

# COMPLIANCE TEST REPORT ETHYLENE OXIDE STERILIZATION CHAMBER EXHAUSTS AT CHEMENCE MEDICAL PROJECT ID: KR-10590

PREPARED FOR:



CHEMENCE MEDICAL 200 TECHNOLOGY DRIVE ALPHARETTA, GEORGIA 30005

#### PREPARED BY:

ADVANCED INDUSTRIAL RESOURCES, INC.
3407 Novis pointe
Acworth, Georgia 30101

**OCTOBER 14, 2020** 



# REPORT CERTIFICATION SHEET

Having conducted the Technical Review of this report, I hereby certify the data, information, results, and calculations in this report to be accurate and true according to the methods and procedures used.

Los Co. Wine	Novmeber 16, 2020
Ross Winne	Date
Technical Director	

Having written and prepared this report, I hereby certify that the data, information and results in this report to be correct and all inclusive of the necessary information required for a complete third-party review of the testing event.

Steven Haigh Date
Report Preparation Director

Having supervised all aspects of the field testing, I hereby certify the equipment preparation, field sample collection procedures, and all equipment calibrations were conducted in accordance to the applicable methodologies.

November 16, 2020
Scott-Gunnell Date

Field Project Supervisor Advanced Industrial Resources

Advanced Industrial Resources

Advanced Industrial Resources

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### 1.0 INTRODUCTION

#### 1.1 SUMMARY OF TEST PROGRAM

The Chemence Medical facility is located at 200 Technology Drive, Alpharetta, GA 30005. Chemence manufactures and distributes adhesive-based medical devices used by many of the largest medical centers around the globe. Chemence also operates medical product and device sterilization chambers using ethylene oxide (EO). Source emissions testing was conducted on one each of the two sets of ethylene oxide sterilization chamber exhausts: EOA and EOE. Similar chambers to EOA are EOB and EOC. EOD is a similar chamber to EOE but is not currently operating. This testing was conducted in response to an EPD letter of August 10, 2020 from Sean Taylor and follow-up conversations with Stephen Damaske and Daniel McCain of EPD regarding the ethylene oxide emissions from this source. Note that weekly batch production is between zero and 3 batches.

Testing was conducted on October 14, 2020, in accordance with the generally approved test protocol developed for projects of this type modified for the small duct diameters. All testing was conducted by Advanced Industrial Resources, Inc. (*AIR*) in accordance with approved USEPA Methods (i.e., 40 CFR 60 Appendix A, Methods 1, 2, 3, 4, and Modified TO-15).

#### 1.2 KEY PERSONNEL

The key personnel who coordinated and this Test Report and their telephone numbers are:

Hugo Escobar, Chemence Medical	770-664-7078
Ross Winne, AIR	404-843-2100
Scott Wilson, AIR	800-224-5007

#### 2.0 PLANT AND SAMPLING LOCATION DESCRIPTIONS

# 2.1 PROCESS & CONTROL EQUIPMENT DESCRIPTION

The Chemence Medical facility is located at 200 Technology Drive, Alpharetta, GA 30005. Plastic sealed tote baskets are used to hold products and devices for EO sterilization in batch processes after loading to the chambers. Batches typically run for 19 hours, followed by a purge cycle lasting 1 hour for EOA, EOB, and EOC, or 4 hours for EOE. During this purge cycle the gases are vented to the outside.

#### 2.2 SAMPLING LOCATION

The exhaust sampling location for EOA was a 3-inch id section of PVC pipe modified to house a calibrated propeller vane anemometer for measuring the flow in ft/min. The A distance was 3 inches and the B distance was 6 inches to disturbances.

The exhaust sampling location for EOE was a 1.625-inch id section of PVC pipe modified to house a calibrated hot wire anemometer for measuring the flow in ft/min. The A distance was 6 inches and the B distance was 12 inches to disturbances.

#### 3.0 SUMMARY AND DISCUSSION OF TEST RESULTS

#### 3.1 OBJECTIVES

The purpose of the test program was to verify source emissions of ethylene oxide (EO) both in ppm and in lb/hr. The molecular weight (Mw) of EO is 44.05.

#### 3.2 FIELD TEST CHANGES AND PROBLEMS

The testing was conducted in accordance with the general test protocol developed for projects of this type scaled to the smaller exhaust sizes. At the request of EPD, a duplicate sample was taken for each chamber utilizing 2 Summa cannisters simultaneously. No problems were encountered during testing that required deviation from the planned test protocol.

#### 3.3 PRESENTATION OF TEST RESULTS

Emission concentrations and mass rates are summarized in Table 3-1. Reduced and tabulated data from the field-testing is included in Appendix A. The calculations and nomenclature used to reduce the data are presented in Appendix B. Actual raw field data sheets are presented in Appendix C.

**Table 3-1** 

Source	Average Measured ppm (EO)	Average Measured lb/hr (EO)		
EOA 52 ppm		0.02602589 lb/hr for the 1-hour cycle		
EOE 405 ppm		0.06795603 lb/hr for the 4-hour cycle		

EOA average emission concentration was determined to be **52 ppm (0.02603 lb/hr.)** EOE average emission concentration was determined to be **405 ppm (0.06796 lb/hr.)** 

# 3.4 PROCESS MONITORING

All essential process monitoring equipment was operating and data was recorded throughout the test period so as to allow necessary monitoring parameters and limits to be established, where applicable. Data, as made available, is presented in Appendix F.

#### 4.0 SAMPLING AND ANALYTICAL PROCEDURES

Each of the two (2) ethylene oxide (EO) emissions performance tests was comprised of one (1) **duplicate** sampling repetition of four (4) hours for EOE and of one (1) **duplicate** 1-hour for EOA during the purge of each chamber, which followed a nineteen (19) hour sterilization cycle. All testing was according to the methodologies detailed in EPA Methods 1, 2, 3, 4, and Modified TO-15.

Performance testing for this source will be conducted according to the methodology in 40 *CFR* 60, Appendix A. Specifically:

- X Method 1 or 1A was used for the qualification of the location of sampling ports and for the determination of the number and positions of stack traverse points, as applicable to sample traverses.
- X Method 2 or 2A was employed for the determination of the stack gas velocity and volumetric flow rate during stack sampling using the Type "S" pitot tube or a calibrated anemometer.
- X Method 3 was used for the calculation of the density and dry molecular weight of the effluent stack gas.
- X Method 4 was used for the determination of moisture (or wet-bulb/dry-bulb).
- Method TO-15 Modified SIM (Selective Ion Monitoring) VOCs by GCMS in SIM Mode (reporting limit 0.5 ppbv). 6-liter summa cannisters to sample for 240-minute batch sample time using 4-hour flow controllers and for 60-minute batch using 1-hour flow controllers. Sample location will be in the centroid of the small diameter exhaust pipes, which are 1.625 inches for EOE and 3.0 inches for EOA.

Summa cannister samples were recovered on site by sealing and tagging them. All samples were stored upright in a closed shipping box until final laboratory analysis. All samples were ground transported via the *AIR* equipment resource vehicle and shipped for analysis to Eurofins Air Toxics, LLC, Folsom, CA. In order to limit the chain of custody, only essential *AIR* personnel were permitted access to these samples.

# 5.0 DATA QUALITY OBJECTIVES

The data quality objectives (DQOs) process is generally a seven-step iterative planning approach to ensure development of sampling designs for data collection activities that support decision making. The seven steps are as follows: (1) defining the problem; (2) stating decisions and alternative actions; (3) identifying inputs into the decision; (4) defining the study boundaries; (5) defining statistical parameters, specifying action levels, and developing action logic; (6) specifying acceptable error limits; and (7) selecting resource-effective sampling and analysis plan to meet the performance criteria. The first five steps are primarily focused on identifying qualitative criteria such as the type of data needed and defining how the data will be used. The sixth step defines quantitative criteria and the seventh step is used to develop a data collection design. In regards to emissions sampling, these steps have already been identified for typical monitoring parameters.

Monitoring methods presented in 40 *CFR* 60 Appendix A indicate the following regarding DQOs: Adherence to the requirements of this method will enhance the quality of the data obtained from air pollutant sampling methods. At a minimum, each method provides the following types of information: summary of method; equipment and supplies; reagents and standards; sample collection, preservation, storage, and transportation; quality control; calibration and standardization; analytical procedures, data analysis and calculations; and alternative procedures. These test methods have been designed and tested according to DQOs for emissions testing and analysis. These test methods have been specified and were followed to testing to ensure that DQOs were met for this project.

# APPENDIX A TEST RESULTS

# **Advanced Industrial Resources, Inc.**

# **Test Results**

Chemance Medical Alpharetta, Georgia

		Units	EOA	EOA - Duplicate	EOE	EOE - Duplicate		
	Test Date		14-Oct-20	14-Oct-20	14-Oct-20	14-Oct-20		
	Start Time		10:33	10:33	10:22	10:22		
	End Time		11:33	11:33	14:22	14:22		
$\mathbf{P}_{\mathrm{bar}}$	Barometric pressure	inches Hg	29.12	29.12	29.12	29.12		
$\mathbf{p_g}$	Gauge pressure of stack gas	inches H <sub>2</sub> O	0.00	0.00	0.00	0.00		
$\mathbf{P_s}$	Pressure of stack gases	inches Hg	29.12	29.12	29.12	29.12		
B <sub>ws,act</sub>	Actual moisture	%	0.0175	0.0175	0.0181	0.0181		
$\mathbf{v}_{\mathbf{s}}$	Velocity of stack gas	ft./min	1,664	1,664	1,915	1,915		
$\mathbf{v}_{\mathbf{s}}$	Velocity of stack gas	ft./sec	28	28	32	32		
$\mathbf{D}_{\mathrm{s}}$	Diameter of stack	in	3.00	3.00	1.625	1.625		
$\mathbf{A_s}$	Area of stack	$ft^2$	0.0491	0.0491	0.0144	0.0144		
$T_{s}$	Temperature of stack gas	°R	565	565	569	569		
Gas Stream	n Flow Rates							
$Q_a$	Vol. Flow rate of actual gas	cfm	82	82	28	28		
$\mathbf{Q}_{\mathbf{w}}$	Vol. Flow rate of wet gas	scfm	74	74	25	25		
$Q_{sd}$	Vol. Flow rate of dry gas	dscfm	73	73	24	24		
Gas Stream	Gas Stream Ethylene Oxide Concentrations - TO-15 SIM							
$c_{EtO}$	Conc. Of PM in dry stack gas	ppm	58.0	46.0	360.0	450.0		
$c_{EtO}$	Conc. Of PM in dry stack gas	mg/dscm	106.2	84.3	659.4	824.2		
$c_{PM}$	Conc. Of PM in dry stack gas	gr/dscf	0.0464	0.0368	0.2880	0.3600		
<b>Ethylene C</b>	xide Mass Rates TO-15 S	SIM						
$\mathbf{E_{EtO}}$	Emission rate of EtO	lb/hour	0.029	0.023	0.060	0.076		

	ppm	ppm	lb/hr	lb/hr	Averages
EOA	58	58	0.02900615	0.02900615	0.02600551
EOA Dup	46	46	0.02300487	0.02300487	0.02600551
EOE	360	360	0.06035624	0.06035624	0.06790077
EOE Dup	450	450	0.0754453	0.0754453	0.00790077

# APPENDIX B

# **EXAMPLE CALCULATIONS**

AND

# **EXAMPLE CALCULATIONS**

Symbol	Units	Description				
Abs(x)	dimensionless	Absolute value of parameter x				
An	ft <sup>2</sup>	Area of the nozzle				
As	ft <sup>2</sup>	Area of the stack				
Bws	dimensionless	Volume proportion of water in the stack gas stream				
Cp	dimensionless	Type S pitot tube coefficient				
Canalyte	mg/dscm	Concentration of analyte in dry stack gas, standardized				
'Canalyte	gr./dscf	Concentration of analyte in dry stack gas, standardized				
'Canalyte	ppm	Concentration of analyte in dry stack gas, standardized				
CC	dimensionless	One-tailed 2.5% error confidence coefficient				
d	ppm	Arithmetic mean of differences				
di	ppm	Difference between individual CEM and reference				
		method concentration value				
Dn	inches	Internal diameter of the nozzle at the entrance orifice				
$\mathbf{D}_{\mathbf{s}}$	inches	Internal diameter of the stack at sampling location				
DE	percent	Destruction efficiency				
DH	inches H <sub>2</sub> O	Average pressure differential across the meter orifice				
DH@	inches H <sub>2</sub> O	Orifice pressure differential that corresponds to 0.75 cfm of air at 68 °F and 29.92 inches of Hg				
Dp	inches H <sub>2</sub> O	Velocity head of stack gas				
Eanalyte	lb./hour	Emission rate of analyte, time basis				
I	percent	Isokinetic sampling ratio expressed as percentage				
Kı	dimensionless	K-factor, ratio of DH to DP, ideal				
Kp	ft[(lb/lb-mol)(in. Hg)] <sup>1/2</sup> s[(°R)(in. H <sub>2</sub> O)] <sup>1/2</sup>	Type S pitot tube constant, = 85.49				
_		Measured post-test leakage rate of the sampling train				
$\mathbf{L}_{\mathbf{p}}$	cfm	Measured post-test leakage rate of the sampling train				
L <sub>p</sub> M <sub>d</sub>	cfm lb./lbmole	Measured post-test leakage rate of the sampling train  Molecular weight of gas at the DGM				

Symbol	Units	Description
M <sub>w</sub>	lb./lbmole	Molecular weight of water,
		= 18.0
Manalyte	mg	Mass of analyte in the sample
n	dimensionless	Number of data points
P	MMBtu	Fuel firing rate
Pbar	inches Hg	Barometric pressure at measurement site
Pinput	tons/hour	Process dry mass input rate
pg	inches H <sub>2</sub> O	Gauge (static) pressure of stack gas
P <sub>m</sub>	inches Hg	Absolute pressure of meter gases
Ps	inches Hg	Absolute pressure of stack gases
Pstd	inches Hg	Standard absolute pressure
		= 29.92
Qa	cfm	Volumetric flow rate of actual stack gas
Qsd	dscfm	Volumetric flow rate of dry stack gas, standardized
R	(in. Hg)(ft <sup>3</sup> )	Ideal gas constant,
	(lb-mole)(°R)	= 21.85
RA	percent	Relative accuracy
RE	percent	Removal efficiency
RM	ppm	Average reference method concentration
rw	lb/mL	Density of water,
		= 0.002201
ra	g/mL	Density of acetone,
		= 0.7899
Sd	dimensionless	Standard deviation
Tm	°R	Absolute temperature of dry gas meter
Ts	°R	Absolute temperature of stack gas
Tstd	°R	Standard absolute temperature,
		= 528
to.975	dimensionless	2.5 percent error t-value
t <sub>m</sub>	°F	Temperature of DGM
ts	°F	Temperature of stack gas
q	minutes	Total sampling time
		I I

Symbol	Units	Description		
V <sub>lc</sub>	mL	Total volume of liquid collected		
V <sub>m</sub>	dcf	Volume of gas sample as measured by the DGM		
V <sub>m(std)</sub>	dscf	Volume of gas sample as measured by the DGM, standardized		
V <sub>w(std)</sub>	scf	Volume of water vapor in the gas sample, standardized		
Vs	ft./sec	Velocity of stack gas		
Ym	dimensionless	DGM calibration coefficient		
Yc	dimensionless	DGM calibration check value		
Yw	dimensionless	Reference (wet) gas meter calibration coefficient		
% CO <sub>2</sub>	percent	Percent CO <sub>2</sub> by volume, dry basis		
% O <sub>2</sub>	percent	Percent O <sub>2</sub> by volume, dry basis		
% N <sub>2</sub>	percent	Percent N <sub>2</sub> by volume, dry basis		

# APPENDIX C

# FIELD DATA

# **Advanced Industrial Resources, Inc.**

# Field Data

Chemance Medical Alpharetta, Georgia

	EOA			EOE	
Time	ft/min	$T_s C^o$	Time	ft/min	$T_s F^o$
10:33	1660	40.6	10:22	3250	109
10:38	1671	40.6	10:32	2270	
10:43	1665	40.7	10:42	1220	
10:48	1671	40.8	10:53	2100	
10:53	1660	40.8	11:03	2246	
10:58	1665	40.8	11:13	1526	
11:03	1655	40.7	11:22	2647	
11:08	1665	40.8	11:32	1200	
11:13	1665	40.7	11:42	2691	
11:18	1671	40.8	11:53	2660	
11:23	1670	40.8	12:04	2240	
11:28	1655	40.8	12:13	1240	
11:33	1660	40.8	12:22	2280	
Average:	1664.1	40.7	12:32	2150	
			12:42	2330	
			12:52	1040	
			13:02	2300	
			13:12	1155	
			13:22	1145	
			13:32	2220	
			13:42	1029	
			13:52	2365	
		14:02	1125		
	14:12	2315			-
	14:22	1128			
	Average:	1914.9	109		

Input va	lues:	Run Number		
		EOA	EOE	
$T_{db}$	F	103.8	106.1	
$T_{\mathrm{wb}}$	F	73.7	74.8	
$P_{g}$	in $H_20$	0.00	0.00	
$P_{bar}$	in Hg	29.12	29.12	
$O_2$	%	21.0	21.0	
$CO_2$	%	0.0	0.0	
Calcula	ted values:			
P	in Hg	29.12	29.12	
$MW_{\text{air}} \\$	lb/mol	28.84	28.84	
$p_{sat}$	in Hg	0.84	0.87	
p	in Hg	0.51	0.53	
Н	lb H <sub>2</sub> O/lb air	0.0111	0.0115	
$\mathbf{B}_{\mathbf{w}\mathbf{s}}$		0.0175	0.0181	

Note: % O<sub>2</sub> and % CO<sub>2</sub> are not important variables. Use 21% and 0% if values have not been measured.

