 05, 2016 18:46:44 0.990	758.86	50.5
Saturday, March 05, 2016 18:51:45 0.990	763.83	50.7
Saturday, March 05, 2016 18:56:45 0.990	768.78	50.6
Saturday, March 05, 2016 19:01:46 0.990	773.75	50.3
Saturday, March 05, 2016 19:06:46 0.990	778.70	50.2
Saturday, March 05, 2016 19:11:47 0.990	783.67	49.8
Saturday, March 05, 2016 19:16:47 0.990	788.62	50.5
Saturday, March 05, 2016 19:21:48 0.990	793.58	50.3
Saturday, March 05, 2016 19:26:48 0.990	798.54	50.5
Saturday, March 05, 2016 19:31:49 0.990	803.50	51.0
Saturday, March 05, 2016 19:36:49 0.990	808.45	50.9
Saturday, March 05, 2016 19:41:50 0.990	813.42	49.8
Saturday, March 05, 2016 19:46:50 0.990	818.37	50.0
Saturday, March 05, 2016 19:51:51 0.990	823.34	50.2
Saturday, March 05, 2016 19:56:51 0.990	828.29	50.5
Saturday, March 05, 2016 20:01:52 0.990	833.26	50.8
Saturday, March 05, 2016 20:06:52 0.990	838.21	50.8
Saturday, March 05, 2016 20:11:53 0.990	843.17	50.4
Saturday, March 05, 2016 20:16:53 0.990	848.13	50.2
Saturday, March 05, 2016 20:21:54 0.990	853.09	50.4
Saturday, March 05, 2016 20:26:54 0.990	858.04	50.6
Saturday, March 05, 2016 20:31:55 0.990	863.01	50.6
Saturday, March 05, 2016 20:36:55 0.990	867.96	50.3
Saturday, March 05, 2016 20:41:56 0.990	872.93	50.7
Saturday, March 05, 2016 20:46:56 0.990	877.88	50.5
Saturday, March 05, 2016 20:51:57 0.990	882.84	50.4
Saturday, March 05, 2016 20:56:57 0.990	887.80	50.7
Saturday, March 05, 2016 21:01:58 0.990	892.76	50.5
Saturday, March 05, 2016 21:06:58 0.990	897.71	50.6
Saturday, March 05, 2016 21:11:59 0.990	902.68	49.8
Saturday, March 05, 2016 21:16:59 0.990	907.63	50.4
Saturday, March 05, 2016 21:22:00 0.990	912.60	50.4
Saturday, March 05, 2016 21:27:00 0.990	917.55	51.1
Saturday, March 05, 2016 21:32:01 0.990	922.51	50.3
Saturday, March 05, 2016 21:37:01 0.990	927.46	50.8
Saturday, March 05, 2016 21:42:02 0.990	932.43	50.9
Saturday, March 05, 2016 21:47:02 0.990	937.38	50.4
Saturday, March 05, 2016 21:52:03 0.990	942.35	49.9
Saturday, March 05, 2016 21:57:03 0.990	947.30	50.6
Saturday, March 05, 2016 22:02:04 0.990	952.26	50.4
Saturday, March 05, 2016 22:07:04 0.990	957.21	50.7
Saturday, March 05, 2016 22:12:05 0.990	962.18	50.4

Saturday, March 05, 2016 22:17:05 0.990	967.13	50.1
Saturday, March 05, 2016 22:22:06 0.990	972.10	50.7
Saturday, March 05, 2016 22:27:06 0.990	977.05	50.9
Saturday, March 05, 2016 22:32:07 0.990	982.01	50.1
Saturday, March 05, 2016 22:37:07 0.990	986.96	50.4
Saturday, March 05, 2016 22:42:08 0.990	991.93	50.5
Saturday, March 05, 2016 22:47:08 0.990	996.88	50.6
Saturday, March 05, 2016 22:52:09 0.990	1001.85	50.1
Saturday, March 05, 2016 22:57:09 0.990	1006.80	50.8
Saturday, March 05, 2016 23:02:10 0.990	1011.77	49.7
Saturday, March 05, 2016 23:07:10 0.990	1016.72	50.7
Saturday, March 05, 2016 23:12:11 0.990	1021.68	50.5
Saturday, March 05, 2016 23:17:11 0.990	1026.63	50.5
Saturday, March 05, 2016 23:22:12 0.990	1031.60	50.7
Saturday, March 05, 2016 23:27:12 0.990	1036.55	50.2
Saturday, March 05, 2016 23:32:13 0.990	1041.51	50.8
Saturday, March 05, 2016 23:37:13 0.990	1046.46	50.5
Saturday, March 05, 2016 23:42:14 0.990	1051.43	50.6
Saturday, March 05, 2016 23:47:14 0.990	1056.38	50.2
Saturday, March 05, 2016 23:52:15 0.990	1061.35	50.5
Saturday, March 05, 2016 23:57:15 0.990	1066.30	50.4
Sunday, March 06, 2016 0:02:16 0.990	1071.26	50.5
Sunday, March 06, 2016 0:07:16 0.990	1076.21	50.2
Sunday, March 06, 2016 0:12:17 0.990	1081.18	49.9
Sunday, March 06, 2016 0:17:17 0.990	1086.13	50.4
Sunday, March 06, 2016 0:22:17 0.990	1091.08	50.0
Sunday, March 06, 2016 0:27:18 0.990	1096.04	49.4
Sunday, March 06, 2016 0:32:18 0.990	1100.99	50.0
Sunday, March 06, 2016 0:37:19 0.990	1105.96	50.5
Sunday, March 06, 2016 0:42:19 0.990	1110.91	50.8
Sunday, March 06, 2016 0:47:20 0.990	1115.88	50.1
Sunday, March 06, 2016 0:52:20 0.990	1120.83	50.2
Sunday, March 06, 2016 0:57:21 0.990	1125.79	50.0
Sunday, March 06, 2016 1:02:21 0.990	1130.74	50.7
Sunday, March 06, 2016 1:07:22 0.990	1135.71	50.8
Sunday, March 06, 2016 1:12:22 0.990	1140.66	50.9
Sunday, March 06, 2016 1:17:22 0.990	1145.61	50.7
Sunday, March 06, 2016 1:22:23 0.990	1150.57	50.8
Sunday, March 06, 2016 1:27:23 0.990	1155.52	50.7
Sunday, March 06, 2016 1:32:24 0.990	1160.49	50.4
Sunday, March 06, 2016 1:37:24 0.990	1165.44	50.0
Sunday, March 06, 2016 1:42:25 0.990	1170.41	49.3
Sunday, March 06, 2016 1:47:25 0.990	1175.35	50.4
Sunday, March 06, 2016 1:52:26 0.990	1180.32	50.2
Sunday, March 06, 2016 1:57:26 0.990	1185.27	50.7
Sunday, March 06, 2016 2:02:27 0.990	1190.24	50.0
Sunday, March 06, 2016 2:07:27 0.990	1195.19	49.9
Sunday, March 06, 2016 2:12:27 0.990	1200.14	50.8
Sunday, March 06, 2016 2:17:28 0.990	1205.10	50.8
Sunday, March 06, 2016 2:22:28 0.990	1210.05	49.1
Sunday, March 06, 2016 2:27:29 0.990	1215.02	50.1
Sunday, March 06, 2016 2:32:29 0.990	1219.97	50.7
Sunday, March 06, 2016 2:37:30 0.990	1224.93	50.0
Sunday, March 06, 2016 2:42:30 0.990	1229.88	50.1

Sunday, March 06, 2016 2:47:31 0.990	1234.85	50.1
Sunday, March 06, 2016 2:52:31 0.990	1239.80	50.7
Sunday, March 06, 2016 2:57:32 0.990	1244.77	50.5
Sunday, March 06, 2016 3:02:32 0.990	1249.72	50.8
Sunday, March 06, 2016 3:07:32 0.990	1254.67	50.4
Sunday, March 06, 2016 3:12:33 0.990	1259.63	50.2
Sunday, March 06, 2016 3:17:33 0.990	1264.58	49.9
Sunday, March 06, 2016 3:22:34 0.990	1269.55	50.1
Sunday, March 06, 2016 3:27:34 0.990	1274.50	50.1
Sunday, March 06, 2016 3:32:35 0.990	1279.46	50.2
Sunday, March 06, 2016 3:37:35 0.990	1284.41	50.9
Sunday, March 06, 2016 3:42:36 0.990	1289.38	50.4
Sunday, March 06, 2016 3:47:36 0.990	1294.33	50.0
Sunday, March 06, 2016 3:52:36 0.990	1299.28	50.1
Sunday, March 06, 2016 3:57:37 0.990	1304.25	50.5
Sunday, March 06, 2016 4:02:37 0.990	1309.20	50.8
Sunday, March 06, 2016 4:07:38 0.990	1314.16	51.0
Sunday, March 06, 2016 4:12:38 0.990	1319.11	50.1
Sunday, March 06, 2016 4:17:39 0.990	1324.08	50.3
Sunday, March 06, 2016 4:22:39 0.990	1329.03	50.1
Sunday, March 06, 2016 4:27:39 0.990	1333.98	50.7
Sunday, March 06, 2016 4:32:40 0.990	1338.94	50.5
Sunday, March 06, 2016 4:37:40 0.990	1343.89	50.5
Sunday, March 06, 2016 4:42:41 0.990	1348.86	50.1
Sunday, March 06, 2016 4:47:41 0.990	1353.81	50.1
Sunday, March 06, 2016 4:52:42 0.990	1358.78	50.4
Sunday, March 06, 2016 4:57:42 0.990	1363.73	50.4
Sunday, March 06, 2016 5:02:43 0.990	1368.69	50.1
Sunday, March 06, 2016 5:07:43 0.990	1373.64	49.9
Sunday, March 06, 2016 5:12:43 0.990	1378.59	50.2
Sunday, March 06, 2016 5:17:44 0.990	1383.56	50.1
Sunday, March 06, 2016 5:22:44 0.990	1388.51	50.6
Sunday, March 06, 2016 5:27:45 0.990	1393.47	50.9
Sunday, March 06, 2016 5:32:45 0.990	1398.42	50.0
Sunday, March 06, 2016 5:37:46 0.990	1403.39	50.0
Sunday, March 06, 2016 5:42:46 0.990	1408.34	50.6
Sunday, March 06, 2016 5:47:47 0.990	1413.30	50.0
Sunday, March 06, 2016 5:52:47 0.990	1418.25	49.8
Sunday, March 06, 2016 5:57:48 0.990	1423.22	50.2
Sunday, March 06, 2016 6:00:02 0.990	1425.43	50.3

aqms5

formaldehyde001

Ch. 1 Cartridge Started Friday, March 11, 2016 11:30:01

Flow Rate Set Point 1.00 l/min

Stopped Friday, March 11, 2016 23:30:21

Total Volume 713.20 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.991 l/min

Minimum Flow Rate 0.991 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate -0.002 l/min

Ending Leak Rate -0.006 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Friday, March 11, 2016 11:30:28	0.080	0.23	50.3
Friday, March 11, 2016 11:35:29	0.991	5.20	50.3
Friday, March 11, 2016 11:40:29	0.991	10.15	49.7
Friday, March 11, 2016 11:45:30	0.991	15.12	50.5
Friday, March 11, 2016 11:50:30	0.991	20.08	49.6
Friday, March 11, 2016 11:55:31	0.991	25.05	50.4
Friday, March 11, 2016 12:00:31	0.991	30.00	50.1
Friday, March 11, 2016 12:05:32	0.991	34.97	50.6
Friday, March 11, 2016 12:10:32	0.991	39.92	50.1
Friday, March 11, 2016 12:15:33	0.991	44.89	50.4
Friday, March 11, 2016 12:20:33	0.991	49.85	50.3
Friday, March 11, 2016 12:25:34	0.991	54.82	50.0
Friday, March 11, 2016 12:30:34	0.991	59.77	50.9
Friday, March 11, 2016 12:35:35	0.991	64.74	50.5
Friday, March 11, 2016 12:40:35	0.991	69.70	50.4
Friday, March 11, 2016 12:45:36	0.991	74.67	50.6
Friday, March 11, 2016 12:50:36	0.991	79.62	50.6
Friday, March 11, 2016 12:55:37	0.991	84.59	50.4
Friday, March 11, 2016 13:00:38	0.991	89.55	50.8
Friday, March 11, 2016 13:05:38	0.991	94.52	50.1
Friday, March 11, 2016 13:10:39	0.991	99.49	50.3
Friday, March 11, 2016 13:15:39	0.991	104.44	50.4
Friday, March 11, 2016 13:20:40	0.991	109.41	50.4
Friday, March 11, 2016 13:25:40	0.991	114.37	50.5
Friday, March 11, 2016 13:30:41	0.991	119.34	49.9
Friday, March 11, 2016 13:35:41	0.991	124.29	51.0
Friday, March 11, 2016 13:40:42	0.991	129.26	50.4
Friday, March 11, 2016 13:45:43	0.991	134.23	50.9
Friday, March 11, 2016 13:50:43	0.991	139.19	51.0
Friday, March 11, 2016 13:55:44	0.991	144.16	50.6
Friday, March 11, 2016 14:00:44	0.991	149.11	50.4
Friday, March 11, 2016 14:05:45	0.991	154.08	50.5
Friday, March 11, 2016 14:10:45	0.991	159.04	50.9

