

June 23, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Fulton April 15, 2020 – May 03, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of April 15, 2020 – May 03, 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 “AN” is applied to designate a battery issue and code “AA” is applied to designate sample pressure issues.

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

Location	Date	Qualifier	EtO Concentration (ug/m ³)
F1	04/15/2020	2	0.59
F1	04/21/2020	2	0.64
F1	04/27/2020	2	1.50
F1	05/03/2020		AN
F2	04/15/2020	2	2.74
F2	04/21/2020	2	0.83
F2	04/27/2020	2	3.61
F2 QA	04/27/2020		3.48
F2	05/03/2020		AA

If you have any questions, please let me know.



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

June 05, 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 04/22/20 10:08 through 05/14/20 10:43.

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: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

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	0042219-01	Air	04/15/20 23:59	04/22/20 10:08
F2	0042219-02	Air	04/15/20 23:59	04/22/20 10:08
F1	0050112-01	Air	04/21/20 23:59	05/01/20 12:35
F2	0050112-02	Air	04/21/20 23:59	05/01/20 12:35
F1	0050616-01	Air	04/27/20 23:59	05/06/20 11:08
F2	0050616-02	Air	04/27/20 23:59	05/06/20 11:08
F2 QA	0050616-03	Air	04/27/20 23:59	05/06/20 11:08
F1	0051408-01	Air	05/03/20 23:59	05/14/20 10:43



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0042219-01

Sampled: 04/15/20 23:59

Pressure @ Receipt: 7.50" Hg

Canister #: 5072

Received: 04/22/20 10:08

Comments:

Analyzed: 05/01/20 17:18

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	0.326	0.59		0.0285



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0042219-02

Sampled: 04/15/20 23:59

Pressure @ Receipt: 0.00" Hg

Canister #: SAT025

Received: 04/22/20 10:08

Comments:

Analyzed: 05/01/20 18:13

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	1.52	2.74		0.0285



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REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0050112-01

Sampled: 04/21/20 23:59

Pressure @ Receipt: 7.50" Hg

Canister #: 19668

Received: 05/01/20 12:35

Comments: Sampled Outside 30 Day Can Cleaning Date

Analyzed: 05/16/20 17:14

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	0.353	0.64		0.0285



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SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0050112-02

Sampled: 04/21/20 23:59

Pressure @ Receipt: 0.00" psi

Canister #: SAT064

Received: 05/01/20 12:35

Comments:

Analyzed: 05/16/20 18:09

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	0.460	0.83		0.0285



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0050616-01

Sampled: 04/27/20 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: SAT043

Received: 05/06/20 11:08

Comments:

Analyzed: 05/19/20 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/m³</u>		<u>ppbv</u>
Ethylene oxide	0.832	1.50		0.0285



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0050616-02

Sampled: 04/27/20 23:59

Pressure @ Receipt: 0.00" psi

Canister #: SAT007

Received: 05/06/20 11:08

Comments:

Analyzed: 05/19/20 01:06

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/m³</u>		<u>ppbv</u>
Ethylene oxide	2.00	3.61		0.0285



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2 QA

Lab ID: 0050616-03

Sampled: 04/27/20 23:59

Pressure @ Receipt: 5.00" Hg

Canister #: SAT011

Received: 05/06/20 11:08

Comments:

Analyzed: 05/19/20 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/m³</u>		<u>ppbv</u>
Ethylene oxide	1.93	3.48		0.0285



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0051408-01

Sampled: 05/03/20 23:59

Pressure @ Receipt: 0 psig

Canister #: 5103

Received: 05/14/20 10:43

Comments: Recieved at ambient and oustide of 30 day can cleaning

Analyzed: 05/26/20 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	0.351	0.63		0.0285



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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

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 B0E0102 - Summa Canister Prep

Blank (B0E0102-BLK1)

Prepared & Analyzed: 05/01/20

Ethylene oxide	ND	ppbv				U
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Batch B0E1502 - Summa Canister Prep

Blank (B0E1502-BLK1)

Prepared: 05/15/20 Analyzed: 05/16/20

Ethylene oxide	ND	ppbv				U
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Batch B0E1703 - Summa Canister Prep

Blank (B0E1703-BLK1)

Prepared: 05/17/20 Analyzed: 05/18/20

Ethylene oxide	ND	ppbv				U
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Duplicate (B0E1703-DUP1)

Source: 0050616-02

Prepared: 04/27/20 Analyzed: 05/19/20

Ethylene oxide	2.02	ppbv	2.00	1.12	25	
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Duplicate (B0E1703-DUP2)

