

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office 2 Martin Luther King, Jr. Drive Suite 1456, East Tower Atlanta, Georgia 30334 404-656-4713

March 12, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Covington December 17, 2019- January 19, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were taken in the Covington area to characterize the EtO concentration during the period of December 2019 and January 2020. Each of the samples were sent to Eastern Research Group (ERG) for analysis.

The Qualifier code of "LK" was given by ERG to indicate that the sample may be biased high. The Qualifier code of "2" was given two samples to indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised. The samples listed as AF indicate that the sample was scheduled but not collected. On previous memos, this was listed as an X rather than AF, but we have changed the code to be more consistent with our other documentation. The samples listed as AN indicate that the machine malfunctioned while collecting the sample. No samples were taken at location C1, C6, C7, C8, or C9 during this period. Please note that ERG is now providing values for levels below the detection limit. The sample results for C2 on 1/16/2020 were omitted by the analytical laboratory and will be included with the results for next month.

Location	Date	Qualifier	EtO Concentration (ug/m ³)
C2	12/17/2019	LK; 2	0.21
C2	12/19/2019	2	0.21
C2	12/23/2019		AN
C2	12/31/2019		0.29
C2	01/04/2020		AF
C2	01/07/2020		0.49
C2	01/10/2020	LK; 2	0.37
C2	01/14/2020		AF
C2	01/16/2020		**
C2	01/19/2020	LK	0.14
C3	12/17/2019		0.38
C3	12/19/2019	2	0.66

Location	Date	Qualifier	EtO Concentration (ug/m ³)
C3	12/23/2019		AF
C3	12/31/2019	2	0.09
C3	01/04/2020	2	0.12
C3	01/07/2020	LK; 2	0.49
C3	01/10/2020		0.09
C3	01/14/2020	2	0.47
C3	01/16/2020		AF
C3	01/19/2020	LK; 2	0.47
C4	12/17/2019	LK; 2	0.19
C4	12/19/2019	2	0.28
C4	12/23/2019		AN
C4	12/31/2019	2	0.13
C4	01/04/2020	2	0.25
C4	01/07/2020	LK; 2	0.18
C4	01/10/2020		0.66
C4	01/14/2020		AF
C4	01/16/2020		AF
C4	01/19/2020	LK; 2	0.33
C5	12/17/2019		0.35
C5	12/19/2019	2	0.42
C5	12/23/2019		AN
C5	12/31/2019		0.14
C5	01/04/2019		AN
C5	01/07/2020	LK; 2	0.22
C5	01/10/2020	LK	0.26
C5	01/14/2020		AF
C5	01/16/2020		AF
C5	01/19/2020		0.56

If you have any questions, please let me know.

DGO/do



Eastern Research Group 601 Keystone Park Drive Suite 700 Morrisville, NC 27560

February 20, 2020

Ms. Jaime Gore U.S. Environmental Protection Agency, Region 4 4244 International Pkwy, Suite 120 Atlanta, GA 30354 Project Name: Covington

Dear Ms. Jaime Gore,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 01/03/20 14:11 through 12/20/19 12:44.

The test results in this report are in compliance with NELAC accreditation requirements for the certified parameters. All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

Release of the data contained in this data package and in the data submitted in the electronic data deliverable, has been authorized by the Program Manager, or the Program Manager's designee as verified by the following signature.

The issuance of the final Certificate of Analysis takes precedence over any previous Report. If you have any questions, please contact me at 919-468-7924.

Sincerely,

Julie Swift Program Manager julie.swift@erg.com

The information contained in this report and its attachment(s) are intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this report is strictly prohibited. If you have received this report in error, please notify julie.swift@erg.com and delete the report without retaining any copies.

CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

NERG

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912 **FAX:** (919) 541-0516

 FILE #: 4222.00

 REPORTED: 02/20/20 12:31

 SUBMITTED: 01/03/20 to 12/20/19

 AQS SITE CODE:

 SITE CODE:

 Covington

ANALYTICAL REPORT FOR SAMPLES

SampleName	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	Received
C2	0010322-01	Air	12/19/19 23:59	01/03/20 14:11
C3	0010322-02	Air	12/19/19 23:59	01/03/20 14:11
C4	0010322-03	Air	12/19/19 23:59	01/03/20 14:11
C5	0010322-04	Air	12/19/19 23:59	01/03/20 14:11
Field Blank	0010322-09	Air	12/30/19 00:00	01/03/20 14:11
C2	0010717-01	Air	12/31/19 23:59	01/07/20 10:29
C3	0010717-02	Air	12/31/19 23:59	01/07/20 10:29
C4	0010717-03	Air	12/31/19 23:59	01/07/20 10:29
C5	0010717-04	Air	12/31/19 23:59	01/07/20 10:29
C3	0010907-02	Air	01/04/20 23:59	01/09/20 11:06
C4	0010907-03	Air	01/04/20 23:59	01/09/20 11:06
C3	0011423-01	Air	01/07/20 23:59	01/14/20 12:28
C4	0011423-02	Air	01/07/20 23:59	01/14/20 12:28
C5	0011423-03	Air	01/07/20 23:59	01/14/20 12:28
C2	0011423-04	Air	01/10/20 23:59	01/14/20 12:28
C3	0011423-05	Air	01/10/20 23:59	01/14/20 12:28
C4	0011423-06	Air	01/10/20 23:59	01/14/20 12:28
C5	0011423-07	Air	01/10/20 23:59	01/14/20 12:28
C2	0011618-01	Air	01/07/20 23:59	01/16/20 13:32
C3	0011705-02	Air	01/14/20 23:59	01/17/20 10:58
C2	0012317-01	Air	01/19/20 23:59	01/23/20 12:26
C3	0012317-02	Air	01/19/20 23:59	01/23/20 12:26
C4	0012317-03	Air	01/19/20 23:59	01/23/20 12:26

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The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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U.S. Environmental Protectio	on Agency, Region 4	FILE #: 4222.00					
4244 International Pkwy, Sui	te 120		REPORTED: 02/20/20	12:31			
Atlanta, GA 30354			SUBMITTED: 01/03/2	SUBMITTED: 01/03/20 to 12/20/19			
ATTN: Ms. Jaime Gore			AQS SITE CODE:				
PHONE: (404) 362-4912	FAX: (919) 541-0516		SITE CODE: Cov	vington			
C5	0012317-04	Air	01/19/20 23:59	01/23/20 12:26			
C2	9122019-01	Air	12/17/19 23:59	12/20/19 12:44			
C3	9122019-02	Air	12/17/19 23:59	12/20/19 12:44			
C4	9122019-03	Air	12/17/19 23:59	12/20/19 12:44			
C5	9122019-04	Air	12/17/19 23:59	12/20/19 12:44			

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U.S. Environmental Protection Agen	cy, Region 4			FILE #: 4	222.00	
4244 International Pkwy, Suite 120				REPORTE	D: 02/20/20 12:3	31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20	to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE	CODE:	
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE	Coving	ton
Description: C2		Lab ID:	0010322-01			Sampled: 12/19/19 23:59
Pressure @ Receipt: 0.75" Hg		Canister #:	SAT070			Received: 01/03/20 14:11
Comments:						Analyzed: 01/10/20 14:04
	Air To	xics by EPA	Compend	ium Metho	od TO-15	
	<u>Results</u>		<u>MDL</u>			
<u>Analyte</u>	<u>ppbv</u> ug/m ³	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide	0.118 0.21		0.0250			