Friday, March 11, 2016 14:15:46 0.991	164.01	50.2
Friday, March 11, 2016 14:20:46 0.991	168.96	50.9
Friday, March 11, 2016 14:25:47 0.991	173.94	50.2
Friday, March 11, 2016 14:30:48 0.991	178.91	50.6
Friday, March 11, 2016 14:35:48 0.991	183.86	50.5
Friday, March 11, 2016 14:40:49 0.991	188.83	50.1
Friday, March 11, 2016 14:45:49 0.991	193.79	50.6
Friday, March 11, 2016 14:50:50 0.991	198.76	50.8
Friday, March 11, 2016 14:55:50 0.991	203.71	50.5
Friday, March 11, 2016 15:00:51 0.991	208.68	49.6
Friday, March 11, 2016 15:05:52 0.991	213.65	50.1
Friday, March 11, 2016 15:10:52 0.991	218.61	50.5
Friday, March 11, 2016 15:15:53 0.991	223.58	50.4
Friday, March 11, 2016 15:20:53 0.991	228.53	50.7
Friday, March 11, 2016 15:25:54 0.991	233.50	50.5
Friday, March 11, 2016 15:30:54 0.991	238.46	50.9
Friday, March 11, 2016 15:35:55 0.991	243.43	50.9
Friday, March 11, 2016 15:40:56 0.991	248.40	50.5
Friday, March 11, 2016 15:45:56 0.991	253.36	50.1
Friday, March 11, 2016 15:50:57 0.991	258.33	51.0
Friday, March 11, 2016 15:55:57 0.991	263.28	50.6
Friday, March 11, 2016 16:00:58 0.991	268.25	50.5
Friday, March 11, 2016 16:05:58 0.991	273.21	50.1
Friday, March 11, 2016 16:10:59 0.991	278.18	50.5
Friday, March 11, 2016 16:16:00 0.991	283.15	50.2
Friday, March 11, 2016 16:21:00 0.991	288.10	50.1
Friday, March 11, 2016 16:26:01 0.991	293.07	50.1
Friday, March 11, 2016 16:31:01 0.991	298.03	50.7
Friday, March 11, 2016 16:36:02 0.991	303.00	50.2
Friday, March 11, 2016 16:41:02 0.991	307.95	50.7
Friday, March 11, 2016 16:46:03 0.991	312.92	50.5
Friday, March 11, 2016 16:51:04 0.991	317.90	50.5
Friday, March 11, 2016 16:56:04 0.991	322.85	50.5
Friday, March 11, 2016 17:01:05 0.991	327.82	50.7
Friday, March 11, 2016 17:06:05 0.991	332.77	50.1
Friday, March 11, 2016 17:11:06 0.991	337.75	50.8
Friday, March 11, 2016 17:16:06 0.991	342.70	50.0
Friday, March 11, 2016 17:21:07 0.991	347.67	51.0
Friday, March 11, 2016 17:26:08 0.991	352.64	50.2
Friday, March 11, 2016 17:31:08 0.991	357.60	50.1
Friday, March 11, 2016 17:36:09 0.991	362.57	50.5
Friday, March 11, 2016 17:41:09 0.991	367.52	50.2
Friday, March 11, 2016 17:46:10 0.991	372.49	50.5
Friday, March 11, 2016 17:51:10 0.991	377.45	50.4
Friday, March 11, 2016 17:56:11 0.991	382.42	50.6
Friday, March 11, 2016 18:01:12 0.991	387.39	50.9
Friday, March 11, 2016 18:06:12 0.991	392.34	50.4
Friday, March 11, 2016 18:11:13 0.991	397.31	50.7
Friday, March 11, 2016 18:16:13 0.991	402.27	50.9
Friday, March 11, 2016 18:21:14 0.991	407.24	50.6
Friday, March 11, 2016 18:26:14 0.991	412.19	50.2
Friday, March 11, 2016 18:31:15 0.991	417.16	50.9
Friday, March 11, 2016 18:36:16 0.991	422.14	50.0
Friday, March 11, 2016 18:41:16 0.991	427.09	50.4

Friday, March 11, 2016 18:46:17 0.991	432.06	50.1
Friday, March 11, 2016 18:51:17 0.991	437.01	50.4
Friday, March 11, 2016 18:56:18 0.991	441.99	50.9
Friday, March 11, 2016 19:01:18 0.991	446.94	50.1
Friday, March 11, 2016 19:06:19 0.991	451.91	50.1
Friday, March 11, 2016 19:11:19 0.991	456.87	50.2
Friday, March 11, 2016 19:16:20 0.991	461.84	51.0
Friday, March 11, 2016 19:21:20 0.991	466.79	50.2
Friday, March 11, 2016 19:26:21 0.991	471.76	50.5
Friday, March 11, 2016 19:31:21 0.991	476.72	49.8
Friday, March 11, 2016 19:36:22 0.991	481.69	50.9
Friday, March 11, 2016 19:41:22 0.991	486.64	50.7
Friday, March 11, 2016 19:46:23 0.991	491.61	50.4
Friday, March 11, 2016 19:51:23 0.991	496.57	50.6
Friday, March 11, 2016 19:56:24 0.991	501.54	50.4
Friday, March 11, 2016 20:01:25 0.991	506.51	50.5
Friday, March 11, 2016 20:06:25 0.991	511.46	50.6
Friday, March 11, 2016 20:11:26 0.991	516.43	51.0
Friday, March 11, 2016 20:16:26 0.991	521.39	49.9
Friday, March 11, 2016 20:21:27 0.991	526.36	50.3
Friday, March 11, 2016 20:26:27 0.991	531.31	50.5
Friday, March 11, 2016 20:31:28 0.991	536.28	50.8
Friday, March 11, 2016 20:36:28 0.991	541.24	50.5
Friday, March 11, 2016 20:41:29 0.991	546.21	50.6
Friday, March 11, 2016 20:46:29 0.991	551.16	50.6
Friday, March 11, 2016 20:51:30 0.991	556.13	50.9
Friday, March 11, 2016 20:56:30 0.991	561.09	50.3
Friday, March 11, 2016 21:01:31 0.991	566.06	50.8
Friday, March 11, 2016 21:06:32 0.991	571.03	50.6
Friday, March 11, 2016 21:11:32 0.991	575.99	50.4
Friday, March 11, 2016 21:16:33 0.991	580.96	50.1
Friday, March 11, 2016 21:21:33 0.991	585.91	50.7
Friday, March 11, 2016 21:26:34 0.991	590.88	50.0
Friday, March 11, 2016 21:31:34 0.991	595.84	50.9
Friday, March 11, 2016 21:36:35 0.991	600.81	50.8
Friday, March 11, 2016 21:41:35 0.991	605.76	50.7
Friday, March 11, 2016 21:46:36 0.991	610.73	50.6
Friday, March 11, 2016 21:51:36 0.991	615.69	50.5
Friday, March 11, 2016 21:56:37 0.991	620.66	50.8
Friday, March 11, 2016 22:01:37 0.991	625.61	50.6
Friday, March 11, 2016 22:06:38 0.991	630.58	50.0
Friday, March 11, 2016 22:11:38 0.991	635.54	50.8
Friday, March 11, 2016 22:16:39 0.991	640.51	50.3
Friday, March 11, 2016 22:21:40 0.991	645.48	50.6
Friday, March 11, 2016 22:26:40 0.991	650.44	49.9
Friday, March 11, 2016 22:31:41 0.991	655.41	50.4
Friday, March 11, 2016 22:36:41 0.991	660.36	50.5
Friday, March 11, 2016 22:41:42 0.991	665.33	50.5
Friday, March 11, 2016 22:46:42 0.991	670.29	50.2
Friday, March 11, 2016 22:51:43 0.991	675.26	50.4
Friday, March 11, 2016 22:56:43 0.991	680.21	50.5
Friday, March 11, 2016 23:01:44 0.991	685.18	50.5
Friday, March 11, 2016 23:06:44 0.991	690.14	50.4
Friday, March 11, 2016 23:11:45 0.991	695.11	50.6

Friday, March 11, 2016 23:16:45 0.991	700.06	50.6
Friday, March 11, 2016 23:21:46 0.991	705.03	49.7
Friday, March 11, 2016 23:26:46 0.991	709.99	50.5
Friday, March 11, 2016 23:30:00 0.991	713.19	50.4

aqms5

formaldehyde002

Ch. 2 Cartridge Started Friday, March 11, 2016 23:46:01

Flow Rate Set Point 1.00 l/min

Stopped Saturday, March 12, 2016 11:46:26

Total Volume 712.86 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
Friday, March 11, 2016 23:46:28	0.080	0.22	49.5
Friday, March 11, 2016 23:51:29	0.990	5.19	50.5
Friday, March 11, 2016 23:56:29	0.990	10.14	50.4
Saturday, March 12, 2016 0:01:30	0.990	15.11	50.1
Saturday, March 12, 2016 0:06:30	0.990	20.06	50.6
Saturday, March 12, 2016 0:11:31	0.990	25.03	49.7
Saturday, March 12, 2016 0:16:31	0.990	29.98	51.0
Saturday, March 12, 2016 0:21:32	0.990	34.95	50.5
Saturday, March 12, 2016 0:26:32	0.990	39.90	50.6
Saturday, March 12, 2016 0:31:33	0.990	44.87	50.6
Saturday, March 12, 2016 0:36:33	0.990	49.82	50.1
Saturday, March 12, 2016 0:41:34	0.990	54.79	50.1
Saturday, March 12, 2016 0:46:34	0.990	59.74	50.5
Saturday, March 12, 2016 0:51:35	0.990	64.71	50.1
Saturday, March 12, 2016 0:56:36	0.990	69.68	50.2
Saturday, March 12, 2016 1:01:36	0.990	74.63	50.8
Saturday, March 12, 2016 1:06:37	0.990	79.59	49.7
Saturday, March 12, 2016 1:11:37	0.990	84.55	50.5
Saturday, March 12, 2016 1:16:38	0.990	89.51	50.0
Saturday, March 12, 2016 1:21:38	0.990	94.47	50.2
Saturday, March 12, 2016 1:26:39	0.990	99.43	50.9
Saturday, March 12, 2016 1:31:39	0.990	104.39	50.4
Saturday, March 12, 2016 1:36:40	0.990	109.35	50.0
Saturday, March 12, 2016 1:41:41	0.990	114.32	50.1
Saturday, March 12, 2016 1:46:41	0.990	119.27	50.5
Saturday, March 12, 2016 1:51:42	0.990	124.24	50.5
Saturday, March 12, 2016 1:56:42	0.990	129.19	50.8
Saturday, March 12, 2016 2:01:43	0.990	134.16	50.5
Saturday, March 12, 2016 2:06:43	0.990	139.11	50.8
Saturday, March 12, 2016 2:11:44	0.990	144.08	50.0
Saturday, March 12, 2016 2:16:44	0.990	149.03	50.8
Saturday, March 12, 2016 2:21:45	0.990	154.00	49.9
Saturday, March 12, 2016 2:26:45	0.990	158.95	50.8

