



EMISSIONS TEST REPORT

J.H. BAXTER & CO.

AMMONIA EMISSIONS TESTING AND VERIFICATION OF DIRECTIONAL FLOW

Lane Regional Air Protection Agency
Standard Air Contaminant Discharge Permit: 200502

Prepared for:

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Project Number: JHB221625
Test Dates: September 15-16, 2021
Report Issued: November 15, 2021



EXECUTIVE SUMMARY

J.H. Baxter & Co. contracted Bison Engineering, Inc. to perform emissions testing at their facility in Eugene, Oregon. Testing was performed pursuant to the letter sent to J.H. Baxter & Co. by the Lane Regional Air Protection Agency (LRAPA) on January 7, 2021. This test campaign included ammonia emissions testing on the ammoniacal copper zinc arsenate (ACZA) scrubber and modified Method 204 tests to evaluate the draw from the tank vents into the vapor phase carbon (VPC) ventilation system. Emissions testing on the VPC unit and pentachlorophenol (PCP) stack will occur during a separate deployment.

This report presents emissions test data, describes the methods employed and details the quality assurance measures taken to ensure accurate data. Table 1 summarizes the ACZA scrubber test results. Detailed emission test results and further discussion of directional flow evaluations are included in Section 3.0 of this report.

Table 1: ACZA Scrubber Results Summary

J.H. Baxter & Co. ACZA Scrubber Emissions Test Results Summary September 15-16, 2021				
Parameter	Units	Run 1 *	Run 2	Average
Ammonia	average ppmvw	6,849	3,215	5,032
	average lb/hr	0.17	0.74	0.46
	total lb emitted over	1.24	4.02	2.63
	lb/ft ³ of treated	0.00323	0.01047	0.00685
	lb/gal of treating	0.00284	0.01344	0.00814

ppmvw – parts per million by volume on a wet basis

lb/hr – pounds per hour

lb- pounds

lb/ft³ of treated wood – pounds per cubic foot of treated wood produced

lb/gal of treating solution – pounds per gallon of treating solution used

*- run 1 does not include data from the crack-and-vac and fumes process step, further explanation can be found in section 3.1 of this report.

During evaluations of flow from the tanks to the VPC ventilation system, Bison observed definitive inward direction of flow at tanks 3, 4 and both retorts tested. Inconclusive direction of flow was observed at tanks 2, 7, 26 and 27. Situational circumstances and hazards made collecting conclusive data difficult.

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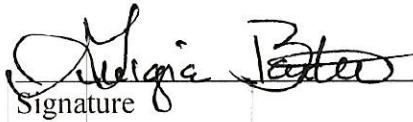
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CERTIFICATION FROM RESPONSIBLE OFFICIAL

I have reviewed the information being submitted in its entirety. Based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this submittal are true, accurate, and complete.


Signature

11/15/21
Date

Georgia Baxter
Name (printed)

President
Title

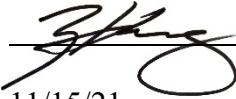
J. H. Baxter & Co.
Company

REVIEW AND CERTIFICATION

All work, calculations, other activities, and tasks performed and documented in this report were carried out under my direction and supervision. This test project conforms to the requirements of Bison Engineering, Inc.'s quality manual and American Society for Testing and Materials (ASTM) D7036-04.

Project Manager: Zach Harding

Title: Source Director

Signature: 

Date: 11/15/21

I have reviewed all testing details, calculations, results, conclusions and other appropriate written material contained herein, and hereby certify that the presented material is authentic and accurate.

Reviewer: Lynn Dunnington

Title: Environmental Scientist

Signature: 

Date: 11/15/21

1.0 INTRODUCTION

1.1 Project Summary and Objectives

J.H. Baxter & Co. (J.H. Baxter) retained Bison Engineering, Inc. (Bison) to perform emissions testing at their wood preservation facility in Eugene, Oregon. Bison submitted a pre-test protocol to the Lane Regional Air Protection Agency (LRAPA) on September 8, 2021. In a letter sent to J.H. Baxter on January 7, 2021, LRAPA requested emissions testing on three of the facility's emission units: the vapor phase carbon (VPC) unit while using the creosote preservative solution, the pentachlorophenol (PCP) stack, and the ammoniacal copper zinc arsenate (ACZA) scrubber exhaust. This facility is subject to the provisions of LRAPA Standard Air Contaminant Discharge Permit (ACDP) number 200502. Results of emissions testing presented in this report will support the development of J.H. Baxter's Cleaner Air Oregon (CAO) emissions inventory.

During this testing deployment, Bison conducted emissions testing on the ACZA scrubber, and evaluations of directional flow on the VPC ventilation system and retorts 81 and 84 during the "crack and vac" process. Emissions testing on the VPC unit and PCP stack will occur during a second test campaign.

Bison employed U.S. Environmental Protection Agency (EPA) test methods as described in Title 40 Code of Federal Regulations (CFR) Part 60, Appendix A. Tables 2 and 3 summarize the test methods used during the test campaign.

Table 2: ACZA Scrubber Emission Test Matrix

J.H. Baxter & Co. ACZA Scrubber Emission Test Matrix September 15-16, 2021		
EPA Method	Parameter	Test Plan and Comments
1A	Sampling location and traverse points	One measurement prior to sampling.
320	Ammonia, moisture	Two, approximately 9-hour test runs.

Table 3: Verification of Directional Flow Test Matrix

J.H. Baxter & Co. VPC Ventilation System and Retorts Directional Flow Verification Test Matrix September 15-16, 2021			
Source	EPA Method	Parameter	Test Plan and Comments
Vent Hoods on VPC Tanks 2, 3, 4, 7, 26, 27 & Retorts 81 and 84	Modified Method 204	Verification of Directional Flow	Visual inspections to identify natural draft openings (NDO). Smoke tests to show direction of airflow at NDOs.

1.2 Project Contacts

Facility: **J.H. Baxter & Co.**
Address: 3494 Roosevelt Blvd.
Eugene, OR 97402
Contact: Scott Thielke
Phone: (541) 689-3801
Email: sthielke@jhbaxter.com

Air Quality

Consultant: **Maul Foster & Alongi, Inc.**
Address: 3140 NE Broadway St.
Portland, OR 97232
Contact: Brian Snuffer Zukas
Phone: (503) 314-8589
Email: bsnuffer@maulfoster.com

Testing Consultant: **Bison Engineering, Inc.**
Address: 3143 East Lyndale Ave.
Helena, MT 59601
Contact: Zach Harding
Phone: (406) 431-8930
Email: zharding@bison-eng.com

State Authority: **Lane Regional Air Protection Agency**
Address: 1010 Main St.
Springfield, OR 97477
Contact: Max Hueftle
Phone: (541) 736-1056
Email: max@lrapa.org

1.3 Testing Personnel

The Bison on-site testing team was led by Zach Harding, Source Testing Director. He was assisted during field testing by Conor Fox, QI, Project Scientist. Mr. Harding served as project manager. Mr. Harding, Mr. Fox and Lynn Dunnington, Environmental Scientist, processed the test data. Ms. Dunnington authored this report. Mr. Harding performed a final quality assurance review of the data and test report.

Scott Thielke, Environmental and Safety Manager, was the primary contact for J.H. Baxter. Mr. Thielke was present on-site for most of the testing. J.H. Baxter staff members were responsible for monitoring process parameters during testing. Brian Snuffer Zukas of Maul Foster & Alongi compiled the process data and provided it to Bison for use in this report.

Katie Eagleson from LRAPA was present on-site during the test campaign.

2.0 SOURCE DESCRIPTION

2.1 Facility Description

J.H. Baxter owns and operates a wood preservation facility in Eugene, Oregon. The facility treats multiple commodities including poles, railroad ties, glued laminated timbers (i.e., glulams and powerlams), pilings, posts, original equipment manufacturer parts and components, and miscellaneous dimensional lumber products. The wood products are treated with water- or oil-based preservative solutions in a high pressure and high temperature environment. Oil-based preservative solutions currently used by the facility are PCP, creosote, and a 50/50 blend of creosote and Bunker C oil (50/50). The only water-based preservative currently used at the facility is ACZA, trade name “Chemonite”.

2.2 Emission Source Description

2.2.1 VPC Ventilation System and Retorts

Untreated commodities are packed into bundles on a tram. The bundle configurations vary depending on the commodity type and which wood treating vessel (referred to as a “retort”) is used. Each retort has a unique identification number and utilizes the treatment solution(s) as follows:

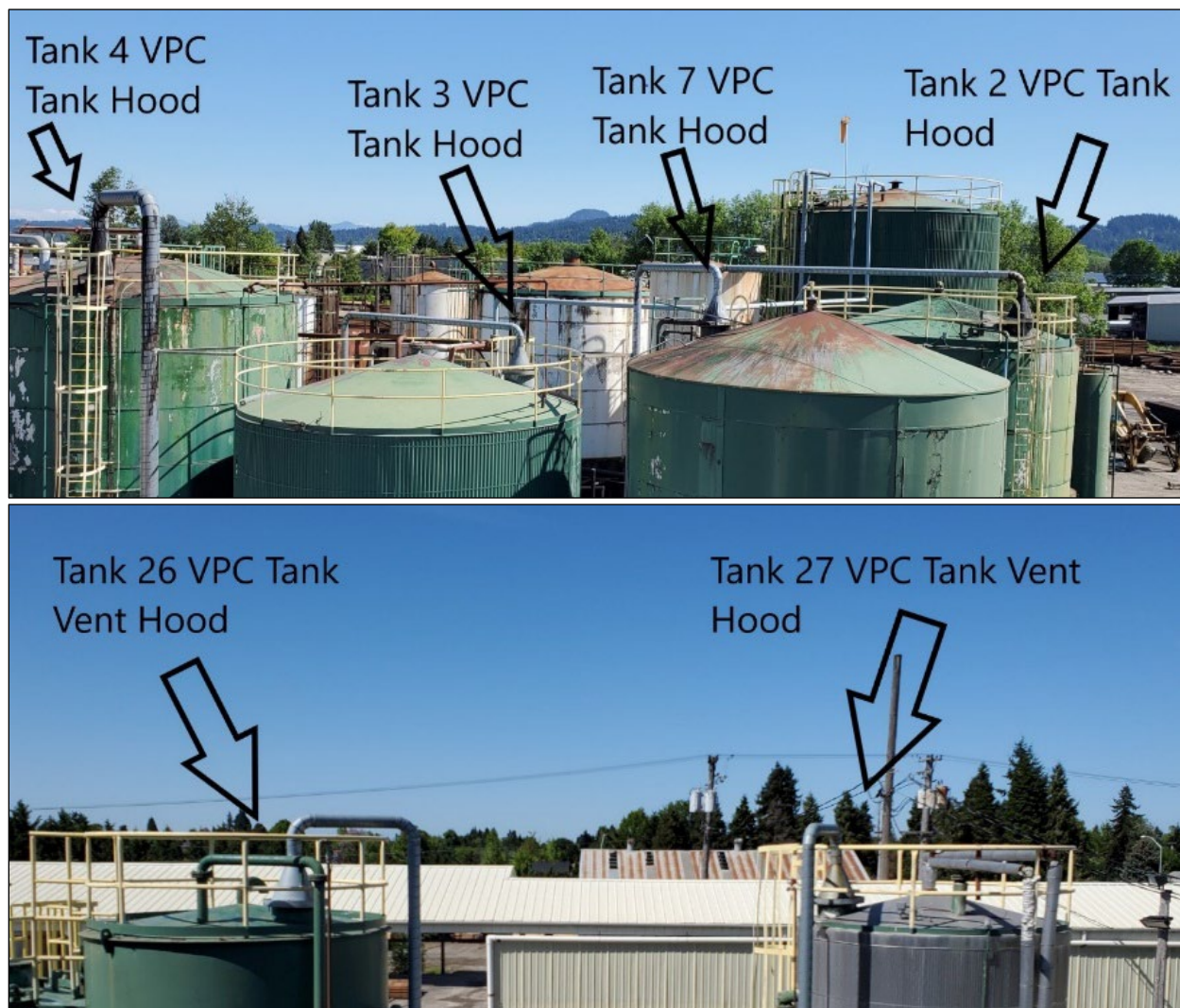
- Retort 81: Creosote, 50/50, or PCP
- Retort 82: ACZA or PCP
- Retort 83: Creosote or 50/50
- Retort 84: ACZA
- Retort 85: PCP

Vapors generated during the wood conditioning process are routed to a condenser. The condenser removes liquid from the exhaust stream. Liquids removed by the condenser are routed to a hot well (i.e., sealed vessel) prior to flowing, via gravity, to a downstream collection sump. An open top catch basin is located directly below the hot well for maintenance purposes only. Process liquids collected in the sump are delivered to a recovery tank prior to entering the process water treatment system. The dried exhaust stream is routed to a knock-out drum prior to exhausting to atmosphere through the PCP stack. The dried exhaust stream during heavy oil (i.e., creosote or 50/50) charges is routed to a downstream VPC ventilation system for control of VOC emissions prior to emitting to atmosphere.

Once the final vacuum is released, the retort doors are cracked open and the vacuum pump is restarted. The vacuum pump pulls in fresh air allowing for the charge to cool inside the retort. This process is referred to as the “crack-and-vac” cycle. The volume of air displaced by the vacuum pump is routed to the downstream condenser, similar to the conditioning process described above.

The vent hoods of tanks 2, 3, 4, 7, 26 and 27 are also connected to the VPC ventilation system. Figure 1 shows the locations of the vent hoods.

Figure 1: VPC Tank Vent Hoods



2.2.2 ACZA Scrubber Stack

The ACZA scrubber is located in the north tank farm area. Dried exhausts from the condensers connected to Retorts 82 and 84 are routed to the ACZA scrubber and associated stack prior to release to atmosphere. The ACZA scrubber stack is vertically-oriented with a circular diameter of 10.25 inches. The release height of the stack is approximately 29 feet above ground level and 50 inches above the top of the tank. A temporary stack extension was added by Bison and sampling ports were installed prior to the start of the test campaign. Sampling ports were accessed via the top of the scrubber tank. While on-site, Bison verified the sampling locations meet EPA Method 1A specifications; detailed Method 1A information is included in the appendices to this report. A photo of the stack and scrubber tank is provided in Figure 2.

Figure 2: ACZA Scrubber Stack and Sampling Location



3.0 EMISSION TEST RESULTS

3.1 Summary of Emissions Test Results

The table below summarizes the ACZA scrubber test results. During periods that the retort was closed, Bison was unable to perform flow measurements at the ACZA scrubber outlet because actual flow was either very intermittent or non-existent at the outlet. To determine mass rates of ammonia during these periods, Bison used the volume of the entire retort less the volume of wood, every time the retort would have been evacuated or filled, causing the displacement of vapors. Additional supporting material, including raw data, plant data, example calculations and calibration records, can be found in the appendices to this report. Flow measurements taken during crack-and-vac and fumes step were used to determine mass emissions during that process step for Run 2. Due to a miscommunication Bison did not capture the crack-and-vac and fumes process step for Run 1.

Table 3: ACZA Scrubber Test Results

J.H. Baxter & Co. ACZA Scrubber Exhaust Ammonia Emissions Test Results September 15-16, 2021				
Parameter	Units	Run 1*	Run 2	Average
Treatment Cycle Start Time		04:00	06:00	
Treatment Cycle End Time		20:55	17:10	
Treatment Cycle Duration	hh:mm	16:55	11:10	
Sampling Duration ¹	hh:mm	9:15	9:30	
Retort Void Space	ft ³	1,023	1,023	1,023
Wood Treated	ft ³	384	384	384
Treating Solution Used	gal	436	299	367.50
Ammonia	average ppmvw over treatment cycle	6,849	3,215	5,032
	lb over treatment cycle	1.24	4.02	2.63
	lb/ft ³ of treated wood	0.00323	0.01047	0.00685
	lb/gal of treating solution	0.00284	0.01344	0.00814

¹sampling duration is less than treatment cycle duration to reduce sampling time to coincide with cycle steps when vapors from the retort are potentially released.

²Run 1 does not include the crack-and-vac/fumes process step

hh:mm- hours: minutes

gal- gallons

ft³- cubic feet

3.2 Summary of Modified Evaluation of Directional Flow

Bison followed an abbreviated version of EPA Method 204 in an attempt to validate the directional flow from the tank vents to the VPC ventilation system. Since there was not a true enclosure (e.g., a building) to test, Bison used direction of air flow and visual inspection of the vacuum systems, capture hoods and associated ductwork to evaluate each location.

Visual inspection was used to identify any NDOs. Direction of air flow was monitored by placing a smoke emitter at each NDO to show the direction of air flow. Smoke tests were documented through photographs or video.

3.2.1 Flow Direction Evaluation at VPC Tank Vent Hoods

Bison performed this modified Method 204 at six VPC tank vent hoods. The vent hoods tested were associated with tanks 2, 3, 4, 7, 26 and 27. The NDOs at each hood are simply the gap between the tank vent outlet and the overarching hood and ductwork. It was not possible to accurately measure the area of these NDOs. Bison placed a smoke emitter at each vent-hood NDO and captured a picture every 10 minutes for one hour. A montage of these photographs is presented in Appendix B to this report.

Bison observed definitive inward direction of flow at tanks 3 and 4. The smoke tests at tanks 2, 7, 26 and 27 were inconclusive. Bison feels that performance of modified Method 204 did not yield results sufficient to confirm or deny whether any flow from these VPC tank vent hoods was not captured by the VPC ventilation system because the test method is not designed for this purpose (i.e., it is designed for evaluating buildings). Visual inspection of the VPC ventilation system ductwork showed no unexpected NDOs.

3.2.2 Flow Direction Evaluation at Retorts

Bison performed modified Method 204 at Retorts 81 and 84 during the “crack-and-vac” cycle. Bison identified the gap between the door and the retort body (when the door is cracked open) as the only NDO at each retort door. It was not possible to obtain an accurate measurement of the NDO area at either retort. Bison placed a smoke emitter at various locations near each NDO and captured video documentation. The smoke test was performed twice at each retort. The first test at each retort was performed on day one of testing. The second test was performed the following day. A montage of still frames derived from the video documentation illustrates these phenomena and is included in Appendix B to this report. The videos will be provided to LRAPA for review.

Bison observed definitive inward direction of flow at both Retort 81 and Retort 84 once the vacuum pump was turned on and when the smoke emitter was held in close proximity to the NDOs. Igniting a smoke emitter while near the cracked retort was a safety concern because of the possibility of inadvertently igniting flammable vapors inside the retort. The smoke test at each retort revealed a short period following the opening of the retort door during which air flow was not definitively inward. Once the vacuum pump was fully engaged, direction of flow became definitively inward. Bison feels that performance of modified Method 204 did not yield results sufficient to confirm or deny whether any flow from either retort might exit the door because the test method is not designed for this purpose (i.e., it is designed for evaluating buildings).

3.3 Operating Conditions

Representatives of J.H. Baxter recorded details of plant operations during testing. Maul Foster and Alongi personnel compiled the raw process data and provided it to Bison for use in this report. Process data is presented in the report appendices.

3.4 Field Observations

Testing was performed as outlined in the test protocol dated September 8, 2021. No adverse or unusual environmental conditions were noted that are known to have influenced the outcome of these tests. The ACZA scrubber does not have an induced draft fan and therefore does not have consistent flow rate. Bison was unable to perform flow measurements at the ACZA scrubber outlet during all process steps except crack-and-vac and fumes because actual flow was either very intermittent or non-existent at the outlet. To determine mass emission rates of ammonia during process steps other than crack-and-vac and fumes, Bison used the volume of the entire retort less the volume of wood, every time the retort would have been evacuated or filled causing the displacement of vapors. Sampling time for ammonia concentrations during run 2, step 2 does not match production data run times. Bison run time ended at 9:00 am but production data states step 2 lasted until 9:30. Bison does not feel this has significant impact on results because flow rates were determined assuming the entire retort volume was evacuated during step 2. To determine mass emission rates of ammonia during the crack-and-vac and fumes process step, Bison used the flow rate measured during that time. As previously stated, due to a miscommunication Bison does not have ammonia concentration or flow rates during the crack-and-vac and fumes process step for Run 1.

4.0 EMISSION TEST METHODS AND PROCEDURES

4.1 Testing Methods and Procedures

Bison testing personnel performed the following EPA methods as described in 40 CFR 60, Appendix A.

EPA Reference Method 1A, "Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts." The objective of Method 1A is to determine a suitable location for testing and to determine the velocity and/or sample points for the source when the stack/duct is less than 12 but greater than four inches in diameter.

EPA Reference Method 2C, "Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)." The objective of Method 2 is to determine volumetric flow in a source when the stack/duct is less than 12 inches in diameter but greater than 4 inches. The average velocity, temperature, static pressure, and source area are used to calculate volumetric flow for the source.

EPA Reference Method 204, "Criteria for and Verification of a Permanent or Temporary Total Enclosure." The objective of Method 204 is to determine whether a permanent or temporary enclosure meets the criteria for being considered a total enclosure. If all the criteria are met, then the VOC capture efficiency is assumed to be 100 percent. For this test an abbreviated methodology was used requiring only visual inspection and demonstration of air flow direction.

EPA Reference Method 320, "Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy." The objective of Method 320 is to determine the concentrations of vapor phase organic or inorganic compounds, including hazardous air pollutants (HAPs) for which EPA reference spectra have been developed. Ammonia calibration gas will be used for spiking. Dynamic spiking using water or carbon dioxide as a surrogate tracer will be used in lieu of sulfur hexafluoride (SF₆).

4.2 Sample Handling and Analytical Procedures

No physical samples requiring off-site processing were generating during this test campaign. All analytical procedures complied with EPA methodology.

APPENDIX A: ACZA SCRUBBER TEST DATA

Bison Engineering, Inc.
Ammonia Emissions Summary

Client: JH Baxter
Location: Eugene, OR
Source: ACZA Scrubber

Test Date: 9/15/2021
Treatment Cycle Start Time: 4:00
Treatment Cycle End Time: 20:55

Process Parameters

Total Retort Void Space	1023 ft ³
Molecular Weight of NH ₃	17.031 g/mol
Wood Treated	384 ft ³
Treating Solution Used	436 gallons
Treatment Cycle Length	16:55 hh:mm

Ammonia Emissions Results

Total lb NH ₃ over treatment cycle	1.24
lb/ft ³ of treated wood	3.23E-03
lb/gal treating solution	2.84E-03

Sampling Data

Treatment Step Number	Description	Step length (hr)	Step Length (min)	Retort evacuated space per minute (ft ³ /min)	NH ₃ (ppmvd)	NH ₃ (ppmvw)	NH ₃ (lb/hr)	NH ₃ (lb)
2	Vacuum	2.5	150	6.82	6,204.03	6,097.87	0.11	0.28
3	Fill retort and heat solution	0.75	45	22.73	5,292.67	5,183.01	0.31	0.23
6	Vacuum	3	180	5.68	8,554.02	8,344.26	0.13	0.38
8	Final vacuum	3	180	5.68	7,932.03	7,771.09	0.12	0.35

Bison Engineering, Inc.
Ammonia Emissions Summary

Client: JH Baxter
Location: Eugene, OR
Source: ACZA Scrubber

Test Date: 9/16/2021
Treatment Cycle Start Time: 6:00
Treatment Cycle End Time: 17:10

Process Parameters

Total Retort Void Space	1023 ft ³
Molecular Weight of NH ₃	17.031 g/mol
Wood Treated	384 ft ³
Treating Solution Used	299 gallons
Treatment Cycle Length	11:10 hh:mm

Ammonia Emissions Results

Total lb NH ₃ over treatment cycle	4.02
lb/ft ³ of treated wood	1.047E-02
lb/gal treating solution	1.344E-02

Stack Flow during Fumes -Treatment Step 8

Flow at 16:40 (dscfm)	293.5
Flow at 17:07 (dscfm)	298.2
Average	295.9

Sampling Data

Treatment Step Number	Description	Step length (hr)	Step Length (min)	Stack Flow (dscfm)	Retort evacuated space per minute (ft ³ /min)	NH ₃ (ppmvd)	NH ₃ (ppmvw)	NH ₃ (lb/hr)	NH ₃ (lb)
1	Vacuum	2.5	150	N/A	6.82	1,473.15	1,453.27	0.03	0.07
2	Fill retort and heat solution	1	60	N/A	17.05	406.92	402.16	0.02	0.02
5	Vacuum	3	180	N/A	5.68	4,691.43	4,599.07	0.07	0.21
7	Final vacuum	2	120	N/A	8.53	5,372.81	5,256.94	0.12	0.24
8	Fumes	1	60	294.9	N/A	4,458.57	4,364.31	3.49	3.49

Bison Engineering, Inc.
Method 320 Ammonia Emissions
Example Calculations

Client: JH Baxter
Location: Eugene, OR
Source: ACZA Scrubber

Test Date: 9/15/2021
Treatment Step: 1

Treatment Step 2

1) Retort Evacuated Space per Minute = Total Retort Void Space / Step Length = 6.82 ft³/min
where Total Retort Void Space: 1023 ft³
Step Length: 150 min

2) NH₃ lb/hr = (C) (ft³/min) (MW NH₃) (1.558E-07) = 0.11 lb/hr
where C: 6097.87 ppmvw
ft³/min: 6.82
Molecular Weight NH₃: 17.031 g/mol

3) lb NH₃ = (lb/hr) (Step Length) = 0.28 lb
where lb/hr: 0.11
Step Length: 2.5 hr

Entire Treatment Cycle

4) Total lb NH₃ = sum of lb NH₃ for Treatment Steps 2, 3, 6, 8 = 1.24 lb
where lb NH₃ Treatment Step 2: 0.28
where lb NH₃ Treatment Step 3: 0.23
where lb NH₃ Treatment Step 6: 0.38
where lb NH₃ Treatment Step 8: 0.35

5) lb NH₃ / ft³ of Treated Wood = Total lb NH₃ / ft³ of Wood Treated = 3.23E-03 lb/ft³ of treated wood
where Total lb NH₃: 1.24
ft³ of Wood Treated: 384

6) lb NH₃ / gal of treating solution = Total lb NH₃ / Gallons of Treating Solution Used = 2.84E-03 lb/gal treating solution
where Total lb NH₃: 1.24
Gallons of Treating Solution: 436

Bison Engineering Velocity and Flow Measurements

Client: JH Baxter
Location: Eugene, OR
Source: ACZA
Date: 9/16/2021
Time: 16:40

Source ID 10.25 inches
 Source area 0.573 square feet

Two port measurement points

	% ID	point (in.)	Delta P "H ₂ O		√Dp	
1	3.2	0.3	0.03	0.03	0.173	0.173
2	10.5	1.1	0.02	0.04	0.141	0.200
3	19.4	2.0	0.04	0.03	0.200	0.173
4	32.3	3.3	0.03	0.02	0.173	0.141
5	67.7	6.9	0.01	0.01	0.100	0.100
6	80.6	8.3	0.01	0.00	0.100	0.000
7	89.5	9.2	0.02	0.01	0.141	0.100
8	96.8	9.9	0.01	0.02	0.100	0.141

Data Input			Calculations		
Temperature [ts]	80	°F	Avg. Dp	0.021	
Points:	16		Avg.√[Dp]	0.135	
Pitot tube coef. [Cp]	0.99		Absolute stack temp. [Ts]	540	
Barometric pres [Pbar]	29.51	"Hg	Absolute stack pres. [Ps]	29.51	
Moisture [Bws]	1.89%	% H ₂ O	Constants		
Static gauge pres. [Pg]	0	"H ₂ O	Pitot tube constant [Kp]	85.49	
Molecular weight [Ms]	29	lb/lb mole	Standard pres.[Pstd]	29.92	"Hg
			Standard temp. [Tstd]	527.67	°R

Velocity: 9.07 ft/sec
Flow: 311.8 acfm
Flow: 294.8 dscfm

Bison Engineering Velocity and Flow Measurements

Client: JH Baxter
Location: Eugene, OR
Source: ACZA
Date: 9/16/2021
Time: 17:07

Source ID 10.25 inches
 Source area 0.573 square feet

Two port measurement points

	% ID	point (in.)	Delta P "H ₂ O		√Dp	
1	3.2	0.3	0.04	0.01	0.200	0.100
2	10.5	1.1	0.03	0.01	0.173	0.100
3	19.4	2.0	0.02	0.02	0.141	0.141
4	32.3	3.3	0.02	0.03	0.141	0.173
5	67.7	6.9	0.02	0.02	0.141	0.141
6	80.6	8.3	0.03	0.01	0.173	0.100
7	89.5	9.2	0.02	0.01	0.141	0.100
8	96.8	9.9	0.01	0.01	0.100	0.100

Data Input			Calculations		
Temperature [ts]	84	°F	Avg. Dp	0.019	
Points:	16		Avg.√[Dp]	0.136	
Pitot tube coef. [Cp]	0.99		Absolute stack temp. [Ts]	544	
Barometric pres [Pbar]	29.49	"Hg	Absolute stack pres. [Ps]	29.49	
Moisture [Bws]	1.89%	% H ₂ O	Constants		
Static gauge pres. [Pg]	0	"H ₂ O	Pitot tube constant [Kp]	85.49	
Molecular weight [Ms]	29	lb/lb mole	Standard pres.[Pstd]	29.92	"Hg
			Standard temp. [Tstd]	527.67	°R

Velocity: 9.15 ft/sec
Flow: 314.5 acfm
Flow: 295.0 dscfm

EPA Method 2
Example Calculations

Client: JH Baxter
Location: Eugene, OR
Source: ACZA
Date: 9/16/2021
Time: 16:40

Stack Absolute Temperature

$$T_m = T_s + 460 \quad 540 \text{ }^{\circ}\text{R}$$

Where: $T_s = 80$

T_s stack temperature, $^{\circ}\text{F}$
 T_m absolute temperature, $^{\circ}\text{R}$

Stack Absolute Pressure

$$P_s = P_{\text{bar}} + (P_g / 13.6) \quad 29.510 \text{ "Hg}$$

Where: $P_{\text{bar}} = 29.51$
 $P_g = 0$

P_{bar} barometric pressure, "Hg
 P_g stack static pressure, "H₂O
 13.6 Hg molecular weight relative to water molecular weight

Velocity

$$V_s = K_p C_p [\text{avg. } \sqrt{D_p}] [\sqrt{(T_s/P_s M_s)}] \quad 9.07 \text{ fps}$$

Where: $K_p = 85.49$
 $C_p = 0.99$
 Avg. $\sqrt{D_p} = 0.135$
 $T_s = 540$
 $P_s = 29.51$
 $M_s = 29$

v_s velocity, ft/sec
 K_p pitot tube constant
 C_p pitot tube coefficient
 T_s stack temperature, degrees Rankin
 P_s stack pressure, inHg
 M_s stack molecular weight, lb/lb.mole
 D_p delta pressure

Actual Flow

$$Q = 60 V_s A \quad 311.8 \text{ acfm}$$

Where: $A = 0.573$
 $V_s = 9.07$

Q flow, acfm
 acfm actual cubic feet per minute
 Bws source moisture percentage
 60 minutes per hour
 V_s velocity, ft/sec
 A area square feet, sqft

EPA Method 2
Example Calculations

Client: JH Baxter
Location: Eugene, OR
Standard Flow

$$Q_{std} = Q (1-Bws) * (T_{std}/T_s) * (P_s/P_{std}) \quad 293.57 \text{ dscfm}$$

Where:

$$Q = 312$$

$$Bws = 2.38\%$$

$$T_s = 540$$

$$P_s = 29.51$$

Q flow, acfm
 Bws source moisture percentage
 Tstd standard absolute temperature, 528 degrees Rankin
 Ps absolute stack pressure, inHg
 Ts absolute stack temperature, degrees R
 Pstd standard barometric pressure, 29.92 inHg

EPA Method 1
Stack Parameters and Traverse Points

Client: JH Baxter
Facility: Eugene
Location: Eugene, OR
Source: ACZA Scrubber

Type of Testing: C (P for Particulate; V for Velocity/Nonparticulate)
Type of Duct: V (C for circular; R for rectangular)

Number of ports available: 2
Number of ports to be used: 2
Port diameter: 1 inches
Sampling location height (approx.): feet
Stack height (approx.): feet

Circular ID (Rectangular Depth): 10.25 inches
Port depth and/or wall thickness: 0.25 inches
Stack width (Rectangular only): inches

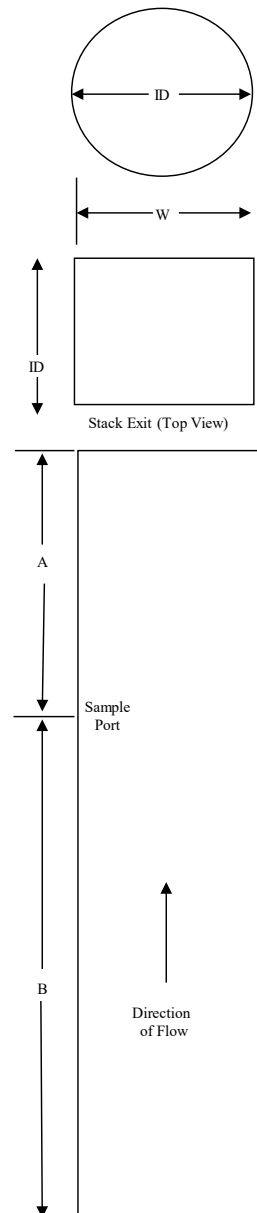
Equivalent Diameter
If rectangular = $\frac{2 * \text{Depth} * \text{Width}}{\text{Depth} + \text{Width}}$ = 10.25 inches (If circular = duct ID)
MAKE SURE TO USE METHOD 1A
Stack/duct area = 0.573 sq. feet 82.5 sq. inches

Sample Port Location:	Downstream flow disturbance from process	Upstream flow disturbance toward exit
	B	A
Number of Inches:	80.00	30.00
Number of Diameters:	7.80	2.93

Minimum Number of Traverse Points: 12

Points	% of diameter	Distance from inside wall (in.)	Distance including port (in.)
1	4.4	0.50	0 3/4
2	14.6	1.50	1 3/4
3	29.6	3.03	3 1/4
4	70.4	7.22	7 1/2
5	85.4	8.75	9
6	95.6	9.75	10

Reference Diagram



Drawing NOT to scale and
NOT an accurate representation of stack.

