

August 12, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Covington June 14-20, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of June 14-20, 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. No samples were taken at location C1, C6, C8, or C9 during this period.

Location	Date	Qualifier	EtO Concentration (ug/m ³)
C2	06/14/2020	2	0.51
C2	06/20/2020		1.04
C3	06/14/2020		0.50
C3	06/20/2020		1.07
C4	06/14/2020	2	0.87
C4	06/20/2020	2	0.73
C5	06/14/2020		0.62
C5	06/20/2020		0.51
C7	06/20/2020	2	1.67

If you have any questions, please let me know.

DGO/do



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

July 16, 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 06/19/20 10:30 through 07/06/20 09:56.

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

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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: 07/16/20 11:10

SUBMITTED: 06/19/20 to 07/06/20

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>
C2	0061908-01	Air	06/14/20 23:59	06/19/20 10:30
C3	0061908-02	Air	06/14/20 23:59	06/19/20 10:30
C4	0061908-03	Air	06/14/20 23:59	06/19/20 10:30
C5	0061908-04	Air	06/14/20 23:59	06/19/20 10:30
C2	0070602-01	Air	06/20/20 23:59	07/06/20 09:56
C3	0070602-02	Air	06/20/20 23:59	07/06/20 09:56
C4	0070602-03	Air	06/20/20 23:59	07/06/20 09:56
C5	0070602-04	Air	06/20/20 23:59	07/06/20 09:56
C7 - SA	0070602-05	Air	06/20/20 23:59	07/06/20 09:56
Covington FB	0070602-06	Air	06/24/20 23:59	07/06/20 09:56



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AQS SITE CODE:

SITE CODE: Covington

Description: C2	Lab ID: 0061908-01	Sampled: 06/14/20 23:59
Pressure @ Receipt: 0.00" Hg	Canister #: SAT023	Received: 06/19/20 10:30
Comments: ambient at field recovery and lab recovery		Analyzed: 06/26/20 17:34

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	0.281	0.51		0.0285



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REPORTED: 07/16/20 11:10

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AQS SITE CODE:

SITE CODE: Covington

Description: C3	Lab ID: 0061908-02	Sampled: 06/14/20 23:59
Pressure @ Receipt: 5.50" Hg	Canister #: SAT123	Received: 06/19/20 10:30
Comments:		Analyzed: 06/26/20 18:29

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	0.278	0.50		0.0285



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AQS SITE CODE:

SITE CODE: Covington

Description: C4	Lab ID: 0061908-03	Sampled: 06/14/20 23:59
Pressure @ Receipt: 9.00" Hg	Canister #: SAT012	Received: 06/19/20 10:30
Comments:		Analyzed: 06/26/20 19:25

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	0.479	0.87		0.0285



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SUBMITTED: 06/19/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0061908-04

Sampled: 06/14/20 23:59

Pressure @ Receipt: 4.50" Hg

Canister #: SAT092

Received: 06/19/20 10:30

Comments:

Analyzed: 06/26/20 20:20

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	0.344	0.62		0.0285



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REPORTED: 07/16/20 11:10

SUBMITTED: 06/19/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2	Lab ID: 0070602-01	Sampled: 06/20/20 23:59
Pressure @ Receipt: 3.00" Hg	Canister #: SAT028	Received: 07/06/20 09:56
Comments:		Analyzed: 07/07/20 20:06

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	0.574	1.04		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:10

SUBMITTED: 06/19/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0070602-02

Sampled: 06/20/20 23:59

Pressure @ Receipt: 6.00" Hg

Canister #: SAT114

Received: 07/06/20 09:56

Comments:

Analyzed: 07/07/20 21:01

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	0.592	1.07		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:10

SUBMITTED: 06/19/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4	Lab ID: 0070602-03	Sampled: 06/20/20 23:59
Pressure @ Receipt: 9.00" Hg	Canister #: 35131	Received: 07/06/20 09:56
Comments:		Analyzed: 07/07/20 21:57

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	0.402	0.73		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:10

SUBMITTED: 06/19/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C7 - SA

Lab ID: 0070602-05

Sampled: 06/20/20 23:59

Pressure @ Receipt: 6.50" Hg

Canister #: SAT165

Received: 07/06/20 09:56

Comments:

Analyzed: 07/07/20 23:47

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	0.926	1.67		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:10

SUBMITTED: 06/19/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: Covington FB

Lab ID: 0070602-06

Sampled: 06/24/20 23:59

Pressure @ Receipt: 29.50" Hg

Canister #: SAT056

Received: 07/06/20 09:56

Comments: Field Blank

Analyzed: 07/07/20 17:20

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	ND	ND	U	0.0285



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FILE #: 4222.00
REPORTED: 07/16/20 11:10
SUBMITTED: 06/19/20 to 07/06/20
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						
<i>Batch B0F2607 - Summa Canister Prep</i>						
Blank (B0F2607-BLK1)			Prepared & Analyzed: 06/26/20			
Ethylene oxide	ND	ppbv				U
<i>Batch B0G0705 - Summa Canister Prep</i>						
Blank (B0G0705-BLK1)			Prepared & Analyzed: 07/07/20			
Ethylene oxide	ND	ppbv				U
Duplicate (B0G0705-DUP1)			Source: 0070602-05 Prepared: 06/20/20 Analyzed: 07/08/20			
Ethylene oxide	0.916	ppbv	0.93	1.06	25	



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FILE #: 4222.00
REPORTED: 07/16/20 11:10
SUBMITTED: 06/19/20 to 07/06/20
AQS SITE CODE:
SITE CODE: Covington

Analyte	Result	Units	% Difference	Limit (%)	Notes
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Air Toxics by EPA Compendium Method TO-15 - Quality Control

Sequence 2006073

Calibration Check (2006073-CCV1)

Prepared & Analyzed: 06/26/20

Ethylene oxide	2.47	ppbv	-1.3	30.00	
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Sequence 2007010

Calibration Check (2007010-CCV1)

Prepared & Analyzed: 07/07/20

Ethylene oxide	2.69	ppbv	7.6	30.00	
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CERTIFICATE OF ANALYSIS

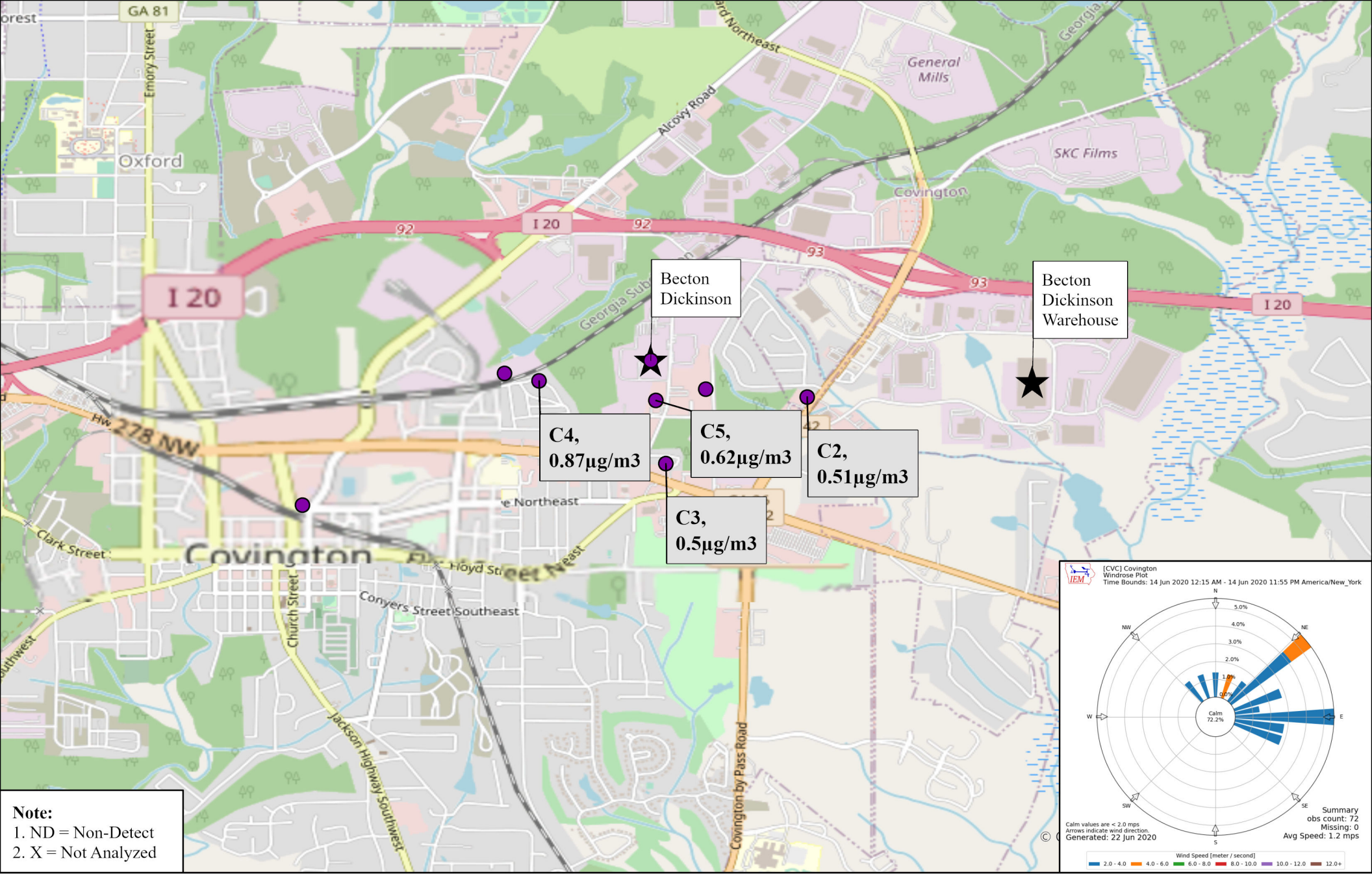
U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 07/16/20 11:10
SUBMITTED: 06/19/20 to 07/06/20
AQS SITE CODE:
SITE CODE: Covington

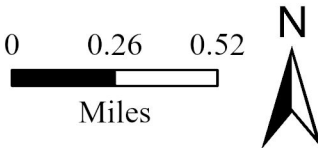
Notes and Definitions

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

Note: 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 trichlorotrifluoroethane.



Note:
 1. ND = Non-Detect
 2. X = Not Analyzed

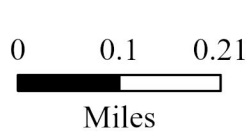
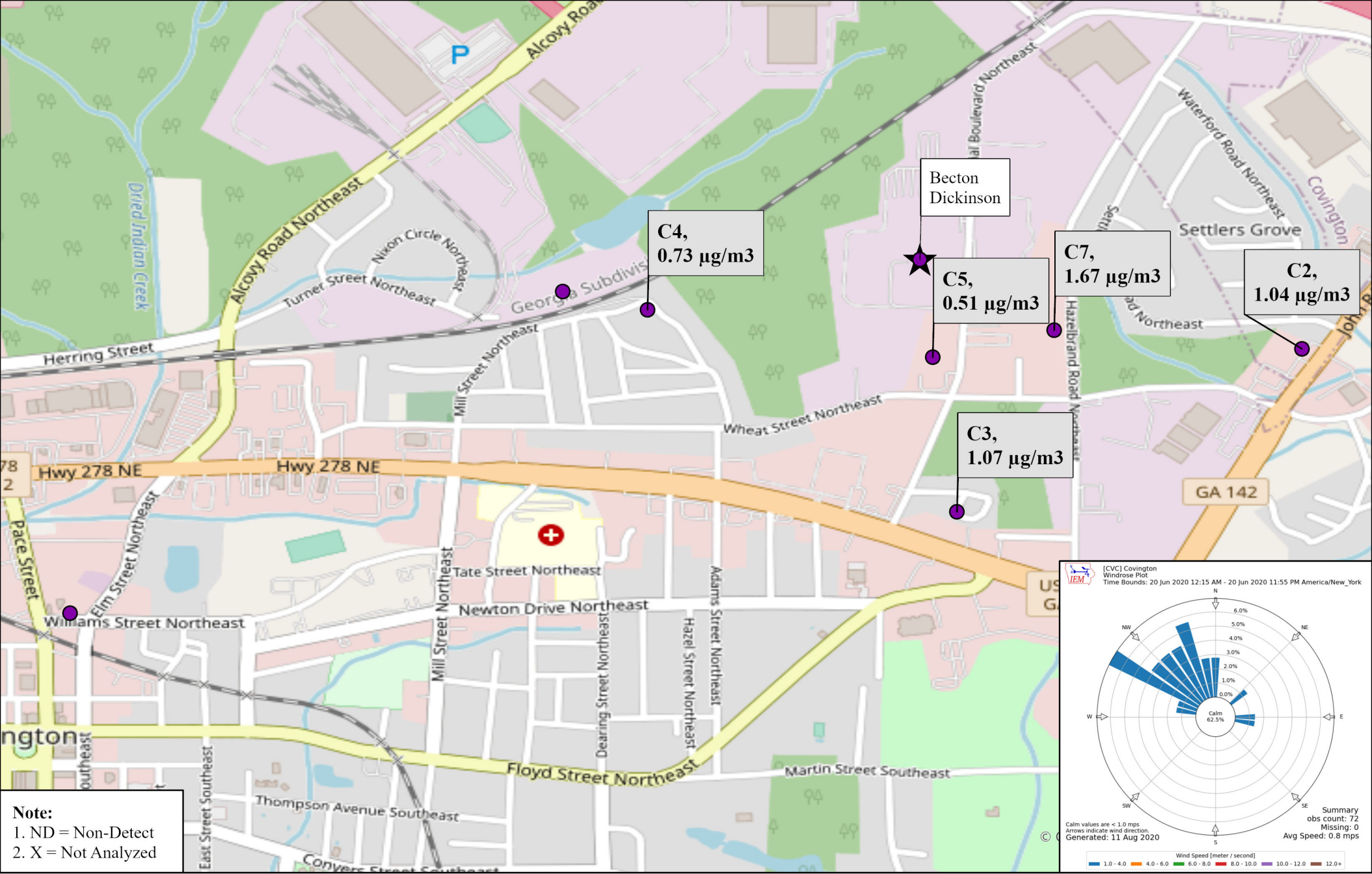


Site ID, Concentration ($\mu\text{g}/\text{m}^3$)

Ethylene Oxide Sampling
 Covington, GA

06/14/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group





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

Ethylene Oxide Sampling
 Covington, GA

06/20/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group