Saturday, March 12, 2016 2:31:46 0.990	163.92	50.6
Saturday, March 12, 2016 2:36:46 0.990	168.87	50.4
Saturday, March 12, 2016 2:41:47 0.990	173.84	50.5
Saturday, March 12, 2016 2:46:48 0.990	178.81	50.0
Saturday, March 12, 2016 2:51:48 0.990	183.76	50.4
Saturday, March 12, 2016 2:56:49 0.990	188.73	50.3
Saturday, March 12, 2016 3:01:49 0.990	193.68	50.3
Saturday, March 12, 2016 3:06:50 0.990	198.65	50.5
Saturday, March 12, 2016 3:11:50 0.990	203.60	50.4
Saturday, March 12, 2016 3:16:51 0.990	208.57	49.7
Saturday, March 12, 2016 3:21:51 0.990	213.52	50.0
Saturday, March 12, 2016 3:26:52 0.990	218.48	50.7
Saturday, March 12, 2016 3:31:52 0.990	223.44	50.8
Saturday, March 12, 2016 3:36:53 0.990	228.40	50.1
Saturday, March 12, 2016 3:41:54 0.990	233.37	50.9
Saturday, March 12, 2016 3:46:54 0.990	238.32	50.1
Saturday, March 12, 2016 3:51:55 0.990	243.29	50.2
Saturday, March 12, 2016 3:56:55 0.990	248.24	50.4
Saturday, March 12, 2016 4:01:56 0.990	253.21	50.6
Saturday, March 12, 2016 4:06:56 0.990	258.16	50.1
Saturday, March 12, 2016 4:11:57 0.990	263.13	50.1
Saturday, March 12, 2016 4:16:57 0.990	268.08	50.5
Saturday, March 12, 2016 4:21:58 0.990	273.05	50.2
Saturday, March 12, 2016 4:26:58 0.990	278.00	49.7
Saturday, March 12, 2016 4:31:59 0.990	282.97	50.2
Saturday, March 12, 2016 4:37:00 0.990	287.94	50.7
Saturday, March 12, 2016 4:42:00 0.990	292.89	50.5
Saturday, March 12, 2016 4:47:01 0.990	297.86	50.8
Saturday, March 12, 2016 4:52:01 0.990	302.81	50.0
Saturday, March 12, 2016 4:57:02 0.990	307.78	50.7
Saturday, March 12, 2016 5:02:02 0.990	312.73	50.2
Saturday, March 12, 2016 5:07:03 0.990	317.70	50.0
Saturday, March 12, 2016 5:12:03 0.990	322.65	49.8
Saturday, March 12, 2016 5:17:04 0.990	327.62	50.6
Saturday, March 12, 2016 5:22:04 0.990	332.57	50.4
Saturday, March 12, 2016 5:27:05 0.990	337.54	50.6
Saturday, March 12, 2016 5:32:06 0.990	342.50	50.6
Saturday, March 12, 2016 5:37:06 0.990	347.46	50.4
Saturday, March 12, 2016 5:42:07 0.990	352.42	50.8
Saturday, March 12, 2016 5:47:07 0.990	357.38	50.5
Saturday, March 12, 2016 5:52:08 0.990	362.34	50.1
Saturday, March 12, 2016 5:57:08 0.990	367.29	50.8
Saturday, March 12, 2016 6:02:09 0.990	372.26	50.2
Saturday, March 12, 2016 6:07:09 0.990	377.21	50.4
Saturday, March 12, 2016 6:12:10 0.990	382.18	50.2
Saturday, March 12, 2016 6:17:11 0.990	387.15	50.1
Saturday, March 12, 2016 6:22:11 0.990	392.10	49.6
Saturday, March 12, 2016 6:27:12 0.990	397.07	50.5
Saturday, March 12, 2016 6:32:12 0.990	402.02	50.7
Saturday, March 12, 2016 6:37:13 0.990	406.99	50.4
Saturday, March 12, 2016 6:42:13 0.990	411.94	50.6
Saturday, March 12, 2016 6:47:14 0.990	416.91	50.8
Saturday, March 12, 2016 6:52:14 0.990	421.86	50.1
Saturday, March 12, 2016 6:57:15 0.990	426.83	50.3

Saturday, March 12, 2016 7:02:15 0.990	431.78	49.7
Saturday, March 12, 2016 7:07:16 0.990	436.75	50.2
Saturday, March 12, 2016 7:12:16 0.990	441.70	50.3
Saturday, March 12, 2016 7:17:17 0.990	446.67	50.7
Saturday, March 12, 2016 7:22:17 0.990	451.62	50.4
Saturday, March 12, 2016 7:27:18 0.990	456.59	50.4
Saturday, March 12, 2016 7:32:18 0.990	461.54	50.8
Saturday, March 12, 2016 7:37:19 0.990	466.51	50.4
Saturday, March 12, 2016 7:42:20 0.990	471.47	50.3
Saturday, March 12, 2016 7:47:20 0.990	476.43	50.1
Saturday, March 12, 2016 7:52:21 0.990	481.39	50.5
Saturday, March 12, 2016 7:57:21 0.990	486.35	49.9
Saturday, March 12, 2016 8:02:22 0.990	491.31	50.5
Saturday, March 12, 2016 8:07:22 0.990	496.26	50.9
Saturday, March 12, 2016 8:12:23 0.990	501.23	50.5
Saturday, March 12, 2016 8:17:23 0.990	506.18	49.9
Saturday, March 12, 2016 8:22:24 0.990	511.15	50.1
Saturday, March 12, 2016 8:27:24 0.990	516.10	50.0
Saturday, March 12, 2016 8:32:25 0.990	521.07	50.1
Saturday, March 12, 2016 8:37:25 0.990	526.02	50.9
Saturday, March 12, 2016 8:42:26 0.990	530.99	50.7
Saturday, March 12, 2016 8:47:27 0.990	535.96	50.5
Saturday, March 12, 2016 8:52:27 0.990	540.91	50.1
Saturday, March 12, 2016 8:57:28 0.990	545.88	49.9
Saturday, March 12, 2016 9:02:28 0.990	550.83	50.9
Saturday, March 12, 2016 9:07:29 0.990	555.80	50.1
Saturday, March 12, 2016 9:12:29 0.990	560.75	50.2
Saturday, March 12, 2016 9:17:30 0.990	565.72	50.1
Saturday, March 12, 2016 9:22:30 0.990	570.67	50.4
Saturday, March 12, 2016 9:27:31 0.990	575.64	50.3
Saturday, March 12, 2016 9:32:31 0.990	580.59	50.7
Saturday, March 12, 2016 9:37:32 0.990	585.56	50.4
Saturday, March 12, 2016 9:42:32 0.990	590.51	50.6
Saturday, March 12, 2016 9:47:33 0.990	595.48	50.7
Saturday, March 12, 2016 9:52:34 0.990	600.45	50.2
Saturday, March 12, 2016 9:57:34 0.990	605.40	50.4
Saturday, March 12, 2016 10:02:35 0.990	610.37	50.7
Saturday, March 12, 2016 10:07:35 0.990	615.32	50.4
Saturday, March 12, 2016 10:12:36 0.990	620.29	50.5
Saturday, March 12, 2016 10:17:36 0.990	625.24	50.3
Saturday, March 12, 2016 10:22:37 0.990	630.21	50.4
Saturday, March 12, 2016 10:27:37 0.990	635.16	50.1
Saturday, March 12, 2016 10:32:38 0.990	640.13	50.8
Saturday, March 12, 2016 10:37:38 0.990	645.08	50.9
Saturday, March 12, 2016 10:42:39 0.990	650.05	50.4
Saturday, March 12, 2016 10:47:40 0.990	655.02	50.4
Saturday, March 12, 2016 10:52:40 0.990	659.97	50.5
Saturday, March 12, 2016 10:57:41 0.990	664.94	50.6
Saturday, March 12, 2016 11:02:41 0.990	669.89	50.2
Saturday, March 12, 2016 11:07:42 0.990	674.86	50.1
Saturday, March 12, 2016 11:12:42 0.990	679.81	50.9
Saturday, March 12, 2016 11:17:43 0.990	684.78	49.8
Saturday, March 12, 2016 11:22:43 0.990	689.73	50.0
Saturday, March 12, 2016 11:27:44 0.990	694.70	50.8

Saturday, March 12, 2016 11:32:45 0.990	699.67	50.3
Saturday, March 12, 2016 11:37:45 0.990	704.62	50.6
Saturday, March 12, 2016 11:42:46 0.990	709.59	50.6
Saturday, March 12, 2016 11:46:04 0.990	712.86	50.2

aqms5

formaldehyde001

Ch. 1 Cartridge Started Thursday, March 17, 2016 6:00:00

Flow Rate Set Point 1.00 l/min

Stopped Thursday, March 17, 2016 18:00:25

Total Volume 713.31 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.991 l/min

Minimum Flow Rate 0.991 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate -0.003 l/min

Ending Leak Rate -0.006 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Thursday, March 17, 2016 6:00:27	0.079	0.23	50.5
Thursday, March 17, 2016 6:05:27	0.991	5.18	50.5
Thursday, March 17, 2016 6:10:28	0.991	10.15	50.3
Thursday, March 17, 2016 6:15:28	0.991	15.11	50.1
Thursday, March 17, 2016 6:20:29	0.991	20.08	50.1
Thursday, March 17, 2016 6:25:30	0.991	25.05	50.4
Thursday, March 17, 2016 6:30:30	0.991	30.00	50.4
Thursday, March 17, 2016 6:35:31	0.991	34.97	50.7
Thursday, March 17, 2016 6:40:31	0.991	39.92	50.7
Thursday, March 17, 2016 6:45:32	0.991	44.89	50.6
Thursday, March 17, 2016 6:50:32	0.991	49.85	49.6
Thursday, March 17, 2016 6:55:33	0.991	54.82	50.5
Thursday, March 17, 2016 7:00:34	0.991	59.79	50.4
Thursday, March 17, 2016 7:05:34	0.991	64.74	50.2
Thursday, March 17, 2016 7:10:35	0.991	69.71	50.6
Thursday, March 17, 2016 7:15:35	0.991	74.67	50.9
Thursday, March 17, 2016 7:20:36	0.991	79.64	50.1
Thursday, March 17, 2016 7:25:37	0.991	84.61	50.1
Thursday, March 17, 2016 7:30:37	0.991	89.56	50.0
Thursday, March 17, 2016 7:35:38	0.991	94.53	50.3
Thursday, March 17, 2016 7:40:39	0.991	99.51	50.7
Thursday, March 17, 2016 7:45:39	0.991	104.46	50.7
Thursday, March 17, 2016 7:50:40	0.991	109.43	51.0
Thursday, March 17, 2016 7:55:41	0.991	114.40	51.0
Thursday, March 17, 2016 8:00:41	0.991	119.36	50.4
Thursday, March 17, 2016 8:05:42	0.991	124.33	50.2
Thursday, March 17, 2016 8:10:42	0.991	129.28	50.0
Thursday, March 17, 2016 8:15:43	0.991	134.25	50.6
Thursday, March 17, 2016 8:20:44	0.991	139.22	50.2
Thursday, March 17, 2016 8:25:44	0.991	144.18	50.6
Thursday, March 17, 2016 8:30:45	0.991	149.15	50.7
Thursday, March 17, 2016 8:35:46	0.991	154.12	50.8
Thursday, March 17, 2016 8:40:46	0.991	159.07	49.9

Thursday, March 17, 2016 8:45:47 0.991	164.05	50.5
Thursday, March 17, 2016 8:50:47 0.991	169.00	50.2
Thursday, March 17, 2016 8:55:48 0.991	173.97	50.5
Thursday, March 17, 2016 9:00:49 0.991	178.94	50.9
Thursday, March 17, 2016 9:05:49 0.991	183.90	49.8
Thursday, March 17, 2016 9:10:50 0.991	188.87	50.8
Thursday, March 17, 2016 9:15:51 0.991	193.84	50.4
Thursday, March 17, 2016 9:20:51 0.991	198.79	50.1
Thursday, March 17, 2016 9:25:52 0.991	203.76	50.8
Thursday, March 17, 2016 9:30:52 0.991	208.72	50.4
Thursday, March 17, 2016 9:35:53 0.991	213.69	50.6
Thursday, March 17, 2016 9:40:54 0.991	218.66	49.7
Thursday, March 17, 2016 9:45:54 0.991	223.62	50.9
Thursday, March 17, 2016 9:50:55 0.991	228.59	50.4
Thursday, March 17, 2016 9:55:55 0.991	233.54	50.5
Thursday, March 17, 2016 10:00:56 0.991	238.51	50.9
Thursday, March 17, 2016 10:05:57 0.991	243.48	50.9
Thursday, March 17, 2016 10:10:57 0.991	248.44	50.4
Thursday, March 17, 2016 10:15:58 0.991	253.41	49.7
Thursday, March 17, 2016 10:20:59 0.991	258.38	50.1
Thursday, March 17, 2016 10:25:59 0.991	263.33	50.5
Thursday, March 17, 2016 10:31:00 0.991	268.31	50.0
Thursday, March 17, 2016 10:36:01 0.991	273.28	50.5
Thursday, March 17, 2016 10:41:01 0.991	278.23	50.6
Thursday, March 17, 2016 10:46:02 0.991	283.20	50.8
Thursday, March 17, 2016 10:51:02 0.991	288.16	50.9
Thursday, March 17, 2016 10:56:03 0.991	293.13	50.6
Thursday, March 17, 2016 11:01:04 0.991	298.10	50.5
Thursday, March 17, 2016 11:06:04 0.991	303.05	49.8
Thursday, March 17, 2016 11:11:05 0.991	308.02	50.2
Thursday, March 17, 2016 11:16:06 0.991	312.99	50.2
Thursday, March 17, 2016 11:21:06 0.991	317.95	49.9
Thursday, March 17, 2016 11:26:07 0.991	322.92	50.6
Thursday, March 17, 2016 11:31:07 0.991	327.87	49.9
Thursday, March 17, 2016 11:36:08 0.991	332.84	50.5
Thursday, March 17, 2016 11:41:09 0.991	337.82	50.1
Thursday, March 17, 2016 11:46:09 0.991	342.77	50.3
Thursday, March 17, 2016 11:51:10 0.991	347.74	51.0
Thursday, March 17, 2016 11:56:11 0.991	352.71	50.0
Thursday, March 17, 2016 12:01:11 0.991	357.67	50.2
Thursday, March 17, 2016 12:06:12 0.991	362.64	50.9
Thursday, March 17, 2016 12:11:12 0.991	367.59	50.7
Thursday, March 17, 2016 12:16:13 0.991	372.56	50.4
Thursday, March 17, 2016 12:21:14 0.991	377.53	50.2
Thursday, March 17, 2016 12:26:14 0.991	382.49	49.9
Thursday, March 17, 2016 12:31:15 0.991	387.46	50.5
Thursday, March 17, 2016 12:36:16 0.991	392.43	50.5
Thursday, March 17, 2016 12:41:16 0.991	397.38	50.8
Thursday, March 17, 2016 12:46:17 0.991	402.35	50.2
Thursday, March 17, 2016 12:51:17 0.991	407.31	50.5
Thursday, March 17, 2016 12:56:18 0.991	412.28	50.5
Thursday, March 17, 2016 13:01:19 0.991	417.25	49.5
Thursday, March 17, 2016 13:06:19 0.991	422.21	50.9
Thursday, March 17, 2016 13:11:20 0.991	427.18	49.7