U.S. Environmental Protection Agen	cy, Region 4			FILE #: 42	222.00
4244 International Pkwy, Suite 120				REPORTED	0: 02/20/20 12:31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE C	CODE:
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE	: Covington
Description: C3		Lab ID:	0010322-02		Sampled: 12/19/19 23:59
Pressure @ Receipt: 0.75" Hg		Canister #:	SAT122		Received: 01/03/20 14:11
Comments:					Analyzed: 01/10/20 15:00
	Air To	xics by EPA	Compend	ium Metho	od TO-15
	<u>Results</u>		MDL		
Analyte	<u>ppbv</u> _ug/m ³	<u>Flag</u>	<u>ppbv</u>		
Ethylene oxide	0.365 0.66		0.0250		

U.S. Environmental Protection Agency,	Region 4			FILE #:	4222.00	
4244 International Pkwy, Suite 120				REPORTE	ED: 02/20/20	12:31
Atlanta, GA 30354				SUBMITT	ED: 01/03/2	20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE	CODE:	
PHONE: (404) 362-4912 FAX: (9	19) 541-0516			SITE COD	DE: Co	vington
Description: C4	La	b ID: 0	010322-03			Sampled: 12/19/19 23:59
Pressure @ Receipt: 0.75" Hg	Ca	nister #:	SAT166			Received: 01/03/20 14:11
Comments:						Analyzed: 01/10/20 15:56
Air Toxics by EPA Compendium Method TO-15						
	<u>Results</u>		MDL			
Analyte g	opbv ug/m³	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide 0	.153 0.28		0.0250			

U.S. Environmental Protection Age	ncy, Region 4			FILE #: 42	222.00
4244 International Pkwy, Suite 120				REPORTED	0: 02/20/20 12:31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE C	CODE:
PHONE: (404) 362-4912 FAX	: (919) 541-0516			SITE CODE	: Covington
Description: C5		Lab ID:	0010322-04		Sampled: 12/19/19 23:59
Pressure @ Receipt: 0" Hg		Canister #:	5127		Received: 01/03/20 14:11
Comments:					Analyzed: 01/10/20 16:51
	Air To	xics by EPA	Compend	ium Metho	od TO-15
	<u>Results</u>		<u>MDL</u>		
Analyte	<u>ppbv</u> ug/m	<u>³ </u>	<u>ppbv</u>		
Ethylene oxide	0.230 0.42		0.0250		

U.S. Environmental Protection Age	ency, Region 4			FILE #: 4222.00		
4244 International Pkwy, Suite 120)			REPORTED: 02/20	/20 12:31	
Atlanta, GA 30354				SUBMITTED: 01/0	03/20 to 12/20/19	
ATTN: Ms. Jaime Gore				AQS SITE CODE:		
PHONE: (404) 362-4912 FAX	: (919) 541-0516			SITE CODE:	Covington	
Description: Field Blank		Lab ID:	0010322-09		Sampled: 12/30/19 00:00	
Pressure @ Receipt: 30" Hg		Canister #:	A21026		Received: 01/03/20 14:11	
Comments: Field Blank					Analyzed: 01/10/20 21:28	
Air Toxics by EPA Compendium Method TO-15						
	<u>Results</u>		<u>MDL</u>			
Analyte	<u>ppbv</u> _ug/m	<u>³ Flag</u>	<u>ppbv</u>			
Ethylene oxide	ND ND	U	0.0250			

U.S. Environmental Protection Agency, Re	egion 4			FILE #: 42	222.00	
4244 International Pkwy, Suite 120				REPORTED): 02/20/20 12	:31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20	to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE C	CODE:	
PHONE: (404) 362-4912 FAX: (919)) 541-0516			SITE CODE	: Covin	gton
Description: C2	Lab II): 0	010717-01			Sampled: 12/31/19 23:59
Pressure @ Receipt: 0" Hg	Canist	ter #:	5045			Received: 01/07/20 10:29
Comments: Received at ambient						Analyzed: 01/09/20 03:48
	Air Toxics by	y EPA (Compendi	ium Metho	od TO-15	
<u>F</u>	<u>Results</u>		MDL			
Analyte ppt	ov ug/m³	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide 0.16	1 0.29		0.0250			

U.S. Environmental Protection Agency, Region 4	Ļ	FILE #: 4222.00
4244 International Pkwy, Suite 120		REPORTED: 02/20/20 12:31
Atlanta, GA 30354		SUBMITTED: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore		AQS SITE CODE:
PHONE: (404) 362-4912 FAX: (919) 541-0	516	SITE CODE: Covington
Description: C3	Lab ID: 0010717-02	Sampled: 12/31/19 23:59
Pressure @ Receipt: 0" Hg	Canister #: SAT177	Received: 01/07/20 10:29
Comments: Received at ambient		Analyzed: 01/09/20 18:20
A	r Toxics by EPA Compend	ium Method TO-15
Result	<u>s MDL</u>	
Analyte ppbv u	<u>g/m³ Flag ppbv</u>	
Ethylene oxide 0.0493	0.09 0.0250	

U.S. Environmental Protection Agency, Regio	n 4	FILE #: 4222.00
4244 International Pkwy, Suite 120		REPORTED: 02/20/20 12:31
Atlanta, GA 30354		SUBMITTED: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore		AQS SITE CODE:
PHONE: (404) 362-4912 FAX: (919) 54	1-0516	SITE CODE: Covington
Description: C4	Lab ID: 0010717-03	Sampled: 12/31/19 23:59
Pressure @ Receipt: 0" Hg	Canister #: SAT170	Received: 01/07/20 10:29
Comments: Received at ambient		Analyzed: 01/09/20 19:15
	Air Toxics by EPA Compend	ium Method TO-15
Res	ults MDL	
Analyte ppbv	ug/m ³ Flag ppbv	
Ethylene oxide 0.0715	0.13 0.0250	

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U.S. Environmental Protection Agen	cy, Region 4			FILE #: 422	2.00		
4244 International Pkwy, Suite 120				REPORTED:	02/20/20 12:31		
Atlanta, GA 30354				SUBMITTED:	01/03/20 to 12/20/19		
ATTN: Ms. Jaime Gore				AQS SITE CO	DE:		
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE:	Covington		
Description: C5		Lab ID:	0010717-04		Sampled: 12/31/19 23:59		
Pressure @ Receipt: 0" Hg		Canister #:	5062		Received: 01/07/20 10:29		
Comments: Received at ambien	t				Analyzed: 01/09/20 20:11		
Air Toxics by EPA Compendium Method TO-15							
	<u>Results</u>		<u>MDL</u>				
<u>Analyte</u>	<u>ppbv ug/m³</u>	Flag	<u>ppbv</u>				
Ethylene oxide	0.0764 0.14		0.0250				

U.S. Environmental Protection Agency, Re	gion 4	FILE #:	4222.00
4244 International Pkwy, Suite 120		REPOR	RTED: 02/20/20 12:31
Atlanta, GA 30354		SUBMI	TTED: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore		AQS SI	TE CODE:
PHONE: (404) 362-4912 FAX: (919)	541-0516	SITE C	ODE: Covington
Description: C3	Lab ID: 0	010907-02	Sampled: 01/04/20 23:59
Pressure @ Receipt: 0" Hg	Canister #:	19297	Received: 01/09/20 11:06
Comments: Received at ambient			Analyzed: 01/15/20 02:25
	Air Toxics by EPA	Compendium Me	ethod TO-15
<u>R</u>	<u>esults</u>	<u>MDL</u>	
Analyte ppb	<u>v ug/m³ Flag</u>	<u>ppbv</u>	
Ethylene oxide 0.064	7 0.12	0.0250	

