

November 5, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Cobb August 19- August 31, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of August 19- August 31, 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. The sample listed as AO indicate that sample was invalidated because of bad weather. The sample listed as DA indicate that data was aberrant data (corrupt files, aberrant chromatography, spikes, shifts). The sample listed as AA indicate that the sample pressure is out of limits. Please note that ERG is now providing values for levels below the detection limit.

Location	Date	Qualifier	EtO Concentration (ug/m ³)
S1	08/19/2020	2	1.10
S1	08/25/2020		1.11
S1	08/31/2020		0.58
S2	08/19/2020		0.78
S2	08/25/2020	2	0.77
S2	08/31/2020	2	0.60
S3	08/19/2020	2	2.46
S3	08/25/2020	2	1.80
S3	08/31/2020		0.35
S4	08/19/2020		AO
S4	08/25/2020		DA
S4	08/31/2020		AA

If you have any questions, please let me know.

DGO/do



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

October 06, 2020

Ms. Jaime Gore
U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
Project Name: 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 08/27/20 13:20 through 09/08/20 11:00.

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

This test is accredited under the 2016 TNI Standard for Environmental Laboratories (FL DOH Certification # E87673). All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

Release of the data contained in this data package and in the data submitted in the electronic data deliverable, has been authorized by the Program Manager, or the Program Manager's designee as verified by the following signature.

The issuance of the final Certificate of Analysis takes precedence over any previous Report. If you have any questions, please contact me at 919-468-7924.

Sincerely,

Julie Swift
Program Manager
julie.swift@erg.com

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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: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

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	0082740-01	Air	08/19/20 23:59	08/27/20 13:20
S2	0082740-02	Air	08/19/20 23:59	08/27/20 13:20
S3	0082740-03	Air	08/19/20 23:59	08/27/20 13:20
S1	0090237-01	Air	08/25/20 23:59	09/02/20 12:08
S2	0090237-02	Air	08/25/20 23:59	09/02/20 12:08
S3	0090237-03	Air	08/25/20 23:59	09/02/20 12:08
S1	0090831-01	Air	08/31/20 23:59	09/08/20 11:00
S2	0090831-02	Air	08/31/20 23:59	09/08/20 11:00
S3	0090831-03	Air	08/31/20 23:59	09/08/20 11:00



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S1

Lab ID: 0082740-01

Sampled: 08/19/20 23:59

Pressure @ Receipt: 10.00" Hg

Canister #: AZ53

Received: 08/27/20 13:20

Comments:

Analyzed: 09/03/20 07:58

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	0.608	1.10		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S2

Lab ID: 0082740-02

Sampled: 08/19/20 23:59

Pressure @ Receipt: 4.50" Hg

Canister #: SAT182

Received: 08/27/20 13:20

Comments:

Analyzed: 09/04/20 17:16

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/m³</u>		<u>ppbv</u>
Ethylene oxide	0.430	0.78		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S3

Lab ID: 0082740-03

Sampled: 08/19/20 23:59

Pressure @ Receipt: 9.50" Hg

Canister #: 19279

Received: 08/27/20 13:20

Comments:

Analyzed: 09/04/20 18:11

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	1.36	2.46		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: 10/06/20 12:21
SUBMITTED: 08/27/20 to 09/08/20
AQS SITE CODE:
SITE CODE: Cobb

Description: S1	Lab ID: 0090237-01	Sampled: 08/25/20 23:59
Pressure @ Receipt: 2.50" Hg	Canister #: SAT033	Received: 09/02/20 12:08
Comments:		Analyzed: 09/05/20 03:21

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/m³</u>		<u>ppbv</u>
Ethylene oxide	0.616	1.11		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S2

Lab ID: 0090237-02

Sampled: 08/25/20 23:59

Pressure @ Receipt: 15.50" Hg

Canister #: 33266

Received: 09/02/20 12:08

Comments:

Analyzed: 09/05/20 04:20

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	0.425	0.77		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S3

