



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office

2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334
404-656-4713

September 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 July 02, 2020 – July 20, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of July 02, 2020 – July 20, 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. Qualifier code “LK” (Analyte Identified; Reported Value May Be Biased High) is also applied to one of the samples.

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

Location	Date	Qualifier	EtO Concentration (ug/m ³)
F1	07/02/2020	2, LK	1.19
F1	07/08/2020	2	0.39
F1	07/14/2020	2	1.43
F1	07/20/2020		0.72
F2	07/02/2020	2	1.73
F2	07/08/2020	2	0.37
F2	07/14/2020	2	0.52
F2	07/20/2020		0.46
F2 QA	07/08/2020	2	0.46

If you have any questions, please let me know.

DGO/do



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

August 25, 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 07/09/20 10:58 through 07/29/20 12:22.

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: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

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	0070930-01	Air	07/02/20 23:59	07/09/20 10:58
F2	0070930-02	Air	07/02/20 23:59	07/09/20 10:58
F1	0071533-01	Air	07/08/20 23:59	07/15/20 11:03
F2	0071533-02	Air	07/08/20 23:59	07/15/20 11:03
F2-QA	0071533-03	Air	07/08/20 23:59	07/15/20 11:03
F1	0072414-01	Air	07/14/20 23:59	07/24/20 12:17
F2	0072414-02	Air	07/14/20 23:59	07/24/20 12:17
F1	0072931-01	Air	07/20/20 23:59	07/29/20 12:22
F2	0072931-02	Air	07/20/20 23:59	07/29/20 12:22



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0071533-01

Sampled: 07/08/20 23:59

Pressure @ Receipt: 8.00" Hg

Canister #: A21080

Received: 07/15/20 11:03

Comments:

Analyzed: 08/05/20 22:53

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/m³</u>		<u>ppbv</u>
Ethylene oxide	0.215	0.39		0.0285



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0071533-02

Sampled: 07/08/20 23:59

Pressure @ Receipt: 6.50" Hg

Canister #: A21053

Received: 07/15/20 11:03

Comments:

Analyzed: 08/05/20 23:48

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	0.204	0.37		0.0285



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2-QA

Lab ID: 0071533-03

Sampled: 07/08/20 23:59

Pressure @ Receipt: 0" Hg

Canister #: 33232

Received: 07/15/20 11:03

Comments: Received at ambient

Analyzed: 08/06/20 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	0.255	0.46		0.0285



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0072414-01

Sampled: 07/14/20 23:59

Pressure @ Receipt: 8.00" Hg

Canister #: AZ45

Received: 07/24/20 12:17

Comments:

Analyzed: 08/07/20 04:06

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	0.791	1.43		0.0285



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0072414-02

Sampled: 07/14/20 23:59

Pressure @ Receipt: 8.00" Hg

Canister #: 5055

Received: 07/24/20 12:17

Comments:

Analyzed: 08/07/20 05:01

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/m³</u>		<u>ppbv</u>
Ethylene oxide	0.289	0.52		0.0285



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F1

Lab ID: 0072931-01

Sampled: 07/20/20 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: 18829

Received: 07/29/20 12:22

Comments:

Analyzed: 08/08/20 05:41

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	0.398	0.72		0.0285



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FILE #: 4222.00

REPORTED: 08/25/20 09:00

SUBMITTED: 07/09/20 to 07/29/20

AQS SITE CODE:

SITE CODE: Fulton

Description: F2

Lab ID: 0072931-02

Sampled: 07/20/20 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: 33531

Received: 07/29/20 12:22

Comments:

Analyzed: 08/08/20 06:36

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	0.254	0.46		0.0285



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PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 08/25/20 09:00
SUBMITTED: 07/09/20 to 07/29/20
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 B0H0304 - Summa Canister Prep

Blank (B0H0304-BLK1)

Prepared: 07/28/20 Analyzed: 08/01/20

Ethylene oxide	ND	ppbv				U
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Batch B0H0507 - Summa Canister Prep