Source: 0050616-03

Prepared: 04/27/20 Analyzed: 05/19/20

Ethylene oxide	2.01	ppbv	1.93	3.95	25	
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Batch B0E2608 - Summa Canister Prep

Blank (B0E2608-BLK1)

Prepared & Analyzed: 05/26/20

Ethylene oxide	ND	ppbv				U
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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

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 2005002

Calibration Check (2005002-CCV1)

Prepared & Analyzed: 05/01/20

Ethylene oxide	2.30	ppbv	-7.9	30.00
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Sequence 2005034

Calibration Check (2005034-CCV1)

Prepared: 05/15/20 Analyzed: 05/16/20

Ethylene oxide	3.15	ppbv	26.0	30.00
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Sequence 2005035

Calibration Check (2005035-CCV1)

Prepared: 05/17/20 Analyzed: 05/18/20

Ethylene oxide	3.13	ppbv	25.3	30.00
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Sequence 2005056

Calibration Check (2005056-CCV1)

Prepared & Analyzed: 05/26/20

Ethylene oxide	2.55	ppbv	3.0	30.00
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FILE #: 4222.00

REPORTED: 06/05/20 12:22

SUBMITTED: 04/22/20 to 05/14/20

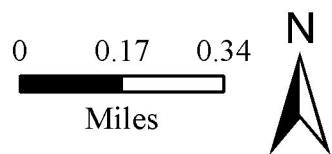
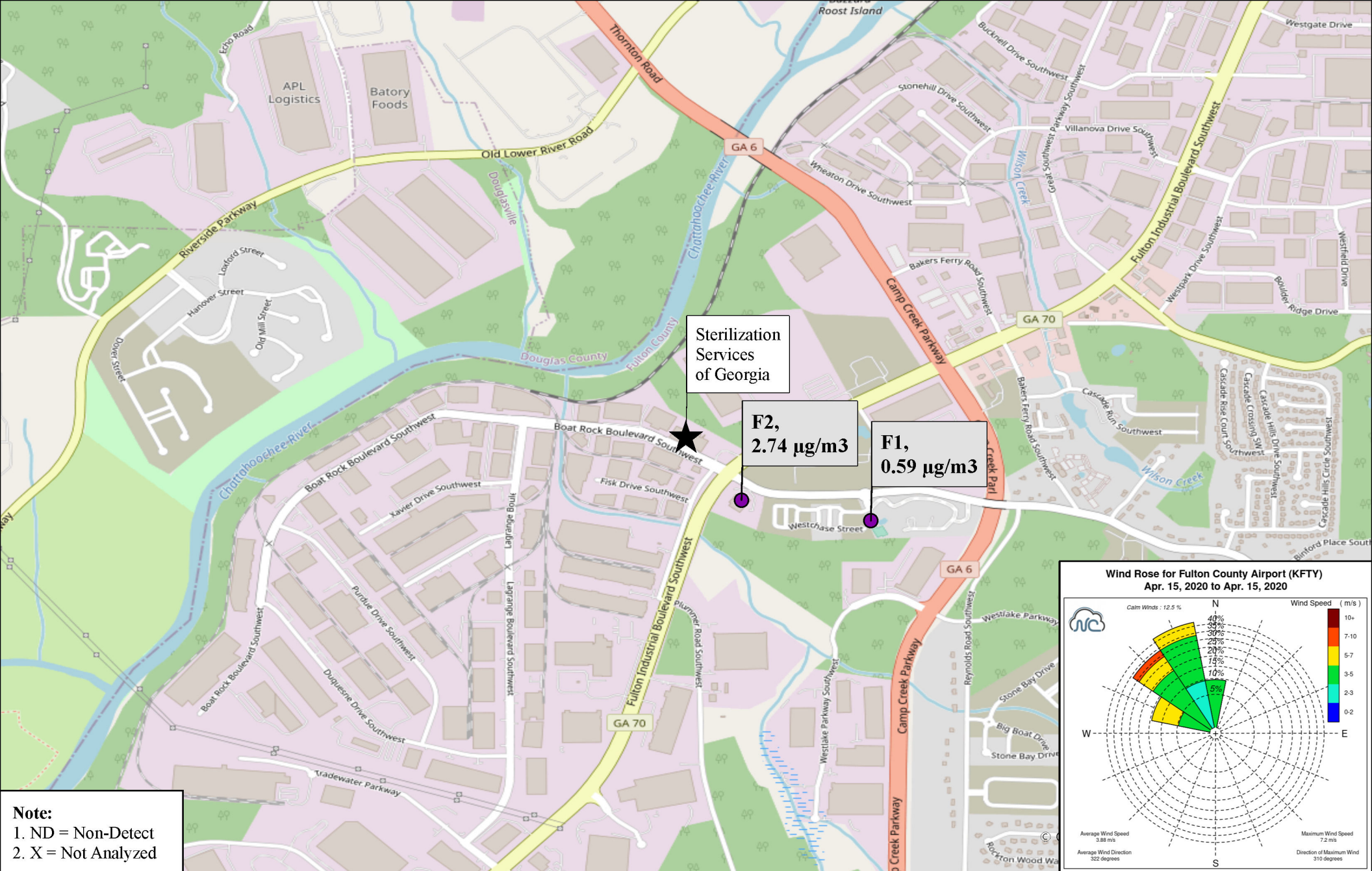
AQS SITE CODE:

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.



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

Ethylene Oxide Sampling
 Fulton County, GA

04/15/2020

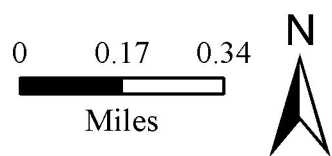
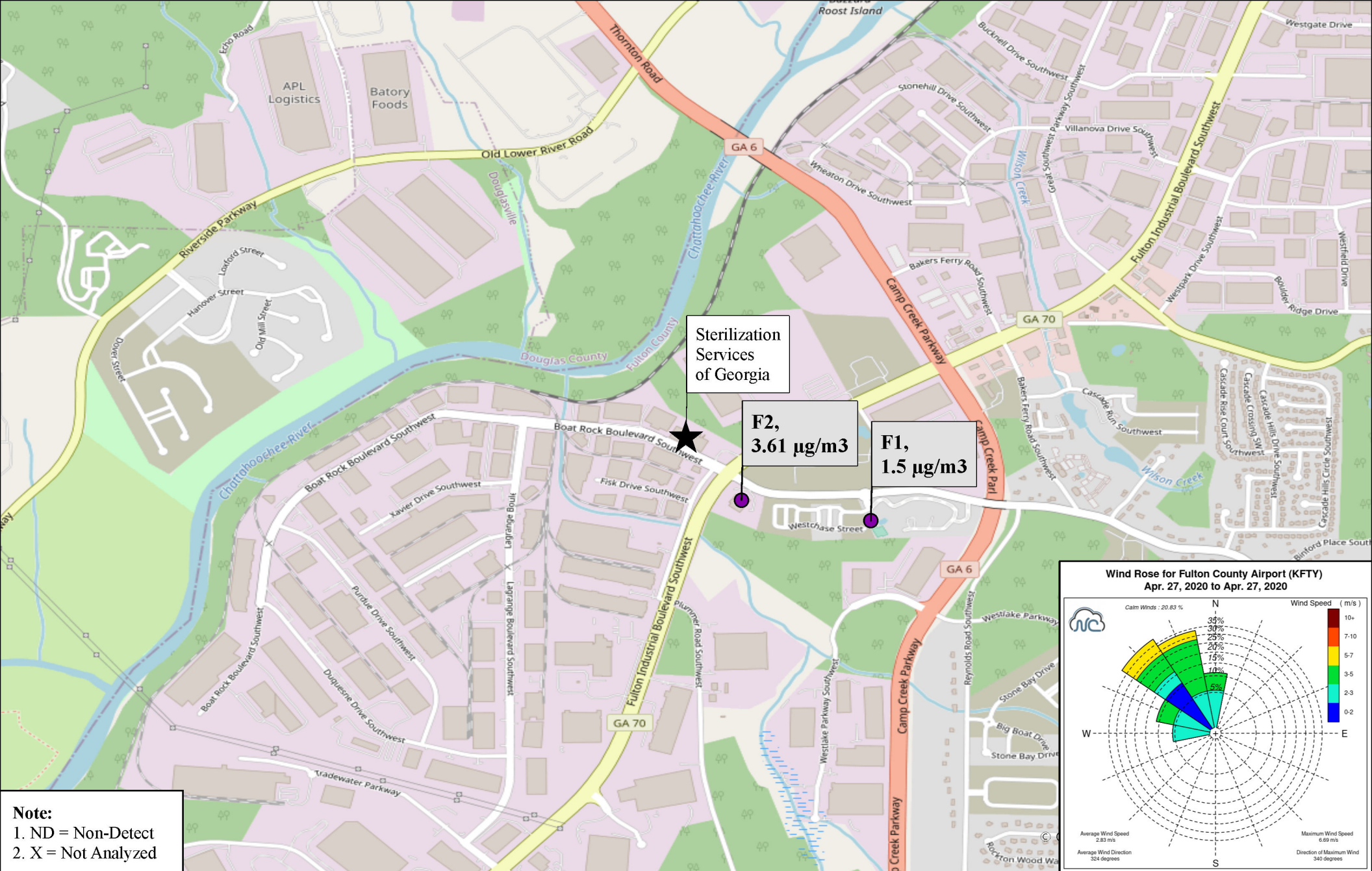
Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



