


August 11, 2020

**MEMORANDUM**

To: Karen Hays, Air Branch Chief 

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

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

Samples of Ethylene Oxide (EtO) were collected during the period of June 14 - June 20, 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 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/m <sup>3</sup> )
S1		06/14/2020		2		1.29
S1		06/20/2020		2		0.40
S2		06/14/2020				1.04
S2		06/20/2020				0.59
S3		06/14/2020				0.17
S3		06/20/2020		2		0.18
S4		06/14/2020		2		0.15
S4		06/20/2020				0.49
S6 SA		06/20/2020		2		0.24
S7 SA		06/20/2020		2		0.62

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: 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 06/25/20 11:21 through 06/26/20 11:24.

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](mailto: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 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

### ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
S1	0062524-01	Air	06/14/20 23:59	06/25/20 11:21
S2	0062524-02	Air	06/14/20 23:59	06/25/20 11:21
S3	0062524-03	Air	06/14/20 23:59	06/25/20 11:21
S4	0062524-04	Air	06/14/20 23:59	06/25/20 11:21
S1	0062611-01	Air	06/20/20 23:59	06/26/20 11:24
S2	0062611-02	Air	06/20/20 23:59	06/26/20 11:24
S3	0062611-03	Air	06/20/20 23:59	06/26/20 11:24
S4	0062611-04	Air	06/20/20 23:59	06/26/20 11:24
S6-SA	0062611-05	Air	06/20/20 23:59	06/26/20 11:24
S7-SA	0062611-06	Air	06/20/20 23:59	06/26/20 11:24
Cobb FB	0062611-07	Air	06/23/20 23:59	06/26/20 11:24



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S1

Lab ID: 0062524-01

Sampled: 06/14/20 23:59

Pressure @ Receipt: 5.50" Hg

Canister #: 5051

Received: 06/25/20 11:21

Comments:

Analyzed: 06/26/20 22:10

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.715	1.29		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S2

Lab ID: 0062524-02

Sampled: 06/14/20 23:59

Pressure @ Receipt: 5.00" Hg

Canister #: SAT159

Received: 06/25/20 11:21

Comments:

Analyzed: 06/26/20 23:05

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.574	1.04		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S3

Lab ID: 0062524-03

Sampled: 06/14/20 23:59

Pressure @ Receipt: 5.00" Hg

Canister #: 110335

Received: 06/25/20 11:21

Comments:

Analyzed: 06/27/20 00:00

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.0916	0.17		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S4

Lab ID: 0062524-04

Sampled: 06/14/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: A21010

Received: 06/25/20 11:21

Comments: Received at ambient pressure

Analyzed: 06/29/20 15:53

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.0833	0.15		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S1

Lab ID: 0062611-01

Sampled: 06/20/20 23:59

Pressure @ Receipt: 6.50" Hg

Canister #: 5127

Received: 06/26/20 11:24

Comments:

Analyzed: 06/29/20 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.220	0.40		0.0285





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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S2

Lab ID: 0062611-02

Sampled: 06/20/20 23:59

Pressure @ Receipt: 6.00" Hg

Canister #: SAT103

Received: 06/26/20 11:24

Comments:

Analyzed: 06/29/20 22:21

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.325	0.59		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S3

Lab ID: 0062611-03

Sampled: 06/20/20 23:59

Pressure @ Receipt: 6.50" Hg

Canister #: 18865

Received: 06/26/20 11:24

Comments:

Analyzed: 06/29/20 23:16

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.0981	0.18		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S4

Lab ID: 0062611-04

Sampled: 06/20/20 23:59

Pressure @ Receipt: 2.00" Hg

Canister #: A21095

Received: 06/26/20 11:24

Comments:

Analyzed: 06/30/20 00:11

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.270	0.49		0.0285



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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 11:07  
**SUBMITTED:** 06/25/20 to 06/26/20  
**AQS SITE CODE:**  
**SITE CODE:** Cobb

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<b>Description:</b> S6-SA	<b>Lab ID:</b> 0062611-05	<b>Sampled:</b> 06/20/20 23:59
<b>Pressure @ Receipt:</b> 8.50" Hg	<b>Canister #:</b> 18883	<b>Received:</b> 06/26/20 11:24
<b>Comments:</b>		<b>Analyzed:</b> 06/30/20 01:06

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### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.133	0.24		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S7-SA

Lab ID: 0062611-06

Sampled: 06/20/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 5108

Received: 06/26/20 11:24

Comments:

Analyzed: 06/30/20 02:57

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.344	0.62		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:07

SUBMITTED: 06/25/20 to 06/26/20

AQS SITE CODE:

SITE CODE: Cobb

Description: Cobb FB

Lab ID: 0062611-07

Sampled: 06/23/20 23:59

Pressure @ Receipt: 29.50" Hg

Canister #: 33506

Received: 06/26/20 11:24

Comments: Field Blank

Analyzed: 07/07/20 15:31

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	ND	ND	U	0.0285



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Atlanta, GA 30354  
**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4222.00  
**REPORTED:** 07/16/20 11:07  
**SUBMITTED:** 06/25/20 to 06/26/20  
**AQS SITE CODE:**  
**SITE CODE:** Cobb

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
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### Air Toxics by EPA Compendium Method TO-15 - Quality Control

#### Batch B0F2607 - Summa Canister Prep

##### Blank (B0F2607-BLK1)

Prepared & Analyzed: 06/26/20

Ethylene oxide	ND	ppbv				U
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#### Batch B0F2906 - Summa Canister Prep

##### Blank (B0F2906-BLK1)

Prepared & Analyzed: 06/29/20

Ethylene oxide	ND	ppbv				U
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##### Duplicate (B0F2906-DUP1)

Source: 0062611-05

Prepared: 06/20/20 Analyzed: 06/30/20

Ethylene oxide	0.135	ppbv	0.13	1.87	25	
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##### Duplicate (B0F2906-DUP2)

Source: 0062611-06

Prepared: 06/20/20 Analyzed: 06/30/20

Ethylene oxide	0.344	ppbv	0.34	0.0871	25	
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#### Batch B0G0705 - Summa Canister Prep

##### Blank (B0G0705-BLK1)

Prepared & Analyzed: 07/07/20

Ethylene oxide	ND	ppbv				U
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**FILE #:** 4222.00  
**REPORTED:** 07/16/20 11:07  
**SUBMITTED:** 06/25/20 to 06/26/20  
**AQS SITE CODE:**  
**SITE CODE:** Cobb

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 2006077*

##### **Calibration Check (2006077-CCV1)**

Prepared & Analyzed: 06/29/20

Ethylene oxide	2.56	ppbv	2.3	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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**FILE #:** 4222.00

**REPORTED:** 07/16/20 11:07

**SUBMITTED:** 06/25/20 to 06/26/20

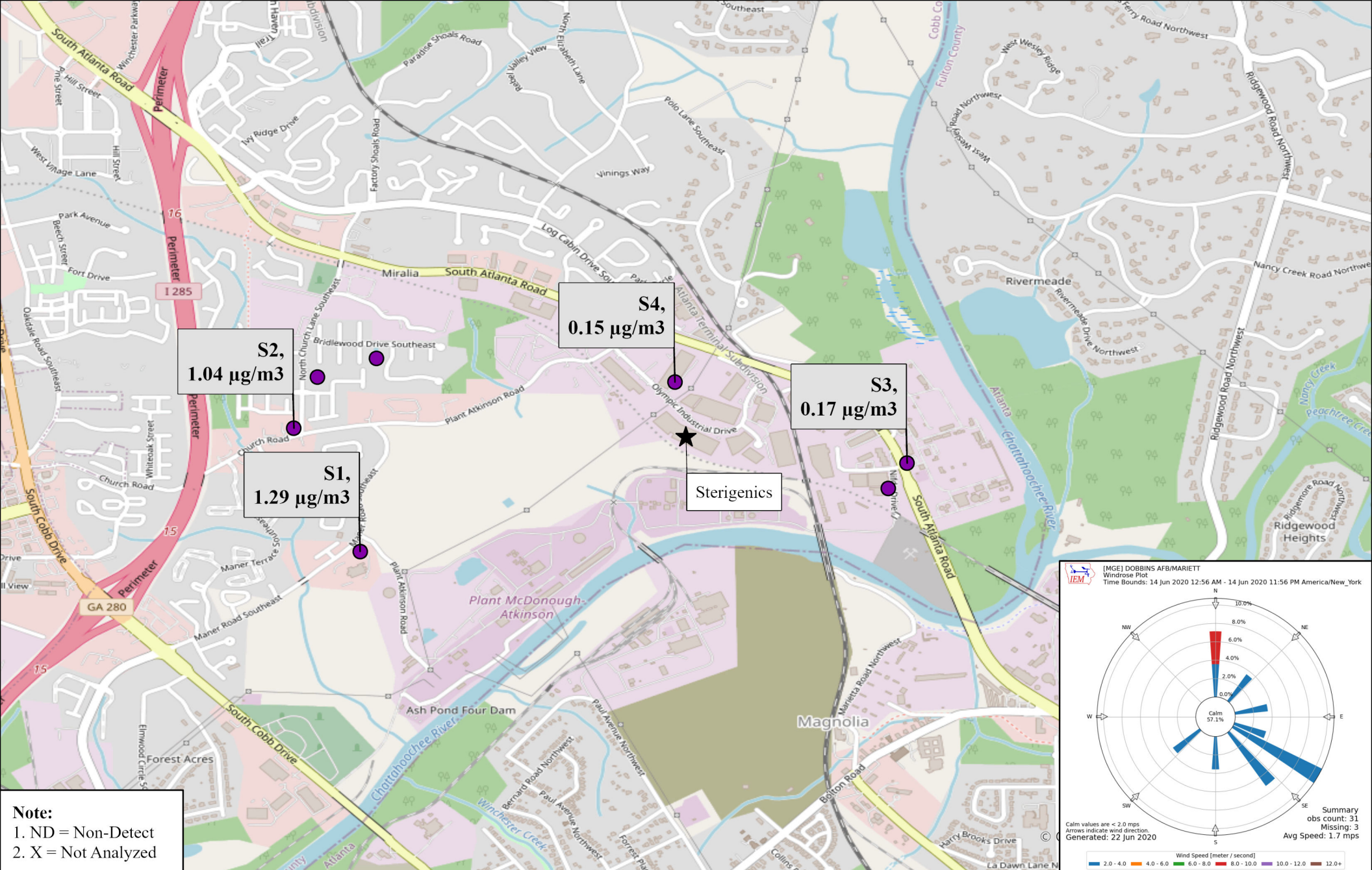
**AQS SITE CODE:**

**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, 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 (µg/m³)

Ethylene Oxide Sampling  
Cobb County, GA

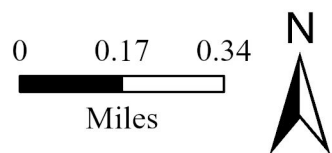
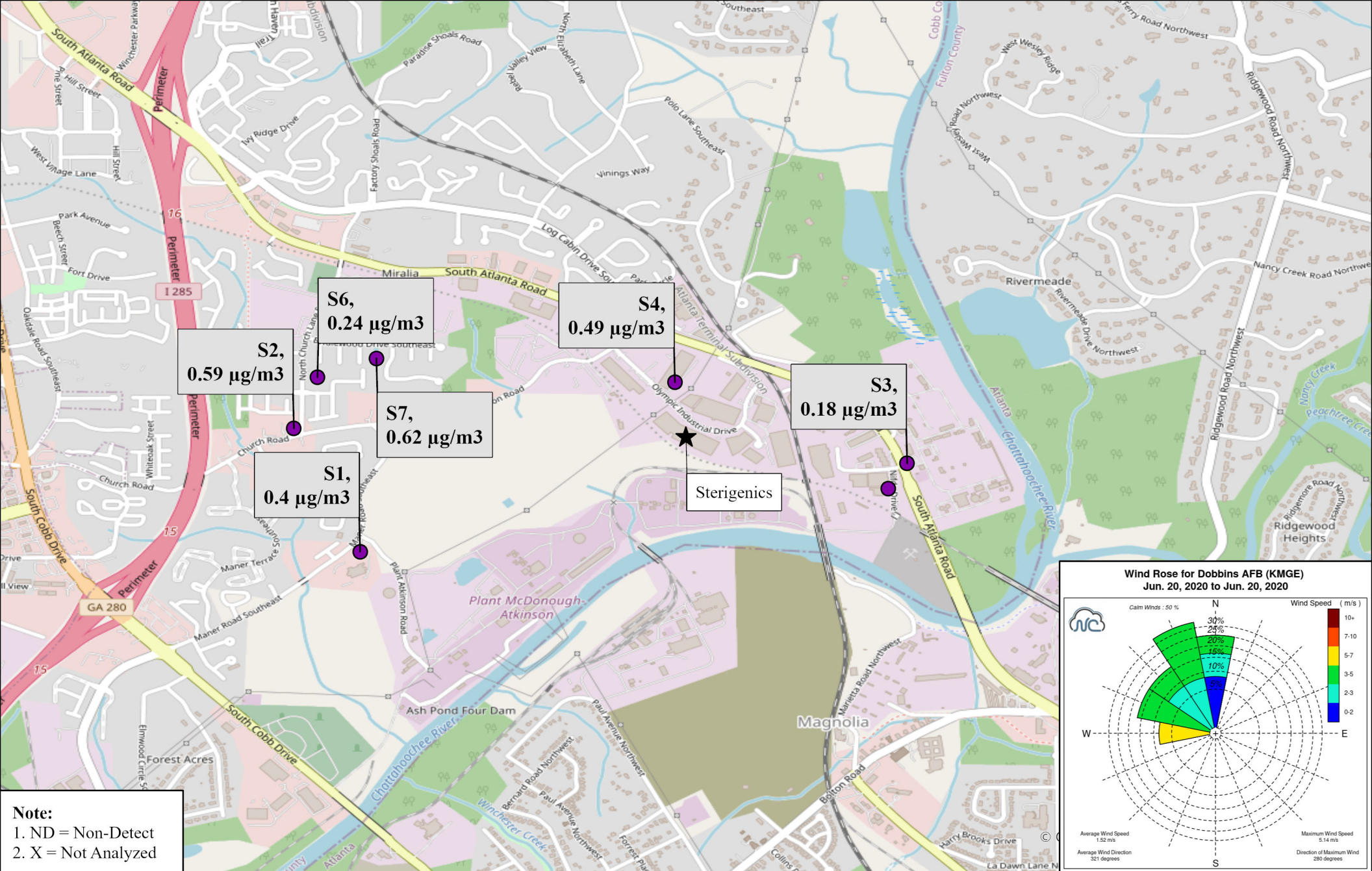
06/14/2020  
Sampled By: Georgia Environmental Protection Division  
Analyzed By: Eastern Research Group



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION





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

Ethylene Oxide Sampling  
 Cobb County, GA

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