Bison Engineering, Inc.**Method 320****Calibration Transfer Standard Verification**

Client: JH Baxter
Facility: Eugene
Location: Eugene, OR

Source: ACZA Scrubber
Test Date: 9/15/21

CTS Compound: Ethylene
Cylinder Concentration: 99.80 ppm
Cylinder Number: ALM020250

	FTIR Response (ppmvd)	% Difference from Cylinder	Within 5% Limit?	% Difference from Mean	Within 5% Limit?
Pre Test Instrument Check	98.16	1.64	PASS	0.10	PASS
Mid Test System Check	97.97	1.83	PASS	0.10	PASS
Post Test System Check	97.76	2.04	PASS	0.11	PASS

Bison Engineering, Inc.**Method 320****Calibration Transfer Standard Verification**

Client: JH Baxter
Facility: Eugene
Location: Eugene, OR

Source: ACZA Scrubber
Test Date: 9/16/21

CTS Compound: Ethylene
Cylinder Concentration: 99.8 ppm
Cylinder Number: ALM020250

	FTIR Response (ppmvd)	% Difference from Cylinder	Within 5% Limit?	% Difference from Mean	Within 5% Limit?
Pre Test Instrument Check	98.26	1.54	PASS	0.03	PASS
Mid Test System Check	98.21	1.59	PASS	0.03	PASS
Post Test System Check	98.04	1.76	PASS	0.09	PASS

Bison Engineering, Inc.
Method 320
Dynamic Spike Recovery Test

Client: JH Baxter
Facility: Eugene
Location: Eugene, OR
Source: ACZA Scrubber
Test Date: 9/15-16/2021

		Analyte 1	
Compound		Analyte	Dilutant
Calibration Spike Gas Concentration		Ammonia	H2O
Calibration Gas Cylinder Number		10,500	NA
		304-402222514-1	NA
Measured	Unspiked	5,193.32	2.62
Concentrations	Spiked	6,655.88	2.12
Dilution Calculations	Dilution Factor	0.81	
	Diluted Unspiked Sample Concentration	4,202.23	
	Diluted Spiked Sample Concentration	2,453.65	
	Diluted Calibration Spike Gas Concentration	2,003.82	
		2,003.82	
Spike Recovery Results (%)		122.4	
Spike Recovery Within 70-130%?		PASS	

Note: All units are ppmvd unless otherwise noted. Dilution factor is dimensionless.

NA - not applicable

Stratification Check

Client:	JH Baxter	Source:	ACZA Scrubber
Facility:	Eugene	Test Date:	9/15-16/2021
Location:	Eugene, OR		

Stack Diameter: 10.25 inches

Port Depth: 0.25 inches

3 POINT METHOD						
<u>% of diameter</u>	<u>Pt</u>	<u>Pt location</u>	<u>ppmvw</u>	<u>Diff (+/- 5%)</u>	<u>Pass/Fail</u>	
16.7%	S1	1.96	7902.59	-0.64%	PASS	
50.0%	S2	5.38	7972.65	0.24%	PASS	
83.3%	S3	8.79	7984.47	0.39%	PASS	
AVERAGE:			7953.24			

Bison Engineering, Inc.
Method 320 Ammonia Emissions
Example Calculations

Client: JH Baxter
Location: Eugene, OR
Source: ACZA Scrubber

Test Date: 9/15/2021
Treatment Step: 2

Treatment Step 2

$$\begin{aligned} 1) \text{ Retort Evacuated Space per Minute} &= \text{Total Retort Void Space} / \text{Step Length} = & 6.82 \text{ ft}^3/\text{min} \\ \text{where Total Retort Void Space:} & 1023 \text{ ft}^3 \\ \text{Step Length:} & 150 \text{ min} \end{aligned}$$

$$\begin{aligned} 2) \text{ NH}_3 \text{ lb/hr} &= (C) (\text{ft}^3/\text{min}) (\text{MW NH}_3) (1.558\text{E-}07) = & 0.11 \text{ lb/hr} \\ \text{where C:} & 6097.87 \text{ ppmvw} \\ \text{ft}^3/\text{min:} & 6.82 \\ \text{Molecular Weight NH}_3: & 17.031 \text{ g/mol} \end{aligned}$$

$$\begin{aligned} 3) \text{ lb NH}_3 &= (\text{lb/hr}) (\text{Step Length}) = & 0.28 \text{ lb} \\ \text{where lb/hr:} & 0.11 \\ \text{Step Length:} & 2.5 \text{ hr} \end{aligned}$$

Entire Treatment Cycle

$$\begin{aligned} 4) \text{ Total lb NH}_3 &= \text{sum of lb NH}_3 \text{ for Treatment Steps 2, 3, 6, 8} = & 1.24 \text{ lb} \\ \text{where lb NH}_3 \text{ Treatment Step 2:} & 0.28 \\ \text{where lb NH}_3 \text{ Treatment Step 3:} & 0.23 \\ \text{where lb NH}_3 \text{ Treatment Step 6:} & 0.38 \\ \text{where lb NH}_3 \text{ Treatment Step 8:} & 0.35 \end{aligned}$$

$$\begin{aligned} 5) \text{ lb NH}_3 / \text{ft}^3 \text{ of Treated Wood} &= \text{Total lb NH}_3 / \text{ft}^3 \text{ of Wood Treated} = & 3.23\text{E-}03 \text{ lb/ft}^3 \text{ of treated wood} \\ \text{where Total lb NH}_3: & 1.24 \\ \text{ft}^3 \text{ of Wood Treated:} & 384 \end{aligned}$$

$$\begin{aligned} 6) \text{ lb NH}_3 / \text{gal of treating solution} &= \text{Total lb NH}_3 / \text{Gallons of Treating Solution Used} = & 2.84\text{E-}03 \text{ lb/gal treating solution} \\ \text{where Total lb NH}_3: & 1.24 \\ \text{Gallons of Treating Solution:} & 436 \end{aligned}$$

**JH Baxter
ACZA Scrubber
Runs and Calibrations**

Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_0001BKG.LAB	9/15/2021	6:21:10	0.00	0.00	0.00	0.00	New Background
ACZASCRUBBER_0002.LAB	9/15/2021	6:22:17	0.00	0.01	-0.15	-0.15	
ACZASCRUBBER_0003.LAB	9/15/2021	6:23:17	0.00	0.04	-0.19	-0.19	
ACZASCRUBBER_0004.LAB	9/15/2021	6:24:17	0.00	0.00	-0.22	-0.22	
ACZASCRUBBER_0005.LAB	9/15/2021	6:25:17	0.00	-0.01	-0.25	-0.25	
ACZASCRUBBER_0006.LAB	9/15/2021	6:26:17	0.09	8.00	-0.25	-0.25	
ACZASCRUBBER_0007.LAB	9/15/2021	6:27:17	0.00	91.95	-0.24	-0.24	
ACZASCRUBBER_0008.LAB	9/15/2021	6:28:17	-0.01	91.97	-0.27	-0.27	
ACZASCRUBBER_0009.LAB	9/15/2021	6:29:17	-0.01	92.14	-0.27	-0.27	Ethylene CTS Pre-Test Verification
ACZASCRUBBER_0010.LAB	9/15/2021	6:30:17	-0.01	98.23	-0.26	-0.26	98.16
ACZASCRUBBER_0011.LAB	9/15/2021	6:31:17	-0.01	98.10	-0.27	-0.27	
ACZASCRUBBER_0012.LAB	9/15/2021	6:32:17	0.93	21.37	0.20	0.20	
ACZASCRUBBER_0013.LAB	9/15/2021	6:33:18	1.49	0.08	1.30	1.28	
ACZASCRUBBER_0014.LAB	9/15/2021	6:34:17	1.51	-0.01	1.42	1.40	
ACZASCRUBBER_0015.LAB	9/15/2021	6:35:18	1.49	-0.01	1.04	1.02	
ACZASCRUBBER_0016.LAB	9/15/2021	6:36:17	1.48	0.07	3.24	3.19	
ACZASCRUBBER_0017.LAB	9/15/2021	6:37:17	1.51	-35.67	6,765.65	6,663.37	
ACZASCRUBBER_0018.LAB	9/15/2021	6:38:18	1.88	-32.08	8,005.01	7,854.90	
ACZASCRUBBER_0019.LAB	9/15/2021	6:39:18	1.89	-33.97	8,025.76	7,874.29	Stratification Check Point 1
ACZASCRUBBER_0020.LAB	9/15/2021	6:40:18	1.85	-33.09	8,041.99	7,892.82	7,902.59
ACZASCRUBBER_0021.LAB	9/15/2021	6:41:18	1.79	-34.54	8,056.46	7,912.28	
ACZASCRUBBER_0022.LAB	9/15/2021	6:42:18	1.78	-34.79	8,074.52	7,930.98	
ACZASCRUBBER_0023.LAB	9/15/2021	6:43:18	1.81	-33.57	8,078.71	7,932.13	
ACZASCRUBBER_0024.LAB	9/15/2021	6:44:18	1.89	-33.16	8,128.79	7,975.13	
ACZASCRUBBER_0025.LAB	9/15/2021	6:45:18	1.83	-33.78	8,103.03	7,954.59	Stratification Check Point 2
ACZASCRUBBER_0026.LAB	9/15/2021	6:46:18	1.80	-32.84	8,114.11	7,967.68	7,972.65
ACZASCRUBBER_0027.LAB	9/15/2021	6:47:18	1.86	-32.87	8,154.20	8,002.49	
ACZASCRUBBER_0028.LAB	9/15/2021	6:48:18	1.78	-33.79	8,110.57	7,965.85	
ACZASCRUBBER_0029.LAB	9/15/2021	6:49:18	1.75	-32.96	8,122.46	7,980.38	
ACZASCRUBBER_0030.LAB	9/15/2021	6:50:18	1.81	-30.58	8,156.95	8,009.17	
ACZASCRUBBER_0031.LAB	9/15/2021	6:51:18	1.91	-31.17	8,127.70	7,972.20	Stratification Check Point 3
ACZASCRUBBER_0032.LAB	9/15/2021	6:52:18	1.92	-30.54	8,134.59	7,978.57	7,984.47
ACZASCRUBBER_0033.LAB	9/15/2021	6:53:18	1.91	-31.58	8,147.67	7,992.30	
ACZASCRUBBER_0034.LAB	9/15/2021	6:54:19	1.95	-32.61	8,143.53	7,985.02	
ACZASCRUBBER_0035.LAB	9/15/2021	6:55:18	1.92	-31.87	8,150.41	7,994.24	
ACZASCRUBBER_0036.LAB	9/15/2021	6:56:18	1.79	-32.09	8,159.97	8,013.63	
ACZASCRUBBER_0037.LAB	9/15/2021	6:57:19	1.94	-36.42	8,176.17	8,017.37	
ACZASCRUBBER_0038.LAB	9/15/2021	6:58:18	1.92	-31.19	8,150.59	7,994.17	
ACZASCRUBBER_0039.LAB	9/15/2021	6:59:18	1.93	-32.67	8,193.47	8,035.68	
ACZASCRUBBER_0040.LAB	9/15/2021	7:00:18	1.90	-32.31	8,207.97	8,052.09	
ACZASCRUBBER_0041.LAB	9/15/2021	7:01:19	1.91	-34.19	8,189.40	8,033.14	
ACZASCRUBBER_0042.LAB	9/15/2021	7:02:19	2.83	-15.00	5,164.99	5,018.87	
ACZASCRUBBER_0043.LAB	9/15/2021	7:03:19	1.99	-29.45	7,667.18	7,514.92	
ACZASCRUBBER_0044.LAB	9/15/2021	7:04:19	1.89	-37.12	8,188.22	8,033.18	
ACZASCRUBBER_0045.LAB	9/15/2021	7:05:19	1.84	-35.20	8,163.21	8,013.22	Start Vacuum - Treatment Step 2
ACZASCRUBBER_0046.LAB	9/15/2021	7:06:19	1.93	-32.47	8,169.70	8,012.22	
ACZASCRUBBER_0047.LAB	9/15/2021	7:07:19	1.93	-31.18	8,151.55	7,993.93	
ACZASCRUBBER_0048.LAB	9/15/2021	7:08:19	1.94	-32.07	8,162.12	8,003.59	
ACZASCRUBBER_0049.LAB	9/15/2021	7:09:19	1.86	-31.86	8,176.68	8,024.74	
ACZASCRUBBER_0050.LAB	9/15/2021	7:10:19	2.02	-36.14	8,154.64	7,990.27	
ACZASCRUBBER_0051.LAB	9/15/2021	7:11:19	1.85	-36.86	8,155.95	8,005.26	
ACZASCRUBBER_0052.LAB	9/15/2021	7:12:19	1.76	-33.96	7,974.51	7,834.43	
ACZASCRUBBER_0053.LAB	9/15/2021	7:13:19	1.81	-29.55	7,642.16	7,504.06	
ACZASCRUBBER_0054.LAB	9/15/2021	7:14:19	1.77	-26.09	7,085.43	6,959.78	
ACZASCRUBBER_0055.LAB	9/15/2021	7:15:20	2.20	-17.50	6,281.25	6,142.89	
ACZASCRUBBER_0056.LAB	9/15/2021	7:16:19	2.34	-8.60	4,859.05	4,745.13	
ACZASCRUBBER_0057.LAB	9/15/2021	7:17:19	2.49	-2.04	3,609.10	3,519.29	
ACZASCRUBBER_0058.LAB	9/15/2021	7:18:19	2.49	0.23	3,011.99	2,936.86	
ACZASCRUBBER_0059.LAB	9/15/2021	7:19:19	2.47	0.55	2,631.42	2,566.46	
ACZASCRUBBER_0060.LAB	9/15/2021	7:20:19	2.40	0.87	2,207.09	2,154.22	
ACZASCRUBBER_0061.LAB	9/15/2021	7:21:20	2.39	0.45	2,155.91	2,104.34	
ACZASCRUBBER_0062.LAB	9/15/2021	7:22:20	2.31	0.48	1,971.11	1,925.63	
ACZASCRUBBER_0063.LAB	9/15/2021	7:23:20	2.26	0.31	1,540.50	1,505.62	
ACZASCRUBBER_0064.LAB	9/15/2021	7:24:20	2.28	0.48	2,035.04	1,988.72	
ACZASCRUBBER_0065.LAB	9/15/2021	7:25:20	2.25	0.56	1,701.48	1,663.12	
ACZASCRUBBER_0066.LAB	9/15/2021	7:26:20	2.24	0.49	1,567.11	1,532.07	
ACZASCRUBBER_0067.LAB	9/15/2021	7:27:20	2.21	-1.55	1,977.46	1,933.79	
ACZASCRUBBER_0068.LAB	9/15/2021	7:28:20	1.95	-8.94	4,887.10	4,791.59	
ACZASCRUBBER_0069.LAB	9/15/2021	7:29:20	2.22	-2.30	3,512.50	3,434.50	
ACZASCRUBBER_0070.LAB	9/15/2021	7:30:20	2.26	0.41	2,263.16	2,211.99	
ACZASCRUBBER_0071.LAB	9/15/2021	7:31:20	2.22	0.20	1,873.93	1,832.28	
ACZASCRUBBER_0072.LAB	9/15/2021	7:32:20	2.18	0.34	1,542.41	1,508.80	
ACZASCRUBBER_0073.LAB	9/15/2021	7:33:20	2.09	-6.90	2,594.73	2,540.42	
ACZASCRUBBER_0074.LAB	9/15/2021	7:34:20	1.65	-17.78	6,169.70	6,067.93	
ACZASCRUBBER_0075.LAB	9/15/2021	7:35:20	2.08	-6.11	4,272.78	4,183.91	
ACZASCRUBBER_0076.LAB	9/15/2021	7:36:20	2.11	-4.48	3,844.42	3,763.16	

**JH Baxter
ACZA Scrubber
Runs and Calibrations**

Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_0077.LAB	9/15/2021	7:37:20	1.58	-18.00	6,244.42	6,145.44	
ACZASCRUBBER_0078.LAB	9/15/2021	7:38:20	1.26	-28.13	7,404.37	7,310.93	
ACZASCRUBBER_0079.LAB	9/15/2021	7:39:20	1.31	-24.55	7,107.59	7,014.70	
ACZASCRUBBER_0080.LAB	9/15/2021	7:40:21	1.67	-21.26	6,576.82	6,467.15	
ACZASCRUBBER_0081.LAB	9/15/2021	7:41:21	1.67	-16.39	6,044.03	5,942.92	
ACZASCRUBBER_0082.LAB	9/15/2021	7:42:20	1.88	-11.35	5,199.12	5,101.36	
ACZASCRUBBER_0083.LAB	9/15/2021	7:43:20	1.75	-13.00	5,467.44	5,371.62	
ACZASCRUBBER_0084.LAB	9/15/2021	7:44:21	1.35	-23.71	7,031.04	6,935.90	
ACZASCRUBBER_0085.LAB	9/15/2021	7:45:20	1.28	-27.52	7,471.47	7,375.62	
ACZASCRUBBER_0086.LAB	9/15/2021	7:46:21	1.31	-24.27	7,152.40	7,058.49	
ACZASCRUBBER_0087.LAB	9/15/2021	7:47:21	1.41	-24.39	6,952.73	6,854.80	
ACZASCRUBBER_0088.LAB	9/15/2021	7:48:21	1.31	-25.52	7,287.84	7,192.23	
ACZASCRUBBER_0089.LAB	9/15/2021	7:49:21	1.28	-26.75	7,512.35	7,416.28	
ACZASCRUBBER_0090.LAB	9/15/2021	7:50:21	1.27	-28.57	7,526.36	7,430.66	
ACZASCRUBBER_0091.LAB	9/15/2021	7:51:21	1.27	-26.73	7,511.75	7,416.25	
ACZASCRUBBER_0092.LAB	9/15/2021	7:52:21	1.29	-29.28	7,473.41	7,376.73	
ACZASCRUBBER_0093.LAB	9/15/2021	7:53:21	1.36	-25.02	7,002.06	6,906.80	
ACZASCRUBBER_0094.LAB	9/15/2021	7:54:21	1.32	-26.37	7,353.88	7,256.86	
ACZASCRUBBER_0095.LAB	9/15/2021	7:55:21	1.29	-26.16	7,473.47	7,377.18	
ACZASCRUBBER_0096.LAB	9/15/2021	7:56:21	1.34	-25.90	7,406.69	7,307.22	
ACZASCRUBBER_0097.LAB	9/15/2021	7:57:21	1.30	-27.32	7,438.37	7,341.50	
ACZASCRUBBER_0098.LAB	9/15/2021	7:58:21	1.32	-27.38	7,444.65	7,346.40	
ACZASCRUBBER_0099.LAB	9/15/2021	7:59:21	1.29	-28.48	7,493.97	7,396.98	
ACZASCRUBBER_0100.LAB	9/15/2021	8:00:21	1.30	-27.42	7,511.81	7,414.13	
ACZASCRUBBER_0101.LAB	9/15/2021	8:01:21	1.29	-27.30	7,487.23	7,390.58	
ACZASCRUBBER_0102.LAB	9/15/2021	8:02:21	1.38	-23.98	7,039.21	6,942.08	
ACZASCRUBBER_0103.LAB	9/15/2021	8:03:21	1.34	-26.02	7,439.53	7,340.05	
ACZASCRUBBER_0104.LAB	9/15/2021	8:04:22	1.36	-25.39	7,296.47	7,197.38	
ACZASCRUBBER_0105.LAB	9/15/2021	8:05:21	1.36	-25.02	7,458.80	7,357.60	
ACZASCRUBBER_0106.LAB	9/15/2021	8:06:21	1.39	-24.58	7,436.59	7,333.11	
ACZASCRUBBER_0107.LAB	9/15/2021	8:07:21	1.38	-24.30	7,447.73	7,344.83	
ACZASCRUBBER_0108.LAB	9/15/2021	8:08:22	1.36	-27.99	7,421.59	7,320.57	
ACZASCRUBBER_0109.LAB	9/15/2021	8:09:22	1.36	-24.80	7,187.56	7,090.17	
ACZASCRUBBER_0110.LAB	9/15/2021	8:10:22	1.45	-24.54	7,406.79	7,299.21	
ACZASCRUBBER_0111.LAB	9/15/2021	8:11:22	1.43	-25.96	7,362.37	7,256.73	
ACZASCRUBBER_0112.LAB	9/15/2021	8:12:22	1.34	-26.42	7,229.46	7,132.24	
ACZASCRUBBER_0113.LAB	9/15/2021	8:13:22	1.40	-25.97	7,391.57	7,288.07	
ACZASCRUBBER_0114.LAB	9/15/2021	8:14:22	1.38	-24.97	7,085.30	6,987.20	
ACZASCRUBBER_0115.LAB	9/15/2021	8:15:22	1.50	-23.35	7,157.89	7,050.50	
ACZASCRUBBER_0116.LAB	9/15/2021	8:16:22	1.51	-23.73	7,325.78	7,215.31	
ACZASCRUBBER_0117.LAB	9/15/2021	8:17:22	1.43	-25.69	7,465.88	7,359.30	
ACZASCRUBBER_0118.LAB	9/15/2021	8:18:22	1.44	-24.50	7,467.31	7,359.53	
ACZASCRUBBER_0119.LAB	9/15/2021	8:19:22	1.49	-24.22	7,399.66	7,289.60	
ACZASCRUBBER_0120.LAB	9/15/2021	8:20:22	1.54	-24.17	7,176.52	7,066.08	
ACZASCRUBBER_0121.LAB	9/15/2021	8:21:22	1.55	-23.55	6,840.39	6,734.44	
ACZASCRUBBER_0122.LAB	9/15/2021	8:22:23	1.52	-23.50	6,819.26	6,715.30	
ACZASCRUBBER_0123.LAB	9/15/2021	8:23:22	1.54	-23.04	7,123.24	7,013.42	
ACZASCRUBBER_0124.LAB	9/15/2021	8:24:22	1.77	-17.56	6,171.17	6,062.17	
ACZASCRUBBER_0125.LAB	9/15/2021	8:25:23	1.90	-11.76	5,494.64	5,390.24	
ACZASCRUBBER_0126.LAB	9/15/2021	8:26:22	1.83	-14.32	5,736.51	5,631.32	
ACZASCRUBBER_0127.LAB	9/15/2021	8:27:23	1.84	-16.31	6,111.62	5,999.10	
ACZASCRUBBER_0128.LAB	9/15/2021	8:28:22	1.78	-18.05	6,304.74	6,192.32	
ACZASCRUBBER_0129.LAB	9/15/2021	8:29:23	1.83	-20.34	6,393.95	6,276.70	
ACZASCRUBBER_0130.LAB	9/15/2021	8:30:22	1.78	-22.18	6,544.96	6,428.20	
ACZASCRUBBER_0131.LAB	9/15/2021	8:31:23	1.83	-19.34	6,414.55	6,296.90	
ACZASCRUBBER_0132.LAB	9/15/2021	8:32:22	1.82	-19.77	6,467.54	6,349.71	
ACZASCRUBBER_0133.LAB	9/15/2021	8:33:23	1.77	-21.32	6,604.01	6,487.18	
ACZASCRUBBER_0134.LAB	9/15/2021	8:34:23	1.72	-18.66	6,298.03	6,189.53	
ACZASCRUBBER_0135.LAB	9/15/2021	8:35:23	1.96	-12.70	5,490.03	5,382.28	
ACZASCRUBBER_0136.LAB	9/15/2021	8:36:23	1.97	-11.51	5,352.40	5,246.92	
ACZASCRUBBER_0137.LAB	9/15/2021	8:37:23	1.85	-16.61	6,056.95	5,944.85	
ACZASCRUBBER_0138.LAB	9/15/2021	8:38:23	1.81	-17.20	6,057.04	5,947.63	
ACZASCRUBBER_0139.LAB	9/15/2021	8:39:23	1.82	-19.24	6,484.56	6,366.22	
ACZASCRUBBER_0140.LAB	9/15/2021	8:40:23	1.65	-20.50	6,787.18	6,675.26	
ACZASCRUBBER_0141.LAB	9/15/2021	8:41:23	1.64	-20.78	6,584.01	6,475.94	
ACZASCRUBBER_0142.LAB	9/15/2021	8:42:23	1.60	-22.28	6,669.83	6,563.40	
ACZASCRUBBER_0143.LAB	9/15/2021	8:43:23	1.63	-20.51	6,743.78	6,634.02	
ACZASCRUBBER_0144.LAB	9/15/2021	8:44:23	1.75	-20.80	6,606.47	6,490.66	
ACZASCRUBBER_0145.LAB	9/15/2021	8:45:23	1.72	-17.26	6,190.32	6,084.14	
ACZASCRUBBER_0146.LAB	9/15/2021	8:46:23	1.91	-10.86	5,446.26	5,342.34	
ACZASCRUBBER_0147.LAB	9/15/2021	8:47:23	1.86	-15.09	5,821.36	5,713.24	
ACZASCRUBBER_0148.LAB	9/15/2021	8:48:23	1.82	-17.71	6,403.55	6,286.83	
ACZASCRUBBER_0149.LAB	9/15/2021	8:49:23	1.66	-19.75	6,611.72	6,502.03	
ACZASCRUBBER_0150.LAB	9/15/2021	8:50:23	1.93	-12.97	5,510.75	5,404.54	
ACZASCRUBBER_0151.LAB	9/15/2021	8:51:23	1.87	-13.56	5,618.32	5,513.20	
ACZASCRUBBER_0152.LAB	9/15/2021	8:52:23	1.91	-17.70	6,217.01	6,098.09	
ACZASCRUBBER_0153.LAB	9/15/2021	8:53:23	1.86	-16.24	5,911.47	5,801.65	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_0154.LAB	9/15/2021	8:54:24	1.83	-15.35	5,957.71	5,848.76	
ACZASCRUBBER_0155.LAB	9/15/2021	8:55:23	1.90	-12.93	5,605.89	5,499.60	
ACZASCRUBBER_0156.LAB	9/15/2021	8:56:24	1.97	-15.53	5,905.80	5,789.41	
ACZASCRUBBER_0157.LAB	9/15/2021	8:57:24	1.87	-18.50	6,530.24	6,408.18	
ACZASCRUBBER_0158.LAB	9/15/2021	8:58:24	1.87	-14.28	5,769.92	5,661.88	
ACZASCRUBBER_0159.LAB	9/15/2021	8:59:24	1.89	-14.09	5,742.78	5,634.38	
ACZASCRUBBER_0160.LAB	9/15/2021	9:00:24	2.10	-8.59	4,922.60	4,819.01	
ACZASCRUBBER_0161.LAB	9/15/2021	9:01:24	1.94	-12.97	5,518.71	5,411.86	
ACZASCRUBBER_0162.LAB	9/15/2021	9:02:24	1.76	-21.21	6,856.11	6,735.27	
ACZASCRUBBER_0163.LAB	9/15/2021	9:03:24	1.60	-23.44	7,027.66	6,915.53	
ACZASCRUBBER_0164.LAB	9/15/2021	9:04:24	1.83	-19.07	6,576.15	6,455.61	
ACZASCRUBBER_0165.LAB	9/15/2021	9:05:24	1.87	-14.85	5,848.70	5,739.30	
ACZASCRUBBER_0166.LAB	9/15/2021	9:06:24	1.90	-13.12	5,673.08	5,565.43	
ACZASCRUBBER_0167.LAB	9/15/2021	9:07:24	2.03	-9.90	5,237.71	5,131.16	
ACZASCRUBBER_0168.LAB	9/15/2021	9:08:24	1.97	-12.07	5,514.21	5,405.86	
ACZASCRUBBER_0169.LAB	9/15/2021	9:09:24	1.97	-16.17	6,169.05	6,047.56	
ACZASCRUBBER_0170.LAB	9/15/2021	9:10:24	1.74	-21.20	6,950.39	6,829.22	
ACZASCRUBBER_0171.LAB	9/15/2021	9:11:25	1.73	-23.48	7,193.50	7,069.06	
ACZASCRUBBER_0172.LAB	9/15/2021	9:12:25	1.79	-24.02	7,175.28	7,046.99	
ACZASCRUBBER_0173.LAB	9/15/2021	9:13:24	1.79	-22.77	7,174.84	7,046.67	
ACZASCRUBBER_0174.LAB	9/15/2021	9:14:24	1.68	-24.66	7,297.68	7,174.86	
ACZASCRUBBER_0175.LAB	9/15/2021	9:15:24	1.81	-22.10	7,117.74	6,988.88	
ACZASCRUBBER_0176.LAB	9/15/2021	9:16:24	2.18	-21.80	6,989.36	6,837.20	
ACZASCRUBBER_0177.LAB	9/15/2021	9:17:24	1.92	-21.38	7,005.07	6,870.43	
ACZASCRUBBER_0178.LAB	9/15/2021	9:18:24	1.81	-23.11	7,074.28	6,946.19	
ACZASCRUBBER_0179.LAB	9/15/2021	9:19:25	1.77	-18.94	6,650.77	6,533.00	
ACZASCRUBBER_0180.LAB	9/15/2021	9:20:25	2.37	-19.85	7,127.08	6,958.28	
ACZASCRUBBER_0181.LAB	9/15/2021	9:21:25	2.08	-20.81	6,987.74	6,842.36	
ACZASCRUBBER_0182.LAB	9/15/2021	9:22:25	1.73	-23.87	7,248.16	7,122.65	
ACZASCRUBBER_0183.LAB	9/15/2021	9:23:25	1.77	-24.25	7,245.04	7,117.04	
ACZASCRUBBER_0184.LAB	9/15/2021	9:24:25	1.79	-23.27	7,310.81	7,180.05	
ACZASCRUBBER_0185.LAB	9/15/2021	9:25:25	1.81	-24.08	7,298.95	7,167.16	
ACZASCRUBBER_0186.LAB	9/15/2021	9:26:25	1.82	-23.09	7,131.63	7,001.84	
ACZASCRUBBER_0187.LAB	9/15/2021	9:27:25	1.81	-23.47	7,218.96	7,088.04	
ACZASCRUBBER_0188.LAB	9/15/2021	9:28:25	1.88	-21.40	7,010.74	6,878.92	
ACZASCRUBBER_0189.LAB	9/15/2021	9:29:25	1.86	-21.80	6,994.91	6,865.07	
ACZASCRUBBER_0190.LAB	9/15/2021	9:30:25	1.89	-22.72	7,113.21	6,978.78	
ACZASCRUBBER_0191.LAB	9/15/2021	9:31:25	1.87	-24.63	7,271.49	7,135.64	
ACZASCRUBBER_0192.LAB	9/15/2021	9:32:25	1.82	-23.88	7,247.24	7,115.09	
ACZASCRUBBER_0193.LAB	9/15/2021	9:33:25	1.91	-21.50	6,181.34	6,063.14	
ACZASCRUBBER_0194.LAB	9/15/2021	9:34:25	2.37	-1.71	2,635.65	2,573.28	
ACZASCRUBBER_0195.LAB	9/15/2021	9:35:26	2.21	0.28	1,295.74	1,267.16	End Vacuum - Treatment Step 2
				1.77	6,204.03	6,097.87	Average Treatment Step 2
ACZASCRUBBER_0196.LAB	9/15/2021	9:36:25	2.09	0.28	901.59	882.77	Start Fill/Heat - Treatment Step 3
ACZASCRUBBER_0197.LAB	9/15/2021	9:37:25	2.05	0.21	739.09	723.95	
ACZASCRUBBER_0198.LAB	9/15/2021	9:38:26	2.01	0.20	619.96	607.48	
ACZASCRUBBER_0199.LAB	9/15/2021	9:39:25	1.99	0.10	522.81	512.41	
ACZASCRUBBER_0200.LAB	9/15/2021	9:40:26	1.98	0.03	425.45	417.05	
ACZASCRUBBER_0201.LAB	9/15/2021	9:41:26	1.96	0.13	329.21	322.76	
ACZASCRUBBER_0202.LAB	9/15/2021	9:42:25	1.95	-0.01	238.50	233.85	
ACZASCRUBBER_0203.LAB	9/15/2021	9:43:26	1.96	0.02	170.56	167.21	
ACZASCRUBBER_0204.LAB	9/15/2021	9:44:26	1.94	-0.02	118.84	116.53	
ACZASCRUBBER_0205.LAB	9/15/2021	9:45:26	1.94	0.06	88.25	86.54	
ACZASCRUBBER_0206.LAB	9/15/2021	9:46:26	1.95	-2.36	499.41	489.67	
ACZASCRUBBER_0207.LAB	9/15/2021	9:47:26	1.96	-14.64	5,468.35	5,361.43	
ACZASCRUBBER_0208.LAB	9/15/2021	9:48:26	1.62	-21.65	6,889.29	6,777.39	
ACZASCRUBBER_0209.LAB	9/15/2021	9:49:26	1.59	-22.89	7,028.16	6,916.49	
ACZASCRUBBER_0210.LAB	9/15/2021	9:50:26	1.70	-20.92	6,600.63	6,488.45	
ACZASCRUBBER_0211.LAB	9/15/2021	9:51:26	1.90	-16.86	6,133.38	6,017.07	
ACZASCRUBBER_0212.LAB	9/15/2021	9:52:26	1.88	-22.52	7,055.11	6,922.76	
ACZASCRUBBER_0213.LAB	9/15/2021	9:53:26	1.87	-22.45	7,308.50	7,171.63	
ACZASCRUBBER_0214.LAB	9/15/2021	9:54:26	1.99	-22.28	7,254.74	7,110.48	
ACZASCRUBBER_0215.LAB	9/15/2021	9:55:27	2.02	-23.34	7,363.52	7,214.41	
ACZASCRUBBER_0216.LAB	9/15/2021	9:56:26	2.08	-22.71	7,341.52	7,188.58	
ACZASCRUBBER_0217.LAB	9/15/2021	9:57:26	2.08	-22.18	7,323.18	7,170.75	
ACZASCRUBBER_0218.LAB	9/15/2021	9:58:27	2.22	-20.91	7,207.03	7,047.32	
ACZASCRUBBER_0219.LAB	9/15/2021	9:59:27	2.20	-23.57	7,252.19	7,092.37	
ACZASCRUBBER_0220.LAB	9/15/2021	10:00:26	2.12	-23.53	7,314.13	7,158.73	
ACZASCRUBBER_0221.LAB	9/15/2021	10:01:27	2.20	-24.14	7,434.45	7,270.54	
ACZASCRUBBER_0222.LAB	9/15/2021	10:02:26	2.11	-24.32	7,375.89	7,220.61	
ACZASCRUBBER_0223.LAB	9/15/2021	10:03:26	2.14	-23.87	7,293.46	7,137.33	
ACZASCRUBBER_0224.LAB	9/15/2021	10:04:27	2.20	-23.00	7,263.62	7,103.80	
ACZASCRUBBER_0225.LAB	9/15/2021	10:05:27	2.18	-23.21	7,412.03	7,250.18	
ACZASCRUBBER_0226.LAB	9/15/2021	10:06:27	2.08	-23.68	7,297.37	7,145.84	
ACZASCRUBBER_0227.LAB	9/15/2021	10:07:27	2.16	-24.02	7,352.93	7,194.32	
ACZASCRUBBER_0228.LAB	9/15/2021	10:08:27	2.10	-23.27	7,355.04	7,200.37	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_0229.LAB	9/15/2021	10:09:27	2.13	-21.43	7,023.66	6,874.10	
ACZASCRUBBER_0230.LAB	9/15/2021	10:10:27	2.02	-22.73	7,139.96	6,995.45	
ACZASCRUBBER_0231.LAB	9/15/2021	10:11:27	2.12	-20.12	6,909.00	6,762.50	
ACZASCRUBBER_0232.LAB	9/15/2021	10:12:27	2.16	-19.62	6,752.58	6,606.59	
ACZASCRUBBER_0233.LAB	9/15/2021	10:13:27	2.14	-19.07	6,757.66	6,612.84	
ACZASCRUBBER_0234.LAB	9/15/2021	10:14:27	2.01	-17.91	6,631.58	6,498.40	
ACZASCRUBBER_0235.LAB	9/15/2021	10:15:27	2.03	-18.47	6,677.85	6,542.40	
ACZASCRUBBER_0236.LAB	9/15/2021	10:16:27	2.22	-14.70	5,873.71	5,743.39	
ACZASCRUBBER_0237.LAB	9/15/2021	10:17:27	2.82	-3.55	4,003.61	3,890.61	
ACZASCRUBBER_0238.LAB	9/15/2021	10:18:27	2.33	-13.70	5,778.12	5,643.58	
ACZASCRUBBER_0239.LAB	9/15/2021	10:19:27	2.25	-18.47	6,785.02	6,632.32	
ACZASCRUBBER_0240.LAB	9/15/2021	10:20:27	2.14	-19.26	6,859.16	6,712.14	End Fill/Heat - Treatment Step 3
				2.06	5,292.67	5,183.01	Average Treatment Step 3
ACZASCRUBBER_0241.LAB	9/15/2021	10:21:27	2.34	-18.55	6,453.23	6,301.98	
ACZASCRUBBER_0242.LAB	9/15/2021	10:22:27	2.66	-7.19	4,767.17	4,640.45	
ACZASCRUBBER_0243.LAB	9/15/2021	10:23:27	2.44	-10.15	5,093.86	4,969.55	
ACZASCRUBBER_0244.LAB	9/15/2021	10:24:27	2.59	-7.36	4,512.19	4,395.45	
ACZASCRUBBER_0245.LAB	9/15/2021	10:25:27	2.15	-19.11	6,740.11	6,595.35	
ACZASCRUBBER_0246.LAB	9/15/2021	10:26:27	2.05	-20.14	6,679.52	6,542.44	
ACZASCRUBBER_0247.LAB	9/15/2021	10:27:27	2.09	-19.43	6,826.44	6,683.93	
ACZASCRUBBER_0248.LAB	9/15/2021	10:28:28	2.39	-16.86	6,412.34	6,259.06	
ACZASCRUBBER_0249.LAB	9/15/2021	10:29:28	2.10	-20.28	6,956.25	6,810.11	
ACZASCRUBBER_0250.LAB	9/15/2021	10:30:12	2.48	-15.18	6,276.30	6,120.61	
ACZASCRUBBER_0251.LAB	9/15/2021	10:30:21	2.42	-15.03	6,096.05	5,948.68	
ACZASCRUBBER_0252.LAB	9/15/2021	10:30:31	2.34	-17.69	6,313.06	6,165.43	
ACZASCRUBBER_0253.LAB	9/15/2021	10:30:40	2.21	-17.41	6,538.74	6,394.50	
ACZASCRUBBER_0254.LAB	9/15/2021	10:30:50	2.19	-17.43	6,612.60	6,467.72	
ACZASCRUBBER_0255.LAB	9/15/2021	10:30:59	2.28	-20.15	6,744.75	6,590.86	
ACZASCRUBBER_0256.LAB	9/15/2021	10:31:08	2.15	-21.06	7,139.35	6,986.04	
ACZASCRUBBER_0257.LAB	9/15/2021	10:31:18	2.01	-25.28	7,273.22	7,127.14	
ACZASCRUBBER_0258.LAB	9/15/2021	10:31:27	2.04	-23.80	7,316.23	7,167.10	
ACZASCRUBBER_0259.LAB	9/15/2021	10:31:37	2.24	-21.62	7,287.35	7,124.34	
ACZASCRUBBER_0260.LAB	9/15/2021	10:31:46	2.12	-19.50	7,176.33	7,023.97	
ACZASCRUBBER_0261.LAB	9/15/2021	10:31:56	2.16	-22.76	7,119.92	6,965.92	
ACZASCRUBBER_0262.LAB	9/15/2021	10:32:05	2.13	-21.54	7,215.87	7,062.11	
ACZASCRUBBER_0263.LAB	9/15/2021	10:32:14	2.23	-23.66	7,267.17	7,104.86	
ACZASCRUBBER_0264.LAB	9/15/2021	10:32:24	2.14	-19.66	7,275.06	7,119.13	
ACZASCRUBBER_0265.LAB	9/15/2021	10:32:33	2.17	-23.34	7,233.80	7,076.57	
ACZASCRUBBER_0266.LAB	9/15/2021	10:32:42	2.22	-23.65	7,174.22	7,015.12	
ACZASCRUBBER_0267.LAB	9/15/2021	10:32:52	2.23	-20.37	7,199.36	7,038.78	
ACZASCRUBBER_0268.LAB	9/15/2021	10:33:01	2.12	-21.20	6,975.82	6,827.86	
ACZASCRUBBER_0269.LAB	9/15/2021	10:33:11	2.20	-19.81	6,769.34	6,620.48	
ACZASCRUBBER_0270.LAB	9/15/2021	10:33:20	2.28	-18.98	6,635.22	6,484.03	
ACZASCRUBBER_0271.LAB	9/15/2021	10:33:29	2.28	-16.50	6,436.81	6,290.21	
ACZASCRUBBER_0272.LAB	9/15/2021	10:33:39	2.43	-15.10	6,132.40	5,983.17	
ACZASCRUBBER_0273.LAB	9/15/2021	10:33:48	2.55	-10.19	5,716.09	5,570.27	
ACZASCRUBBER_0274.LAB	9/15/2021	10:33:58	2.64	-5.46	5,472.23	5,327.70	
ACZASCRUBBER_0275.LAB	9/15/2021	10:34:07	2.51	-8.72	5,426.17	5,289.84	
ACZASCRUBBER_0276.LAB	9/15/2021	10:34:16	2.47	-8.80	5,205.23	5,076.54	
ACZASCRUBBER_0277.LAB	9/15/2021	10:34:25	2.42	-8.65	5,283.09	5,155.16	
ACZASCRUBBER_0278.LAB	9/15/2021	10:34:35	2.18	-13.58	5,861.87	5,734.08	
ACZASCRUBBER_0279.LAB	9/15/2021	10:34:44	2.16	-16.04	5,937.52	5,809.11	
ACZASCRUBBER_0280.LAB	9/15/2021	10:34:54	2.11	-13.79	5,874.99	5,750.86	
ACZASCRUBBER_0281.LAB	9/15/2021	10:35:03	2.18	-12.44	5,762.67	5,636.84	
ACZASCRUBBER_0282.LAB	9/15/2021	10:35:12	2.13	-12.55	5,834.91	5,710.87	
ACZASCRUBBER_0283.LAB	9/15/2021	10:35:22	2.14	-13.84	6,218.77	6,085.53	
ACZASCRUBBER_0284.LAB	9/15/2021	10:35:31	2.03	-19.00	6,506.83	6,374.51	
ACZASCRUBBER_0285.LAB	9/15/2021	10:35:40	1.89	-15.37	6,658.05	6,532.10	
ACZASCRUBBER_0286.LAB	9/15/2021	10:35:50	1.95	-16.30	6,544.49	6,416.86	
ACZASCRUBBER_0287.LAB	9/15/2021	10:35:59	2.12	-14.96	6,528.88	6,390.70	
ACZASCRUBBER_0288.LAB	9/15/2021	10:36:09	2.02	-17.48	6,490.60	6,359.63	
ACZASCRUBBER_0289.LAB	9/15/2021	10:36:18	1.93	-17.90	6,650.95	6,522.47	
ACZASCRUBBER_0290.LAB	9/15/2021	10:36:27	1.95	-18.73	6,592.09	6,463.22	
ACZASCRUBBER_0291.LAB	9/15/2021	10:36:37	2.19	-17.64	6,383.62	6,243.51	
ACZASCRUBBER_0292.LAB	9/15/2021	10:36:46	2.12	-13.71	6,005.28	5,878.12	
ACZASCRUBBER_0293.LAB	9/15/2021	10:36:55	2.11	-14.83	5,945.89	5,820.67	
ACZASCRUBBER_0294.LAB	9/15/2021	10:37:05	2.00	-17.86	6,526.82	6,396.27	
ACZASCRUBBER_0295.LAB	9/15/2021	10:37:14	1.92	-19.01	6,661.18	6,533.52	Spiked with 10,500 ppm NH3
ACZASCRUBBER_0296.LAB	9/15/2021	10:37:24	2.05	-14.81	6,436.46	6,304.23	
ACZASCRUBBER_0297.LAB	9/15/2021	10:37:33	2.17	-17.69	6,287.47	6,151.08	Average H2O
ACZASCRUBBER_0298.LAB	9/15/2021	10:37:42	2.17	-16.50	6,394.05	6,255.05	
ACZASCRUBBER_0299.LAB	9/15/2021	10:37:52	2.11	-17.09	6,612.15	6,472.71	Average NH3
ACZASCRUBBER_0300.LAB	9/15/2021	10:38:01	2.03	-19.78	6,978.70	6,837.19	
ACZASCRUBBER_0301.LAB	9/15/2021	10:38:11	2.05	-22.05	7,265.12	7,116.24	
ACZASCRUBBER_0302.LAB	9/15/2021	10:38:20	2.15	-20.58	7,164.18	7,009.79	
ACZASCRUBBER_0303.LAB	9/15/2021	10:38:29	2.10	-24.67	7,162.06	7,011.54	

