

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

May 11, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Cobb January 22, 2020- February 27, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of January 22, 2020- February 27, 2020 by the Ambient Monitoring Program in the Cobb area to characterize the EtO concentration. Each of the samples were sent to Eastern Research Group (ERG) for analysis. 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. The samples listed as AO indicate that bad weather destroyed the sample. The Qualifier code of "LK" was given by ERG to indicate that the sample may be biased high. The Qualifier code "U" was given by ERG to indicate that the sample is under the detection limit. 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. Please note that ERG is now providing values for levels below the detection limit.

Location	Date	Qualifier	EtO Concentration (ug/m³)
S1	01/22/2020	2	0.73
S1	01/28/2020	2	0.32
S1	02/03/2020		0.85
S1	02/09/2020	2	0.77
S1	02/15/2020		0.28
S1	02/21/2020	LK, 2	2.58
S1	02/27/2020	2	0.46
S2	01/22/2020	2	0.10
S2	01/28/2020	2	0.40
S2	02/03/2020	2	0.78
S2	02/09/2020		AO
S2	02/15/2020	2	0.80
S2	02/21/2020		AN
S2	02/27/2020	LK	0.15

Location	Date	Qualifier	EtO Concentration (ug/m³)
S 3	01/22/2020		0.61
S3	01/28/2020	2	0.73
S3	02/03/2020		0.42
S3	02/09/2020		0.68
S3	02/15/2020	2	0.43
S3	02/21/2020	LK	0.19
S3	02/27/2020	LK	0.31
S4	01/22/2020		0.16
S4	01/28/2020	2	0.49
S4	02/03/2020		0.38
S4	02/09/2020		0.34
S4	02/15/2020		0.45
S4	02/21/2020	LK	0.15
S4	02/27/2020	LK	0.33
S4 QA	01/22/2020		0.18
S4 QA	02/15/2020		0.42
67.64	01/22/2020	U	0.10
S7-SA	01/22/2020		0.10
S7-SA	02/27/2020	LK	0.15

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: Cobb

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 01/30/20 11:00 through 03/06/20 10:55.

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.



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 12:22

SUBMITTED: 01/30/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Cobb

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	Received
S1	0013009-01	Air	01/22/20 23:59	01/30/20 11:00
S2	0013009-02	Air	01/22/20 23:59	01/30/20 11:00
S3	0013009-03	Air	01/22/20 23:59	01/30/20 11:00
S4	0013009-04	Air	01/22/20 23:59	01/30/20 11:00
S4 QA	0013009-05	Air	01/22/20 23:59	01/30/20 11:00
Cobb-FS	0013118-01	Air	01/23/20 23:59	01/31/20 12:48
S1	0020525-01	Air	01/28/20 23:59	02/05/20 11:58
S2	0020525-02	Air	01/28/20 23:59	02/05/20 11:58
S3	0020525-03	Air	01/28/20 23:59	02/05/20 11:58
S4	0020525-04	Air	01/28/20 23:59	02/05/20 11:58
S1	0021216-01	Air	02/03/20 23:59	02/12/20 11:05
S2	0021216-02	Air	02/03/20 23:59	02/12/20 11:05
S3	0021216-03	Air	02/03/20 23:59	02/12/20 11:05
S4	0021216-04	Air	02/03/20 23:59	02/12/20 11:05
S1	0021825-01	Air	02/09/20 23:59	02/18/20 15:16
S3	0021825-03	Air	02/09/20 23:59	02/18/20 15:16
S4	0021825-04	Air	02/09/20 23:59	02/18/20 15:16
S4 QA	0022527-01	Air	02/15/20 23:59	02/25/20 11:57
S1	0022612-01	Air	02/15/20 23:59	02/26/20 10:57
S2	0022612-02	Air	02/15/20 23:59	02/26/20 10:57
S3	0022612-03	Air	02/15/20 23:59	02/26/20 10:57
S4	0022612-04	Air	02/15/20 23:59	02/26/20 10:57
S1	0030235-01	Air	02/21/20 23:59	03/02/20 13:22

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.



U.S. Environmental Protection Agency, Region 4

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Atlanta, GA 30354

ATTN: Ms. Jaime Gore

FILE #: 4222.00

REPORTED: 03/24/20 12:22

SUBMITTED: 01/30/20 to 03/06/20

AQS SITE CODE:

PHONE: (404) 362-4912	FAX: (919) 541-0516		SITE CODE:	Cobb
S3	0030235-03	Air	02/21/20 23:59	03/02/20 13:22
S4	0030235-04	Air	02/21/20 23:59	03/02/20 13:22
Cobb FB	0030235-05	Air	02/21/20 23:59	03/02/20 13:22
S1	0030536-01	Air	02/27/20 23:59	03/05/20 13:39
S2	0030536-02	Air	02/27/20 23:59	03/05/20 13:39
S4	0030536-03	Air	02/27/20 23:59	03/05/20 13:39
S3	0030605-01	Air	02/27/20 23:59	03/06/20 10:55
S7-SA	0030605-02	Air	02/27/20 23:59	03/06/20 10:55



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

Description: S1

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore **AQS SITE CODE:**

> SITE CODE: Cobb

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

Sampled: 01/22/20 23:59

Pressure @ Receipt: 0" Hg Canister #: SAT014 Received: 01/30/20 11:00 **Comments:** Received at ambient **Analyzed:** 02/19/20 21:15

Air Toxics by EPA Compendium Method TO-15

0013009-01

MDL Results <u>Flag</u>

Lab ID:

Analyte ppbv ug/m³ ppbv Ethylene oxide 0.406 0.73 0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 01/22/20 23:59

Description: S2 **Pressure @ Receipt:** 0" Hg

Lab ID:

0013009-02

Received: 01/30/20 11:00

Comments:

Ethylene oxide

Received at ambient

Canister #: SAT126

Analyzed: 02/19/20 22:10

Air Toxics by EPA Compendium Method TO-15

Results

0.0548

MDL

<u>Analyte</u>

ppbv ug/m³

0.10

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 01/22/20 23:59

Description: S3 Pressure @ Receipt: 4.50" Hg Lab ID: 0013009-03

Comments:

Canister #: SAT033

Received: 01/30/20 11:00 **Analyzed:** 02/19/20 23:06

Air Toxics by EPA Compendium Method TO-15

Results

0.335

MDL

Analyte Ethylene oxide ppbv ug/m³

0.61

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

Description: S4

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore **FAX:** (919) 541-0516

AQS SITE CODE:

SITE CODE:

PHONE: (404) 362-4912

Lab ID: 0013009-04

Sampled: 01/22/20 23:59

Pressure @ Receipt: 3.00" Hg

Received: 01/30/20 11:00

Canister #: SAT078

0.16

Analyzed: 02/20/20 00:01

Air Toxics by EPA Compendium Method TO-15

Results

0.0896

MDL

Analyte Ethylene oxide

Comments:

ppbv ug/m³

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 01/22/20 23:59

Description: S4 QA Pressure @ Receipt: 3.50" Hg Lab ID: 0013009-05

Received: 01/30/20 11:00

Canister #: A21025

Analyzed: 02/20/20 00:56

Air Toxics by EPA Compendium Method TO-15

Results

FAX: (919) 541-0516

MDL

Analyte Ethylene oxide

Comments:

ppbv ug/m³

0.0973

0.18

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

Ethylene oxide

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912 **Description:** Cobb-FS

SITE CODE: 0013118-01

Sampled: 01/23/20 23:59

Pressure @ Receipt: 30.00" Hg

Canister #: 9570

Lab ID:

Received: 01/31/20 12:48

Comments: Field Blank

Analyzed: 02/21/20 19:09

Air Toxics by EPA Compendium Method TO-15

MDL

ppbv

0.0250

Results Analyte ppbv ug/m³ <u>Flag</u> U

ND

ND



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FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 01/28/20 23:59

Description: S1

Lab ID:

0020525-01

Received: 02/05/20 11:58

Comments:

Pressure @ Receipt: 0" Hg Received at ambient Canister #: SAT086

Analyzed: 02/22/20 02:40

Air Toxics by EPA Compendium Method TO-15

Results

MDL

Analyte Ethylene oxide ppbv ug/m³ 0.176

FAX: (919) 541-0516

<u>Flag</u> 0.32

ppbv 0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

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REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 01/28/20 23:59

Description:

Lab ID:

0020525-02

Received: 02/05/20 11:58

Comments:

Pressure @ Receipt: 0" Hg Received at ambient Canister #: SAT076

Analyzed: 02/22/20 03:36

Air Toxics by EPA Compendium Method TO-15

Results

0.222

MDL

Analyte Ethylene oxide ppbv ug/m³

0.40

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore AQS SITE CODE:

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

 Description:
 S3
 Lab ID:
 0020525-03
 Sampled: 01/28/20 23:59

 Pressure @ Receipt:
 6.00" Hg
 Canister #:
 5046
 Received: 02/05/20 11:58

 Comments:
 Analyzed: 02/22/20 04:32

Air Toxics by EPA Compendium Method TO-15



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 01/28/20 23:59

Description: S4

Lab ID: 0020525-04

Received: 02/05/20 11:58

Pressure @ Receipt: 0" Hg

Comments: Received at ambient

Canister #: SAT173

0.49

Analyzed: 02/22/20 05:29

Air Toxics by EPA Compendium Method TO-15

Results

0.270

MDL

Analyte
Ethylene oxide

ppbv ug/m³

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/03/20 23:59

Description: S1

0021216-01 Lab ID:

Received: 02/12/20 11:05

Pressure @ Receipt: 2.00" Hg

Canister #: 5080

Analyzed: 02/25/20 02:38

Air Toxics by EPA Compendium Method TO-15

Results

0.85

MDL

Analyte Ethylene oxide

Comments:

ppbv ug/m³

0.470

FAX: (919) 541-0516

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/03/20 23:59

Description: S2

Lab ID:

0021216-02

Received: 02/12/20 11:05

Comments: Received at ambient

Pressure @ Receipt: 0.00" Hg

Canister #: SAT048

Analyzed: 02/25/20 03:34

Air Toxics by EPA Compendium Method TO-15

Results

0.432

FAX: (919) 541-0516

MDL

Analyte
Ethylene oxide

ppbv ug/m³

0.78

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

n 4 FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore AQS SITE CODE:

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

 Description:
 S3
 Lab ID:
 0021216-03
 Sampled: 02/03/20 23:59

 Pressure @ Receipt:
 6.50" Hg
 Canister #:
 SAT127
 Received: 02/12/20 11:05

 Comments:
 Analyzed: 02/25/20 04:30

Air Toxics by EPA Compendium Method TO-15



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

FAX: (919) 541-0516

SITE CODE:

Sampled: 02/03/20 23:59

Description: S4 Pressure @ Receipt: 5.50" Hg

Lab ID:

Received: 02/12/20 11:05

Comments:

Canister #: 19664

Analyzed: 02/25/20 05:27

Air Toxics by EPA Compendium Method TO-15

0021216-04

Results

0.38

MDL

Analyte Ethylene oxide ppbv ug/m³

0.210

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/09/20 23:59

Description: S1 **Pressure @ Receipt:** 11.00" Hg

Lab ID:

Received: 02/18/20 15:16

Comments:

Canister #: 5129

Analyzed: 03/03/20 20:24

Air Toxics by EPA Compendium Method TO-15

0021825-01

Results

0.77

<u>MDL</u>

Analyte
Ethylene oxide

ppbv ug/m³

0.427

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Description: S3

Lab ID:

0021825-03

Sampled: 02/09/20 23:59

Pressure @ Receipt: 4.00" Hg

_ . . .