U.S. Environmental Protection Agen	cy, Region 4			FILE #: 4	222.00		
4244 International Pkwy, Suite 120				REPORTE	D: 02/20/20 12:	31	
Atlanta, GA 30354			SUBMITTE	D: 01/03/20	to 12/20/19		
ATTN: Ms. Jaime Gore			AQS SITE CODE:				
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE	E: Coving	ton	
Description: C4		Lab ID:	0010907-03			Sampled: 01/04/20 23:59	
Pressure @ Receipt: 2.50" Hg		Canister #:	A21005			Received: 01/09/20 11:06	
Comments:						Analyzed: 01/15/20 03:20	
Air Toxics by EPA Compendium Method TO-15							
	<u>Results</u>		<u>MDL</u>				
Analyte	<u>ppbv</u> _ug/m ³	<u>Flag</u>	<u>ppbv</u>				
Ethylene oxide	0.139 0.25		0.0250				

U.S. Environmental Protection Agenc	y, Region 4			FILE #: 4222	00
4244 International Pkwy, Suite 120				REPORTED:	02/20/20 12:31
Atlanta, GA 30354				SUBMITTED:	01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE COD	DE:
PHONE: (404) 362-4912 FAX: ((919) 541-0516			SITE CODE:	Covington
Description: C3		Lab ID:	0011423-01		Sampled: 01/07/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	SAT038		Received: 01/14/20 12:28
Comments: Received at ambient					Analyzed: 01/23/20 17:14
	Air To	xics by EPA	Compend	ium Method 1	70-15
	<u>Results</u>		MDL		
Analyte	<u>ppbv</u> ug/m ³	<u>Flag</u>	<u>ppbv</u>		
Ethylene oxide	0.270 0.49	LK	0.0250		

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U.S. Environmental Protection Agen	cy, Region 4			FILE #: 4222	.00
4244 International Pkwy, Suite 120				REPORTED:	02/20/20 12:31
Atlanta, GA 30354				SUBMITTED:	01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE CO	DE:
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE:	Covington
Description: C4		Lab ID:	0011423-02		Sampled: 01/07/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	SAT018		Received: 01/14/20 12:28
Comments: Received at ambien	t				Analyzed: 01/23/20 19:22
	Air To	xics by EPA	Compend	ium Method	ТО-15
	<u>Results</u>		MDL		
<u>Analyte</u>	<u>ppbv</u> _ug/m ³	<u>Flag</u>	ppbv		
Ethylene oxide	0.101 0.18	LK	0.0250		

U.S. Environmental Protection Agency, I	Region 4			FILE #: 4	222.00	
4244 International Pkwy, Suite 120				REPORTE	D: 02/20/20 12	2:31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20	to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE	CODE:	
PHONE: (404) 362-4912 FAX: (91	9) 541-0516			SITE CODE	E: Covin	gton
Description: C5		Lab ID:	0011423-03			Sampled: 01/07/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	A21073			Received: 01/14/20 12:28
Comments: Received at ambient						Analyzed: 01/23/20 20:27
	Air To	cics by EPA	Compend	ium Metho	od TO-15	
	<u>Results</u>		<u>MDL</u>			
Analyte p	<u>pbv_ug/m³</u>	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide 0.:	119 0.22	LK	0.0250			

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U.S. Environmental Protection Agence	y, Region 4			FILE #: 4222	2.00	
4244 International Pkwy, Suite 120				REPORTED:	02/20/20 12:31	
Atlanta, GA 30354				SUBMITTED:	01/03/20 to 12/20/19	
ATTN: Ms. Jaime Gore				AQS SITE CODE:		
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE:	Covington	
Description: C2		Lab ID:	0011423-04		Sampled: 01/10/20 23:59	
Pressure @ Receipt: 0" Hg		Canister #:	SAT050		Received: 01/14/20 12:28	
Comments: Received at ambient					Analyzed: 01/23/20 21:31	
	Air To	xics by EPA	Compend	ium Method	TO-15	
	<u>Results</u>		<u>MDL</u>			
Analyte	<u>ppbv</u> <u>ug/m³</u>	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide	0.207 0.37	LK	0.0250			

Eastern Research Group

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U.S. Environmental Protection Agend	cy, Region 4			FILE #:	4222.00		
4244 International Pkwy, Suite 120				REPORTE	ED: 02/	20/20 12:31	
Atlanta, GA 30354			SUBMITTED: 01/03/20 to 12/20/19				
ATTN: Ms. Jaime Gore				AQS SITE CODE:			
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE COD	DE:	Covington	
Description: C3	Li	ab ID: (0011423-05			Sampled: 01/10/20 23:59	
Pressure @ Receipt: 3.50" Hg	C	anister #:	18824			Received: 01/14/20 12:28	
Comments:						Analyzed: 01/23/20 22:35	
Air Toxics by EPA Compendium Method TO-15							
	<u>Results</u>		MDL				
Analyte	<u>ppbv ug/m³</u>	<u>Flag</u>	<u>ppbv</u>				
Ethylene oxide	0.0483 0.09		0.0250				

U.S. Environmental Protection Agency, Region 4		FILE #: 4222.00					
4244 International Pkwy, Suite 120		REPORTED: 02/20/20 12:31					
Atlanta, GA 30354		SUBMITTED: 01/03/20 to 12/20/19					
ATTN: Ms. Jaime Gore		AQS SITE CODE:					
PHONE: (404) 362-4912 FAX: (919) 541-0516		SITE CODE: Covington					
Description: C4	Lab ID: 0011423-06	Sampled: 01/10/20 23:59					
Pressure @ Receipt: 4.50" Hg	Canister #: SAT011	Received: 01/14/20 12:28					
Comments:		Analyzed: 01/23/20 23:40					
Air Toxics by EPA Compendium Method TO-15							
<u>Results</u>	<u>MDL</u>						
Analyte ppbv ug/m ³	<u>Flag</u> ppbv						

0.0250

NERG

Ethylene oxide

0.363

0.66

U.S. Environmental Protection Agency, Region 4		FILE #: 4222.00					
4244 International Pkwy, Suite 120		REPORTED: 02/20/20 12:31					
Atlanta, GA 30354		SUBMITTED: 01/03/20 to 12/20/19					
ATTN: Ms. Jaime Gore		AQS SITE CODE:					
PHONE: (404) 362-4912 FAX: (919) 541-0516		SITE CODE: Covington					
Description: C5	Lab ID: 0011423-07	Sampled: 01/10/20 23:59					
Pressure @ Receipt: 2.50" Hg	Canister #: SAT118	Received: 01/14/20 12:28					
Comments:		Analyzed: 01/24/20 00:44					
Air Toxics by EPA Compendium Method TO-15							
<u>Results</u>	<u>MDL</u>						
Analyte ppbv ug/m ³	<u>Flag</u> ppbv						

