ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

Report Date: April 22, 2016

Project: 1-290 Nockamixon

Submittal Date: 04/07/2016
Group Number: 1648311
SDG: PDY22
PO Number: 4000016590
Release Number: 1-290
State of Sample Origin: PA

Client Sample Description	Lancaster Labs (LL) #
65 Brennan - Basement Air	8322830
65 Brennan - First Floor Air	8322831
65 Brennan - Ambient Air	8322832
77 Brennan - First Floor Air	8322833
84 Brennan - Basement Air	8322834
84 Brennan - Basement Dup Air	8322835
84 Brennan - First Floor Air	8322836
77 Brennan - Basement Air	8322837
Trip Blank Air	8322838

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

Electronic Copy To	PA Dept. of Env. Protection	Attn: Ellen Davies
Electronic Copy To	PA Dept. of Env. Protection	Attn: Ann Asbury
Electronic Copy To	PA Dept. of Env. Protection	Attn: Dustin Armstrong

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 65 Brennan - Basement Air
SummaCan# 1295
1-290 Nockamixon

LL Sample # AQ 8322830
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 03/31/2016 10:40 by DA
through 04/01/2016 10:42
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD221 SDG#: PDY22-01

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3	ug/m3	ppb(v)	ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.	0.81	N.D.	0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.81	N.D.	0.20	1
05298	1,1-Dichloroethene	75-35-4	4.5	0.79	1.1	0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	9.5	0.79	2.4	0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	N.D.	0.20	1
05298	Tetrachloroethene	127-18-4	120	1.4	18	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	7.0	1.1	1.3	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	N.D.	0.20	1
05298	Trichloroethene	79-01-6	31	1.1	5.8	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.	0.51	N.D.	0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611030AA	04/20/2016 04:24	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 65 Brennan - First Floor Air
SummaCan# 1339
1-290 Nockamixon

LL Sample # AQ 8322831
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 03/31/2016 10:37 by DA
through 04/01/2016 10:41
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD222 SDG#: PDY22-02

CAT No.	Analysis Name	CAS Number	Final Result		MDL	Final Result		MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3		ug/m3	ppb(v)		ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.		0.81	N.D.		0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.		0.81	N.D.		0.20	1
05298	1,1-Dichloroethene	75-35-4	2.3	J	0.79	0.57	J	0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	5.0		0.79	1.3		0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.		0.79	N.D.		0.20	1
05298	Tetrachloroethene	127-18-4	59		1.4	8.7		0.20	1
05298	1,1,1-Trichloroethane	71-55-6	3.8	J	1.1	0.70	J	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.		1.1	N.D.		0.20	1
05298	Trichloroethene	79-01-6	16		1.1	2.9		0.20	1
05298	Vinyl Chloride	75-01-4	N.D.		0.51	N.D.		0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611030AA	04/20/2016 04:56	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 65 Brennan - Ambient Air
SummaCan# 1341
1-290 Nockamixon

LL Sample # AQ 8322832
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 03/31/2016 10:53 by DA
through 04/01/2016 10:40
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD223 SDG#: PDY22-03AB

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3	ug/m3	ppb(v)	ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.	0.81	N.D.	0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.81	N.D.	0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.79	N.D.	0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	N.D.	0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	N.D.	0.20	1
05298	Tetrachloroethene	127-18-4	N.D.	1.4	N.D.	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	1.1	N.D.	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	N.D.	0.20	1
05298	Trichloroethene	79-01-6	N.D.	1.1	N.D.	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.	0.51	N.D.	0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611030AA	04/20/2016 05:30	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 77 Brennan - First Floor Air
SummaCan# 888
1-290 Nockamixon

LL Sample # AQ 8322833
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 04/05/2016 10:20 by DA
through 04/06/2016 09:55
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD224 SDG#: PDY22-04

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3	ug/m3	ppb(v)	ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.	0.81	N.D.	0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.81	N.D.	0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.79	N.D.	0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	N.D.	0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	N.D.	0.20	1
05298	Tetrachloroethene	127-18-4	N.D.	1.4	N.D.	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	1.2 J	1.1	0.22 J	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	N.D.	0.20	1
05298	Trichloroethene	79-01-6	N.D.	1.1	N.D.	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.	0.51	N.D.	0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611130AA	04/20/2016 20:04	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 84 Brennan - Basement Air
SummaCan# 540
1-290 Nockamixon

LL Sample # AQ 8322834
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 04/05/2016 10:00 by DA
through 04/06/2016 09:42
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD225 SDG#: PDY22-05

CAT No.	Analysis Name	CAS Number	Final Result		MDL	Final Result		MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3		ug/m3	ppb(v)		ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.		0.81	N.D.		0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.		0.81	N.D.		0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.		0.79	N.D.		0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.		0.79	N.D.		0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.		0.79	N.D.		0.20	1
05298	Tetrachloroethene	127-18-4	2.0	J	1.4	0.29	J	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.		1.1	N.D.		0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.		1.1	N.D.		0.20	1
05298	Trichloroethene	79-01-6	1.9	J	1.1	0.35	J	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.		0.51	N.D.		0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611130AA	04/20/2016 21:07	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 84 Brennan - Basement Dup Air
SummaCan# 876
1-290 Nockamixon

LL Sample # AQ 8322835
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 04/05/2016 10:00 by DA
through 04/06/2016 09:42
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD226 SDG#: PDY22-06FD

CAT No.	Analysis Name	CAS Number	Final Result		MDL	Final Result		MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3		ug/m3	ppb(v)		ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.		0.81	N.D.		0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.		0.81	N.D.		0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.		0.79	N.D.		0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	0.91	J	0.79	0.23	J	0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.		0.79	N.D.		0.20	1
05298	Tetrachloroethene	127-18-4	2.3	J	1.4	0.33	J	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.		1.1	N.D.		0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.		1.1	N.D.		0.20	1
05298	Trichloroethene	79-01-6	2.6	J	1.1	0.48	J	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.		0.51	N.D.		0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611130AA	04/20/2016 21:40	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 84 Brennan - First Floor Air
SummaCan# 1342
1-290 Nockamixon

LL Sample # AQ 8322836
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 04/05/2016 09:55 by DA
through 04/06/2016 09:40
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD227 SDG#: PDY22-07

CAT No.	Analysis Name	CAS Number	Final Result		MDL	Final Result		MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3		ug/m3	ppb(v)		ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.		0.81	N.D.		0.20	1
05298	1,2-Dichloroethane	107-06-2	1.3	J	0.81	0.33	J	0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.		0.79	N.D.		0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.		0.79	N.D.		0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.		0.79	N.D.		0.20	1
05298	Tetrachloroethene	127-18-4	N.D.		1.4	N.D.		0.20	1
05298	1,1,1-Trichloroethane	71-55-6	1.3	J	1.1	0.23	J	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.		1.1	N.D.		0.20	1
05298	Trichloroethene	79-01-6	N.D.		1.1	N.D.		0.20	1
05298	Vinyl Chloride	75-01-4	N.D.		0.51	N.D.		0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611130AA	04/20/2016 22:11	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 77 Brennan - Basement Air
SummaCan# 1151
1-290 Nockamixon

LL Sample # AQ 8322837
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 04/05/2016 10:15 by DA
through 04/06/2016 09:57
Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD228 SDG#: PDY22-08

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3	ug/m3	ppb(v)	ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.	0.81	N.D.	0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.81	N.D.	0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.79	N.D.	0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	N.D.	0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	N.D.	0.20	1
05298	Tetrachloroethene	127-18-4	N.D.	1.4	N.D.	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	1.1	N.D.	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	N.D.	0.20	1
05298	Trichloroethene	79-01-6	N.D.	1.1	N.D.	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.	0.51	N.D.	0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611130AA	04/20/2016 22:47	Jacob E Bailey	1