Thursday, March 17, 2016 13:16:21 0.991	432.15	50.8
Thursday, March 17, 2016 13:21:21 0.991	437.10	49.9
Thursday, March 17, 2016 13:26:22 0.991	442.07	50.5
Thursday, March 17, 2016 13:31:23 0.991	447.04	50.4
Thursday, March 17, 2016 13:36:23 0.991	452.00	50.2
Thursday, March 17, 2016 13:41:24 0.991	456.97	50.6
Thursday, March 17, 2016 13:46:24 0.991	461.92	50.1
Thursday, March 17, 2016 13:51:25 0.991	466.90	50.9
Thursday, March 17, 2016 13:56:26 0.991	471.87	50.5
Thursday, March 17, 2016 14:01:26 0.991	476.82	49.2
Thursday, March 17, 2016 14:06:27 0.991	481.79	50.3
Thursday, March 17, 2016 14:11:28 0.991	486.76	49.8
Thursday, March 17, 2016 14:16:28 0.991	491.72	50.1
Thursday, March 17, 2016 14:21:29 0.991	496.69	50.9
Thursday, March 17, 2016 14:26:29 0.991	501.64	50.4
Thursday, March 17, 2016 14:31:30 0.991	506.61	50.5
Thursday, March 17, 2016 14:36:31 0.991	511.59	50.9
Thursday, March 17, 2016 14:41:31 0.991	516.54	50.5
Thursday, March 17, 2016 14:46:32 0.991	521.51	50.8
Thursday, March 17, 2016 14:51:33 0.991	526.48	50.2
Thursday, March 17, 2016 14:56:33 0.991	531.44	50.1
Thursday, March 17, 2016 15:01:34 0.991	536.41	50.1
Thursday, March 17, 2016 15:06:34 0.991	541.37	50.6
Thursday, March 17, 2016 15:11:35 0.991	546.34	51.1
Thursday, March 17, 2016 15:16:36 0.991	551.31	50.6
Thursday, March 17, 2016 15:21:36 0.991	556.26	50.2
Thursday, March 17, 2016 15:26:37 0.991	561.24	50.6
Thursday, March 17, 2016 15:31:38 0.991	566.21	50.0
Thursday, March 17, 2016 15:36:38 0.991	571.16	50.1
Thursday, March 17, 2016 15:41:39 0.991	576.13	50.9
Thursday, March 17, 2016 15:46:39 0.991	581.09	50.6
Thursday, March 17, 2016 15:51:40 0.991	586.06	50.2
Thursday, March 17, 2016 15:56:41 0.991	591.03	50.1
Thursday, March 17, 2016 16:01:41 0.991	595.99	50.5
Thursday, March 17, 2016 16:06:42 0.991	600.96	50.9
Thursday, March 17, 2016 16:11:43 0.991	605.93	50.0
Thursday, March 17, 2016 16:16:43 0.991	610.88	50.1
Thursday, March 17, 2016 16:21:44 0.991	615.86	50.3
Thursday, March 17, 2016 16:26:44 0.991	620.81	50.3
Thursday, March 17, 2016 16:31:45 0.991	625.78	50.7
Thursday, March 17, 2016 16:36:46 0.991	630.75	50.3
Thursday, March 17, 2016 16:41:46 0.991	635.71	50.4
Thursday, March 17, 2016 16:46:47 0.991	640.68	50.4
Thursday, March 17, 2016 16:51:48 0.991	645.65	50.1
Thursday, March 17, 2016 16:56:48 0.991	650.61	49.9
Thursday, March 17, 2016 17:01:49 0.991	655.58	50.8
Thursday, March 17, 2016 17:06:50 0.991	660.55	50.4
Thursday, March 17, 2016 17:11:50 0.991	665.51	50.7
Thursday, March 17, 2016 17:16:51 0.991	670.48	50.7
Thursday, March 17, 2016 17:21:52 0.991	675.45	50.4
Thursday, March 17, 2016 17:26:52 0.991	680.40	50.5
Thursday, March 17, 2016 17:31:53 0.991	685.38	50.7
Thursday, March 17, 2016 17:36:53 0.991	690.33	50.8
Thursday, March 17, 2016 17:41:54 0.991	695.30	51.1

Thursday, March 17, 2016 17:46:55 0.991	700.27	50.1
Thursday, March 17, 2016 17:51:55 0.991	705.23	49.8
Thursday, March 17, 2016 17:56:56 0.991	710.20	50.6
Thursday, March 17, 2016 18:00:04 0.991	713.31	50.2

aqms5

formaldehyde002

Ch. 2 Cartridge Started Thursday, March 17, 2016 18:15:01

Flow Rate Set Point 1.00 l/min

Stopped Friday, March 18, 2016 6:15:23

Total Volume 712.84 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
Thursday, March 17, 2016 18:15:28	0.080	0.22	49.7
Thursday, March 17, 2016 18:20:29	0.990	5.19	50.5
Thursday, March 17, 2016 18:25:30	0.990	10.16	50.5
Thursday, March 17, 2016 18:30:30	0.990	15.11	50.1
Thursday, March 17, 2016 18:35:31	0.990	20.08	49.7
Thursday, March 17, 2016 18:40:31	0.990	25.03	50.6
Thursday, March 17, 2016 18:45:32	0.990	30.00	50.2
Thursday, March 17, 2016 18:50:33	0.990	34.97	50.1
Thursday, March 17, 2016 18:55:33	0.990	39.92	51.2
Thursday, March 17, 2016 19:00:34	0.990	44.89	50.9
Thursday, March 17, 2016 19:05:35	0.990	49.85	50.2
Thursday, March 17, 2016 19:10:35	0.990	54.81	50.6
Thursday, March 17, 2016 19:15:36	0.990	59.77	49.6
Thursday, March 17, 2016 19:20:37	0.990	64.74	50.1
Thursday, March 17, 2016 19:25:37	0.990	69.69	50.1
Thursday, March 17, 2016 19:30:38	0.990	74.66	50.6
Thursday, March 17, 2016 19:35:38	0.990	79.61	50.5
Thursday, March 17, 2016 19:40:39	0.990	84.58	50.4
Thursday, March 17, 2016 19:45:40	0.990	89.55	50.2
Thursday, March 17, 2016 19:50:40	0.990	94.50	51.0
Thursday, March 17, 2016 19:55:41	0.990	99.47	50.5
Thursday, March 17, 2016 20:00:42	0.990	104.44	49.7
Thursday, March 17, 2016 20:05:42	0.990	109.39	50.9
Thursday, March 17, 2016 20:10:43	0.990	114.36	51.0
Thursday, March 17, 2016 20:15:44	0.990	119.33	50.0
Thursday, March 17, 2016 20:20:44	0.990	124.28	51.1
Thursday, March 17, 2016 20:25:45	0.990	129.25	50.8
Thursday, March 17, 2016 20:30:46	0.990	134.21	49.8
Thursday, March 17, 2016 20:35:46	0.990	139.17	50.7
Thursday, March 17, 2016 20:40:47	0.990	144.13	50.2
Thursday, March 17, 2016 20:45:47	0.990	149.09	50.5
Thursday, March 17, 2016 20:50:48	0.990	154.05	49.9
Thursday, March 17, 2016 20:55:49	0.990	159.02	51.0

Thursday, March 17, 2016 21:00:49 0.990	163.97	51.0
Thursday, March 17, 2016 21:05:50 0.990	168.94	50.6
Thursday, March 17, 2016 21:10:51 0.990	173.91	50.4
Thursday, March 17, 2016 21:15:51 0.990	178.86	50.2
Thursday, March 17, 2016 21:20:52 0.990	183.83	50.2
Thursday, March 17, 2016 21:25:53 0.990	188.80	51.0
Thursday, March 17, 2016 21:30:53 0.990	193.75	50.9
Thursday, March 17, 2016 21:35:54 0.990	198.72	50.1
Thursday, March 17, 2016 21:40:54 0.990	203.67	50.2
Thursday, March 17, 2016 21:45:55 0.990	208.64	50.1
Thursday, March 17, 2016 21:50:56 0.990	213.61	51.1
Thursday, March 17, 2016 21:55:56 0.990	218.56	49.7
Thursday, March 17, 2016 22:00:57 0.990	223.53	50.8
Thursday, March 17, 2016 22:05:58 0.990	228.49	50.6
Thursday, March 17, 2016 22:10:58 0.990	233.45	50.1
Thursday, March 17, 2016 22:15:59 0.990	238.41	50.8
Thursday, March 17, 2016 22:20:59 0.990	243.37	50.7
Thursday, March 17, 2016 22:26:00 0.990	248.33	49.8
Thursday, March 17, 2016 22:31:01 0.990	253.30	50.9
Thursday, March 17, 2016 22:36:01 0.990	258.25	50.2
Thursday, March 17, 2016 22:41:02 0.990	263.22	50.2
Thursday, March 17, 2016 22:46:03 0.990	268.19	50.6
Thursday, March 17, 2016 22:51:03 0.990	273.14	51.1
Thursday, March 17, 2016 22:56:04 0.990	278.11	49.7
Thursday, March 17, 2016 23:01:05 0.990	283.08	50.1
Thursday, March 17, 2016 23:06:05 0.990	288.03	50.1
Thursday, March 17, 2016 23:11:06 0.990	293.00	50.5
Thursday, March 17, 2016 23:16:06 0.990	297.95	51.1
Thursday, March 17, 2016 23:21:07 0.990	302.92	50.1
Thursday, March 17, 2016 23:26:08 0.990	307.89	49.8
Thursday, March 17, 2016 23:31:08 0.990	312.84	50.2
Thursday, March 17, 2016 23:36:09 0.990	317.81	50.8
Thursday, March 17, 2016 23:41:10 0.990	322.78	51.1
Thursday, March 17, 2016 23:46:10 0.990	327.73	51.1
Thursday, March 17, 2016 23:51:11 0.990	332.70	50.4
Thursday, March 17, 2016 23:56:12 0.990	337.66	51.0
Friday, March 18, 2016 0:01:12 0.990	342.62	50.6
Friday, March 18, 2016 0:06:13 0.990	347.59	50.3
Friday, March 18, 2016 0:11:13 0.990	352.54	50.5
Friday, March 18, 2016 0:16:14 0.990	357.51	50.4
Friday, March 18, 2016 0:21:15 0.990	362.47	49.7
Friday, March 18, 2016 0:26:15 0.990	367.43	50.5
Friday, March 18, 2016 0:31:16 0.990	372.39	50.8
Friday, March 18, 2016 0:36:17 0.990	377.36	49.7
Friday, March 18, 2016 0:41:17 0.990	382.31	50.3
Friday, March 18, 2016 0:46:18 0.990	387.28	50.4
Friday, March 18, 2016 0:51:18 0.990	392.24	50.6
Friday, March 18, 2016 0:56:19 0.990	397.20	50.3
Friday, March 18, 2016 1:01:20 0.990	402.17	50.7
Friday, March 18, 2016 1:06:20 0.990	407.12	50.7
Friday, March 18, 2016 1:11:21 0.990	412.09	50.1
Friday, March 18, 2016 1:16:22 0.990	417.06	50.2
Friday, March 18, 2016 1:21:22 0.990	422.01	50.0
Friday, March 18, 2016 1:26:23 0.990	426.98	50.1