2.12

6,655.88

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_0304.LAB	9/15/2021	10:38:39	2.21	-20.86	6,952.36	6,799.03	
ACZASCRUBBER_0305.LAB	9/15/2021	10:38:48	2.26	-15.53	6,827.86	6,673.56	
ACZASCRUBBER_0306.LAB	9/15/2021	10:38:58	2.22	-20.99	6,858.63	6,706.59	
ACZASCRUBBER_0307.LAB	9/15/2021	10:39:07	2.17	-17.99	6,639.98	6,496.19	
ACZASCRUBBER_0308.LAB	9/15/2021	10:39:16	2.34	-18.16	6,516.72	6,364.06	
ACZASCRUBBER_0309.LAB	9/15/2021	10:39:26	2.26	-17.53	6,185.11	6,045.48	
ACZASCRUBBER_0310.LAB	9/15/2021	10:39:35	2.30	-14.04	5,831.13	5,696.72	
ACZASCRUBBER_0311.LAB	9/15/2021	10:39:45	2.46	-10.76	5,381.59	5,249.06	
ACZASCRUBBER_0312.LAB	9/15/2021	10:39:54	2.23	-14.10	6,021.34	5,886.91	
ACZASCRUBBER_0313.LAB	9/15/2021	10:40:03	2.25	-17.39	6,428.24	6,283.39	
ACZASCRUBBER_0314.LAB	9/15/2021	10:40:13	2.21	-15.68	6,438.91	6,296.63	
ACZASCRUBBER_0315.LAB	9/15/2021	10:40:22	2.24	-19.01	6,692.78	6,543.08	
ACZASCRUBBER_0316.LAB	9/15/2021	10:40:31	2.16	-20.10	6,915.61	6,765.92	
ACZASCRUBBER_0317.LAB	9/15/2021	10:40:41	2.04	-20.61	6,956.06	6,814.00	
ACZASCRUBBER_0318.LAB	9/15/2021	10:40:50	2.21	-16.69	6,515.71	6,371.54	Unspiked
ACZASCRUBBER_0319.LAB	9/15/2021	10:41:00	2.41	-17.24	6,325.62	6,173.47	
ACZASCRUBBER_0320.LAB	9/15/2021	10:41:09	2.39	-14.61	6,328.66	6,177.46	Average H2O
ACZASCRUBBER_0321.LAB	9/15/2021	10:41:18	2.39	-13.35	5,977.74	5,835.04	
ACZASCRUBBER_0322.LAB	9/15/2021	10:41:28	2.53	-11.57	5,474.88	5,336.23	Average NH3
ACZASCRUBBER_0323.LAB	9/15/2021	10:41:37	2.69	-7.77	5,023.72	4,888.79	
ACZASCRUBBER_0324.LAB	9/15/2021	10:41:46	2.84	-7.40	4,721.13	4,586.99	
ACZASCRUBBER_0325.LAB	9/15/2021	10:41:56	2.92	-4.22	4,284.37	4,159.08	
ACZASCRUBBER_0326.LAB	9/15/2021	10:42:05	2.91	-5.07	4,476.60	4,346.14	
ACZASCRUBBER_0327.LAB	9/15/2021	10:42:15	2.92	-4.65	4,367.56	4,239.95	
ACZASCRUBBER_0328.LAB	9/15/2021	10:42:24	2.85	-6.68	4,655.97	4,523.44	
ACZASCRUBBER_0329.LAB	9/15/2021	10:42:33	2.40	-13.34	5,821.09	5,681.66	
ACZASCRUBBER_0330.LAB	9/15/2021	10:42:43	1.71	7.70	4,700.66	4,620.39	
ACZASCRUBBER_0331.LAB	9/15/2021	10:42:52	0.18	91.88	357.84	357.19	
ACZASCRUBBER_0332.LAB	9/15/2021	10:43:01	0.03	97.07	96.22	96.19	
ACZASCRUBBER_0333.LAB	9/15/2021	10:43:11	0.01	97.26	66.55	66.54	
ACZASCRUBBER_0334.LAB	9/15/2021	10:43:20	0.01	97.96	53.51	53.50	
ACZASCRUBBER_0335.LAB	9/15/2021	10:43:30	-0.01	98.03	45.16	45.16	Ethylene CTS Verification
ACZASCRUBBER_0336.LAB	9/15/2021	10:43:39	-0.01	97.82	39.40	39.40	
ACZASCRUBBER_0337.LAB	9/15/2021	10:43:48	-0.01	97.93	35.28	35.29	
ACZASCRUBBER_0338.LAB	9/15/2021	10:43:58	-0.02	97.98	31.85	31.86	
ACZASCRUBBER_0339.LAB	9/15/2021	10:44:07	0.00	97.92	29.37	29.37	
ACZASCRUBBER_0340.LAB	9/15/2021	10:44:16	-0.02	97.83	26.88	26.88	
ACZASCRUBBER_0341.LAB	9/15/2021	10:44:26	-0.01	98.30	25.77	25.77	
ACZASCRUBBER_0342.LAB	9/15/2021	10:44:35	0.29	21.14	695.81	693.78	
ACZASCRUBBER_0343.LAB	9/15/2021	10:44:45	0.03	0.51	82.07	82.04	
ACZASCRUBBER_0344.LAB	9/15/2021	10:44:54	0.00	0.09	44.41	44.41	
ACZASCRUBBER_0345.LAB	9/15/2021	10:45:04	-0.01	-0.03	34.31	34.31	
ACZASCRUBBER_0346.LAB	9/15/2021	10:45:13	-0.01	0.14	29.29	29.30	
ACZASCRUBBER_0347.LAB	9/15/2021	10:45:22	-0.01	-0.03	25.93	25.94	
ACZASCRUBBER_0348.LAB	9/15/2021	10:45:32	-0.02	0.01	23.52	23.53	
ACZASCRUBBER_0349.LAB	9/15/2021	10:45:41	-0.02	0.07	21.71	21.71	
ACZASCRUBBER_0936.LAB	9/15/2021	13:43:42	2.31	-27.11	8,170.76	7,981.64	
ACZASCRUBBER_0937.LAB	9/15/2021	13:44:43	2.34	-28.10	8,213.64	8,021.20	
ACZASCRUBBER_0938.LAB	9/15/2021	13:45:43	2.36	-33.57	8,255.31	8,060.54	Start Vacuum - Treatment Step 6
ACZASCRUBBER_0939.LAB	9/15/2021	13:46:43	2.34	-25.88	8,259.46	8,066.08	
ACZASCRUBBER_0940.LAB	9/15/2021	13:47:43	2.36	-26.78	8,287.53	8,091.68	
ACZASCRUBBER_0941.LAB	9/15/2021	13:48:43	2.46	-34.93	8,321.02	8,116.62	
ACZASCRUBBER_0942.LAB	9/15/2021	13:49:43	2.45	-27.83	8,324.25	8,120.11	
ACZASCRUBBER_0943.LAB	9/15/2021	13:50:43	2.44	-35.16	8,337.04	8,133.63	
ACZASCRUBBER_0944.LAB	9/15/2021	13:51:43	2.34	-27.78	8,328.88	8,134.37	
ACZASCRUBBER_0945.LAB	9/15/2021	13:52:43	2.45	-35.85	8,362.38	8,157.33	
ACZASCRUBBER_0946.LAB	9/15/2021	13:53:43	2.46	-28.56	8,370.56	8,164.38	
ACZASCRUBBER_0947.LAB	9/15/2021	13:54:43	2.49	-36.61	8,378.94	8,170.16	
ACZASCRUBBER_0948.LAB	9/15/2021	13:55:43	2.45	-29.66	8,380.65	8,175.25	
ACZASCRUBBER_0949.LAB	9/15/2021	13:56:43	2.43	-36.18	8,398.28	8,193.90	
ACZASCRUBBER_0950.LAB	9/15/2021	13:57:43	2.49	-34.32	8,380.01	8,171.62	
ACZASCRUBBER_0951.LAB	9/15/2021	13:58:43	2.49	-35.98	8,383.44	8,174.42	
ACZASCRUBBER_0952.LAB	9/15/2021	13:59:43	2.46	-36.26	8,394.75	8,187.89	
ACZASCRUBBER_0953.LAB	9/15/2021	14:00:43	2.46	-35.77	8,383.10	8,176.93	
ACZASCRUBBER_0954.LAB	9/15/2021	14:01:43	2.49	-34.66	8,366.47	8,158.29	
ACZASCRUBBER_0955.LAB	9/15/2021	14:02:43	2.50	-35.35	8,336.01	8,127.84	
ACZASCRUBBER_0956.LAB	9/15/2021	14:03:43	2.49	-28.77	8,279.24	8,073.30	
ACZASCRUBBER_0957.LAB	9/15/2021	14:04:44	2.49	-26.52	8,304.13	8,097.63	
ACZASCRUBBER_0958.LAB	9/15/2021	14:05:43	2.42	-28.62	8,140.23	7,942.94	
ACZASCRUBBER_0959.LAB	9/15/2021	14:06:43	2.48	-27.17	8,267.58	8,062.77	
ACZASCRUBBER_0960.LAB	9/15/2021	14:07:43	2.45	-26.46	8,182.71	7,982.12	
ACZASCRUBBER_0961.LAB	9/15/2021	14:08:43	2.39	-28.66	8,172.94	7,977.86	
ACZASCRUBBER_0962.LAB	9/15/2021	14:09:44	2.40	-35.63	8,418.23	8,216.19	
ACZASCRUBBER_0963.LAB	9/15/2021	14:10:44	2.40	-36.78	8,393.34	8,191.55	
ACZASCRUBBER_0964.LAB	9/15/2021	14:11:44	2.43	-34.58	8,321.76	8,119.55	
ACZASCRUBBER_0965.LAB	9/15/2021	14:12:44	2.38	-24.61	8,140.82	7,947.24	

2.62
5,193.32

97.97

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_0966.LAB	9/15/2021	14:13:44	2.40	-22.19	7,718.47	7,533.49	
ACZASCRUBBER_0967.LAB	9/15/2021	14:14:44	2.46	-34.49	8,288.13	8,084.37	
ACZASCRUBBER_0968.LAB	9/15/2021	14:15:44	2.44	-24.90	8,052.13	7,855.80	
ACZASCRUBBER_0969.LAB	9/15/2021	14:16:44	2.41	-20.86	7,579.98	7,397.05	
ACZASCRUBBER_0970.LAB	9/15/2021	14:17:44	2.46	-23.78	7,737.31	7,547.29	
ACZASCRUBBER_0971.LAB	9/15/2021	14:18:44	2.42	-25.77	8,120.00	7,923.67	
ACZASCRUBBER_0972.LAB	9/15/2021	14:19:44	2.51	-27.84	8,228.62	8,021.71	
ACZASCRUBBER_0973.LAB	9/15/2021	14:20:44	2.46	-25.57	8,150.01	7,949.49	
ACZASCRUBBER_0974.LAB	9/15/2021	14:21:44	2.45	-27.08	8,279.34	8,076.56	
ACZASCRUBBER_0975.LAB	9/15/2021	14:22:44	2.44	-25.18	8,056.26	7,859.30	
ACZASCRUBBER_0976.LAB	9/15/2021	14:23:44	2.48	-26.15	8,165.32	7,962.49	
ACZASCRUBBER_0977.LAB	9/15/2021	14:24:44	2.51	-37.56	8,387.20	8,176.50	
ACZASCRUBBER_0978.LAB	9/15/2021	14:25:44	2.55	-28.16	8,316.54	8,104.25	
ACZASCRUBBER_0979.LAB	9/15/2021	14:26:45	2.45	-37.08	8,415.30	8,208.79	
ACZASCRUBBER_0980.LAB	9/15/2021	14:27:45	2.47	-37.33	8,418.02	8,210.04	
ACZASCRUBBER_0981.LAB	9/15/2021	14:28:45	2.44	-37.33	8,468.17	8,261.57	
ACZASCRUBBER_0982.LAB	9/15/2021	14:29:44	2.43	-36.28	8,449.64	8,243.97	
ACZASCRUBBER_0983.LAB	9/15/2021	14:30:44	2.46	-35.68	8,424.03	8,216.59	
ACZASCRUBBER_0984.LAB	9/15/2021	14:31:45	2.38	-35.55	8,480.50	8,278.38	
ACZASCRUBBER_0985.LAB	9/15/2021	14:32:44	2.35	-23.89	7,855.18	7,670.89	
ACZASCRUBBER_0986.LAB	9/15/2021	14:33:45	2.42	-25.08	8,064.68	7,869.68	
ACZASCRUBBER_0987.LAB	9/15/2021	14:34:45	2.23	-24.02	7,996.07	7,817.51	
ACZASCRUBBER_0988.LAB	9/15/2021	14:35:45	2.42	-34.53	8,318.48	8,117.55	
ACZASCRUBBER_0989.LAB	9/15/2021	14:36:45	2.36	-36.34	8,467.03	8,267.54	
ACZASCRUBBER_0990.LAB	9/15/2021	14:37:45	2.38	-35.39	8,500.29	8,297.57	
ACZASCRUBBER_0991.LAB	9/15/2021	14:38:45	2.42	-28.10	8,210.47	8,012.04	
ACZASCRUBBER_0992.LAB	9/15/2021	14:39:45	2.39	-37.53	8,540.15	8,336.38	
ACZASCRUBBER_0993.LAB	9/15/2021	14:40:45	2.36	-38.24	8,518.93	8,317.88	
ACZASCRUBBER_0994.LAB	9/15/2021	14:41:45	2.37	-28.16	8,107.72	7,915.68	
ACZASCRUBBER_0995.LAB	9/15/2021	14:42:45	2.36	-36.28	8,434.33	8,235.44	
ACZASCRUBBER_0996.LAB	9/15/2021	14:43:45	2.35	-37.48	8,484.16	8,285.01	
ACZASCRUBBER_0997.LAB	9/15/2021	14:44:45	2.37	-37.80	8,581.32	8,378.12	
ACZASCRUBBER_0998.LAB	9/15/2021	14:45:45	2.33	-36.06	8,446.56	8,249.96	
ACZASCRUBBER_0999.LAB	9/15/2021	14:46:45	2.33	-27.12	8,262.05	8,069.84	
ACZASCRUBBER_1000.LAB	9/15/2021	14:47:45	2.43	-21.91	7,456.54	7,275.68	
ACZASCRUBBER_1001.LAB	9/15/2021	14:48:45	2.35	-25.52	7,936.94	7,750.11	
ACZASCRUBBER_1002.LAB	9/15/2021	14:49:45	2.36	-36.79	8,562.81	8,361.10	
ACZASCRUBBER_1003.LAB	9/15/2021	14:50:45	2.34	-37.85	8,579.83	8,379.40	
ACZASCRUBBER_1004.LAB	9/15/2021	14:51:46	2.37	-26.43	8,110.09	7,917.80	
ACZASCRUBBER_1005.LAB	9/15/2021	14:52:46	2.35	-37.25	8,420.20	8,221.98	
ACZASCRUBBER_1006.LAB	9/15/2021	14:53:45	2.34	-38.54	8,541.73	8,342.18	
ACZASCRUBBER_1007.LAB	9/15/2021	14:54:45	2.44	-24.74	7,895.06	7,702.41	
ACZASCRUBBER_1008.LAB	9/15/2021	14:55:46	2.43	-34.78	8,287.56	8,086.19	
ACZASCRUBBER_1009.LAB	9/15/2021	14:56:45	2.38	-38.78	8,501.43	8,299.16	
ACZASCRUBBER_1010.LAB	9/15/2021	14:57:46	2.43	-25.26	8,044.06	7,848.19	
ACZASCRUBBER_1011.LAB	9/15/2021	14:58:46	2.72	-17.78	7,020.57	6,829.35	
ACZASCRUBBER_1012.LAB	9/15/2021	14:59:46	2.44	-35.44	8,341.95	8,138.79	
ACZASCRUBBER_1013.LAB	9/15/2021	15:00:46	2.36	-38.06	8,552.26	8,350.50	
ACZASCRUBBER_1014.LAB	9/15/2021	15:01:46	2.38	-36.74	8,395.96	8,196.54	
ACZASCRUBBER_1015.LAB	9/15/2021	15:02:46	2.36	-35.62	8,604.08	8,401.09	
ACZASCRUBBER_1016.LAB	9/15/2021	15:03:46	2.38	-36.70	8,600.76	8,396.39	
ACZASCRUBBER_1017.LAB	9/15/2021	15:04:46	2.34	-35.87	8,324.05	8,129.02	
ACZASCRUBBER_1018.LAB	9/15/2021	15:05:46	2.40	-25.20	7,862.99	7,674.03	
ACZASCRUBBER_1019.LAB	9/15/2021	15:06:46	2.40	-38.07	8,581.42	8,375.59	
ACZASCRUBBER_1020.LAB	9/15/2021	15:07:46	2.38	-35.00	8,603.45	8,398.34	
ACZASCRUBBER_1021.LAB	9/15/2021	15:08:46	2.40	-37.81	8,423.07	8,220.78	
ACZASCRUBBER_1022.LAB	9/15/2021	15:09:46	2.43	-37.74	8,508.94	8,302.46	
ACZASCRUBBER_1023.LAB	9/15/2021	15:10:46	2.43	-37.68	8,483.68	8,277.53	
ACZASCRUBBER_1024.LAB	9/15/2021	15:11:46	2.44	-28.21	8,192.89	7,992.96	
ACZASCRUBBER_1025.LAB	9/15/2021	15:12:46	2.38	-37.42	8,547.18	8,343.49	
ACZASCRUBBER_1026.LAB	9/15/2021	15:13:46	2.45	-34.08	8,339.55	8,134.83	
ACZASCRUBBER_1027.LAB	9/15/2021	15:14:46	2.57	-44.43	8,660.82	8,438.22	
ACZASCRUBBER_1028.LAB	9/15/2021	15:15:46	2.62	-45.01	8,486.51	8,263.88	
ACZASCRUBBER_1029.LAB	9/15/2021	15:16:46	2.58	-46.53	8,643.80	8,420.87	
ACZASCRUBBER_1030.LAB	9/15/2021	15:17:46	2.57	-44.08	8,497.48	8,279.29	
ACZASCRUBBER_1031.LAB	9/15/2021	15:18:46	2.62	-44.49	8,589.82	8,365.13	
ACZASCRUBBER_1032.LAB	9/15/2021	15:19:47	2.52	-44.19	8,742.35	8,522.37	
ACZASCRUBBER_1033.LAB	9/15/2021	15:20:46	2.54	-44.36	8,708.73	8,487.40	
ACZASCRUBBER_1034.LAB	9/15/2021	15:21:46	2.54	-44.69	8,691.29	8,470.56	
ACZASCRUBBER_1035.LAB	9/15/2021	15:22:47	2.68	-44.71	8,780.70	8,545.10	
ACZASCRUBBER_1036.LAB	9/15/2021	15:23:47	2.55	-44.53	8,720.07	8,497.66	
ACZASCRUBBER_1037.LAB	9/15/2021	15:24:47	2.55	-44.85	8,675.41	8,454.26	
ACZASCRUBBER_1038.LAB	9/15/2021	15:25:47	2.57	-45.69	8,434.38	8,217.34	
ACZASCRUBBER_1039.LAB	9/15/2021	15:26:47	2.59	-45.25	8,687.37	8,462.55	
ACZASCRUBBER_1040.LAB	9/15/2021	15:27:47	2.58	-45.63	8,393.83	8,177.53	
ACZASCRUBBER_1041.LAB	9/15/2021	15:28:47	2.66	-45.95	8,788.85	8,555.47	
ACZASCRUBBER_1042.LAB	9/15/2021	15:29:47	2.65	-45.70	8,754.99	8,523.11	

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Spectrum	Date	Time	H2O%	Ethylene PPMV	NH3 PPMV	NH3 PPMV	Notes
ACZASCRUBBER_1043.LAB	9/15/2021	15:30:47	2.61	-44.60	8,778.17	8,549.46	
ACZASCRUBBER_1044.LAB	9/15/2021	15:31:47	2.42	-43.39	8,649.53	8,440.50	
ACZASCRUBBER_1045.LAB	9/15/2021	15:32:47	2.43	-43.37	8,659.21	8,448.76	
ACZASCRUBBER_1046.LAB	9/15/2021	15:33:47	2.42	-43.83	8,561.95	8,354.83	
ACZASCRUBBER_1047.LAB	9/15/2021	15:34:47	2.66	-45.76	8,789.38	8,555.41	
ACZASCRUBBER_1048.LAB	9/15/2021	15:35:47	2.53	-43.75	8,784.07	8,562.06	
ACZASCRUBBER_1049.LAB	9/15/2021	15:36:47	2.39	-44.18	8,758.58	8,549.19	
ACZASCRUBBER_1050.LAB	9/15/2021	15:37:47	2.66	-44.41	8,807.58	8,573.15	
ACZASCRUBBER_1051.LAB	9/15/2021	15:38:47	2.62	-46.59	8,848.17	8,615.91	
ACZASCRUBBER_1052.LAB	9/15/2021	15:39:47	2.61	-44.59	8,843.29	8,612.61	
ACZASCRUBBER_1053.LAB	9/15/2021	15:40:47	2.63	-43.80	8,797.46	8,566.51	
ACZASCRUBBER_1054.LAB	9/15/2021	15:41:47	2.59	-45.28	8,812.96	8,585.03	
ACZASCRUBBER_1055.LAB	9/15/2021	15:42:47	2.39	-45.30	8,746.83	8,537.76	
ACZASCRUBBER_1056.LAB	9/15/2021	15:43:47	2.62	-45.26	8,756.83	8,527.08	
ACZASCRUBBER_1057.LAB	9/15/2021	15:44:48	2.64	-45.48	8,818.52	8,585.78	
ACZASCRUBBER_1058.LAB	9/15/2021	15:45:47	2.65	-46.82	8,888.15	8,652.77	
ACZASCRUBBER_1059.LAB	9/15/2021	15:46:47	2.61	-47.29	8,869.01	8,637.11	
ACZASCRUBBER_1060.LAB	9/15/2021	15:47:48	2.59	-46.41	8,827.51	8,598.52	
ACZASCRUBBER_1061.LAB	9/15/2021	15:48:48	2.48	-44.91	8,695.81	8,480.58	
ACZASCRUBBER_1062.LAB	9/15/2021	15:49:48	2.62	-45.37	8,734.23	8,505.23	
ACZASCRUBBER_1063.LAB	9/15/2021	15:50:48	2.44	-44.59	8,749.00	8,535.66	
ACZASCRUBBER_1064.LAB	9/15/2021	15:51:48	2.44	-44.88	8,790.61	8,576.00	
ACZASCRUBBER_1065.LAB	9/15/2021	15:52:48	2.46	-49.84	8,931.00	8,711.22	
ACZASCRUBBER_1066.LAB	9/15/2021	15:53:48	2.47	-48.40	8,880.44	8,660.81	
ACZASCRUBBER_1067.LAB	9/15/2021	15:54:48	2.38	-46.01	8,750.58	8,542.34	
ACZASCRUBBER_1068.LAB	9/15/2021	15:55:48	2.34	-48.83	8,848.11	8,640.66	
ACZASCRUBBER_1069.LAB	9/15/2021	15:56:48	2.58	-46.94	8,870.46	8,641.62	
ACZASCRUBBER_1070.LAB	9/15/2021	15:57:48	2.64	-46.51	8,922.42	8,687.24	
ACZASCRUBBER_1071.LAB	9/15/2021	15:58:48	2.44	-50.67	8,916.75	8,699.50	
ACZASCRUBBER_1072.LAB	9/15/2021	15:59:48	2.58	-46.48	8,871.67	8,642.51	
ACZASCRUBBER_1073.LAB	9/15/2021	16:00:48	2.45	-49.28	8,912.04	8,693.67	
ACZASCRUBBER_1074.LAB	9/15/2021	16:01:48	2.64	-45.46	8,799.83	8,567.86	
ACZASCRUBBER_1075.LAB	9/15/2021	16:02:48	2.44	-49.94	8,912.40	8,694.50	
ACZASCRUBBER_1076.LAB	9/15/2021	16:03:48	2.43	-50.33	8,914.46	8,697.99	
ACZASCRUBBER_1077.LAB	9/15/2021	16:04:48	2.41	-50.15	8,979.02	8,762.25	
ACZASCRUBBER_1078.LAB	9/15/2021	16:05:48	2.57	-47.13	8,822.43	8,595.74	
ACZASCRUBBER_1079.LAB	9/15/2021	16:06:48	2.34	-42.73	8,529.57	8,330.22	
ACZASCRUBBER_1080.LAB	9/15/2021	16:07:48	2.39	-48.97	8,965.17	8,751.02	
ACZASCRUBBER_1081.LAB	9/15/2021	16:08:48	2.43	-49.98	8,940.88	8,723.97	
ACZASCRUBBER_1082.LAB	9/15/2021	16:09:48	2.40	-50.94	9,003.39	8,787.34	
ACZASCRUBBER_1083.LAB	9/15/2021	16:10:48	2.56	-45.23	8,851.99	8,625.30	
ACZASCRUBBER_1084.LAB	9/15/2021	16:11:49	2.49	-44.06	8,570.04	8,356.93	
ACZASCRUBBER_1085.LAB	9/15/2021	16:12:49	2.57	-44.51	8,857.72	8,630.37	
ACZASCRUBBER_1086.LAB	9/15/2021	16:13:49	2.41	-49.61	8,945.55	8,729.97	
ACZASCRUBBER_1087.LAB	9/15/2021	16:14:49	2.42	-48.72	8,949.29	8,732.76	
ACZASCRUBBER_1088.LAB	9/15/2021	16:15:49	2.43	-49.66	8,957.78	8,740.54	
ACZASCRUBBER_1089.LAB	9/15/2021	16:16:49	2.37	-52.31	8,983.24	8,770.52	
ACZASCRUBBER_1090.LAB	9/15/2021	16:17:49	2.38	-50.51	8,963.59	8,750.42	
ACZASCRUBBER_1091.LAB	9/15/2021	16:18:49	2.37	-50.35	8,758.50	8,550.80	
ACZASCRUBBER_1092.LAB	9/15/2021	16:19:49	2.39	-23.65	7,745.67	7,560.32	
ACZASCRUBBER_1093.LAB	9/15/2021	16:20:49	2.39	-47.28	8,738.86	8,530.40	
ACZASCRUBBER_1094.LAB	9/15/2021	16:21:49	2.38	-51.37	8,933.32	8,721.06	
ACZASCRUBBER_1095.LAB	9/15/2021	16:22:49	2.37	-52.15	9,019.36	8,805.19	
ACZASCRUBBER_1096.LAB	9/15/2021	16:23:49	2.40	-51.34	8,939.34	8,724.71	
ACZASCRUBBER_1097.LAB	9/15/2021	16:24:49	2.40	-50.67	8,937.75	8,723.27	
ACZASCRUBBER_1098.LAB	9/15/2021	16:25:49	2.40	-51.06	8,967.64	8,752.54	
ACZASCRUBBER_1099.LAB	9/15/2021	16:26:49	2.38	-51.70	9,030.64	8,815.47	
ACZASCRUBBER_1100.LAB	9/15/2021	16:27:49	2.39	-51.95	8,929.82	8,716.78	
ACZASCRUBBER_1101.LAB	9/15/2021	16:28:49	2.36	-51.24	8,996.32	8,783.92	
ACZASCRUBBER_1102.LAB	9/15/2021	16:29:50	2.40	-48.31	8,958.46	8,743.57	
ACZASCRUBBER_1103.LAB	9/15/2021	16:30:49	2.56	-45.78	8,851.11	8,624.53	
ACZASCRUBBER_1104.LAB	9/15/2021	16:31:49	2.57	-45.62	8,860.15	8,632.11	
ACZASCRUBBER_1105.LAB	9/15/2021	16:32:49	2.45	-50.06	8,905.32	8,686.99	
ACZASCRUBBER_1106.LAB	9/15/2021	16:33:49	2.38	-52.56	9,013.78	8,799.10	
ACZASCRUBBER_1107.LAB	9/15/2021	16:34:50	2.39	-50.52	9,047.74	8,831.48	
ACZASCRUBBER_1108.LAB	9/15/2021	16:35:49	2.38	-53.20	9,029.26	8,814.62	
ACZASCRUBBER_1109.LAB	9/15/2021	16:36:50	2.44	-52.67	9,075.12	8,853.63	
ACZASCRUBBER_1110.LAB	9/15/2021	16:37:50	2.37	-54.01	9,051.46	8,837.36	
ACZASCRUBBER_1111.LAB	9/15/2021	16:38:50	2.34	-51.22	9,010.81	8,799.58	
ACZASCRUBBER_1112.LAB	9/15/2021	16:39:50	2.36	-52.42	9,030.40	8,817.65	
ACZASCRUBBER_1113.LAB	9/15/2021	16:40:50	2.33	-51.80	9,079.97	8,868.36	
ACZASCRUBBER_1114.LAB	9/15/2021	16:41:50	2.32	-49.66	8,966.87	8,758.47	
ACZASCRUBBER_1115.LAB	9/15/2021	16:42:50	2.51	-45.65	8,828.57	8,607.18	
ACZASCRUBBER_1116.LAB	9/15/2021	16:43:50	2.32	-48.84	8,900.46	8,693.88	
ACZASCRUBBER_1117.LAB	9/15/2021	16:44:50	2.33	-51.71	8,932.80	8,724.65	End Vacuum - Treatment Step 6
				2.45	8,554.02	8,344.26	Average of Treatment Step 6

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Spectrum	Date	Time	H2O%	Ethylene PPMV	NH3 PPMV	NH3 PPMV	Notes
ACZASCRUBBER_1118.LAB	9/15/2021	16:45:50	2.39	-44.82	8,719.12	8,510.50	Start Strip- Treatment Step 7
ACZASCRUBBER_1119.LAB	9/15/2021	16:46:50	2.34	-50.61	8,933.51	8,724.39	
ACZASCRUBBER_1120.LAB	9/15/2021	16:47:50	2.33	-50.59	9,016.21	8,806.41	
ACZASCRUBBER_1121.LAB	9/15/2021	16:48:50	2.52	-48.14	8,866.21	8,643.09	
ACZASCRUBBER_1122.LAB	9/15/2021	16:49:50	2.13	-53.96	9,087.87	8,894.62	
ACZASCRUBBER_1123.LAB	9/15/2021	16:50:50	2.15	-52.97	9,089.12	8,893.43	
ACZASCRUBBER_1124.LAB	9/15/2021	16:51:50	2.14	-55.55	9,087.61	8,893.42	
ACZASCRUBBER_1125.LAB	9/15/2021	16:52:50	2.10	-53.11	9,096.11	8,904.86	
ACZASCRUBBER_1126.LAB	9/15/2021	16:53:50	2.34	-30.09	9,120.97	8,907.33	
ACZASCRUBBER_1127.LAB	9/15/2021	16:54:51	2.34	-29.39	9,141.14	8,926.86	End Strip- Treatment Step 7
ACZASCRUBBER_1128.LAB	9/15/2021	16:55:50	2.37	-29.09	9,152.96	8,936.48	
ACZASCRUBBER_1129.LAB	9/15/2021	16:56:50	2.36	-28.65	9,149.97	8,933.59	Start Final Vacuum- Treatment Step 8
ACZASCRUBBER_1130.LAB	9/15/2021	16:57:51	2.38	-28.13	9,147.28	8,929.71	
ACZASCRUBBER_1131.LAB	9/15/2021	16:58:50	2.42	-28.66	9,163.97	8,942.44	
ACZASCRUBBER_1132.LAB	9/15/2021	16:59:50	2.35	-25.37	9,140.60	8,925.72	
ACZASCRUBBER_1133.LAB	9/15/2021	17:00:51	2.34	-29.81	9,117.40	8,904.36	
ACZASCRUBBER_1134.LAB	9/15/2021	17:01:51	2.33	-29.76	9,125.03	8,912.05	
ACZASCRUBBER_1135.LAB	9/15/2021	17:02:51	2.31	-29.94	9,116.59	8,905.87	
ACZASCRUBBER_1136.LAB	9/15/2021	17:03:51	2.30	-30.42	9,061.73	8,853.18	
ACZASCRUBBER_1137.LAB	9/15/2021	17:04:51	2.30	-29.74	9,098.23	8,889.05	
ACZASCRUBBER_1138.LAB	9/15/2021	17:05:51	2.30	-30.39	9,103.22	8,893.95	
ACZASCRUBBER_1139.LAB	9/15/2021	17:06:51	2.25	-32.95	9,077.59	8,873.73	
ACZASCRUBBER_1140.LAB	9/15/2021	17:07:51	2.28	-30.24	9,074.61	8,868.11	
ACZASCRUBBER_1141.LAB	9/15/2021	17:08:51	2.29	-27.81	9,070.37	8,862.56	
ACZASCRUBBER_1142.LAB	9/15/2021	17:09:51	2.32	-27.74	9,022.70	8,813.16	
ACZASCRUBBER_1143.LAB	9/15/2021	17:10:51	2.32	-27.27	8,973.12	8,764.99	
ACZASCRUBBER_1144.LAB	9/15/2021	17:11:51	2.29	-27.95	9,050.16	8,843.17	
ACZASCRUBBER_1145.LAB	9/15/2021	17:12:51	2.37	-26.83	8,815.51	8,606.96	
ACZASCRUBBER_1146.LAB	9/15/2021	17:13:51	2.39	-27.41	8,780.40	8,570.94	
ACZASCRUBBER_1147.LAB	9/15/2021	17:14:51	2.35	-28.70	9,052.46	8,839.63	
ACZASCRUBBER_1148.LAB	9/15/2021	17:15:51	2.39	-27.80	9,024.21	8,808.58	
ACZASCRUBBER_1149.LAB	9/15/2021	17:16:51	2.36	-29.11	8,961.02	8,749.97	
ACZASCRUBBER_1150.LAB	9/15/2021	17:17:51	2.31	-25.10	8,601.98	8,402.96	
ACZASCRUBBER_1151.LAB	9/15/2021	17:18:51	2.32	-26.05	8,464.40	8,268.04	
ACZASCRUBBER_1152.LAB	9/15/2021	17:19:51	2.17	-24.16	8,624.13	8,437.06	
ACZASCRUBBER_1153.LAB	9/15/2021	17:20:51	2.18	-26.27	8,673.70	8,484.63	
ACZASCRUBBER_1154.LAB	9/15/2021	17:21:51	2.29	-27.61	8,885.40	8,682.02	
ACZASCRUBBER_1155.LAB	9/15/2021	17:22:51	2.31	-26.93	9,032.62	8,823.94	
ACZASCRUBBER_1156.LAB	9/15/2021	17:23:51	2.28	-26.11	8,863.42	8,660.92	
ACZASCRUBBER_1157.LAB	9/15/2021	17:24:52	2.50	-23.25	7,502.70	7,314.88	
ACZASCRUBBER_1158.LAB	9/15/2021	17:25:51	2.43	-28.04	7,839.27	7,648.64	
ACZASCRUBBER_1159.LAB	9/15/2021	17:26:52	2.39	-48.17	8,626.59	8,420.01	
ACZASCRUBBER_1160.LAB	9/15/2021	17:27:52	2.30	-25.94	8,827.98	8,624.98	
ACZASCRUBBER_1161.LAB	9/15/2021	17:28:52	2.27	-29.05	8,782.75	8,583.26	
ACZASCRUBBER_1162.LAB	9/15/2021	17:29:52	2.25	-28.44	8,850.98	8,651.67	
ACZASCRUBBER_1163.LAB	9/15/2021	17:30:52	2.27	-29.33	8,841.85	8,640.84	
ACZASCRUBBER_1164.LAB	9/15/2021	17:31:52	2.29	-27.79	8,877.19	8,674.16	
ACZASCRUBBER_1165.LAB	9/15/2021	17:32:52	2.39	-30.84	7,700.66	7,516.25	
ACZASCRUBBER_1166.LAB	9/15/2021	17:33:52	2.70	-15.61	6,671.97	6,492.07	
ACZASCRUBBER_1167.LAB	9/15/2021	17:34:52	2.33	-48.56	8,674.71	8,472.19	
ACZASCRUBBER_1168.LAB	9/15/2021	17:35:52	2.22	-29.30	8,916.13	8,718.60	
ACZASCRUBBER_1169.LAB	9/15/2021	17:36:52	2.23	-30.18	8,956.51	8,756.80	
ACZASCRUBBER_1170.LAB	9/15/2021	17:37:52	2.16	-27.64	8,479.23	8,296.36	
ACZASCRUBBER_1171.LAB	9/15/2021	17:38:53	2.10	-27.37	8,684.38	8,501.90	
ACZASCRUBBER_1172.LAB	9/15/2021	17:39:52	2.14	-38.23	8,231.53	8,055.37	
ACZASCRUBBER_1173.LAB	9/15/2021	17:40:52	2.35	-21.43	6,915.54	6,752.78	
ACZASCRUBBER_1174.LAB	9/15/2021	17:41:52	1.92	-29.76	8,919.20	8,748.37	
ACZASCRUBBER_1175.LAB	9/15/2021	17:42:52	2.30	-47.60	8,437.34	8,243.60	
ACZASCRUBBER_1176.LAB	9/15/2021	17:43:52	2.15	-29.85	8,897.48	8,705.79	
ACZASCRUBBER_1177.LAB	9/15/2021	17:44:52	2.18	-27.74	8,807.56	8,615.79	
ACZASCRUBBER_1178.LAB	9/15/2021	17:45:52	2.13	-50.31	8,454.64	8,274.87	
ACZASCRUBBER_1179.LAB	9/15/2021	17:46:53	2.14	-29.66	8,787.64	8,599.21	
ACZASCRUBBER_1180.LAB	9/15/2021	17:47:52	2.18	-26.27	8,650.48	8,461.56	
ACZASCRUBBER_1181.LAB	9/15/2021	17:48:52	2.36	-17.42	6,690.67	6,532.65	
ACZASCRUBBER_1182.LAB	9/15/2021	17:49:53	2.23	-47.87	8,589.32	8,397.55	
ACZASCRUBBER_1183.LAB	9/15/2021	17:50:53	2.12	-28.91	8,956.62	8,766.51	
ACZASCRUBBER_1184.LAB	9/15/2021	17:51:53	2.26	-46.01	8,391.57	8,202.10	
ACZASCRUBBER_1185.LAB	9/15/2021	17:52:53	2.56	-14.84	5,963.51	5,810.97	
ACZASCRUBBER_1186.LAB	9/15/2021	17:53:53	2.18	-32.15	7,840.64	7,669.42	
ACZASCRUBBER_1187.LAB	9/15/2021	17:54:53	2.03	-46.42	8,264.59	8,096.77	
ACZASCRUBBER_1188.LAB	9/15/2021	17:55:53	2.06	-33.01	8,090.95	7,924.16	
ACZASCRUBBER_1189.LAB	9/15/2021	17:56:53	1.92	-29.99	8,747.64	8,579.61	
ACZASCRUBBER_1190.LAB	9/15/2021	17:57:53	2.18	-47.19	8,480.58	8,296.00	
ACZASCRUBBER_1191.LAB	9/15/2021	17:58:53	2.11	-25.50	7,681.94	7,519.72	
ACZASCRUBBER_1192.LAB	9/15/2021	17:59:53	2.01	-36.51	8,254.91	8,088.58	
ACZASCRUBBER_1193.LAB	9/15/2021	18:00:53	2.06	-29.16	8,904.82	8,721.26	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_1194.LAB	9/15/2021	18:01:53	2.03	-35.24	8,260.59	8,092.83	
ACZASCRUBBER_1195.LAB	9/15/2021	18:02:53	2.06	-51.16	8,814.00	8,632.74	
ACZASCRUBBER_1196.LAB	9/15/2021	18:03:53	2.04	-51.57	8,799.14	8,619.33	
ACZASCRUBBER_1197.LAB	9/15/2021	18:04:53	2.12	-48.91	8,504.15	8,323.75	
ACZASCRUBBER_1198.LAB	9/15/2021	18:05:53	2.07	-53.29	8,861.25	8,677.72	
ACZASCRUBBER_1199.LAB	9/15/2021	18:06:53	2.16	-50.23	8,609.51	8,423.54	
ACZASCRUBBER_1200.LAB	9/15/2021	18:07:53	2.05	-35.68	8,157.67	7,990.47	
ACZASCRUBBER_1201.LAB	9/15/2021	18:08:53	2.15	-49.73	8,578.74	8,394.11	
ACZASCRUBBER_1202.LAB	9/15/2021	18:09:53	2.11	-52.15	8,810.92	8,624.74	
ACZASCRUBBER_1203.LAB	9/15/2021	18:10:53	2.12	-51.60	8,783.63	8,597.17	
ACZASCRUBBER_1204.LAB	9/15/2021	18:11:53	2.11	-47.80	8,483.47	8,304.68	
ACZASCRUBBER_1205.LAB	9/15/2021	18:12:53	2.10	-48.73	8,592.29	8,412.24	
ACZASCRUBBER_1206.LAB	9/15/2021	18:13:53	2.01	-42.90	8,229.70	8,064.09	
ACZASCRUBBER_1207.LAB	9/15/2021	18:14:54	2.11	-48.69	8,506.04	8,326.86	
ACZASCRUBBER_1208.LAB	9/15/2021	18:15:54	2.10	-46.99	8,479.81	8,301.38	
ACZASCRUBBER_1209.LAB	9/15/2021	18:16:54	2.10	-51.41	8,754.54	8,570.69	
ACZASCRUBBER_1210.LAB	9/15/2021	18:17:54	2.05	-26.20	7,322.08	7,172.29	
ACZASCRUBBER_1211.LAB	9/15/2021	18:18:54	2.04	-25.63	7,594.07	7,439.42	
ACZASCRUBBER_1212.LAB	9/15/2021	18:19:54	1.88	-52.89	8,734.53	8,570.16	
ACZASCRUBBER_1213.LAB	9/15/2021	18:20:54	1.96	-49.87	8,593.67	8,425.37	
ACZASCRUBBER_1214.LAB	9/15/2021	18:21:54	2.07	-47.56	8,496.85	8,320.57	
ACZASCRUBBER_1215.LAB	9/15/2021	18:22:54	2.03	-52.96	8,789.36	8,611.26	
ACZASCRUBBER_1216.LAB	9/15/2021	18:23:54	2.07	-50.20	8,650.42	8,471.64	
ACZASCRUBBER_1217.LAB	9/15/2021	18:24:54	1.97	-51.12	8,707.47	8,535.92	
ACZASCRUBBER_1218.LAB	9/15/2021	18:25:54	1.98	-51.93	8,711.99	8,539.36	
ACZASCRUBBER_1219.LAB	9/15/2021	18:26:54	2.04	-48.49	8,463.87	8,291.62	
ACZASCRUBBER_1220.LAB	9/15/2021	18:27:55	2.04	-52.23	8,650.23	8,474.20	
ACZASCRUBBER_1221.LAB	9/15/2021	18:28:54	2.00	-49.62	8,581.41	8,409.58	
ACZASCRUBBER_1222.LAB	9/15/2021	18:29:54	2.02	-45.50	8,324.36	8,155.88	
ACZASCRUBBER_1223.LAB	9/15/2021	18:30:55	1.98	-33.45	7,844.30	7,688.64	
ACZASCRUBBER_1224.LAB	9/15/2021	18:31:54	2.35	-18.38	6,380.10	6,229.92	
ACZASCRUBBER_1225.LAB	9/15/2021	18:32:54	1.99	-25.64	7,280.46	7,135.33	
ACZASCRUBBER_1226.LAB	9/15/2021	18:33:55	1.92	-33.64	8,120.20	7,963.95	
ACZASCRUBBER_1227.LAB	9/15/2021	18:34:54	1.95	-50.85	8,501.93	8,335.93	
ACZASCRUBBER_1228.LAB	9/15/2021	18:35:54	1.97	-44.75	8,307.67	8,143.93	
ACZASCRUBBER_1229.LAB	9/15/2021	18:36:55	2.00	-50.61	8,507.77	8,337.88	
ACZASCRUBBER_1230.LAB	9/15/2021	18:37:55	1.94	-34.89	7,776.03	7,625.01	
ACZASCRUBBER_1231.LAB	9/15/2021	18:38:55	2.17	-23.55	7,435.55	7,274.17	
ACZASCRUBBER_1232.LAB	9/15/2021	18:39:55	1.86	-28.63	7,951.06	7,803.32	
ACZASCRUBBER_1233.LAB	9/15/2021	18:40:55	1.83	-35.62	7,838.14	7,694.71	
ACZASCRUBBER_1234.LAB	9/15/2021	18:41:55	2.11	-24.65	7,489.43	7,331.32	
ACZASCRUBBER_1235.LAB	9/15/2021	18:42:55	1.90	-25.25	7,673.50	7,527.65	
ACZASCRUBBER_1236.LAB	9/15/2021	18:43:55	2.02	-23.04	6,957.27	6,817.00	
ACZASCRUBBER_1237.LAB	9/15/2021	18:44:55	1.96	-50.32	8,492.15	8,325.96	
ACZASCRUBBER_1238.LAB	9/15/2021	18:45:55	1.84	-34.70	7,786.29	7,643.20	
ACZASCRUBBER_1239.LAB	9/15/2021	18:46:55	1.93	-25.60	7,690.79	7,542.17	
ACZASCRUBBER_1240.LAB	9/15/2021	18:47:55	1.91	-49.28	8,451.87	8,290.65	
ACZASCRUBBER_1241.LAB	9/15/2021	18:48:55	1.91	-35.54	7,931.34	7,779.78	
ACZASCRUBBER_1242.LAB	9/15/2021	18:49:55	1.82	-34.81	8,083.49	7,935.97	
ACZASCRUBBER_1243.LAB	9/15/2021	18:50:55	2.02	-24.58	7,446.03	7,295.98	
ACZASCRUBBER_1244.LAB	9/15/2021	18:51:55	2.11	-24.56	7,423.11	7,266.66	
ACZASCRUBBER_1245.LAB	9/15/2021	18:52:55	2.15	-17.89	6,508.21	6,367.97	
ACZASCRUBBER_1246.LAB	9/15/2021	18:53:56	2.25	-20.96	6,005.11	5,869.90	
ACZASCRUBBER_1247.LAB	9/15/2021	18:54:55	2.19	-14.61	5,413.03	5,294.23	
ACZASCRUBBER_1248.LAB	9/15/2021	18:55:56	2.02	-24.06	7,148.25	7,003.63	
ACZASCRUBBER_1249.LAB	9/15/2021	18:56:55	1.77	-36.18	8,171.21	8,026.37	
ACZASCRUBBER_1250.LAB	9/15/2021	18:57:56	1.76	-48.53	8,453.71	8,305.19	
ACZASCRUBBER_1251.LAB	9/15/2021	18:58:55	1.77	-35.08	8,038.81	7,896.27	
ACZASCRUBBER_1252.LAB	9/15/2021	18:59:56	1.85	-53.78	8,492.75	8,335.67	
ACZASCRUBBER_1253.LAB	9/15/2021	19:00:56	1.80	-34.85	7,735.81	7,596.33	
ACZASCRUBBER_1254.LAB	9/15/2021	19:01:56	1.71	-35.22	8,193.94	8,053.64	
ACZASCRUBBER_1255.LAB	9/15/2021	19:02:56	2.25	-15.54	5,892.13	5,759.47	
ACZASCRUBBER_1256.LAB	9/15/2021	19:03:56	1.95	-25.90	7,435.57	7,290.47	
ACZASCRUBBER_1257.LAB	9/15/2021	19:04:56	1.86	-24.03	7,086.24	6,954.12	
ACZASCRUBBER_1258.LAB	9/15/2021	19:05:56	2.13	-12.35	5,191.61	5,081.28	
ACZASCRUBBER_1259.LAB	9/15/2021	19:06:56	1.91	-21.86	6,975.10	6,841.55	
ACZASCRUBBER_1260.LAB	9/15/2021	19:07:56	2.14	-12.15	5,402.29	5,286.62	
ACZASCRUBBER_1261.LAB	9/15/2021	19:08:56	1.85	-30.37	7,585.22	7,444.73	
ACZASCRUBBER_1262.LAB	9/15/2021	19:09:56	1.60	-38.31	8,195.75	8,064.87	
ACZASCRUBBER_1263.LAB	9/15/2021	19:10:56	2.05	-15.82	5,424.88	5,313.60	
ACZASCRUBBER_1264.LAB	9/15/2021	19:11:56	2.12	-10.01	4,925.53	4,821.14	
ACZASCRUBBER_1265.LAB	9/15/2021	19:12:56	2.12	-14.78	6,079.81	5,951.17	
ACZASCRUBBER_1266.LAB	9/15/2021	19:13:57	1.92	-18.02	6,424.47	6,301.32	
ACZASCRUBBER_1267.LAB	9/15/2021	19:14:56	1.60	-38.72	8,145.76	8,015.15	
ACZASCRUBBER_1268.LAB	9/15/2021	19:15:56	1.60	-35.47	8,075.66	7,946.58	
ACZASCRUBBER_1269.LAB	9/15/2021	19:16:56	1.71	-46.95	8,416.78	8,272.94	
ACZASCRUBBER_1270.LAB	9/15/2021	19:17:56	1.59	-35.26	7,642.57	7,521.17	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER_1271.LAB	9/15/2021	19:18:56	1.60	-35.45	7,694.60	7,571.72	
ACZASCRUBBER_1272.LAB	9/15/2021	19:19:56	1.58	-36.78	7,646.48	7,525.47	
ACZASCRUBBER_1273.LAB	9/15/2021	19:20:57	1.95	-17.80	6,118.20	5,998.67	
ACZASCRUBBER_1274.LAB	9/15/2021	19:21:56	1.72	-24.11	6,876.13	6,757.58	
ACZASCRUBBER_1275.LAB	9/15/2021	19:22:56	1.53	-36.66	7,816.42	7,696.56	
ACZASCRUBBER_1276.LAB	9/15/2021	19:23:56	1.50	-35.94	8,094.44	7,972.73	
ACZASCRUBBER_1277.LAB	9/15/2021	19:24:57	1.61	-25.83	7,028.39	6,915.56	
ACZASCRUBBER_1278.LAB	9/15/2021	19:25:57	1.67	-25.06	7,210.88	7,090.43	
ACZASCRUBBER_1279.LAB	9/15/2021	19:26:57	1.88	-23.76	6,569.48	6,446.19	
ACZASCRUBBER_1280.LAB	9/15/2021	19:27:57	1.71	-29.96	7,626.76	7,496.55	
ACZASCRUBBER_1281.LAB	9/15/2021	19:28:57	1.49	-35.89	8,062.15	7,941.92	
ACZASCRUBBER_1282.LAB	9/15/2021	19:29:57	1.48	-34.03	7,960.16	7,842.18	
ACZASCRUBBER_1283.LAB	9/15/2021	19:30:57	1.58	-46.23	8,258.85	8,128.58	
ACZASCRUBBER_1284.LAB	9/15/2021	19:31:57	1.48	-33.98	7,973.29	7,855.64	
ACZASCRUBBER_1285.LAB	9/15/2021	19:32:57	1.51	-26.41	7,376.07	7,264.42	
ACZASCRUBBER_1286.LAB	9/15/2021	19:33:57	1.78	-20.58	6,434.90	6,320.23	
ACZASCRUBBER_1287.LAB	9/15/2021	19:34:57	2.14	-4.58	3,932.65	3,848.46	
ACZASCRUBBER_1288.LAB	9/15/2021	19:35:57	2.21	-0.54	2,871.17	2,807.68	
ACZASCRUBBER_1289.LAB	9/15/2021	19:36:57	2.03	-8.33	3,316.88	3,249.47	
ACZASCRUBBER_1290.LAB	9/15/2021	19:37:57	2.13	-3.85	3,134.27	3,067.44	
ACZASCRUBBER_1291.LAB	9/15/2021	19:38:57	1.91	-12.83	5,087.96	4,990.58	
ACZASCRUBBER_1292.LAB	9/15/2021	19:39:57	1.75	-19.49	6,409.75	6,297.82	
ACZASCRUBBER_1293.LAB	9/15/2021	19:40:57	1.54	-25.12	6,867.57	6,761.96	
ACZASCRUBBER_1294.LAB	9/15/2021	19:41:57	1.43	-36.85	8,079.84	7,964.58	
ACZASCRUBBER_1295.LAB	9/15/2021	19:42:57	1.53	-45.02	8,257.59	8,131.14	
ACZASCRUBBER_1296.LAB	9/15/2021	19:43:58	1.49	-28.07	7,341.14	7,232.09	
ACZASCRUBBER_1297.LAB	9/15/2021	19:44:57	1.47	-25.41	7,319.11	7,211.49	
ACZASCRUBBER_1298.LAB	9/15/2021	19:45:57	1.50	-37.98	7,894.32	7,776.18	
ACZASCRUBBER_1299.LAB	9/15/2021	19:46:57	1.47	-33.73	7,601.40	7,489.29	
ACZASCRUBBER_1300.LAB	9/15/2021	19:47:58	1.51	-26.21	7,422.91	7,310.95	
ACZASCRUBBER_1301.LAB	9/15/2021	19:48:58	1.47	-36.15	8,023.21	7,904.93	
ACZASCRUBBER_1302.LAB	9/15/2021	19:49:58	1.79	-19.37	6,288.65	6,175.82	
ACZASCRUBBER_1303.LAB	9/15/2021	19:50:58	1.52	-35.62	7,894.87	7,775.10	
ACZASCRUBBER_1304.LAB	9/15/2021	19:51:58	1.41	-34.60	7,932.49	7,820.57	
ACZASCRUBBER_1305.LAB	9/15/2021	19:52:58	1.75	-47.19	8,478.79	8,330.49	
ACZASCRUBBER_1306.LAB	9/15/2021	19:53:58	2.16	-49.79	8,618.01	8,431.48	
ACZASCRUBBER_1307.LAB	9/15/2021	19:54:58	1.83	-39.62	8,575.65	8,418.81	End Final Vacuum - Treatment Step 8
				2.02	7,932.03	7,771.09	Average Treatment Step 8
ACZASCRUBBER_1308.LAB	9/15/2021	19:55:58	1.30	5.67	6,011.48	5,933.38	
ACZASCRUBBER_1309.LAB	9/15/2021	19:56:58	0.01	97.37	65.61	65.60	CTS Verification Post Test Check
ACZASCRUBBER_1310.LAB	9/15/2021	19:57:58	-0.01	97.99	29.00	29.01	97.76
ACZASCRUBBER_1311.LAB	9/15/2021	19:58:58	-0.02	97.92	19.72	19.72	
ACZASCRUBBER_1312.LAB	9/15/2021	19:59:58	-0.01	18.80	15.36	15.36	
ACZASCRUBBER_1313.LAB	9/15/2021	20:00:58	-0.02	-0.13	12.72	12.72	
ACZASCRUBBER_1314.LAB	9/15/2021	20:01:58	-0.02	-0.14	10.76	10.76	
ACZASCRUBBER_1315.LAB	9/15/2021	20:02:58	-0.02	-0.14	9.30	9.30	
ACZASCRUBBER_1316.LAB	9/15/2021	20:03:58	0.13	-0.20	16.15	16.13	
ACZASCRUBBER_1317.LAB	9/15/2021	20:04:58	1.02	-0.05	31.78	31.46	
ACZASCRUBBER_1318.LAB	9/15/2021	20:05:58	1.01	-0.10	15.31	15.15	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1319.LAB	9/16/2021	5:25:47	-0.02	-0.17	-0.36	-0.36	
ACZASCRUBBER2_1320BKG.LAB	9/16/2021	5:28:05	0.00	0.00	0.00	0.00	New Background
ACZASCRUBBER2_1321.LAB	9/16/2021	5:29:11	0.00	0.07	0.01	0.01	
ACZASCRUBBER2_1322.LAB	9/16/2021	5:30:11	0.01	48.89	-0.25	-0.25	
ACZASCRUBBER2_1323.LAB	9/16/2021	5:31:11	0.00	98.29	0.02	0.02	Ethylene CTS Verification Pre-Test
ACZASCRUBBER2_1324.LAB	9/16/2021	5:32:11	0.00	98.22	-0.05	-0.05	98.26
ACZASCRUBBER2_1325.LAB	9/16/2021	5:33:11	0.42	28.39	0.11	0.11	
ACZASCRUBBER2_1326.LAB	9/16/2021	5:34:11	0.76	0.10	0.56	0.55	
ACZASCRUBBER2_1327.LAB	9/16/2021	5:35:11	1.06	-1.21	1,001.00	990.35	
ACZASCRUBBER2_1328.LAB	9/16/2021	5:36:11	1.34	0.24	2,696.11	2,659.96	
ACZASCRUBBER2_1329.LAB	9/16/2021	5:36:20	1.26	-0.54	2,472.55	2,441.30	
ACZASCRUBBER2_1330.LAB	9/16/2021	5:36:29	1.20	0.07	2,074.63	2,049.77	
ACZASCRUBBER2_1331.LAB	9/16/2021	5:36:38	1.16	-0.10	1,777.83	1,757.26	
ACZASCRUBBER2_1332.LAB	9/16/2021	5:36:48	1.12	0.22	1,444.48	1,428.32	
ACZASCRUBBER2_1333.LAB	9/16/2021	5:36:57	1.15	-0.13	1,595.91	1,577.57	
ACZASCRUBBER2_1334.LAB	9/16/2021	5:37:07	1.20	0.38	1,984.35	1,960.44	
ACZASCRUBBER2_1335.LAB	9/16/2021	5:37:16	1.21	0.51	2,002.27	1,977.97	
ACZASCRUBBER2_1336.LAB	9/16/2021	5:37:25	1.22	0.03	2,136.52	2,110.47	
ACZASCRUBBER2_1337.LAB	9/16/2021	5:37:35	1.25	0.23	2,368.89	2,339.23	
ACZASCRUBBER2_1338.LAB	9/16/2021	5:37:44	1.27	0.05	2,534.31	2,502.14	
ACZASCRUBBER2_1339.LAB	9/16/2021	5:37:53	1.25	0.10	2,460.14	2,429.43	
ACZASCRUBBER2_1340.LAB	9/16/2021	5:38:03	1.17	-0.13	2,062.18	2,037.97	
ACZASCRUBBER2_1341.LAB	9/16/2021	5:38:12	1.13	0.32	1,583.12	1,565.29	
ACZASCRUBBER2_1342.LAB	9/16/2021	5:38:22	1.00	0.26	886.47	877.56	
ACZASCRUBBER2_1343.LAB	9/16/2021	5:38:31	0.93	0.29	564.19	558.95	
ACZASCRUBBER2_1344.LAB	9/16/2021	5:38:41	0.89	0.02	395.70	392.18	
ACZASCRUBBER2_1345.LAB	9/16/2021	5:38:50	0.86	0.15	237.82	235.77	
ACZASCRUBBER2_1346.LAB	9/16/2021	5:38:59	0.84	0.05	161.50	160.15	
ACZASCRUBBER2_1347.LAB	9/16/2021	5:39:09	0.85	0.10	177.27	175.77	
ACZASCRUBBER2_1348.LAB	9/16/2021	5:39:18	0.91	0.05	341.54	338.45	
ACZASCRUBBER2_1349.LAB	9/16/2021	5:39:27	1.05	0.28	849.46	840.57	
ACZASCRUBBER2_1350.LAB	9/16/2021	5:39:37	1.07	0.43	921.37	911.47	
ACZASCRUBBER2_1351.LAB	9/16/2021	5:39:46	0.98	0.16	619.17	613.10	
ACZASCRUBBER2_1352.LAB	9/16/2021	5:39:55	0.97	0.26	610.25	604.32	
ACZASCRUBBER2_1353.LAB	9/16/2021	5:40:05	1.10	0.57	1,118.18	1,105.87	
ACZASCRUBBER2_1354.LAB	9/16/2021	5:40:14	1.20	0.23	1,717.57	1,697.01	
ACZASCRUBBER2_1355.LAB	9/16/2021	5:40:24	1.21	0.21	2,043.90	2,019.11	
ACZASCRUBBER2_1356.LAB	9/16/2021	5:40:33	1.25	0.43	2,218.16	2,190.44	
ACZASCRUBBER2_1357.LAB	9/16/2021	5:40:42	1.26	-0.45	2,455.51	2,424.47	
ACZASCRUBBER2_1358.LAB	9/16/2021	5:40:52	1.28	-0.41	3,002.59	2,964.20	
ACZASCRUBBER2_1359.LAB	9/16/2021	5:41:01	1.26	-2.52	3,611.80	3,566.45	
ACZASCRUBBER2_1360.LAB	9/16/2021	5:41:10	1.27	-1.32	3,346.24	3,303.83	
ACZASCRUBBER2_1361.LAB	9/16/2021	5:41:20	1.27	-0.51	2,959.37	2,921.81	
ACZASCRUBBER2_1362.LAB	9/16/2021	5:41:30	1.26	-0.16	2,672.40	2,638.74	
ACZASCRUBBER2_1363.LAB	9/16/2021	5:41:39	1.22	-0.30	2,149.98	2,123.70	
ACZASCRUBBER2_1364.LAB	9/16/2021	5:41:48	1.19	0.19	1,961.58	1,938.20	
ACZASCRUBBER2_1365.LAB	9/16/2021	5:41:58	1.25	-1.86	3,304.63	3,263.46	
ACZASCRUBBER2_1366.LAB	9/16/2021	5:42:07	1.28	-1.88	3,345.21	3,302.51	
ACZASCRUBBER2_1367.LAB	9/16/2021	5:42:16	1.21	6.55	2,528.45	2,497.78	
ACZASCRUBBER2_1368.LAB	9/16/2021	5:42:26	1.10	6.83	1,988.36	1,966.53	
ACZASCRUBBER2_1369.LAB	9/16/2021	5:42:35	1.09	0.98	2,166.13	2,142.62	
ACZASCRUBBER2_1370.LAB	9/16/2021	5:42:45	1.08	0.90	2,216.59	2,192.75	
ACZASCRUBBER2_1371.LAB	9/16/2021	5:42:54	0.98	0.15	1,708.95	1,692.20	
ACZASCRUBBER2_1372.LAB	9/16/2021	5:43:03	0.90	0.44	1,330.60	1,318.67	
ACZASCRUBBER2_1373.LAB	9/16/2021	5:43:12	0.94	0.19	1,745.84	1,729.37	
ACZASCRUBBER2_1374.LAB	9/16/2021	5:43:22	0.99	0.14	1,913.38	1,894.50	
ACZASCRUBBER2_1375.LAB	9/16/2021	5:43:31	1.04	0.32	2,344.65	2,320.26	
ACZASCRUBBER2_1376.LAB	9/16/2021	5:43:41	1.08	0.86	2,617.24	2,589.10	
ACZASCRUBBER2_1377.LAB	9/16/2021	5:43:50	1.12	0.42	2,792.62	2,761.36	
ACZASCRUBBER2_1378.LAB	9/16/2021	5:43:59	1.07	-0.30	3,045.46	3,012.77	
ACZASCRUBBER2_1379.LAB	9/16/2021	5:44:09	1.02	-1.02	3,308.36	3,274.57	
ACZASCRUBBER2_1380.LAB	9/16/2021	5:44:18	1.04	-0.63	3,084.78	3,052.73	
ACZASCRUBBER2_1381.LAB	9/16/2021	5:44:28	1.04	1.04	2,766.23	2,737.37	
ACZASCRUBBER2_1382.LAB	9/16/2021	5:44:37	1.02	1.29	2,518.79	2,493.10	
ACZASCRUBBER2_1383.LAB	9/16/2021	5:44:47	1.00	0.90	2,494.02	2,469.04	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1384.LAB	9/16/2021	5:44:56	0.95	0.23	2,372.18	2,349.64	
ACZASCRUBBER2_1385.LAB	9/16/2021	5:45:05	0.97	0.18	2,443.22	2,419.57	
ACZASCRUBBER2_1386.LAB	9/16/2021	5:45:14	1.00	-0.09	2,723.61	2,696.27	
ACZASCRUBBER2_1387.LAB	9/16/2021	5:45:24	1.03	-0.43	3,122.65	3,090.50	
ACZASCRUBBER2_1388.LAB	9/16/2021	5:45:33	1.05	0.41	2,979.99	2,948.82	
ACZASCRUBBER2_1389.LAB	9/16/2021	5:45:43	1.04	0.29	2,950.45	2,919.89	
ACZASCRUBBER2_1390.LAB	9/16/2021	5:45:52	1.02	-1.71	3,264.25	3,230.94	
ACZASCRUBBER2_1391.LAB	9/16/2021	5:46:02	0.98	-2.84	3,603.85	3,568.42	
ACZASCRUBBER2_1392.LAB	9/16/2021	5:46:11	0.95	-4.82	4,089.29	4,050.53	
ACZASCRUBBER2_1393.LAB	9/16/2021	5:46:20	0.94	-7.47	4,467.01	4,425.08	
ACZASCRUBBER2_1394.LAB	9/16/2021	5:46:30	0.90	-9.41	4,653.86	4,612.14	
ACZASCRUBBER2_1395.LAB	9/16/2021	5:46:39	0.90	-8.79	4,733.03	4,690.23	
ACZASCRUBBER2_1396.LAB	9/16/2021	5:46:48	0.94	-6.37	4,422.29	4,380.83	
ACZASCRUBBER2_1397.LAB	9/16/2021	5:46:58	0.96	-5.87	4,191.67	4,151.40	
ACZASCRUBBER2_1398.LAB	9/16/2021	5:47:07	0.98	-3.84	3,846.36	3,808.64	
ACZASCRUBBER2_1399.LAB	9/16/2021	5:47:17	1.01	-2.19	3,602.78	3,566.57	
ACZASCRUBBER2_1400.LAB	9/16/2021	5:47:26	1.02	-1.38	3,296.90	3,263.16	
ACZASCRUBBER2_1401.LAB	9/16/2021	5:47:35	1.06	0.03	2,931.89	2,900.95	
ACZASCRUBBER2_1402.LAB	9/16/2021	5:47:45	1.04	0.47	2,867.56	2,837.72	
ACZASCRUBBER2_1403.LAB	9/16/2021	5:47:54	1.03	-0.35	3,001.40	2,970.49	
ACZASCRUBBER2_1404.LAB	9/16/2021	5:48:03	1.14	-0.60	2,871.88	2,839.04	
ACZASCRUBBER2_1405.LAB	9/16/2021	5:48:13	1.21	0.46	2,231.54	2,204.55	
ACZASCRUBBER2_1406.LAB	9/16/2021	5:48:22	1.22	-0.57	2,521.20	2,490.57	
ACZASCRUBBER2_1407.LAB	9/16/2021	5:48:32	1.25	-1.01	3,173.82	3,134.23	
ACZASCRUBBER2_1408.LAB	9/16/2021	5:48:41	1.26	-0.23	2,813.66	2,778.12	
ACZASCRUBBER2_1409.LAB	9/16/2021	5:48:50	1.25	-0.39	2,588.13	2,555.79	
ACZASCRUBBER2_1410.LAB	9/16/2021	5:49:00	1.22	0.33	2,009.49	1,984.95	
ACZASCRUBBER2_1411.LAB	9/16/2021	5:49:09	1.23	-0.42	2,159.45	2,132.83	
ACZASCRUBBER2_1412.LAB	9/16/2021	5:49:18	1.18	0.36	1,827.21	1,805.61	
ACZASCRUBBER2_1413.LAB	9/16/2021	5:49:28	1.17	-0.15	1,823.88	1,802.45	
ACZASCRUBBER2_1414.LAB	9/16/2021	5:49:37	1.15	0.19	1,735.15	1,715.13	
ACZASCRUBBER2_1415.LAB	9/16/2021	5:49:47	1.17	-0.21	1,918.39	1,895.86	
ACZASCRUBBER2_1416.LAB	9/16/2021	5:49:56	1.18	0.46	1,974.49	1,951.20	
ACZASCRUBBER2_1417.LAB	9/16/2021	5:50:05	1.16	-0.08	1,808.40	1,787.51	
ACZASCRUBBER2_1418.LAB	9/16/2021	5:50:15	1.16	0.33	1,827.93	1,806.76	
ACZASCRUBBER2_1419.LAB	9/16/2021	5:50:24	1.20	0.24	2,086.95	2,061.99	
ACZASCRUBBER2_1420.LAB	9/16/2021	5:50:33	1.24	-0.41	2,470.84	2,440.17	
ACZASCRUBBER2_1421.LAB	9/16/2021	5:50:43	1.23	0.04	2,462.94	2,432.75	
ACZASCRUBBER2_1422.LAB	9/16/2021	5:52:16	1.20	-3.91	3,679.62	3,635.30	
ACZASCRUBBER2_1423.LAB	9/16/2021	5:53:16	1.21	-2.09	3,418.30	3,376.83	
ACZASCRUBBER2_1424.LAB	9/16/2021	5:54:16	1.23	-0.48	2,596.60	2,564.77	
ACZASCRUBBER2_1425.LAB	9/16/2021	5:55:16	1.23	-1.73	3,126.06	3,087.49	
ACZASCRUBBER2_1426.LAB	9/16/2021	5:56:16	1.18	-4.16	3,777.12	3,732.37	
ACZASCRUBBER2_1427.LAB	9/16/2021	5:57:16	1.21	-0.30	2,259.00	2,231.71	
ACZASCRUBBER2_1428.LAB	9/16/2021	5:58:16	1.04	-0.36	853.40	844.55	
ACZASCRUBBER2_1429.LAB	9/16/2021	5:59:16	0.92	-0.04	403.61	399.88	
ACZASCRUBBER2_1430.LAB	9/16/2021	6:00:16	0.93	-0.03	474.56	470.15	
ACZASCRUBBER2_1431.LAB	9/16/2021	6:01:16	0.94	-10.89	1,403.37	1,390.23	Start Vacuum - Treatment Step 1
ACZASCRUBBER2_1432.LAB	9/16/2021	6:02:16	1.49	-10.92	5,195.05	5,117.78	
ACZASCRUBBER2_1433.LAB	9/16/2021	6:03:16	1.57	-11.00	5,226.15	5,144.19	
ACZASCRUBBER2_1434.LAB	9/16/2021	6:04:16	1.60	-11.24	5,260.23	5,175.97	
ACZASCRUBBER2_1435.LAB	9/16/2021	6:05:17	1.62	-11.57	5,261.97	5,176.81	
ACZASCRUBBER2_1436.LAB	9/16/2021	6:06:16	1.62	-11.48	5,263.02	5,177.93	
ACZASCRUBBER2_1437.LAB	9/16/2021	6:07:16	1.61	-11.41	5,258.56	5,173.95	
ACZASCRUBBER2_1438.LAB	9/16/2021	6:08:16	1.60	-10.84	5,244.25	5,160.49	
ACZASCRUBBER2_1439.LAB	9/16/2021	6:09:16	1.58	-11.29	5,238.11	5,155.55	
ACZASCRUBBER2_1440.LAB	9/16/2021	6:10:17	1.56	-10.67	5,223.76	5,142.24	
ACZASCRUBBER2_1441.LAB	9/16/2021	6:11:17	1.54	-10.55	5,215.57	5,135.17	
ACZASCRUBBER2_1442.LAB	9/16/2021	6:12:17	1.52	-11.97	5,204.84	5,125.87	
ACZASCRUBBER2_1443.LAB	9/16/2021	6:13:17	1.51	-11.48	5,214.45	5,135.83	
ACZASCRUBBER2_1444.LAB	9/16/2021	6:14:17	1.49	-11.11	5,209.08	5,131.65	
ACZASCRUBBER2_1445.LAB	9/16/2021	6:15:17	1.44	-11.46	5,163.15	5,089.00	
ACZASCRUBBER2_1446.LAB	9/16/2021	6:16:17	1.41	-10.90	5,160.71	5,087.92	
ACZASCRUBBER2_1447.LAB	9/16/2021	6:17:17	1.38	-10.80	5,109.81	5,039.13	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1448.LAB	9/16/2021	6:18:17	1.33	-10.15	5,046.63	4,979.37	
ACZASCRUBBER2_1449.LAB	9/16/2021	6:19:17	1.32	-9.63	4,969.35	4,903.82	
ACZASCRUBBER2_1450.LAB	9/16/2021	6:20:17	1.29	-8.90	4,819.43	4,757.39	
ACZASCRUBBER2_1451.LAB	9/16/2021	6:21:17	1.29	-7.82	4,537.36	4,478.82	
ACZASCRUBBER2_1452.LAB	9/16/2021	6:22:17	1.32	-4.86	4,002.59	3,949.79	
ACZASCRUBBER2_1453.LAB	9/16/2021	6:23:17	1.36	-1.85	3,398.60	3,352.29	
ACZASCRUBBER2_1454.LAB	9/16/2021	6:24:18	1.35	0.08	2,599.14	2,564.01	
ACZASCRUBBER2_1455.LAB	9/16/2021	6:25:17	1.26	0.35	1,735.63	1,713.83	
ACZASCRUBBER2_1456.LAB	9/16/2021	6:26:17	1.25	0.23	1,598.42	1,578.51	
ACZASCRUBBER2_1457.LAB	9/16/2021	6:27:17	1.22	0.27	1,441.83	1,424.22	
ACZASCRUBBER2_1458.LAB	9/16/2021	6:28:18	1.20	0.37	1,271.02	1,255.76	
ACZASCRUBBER2_1459.LAB	9/16/2021	6:29:17	1.17	0.31	1,134.20	1,120.92	
ACZASCRUBBER2_1460.LAB	9/16/2021	6:30:17	1.20	0.48	1,420.10	1,403.07	
ACZASCRUBBER2_1461.LAB	9/16/2021	6:31:17	1.17	0.18	1,223.09	1,208.81	
ACZASCRUBBER2_1462.LAB	9/16/2021	6:32:18	1.16	0.32	1,240.18	1,225.76	
ACZASCRUBBER2_1463.LAB	9/16/2021	6:33:17	1.19	0.23	1,439.72	1,422.61	
ACZASCRUBBER2_1464.LAB	9/16/2021	6:34:17	1.17	0.26	1,297.28	1,282.15	
ACZASCRUBBER2_1465.LAB	9/16/2021	6:35:18	1.11	0.01	964.65	953.95	
ACZASCRUBBER2_1466.LAB	9/16/2021	6:36:18	1.08	0.10	772.44	764.10	
ACZASCRUBBER2_1467.LAB	9/16/2021	6:37:18	1.09	0.15	954.72	944.28	
ACZASCRUBBER2_1468.LAB	9/16/2021	6:38:18	1.16	-0.04	1,547.05	1,529.07	
ACZASCRUBBER2_1469.LAB	9/16/2021	6:39:18	1.17	0.05	1,688.55	1,668.74	
ACZASCRUBBER2_1470.LAB	9/16/2021	6:40:18	1.20	-0.56	2,090.04	2,064.97	
ACZASCRUBBER2_1471.LAB	9/16/2021	6:41:18	1.16	-0.96	1,574.06	1,555.82	
ACZASCRUBBER2_1472.LAB	9/16/2021	6:42:18	1.08	0.01	876.46	867.01	
ACZASCRUBBER2_1473.LAB	9/16/2021	6:43:18	1.08	0.26	934.24	924.14	
ACZASCRUBBER2_1474.LAB	9/16/2021	6:44:18	1.10	0.20	1,089.52	1,077.55	
ACZASCRUBBER2_1475.LAB	9/16/2021	6:45:18	1.12	-0.02	1,282.97	1,268.60	
ACZASCRUBBER2_1476.LAB	9/16/2021	6:46:18	1.14	-0.07	1,431.83	1,415.55	
ACZASCRUBBER2_1477.LAB	9/16/2021	6:47:18	1.25	-0.46	2,715.04	2,681.06	
ACZASCRUBBER2_1478.LAB	9/16/2021	6:48:18	1.12	-2.05	1,414.87	1,399.09	
ACZASCRUBBER2_1479.LAB	9/16/2021	6:49:18	1.07	0.08	711.98	704.38	
ACZASCRUBBER2_1480.LAB	9/16/2021	6:50:18	1.08	0.21	865.74	856.40	
ACZASCRUBBER2_1481.LAB	9/16/2021	6:51:18	1.06	-0.04	794.70	786.25	
ACZASCRUBBER2_1482.LAB	9/16/2021	6:52:19	1.07	-0.03	855.11	845.95	
ACZASCRUBBER2_1483.LAB	9/16/2021	6:53:18	1.04	0.20	596.52	590.34	
ACZASCRUBBER2_1484.LAB	9/16/2021	6:54:18	1.02	0.03	500.25	495.14	
ACZASCRUBBER2_1485.LAB	9/16/2021	6:55:18	1.03	0.10	591.13	585.03	
ACZASCRUBBER2_1486.LAB	9/16/2021	6:56:19	1.01	0.10	521.96	516.67	
ACZASCRUBBER2_1487.LAB	9/16/2021	6:57:18	1.02	0.10	557.95	552.24	
ACZASCRUBBER2_1488.LAB	9/16/2021	6:58:19	1.04	-0.11	730.79	723.19	
ACZASCRUBBER2_1489.LAB	9/16/2021	6:59:19	1.01	0.00	469.30	464.55	
ACZASCRUBBER2_1490.LAB	9/16/2021	7:00:19	1.00	-0.06	458.64	454.06	
ACZASCRUBBER2_1491.LAB	9/16/2021	7:01:19	1.00	0.16	535.47	530.10	
ACZASCRUBBER2_1492.LAB	9/16/2021	7:02:19	1.01	0.10	651.16	644.55	
ACZASCRUBBER2_1493.LAB	9/16/2021	7:03:19	1.03	0.22	682.05	675.04	
ACZASCRUBBER2_1494.LAB	9/16/2021	7:04:19	1.00	0.08	423.45	419.21	
ACZASCRUBBER2_1495.LAB	9/16/2021	7:05:19	1.02	-0.22	579.32	573.43	
ACZASCRUBBER2_1496.LAB	9/16/2021	7:06:19	1.01	0.07	471.63	466.85	
ACZASCRUBBER2_1497.LAB	9/16/2021	7:07:19	1.00	0.02	408.11	404.01	
ACZASCRUBBER2_1498.LAB	9/16/2021	7:08:19	1.04	0.05	561.13	555.31	
ACZASCRUBBER2_1499.LAB	9/16/2021	7:09:19	1.03	0.02	478.94	474.00	
ACZASCRUBBER2_1500.LAB	9/16/2021	7:10:19	1.04	0.17	502.13	496.92	
ACZASCRUBBER2_1501.LAB	9/16/2021	7:11:19	1.05	0.10	516.44	511.04	
ACZASCRUBBER2_1502.LAB	9/16/2021	7:12:19	1.05	0.21	499.58	494.36	
ACZASCRUBBER2_1503.LAB	9/16/2021	7:13:19	1.05	0.13	519.82	514.35	
ACZASCRUBBER2_1504.LAB	9/16/2021	7:14:20	1.03	0.04	390.18	386.15	
ACZASCRUBBER2_1505.LAB	9/16/2021	7:15:19	1.03	0.02	372.78	368.95	
ACZASCRUBBER2_1506.LAB	9/16/2021	7:16:20	1.06	0.11	518.08	512.58	
ACZASCRUBBER2_1507.LAB	9/16/2021	7:17:19	1.06	0.04	448.33	443.56	
ACZASCRUBBER2_1508.LAB	9/16/2021	7:18:19	1.06	0.03	480.79	475.67	
ACZASCRUBBER2_1509.LAB	9/16/2021	7:19:19	1.09	0.16	548.32	542.37	
ACZASCRUBBER2_1510.LAB	9/16/2021	7:20:19	1.08	0.10	448.09	443.25	
ACZASCRUBBER2_1511.LAB	9/16/2021	7:21:19	1.10	0.18	573.32	567.04	
ACZASCRUBBER2_1512.LAB	9/16/2021	7:22:20	1.11	0.23	535.31	529.37	