Blank (B0H0507-BLK1)

Prepared & Analyzed: 08/05/20

Ethylene oxide	ND	ppbv				U
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Duplicate (B0H0507-DUP3)

Source: 0071533-02

Prepared: 07/08/20 Analyzed: 08/06/20

Ethylene oxide	0.219	ppbv	0.20	6.85	25	
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Duplicate (B0H0507-DUP4)

Source: 0071533-03

Prepared: 07/08/20 Analyzed: 08/06/20

Ethylene oxide	0.252	ppbv	0.26	1.22	25	
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Batch B0H0606 - Summa Canister Prep

Blank (B0H0606-BLK1)

Prepared & Analyzed: 08/06/20

Ethylene oxide	ND	ppbv				U
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Batch B0H0705 - Summa Canister Prep

Blank (B0H0705-BLK1)

Prepared & Analyzed: 08/07/20

Ethylene oxide	ND	ppbv				U
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FILE #: 4222.00
 REPORTED: 08/25/20 09:00
 SUBMITTED: 07/09/20 to 07/29/20
 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 2007060

Initial Cal Check (2007060-ICV2)

Prepared: 07/31/20 Analyzed: 08/01/20

Ethylene oxide	2.26	ppbv	2.6	30.00
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Sequence 2008010

Calibration Check (2008010-CCV1)

Prepared & Analyzed: 08/05/20

Ethylene oxide	2.69	ppbv	9.0	30.00
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Sequence 2008012

Calibration Check (2008012-CCV1)

Prepared & Analyzed: 08/06/20

Ethylene oxide	2.91	ppbv	17.8	30.00
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Sequence 2008018

Calibration Check (2008018-CCV1)

Prepared & Analyzed: 08/07/20

Ethylene oxide	3.01	ppbv	21.6	30.00
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CERTIFICATE OF ANALYSIS