Friday, March 18, 2016 1:31:24 0.990	431.95	50.1
Friday, March 18, 2016 1:36:24 0.990	436.90	50.6
Friday, March 18, 2016 1:41:25 0.990	441.87	50.5
Friday, March 18, 2016 1:46:25 0.990	446.82	51.0
Friday, March 18, 2016 1:51:26 0.990	451.79	50.2
Friday, March 18, 2016 1:56:27 0.990	456.76	50.5
Friday, March 18, 2016 2:01:27 0.990	461.71	50.4
Friday, March 18, 2016 2:06:28 0.990	466.68	50.6
Friday, March 18, 2016 2:11:29 0.990	471.65	50.5
Friday, March 18, 2016 2:16:29 0.990	476.60	50.6
Friday, March 18, 2016 2:21:30 0.990	481.57	51.2
Friday, March 18, 2016 2:26:30 0.990	486.52	50.6
Friday, March 18, 2016 2:31:31 0.990	491.49	50.0
Friday, March 18, 2016 2:36:32 0.990	496.45	50.5
Friday, March 18, 2016 2:41:32 0.990	501.41	50.4
Friday, March 18, 2016 2:46:33 0.990	506.37	50.5
Friday, March 18, 2016 2:51:34 0.990	511.34	50.6
Friday, March 18, 2016 2:56:34 0.990	516.30	50.9
Friday, March 18, 2016 3:01:35 0.990	521.26	49.8
Friday, March 18, 2016 3:06:35 0.990	526.22	49.8
Friday, March 18, 2016 3:11:36 0.990	531.18	51.0
Friday, March 18, 2016 3:16:37 0.990	536.15	50.9
Friday, March 18, 2016 3:21:37 0.990	541.10	50.8
Friday, March 18, 2016 3:26:38 0.990	546.07	49.8
Friday, March 18, 2016 3:31:39 0.990	551.04	50.4
Friday, March 18, 2016 3:36:39 0.990	555.99	49.4
Friday, March 18, 2016 3:41:40 0.990	560.96	50.6
Friday, March 18, 2016 3:46:40 0.990	565.91	50.2
Friday, March 18, 2016 3:51:41 0.990	570.88	50.1
Friday, March 18, 2016 3:56:42 0.990	575.85	50.3
Friday, March 18, 2016 4:01:42 0.990	580.80	50.8
Friday, March 18, 2016 4:06:43 0.990	585.77	50.6
Friday, March 18, 2016 4:11:44 0.990	590.74	50.7
Friday, March 18, 2016 4:16:44 0.990	595.69	51.1
Friday, March 18, 2016 4:21:45 0.990	600.66	50.3
Friday, March 18, 2016 4:26:45 0.990	605.61	50.1
Friday, March 18, 2016 4:31:46 0.990	610.58	50.5
Friday, March 18, 2016 4:36:47 0.990	615.55	50.1
Friday, March 18, 2016 4:41:47 0.990	620.50	50.4
Friday, March 18, 2016 4:46:48 0.990	625.47	50.3
Friday, March 18, 2016 4:51:49 0.990	630.44	49.8
Friday, March 18, 2016 4:56:49 0.990	635.39	50.5
Friday, March 18, 2016 5:01:50 0.990	640.36	51.0
Friday, March 18, 2016 5:06:50 0.990	645.31	50.1
Friday, March 18, 2016 5:11:51 0.990	650.28	50.5
Friday, March 18, 2016 5:16:52 0.990	655.25	50.5
Friday, March 18, 2016 5:21:52 0.990	660.20	50.7
Friday, March 18, 2016 5:26:53 0.990	665.17	50.4
Friday, March 18, 2016 5:31:54 0.990	670.13	50.9
Friday, March 18, 2016 5:36:54 0.990	675.09	50.4
Friday, March 18, 2016 5:41:55 0.990	680.05	51.0
Friday, March 18, 2016 5:46:55 0.990	685.01	50.1
Friday, March 18, 2016 5:51:56 0.990	689.97	50.8
Friday, March 18, 2016 5:56:57 0.990	694.94	50.5

Friday, March 18, 2016 6:01:57	0.990	699.89	49.9
Friday, March 18, 2016 6:06:58	0.990	704.86	50.2
Friday, March 18, 2016 6:11:58	0.990	709.82	50.4
Friday, March 18, 2016 6:15:01	0.990	712.84	49.8

aqms5

formaldehyde001

Ch. 1 Cartridge Started Wednesday, March 23, 2016 6:00:03

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, March 23, 2016 18:00:22

Total Volume 713.19 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.991 l/min

Minimum Flow Rate 0.991 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate 0.057 l/min

Ending Leak Rate 0.050 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
Wednesday, March 23, 2016 6:00:30	0.135	0.23	49.9
Wednesday, March 23, 2016 6:05:30	0.991	5.18	50.1
Wednesday, March 23, 2016 6:10:31	0.991	10.15	50.4
Wednesday, March 23, 2016 6:15:31	0.991	15.10	50.0
Wednesday, March 23, 2016 6:20:32	0.991	20.07	50.2
Wednesday, March 23, 2016 6:25:33	0.991	25.04	50.1
Wednesday, March 23, 2016 6:30:33	0.991	30.00	50.1
Wednesday, March 23, 2016 6:35:34	0.991	34.97	49.7
Wednesday, March 23, 2016 6:40:34	0.991	39.92	50.0
Wednesday, March 23, 2016 6:45:35	0.991	44.89	50.8
Wednesday, March 23, 2016 6:50:36	0.991	49.86	49.7
Wednesday, March 23, 2016 6:55:36	0.991	54.82	50.8
Wednesday, March 23, 2016 7:00:37	0.991	59.79	50.6
Wednesday, March 23, 2016 7:05:37	0.991	64.74	50.2
Wednesday, March 23, 2016 7:10:38	0.991	69.71	50.4
Wednesday, March 23, 2016 7:15:39	0.991	74.68	50.1
Wednesday, March 23, 2016 7:20:39	0.991	79.64	50.8
Wednesday, March 23, 2016 7:25:40	0.991	84.61	50.7
Wednesday, March 23, 2016 7:30:41	0.991	89.58	50.5
Wednesday, March 23, 2016 7:35:41	0.991	94.53	50.4
Wednesday, March 23, 2016 7:40:42	0.991	99.50	50.3
Wednesday, March 23, 2016 7:45:42	0.991	104.46	49.9
Wednesday, March 23, 2016 7:50:43	0.991	109.43	50.5
Wednesday, March 23, 2016 7:55:44	0.991	114.40	50.6
Wednesday, March 23, 2016 8:00:44	0.991	119.35	50.6
Wednesday, March 23, 2016 8:05:45	0.991	124.32	49.8
Wednesday, March 23, 2016 8:10:46	0.991	129.29	50.0
Wednesday, March 23, 2016 8:15:46	0.991	134.25	50.6
Wednesday, March 23, 2016 8:20:47	0.991	139.22	51.0
Wednesday, March 23, 2016 8:25:48	0.991	144.19	50.5
Wednesday, March 23, 2016 8:30:48	0.991	149.14	50.0
Wednesday, March 23, 2016 8:35:49	0.991	154.11	50.5

Wednesday, March 23, 2016 8:40:50 0.991	159.08	50.0
Wednesday, March 23, 2016 8:45:50 0.991	164.04	50.2
Wednesday, March 23, 2016 8:50:51 0.991	169.01	50.5
Wednesday, March 23, 2016 8:55:52 0.991	173.98	50.6
Wednesday, March 23, 2016 9:00:52 0.991	178.93	50.6
Wednesday, March 23, 2016 9:05:53 0.991	183.90	50.4
Wednesday, March 23, 2016 9:10:53 0.991	188.86	50.2
Wednesday, March 23, 2016 9:15:54 0.991	193.83	50.0
Wednesday, March 23, 2016 9:20:55 0.991	198.80	49.7
Wednesday, March 23, 2016 9:25:55 0.991	203.75	50.5
Wednesday, March 23, 2016 9:30:56 0.991	208.72	50.0
Wednesday, March 23, 2016 9:35:57 0.991	213.69	49.0
Wednesday, March 23, 2016 9:40:57 0.991	218.65	50.8
Wednesday, March 23, 2016 9:45:58 0.991	223.62	50.3
Wednesday, March 23, 2016 9:50:58 0.991	228.57	50.4
Wednesday, March 23, 2016 9:55:59 0.991	233.54	50.9
Wednesday, March 23, 2016 10:01:00 0.991	238.51	49.7
Wednesday, March 23, 2016 10:06:00 0.991	243.47	49.6
Wednesday, March 23, 2016 10:11:01 0.991	248.44	49.9
Wednesday, March 23, 2016 10:16:02 0.991	253.41	50.4
Wednesday, March 23, 2016 10:21:02 0.991	258.36	50.5
Wednesday, March 23, 2016 10:26:03 0.991	263.33	50.5
Wednesday, March 23, 2016 10:31:03 0.991	268.29	50.8
Wednesday, March 23, 2016 10:36:04 0.991	273.26	50.5
Wednesday, March 23, 2016 10:41:05 0.991	278.23	50.2
Wednesday, March 23, 2016 10:46:05 0.991	283.18	50.8
Wednesday, March 23, 2016 10:51:06 0.991	288.16	49.9
Wednesday, March 23, 2016 10:56:07 0.991	293.13	50.4
Wednesday, March 23, 2016 11:01:07 0.991	298.08	50.1
Wednesday, March 23, 2016 11:06:08 0.991	303.05	50.9
Wednesday, March 23, 2016 11:11:09 0.991	308.02	50.2
Wednesday, March 23, 2016 11:16:09 0.991	312.98	50.9
Wednesday, March 23, 2016 11:21:10 0.991	317.95	50.3
Wednesday, March 23, 2016 11:26:11 0.991	322.92	50.4
Wednesday, March 23, 2016 11:31:11 0.991	327.87	50.6
Wednesday, March 23, 2016 11:36:12 0.991	332.84	50.4
Wednesday, March 23, 2016 11:41:13 0.991	337.81	50.8
Wednesday, March 23, 2016 11:46:13 0.991	342.77	50.9
Wednesday, March 23, 2016 11:51:14 0.991	347.74	50.3
Wednesday, March 23, 2016 11:56:15 0.991	352.71	50.9
Wednesday, March 23, 2016 12:01:15 0.991	357.66	50.2
Wednesday, March 23, 2016 12:06:16 0.991	362.63	50.5
Wednesday, March 23, 2016 12:11:17 0.991	367.61	49.7
Wednesday, March 23, 2016 12:16:17 0.991	372.56	50.1
Wednesday, March 23, 2016 12:21:18 0.991	377.53	50.2
Wednesday, March 23, 2016 12:26:18 0.991	382.49	50.2
Wednesday, March 23, 2016 12:31:19 0.991	387.46	50.2
Wednesday, March 23, 2016 12:36:20 0.991	392.43	50.5
Wednesday, March 23, 2016 12:41:20 0.991	397.38	50.8
Wednesday, March 23, 2016 12:46:21 0.991	402.35	50.9
Wednesday, March 23, 2016 12:51:22 0.991	407.32	50.9
Wednesday, March 23, 2016 12:56:22 0.991	412.28	49.7
Wednesday, March 23, 2016 13:01:23 0.991	417.25	50.6
Wednesday, March 23, 2016 13:06:24 0.991	422.22	50.1

Wednesday, March 23, 2016 13:11:24 0.991	427.17	50.5
Wednesday, March 23, 2016 13:16:25 0.991	432.14	50.0
Wednesday, March 23, 2016 13:21:26 0.991	437.12	50.5
Wednesday, March 23, 2016 13:26:26 0.991	442.07	50.2
Wednesday, March 23, 2016 13:31:27 0.991	447.04	50.5
Wednesday, March 23, 2016 13:36:28 0.991	452.01	50.7
Wednesday, March 23, 2016 13:41:28 0.991	456.97	50.6
Wednesday, March 23, 2016 13:46:29 0.991	461.94	50.6
Wednesday, March 23, 2016 13:51:30 0.991	466.91	50.4
Wednesday, March 23, 2016 13:56:30 0.991	471.86	50.5
Wednesday, March 23, 2016 14:01:31 0.991	476.83	50.5
Wednesday, March 23, 2016 14:06:32 0.991	481.80	50.2
Wednesday, March 23, 2016 14:11:32 0.991	486.76	50.7
Wednesday, March 23, 2016 14:16:33 0.991	491.73	50.4
Wednesday, March 23, 2016 14:21:34 0.991	496.70	50.1
Wednesday, March 23, 2016 14:26:34 0.991	501.65	50.9
Wednesday, March 23, 2016 14:31:35 0.991	506.62	50.8
Wednesday, March 23, 2016 14:36:36 0.991	511.60	50.1
Wednesday, March 23, 2016 14:41:36 0.991	516.55	50.4
Wednesday, March 23, 2016 14:46:37 0.991	521.52	50.7
Wednesday, March 23, 2016 14:51:38 0.991	526.49	50.8
Wednesday, March 23, 2016 14:56:38 0.991	531.45	50.0
Wednesday, March 23, 2016 15:01:39 0.991	536.42	50.5
Wednesday, March 23, 2016 15:06:40 0.991	541.39	50.8
Wednesday, March 23, 2016 15:11:40 0.991	546.35	51.0
Wednesday, March 23, 2016 15:16:41 0.991	551.32	50.9
Wednesday, March 23, 2016 15:21:42 0.991	556.29	50.9
Wednesday, March 23, 2016 15:26:43 0.991	561.26	50.5
Wednesday, March 23, 2016 15:31:43 0.991	566.22	50.5
Wednesday, March 23, 2016 15:36:44 0.991	571.19	50.4
Wednesday, March 23, 2016 15:41:45 0.991	576.16	50.6
Wednesday, March 23, 2016 15:46:45 0.991	581.11	49.7
Wednesday, March 23, 2016 15:51:46 0.991	586.09	50.5
Wednesday, March 23, 2016 15:56:47 0.991	591.06	50.7
Wednesday, March 23, 2016 16:01:47 0.991	596.01	50.7
Wednesday, March 23, 2016 16:06:48 0.991	600.98	50.6
Wednesday, March 23, 2016 16:11:49 0.991	605.96	50.4
Wednesday, March 23, 2016 16:16:49 0.991	610.91	50.9
Wednesday, March 23, 2016 16:21:50 0.991	615.88	50.9
Wednesday, March 23, 2016 16:26:51 0.991	620.85	50.9
Wednesday, March 23, 2016 16:31:51 0.991	625.81	50.2
Wednesday, March 23, 2016 16:36:52 0.991	630.78	50.9
Wednesday, March 23, 2016 16:41:53 0.991	635.75	50.4
Wednesday, March 23, 2016 16:46:53 0.991	640.71	50.2
Wednesday, March 23, 2016 16:51:54 0.991	645.68	50.6
Wednesday, March 23, 2016 16:56:55 0.991	650.65	50.8
Wednesday, March 23, 2016 17:01:55 0.991	655.61	50.8
Wednesday, March 23, 2016 17:06:56 0.991	660.58	50.4
Wednesday, March 23, 2016 17:11:57 0.991	665.55	50.5
Wednesday, March 23, 2016 17:16:57 0.991	670.50	50.4
Wednesday, March 23, 2016 17:21:58 0.991	675.48	50.5
Wednesday, March 23, 2016 17:26:59 0.991	680.45	50.5
Wednesday, March 23, 2016 17:31:59 0.991	685.40	50.6
Wednesday, March 23, 2016 17:37:00 0.991	690.37	50.8