0.0250

LK

0.142 0.26

NERG

Ethylene oxide

U.S. Environmental Protection Agency, Region 4		FILE #: 4222.00						
4244 International Pkwy, Suite 120		REPORTED: 02/20/20 12:31						
Atlanta, GA 30354		SUBMITTED: 01/03/20 to 12/20/19						
ATTN: Ms. Jaime Gore		AQS SITE CODE:						
PHONE: (404) 362-4912 FAX: (919) 541-0	516	SITE CODE: Covington						
Description: C2	Lab ID: 0011618-01	Sampled: 01/07/20 23:59						
Pressure @ Receipt: 0" Hg	Canister #: SAT113	Received: 01/16/20 13:32						
Comments: Received at ambient		Analyzed: 01/24/20 06:05						
Air Toxics by EPA Compendium Method TO-15								
Results	<u>MDL</u>							
Analyte ppbv ug	<u>/m³ Flag ppbv</u>							
Ethylene oxide 0.271 0	.49 0.0250							

U.S. Environmental Protection Agen	cy, Region 4			FILE #:	4222.00		
4244 International Pkwy, Suite 120				REPORTE	ED: 02/20/20 12	2:31	
Atlanta, GA 30354			SUBMITT	ED: 01/03/20	to 12/20/19		
ATTN: Ms. Jaime Gore			AQS SITE CODE:				
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE COD	DE: Covir	ngton	
Description: C3		Lab ID:	0011705-02			Sampled: 01/14/20 23:59	
Pressure @ Receipt: 16.00" Hg		Canister #:	SAT184			Received: 01/17/20 10:58	
Comments:						Analyzed: 01/21/20 21:18	
Air Toxics by EPA Compendium Method TO-15							
	<u>Results</u>		MDL				
<u>Analyte</u>	<u>ppbv</u> _ug/m ³	<u>Flag</u>	<u>ppbv</u>				
Ethylene oxide	0.258 0.47		0.0250				

U.S. Environmental Protection Agency,	Region 4			FILE #: 4222	.00
4244 International Pkwy, Suite 120				REPORTED:	02/20/20 12:31
Atlanta, GA 30354				SUBMITTED:	01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE CO	DE:
PHONE: (404) 362-4912 FAX: (91	9) 541-0516			SITE CODE:	Covington
Description: C2		Lab ID:	0012317-01		Sampled: 01/19/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	SAT138		Received: 01/23/20 12:26
Comments: Received at ambient					Analyzed: 01/28/20 03:57
	Air Tox	ics by EPA	Compend	ium Method	ТО-15
	<u>Results</u>		<u>MDL</u>		
Analyte p	<u>pbv ug/m³</u>	<u>Flag</u>	<u>ppbv</u>		
Ethylene oxide 0.0	0758 0.14	LK	0.0250		

U.S. Environmental Protection Agency,	Region 4			FILE #: 4222.00	
4244 International Pkwy, Suite 120				REPORTED: 02/20/20 12:31	
Atlanta, GA 30354				SUBMITTED: 01/03/20 to 12	2/20/19
ATTN: Ms. Jaime Gore				AQS SITE CODE:	
PHONE: (404) 362-4912 FAX: (91	9) 541-0516			SITE CODE: Covington	
Description: C3		Lab ID:	0012317-02	S	Campled: 01/19/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	SAT185	R	eceived: 01/23/20 12:26
Comments: Received at ambient				Α	nalyzed: 01/28/20 05:01
	Air Tox	cics by EPA	Compend	um Method TO-15	
	<u>Results</u>		<u>MDL</u>		
Analyte p	<u>pbv ug/m³</u>	<u>Flag</u>	<u>ppbv</u>		
Ethylene oxide 0.	260 0.47	LK	0.0250		

U.S. Environmental Protection Agen	cy, Region 4			FILE #: 4222	2.00
4244 International Pkwy, Suite 120				REPORTED:	02/20/20 12:31
Atlanta, GA 30354				SUBMITTED:	01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE CO	DE:
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE:	Covington
Description: C4		Lab ID:	0012317-03		Sampled: 01/19/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	A21067		Received: 01/23/20 12:26
Comments: Received at ambien	t				Analyzed: 01/28/20 06:06
	Air To	xics by EPA	Compend	ium Method	TO-15
	<u>Results</u>		MDL		
<u>Analyte</u>	<u>ppbv_ug/m³</u>	<u>Flag</u>	ppbv		
Ethylene oxide	0.181 0.33	LK	0.0250		

U.S. Environmental Protection Agency, R	legion 4			FILE #: 4	222.00	
4244 International Pkwy, Suite 120				REPORTE	D: 02/20/20 12	:31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20	to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE	CODE:	
PHONE: (404) 362-4912 FAX: (919	9) 541-0516			SITE CODE	E: Covin	gton
Description: C5		Lab ID:	0012317-04			Sampled: 01/19/20 23:59
Pressure @ Receipt: 0" Hg		Canister #:	5059			Received: 01/23/20 12:26
Comments: Received at ambient						Analyzed: 01/28/20 07:10
	Air Tox	ics by EPA	Compend	ium Metho	od TO-15	
	<u>Results</u>		<u>MDL</u>			
Analyte pp	<u>bv ug/m³</u>	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide 0.3	08 0.56		0.0250			

U.S. Environmental Protection Agency, Regi	on 4		FILE #: 4222.00
4244 International Pkwy, Suite 120			REPORTED: 02/20/20 12:31
Atlanta, GA 30354			SUBMITTED: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore			AQS SITE CODE:
PHONE: (404) 362-4912 FAX: (919) 5	41-0516		SITE CODE: Covington
Description: C2	Lab ID:	9122019-01	1 Sampled: 12/17/19 23:59
Pressure @ Receipt: 0" Hg	Canister :	#: 5033	Received: 12/20/19 12:44
Comments: Received at ambient			Analyzed: 12/29/19 03:28
	Air Toxics by El	PA Compend	dium Method TO-15
Re	<u>sults</u>	<u>MDL</u>	
Analyte ppbv	<u>ug/m³</u> <u>Flac</u>	g <u>ppbv</u>	L
Ethylene oxide 0.117	0.21 LK	0.0250	

U.S. Environmental Protection Agen	cy, Region 4			FILE #: 4	222.00	
4244 International Pkwy, Suite 120				REPORTE	D: 02/20/20 12	31
Atlanta, GA 30354				SUBMITTE	D: 01/03/20	to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE	CODE:	
PHONE: (404) 362-4912 FAX:	(919) 541-0516			SITE CODE	E: Coving	gton
Description: C3		Lab ID:	9122019-02			Sampled: 12/17/19 23:59
Pressure @ Receipt: 7.50" Hg		Canister #:	SAT164			Received: 12/20/19 12:44
Comments:						Analyzed: 12/29/19 04:32
	Air To	xics by EPA	Compend	ium Metho	od TO-15	
	<u>Results</u>		<u>MDL</u>			
<u>Analyte</u>	<u>ppbv_ug/m³</u>	<u>Flag</u>	<u>ppbv</u>			
Ethylene oxide	0.209 0.38		0.0250			

U.S. Environmental Protection Agency	, Region 4			FILE #: 4222.00	
4244 International Pkwy, Suite 120				REPORTED: 02/20/20	12:31
Atlanta, GA 30354				SUBMITTED: 01/03/2	0 to 12/20/19
ATTN: Ms. Jaime Gore				AQS SITE CODE:	
PHONE: (404) 362-4912 FAX: (919) 541-0516			SITE CODE: Cov	ington
Description: C4		Lab ID:	9122019-03		Sampled: 12/17/19 23:59
Pressure @ Receipt: 0" Hg		Canister #:	SAT012		Received: 12/20/19 12:44
Comments: Received at ambient					Analyzed: 12/29/19 05:36
	Air To	xics by EPA	Compend	um Method TO-15	
	<u>Results</u>		<u>MDL</u>		
<u>Analyte</u>	<u>ppbv</u> <u>ug/m³</u>	Flag	ppbv		
Ethylene oxide	0.106 0.19	LK	0.0250		