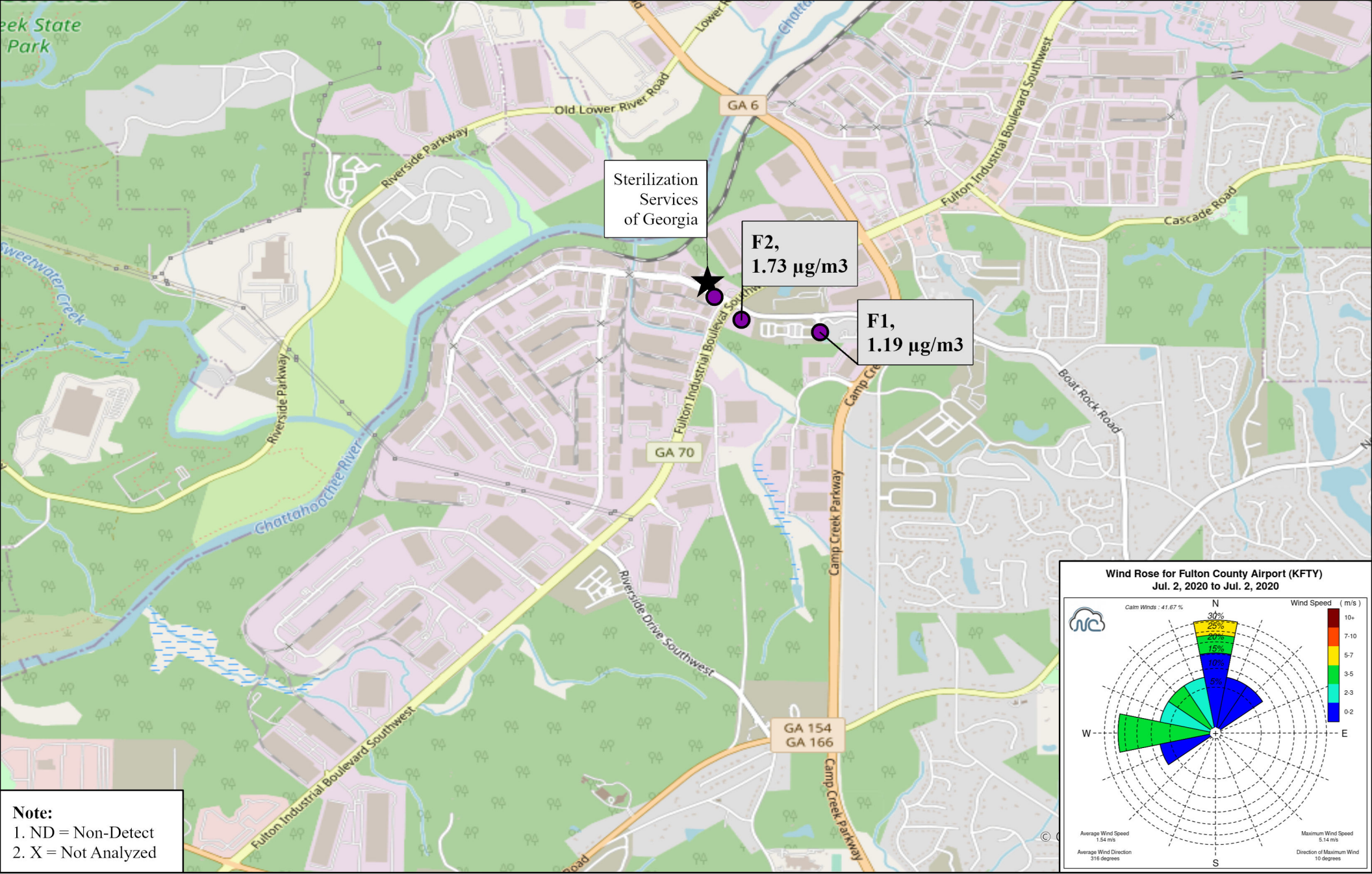
U.S. Environmental Protection Agency, Region 4
4244 International Pkwy, Suite 120
Atlanta, GA 30354
ATTN: Ms. Jaime Gore
PHONE: (404) 362-4912 **FAX:** (919) 541-0516

FILE #: 4222.00
REPORTED: 08/25/20 09:00
SUBMITTED: 07/09/20 to 07/29/20
AQS SITE CODE:
SITE CODE: Fulton

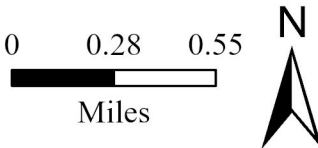
Notes and Definitions

U Under Detection Limit
LK Analyte identified; Reported value may be biased high.
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.



