

August 13, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Fulton June 14, 2020 – June 26, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of June 14, 2020 – June 26, 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. Null code “BI” is applied to the sample to indicate the sample was damaged during transit.

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

Location	Date	Qualifier	EtO Concentration (ug/m ³)
F1	06/14/2020	2	0.29
F1	06/20/2020	2	0.48
F1	06/26/2020	2	1.17
F2	06/14/2020		BI
F2	06/20/2020	2	0.89
F2	06/26/2020	2	1.72

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: 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 06/25/20 11:28 through 07/06/20 10:05.

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: 07/16/20 11:14

SUBMITTED: 06/25/20 to 07/06/20

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	0062525-01	Air	06/14/20 23:59	06/25/20 11:28
F1	0062612-01	Air	06/20/20 23:59	06/26/20 11:34
F2	0062612-02	Air	06/20/20 23:59	06/26/20 11:34
Fulton FB	0062612-03	Air	06/23/20 23:59	06/26/20 11:34
F1	0070603-01	Air	06/26/20 23:59	07/06/20 10:05
F2	0070603-02	Air	06/26/20 23:59	07/06/20 10:05



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REPORTED: 07/16/20 11:14

SUBMITTED: 06/25/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Fulton

Description: Fulton FB

Lab ID: 0062612-03

Sampled: 06/23/20 23:59

Pressure @ Receipt: 29.50" Hg

Canister #: 19300

Received: 06/26/20 11:34

Comments: Field Blank

Analyzed: 07/07/20 16:26

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/m³</u>		<u>ppbv</u>
Ethylene oxide	ND	ND	U	0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:14

SUBMITTED: 06/25/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0070603-01

Sampled: 06/26/20 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: SAT039

Received: 07/06/20 10:05

Comments:

Analyzed: 07/08/20 01:38

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	0.650	1.17		0.0285



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FILE #: 4222.00

REPORTED: 07/16/20 11:14

SUBMITTED: 06/25/20 to 07/06/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0070603-02

Sampled: 06/26/20 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: 5090

Received: 07/06/20 10:05

Comments:

Analyzed: 07/08/20 02:33

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	0.950	1.72		0.0285



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FILE #: 4222.00
REPORTED: 07/16/20 11:14
SUBMITTED: 06/25/20 to 07/06/20
AQS SITE CODE:
SITE CODE: Fulton

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
Air Toxics by EPA Compendium Method TO-15 - Quality Control						
<i>Batch B0F2607 - Summa Canister Prep</i>						
Blank (B0F2607-BLK1)			Prepared & Analyzed: 06/26/20			
Ethylene oxide	ND	ppbv				U
<i>Batch B0F2906 - Summa Canister Prep</i>						
Blank (B0F2906-BLK1)			Prepared & Analyzed: 06/29/20			
Ethylene oxide	ND	ppbv				U
<i>Batch B0G0705 - Summa Canister Prep</i>						
Blank (B0G0705-BLK1)			Prepared & Analyzed: 07/07/20			
Ethylene oxide	ND	ppbv				U



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FILE #: 4222.00
REPORTED: 07/16/20 11:14
SUBMITTED: 06/25/20 to 07/06/20
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 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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CERTIFICATE OF ANALYSIS

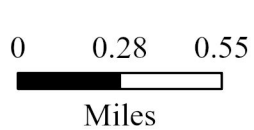
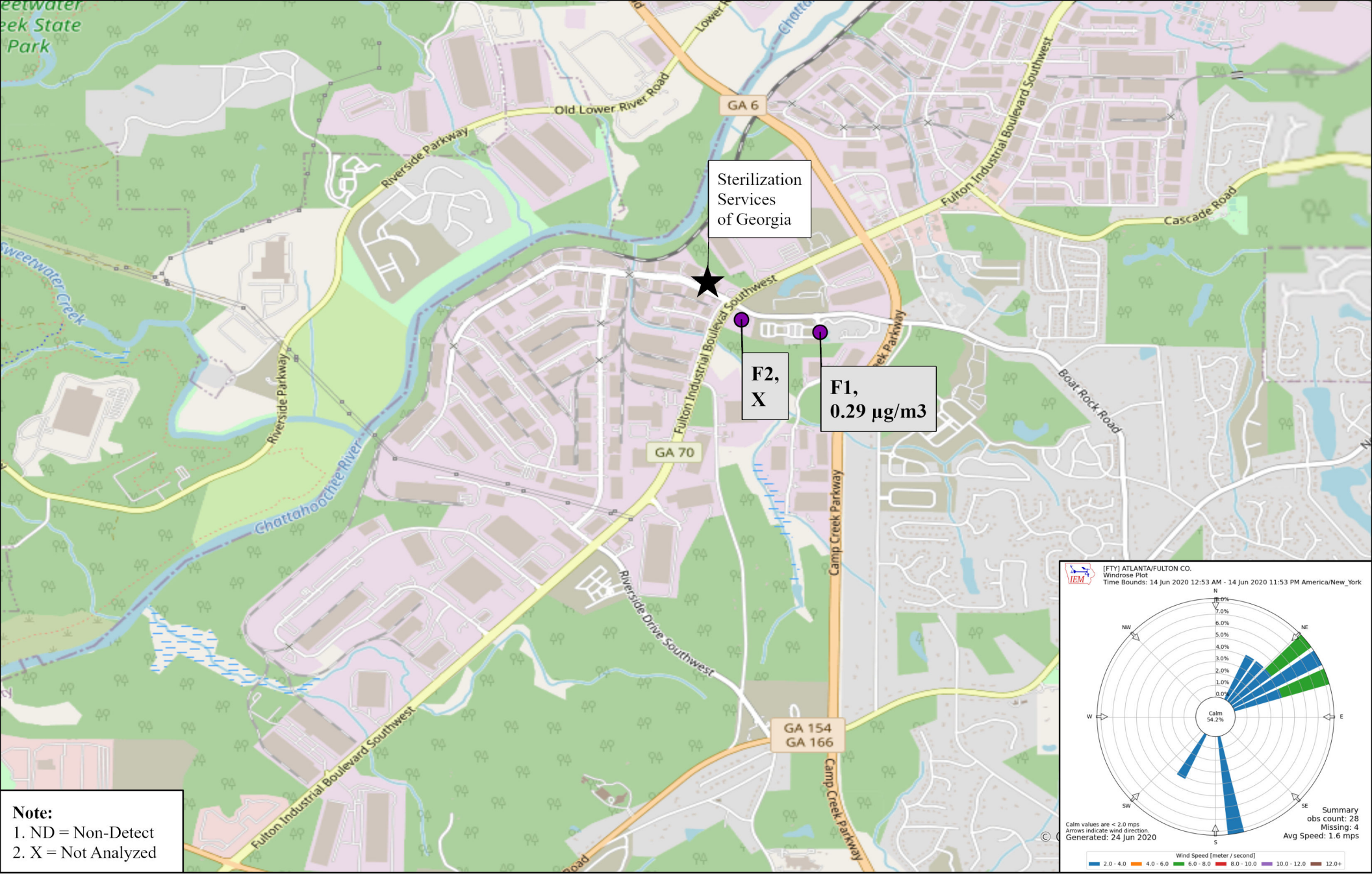
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Notes and Definitions

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 (µg/m³)