Lab ID: 0090237-03

Sampled: 08/25/20 23:59

Pressure @ Receipt: 3.00" Hg

Canister #: SAT118

Received: 09/02/20 12:08

Comments:

Analyzed: 09/05/20 05:15

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	0.999	1.80		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S1

Lab ID: 0090831-01

Sampled: 08/31/20 23:59

Pressure @ Receipt: 3.00" Hg

Canister #: A21001

Received: 09/08/20 11:00

Comments:

Analyzed: 09/17/20 18:36

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	0.320	0.58		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S2

Lab ID: 0090831-02

Sampled: 08/31/20 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: 18870

Received: 09/08/20 11:00

Comments:

Analyzed: 09/17/20 19:30

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	0.334	0.60		0.0285



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FILE #: 4222.00

REPORTED: 10/06/20 12:21

SUBMITTED: 08/27/20 to 09/08/20

AQS SITE CODE:

SITE CODE: Cobb

Description: S3

Lab ID: 0090831-03

Sampled: 08/31/20 23:59

Pressure @ Receipt: 4.00" Hg

Canister #: 18828

Received: 09/08/20 11:00

Comments:

Analyzed: 09/17/20 20:25

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	0.195	0.35		0.0285



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FILE #: 4222.00
REPORTED: 10/06/20 12:21
SUBMITTED: 08/27/20 to 09/08/20
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 B0I0206 - Summa Canister Prep

Blank (B0I0206-BLK1)

Prepared & Analyzed: 09/02/20

Ethylene oxide	ND	ppbv				U
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Batch B0I0402 - Summa Canister Prep

Blank (B0I0402-BLK1)

Prepared & Analyzed: 09/04/20

Ethylene oxide	ND	ppbv				U
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Batch B0I1707 - Summa Canister Prep

Blank (B0I1707-BLK1)

Prepared & Analyzed: 09/17/20

Ethylene oxide	ND	ppbv				U
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ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 10/06/20 12:21
SUBMITTED: 08/27/20 to 09/08/20
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 2009005

Calibration Check (2009005-CCV1)

Prepared & Analyzed: 09/02/20

Ethylene oxide	2.31	ppbv	-7.5	30.00
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Sequence 2009011

Calibration Check (2009011-CCV1)

Prepared & Analyzed: 09/04/20

Ethylene oxide	2.56	ppbv	2.6	30.00
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Sequence 2009019

Calibration Check (2009019-CCV1)

Prepared & Analyzed: 09/09/20

Ethylene oxide	2.96	ppbv	18.5	30.00
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Sequence 2009043

Calibration Check (2009043-CCV1)

Prepared & Analyzed: 09/17/20

Ethylene oxide	2.97	ppbv	18.7	30.00
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CERTIFICATE OF ANALYSIS

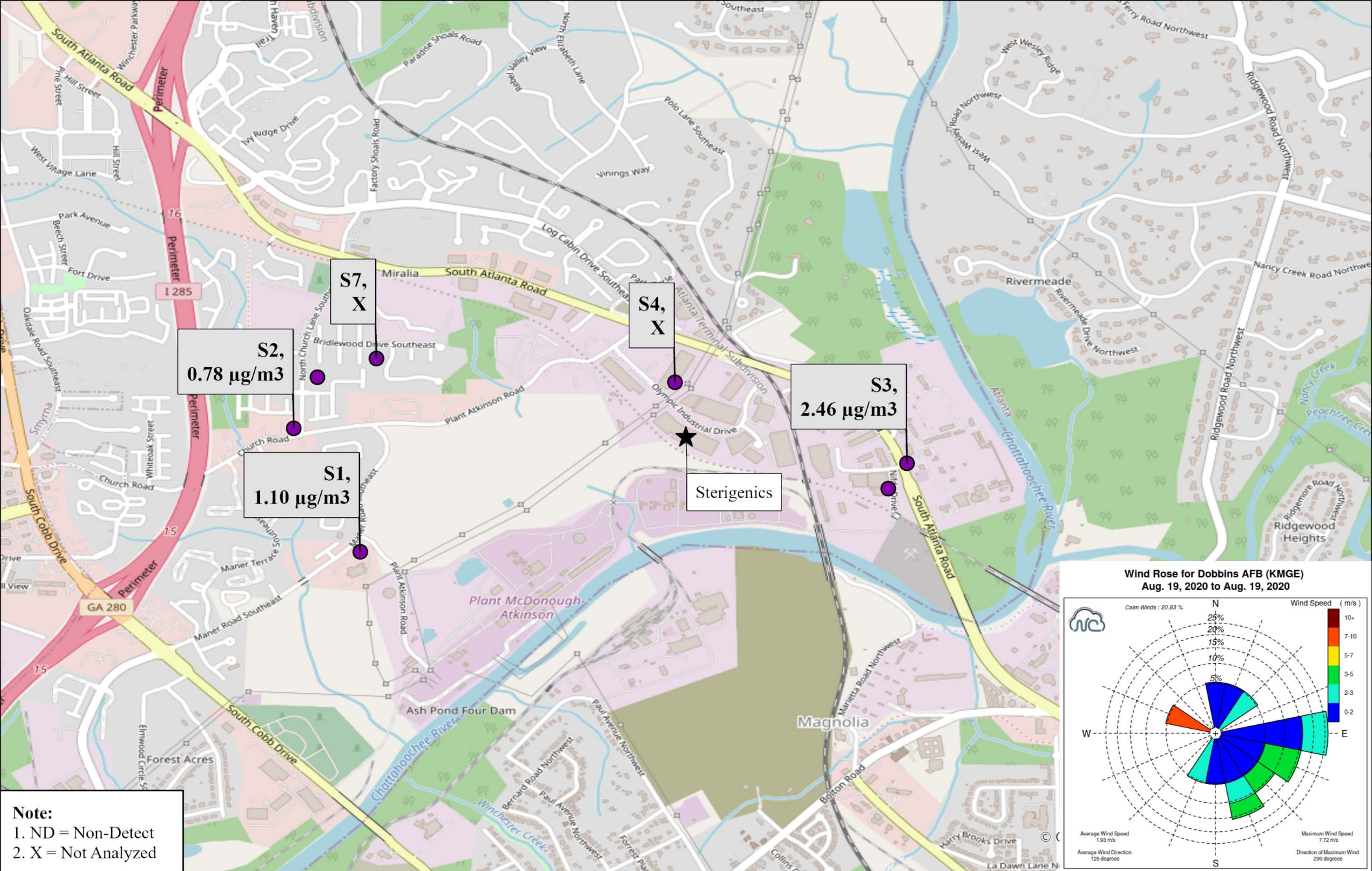
U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 10/06/20 12:21
SUBMITTED: 08/27/20 to 09/08/20
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: This test is accredited under the 2016 TNI Standard; however the following analytes are not accredited: acetylene, bromodichloroethane, dichlorotetrafluoromethane, ethyl tert butyl ether, n-octane, tert amyl methyl ether, trichlorofluoroethane, and bromochloromethane.



0 0.17 0.34
 Miles



Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling
 Cobb County, GA

08/19/2020

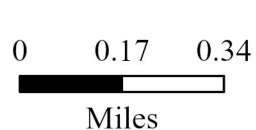
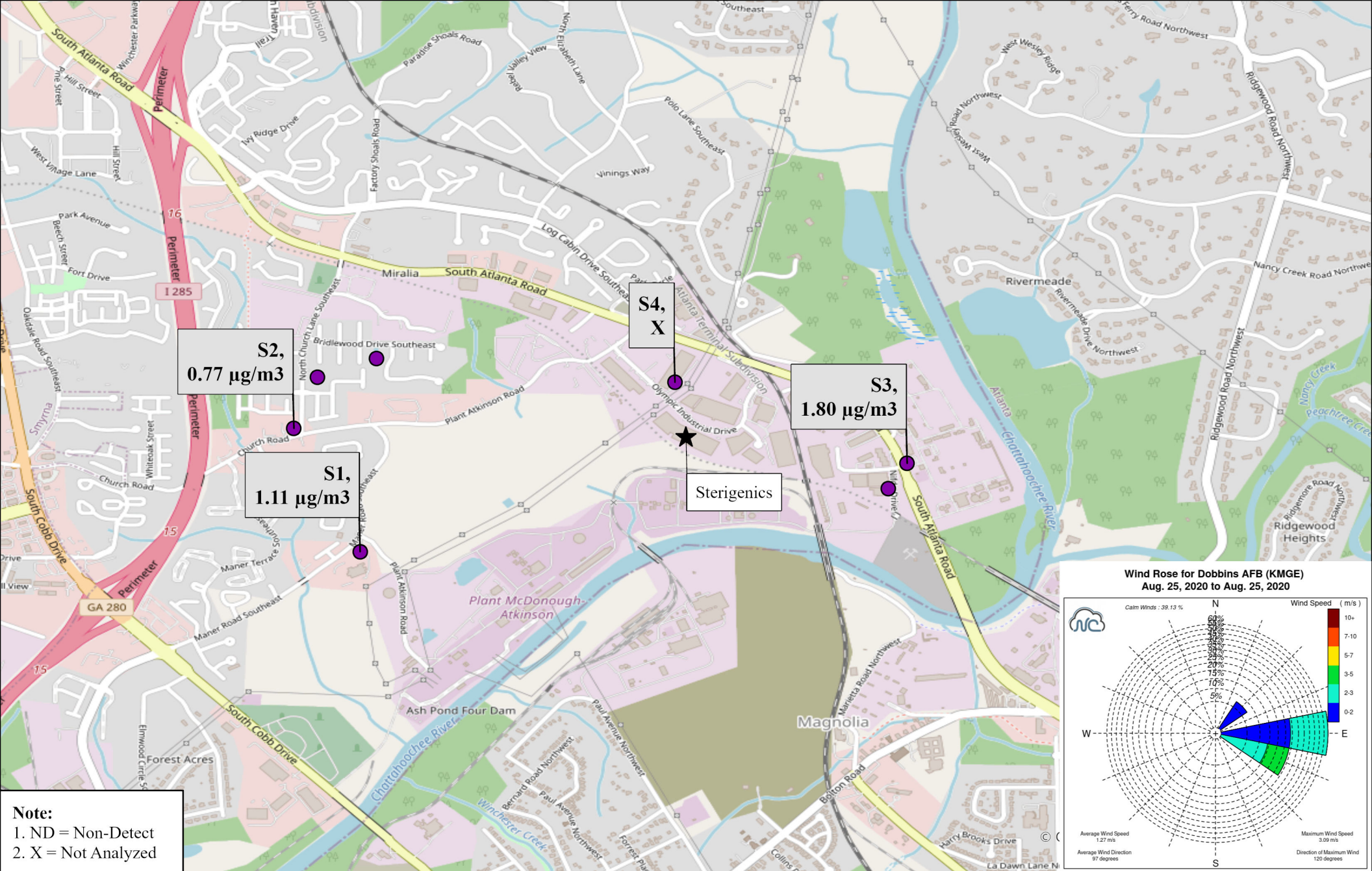
Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



Site ID, Concentration (µg/m³)

Ethylene Oxide Sampling
 Cobb County, GA

08/25/2020

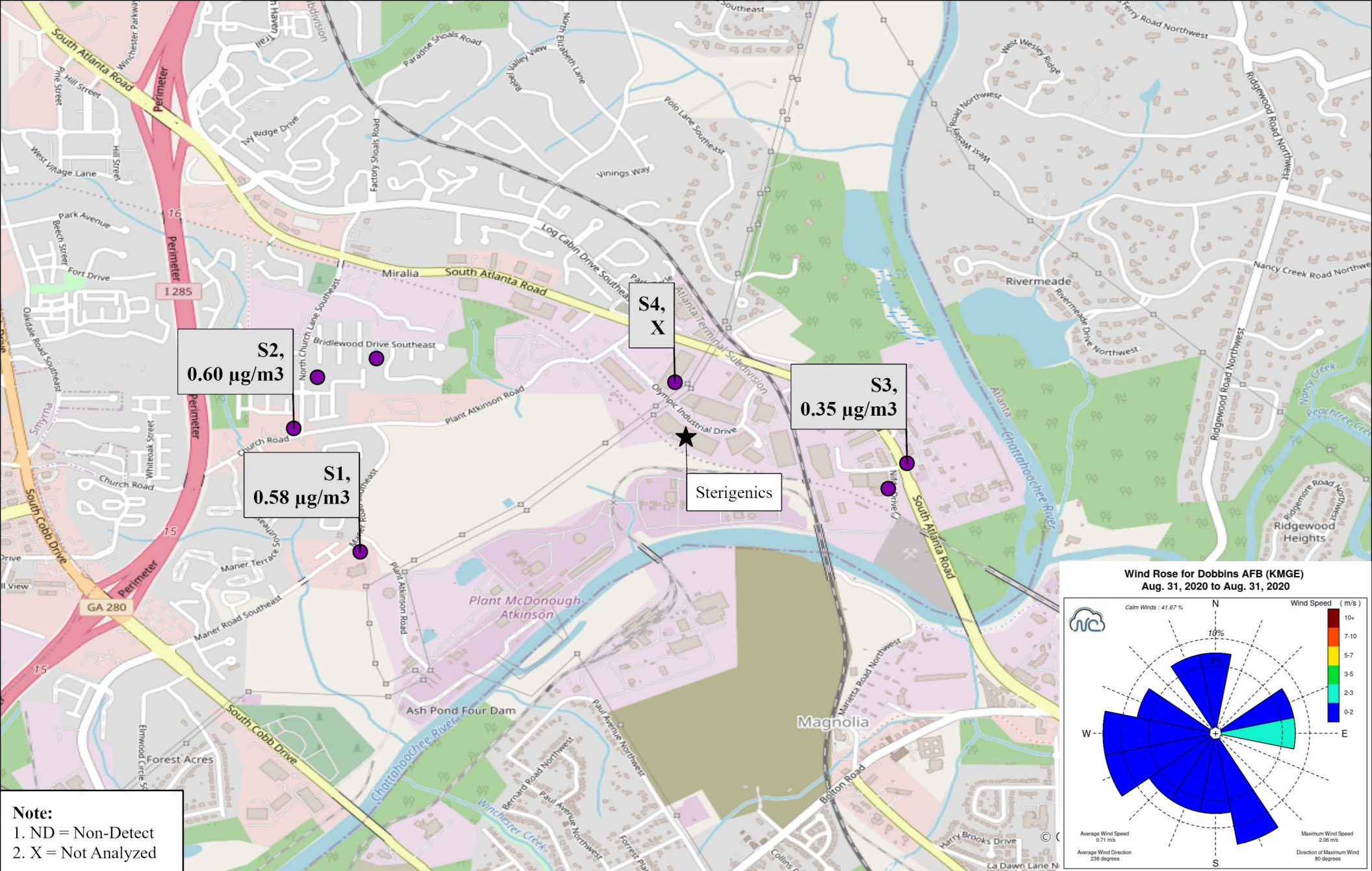
Sampled By: Georgia Environmental Protection Division

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
 Cobb County, GA

08/31/2020

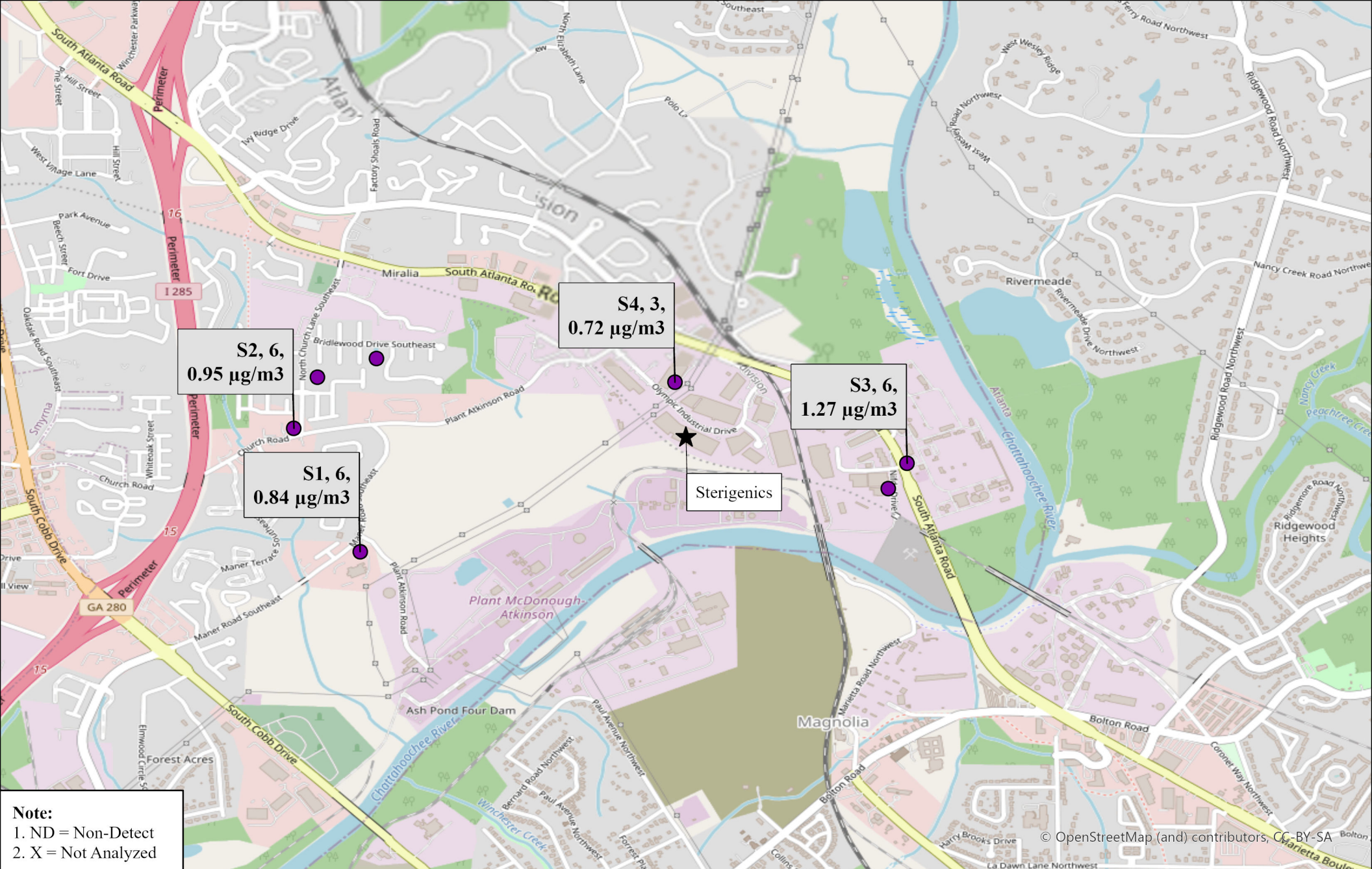
Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



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 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



Ethylene Oxide Sampling
 Cobb County, GA

August 2020 Site Average Values
 Note: Not detectable values were included in average calculations as a value of 0.
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group