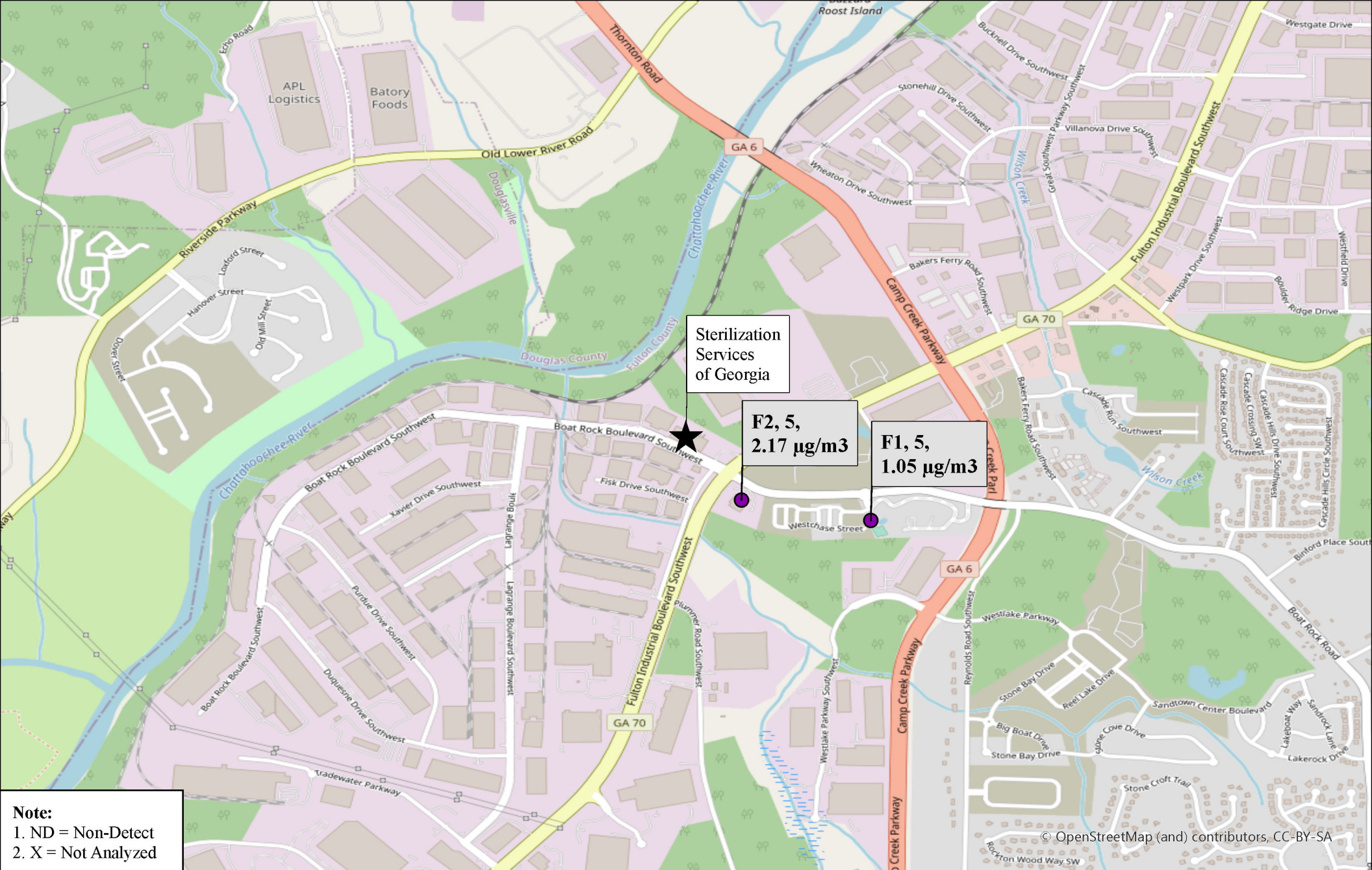
GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