Canister #: SAT176

Received: 02/18/20 15:16

Comments:

Analyzed: 03/03/20 21:19

Air Toxics by EPA Compendium Method TO-15

Results

0.68

MDL

Analyte
Ethylene oxide

ppbv ug/m³

0.378

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

SITE CODE:

PHONE: (404) 362-4912

0021825-04

Sampled: 02/09/20 23:59

Description: S4 Pressure @ Receipt: 3.50" Hg Lab ID:

Received: 02/18/20 15:16

Comments:

Canister #: A21042

Analyzed: 03/03/20 22:14

Air Toxics by EPA Compendium Method TO-15

Results

0.188

FAX: (919) 541-0516

MDL

Analyte Ethylene oxide ppbv ug/m³

0.34

<u>Flag</u>



FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 03/24/20 12:22

SUBMITTED: 01/30/20 to 03/06/20

Cobb

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Description: S4 QA

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

Pressure @ Receipt: 0.00" Hg

FAX: (919) 541-0516

Lab ID: 0022527-01

Canister #: 0049

Sampled: 02/15/20 23:59 Received: 02/25/20 11:57

Analyzed: 03/04/20 21:07

Air Toxics by EPA Compendium Method TO-15

0.0250

Results

MDL ppbv

Ethylene oxide

Analyte

Comments:

ppbv ug/m³ 0.230

0.42

<u>Flag</u>

Eastern Research Group

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4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE: Cobb

Description:

FAX: (919) 541-0516

0022612-01

Sampled: 02/15/20 23:59

Pressure @ Receipt: 0.00" Hg

Received at ambient

Canister #: 19668

Lab ID:

Received: 02/26/20 10:57 Analyzed: 03/04/20 16:29

Air Toxics by EPA Compendium Method TO-15

Results

0.154

MDL

Analyte Ethylene oxide

Comments:

ppbv ug/m³

0.28

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/15/20 23:59

Description: S2 **Pressure @ Receipt:** 8.50" Hg

Lab ID: 0022612-02

Received: 02/26/20 10:57

Comments:

Canister #: SAT025

Analyzed: 03/04/20 17:25

Air Toxics by EPA Compendium Method TO-15

Results

0.441

FAX: (919) 541-0516

MDL

Analyte
Ethylene oxide

ppbv ug/m³

0.80

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/15/20 23:59

Description: S3 **Pressure @ Receipt:** 5.00" Hg

Lab ID: 0022612-03

Received: 02/26/20 10:57

Comments:

Canister #: 5072

Analyzed: 03/04/20 18:20

Air Toxics by EPA Compendium Method TO-15

Results

0.239

FAX: (919) 541-0516

MDL

Analyte
Ethylene oxide

ppbv ug/m³

0.43

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE: SITE CODE: Cobb

PHONE: (404) 362-4912

Lab ID: 0022612-04

Sampled: 02/15/20 23:59

Pressure @ Receipt: 2.50" Hg

Received: 02/26/20 10:57

Comments:

Description: S4

Canister #: A21051

Analyzed: 03/04/20 19:16

Air Toxics by EPA Compendium Method TO-15

Results

0.45

MDL

Analyte Ethylene oxide ppbv ug/m³

0.249

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

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Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Cobb

Description: S1

Lab ID:

0030235-01

Sampled: 02/21/20 23:59

Comments:

Pressure @ Receipt: 0.00" Hg

Received at ambient

Canister #: A21059

Received: 03/02/20 13:22 **Analyzed:** 03/14/20 01:01

Air Toxics by EPA Compendium Method TO-15

<u>Results</u>

<u>MDL</u>

Analyte
Ethylene oxide

ppbv ug/m³
1.43 2.58

<u>g/m³</u> <u>Flag</u> 2.58 [⊥]K



U.S. Environmental Protection Agency, Region 4

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REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/21/20 23:59

Description: S3

Lab ID:

0030235-03

Received: 03/02/20 13:22

Pressure @ Receipt: 4.00" Hg **Comments:**

Canister #: 19665

Analyzed: 03/14/20 02:06

Air Toxics by EPA Compendium Method TO-15

Results

0.19

MDL

Analyte Ethylene oxide ppbv ug/m³ 0.105

<u>Flag</u> LK



U.S. Environmental Protection Agency, Region 4

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4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore

AQS SITE CODE:

SITE CODE:

PHONE: (404) 362-4912

FAX: (919) 541-0516

Cobb

Description: S4

Lab ID: 003023

Sampled: 02/21/20 23:59

Lab 1D

0030235-04

Received: 03/02/20 13:22

Pressure @ Receipt: 3.00" Hg

O" Hg **Canister #:** A21011

Analyzed: 03/14/20 03:10

Air Toxics by EPA Compendium Method TO-15

Results

0.0837

MDL

Analyte
Ethylene oxide

Comments:

ppbv ug/m³

0.15

Flag



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/21/20 23:59

Description: Cobb FB

Lab ID: 0030235-05 **Canister #:** 0053

Received: 03/02/20 13:22

Pressure @ Receipt: 30.00" Hg **Comments:** Field Blank

... ...

Analyzed: 03/14/20 04:14

Air Toxics by EPA Compendium Method TO-15

	<u>Res</u>		<u>MDL</u>	
<u>Analyte</u>	<u>ppbv</u>	ug/m³	<u>Flag</u>	<u>ppbv</u>
Ethylene oxide	ND	ND	U	0.0250



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

SITE CODE:

PHONE: (404) 362-4912

Sampled: 02/27/20 23:59

Description:

Lab ID:

0030536-01

Received: 03/05/20 13:39

Comments:

Pressure @ Receipt: 0.00" Hg Received at ambient **Canister #:** 5121

Analyzed: 03/16/20 16:03

Air Toxics by EPA Compendium Method TO-15

Results

0.46

MDL

Analyte Ethylene oxide ppbv ug/m³

0.253

<u>Flag</u>



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:
SITE CODE: Cobb

PHONE: (404) 362-4912

Lab ID: 0030536-02

Sampled: 02/27/20 23:59

Description: S2 **Pressure @ Receipt:** 4.00" Hg

_ _ _

Received: 03/05/20 13:39

Comments:

Canister #: 19663

Analyzed: 03/16/20 18:12

Air Toxics by EPA Compendium Method TO-15

<u>Results</u>

<u>MDL</u>

Analyte
Ethylene oxide

ppbv ug/m³

0.0818

<u>g/m³</u> <u>Flag</u> 0.15 [⊥]K

9.



