

May 14, 2020

**MEMORANDUM**

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Fulton March 04, 2020 – March 22, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of March 04, 2020 – March 22, 2020 in the south Fulton area to characterize the EtO concentrations. The samples were sent to Eastern Research Group (ERG) for analysis. The Qualifier code of "2" is applied to samples to indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised. Code AL is applied to the sample to indicate that it is voided by operator.

Please note that ERG is now providing values for levels below the detection limit.

Location	Date	Qualifier	EtO Concentration (ug/m <sup>3</sup> )
F1	03/04/2020		0.86
F1	03/10/2020		AL
F1	03/16/2020	2	0.37
F1	03/22/2020		0.31
F2	03/04/2020	2	2.83
F2	03/10/2020		0.82
F2	03/16/2020		0.80
F2	03/22/2020	2	0.96

If you have any questions, please let me know.

DGO/do



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

April 15, 2020

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

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 03/11/20 11:53 through 04/01/20 12:18.

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:** 04/15/20 15:43

**SUBMITTED:** 03/11/20 to 04/01/20

**AQS SITE CODE:**

**SITE CODE:** Fulton

### ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
F1	0031135-01	Air	03/04/20 23:59	03/11/20 11:53
F2	0031135-02	Air	03/04/20 23:59	03/11/20 11:53
F2	0031834-02	Air	03/10/20 23:59	03/18/20 11:54
F1	0032319-01	Air	03/16/20 23:59	03/23/20 10:18
F2	0032319-02	Air	03/16/20 23:59	03/23/20 10:18
F1	0040113-01	Air	03/22/20 23:59	04/01/20 12:18
F2	0040113-02	Air	03/22/20 23:59	04/01/20 12:18



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REPORTED: 04/15/20 15:43

SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0031135-01

Sampled: 03/04/20 23:59

Pressure @ Receipt: 4.00" Hg

Canister #: SAT163

Received: 03/11/20 11:53

Comments:

Analyzed: 03/23/20 22:17

### 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	0.477	0.86		0.0285





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SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0031135-02

Sampled: 03/04/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: SAT130

Received: 03/11/20 11:53

Comments: Received at ambient

Analyzed: 03/23/20 23:21

### 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	1.57	2.83		0.0285



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REPORTED: 04/15/20 15:43

SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0031834-02

Sampled: 03/10/20 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: 5132

Received: 03/18/20 11:54

Comments:

Analyzed: 04/02/20 22:17

### 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	0.453	0.82		0.0285



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REPORTED: 04/15/20 15:43

SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0032319-01

Sampled: 03/16/20 23:59

Pressure @ Receipt: 12.50" Hg

Canister #: 19289

Received: 03/23/20 10:18

Comments:

Analyzed: 04/03/20 07:29

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.204	0.37		0.0285



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FILE #: 4222.00

REPORTED: 04/15/20 15:43

SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0032319-02

Sampled: 03/16/20 23:59

Pressure @ Receipt: 2.00" Hg

Canister #: 5045

Received: 03/23/20 10:18

Comments:

Analyzed: 04/03/20 08:25

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.444	0.80		0.0285



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REPORTED: 04/15/20 15:43

SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0040113-01

Sampled: 03/22/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: 18829

Received: 04/01/20 12:18

Comments:

Analyzed: 04/03/20 20:06

### Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.172	0.31		0.0285



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FILE #: 4222.00

REPORTED: 04/15/20 15:43

SUBMITTED: 03/11/20 to 04/01/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0040113-02

Sampled: 03/22/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: SAT070

Received: 04/01/20 12:18

Comments: Received at ambient

Analyzed: 04/03/20 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.534	0.96		0.0285



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**SUBMITTED:** 03/11/20 to 04/01/20

**AQS SITE CODE:**

**SITE CODE:** Fulton

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

#### *Batch B0C2305 - Summa Canister Prep*

##### **Blank (B0C2305-BLK1)**

Prepared: 03/09/20 Analyzed: 03/23/20

Ethylene oxide	ND	ppbv				U
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#### *Batch B0D0204 - Summa Canister Prep*

##### **Blank (B0D0204-BLK1)**

Prepared & Analyzed: 04/02/20

Ethylene oxide	ND	ppbv				U
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#### *Batch B0D0302 - Summa Canister Prep*

##### **Blank (B0D0302-BLK1)**

Prepared & Analyzed: 04/03/20

Ethylene oxide	ND	ppbv				U
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**REPORTED:** 04/15/20 15:43

**SUBMITTED:** 03/11/20 to 04/01/20

**AQS SITE CODE:**

**SITE CODE:** Fulton

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

*Sequence 2003049*

#### Calibration Check (2003049-CCV1)

Prepared & Analyzed: 03/23/20

Ethylene oxide	2.72	ppbv	10.0	30.00
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**AQS SITE CODE:**

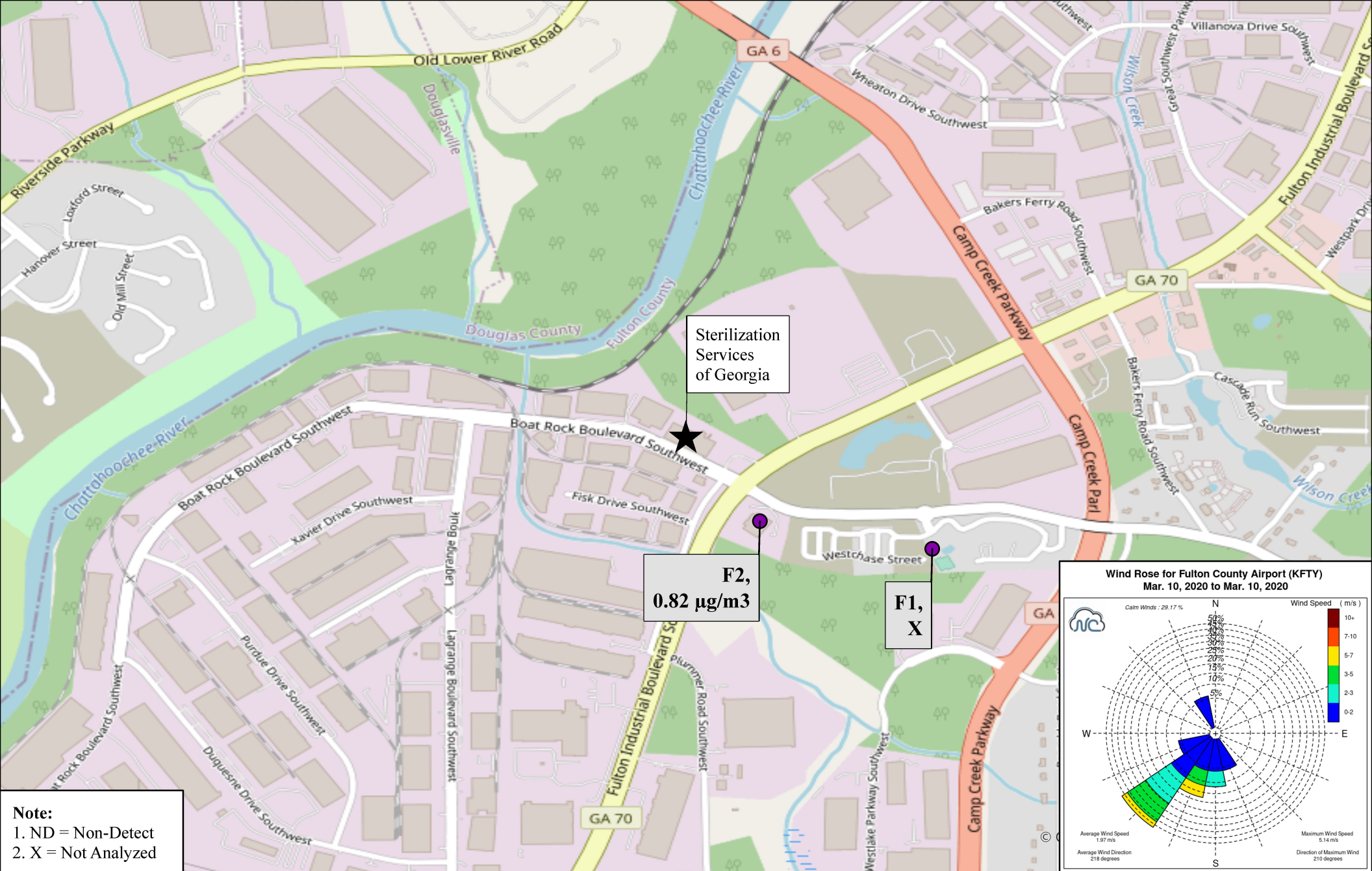
**SITE CODE:** Fulton

### 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 0.13 0.25  
 Miles



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

Ethylene Oxide Sampling  
 Fulton County, GA

03/10/2020

Sampled By: Georgia Environmental Protection Division

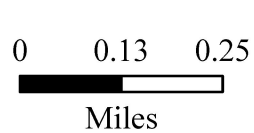
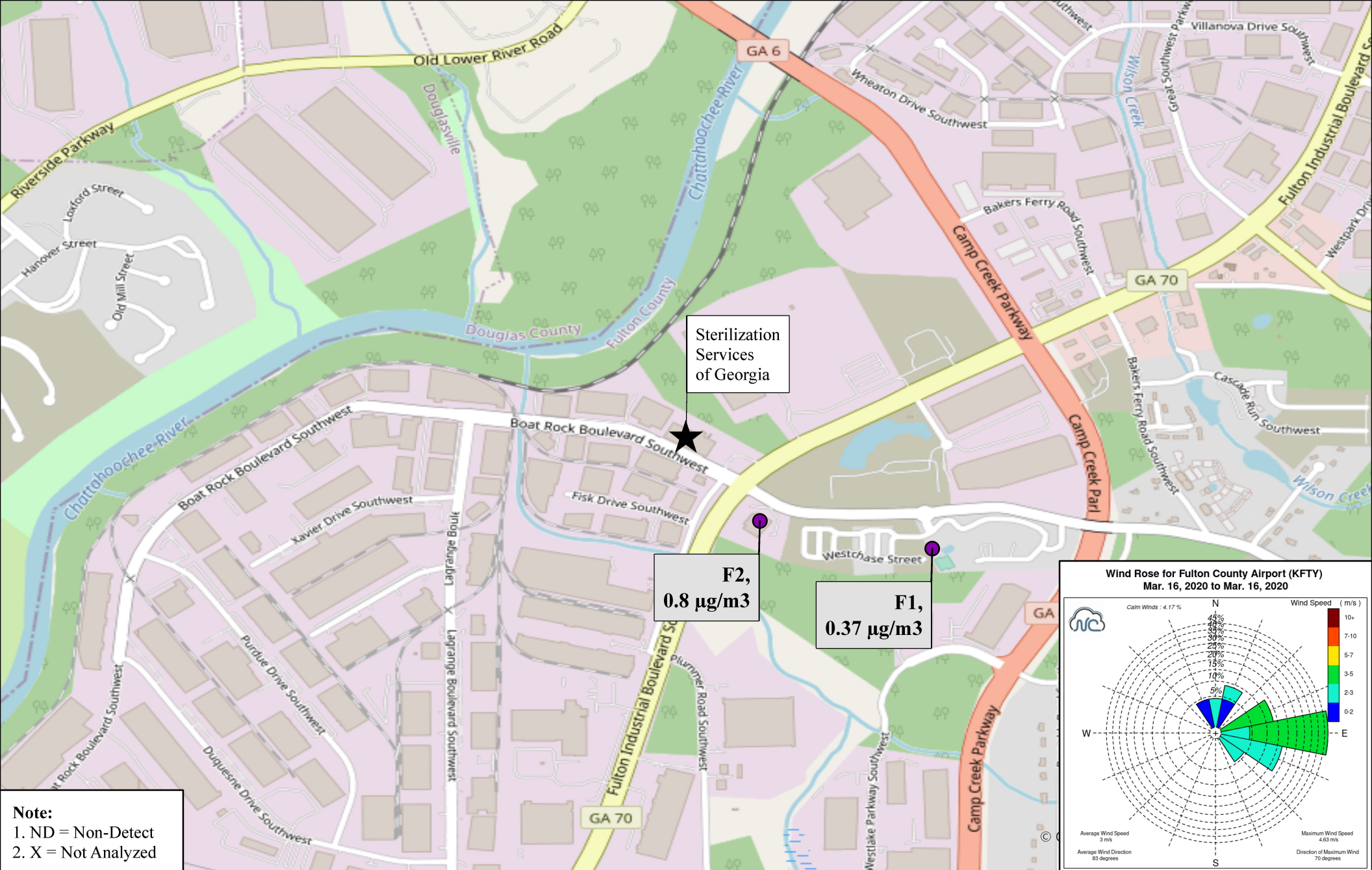
Analyzed By: Eastern Research Group



**GEORGIA**  
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION





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

Ethylene Oxide Sampling  
 Fulton County, GA

03/16/2020

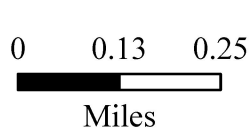
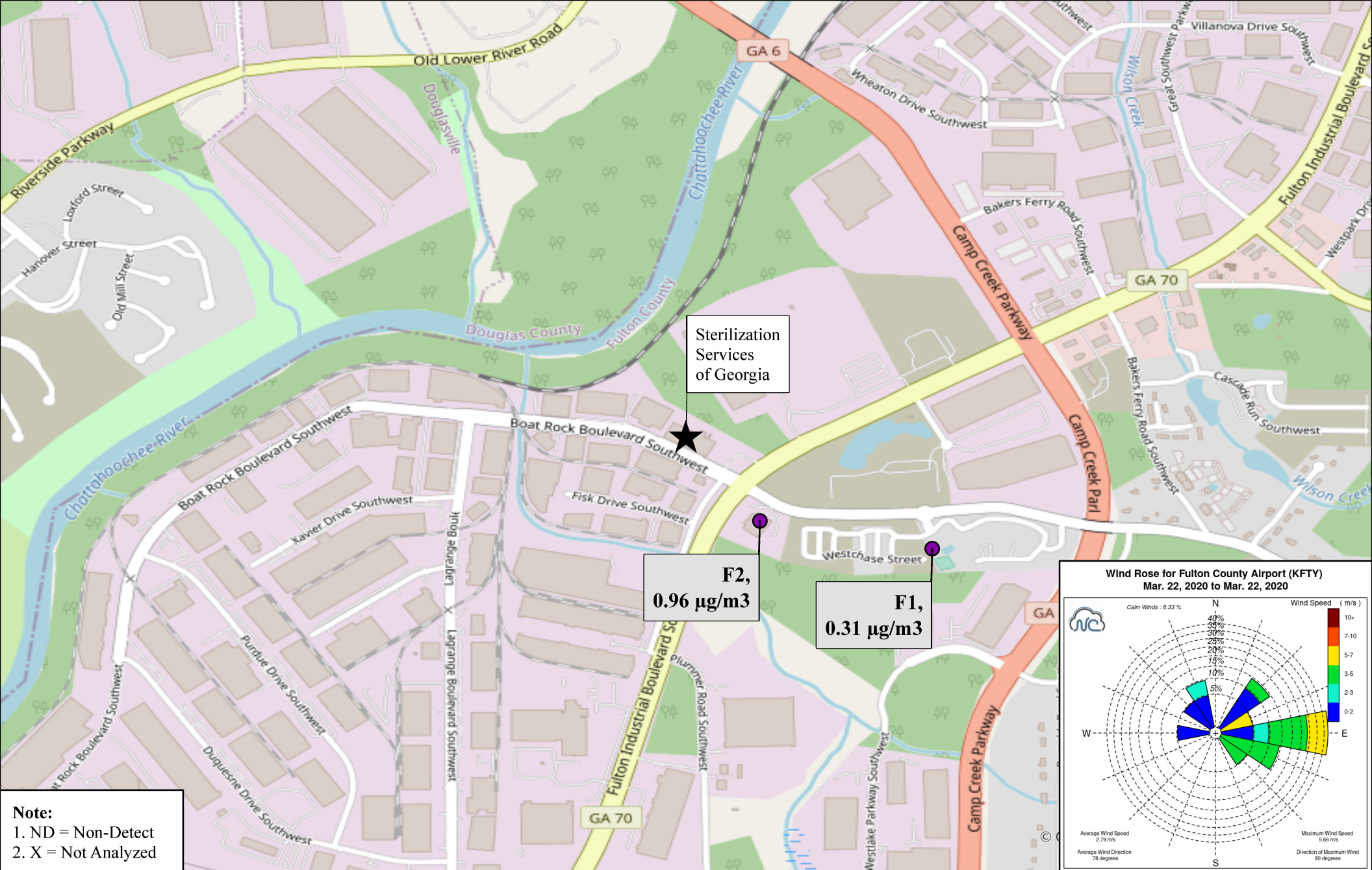
Sampled By: Georgia Environmental Protection Division

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  
Fulton County, GA

03/22/2020

Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



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