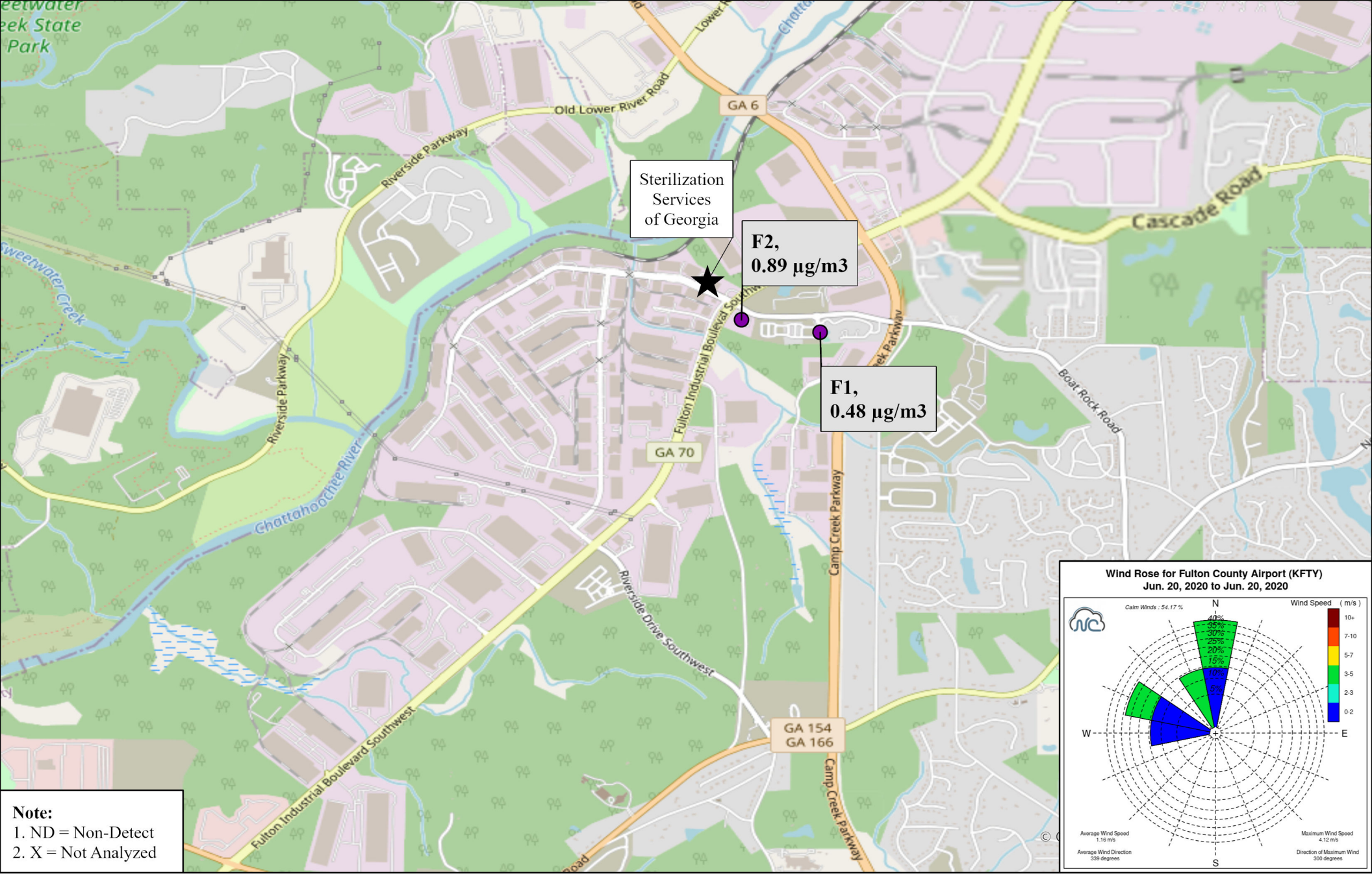
Ethylene Oxide Sampling
 Fulton County, GA

