

November 30, 2021

**MEMORANDUM**

To: Karen Hays, Air Branch Chief *KH*

Through: James Boylan, Assistant Branch Chief

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: South DeKalb and NR-285 May 4-10, 2021 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were taken at our South DeKalb monitoring station during the period of May 4-10, 2021. Samples were also collected at a nearby ambient monitoring station close to the interstate (NR-285) to see the impacts of mobile traffic on the ethylene oxide measurements. 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 of "2" was given to samples to indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised. The Qualifier code of "D-F" was given by ERG to indicate that the duplicate exceeds Data Quality Objectives (DQO) criteria. Please note that ERG is now providing values for levels below the detection limit.

Location	Date	Qualifier	EtO Concentration (ug/m <sup>3</sup> )
South DeKalb passive	05/04/2021	D-F, LK, 2	0.68
South DeKalb passive QA	05/04/2021	D-F, 2	0.27
South DeKalb passive	05/10/2021		0.21
South DeKalb ATEC	05/04/2021	LK	0.29
South DeKalb ATEC	05/10/2021		0.10
South DeKalb ATEC QA	05/10/2021		0.15
NR – 285 Xontech	05/04/2021	2	0.08

If you have any questions, please let me know.

DGO/do



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

July 09, 2021

Ms. Jaime Gore  
GA Ambient Monitoring Program  
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 05/12/21 13:31 through 05/19/21 13:56.

Values below the MDL for QC results in this report are recorded as ND, however the actual values are reported in the accompanying Excel report with a "U" flag (Under the detection limit). The actual values are reported in AQS.

This test is accredited under the 2016 TNI Standard for Environmental Laboratories (FL DOH Certification # E87673). 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:** 07/09/21 13:30  
**SUBMITTED:** 05/12/21 to 05/19/21  
**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	1051245-01	Air	05/04/21 23:59	05/12/21 13:31
South Dekalb QA	1051245-02	Air	05/04/21 23:59	05/12/21 13:31
South Dekalb-Atec	1051245-03	Air	05/04/21 23:59	05/12/21 13:31
South Dekalb	1051940-01	Air	05/10/21 23:59	05/19/21 13:56
South Dekalb-Atec QA	1051940-02	Air	05/10/21 23:59	05/19/21 13:56
South Dekalb-Atec	1051940-03	Air	05/10/21 23:59	05/19/21 13:56



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Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4022.00

REPORTED: 07/09/21 13:30

SUBMITTED: 05/12/21 to 05/19/21

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb

Lab ID: 1051245-01

Sampled: 05/04/21 23:59

Pressure @ Receipt: 9.50" Hg

Canister #: A21096

Received: 05/12/21 13:31

Comments:

Analyzed: 05/21/21 04:10

### 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	0.375	0.68	D-F, LK	0.0261



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ATTN: Ms. Jaime Gore

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

FILE #: 4022.00

REPORTED: 07/09/21 13:30

SUBMITTED: 05/12/21 to 05/19/21

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb QA

Lab ID: 1051245-02

Sampled: 05/04/21 23:59

Pressure @ Receipt: 15.00" Hg

Canister #: A21013

Received: 05/12/21 13:31

Comments:

Analyzed: 05/21/21 06:14

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.148	0.27	D-F	0.0261



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FILE #: 4022.00

REPORTED: 07/09/21 13:30

SUBMITTED: 05/12/21 to 05/19/21

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb-Atec

Lab ID: 1051245-03

Sampled: 05/04/21 23:59

Pressure @ Receipt: 9.75 psig

Canister #: A21047

Received: 05/12/21 13:31

Comments:

Analyzed: 05/21/21 08:21

### 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	0.161	0.29	LK	0.0261



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FILE #: 4022.00

REPORTED: 07/09/21 13:30

SUBMITTED: 05/12/21 to 05/19/21

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb

Lab ID: 1051940-01

Sampled: 05/10/21 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: 18879

Received: 05/19/21 13:56

Comments:

Analyzed: 05/20/21 23:06

### 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/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.117	0.21		0.0261



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FILE #: 4022.00

REPORTED: 07/09/21 13:30

SUBMITTED: 05/12/21 to 05/19/21

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb-Atec QA

Lab ID: 1051940-02

Sampled: 05/10/21 23:59

Pressure @ Receipt: 12.25 psi

Canister #: 18881

Received: 05/19/21 13:56

Comments: \*\*SEND CAN TO R4 FOR ANALYSIS\*\*

Analyzed: 05/21/21 00:07

### 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	0.0811	0.15		0.0261





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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: 07/09/21 13:30

SUBMITTED: 05/12/21 to 05/19/21

AQS SITE CODE:

SITE CODE: GA EtO

Description: South Dekalb-Atec

Lab ID: 1051940-03

Sampled: 05/10/21 23:59

Pressure @ Receipt: 10.0 psi

Canister #: 33235

Received: 05/19/21 13:56

Comments: \*\*SEND CAN TO GA EPD LAB FOR ANALYSIS\*\*

Analyzed: 05/21/21 02:08

### 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	0.0545	0.10		0.0261



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4244 International Pkwy, Suite 120  
Atlanta, GA 30354  
**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4022.00  
**REPORTED:** 07/09/21 13:30  
**SUBMITTED:** 05/12/21 to 05/19/21  
**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 B1E2006 - Summa Canister Prep*

