

November 5, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Covington August 25-31, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of August 19-31, 2020 by the Ambient Monitoring Program in the Covington area to characterize the EtO concentration. Each of the samples were sent to Eastern Research Group (ERG) for analysis.

The Qualifier code of "2" was given to 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. The sample listed as AN indicate that the sampler malfunctioned while collecting sample. No samples were taken at location C1, C6, C7, C8, or C9 during this period.

Location		Date		Qualifier		EtO Concentration (ug/m ³)
C2		08/19/2020				AF
C2		08/25/2020				AF
C2		08/31/2020				0.15
C3		08/19/2020				AF
C3		08/25/2020				AF
C3		08/31/2020		2		0.30
C4		08/19/2020				AN
C4		08/25/2020				0.55
C4		08/31/2020				0.51
C5		08/19/2020				AF
C5		08/25/2020				AF
C5		08/31/2020				0.19

If you have any questions, please let me know.

DGO/do



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

October 06, 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 09/02/20 12:17 through 09/04/20 12:57.

Values below the MDL for QC results in this report are recorded as ND, however the actual values are reported in the accompanying Excel report with a "U" flag (Under the detection limit). The actual values are reported in AQS.

This test is accredited under the 2016 TNI Standard for Environmental Laboratories (FL DOH Certification # E87673). 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

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 10/06/20 13:49

SUBMITTED: 09/02/20 to 09/04/20

AQS SITE CODE:

SITE CODE: Covington

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
C4	0090239-01	Air	08/25/20 23:59	09/02/20 12:17
C2	0090413-01	Air	08/31/20 23:59	09/04/20 12:57
C3	0090413-02	Air	08/31/20 23:59	09/04/20 12:57
C4	0090413-03	Air	08/31/20 23:59	09/04/20 12:57
C5	0090413-04	Air	08/31/20 23:59	09/04/20 12:57



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 10/06/20 13:49

SUBMITTED: 09/02/20 to 09/04/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0090239-01

Sampled: 08/25/20 23:59

Pressure @ Receipt: 5.50" Hg

Canister #: 5045

Received: 09/02/20 12:17

Comments:

Analyzed: 09/09/20 19:04

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.305	0.55		0.0285



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 10/06/20 13:49

SUBMITTED: 09/02/20 to 09/04/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0090413-01

Sampled: 08/31/20 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: 19276

Received: 09/04/20 12:57

Comments:

Analyzed: 09/09/20 21:48

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.0850	0.15		0.0285



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 10/06/20 13:49

SUBMITTED: 09/02/20 to 09/04/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0090413-02

Sampled: 08/31/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: A21026

Received: 09/04/20 12:57

Comments: Received at ambient pressure

Analyzed: 09/09/20 22:43

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.167	0.30		0.0285



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 10/06/20 13:49

SUBMITTED: 09/02/20 to 09/04/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0090413-03

Sampled: 08/31/20 23:59

Pressure @ Receipt: 5.00" Hg

Canister #: A22328

Received: 09/04/20 12:57

Comments:

Analyzed: 09/09/20 23:38

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.283	0.51		0.0285



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 10/06/20 13:49

SUBMITTED: 09/02/20 to 09/04/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0090413-04

Sampled: 08/31/20 23:59

Pressure @ Receipt: 3.50" Hg

Canister #: 18837

Received: 09/04/20 12:57

Comments:

Analyzed: 09/10/20 00:33

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.106	0.19		0.0285



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 10/06/20 13:49
SUBMITTED: 09/02/20 to 09/04/20
AQS SITE CODE:
SITE CODE: Covington

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
---------	--------	-------	------------------	-----	--------------	-------

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Batch B0I0910 - Summa Canister Prep

Blank (B0I0910-BLK1)

Prepared & Analyzed: 09/09/20

Ethylene oxide	ND	ppbv				U
----------------	----	------	--	--	--	---



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 10/06/20 13:49
SUBMITTED: 09/02/20 to 09/04/20
AQS SITE CODE:
SITE CODE: Covington

Analyte	Result	Units	% Difference	Limit (%)	Notes
---------	--------	-------	--------------	-----------	-------

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Sequence 2009019

Calibration Check (2009019-CCV1)

Prepared & Analyzed: 09/09/20

Ethylene oxide	2.96	ppbv	18.5	30.00	
----------------	------	------	------	-------	--



CERTIFICATE OF ANALYSIS

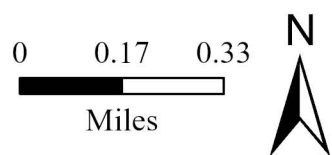
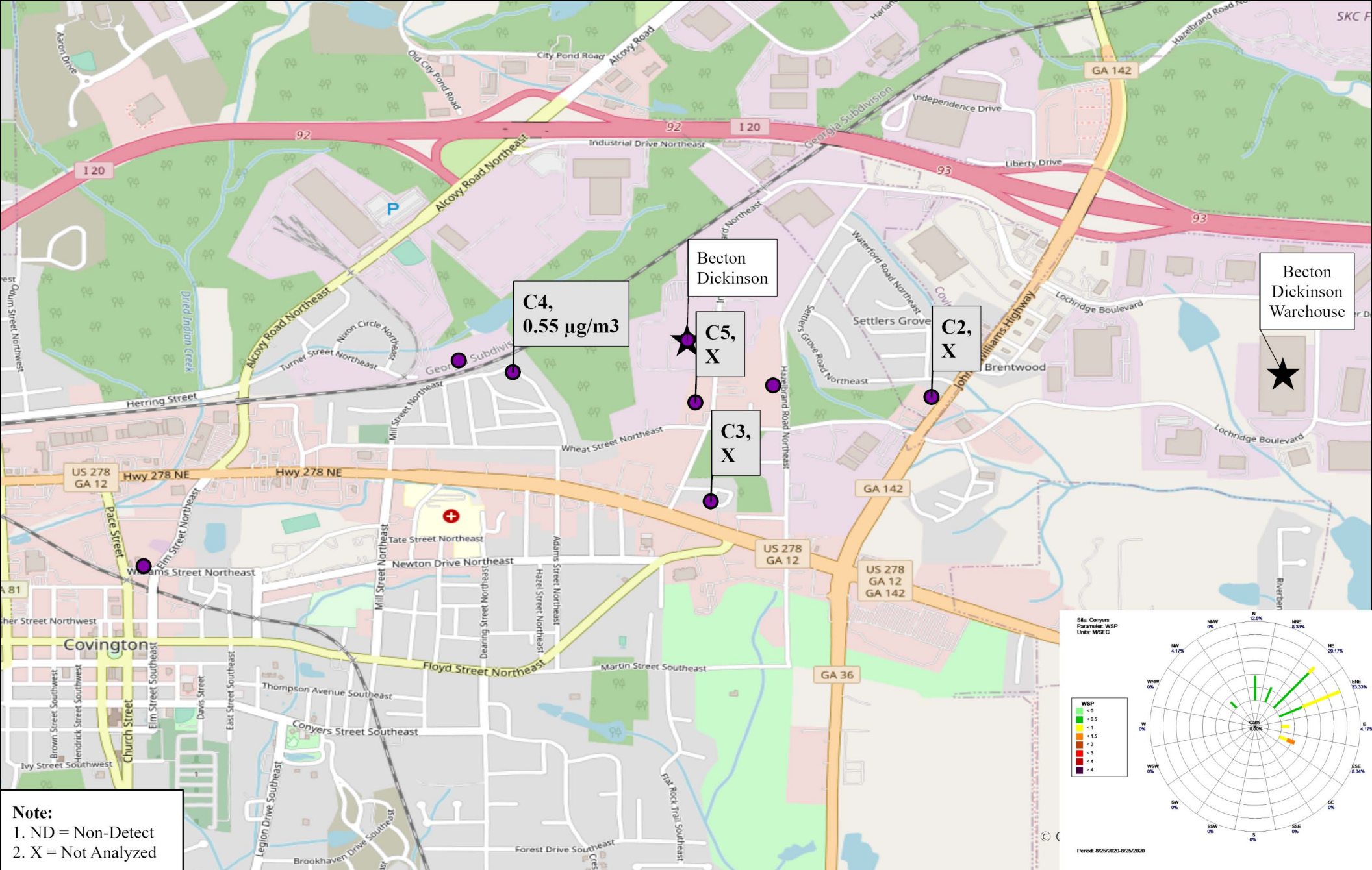
U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 10/06/20 13:49
SUBMITTED: 09/02/20 to 09/04/20
AQS SITE CODE:
SITE CODE: Covington

Notes and Definitions

U	Under Detection Limit
ND	Analyte NOT DETECTED
NR	Not Reported
MDL	Method Detection Limit
RPD	Relative Percent Difference

Note: This test is accredited under the 2016 TNI Standard; however the following analytes are not accredited: acetylene, bromodichloroethane, dichlorotetrafluoromethane, ethyl tert butyl ether, n-octane, tert amyl methyl ether, trichlorofluoroethane, and bromochloromethane.



Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling
Covington, GA

08/25/2020

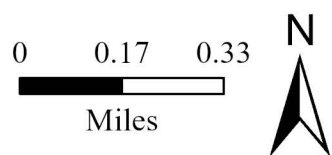
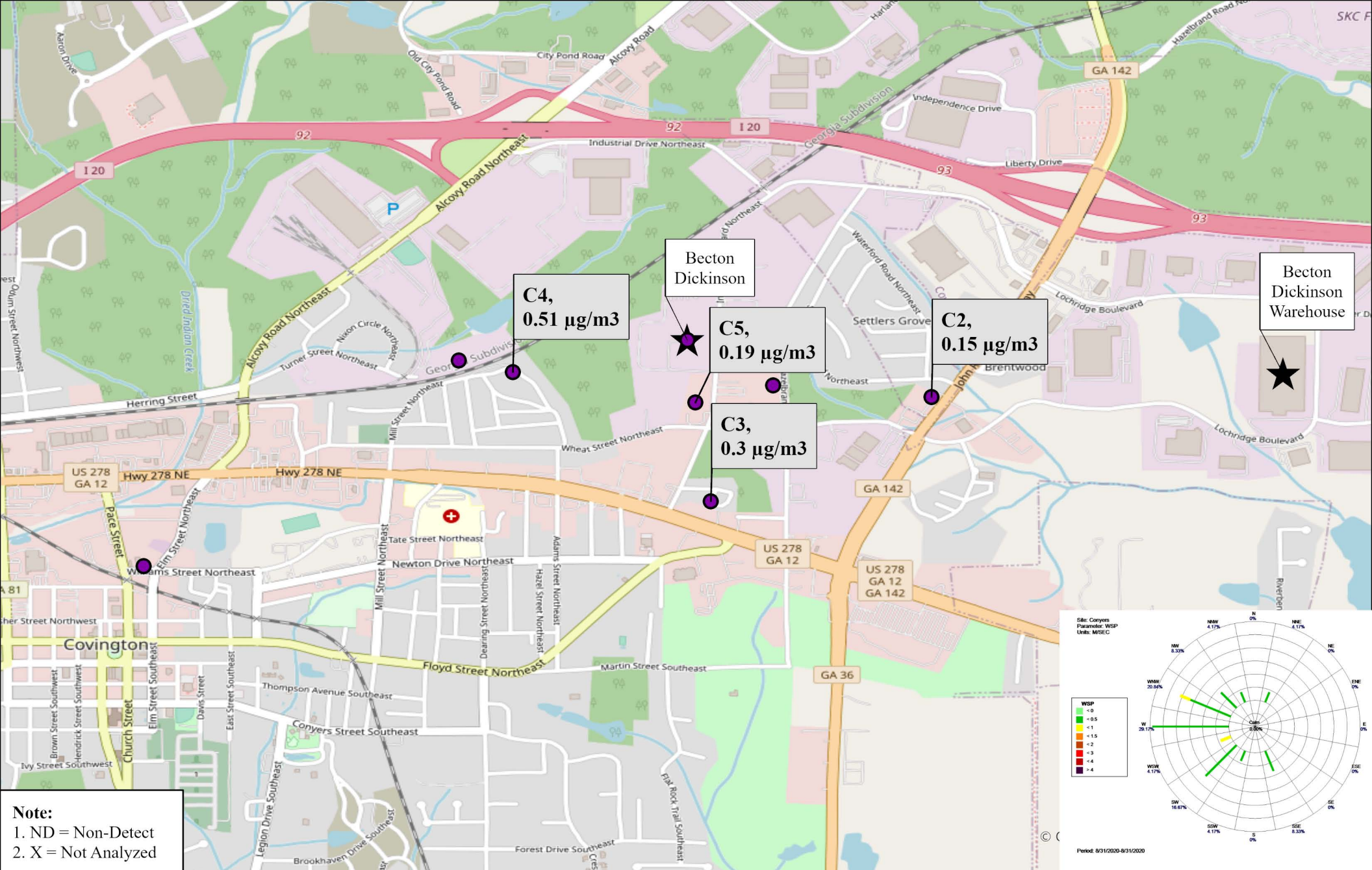
Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



Site ID, Concentration ($\mu\text{g}/\text{m}^3$)

Ethylene Oxide Sampling
Covington, GA

08/31/2020

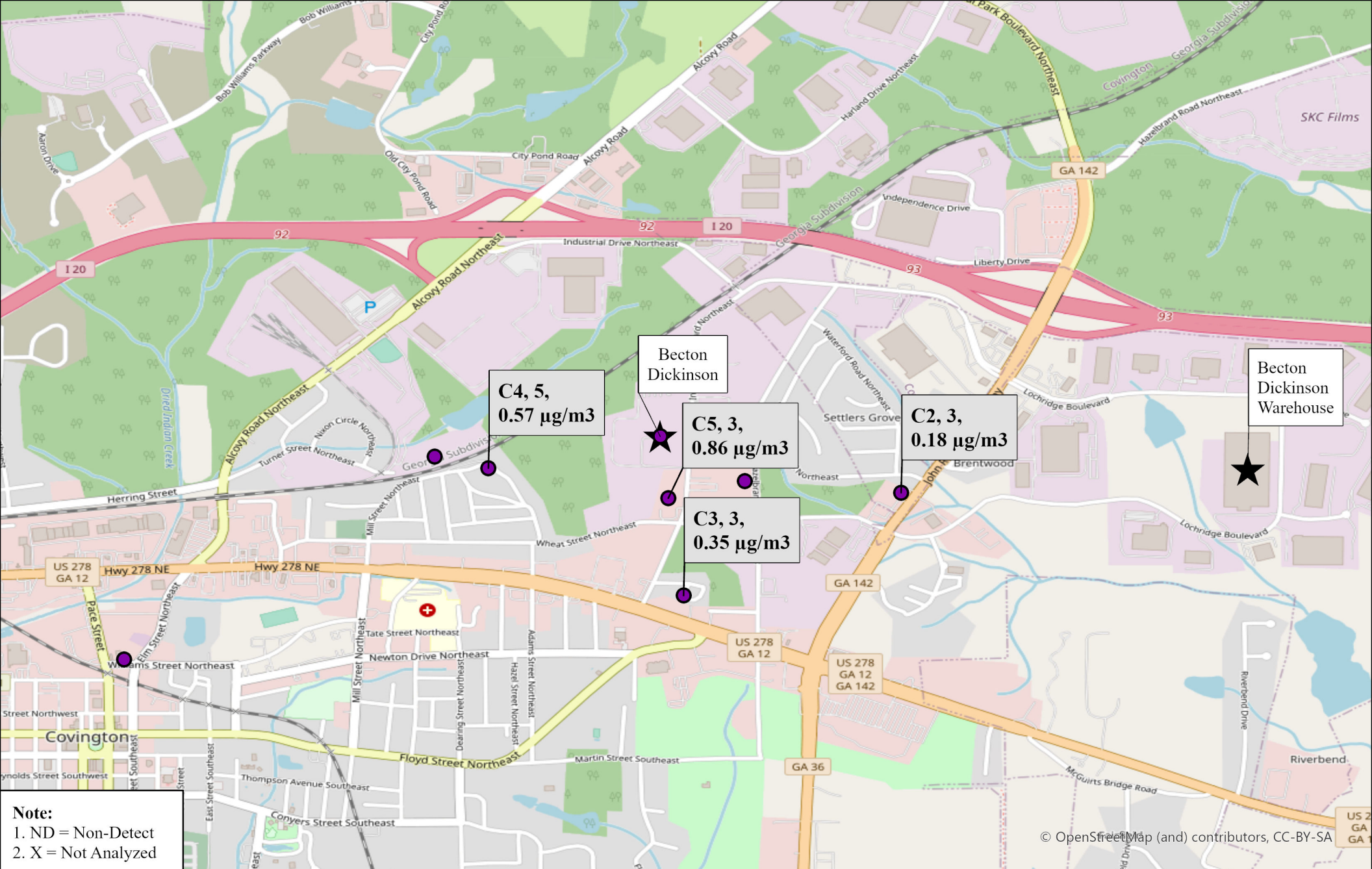
Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



Ethylene Oxide Sampling Covington, GA

August 2020 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