

May 13, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Covington January 16, 2020- February 27, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were taken at our Covington monitoring station in January and February 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 sample values for Location C2 on 1/16/2020 was omitted in the previous data package from ERG and is included below. The samples listed as AA indicate a sample pressure out of limits. No samples were taken at location C1, C6, C8, or C9 during this period.

| Location | | Date | | Qualifier | | EtO Concentration (ug/m ³) |
|----------|--|------------|--|-----------|--|---|
| C2 | | 01/16/2020 | | | | 0.60 |
| C2 | | 01/22/2020 | | | | 0.43 |
| C2 | | 01/25/2020 | | | | 0.84 |
| C2 | | 01/28/2020 | | | | 1.01 |
| C2 | | 01/30/2020 | | | | AA |
| C2 | | 02/03/2020 | | | | 0.33 |
| C2 | | 02/09/2020 | | | | 0.70 |
| C2 | | 02/15/2020 | | | | 0.15 |
| C2 | | 02/21/2020 | | | | 0.48 |
| C2 | | 02/27/2020 | | | | 0.41 |
| | | | | | | |
| C3 | | 01/22/2020 | | 2 | | 0.40 |
| C3 | | 01/25/2020 | | 2 | | 0.51 |
| C3 | | 01/28/2020 | | | | 0.16 |
| C3 | | 01/30/2020 | | | | 0.17 |
| C3 | | 02/03/2020 | | | | 0.08 |
| C3 | | 02/09/2020 | | | | 0.54 |

| Location | | Date | | Qualifier | | EtO Concentration (ug/m ³) |
|----------|--|------------|--|-----------|--|---|
| C3 | | 02/15/2020 | | | | 0.29 |
| C3 | | 02/21/2020 | | | | 0.49 |
| C3 | | 02/27/2020 | | LK | | 0.18 |
| | | | | | | |
| C4 | | 01/22/2020 | | 2 | | 0.78 |
| C4 | | 01/25/2020 | | | | AA |
| C4 | | 01/28/2020 | | 2 | | 0.55 |
| C4 | | 01/30/2020 | | 2 | | 0.61 |
| C4 | | 02/03/2020 | | 2 | | 0.17 |
| C4 | | 02/09/2020 | | 2 | | 0.96 |
| C4 | | 02/15/2020 | | 2 | | 0.85 |
| C4 | | 02/21/2020 | | 2 | | 0.71 |
| C4 | | 02/27/2020 | | LK, 2 | | 0.16 |
| C4 QA | | 01/22/2020 | | 2 | | 1.01 |
| C4 QA | | 02/15/2020 | | | | 0.82 |
| | | | | | | |
| C5 | | 01/22/2020 | | 2 | | 0.28 |
| C5 | | 01/25/2020 | | 2 | | 0.18 |
| C5 | | 01/28/2020 | | | | 0.77 |
| C5 | | 01/30/2020 | | | | 0.36 |
| C5 | | 02/03/2020 | | | | 0.33 |
| C5 | | 02/09/2020 | | 2 | | 0.14 |
| C5 | | 02/15/2020 | | 2 | | 0.72 |
| C5 | | 02/21/2020 | | 2 | | 1.13 |
| C5 | | 02/27/2020 | | LK, 2 | | 0.21 |
| | | | | | | |
| C7 | | 02/27/2020 | | LK | | 0.28 |

If you have any questions, please let me know.

DGO/do



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

March 24, 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 01/29/20 10:52 through 03/06/20 10:50.

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: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

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 | 0012927-01 | Air | 01/16/20 23:59 | 01/29/20 10:52 |
| C2 | 0012927-05 | Air | 01/22/20 23:59 | 01/29/20 10:52 |
| C3 | 0012927-06 | Air | 01/22/20 23:59 | 01/29/20 10:52 |
| C4 | 0012927-07 | Air | 01/22/20 23:59 | 01/29/20 10:52 |
| C4 QA | 0012927-08 | Air | 01/22/20 23:59 | 01/29/20 10:52 |
| C5 | 0012927-09 | Air | 01/22/20 23:59 | 01/29/20 10:52 |
| C2 | 0013008-01 | Air | 01/25/20 23:59 | 01/30/20 10:57 |
| C5 | 0013008-02 | Air | 01/25/20 23:59 | 01/30/20 10:57 |
| C3 | 0013117-01 | Air | 01/25/20 23:59 | 01/31/20 12:39 |
| C4 | 0013117-02 | Air | 01/25/20 23:59 | 01/31/20 12:39 |
| Covington-FS | 0013117-03 | Air | 01/27/20 23:59 | 01/31/20 12:39 |
| C2 | 0020524-01 | Air | 01/28/20 23:59 | 02/05/20 11:53 |
| C3 | 0020524-02 | Air | 01/28/20 23:59 | 02/05/20 11:53 |
| C4 | 0020524-03 | Air | 01/28/20 23:59 | 02/05/20 11:53 |
| C5 | 0020524-04 | Air | 01/28/20 23:59 | 02/05/20 11:53 |
| C2 | 0020524-05 | Air | 01/30/20 23:59 | 02/05/20 11:53 |
| C4 | 0020524-06 | Air | 01/30/20 23:59 | 02/05/20 11:53 |
| C5 | 0020524-07 | Air | 01/30/20 23:59 | 02/05/20 11:53 |
| C3 | 0021214-01 | Air | 01/30/20 23:59 | 02/12/20 11:01 |
| C2 | 0021311-01 | Air | 02/03/20 23:59 | 02/13/20 14:03 |
| C3 | 0021311-02 | Air | 02/03/20 23:59 | 02/13/20 14:03 |
| C4 | 0021311-03 | Air | 02/03/20 23:59 | 02/13/20 14:03 |
| C5 | 0021311-04 | Air | 02/03/20 23:59 | 02/13/20 14:03 |

Eastern Research Group

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 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: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

| | | | | |
|--------------|------------|-----|----------------|----------------|
| C2 | 0021921-01 | Air | 02/09/20 23:59 | 02/19/20 11:05 |
| C3 | 0021921-02 | Air | 02/09/20 23:59 | 02/19/20 11:05 |
| C4 | 0021921-03 | Air | 02/09/20 23:59 | 02/19/20 11:05 |
| C5 | 0021921-04 | Air | 02/09/20 23:59 | 02/19/20 11:05 |
| C4 QA | 0022108-01 | Air | 02/15/20 23:59 | 02/21/20 12:44 |
| C2 | 0022425-01 | Air | 02/15/20 23:59 | 02/24/20 10:36 |
| C3 | 0022425-02 | Air | 02/15/20 23:59 | 02/24/20 10:36 |
| C4 | 0022425-03 | Air | 02/15/20 23:59 | 02/24/20 10:36 |
| C2 | 0022816-01 | Air | 02/21/20 23:59 | 02/28/20 13:29 |
| C3 | 0022816-02 | Air | 02/21/20 23:59 | 02/28/20 13:29 |
| C4 | 0022816-03 | Air | 02/21/20 23:59 | 02/28/20 13:29 |
| C5 | 0022816-04 | Air | 02/21/20 23:59 | 02/28/20 13:29 |
| Covington FB | 0030236-01 | Air | 02/21/20 23:59 | 03/02/20 13:29 |
| C2 | 0030604-01 | Air | 02/27/20 23:59 | 03/06/20 10:50 |
| C3 | 0030604-02 | Air | 02/27/20 23:59 | 03/06/20 10:50 |
| C4 | 0030604-03 | Air | 02/27/20 23:59 | 03/06/20 10:50 |
| C5 | 0030604-04 | Air | 02/27/20 23:59 | 03/06/20 10:50 |
| C7 - SA | 0030604-05 | Air | 02/27/20 23:59 | 03/06/20 10:50 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0012927-01

Sampled: 01/16/20 23:59

Pressure @ Receipt: 3.00" Hg

Canister #: SAT156

Received: 01/29/20 10:52

Comments:

Analyzed: 02/20/20 05:34

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 | 0.331 | 0.60 | | 0.0250 |



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REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0012927-05

Sampled: 01/22/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: 5024

Received: 01/29/20 10:52

Comments: Received at ambient

Analyzed: 02/20/20 06:29

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 | 0.240 | 0.43 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0012927-06

Sampled: 01/22/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: 5108

Received: 01/29/20 10:52

Comments: Received at ambient

Analyzed: 02/20/20 09:35

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 | 0.223 | 0.40 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0012927-07

Sampled: 01/22/20 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: 19656

Received: 01/29/20 10:52

Comments:

Analyzed: 02/20/20 01:52

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 | 0.432 | 0.78 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4 QA

Lab ID: 0012927-08

Sampled: 01/22/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: SAT020

Received: 01/29/20 10:52

Comments:

Analyzed: 02/20/20 02:47

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 | 0.557 | 1.01 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0012927-09

Sampled: 01/22/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: 19282

Received: 01/29/20 10:52

Comments:

Analyzed: 02/20/20 03:42

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 | 0.154 | 0.28 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0013008-01

Sampled: 01/25/20 23:59

Pressure @ Receipt: 3.00" Hg

Canister #: 5132

Received: 01/30/20 10:57

Comments:

Analyzed: 02/19/20 19:24

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 | 0.467 | 0.84 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0013008-02

Sampled: 01/25/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: 19641

Received: 01/30/20 10:57

Comments:

Analyzed: 02/19/20 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 | 0.0984 | 0.18 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0013117-01

Sampled: 01/25/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: SAT110

Received: 01/31/20 12:39

Comments: Received at ambient

Analyzed: 02/20/20 10:27

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 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0013117-02

Sampled: 01/25/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 18879

Received: 01/31/20 12:39

Comments: Received at ambient

Analyzed: 02/20/20 11:29

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 | 5.43 | 9.80 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: Covington-FS

Lab ID: 0013117-03

Sampled: 01/27/20 23:59

Pressure @ Receipt: 30.00" Hg

Canister #: A21000

Received: 01/31/20 12:39

Comments: Field Blank

Analyzed: 02/21/20 20:05

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 | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0020524-01

Sampled: 01/28/20 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: 5083

Received: 02/05/20 11:53

Comments:

Analyzed: 02/21/20 22:54

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 | 0.558 | 1.01 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0020524-02

Sampled: 01/28/20 23:59

Pressure @ Receipt: 4.00" Hg

Canister #: 18868

Received: 02/05/20 11:53

Comments:

Analyzed: 02/21/20 23:50

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 | 0.0909 | 0.16 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0020524-03

Sampled: 01/28/20 23:59

Pressure @ Receipt: 8.00" Hg

Canister #: SAT081

Received: 02/05/20 11:53

Comments:

Analyzed: 02/22/20 00:47

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 | 0.302 | 0.55 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0020524-04

Sampled: 01/28/20 23:59

Pressure @ Receipt: 4.00" Hg

Canister #: SAT097

Received: 02/05/20 11:53

Comments:

Analyzed: 02/22/20 01:43

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 | 0.424 | 0.77 | | 0.0250 |



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: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0020524-05

Sampled: 01/30/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: 5062

Received: 02/05/20 11:53

Comments: Received at ambient

Analyzed: 02/24/20 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 | 0.339 | 0.61 | | 0.0250 |



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ATTN: Ms. Jaime Gore

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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0020524-06

Sampled: 01/30/20 23:59

Pressure @ Receipt: 8.50" Hg

Canister #: A21102

Received: 02/05/20 11:53

Comments:

Analyzed: 02/24/20 21:58

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 | 0.339 | 0.61 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0020524-07

Sampled: 01/30/20 23:59

Pressure @ Receipt: 4.50" Hg

Canister #: 5117

Received: 02/05/20 11:53

Comments:

Analyzed: 02/24/20 23:49

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 | 0.200 | 0.36 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0021214-01

Sampled: 01/30/20 23:59

Pressure @ Receipt: 4.50" Hg

Canister #: 19278

Received: 02/12/20 11:01

Comments:

Analyzed: 02/24/20 22:53

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 | 0.0924 | 0.17 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0021311-01

Sampled: 02/03/20 23:59

Pressure @ Receipt: 2.00" Hg

Canister #: 19649

Received: 02/13/20 14:03

Comments:

Analyzed: 02/25/20 06:23

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 | 0.185 | 0.33 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0021311-02

Sampled: 02/03/20 23:59

Pressure @ Receipt: 5.00" Hg

Canister #: 19647

Received: 02/13/20 14:03

Comments:

Analyzed: 02/25/20 07:19

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 | 0.0462 | 0.08 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0021311-03

Sampled: 02/03/20 23:59

Pressure @ Receipt: 9.00" Hg

Canister #: 33535

Received: 02/13/20 14:03

Comments:

Analyzed: 02/25/20 08:15

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 | 0.0959 | 0.17 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0021311-04

Sampled: 02/03/20 23:59

Pressure @ Receipt: 5.50" Hg

Canister #: SAT120

Received: 02/13/20 14:03

Comments:

Analyzed: 02/25/20 09:11

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 | 0.181 | 0.33 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0021921-01

Sampled: 02/09/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: SAT085

Received: 02/19/20 11:05

Comments: Received at ambient

Analyzed: 03/03/20 17:38

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 | 0.389 | 0.70 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0021921-02

Sampled: 02/09/20 23:59

Pressure @ Receipt: 3.50" Hg

Canister #: SAT182

Received: 02/19/20 11:05

Comments:

Analyzed: 03/03/20 18:33

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 | 0.299 | 0.54 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0021921-03

Sampled: 02/09/20 23:59

Pressure @ Receipt: 8.00" Hg

Canister #: SAT140

Received: 02/19/20 11:05

Comments:

Analyzed: 02/25/20 16:00

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 | 0.534 | 0.96 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0021921-04

Sampled: 02/09/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 19644

Received: 02/19/20 11:05

Comments: Received at ambient

Analyzed: 03/03/20 16:42

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 | 0.0791 | 0.14 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4 QA

Lab ID: 0022108-01

Sampled: 02/15/20 23:59

Pressure @ Receipt: 3.50" Hg

Canister #: SAT036

Received: 02/21/20 12:44

Comments:

Analyzed: 03/04/20 00:04

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 | 0.456 | 0.82 | | 0.0250 |



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ATTN: Ms. Jaime Gore

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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0022425-01

Sampled: 02/15/20 23:59

Pressure @ Receipt: 2.00" Hg

Canister #: 18889

Received: 02/24/20 10:36

Comments:

Analyzed: 03/04/20 01:55

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 | 0.0818 | 0.15 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0022425-02

Sampled: 02/15/20 23:59

Pressure @ Receipt: 4.00" Hg

Canister #: SAT096

Received: 02/24/20 10:36

Comments:

Analyzed: 03/04/20 02:50

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 | 0.159 | 0.29 | | 0.0250 |



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

FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0022425-03

Sampled: 02/15/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 5089

Received: 02/24/20 10:36

Comments: Received at ambient

Analyzed: 03/04/20 03:45

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 | 0.473 | 0.85 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0022816-01

Sampled: 02/21/20 23:59

Pressure @ Receipt: 2.00" Hg

Canister #: 5145

Received: 02/28/20 13:29

Comments:

Analyzed: 03/05/20 02:39

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 | 0.266 | 0.48 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0022816-02

Sampled: 02/21/20 23:59

Pressure @ Receipt: 3.00" Hg

Canister #: 2527

Received: 02/28/20 13:29

Comments:

Analyzed: 03/05/20 03:35

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 | 0.271 | 0.49 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0022816-03

Sampled: 02/21/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 5101

Received: 02/28/20 13:29

Comments: Received at ambient

Analyzed: 03/05/20 04:30

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 | 0.393 | 0.71 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0022816-04

Sampled: 02/21/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 19662

Received: 02/28/20 13:29

Comments: Received at ambient

Analyzed: 03/05/20 05:25

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 | 0.625 | 1.13 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: Covington FB

Lab ID: 0030236-01

Sampled: 02/21/20 23:59

Pressure @ Receipt: 30.00" Hg

Canister #: 19280

Received: 03/02/20 13:29

Comments: Field Blank

Analyzed: 03/14/20 05:19

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 | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C2

Lab ID: 0030604-01

Sampled: 02/27/20 23:59

Pressure @ Receipt: 0.00 psig

Canister #: SAT008

Received: 03/06/20 10:50

Comments:

Analyzed: 03/16/20 21:26

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 | 0.225 | 0.41 | | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C3

Lab ID: 0030604-02

Sampled: 02/27/20 23:59

Pressure @ Receipt: 4.50" Hg

Canister #: 5103

Received: 03/06/20 10:50

Comments:

Analyzed: 03/16/20 22:30

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 | 0.101 | 0.18 | LK | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C4

Lab ID: 0030604-03

Sampled: 02/27/20 23:59

Pressure @ Receipt: 8.50" Hg

Canister #: A21036

Received: 03/06/20 10:50

Comments:

Analyzed: 03/16/20 23:35

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 | 0.0910 | 0.16 | LK | 0.0250 |



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: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C5

Lab ID: 0030604-04

Sampled: 02/27/20 23:59

Pressure @ Receipt: 0.0 psig

Canister #: SAT099

Received: 03/06/20 10:50

Comments:

Analyzed: 03/17/20 00:39

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 | 0.115 | 0.21 | LK | 0.0250 |



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FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

Description: C7 - SA

Lab ID: 0030604-05

Sampled: 02/27/20 23:59

Pressure @ Receipt: 0.00 psig

Canister #: 5146

Received: 03/06/20 10:50

Comments:

Analyzed: 03/17/20 01:44

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 | 0.155 | 0.28 | LK | 0.0250 |



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

FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

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 B0B1907 - Summa Canister Prep</i> | | | | | | |
| Blank (B0B1907-BLK1) | | | Prepared: 02/14/20 Analyzed: 02/19/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |
| Duplicate (B0B1907-DUP1) | Source: 0012927-05 | | Prepared: 01/22/20 Analyzed: 02/20/20 | | | |
| Ethylene oxide | 0.242 | ppbv | 0.24 | 0.498 | 25 | |
| <i>Batch B0B2006 - Summa Canister Prep</i> | | | | | | |
| Blank (B0B2006-BLK1) | | | Prepared: 02/14/20 Analyzed: 02/21/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |
| <i>Batch B0B2408 - Summa Canister Prep</i> | | | | | | |
| Blank (B0B2408-BLK1) | | | Prepared: 02/14/20 Analyzed: 02/24/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |
| Duplicate (B0B2408-DUP1) | Source: 0021311-04 | | Prepared: 02/03/20 Analyzed: 02/25/20 | | | |
| Ethylene oxide | 0.168 | ppbv | 0.18 | 7.16 | 25 | |
| <i>Batch B0C0310 - Summa Canister Prep</i> | | | | | | |
| Blank (B0C0310-BLK1) | | | Prepared & Analyzed: 03/03/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |
| Duplicate (B0C0310-DUP1) | Source: 0022108-01 | | Prepared: 02/15/20 Analyzed: 03/04/20 | | | |
| Ethylene oxide | 0.444 | ppbv | 0.46 | 2.87 | 25 | |
| Duplicate (B0C0310-DUP2) | Source: 0022425-03 | | Prepared: 02/15/20 Analyzed: 03/04/20 | | | |
| Ethylene oxide | 0.471 | ppbv | 0.47 | 0.318 | 25 | |
| <i>Batch B0C0407 - Summa Canister Prep</i> | | | | | | |
| Blank (B0C0407-BLK1) | | | Prepared & Analyzed: 03/04/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |
| <i>Batch B0C0910 - Summa Canister Prep</i> | | | | | | |
| Blank (B0C0910-BLK1) | | | Prepared: 03/09/20 Analyzed: 03/13/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |
| <i>Batch B0C1605 - Summa Canister Prep</i> | | | | | | |
| Blank (B0C1605-BLK1) | | | Prepared: 03/09/20 Analyzed: 03/16/20 | | | |
| Ethylene oxide | ND | ppbv | | | | U |



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U.S. Environmental Protection Agency, Region 4

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

FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Covington

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

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

Sequence 2002042

Calibration Check (2002042-CCV1)

Prepared & Analyzed: 02/19/20

| | | | | |
|----------------|------|------|-----|-------|
| Ethylene oxide | 2.61 | ppbv | 4.5 | 30.00 |
|----------------|------|------|-----|-------|

Sequence 2002044

Calibration Check (2002044-CCV1)

Prepared: 02/20/20 Analyzed: 02/21/20

| | | | | |
|----------------|------|------|-----|-------|
| Ethylene oxide | 2.66 | ppbv | 6.3 | 30.00 |
|----------------|------|------|-----|-------|

Sequence 2002051

Calibration Check (2002051-CCV1)

Prepared: 02/19/20 Analyzed: 02/24/20

| | | | | |
|----------------|------|------|------|-------|
| Ethylene oxide | 2.76 | ppbv | 10.6 | 30.00 |
|----------------|------|------|------|-------|

Sequence 2003009

Calibration Check (2003009-CCV1)

Prepared & Analyzed: 03/03/20

| | | | | |
|----------------|------|------|------|-------|
| Ethylene oxide | 2.43 | ppbv | -2.7 | 30.00 |
|----------------|------|------|------|-------|

Sequence 2003013

Calibration Check (2003013-CCV1)

Prepared & Analyzed: 03/04/20

| | | | | |
|----------------|------|------|------|-------|
| Ethylene oxide | 2.87 | ppbv | 14.6 | 30.00 |
|----------------|------|------|------|-------|

Sequence 2003022

Calibration Check (2003022-CCV1)

Prepared: 03/09/20 Analyzed: 03/13/20

| | | | | |
|----------------|------|------|-----|-------|
| Ethylene oxide | 2.50 | ppbv | 1.0 | 30.00 |
|----------------|------|------|-----|-------|

Sequence 2003031

Calibration Check (2003031-CCV1)

Prepared & Analyzed: 03/16/20

| | | | | |
|----------------|------|------|------|-------|
| Ethylene oxide | 2.77 | ppbv | 12.1 | 30.00 |
|----------------|------|------|------|-------|



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Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 03/24/20 12:32

SUBMITTED: 01/29/20 to 03/06/20

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 trichlorotrifluoroethane.



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

April 23, 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 02/24/20 10:36.

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.



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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: 04/23/20 07:38

SUBMITTED: 02/24/20

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> |
|-------------------|------------------|---------------|----------------|-----------------|
| C5 | 0022425-04 | Air | 02/15/20 23:59 | 02/24/20 10:36 |

| | | |
|--------------------------------------|---------------------------|---------------------------------|
| Description: C5 | Lab ID: 0022425-04 | Sampled: 02/15/20 23:59 |
| Pressure @ Receipt: 0.00" Hg | Canister #: A21105 | Received: 02/24/20 10:36 |
| Comments: Received at ambient | | Analyzed: 03/04/20 05:35 |

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 | 0.397 | 0.72 | | 0.0250 |



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Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 04/23/20 07:38

SUBMITTED: 02/24/20

AQS SITE CODE:

SITE CODE: Covington

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



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ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 04/23/20 07:38

SUBMITTED: 02/24/20

AQS SITE CODE:

SITE CODE: Covington

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



CERTIFICATE OF ANALYSIS

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ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

REPORTED: 04/23/20 07:38

SUBMITTED: 02/24/20

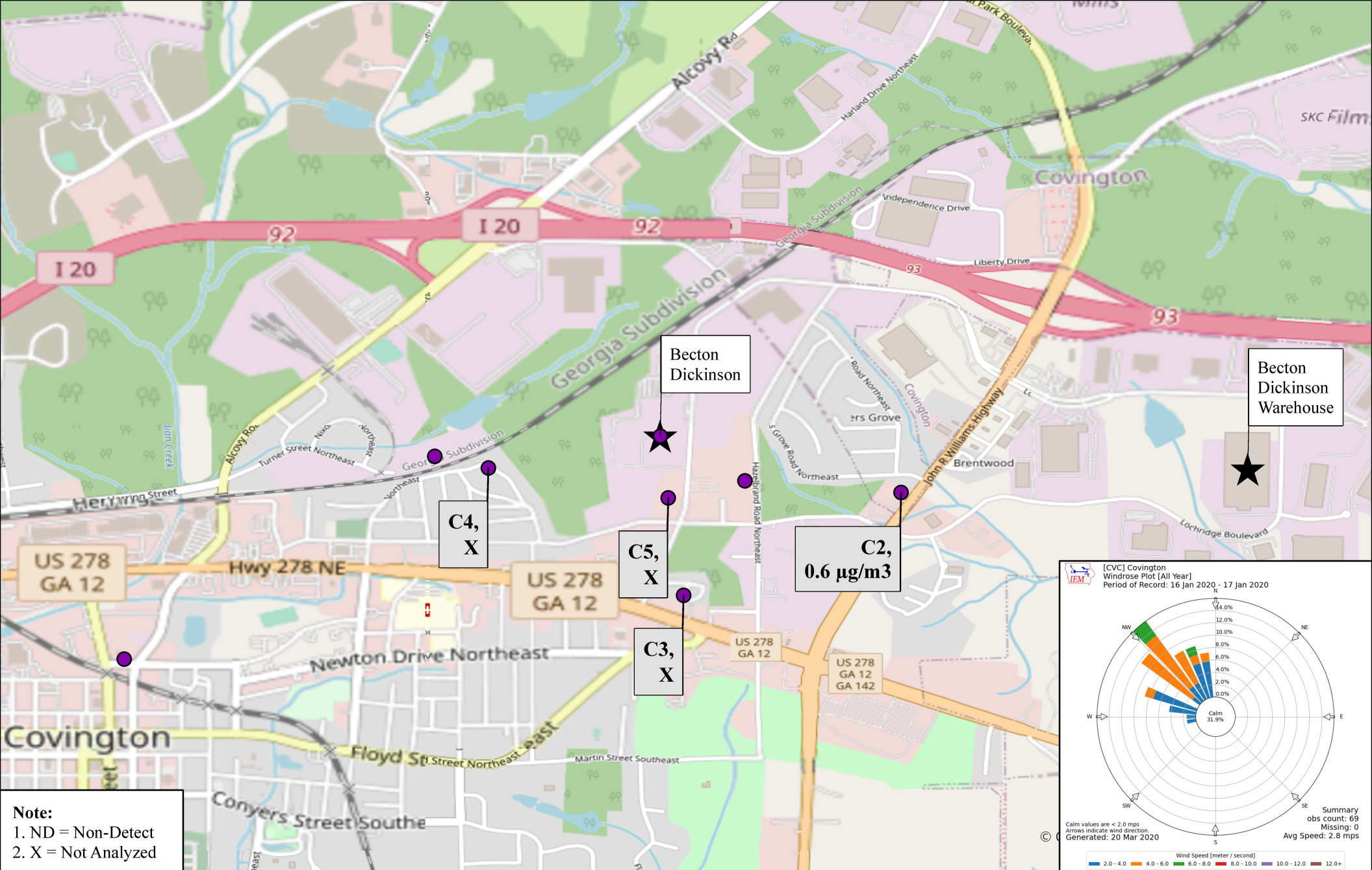
AQS SITE CODE:

SITE CODE: Covington

Notes and Definitions

| | |
|-----|-----------------------------|
| 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.



0 0.17 0.34
Miles



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

Ethylene Oxide Sampling
Covington, GA

01/16/2020

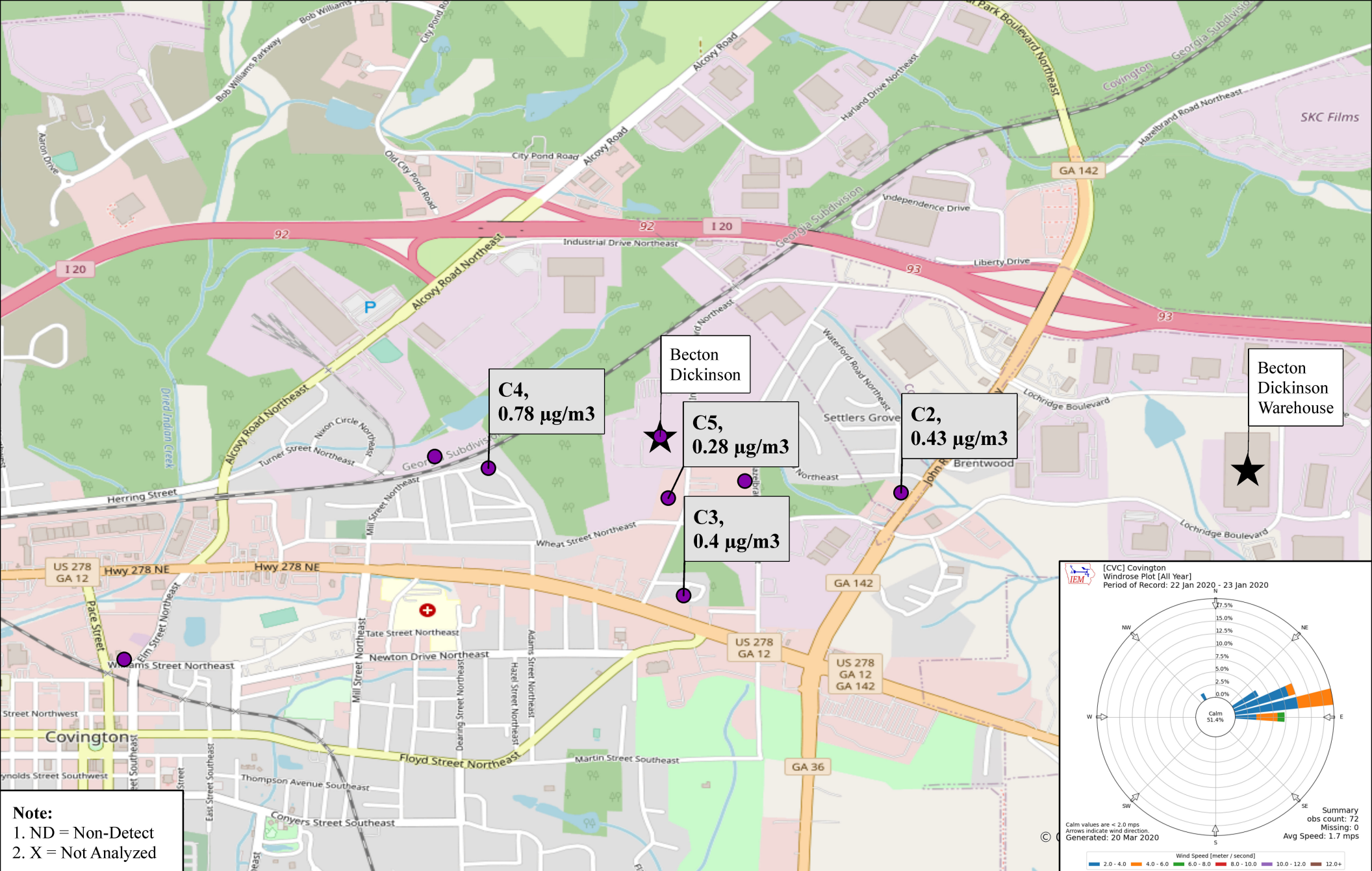
Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
Miles



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

Ethylene Oxide Sampling
Covington, GA

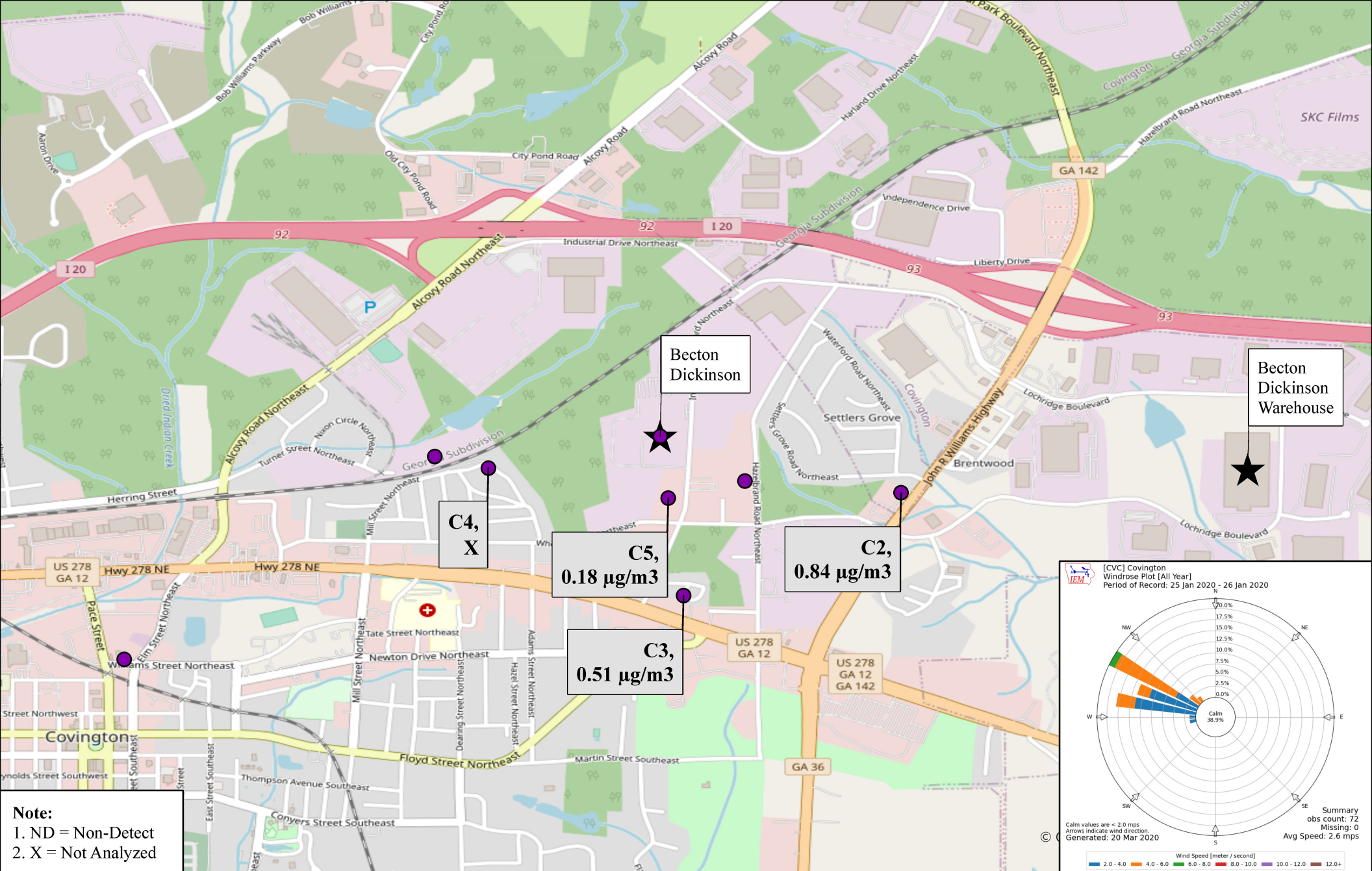
01/22/2020

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



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
 Miles



Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling
 Covington, GA

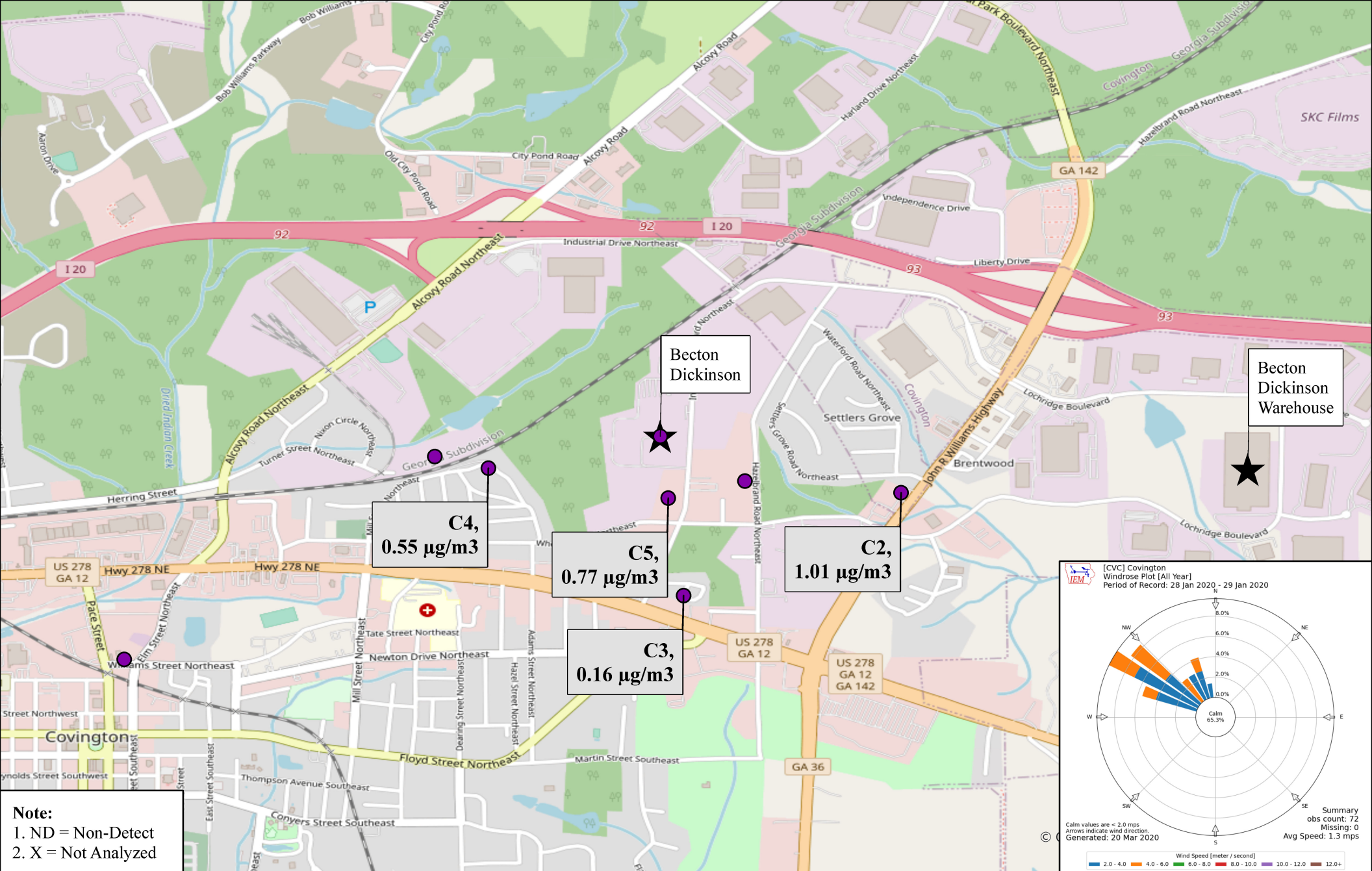
01/25/2020

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



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 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
 Miles



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

Ethylene Oxide Sampling
 Covington, GA

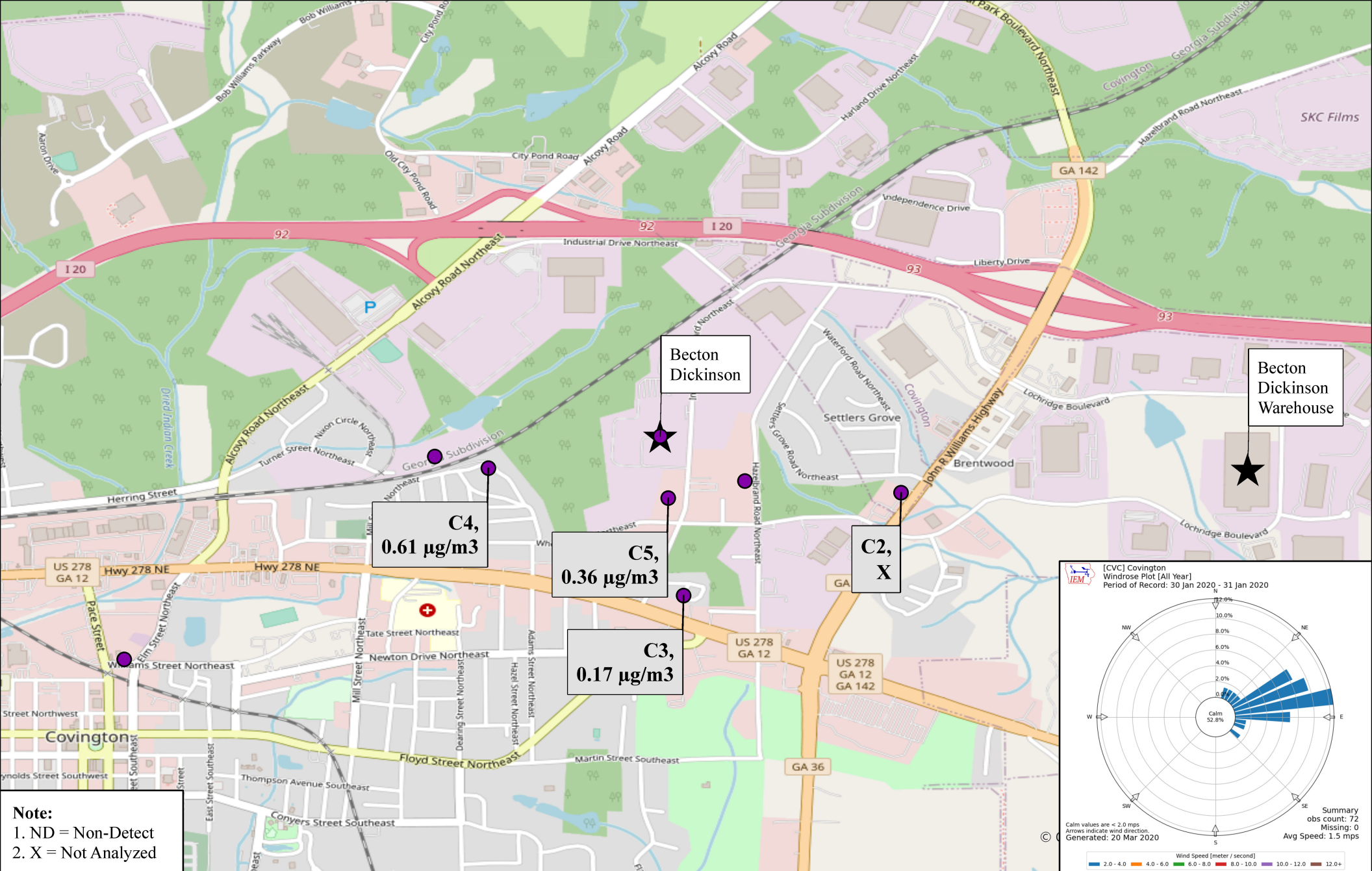
01/28/2020

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



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 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
 Miles