Con ID 1 hour - 6L1822 - EOA Paux 29,12 1 hour - 612491 - EOA 4 how - 660682 - EOE 4 hour - 661011 - EDE EOE anno amandra e Eo A Start - 1022 State - 1038 541 - 1132 stop - 1422 EOE - 610682 - Initial Vacuum - 29.0" Hg Final Vainain - 9.5"Hg · Col (011 - Taitid Vacuum - 29.0" Hg Final Vacuum - 10" Mg EOA 28 xan - 622491 - Initial Vacuum - 29.8" Hg Final Vacuum - 7.5 " Mg 661822 - Initial Vacuum - 29-4" Hg Final Vacuum 9.0 " Mg EOE Os = 15/8" EOA Ds 3"

EDE

Pour = 29.12

	<u> </u>			Pour = 29.12
Time	Flow (ft./min)	Vernun		W6 = 74.8 °F
7m +020	325 H25	zan Hg		Db : 106.7 °F
1032	2270			106.1 8 mc
1042	1220			1001
1053	34.3> 2100			
1203	25.59 2246	Jan		
1113	<del></del>			Fan turns
11 22	19.67 1526 2647			or and off
1132	1200	2€"Hg		or and off
1142	2691			
1153	2665			
1204	2240			
1213	1240		£ =	109.
1222	2280		7.7	
1238	2150			
1242	2330	•		1. 625
1252	1040		$\mathcal{D}_{\mathcal{S}}$	1. 423
1302	2300		-	
1312	1150			•
1322	1145			
1372	8220			
(342	1021			
1352	1365			
1402	1125			
1412	2315			
1422	1128			

Ds 3.0"

# APPENDIX D LABORATORY REPORT



10/29/2020

Mr. Derek Stephens Advanced Industrial Resources 3407 Novis Pointe

Acworth GA 30101

Project Name: Project #: KR10590

Workorder #: 2010412

Dear Mr. Derek Stephens

The following report includes the data for the above referenced project for sample(s) received on 10/16/2020 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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

Brian Whittaker

Regards,

Brian Whittaker

Project Manager



#### **WORK ORDER #: 2010412**

Work Order Summary

CLIENT: Mr. Derek Stephens BILL TO: Mr. Derek Stephens

Advanced Industrial Resources Advanced Industrial Resources

3407 Novis Pointe
Acworth, GA 30101

3407 Novis Pointe
Acworth, GA 30101

**PHONE:** 404-843-2100 **P.O.**#

FAX: 404-845-0020 PROJECT # KR10590

**DATE RECEIVED:** 10/16/2020 **CONTACT:** Brian Whittaker

**DATE COMPLETED:** 10/29/2020

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
01A	KR10590-1 (EOE)	Modified TO-15 SIM	10.5 "Hg	5 psi
02A	KR10590-2 (EOE) DUP	Modified TO-15 SIM	9.5 "Hg	5 psi
03A	KR10590-3 (EOA)	Modified TO-15 SIM	8.5 "Hg	5 psi
04A	KR10590-4 (EOA) DUP	Modified TO-15 SIM	9.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15 SIM	NA	NA
06A	CCV	Modified TO-15 SIM	NA	NA
07A	LCS	Modified TO-15 SIM	NA	NA
07AA	LCSD	Modified TO-15 SIM	NA	NA

	The	ude Tlayer		
CERTIFIED BY:	0	00	DATE: 10/29/20	

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.

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

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



### LABORATORY NARRATIVE EPA TO-15 Ethylene oxide (SIM) Advanced Industrial Resources Workorder# 2010412

Four 6 Liter Summa Canister (100% Certified) samples were received on October 16, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the SIM acquisition mode for the measurement of Ethylene oxide in ambient air.

#### **Receiving Notes**

The Chain of Custody (COC) information for samples KR10590-1 (EOE), KR10590-2 (EOE) DUP, KR10590-3 (EOA) and KR10590-4 (EOA) DUP did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

#### **Analytical Notes**

Ethylene Oxide is not included on the laboratory's NELAP scope of accreditation for TO-15 SIM. However, TO-15 method and NELAP quality requirements were met.

Dilution was performed on samples KR10590-1 (EOE), KR10590-2 (EOE) DUP, KR10590-3 (EOA) and KR10590-4 (EOA) DUP due to the presence of high level target species.

Samples KR10590-1 (EOE), KR10590-2 (EOE) DUP, KR10590-3 (EOA) and KR10590-4 (EOA) DUP were analyzed 15 days after sample collection which was past the laboratory's SOP specified 14-day hold time, but within the method recommended 30-day hold time.

# **Definition of Data Qualifying Flags**

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
  - J Estimated value.
  - S Saturated peak.
  - Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
  - UJ- Non-detected compound associated with low bias in the CCV
  - N The identification is based on presumptive evidence.
  - CN See Case Narrative

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

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



# **Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM**

Client Sample ID: KR10590-1 (EOE)

Lab ID#: 2010412-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Ethylene Oxide	1600	360000	3000	660000	

Client Sample ID: KR10590-2 (EOE) DUP

Lab ID#: 2010412-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Ethylene Oxide	1600	450000	2800	810000	

Client Sample ID: KR10590-3 (EOA)

Lab ID#: 2010412-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Ethylene Oxide	1500	58000	2700	100000	

Client Sample ID: KR10590-4 (EOA) DUP

Lab ID#: 2010412-04A

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Ethylene Oxide	1500	46000	2800	83000



# Client Sample ID: KR10590-1 (EOE)

# Lab ID#: 2010412-01A

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	30102822sim	Date of Collection: 10/14/20 2:22:00		
Dil. Factor:	33000	Date of Analysis: 10/28/20 11:51 PM		
Compound	Rpt. Limit	Amount	Rpt. Limit	Amount
	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Ethylene Oxide	1600	360000	3000	660000



# Client Sample ID: KR10590-2 (EOE) DUP

Lab ID#: 2010412-02A

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	30102823sim Date of Collection: 10/14/20 2:2 31400 Date of Analysis: 10/29/20 12:22			
_	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Ethylene Oxide	1600	450000	2800	810000



# Client Sample ID: KR10590-3 (EOA)

# Lab ID#: 2010412-03A

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	30102824sim Date of		te of Collection: 10/1	Collection: 10/14/20 11:33:00 A	
Dil. Factor:	29900	Date of Analysis: 10/29/20 12:52 AM			
	Rpt. Limit	Amount	Rpt. Limit	Amount	
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)	
Ethylene Oxide	1500	58000	2700	100000	



# Client Sample ID: KR10590-4 (EOA) DUP

Lab ID#: 2010412-04A

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	30102825sim Date of Collection: 10		4/20 11:33:00 A	
Dil. Factor:	30600	Date of Analysis: 10/29/20 01:24 AM		
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Ethylene Oxide	1500	46000	2800	83000



# Client Sample ID: Lab Blank Lab ID#: 2010412-05A

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	30102805sim	Date	e of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/28/20 11:47 AM		
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Ethylene Oxide	0.050	Not Detected	0.090	Not Detected



# Client Sample ID: CCV Lab ID#: 2010412-06A

#### MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: 30102802sim Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 10/28/20 10:08 AM

Compound %Recovery

Ethylene Oxide 118



# Client Sample ID: LCS Lab ID#: 2010412-07A

# **MODIFIED EPA METHOD TO-15 GC/MS SIM**

File Name: 30102803sim Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 10/28/20 10:40 AM

		Method
Compound	%Recovery	Limits
Ethylene Oxide	111	70-130



# Client Sample ID: LCSD Lab ID#: 2010412-07AA

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	30102804sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/28/20 11:12 AM

		Method
Compound	%Recovery	Limits
Ethylene Oxide	105	70-130

# APPENDIX E CALIBRATION DATA



Issue Date: 4/27/2018 Certificate No: 344684



Calibration Performed By:

Accurate Solutions - Atlanta, Inc.

825 Chance Rd, Suite 10 Marietta, GA 30066

Phone: (770) 428-9400

Performed By: GALEN EVANS

For: CHEMENCE MEDICAL 200 TECHNOLOGY DRIVE ALPHARETTA, GA 30005

Contact: HETAL PATEL

770-664-6732

Equipment Information:

**Description: HOT WIRE ANEMOMETER** 

I.D.: 15100075
Manufacturer: AMPROBE
Model Number: TMA-20HW
Cal Date: 4/27/2018

Cal. Due Date: 4/30/2019

Calibration Notes

Serial Number: 15100075

Temp./RH: 20 °C / 49 %RH
Cal. Procedure: COMPARATIVE
As Found: IN TOLERANCE

Calibration Result: PASS

Seq.		Description	Standard	Tol	Tol. +	As Found	As Left	Unit
1	Applied Standard		70.0	52.0	88.0	68.0	68.0	FPM
2			150.0	132.0	168.0	151.2	151.2	FPM
3			806.0	788.0	824.0	799.8	799.8	FPM

### Standards Used To Calibrate Equipment:

Company	I.D.	Description	Last Cal.	Cal. Due Date
ACCURATE SOLUTIONS	40-06-03532	AIR FLOW STANDARD	4/10/2018	4/30/2023

This Certificate may not be copied, except in full, without written consent of Accurate Solutions - Atlanta, Inc. Results listed relate only to the items that were tested and/or calibrated. "Due Date" is provided as a result of customer instruction. Any number of factors may cause the calibration item to drift out of calibration before the due date.

Accurate Solutions - Atlanta, Inc. maintains a quality system that is accredited by Perry Johnson Laboratory Accreditation, Inc. to meet or exceed the requirements set forth in ISO/IEC 17025:2005. The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Calibrations meet or exceed a 4:1 TUR ratio unless otherwise noted. The uncertainty of measurement associated with the measurement result reported in this certificate is available upon request and was accounted for in making the decision of compliance or noncompliance with the relevant specification above. This certificate generated under digital signature by the below indicated technician certified competent in the company quality documents for the test(s) performed. The work was performed at the Accurate Solutions - Atlanta facility above.

Cert. #: 344684 Authorized Signature/Technician: GALEN EVANS Date: 4/27/2018



Issue Date: 11/10/2020 Certificate No: 368950



Calibration Performed By:

Accurate Solutions - Atlanta, Inc.

825 Chance Rd, Suite 10 Marietta, GA 30066

Phone: (770) 428-9400

Performed By: GALEN EVANS

For: CHEMENCE MEDICAL 200 TECHNOLOGY DRIVE

ALPHARETTA, GA 30005

Contact: RICHARD NARDINI

470-359-2896 X208

Equipment Information:

**Description: HOT WIRE ANEMOMETER** 

I.D.: 15100075 Serial Number: 15100075

Manufacturer:AMPROBETemp./RH:23 °C / 52 %RHModel Number:TMA-20HWCal. Procedure:COMPARATIVECal Date:11/10/2020As Found:IN TOLERANCE

Cal. Due Date: 11/30/2021 Calibration Result: PASS

Calibration Notes Tolerance is ±18 up to 600 FPM, then 3% of reading.

Seq.		Description	Standard	Tol	Tol. +	As Found	As Left	Unit
1	Applied Standard		120.0	102.0	138.0	114.0	114.0	FPM
2			497.0	479.0	515.0	494.0	494.0	FPM
3			1996.0	1936.0	1956.0	1941.0	1941.0	FPM

### Standards Used To Calibrate Equipment:

Company	I.D.	Description	Last Cal.	Cal. Due Date
ACCURATE SOLUTIONS	40-06-03532	AIR FLOW STANDARD	11/5/2020	11/30/2022

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Accurate Solutions - Atlanta, Inc. maintains a quality system that is accredited by Perry Johnson Laboratory Accreditation, Inc. to meet or exceed the requirements set forth in ISO/IEC 17025:2017. The calibration results published in this certificate were obtained using equipment capable of producing resuts that are traceable through NIST to the International System of Units (SI). Calibrations meet or exceed a 4:1 TUR ratio unless otherwise noted or uncertainties are provided; Any uncertainty of measurement or TUR reported in this certificate is expressed as expanded uncertainty value at approximately the 95% confidence level using a coverage factor of k=2; Uncertainty computation does not include instrument under test resolution or repeatability; Any statement of conformity was made using a simple limit criteria not accounting for any uncertainties; or as determined by the contract review on file. This certificate generated under digital signature by the below indicated technician certified competent in the company quality documents for the test(s) performed. The work was performed at the Accurate Solutions - Atlanta facility indicated above.

Cert. #: 368950 Authorized Signature/Technician: GALEN EVANS Date: 11/10/2020



Issue Date: 11/10/2020 Certificate No: 368954



Calibration Performed By:

Accurate Solutions - Atlanta, Inc.

825 Chance Rd, Suite 10 Marietta, GA 30066

Phone: (770) 428-9400

Performed By: GALEN EVANS

For: CHEMENCE MEDICAL 200 TECHNOLOGY DRIVE

ALPHARETTA, GA 30005

Contact: RICHARD NARDINI

470-359-2896 X208

Equipment Information:

Description: VANE ANEMOMETER WITH IR THERMOMETER

 I.D.:
 160602500
 Serial Number:
 160602500

 Manufacturer:
 EXTECH
 Temp./RH:
 23 °C / 52%RH

 Model Number:
 AN200
 Cal. Procedure:
 OEM PROC

 Cal Date:
 11/10/2020
 As Found:
 IN TOLERANCE

Cal. Due Date: 11/30/2021 Calibration Result: PASS

Calibration Notes

Seq.	Description	Standard	Tol	Tol. +	As Found	As Left	Unit
1	Air Flow, Observed Standard	120	76	164	118	118	FPM
2		875	809	941	882	882	FPM
3		1724	1632	1816	1663	1663	FPM
4	IR Temperature	25	23	27	25	25	°C
5		270	265	275	269	269	°C

## Standards Used To Calibrate Equipment:

Company	I.D.	Description	Last Cal.	Cal. Due Date
ACCURATE SOLUTIONS	160122045	CALIBRATOR, IR	10/30/2020	10/31/2021
ACCURATE SOLUTIONS	40-06-03532	AIR FLOW STANDARD	11/5/2020	11/30/2022

This Certificate may not be copied, except in full, without written consent of Accurate Solutions - Atlanta, Inc. Results listed relate only to the items that were tested and/or calibrated and the observations made during the test. "Due Date" is provided as a result of customer instruction. Any number of factors may cause the calibration item to drift out of calibration before the due date.

Accurate Solutions - Atlanta, Inc. maintains a quality system that is accredited by Perry Johnson Laboratory Accreditation, Inc. to meet or exceed the requirements set forth in ISO/IEC 17025:2017. The calibration results published in this certificate were obtained using equipment capable of producing resuts that are traceable through NIST to the International System of Units (SI). Calibrations meet or exceed a 4:1 TUR ratio unless otherwise noted or uncertainties are provided; Any uncertainty of measurement or TUR reported in this certificate is expressed as expanded uncertainty value at approximately the 95% confidence level using a coverage factor of k=2; Uncertainty computation does not include instrument under test resolution or repeatability; Any statement of conformity was made using a simple limit criteria not accounting for any uncertainties; or as determined by the contract review on file. This certificate generated under digital signature by the below indicated technician certified competent in the company quality documents for the test(s) performed. The work was performed at the Accurate Solutions - Atlanta facility indicated above.

Cert. #: 368954 Authorized Signature/Technician: GALEN EVANS Date: 11/10/2020



Issue Date: 5/3/2018 Certificate No: 344740



Calibration Performed By:

Accurate Solutions - Atlanta, Inc.

825 Chance Rd, Suite 10 Marietta, GA 30066

Phone: (770) 428-9400

Performed By: GALEN EVANS

For: CHEMENCE MEDICAL 200 TECHNOLOGY DRIVE ALPHARETTA, GA 30005

Contact: HETAL PATEL

770-664-6732

Equipment Information:

Description: VANE ANEMOMETER WITH IR THERMOMETER

 I.D.:
 160602500
 Serial Number:
 160602500

 Manufacturer:
 EXTECH
 Temp./RH:
 20 °C / 49 %RH

 Model Number:
 AN200
 Cal. Procedure:
 OEM PROC

 Cal Date:
 4/27/2018
 As Found:
 IN TOLERANCE

Cal. Due Date: 4/30/2019 Calibration Result: PASS

Calibration Notes

Seq.	Description	Standard	Tol	Tol. +	As Found	As Left	Unit
1	Air Flow, Observed Standard	75	32	118	83	83	FPM
2		806	751	861	813	813	FPM
3		2008	1933	2083	2051	2051	FPM
4	IR Temperature	25	23	27	25	25	°C
5		250	245	255	247	247	°C

## Standards Used To Calibrate Equipment:

Company	I.D.	Description	Last Cal.	Cal. Due Date
ACCURATE SOLUTIONS	160122045	CALIBRATOR, IR	8/17/2017	8/31/2018
ACCURATE SOLUTIONS	40-06-03532	AIR FLOW STANDARD	4/10/2018	4/30/2023

This Certificate may not be copied, except in full, without written consent of Accurate Solutions - Atlanta, Inc. Results listed relate only to the items that were tested and/or calibrated. "Due Date" is provided as a result of customer instruction. Any number of factors may cause the calibration item to drift out of calibration before the due date.

Accurate Solutions - Atlanta, Inc. maintains a quality system that is accredited by Perry Johnson Laboratory Accreditation, Inc. to meet or exceed the requirements set forth in ISO/IEC 17025:2005. The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Calibrations meet or exceed a 4:1 TUR ratio unless otherwise noted. The uncertainty of measurement associated with the measurement result reported in this certificate is available upon request and was accounted for in making the decision of compliance or noncompliance with the relevant specification above. This certificate generated under digital signature by the below indicated technician certified competent in the company quality documents for the test(s) performed. The work was performed at the Accurate Solutions - Atlanta facility above.