Wednesday, March 23, 2016 17:42:01	0.991	695.35	50.5
Wednesday, March 23, 2016 17:47:02	0.991	700.32	50.4
Wednesday, March 23, 2016 17:52:02	0.991	705.27	50.4
Wednesday, March 23, 2016 17:57:03	0.991	710.24	50.8
Wednesday, March 23, 2016 18:00:00	0.991	713.17	50.4

aqms5

formaldehyde002

Ch. 2 Cartridge Started Wednesday, March 23, 2016 18:15:03

Flow Rate Set Point 1.00 l/min

Stopped Thursday, March 24, 2016 6:15:21

Total Volume 712.79 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 0.020 l/min

Ending Leak Rate 0.013 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Wednesday, March 23, 2016 18:15:30	0.098	0.22	50.0
Wednesday, March 23, 2016 18:20:30	0.990	5.18	50.6
Wednesday, March 23, 2016 18:25:31	0.990	10.14	50.6
Wednesday, March 23, 2016 18:30:32	0.990	15.11	50.5
Wednesday, March 23, 2016 18:35:32	0.990	20.06	50.5
Wednesday, March 23, 2016 18:40:33	0.990	25.03	50.0
Wednesday, March 23, 2016 18:45:34	0.990	30.00	50.6
Wednesday, March 23, 2016 18:50:34	0.990	34.95	51.1
Wednesday, March 23, 2016 18:55:35	0.990	39.92	50.9
Wednesday, March 23, 2016 19:00:36	0.990	44.89	50.1
Wednesday, March 23, 2016 19:05:36	0.990	49.84	50.5
Wednesday, March 23, 2016 19:10:37	0.990	54.81	50.5
Wednesday, March 23, 2016 19:15:37	0.990	59.76	50.2
Wednesday, March 23, 2016 19:20:38	0.990	64.73	50.5
Wednesday, March 23, 2016 19:25:39	0.990	69.70	50.6
Wednesday, March 23, 2016 19:30:39	0.990	74.65	50.2
Wednesday, March 23, 2016 19:35:40	0.990	79.61	50.4
Wednesday, March 23, 2016 19:40:41	0.990	84.58	50.6
Wednesday, March 23, 2016 19:45:41	0.990	89.53	50.9
Wednesday, March 23, 2016 19:50:42	0.990	94.50	50.5
Wednesday, March 23, 2016 19:55:43	0.990	99.47	50.7
Wednesday, March 23, 2016 20:00:43	0.990	104.42	51.1
Wednesday, March 23, 2016 20:05:44	0.990	109.39	50.7
Wednesday, March 23, 2016 20:10:45	0.990	114.36	50.1
Wednesday, March 23, 2016 20:15:45	0.990	119.31	50.8
Wednesday, March 23, 2016 20:20:46	0.990	124.28	50.4
Wednesday, March 23, 2016 20:25:47	0.990	129.25	50.2
Wednesday, March 23, 2016 20:30:47	0.990	134.20	50.6
Wednesday, March 23, 2016 20:35:48	0.990	139.17	50.1
Wednesday, March 23, 2016 20:40:49	0.990	144.13	50.7
Wednesday, March 23, 2016 20:45:49	0.990	149.09	50.5
Wednesday, March 23, 2016 20:50:50	0.990	154.05	50.3
Wednesday, March 23, 2016 20:55:51	0.990	159.02	50.7

Wednesday, March 23, 2016 21:00:51 0.990	163.97	51.1
Wednesday, March 23, 2016 21:05:52 0.990	168.94	50.9
Wednesday, March 23, 2016 21:10:52 0.990	173.89	50.6
Wednesday, March 23, 2016 21:15:53 0.990	178.86	50.5
Wednesday, March 23, 2016 21:20:54 0.990	183.83	50.1
Wednesday, March 23, 2016 21:25:54 0.990	188.78	50.5
Wednesday, March 23, 2016 21:30:55 0.990	193.75	50.8
Wednesday, March 23, 2016 21:35:55 0.990	198.70	50.5
Wednesday, March 23, 2016 21:40:56 0.990	203.67	51.0
Wednesday, March 23, 2016 21:45:57 0.990	208.64	50.5
Wednesday, March 23, 2016 21:50:57 0.990	213.59	50.4
Wednesday, March 23, 2016 21:55:58 0.990	218.56	50.5
Wednesday, March 23, 2016 22:00:59 0.990	223.53	50.6
Wednesday, March 23, 2016 22:05:59 0.990	228.48	50.2
Wednesday, March 23, 2016 22:11:00 0.990	233.45	50.9
Wednesday, March 23, 2016 22:16:01 0.990	238.41	50.6
Wednesday, March 23, 2016 22:21:01 0.990	243.37	50.5
Wednesday, March 23, 2016 22:26:02 0.990	248.33	50.8
Wednesday, March 23, 2016 22:31:02 0.990	253.29	49.7
Wednesday, March 23, 2016 22:36:03 0.990	258.25	50.8
Wednesday, March 23, 2016 22:41:04 0.990	263.22	50.2
Wednesday, March 23, 2016 22:46:04 0.990	268.17	51.2
Wednesday, March 23, 2016 22:51:05 0.990	273.14	49.8
Wednesday, March 23, 2016 22:56:06 0.990	278.11	50.6
Wednesday, March 23, 2016 23:01:06 0.990	283.06	49.8
Wednesday, March 23, 2016 23:06:07 0.990	288.03	50.2
Wednesday, March 23, 2016 23:11:08 0.990	293.00	50.9
Wednesday, March 23, 2016 23:16:08 0.990	297.95	49.8
Wednesday, March 23, 2016 23:21:09 0.990	302.92	50.1
Wednesday, March 23, 2016 23:26:10 0.990	307.89	50.1
Wednesday, March 23, 2016 23:31:10 0.990	312.84	50.6
Wednesday, March 23, 2016 23:36:11 0.990	317.81	50.8
Wednesday, March 23, 2016 23:41:12 0.990	322.78	50.7
Wednesday, March 23, 2016 23:46:12 0.990	327.73	50.1
Wednesday, March 23, 2016 23:51:13 0.990	332.70	49.7
Wednesday, March 23, 2016 23:56:14 0.990	337.66	51.0
Thursday, March 24, 2016 0:01:14 0.990	342.61	50.9
Thursday, March 24, 2016 0:06:15 0.990	347.58	50.6
Thursday, March 24, 2016 0:11:16 0.990	352.55	50.8
Thursday, March 24, 2016 0:16:16 0.990	357.50	50.7
Thursday, March 24, 2016 0:21:17 0.990	362.47	50.2
Thursday, March 24, 2016 0:26:17 0.990	367.42	50.0
Thursday, March 24, 2016 0:31:18 0.990	372.39	50.6
Thursday, March 24, 2016 0:36:19 0.990	377.36	50.8
Thursday, March 24, 2016 0:41:19 0.990	382.31	50.8
Thursday, March 24, 2016 0:46:20 0.990	387.28	50.4
Thursday, March 24, 2016 0:51:21 0.990	392.25	50.2
Thursday, March 24, 2016 0:56:21 0.990	397.20	50.9
Thursday, March 24, 2016 1:01:22 0.990	402.17	50.5
Thursday, March 24, 2016 1:06:23 0.990	407.14	50.5
Thursday, March 24, 2016 1:11:23 0.990	412.09	50.5
Thursday, March 24, 2016 1:16:24 0.990	417.06	50.5
Thursday, March 24, 2016 1:21:25 0.990	422.02	50.7
Thursday, March 24, 2016 1:26:25 0.990	426.98	50.6

Thursday, March 24, 2016 1:31:26 0.990	431.94	50.3
Thursday, March 24, 2016 1:36:27 0.990	436.91	50.8
Thursday, March 24, 2016 1:41:27 0.990	441.87	49.7
Thursday, March 24, 2016 1:46:28 0.990	446.83	50.5
Thursday, March 24, 2016 1:51:28 0.990	451.79	50.2
Thursday, March 24, 2016 1:56:29 0.990	456.75	50.1
Thursday, March 24, 2016 2:01:30 0.990	461.72	49.9
Thursday, March 24, 2016 2:06:30 0.990	466.67	50.6
Thursday, March 24, 2016 2:11:31 0.990	471.64	50.6
Thursday, March 24, 2016 2:16:32 0.990	476.61	50.3
Thursday, March 24, 2016 2:21:32 0.990	481.56	50.9
Thursday, March 24, 2016 2:26:33 0.990	486.53	50.8
Thursday, March 24, 2016 2:31:34 0.990	491.50	50.5
Thursday, March 24, 2016 2:36:34 0.990	496.45	50.5
Thursday, March 24, 2016 2:41:35 0.990	501.42	50.3
Thursday, March 24, 2016 2:46:36 0.990	506.39	50.5
Thursday, March 24, 2016 2:51:36 0.990	511.34	50.6
Thursday, March 24, 2016 2:56:37 0.990	516.31	50.6
Thursday, March 24, 2016 3:01:38 0.990	521.28	50.1
Thursday, March 24, 2016 3:06:38 0.990	526.23	50.3
Thursday, March 24, 2016 3:11:39 0.990	531.20	49.8
Thursday, March 24, 2016 3:16:40 0.990	536.16	50.1
Thursday, March 24, 2016 3:21:40 0.990	541.12	50.8
Thursday, March 24, 2016 3:26:41 0.990	546.08	50.6
Thursday, March 24, 2016 3:31:42 0.990	551.05	50.6
Thursday, March 24, 2016 3:36:42 0.990	556.00	50.5
Thursday, March 24, 2016 3:41:43 0.990	560.97	50.3
Thursday, March 24, 2016 3:46:44 0.990	565.94	50.9
Thursday, March 24, 2016 3:51:44 0.990	570.89	50.3
Thursday, March 24, 2016 3:56:45 0.990	575.86	49.8
Thursday, March 24, 2016 4:01:46 0.990	580.83	50.4
Thursday, March 24, 2016 4:06:46 0.990	585.78	49.7
Thursday, March 24, 2016 4:11:47 0.990	590.75	50.7
Thursday, March 24, 2016 4:16:48 0.990	595.72	50.1
Thursday, March 24, 2016 4:21:48 0.990	600.67	50.2
Thursday, March 24, 2016 4:26:49 0.990	605.64	50.3
Thursday, March 24, 2016 4:31:50 0.990	610.61	50.4
Thursday, March 24, 2016 4:36:50 0.990	615.56	50.1
Thursday, March 24, 2016 4:41:51 0.990	620.53	50.6
Thursday, March 24, 2016 4:46:52 0.990	625.50	50.6
Thursday, March 24, 2016 4:51:52 0.990	630.45	50.7
Thursday, March 24, 2016 4:56:53 0.990	635.42	50.1
Thursday, March 24, 2016 5:01:54 0.990	640.38	50.6
Thursday, March 24, 2016 5:06:54 0.990	645.34	50.5
Thursday, March 24, 2016 5:11:55 0.990	650.30	50.4
Thursday, March 24, 2016 5:16:56 0.990	655.27	50.9
Thursday, March 24, 2016 5:21:56 0.990	660.23	50.4
Thursday, March 24, 2016 5:26:57 0.990	665.19	50.0
Thursday, March 24, 2016 5:31:58 0.990	670.16	50.0
Thursday, March 24, 2016 5:36:58 0.990	675.11	49.8
Thursday, March 24, 2016 5:41:59 0.990	680.08	50.6
Thursday, March 24, 2016 5:46:59 0.990	685.03	49.8
Thursday, March 24, 2016 5:52:00 0.990	690.00	49.9
Thursday, March 24, 2016 5:57:01 0.990	694.97	50.6