U.S. Environmental Protection Agency, Region 4		FILE #: 4222.00			
4244 International Pkwy, Suite 120		REPORTED: 02/20/20 12:31			
Atlanta, GA 30354		SUBMITTED: 01/03/20 to 12/20/19			
ATTN: Ms. Jaime Gore	Ms. Jaime Gore AQS SITE CODE:				
PHONE: (404) 362-4912 FAX: (919) 541-0516		SITE CODE: Covington			
Description: C5	Lab ID: 9122019-04	Sampled: 12/17/19 23:59			
Pressure @ Receipt: 8.50" Hg	Canister #: 5114	Received: 12/20/19 12:44			
Comments:		Analyzed: 12/29/19 06:40			
Air To	xics by EPA Compend	ium Method TO-15			
<u>Results</u>	MDL				
Analyte ppbv ug/m ³	<u>Flag</u> ppbv				

0.0250

NERG

Ethylene oxide

0.191

0.35

U.S. Environmental Protection Agency, Region 4	FILE #: 4222.00
4244 International Pkwy, Suite 120	REPORTED: 02/20/20 12:31
Atlanta, GA 30354	SUBMITTED: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore	AQS SITE CODE:
PHONE: (404) 362-4912 FAX: (919) 541-0516	SITE CODE: Covington

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
Air Toxics by EPA Compendium Met	hod TO-15 -	Quality Control				
Batch B0A0806 - Summa Canister Prep						
Blank (B0A0806-BLK1)			Prepared: 12/31/19	Analyzed: 01/08/20		
Ethylene oxide	ND	ppbv				U
Duplicate (B0A0806-DUP1)	Source	: 0010717-01	Prepared: 12/31/19	Analyzed: 01/09/20		
Ethylene oxide	0.151	ppbv	0.16	6.73	25	
Batch B0A0903 - Summa Canister Prep						
Blank (B0A0903-BLK1)			Prepared: 12/31/19	Analyzed: 01/09/20		
Ethylene oxide	ND	ppbv				U
Batch B0A1009 - Summa Canister Prep						
Blank (B0A1009-BLK1)			Prepared: 12/31/19	Analyzed: 01/10/20		
Ethylene oxide	ND	ppbv				U
Duplicate (B0A1009-DUP1)	Source	: 0010322-04	Prepared: 12/19/19	Analyzed: 01/10/20		
Ethylene oxide	0.224	ppbv	0.23	2.82	25	
Batch B0A1407 - Summa Canister Prep						
Blank (B0A1407-BLK1)			Prepared: 12/31/19	Analyzed: 01/14/20		
Ethylene oxide	ND	ppbv				U
Batch B0A2105 - Summa Canister Prep						
Blank (B0A2105-BLK1)			Prepared & Analyzed	d: 01/21/20		
Ethylene oxide	ND	ppbv				U
Batch B0A2304 - Summa Canister Prep						
Blank (B0A2304-BLK1)			Prepared & Analyzed	1: 01/23/20		
Ethylene oxide	ND	ppbv				U
Duplicate (B0A2304-DUP1)	Source	: 0011423-01	Prepared: 01/04/20	Analyzed: 01/23/20		
Ethylene oxide	0.254	ppbv	0.27	5.88	25	LK
Batch B0A2707 - Summa Canister Prep						
Blank (B0A2707-BLK1)			Prepared & Analyzed	l: 01/27/20		
Ethylene oxide	ND	ppbv	· ·	-		U
Batch B9L2803 - Summa Canister Prep						
Blank (B9L2803-BLK1)			Prepared & Analyzed	1: 12/28/19		
Ethylene oxide	ND	ppbv				U

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The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

U.S. Environmental Protection Agency, Region 4	FILE #: 4222.00
4244 International Pkwy, Suite 120	REPORTED: 02/20/20 12:31
Atlanta, GA 30354	SUBMITTED: 01/03/20 to 12/20/19
ATTN: Ms. Jaime Gore	AQS SITE CODE:
PHONE: (404) 362-4912 FAX: (919) 541-0516	SITE CODE: Covington

Analyte	Result	Units	% Difference	Limit (%)	Notes
Air Toxics by EPA Compendium Met	:hod TO-15 - (Quality Contro			
Sequence 1912061					
Calibration Check (1912061-CCV1)			Prepared & Analyzed	1: 12/28/19	
Ethylene oxide	2.12	ppbv	-15.0	30.00	
Sequence 2001022					
Calibration Check (2001022-CCV1)		l	Prepared & Analyzed	1: 01/08/20	
Ethylene oxide	2.40	ppbv	-3.9	30.00	
Sequence 2001026					
Calibration Check (2001026-CCV1)		1	Prepared & Analyzed	l: 01/09/20	
Ethylene oxide	2.40	ppbv	-4.1	30.00	
Sequence 2001032					
Calibration Check (2001032-CCV1)		1	Prepared & Analyzed	l: 01/10/20	
Ethylene oxide	2.48	ppbv	-0.8	30.00	
Ethylene oxide	2.48	ppbv	-0.8	30.00	
Sequence 2001043					
Calibration Check (2001043-CCV1)		1	Prepared & Analyzed	l: 01/14/20	
Ethylene oxide	2.55	ppbv	2.1	30.00	
Sequence 2001057					
Calibration Check (2001057-CCV1)		1	Prepared & Analyzed	l: 01/21/20	
Ethylene oxide	3.14	ppbv	25.7	30.00	
Sequence 2001063					
Calibration Check (2001063-CCV1)		1	Prepared & Analyzed	l: 01/23/20	
Ethylene oxide	2.92	ppbv	16.7	30.00	
Sequence 2001070					
Calibration Check (2001070-CCV1)		1	Prepared & Analyzed	l: 01/27/20	
Ethylene oxide	2.77	ppbv	10.7	30.00	

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

NERG

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912 **FAX:** (919) 541-0516

 FILE #: 4222.00

 REPORTED: 02/20/20 12:31

 SUBMITTED: 01/03/20 to 12/20/19

 AQS SITE CODE:

 SITE CODE:

 Covington

Notes and Definitions

U Under Detection Limit

LK Analyte identified; Reported value may be biased high.