Cert. #: 344740 Authorized Signature/Technician: GALEN EVANS Date: 4/27/2018

# APPENDIX F PROCESS OPERATION DATA

Document ID: SOP-MED-0064

Document Type: Device History Record

Glue

040482-R5



Name: Version

EO Sterlization Router

RUN # 100A94

Operation		Description		Date Completed	•
	Operation $1-$ Staging and Preconditioning $*$ (Minimum $12$ hours)	econditioning *(Mir	imum 12 hours)	Aff 19 Old 22	
48	Operation 2– EO Gas Consumable Preparation	nable Preparation		BA 19 CEL 22	
<u>:</u>	Operation 3 – Tote Preperation and Bag Sealing	ion and Bag Sealing		A) 19 cet Dro	
40	Operation 4 – Transfer and Load Time	oad Time		AN 19 CEL 22	
	Operation 5 – Sterilization/Aeration	eration		AN 19 OCT Joh	
40	Operation 6- Dosimeter Check	ck		by 10 oct los	
PRODUCTION REVIEW COMPLETED BY/DATE:	Much !	men Missic	19 out him		
		Acceptance	Acceptance Criteria & Final Release		
The sterilization load/bag/tote contains appropriate QTY of devices.	contains appropriate QTY	Yes No	The environment within the EO sminimum at the start of the cycle	The environment within the EO sterilization bag is ≥30% (absolute minimum at the start of the cycle during the warm-up phase is 24%RH	☑ Yes ☐ No
The average preconditioning environment is ≥12hours at ≥68°F and ≥30%RH.	nvironment is ≥12hours at	Yes No	Devices are aerated within the si	the sterilizer set to 50°C for ≥1 hour.	Yes No
The average sterilizer cabinet temperature is 50ºC± 3°.	emperature is 50ºC± 3°.	Yes No	All Dosimeters (for all bags) pass	pass the calibration triangle.	☐ Yes ☐ No
The net EO delivered to each sterilization bag is 9.98g- 12.00g	erilization bag is 9.98g-	Yes No	The BIs are negative (remain orange).	nge).	√Yes □ No
Two (2) Humdichips were placed into every sterilization bag.	ed into every sterilization	Yes No	The positive control turns positive (turbid and yellow).	ve (turbid and yellow).	√Yes □ No
The transfer time from 'white room' to final cartridge activation is $\leq$ 17 minutes.	oom' to final cartridge	Yes No	The incubation time/temperatur	The incubation time/temperature for the BIs is 7 days at 35-39°C.	¥Yes □ No
The average environment within the EO sterilization bag is 50°C± 3°	in the EO sterilization bag is	Yes No			
Comments: UN/A					
QA Release: 10 16 0 0 20 20	J 2020				

Document ID: SOP-MED-0064
Document Type: Device History Record



Name: Version

EO Sterlization Router 2.0

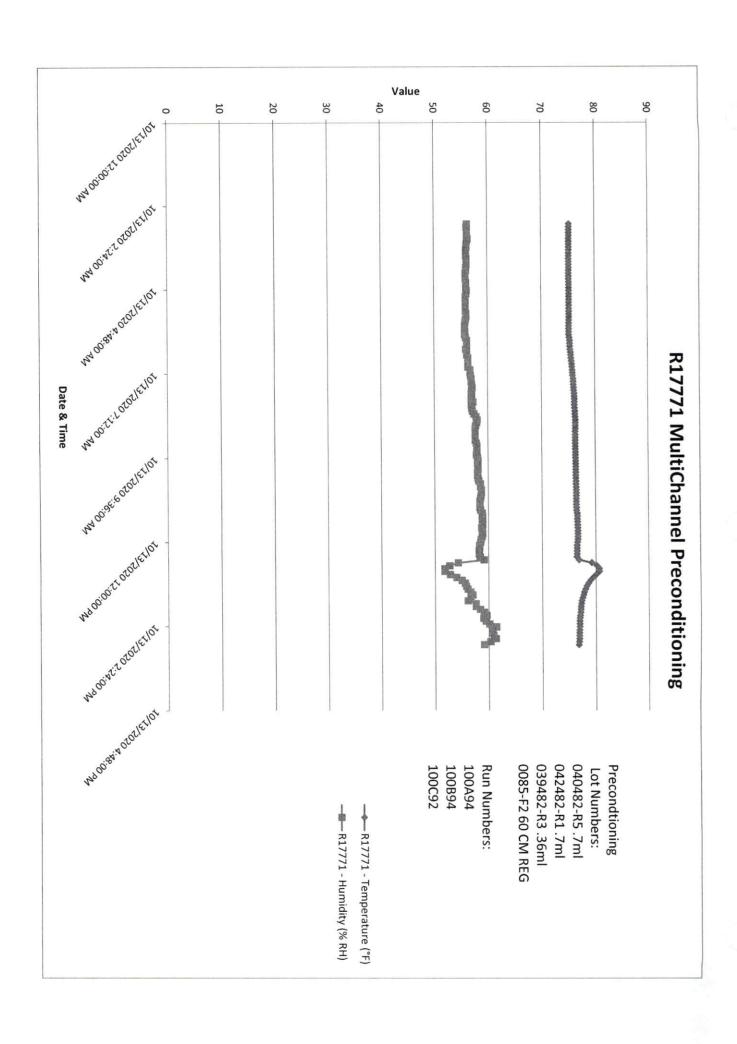
**Verify that totes are arranged as outlined in WI-MED-0018	**Verify that totes are a				•	
130C+1070 1:05pm	Programmed Start Date/Time (include Quickstart):	Jul 2021	Calibration Due Date:		037941	Data Logger ID:
1300+2020 1:05 pm	Programmed Start Date/Time (include Quickstart):	Apr 2021	Calibration Due Date:		P70074	Data Logger ID:
	ee WI-MED-0018)	Operation 2 - Data Logger Setup (see WI-MED-0018)	Operation 2 -			
Pass   Fail*		130CT 202		Jahra unchemore		QA Signature/Date:
180c+2020	amarala Billin	Checked By/Date:	130C+2010	Elijulum Rosaler 130C+2010	Eliga	Operator Signature/Date:
%	dity (≥ 30%): 57.16	Avg. Relative Humidity (≥ 30%)	- F	76.26		Avg. Temperature ( ≥68ºF):
1300+2020	2:55pm +30C+ 2020 End Date:	End Time: 2:55	1300+2020	Start Date:	2:55am	Start Time:
				VI-MED-0018	Data Logger Prepared as outlined in WI-MED-0018	Data Logger Prepa
	Pcc 2020	Calibration Due Date:			RITTI	Data Logger ID:
	inimum 12 hours)	Operation 1 - Preconditioning *(Minimum 12 hours)	Operation 1 -			
N/A	Dunnage Qty/ Tote#:	N/A D	N/A 🛛 Qty:	N/A Tote#:	N/A	Lot#:
N/A	Dunnage Qty/ Tote#:	N/A D	N/A Oty:	N/A Tote#:	N/A	Lot#:
N/A	Dunnage Qty/ Tote#:	000 D	- 10 Qty:	Tote#:	- R5	Lot#: 040482-R5
	Minimum Quantity and Maximum Quantity Are Both 600 Pouches/Blisters per Tote Exofin XL min/ max is 99 pouches in each tote Exofin® Fusion min/max is 18 pouches in each tote and/or 45 pouches in each liner bag Ampoule boxes (Mastic/Glugone) min/max is 15 boxes per tote	Quantity and Maximum Quantity Are Both 600 Pouches/Blister Exofin XL min/ max is 99 pouches in each tote on min/max is 18 pouches in each tote and/or 45 pouches in ea Ampoule boxes (Mastic/Glugone) min/max is 15 boxes per tote	n Quantity and Max Exofin XL sion min/max is 18 Ampoule boxes (N	Minimur Exofin® Fus		
	Sterilization	Operation 1 - Staging for EO Sterilization	Operati			

Page 2 of 5

Printed by/date: ER 13Oct2020 Lo

Lot: 040482-R5

Run #: 100A94



Device Name: Device Description:

Serial Number: Device ID: R17771 Precondtioning Lot Numbers:

RHTemp1000IS Intrinsically Safe Temperature and Humidity Data Logger

MultiChannel

RHTemp1000IS Intrinsically Safe Temperature and Humidity Data Logger R17771

MultiChannel

042482-R1 .7ml 039482-R3 .36ml 0085-F2 60 CM REG Run Numbers: 100A94 100B94 100C92

040482-R5 .7ml

	Channel 1	Channel 2	
Ter	nperature (°F)	Humidity (% RH)	
M	75.186		56.2
M	75.186		56.1
M	75.186		56.2
M	75.186		56.2
M	75.186		56.2
M	75.204		56.3
M	75.204		56.2
M	75.186		56.1
**	75 106		

		Channel 1	Channel 2
Date	Time	Temperature (°F)	Humidity (% RH)
10/13/2020	2:55:49 AM	75.186	56.2
10/13/2020	3:00:49 AM	75.186	56.1
10/13/2020	3:05:49 AM	75.186	56.2
10/13/2020	3:10:49 AM	75.186	56.2
10/13/2020	3:15:49 AM	75.186	56.2
10/13/2020	3:20:49 AM	75.204	56.3
10/13/2020	3:25:49 AM	75.204	56.2
10/13/2020	3:30:49 AM	75.186	56.1
10/13/2020	3:35:49 AM	75.186	56.1
10/13/2020	3:40:49 AM	75.186	56
10/13/2020	3:45:49 AM	75.186	56
10/13/2020	3:50:49 AM	75.186	56
10/13/2020	3:55:49 AM	75.168	56.1
10/13/2020	4:00:49 AM	75.186	56.1
	4:05:49 AM		
10/13/2020		75.186	56.1
10/13/2020	4:10:49 AM	75.186	56
10/13/2020	4:15:49 AM	75.168	56
10/13/2020	4:20:49 AM	75.168	55.9
10/13/2020	4:25:49 AM	75.168	55.9
10/13/2020	4:30:49 AM	75.168	55.9
10/13/2020	4:35:49 AM	75.168	56
10/13/2020	4:40:49 AM	75.168	56
10/13/2020	4:45:49 AM	75.168	56
10/13/2020	4:50:49 AM	75.168	56.1
10/13/2020	4:55:49 AM	75.168	56
10/13/2020	5:00:49 AM	75.168	55.9
10/13/2020	5:05:49 AM	75.15	55.9
10/13/2020	5:10:49 AM	75.15	55.9
10/13/2020	5:15:49 AM	75.168	55.9
10/13/2020	5:20:49 AM	75.15	55.9
10/13/2020	5:25:49 AM	75.15	55.9
10/13/2020	5:30:49 AM	75.168	56
10/13/2020	5:35:49 AM	75.168	56
10/13/2020	5:40:49 AM	75.15	55.9
10/13/2020	5:45:49 AM	75.15	55.8
10/13/2020	5:50:49 AM	75.15	55.7
10/13/2020	5:55:49 AM	75.132	55.7
10/13/2020	6:00:49 AM	75.15	55.8
10/13/2020	6:05:49 AM	75.168	55.7
10/13/2020	6:10:49 AM	75.222	55.9
10/13/2020	6:15:49 AM	75.276	56.1
10/13/2020	6:20:49 AM	75.312	56.1
10/13/2020	6:25:49 AM	75.348	56.1
10/13/2020	6:30:49 AM	75.384	55.9
10/13/2020	6:35:49 AM	75.456	56.1
10/13/2020	6:40:49 AM	75.51	56.1
10/13/2020	6:45:49 AM	75.564	56.1
10/13/2020	6:50:49 AM	75.504	
10/13/2020	6:55:49 AM		56.3
10/13/2020	7:00:49 AM	75.672	56.3
		75.708	56.3
10/13/2020	7:05:49 AM	75.78	56.7
10/13/2020	7:10:49 AM	75.834	56.7
10/13/2020	7:15:49 AM	75.87	56.8
10/13/2020	7:20:49 AM	75.906	56.9

10/13/2020	7:25:49 AM	75.96	56.9
10/13/2020	7:30:49 AM	75.996	57
	7:35:49 AM	76.032	57.1
10/13/2020			
10/13/2020	7:40:49 AM	76.05	57
10/13/2020	7:45:49 AM	76.086	56.9
10/13/2020	7:50:49 AM	76.104	57
10/13/2020	7:55:49 AM	76.122	56.9
			57.2
10/13/2020	8:00:49 AM	76.122	
10/13/2020	8:05:49 AM	76.14	56.9
10/13/2020	8:10:49 AM	76.158	57
10/13/2020	8:15:49 AM	76.212	57.1
10/13/2020	8:20:49 AM	76.23	57.4
10/13/2020	8:25:49 AM	76.284	57.8
10/13/2020	8:30:49 AM	76.302	58
10/13/2020	8:35:49 AM	76.302	57.9
10/13/2020	8:40:49 AM	76.302	57.7
10/13/2020	8:45:49 AM	76.302	57.6
10/13/2020	8:50:49 AM	76.284	57.6
10/13/2020	8:55:49 AM	76.284	57.6
10/13/2020	9:00:49 AM	76.284	57.6
10/13/2020	9:05:49 AM	76.284	57.6
10/13/2020	9:10:49 AM	76.266	57.8
	9:15:49 AM	76.266	57.9
10/13/2020			
10/13/2020	9:20:49 AM	76.248	57.9
10/13/2020	9:25:49 AM	76.266	57.9
10/13/2020	9:30:49 AM	76.266	57.8
10/13/2020	9:35:49 AM	76.284	58
10/13/2020	9:40:49 AM	76.302	58.1
10/13/2020	9:45:49 AM	76.32	58
10/13/2020	9:50:49 AM	76.338	58.1
10/13/2020	9:55:49 AM	76.338	58.1
	10:00:49 AM	76.338	58
	10:05:49 AM	76.338	58
10/13/2020	10:10:49 AM	76.338	58.1
10/13/2020	10:15:49 AM	76.374	58.2
10/13/2020	10:20:49 AM	76.356	58.5
	10:25:49 AM	76.392	58.5
	10:30:49 AM	76.392	58.7
10/13/2020	10:35:49 AM	76.41	58.7
10/13/2020	10:40:49 AM	76.41	58.6
10/13/2020	10:45:49 AM	76.41	58.5
	10:50:49 AM	76.41	58.4
	10:55:49 AM	76.428	58.4
10/13/2020	11:00:49 AM	76.428	58.4
10/13/2020	11:05:49 AM	76.464	58.5
10/13/2020	11:10:49 AM	76.518	58.8
	11:15:49 AM	76.536	58.9
	11:20:49 AM	76.536	58.8
10/13/2020	11:25:49 AM	76.59	58.9
10/13/2020	11:30:49 AM	76.626	58.9
	11:35:49 AM	76.644	58.7
	11:40:49 AM	76.626	58.8
	11:45:49 AM	76.644	58.9
10/13/2020	11:50:49 AM	76.644	58.8
10/13/2020	11:55:49 AM	76.626	58.6
	12:00:49 PM	76.572	58.5
	12:05:49 PM	76.518	58.3
10/13/2020	12:10:49 PM	76.482	58.3
10/13/2020	12:15:49 PM	76.464	58.2
	12:20:49 PM	76.446	58.2
	12:25:49 PM	76.428	58.4
	12:30:49 PM	76.824	59.1
	12:35:49 PM	79.236	54.3
10/13/2020	12:40:49 PM	80.208	52.7
10/13/2020	12:45:49 PM	80.622	51.8
	12:50:49 PM	80.658	51.8
	12:55:49 PM	80.01	52.8
10/13/2020			
		79.47	54
10/13/2020		79.02	55
10/13/2020	1:10:49 PM	78.642	55.6
10/13/2020	1:15:49 PM	78.3	55.8
10/13/2020		78.012	
			56.1
10/13/2020		77.796	56.6
10/13/2020		77.634	57
10/13/2020	1:35:49 PM	77.472	56.6
10/13/2020		77.328	56.1
10/13/2020		77.238	
			57.6
10/13/2020		77.184	57.6
10/13/2020	1:55:49 PM	77.148	58.4
10/13/2020	2:00:49 PM	77.094	59.1
10/13/2020		77.04	59.6
10/13/2020			
		76.968	59
10/13/2020		76.95	59.4
10/13/2020	2:20:49 PM	76.932	60.1
10/13/2020	2:25:49 PM	76.932	61.4
10/13/2020		76.914	
			60.7
10/13/2020		76.878	60.7
10/13/2020		76.86	60.9
10/13/2020	2:45:49 PM	76.842	61.3
10/13/2020	2:50:49 PM	76.824	60.3
10/13/2020	2:55:49 PM	76.77	
20, 20, 2020	2.00.73 FIVI		59.1
		76.26252414	57.15655172

Document Type: SOP-MED-0064
Document Type: Device History Record



EO Sterlization Router

Name: Version

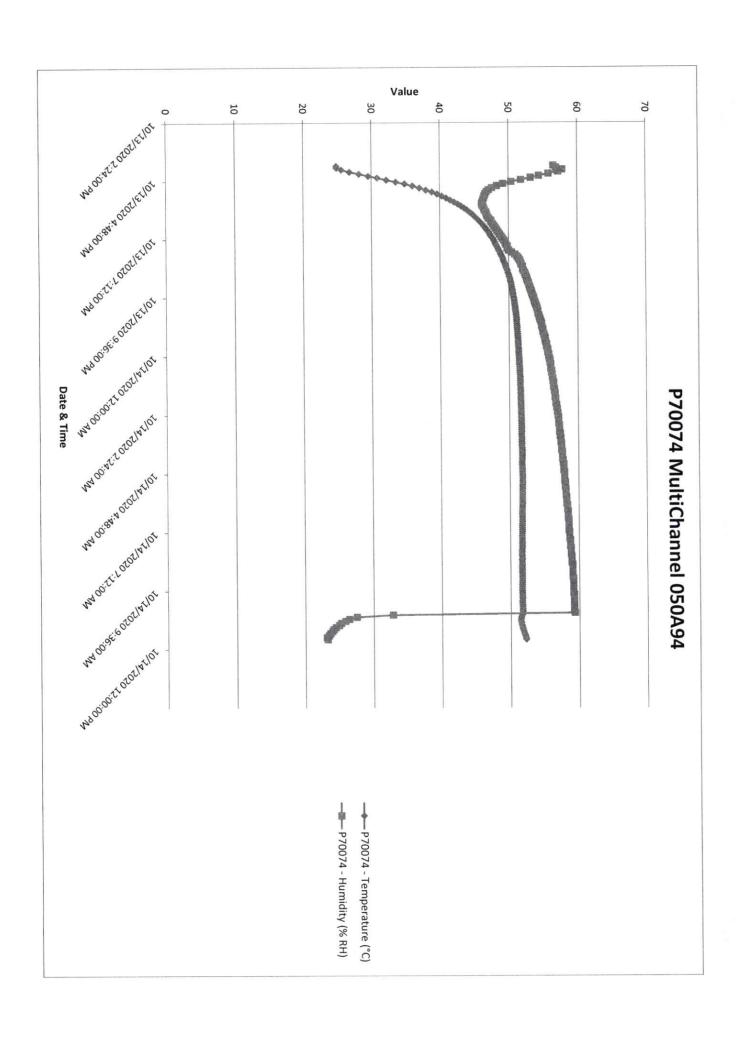
r Signature/Date:	Time/Date that cycle started (countdown completed/doors  H'.) + pm 1300+20	Time Last Cartridge Activated (a): 4:13 pm  Total Transfer Time (c) (a-b) Not to exceed 17 minutes:	Check to ensure each tote remains vacuum sealed prior to loading into the chamber:	Time left "white room" area (b): 4:10pm Sterilizer Temp (50ºC± 3º): 49.5 ºC Printer Paper/Ink Checked:	Operation 4 - Transfer & Load Time	Signature/Date: YAhrA MCherrore 13 OCT 2020	All steps in Operation 2 are complete and all consumables are loaded into each tote	QA Line Clearance – Proceed to Bag Sealing	EO Bag Sealer Asset ID: EO Bag Sealer Calibration Due Date: FC () 2021	Operation 3 - Tote Preparation and Bag Sealing	Operator Signature/date: Elijubeth Roxuly 130C+ 2020 Checked By/date: Unaywalla CBIII 130	Control Number (Location): 050시에 Serial Number: 무기00기막 (Location): 이어에서 Serial Number: 이어에서 (Location): 이어에서 이어에서 (Location): 이어에서 (Location)	2 Data loggers placed into the front of the tote (hotest and coolest locations):	Humidichips (2) placed inside Humiditube inside the tote. Equipment Logbooks filled out.	EZ Test Bls not damaged, Labeled, inside PCD and sealed.  Dosimeter is labeled and placed in the center of the load.	EO Gas Canister Labeled and mounted to tote (s) with product.  Positive Control same Lot number as PCDs in totes	EO Bag Information Recorded on Pg. 4 PCDs are placed in the center of the load.	EO Gas Canister Pre-Weight Information Recorded on Pg. 5  Box labels are printed and match each tote.	Operation 2 – EO Gas Consumable Preparation
OC+2020		(3) min									130C+ 2520	Imber: 037941							