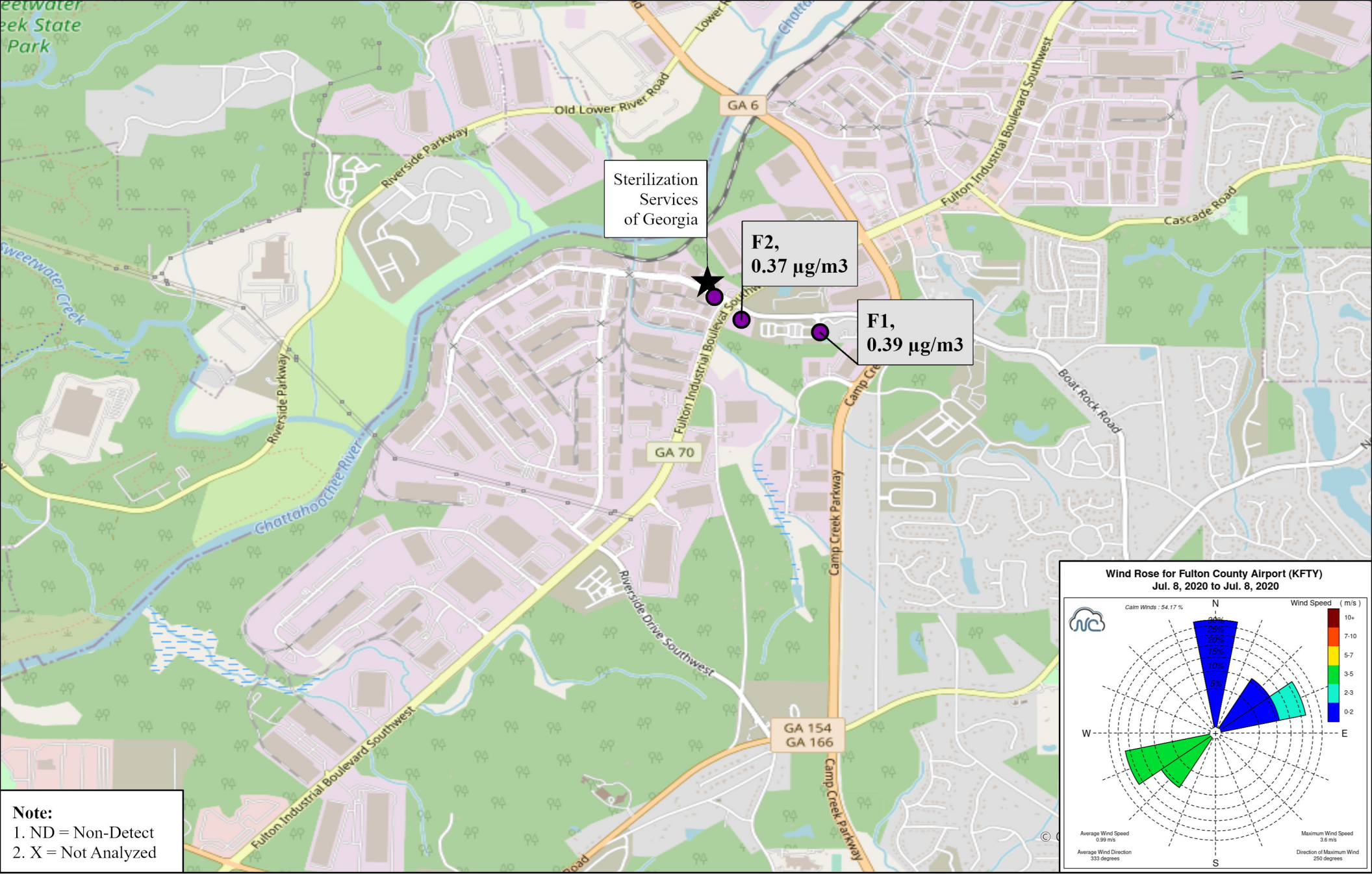
Note:
 1. ND = Non-Detect
 2. X = Not Analyzed



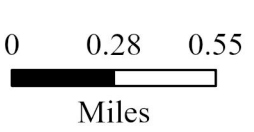
Site ID, Concentration (µg/m3)