ND Analyte NOT DETECTED

NR Not Reported

MDL Method Detection Limit

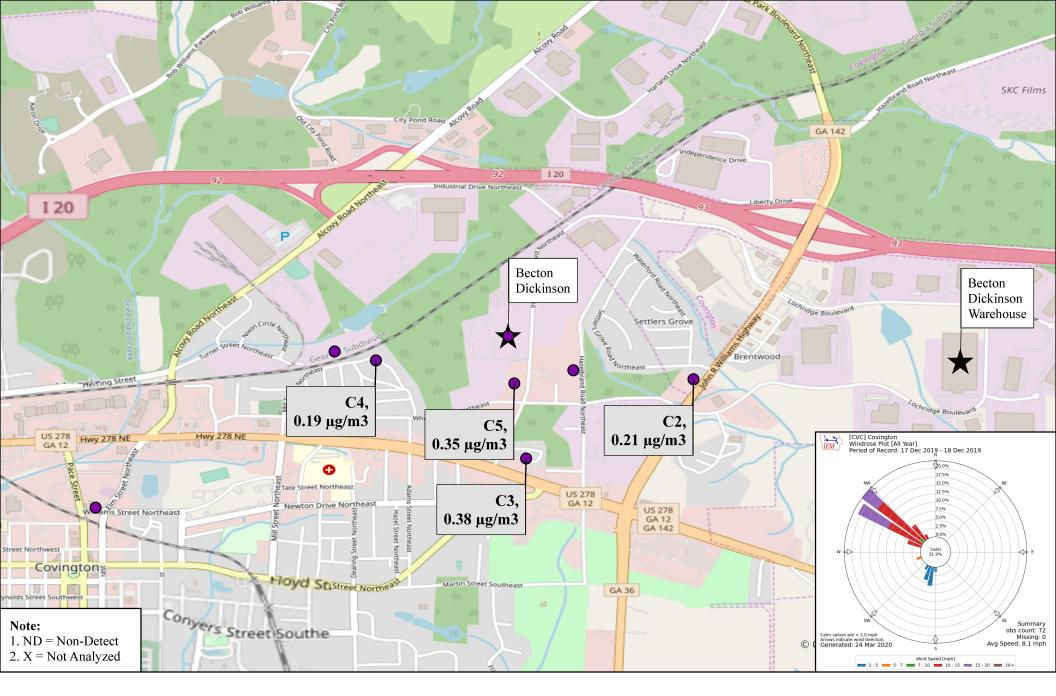
RPD Relative Percent Difference

Note: The test results meet all requirements of NELAC; however the following analytes are not accredited: 1,2,4-trimethylbenzene, 1,2-dibromoethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-butadiene, acetylene, acrolein, bromochloromethane, bromodichloromethane, bromoform, carbon disulfide, dibromochloromethane, dichlorodifluoromethane, dichlorotetrafluoroethane, ethyl acrylate, ethyl tert butyl ether, ethylene oxide, hexachloro-1,3-butadiene, n-octane, propylene, tert amyl methyl ether, tetrachloroethylene, trans-1,2-dichloroethylene, trichlorofluoromethane, and trichlorotrufluoroethane.

Eastern Research Group

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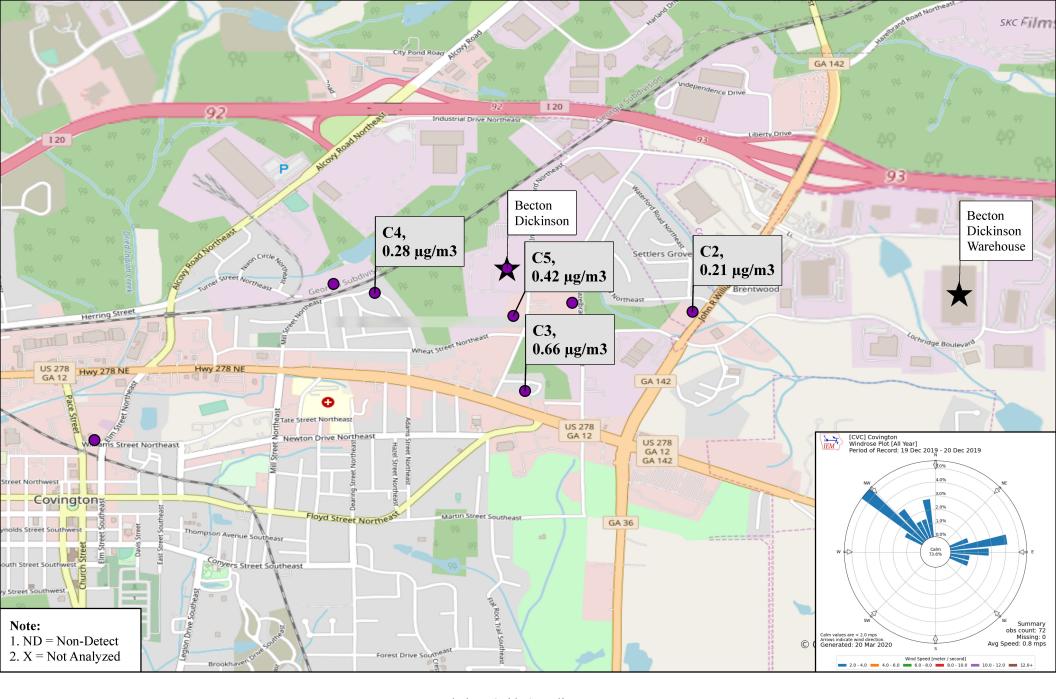
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

12/17/2019

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





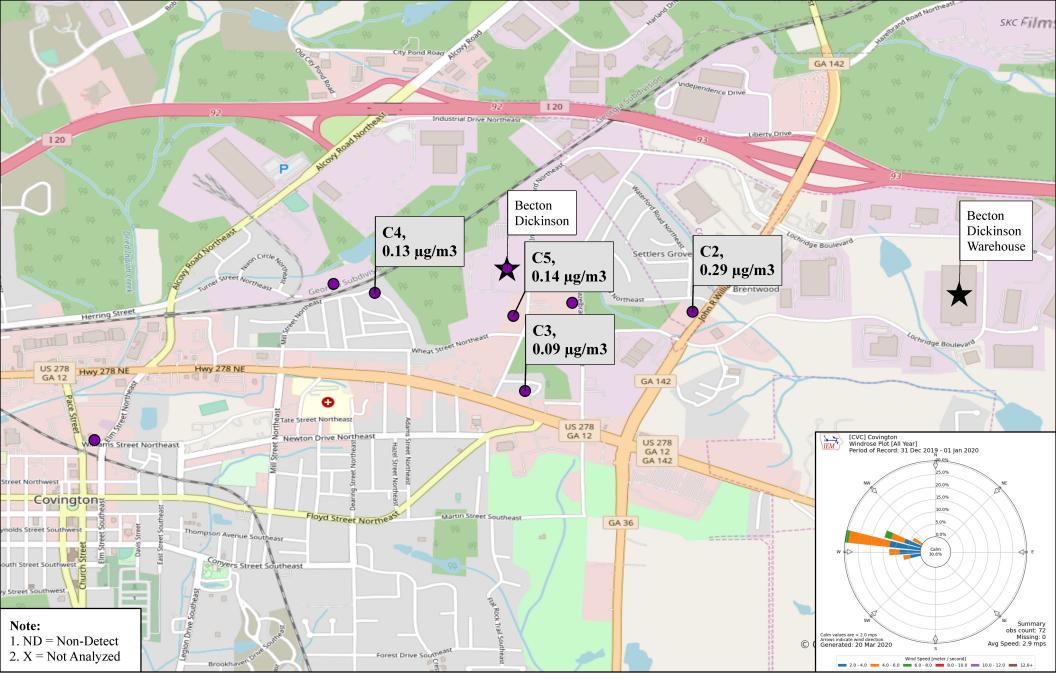
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

