



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

February 07, 2022

Ms. Renu Chakrabarty
WV Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304
Project Name: WV EtO

Dear Ms. Renu Chakrabarty,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 01/28/22 10:55.

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

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 3
 601 57th Street, SE
 Charleston, WV 25304
ATTN: Ms. Renu Chakrabarty
PHONE: (303) 414-1249 **FAX:**

FILE #: 0344.00
REPORTED: 02/07/22 14:24
SUBMITTED: 01/28/22
AQS SITE CODE:
SITE CODE: WV EtO

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
Guthrie WV Background Site	2012807-01	Air	01/25/22 23:59	01/28/22 10:55
#0 South Charleston, WV	2012807-02	Air	01/25/22 23:59	01/28/22 10:55
#3 North Charleston, WV	2012807-03	Air	01/25/22 23:59	01/28/22 10:55
#4 North Charleston, WV	2012807-04	Air	01/25/22 23:59	01/28/22 10:55
#10 Institute, WV	2012807-05	Air	01/25/22 23:59	01/28/22 10:55
#13 Institute, WV	2012807-06	Air	01/25/22 23:59	01/28/22 10:55
#14 Institute, WV	2012807-07	Air	01/25/22 23:59	01/28/22 10:55
#15 Institute, WV	2012807-08	Air	01/25/22 23:59	01/28/22 10:55



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AQS SITE CODE:

SITE CODE: WV EtO

Description: Guthrie WV Background Site

Lab ID: 2012807-01

Sampled: 01/25/22 23:59

Pressure @ Receipt: 2.50 "Hg

Canister #: 33531

Received: 01/28/22 10:55

Comments:

Analyzed: 01/31/22 20:35

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	0.0361	0.07		0.0261



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REPORTED: 02/07/22 14:24

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AQS SITE CODE:

SITE CODE: WV EtO

Description: #0 South Charleston, WV

Lab ID: 2012807-02

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.25 psig

Canister #: 19648

Received: 01/28/22 10:55

Comments: Regulator S/N-15594

Analyzed: 01/31/22 21:37

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	ND	ND	U	0.0261



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REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV EtO

Description: #3 North Charleston, WV

Lab ID: 2012807-03

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.6 psig

Canister #: 18875

Received: 01/28/22 10:55

Comments: Regulator S/N-15585

Analyzed: 01/31/22 22:38

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	0.0165	0.03	U	0.0261



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REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV EtO

Description: #4 North Charleston, WV

Lab ID: 2012807-04

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.6 psig

Canister #: 19280

Received: 01/28/22 10:55

Comments: Regulator S/N-15584

Analyzed: 01/31/22 23:39

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	0.0121	0.02	U	0.0261



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REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV EtO

Description: #10 Institute, WV

Lab ID: 2012807-05

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.45 psig

Canister #: 40457

Received: 01/28/22 10:55

Comments: Regulator S/N-15589

Analyzed: 02/01/22 00:41

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	0.0821	0.15		0.0261



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FILE #: 0344.00

REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV EtO

Description: #13 Institute, WV

Lab ID: 2012807-06

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.5 psig

Canister #: 19656

Received: 01/28/22 10:55

Comments: Regulator S/N-15586

Analyzed: 02/01/22 02:44

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	0.0375	0.07		0.0261



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REPORTED: 02/07/22 14:24

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AQS SITE CODE:

SITE CODE: WV EtO

Description: #14 Institute, WV

Lab ID: 2012807-07

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.5 psig

Canister #: 40451

Received: 01/28/22 10:55

Comments: Regulator S/N-15597

Analyzed: 02/01/22 03:45

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	0.0376	0.07		0.0261



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REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV EtO

Description: #15 Institute, WV

Lab ID: 2012807-08

Sampled: 01/25/22 23:59

Pressure @ Receipt: 0.85 psig

Canister #: 39938

Received: 01/28/22 10:55

Comments: Regulator S/N-15590

Analyzed: 02/01/22 04:46

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	0.0505	0.09		0.0261



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FILE #: 0344.00

REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV 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 B2A3110 - Summa Canister Prep

Blank (B2A3110-BLK1)

Prepared & Analyzed: 01/31/22

Ethylene oxide	ND	ppbv				U
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Duplicate (B2A3110-DUP3)

Source: 2012807-05

Prepared: 01/25/22 Analyzed: 02/01/22

Ethylene oxide	0.0797	ppbv	0.08	2.97	25	
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FILE #: 0344.00

REPORTED: 02/07/22 14:24

SUBMITTED: 01/28/22

AQS SITE CODE:

SITE CODE: WV EtO

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

Sequence 2201069

Calibration Check (2201069-CCV1)

Prepared & Analyzed: 01/31/22

Ethylene oxide	2.55	ppbv	5.6	30.00	
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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.