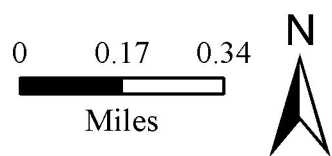
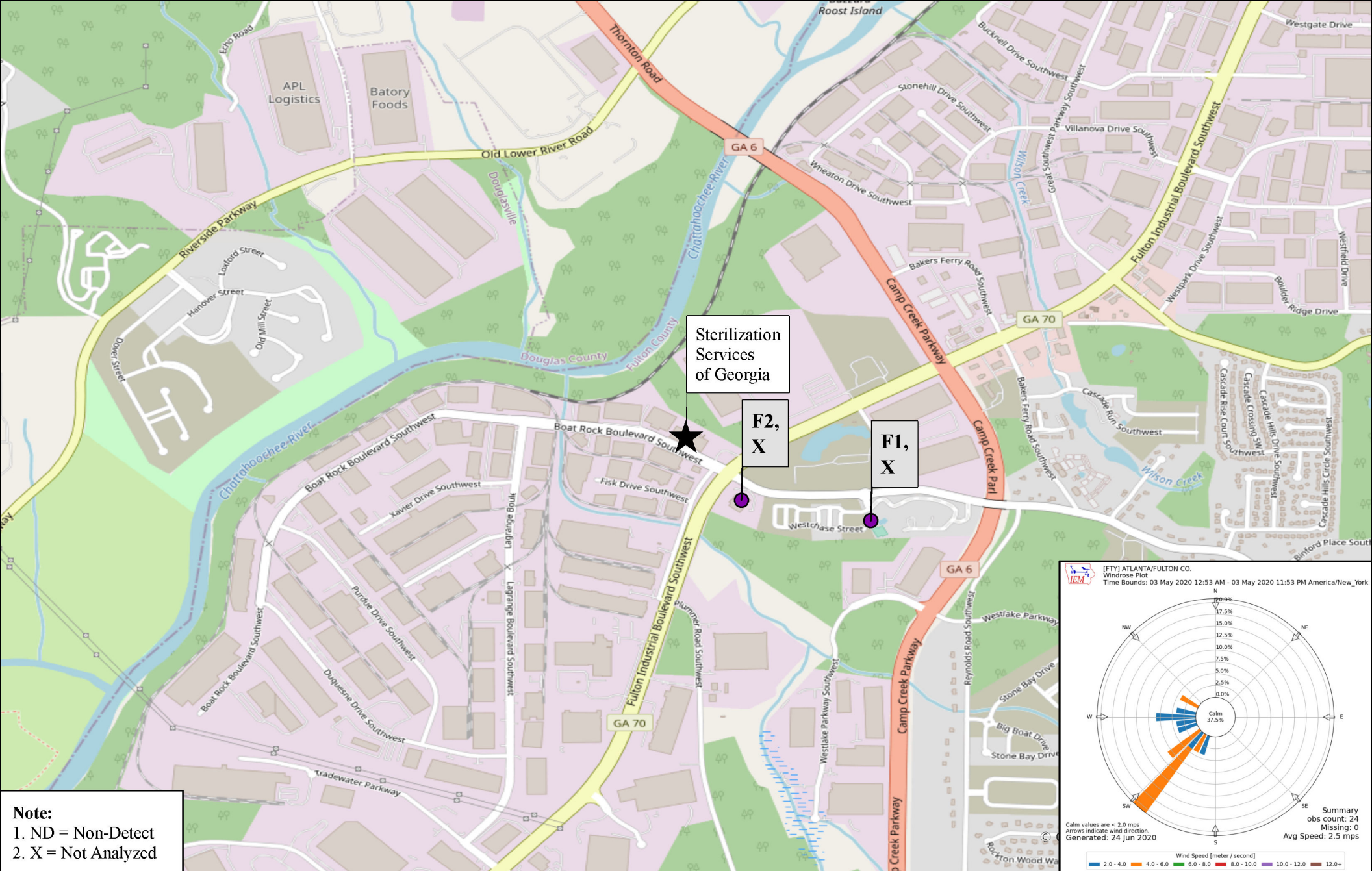
Ethylene Oxide Sampling
 Fulton County, GA

04/27/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group



Ethylene Oxide Sampling Fulton County, GA

April 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



Ethylene Oxide Sampling
 Fulton County, GA

05/03/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group