Thursday, March 24, 2016 6:02:01	0.990	699.92	50.2
Thursday, March 24, 2016 6:07:02	0.990	704.89	50.5
Thursday, March 24, 2016 6:12:03	0.990	709.86	50.5
Thursday, March 24, 2016 6:15:00	0.990	712.78	50.6

aqms5

formaldehyde001

Ch. 1 Cartridge Started Tuesday, March 29, 2016 6:00:02

Flow Rate Set Point 1.00 l/min

Stopped Tuesday, March 29, 2016 18:00:23

Total Volume 713.22 liters

Total Sample Time 12.00 hours

Average Flow Rate 0.991 l/min

Minimum Flow Rate 0.991 l/min

Maximum Flow Rate 0.991 l/min

Pre Start Leak Rate -0.003 l/min

Ending Leak Rate -0.006 l/min

Flow Controller Zero -0.002 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Tuesday, March 29, 2016 6:00:29	0.079	0.23	49.6
Tuesday, March 29, 2016 6:05:30	0.991	5.20	50.4
Tuesday, March 29, 2016 6:10:31	0.991	10.17	50.1
Tuesday, March 29, 2016 6:15:31	0.991	15.12	50.4
Tuesday, March 29, 2016 6:20:32	0.991	20.09	49.4
Tuesday, March 29, 2016 6:25:32	0.991	25.05	50.0
Tuesday, March 29, 2016 6:30:33	0.991	30.02	49.7
Tuesday, March 29, 2016 6:35:33	0.991	34.97	50.5
Tuesday, March 29, 2016 6:40:34	0.991	39.94	50.6
Tuesday, March 29, 2016 6:45:35	0.991	44.91	49.8
Tuesday, March 29, 2016 6:50:35	0.991	49.86	50.4
Tuesday, March 29, 2016 6:55:36	0.991	54.83	50.3
Tuesday, March 29, 2016 7:00:36	0.991	59.79	50.3
Tuesday, March 29, 2016 7:05:37	0.991	64.76	50.8
Tuesday, March 29, 2016 7:10:38	0.991	69.73	50.0
Tuesday, March 29, 2016 7:15:38	0.991	74.68	49.6
Tuesday, March 29, 2016 7:20:39	0.991	79.65	50.3
Tuesday, March 29, 2016 7:25:39	0.991	84.61	50.4
Tuesday, March 29, 2016 7:30:40	0.991	89.58	50.3
Tuesday, March 29, 2016 7:35:41	0.991	94.55	50.6
Tuesday, March 29, 2016 7:40:41	0.991	99.50	50.3
Tuesday, March 29, 2016 7:45:42	0.991	104.47	50.4
Tuesday, March 29, 2016 7:50:42	0.991	109.43	50.9
Tuesday, March 29, 2016 7:55:43	0.991	114.40	50.9
Tuesday, March 29, 2016 8:00:44	0.991	119.37	50.0
Tuesday, March 29, 2016 8:05:44	0.991	124.32	50.4
Tuesday, March 29, 2016 8:10:45	0.991	129.29	50.9
Tuesday, March 29, 2016 8:15:46	0.991	134.26	50.8
Tuesday, March 29, 2016 8:20:46	0.991	139.22	50.8
Tuesday, March 29, 2016 8:25:47	0.991	144.19	50.5
Tuesday, March 29, 2016 8:30:47	0.991	149.14	50.4
Tuesday, March 29, 2016 8:35:48	0.991	154.11	50.7
Tuesday, March 29, 2016 8:40:49	0.991	159.08	50.6

Tuesday, March 29, 2016 8:45:49 0.991	164.04	50.5
Tuesday, March 29, 2016 8:50:50 0.991	169.01	50.6
Tuesday, March 29, 2016 8:55:51 0.991	173.98	50.2
Tuesday, March 29, 2016 9:00:51 0.991	178.93	50.0
Tuesday, March 29, 2016 9:05:52 0.991	183.91	50.4
Tuesday, March 29, 2016 9:10:52 0.991	188.86	50.9
Tuesday, March 29, 2016 9:15:53 0.991	193.83	49.9
Tuesday, March 29, 2016 9:20:54 0.991	198.80	50.1
Tuesday, March 29, 2016 9:25:54 0.991	203.76	50.1
Tuesday, March 29, 2016 9:30:55 0.991	208.73	50.2
Tuesday, March 29, 2016 9:35:55 0.991	213.68	49.5
Tuesday, March 29, 2016 9:40:56 0.991	218.65	49.7
Tuesday, March 29, 2016 9:45:57 0.991	223.62	50.2
Tuesday, March 29, 2016 9:50:57 0.991	228.58	49.5
Tuesday, March 29, 2016 9:55:58 0.991	233.55	50.3
Tuesday, March 29, 2016 10:00:58 0.991	238.50	50.8
Tuesday, March 29, 2016 10:05:59 0.991	243.47	50.7
Tuesday, March 29, 2016 10:11:00 0.991	248.44	50.3
Tuesday, March 29, 2016 10:16:00 0.991	253.40	50.8
Tuesday, March 29, 2016 10:21:01 0.991	258.37	50.9
Tuesday, March 29, 2016 10:26:02 0.991	263.34	50.2
Tuesday, March 29, 2016 10:31:02 0.991	268.29	50.0
Tuesday, March 29, 2016 10:36:03 0.991	273.26	50.6
Tuesday, March 29, 2016 10:41:04 0.991	278.23	49.9
Tuesday, March 29, 2016 10:46:04 0.991	283.19	50.0
Tuesday, March 29, 2016 10:51:05 0.991	288.16	50.5
Tuesday, March 29, 2016 10:56:05 0.991	293.11	50.6
Tuesday, March 29, 2016 11:01:06 0.991	298.08	50.5
Tuesday, March 29, 2016 11:06:07 0.991	303.05	50.5
Tuesday, March 29, 2016 11:11:07 0.991	308.01	50.1
Tuesday, March 29, 2016 11:16:08 0.991	312.98	50.1
Tuesday, March 29, 2016 11:21:09 0.991	317.95	50.6
Tuesday, March 29, 2016 11:26:09 0.991	322.91	50.4
Tuesday, March 29, 2016 11:31:10 0.991	327.88	50.3
Tuesday, March 29, 2016 11:36:10 0.991	332.83	51.0
Tuesday, March 29, 2016 11:41:11 0.991	337.80	50.4
Tuesday, March 29, 2016 11:46:12 0.991	342.77	49.7
Tuesday, March 29, 2016 11:51:12 0.991	347.73	50.7
Tuesday, March 29, 2016 11:56:13 0.991	352.70	50.0
Tuesday, March 29, 2016 12:01:14 0.991	357.67	50.7
Tuesday, March 29, 2016 12:06:14 0.991	362.62	50.8
Tuesday, March 29, 2016 12:11:15 0.991	367.59	50.9
Tuesday, March 29, 2016 12:16:15 0.991	372.55	50.4
Tuesday, March 29, 2016 12:21:16 0.991	377.52	50.8
Tuesday, March 29, 2016 12:26:17 0.991	382.49	50.2
Tuesday, March 29, 2016 12:31:17 0.991	387.44	50.8
Tuesday, March 29, 2016 12:36:18 0.991	392.41	50.6
Tuesday, March 29, 2016 12:41:19 0.991	397.38	50.0
Tuesday, March 29, 2016 12:46:19 0.991	402.34	50.3
Tuesday, March 29, 2016 12:51:20 0.991	407.31	50.2
Tuesday, March 29, 2016 12:56:20 0.991	412.26	50.9
Tuesday, March 29, 2016 13:01:21 0.991	417.23	50.9
Tuesday, March 29, 2016 13:06:22 0.991	422.21	50.6
Tuesday, March 29, 2016 13:11:22 0.991	427.16	50.6

Tuesday, March 29, 2016 13:16:23 0.991	432.13	50.0
Tuesday, March 29, 2016 13:21:24 0.991	437.10	50.1
Tuesday, March 29, 2016 13:26:24 0.991	442.06	51.0
Tuesday, March 29, 2016 13:31:25 0.991	447.03	51.0
Tuesday, March 29, 2016 13:36:25 0.991	451.98	50.5
Tuesday, March 29, 2016 13:41:26 0.991	456.95	50.9
Tuesday, March 29, 2016 13:46:27 0.991	461.92	50.4
Tuesday, March 29, 2016 13:51:27 0.991	466.88	50.8
Tuesday, March 29, 2016 13:56:28 0.991	471.85	50.8
Tuesday, March 29, 2016 14:01:29 0.991	476.82	50.6
Tuesday, March 29, 2016 14:06:29 0.991	481.77	50.2
Tuesday, March 29, 2016 14:11:30 0.991	486.74	50.5
Tuesday, March 29, 2016 14:16:31 0.991	491.72	50.5
Tuesday, March 29, 2016 14:21:31 0.991	496.67	51.0
Tuesday, March 29, 2016 14:26:32 0.991	501.64	50.9
Tuesday, March 29, 2016 14:31:32 0.991	506.60	51.0
Tuesday, March 29, 2016 14:36:33 0.991	511.57	50.5
Tuesday, March 29, 2016 14:41:34 0.991	516.54	50.6
Tuesday, March 29, 2016 14:46:34 0.991	521.49	50.6
Tuesday, March 29, 2016 14:51:35 0.991	526.46	50.1
Tuesday, March 29, 2016 14:56:36 0.991	531.44	51.0
Tuesday, March 29, 2016 15:01:36 0.991	536.39	50.8
Tuesday, March 29, 2016 15:06:37 0.991	541.36	50.5
Tuesday, March 29, 2016 15:11:38 0.991	546.33	50.5
Tuesday, March 29, 2016 15:16:38 0.991	551.29	50.1
Tuesday, March 29, 2016 15:21:39 0.991	556.26	50.8
Tuesday, March 29, 2016 15:26:40 0.991	561.23	50.2
Tuesday, March 29, 2016 15:31:40 0.991	566.19	50.2
Tuesday, March 29, 2016 15:36:41 0.991	571.16	50.5
Tuesday, March 29, 2016 15:41:41 0.991	576.11	51.0
Tuesday, March 29, 2016 15:46:42 0.991	581.08	50.7
Tuesday, March 29, 2016 15:51:43 0.991	586.06	50.5
Tuesday, March 29, 2016 15:56:43 0.991	591.01	50.5
Tuesday, March 29, 2016 16:01:44 0.991	595.98	49.9
Tuesday, March 29, 2016 16:06:45 0.991	600.95	50.8
Tuesday, March 29, 2016 16:11:45 0.991	605.91	50.2
Tuesday, March 29, 2016 16:16:46 0.991	610.88	50.5
Tuesday, March 29, 2016 16:21:47 0.991	615.85	50.7
Tuesday, March 29, 2016 16:26:47 0.991	620.81	50.9
Tuesday, March 29, 2016 16:31:48 0.991	625.78	50.2
Tuesday, March 29, 2016 16:36:49 0.991	630.75	50.6
Tuesday, March 29, 2016 16:41:49 0.991	635.70	50.1
Tuesday, March 29, 2016 16:46:50 0.991	640.68	50.1
Tuesday, March 29, 2016 16:51:50 0.991	645.63	50.4
Tuesday, March 29, 2016 16:56:51 0.991	650.60	50.3
Tuesday, March 29, 2016 17:01:52 0.991	655.57	49.8
Tuesday, March 29, 2016 17:06:52 0.991	660.53	49.8
Tuesday, March 29, 2016 17:11:53 0.991	665.50	50.8
Tuesday, March 29, 2016 17:16:54 0.991	670.47	51.1
Tuesday, March 29, 2016 17:21:54 0.991	675.43	50.5
Tuesday, March 29, 2016 17:26:55 0.991	680.40	50.8
Tuesday, March 29, 2016 17:31:56 0.991	685.37	50.9
Tuesday, March 29, 2016 17:36:56 0.991	690.32	49.7
Tuesday, March 29, 2016 17:41:57 0.991	695.30	50.8

Tuesday, March 29, 2016 17:46:58 0.991	700.27	50.5
Tuesday, March 29, 2016 17:51:58 0.991	705.22	50.8
Tuesday, March 29, 2016 17:56:59 0.991	710.19	51.0
Tuesday, March 29, 2016 18:00:02 0.991	713.22	50.1

aqms5

formaldehyde002

Ch. 2 Cartridge Started Tuesday, March 29, 2016 18:15:04

Flow Rate Set Point 1.00 l/min

Stopped Wednesday, March 30, 2016 6:15:21

Total Volume 712.76 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 -0.007 l/min