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ACZASCRUBBER2_1513.LAB	9/16/2021	7:23:20	1.11	0.04	604.80	598.07	
ACZASCRUBBER2_1514.LAB	9/16/2021	7:24:20	1.09	0.08	451.90	446.98	
ACZASCRUBBER2_1515.LAB	9/16/2021	7:25:20	1.08	0.07	462.50	457.49	
ACZASCRUBBER2_1516.LAB	9/16/2021	7:26:20	1.08	-0.08	440.98	436.21	
ACZASCRUBBER2_1517.LAB	9/16/2021	7:27:20	1.10	0.04	513.51	507.84	
ACZASCRUBBER2_1518.LAB	9/16/2021	7:28:20	1.15	0.09	681.80	673.97	
ACZASCRUBBER2_1519.LAB	9/16/2021	7:29:20	1.12	0.22	540.81	534.74	
ACZASCRUBBER2_1520.LAB	9/16/2021	7:30:20	1.13	0.21	580.57	574.01	
ACZASCRUBBER2_1521.LAB	9/16/2021	7:31:20	1.11	0.02	405.68	401.17	
ACZASCRUBBER2_1522.LAB	9/16/2021	7:32:20	1.11	-0.01	371.66	367.55	
ACZASCRUBBER2_1523.LAB	9/16/2021	7:33:20	1.11	-0.02	420.70	416.04	
ACZASCRUBBER2_1524.LAB	9/16/2021	7:34:21	1.17	-0.92	808.11	798.68	
ACZASCRUBBER2_1525.LAB	9/16/2021	7:35:20	1.22	-0.09	790.79	781.18	
ACZASCRUBBER2_1526.LAB	9/16/2021	7:36:20	1.17	0.16	506.57	500.63	
ACZASCRUBBER2_1527.LAB	9/16/2021	7:37:20	1.20	0.20	570.51	563.67	
ACZASCRUBBER2_1528.LAB	9/16/2021	7:38:21	1.21	0.11	607.97	600.63	
ACZASCRUBBER2_1529.LAB	9/16/2021	7:39:21	1.27	0.03	792.57	782.53	
ACZASCRUBBER2_1530.LAB	9/16/2021	7:40:20	1.24	0.20	697.19	688.57	
ACZASCRUBBER2_1531.LAB	9/16/2021	7:41:21	1.28	0.04	813.72	803.34	
ACZASCRUBBER2_1532.LAB	9/16/2021	7:42:20	1.25	0.14	687.33	678.76	
ACZASCRUBBER2_1533.LAB	9/16/2021	7:43:20	1.29	0.11	706.71	697.62	
ACZASCRUBBER2_1534.LAB	9/16/2021	7:44:21	1.31	0.10	749.15	739.32	
ACZASCRUBBER2_1535.LAB	9/16/2021	7:45:21	1.30	0.10	662.48	653.90	
ACZASCRUBBER2_1536.LAB	9/16/2021	7:46:21	1.32	0.10	738.87	729.15	
ACZASCRUBBER2_1537.LAB	9/16/2021	7:47:21	1.30	0.10	748.54	738.78	
ACZASCRUBBER2_1538.LAB	9/16/2021	7:48:21	1.28	0.13	586.38	578.89	
ACZASCRUBBER2_1539.LAB	9/16/2021	7:49:21	1.29	0.18	613.52	605.59	
ACZASCRUBBER2_1540.LAB	9/16/2021	7:50:21	1.36	-0.15	888.11	876.06	
ACZASCRUBBER2_1541.LAB	9/16/2021	7:51:21	1.36	0.24	913.41	900.98	
ACZASCRUBBER2_1542.LAB	9/16/2021	7:52:21	1.34	0.20	872.13	860.43	
ACZASCRUBBER2_1543.LAB	9/16/2021	7:53:21	1.32	0.07	704.48	695.16	
ACZASCRUBBER2_1544.LAB	9/16/2021	7:54:21	1.33	0.08	685.75	676.63	
ACZASCRUBBER2_1545.LAB	9/16/2021	7:55:21	1.38	0.04	827.81	816.42	
ACZASCRUBBER2_1546.LAB	9/16/2021	7:56:21	1.34	0.06	747.49	737.45	
ACZASCRUBBER2_1547.LAB	9/16/2021	7:57:21	1.30	0.12	625.23	617.11	
ACZASCRUBBER2_1548.LAB	9/16/2021	7:58:21	1.32	-0.01	700.21	690.93	
ACZASCRUBBER2_1549.LAB	9/16/2021	7:59:22	1.35	-0.04	790.30	779.61	
ACZASCRUBBER2_1550.LAB	9/16/2021	8:00:22	1.38	-0.24	898.59	886.16	
ACZASCRUBBER2_1551.LAB	9/16/2021	8:01:21	1.40	0.25	933.46	920.38	
ACZASCRUBBER2_1552.LAB	9/16/2021	8:02:21	1.40	0.17	892.91	880.45	
ACZASCRUBBER2_1553.LAB	9/16/2021	8:03:22	1.39	0.13	877.39	865.19	
ACZASCRUBBER2_1554.LAB	9/16/2021	8:04:21	1.46	0.19	1,229.56	1,211.66	
ACZASCRUBBER2_1555.LAB	9/16/2021	8:05:22	1.32	0.14	759.03	748.97	
ACZASCRUBBER2_1556.LAB	9/16/2021	8:06:21	1.33	0.02	786.00	775.56	
ACZASCRUBBER2_1557.LAB	9/16/2021	8:07:21	1.46	-0.07	1,300.27	1,281.30	
ACZASCRUBBER2_1558.LAB	9/16/2021	8:08:22	1.51	-0.73	1,778.10	1,751.24	
ACZASCRUBBER2_1559.LAB	9/16/2021	8:09:22	1.42	0.16	1,198.86	1,181.89	
ACZASCRUBBER2_1560.LAB	9/16/2021	8:10:22	1.43	0.16	1,282.87	1,264.57	
ACZASCRUBBER2_1561.LAB	9/16/2021	8:11:22	1.33	0.03	923.21	910.95	
ACZASCRUBBER2_1562.LAB	9/16/2021	8:12:22	1.31	0.25	864.61	853.32	
ACZASCRUBBER2_1563.LAB	9/16/2021	8:13:22	1.35	-0.24	1,122.94	1,107.80	
ACZASCRUBBER2_1564.LAB	9/16/2021	8:14:22	1.35	0.09	1,061.68	1,047.31	
ACZASCRUBBER2_1565.LAB	9/16/2021	8:15:22	1.26	-0.03	772.05	762.34	
ACZASCRUBBER2_1566.LAB	9/16/2021	8:16:22	1.27	0.06	832.96	822.42	
ACZASCRUBBER2_1567.LAB	9/16/2021	8:17:22	1.27	-0.02	817.08	806.71	
ACZASCRUBBER2_1568.LAB	9/16/2021	8:18:22	1.31	0.26	986.52	973.59	
ACZASCRUBBER2_1569.LAB	9/16/2021	8:19:22	1.29	0.21	944.79	932.63	
ACZASCRUBBER2_1570.LAB	9/16/2021	8:20:22	1.23	0.06	733.49	724.47	
ACZASCRUBBER2_1571.LAB	9/16/2021	8:21:22	1.24	0.07	711.29	702.49	
ACZASCRUBBER2_1572.LAB	9/16/2021	8:22:22	1.19	0.14	624.99	617.57	
ACZASCRUBBER2_1573.LAB	9/16/2021	8:23:22	1.19	0.06	605.69	598.47	
ACZASCRUBBER2_1574.LAB	9/16/2021	8:24:22	1.34	0.18	1,132.42	1,117.26	
ACZASCRUBBER2_1575.LAB	9/16/2021	8:25:22	1.25	-0.02	767.77	758.14	
ACZASCRUBBER2_1576.LAB	9/16/2021	8:26:23	1.27	-0.01	769.69	759.91	
ACZASCRUBBER2_1577.LAB	9/16/2021	8:27:22	1.37	0.19	1,079.14	1,064.37	

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ACZASCRUBBERR2_1578.LAB	9/16/2021	8:28:22	1.37	0.01	1,157.34	1,141.49	
ACZASCRUBBERR2_1579.LAB	9/16/2021	8:29:22	1.36	0.19	1,182.20	1,166.15	End Vacuum - Treatment Step 1
			1.23		1,473.15	1,453.27	Average
ACZASCRUBBERR2_1580.LAB	9/16/2021	8:30:23	1.17	-0.08	569.13	562.48	Start Fill/Heat - Treatment Step 2
ACZASCRUBBERR2_1581.LAB	9/16/2021	8:31:22	1.05	-0.08	349.52	345.84	
ACZASCRUBBERR2_1582.LAB	9/16/2021	8:32:23	0.82	0.07	47.26	46.87	
ACZASCRUBBERR2_1583.LAB	9/16/2021	8:33:23	0.82	0.05	30.30	30.05	
ACZASCRUBBERR2_1584.LAB	9/16/2021	8:34:23	0.82	0.06	24.87	24.66	
ACZASCRUBBERR2_1585.LAB	9/16/2021	8:35:23	0.81	0.03	20.25	20.09	
ACZASCRUBBERR2_1586.LAB	9/16/2021	8:36:23	0.81	0.02	17.08	16.94	
ACZASCRUBBERR2_1587.LAB	9/16/2021	8:37:23	0.81	-0.02	14.93	14.81	
ACZASCRUBBERR2_1588.LAB	9/16/2021	8:38:23	0.81	0.01	13.54	13.43	
ACZASCRUBBERR2_1589.LAB	9/16/2021	8:39:23	0.82	0.04	13.22	13.11	
ACZASCRUBBERR2_1590.LAB	9/16/2021	8:40:23	0.82	0.03	12.62	12.52	
ACZASCRUBBERR2_1591.LAB	9/16/2021	8:41:23	0.81	0.08	11.64	11.55	
ACZASCRUBBERR2_1592.LAB	9/16/2021	8:42:23	0.81	0.05	10.88	10.80	
ACZASCRUBBERR2_1593.LAB	9/16/2021	8:43:23	0.81	0.03	9.85	9.77	
ACZASCRUBBERR2_1594.LAB	9/16/2021	8:44:23	0.89	0.02	55.09	54.60	
ACZASCRUBBERR2_1595.LAB	9/16/2021	8:45:23	1.04	0.06	342.23	338.68	
ACZASCRUBBERR2_1596.LAB	9/16/2021	8:46:23	1.14	0.12	641.72	634.40	
ACZASCRUBBERR2_1597.LAB	9/16/2021	8:47:23	1.16	0.23	689.86	681.86	
ACZASCRUBBERR2_1598.LAB	9/16/2021	8:48:23	1.12	0.20	527.15	521.24	
ACZASCRUBBERR2_1599.LAB	9/16/2021	8:49:24	1.13	0.06	488.92	483.40	
ACZASCRUBBERR2_1600.LAB	9/16/2021	8:50:23	1.13	0.13	477.32	471.94	
ACZASCRUBBERR2_1601.LAB	9/16/2021	8:51:23	1.12	0.01	445.71	440.74	
ACZASCRUBBERR2_1602.LAB	9/16/2021	8:52:23	1.11	0.11	482.55	477.19	
ACZASCRUBBERR2_1603.LAB	9/16/2021	8:53:23	1.21	-0.23	824.83	814.86	
ACZASCRUBBERR2_1604.LAB	9/16/2021	8:54:24	1.18	-0.68	821.30	811.58	
ACZASCRUBBERR2_1605.LAB	9/16/2021	8:55:23	1.31	-1.22	1,332.10	1,314.65	
ACZASCRUBBERR2_1606.LAB	9/16/2021	8:56:24	1.20	-0.04	884.54	873.90	
ACZASCRUBBERR2_1607.LAB	9/16/2021	8:57:24	1.29	0.12	1,251.47	1,235.33	
ACZASCRUBBERR2_1608.LAB	9/16/2021	8:58:24	1.12	0.14	649.14	641.87	
ACZASCRUBBERR2_1609.LAB	9/16/2021	8:59:24	1.11	0.06	651.30	644.08	
ACZASCRUBBERR2_1610.LAB	9/16/2021	9:00:24	1.18	0.21	904.27	893.60	End Fill/Heat - Treatment Step 2
			1.01		406.92	402.16	Average Treatment Step 2
ACZASCRUBBERR2_1611.LAB	9/16/2021	9:01:24	1.17	0.19	884.81	874.44	
ACZASCRUBBERR2_1612.LAB	9/16/2021	9:02:24	1.43	-2.33	2,152.17	2,121.32	
ACZASCRUBBERR2_1613.LAB	9/16/2021	9:03:24	1.55	-0.96	2,715.33	2,673.25	
ACZASCRUBBERR2_1614.LAB	9/16/2021	9:04:24	1.32	-0.40	1,493.55	1,473.87	
ACZASCRUBBERR2_1615.LAB	9/16/2021	9:05:24	0.33	-0.16	116.99	116.60	
ACZASCRUBBERR2_1616.LAB	9/16/2021	9:06:24	0.01	0.07	15.01	15.01	
ACZASCRUBBERR2_1617.LAB	9/16/2021	9:07:24	0.00	0.01	9.83	9.83	
ACZASCRUBBERR2_1618.LAB	9/16/2021	9:08:24	0.00	0.03	7.51	7.51	
ACZASCRUBBERR2_1619.LAB	9/16/2021	9:09:24	0.01	86.33	14.06	14.06	
ACZASCRUBBERR2_1620.LAB	9/16/2021	9:10:24	0.00	98.24	6.64	6.64	Ethylene CTS Verification
ACZASCRUBBERR2_1621.LAB	9/16/2021	9:11:24	0.00	98.18	5.40	5.40	98.21
ACZASCRUBBERR2_1622.LAB	9/16/2021	9:12:24	0.00	38.77	4.46	4.46	
ACZASCRUBBERR2_1623.LAB	9/16/2021	9:13:25	0.00	0.13	4.18	4.18	
ACZASCRUBBERR2_1624.LAB	9/16/2021	9:14:24	0.10	0.11	8.13	8.12	
ACZASCRUBBERR2_1625.LAB	9/16/2021	9:15:24	0.79	0.13	22.89	22.71	
ACZASCRUBBERR2_1626.LAB	9/16/2021	10:42:02	0.78	0.12	1.09	1.08	
ACZASCRUBBERR2_1627.LAB	9/16/2021	10:43:02	0.91	-7.13	574.08	568.83	
ACZASCRUBBERR2_1628.LAB	9/16/2021	10:44:02	1.92	-11.69	5,460.39	5,355.29	
ACZASCRUBBERR2_1629.LAB	9/16/2021	10:45:02	1.87	-11.76	5,490.83	5,388.38	
ACZASCRUBBERR2_1630.LAB	9/16/2021	10:46:02	1.87	-12.09	5,507.07	5,404.29	
ACZASCRUBBERR2_1631.LAB	9/16/2021	10:47:02	1.84	-12.42	5,518.11	5,416.64	
ACZASCRUBBERR2_1632.LAB	9/16/2021	10:48:02	1.82	-12.38	5,512.02	5,411.58	
ACZASCRUBBERR2_1633.LAB	9/16/2021	10:49:02	1.81	-11.91	5,517.64	5,417.64	
ACZASCRUBBERR2_1634.LAB	9/16/2021	10:50:02	1.83	-11.87	5,519.84	5,419.02	
ACZASCRUBBERR2_1635.LAB	9/16/2021	10:51:02	1.81	-12.48	5,519.90	5,419.95	
ACZASCRUBBERR2_1636.LAB	9/16/2021	10:52:02	1.80	-12.29	5,523.07	5,423.40	
ACZASCRUBBERR2_1637.LAB	9/16/2021	10:53:02	1.84	-11.50	5,391.29	5,292.22	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBERR2_1638.LAB	9/16/2021	10:54:02	1.84	-9.05	5,029.51	4,936.87	
ACZASCRUBBERR2_1639.LAB	9/16/2021	10:55:02	1.82	-9.50	5,039.00	4,947.07	
ACZASCRUBBERR2_1640.LAB	9/16/2021	10:56:02	1.86	-5.82	4,291.66	4,212.01	
ACZASCRUBBERR2_1641.LAB	9/16/2021	10:57:02	1.92	-2.81	3,547.90	3,479.88	
ACZASCRUBBERR2_1642.LAB	9/16/2021	10:58:02	1.80	-12.52	5,526.41	5,426.95	
ACZASCRUBBERR2_1643.LAB	9/16/2021	10:59:02	1.79	-12.52	5,549.57	5,450.49	
ACZASCRUBBERR2_1644.LAB	9/16/2021	11:00:02	1.80	-13.31	5,562.22	5,462.35	Start Vacuum - Treatment Step 5
ACZASCRUBBERR2_1645.LAB	9/16/2021	11:01:02	1.82	-12.61	5,580.75	5,479.41	
ACZASCRUBBERR2_1646.LAB	9/16/2021	11:02:03	1.84	-12.96	5,596.48	5,493.61	
ACZASCRUBBERR2_1647.LAB	9/16/2021	11:03:03	1.87	-12.08	5,608.45	5,503.40	
ACZASCRUBBERR2_1648.LAB	9/16/2021	11:04:03	1.87	-13.02	5,608.51	5,503.70	
ACZASCRUBBERR2_1649.LAB	9/16/2021	11:05:03	1.83	-12.95	5,611.95	5,509.47	
ACZASCRUBBERR2_1650.LAB	9/16/2021	11:06:03	1.82	-13.05	5,617.67	5,515.60	
ACZASCRUBBERR2_1651.LAB	9/16/2021	11:07:03	1.83	-12.80	5,626.09	5,523.11	
ACZASCRUBBERR2_1652.LAB	9/16/2021	11:08:03	1.83	-12.91	5,606.77	5,504.33	
ACZASCRUBBERR2_1653.LAB	9/16/2021	11:09:03	1.83	-12.36	5,579.18	5,476.89	
ACZASCRUBBERR2_1654.LAB	9/16/2021	11:10:03	1.84	-13.04	5,543.81	5,442.00	
ACZASCRUBBERR2_1655.LAB	9/16/2021	11:11:03	1.84	-11.58	5,470.89	5,369.96	
ACZASCRUBBERR2_1656.LAB	9/16/2021	11:12:03	1.88	-10.90	5,391.84	5,290.45	
ACZASCRUBBERR2_1657.LAB	9/16/2021	11:13:03	1.86	-11.58	5,400.92	5,300.29	
ACZASCRUBBERR2_1658.LAB	9/16/2021	11:14:03	1.86	-10.92	5,332.91	5,233.64	
ACZASCRUBBERR2_1659.LAB	9/16/2021	11:15:03	1.88	-9.05	5,059.40	4,964.31	
ACZASCRUBBERR2_1660.LAB	9/16/2021	11:16:03	1.88	-8.77	5,059.17	4,964.23	
ACZASCRUBBERR2_1661.LAB	9/16/2021	11:17:03	1.89	-8.71	4,769.07	4,678.84	
ACZASCRUBBERR2_1662.LAB	9/16/2021	11:18:04	2.12	-0.34	3,119.58	3,053.31	
ACZASCRUBBERR2_1663.LAB	9/16/2021	11:19:04	2.03	-7.63	4,395.84	4,306.66	
ACZASCRUBBERR2_1664.LAB	9/16/2021	11:20:03	1.92	-8.72	4,979.87	4,884.26	
ACZASCRUBBERR2_1665.LAB	9/16/2021	11:21:04	2.02	-4.72	4,136.85	4,053.19	
ACZASCRUBBERR2_1666.LAB	9/16/2021	11:22:03	2.09	-2.01	3,540.13	3,466.14	
ACZASCRUBBERR2_1667.LAB	9/16/2021	11:23:03	2.12	-1.95	3,473.58	3,399.92	
ACZASCRUBBERR2_1668.LAB	9/16/2021	11:24:03	1.97	-7.60	4,644.64	4,553.06	
ACZASCRUBBERR2_1669.LAB	9/16/2021	11:25:04	1.96	-6.64	4,435.18	4,348.13	
ACZASCRUBBERR2_1670.LAB	9/16/2021	11:26:04	2.05	-2.25	3,591.04	3,517.29	
ACZASCRUBBERR2_1671.LAB	9/16/2021	11:27:04	1.97	-5.21	3,833.83	3,758.22	
ACZASCRUBBERR2_1672.LAB	9/16/2021	11:28:04	1.97	-8.52	4,417.34	4,330.17	
ACZASCRUBBERR2_1673.LAB	9/16/2021	11:29:04	2.00	-5.23	4,094.98	4,012.92	
ACZASCRUBBERR2_1674.LAB	9/16/2021	11:30:04	2.09	-1.17	3,191.43	3,124.88	
ACZASCRUBBERR2_1675.LAB	9/16/2021	11:31:04	2.01	-6.71	4,408.20	4,319.68	
ACZASCRUBBERR2_1676.LAB	9/16/2021	11:32:04	2.05	-5.35	3,876.11	3,796.82	
ACZASCRUBBERR2_1677.LAB	9/16/2021	11:33:04	1.92	-8.65	4,982.58	4,886.80	
ACZASCRUBBERR2_1678.LAB	9/16/2021	11:34:04	2.05	-2.29	3,466.11	3,395.12	
ACZASCRUBBERR2_1679.LAB	9/16/2021	11:35:04	2.05	-0.11	2,619.81	2,566.01	
ACZASCRUBBERR2_1680.LAB	9/16/2021	11:36:04	2.04	-4.17	3,587.18	3,514.07	
ACZASCRUBBERR2_1681.LAB	9/16/2021	11:37:04	1.96	-7.12	4,534.39	4,445.68	
ACZASCRUBBERR2_1682.LAB	9/16/2021	11:38:04	1.97	-5.66	4,087.74	4,007.20	
ACZASCRUBBERR2_1683.LAB	9/16/2021	11:39:05	1.95	-6.06	4,117.76	4,037.37	
ACZASCRUBBERR2_1684.LAB	9/16/2021	11:40:04	1.96	-4.04	3,210.83	3,148.05	
ACZASCRUBBERR2_1685.LAB	9/16/2021	11:41:04	1.98	-6.96	4,550.07	4,459.99	
ACZASCRUBBERR2_1686.LAB	9/16/2021	11:42:04	2.02	-1.47	3,278.48	3,212.19	
ACZASCRUBBERR2_1687.LAB	9/16/2021	11:43:05	2.03	-1.00	3,232.07	3,166.60	
ACZASCRUBBERR2_1688.LAB	9/16/2021	11:44:05	1.99	-6.29	4,316.80	4,230.80	
ACZASCRUBBERR2_1689.LAB	9/16/2021	11:45:04	1.98	-6.04	4,361.71	4,275.51	
ACZASCRUBBERR2_1690.LAB	9/16/2021	11:46:04	1.99	-5.63	4,290.33	4,205.08	
ACZASCRUBBERR2_1691.LAB	9/16/2021	11:47:05	1.92	-9.73	5,171.78	5,072.26	
ACZASCRUBBERR2_1692.LAB	9/16/2021	11:48:04	1.90	-11.24	5,487.05	5,382.73	
ACZASCRUBBERR2_1693.LAB	9/16/2021	11:49:05	1.95	-7.74	4,761.59	4,668.89	
ACZASCRUBBERR2_1694.LAB	9/16/2021	11:50:05	1.93	-8.85	4,859.21	4,765.33	
ACZASCRUBBERR2_1695.LAB	9/16/2021	11:51:05	1.94	-6.52	4,421.78	4,336.21	
ACZASCRUBBERR2_1696.LAB	9/16/2021	11:52:05	1.91	-7.23	4,264.08	4,182.45	
ACZASCRUBBERR2_1697.LAB	9/16/2021	11:53:05	1.73	0.22	2,160.25	2,122.95	
ACZASCRUBBERR2_1698.LAB	9/16/2021	11:54:05	1.88	-10.57	4,748.25	4,659.01	
ACZASCRUBBERR2_1699.LAB	9/16/2021	11:55:05	1.89	-11.12	5,371.91	5,270.57	
ACZASCRUBBERR2_1700.LAB	9/16/2021	11:56:05	1.89	-10.91	5,248.30	5,149.15	
ACZASCRUBBERR2_1701.LAB	9/16/2021	11:57:05	1.89	-9.81	5,087.63	4,991.46	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBERR2_1702.LAB	9/16/2021	11:58:05	1.92	-9.25	5,005.35	4,909.14	
ACZASCRUBBERR2_1703.LAB	9/16/2021	11:59:05	1.97	-7.09	4,709.14	4,616.44	
ACZASCRUBBERR2_1704.LAB	9/16/2021	12:00:05	1.91	-10.44	5,309.44	5,207.97	
ACZASCRUBBERR2_1705.LAB	9/16/2021	12:01:05	1.96	-8.39	4,440.91	4,354.06	
ACZASCRUBBERR2_1706.LAB	9/16/2021	12:02:05	1.91	-10.70	4,241.15	4,159.96	
ACZASCRUBBERR2_1707.LAB	9/16/2021	12:03:05	1.90	-10.93	5,355.81	5,253.86	
ACZASCRUBBERR2_1708.LAB	9/16/2021	12:04:05	1.90	-11.10	5,384.74	5,282.18	
ACZASCRUBBERR2_1709.LAB	9/16/2021	12:05:05	1.92	-10.43	5,195.42	5,095.83	
ACZASCRUBBERR2_1710.LAB	9/16/2021	12:06:05	1.92	-9.49	5,137.61	5,038.91	
ACZASCRUBBERR2_1711.LAB	9/16/2021	12:07:05	1.93	-9.53	5,096.30	4,997.85	
ACZASCRUBBERR2_1712.LAB	9/16/2021	12:08:05	1.94	-9.97	5,163.75	5,063.68	
ACZASCRUBBERR2_1713.LAB	9/16/2021	12:09:05	2.01	-2.49	3,433.86	3,364.96	
ACZASCRUBBERR2_1714.LAB	9/16/2021	12:10:05	1.94	-11.21	4,943.51	4,847.52	
ACZASCRUBBERR2_1715.LAB	9/16/2021	12:11:05	1.95	-9.16	5,078.94	4,979.81	
ACZASCRUBBERR2_1716.LAB	9/16/2021	12:12:06	1.79	-5.74	3,095.92	3,040.63	
ACZASCRUBBERR2_1717.LAB	9/16/2021	12:13:06	1.96	-6.98	3,916.24	3,839.47	
ACZASCRUBBERR2_1718.LAB	9/16/2021	12:14:06	1.95	-9.87	5,157.43	5,056.79	
ACZASCRUBBERR2_1719.LAB	9/16/2021	12:15:06	1.95	-12.01	5,454.17	5,347.82	
ACZASCRUBBERR2_1720.LAB	9/16/2021	12:16:06	1.97	-9.60	5,096.81	4,996.46	
ACZASCRUBBERR2_1721.LAB	9/16/2021	12:17:06	1.95	-9.76	5,232.78	5,130.76	
ACZASCRUBBERR2_1722.LAB	9/16/2021	12:18:06	1.98	-7.71	4,859.08	4,762.91	
ACZASCRUBBERR2_1723.LAB	9/16/2021	12:19:06	2.01	-6.51	4,610.53	4,517.76	
ACZASCRUBBERR2_1724.LAB	9/16/2021	12:20:06	1.98	-10.24	5,230.08	5,126.39	
ACZASCRUBBERR2_1725.LAB	9/16/2021	12:21:06	1.98	-11.67	5,493.94	5,385.36	
ACZASCRUBBERR2_1726.LAB	9/16/2021	12:22:06	1.97	-10.13	5,311.21	5,206.52	
ACZASCRUBBERR2_1727.LAB	9/16/2021	12:23:06	2.00	-6.82	4,641.81	4,548.82	
ACZASCRUBBERR2_1728.LAB	9/16/2021	12:24:06	1.97	-11.80	5,468.49	5,360.75	
ACZASCRUBBERR2_1729.LAB	9/16/2021	12:25:06	1.96	-12.86	5,632.49	5,522.25	
ACZASCRUBBERR2_1730.LAB	9/16/2021	12:26:06	1.98	-10.35	5,316.24	5,211.17	
ACZASCRUBBERR2_1731.LAB	9/16/2021	12:27:06	1.97	-10.65	5,269.10	5,165.31	
ACZASCRUBBERR2_1732.LAB	9/16/2021	12:28:06	1.96	-13.46	5,734.46	5,621.90	
ACZASCRUBBERR2_1733.LAB	9/16/2021	12:29:06	1.97	-10.53	5,337.03	5,231.63	
ACZASCRUBBERR2_1734.LAB	9/16/2021	12:30:06	1.97	-3.89	3,835.39	3,759.95	
ACZASCRUBBERR2_1735.LAB	9/16/2021	12:31:07	1.99	-8.77	4,889.67	4,792.22	
ACZASCRUBBERR2_1736.LAB	9/16/2021	12:32:06	1.96	-10.64	5,317.98	5,213.54	
ACZASCRUBBERR2_1737.LAB	9/16/2021	12:33:07	1.98	-5.18	4,050.93	3,970.80	
ACZASCRUBBERR2_1738.LAB	9/16/2021	12:34:06	2.01	-2.11	3,479.59	3,409.55	
ACZASCRUBBERR2_1739.LAB	9/16/2021	12:35:06	1.99	-11.79	5,319.02	5,213.32	
ACZASCRUBBERR2_1740.LAB	9/16/2021	12:36:06	1.99	-9.72	5,083.11	4,982.05	
ACZASCRUBBERR2_1741.LAB	9/16/2021	12:37:07	1.96	-8.10	4,585.18	4,495.27	
ACZASCRUBBERR2_1742.LAB	9/16/2021	12:38:07	1.99	-9.22	5,049.86	4,949.27	
ACZASCRUBBERR2_1743.LAB	9/16/2021	12:39:07	1.99	-12.14	5,533.32	5,423.43	
ACZASCRUBBERR2_1744.LAB	9/16/2021	12:40:07	2.00	-5.14	4,003.62	3,923.71	
ACZASCRUBBERR2_1745.LAB	9/16/2021	12:41:07	1.91	-3.13	3,097.07	3,037.81	
ACZASCRUBBERR2_1746.LAB	9/16/2021	12:42:07	1.88	-13.59	4,113.25	4,036.12	
ACZASCRUBBERR2_1747.LAB	9/16/2021	12:43:07	1.94	-5.38	4,172.21	4,091.41	
ACZASCRUBBERR2_1748.LAB	9/16/2021	12:44:07	2.03	-9.42	5,074.61	4,971.51	
ACZASCRUBBERR2_1749.LAB	9/16/2021	12:45:07	2.01	-13.22	5,732.20	5,617.08	
ACZASCRUBBERR2_1750.LAB	9/16/2021	12:46:07	2.03	-10.33	5,391.98	5,282.44	
ACZASCRUBBERR2_1751.LAB	9/16/2021	12:47:07	2.03	-9.54	5,130.37	5,026.27	
ACZASCRUBBERR2_1752.LAB	9/16/2021	12:48:07	2.04	-10.44	5,308.94	5,200.43	
ACZASCRUBBERR2_1753.LAB	9/16/2021	12:49:07	2.02	-10.21	5,069.04	4,966.56	
ACZASCRUBBERR2_1754.LAB	9/16/2021	12:50:07	2.04	-9.32	4,992.68	4,890.62	
ACZASCRUBBERR2_1755.LAB	9/16/2021	12:51:07	2.03	-12.13	5,562.59	5,449.60	
ACZASCRUBBERR2_1756.LAB	9/16/2021	12:52:07	1.96	-7.08	4,094.06	4,013.61	
ACZASCRUBBERR2_1757.LAB	9/16/2021	12:53:07	2.02	-2.92	3,594.85	3,522.14	
ACZASCRUBBERR2_1758.LAB	9/16/2021	12:54:07	2.02	-10.41	4,963.26	4,862.91	
ACZASCRUBBERR2_1759.LAB	9/16/2021	12:55:08	2.03	-9.43	5,067.47	4,964.64	
ACZASCRUBBERR2_1760.LAB	9/16/2021	12:56:08	2.04	-11.31	5,487.41	5,375.58	
ACZASCRUBBERR2_1761.LAB	9/16/2021	12:57:07	2.04	-11.48	5,523.86	5,410.93	
ACZASCRUBBERR2_1762.LAB	9/16/2021	12:58:07	2.00	-7.50	4,357.16	4,270.08	
ACZASCRUBBERR2_1763.LAB	9/16/2021	12:59:07	1.95	-5.38	3,554.08	3,484.84	
ACZASCRUBBERR2_1764.LAB	9/16/2021	13:00:08	2.03	-12.90	5,660.15	5,544.99	
ACZASCRUBBERR2_1765.LAB	9/16/2021	13:01:08	2.03	-13.03	5,645.51	5,530.74	
ACZASCRUBBERR2_1766.LAB	9/16/2021	13:02:08	2.03	-12.36	5,631.74	5,517.47	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1767.LAB	9/16/2021	13:03:08	2.04	-6.28	4,146.53	4,061.80	
ACZASCRUBBER2_1768.LAB	9/16/2021	13:04:08	1.97	-10.69	4,433.81	4,346.38	
ACZASCRUBBER2_1769.LAB	9/16/2021	13:05:08	2.01	-9.23	4,876.53	4,778.35	
ACZASCRUBBER2_1770.LAB	9/16/2021	13:06:08	1.82	-0.90	2,701.95	2,652.72	
ACZASCRUBBER2_1771.LAB	9/16/2021	13:07:08	1.45	-0.03	1,469.87	1,448.55	
ACZASCRUBBER2_1772.LAB	9/16/2021	13:08:08	1.76	-5.12	2,840.59	2,790.51	
ACZASCRUBBER2_1773.LAB	9/16/2021	13:09:08	2.00	-8.38	4,838.98	4,742.42	
ACZASCRUBBER2_1774.LAB	9/16/2021	13:10:08	2.04	-6.52	4,576.03	4,482.88	
ACZASCRUBBER2_1775.LAB	9/16/2021	13:11:08	2.04	-10.56	5,420.59	5,309.80	
ACZASCRUBBER2_1776.LAB	9/16/2021	13:12:08	2.05	-10.09	5,155.47	5,049.61	
ACZASCRUBBER2_1777.LAB	9/16/2021	13:13:08	1.99	-6.89	4,051.48	3,970.79	
ACZASCRUBBER2_1778.LAB	9/16/2021	13:14:08	1.77	-4.84	2,765.54	2,716.64	
ACZASCRUBBER2_1779.LAB	9/16/2021	13:15:08	2.02	-11.80	5,475.22	5,364.45	
ACZASCRUBBER2_1780.LAB	9/16/2021	13:16:08	2.03	-6.78	4,568.33	4,475.68	
ACZASCRUBBER2_1781.LAB	9/16/2021	13:17:09	2.04	-11.60	5,484.89	5,372.83	
ACZASCRUBBER2_1782.LAB	9/16/2021	13:18:08	2.04	-8.67	4,811.30	4,713.37	
ACZASCRUBBER2_1783.LAB	9/16/2021	13:19:08	1.91	-2.53	3,232.69	3,170.89	
ACZASCRUBBER2_1784.LAB	9/16/2021	13:20:08	1.92	-9.64	4,134.76	4,055.28	
ACZASCRUBBER2_1785.LAB	9/16/2021	13:21:08	2.01	-10.09	5,145.92	5,042.68	
ACZASCRUBBER2_1786.LAB	9/16/2021	13:22:08	2.01	-8.39	4,775.73	4,679.86	
ACZASCRUBBER2_1787.LAB	9/16/2021	13:23:08	1.95	-3.18	3,656.36	3,584.93	
ACZASCRUBBER2_1788.LAB	9/16/2021	13:24:09	1.92	-1.72	3,401.08	3,335.86	
ACZASCRUBBER2_1789.LAB	9/16/2021	13:25:09	1.95	-7.54	4,411.51	4,325.29	
ACZASCRUBBER2_1790.LAB	9/16/2021	13:26:09	1.83	-0.36	2,917.23	2,863.71	
ACZASCRUBBER2_1791.LAB	9/16/2021	13:27:09	1.91	-11.85	4,548.21	4,461.26	
ACZASCRUBBER2_1792.LAB	9/16/2021	13:28:09	2.02	-10.91	5,242.74	5,136.59	
ACZASCRUBBER2_1793.LAB	9/16/2021	13:29:09	2.05	-10.43	5,290.78	5,182.45	
ACZASCRUBBER2_1794.LAB	9/16/2021	13:30:09	2.05	-12.55	5,579.20	5,464.63	
ACZASCRUBBER2_1795.LAB	9/16/2021	13:31:09	2.02	-8.82	4,627.96	4,534.47	
ACZASCRUBBER2_1796.LAB	9/16/2021	13:32:09	1.76	-0.22	2,666.10	2,619.27	
ACZASCRUBBER2_1797.LAB	9/16/2021	13:33:09	1.99	-12.40	5,348.81	5,242.29	
ACZASCRUBBER2_1798.LAB	9/16/2021	13:34:09	2.04	-13.02	5,408.74	5,298.13	
ACZASCRUBBER2_1799.LAB	9/16/2021	13:35:09	2.03	-11.09	5,052.51	4,950.13	
ACZASCRUBBER2_1800.LAB	9/16/2021	13:36:09	2.06	-11.48	5,411.50	5,299.89	
ACZASCRUBBER2_1801.LAB	9/16/2021	13:37:09	2.06	-12.39	5,536.33	5,422.03	
ACZASCRUBBER2_1802.LAB	9/16/2021	13:38:09	1.99	-7.62	4,186.11	4,102.61	
ACZASCRUBBER2_1803.LAB	9/16/2021	13:39:09	2.02	-8.02	4,792.65	4,695.99	
ACZASCRUBBER2_1804.LAB	9/16/2021	13:40:09	2.01	-8.36	4,756.87	4,661.28	
ACZASCRUBBER2_1805.LAB	9/16/2021	13:41:09	2.03	-9.39	5,120.75	5,016.93	
ACZASCRUBBER2_1806.LAB	9/16/2021	13:42:09	2.06	-13.84	5,828.94	5,709.12	
ACZASCRUBBER2_1807.LAB	9/16/2021	13:43:09	2.06	-13.96	5,807.08	5,687.33	
ACZASCRUBBER2_1808.LAB	9/16/2021	13:44:09	2.08	-11.13	5,290.63	5,180.57	
ACZASCRUBBER2_1809.LAB	9/16/2021	13:45:09	2.05	-13.94	5,809.48	5,690.34	
ACZASCRUBBER2_1810.LAB	9/16/2021	13:46:10	2.10	-11.57	5,435.92	5,321.79	
ACZASCRUBBER2_1811.LAB	9/16/2021	13:47:09	2.06	-10.37	5,141.93	5,035.96	
ACZASCRUBBER2_1812.LAB	9/16/2021	13:48:09	2.05	-14.59	5,909.53	5,788.30	
ACZASCRUBBER2_1813.LAB	9/16/2021	13:49:10	2.08	-13.96	5,699.12	5,580.50	
ACZASCRUBBER2_1814.LAB	9/16/2021	13:50:10	1.91	-2.70	3,127.99	3,068.25	
ACZASCRUBBER2_1815.LAB	9/16/2021	13:51:10	2.01	-9.71	4,962.06	4,862.39	
ACZASCRUBBER2_1816.LAB	9/16/2021	13:52:10	2.05	-13.66	5,718.84	5,601.37	
ACZASCRUBBER2_1817.LAB	9/16/2021	13:53:10	2.05	-13.52	5,737.52	5,619.94	
ACZASCRUBBER2_1818.LAB	9/16/2021	13:54:10	2.10	-11.98	5,395.42	5,282.19	
ACZASCRUBBER2_1819.LAB	9/16/2021	13:55:10	2.08	-11.26	5,442.93	5,329.78	
ACZASCRUBBER2_1820.LAB	9/16/2021	13:56:10	1.70	-2.46	2,537.13	2,493.96	
ACZASCRUBBER2_1821.LAB	9/16/2021	13:57:10	1.76	-7.54	3,247.39	3,190.16	
ACZASCRUBBER2_1822.LAB	9/16/2021	13:58:10	1.97	-8.68	4,921.96	4,825.15	
ACZASCRUBBER2_1823.LAB	9/16/2021	13:59:10	1.99	-6.75	4,521.59	4,431.54	
ACZASCRUBBER2_1824.LAB	9/16/2021	14:00:10	1.95	-2.92	3,642.88	3,571.78	End Vacuum - Treatment Step 5
			1.96		4,691.43	4,599.07	Average Treatment Step 5
ACZASCRUBBER2_1825.LAB	9/16/2021	14:01:10	2.02	-10.79	5,209.56	5,104.36	Start Strip - Treatment Step 6
ACZASCRUBBER2_1826.LAB	9/16/2021	14:02:10	2.07	-13.56	5,721.49	5,603.28	
ACZASCRUBBER2_1827.LAB	9/16/2021	14:03:10	2.08	-7.82	4,792.74	4,693.06	
ACZASCRUBBER2_1828.LAB	9/16/2021	14:04:10	2.03	-6.19	4,246.66	4,160.44	
ACZASCRUBBER2_1829.LAB	9/16/2021	14:05:10	2.02	-8.56	4,681.30	4,586.66	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1830.LAB	9/16/2021	14:06:10	2.00	-4.29	4,024.10	3,943.56	
ACZASCRUBBER2_1831.LAB	9/16/2021	14:07:10	2.02	-9.45	5,056.63	4,954.51	
ACZASCRUBBER2_1832.LAB	9/16/2021	14:08:10	2.03	-7.49	4,538.28	4,445.93	
ACZASCRUBBER2_1833.LAB	9/16/2021	14:09:11	2.11	-18.76	6,586.72	6,447.79	End Strip - Treatment Step 6
ACZASCRUBBER2_1834.LAB	9/16/2021	14:10:10	2.10	-18.71	6,592.26	6,453.94	Start Final Vacuum - Treatment Step 7
ACZASCRUBBER2_1835.LAB	9/16/2021	14:11:10	2.20	-17.96	6,617.46	6,472.07	
ACZASCRUBBER2_1836.LAB	9/16/2021	14:12:11	2.20	-18.76	6,617.57	6,471.71	
ACZASCRUBBER2_1837.LAB	9/16/2021	14:13:11	2.18	-19.46	6,629.03	6,484.53	
ACZASCRUBBER2_1838.LAB	9/16/2021	14:14:11	2.16	-18.48	6,628.82	6,485.56	
ACZASCRUBBER2_1839.LAB	9/16/2021	14:15:11	2.29	-18.46	6,654.95	6,502.67	
ACZASCRUBBER2_1840.LAB	9/16/2021	14:16:11	2.29	-18.16	6,679.15	6,526.24	
ACZASCRUBBER2_1841.LAB	9/16/2021	14:17:11	2.17	-18.87	6,671.54	6,526.47	
ACZASCRUBBER2_1842.LAB	9/16/2021	14:18:11	2.19	-18.86	6,672.91	6,526.80	
ACZASCRUBBER2_1843.LAB	9/16/2021	14:19:11	2.31	-18.17	6,666.08	6,511.83	
ACZASCRUBBER2_1844.LAB	9/16/2021	14:20:11	2.31	-17.93	6,615.50	6,462.83	
ACZASCRUBBER2_1845.LAB	9/16/2021	14:21:11	2.21	-18.17	6,624.12	6,477.91	
ACZASCRUBBER2_1846.LAB	9/16/2021	14:22:11	2.20	-19.04	6,635.46	6,489.60	
ACZASCRUBBER2_1847.LAB	9/16/2021	14:23:11	2.33	-17.23	6,557.67	6,404.66	
ACZASCRUBBER2_1848.LAB	9/16/2021	14:24:11	2.31	-17.67	6,575.61	6,423.95	
ACZASCRUBBER2_1849.LAB	9/16/2021	14:25:11	2.31	-17.11	6,419.67	6,271.20	
ACZASCRUBBER2_1850.LAB	9/16/2021	14:26:11	2.19	-17.01	6,477.48	6,335.83	
ACZASCRUBBER2_1851.LAB	9/16/2021	14:27:11	2.21	-16.67	6,347.09	6,207.04	
ACZASCRUBBER2_1852.LAB	9/16/2021	14:28:11	2.24	-14.13	6,001.74	5,867.09	
ACZASCRUBBER2_1853.LAB	9/16/2021	14:29:11	2.26	-12.98	5,810.21	5,678.65	
ACZASCRUBBER2_1854.LAB	9/16/2021	14:30:12	2.25	-13.94	5,940.53	5,807.01	
ACZASCRUBBER2_1855.LAB	9/16/2021	14:31:11	2.24	-14.40	6,036.62	5,901.39	
ACZASCRUBBER2_1856.LAB	9/16/2021	14:32:11	2.22	-14.33	6,089.02	5,953.69	
ACZASCRUBBER2_1857.LAB	9/16/2021	14:33:11	2.22	-14.48	5,989.52	5,856.55	
ACZASCRUBBER2_1858.LAB	9/16/2021	14:34:11	2.18	-12.96	5,674.51	5,551.04	
ACZASCRUBBER2_1859.LAB	9/16/2021	14:35:12	2.20	-13.15	5,876.76	5,747.42	
ACZASCRUBBER2_1860.LAB	9/16/2021	14:36:12	2.19	-13.04	5,883.86	5,755.22	
ACZASCRUBBER2_1861.LAB	9/16/2021	14:37:12	2.18	-13.15	5,761.20	5,635.87	
ACZASCRUBBER2_1862.LAB	9/16/2021	14:38:12	2.17	-9.37	5,057.36	4,947.84	
ACZASCRUBBER2_1863.LAB	9/16/2021	14:39:12	2.04	-3.47	3,463.14	3,392.53	
ACZASCRUBBER2_1864.LAB	9/16/2021	14:40:12	2.07	-6.17	4,163.62	4,077.55	
ACZASCRUBBER2_1865.LAB	9/16/2021	14:41:12	2.10	-13.69	5,703.23	5,583.46	
ACZASCRUBBER2_1866.LAB	9/16/2021	14:42:12	2.17	-13.77	5,888.94	5,761.35	
ACZASCRUBBER2_1867.LAB	9/16/2021	14:43:12	2.35	-15.98	6,217.74	6,071.37	
ACZASCRUBBER2_1868.LAB	9/16/2021	14:44:12	2.18	-14.03	5,794.95	5,668.69	
ACZASCRUBBER2_1869.LAB	9/16/2021	14:45:12	1.71	-3.31	2,438.23	2,396.50	
ACZASCRUBBER2_1870.LAB	9/16/2021	14:46:12	1.73	-2.73	2,683.71	2,637.25	
ACZASCRUBBER2_1871.LAB	9/16/2021	14:47:12	1.86	-3.62	3,631.92	3,564.19	
ACZASCRUBBER2_1872.LAB	9/16/2021	14:48:12	1.95	-13.85	4,936.39	4,840.13	
ACZASCRUBBER2_1873.LAB	9/16/2021	14:49:12	2.34	-16.53	6,299.86	6,152.17	
ACZASCRUBBER2_1874.LAB	9/16/2021	14:50:12	2.21	-17.14	6,385.56	6,244.39	
ACZASCRUBBER2_1875.LAB	9/16/2021	14:51:12	2.22	-13.82	5,915.90	5,784.72	
ACZASCRUBBER2_1876.LAB	9/16/2021	14:52:12	2.16	-8.72	4,936.63	4,830.10	
ACZASCRUBBER2_1877.LAB	9/16/2021	14:53:12	2.10	-11.64	5,211.62	5,102.30	
ACZASCRUBBER2_1878.LAB	9/16/2021	14:54:12	1.99	-3.15	3,591.10	3,519.72	
ACZASCRUBBER2_1879.LAB	9/16/2021	14:55:13	1.88	-3.52	3,241.35	3,180.27	
ACZASCRUBBER2_1880.LAB	9/16/2021	14:56:13	1.99	-8.54	4,631.43	4,539.49	
ACZASCRUBBER2_1881.LAB	9/16/2021	14:57:12	2.01	-6.86	4,430.25	4,341.19	
ACZASCRUBBER2_1882.LAB	9/16/2021	14:58:13	2.06	-11.44	5,522.01	5,408.31	
ACZASCRUBBER2_1883.LAB	9/16/2021	14:59:12	2.04	-11.80	5,085.60	4,981.89	
ACZASCRUBBER2_1884.LAB	9/16/2021	15:00:12	2.02	-4.09	3,888.92	3,810.32	
ACZASCRUBBER2_1885.LAB	9/16/2021	15:01:13	1.97	-3.56	3,700.54	3,627.48	
ACZASCRUBBER2_1886.LAB	9/16/2021	15:02:13	2.10	-15.39	5,748.85	5,628.15	
ACZASCRUBBER2_1887.LAB	9/16/2021	15:03:13	2.37	-16.48	6,245.71	6,097.79	
ACZASCRUBBER2_1888.LAB	9/16/2021	15:04:13	2.26	-15.90	6,192.60	6,052.45	
ACZASCRUBBER2_1889.LAB	9/16/2021	15:05:13	2.32	-17.06	6,428.13	6,278.81	
ACZASCRUBBER2_1890.LAB	9/16/2021	15:06:13	2.33	-17.45	6,397.94	6,249.13	
ACZASCRUBBER2_1891.LAB	9/16/2021	15:07:13	2.14	-6.80	4,479.34	4,383.58	
ACZASCRUBBER2_1892.LAB	9/16/2021	15:08:13	2.08	-8.37	4,766.35	4,666.98	
ACZASCRUBBER2_1893.LAB	9/16/2021	15:09:13	2.10	-14.49	5,870.13	5,746.70	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1894.LAB	9/16/2021	15:10:13	2.33	-16.07	6,205.03	6,060.59	
ACZASCRUBBER2_1895.LAB	9/16/2021	15:11:13	2.12	-11.29	5,056.59	4,949.40	
ACZASCRUBBER2_1896.LAB	9/16/2021	15:12:13	2.04	-5.39	3,962.61	3,881.61	
ACZASCRUBBER2_1897.LAB	9/16/2021	15:13:13	2.12	-14.66	5,777.29	5,654.93	
ACZASCRUBBER2_1898.LAB	9/16/2021	15:14:13	2.08	-10.38	5,082.85	4,977.10	
ACZASCRUBBER2_1899.LAB	9/16/2021	15:15:13	2.10	-8.41	4,838.36	4,736.89	
ACZASCRUBBER2_1900.LAB	9/16/2021	15:16:13	2.14	-15.01	5,861.01	5,735.40	
ACZASCRUBBER2_1901.LAB	9/16/2021	15:17:13	2.25	-15.13	6,056.14	5,919.92	
ACZASCRUBBER2_1902.LAB	9/16/2021	15:18:14	2.07	-5.73	4,244.51	4,156.59	
ACZASCRUBBER2_1903.LAB	9/16/2021	15:19:13	2.08	-7.28	4,647.71	4,550.90	
ACZASCRUBBER2_1904.LAB	9/16/2021	15:20:13	2.09	-12.96	5,585.90	5,469.39	
ACZASCRUBBER2_1905.LAB	9/16/2021	15:21:13	2.06	-6.78	4,379.96	4,289.65	
ACZASCRUBBER2_1906.LAB	9/16/2021	15:22:14	1.79	-2.11	2,848.36	2,797.45	
ACZASCRUBBER2_1907.LAB	9/16/2021	15:23:13	1.60	-1.92	2,343.44	2,305.95	
ACZASCRUBBER2_1908.LAB	9/16/2021	15:24:14	1.89	-12.42	4,647.54	4,559.80	
ACZASCRUBBER2_1909.LAB	9/16/2021	15:25:14	2.35	-18.06	6,390.59	6,240.62	
ACZASCRUBBER2_1910.LAB	9/16/2021	15:26:14	2.13	-12.30	5,385.54	5,270.84	
ACZASCRUBBER2_1911.LAB	9/16/2021	15:27:14	2.17	-15.99	6,015.18	5,884.74	
ACZASCRUBBER2_1912.LAB	9/16/2021	15:28:14	2.38	-15.99	6,140.97	5,994.99	
ACZASCRUBBER2_1913.LAB	9/16/2021	15:29:14	2.14	-13.63	5,520.05	5,402.07	
ACZASCRUBBER2_1914.LAB	9/16/2021	15:30:14	2.05	-4.28	3,737.99	3,661.41	
ACZASCRUBBER2_1915.LAB	9/16/2021	15:31:14	2.03	-8.26	4,544.79	4,452.38	
ACZASCRUBBER2_1916.LAB	9/16/2021	15:32:14	1.86	-7.84	3,885.90	3,813.78	
ACZASCRUBBER2_1917.LAB	9/16/2021	15:33:14	1.60	-0.57	2,322.94	2,285.87	
ACZASCRUBBER2_1918.LAB	9/16/2021	15:34:14	1.84	-3.04	3,616.26	3,549.56	
ACZASCRUBBER2_1919.LAB	9/16/2021	15:35:14	1.83	-3.73	3,615.07	3,548.84	
ACZASCRUBBER2_1920.LAB	9/16/2021	15:36:14	2.02	-11.17	5,337.76	5,230.17	
ACZASCRUBBER2_1921.LAB	9/16/2021	15:37:14	2.28	-16.86	6,400.92	6,254.93	
ACZASCRUBBER2_1922.LAB	9/16/2021	15:38:14	2.06	-9.98	4,878.20	4,777.54	
ACZASCRUBBER2_1923.LAB	9/16/2021	15:39:14	2.17	-15.75	6,085.61	5,953.48	
ACZASCRUBBER2_1924.LAB	9/16/2021	15:40:14	2.12	-12.65	5,300.08	5,187.98	
ACZASCRUBBER2_1925.LAB	9/16/2021	15:41:14	2.11	-6.30	4,497.55	4,402.49	
ACZASCRUBBER2_1926.LAB	9/16/2021	15:42:14	2.08	-8.55	4,892.84	4,791.17	
ACZASCRUBBER2_1927.LAB	9/16/2021	15:43:14	2.05	-7.99	4,611.04	4,516.56	
ACZASCRUBBER2_1928.LAB	9/16/2021	15:44:15	2.11	-15.54	5,889.09	5,764.74	
ACZASCRUBBER2_1929.LAB	9/16/2021	15:45:14	2.34	-18.38	6,580.70	6,426.68	
ACZASCRUBBER2_1930.LAB	9/16/2021	15:46:14	2.19	-13.55	5,631.76	5,508.58	
ACZASCRUBBER2_1931.LAB	9/16/2021	15:47:14	2.08	-3.70	3,956.76	3,874.39	
ACZASCRUBBER2_1932.LAB	9/16/2021	15:48:14	1.99	-5.27	3,760.89	3,685.94	
ACZASCRUBBER2_1933.LAB	9/16/2021	15:49:15	1.98	-12.27	4,785.36	4,690.81	
ACZASCRUBBER2_1934.LAB	9/16/2021	15:50:15	2.11	-15.31	5,987.63	5,861.18	
ACZASCRUBBER2_1935.LAB	9/16/2021	15:51:15	2.04	-7.00	4,279.71	4,192.61	
ACZASCRUBBER2_1936.LAB	9/16/2021	15:52:15	2.10	-15.44	5,431.67	5,317.73	
ACZASCRUBBER2_1937.LAB	9/16/2021	15:53:15	2.38	-16.98	6,317.62	6,167.44	
ACZASCRUBBER2_1938.LAB	9/16/2021	15:54:15	2.20	-15.71	6,069.54	5,936.04	
ACZASCRUBBER2_1939.LAB	9/16/2021	15:55:15	2.20	-15.61	5,944.67	5,813.79	
ACZASCRUBBER2_1940.LAB	9/16/2021	15:56:15	2.11	-10.69	5,098.49	4,990.70	
ACZASCRUBBER2_1941.LAB	9/16/2021	15:57:15	2.06	-14.57	5,337.61	5,227.70	
ACZASCRUBBER2_1942.LAB	9/16/2021	15:58:15	2.34	-18.96	6,619.59	6,464.99	
ACZASCRUBBER2_1943.LAB	9/16/2021	15:59:15	2.22	-17.27	6,489.96	6,345.80	
ACZASCRUBBER2_1944.LAB	9/16/2021	16:00:15	2.22	-17.00	6,599.96	6,453.75	
ACZASCRUBBER2_1945.LAB	9/16/2021	16:01:15	2.34	-17.06	6,428.89	6,278.30	
ACZASCRUBBER2_1946.LAB	9/16/2021	16:02:15	2.34	-17.02	6,402.03	6,252.10	
ACZASCRUBBER2_1947.LAB	9/16/2021	16:03:15	2.20	-9.54	4,862.73	4,755.71	
ACZASCRUBBER2_1948.LAB	9/16/2021	16:04:16	2.14	-13.84	5,778.32	5,654.68	
ACZASCRUBBER2_1949.LAB	9/16/2021	16:05:15	2.13	-10.25	4,998.14	4,891.75	
ACZASCRUBBER2_1950.LAB	9/16/2021	16:06:15	2.17	-16.23	6,028.87	5,898.06	
ACZASCRUBBER2_1951.LAB	9/16/2021	16:07:16	2.12	-11.00	5,129.57	5,020.80	
ACZASCRUBBER2_1952.LAB	9/16/2021	16:08:15	2.09	-7.65	4,673.23	4,575.76	
ACZASCRUBBER2_1953.LAB	9/16/2021	16:09:15	1.88	-13.11	4,242.06	4,162.18	End Final Vacuum- Treatment Step 7
			2.13		5,372.81	5,256.94	Average Treatment Step 7
ACZASCRUBBER2_1954.LAB	9/16/2021	16:10:15	2.14	-14.69	5,902.24	5,776.09	Start Fumes- Treatment Step 8
ACZASCRUBBER2_1955.LAB	9/16/2021	16:11:15	2.20	-19.09	6,629.37	6,483.40	
ACZASCRUBBER2_1956.LAB	9/16/2021	16:12:15	2.33	-17.52	6,591.88	6,437.98	