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



GEORGIA
 DEPARTMENT OF NATURAL RESOURCES

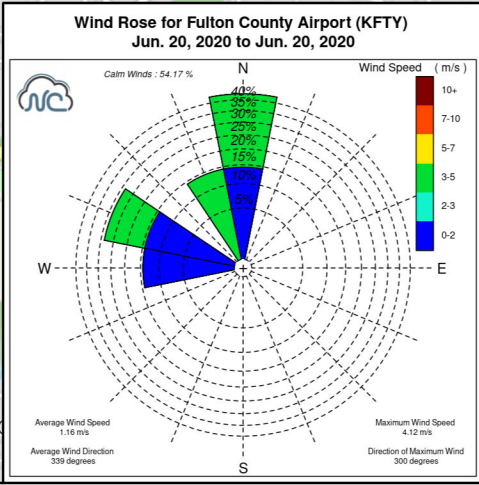
ENVIRONMENTAL PROTECTION DIVISION



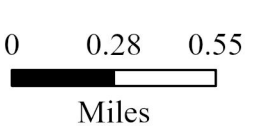
Sterilization
Services
of Georgia

F2,
0.89 µg/m3

F1,
0.48 µg/m3



Note:
1. ND = Non-Detect
2. X = Not Analyzed

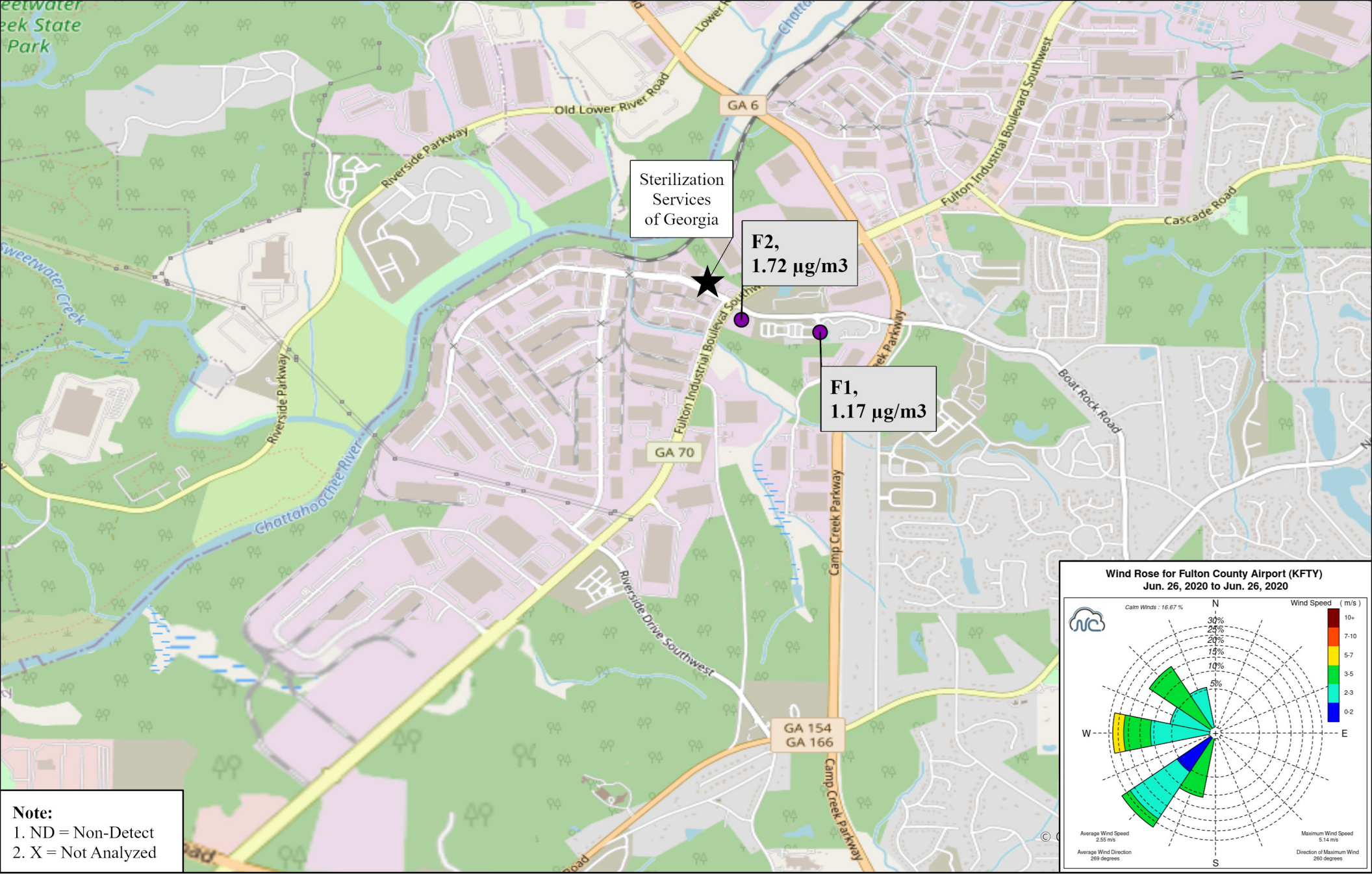


Site ID, Concentration (µg/m3)

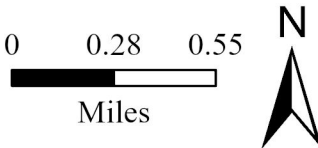
Ethylene Oxide Sampling
Fulton County, GA