12/19/2019

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





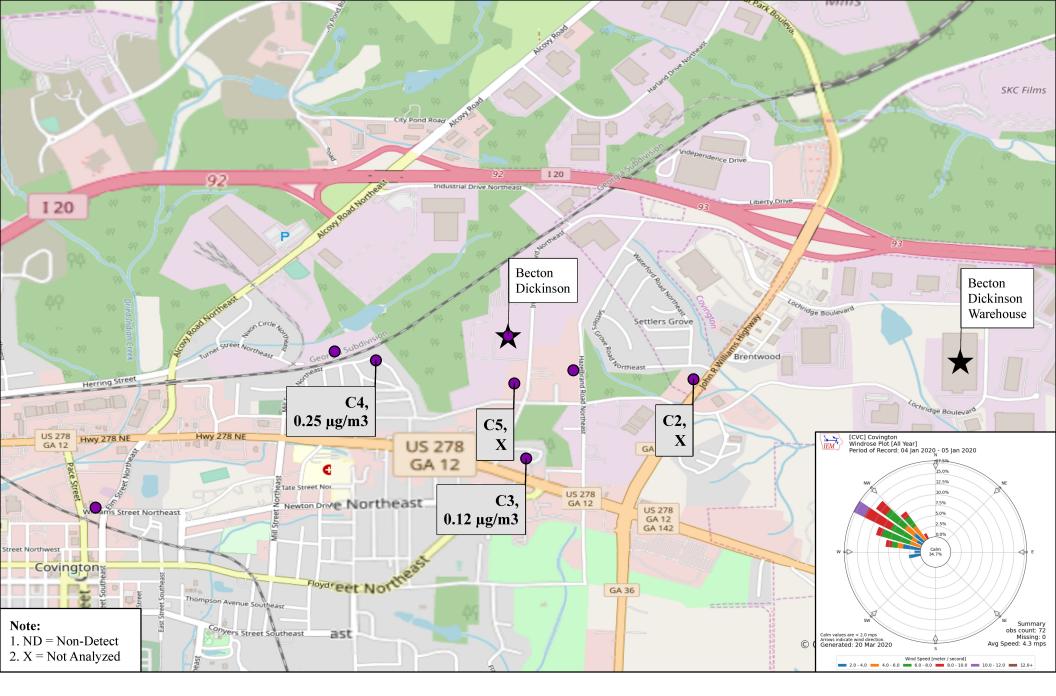
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

12/31/2019

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





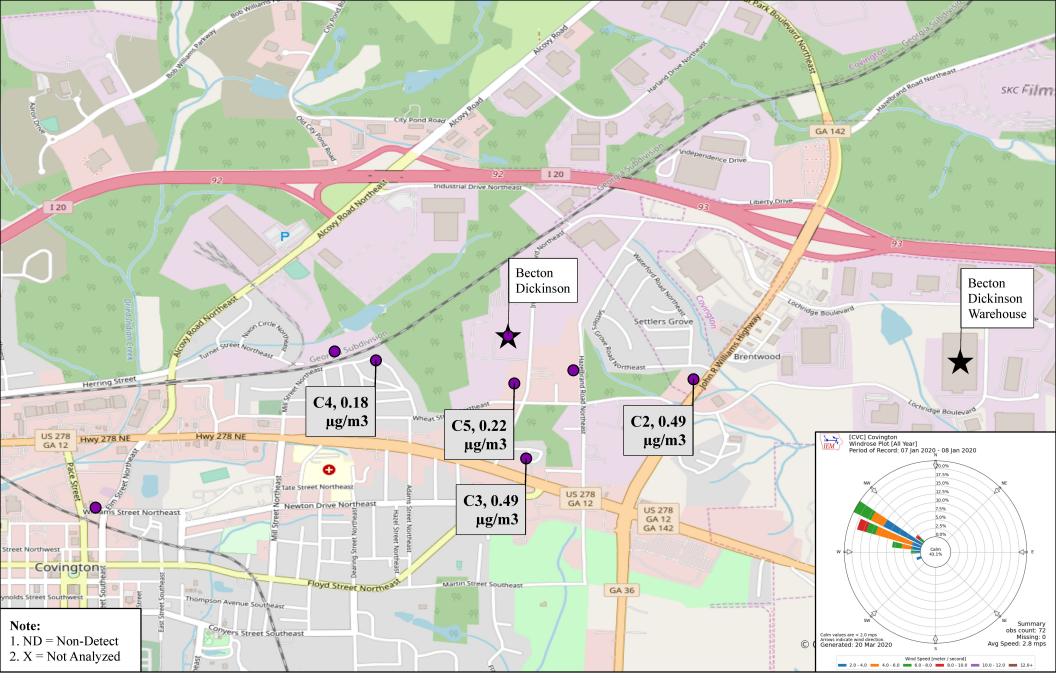
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

01/04/2020

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





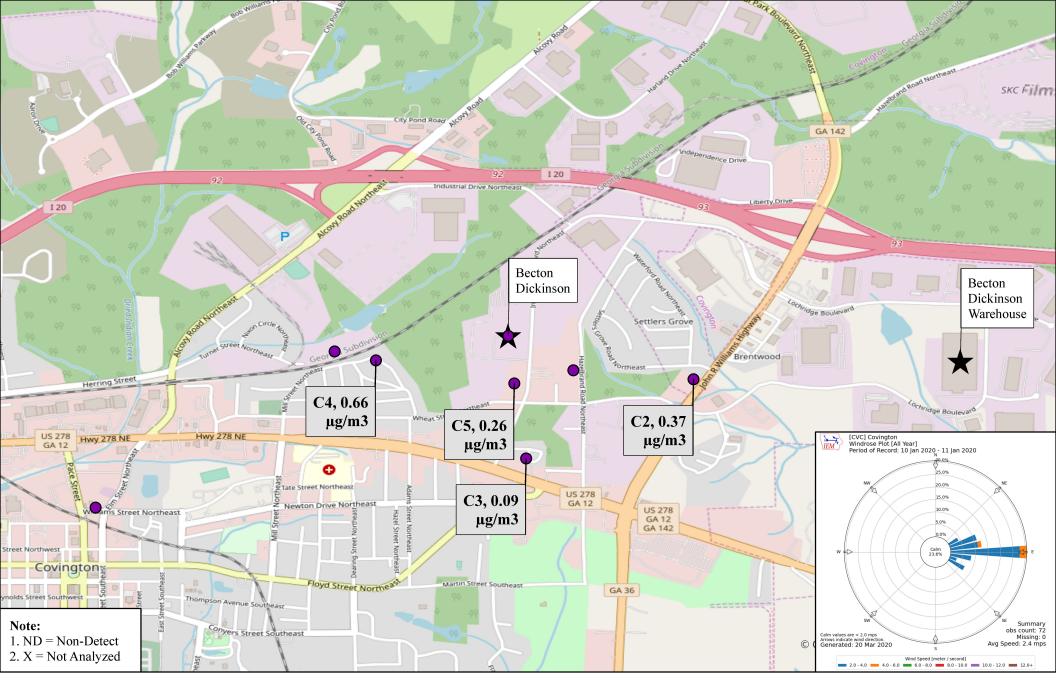
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