Ethylene Oxide Sampling
 Fulton County, GA

07/02/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group



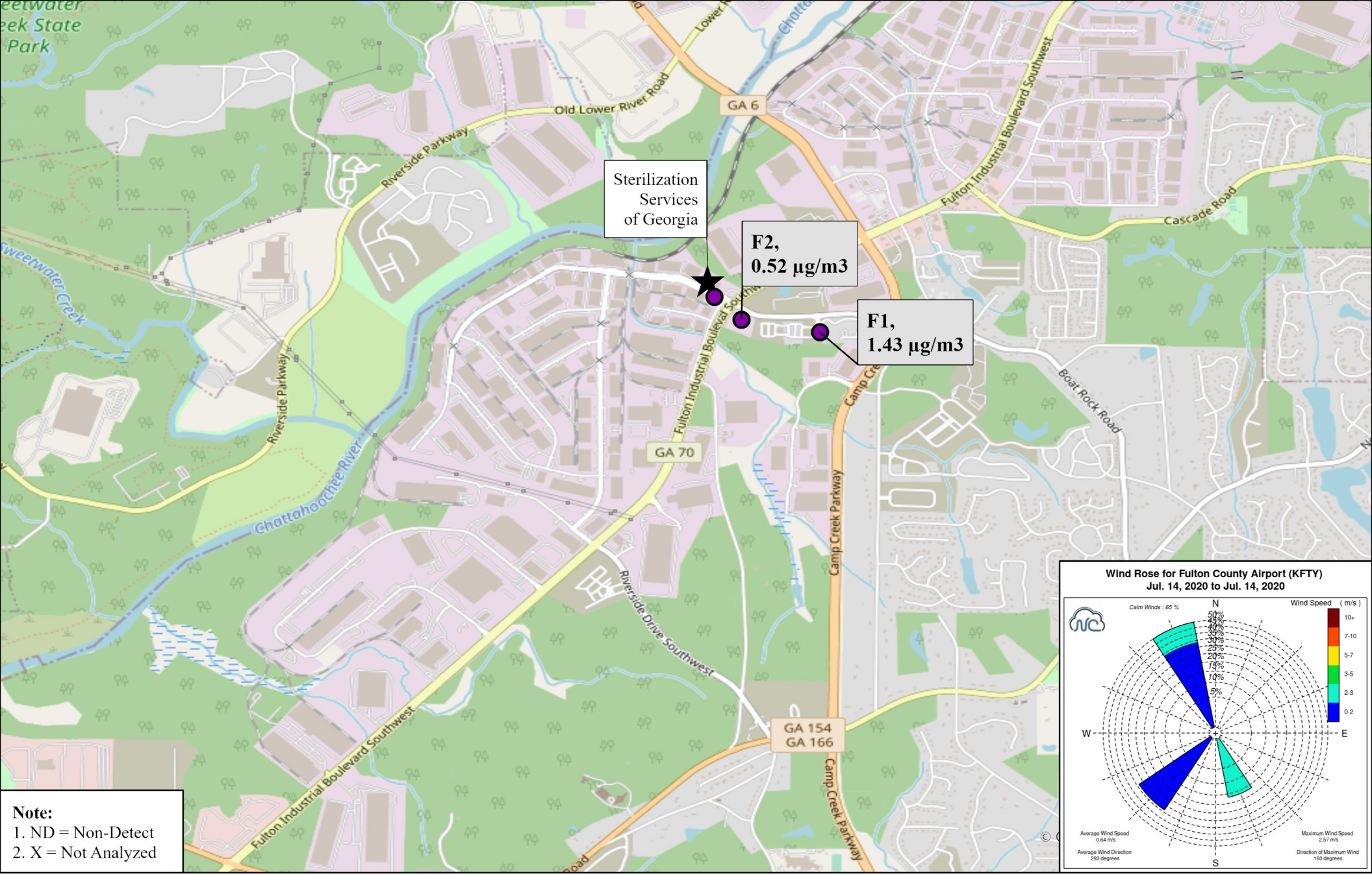
Note:
 1. ND = Non-Detect
 2. X = Not Analyzed