#### Blank (B1E2006-BLK1)

Prepared & Analyzed: 05/20/21

Ethylene oxide	ND	ppbv				U
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#### Duplicate (B1E2006-DUP1)

**Source: 1051940-02**

Prepared: 05/10/21 Analyzed: 05/21/21

Ethylene oxide	0.0822	ppbv	0.08	1.35	25	LK
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#### Duplicate (B1E2006-DUP2)

**Source: 1051940-03**

Prepared: 05/10/21 Analyzed: 05/21/21

Ethylene oxide	0.0531	ppbv	0.05	2.60	25	
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#### Duplicate (B1E2006-DUP3)

**Source: 1051245-01**

Prepared: 05/04/21 Analyzed: 05/21/21

Ethylene oxide	0.389	ppbv	0.38	3.75	25	
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#### Duplicate (B1E2006-DUP4)

**Source: 1051245-02**

Prepared: 05/04/21 Analyzed: 05/21/21

Ethylene oxide	0.143	ppbv	0.15	3.29	25	
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**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4022.00  
**REPORTED:** 07/09/21 13:30  
**SUBMITTED:** 05/12/21 to 05/19/21  
**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 2105053*

#### Calibration Check (2105053-CCV1)

Prepared & Analyzed: 05/20/21

Ethylene oxide	2.17	ppbv	-10.2	30.00	
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**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4022.00  
**REPORTED:** 07/09/21 13:30  
**SUBMITTED:** 05/12/21 to 05/19/21  
**AQS SITE CODE:**  
**SITE CODE:** GA EtO

### Notes and Definitions

U	Under Detection Limit
D-F	Duplicate exceeds DQO criteria.
ND	Analyte NOT DETECTED
NR	Not Reported
MDL	Method Detection Limit Relative
RPD	Percent Difference
LK	Analyte identified; Reported value may be biased high.

Note: This test is accredited under the 2016 TNI Standard; however the following analytes are not accredited: acetylene, bromodichloroethane, dichlorotetrafluoromethane, ethyl tert butyl ether, n-octane, tert amyl methyl ether, trichlorofluoroethane, and bromochloromethane.



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

July 09, 2021

Ms. Jaime Gore  
GA Ambient Monitoring Program  
4244 International Pkwy, Suite 120  
Atlanta, GA 30354  
Project Name: NR285

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 05/19/21 13:39.

Values below the MDL for QC results in this report are recorded as ND, however the actual values are reported in the accompanying Excel report with a "U" flag (Under the detection limit). The actual values are reported in AQS.

This test is accredited under the 2016 TNI Standard for Environmental Laboratories (FL DOH Certification # E87673). 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)

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](mailto:julie.swift@erg.com) and delete the report without retaining any copies.



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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:** 07/09/21 13:33  
**SUBMITTED:** 05/19/21  
**AQS SITE CODE:**  
**SITE CODE:** NR285

### ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
NR285	1051938-01	Air	05/04/21 23:59	05/19/21 13:39

<b>Description:</b> NR285	<b>Lab ID:</b> 1051938-01	<b>Sampled:</b> 05/04/21 23:59
<b>Pressure @ Receipt:</b> 18.25 psi	<b>Canister #:</b> 19283	<b>Received:</b> 05/19/21 13:39
<b>Comments:</b>		<b>Analyzed:</b> 05/21/21 09:21

### 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	0.0442	0.08		0.0261



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4244 International Pkwy, Suite 120  
Atlanta, GA 30354  
**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4222.00  
**REPORTED:** 07/09/21 13:33  
**SUBMITTED:** 05/19/21  
**AQS SITE CODE:**  
**SITE CODE:** NR285

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

*Batch B1E2006 - Summa Canister Prep*

#### Blank (B1E2006-BLK1)

Prepared & Analyzed: 05/20/21

Ethylene oxide	ND	ppbv				U
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Atlanta, GA 30354  
**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4222.00  
**REPORTED:** 07/09/21 13:33  
**SUBMITTED:** 05/19/21  
**AQS SITE CODE:**  
**SITE CODE:** NR285

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

*Sequence 2105053*

#### Calibration Check (2105053-CCV1)

Prepared & Analyzed: 05/20/21

Ethylene oxide	2.17	ppbv	-10.2	30.00	
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**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4222.00  
**REPORTED:** 07/09/21 13:33  
**SUBMITTED:** 05/19/21  
**AQS SITE CODE:**  
**SITE CODE:** NR285

### Notes and Definitions

U	Under Detection Limit
ND	Analyte NOT DETECTED
NR	Not Reported
MDL	Method Detection Limit
RPD	Relative Percent Difference

Note: This test is accredited under the 2016 TNI Standard; however the following analytes are not accredited: acetylene, bromodichloroethane, dichlorotetrafluoromethane, ethyl tert butyl ether, n-octane, tert amyl methyl ether, trichlorofluoroethane, and bromochloromethane.



Ethylene Oxide Sampling  
DeKalb County, GA

05/04/2021

Sampled By: Georgia Environmental Protection Division

Analyzed By: Eastern Research Group



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION