

#### **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

December 13, 2019

#### **MEMORANDUM**

To:

Karen Hays, Air Branch Chief

Through:

Dika Kuoh, Assistant Branch Chief

From:

DeAnna Oser, Ambient Monitoring Program Manager

RE:

Cobb County September and October Revised Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected September 24 through October 24, 2019 by the Ambient Monitoring Program in the Cobb county area to characterize the EtO concentration. All samples were sent for analysis to Eastern Research Group (ERG), a contract laboratory used both by Georgia EPD and US EPA. ERG has revised the sampling results previously reported to Georgia EPD upon request by the US EPA (reasons provided in the attached December 3, 2019 email from Ken Mitchell, Acting Director of the Air and Radiation Division at US EPA Region 4). The values below reflect the revised concentrations for the EtO project to date in Cobb County.

Samples listed in the table below as ND were reported below the method detection limit of 0.0452 ug/m<sup>3</sup>. The code LK indicates that the concentration may be biased high. The samples listed as X indicate that the sample was not collected properly. Sampling was paused at S5 due to potential instability of the roof where the sampler was placed.

Location	Date	Qualifier	EtO Concentration (ug/m3)
S1	09/24/2019		X
S1	09/26/2019		X
S1	09/30/2019	LK	0.19
S1	10/03/2019	LK	0.31
S1	10/06/2019		0.06
S1	10/12/2019	LK	0.21
S1	10/18/2019		0.10
S1	10/24/2019		0.10
S2	09/24/2019		0.33
S2	09/26/2019	LK	0.22
S2	09/30/2019	LK	0.30
S2	10/03/2019	LK	0.40
S2	10/06/2019		0.12

Mrs. Hays December 17, 2019 Page 1 of 2

S2	10/12/2019	LK	0.27
S2	10/18/2019		0.07
S2	10/24/2019		0.05
S3	09/24/2019		0.54
S3	09/26/2019		0.10
S3	09/30/2019		0.06
S3	10/03/2019	LK	0.17
S3	10/06/2019		0.23
S3	10/12/2019		0.21
S3	10/18/2019		0.18
S3	10/24/2019		0.06
S4	09/24/2019	··	0.37
S4	09/26/2019	LK	0.71
S4	09/30/2019	LK	0.25
S4	10/03/2019		1.15
S4	10/06/2019		0.06
S4	10/12/2019	LK	0.21
S4	10/18/2019		0.15
S4	10/24/2019		ND
S5	09/24/2019		2.04
S5	09/30/2019		0.32

If you have any questions, please let me know.

DGO/do



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

December 02, 2019

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

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 09/27/19 12:07 through 10/30/19 11:25.

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 <a href="mailto:julie.swift@erg.com">julie.swift@erg.com</a> and delete the report without retaining any copies.



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:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

**AQS SITE CODE:** 

SITE CODE:

Cobb

#### **ANALYTICAL REPORT FOR SAMPLES**

SampleName	LabNumber	<u>Matrix</u>	Sampled	Received
S5	9092730-01	Air	09/24/19 23:59	09/27/19 12:07
S2	9092733-02	Air	09/24/19 23:59	09/27/19 12:13
S3	9092733-03	Air	09/24/19 23:59	09/27/19 12:13
S4	9092733-04	Air	09/24/19 23:59	09/27/19 12:13
S1	9100318-01	Air	09/30/19 23:59	10/03/19 11:41
S2	9100318-02	Air	09/26/19 23:59	10/03/19 11:41
S2	9100318-03	Air	09/30/19 23:59	10/03/19 11:41
S3	9100318-04	Air	09/26/19 23:59	10/03/19 11:41
S3	9100318-05	Air	09/30/19 23:59	10/03/19 11:41
S4	9100318-06	Air	09/26/19 23:59	10/03/19 11:41
S4	9100318-07	Air	09/30/19 23:59	10/03/19 11:41
S5	9100921-01	Air	09/30/19 23:59	10/09/19 11:19
S1	9100921-02	Air	10/03/19 23:59	10/09/19 11:19
S3	9100921-03	Air	10/03/19 23:59	10/09/19 11:19
S2	9100921-04	Air	10/03/19 23:59	10/09/19 11:19
S3	9100921-05	Air	10/06/19 23:59	10/09/19 11:19
S1	9100921-06	Air	10/06/19 23:59	10/09/19 11:19
S4	9100921-08	Air	10/03/19 23:59	10/09/19 11:19
S2	9100921-09	Air	10/06/19 23:59	10/09/19 11:19
S4	9100921-10	Air	10/06/19 23:59	10/09/19 11:19
S1	9101802-01	Air	10/12/19 23:59	10/18/19 10:18
S2	9101802-02	Air	10/12/19 23:59	10/18/19 10:18
S3	9101802-03	Air	10/12/19 23:59	10/18/19 10:18