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/27/20 23:59

Description: S4

Lab ID: 0030536-03

Pressure @ Receipt: 3.00" Hg

Canister #: A21067

Received: 03/05/20 13:39 **Analyzed:** 03/16/20 19:17

Air Toxics by EPA Compendium Method TO-15

Results

0.180

MDL

Analyte Ethylene oxide

Comments:

ppbv ug/m³

0.33

<u>Flag</u> LK



U.S. Environmental Protection Agency, Region 4

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4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/27/20 23:59

Description: S3 **Pressure @ Receipt:** 4.50" Hg

Lab ID: 0030605-01

Received: 03/06/20 10:55

Comments:

Canister #: A21095

Analyzed: 03/17/20 02:48

Air Toxics by EPA Compendium Method TO-15

<u>Results</u>

<u>MDL</u>

Analyte
Ethylene oxide

ppbv ug/m³

0.171

<u>g/m³</u> <u>Flag</u> 0.31 [⊥]K



U.S. Environmental Protection Agency, Region 4

FILE #: 4222.00

4244 International Pkwy, Suite 120

REPORTED: 03/24/20 12:22

Atlanta, GA 30354

SUBMITTED: 01/30/20 to 03/06/20

Cobb

ATTN: Ms. Jaime Gore

AQS SITE CODE:

PHONE: (404) 362-4912

SITE CODE:

Sampled: 02/27/20 23:59

Description: S7-SA **Pressure @ Receipt:** 3.00" Hg

Lab ID: 0030605-02

Received: 03/06/20 10:55

Comments: Received at ambient

Canister #: 18884

Analyzed: 03/17/20 03:53

Air Toxics by EPA Compendium Method TO-15

Results

0.0838

FAX: (919) 541-0516

MDL

Analyte
Ethylene oxide

ppbv ug/m³

0.15

Flag

<u>ppbv</u> 0.0250

Eastern Research Group

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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 12:22

SUBMITTED: 01/30/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Cobb

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
Air Toxics by EPA Compendium Metl	nod TO-15 -	Quality Control				
Batch B0B1907 - Summa Canister Prep						
Blank (B0B1907-BLK1)			Prepared: 02/14/20	Analyzed: 02/19/20		
Ethylene oxide	ND	ppbv				U
Batch B0B2006 - Summa Canister Prep						
Blank (B0B2006-BLK1)			Prepared: 02/14/20	Analyzed: 02/21/20		
Ethylene oxide	ND	ppbv				U
Batch B0B2408 - Summa Canister Prep						
Blank (B0B2408-BLK1)			Prepared: 02/14/20	Analyzed: 02/24/20		
Ethylene oxide	ND	ppbv				U
Batch B0C0310 - Summa Canister Prep						
Blank (B0C0310-BLK1)	Prepa		Prepared & Analyzed: 03/03/20			
Ethylene oxide	ND	ppbv				U
Batch B0C0407 - Summa Canister Prep						
Blank (B0C0407-BLK1)			Prepared & Analyzed			
Ethylene oxide	ND	ppbv			<u> </u>	U
Duplicate (B0C0407-DUP1)	Source:	0022612-04		Analyzed: 03/04/20		
Ethylene oxide	0.254	ppbv	0.25	1.95	25	
Duplicate (B0C0407-DUP2)	Source:	0022527-01	Prepared: 02/15/20	Analyzed: 03/04/20		
Ethylene oxide	0.192	ppbv	0.23	17.9	25	
Batch B0C0910 - Summa Canister Prep						
Blank (B0C0910-BLK1)			Prepared: 03/09/20	Analyzed: 03/13/20		
Ethylene oxide	ND	ppbv				U
Batch B0C1605 - Summa Canister Prep						
Blank (B0C1605-BLK1)			Prepared: 03/09/20	Analyzed: 03/16/20		
Ethylene oxide	ND	ppbv				U
Duplicate (B0C1605-DUP1)	Source:	0030536-01	Prepared: 02/27/20	Analyzed: 03/16/20		
Ethylene oxide	0.269	ppbv	0.25	6.02	25	LK

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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 12:22

SUBMITTED: 01/30/20 to 03/06/20

AQS SITE CODE:

SITE CODE: Cobb

Analyte	Result	Units	% Difference	Limit (%)	Notes
ir Toxics by EPA Compendium Me	thod TO-15 -	Quality Contr	ol		
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	

Eastern Research Group

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FILE #: 4222.00

REPORTED: 03/24/20 12:22

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354 SUBMITTED: 01/30/20 to 03/06/20

ATTN: Ms. Jaime Gore AQS SITE CODE:

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

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 601 Keystone Park Drive Suite 700 Morrisville, NC 27560

May 01, 2020

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

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 11:13.

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.



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

S7-SA

Comments:

Analyte

Ethylene oxide

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

FILE #: 4222.00

REPORTED: 05/01/20 09:36

SUBMITTED: 01/29/20

AQS SITE CODE:

SITE CODE: Cobb

ANALYTICAL REPORT FOR SAMPLES

SampleName LabNumber

FAX: (919) 541-0516

<u>Matrix</u>

Sampled

Received

01/29/20 11:13

0012928-01

Air

01/22/20 23:59

Description: S7-SA Pressure @ Receipt: 0" Hg

Received at ambient

Sampled: 01/22/20 23:59 **Received:** 01/29/20 11:13

Canister #: 18831

Lab ID:

Analyzed: 02/20/20 04:38

Air Toxics by EPA Compendium Method TO-15

0012928-01

Results ppbv ug/m³

0.10

0.0562

U

<u>Flag</u>

ppbv 0.0250

<u>MDL</u>



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: 05/01/20 09:36

SUBMITTED: 01/29/20

AQS SITE CODE:

SITE CODE: Cobb

Source RPD
Analyte Result Units Result RPD Limit Notes

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

Batch B0B1907 - Summa Canister Prep

Blank (B0B1907-BLK1) Prepared: 02/14/20 Analyzed: 02/19/20

Ethylene oxide ND ppbv U

Eastern Research Group

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Page 3 of 5



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

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

FILE #: 4222.00

REPORTED: 05/01/20 09:36

SUBMITTED: 01/29/20

AQS SITE CODE:

SITE CODE: Cobb

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

Eastern Research Group

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Page 4 of 5



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: 05/01/20 09:36

SUBMITTED: 01/29/20

AQS SITE CODE:

SITE CODE: Cobb

Notes and Definitions

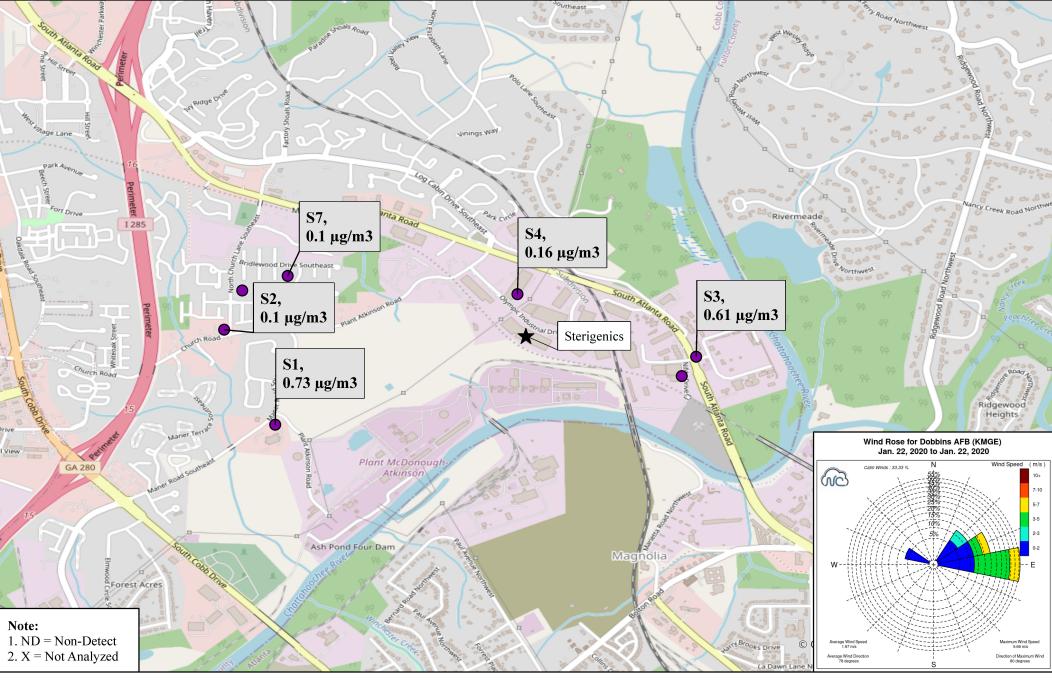
U Under Detection Limit
ND Analyte NOT DETECTED

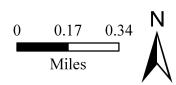
NR Not Reported

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, 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.



