



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

March 12, 2020

MEMORANDUM

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: South DeKalb December 19, 2019 – January 16, 2020 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were taken at our South DeKalb monitoring station in December 2019 and January 2020. Each of the samples were sent to Eastern Research Group (ERG) for analysis.

The Qualifier code of "LK" was given by ERG to indicate that the sample may be biased high. The qualifier code "U" was given by ERG to indicate that the sample is under the detection limit. Please note that ERG is now providing values for levels below the detection limit. The samples listed as AF indicate that the sample was scheduled but not collected. On previous memos, this was listed as an X rather than AF, but we have changed the code to be more consistent with our other documentation. The samples listed as AN indicate that the machine malfunctioned while collecting the sample. The Qualifier code of "2" was given to the sample to indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised. Please note that ERG is now providing values for levels below the detection limit. As of January 1, this site began sampling once every 6 days consistent with the other compounds for the National Air Toxics Trends Station (NATTS).

Date	Qualifier	EtO Concentration (ug/m ³)
12/19/2019	2	0.28
12/23/2019		AN
12/31/2019		0.13
01/04/2020	2	0.16
01/07/2020	U, 2	0.04
01/10/2020		AF
01/16/2020	LK	0.24

If you have any questions, please let me know.

DGO/do



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

February 20, 2020

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

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 01/07/20 10:35 through 01/23/20 12:19.

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

The information contained in this report and its attachment(s) are intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this report is strictly prohibited. If you have received this report in error, please notify julie.swift@erg.com and delete the report without retaining any copies.



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
South Dekalb	0010718-01	Air	12/19/19 23:59	01/07/20 10:35
South Dekalb	0010718-02	Air	12/31/19 23:59	01/07/20 10:35
South Dekalb	0010908-01	Air	01/04/20 23:59	01/09/20 11:20
South Dekalb	0011706-01	Air	01/07/20 23:59	01/17/20 11:14
South Dekalb	0012314-01	Air	01/16/20 23:59	01/23/20 12:19



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb

Lab ID: 0010718-01

Sampled: 12/19/19 23:59

Pressure @ Receipt: 0.75" Hg

Canister #: SAT110

Received: 01/07/20 10:35

Comments:

Analyzed: 01/09/20 21:06

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	0.154	0.28		0.0250



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb	Lab ID: 0010718-02	Sampled: 12/31/19 23:59
Pressure @ Receipt: 0" Hg	Canister #: 5004	Received: 01/07/20 10:35
Comments: Received at ambient		Analyzed: 01/09/20 22:01

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	0.0709	0.13		0.0250



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb	Lab ID: 0010908-01	Sampled: 01/04/20 23:59
Pressure @ Receipt: 0" Hg	Canister #: A21084	Received: 01/09/20 11:20
Comments: Received at ambient		Analyzed: 01/15/20 11:37

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	0.0888	0.16		0.0250



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb

Lab ID: 0011706-01

Sampled: 01/07/20 23:59

Pressure @ Receipt: 2.00" Hg

Canister #: A21058

Received: 01/17/20 11:14

Comments:

Analyzed: 01/21/20 22:22

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	0.0235	0.04	U	0.0250



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb

Lab ID: 0012314-01

Sampled: 01/16/20 23:59

Pressure @ Receipt: 6.50" Hg

Canister #: SAT178

Received: 01/23/20 12:19

Comments:

Analyzed: 01/27/20 23:40

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	0.134	0.24	LK	0.0250



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
---------	--------	-------	---------------	-----	-----------	-------

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Batch B0A0903 - Summa Canister Prep

Blank (B0A0903-BLK1)

Prepared: 12/31/19 Analyzed: 01/09/20

Ethylene oxide	ND	ppbv				U
----------------	----	------	--	--	--	---

Batch B0A1407 - Summa Canister Prep

Blank (B0A1407-BLK1)

Prepared: 12/31/19 Analyzed: 01/14/20

Ethylene oxide	ND	ppbv				U
----------------	----	------	--	--	--	---

Batch B0A2105 - Summa Canister Prep

Blank (B0A2105-BLK1)

Prepared & Analyzed: 01/21/20

Ethylene oxide	ND	ppbv				U
----------------	----	------	--	--	--	---

Batch B0A2707 - Summa Canister Prep

Blank (B0A2707-BLK1)

Prepared & Analyzed: 01/27/20

Ethylene oxide	ND	ppbv				U
----------------	----	------	--	--	--	---



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

Analyte	Result	Units	% Difference	Limit (%)	Notes
---------	--------	-------	--------------	-----------	-------

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Sequence 2001026

Calibration Check (2001026-CCV1)

Prepared & Analyzed: 01/09/20

Ethylene oxide	2.40	ppbv	-4.1	30.00
----------------	------	------	------	-------

Sequence 2001043

Calibration Check (2001043-CCV1)

Prepared & Analyzed: 01/14/20

Ethylene oxide	2.55	ppbv	2.1	30.00
----------------	------	------	-----	-------

Sequence 2001057

Calibration Check (2001057-CCV1)

Prepared & Analyzed: 01/21/20

Ethylene oxide	3.14	ppbv	25.7	30.00
----------------	------	------	------	-------

Sequence 2001070

Calibration Check (2001070-CCV1)

Prepared & Analyzed: 01/27/20

Ethylene oxide	2.77	ppbv	10.7	30.00
----------------	------	------	------	-------



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 #: 4022.00

REPORTED: 02/20/20 12:45

SUBMITTED: 01/07/20 to 01/23/20

AQS SITE CODE:

SITE CODE: GA EtO

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.