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

Ethylene Oxide Sampling
 Covington, GA

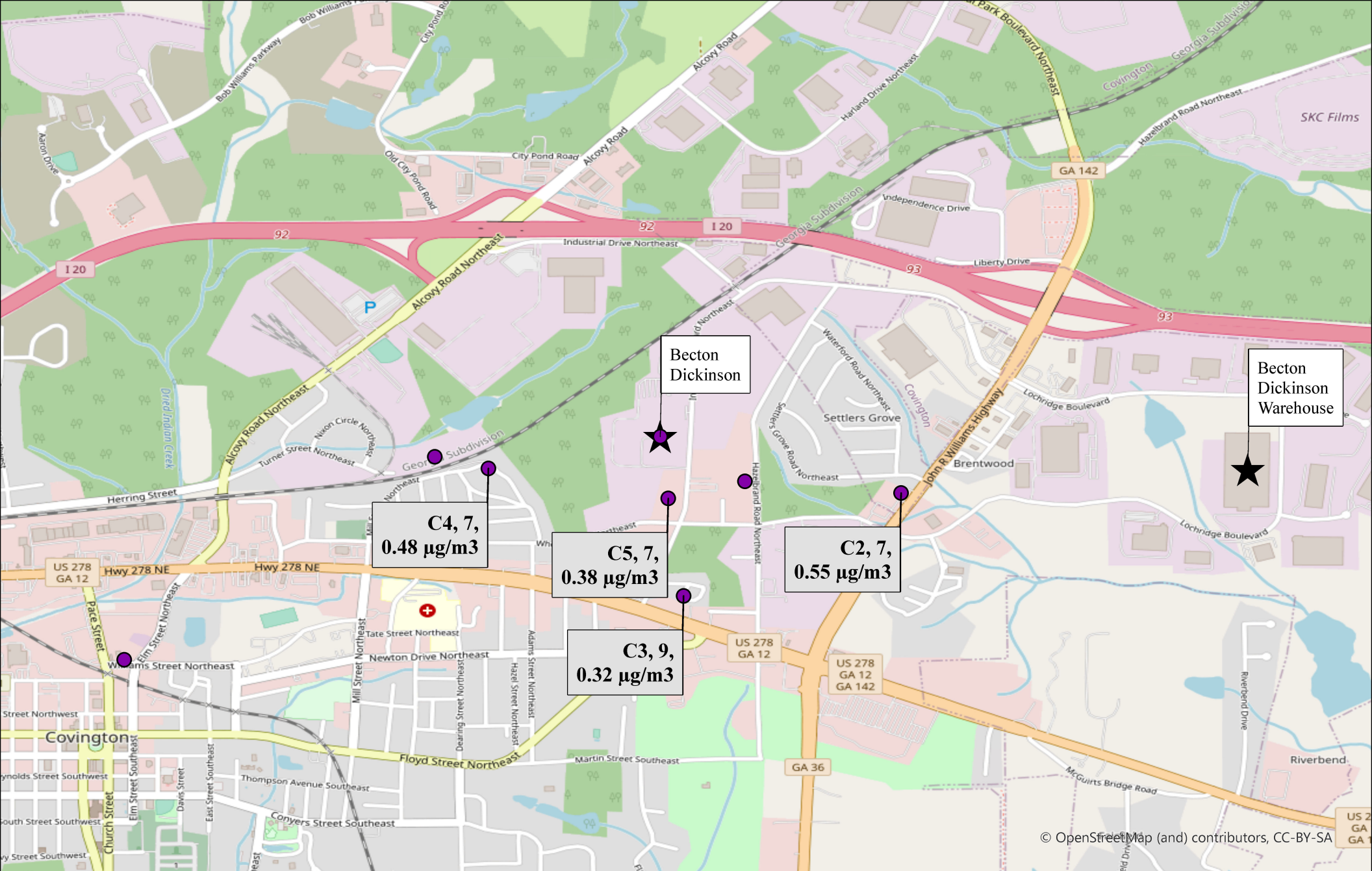
01/30/2020

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



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

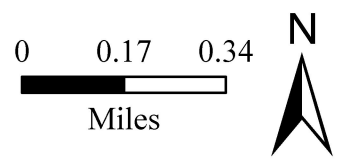
ENVIRONMENTAL PROTECTION DIVISION



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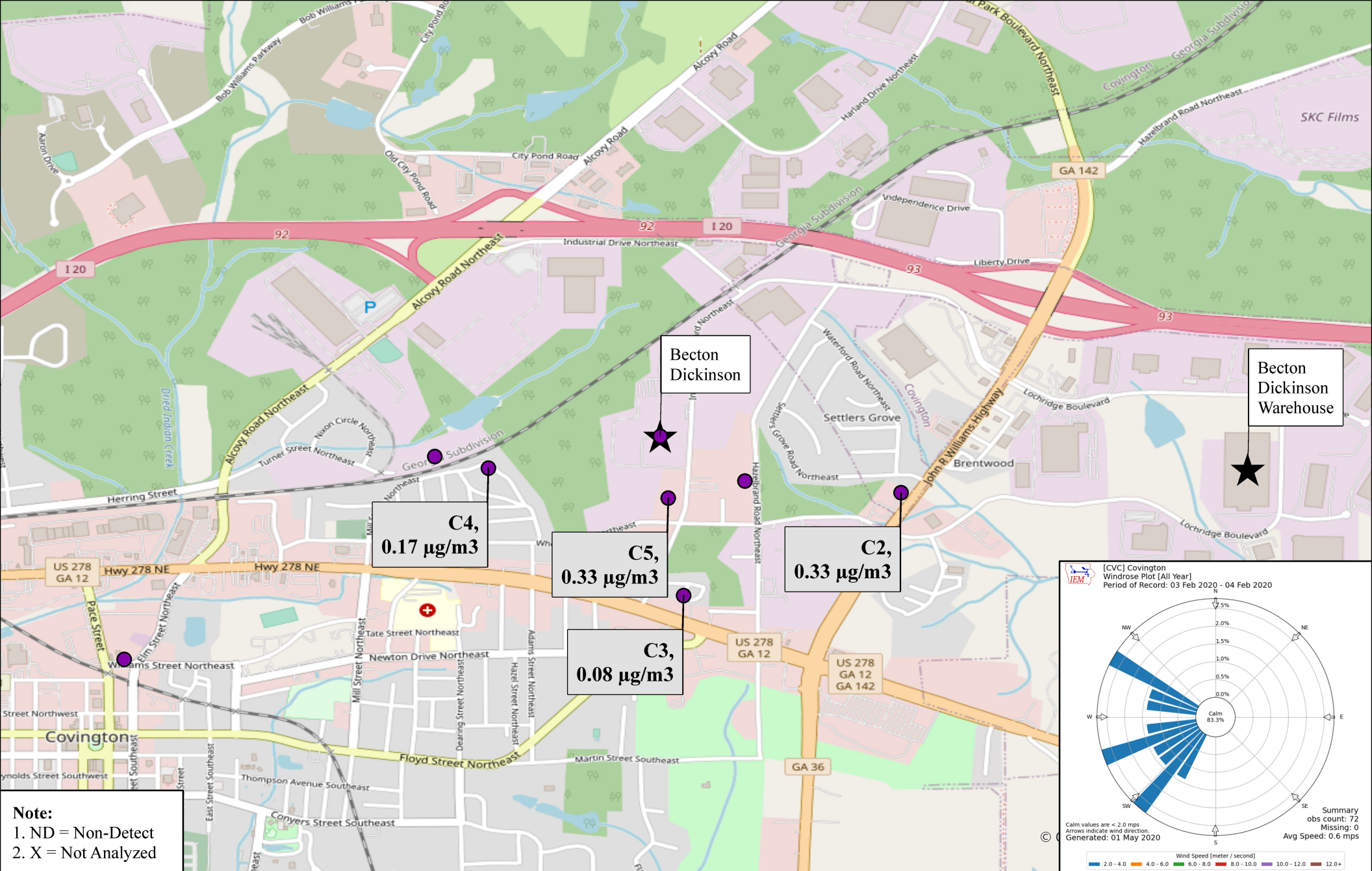
Ethylene Oxide Sampling Covington, GA