Eastern Research Group

The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

FILE #: 4222.00

**REPORTED:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

**AQS SITE CODE:** 

PHONE: (404) 362-4912	FAX: (919) 541-0516		SITE CODE:	Cobb
S4	9101802-04	Air	10/12/19 23:59	10/18/19 10:18
S1	9102414-01	Air	10/18/19 23:59	10/24/19 11:02
S2	9102414-02	Air	10/18/19 23:59	10/24/19 11:02
S3	9102414-03	Air	10/18/19 23:59	10/24/19 11:02
S4	9102414-04	Air	10/18/19 23:59	10/24/19 11:02
S1	9103068-01	Air	10/24/19 23:59	10/30/19 11:25
S2	9103068-02	Air	10/24/19 23:59	10/30/19 11:25
S3	9103068-03	Air	10/24/19 23:59	10/30/19 11:25
S4	9103068-04	Air	10/24/19 23:59	10/30/19 11:25



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

**Description:** S5

Canister #: 19300

Lab ID:

Pressure @ Receipt: 0.00 psig

**Comments:** 

FILE #: 4222.00

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 09/24/19 23:59 Received: 09/27/19 12:07

Analyzed: 10/03/19 21:57

Air Toxics by EPA Compendium Method TO-15

9092730-01

Results

MDL

ppbv ug/m<sup>3</sup>

ppby <u>Flaq</u>

Ethylene oxide

**Analyte** 

2.04 1.13



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S2

ATTN: Ms. Jaime Gore

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

Lab ID: Canister #: SAT023

Pressure @ Receipt: 8.5" Hg

**Comments:** 

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

**AQS SITE CODE:** 

SITE CODE:

Cobb

Sampled: 09/24/19 23:59

Received: 09/27/19 12:13

Analyzed: 10/03/19 19:32

Air Toxics by EPA Compendium Method TO-15

9092733-02

MDL.

ppbv uq/m³

<u>Flaq</u>

ppbv

Ethylene oxide

**Analyte** 

0,180 0.33



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S3

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 3.50" Hg

9092733-03

Canister #: 18834

Lab ID:

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 09/24/19 23:59

Received: 09/27/19 12:13 Analyzed: 10/03/19 20:20

Air Toxics by EPA Compendium Method TO-15

**Results** 

ppbv ug/m3

<u>Flag</u>

<u>MDL</u> <u>ppbv</u>

<u>Analyte</u> Ethylene oxide

Comments:

0,299

0.54



FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

Description: S4

ATTN: Ms. Jaime Gore

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

**Canister #:** 5117

Pressure @ Receipt: 11.0" Hg Comments:

Lab ID: 9092733-04

Cobb

Sampled: 09/24/19 23:59 Received: 09/27/19 12:13

Analyzed: 10/03/19 21:09

Air Toxics by EPA Compendium Method TO-15

Results

MDL

ppbv ug/m³

<u>Flaq</u>

ppbv

**Analyte** Ethylene oxide

0.206

0.37



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S1

ATTN: Ms. Jaime Gore

**PHONE**: (404) 362-4912

FAX: (919) 541-0516

9100318-01 Lab ID:

Canister #: 18831

Pressure @ Receipt: 6.00" Hg Comments:

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

**REPORTED:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 09/30/19 23:59

Received: 10/03/19 11:41 Analyzed: 10/04/19 17:54

Air Toxics by EPA Compendium Method TO-15 <u>MDL</u>

<u>Flaq</u>

Ethylene oxide

**Analyte** 

ppbv ug/m³ 0.107

0.19

ppbv 0.0250

Eastern Research Group

The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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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

**Description:** S2

Pressure @ Receipt: 8.00" Hg

Comments:

**Analyte** 

Ethylene oxide

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 09/26/19 23:59 Received: 10/03/19 11:41

Analyzed: 10/04/19 18:42

Air Toxics by EPA Compendium Method TO-15

9100318-02

<u>Flag</u>

Lab ID:

**MDL** ppby

ppbv ug/m<sup>3</sup>

0.22 0,120

LK

Canister #: A21104

0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

Comments: Ambient at field site recovery

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

FILE #: 4222.00

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Lab ID: 9100318-03 **Description:** S2 Canister #: SAT155 Pressure @ Receipt: 2.00" Hg

Sampled: 09/30/19 23:59 Received: 10/03/19 11:41

Analyzed: 10/04/19 19:30

Air Toxics by EPA Compendium Method TO-15

Results

MDL

**Analyte** Ethylene oxide ppbv uq/m3

<u>Flaq</u>

<u>ppbv</u>

0,164 0.30



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

Description: S3

Pressure @ Receipt: 9.00" Hg

Comments:

**Analyte** 

Ethylene oxide

FILE #: 4222,00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Cobb

SITE CODE:

AQS SITE CODE:

Sampled: 09/26/19 23:59

Received: 10/03/19 11:41

Analyzed: 10/04/19 20:18

Air Toxics by EPA Compendium Method TO-15

9100318-04

**MDL** 

ppbv ug/m³

<u>Flaq</u> ppbv

Lab ID:

Canister #: 18879

0.10 0.0578

0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S3

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 9.50" Hg

**Comments:** 

**Analyte** 

Et' , ene oxide

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 09/30/19 23:59 Received: 10/03/19 11:41

Analyzed: 10/04/19 21:07

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

9100318-05

**Results** ppbv ug/m<sup>3</sup>

MDL ppbv

0.06 0.0340

Flag

Canister #: 19650

Lab ID:

0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S4

**Comments:** 

Ethylene oxide

**Analyte** 

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 10.50" Hg

Lab ID:

Canister #: 5026

9100318-06

FILE #: 4222.00

AQS SITE CODE: SITE CODE:

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 09/26/19 23:59 Received: 10/03/19 11:41

Analyzed: 10/04/19 21:56

Air Toxics by EPA Compendium Method TO-15

**Results** 

MDL

0.391

ppbv ug/m3 0.71

Flag LK

ppby 0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description: S4** 

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 5.00" Hg

Lab ID: 9100318-07

Canister #: SAT081

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

FILE #: 4222.00

**AQS SITE CODE:** 

Cobb

Sampled: 09/30/19 23:59

Received: 10/03/19 11:41

Analyzed: 10/04/19 22:44

Air Toxics by EPA Compendium Method TO-15

**Results** 

ppbv ug/m³

<u>Flaq</u>

MDL ppbv

Ethylene oxide

**Analyte** 

**Comments:** 

0.137

0.25

LK

0.0250

Eastern Research Group

The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description: S5** 

**Comments:** 

**Analyte** 

Ethylene oxide

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 3.00" Hg

Canister #: A21101

Lab ID:

0.176

0.32

FILE #: 4222.00

**REPORTED:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

**AQS SITE CODE:** 

SITE CODE:

Cobb

Sampled: 09/30/19 23:59

Received: 10/09/19 11:19

Analyzed: 10/10/19 14:51

Air Toxics by EPA Compendium Method TO-15

9100921-01

ppbv uq/m³

<u>MDL</u> <u>Flaq</u>

<u>ppbv</u> 0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S1

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 7.00" Hg

9100921-02 Lab ID:

Canister #: 18833

Cobb

SUBMITTED: 09/27/19 to 10/30/19

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

Sampled: 10/03/19 23:59 Received: 10/09/19 11:19

Analyzed: 10/10/19 15:39

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

**Results** 

**Analyte** Ethylene oxide

**Comments:** 

MDL ppbv 0.0250

<u>Flag</u> ppbv ug/m<sup>3</sup> LK 0.31 0.172



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S3

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 9.50" Hg

9100921-03 Lab ID:

Canister #: 19289

Cobb

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Sampled: 10/03/19 23:59

Received: 10/09/19 11:19 Analyzed: 10/10/19 16:27

Comments:

**Analyte** 

Air Toxics by EPA Compendium Method TO-15

ppbv ug/m<sup>3</sup>

<u>Flaq</u>

Ethylene oxide

0.0939

0.17

LK

ppbv 0.0250

**MDL** 

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S2

**Analyte** 

Ethylene oxide

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 7.00" Hg

Comments:

9100921-04

Canister #: SAT135

Lab ID:

Cobb

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Sampled: 10/03/19 23:59

Received: 10/09/19 11:19

Analyzed: 10/10/19 17:16

Air Toxics by EPA Compendium Method TO-15

**Results** 

**MDL** ppbv Flag

ppbv uq/m³

0.40 0,223

ŁΚ

0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Pressure @ Receipt: 8.50" Hg

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912 FAX: (919) 541-0516 FILE #: 4222.00

**REPORTED:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

**Description:** S3

Lab ID: 9100921-05

Sampled: 10/06/19 23:59

Canister #: N4087

Received: 10/09/19 11:19 Analyzed: 10/10/19 18:04

Comments:

Air Toxics by EPA Compendium Method TO-15

**Results** 

MDL ppby

**Analyte** 

ppbv uq/m3

Flag

Ethylene oxide

0.126 0.23



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Comments:** 

**Analyte** 

Ethylene oxide

ATTN: Ms. Jaime Gore

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

**Description:** S1

Pressure @ Receipt: 5.50" Hg

Lab ID:

**Canister #:** 19653

9100921-06

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 10/06/19 23:59 Received: 10/09/19 11:19

Analyzed: 10/10/19 18:52

Air Toxics by EPA Compendium Method TO-15

**MDL** 

ppbv uq/m3 0.0311 0.06

<u>Flag</u>

ppbv 0.0250



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S4

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 5.50" Hg **Comments:** 

Lab ID: 9100921-08

Canister #: N4120

AQS SITE CODE: SITE CODE: Cobb

SUBMITTED: 09/27/19 to 10/30/19

REPORTED: 12/02/19 10:41

FILE #: 4222.00

Sampled: 10/03/19 23:59

Received: 10/09/19 11:19 Analyzed: 10/10/19 22:54

Air Toxics by EPA Compendium Method TO-15

**Results** 

MDL

**Analyte** Ethylene oxide ppbv ug/m<sup>3</sup> 0.639

1,15

ppbv <u>Flag</u>

0.0250

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Analyte** 

Ethylene oxide

ATTN: Ms. Jaime Gore

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

**Description:** S2

**Comments:** 

Pressure @ Receipt: 6.50" Hg

Lab ID: 9100921-09

**Canister #:** 5005

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

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 10/06/19 23:59

Received: 10/09/19 11:19

Analyzed: 10/10/19 20:29

**Results** ppbv ug/m<sup>3</sup>

<u>MDL</u> <u>ppbv</u> Flag

0,0654

0.12

0.0250

Eastern Research Group

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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

**Description:** S4

**Analyte** 

Ethylene oxide

Pressure @ Receipt: 3.50" Hg

Comments:

Air Toxics by EPA Compendium Method TO-15 Results 8 1

0.0332

ppbv ug/m3 0.06

Lab ID:

Flag

Canister #: A21078

<u>ppbv</u> 0.0250

<u>MDL</u>

9100921-10

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 10/06/19 23:59

Received: 10/09/19 11:19

Analyzed: 10/10/19 21:17

Eastern Research Group

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S1

ATTN: Ms. Jaime Gore

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

9101802-01

Pressure @ Receipt: 6.50" Hg Comments:

Lab ID:

Canister #: 5013

Cobb

SUBMITTED: 09/27/19 to 10/30/19

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

Sampled: 10/12/19 23:59 **Received:** 10/18/19 10:18

Analyzed: 10/22/19 01:33

Air Toxics by EPA Compendium Method TO-15

MDL

**Analyte** Ethylene oxide ppbv ug/m<sup>3</sup> 0.118 0.21

<u>Flag</u> LK

<u>ppbv</u> 0.0250



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S2

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 6.50" Hg

Comments:

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 10/12/19 23:59

Received: 10/18/19 10:18

Analyzed: 10/22/19 02:41

Air Toxics by EPA Compendium Method TO-15

9101802-02

**Results** ppbv ug/m3

Flag

Canister #: 5040

**MDL** <u>vdqq</u>

**Analyte** Ethylene oxide

0.149 0.27 LK

Lab ID:



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description: S3** 

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 9.00" Hg

9101802-03

Canister #: SAT058

Lab ID:

Cobb

FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Sampled: 10/12/19 23:59

Received: 10/18/19 10:18 Analyzed: 10/22/19 03:50

Air Toxics by EPA Compendium Method TO-15

Results

MDL

Comments:

ppbv ug/m<sup>3</sup>

<u>Flag</u>

<u>ppbv</u>

<u>Analyte</u> Ethylene oxide

0.115 0.21



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

Description: S4

Pressure @ Receipt: 3.50" Hg

9101802-04

**Canister #:** 5012

Lab ID:

Comments:

FILE #: 4222.00

**REPORTED:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 10/12/19 23:59

**Received:** 10/18/19 10:18

Analyzed: 10/22/19 05:00

Air Toxics by EPA Compendium Method TO-15

Results ppbv ug/m<sup>3</sup>

Flag

MDL ppby

**Analyte** Ethylene oxide

0,118

0.21

0.0250

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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

Description: S1

Pressure @ Receipt: 5.00" Hg

Comments:

<u>Analyte</u>

Ethylene oxide

FILE #: 4222.00

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 10/18/19 23:59

Received: 10/24/19 11:02

Analyzed: 10/25/19 17:21

Air Toxics by EPA Compendium Method TO-15

9102414-01

Results

<u>MDL</u>

ppbv ug/m<sup>3</sup>

Flag ppbv

Lab ID:

Canister #: 5017

0.0679 0.12

0.0250

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description: S2** 

ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 4.50" Hg

**Comments:** 

9102414-02

Canister #: 18882

Lab ID:

0.0382

SITE CODE:

AQS SITE CODE:

FILE #: 4222.00

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 10/18/19 23:59

Received: 10/24/19 11:02

Analyzed: 10/25/19 18:58

Air Toxics by EPA Compendium Method TO-15

Results

0.07

<u>MDL</u> <u>ppbv</u>

**Analyte** Ethylene oxide ppbv ug/m<sup>3</sup>

<u>Flaq</u>

0.0250

Eastern Research Group

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FILE #: 4222.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 10/18/19 23:59

Received: 10/24/19 11:02

Analyzed: 10/25/19 18:09

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

**Description: S3** 

Pressure @ Receipt: 8.00" Hg

**Comments:** 

9102414-03 Lab ID:

Canister #: SAT110

Air Toxics by EPA Compendium Method TO-15 MDL

**Results** ppby ug/m<sup>3</sup>

<u>Flag</u>

ppby 0.0250

<u>Analyte</u> Ethylene oxide



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:** 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Description: S4

Lab ID:

9102414-04

Sampled: 10/18/19 23:59

Pressure @ Receipt: 4.00".Hg

Received: 10/24/19 11:02

**Comments:** 

Canister #: 5138

Analyzed: 10/25/19 19:46

Air Toxics by EPA Compendium Method TO-15

Results

<u>MDL</u> ppby

<u>Analyte</u> Ethylene oxide ppbv ug/m<sup>3</sup>

<u>Flag</u>

0.0851 0.15



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S1

ATTN: Ms. Jaime Gore

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

9103068-01 Lab ID:

Canister #: A21069

Pressure @ Receipt: 4.50" Hg

Comments:

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Sampled: 10/24/19 23:59

**Received:** 10/30/19 11:25

Analyzed: 11/01/19 16:40

Air Toxics by EPA Compendium Method TO-15

MDL

<u>Analyte</u> Ethylene oxide ppbv uq/m3 0.0555

<u>Flaq</u>

<u>ppbv</u> 0.0250



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Description:** S2

ATTN: Ms. Jaime Gore

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

Lab ID: 9103068-02

Canister #: 19300

Pressure @ Receipt: 4.50" Hg **Comments:** 

Cobb

FILE #: 4222.00

**AQS SITE CODE:** 

SITE CODE:

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

Sampled: 10/24/19 23:59

Received: 10/30/19 11:25 Analyzed: 11/01/19 17:28

Air Toxics by EPA Compendium Method TO-15

**Results** 

<u>MDL</u>

**Analyte** 

ppbv ug/m<sup>3</sup>

<u>Flag</u>

ppbv

Ethylene oxide

0.0298 0.05



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ATTN: Ms. Jaime Gore

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

Pressure @ Receipt: 7.50" Hg

FILE #: 4222.00

REPORTED: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

**Description:** S3 Lab ID: 9103068-03

**Canister #:** A21104

Sampled: 10/24/19 23:59

Received: 10/30/19 11:25

Analyzed: 11/01/19 18:16

Air Toxics by EPA Compendium Method TO-15

<u>MDL</u>

<u>Analyte</u> Ethylene oxide

Comments:

ppbv ug/m<sup>3</sup>

0.0352

0.06

<u>Flaq</u>

ppbv 0.0250



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Pressure @ Receipt: 3.00" Hg

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

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

Description: S4

Lab ID:

9103068-04

Canister #: 19646

SITE CODE:

FILE #: 4222,00

AQS SITE CODE:

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

Cobb

Sampled: 10/24/19 23:59 Received: 10/30/19 11:25

Analyzed: 11/01/19 19:05

Air Toxics by EPA Compendium Method TO-15

**Results** 

ppbv uq/m3

<u>Flag</u>

<u>MDL</u> ppbv

**Analyte** Ethylene oxide

Comments:

ND



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: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE:

Cobb

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
Air Toxics by EPA Compendium Batch B9J0305 - Summa Canister	Method TO-15 Prep	- Quality Cor	ntrol	.,,,,	·	
Blank (B9J0305-BLK1)			Prepared: 09/26/19 Anal	vzed: 10/03/19	)	
Ethylene oxide	ND	ppbv		7-00, 20, 00, 10		U
Batch B9J0404 - Summa Canister	Prep					Ū
Blank (B9J0404-BLK1)			Prepared & Analyzed: 10/	04/19		
Ethylene oxide	ND	ppbv		,		U
Batch B9J1004 - Summa Canister	Prep					Ü
Blank (B9J1004-BLK1)			Prepared: 09/18/19 Anal	vzed: 10/10/19	)	
Ethylene oxide	ND	ppbv		<u>,                                    </u>		[]
Batch B9J2105 - Summa Canister .	Prep					Ü
Blank (B9J2105-BLK1)			Prepared & Analyzed: 10/	21/19		
Ethylene oxide	ND	ppbv				U
Batch B9J2503 - Summa Canister ,	Prep					Ü
Blank (B9J2503-BLK1)	•		Prepared: 10/21/19 Analy	vzed: 10/25/19		
Ethylene oxide	ND	ppbv		,		11
Batch B9K0105 - Summa Canister	Prep					Ü
Blank (B9K0105-BLK1)	-		Prepared: 10/21/19 Analy	vzed: 11/01/19		
Ethylene oxide	ND	ppbv		,,,,		U

Eastern Research Group

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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: 12/02/19 10:41

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE: Cobb

A 1 to	D 2	11	0/ 10/66	Limit (0/ )	R1 - 4
Analyte	Result	Units	% Difference	Limit (%)	Notes
Air Toxics by EPA Compen Sequence 1910010	dium Method TO-15	i - Quality Cor	ntrol		
Calibration Check (191001	0-CCV1)		Prepared & Analyzed: 10/03/19		
Ethylene oxide	2.26	ppbv	-9.5	30.00	
Sequence 1910025					
Calibration Check (191002	5-CCV1)		Prepared & Analyze	ed: 10/04/19	
Ethylene oxide	2,12	ppbv	-15.4	30.00	
Sequence 1910027					
Calibration Check (191002	7-CCV1)		Prepared & Analyze	ed: 10/10/19	
Ethylene oxide	1.96	ppbv	-20.5	30.00	
Sequence 1910046					
Calibration Check (191004	6-CCV1)	Prepared & Analyzed: 10/21/19			
Ethylene oxide	2.21	ppbv	-10.3	30.00	
Sequence 1910064					
Calibration Check (191006	4-CCV1)	Prepared & Analyzed: 10/25/19			
Ethylene oxide	2.46	ppbv	-1.5	30.00	
Sequence 1911003					
Calibration Check (191100	3-CCV1)		Prepared & Analyzo	ed: 11/01/19	
Ethylene oxide	2.44	ppbv	-2.3	30.00	



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FILE #: 4222.00

**REPORTED: 12/02/19 10:41** 

SUBMITTED: 09/27/19 to 10/30/19

AQS SITE CODE:

SITE CODE: Cobb

**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 tert butyl ether, ethylene oxide, hexachloro-1,3-butadiene, n-octane, propylene, tert amyl methyl ether, tetrachloroethylene, trans-1,2-dichloroethylene, trichlorofluoromethane, and trichlorotrufluoroethane.