Document ID: Document Type: **Device History Record** SOP-MED-0064



Name: Version EO Sterlization Router 2.0

Scale/Balance ID: 0035	*BI lot number(s):	EOGas bag lot number(s):	EOGas lot number(s):		Attach EO Chamber Printout 50ºC± 3°	BIs/Do		End Date/Time on Datalogger Printout:	Start Date/Time on Datalogger Printout:	Data Logger ID: 037941	End Date/Time on Datalogger Printout:	Start Date/Time on Datalogger Printout:	Data Logger ID: P7007H	Data Logger Offloaded as outlined in WI 09-014 – Record Batch Number and Control Number on Printouts		Aeration End Time (when countdown is completed/doors unlocked):	Aeration start time (after countdown completed/doors locked):	Time sterilizer "UNLOAD" pressed (Minimum 16 hours from "Cycle Start"):	
0035805143	G-214	EOKCM031090419	191956		<b>1t</b> 50ºC± 3°	simeters subr							正	ned in WI 09-		ntdown is co	ntdown comp	ssed cle Start"):	
		I DESCRIPTION			MIN:	nitted to QC		1400+2020	130C+2020		140C+ 2020	1300+2020		014 – Record		mpleted/doo	pleted/doors	10:2	
	Exp. Date:	Exp. Date:	Exp. Date:	Steri	49.9	(submit P.2 v		) 11:35am	4:10pm		0 11:35am	0 4:10pm		d Batch Numl	Opera	ors unlocked)	locked):	10:25am	<u>.</u>
	13 Jun 2021	N/A ER1360+2020	09 Jul 2024	lization Consu	°C	Bls/Dosimeters submitted to QC (submit P.2 with TR if multiple lots:	Bi in			co		200	Co	per and Control	ation 5 - EO Da	11:33am	10:33am	Sterilize countdov	peration 5 - St
CAL Due:	*If multiple	SECOND STATE	V W U C M	Sterilization Consumable Lot Information	MAX:	ole lots:	BI Incubation	Avg. Relative Humidity Must Be ≥ 30%(for totes with product):	Sterilizer Temp (50ºC± 3°):	Control Number:	Avg. Relative Humidity Must Be ≥ 30% (for totes with product):	Sterilizer Temp (50ºC± 3°):	Control Number:	Number on Prir	Operation 5 - EO Data Logger Downloading	Sam	Sam	Sterilize end time (After countdown/doors unlocked):	Operation 5 - Sterilization / Aeration
OC+	*If multiple lots used, 1 PC from each lot must be present	Humidichip lot number(s):	Dosimeter lot number(s):	rmation	50.2			y Must Be ≥ 30	± 3°):	090 A94	y Must Be ≥ 30	± 3°):	050 A94	ntouts	nloading				ration
OC+ 2020	from each	204/610	204517		°C	TR#:		%(for totes v			% (for totes					Date:		10:30am	
	lot must be					BI: 20		with produc			with					140C+2020			
	present	Exp. Date:	Exp. Date:		Attached:	20-2856		t):   55.72	49.96		53.55	49.45				2020			
		19 FC D 2023	12 Feb 2023		<b>4</b> . Q			12 %	oc.		.%	°C							



Device Name: **Device Description:** Serial Number:

Device ID:

RHTemp1000IS

Intrinsically Safe Temperature and Humidity Data Logger

P70074 050A94 MultiChannel RHTemp1000IS

Intrinsically Safe Temperature and Humidity Data Logger

P70074 MultiChannel

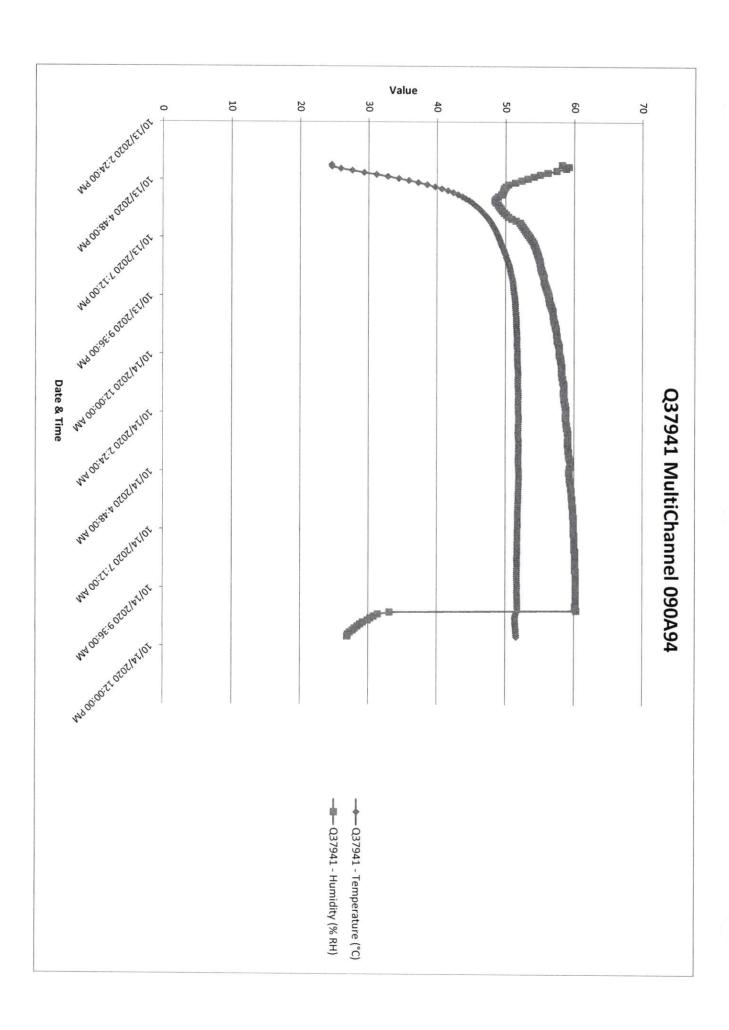
Channel	4

Date	Time	Channel 1 Temperature (°C)	Channel 2 Humidity (% RH)
10/13/2020	4:10:41 PM	24.85	56.5
10/13/2020	4:15:41 PM	24.88	56.9
10/13/2020	4:20:41 PM	25.59	57.8
10/13/2020	4:25:41 PM	26.81	57.2
10/13/2020	4:30:41 PM	28.17	55.8
10/13/2020	4:35:41 PM	29.54	54.4
10/13/2020	4:40:41 PM	30.87	53.2
10/13/2020	4:45:41 PM	32.19	51.8
10/13/2020	4:50:41 PM	33.57	50.4
10/13/2020	4:55:41 PM	34.85	49.2
10/13/2020	5:00:41 PM	36.01	48.3
10/13/2020	5:05:41 PM	37.04	47.6
10/13/2020	5:10:41 PM	37.98	47.1
10/13/2020	5:15:41 PM	38.84	46.8
10/13/2020	5:20:41 PM	39.6	46.6
10/13/2020	5:25:41 PM	40.3	46.5
10/13/2020	5:30:41 PM	40.94	46.4
10/13/2020	5:35:41 PM	41.53	46.3
10/13/2020	5:40:41 PM	42.09	46.2
10/13/2020	5:45:41 PM	42.61	46.1
10/13/2020	5:50:41 PM	43.09	46.2
10/13/2020	5:55:41 PM	43.54	46.4
10/13/2020	6:00:41 PM	43.95	46.5
10/13/2020	6:05:41 PM	44.33	46.7
10/13/2020	6:10:41 PM	44.68 45.02	46.8 46.9
10/13/2020 10/13/2020	6:15:41 PM 6:20:41 PM	45.34	47.1
10/13/2020	6:25:41 PM	45.64	47.4
10/13/2020	6:30:41 PM	45.92	47.5
10/13/2020	6:35:41 PM	46.18	47.7
10/13/2020	6:40:41 PM	46.41	47.9
10/13/2020	6:45:41 PM	46.66	48.1
10/13/2020	6:50:41 PM	46.87	48.3
10/13/2020	6:55:41 PM	47.08	48.5
10/13/2020	7:00:41 PM	47.29	48.7
10/13/2020	7:05:41 PM	47.47	48.9
10/13/2020	7:10:41 PM	47.65	49.1
10/13/2020	7:15:41 PM	47.82	49.3
10/13/2020	7:20:41 PM	47.98	49.5
10/13/2020	7:25:41 PM	48.13	49.6
10/13/2020	7:30:41 PM	48.28	49.8
10/13/2020	7:35:41 PM	48.43	49.8
10/13/2020	7:40:41 PM	48.58	50
10/13/2020	7:45:41 PM	48.73	50.4
10/13/2020	7:50:41 PM	48.86	50.9
10/13/2020	7:55:41 PM	48.99	51.2
10/13/2020	8:00:41 PM	49.13	51.4
10/13/2020	8:05:41 PM	49.24	51.6
10/13/2020	8:10:41 PM	49.37	51.7
10/13/2020	8:15:41 PM	49.49	51.8
10/13/2020	8:20:41 PM	49.59	52
10/13/2020	8:25:41 PM	49.7	52
10/13/2020 10/13/2020	8:30:41 PM 8:35:41 PM	49.8	52.1
10/13/2020	8:40:41 PM	49.89 49.98	52.3
10/13/2020	8:45:41 PM	50.07	52.4 52.5
10/13/2020	8:50:41 PM	50.15	52.6
10/13/2020	8:55:41 PM	50.23	52.7
10/13/2020	9:00:41 PM	50.31	52.8
10/13/2020	9:05:41 PM	50.35	52.9
10/13/2020	9:10:41 PM	50.42	53
	9:15:41 PM	50.47	53.1
10/13/2020	J.13.41 FIVI		
10/13/2020 10/13/2020	9:20:41 PM		
		50.53	53.2
10/13/2020	9:20:41 PM		53.2 53.3
10/13/2020 10/13/2020	9:20:41 PM 9:25:41 PM	50.53 50.58	53.2

10/13/2020	9-45-41 PM	50.77	53.7
		50.81	53.8
10/13/2020			53.9
10/13/2020		50.85	
10/13/2020	10:00:41 PM	50.89	54
10/13/2020	10:05:41 PM	50.92	54.1
10/13/2020		50.95	54.2
			54.2
10/13/2020	10:15:41 PM	50.99	
10/13/2020	10:20:41 PM	51.02	54.3
10/13/2020	10:25:41 PM	51.05	54.4
10/13/2020		51.07	54.5
		51.1	54.6
10/13/2020			
10/13/2020	10:40:41 PM	51.13	54.7
10/13/2020	10:45:41 PM	51.15	54.7
10/13/2020	10:50:41 PM	51.16	54.8
10/13/2020		51.19	54.9
			54.9
10/13/2020		51.21	
10/13/2020	11:05:41 PM	51.23	55
10/13/2020	11:10:41 PM	51.26	55.1
10/13/2020	11:15:41 PM	51.28	55.2
		51.29	55.2
	11:20:41 PM		
10/13/2020	11:25:41 PM	51.31	55.3
10/13/2020	11:30:41 PM	51.33	55.4
10/13/2020	11:35:41 PM	51.33	55.4
	11:40:41 PM	51.35	55.5
	11:45:41 PM	51.36	55.6
10/13/2020	11:50:41 PM	51.38	55.6
10/13/2020	11:55:41 PM	51.41	55.7
	12:00:41 AM	51.41	55.7
	12:05:41 AM	51.42	55.8
10/14/2020	12:10:41 AM	51.43	55.9
10/14/2020	12:15:41 AM	51.45	55.9
10/14/2020	12:20:41 AM	51.46	56
	12:25:41 AM	51.47	56
10/14/2020	12:30:41 AM	51.49	56
10/14/2020	12:35:41 AM	51.5	56.1
10/14/2020	12:40:41 AM	51.53	56.1
	12:45:41 AM	51.53	56.2
	12:50:41 AM	51.56	56.2
10/14/2020	12:55:41 AM	51.55	56.3
10/14/2020	1:00:41 AM	51.57	56.3
10/14/2020	1:05:41 AM	51.57	56.4
10/14/2020		51.57	56.4
10/14/2020	1:15:41 AM	51.59	56.4
10/14/2020	1:20:41 AM	51.59	56.5
10/14/2020	1:25:41 AM	51.61	56.5
10/14/2020	1:30:41 AM	51.62	56.6
10/14/2020	1:35:41 AM		
		51.64	56.6
10/14/2020	1:40:41 AM	51.64	56.6
10/14/2020	1:45:41 AM	51.65	56.7
10/14/2020	1:50:41 AM	51.66	56.7
10/14/2020	1:55:41 AM	51.66	56.7
10/14/2020	2:00:41 AM	51.66	56.8
10/14/2020	2:05:41 AM	51.66	56.8
10/14/2020	2:10:41 AM	51.66	56.9
10/14/2020	2:15:41 AM	51.66	56.9
10/14/2020	2:20:41 AM	51.67	57
10/14/2020	2:25:41 AM	51.68	57
10/14/2020	2:30:41 AM	51.69	57.1
10/14/2020	2:35:41 AM	51.71	57.1
10/14/2020	2:40:41 AM	51.72	57.1
10/14/2020	2:45:41 AM	51.71	57.1
10/14/2020	2:50:41 AM	51.72	57.2
10/14/2020	2:55:41 AM	51.72	57.2
10/14/2020	3:00:41 AM	51.72	57.2
10/14/2020	3:05:41 AM	51.73	57.2
10/14/2020			
	3:10:41 AM	51.72	57.3
10/14/2020	3:15:41 AM	51.72	57.3
10/14/2020	3:20:41 AM	51.73	57.4
10/14/2020	3:25:41 AM	51.73	57.4
10/14/2020	3:30:41 AM	51.74	57.4
10/14/2020	3:35:41 AM	51.75	57.5
10/14/2020	3:40:41 AM	51.76	57.5
10/14/2020	3:45:41 AM	51.77	57.5
10/14/2020	3:50:41 AM	51.78	57.5
and the second	and protection of the Protecti		57.5

10/14/2020	3:55:41 AM	51.77	57.6
10/14/2020	4:00:41 AM	51.77	57.6
10/14/2020	4:05:41 AM	51.77	57.6
10/14/2020	4:10:41 AM	51.77	57.6
10/14/2020	4:15:41 AM	51.77	57.7
10/14/2020	4:20:41 AM	51.76	57.7
10/14/2020	4:25:41 AM	51.76	57.8
10/14/2020	4:30:41 AM	51.76	57.8
10/14/2020	4:35:41 AM	51.77	57.8
10/14/2020	4:40:41 AM	51.78	57.8
10/14/2020	4:45:41 AM	51.8	57.9
10/14/2020	4:50:41 AM	51.8	57.9
10/14/2020	4:55:41 AM	51.8	57.9
10/14/2020	5:00:41 AM	51.81	57.9
10/14/2020	5:05:41 AM	51.8	57.9
10/14/2020	5:10:41 AM	51.8	58
10/14/2020	5:15:41 AM	51.81	58
10/14/2020	5:20:41 AM	51.8	58
10/14/2020	5:25:41 AM	51.8	58.1
10/14/2020	5:30:41 AM	51.79	58.1
10/14/2020	5:35:41 AM	51.78	58.1
10/14/2020	5:40:41 AM	51.78	58.1
10/14/2020	5:45:41 AM	51.78	58.2
10/14/2020	5:50:41 AM	51.77	58.2
10/14/2020	5:55:41 AM	51.77	58.2
10/14/2020	6:00:41 AM	51.77	58.2
10/14/2020	6:05:41 AM	51.76	58.3
10/14/2020	6:10:41 AM	51.75	58.3
10/14/2020	6:15:41 AM	51.75	58.3
10/14/2020	6:20:41 AM	51.75	58.4
10/14/2020	6:25:41 AM	51.73	58.4
10/14/2020	6:30:41 AM	51.73	58.4
10/14/2020	6:35:41 AM	51.73	58.4
10/14/2020	6:40:41 AM	51.73	58.5
10/14/2020	6:45:41 AM	51.73	58.5
10/14/2020	6:50:41 AM	51.73	58.5
10/14/2020	6:55:41 AM	51.72	58.5
10/14/2020	7:00:41 AM	51.73	58.5
10/14/2020	7:05:41 AM	51.72	58.5

10/14/2020	7:10:41 AM	51.72	58.6
10/14/2020	7:15:41 AM	51.71	58.6
10/14/2020	7:20:41 AM	51.71	58.6
10/14/2020	7:25:41 AM	51.72	58.6
10/14/2020	7:30:41 AM	51.71	58.7
10/14/2020	7:35:41 AM	51.7	58.7
10/14/2020	7:40:41 AM	51.7	58.7
10/14/2020	7:45:41 AM	51.7	58.7
10/14/2020	7:50:41 AM	51.7	58.8
10/14/2020	7:55:41 AM	51.69	58.8
10/14/2020	8:00:41 AM	51.69	58.8
10/14/2020	8:05:41 AM	51.68	58.8
10/14/2020	8:10:41 AM	51.68	58.9
10/14/2020	8:15:41 AM	51.68	58.9
10/14/2020	8:20:41 AM	51.67	58.9
10/14/2020	8:25:41 AM	51.67	58.9
10/14/2020	8:30:41 AM	51.67	59
10/14/2020	8:35:41 AM	51.67	59
10/14/2020	8:40:41 AM	51.67	59
10/14/2020	8:45:41 AM	51.67	59
10/14/2020	8:50:41 AM	51.67	59
10/14/2020	8:55:41 AM	51.67	59
10/14/2020	9:00:41 AM	51.66	59
10/14/2020	9:05:41 AM	51.66	59.1
10/14/2020	9:10:41 AM	51.66	59.1
10/14/2020	9:15:41 AM	51.66	59.1
10/14/2020	9:20:41 AM	51.66	59.1
10/14/2020	9:25:41 AM	51.67	59.1
10/14/2020	9:30:41 AM	51.67	59.1
10/14/2020	9:35:41 AM	51.66	59.1
10/14/2020	9:40:41 AM	51.67	59.1
10/14/2020	9:45:41 AM	51.67	59.2
10/14/2020	9:50:41 AM	51.68	59.2
10/14/2020		51.69	59.2
10/14/2020		51.68	59.2
10/14/2020	10:05:41 AM	51.69	59.2
10/14/2020	10:10:41 AM	51.7	59.2
10/14/2020		51.71	59.2
10/14/2020		51.72	59.2
10/14/2020		51.72	59.2
10/14/2020		51.73	59.3
10/14/2020		51.62	32.8
10/14/2020		51.49	27.5
10/14/2020		51.46	26.4
10/14/2020		51.46	25.8
10/14/2020		51.5	25.2
10/14/2020		51.58	24.9
10/14/2020		51.67	24.4
10/14/2020		51.75	24.1
10/14/2020		51.85	23.9
10/14/2020		51.94	23.6
10/14/2020		52.03	23.4
10/14/2020		52.12	23.1
10/14/2020	11:35:41 AM	52.2	23.2
		49.44683761	53.5482906