Flow Controller Zero -0.003 l/min

Error Code 0

Error Status OK No Errors

Time	Flow Rate	Volume	Temp
Tuesday, March 29, 2016 18:15:31	0.080	0.22	50.4
Tuesday, March 29, 2016 18:20:32	0.990	5.19	50.2
Tuesday, March 29, 2016 18:25:33	0.990	10.16	50.2
Tuesday, March 29, 2016 18:30:33	0.990	15.11	49.8
Tuesday, March 29, 2016 18:35:34	0.990	20.08	50.6
Tuesday, March 29, 2016 18:40:34	0.990	25.03	50.5
Tuesday, March 29, 2016 18:45:35	0.990	30.00	50.0
Tuesday, March 29, 2016 18:50:36	0.990	34.97	50.1
Tuesday, March 29, 2016 18:55:36	0.990	39.92	50.8
Tuesday, March 29, 2016 19:00:37	0.990	44.89	50.2
Tuesday, March 29, 2016 19:05:38	0.990	49.85	50.1
Tuesday, March 29, 2016 19:10:38	0.990	54.81	50.5
Tuesday, March 29, 2016 19:15:39	0.990	59.77	50.6
Tuesday, March 29, 2016 19:20:40	0.990	64.74	50.4
Tuesday, March 29, 2016 19:25:40	0.990	69.69	50.5
Tuesday, March 29, 2016 19:30:41	0.990	74.66	50.5
Tuesday, March 29, 2016 19:35:41	0.990	79.61	50.4
Tuesday, March 29, 2016 19:40:42	0.990	84.58	50.6
Tuesday, March 29, 2016 19:45:43	0.990	89.55	50.5
Tuesday, March 29, 2016 19:50:43	0.990	94.50	50.5
Tuesday, March 29, 2016 19:55:44	0.990	99.47	50.1
Tuesday, March 29, 2016 20:00:45	0.990	104.44	50.5
Tuesday, March 29, 2016 20:05:45	0.990	109.39	50.0
Tuesday, March 29, 2016 20:10:46	0.990	114.36	49.8
Tuesday, March 29, 2016 20:15:47	0.990	119.32	50.6
Tuesday, March 29, 2016 20:20:47	0.990	124.28	50.2
Tuesday, March 29, 2016 20:25:48	0.990	129.24	50.6
Tuesday, March 29, 2016 20:30:48	0.990	134.20	50.5
Tuesday, March 29, 2016 20:35:49	0.990	139.16	50.5
Tuesday, March 29, 2016 20:40:50	0.990	144.13	50.7
Tuesday, March 29, 2016 20:45:50	0.990	149.08	50.2
Tuesday, March 29, 2016 20:50:51	0.990	154.05	50.4
Tuesday, March 29, 2016 20:55:52	0.990	159.02	50.5

Tuesday, March 29, 2016 21:00:52 0.990	163.97	50.9
Tuesday, March 29, 2016 21:05:53 0.990	168.94	49.4
Tuesday, March 29, 2016 21:10:53 0.990	173.89	50.4
Tuesday, March 29, 2016 21:15:54 0.990	178.86	50.1
Tuesday, March 29, 2016 21:20:55 0.990	183.83	50.5
Tuesday, March 29, 2016 21:25:55 0.990	188.78	50.6
Tuesday, March 29, 2016 21:30:56 0.990	193.75	50.1
Tuesday, March 29, 2016 21:35:57 0.990	198.72	50.5
Tuesday, March 29, 2016 21:40:57 0.990	203.67	51.1
Tuesday, March 29, 2016 21:45:58 0.990	208.64	50.2
Tuesday, March 29, 2016 21:50:59 0.990	213.60	49.9
Tuesday, March 29, 2016 21:55:59 0.990	218.56	50.8
Tuesday, March 29, 2016 22:01:00 0.990	223.52	50.4
Tuesday, March 29, 2016 22:06:01 0.990	228.49	49.8
Tuesday, March 29, 2016 22:11:01 0.990	233.44	49.7
Tuesday, March 29, 2016 22:16:02 0.990	238.41	50.6
Tuesday, March 29, 2016 22:21:03 0.990	243.38	50.6
Tuesday, March 29, 2016 22:26:03 0.990	248.33	50.0
Tuesday, March 29, 2016 22:31:04 0.990	253.30	50.6
Tuesday, March 29, 2016 22:36:05 0.990	258.27	50.5
Tuesday, March 29, 2016 22:41:05 0.990	263.22	50.3
Tuesday, March 29, 2016 22:46:06 0.990	268.19	50.1
Tuesday, March 29, 2016 22:51:06 0.990	273.14	50.8
Tuesday, March 29, 2016 22:56:07 0.990	278.11	50.7
Tuesday, March 29, 2016 23:01:08 0.990	283.08	50.3
Tuesday, March 29, 2016 23:06:08 0.990	288.03	50.3
Tuesday, March 29, 2016 23:11:09 0.990	293.00	50.9
Tuesday, March 29, 2016 23:16:10 0.990	297.96	50.0
Tuesday, March 29, 2016 23:21:10 0.990	302.92	50.6
Tuesday, March 29, 2016 23:26:11 0.990	307.88	50.2
Tuesday, March 29, 2016 23:31:12 0.990	312.85	50.6
Tuesday, March 29, 2016 23:36:12 0.990	317.80	50.2
Tuesday, March 29, 2016 23:41:13 0.990	322.77	50.0
Tuesday, March 29, 2016 23:46:13 0.990	327.72	50.6
Tuesday, March 29, 2016 23:51:14 0.990	332.69	50.2
Tuesday, March 29, 2016 23:56:15 0.990	337.66	50.5
Wednesday, March 30, 2016 0:01:15 0.990	342.61	50.3
Wednesday, March 30, 2016 0:06:16 0.990	347.58	50.6
Wednesday, March 30, 2016 0:11:17 0.990	352.55	50.7
Wednesday, March 30, 2016 0:16:17 0.990	357.50	50.1
Wednesday, March 30, 2016 0:21:18 0.990	362.47	50.4
Wednesday, March 30, 2016 0:26:19 0.990	367.44	50.8
Wednesday, March 30, 2016 0:31:19 0.990	372.39	50.0
Wednesday, March 30, 2016 0:36:20 0.990	377.36	50.5
Wednesday, March 30, 2016 0:41:21 0.990	382.32	50.8
Wednesday, March 30, 2016 0:46:21 0.990	387.28	49.7
Wednesday, March 30, 2016 0:51:22 0.990	392.24	50.4
Wednesday, March 30, 2016 0:56:23 0.990	397.21	50.5
Wednesday, March 30, 2016 1:01:23 0.990	402.16	50.2
Wednesday, March 30, 2016 1:06:24 0.990	407.13	50.6
Wednesday, March 30, 2016 1:11:25 0.990	412.10	50.1
Wednesday, March 30, 2016 1:16:25 0.990	417.05	50.5
Wednesday, March 30, 2016 1:21:26 0.990	422.02	50.8
Wednesday, March 30, 2016 1:26:27 0.990	426.99	50.5

Wednesday, March 30, 2016 1:31:27 0.990	431.94	50.4
Wednesday, March 30, 2016 1:36:28 0.990	436.91	50.3
Wednesday, March 30, 2016 1:41:29 0.990	441.87	50.5
Wednesday, March 30, 2016 1:46:29 0.990	446.83	50.4
Wednesday, March 30, 2016 1:51:30 0.990	451.79	50.4
Wednesday, March 30, 2016 1:56:30 0.990	456.75	50.8
Wednesday, March 30, 2016 2:01:31 0.990	461.71	50.1
Wednesday, March 30, 2016 2:06:32 0.990	466.68	50.4
Wednesday, March 30, 2016 2:11:32 0.990	471.63	50.8
Wednesday, March 30, 2016 2:16:33 0.990	476.60	50.2
Wednesday, March 30, 2016 2:21:34 0.990	481.57	50.6
Wednesday, March 30, 2016 2:26:34 0.990	486.52	50.6
Wednesday, March 30, 2016 2:31:35 0.990	491.49	49.9
Wednesday, March 30, 2016 2:36:36 0.990	496.46	50.5
Wednesday, March 30, 2016 2:41:36 0.990	501.41	50.5
Wednesday, March 30, 2016 2:46:37 0.990	506.38	50.9
Wednesday, March 30, 2016 2:51:38 0.990	511.34	51.0
Wednesday, March 30, 2016 2:56:38 0.990	516.30	50.4
Wednesday, March 30, 2016 3:01:39 0.990	521.26	50.9
Wednesday, March 30, 2016 3:06:39 0.990	526.22	49.5
Wednesday, March 30, 2016 3:11:40 0.990	531.18	50.3
Wednesday, March 30, 2016 3:16:41 0.990	536.15	50.3
Wednesday, March 30, 2016 3:21:41 0.990	541.10	50.1
Wednesday, March 30, 2016 3:26:42 0.990	546.07	50.4
Wednesday, March 30, 2016 3:31:43 0.990	551.04	50.9
Wednesday, March 30, 2016 3:36:43 0.990	555.99	50.9
Wednesday, March 30, 2016 3:41:44 0.990	560.96	50.6
Wednesday, March 30, 2016 3:46:44 0.990	565.91	50.5
Wednesday, March 30, 2016 3:51:45 0.990	570.88	50.5
Wednesday, March 30, 2016 3:56:46 0.990	575.85	50.9
Wednesday, March 30, 2016 4:01:46 0.990	580.80	50.2
Wednesday, March 30, 2016 4:06:47 0.990	585.77	50.0
Wednesday, March 30, 2016 4:11:48 0.990	590.74	50.0
Wednesday, March 30, 2016 4:16:48 0.990	595.69	49.7
Wednesday, March 30, 2016 4:21:49 0.990	600.66	50.8
Wednesday, March 30, 2016 4:26:49 0.990	605.61	50.8
Wednesday, March 30, 2016 4:31:50 0.990	610.58	49.7
Wednesday, March 30, 2016 4:36:51 0.990	615.55	50.3
Wednesday, March 30, 2016 4:41:51 0.990	620.50	50.3
Wednesday, March 30, 2016 4:46:52 0.990	625.47	50.5
Wednesday, March 30, 2016 4:51:53 0.990	630.44	50.0
Wednesday, March 30, 2016 4:56:53 0.990	635.39	50.4
Wednesday, March 30, 2016 5:01:54 0.990	640.36	50.1
Wednesday, March 30, 2016 5:06:54 0.990	645.31	50.9
Wednesday, March 30, 2016 5:11:55 0.990	650.28	50.8
Wednesday, March 30, 2016 5:16:56 0.990	655.25	50.4
Wednesday, March 30, 2016 5:21:56 0.990	660.20	50.4
Wednesday, March 30, 2016 5:26:57 0.990	665.17	50.9
Wednesday, March 30, 2016 5:31:57 0.990	670.12	50.1
Wednesday, March 30, 2016 5:36:58 0.990	675.09	50.3
Wednesday, March 30, 2016 5:41:59 0.990	680.05	49.6
Wednesday, March 30, 2016 5:46:59 0.990	685.01	50.7
Wednesday, March 30, 2016 5:52:00 0.990	689.97	50.2
Wednesday, March 30, 2016 5:57:01 0.990	694.94	50.5

Wednesday, March 30, 2016 6:02:01	0.990	699.89	50.3
Wednesday, March 30, 2016 6:07:02	0.990	704.86	50.0
Wednesday, March 30, 2016 6:12:02	0.990	709.82	49.7
Wednesday, March 30, 2016 6:15:00	0.990	712.75	49.9

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

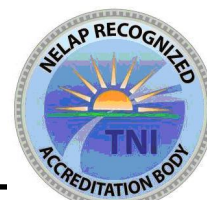
Certificate No: CA300005 - 007





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

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Folsom CA 95630

Issue Date: 10/18/2015

Expiration Date: 10/17/2016

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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
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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)
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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
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Analyte Code	Analyte
3860	Non-methane organics

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

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Customers. Please verify the current accreditation standing with ORELAP.

Analyte Code	Analyte
5895	Dibenz(a,h) anthracene
6265	Fluoranthene
6270	Fluorene
6315	Indeno(1,2,3-cd) pyrene
5005	Naphthalene
6615	Phenanthrene
6665	Pyrene

EPA TO-13A SIM	10248449	Polycyclic Aromatic Hydrocarbons in Ambient Air by GC/MS SIM
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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
5895	Dibenz(a,h) anthracene
6265	Fluoranthene
6270	Fluorene
6315	Indeno(1,2,3-cd) pyrene
6615	Phenanthrene
6665	Pyrene

EPA TO-14A	10248609	Volatile Organic Compounds with SUMMA canister and GC/MS
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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
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
4615	1,3-Dichlorobenzene
4620	1,4-Dichlorobenzene
4836	1-Propene
4860	2-Hexanone
4542	4-Ethyltoluene
4315	Acetone
4375	Benzene
5635	Benzyl chloride
4395	Bromodichloromethane
4455	Carbon tetrachloride
4475	Chlorobenzene
4575	Chlorodibromomethane
4485	Chloroethane (Ethyl chloride)
4505	Chloroform

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

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Expiration Date: 10/17/2016

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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

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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

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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