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





Note:
 1. ND = Non-Detect
 2. X = Not Analyzed

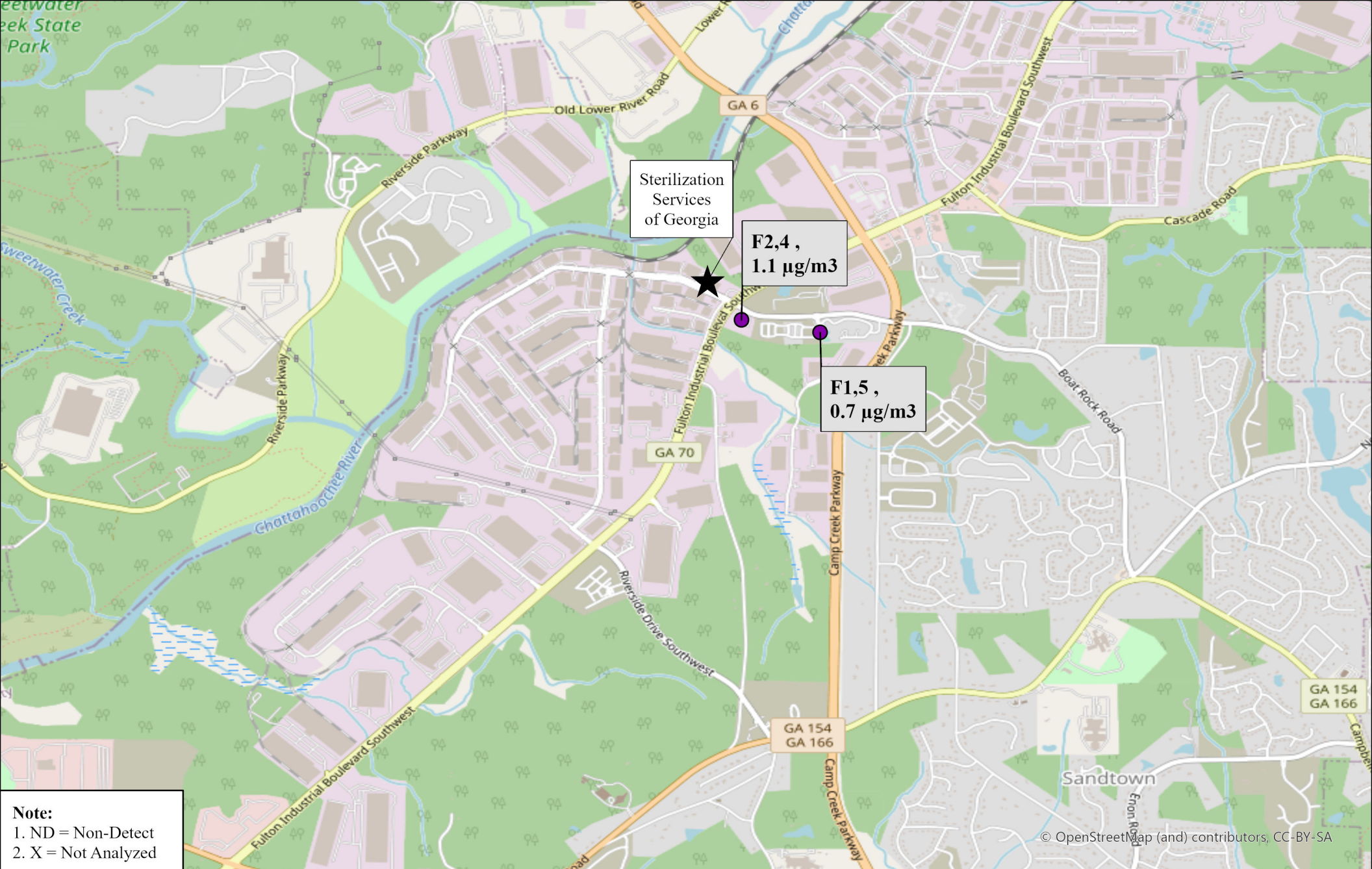


Site ID, Concentration ($\mu\text{g}/\text{m}^3$)

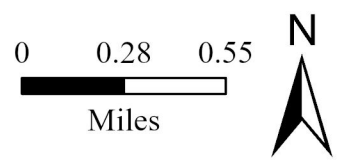
Ethylene Oxide Sampling
 Fulton County, GA

06/26/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group





Ethylene Oxide Sampling
 Fulton County, GA



**Site ID, Number of Samples,
 Concentration (µg/m³)**

June 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