

November 20, 2019

**MEMORANDUM**

To: Karen Hays, Air Branch Chief *KH*

Through: Dika Kuoh, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: South DeKalb October 12-30, 2019 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected during the period of October 12 through October 30 by the Ambient Monitoring Program at the South DeKalb monitoring station. Each of the samples were sent to Eastern Research Group (ERG) for analysis. Samples listed in the table below as ND were reported below the method detection limit of 0.0452 ug/m<sup>3</sup>. The samples listed as X indicate that the sample was not collected properly.

Date	EtO Concentration (ug/m <sup>3</sup> )
10/12/2019	0.44
10/19/2019	ND
10/24/2019	X
10/27/2019	X
10/30/2019	ND



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

November 15, 2019

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 09/25/19 11:22 through 11/01/19 11:14.

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 #: 4022.00

REPORTED: 11/15/19 15:16

SUBMITTED: 09/25/19 to 11/01/19

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	9092560-01	Air	09/19/19 23:59	09/25/19 11:22
South Dekalb	9092609-01	Air	09/20/19 14:00	09/26/19 11:10
South Dekalb	9092728-01	Air	09/24/19 23:59	09/27/19 12:01
South Dekalb	9102315-01	Air	*10/13/19 23:59	10/23/19 10:01
South Dekalb	9102508-01	Air	10/19/19 23:59	10/25/19 10:21
South Dekalb	9110119-01	Air	10/30/19 23:59	11/01/19 11:14

See  
previous  
memo

\* Sample date 10/12/19 DO 11/18/19



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SUBMITTED: 09/25/19 to 11/01/19  
AQS SITE CODE:  
SITE CODE: GA EtO

Description: South Dekalb  
Pressure @ Receipt: 11.50 psig  
Comments:

Lab ID: 9092560-01  
Canister #: 18826

Sampled: 09/19/19 23:59  
Received: 09/25/19 11:22  
Analyzed: 09/27/19 19:27

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

Analyte	Results		Flag	MDL ppbv
	ppbv	ug/m <sup>3</sup>		
Ethylene oxide	ND	ND	U	0.0250

0.0250 ppb  $\approx$  0.0452 ug/m<sup>3</sup>  
verified Dgd 10/18/19



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FILE #: 4022.00  
REPORTED: 11/15/19 15:16  
SUBMITTED: 09/25/19 to 11/01/19  
AQS SITE CODE:  
SITE CODE: GA EtO

Description: South Dekalb  
Pressure @ Receipt: 12.25 psig  
Comments:

Lab ID: 9092609-01  
Canister #: 114369

Sampled: 09/20/19 14:00  
Received: 09/26/19 11:10  
Analyzed: 09/27/19 22:47

### 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	ND	ND	U	0.0250



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FILE #: 4022.00  
REPORTED: 11/15/19 15:16  
SUBMITTED: 09/25/19 to 11/01/19  
AQS SITE CODE:  
SITE CODE: GA EtO

Description: South Dekalb  
Pressure @ Receipt: 8.50" Hg  
Comments:

Lab ID: 9092728-01  
Canister #: 5004

Sampled: 09/24/19 23:59  
Received: 09/27/19 12:01  
Analyzed: 09/28/19 07:47

### 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	ND	ND	U	0.0250



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REPORTED: 11/15/19 15:16

SUBMITTED: 09/25/19 to 11/01/19

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb

Lab ID: 9102315-01

\* Sampled: 10/13/19 23:59

Pressure @ Receipt: 4.50" Hg

Canister #: A21103

Received: 10/23/19 10:01

Comments:

Analyzed: 10/25/19 20:34

### 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	0.243	0.44		0.0250

Sample date 10/12/19 per chain  
of custody. JGD 11/18/19



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FILE #: 4022.00  
REPORTED: 11/15/19 15:16  
SUBMITTED: 09/25/19 to 11/01/19  
AQS SITE CODE:  
SITE CODE: GA EtO

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Description: South Dekalb	Lab ID: 9102508-01	Sampled: 10/19/19 23:59
Pressure @ Receipt: 3.50" Hg	Canister #: A21013	Received: 10/25/19 10:21
Comments:		Analyzed: 10/25/19 22:10

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### 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	ND	ND	U	0.0250





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AQS SITE CODE:  
SITE CODE: GA EtO

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<b>Description:</b> South Dekalb	<b>Lab ID:</b> 9110119-01	<b>Sampled:</b> 10/30/19 23:59
<b>Pressure @ Receipt:</b> 5.50" Hg	<b>Canister #:</b> A21009	<b>Received:</b> 11/01/19 11:14
<b>Comments:</b>		<b>Analyzed:</b> 11/06/19 07:21

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### 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	ND	ND	U	0.0250



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AQS SITE CODE:  
SITE CODE: GA EtO

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

*Batch B9I2705 - Summa Canister Prep*

**Blank (B9I2705-BLK1)**

Prepared & Analyzed: 09/27/19

Ethylene oxide	ND	ppbv				U
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*Batch B9J2503 - Summa Canister Prep*

**Blank (B9J2503-BLK1)**

Prepared: 10/21/19 Analyzed: 10/25/19

Ethylene oxide	ND	ppbv				U
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*Batch B9K0506 - Summa Canister Prep*

**Blank (B9K0506-BLK1)**

Prepared: 10/21/19 Analyzed: 11/05/19

Ethylene oxide	ND	ppbv				U
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FILE #: 4022.00  
REPORTED: 11/15/19 15:16  
SUBMITTED: 09/25/19 to 11/01/19  
AQS SITE CODE:  
SITE CODE: GA EtO

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

#### Sequence 1909072

##### Calibration Check (1909072-CCV1)

Prepared & Analyzed: 09/27/19

Ethylene oxide	2.97	ppbv	18.8	30.00
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#### Sequence 1910064

##### Calibration Check (1910064-CCV1)

Prepared & Analyzed: 10/25/19

Ethylene oxide	2.49	ppbv	-0.4	30.00
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#### Sequence 1911008

##### Calibration Check (1911008-CCV1)

Prepared & Analyzed: 11/05/19

Ethylene oxide	2.36	ppbv	-5.5	30.00
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SUBMITTED: 09/25/19 to 11/01/19  
AQS SITE CODE:  
SITE CODE: GA EtO

### 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.