



December 26, 2019

MEMORANDUM

To: Karen Hays, Air Branch Chief

Through: Dika Kuoh, Assistant Branch Chief *DK*

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: Cobb November 20, 2019 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected November 20 by the Ambient Monitoring Program in the Cobb area to characterize the EtO concentration. The sampling was paused from October 24 through November 19 while additional sampling was conducted at another location.

Each of the samples were sent to Eastern Research Group (ERG) for analysis. The sample listed as QA is a sample taken side by side during the same time period to compare the precision of the measurement. 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 indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised.

Location	Date	Qualifier	EtO Concentration (ug/m3)
S1	11/20/2019	LK	0.27
S2	11/20/2019	LK	0.19
S3	11/20/2019	LK	0.33
S4	11/20/2019	LK	0.15
S4	11/20/2019	QA, 2	0.26

If you have any questions, please let me know.

DGO/do



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

December 10, 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 11/22/19 11:11.

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: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
S1	9112204-01	Air	11/20/19 23:59	11/22/19 11:11
S2	9112204-02	Air	11/20/19 23:59	11/22/19 11:11
S3	9112204-03	Air	11/20/19 23:59	11/22/19 11:11
S4 Col 1	9112204-04	Air	11/20/19 23:59	11/22/19 11:11
S4 Col 2	9112204-05	Air	11/20/19 23:59	11/22/19 11:11

Eastern Research Group

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REPORTED: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

Description: S1

Lab ID: 9112204-01

Sampled: 11/20/19 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: SAT003

Received: 11/22/19 11:11

Comments:

Analyzed: 12/02/19 19:53

Air Toxics by EPA Compendium Method TO-15

Analyte	Results		Flag	MDL
	ppbv	ug/m ³		ppbv
Ethylene oxide	0.151	0.27	LK	0.0250



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FILE #: 4222.00

REPORTED: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

Description: S2	Lab ID: 9112204-02	Sampled: 11/20/19 23:59
Pressure @ Receipt: 4.00" Hg	Canister #: 5005	Received: 11/22/19 11:11
Comments:		Analyzed: 12/02/19 20:42

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	0.103	0.19	LK	0.0250



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FILE #: 4222.00

REPORTED: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

Description: S3

Lab ID: 9112204-03

Sampled: 11/20/19 23:59

Pressure @ Receipt: 7.00" Hg

Canister #: SAT012

Received: 11/22/19 11:11

Comments:

Analyzed: 12/02/19 21:30

Air Toxics by EPA Compendium Method TO-15

Analyte	Results		Flag	MDL
	ppbv	ug/m ³		ppbv
Ethylene oxide	0.180	0.33	UK	0.0250



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FILE #: 4222.00
 REPORTED: 12/10/19 08:49
 SUBMITTED: 11/22/19
 AQS SITE CODE:
 SITE CODE: Cobb

Description: S4 Col 1	Lab ID: 9112204-04	Sampled: 11/20/19 23:59
Pressure @ Receipt: 2.50" Hg	Canister #: A22329	Received: 11/22/19 11:11
Comments: Col 1		Analyzed: 12/02/19 22:19

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	0.0813	0.15	LK	0.0250



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FILE #: 4222.00

REPORTED: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

Description: S4 Col 2

Lab ID: 9112204-05

Sampled: 11/20/19 23:59

Pressure @ Receipt: 0 psig

Canister #: 9570

Received: 11/22/19 11:11

Comments: Col 2-received at ambient

Analyzed: 12/02/19 23:07

Air Toxics by EPA Compendium Method TO-15

Analyte	Results		Flag	MDL
	ppbv	ug/m ³		ppbv
Ethylene oxide	0.142	0.26		0.0250



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FILE #: 4222.00

REPORTED: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

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

Batch B9L0205 - Summa Canister Prep

Blank (B9L0205-BLK1)

Prepared: 11/18/19 Analyzed: 12/02/19

Ethylene oxide	ND	ppbv				U
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Duplicate (B9L0205-DUP1)

Source: 9112204-04

Prepared: 11/20/19 Analyzed: 12/02/19

Ethylene oxide	0.0825	ppbv	0.08	1.47	25	
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Duplicate (B9L0205-DUP2)

Source: 9112204-05

Prepared: 11/20/19 Analyzed: 12/03/19

Ethylene oxide	0.131	ppbv	0.14	7.84	25	
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FILE #: 4222.00

REPORTED: 12/10/19 08:49

SUBMITTED: 11/22/19

AQS SITE CODE:

SITE CODE: Cobb

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

Sequence 1912002

Calibration Check (1912002-CCV1)

Prepared & Analyzed: 12/02/19

Ethylene oxide	2.69	ppbv	7.7	30.00	
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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 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.