Device Name: **Device Description:**  RHTemp1000IS

Intrinsically Safe Temperature and Humidity Data Logger

Q37941

Intrinsically Safe Temperature and Humidity Data Logger Q37941

Channel 2

MultiChannel

RHTemp1000IS

Serial Number: Device ID: 090A94

MultiChannel

Channel 1

		Channel 1	Channel 2
Date	Time	Temperature (°C)	Humidity (% RH)
10/13/2020	4:10:40 PM	24.57	58.2
10/13/2020	4:15:40 PM	24.62	59.2
10/13/2020	4:20:40 PM	25.91	58.8
10/13/2020	4:25:40 PM	27.59	57.4
10/13/2020	4:30:40 PM	29.37	56.1
10/13/2020	4:35:40 PM	31.12	55
10/13/2020	4:40:40 PM	32.8	54.1
			53.2
10/13/2020	4:45:40 PM	34.4	
10/13/2020	4:50:40 PM	35.88	52.3
10/13/2020	4:55:40 PM	37.28	51.4
10/13/2020	5:00:40 PM	38.56	50.4
10/13/2020	5:05:40 PM	39.7	50
10/13/2020	5:10:40 PM	40.71	49.8
10/13/2020	5:15:40 PM	41.59	49.7
10/13/2020	5:20:40 PM	42.37	49.6
10/13/2020	5:25:40 PM	43.06	49.4
		43.68	48.9
10/13/2020	5:30:40 PM		
10/13/2020	5:35:40 PM	44.2	48.6
10/13/2020	5:40:40 PM	44.68	48.4
10/13/2020	5:45:40 PM	45.11	48.6
10/13/2020	5:50:40 PM	45.48	48.9
10/13/2020	5:55:40 PM	45.83	49.1
10/13/2020	6:00:40 PM	46.15	49.3
10/13/2020	6:05:40 PM	46.44	49.5
10/13/2020	6:10:40 PM	46.73	49.8
10/13/2020	6:15:40 PM	47.01	50.1
		47.28	50.4
10/13/2020	6:20:40 PM		
10/13/2020	6:25:40 PM	47.52	50.9
10/13/2020	6:30:40 PM	47.72	51.5
10/13/2020	6:35:40 PM	47.91	52.1
10/13/2020	6:40:40 PM	48.08	52.3
10/13/2020	6:45:40 PM	48.24	52.5
10/13/2020	6:50:40 PM	48.4	52.7
10/13/2020	6:55:40 PM	48.57	52.9
10/13/2020	7:00:40 PM	48.72	53.1
10/13/2020	7:05:40 PM	48.86	53.3
10/13/2020		48.99	53.5
	7:10:40 PM		
10/13/2020	7:15:40 PM	49.1	53.7
10/13/2020	7:20:40 PM	49.21	53.9
10/13/2020	7:25:40 PM	49.32	54.1
10/13/2020	7:30:40 PM	49.45	54.2
10/13/2020	7:35:40 PM	49.58	54.3
10/13/2020	7:40:40 PM	49.71	54.4
10/13/2020	7:45:40 PM	49.82	54.5
10/13/2020	7:50:40 PM	49.92	54.6
10/13/2020	7:55:40 PM	50.02	54.7
10/13/2020	8:00:40 PM	50.11	54.8
10/13/2020	8:05:40 PM	50.11	54.9
10/13/2020		50.33	55
10/13/2020	8:15:40 PM	50.44	55
10/13/2020	8:20:40 PM	50.53	55.1
10/13/2020	8:25:40 PM	50.6	55.1
10/13/2020	8:30:40 PM	50.67	55.2
10/13/2020	8:35:40 PM	50.73	55.3
10/13/2020	8:40:40 PM	50.8	55.4
10/13/2020	8:45:40 PM	50.87	55.5
10/13/2020	8:50:40 PM	50.95	55.6
10/13/2020	8:55:40 PM	51.01	55.6
10/13/2020	9:00:40 PM		
	9:05:40 PM	51.06	55.6
10/13/2020		51.1	55.7
10/13/2020	9:10:40 PM	51.13	55.8
10/13/2020	9:15:40 PM	51.16	55.9
10/13/2020	9:20:40 PM	51.18	56
10/13/2020	9:25:40 PM	51.21	56.1
10/13/2020	9:30:40 PM	51.26	56.2
10/13/2020	9:35:40 PM	51.31	56.3
10/13/2020		51.35	56.3

10/13/2020	9:45:40 PM	51.38	56.4
			56.4
10/13/2020	9:50:40 PM	51.4	
10/13/2020	9:55:40 PM	51.42	56.5
10/13/2020		51.43	56.6
10/13/2020	10:05:40 PM	51.44	56.7
10/13/2020	10:10:40 PM	51.46	56.8
10/13/2020	10:15:40 PM	51.5	56.9
10/13/2020	10:20:40 PM	51.53	56.9
10/13/2020	10:25:40 PM	51.55	56.9
10/13/2020		51.56	57
10/13/2020	10:35:40 PM	51.57	57
10/13/2020	10:40:40 PM	51.57	57.1
10/13/2020		51.57	57.2
10/13/2020	10:50:40 PM	51.58	57.2
10/13/2020	10:55:40 PM	51.59	57.3
10/13/2020		51.62	57.4
10/13/2020	11:05:40 PM	51.65	57.4
10/13/2020	11:10:40 PM	51.66	57.4
10/13/2020		51.67	57.5
and the second			
10/13/2020	11:20:40 PM	51.68	57.5
10/13/2020	11:25:40 PM	51.67	57.5
10/13/2020		51.67	57.6
	11:35:40 PM	51.67	57.7
10/13/2020	11:40:40 PM	51.69	57.8
	11:45:40 PM	51.71	57.8
10/13/2020	11:50:40 PM	51.73	57.8
10/13/2020	11:55:40 PM	51.74	57.8
	12:00:40 AM	51.74	57.8
10/14/2020	12:05:40 AM	51.73	57.9
10/14/2020	12:10:40 AM	51.73	58
10/14/2020	12:15:40 AM	51.73	58
10/14/2020	12:20:40 AM	51.73	58.1
10/14/2020	12:25:40 AM	51.74	58.1
	12:30:40 AM	51.76	58.2
10/14/2020	12:35:40 AM	51.79	58.2
10/14/2020	12:40:40 AM	51.81	58.1
	12:45:40 AM	51.82	58.1
10/14/2020	12:50:40 AM	51.82	58.2
10/14/2020	12:55:40 AM	51.81	58.2
	1:00:40 AM	51.81	58.3
10/14/2020	1:05:40 AM	51.8	58.3
10/14/2020	1:10:40 AM	51.79	58.4
10/14/2020		51.8	58.5
Call Ventur Apple	1:15:40 AM		
10/14/2020	1:20:40 AM	51.81	58.5
10/14/2020	1:25:40 AM	51.84	58.5
10/14/2020	1:30:40 AM	51.87	58.5
10/14/2020	1:35:40 AM	51.88	58.4
10/14/2020	1:40:40 AM	51.88	58.5
10/14/2020		51.87	58.5
10/14/2020	1:50:40 AM	51.86	58.5
10/14/2020	1:55:40 AM	51.85	58.6
10/14/2020	2:00:40 AM	51.84	58.6
10/14/2020	2:05:40 AM	51.82	58.7
10/14/2020	2:10:40 AM	51.82	58.7
10/14/2020	2:15:40 AM	51.82	58.8
10/14/2020	2:20:40 AM	51.85	58.8
10/14/2020	2:25:40 AM	51.87	58.8
10/14/2020	2:30:40 AM	51.89	58.7
10/14/2020	2:35:40 AM	51.9	58.7
10/14/2020	2:40:40 AM	51.89	58.8
10/14/2020	2:45:40 AM	51.89	58.8
10/14/2020	2:50:40 AM	51.88	58.8
10/14/2020	2:55:40 AM	51.87	58.9
10/14/2020	3:00:40 AM	51.86	58.9
10/14/2020	3:05:40 AM	51.84	59
10/14/2020	3:10:40 AM	51.83	59
10/14/2020	3:15:40 AM	51.84	59.1
10/14/2020	3:20:40 AM	51.85	59.1
10/14/2020	3:25:40 AM	51.88	59.1
10/14/2020	3:30:40 AM	51.9	59.1
10/14/2020	3:35:40 AM	51.92	59
10/14/2020	3:40:40 AM	51.93	59
10/14/2020	3:45:40 AM	51.92	59.1
10/14/2020	3:50:40 AM	51.91	59.1

		7.0	59.1
10/14/2020		51.9	
10/14/2020	4:00:40 AM	51.89	59.2
10/14/2020	4:05:40 AM	51.88	59.2
10/14/2020	4:10:40 AM	51.87	59.2
10/14/2020	4:15:40 AM	51.86	59.3
10/14/2020	4:20:40 AM	51.85	59.4
10/14/2020	4:25:40 AM	51.86	59.4
10/14/2020	4:30:40 AM	51.87	59.4
10/14/2020	4:35:40 AM	51.9	59.4
10/14/2020	4:40:40 AM	51.93	59.3
10/14/2020	4:45:40 AM	51.95	59.3
10/14/2020	4:50:40 AM	51.96	59.2
10/14/2020	4:55:40 AM	51.96	59.3
10/14/2020	5:00:40 AM	51.95	59.3
10/14/2020	5:05:40 AM	51.94	59.3
10/14/2020	5:10:40 AM	51.92	59.4
10/14/2020	5:15:40 AM	51.91	59.4
10/14/2020	5:20:40 AM	51.9	59.5
10/14/2020	5:25:40 AM	51.89	59.5
10/14/2020	5:30:40 AM	51.88	59.5
10/14/2020	5:35:40 AM	51.87	59.6
10/14/2020	5:40:40 AM	51.86	59.6
10/14/2020	5:45:40 AM	51.85	59.6
10/14/2020	5:50:40 AM	51.84	59.6
10/14/2020	5:55:40 AM	51.83	59.7
10/14/2020	6:00:40 AM	51.83	59.7
10/14/2020	6:05:40 AM	51.82	59.7
10/14/2020	6:10:40 AM	51.82	59.7
10/14/2020	6:15:40 AM	51.81	59.8
10/14/2020	6:20:40 AM	51.8	59.8
10/14/2020	6:25:40 AM	51.79	59.8
10/14/2020	6:30:40 AM	51.78	59.8
10/14/2020	6:35:40 AM	51.78	59.8
10/14/2020	6:40:40 AM	51.78	59.9
10/14/2020	6:45:40 AM	51.78	59.9
10/14/2020	6:50:40 AM	51.78	59.9
10/14/2020	6:55:40 AM	51.78	59.9
10/14/2020	7:00:40 AM	51.77	59.9
10/14/2020	7:05:40 AM	51.77	59.9

10/14/2020	7:10:40 AM	51.76	59.9
10/14/2020	7:15:40 AM	51.75	59.9
10/14/2020	7:20:40 AM	51.75	59.9
10/14/2020	7:25:40 AM	51.74	60
10/14/2020	7:30:40 AM	51.73	60
10/14/2020	7:35:40 AM	51.73	60
10/14/2020	7:40:40 AM	51.72	60
10/14/2020	7:45:40 AM	51.72	60
10/14/2020	7:50:40 AM	51.71	60
10/14/2020	7:55:40 AM	51.71	60
10/14/2020	8:00:40 AM	51.7	60
10/14/2020	8:05:40 AM	51.7	60.1
10/14/2020	8:10:40 AM	51.7	60.1
10/14/2020	8:15:40 AM	51.69	60.1
10/14/2020	8:20:40 AM	51.69	60.1
10/14/2020	8:25:40 AM	51.69	60.1
10/14/2020	8:30:40 AM	51.68	60.1
10/14/2020	8:35:40 AM	51.68	60.1
10/14/2020	8:40:40 AM	51.68	60.1
10/14/2020	8:45:40 AM	51.67	60.1
10/14/2020	8:50:40 AM	51.67	60.1
10/14/2020	8:55:40 AM	51.67	60.2
10/14/2020	9:00:40 AM	51.67	60.2
10/14/2020	9:05:40 AM	51.67	60.2
10/14/2020	9:10:40 AM	51.67	60.2
10/14/2020	9:15:40 AM	51.67	60.2
10/14/2020	9:20:40 AM	51.67	60.2
10/14/2020	9:25:40 AM	51.68	60.2
10/14/2020	9:30:40 AM	51.68	60.2
10/14/2020	9:35:40 AM	51.69	60.2
10/14/2020	9:40:40 AM	51.69	60.2
10/14/2020	9:45:40 AM	51.69	60.2
10/14/2020	9:50:40 AM	51.7	60.2
10/14/2020	9:55:40 AM	51.71	60.2
10/14/2020 10/14/2020		51.72	60.2
10/14/2020		51.72	60.2
10/14/2020		51.73	60.2
10/14/2020		51.74	60.2
10/14/2020		51.74	60.1
10/14/2020		51.74	60.1
10/14/2020		51.75	60.3
10/14/2020		51.6	33.1
10/14/2020		51.47	31.4
10/14/2020		51.41	30.8
10/14/2020		51.39	30.3
10/14/2020		51.4	29.9
10/14/2020		51.41	29.2
10/14/2020		51.44	28.8
10/14/2020		51.47	28.4
10/14/2020		51.49	28
10/14/2020		51.52	27.7
10/14/2020		51.54	27.3
10/14/2020		51.56	27
20, 27, 2020	AND THE CASE	51.6	26.9
		49.95666667	55.72008547

Document ID: Document Type: SOP-MED-0064

**Device History Record** 

MEDICAL

Version Name:

**EO Sterlization Router** 

	Gas Pre-Weight (g)	Gas Post-Weight (g)	Net Weight Release (g)	Attach Pre and Post Weights Below:	Dosimeter Check
Tote #1	88.38	77.73	70.60	Drep	1
Tote #2	88 74	77.75	10.45	001:N + 88.380 g	2
Tote #3	88.41	4611	ōf	+ 88,413	3
Tote #4	88.36	77.83	10.53	005:N + 89,208 g	4
Tote #5	88.20	77.78	10.42	007:N + 89.155 9	5
Tote #6	88.25	77.82	10.43	+ 88.261 + 88.338	6
Tote #7	88.15	المارة)	10.48	Pre A	7
Tote #8	88.26	77.76	10.50	001:N + 77.730 9 002:N + 77.754 9	∞ ▶
Tote #9	88.26	77,79	10.47	003:N + 77.942 9 004:N + 77.835 9	9
Tote #10	88.33	18, [[	10.52	005:N + 77.783 9	10
All EO Gas	All EO Gas Post Weights Pass (9.98g-12.00g)	3g-12.00g)	] *No (*If "No" notify	007:N + 77.672 9 008:N + 77.760 9	
	Operator/Date:	O O CROST	1-475+2020	+ 77.8	

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Printed by/date: ER 13Oct2020

Lot: 040482-R5

Run #: 100A94

Document ID: Document Type: DHR SOP-MED-0098

MEDICAL

Name:

Version

EOE Sterilization Router

LOT: 040482-R5/039482-R3/0085-F2 60 cm Reg PRODUCTION REVIEW Operation 4c 46 4a Operation 5 - Sterilization/Aeration Operation 4 - Transfer and Load Time Operation 3 – Tote Preperation and Bag Sealing Operation 2-EO Gas Consumable Preparation Operation 1 – Staging and Preconditioning - Minimum 12 hours Operation 6- Dosimeter Check Description **RUN** # 360E21 **Date Verified** 3 88 33

COMPLETED BY/DATE:

thindown o

		THE REAL PROPERTY AND ADDRESS OF THE PERSON.
Acce	Acceptance Criteria and Final Release	
The sterilization tote contains appropriate qty of devices between the minimum and maximum specification.	The environment within the EO sterilization bag is ≥30%	Yes No
The average preconditioning environment is ≥12hours at ≥68°F and ≥30%RH.	Devices are aerated within the sterilizer set to 50°C for ≥4 hours.	Yes No
Temperature Range is between 33° C to 55° C measured from the dataloggers in the totes.	All Dosimeters (for all bags) pass the calibration triangle.	Yes No
The minimum sterilization time requirement is $\geq$ 19 Hours to a maximum sterilization time of $\leq$ 38 hours and 10 $\square$ Yes $\square$ No minutes.	The BIs are negative (remain orange).	Yes No
Two (2) Humdichips were placed into every sterilization Yes No bag.	The positive control turns positive (turbid and yellow).	Yes No
The sterilizer cabinet temperature is set to 50°C	The incubation time/temperature for the BIs is 7 days at 35-39°C.	Yes No
EO gas release is ≥22g but ≤45g	□No	
Comments: N/A		
QA Release: 1099 ( at 909)		

ER 130CT2020 Lot: 040482-R5/039482-R3/0085-F2 WO CM REQ

Run #: 360E21

Printed By/Date:

Document ID: SOP-MED-0098
Document Type: DHR

CHEMENCE

Name: Version

EO Sterilization Router

Pass ☐ Fail*			CT 2020	Jahra melemore 13 OCT 2020	TA MELE	ZAh	QA signature/Date
130	anala Belfran	may	Checked By/Date	1300+7070	With Rossin 1	Elipu	Operator Signature/Date Chipdeth Rowley
13.	If preconditioning is performed in the chamber then prepare all totes with consumables and have QA check operation 2 and 3.	consumables and h	n prepare all totes with	in the chamber the	ioning is performed	If precondit	
ER 130C+2020 %	N/A 1 56. 79 ER	ry (≥ 30%)	Avg. Relative Humidity (≥ 30%)	ň	75.73	F) N/A 🗆	Avg. Temperature ( ≥68°F)
30C+2020 N/A □	N/A 🗆 End Date	12:30 pm	N/A ☐ End Time	130C+2020	N/A   Start Date		Start Time 12:30 am
		g Room	Precondition in Preconditioning Room	Precor			
Dec 2020 *	Calibration Due Date — Dec		R17768	Data Logger ID	-	11062	Tote #
Dec 2020	- Calibration Due Date		R17157 #	— Data Logger ID		01062	Tote #
Dec 7010	Calibration Due Date		R17771	Data Logger ID			EO Room Data Logger
Preconditioning Chamber N/A 🏻	Preconditi					N/A	Preconditioning Room N/A
	Data Logger Setup		Operation 1 - Preconditioning *(Minimum 12 hours) and	on 1 - Precondition	Operatio		
N/A 🛛	Qty:	N/A 🛛		Tote #:	N/A		Lot#:
N/A T	Oty: 27,000	N/A 🖸		Tote #: 10/ 2	N/A D		Lot#: Dinnage
N/A 🗆	Oty: 482	N/A 🗆	Ø	-	N/A 🗆		Lot#: 0085-F2
N/A □	<b>Qty:</b> 5,098	N/A 🗆		] Tote #: 6-9	N/A 🗆		Lot#: 039482-R3
	aty: 6,375			Tote #: 1 - 5			Lot#: 040482-R5
	Per Tote ote 4 blisters In Each Tote	00 Blisters Per Tote In Each Tote isters are 4 blisters	Small Blister Maximum Quantity Is 1,500 Blisters Per Exofin® Fusion Max Is 56 Pouches In Each Tote The Minimum Quantity for Both Fusion and Small Blisters are 4 b	Small Blister Ma Exofin® Fu mum Quantity for Bo	The Mini		
			Operation 1 - Staging for EO Sterilization	Operatio			
outlined in WI-MED-0063	Verity that totes are arranged as outlined in WI-MED-0063	Ver					