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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBER2_1957.LAB	9/16/2021	16:13:15	2.24	-17.20	6,397.26	6,254.13	
ACZASCRUBBER2_1958.LAB	9/16/2021	16:14:16	2.15	-11.84	5,080.47	4,971.42	
ACZASCRUBBER2_1959.LAB	9/16/2021	16:15:16	2.15	-10.95	5,262.84	5,149.52	
ACZASCRUBBER2_1960.LAB	9/16/2021	16:16:16	2.31	-16.67	6,428.56	6,280.17	
ACZASCRUBBER2_1961.LAB	9/16/2021	16:17:16	2.33	-17.55	6,546.99	6,394.71	
ACZASCRUBBER2_1962.LAB	9/16/2021	16:18:16	2.16	-10.17	4,953.08	4,846.20	
ACZASCRUBBER2_1963.LAB	9/16/2021	16:19:16	2.14	-7.34	4,676.33	4,576.12	
ACZASCRUBBER2_1964.LAB	9/16/2021	16:20:16	2.17	-15.51	6,052.66	5,921.51	
ACZASCRUBBER2_1965.LAB	9/16/2021	16:21:16	2.17	-15.60	5,936.37	5,807.81	
ACZASCRUBBER2_1966.LAB	9/16/2021	16:22:16	2.08	-5.97	4,201.94	4,114.34	
ACZASCRUBBER2_1967.LAB	9/16/2021	16:23:16	2.03	-7.66	4,471.24	4,380.62	
ACZASCRUBBER2_1968.LAB	9/16/2021	16:24:16	2.14	-17.95	6,084.31	5,954.32	
ACZASCRUBBER2_1969.LAB	9/16/2021	16:25:16	1.99	-6.18	3,916.63	3,838.87	
ACZASCRUBBER2_1970.LAB	9/16/2021	16:26:16	2.12	-17.91	6,010.64	5,883.09	
ACZASCRUBBER2_1971.LAB	9/16/2021	16:27:16	2.07	-4.62	4,066.37	3,982.04	
ACZASCRUBBER2_1972.LAB	9/16/2021	16:28:16	1.94	-8.12	3,882.03	3,806.85	
ACZASCRUBBER2_1973.LAB	9/16/2021	16:29:16	2.13	-15.27	5,978.12	5,850.54	
ACZASCRUBBER2_1974.LAB	9/16/2021	16:30:16	2.15	-15.05	5,863.88	5,737.87	
ACZASCRUBBER2_1975.LAB	9/16/2021	16:31:16	2.12	-13.14	5,508.13	5,391.13	
ACZASCRUBBER2_1976.LAB	9/16/2021	16:32:16	2.10	-12.77	5,374.81	5,261.81	
ACZASCRUBBER2_1977.LAB	9/16/2021	16:33:16	2.05	-9.08	4,575.45	4,481.61	
ACZASCRUBBER2_1978.LAB	9/16/2021	16:34:17	2.06	-12.71	5,450.96	5,338.51	
ACZASCRUBBER2_1979.LAB	9/16/2021	16:35:16	1.95	-5.37	3,722.29	3,649.52	
ACZASCRUBBER2_1980.LAB	9/16/2021	16:36:17	2.08	-16.09	5,505.95	5,391.36	
ACZASCRUBBER2_1981.LAB	9/16/2021	16:37:16	2.17	-14.67	5,891.37	5,763.72	
ACZASCRUBBER2_1982.LAB	9/16/2021	16:38:17	2.12	-12.76	5,566.97	5,449.08	
ACZASCRUBBER2_1983.LAB	9/16/2021	16:39:17	2.18	-16.27	6,029.19	5,897.82	
ACZASCRUBBER2_1984.LAB	9/16/2021	16:40:17	2.38	-17.41	6,432.43	6,279.61	
ACZASCRUBBER2_1985.LAB	9/16/2021	16:41:17	2.21	-17.87	6,586.70	6,440.93	
ACZASCRUBBER2_1986.LAB	9/16/2021	16:42:17	2.23	-14.84	5,925.98	5,793.58	
ACZASCRUBBER2_1987.LAB	9/16/2021	16:43:17	2.17	-15.08	5,830.63	5,704.09	
ACZASCRUBBER2_1988.LAB	9/16/2021	16:44:17	2.10	-8.06	4,597.75	4,501.16	
ACZASCRUBBER2_1989.LAB	9/16/2021	16:45:17	2.28	-18.87	6,541.70	6,392.29	
ACZASCRUBBER2_1990.LAB	9/16/2021	16:46:17	2.21	-18.18	6,491.93	6,348.52	
ACZASCRUBBER2_1991.LAB	9/16/2021	16:47:17	2.22	-14.94	5,952.90	5,821.03	
ACZASCRUBBER2_1992.LAB	9/16/2021	16:48:17	1.92	-11.68	4,161.78	4,081.83	
ACZASCRUBBER2_1993.LAB	9/16/2021	16:49:17	1.32	0.05	1,327.04	1,309.51	
ACZASCRUBBER2_1994.LAB	9/16/2021	16:50:17	1.33	-1.77	1,580.35	1,559.38	
ACZASCRUBBER2_1995.LAB	9/16/2021	16:51:17	1.09	-0.07	974.22	963.59	
ACZASCRUBBER2_1996.LAB	9/16/2021	16:52:17	2.02	-20.48	5,651.68	5,537.34	
ACZASCRUBBER2_1997.LAB	9/16/2021	16:53:17	1.89	-6.46	4,027.34	3,951.07	
ACZASCRUBBER2_1998.LAB	9/16/2021	16:54:29	2.23	-15.35	6,198.26	6,060.03	
ACZASCRUBBER2_1999.LAB	9/16/2021	16:54:38	2.32	-16.34	6,202.70	6,058.92	
ACZASCRUBBER2_2000.LAB	9/16/2021	16:54:48	2.07	-14.61	5,909.83	5,787.31	
ACZASCRUBBER2_2001.LAB	9/16/2021	16:54:57	2.06	-12.44	5,362.41	5,252.02	
ACZASCRUBBER2_2002.LAB	9/16/2021	16:55:07	2.04	-7.02	4,686.92	4,591.33	
ACZASCRUBBER2_2003.LAB	9/16/2021	16:55:16	2.09	-8.88	5,093.59	4,987.26	
ACZASCRUBBER2_2004.LAB	9/16/2021	16:55:26	2.09	-9.41	5,072.52	4,966.44	
ACZASCRUBBER2_2005.LAB	9/16/2021	16:55:35	2.08	-8.03	4,841.69	4,740.80	
ACZASCRUBBER2_2006.LAB	9/16/2021	16:55:44	2.04	-5.48	4,359.39	4,270.65	
ACZASCRUBBER2_2007.LAB	9/16/2021	16:55:53	1.96	-2.86	3,599.02	3,528.41	
ACZASCRUBBER2_2008.LAB	9/16/2021	16:56:03	2.13	-11.71	5,324.59	5,211.11	
ACZASCRUBBER2_2009.LAB	9/16/2021	16:56:12	2.10	-17.07	6,350.57	6,217.18	
ACZASCRUBBER2_2010.LAB	9/16/2021	16:56:22	2.31	-18.13	6,593.22	6,441.22	
ACZASCRUBBER2_2011.LAB	9/16/2021	16:56:31	2.17	-17.63	6,476.47	6,335.81	
ACZASCRUBBER2_2012.LAB	9/16/2021	16:56:40	2.30	-15.54	6,531.37	6,381.39	
ACZASCRUBBER2_2013.LAB	9/16/2021	16:56:50	2.31	-18.19	6,594.75	6,442.59	
ACZASCRUBBER2_2014.LAB	9/16/2021	16:56:59	2.32	-18.69	6,529.84	6,378.60	
ACZASCRUBBER2_2015.LAB	9/16/2021	16:57:08	2.28	-15.38	6,135.67	5,995.61	
ACZASCRUBBER2_2016.LAB	9/16/2021	16:57:18	2.18	-17.34	6,373.37	6,234.68	
ACZASCRUBBER2_2017.LAB	9/16/2021	16:57:27	2.35	-15.83	6,414.16	6,263.43	
ACZASCRUBBER2_2018.LAB	9/16/2021	16:57:37	2.20	-18.03	6,529.62	6,386.02	
ACZASCRUBBER2_2019.LAB	9/16/2021	16:57:46	2.22	-17.24	6,617.26	6,470.06	
ACZASCRUBBER2_2020.LAB	9/16/2021	16:57:55	2.24	-15.44	6,248.08	6,108.08	
ACZASCRUBBER2_2021.LAB	9/16/2021	16:58:05	2.19	-11.97	5,552.05	5,430.47	

**JH Baxter
ACZA Scrubber
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Spectrum	Date	Time	H2O%	Ethylene PPMVW	NH3 PPMVD	NH3 PPMVW	Notes
ACZASCRUBBERR2_2022.LAB	9/16/2021	16:58:14	2.15	-13.22	5,691.59	5,569.38	
ACZASCRUBBERR2_2023.LAB	9/16/2021	16:58:24	2.15	-13.11	5,664.01	5,542.24	
ACZASCRUBBERR2_2024.LAB	9/16/2021	16:58:33	2.15	-11.67	5,560.24	5,440.47	
ACZASCRUBBERR2_2025.LAB	9/16/2021	16:58:42	2.09	-6.96	4,680.15	4,582.12	
ACZASCRUBBERR2_2026.LAB	9/16/2021	16:58:52	2.01	-3.43	3,729.28	3,654.19	
ACZASCRUBBERR2_2027.LAB	9/16/2021	16:59:01	2.04	-3.34	3,673.37	3,598.35	
ACZASCRUBBERR2_2028.LAB	9/16/2021	16:59:10	2.15	-7.42	4,793.15	4,690.27	
ACZASCRUBBERR2_2029.LAB	9/16/2021	16:59:20	2.16	-11.61	5,681.14	5,558.15	
ACZASCRUBBERR2_2030.LAB	9/16/2021	16:59:29	2.04	-10.15	4,859.43	4,760.46	
ACZASCRUBBERR2_2031.LAB	9/16/2021	16:59:39	1.62	-1.19	2,273.72	2,236.90	
ACZASCRUBBERR2_2032.LAB	9/16/2021	16:59:48	1.34	-0.29	1,380.76	1,362.27	
ACZASCRUBBERR2_2033.LAB	9/16/2021	16:59:57	1.14	0.54	967.63	956.61	
ACZASCRUBBERR2_2034.LAB	9/16/2021	17:00:07	0.97	0.06	571.59	566.06	
ACZASCRUBBERR2_2035.LAB	9/16/2021	17:00:16	1.01	0.34	659.76	653.10	
ACZASCRUBBERR2_2036.LAB	9/16/2021	17:00:25	1.13	0.33	1,065.38	1,053.38	
ACZASCRUBBERR2_2037.LAB	9/16/2021	17:00:35	1.05	0.34	948.12	938.21	
ACZASCRUBBERR2_2038.LAB	9/16/2021	17:00:44	0.94	0.09	711.54	704.85	
ACZASCRUBBERR2_2039.LAB	9/16/2021	17:00:54	0.92	0.25	602.26	596.73	
ACZASCRUBBERR2_2040.LAB	9/16/2021	17:01:03	0.96	0.32	686.57	679.96	
ACZASCRUBBERR2_2041.LAB	9/16/2021	17:02:24	0.84	0.04	430.96	427.33	
ACZASCRUBBERR2_2042.LAB	9/16/2021	17:03:24	0.83	0.06	433.20	429.59	
ACZASCRUBBERR2_2043.LAB	9/16/2021	17:04:24	0.86	0.05	552.53	547.79	
ACZASCRUBBERR2_2044.LAB	9/16/2021	17:05:24	0.91	-0.18	716.44	709.90	
ACZASCRUBBERR2_2045.LAB	9/16/2021	17:06:24	1.02	-0.80	1,003.25	992.99	
ACZASCRUBBERR2_2046.LAB	9/16/2021	17:07:24	0.88	0.16	560.25	555.33	
ACZASCRUBBERR2_2047.LAB	9/16/2021	17:08:24	0.84	0.13	473.33	469.36	
ACZASCRUBBERR2_2048.LAB	9/16/2021	17:09:24	0.98	-0.09	865.34	856.90	
ACZASCRUBBERR2_2049.LAB	9/16/2021	17:10:24	0.87	-0.13	549.99	545.22	End Fumes- Treatment Step 8
			1.89		4,458.57	4,364.31	Average
ACZASCRUBBERR2_2050.LAB	9/16/2021	17:11:24	0.99	-2.96	956.43	946.98	
ACZASCRUBBERR2_2051.LAB	9/16/2021	17:12:24	1.19	-0.08	1,418.05	1,401.16	
ACZASCRUBBERR2_2052.LAB	9/16/2021	17:13:24	1.07	-0.57	1,095.45	1,083.71	
ACZASCRUBBERR2_2053.LAB	9/16/2021	17:14:24	1.12	-8.80	1,584.71	1,567.02	
ACZASCRUBBERR2_2054.LAB	9/16/2021	17:15:24	2.31	-22.85	7,216.09	7,049.16	
ACZASCRUBBERR2_2055.LAB	9/16/2021	17:16:24	2.18	-21.50	7,208.32	7,051.29	
ACZASCRUBBERR2_2056.LAB	9/16/2021	17:17:24	2.04	-24.22	7,192.08	7,045.42	
ACZASCRUBBERR2_2057.LAB	9/16/2021	17:18:24	2.06	-23.41	7,171.39	7,023.46	
ACZASCRUBBERR2_2058.LAB	9/16/2021	17:19:25	2.14	-23.50	7,196.38	7,042.20	
ACZASCRUBBERR2_2059.LAB	9/16/2021	17:20:25	2.09	-25.85	7,217.89	7,066.94	
ACZASCRUBBERR2_2060.LAB	9/16/2021	17:21:24	2.16	-23.71	7,194.16	7,038.66	
ACZASCRUBBERR2_2061.LAB	9/16/2021	17:22:24	2.17	-22.98	7,161.00	7,005.83	
ACZASCRUBBERR2_2062.LAB	9/16/2021	17:23:24	2.17	-24.38	7,149.45	6,994.51	
ACZASCRUBBERR2_2063.LAB	9/16/2021	17:24:25	2.17	-23.96	7,125.47	6,970.75	
ACZASCRUBBERR2_2064.LAB	9/16/2021	17:25:25	2.15	-24.35	7,057.03	6,905.06	
ACZASCRUBBERR2_2065.LAB	9/16/2021	17:26:25	2.13	-24.92	7,068.76	6,918.13	
ACZASCRUBBERR2_2066.LAB	9/16/2021	17:27:25	2.16	-23.83	6,968.50	6,818.07	
ACZASCRUBBERR2_2067.LAB	9/16/2021	17:28:25	2.15	-24.72	6,968.63	6,818.87	
ACZASCRUBBERR2_2068.LAB	9/16/2021	17:29:25	2.12	-25.03	6,993.42	6,845.51	
ACZASCRUBBERR2_2069.LAB	9/16/2021	17:30:25	0.98	-2.84	903.38	894.49	
ACZASCRUBBERR2_2070.LAB	9/16/2021	17:31:25	1.01	-6.99	1,106.26	1,095.06	
ACZASCRUBBERR2_2071.LAB	9/16/2021	17:32:11	2.07	-23.63	7,013.25	6,867.84	
ACZASCRUBBERR2_2072.LAB	9/16/2021	17:32:20	2.12	-21.32	6,635.84	6,495.42	
ACZASCRUBBERR2_2073.LAB	9/16/2021	17:32:30	1.87	-26.52	7,221.06	7,085.81	
ACZASCRUBBERR2_2074.LAB	9/16/2021	17:32:39	1.96	-29.60	7,278.23	7,135.76	
ACZASCRUBBERR2_2075.LAB	9/16/2021	17:32:49	1.84	-26.21	7,238.86	7,105.42	
ACZASCRUBBERR2_2076.LAB	9/16/2021	17:32:58	2.00	-28.21	7,268.36	7,122.80	
ACZASCRUBBERR2_2077.LAB	9/16/2021	17:33:07	1.84	-26.43	7,232.92	7,100.06	
ACZASCRUBBERR2_2078.LAB	9/16/2021	17:33:16	1.98	-26.25	7,270.21	7,126.54	
ACZASCRUBBERR2_2079.LAB	9/16/2021	17:33:26	1.86	-26.24	7,257.02	7,121.73	
ACZASCRUBBERR2_2080.LAB	9/16/2021	17:33:35	1.94	-28.57	7,251.59	7,111.06	
ACZASCRUBBERR2_2081.LAB	9/16/2021	17:33:45	1.88	-26.11	7,242.78	7,106.57	
ACZASCRUBBERR2_2082.LAB	9/16/2021	17:33:54	1.97	-24.68	7,270.58	7,127.51	
ACZASCRUBBERR2_2083.LAB	9/16/2021	17:34:03	1.88	-24.93	7,247.46	7,111.02	
ACZASCRUBBERR2_2084.LAB	9/16/2021	17:34:13	1.99	-26.07	7,268.53	7,124.18	

**JH Baxter
ACZA Scrubber
Runs and Calibrations**

Spectrum	Date	Time	H2O%	Ethylene	NH3	NH3	Notes
				PPMVW	PPMVD	PPMVW	
ACZASCRUBBERR2_2085.LAB	9/16/2021	17:34:22	1.85	-26.67	7,234.91	7,101.07	
ACZASCRUBBERR2_2086.LAB	9/16/2021	17:34:32	1.98	-29.97	7,269.21	7,124.97	
ACZASCRUBBERR2_2087.LAB	9/16/2021	17:34:41	1.92	-27.94	7,248.16	7,109.20	
ACZASCRUBBERR2_2088.LAB	9/16/2021	17:34:51	2.12	-23.54	7,226.04	7,072.92	
ACZASCRUBBERR2_2089.LAB	9/16/2021	17:35:00	2.16	-27.12	7,222.08	7,065.85	
ACZASCRUBBERR2_2090.LAB	9/16/2021	17:35:09	2.11	-25.82	7,200.15	7,048.33	
ACZASCRUBBERR2_2091.LAB	9/16/2021	17:35:18	2.12	-27.58	7,227.81	7,074.81	
ACZASCRUBBERR2_2092.LAB	9/16/2021	17:35:28	2.13	-26.58	7,235.39	7,081.03	
ACZASCRUBBERR2_2093.LAB	9/16/2021	17:35:37	2.18	-29.03	7,229.05	7,071.58	
ACZASCRUBBERR2_2094.LAB	9/16/2021	17:35:47	2.20	-25.46	7,240.49	7,081.53	
ACZASCRUBBERR2_2095.LAB	9/16/2021	17:35:56	2.13	-27.93	7,220.21	7,066.29	
ACZASCRUBBERR2_2096.LAB	9/16/2021	17:36:05	2.17	-26.80	7,209.94	7,053.46	
ACZASCRUBBERR2_2097.LAB	9/16/2021	17:36:15	2.17	-24.82	7,217.65	7,061.23	
ACZASCRUBBERR2_2098.LAB	9/16/2021	17:36:24	2.15	-25.87	7,212.22	7,056.90	
ACZASCRUBBERR2_2099.LAB	9/16/2021	17:36:33	2.12	-24.92	7,184.00	7,031.35	
ACZASCRUBBERR2_2100.LAB	9/16/2021	17:36:43	0.35	-8.17	1,469.94	1,464.80	
ACZASCRUBBERR2_2101.LAB	9/16/2021	17:36:52	0.06	0.00	150.26	150.17	
ACZASCRUBBERR2_2102.LAB	9/16/2021	17:37:02	0.04	0.02	84.28	84.25	
ACZASCRUBBERR2_2103.LAB	9/16/2021	17:37:11	0.01	-0.09	63.65	63.64	
ACZASCRUBBERR2_2104.LAB	9/16/2021	17:37:21	0.01	-0.10	52.09	52.08	
ACZASCRUBBERR2_2105.LAB	9/16/2021	17:37:30	0.01	0.05	44.43	44.42	
ACZASCRUBBERR2_2106.LAB	9/16/2021	17:37:39	0.00	0.11	38.85	38.85	
ACZASCRUBBERR2_2107.LAB	9/16/2021	17:37:49	0.02	26.90	95.51	95.49	
ACZASCRUBBERR2_2108.LAB	9/16/2021	17:37:58	0.01	96.05	63.88	63.87	
ACZASCRUBBERR2_2109.LAB	9/16/2021	17:38:08	0.01	98.00	39.86	39.85	CTS Verification Post Test Check
ACZASCRUBBERR2_2110.LAB	9/16/2021	17:38:17	0.00	98.22	32.98	32.98	
ACZASCRUBBERR2_2111.LAB	9/16/2021	17:38:26	0.00	97.90	29.14	29.13	

98.04

APPENDIX B: DIRECTIONAL FLOW VERIFICATION DATA

Bison Engineering, Inc.
EPA Method 204
Documentation of Air Flow Direction

Client: J.H. Baxter & Co.
Location: Eugene, OR
Dates: 9/15/21 and 9/16/21

The photo montages below document direction of air flow at each of six tank vent hoods and two retort doors.

The images at the retort doors were derived from short videos. Bison chose several still images from each video as representations of the range of results from the smoke test during the crack-and-vac cycle. The images are presented in chronological order.

Tank 2 VPC Tank Hood

09.15.21 15:00



09.15.21 15:10



09.15.21 15:29



09.15.21 15:30



09.15.21 15:40



09.15.21 15:50



09.15.21 15:59



Tank 3 VPC Tank Hood

09.15.21 16:20



09.15.21 16:30



09.15.21 16:40



09.15.21 16:50



09.15.21 17:10



09.15.21 17:20



09.15.21 17:30



Tank 27 VPC Tank Hood

09.15.21 18:30



09.15.21 18:40



09.15.21 18:50



09.15.21 19:00



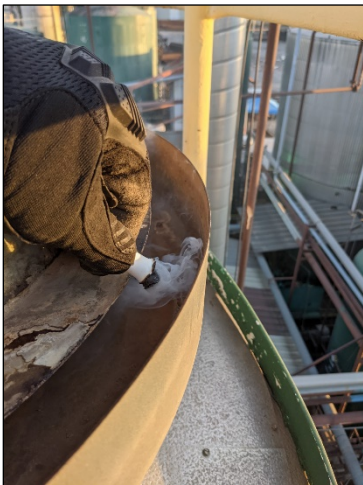
09.15.21 19:10



09.15.21 19:20



09.15.21 19:30



Tank 4 VPC Tank Hood

09.16.21 07:00



09.16.21 07:10



09.16.21 07:20



09.16.21 07:30



09.16.21 07:40



09.16.21 07:50



09.16.21 08:00



Tank 26 VPC Tank Hood

09.16.21 08:15



09.16.21 08:25



09.16.21 08:35



09.16.21 08:45



09.16.21 08:55



09.16.21 09:05



09.16.21 09:15



Tank 7 VPC Tank Hood

09.16.21 15:00



09.16.21 15:10



09.16.21 15:20



09.16.21 15:30



09.16.21 15:40



09.16.21 15:50



09.16.21 16:00



Retort 81
09.15.21 13:19



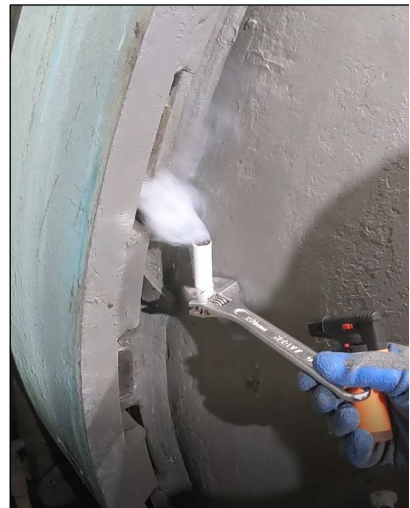
Retort 81
09.15.21 13:19 (cont'd)



Retort 81
09.16.21 11:18



Retort 84
09.15.21 19:53



Retort 84
09.16.21 16:15



APPENDIX C: PLANT OPERATION RECORDS

Table 1
Source Test—Operation and Production Data Summary—Retort 84-135
J.H. Baxter & Co.—Eugene, Oregon

Parameter	Retort 84	Retort 82
Date	9/15/2021	
Operation	Treating	Empty
Treated Wood Volume	384 (ft ³)	N/A
Commodity	Lumber	N/A
Wood Species	Doug Fir	N/A
Preservative Solution Work Tank	12	N/A
Preservative Solution Type	Waterborne	N/A
ACZA Retention	0.6 (lb/ft ³)	N/A
Ammonia Percent Strength	3.464 (%)	N/A
Retort Diameter	8 (ft)	8 (ft)
Retort Length	28 (ft)	145 (ft)
Total Retort Volume	1,407 (ft ³)	7,288 (ft ³)
Total Retort Void Space	1,023 (ft ³)	N/A

Treatment Step Number	Treatment Step Description	Start Time	End Time	Step Duration (h:mm)	Preservative Usage (gal/cycle)	Temperature (°F)
1	Live Steam	4:00	7:05	3:05	0	240
2	Vacuum	7:05	9:35	2:30	0	130 - 170
3	Fill retort and heat solution	9:35	10:20	0:45	436	90
4	Press	10:20	13:20	3:00	0	100
5	Empty retort	13:20	13:45	0:25	0	100
6	Vacuum	13:45	16:45	3:00	0	100
7	Strip	16:45	16:55	0:10	0	94
8	Final vacuum	16:55	19:55	3:00	0	94
9	Fumes	19:55	20:55	1:00	0	90

Step	Height (ft)	Tank Temp (°F)	Volume (gal @ 84°F)	Adjustment Factor	Volume (gal @ 100°F)
Fill Start	18.073	84	51,813	1.0028	51,958
Fill Stop	15.500	84	44,437	1.0028	44,561
Solution Retained	--	--	--	--	230.4
Pumpback Start	15.417	--	44,207	--	44,331
Pumpback Stop	17.938	90	51,425	1.0019	51,523
Total Preservative Used					436

WT-12 Diameter (ft) = 22.09

Treatment Step Number	Treatment Step Description	Actual Start and End Time	Start Time	Temperature (°F)	Pressure (psi)
1	Live Steam	4:00AM - 7:05AM	4:00	--	--
1	Live Steam		4:15	--	5
1	Live Steam		4:30	65	5
1	Live Steam		4:45	180	0
1	Live Steam		5:00	215	5
1	Live Steam		5:15	225	10
1	Live Steam		5:30	230	15
1	Live Steam		5:45	232.5	20
1	Live Steam		6:00	235	20
1	Live Steam		6:15	220	-5
1	Live Steam		6:30	205	-5
1	Live Steam		6:45	190	-5
1	Live Steam		7:00	175	-7.5
2	Vacuum	7:05AM - 9:35AM	7:15	170	-25
2	Vacuum		7:30	160	-30
2	Vacuum		7:45	155	-30
2	Vacuum		8:00	145	-30
2	Vacuum		8:15	142.5	-30
2	Vacuum		8:30	137.5	-30
2	Vacuum		8:45	135	-30
2	Vacuum		9:00	130	-30
2	Vacuum		9:15	127.5	-30
2	Vacuum		9:30	125	-30
3	Fill retort and heat solution	9:35AM - 10:20AM	9:45	122.5	-30
3	Fill retort and heat solution		10:00	105	5
3	Fill retort and heat solution		10:15	90	5
4	Press	10:20AM - 1:20PM	10:30	95	5
4	Press		10:45	100	112-128
4	Press		11:00	105	112-128
4	Press		11:15	105	112-130
4	Press		11:30	105	112-130
4	Press		11:45	105	112-130
4	Press		12:00	105	110-130
4	Press		12:15	105	110-130
4	Press		12:30	105	110-130
4	Press		12:45	105	110-130
4	Press		13:00	105	110-130
4	Press		13:15	105	110-130
5	Empty retort	1:20PM - 1:45PM	13:30	105	0
5	Empty retort		13:45	105	-5
6	Vacuum	1:45PM - 4:45PM	14:00	100	-30
6	Vacuum		14:15	100	-30
6	Vacuum		14:30	100	-30
6	Vacuum		14:45	100	-30
6	Vacuum		15:00	100	-30
6	Vacuum		15:15	100	-30
6	Vacuum		15:30	100	-30
6	Vacuum		15:45	100	-30
6	Vacuum		16:00	95	-30
6	Vacuum		16:15	95	-30
6	Vacuum		16:30	95	-30
6	Vacuum		16:45	95	-30
7	Strip	4:45PM - 4:55 PM	17:00	95	-25
8	Final vacuum	4:55PM - 7:55PM	17:15	90	-30
8	Final vacuum		17:30	90	-30
8	Final vacuum		17:45	92.5	-30
8	Final vacuum		18:00	92.5	-30
8	Final vacuum		18:15	92.5	-30
8	Final vacuum		18:30	90	-30
8	Final vacuum		18:45	90	-30
8	Final vacuum		19:00	90	-30
8	Final vacuum		19:15	90	-30
8	Final vacuum		19:30	90	-30
8	Final vacuum		19:45	90	-30
9	Fumes	7:55PM - 8:55PM	20:00	90	-5
9	Fumes		20:15	87.5	-5
9	Fumes		20:30	85	-5
9	Fumes		20:45	82.5	-5
9	Fumes		21:00	80	-5

Table 2
Source Test—Operation and Production Data Summary—Retort 84-136
J.H. Baxter & Co.—Eugene, Oregon

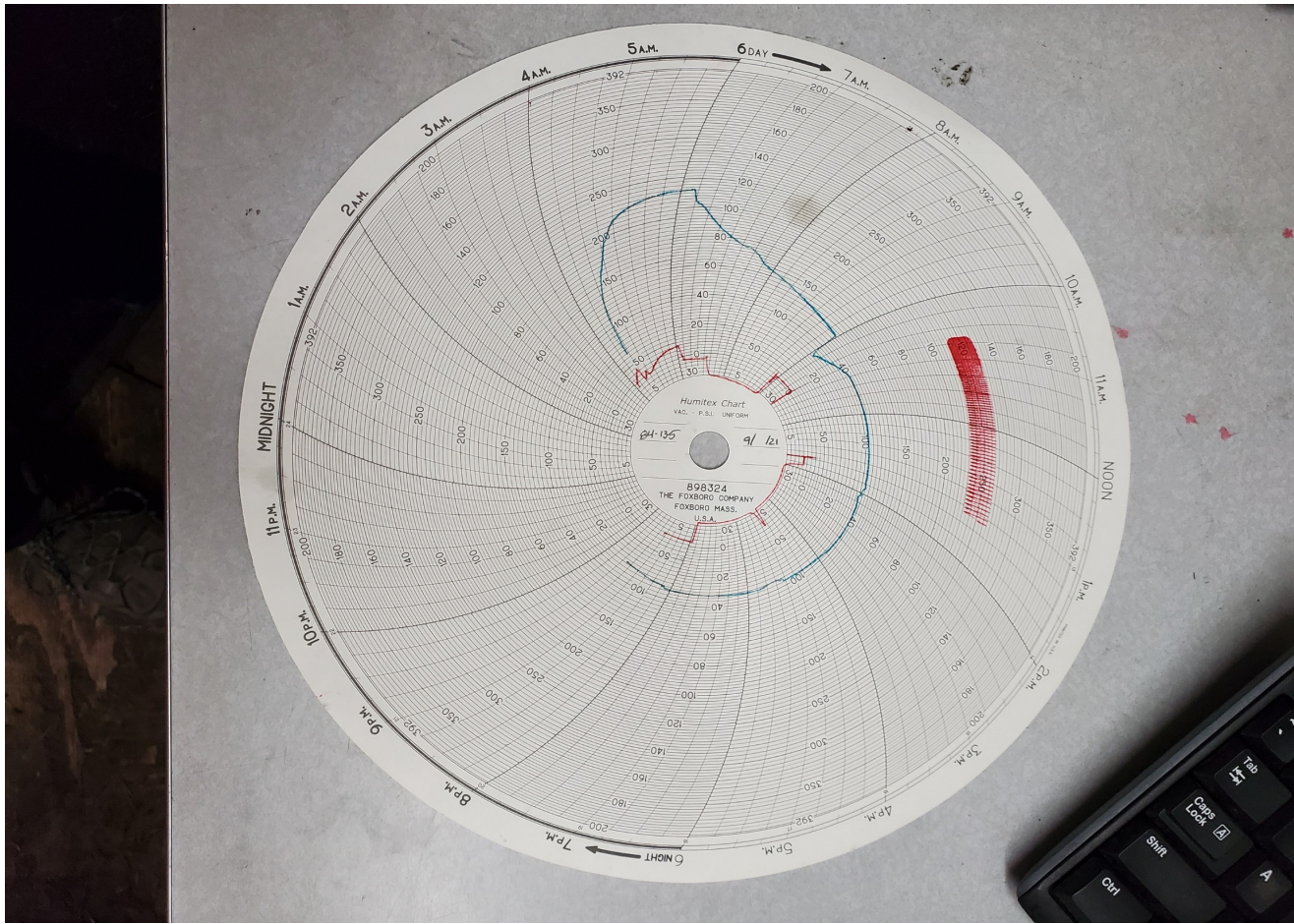
Parameter	Retort 84	Retort 82
Date	9/16/2021	
Operation	Treating	Empty
Treated Wood Volume	384 (ft ³)	N/A
Commodity	Lumber	N/A
Wood Species	Doug Fir	N/A
Preservative Solution Work Tank	12	N/A
Preservative Solution Type	Waterborne	N/A
ACZA Retention	0.6 (lb/ft ³)	N/A
Ammonia Percent Strength	3.464 (%)	N/A
Retort Diameter	8 (ft)	8 (ft)
Retort Length	28 (ft)	145 (ft)
Total Retort Volume	1,407 (ft ³)	7,288 (ft ³)
Total Retort Void Space	1,023 (ft ³)	N/A

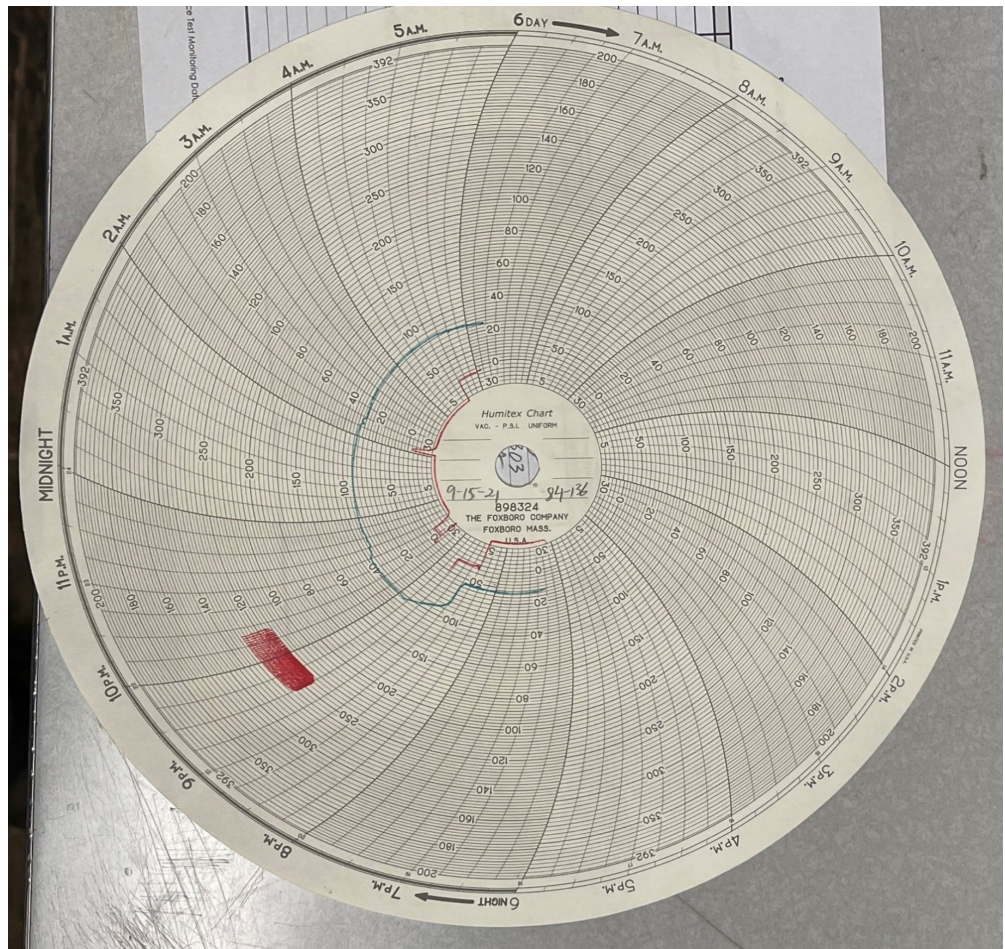
Treatment Step Number	Treatment Step Description	Start Time	End Time	Step Duration (h:mm)	Preservative Usage (gal/cycle)	Temperature (°F)
1	Vacuum	6:00	8:30	2:30	0	80
2	Fill retort and heat solution	8:30	9:30	1:00	299	100
3	Press	9:30	10:30	1:00	0	100
4	Empty retort	10:30	11:00	0:30	0	100
5	Vacuum	11:00	14:00	3:00	0	90
6	Strip	14:00	14:10	0:10	0	90
7	Final vacuum	14:10	16:10	2:00	0	90
8	Fumes	16:10	17:10	1:00	0	90

Step	Height (ft)	Tank Temp (°F)	Volume (gal @ 84°F)	Adjustment Factor	Volume (gal @ 100°F)
Fill Start	17.938	90	51,425	1.0019	51,523
Fill Stop	15.417	90	44,198	1.0019	44,282
Solution Retained	--	--	--	--	230.4
Pumpback Start	15+4/12	--	43,968	--	44,052
Pumpback Stop	17.833	90	51,126	1.0019	51,224
Total Preservative Used					299

WT-12 Diameter (ft) = 22.09

Treatment Step Number	Treatment Step Description	Actual Start and End Time	Start Time	Temperature (°F)	Pressure (psi)
1	Vacuum	6:00AM - 8:30AM	6:00	--	--
1	Vacuum		6:15	--	-30
1	Vacuum		6:30	55	-30
1	Vacuum		6:45	57.5	-30
1	Vacuum		7:00	57.5	-30
1	Vacuum		7:15	57.5	-30
1	Vacuum		7:30	57.5	-30
1	Vacuum		7:45	57.5	-30
1	Vacuum		8:00	55	-30
1	Vacuum		8:15	55	-30
2	Fill retort and heat solution		8:30AM - 9:30AM	8:30	55
2	Fill retort and heat solution	8:45		55	-10
2	Fill retort and heat solution	9:00		70	0
2	Fill retort and heat solution	9:15		92.5	0
3	Press	9:30AM - 10:30AM	9:30	97.5	112-130
3	Press		9:45	105	112-130
3	Press		10:00	102.5	112-130
3	Press		10:15	102.5	112-130
4	Empty retort	10:30AM - 11:00AM	10:30	102.5	5
4	Empty retort		10:45	102.5	-5
5	Vacuum	11:00AM - 2:00PM	11:00	100	-5
5	Vacuum		11:15	95	-30
5	Vacuum		11:30	92.5	-30
5	Vacuum		11:45	92.5	-30
5	Vacuum		12:00	92.5	-30
5	Vacuum		12:15	90	-30
5	Vacuum		12:30	90	-30
5	Vacuum		12:45	90	-30
5	Vacuum		13:00	90	-30
5	Vacuum		13:15	90	-30
5	Vacuum		13:30	90	-30
5	Vacuum	13:45	87.5	-30	
6	Strip	2:00PM - 2:10PM	14:00	87.5	-30
7	Final vacuum	2:10PM - 4:10PM	14:15	85	-15
7	Final vacuum		14:30	82.5	-30
7	Final vacuum		14:45	85	-30
7	Final vacuum		15:00	85	-30
7	Final vacuum		15:15	85	-30
7	Final vacuum		15:30	85	-30
7	Final vacuum		15:45	85	-30
7	Final vacuum	16:00	85	-30	
8	Fumes	5:10PM - 6:10PM	16:15	85	-5
8	Fumes		16:30	85	-5
8	Fumes		16:45	85	-5
8	Fumes		17:00	85	-5





APPENDIX D: CALIBRATIONS AND CERTIFICATIONS

CERTIFICATE OF ANALYSIS

Grade of Product: PRIMARY STANDARD

Part Number:	X02NI99P15AD524	Reference Number:	153-402065048-1
Cylinder Number:	ALM020250	Cylinder Volume:	144.4 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2015 PSIG
Analysis Date:	Mar 25, 2021	Valve Outlet:	350
Lot Number:	153-402065048-1		
Expiration Date: Mar 25, 2024			

Primary Standard Gas Mixtures are traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
ETHYLENE	100.0 PPM	99.80 PPM	+/- 1%
NITROGEN	Balance		



Signature on file

Approved for Release

2021 JH Baxter ACZA Scrubber Testing and Flow Direction Evaluation Report



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fax: (866) 755-8920
www.gascogas.com

CERTIFICATE OF ANALYSIS

Date: September 13, 2021
Order Number: 22044700
Lot Number: 304-402222514-1

Customer: Cal Gas Direct Inc.

Use Before: 09/13/2023

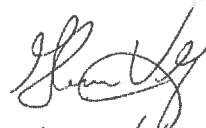
Component	Requested Concentration	Analytical Result (+/- 2%)
Ammonia	1% vol.	1.05 vol.
Nitrogen	Balance	Balance

Cylinder Size: 2.6 Cu. Ft.
Contents: 74 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

Analyst:


Glenn Velez



American Association for Laboratory Accreditation

Accredited Air Emission Testing Body

A2LA has accredited

BISON ENGINEERING, INC.

In recognition of the successful completion of the joint A2LA and Stack Testing Accreditation Council (STAC) evaluation process, this laboratory is accredited to perform testing activities in compliance with ASTM D7036:2004 - Standard Practice for Competence of Air Emission Testing Bodies.

Presented this 15th day of January 2020.



A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 4675.01
Valid to November 30, 2021

This accreditation program is not included under the A2LA ILAC Mutual Recognition Arrangement.

BISON ENGINEERING

Method 2, Section 10.1.6.7.1 Standard Pitot Tube



Date: 9/10/2021
Pitot ID: STD-12

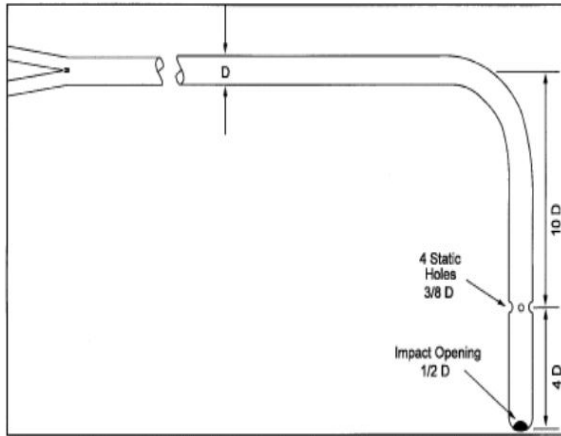


Figure 2C-1. Modified Hemispherical-Nosed Pitot Tube.

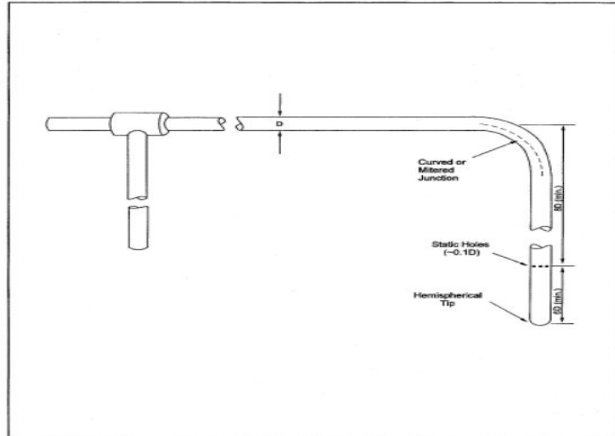


Figure 2-5. Standard pitot tube design specifications.

Are the static pressure holes free of any particulate that may block or obstruct negatives side pressure readings in any way?

Yes ☒ No ☐

Do the openings still align within the specifications illustrated in Figure 2C-1 and 2-5 in accordance with section 6.7.1 below?

Yes ☒ No ☐

Technician: ZDH Date: 9/10/2021

EPA Reference Method 2. Section 10.0 Calibration and Standardization

Method 2C - Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)

10.0 Standard Pitot Calibration and Standardization - Same as Method 2, Sections 10.2 through 10.4.

10.2 Standard Pitot Tube (if applicable). If a standard pitot tube is used for the velocity traverse, the tube shall be constructed according to the criteria of section 6.7 and shall be assigned a baseline coefficient value of 0.99. If the standard pitot tube is used as part of an assembly, the tube shall be in an interference-free arrangement

6.7 Calibration pitot tube

A standard pitot tube designed according to the criteria given in sections 6.7.1 through 6.7.5 below and illustrated in Figure 2-5 Pitot tubes designed according to these specifications will have baseline coefficients of 0.99 ± 0.01 .

6.7.1 Standard Pitot Design.

6.7.1.1 Hemispherical (shown in Figure 2-5), ellipsoidal, or conical tip.

6.7.1.2 A minimum of six diameters straight run (based upon D, the external diameter of the tube) between the tip and the static pressure holes.

6.7.1.3 A minimum of eight diameters straight run between the static pressure holes and the centerline of the external tube, following the 90° bend.

6.7.1.4 Static pressure holes of equal size (approximately 0.1 D), equally spaced in a piezometer ring configuration.

6.7.1.5 90° bend, with curved or mitred junction.



**Field Barometer
Calibration Form**

Project #: JHB221625

IN OFFICE PRE-TEST CALIBRATION

Reference Standard Used:

Standard ID	Serial number	Adjusted on:	Calibration due:
Helena mercury barometer	BIS01	9/10/2021	Must be properly adjusted prior to every use

Field Barometer Verification:

Barometer ID: TS1

Reference Value (in Hg)	Observed (in Hg)	Correction*	Tolerance (+/- 0.1 in Hg)**
26.22	26.23	0.01	PASS

*Correction is the difference between the observed and reference values

**EPA Method 5, Section 6.1.2 and EPA Method 2, Section 6.5.

Technician: ZDH

Date: 9/10/2021

AIRDATA MULTIMETER CERTIFICATE OF RECALIBRATION

Customer ID: 022037 S/N: M16654
 Customer: BISON ENGINEERING, INC. City: HELENA State: MT
 As-Received Model #: ADM-850L Converted to Model #: _____ Order #: R200125
 PO #: _____ Customer Eqpt ID#: _____ Calibration Due Date: 01/2022

This instrument has been calibrated using Calibration Standards which are traceable to NIST (National Institute of Standards and Technology). Test accuracy ratio is 4:1 for pressures and temperature. Quality Assurance Program and calibration procedures meet the requirements for ANSI/NCSL 2540-1, ISO 17025, MIL-STD 45662A and manufacturer's specifications. Calibration accuracy is certified when meters are used with properly functioning accessories only. All Uncertainties are expressed in expanded terms (twice the calculated uncertainty). This report shall not be reproduced, except in full, without the written approval of Shortridge Instruments, Inc. Results relate only to the item calibrated. For limitations on use, see Shortridge Instruments, Inc. Instruction Manual for the use of AirData Multimeters. Procedure used: Procedure for Differential Pressure, Absolute Pressure and Temperature Recalibration of AirData Multimeters SIP-CP02
 Revision: 30 Dated: 04/04/16

Calibration Technician(s): J. LaBash D. Babb Calibration Date: 01/23/2020
 Calibration Approved by: J. Laubmeier Title: Cal mng Date: 01/24/2020
 AS-Received By: M.L. FINAL Test By: DB Test By: _____
 Date: 01/17/2020 Rh: 35% Date: 01/23/2020 Rh: 31% Date: _____ Rh: _____
 Ambient Temperature: 74 °F Ambient Temperature: 76 °F Ambient Temperature: _____ °F
 Barometric Pressure: 28.51 in Hg Barometric Pressure: 28.48 in Hg Barometric Pressure: _____ in Hg
 All within spec: YES NO NA All within spec: YES NO NA All within spec: YES NO

ABSOLUTE PRESSURE TEST (in Hg)

TEST METER TOLERANCE = $\pm 2.0\% \pm 1$ in Hg AS-RECEIVED TEST WITHIN SPEC YES NO N/A See Notes

Pressure Standard	Heise #02-R	S/N: 41741/42451	As-Rcvd	Test 2	Test 3	Pressure Standard	Heise #12A-R	S/N: 45605/48491	As-Rcvd	Test 2	Test 3
Pressure Standard: Heise #04-R	S/N: 41743/42453	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #14-R	S/N: 43412/45043-2	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #06-R	S/N: 41742/42452-1	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #16-R	S/N: 43413/45044	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #08-R	S/N: 42186/43328	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #18-R	S/N: 44581/46845	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #10-R	S/N: 42203/43352	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #20-R	S/N: 44582/46847	As-Rcvd	Test 2	Test 3		

Approx Set Pt	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
14.0	14.07	14.1	.21	14.22	14.2	-.14			
28.4	28.51	28.4	-.32	28.48	28.5	.07			
40.0	40.13	40.2	.17	40.10	40.1	0			

DIFFERENTIAL PRESSURE TEST (in wc)

TEST METER TOLERANCE = $\pm 2.0\% \pm 0.001$ in wc AS-RECEIVED TEST WITHIN SPEC YES NO N/A See Notes

Pressure Standard	Heise #01-L	S/N: 41739/42449	As-Rcvd	Test 2	Test 3	Pressure Standard	Heise #11-L	S/N: 43165/44551-1	As-Rcvd	Test 2	Test 3
Pressure Standard: Heise #01-R	S/N: 41739/42446	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #11-R	S/N: 43165/44730	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #02-L	S/N: 41741/42454	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #12A-L	S/N: 45605/48490	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #03A-L	S/N: 45570/48461	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #13-L	S/N: 43415/45041	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #03A-R	S/N: 45570/48460	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #13-R	S/N: 43415/45039	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #04-L	S/N: 41743/42456	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #14-L	S/N: 43412/45045	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #05-L	S/N: 41740/42450	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #15-L	S/N: 43416/45042	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #05-R	S/N: 41740/42447	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #15-R	S/N: 43416/45040	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #06-L	S/N: 41742/42455	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #16-L	S/N: 43413/45046	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #07-L	S/N: 42185/42186	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #17-L	S/N: 44579/46842	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #07-R	S/N: 42185/43326	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #17-R	S/N: 44579/46841	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #08-L	S/N: 42186/43329	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #18-L	S/N: 44581/46846	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #09-L	S/N: 42202/43351	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #19-L	S/N: 44580/46844	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #09-R	S/N: 42202/43350	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #19-R	S/N: 44580/46843	As-Rcvd	Test 2	Test 3		
Pressure Standard: Heise #10-L	S/N: 42203/43353	As-Rcvd	Test 2	Test 3	Pressure Standard: Heise #20-L	S/N: 44582/46848	As-Rcvd	Test 2	Test 3		

Approx Set Pt	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
0.0100	.0100	.0101	1.00	.0103	.0103	0			
0.0200	.0200	.0200	0	.0202	.0202	0			
0.0300	.0300	.0300	0	.0304	.0304	0			
0.0400	.0400	.0400	0	.0402	.0402	0			
0.0500	.0501	.0501	0	.0502	.0502	0			
0.1250	.1252	.1251	-.08	.1258	.1257	-.08			
0.2250	.2259	.2256	-.13	.2258	.2256	-.09			
1.000	1.019	1.015	-.39	1.015	1.014	-.10			
2.000	2.010	2.005	-.25	2.006	2.002	-.20			
3.600	3.622	3.617	-.14	3.606	3.590	-.44			
4.400	4.419	4.428	.20	4.410	4.417	.16			
27.00	27.16	27.17	.04	27.15	27.17	.07			
50.00	50.26	50.15	-.22	50.14	49.98	-.32			
Overrange	NA	✓	NA	NA	✓	NA	NA		NA

Shortridge Instruments, Inc.
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JHB221625

Procedure used: Procedure for Calibration/Recalibration of MultiTemps and/or TemProbes SIP-CP14 Rev: 03 Dated: 07/31/14

Equipment Being Tested: MultiTemp and TemProbes _____ TemProbe(s) ✓

AS-RECEIVED TEMPERATURE TEST (° F)
 MULTITEMP TOLERANCE (MULTITEMP AND TEMPROBES TESTED AS A UNIT) = $\pm 0.5^\circ \text{ F}$
 TEMPROBE TOLERANCE = $\pm 0.3^\circ \text{ F}$

Thermometer #1 S/N 8A089 / Thermistor S/N A410660	Set Point: 35° F	95° F	155° F
Thermometer #2 S/N 8B104 / Thermistor S/N 871507	Set Point: 35° F	<u>95° F</u>	155° F
Thermometer #5 S/N B11780 / Thermistor S/N B10505	Set Point: 35° F	95° F	<u>155° F</u>
Thermometer #6 S/N B11782 / Thermistor S/N B10509	Set Point: <u>35° F</u>	95° F	155° F
Thermometer #7 S/N B49938 / Thermistor S/N B482202	Set Point: 35° F	95° F	155° F
Temperature Standard AirData Multimeter S/N M00136	Set Point: 35° F	95° F	155° F
Temperature Standard AirData Multimeter S/N M96100	Set Point: <u>35° F</u>	<u>95° F</u>	<u>155° F</u>

Test By: J. LaBash Date: 01/17/2020 Rh: 32 % Ambient Temperature: 75 °F Barometric Pressure: 28.47 in Hg

Approx Set Point	Temp Standard	Test Probe #1 ADT: <u>442</u>	Test Probe #2 ADT: <u>446</u>	Test Probe #3 ADT: _____	Test Probe #4 ADT: _____	Test Probe #5 ADT: _____	Test Probe #6 ADT: _____	Test Probe #7 ADT: _____	Test Probe #8 ADT: _____
35°	<u>35.0</u>	<u>35.0</u>	<u>35.2</u>						
95°	<u>95.0</u>	<u>95.0</u>	<u>95.1</u>				NA		
155°	<u>155.0</u>	<u>155.1</u>	<u>155.0</u>						

A check in the box to the right of a TemProbe reading indicates that the reading is Out Of Specification.

If all As-Received readings were within specification, and no repairs were performed, no Final test is required.

NOTES: _____

FINAL TEMPERATURE TEST (° F)
 MULTITEMP TOLERANCE (MULTITEMP AND TEMPROBES TESTED AS A UNIT) = $\pm 0.5^\circ \text{ F}$
 TEMPROBE TOLERANCE = $\pm 0.3^\circ \text{ F}$

Thermometer #1 S/N 8A089 / Thermistor S/N A410660	Set Point: 35° F	95° F	155° F
Thermometer #2 S/N 8B104 / Thermistor S/N 871507	Set Point: 35° F	95° F	155° F
Thermometer #5 S/N B11780 / Thermistor S/N B10505	Set Point: 35° F	95° F	155° F
Thermometer #6 S/N B11782 / Thermistor S/N B10509	Set Point: 35° F	95° F	155° F
Thermometer #7 S/N B49938 / Thermistor S/N B482202	Set Point: 35° F	95° F	155° F
Temperature Standard AirData Multimeter S/N M00136	Set Point: 35° F	95° F	155° F
Temperature Standard AirData Multimeter S/N M96100	Set Point: 35° F	95° F	155° F

Test By: _____ Date: _____ Rh: NA % Ambient Temperature: _____ °F Barometric Pressure: _____ in Hg

Approx Set Point	Temp Standard	Test Probe #1 ADT: _____	Test Probe #2 ADT: _____	Test Probe #3 ADT: _____	Test Probe #4 ADT: _____	Test Probe #5 ADT: _____	Test Probe #6 ADT: _____	Test Probe #7 ADT: _____	Test Probe #8 ADT: _____
35°									
95°							NA		
155°									

NOTES: _____

Calibration standards used by Shortridge Instruments, Inc. are traceable to NIST (National Institute of Standards and Technology). Calibration is performed in accordance with ANSI/NCSS Z540-1, ISO 17025, MIL-STD 45662A and manufacturer's specifications. Calibration accuracy is certified when meters are used with properly functioning accessories only. This report shall not be reproduced, except in full, without the written approval of Shortridge Instruments, Inc. Results relate only to the item calibrated. Limitations on use: See Shortridge Instruments, Inc. Instruction Manual for the use of AirData Multimitters.

The enclosed ADM or HDM Calibration Standards form(s) is/are an integral part of this calibration and must remain with this Certificate of Calibration. Note: There may be more than one such form included that pertains to this calibration.

Calibration Approved by: J. Laubmeier Title: Cal Mgr Date: 01/24/2020

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