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

Ethylene Oxide Sampling
 Fulton County, GA

07/08/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group

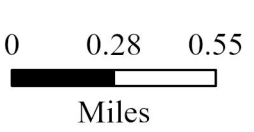


Sterilization Services of Georgia

F2,
0.52 $\mu\text{g}/\text{m}^3$

F1,
1.43 $\mu\text{g}/\text{m}^3$

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

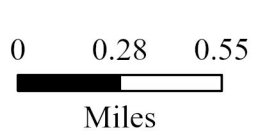
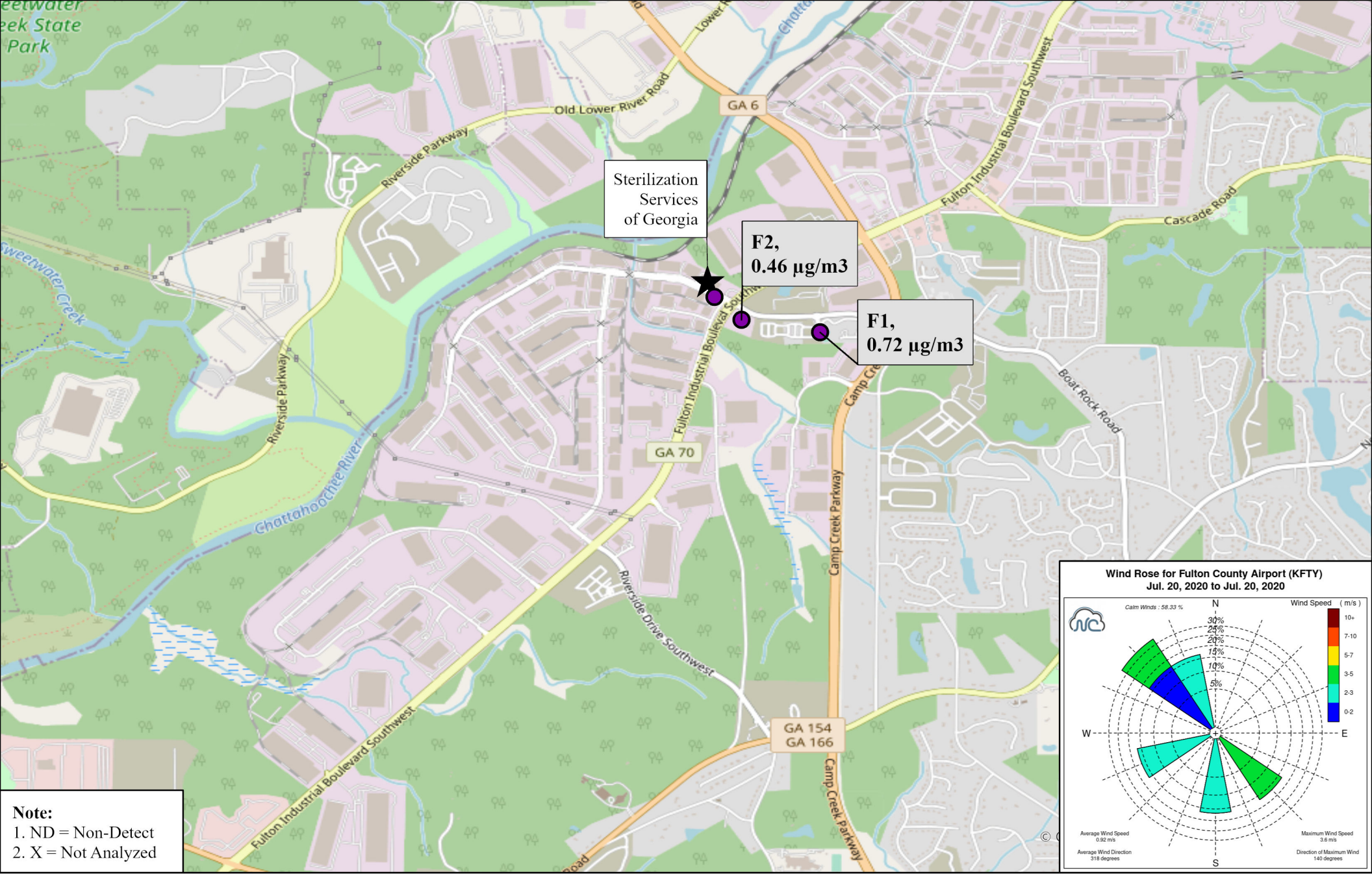


Site ID, Concentration ($\mu\text{g}/\text{m}^3$)

Ethylene Oxide Sampling
Fulton County, GA

07/14/2020
Sampled By: Georgia Environmental Protection Division
Analyzed By: Eastern Research Group





Site ID, Concentration (µg/m³)

Ethylene Oxide Sampling
 Fulton County, GA

07/20/2020
 Sampled By: Georgia Environmental Protection Division
 Analyzed By: Eastern Research Group



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