01/07/2020

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

01/10/2020

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





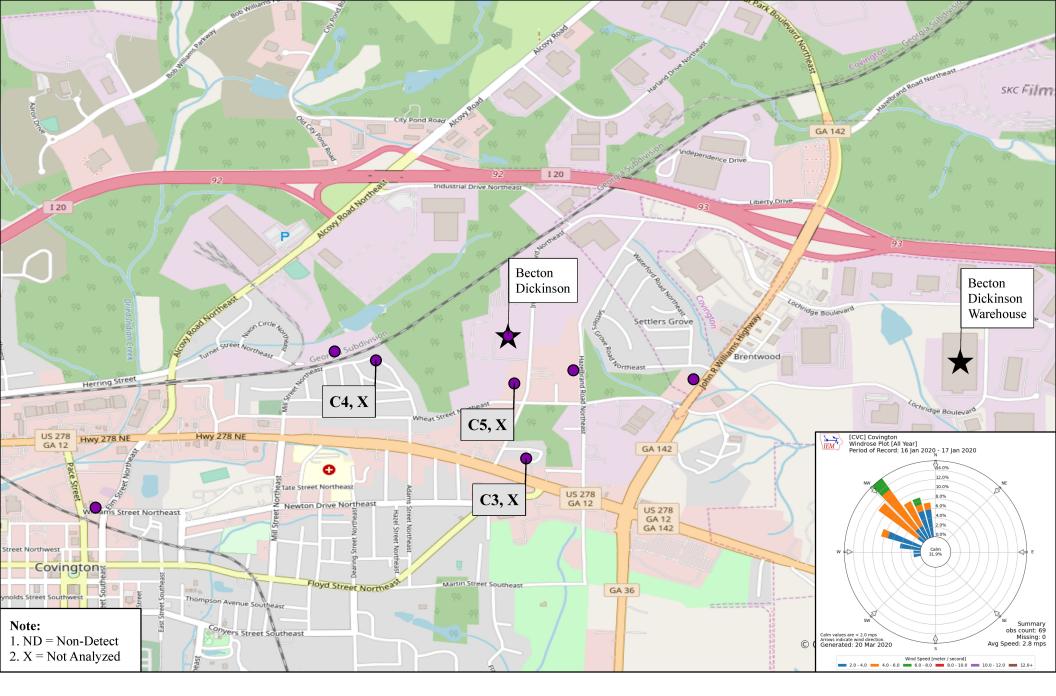
Ethylene Oxide Sampling Covington, GA

0.17 0.34 N Miles Site ID, Concentration (µg/m3)

0

01/14/2020 Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group



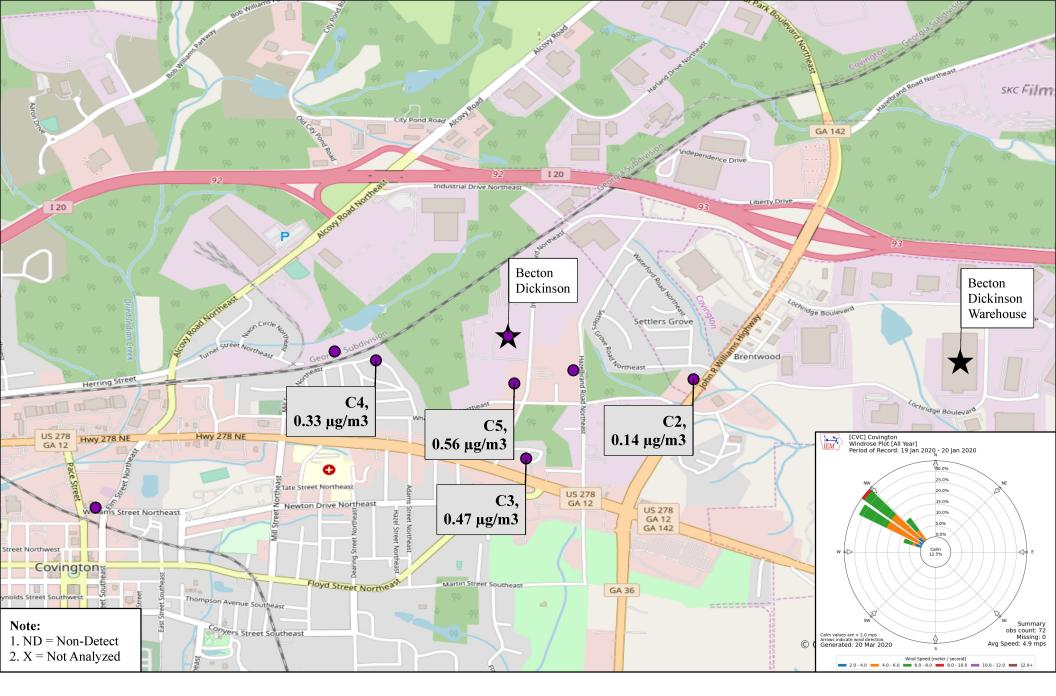


Ethylene Oxide Sampling Covington, GA

 $0 \quad 0.17 \quad 0.34$ Miles
N
Site ID, Concentration (μ g/m3)

01/16/2020 Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





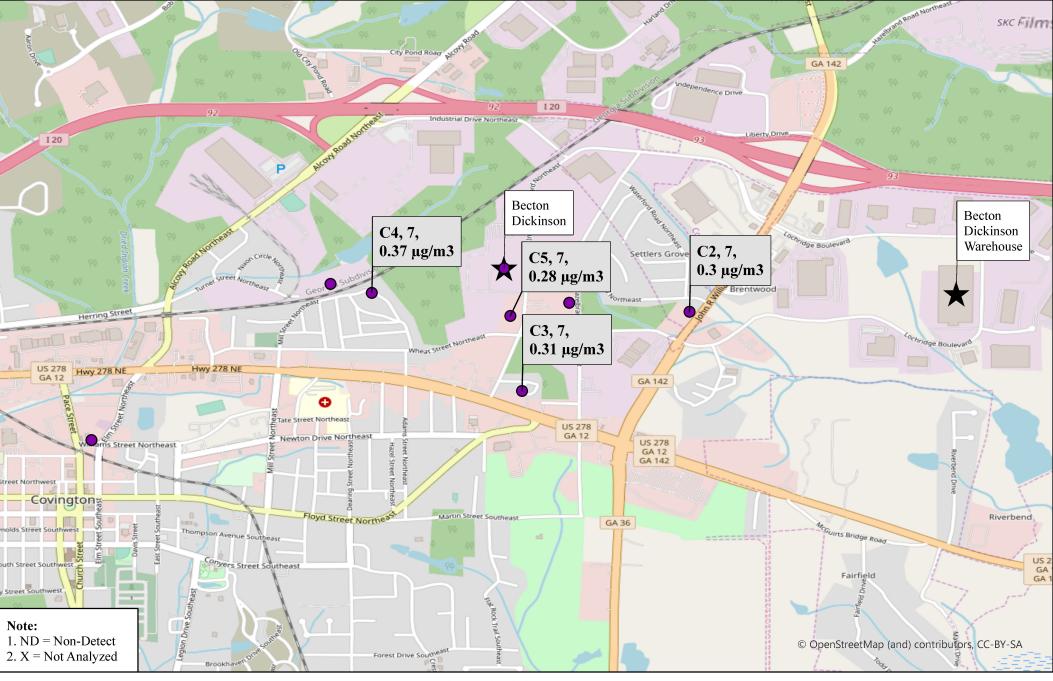
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling Covington, GA

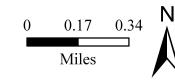
01/19/2020

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group





Ethylene Oxide Sampling Covington, GA



Site ID, Number of Samples, Concentration (μg/m3)

December 2019 Site Average Values Note: Not detectable values were included in average calculations as a value of 0.

Sampled By: Georgia Environmental Protection Division Analyzed By: Eastern Research Group