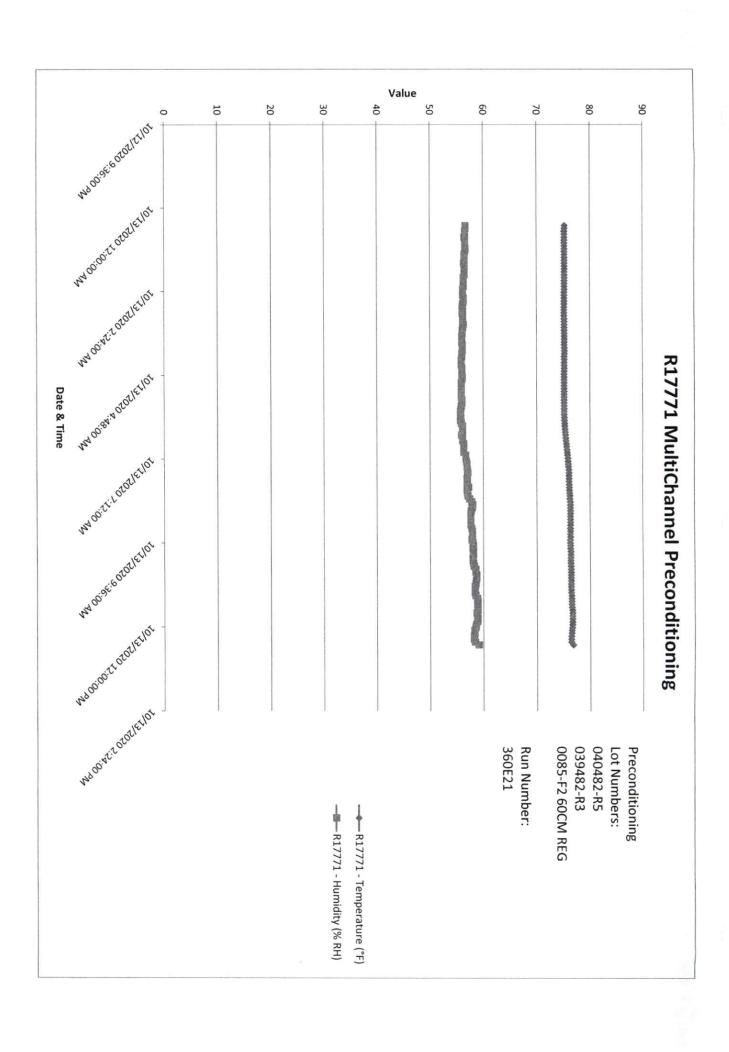
\* EE: ER 1300+2020

Page 2 of 7

ER 130CT2020 Lot: 040482-R5/039482-R3/0085-F2 WOCH REG

Printed By/Date:

Run #: 360E21



Device Name: Device Description: Serial Number:

RHTemp1000IS Intrinsically Safe Temperature and Humidity Data Logger

R17771 MultiChannel

R17771

RHTemp1000IS Intrinsically Safe Temperature and Humidity Data Logger R17771 MultiChannel

Device ID: Preconditioning Lot Numbers: 040482-R5 039482-R3 0085-F2 60CM REG Run Number: 360E 21

		Channel 1	Channel 2
Date	Time	Temperature (°F)	Humidity (% RH)
10/13/2020	12:30:49 AM	75.258	56.7
10/13/2020	12:35:49 AM	75.258	56.7
10/13/2020	12:40:49 AM	75.24	56.6
10/13/2020	12:45:49 AM	75.24	56.6
10/13/2020	12:50:49 AM	75.24	56.5
	12:55:49 AM	75.24	56.6
10/13/2020		75.24	56.6
10/13/2020		75.24	56.6
10/13/2020		75.24	56.7
10/13/2020		75.24	
10/13/2020		75.24	56.6
10/13/2020		75.222	56.5
10/13/2020			56.5
10/13/2020		75.24	56.5
		75.222	56.4
10/13/2020		75.222	56.5
10/13/2020		75.222	56.5
10/13/2020		75.24	56.5
10/13/2020		75.222	56.5
10/13/2020		75.222	56.3
10/13/2020		75.204	56.3
10/13/2020		75.204	56.3
10/13/2020		75.204	56.3
10/13/2020		75.204	56.2
10/13/2020		75.204	56.2
10/13/2020		75.204	56.2
10/13/2020		75.204	56.3
10/13/2020		75.204	56.3
10/13/2020	2:45:49 AM	75.186	56.2
10/13/2020	2:50:49 AM	75.186	56.1
10/13/2020	2:55:49 AM	75.186	56.2
10/13/2020	3:00:49 AM	75.186	56.1
10/13/2020	3:05:49 AM	75.186	56.2
10/13/2020	3:10:49 AM	75.186	56.2
10/13/2020	3:15:49 AM	75.186	56.2
10/13/2020	3:20:49 AM	75.204	56.3
10/13/2020	3:25:49 AM	75.204	56.2
10/13/2020	3:30:49 AM	75.186	56.1
10/13/2020	3:35:49 AM	75.186	56.1
10/13/2020	3:40:49 AM	75.186	56
10/13/2020	3:45:49 AM	75.186	56
10/13/2020		75.186	56
10/13/2020		75.168	56.1
10/13/2020		75.186	
10/13/2020		75.186	56.1
10/13/2020		75.186	56.1
10/13/2020		75.168	56
10/13/2020			56
10/13/2020		75.168	55.9
10/13/2020		75.168	55.9
10/13/2020		75.168	55.9
10/13/2020		75.168	56
		75.168	56
10/13/2020		75.168	56
10/13/2020		75.168	56.1
10/13/2020		75.168	56
10/13/2020		75.168	55.9
10/13/2020		75.15	55.9
10/13/2020	5:10:49 AM	75.15	55.9

10/13/2020	5:15:49 AM	75.168	55.9
10/13/2020	5:20:49 AM	75.15	55.9
10/13/2020	5:25:49 AM	75.15	55.9
10/13/2020	5:30:49 AM	75.168	56
10/13/2020	5:35:49 AM	75.168 75.15	56
10/13/2020	5:40:49 AM 5:45:49 AM	75.15 75.15	55.9 55.8
10/13/2020	5:50:49 AM	75.15	55.7
10/13/2020	5:55:49 AM	75.132	55.7
10/13/2020	6:00:49 AM	75.15	55.8
10/13/2020	6:05:49 AM	75.168	55.7
10/13/2020	6:10:49 AM 6:15:49 AM	75.222 75.276	55.9 56.1
10/13/2020	6:20:49 AM	75.312	56.1
10/13/2020	6:25:49 AM	75.348	56.1
10/13/2020	6:30:49 AM	75.384	55.9
10/13/2020	6:35:49 AM	75.456	56.1
10/13/2020	6:40:49 AM	75.51 75.564	56.1 56.3
10/13/2020	6:45:49 AM 6:50:49 AM	75.618	56.3
10/13/2020	6:55:49 AM	75.672	56.3
10/13/2020	7:00:49 AM	75.708	56.3
10/13/2020	7:05:49 AM	75.78	56.7
10/13/2020	7:10:49 AM	75.834	56.7
10/13/2020	7:15:49 AM	75.87	56.8
10/13/2020 10/13/2020	7:20:49 AM 7:25:49 AM	75.906 75.96	56.9 56.9
10/13/2020	7:30:49 AM	75.996	57
10/13/2020	7:35:49 AM	76.032	57.1
10/13/2020	7:40:49 AM	76.05	57
10/13/2020	7:45:49 AM	76.086	56.9
10/13/2020	7:50:49 AM	76.104	57
10/13/2020	7:55:49 AM	76.122	56.9
10/13/2020	8:00:49 AM 8:05:49 AM	76.122 76.14	57.2 56.9
10/13/2020	8:10:49 AM	76.158	57
10/13/2020	8:15:49 AM	76.212	57.1
10/13/2020	8:20:49 AM	76.23	57.4
10/13/2020	8:25:49 AM	76.284	57.8
10/13/2020	8:30:49 AM	76.302	58
10/13/2020	8:35:49 AM	76.302	57.9
10/13/2020	8:40:49 AM	76.302	57.7
10/13/2020	8:45:49 AM 8:50:49 AM	76.302 76.284	57.6 57.6
10/13/2020	8:55:49 AM	76.284	57.6
10/13/2020	9:00:49 AM	76.284	57.6
10/13/2020	9:05:49 AM	76.284	57.6
10/13/2020	9:10:49 AM	76.266	57.8
10/13/2020	9:15:49 AM	76.266	57.9
10/13/2020	9:20:49 AM	76.248	57.9
10/13/2020	9:25:49 AM 9:30:49 AM	76.266 76.266	57.9
10/13/2020	9:35:49 AM	76.284	57.8 58
10/13/2020	9:40:49 AM	76.302	58.1
10/13/2020	9:45:49 AM	76.32	58
10/13/2020	9:50:49 AM	76.338	58.1
10/13/2020		76.338	58.1
	10:00:49 AM 10:05:49 AM	76.338 76.338	58
	10:10:49 AM	76.338	58 58.1
	10:15:49 AM	76.374	58.2
10/13/2020	10:20:49 AM	76.356	58.5
10/13/2020	10:25:49 AM	76.392	58.5
	10:30:49 AM	76.392	58.7
	10:35:49 AM	76.41	58.7
	10:40:49 AM 10:45:49 AM	76.41 76.41	58.6 58.5
	10:50:49 AM	76.41	58.5
	10:55:49 AM	76.428	58.4
10/13/2020	11:00:49 AM	76.428	58.4
	11:05:49 AM	76.464	58.5
	11:10:49 AM	76.518	58.8
	11:15:49 AM	76.536	58.9
	11:20:49 AM 11:25:49 AM	76.536 76.59	58.8 58.9
	11:30:49 AM	76.626	58.9
	11:35:49 AM	76.644	58.7
10/13/2020	11:40:49 AM	76.626	58.8
	11:45:49 AM	76.644	58.9
	11:50:49 AM	76.644	58.8
	11:55:49 AM	76.626	58.6
	12:00:49 PM 12:05:49 PM	76.572 76.518	58.5
	12:10:49 PM	76.518 76.482	58.3 58.3
	12:15:49 PM	76.462	58.3
	12:20:49 PM	76.446	58.2
	12:25:49 PM	76.428	58.4
10/13/2020	12:30:49 PM	76.824	59.1
		75.72811034	56.98689655

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Name: Version

EO Sterilization Router

Preconditioning Room N/A	eration z - Data	Operation 2 - Data Logger Setup for Sterilization		Preconditioning Chamber N/A
Location # Old E 21 Logger ID 21757	Calibration Due Date	1010	ate	20/ EE: EPISONTA
Data	3	CCC FOFO	Programmed Start Date/Time	13 OCt 2020 12: 30 pm
Location # 170E21 Logger ID R17768		Dec 2020	Programmed Start Date/Time (include Quickstart)	130C+7070 17:79 m
Op	eration 2 – EO G	Operation 2 – EO Gas Consumable Preparation		
EO Gas Canister Pre-Weight Information	∏Yes □ No	Box labels are printed and mat	and match each tote:	☐ Yes ☐ No
EO Bag Information Recorded	☑ Yes ☐ No	PCDs are placed in the center of the load:	of the load:	☐ Yes ☐ No
EO Gas Canister Labeled and mounted to tote (s) with product	☑Yes ☐ No	Positive Control is the same Lo	same Lot number as PCDs in totes	☐ Yes ☐ No
EZ Test BIs not damaged, Labeled, inside PCD		Dosimeter is labeled and placed in the center of the load	d in the center of the load	☐ Yes ☐ No
Humidichips (2) placed inside Humiditube inside the tote		Equipment Logbooks filled out		☐ Yes ☐ No
2 Data loggers placed into the front of the tote (hottest and coolest locations)	☐Yes ☐ No			
Operator Signature/date: Elizabeth Rosally 13.00+20.20	7	Checked By/date:		

Scale/Balance ID: 0035805163	G-214	(5)	EOG bag lot number(s)	EO Gas lot number(s)
5163		N/A ER 130Ct 2020		
	Exp. Date	, care	Data	Exp. Date
	13 Jun 2021	N/A 130C+2020	21 Jan 2023	2
CAL Due:	*If multiple lots used, 1 PC f	Humidichip lot number(s)		Dosimeter lot number(s)
00 + 2020	s used, 1 PC from each lot must be present	204610	204517	
	t be present	Exp. Date		Exp. Date
		19 Feb 2023	12 Feb 2023	

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ER 130CT2020 Lot: 040482-R5/039482-R3/0085-F2 WOCM REJ

Printed By/Date: \_

Run #: 360E21

Document Type: Document iD: SOP-MED-0098 DHR

MEDICAL MEDICAL

Name: Version

**EO Sterilization Router** 

Due Date OC + 2020	EO Bag Sealer Calibration Due Dat	I-28434	EO Bag Sealer Asset ID
nd Bag Sealing	Operation 3 - Tote Preparation and Bag So		

And the state of t				the state of the same of the s	
	We time distanting	Floreed to be	The creat alike - Floreen to bag sealing once UA gives a	gives approval	
	All steps in Operation 2 ar	re complete and	All steps in Operation 2 are complete and all consumables are loaded into each tote	nto each tote	
OA Signature/Date: MANNA MICHONE 13 OCT 2020	milemore 13	OCT 300	20		
	Oper	ration 4 - Trans	Operation 4 - Transfer & Load Time		
	Preco	nditioning in Cl	Preconditioning in Chamber N/A		nie has ichiciasas
Chamber Temperature is Set at 30°C	☐ Yes ☐ No		Printer Paper/Ink Checked		TYes No
Start Time	Start Date	0	Operator Signature/Date		
		C	Checked By/Date		
End Time	End Date	0	Operator Signature/Date		
		0	Checked By/Date		
		Sterilization In Chamber	Chamber		
Time left "white room" area (b)	2:48pn/A  Sterilizer EOE Temp set to 50°C	np set to 50°C	Yes No	Printer Paper/Ink Checked:	Yes No
		Activate all EO Cartridges	Cartridges		
Time Last Cartridge Activated (a):	2.53Pm	Total Transfer	Total Transfer Time (a-b) should be $\leq$ 17 minutes:	nutes:	(5) min
Fime/Date that cycle started (doors Shut):	1: 2:54pm 130c+2020	2020	Operator Signature/Date Checked By/Date	Elyeum Roper 2000+2020 for 1300+2020	30 Chroso 130 + 100
				1	

Document Type: DHR

MEDICAL MEDICAL

Name: Version

EO Sterilization Router

		Оре	Operation 5 - Sterilization / Aerat	n / Aeration				
(Minimum 19 hours from "Cycle Start"):		WID 61:01	Sterilize end time (After countdown/doors unlocked)	(After unlocked):	10:25am	Dan		
		3	Minimum Areation time is ≥ 4 hours	s ≥ 4 hours				
Aeration start time (after countdown completed/doors locked)	wn completed/dc	ors locked)	17: 27 a.m					
Apration End Time ()			I AME TOO					
Aeration End Time (when countdown is completed/doors unlocked)	wn is completed/	doors unlocked)	2:27 pm					
Operator Signature/Date	14.020	Do offere	140CtLOZO Checked By/Date	ed By/Date	2		5	
		Operati	Operation 6 - EO Data Logger Downloading	r Downloadin	<b>0</b> 9		. ( 20 M	
Data Log	ger Offloaded as	outlined in WI-ME Include the s Include th Average Relative I	Data Logger Offloaded as outlined in WI-MED-0018 – Record Lot Number and location # (Con Include the start date and time on data logger printout. Include the end time on the data logger printout.  Average Relative Humidity Must Be > 30% (for totes with product)	umber and local data logger printou logger printou (for totes wit	tion # (Control tout. It. h product)	location # (Control Number) on Printouts r printout. intout. ss with product)	S	
Location #	Data Logger ID		Start Date/Time	130C+2020 2:54 pm	2:54 pm	Avg. Relative Humidity	** 410 02/67 07 %	
010 + 21		R17757	End Date/Time	140C+2020 2:29 pm	2:29 pm	Sterilizer Temp	1 to 40.93	97%
Location #	Data Logger ID		Start Date/Time	130C+2020 2:54 pm	2:54 pm	Avg. Relative Humidity	55.78	.92 % °c
110521		)	End Date/Time		140(+7076 7 170 -:		7	.92 %

		Bili	BI Incubation		The second second	
Bis submitted to QC		☐ Yes ☐ No	TR#	70-7250	BI Lot #	
Attach EO Chamber Printout				100707		10-71H
(Preconditioning)	S N	10/0 FY 150C+7 670°C	MAX	OC CONTRACTOR OF THE PROPERTY	Printout Attached	Yes No
Attach EO Chamber Printout				MA CLIDAT MILL		[
(Sterilization)	3	30 54 05	MAX	°C	Printout Attached	☐ Yes ☐ No
* FF: FK 1-5042020						

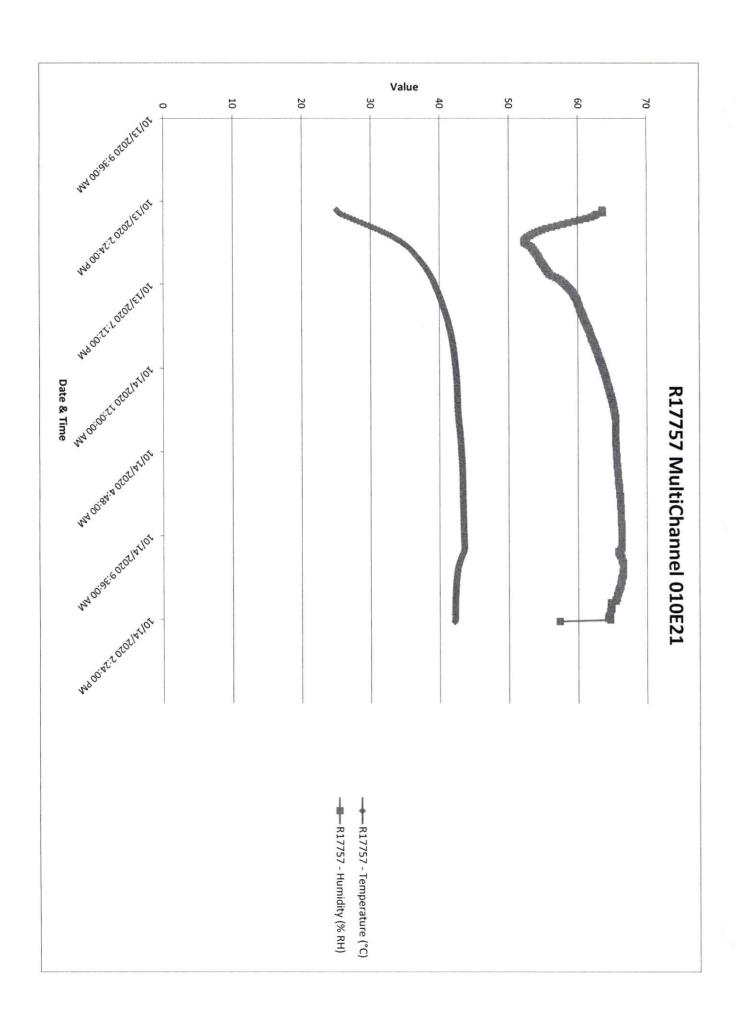
MEE: ERIUDC+2020

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ER 130CT2020 Lot: 040482-R5/039482-R3/0085-F2 40 cm Reg

Printed By/Date:

Run #:360E21



Device Name: Device Description: Serial Number:

Device ID:

RHTemp1000IS

Intrinsically Safe Temperature and Humidity Data Logger

R17757 MultiChannel

010E21

Intrinsically Safe Temperature and Humidity Data Logger R17757

MultiChannel

RHTemp1000IS

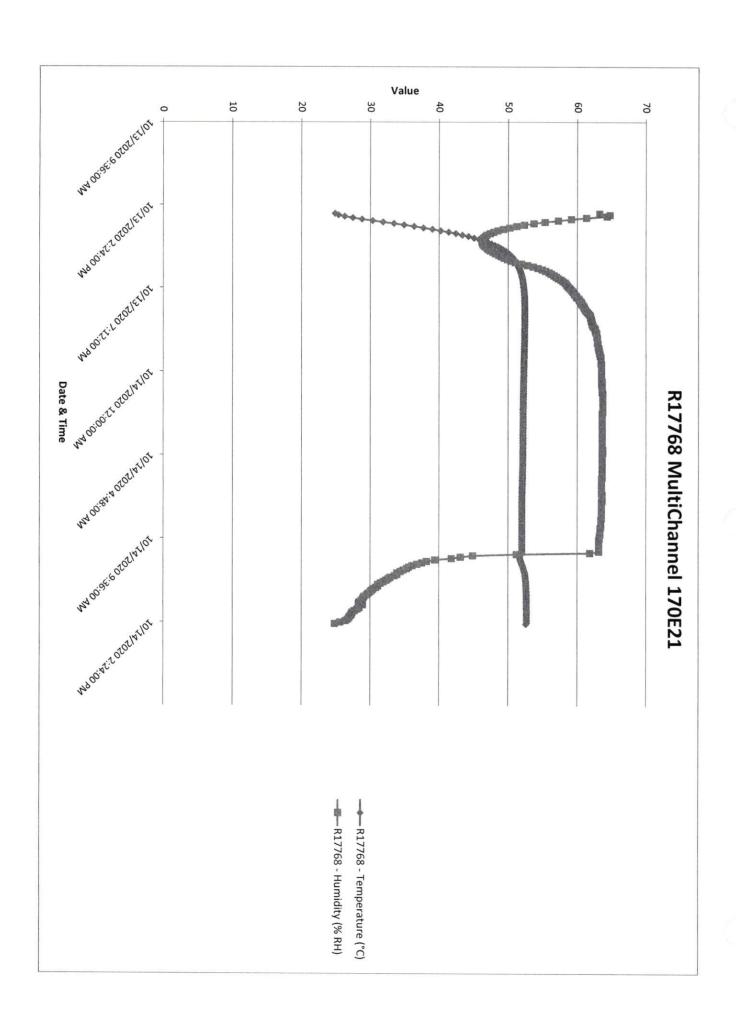
		Channel 1	Channel 2
Date	Time	Temperature (°C)	Humidity (% RH)
10/13/2020	2:54:44 PM	25.08	
10/13/2020 10/13/2020	2:59:44 PM	25.22	63.6
10/13/2020	3:04:44 PM 3:09:44 PM	25.46	63.6
10/13/2020	3:14:44 PM	25.78	62.7
10/13/2020	3:19:44 PM	26.22	62.4
10/13/2020	3:24:44 PM	26.71 27.2	61.9
10/13/2020	3:29:44 PM	27.72	61.2
10/13/2020	3:34:44 PM	28.24	60.3 59.5
10/13/2020	3:39:44 PM	28.76	58.6
10/13/2020	3:44:44 PM	29.27	57.8
10/13/2020	3:49:44 PM	29.78	57.6
10/13/2020	3:54:44 PM	30.28	56.2
10/13/2020	3:59:44 PM	30.77	55.4
10/13/2020	4:04:44 PM	31.24	54.8
10/13/2020	4:09:44 PM	31.7	54.3
10/13/2020	4:14:44 PM	32.14	53.8
10/13/2020	4:19:44 PM	32.56	53.4
10/13/2020	4:24:44 PM	32.96	53.1
10/13/2020	4:29:44 PM	33.33	52.7
10/13/2020	4:34:44 PM	33.69	52.5
10/13/2020	4:39:44 PM	34.03	52.3
10/13/2020	4:44:44 PM	34.35	52.2
10/13/2020	4:49:44 PM	34.66	52.3
10/13/2020	4:54:44 PM	34.95	52.6
10/13/2020	4:59:44 PM	35.22	53
10/13/2020	5:04:44 PM	35.46	53.3
10/13/2020	5:09:44 PM	35.68	53.4
10/13/2020	5:14:44 PM	35.89	53.6
10/13/2020	5:19:44 PM	36.09	53.7
10/13/2020	5:24:44 PM	36.29	53.9
10/13/2020	5:29:44 PM	36.48	54
10/13/2020	5:34:44 PM	36.66	54.2
10/13/2020	5:39:44 PM	36.84	54.3
10/13/2020	5:44:44 PM	37.02	54.4
10/13/2020 10/13/2020	5:49:44 PM	37.19	54.5
10/13/2020	5:54:44 PM 5:59:44 PM	37.36	54.6
10/13/2020	6:04:44 PM	37.53	54.8
10/13/2020	6:09:44 PM	37.69	54.9
10/13/2020	6:14:44 PM	37.84	55.1
10/13/2020	6:19:44 PM	37.99	55.2
10/13/2020	6:24:44 PM	38.13 38.27	55.3
10/13/2020	6:29:44 PM	38.39	55.5
10/13/2020	6:34:44 PM	38.52	55.6
10/13/2020	6:39:44 PM	38.64	55.8 55.9
10/13/2020	6:44:44 PM	38.77	
10/13/2020	6:49:44 PM	38.87	56.3 56.8
10/13/2020	6:54:44 PM	38.98	57.2
10/13/2020	6:59:44 PM	39.07	57.5
10/13/2020	7:04:44 PM	39.17	57.7
10/13/2020	7:09:44 PM	39.26	58
10/13/2020	7:14:44 PM	39.36	58.2
10/13/2020	7:19:44 PM	39.45	58.4
10/13/2020	7:24:44 PM	39.53	58.6
10/13/2020	7:29:44 PM	39.62	58.8
10/13/2020	7:34:44 PM	39.71	59
10/13/2020	7:39:44 PM	39.79	59.2
10/13/2020	7:44:44 PM	39.87	59.3
10/13/2020	7:49:44 PM	39.96	59.4
10/13/2020	7:54:44 PM	40.04	59.5
10/13/2020	7:59:44 PM	40.12	59.7
10/13/2020	8:04:44 PM	40.2	59.8
10/13/2020	8:09:44 PM	40.28	59.9
10/13/2020	8:14:44 PM	40.36	59.9
10/13/2020	8:19:44 PM	40.43	60
10/13/2020	8:24:44 PM	40.51	60.1

10/13/2020	8:29:44 PM	40.58	60.2
		40.65	60.2
10/13/2020	8:34:44 PM		
10/13/2020	8:39:44 PM	40.72	60.3
10/13/2020	8:44:44 PM	40.79	60.4
10/13/2020	8:49:44 PM	40.86	60.5
10/13/2020	8:54:44 PM	40.92	60.6
10/13/2020	8:59:44 PM	40.99	60.7
10/13/2020	9:04:44 PM	41.05	60.8
10/13/2020	9:09:44 PM	41.11	60.8
			60.9
10/13/2020	9:14:44 PM	41.18	
10/13/2020	9:19:44 PM	41.23	61
10/13/2020	9:24:44 PM	41.28	61.1
10/13/2020	9:29:44 PM	41.34	61.2
10/13/2020	9:34:44 PM	41.39	61.3
10/13/2020	9:39:44 PM	41.44	61.4
10/13/2020	9:44:44 PM	41.49	61.5
10/13/2020	9:49:44 PM	41.54	61.6
10/13/2020	9:54:44 PM	41.59	61.7
10/13/2020	9:59:44 PM	41.63	61.7
	10:04:44 PM	41.68	61.8
	10:09:44 PM	41.72	61.9
	10:14:44 PM	41.76	61.9
10/13/2020	10:19:44 PM	41.8	62
10/13/2020	10:24:44 PM	41.84	62.1
	10:29:44 PM	41.87	62.2
	10:34:44 PM	41.91	62.3
	10:39:44 PM	41.94	
			62.4
	10:44:44 PM	41.97	62.4
	10:49:44 PM	42	62.5
	10:54:44 PM	42.03	62.6
	10:59:44 PM	42.06	62.7
10/13/2020	11:04:44 PM	42.09	62.8
	11:09:44 PM	42.11	62.8
	11:14:44 PM	42.14	62.9
	11:19:44 PM	42.16	63
	11:24:44 PM		
		42.18	63
	11:29:44 PM	42.21	63.1
	11:34:44 PM	42.23	63.2
10/13/2020	11:39:44 PM	42.25	63.3
10/13/2020	11:44:44 PM	42.27	63.4
10/13/2020	11:49:44 PM	42.29	63.4
10/13/2020	11:54:44 PM	42.31	63.5
	11:59:44 PM	42.33	63.6
	12:04:44 AM		
		42.35	63.6
	12:09:44 AM	42.37	63.7
	12:14:44 AM	42.39	63.8
10/14/2020	12:19:44 AM	42.41	63.8
10/14/2020	12:24:44 AM	42.42	63.9
10/14/2020	12:29:44 AM	42.44	64
	12:34:44 AM	42.45	64
	12:39:44 AM	42.47	
			64.1
	12:44:44 AM	42.48	64.1
	12:49:44 AM	42.49	64.2
50 17	12:54:44 AM	42.51	64.2
10/14/2020	12:59:44 AM	42.51	64.3
10/14/2020	1:04:44 AM	42.52	64.4
10/14/2020	1:09:44 AM	42.54	64.4
10/14/2020	1:14:44 AM	42.54	64.5
10/14/2020	1:19:44 AM		
		42.55	64.5
10/14/2020	1:24:44 AM	42.56	64.6
10/14/2020	1:29:44 AM	42.56	64.6
10/14/2020	1:34:44 AM	42.57	64.7
10/14/2020	1:39:44 AM	42.57	64.8
10/14/2020	1:44:44 AM	42.58	64.8
10/14/2020	1:49:44 AM	42.59	64.9
10/14/2020	1:54:44 AM	42.59	64.9
10/14/2020	1:59:44 AM	42.6	
10/14/2020			65
The second second	2:04:44 AM	42.6	65
10/14/2020	2:09:44 AM	42.61	65.1
10/14/2020	2:14:44 AM	42.62	65.1
10/14/2020	2:19:44 AM	42.63	65.1
10/14/2020	2:24:44 AM	42.64	65.2
10/14/2020	2:29:44 AM	42.65	65.2
10/14/2020	2:34:44 AM	42.67	65.3
, , , , , , , , , , , , , , , , , , , ,	7550 1120 11 T.	TRIVE	03.3

10/14/2020	2:39:44 AM	42.69	65.3
10/14/2020	2:44:44 AM	42.7	65.3
10/14/2020	2:49:44 AM	42.72	65.4
10/14/2020	2:54:44 AM	42.74	65.4
10/14/2020	2:59:44 AM	42.76	65.4
		42.78	65.4
10/14/2020	3:04:44 AM	42.8	65.4
10/14/2020	3:09:44 AM	42.82	65.4
10/14/2020	3:14:44 AM		65.4
10/14/2020	3:19:44 AM	42.85	65.4
10/14/2020	3:24:44 AM	42.87	65.4
10/14/2020	3:29:44 AM	42.88	65.4
10/14/2020	3:34:44 AM	42.91	
10/14/2020	3:39:44 AM	42.93	65.4
10/14/2020	3:44:44 AM	42.95	65.4
10/14/2020	3:49:44 AM	42.97	65.4
10/14/2020	3:54:44 AM	42.99	65.4
10/14/2020	3:59:44 AM	43.01	65.4
10/14/2020	4:04:44 AM	43.03	65.4
10/14/2020	4:09:44 AM	43.05	65.4
10/14/2020	4:14:44 AM	43.06	65.4
10/14/2020	4:19:44 AM	43.08	65.4
10/14/2020	4:24:44 AM	43.09	65.5
10/14/2020	4:29:44 AM	43.11	65.5
10/14/2020	4:34:44 AM	43.12	65.5
10/14/2020	4:39:44 AM	43.13	65.5
10/14/2020	4:44:44 AM	43.14	65.5
10/14/2020	4:49:44 AM	43.15	65.5
10/14/2020	4:54:44 AM	43.17	65.5
10/14/2020	4:59:44 AM	43.18	65.5
10/14/2020	5:04:44 AM	43.2	65.6
10/14/2020	5:09:44 AM	43.22	65.6
10/14/2020	5:14:44 AM	43.22	65.6
		43.24	65.6
10/14/2020	5:19:44 AM		65.6
10/14/2020	5:24:44 AM	43.25	65.6
10/14/2020	5:29:44 AM	43.26	
10/14/2020	5:34:44 AM	43.26	65.6
10/14/2020	5:39:44 AM	43.27	65.7
10/14/2020	5:44:44 AM	43.28	65.7
10/14/2020	5:49:44 AM	43.29	65.7
10/14/2020	5:54:44 AM	43.3	65.7
10/14/2020	5:59:44 AM	43.3	65.7
10/14/2020	6:04:44 AM	43.3	65.8
10/14/2020	6:09:44 AM	43.31	65.8
10/14/2020	6:14:44 AM	43.31	65.8
10/14/2020	6:19:44 AM	43.32	65.8
10/14/2020	6:24:44 AM	43.32	65.8
10/14/2020	6:29:44 AM	43.33	65.8
10/14/2020	6:34:44 AM	43.33	65.9
10/14/2020	6:39:44 AM	43.34	65.9
10/14/2020	6:44:44 AM	43.34	65.9
10/14/2020	6:49:44 AM	43.34	66
10/14/2020	6:54:44 AM	43.34	66
10/14/2020	6:59:44 AM	43.34	66
10/14/2020	7:04:44 AM	43.35	66
	7:09:44 AM	43.35	66
10/14/2020	7:14:44 AM	43.35	66
			66.1
10/14/2020	7:19:44 AM	43.35	66.1
10/14/2020	7:24:44 AM	43.36	66.1
10/14/2020	7:29:44 AM	43.37	
10/14/2020	7:34:44 AM	43.37	66.1
10/14/2020	7:39:44 AM	43.38	66.1
10/14/2020	7:44:44 AM	43.38	66.1
10/14/2020	7:49:44 AM	43.39	66.1
10/14/2020	7:54:44 AM	43.4	66.1
10/14/2020	7:59:44 AM	43.4	66.2
10/14/2020	8:04:44 AM	43.41	66.2
10/14/2020	8:09:44 AM	43.42	66.2
10/14/2020	8:14:44 AM	43.42	66.2
10/14/2020	8:19:44 AM	43.42	66.2
10/14/2020	8:24:44 AM	43.43	66.2
10/14/2020	8:29:44 AM	43.44	66.2
10/14/2020	8:34:44 AM	43.44	66.2
10/14/2020	8:39:44 AM	43.45	66.2
10/14/2020	8:44:44 AM	43.45	66.2

10/14/2020	8:49:44 AM	43.46	66.2
10/14/2020	8:54:44 AM	43.46	66.3
10/14/2020	8:59:44 AM	43.47	66.3
10/14/2020	9:04:44 AM	43.47	66.3
10/14/2020	9:09:44 AM	43.48	66.3
10/14/2020	9:14:44 AM	43.49	66.3
10/14/2020	9:19:44 AM	43.49	66.3
10/14/2020	9:24:44 AM	43.5	66.3
10/14/2020	9:29:44 AM	43.51	66.3
10/14/2020	9:34:44 AM	43.51	66.3
10/14/2020	9:39:44 AM	43.52	66.3
10/14/2020	9:44:44 AM	43.52	66.3

10/14/2020	9:49:44 AM	43.54	66.3
	9:54:44 AM	43.54	66.3
	9:59:44 AM	43.55	66.3
	10:04:44 AM	43.56	66.3
	10:09:44 AM	43.57	66.3
	10:14:44 AM	43.57	66.3
	10:19:44 AM	43.57	66.2
	10:24:44 AM	43.55	66.1
	10:29:44 AM	43.48	65.8
	10:34:44 AM	43.4	65.9
	10:39:44 AM	43.31	66
	10:44:44 AM	43.21	66.1
10/14/2020	10:49:44 AM	43.11	66.3
10/14/2020	10:54:44 AM	43.02	66.3
	10:59:44 AM	42.94	66.3
	11:04:44 AM	42.88	66.4
10/14/2020	11:09:44 AM	42.81	66.5
	11:14:44 AM	42.75	66.5
10/14/2020	11:19:44 AM	42.7	66.5
10/14/2020	11:24:44 AM	42.66	66.5
	11:29:44 AM	42.62	66.5
10/14/2020	11:34:44 AM	42.58	66.5
10/14/2020	11:39:44 AM	42.55	66.4
10/14/2020	11:44:44 AM	42.52	66.4
10/14/2020	11:49:44 AM	42.5	66.5
10/14/2020	11:54:44 AM	42.47	66.4
10/14/2020	11:59:44 AM	42.45	66.3
10/14/2020	12:04:44 PM	42.43	66.2
10/14/2020	12:09:44 PM	42.41	66.3
10/14/2020	12:14:44 PM	42.39	66.2
10/14/2020	12:19:44 PM	42.38	66.1
10/14/2020	12:24:44 PM	42.37	66.1
10/14/2020	12:29:44 PM	42.35	66.1
10/14/2020	12:34:44 PM	42.34	66
10/14/2020	12:39:44 PM	42.33	65.9
10/14/2020	12:44:44 PM	42.32	65.8
10/14/2020	12:49:44 PM	42.3	65.8
10/14/2020	12:54:44 PM	42.29	65.7
10/14/2020	12:59:44 PM	42.29	65.6
10/14/2020	1:04:44 PM	42.27	65.6
10/14/2020	1:09:44 PM	42.26	65.6
10/14/2020	1:14:44 PM	42.25	65.4
10/14/2020	1:19:44 PM	42.26	65.4
10/14/2020	1:24:44 PM	42.24	64.7
10/14/2020	1:29:44 PM	42.24	64.7
10/14/2020	1:34:44 PM	42.25	64.8
10/14/2020	1:39:44 PM	42.24	64.8
10/14/2020	1:44:44 PM	42.23	64.8
10/14/2020	1:49:44 PM	42.22	64.7
10/14/2020	1:54:44 PM	42.23	64.6
10/14/2020	1:59:44 PM	42.23	64.6
10/14/2020	2:04:44 PM	42.22	64.6
10/14/2020	2:09:44 PM	42.22	64.4
10/14/2020	2:14:44 PM	42.23	64.4
10/14/2020	2:19:44 PM	42.22	64.3
10/14/2020	2:24:44 PM	42.22	64.6
10/14/2020	2:29:44 PM	42.15	57.3
		40.92510563	62.92077465



**Device Name: Device Description:** Serial Number:

Device ID:

RHTemp1000IS

Intrinsically Safe Temperature and Humidity Data Logger

R17768 MultiChannel RHTemp1000IS

Intrinsically Safe Temperature and Humidity Data Logger

MultiChannel

C	hai	nn	ρl	1

Date	Time	Channel 1 Temperature (°C)	Channel 2 Humidity (% RH)
10/13/2020	2:54:43 PM	24.87	63.2
10/13/2020	2:59:43 PM	25.35	64.7
10/13/2020	3:04:43 PM	26.23	64.3
10/13/2020	3:09:43 PM	27.41	61.3
10/13/2020	3:14:43 PM	28.79	59.1
10/13/2020	3:19:43 PM	30.31	57.2
10/13/2020	3:24:43 PM	31.88	55.3
10/13/2020	3:29:43 PM	33.43	53.7
10/13/2020	3:34:43 PM	34.93	52.3
10/13/2020	3:39:43 PM	36.37	51.2
10/13/2020	3:44:43 PM	37.73	50.2
10/13/2020	3:49:43 PM	39.03	49.3
10/13/2020	3:54:43 PM	40.24	48.5
10/13/2020	3:59:43 PM	41.37	47.9
10/13/2020	4:04:43 PM	42.42	47.4
10/13/2020	4:09:43 PM	43.37	46.9
10/13/2020	4:14:43 PM	44.26	46.7
10/13/2020	4:19:43 PM	45.07	46.4
10/13/2020	4:24:43 PM	45.8	46.3
10/13/2020	4:29:43 PM	46.47	46.2
10/13/2020	4:34:43 PM	47.07	46.2
10/13/2020	4:39:43 PM	47.6	46.3
10/13/2020	4:44:43 PM	48.09	46.4
10/13/2020	4:49:43 PM	48.52	46.6
10/13/2020	4:54:43 PM	48.9	46.9
10/13/2020	4:59:43 PM	49.25	47.1
10/13/2020	5:04:43 PM	49.56	47.4
10/13/2020	5:09:43 PM	49.84	47.8
10/13/2020	5:14:43 PM	50.1	48.2
10/13/2020	5:19:43 PM	50.33	48.6
10/13/2020	5:24:43 PM	50.53	49
10/13/2020	5:29:43 PM	50.71	49.4
10/13/2020	5:34:43 PM	50.87	49.9
10/13/2020	5:39:43 PM	51.02	50.4
10/13/2020	5:44:43 PM	51.15	51
10/13/2020	5:49:43 PM	51.28	51.9
10/13/2020	5:54:43 PM	51.4	52.8
10/13/2020	5:59:43 PM	51.51	53.6
10/13/2020	6:04:43 PM	51.61	54.3
10/13/2020	6:09:43 PM	51.69	54.9
10/13/2020	6:14:43 PM	51.77	55.4
10/13/2020	6:19:43 PM	51.84	55.9
10/13/2020	6:24:43 PM	51.9	56.2
	6:29:43 PM	51.96	56.6
10/13/2020		52.01	56.9
10/13/2020	6:39:43 PM	52.06	57.2
10/13/2020	6:44:43 PM	52.1	57.6
10/13/2020	6:49:43 PM	52.13	57.9
10/13/2020	6:54:43 PM	52.16	58.2
10/13/2020	6:59:43 PM	52.19	58.4
10/13/2020	7:04:43 PM	52.21	58.5
10/13/2020	7:09:43 PM	52.24	58.7
10/13/2020	7:14:43 PM	52.27	58.9
10/13/2020	7:19:43 PM	52.28	59.1
10/13/2020 10/13/2020	7:24:43 PM	52.3	59.3
	7:29:43 PM	52.32	59.5
10/13/2020	7:34:43 PM	52.33	59.6
10/13/2020	7:39:43 PM	52.34	59.8
10/13/2020	7:44:43 PM	52.36	59.9
10/13/2020	7:49:43 PM	52.37	60.2
10/13/2020	7:54:43 PM	52.38	60.3
10/13/2020	7:59:43 PM	52.38	60.5
10/13/2020	8:04:43 PM	52.39	60.6

10/13/2020	8:09:43 PM	52.39	
10/13/2020	8:14:43 PM	52.4	
	8:19:43 PM	52.4	
	8:24:43 PM	52.4	
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	8:39:43 PM	52.4	
	8:44:43 PM	52.4 52.4	
	8:49:43 PM	52.39	
10/13/2020	8:54:43 PM	52.39	
10/13/2020	8:59:43 PM	52.39	
	9:04:43 PM	52.39	
	9:09:43 PM	52.39	
	9:14:43 PM 9:19:43 PM	52.4	
	9:24:43 PM	52.39	
	9:29:43 PM	52.39 52.38	
10/13/2020	9:34:43 PM	52.37	
10/13/2020	9:39:43 PM	52.37	
	9:44:43 PM	52.37	
	9:49:43 PM	52.37	
	9:54:43 PM	52.36	
	9:59:43 PM 10:04:43 PM	52.36	
	10:09:43 PM	52.36	
	10:14:43 PM	52.36 52.35	
	10:19:43 PM	52.34	
10/13/2020	10:24:43 PM	52.34	
	10:29:43 PM	52.34	
	10:34:43 PM	52.33	
	10:39:43 PM	52.33	
	10:44:43 PM 10:49:43 PM	52.33	
	10:54:43 PM	52.32	
	10:59:43 PM	52.32 52.31	
	11:04:43 PM	52.3	
10/13/2020	11:09:43 PM	52.3	
	11:14:43 PM	52.3	
	11:19:43 PM	52.29	
	11:24:43 PM 11:29:43 PM	52.29	
	11:34:43 PM	52.28	
	11:39:43 PM	52.28 52.27	
10/13/2020	11:44:43 PM	52.27	
10/13/2020	11:49:43 PM	52.26	
10/13/2020	11:54:43 PM	52.26	
	11:59:43 PM	52.26	
	12:04:43 AM	52.26	
	12:09:43 AM 12:14:43 AM	52.26	
	12:19:43 AM	52.25 52.24	
	12:24:43 AM	52.24	
10/14/2020	12:29:43 AM	52.23	
	12:34:43 AM	52.23	
	12:39:43 AM	52.22	
	12:44:43 AM	52.22	
	12:49:43 AM 12:54:43 AM	52.22	
	12:59:43 AM	52.22 52.22	
	1:04:43 AM	52.22	
10/14/2020		52.21	
10/14/2020		52.21	
10/14/2020		52.2	
10/14/2020		52.2	
10/14/2020 10/14/2020		52.19	
10/14/2020		52.19	
10/14/2020		52.19	
10/14/2020		52.19 52.19	
10/14/2020	1:54:43 AM	52.19	

61.4 61.6 61.8 61.9 61.9 62 62 62.1 62.1 62.2 62.3 62.5 62.6 62.6 62.7 62.8 62.8 62.8 62.9 62.9 62.9 62.9 63 63 63 63.1 63.1 63.2 63.2 63.3 63.3 63.4 63.4 63.4 63.4 63.4 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63.6 63.6 63.5 63.6 63.6 63.6 63.6 63.6 63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.7

60.7 60.9 61 61.1 61.2

10/14/2020	1:59:43 AM	52.19	63.7	
10/14/2020	2:04:43 AM	52.18	63.7	
10/14/2020	2:09:43 AM	52.17	63.7	
10/14/2020 10/14/2020		52.17 52.17	63.7 63.7	
10/14/2020		52.17	63.6	
10/14/2020	2:29:43 AM	52.17	63.6	
10/14/2020	2:34:43 AM	52.17	63.6	
10/14/2020	2:39:43 AM	52.17	63.6	
10/14/2020	2:44:43 AM	52.17	63.6	
10/14/2020	2:49:43 AM	52.17	63.6	
10/14/2020	2:54:43 AM	52.17	63.6	
10/14/2020	2:59:43 AM	52.16	63.6	
10/14/2020		52.17	63.6	
10/14/2020	3:09:43 AM	52.16	63.6	
10/14/2020		52.16	63.6	
10/14/2020 10/14/2020	3:19:43 AM 3:24:43 AM	52.15	63.6	
10/14/2020		52.15 52.15	63.6 63.6	
10/14/2020	3:34:43 AM	52.14	63.6	
10/14/2020	3:39:43 AM	52.15	63.6	
10/14/2020	3:44:43 AM	52.15	63.6	
10/14/2020	3:49:43 AM	52.15	63.6	
10/14/2020	3:54:43 AM	52.15	63.6	
10/14/2020	3:59:43 AM	52.15	63.6	
10/14/2020	4:04:43 AM	52.15	63.6	
10/14/2020	4:09:43 AM	52.15	63.6	
10/14/2020	4:14:43 AM	52.14	63.6	
10/14/2020	4:19:43 AM	52.14	63.6	
10/14/2020	4:24:43 AM	52.13	63.6	
10/14/2020	4:29:43 AM	52.12	63.7	
10/14/2020	4:34:43 AM	52.12	63.7	
10/14/2020	4:39:43 AM	52.11	63.7	
10/14/2020 10/14/2020	4:44:43 AM 4:49:43 AM	52.11 52.12	63.6	
10/14/2020	4:54:43 AM	52.12	63.6 63.6	
10/14/2020	4:59:43 AM	52.12	63.6	
10/14/2020	5:04:43 AM	52.12	63.6	
10/14/2020	5:09:43 AM	52.12	63.6	
10/14/2020	5:14:43 AM	52.11	63.6	
10/14/2020	5:19:43 AM	52.11	63.6	
10/14/2020	5:24:43 AM	52.11	63.6	
10/14/2020	5:29:43 AM	52.1	63.6	
10/14/2020	5:34:43 AM	52.1	63.6	
10/14/2020	5:39:43 AM	52.09	63.6	
10/14/2020	5:44:43 AM	52.09	63.6	
10/14/2020	5:49:43 AM	52.08	63.6	
10/14/2020 10/14/2020	5:54:43 AM	52.07	63.6	
10/14/2020	5:59:43 AM 6:04:43 AM	52.07 52.06	63.6	
10/14/2020	6:09:43 AM	52.06	63.6 63.5	
10/14/2020	6:14:43 AM	52.05	63.5	
10/14/2020	6:19:43 AM	52.05	63.5	
10/14/2020	6:24:43 AM	52.05	63.5	
10/14/2020	6:29:43 AM	52.04	63.5	
10/14/2020	6:34:43 AM	52.04	63.5	
10/14/2020	6:39:43 AM	52.03	63.5	
10/14/2020	6:44:43 AM	52.03	63.5	
10/14/2020	6:49:43 AM	52.02	63.5	
10/14/2020	6:54:43 AM	52.02	63.5	
10/14/2020	6:59:43 AM	52.02	63.5	
10/14/2020	7:04:43 AM	52.01	63.6	
10/14/2020	7:09:43 AM	52.01	63.6	
10/14/2020	7:14:43 AM	52.01	63.6	
10/14/2020 10/14/2020	7:19:43 AM 7:24:43 AM	52.01	63.6	
10/14/2020	7:29:43 AM	52 52	63.6	
10/14/2020	7:34:43 AM	52	63.5 63.5	
10/14/2020	7:39:43 AM	52	63.5	
10/14/2020	7:44:43 AM	52	63.5	
			55.5	

10/14/2020	7:49:43 AM	52	63.5
10/14/2020	7:54:43 AM	52	63.5
10/14/2020	7:59:43 AM	52	63.5
10/14/2020	8:04:43 AM	52	63.5
10/14/2020	8:09:43 AM	52	63.5
10/14/2020	8:14:43 AM	52	63.5
10/14/2020	8:19:43 AM	52	63.5
10/14/2020	8:24:43 AM	52	63.5
10/14/2020	8:29:43 AM	52	63.4
10/14/2020	8:34:43 AM	52	63.4
10/14/2020	8:39:43 AM	52	63.4
10/14/2020	8:44:43 AM	52	63.4
10/14/2020	8:49:43 AM	52	63.4
10/14/2020	8:54:43 AM	51.99	63.4
10/14/2020	8:59:43 AM	51.99	63.3
10/14/2020	9:04:43 AM	51.99	63.3
10/14/2020	9:09:43 AM	51.99	63.3
10/14/2020	9:14:43 AM	51.99	63.3
10/14/2020	9:19:43 AM	51.99	63.3
10/14/2020	9:24:43 AM	51.99	63.2
10/14/2020	9:29:43 AM	52	63.2
10/14/2020	9:34:43 AM	52	63.2
10/14/2020	9:39:43 AM	52	63.1
10/14/2020	9:44:43 AM	52.01	63.1

10/14/202	20 9:49:43 AM	52.01 63.1	
10/14/202	20 9:54:43 AM	52.01 63.1	
10/14/202	20 9:59:43 AM	52.01 63.1	
10/14/202	20 10:04:43 AM	52.01 63.1	
10/14/202	20 10:09:43 AM	52.01 63.1	
10/14/202	20 10:14:43 AM	52 63.1	
10/14/202	20 10:19:43 AM	52 63.1	
10/14/202	20 10:24:43 AM	51.95 61.8	
10/14/202	20 10:29:43 AM	51.78 51.2	
10/14/202	20 10:34:43 AM	51.7 44.9	
10/14/202	20 10:39:43 AM	51.67 43.1	
10/14/20	20 10:44:43 AM	51.7 41.8	
10/14/20	20 10:49:43 AM	51.76 39.4	
10/14/20	20 10:54:43 AM	51.84 38.2	
10/14/20	20 10:59:43 AM	51.93 37.5	
10/14/20	20 11:04:43 AM	52.02 36.8	
10/14/20	20 11:09:43 AM	52.1 36.1	
10/14/20	20 11:14:43 AM	52.18 35.6	
10/14/20	20 11:19:43 AM	52.24 35.3	
10/14/20	20 11:24:43 AM	52.3 34.8	
10/14/20	20 11:29:43 AM	52.35 34.4	
10/14/20	20 11:34:43 AM	52.39 33.9	
10/14/20	20 11:39:43 AM	52.43 33.9	
10/14/20	20 11:44:43 AM	52.46 33.5	
10/14/20	20 11:49:43 AM	52.49 32.9	
10/14/20	20 11:54:43 AM	52.52 32.6	
10/14/20	20 11:59:43 AM	52.54 32.3	
10/14/20	20 12:04:43 PM	52.56 31.9	
10/14/20	20 12:09:43 PM	52.58 31.5	
10/14/20	20 12:14:43 PM	52.59 31.1	
10/14/20	20 12:19:43 PM	52.6 31.1	
10/14/20	20 12:24:43 PM	52.6 30.8	
10/14/20	20 12:29:43 PM	52.61 30.4	
10/14/20	20 12:34:43 PM	52.62 30.2	
10/14/20	20 12:39:43 PM	52.62 30	
10/14/20	20 12:44:43 PM	52.63 29.7	
10/14/20	20 12:49:43 PM	52.64 29.5	
10/14/20	20 12:54:43 PM	52.65 29.1	
10/14/20	20 12:59:43 PM	52.66 29	
10/14/20	1:04:43 PM	52.66 28.9	
10/14/20	1:09:43 PM	52.66 28.7	
10/14/20	1:14:43 PN	52.66 28.4	
10/14/20	1:19:43 PN	52.66 28.3	
10/14/20	1:24:43 PN	52.66 28.9	
10/14/20	1:29:43 PN	1 52.66 28.4	
10/14/20	1:34:43 PN	7 52.66 28.4	
10/14/20	1:39:43 PN	7 52.67 28.1	
10/14/20	)20 1:44:43 PN	1 52.67 27.7	
10/14/20	020 1:49:43 PN	1 52.67 27.4	
10/14/20	020 1:54:43 PN		
10/14/20	020 1:59:43 PN		
10/14/20	2:04:43 PN	A 52.67 27	
10/14/20	020 2:09:43 PN	M 52.66 26.9	
10/14/20	020 2:14:43 PN	A 52.67 26.7	
10/14/20	020 2:19:43 PN	A 52.68 26.4	
10/14/20			
10/14/20	020 2:29:43 PN		
		50.94647887 55.7778169	

Document ID: SOP-MED-0098
Document Type: DHR

MEDICAL

Name: Version

EO Sterilization Router

Tote #	Gas Pre-Weight (g)	Gas Post-Weight (g)	Net Weight Release (g)	Tote #	Gas Pre-Weight (g)	Gas Post-Weight (g)	Net Weight Release (g)
Tote #1	104.48	76.00	28.89	Tote #19			
Tote #2	106.81	75.45	31.30	Tote #20			
Tote #3	101.68	76.00	25.48	Tote #21			
Tote #4	102.59	75.79	24.8D	Tote #22			
Tote #5	102.33	76.42	25.91	Tote #23			
Tote #6	102.88	7585	2703	Tote #24			
Tote #7	103.32	75.97	27 35	Tote #25			
Tote #8	104.00	75.93	2807	Tote #26			
Tote #9	105.40	75.91	29.49	Tote #27			
Tote #10	106.10	75.43	30 47	Tote #28		130	
Tote #11	105.89	75.48	30.21	Tote #29		CR.	
Tote #12	104.59	8 L S L	28.81	Tote #30			
Tote #13	105.16	76.19	28.97	Tote #31			
Tote #14	104.86	76.12	7574	Tote #32	\		
Tote #15	102.99	75.98	27.01	Tote #33			
Tote #16	102.46	76.03	26.43	Tote #34			
Tote #17	104.57	75.91	28.44	Tote #35			
Tote #18	104.28	75.83	28.45	76te #36			
All EO Gas Pos	All EO Gas Post Weights Pass (22 g - 45 g)		No (If no, notify Supervisor)	/isor)			
Operator			1400477	Checked	ed	ed	ed
oignature/ pate.			アーニ エーニ / つろ	Ry/Date:	D N:	1 1 11 017	7 2020

Printed By/Date:

ER 130CT2020 Lot: 040482-R5/039482-R3/0085-F2 60 CM Reg

Run #:360E21

# 104.988 9 022:N  # 106.819 9 022:N  # 101.682 9 024:N  # 102.596 9 025:N  # 102.881 9 026:N  # 103.321 9 025:N  # 105.404 9 028:N  # 105.404 9 033:N  # 104.593 9 033:N  # 104.864 9 033:N  # 102.995 9 036:N  # 102.462 9 038:N  # 104.283 9	018:N	I G	1 6	17 4	2 6	d t	2 1	D OF CHAIN	01050	112 21	1 10 10		10 106	0.46	1.00	(f 12	0.36	8 .	D
021:N 04.988 9 022:N 023:N 01.682 9 024:N 02.596 9 025:N 025:N 026:N 027:N 029:N 030:N 04.007 9 030:N 05.404 9 05.107 9 031:N 05.164 9 031:N 04.593 9 04.593 9 04.595 9 04.283 9 04.283 9 04.283 9	+ +	- 1			F -	+ -	t :	+ -	+ -	+ -	+	+ -	+ -	+ -	+ -	+	+	+	3
021:N 022:N 022:N 022:N 024:N 025:N 026:N 027:N 030:N 030:N 030:N 033:N 036:N 038:N		英	28	107.0			. 10	. 24		107	2 8	3 8	40	3 6	3 5	2 !	3	2	
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EO Sterilization Router

Fail Tote # 19 Fail Tote # 20 Fail Tote # 21 Fail Tote # 22 Fail Tote # 23 Fail Tote # 24 Fail Tote # 25 Fail Tote # 25 Fail Tote # 25 Fail Tote # 27 Fail Tote # 28 Fail Tote # 30 Fail Tote # 31 Fail Tote # 33 Fail Tote # 33 Fail Tote # 34 Fail Tote # 35 Fail Tote # 35	Tote # 18	Tote # 17	Tote # 16	Tote # 15 Pass	Tote # 14	Tote # 13	Tote # 12	Tote # 11	Tote # 10 Pass	Tote # 9	Tote #8	Tote # 7 Pass	Tote # 6 Pass	Tote # 5	Tote # 4	Tote # 3	Tote # 2	Tote #1	Dosimeter Travel Length
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