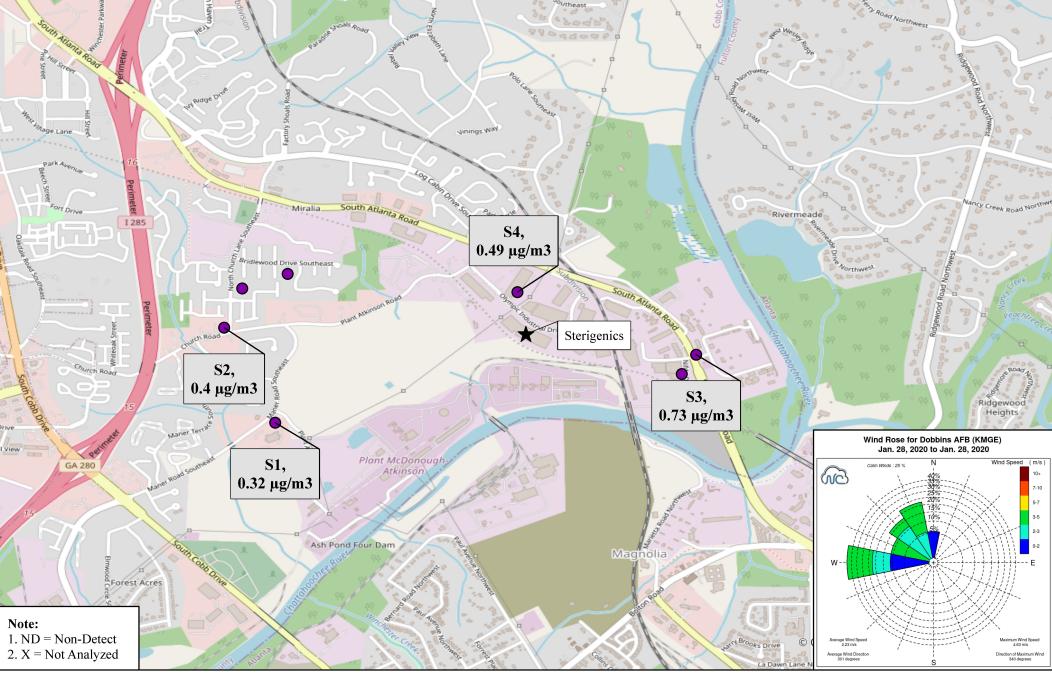


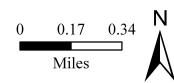
Ethylene Oxide Sampling Cobb County, GA

01/22/2020

Sampled By: Georgia Environmental Protection Division





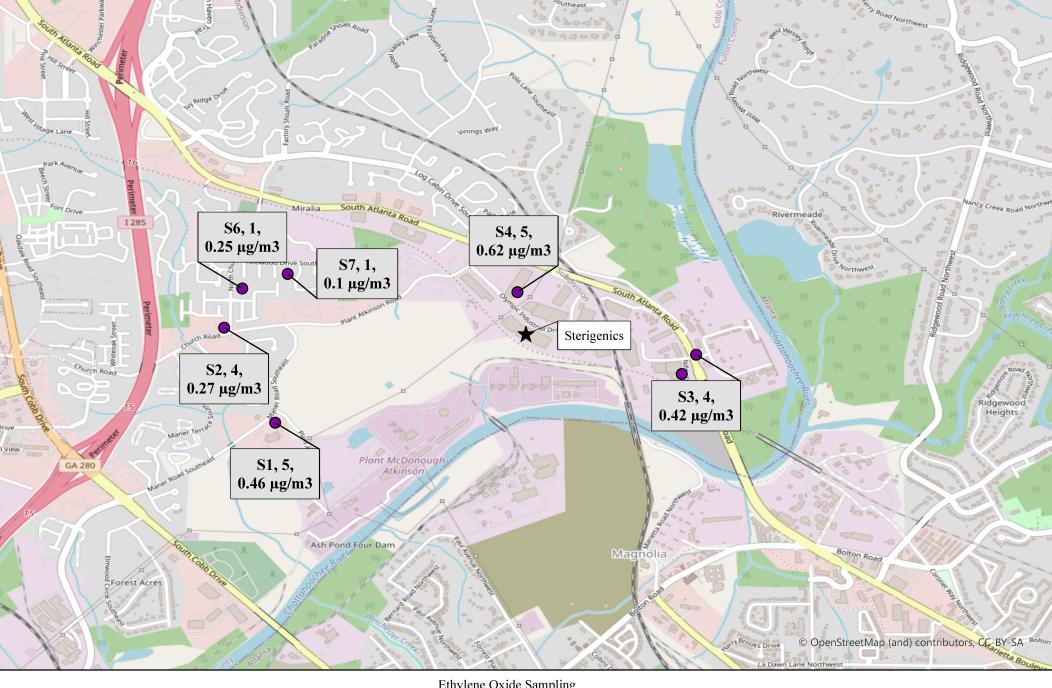


Ethylene Oxide Sampling Cobb County, GA

01/28/2020

Sampled By: Georgia Environmental Protection Division





0 0.17 0.34 Miles

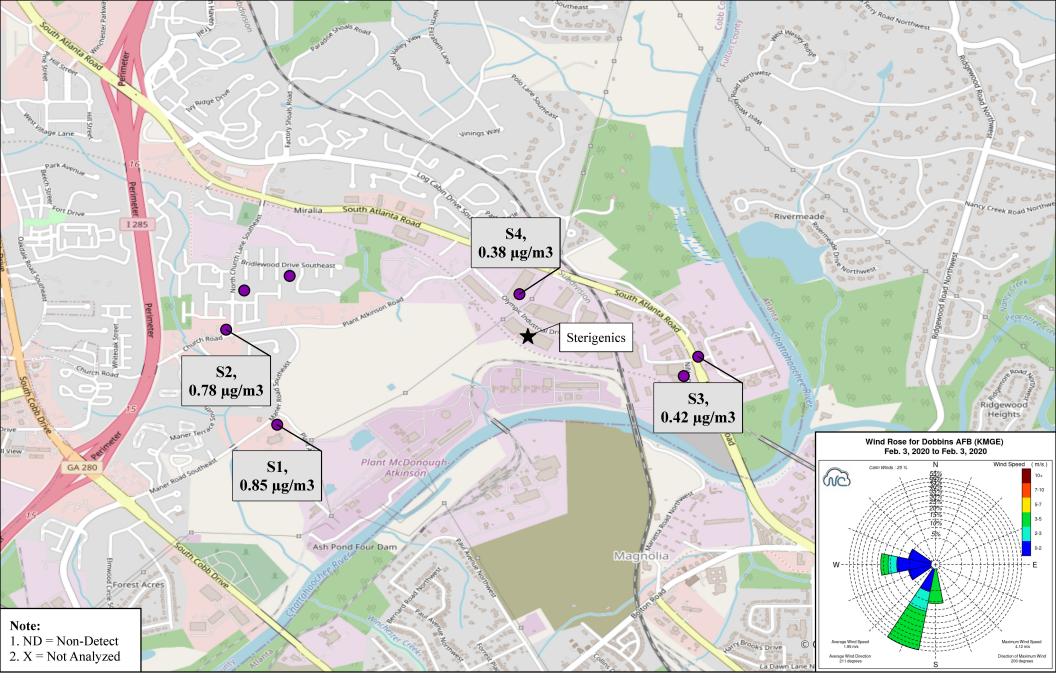
Site ID, Number of Samples, Concentration (μg/m3) Ethylene Oxide Sampling Cobb County, GA

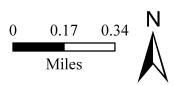
January 2020 Site Average Values

Note: Not detectable values were included in average calculations as a value of 0.

Sampled By: Georgia Environmental Protection Division





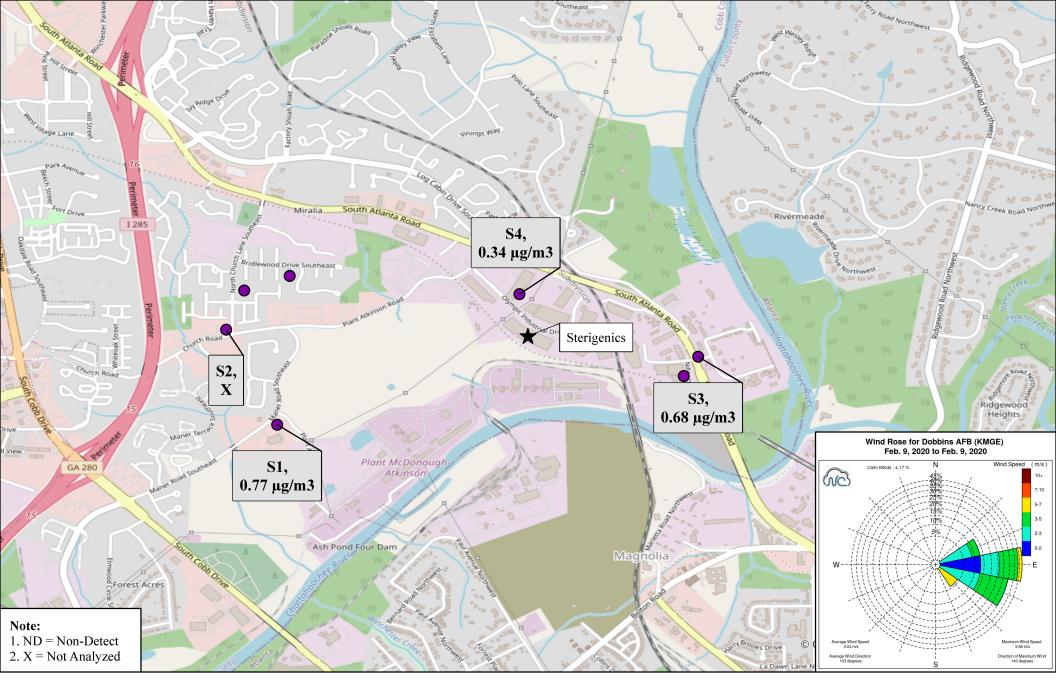


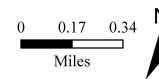
Ethylene Oxide Sampling Cobb County, GA

02/03/2020

Sampled By: Georgia Environmental Protection Division





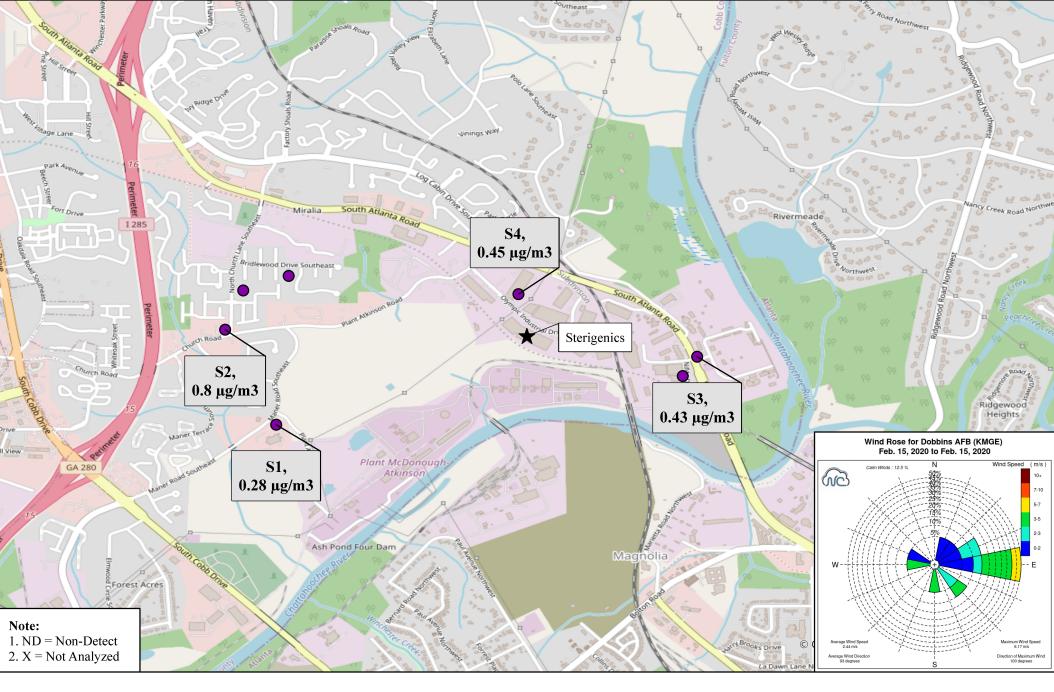


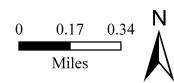
Ethylene Oxide Sampling Cobb County, GA

02/09/2020

Sampled By: Georgia Environmental Protection Division





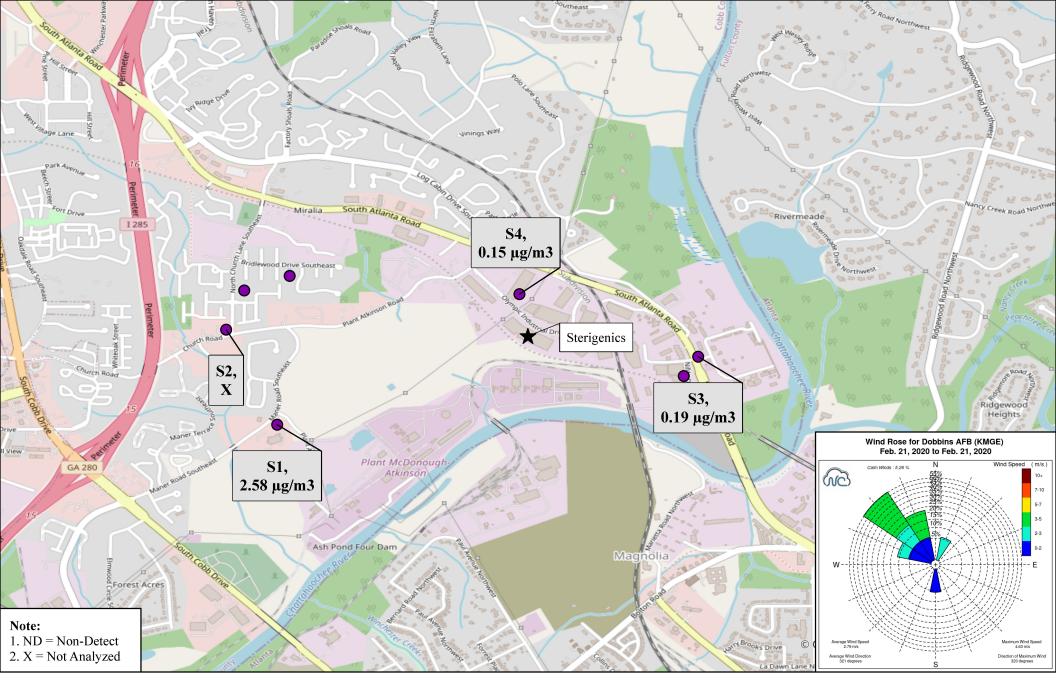


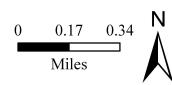
Ethylene Oxide Sampling Cobb County, GA

02/15/2020

Sampled By: Georgia Environmental Protection Division





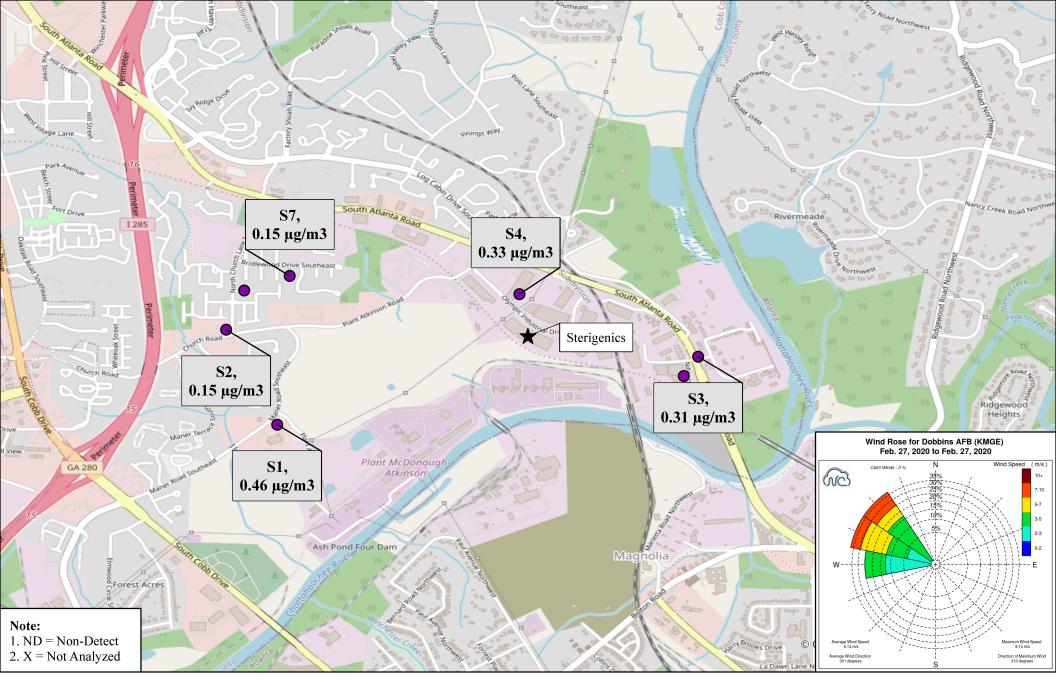


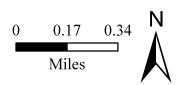
Ethylene Oxide Sampling Cobb County, GA

02/21/2020

Sampled By: Georgia Environmental Protection Division





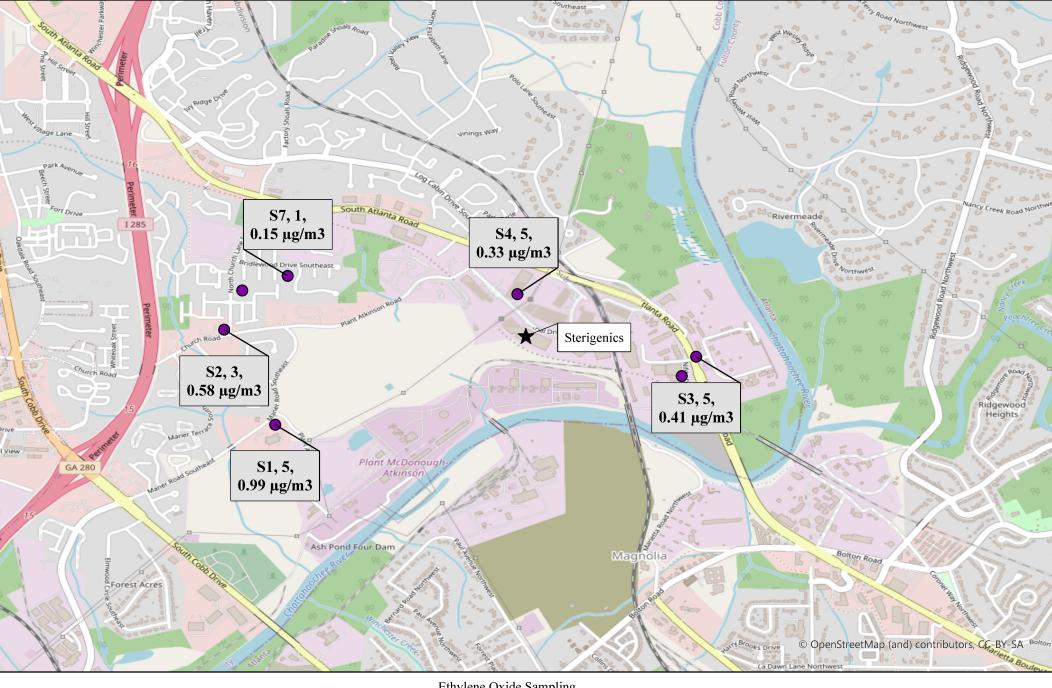


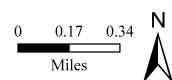
Ethylene Oxide Sampling Cobb County, GA

02/27/2020

Sampled By: Georgia Environmental Protection Division







Site ID, Number of Samples, Concentration (μg/m3) Ethylene Oxide Sampling Cobb County, 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