January 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



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





0 0.17 0.34
 Miles



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

Ethylene Oxide Sampling
 Covington, GA

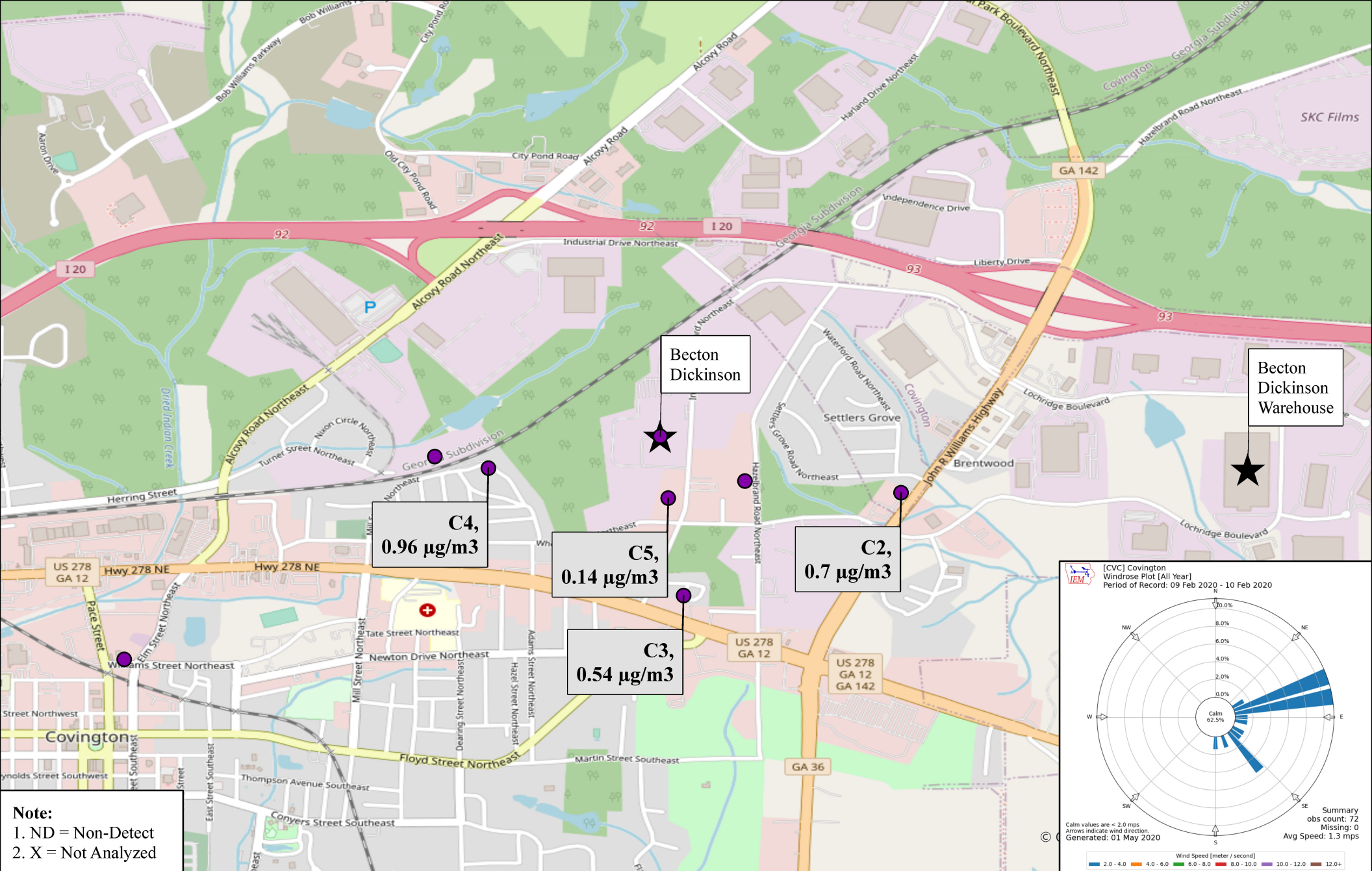
02/03/2020

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



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
Miles



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

Ethylene Oxide Sampling
Covington, GA

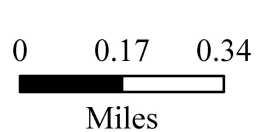
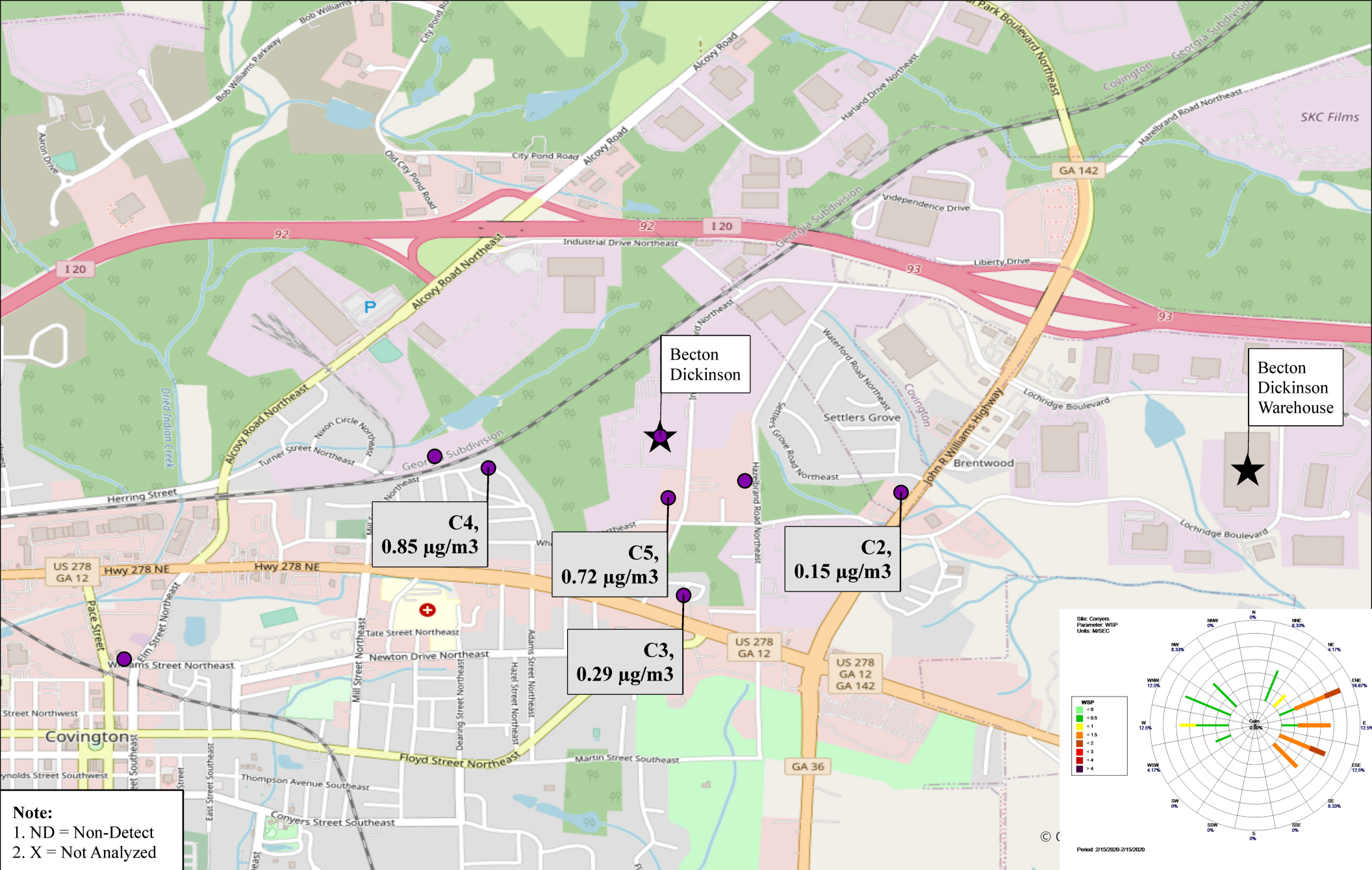
02/09/2020

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



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DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



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

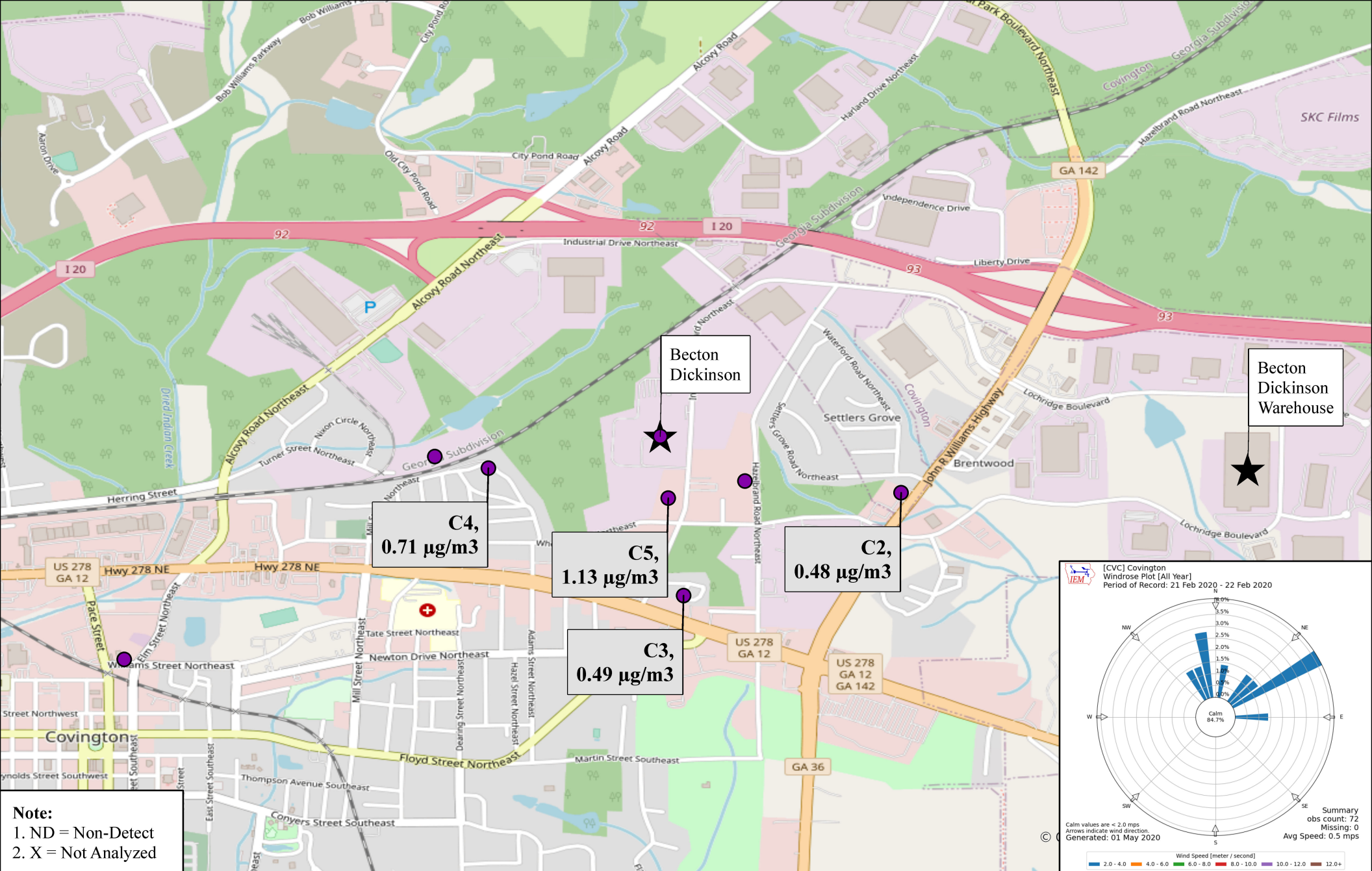
Ethylene Oxide Sampling
Covington, GA

02/15/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
 Miles



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

Ethylene Oxide Sampling
 Covington, GA

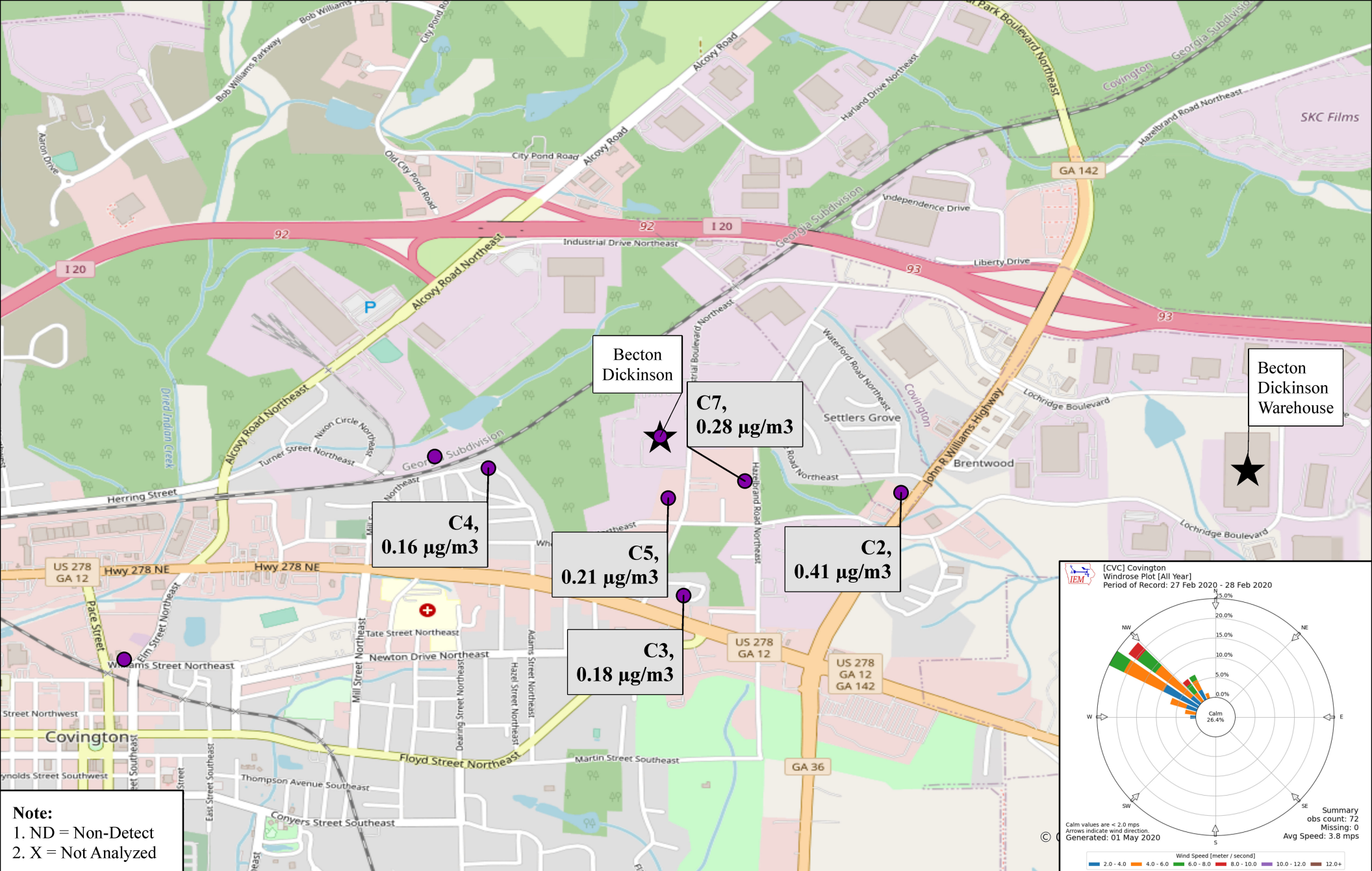
02/21/2020

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



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



0 0.17 0.34
 Miles



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

Ethylene Oxide Sampling
 Covington, GA

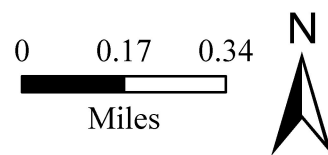
02/27/2020

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



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



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

**Ethylene Oxide Sampling
Covington, GA**

February 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