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: Trip Blank Air
SummaCan# 1201
1-290 Nockamixon

LL Sample # AQ 8322838
LL Group # 1648311
Account # 06195

Project Name: 1-290 Nockamixon

Collected: 03/31/2016

Submitted: 04/07/2016 15:15
Reported: 04/22/2016 17:06

PA Dept. of Env. Protection
Env Cleanup & Brownfields
PO Box 8471
Harrisburg PA 17105-8471

PD229 SDG#: PDY22-09TB

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		ug/m3	ug/m3	ppb(v)	ppb(v)	
05298	1,1-Dichloroethane	75-34-3	N.D.	0.81	N.D.	0.20	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.81	N.D.	0.20	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.79	N.D.	0.20	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	N.D.	0.20	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	N.D.	0.20	1
05298	Tetrachloroethene	127-18-4	N.D.	1.4	N.D.	0.20	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	1.1	N.D.	0.20	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	N.D.	0.20	1
05298	Trichloroethene	79-01-6	N.D.	1.1	N.D.	0.20	1
05298	Vinyl Chloride	75-01-4	N.D.	0.51	N.D.	0.20	1

MDL = Method Detection Limit

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05298	12.22 TO-15 VOA Extended List	EPA TO-15	1	E1611130AA	04/20/2016 23:15	Jacob E Bailey	1

Quality Control Summary

Client Name: PA Dept. of Env. Protection
Reported: 04/22/2016 17:06

Group Number: 1648311

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ug/m3	MDL ug/m3
Batch number: E1611030AA	Sample number(s): 8322830-8322832	
1,1-Dichloroethane	N.D.	0.81
1,2-Dichloroethane	N.D.	0.81
1,1-Dichloroethene	N.D.	0.79
cis-1,2-Dichloroethene	N.D.	0.79
trans-1,2-Dichloroethene	N.D.	0.79
Tetrachloroethene	N.D.	1.4
1,1,1-Trichloroethane	N.D.	1.1
1,1,2-Trichloroethane	N.D.	1.1
Trichloroethene	N.D.	1.1
Vinyl Chloride	N.D.	0.51
Batch number: E1611130AA	Sample number(s): 8322833-8322838	
1,1-Dichloroethane	N.D.	0.81
1,2-Dichloroethane	N.D.	0.81
1,1-Dichloroethene	N.D.	0.79
cis-1,2-Dichloroethene	N.D.	0.79
trans-1,2-Dichloroethene	N.D.	0.79
Tetrachloroethene	N.D.	1.4
1,1,1-Trichloroethane	N.D.	1.1
1,1,2-Trichloroethane	N.D.	1.1
Trichloroethene	N.D.	1.1
Vinyl Chloride	N.D.	0.51

LCS/LCSD

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: E1611030AA	Sample number(s): 8322830-8322832								
1,1-Dichloroethane	40.47	40.9	40.47	41.04	101	101	67-124	0	25
1,2-Dichloroethane	40.47	40.74	40.47	40.57	101	100	70-130	0	25
1,1-Dichloroethene	39.65	38.04	39.65	39.2	96	99	61-128	3	25
cis-1,2-Dichloroethene	39.65	40.96	39.65	41.92	103	106	65-121	2	25
trans-1,2-Dichloroethene	39.65	41.3	39.65	41.62	104	105	66-121	1	25
Tetrachloroethene	67.82	66.52	67.82	66.45	98	98	70-130	0	25
1,1,1-Trichloroethane	54.56	53.05	54.56	53.12	97	97	70-130	0	25
1,1,2-Trichloroethane	54.56	54.8	54.56	55.01	100	101	59-131	0	25
Trichloroethene	53.74	51.92	53.74	51.94	97	97	70-130	0	25
Vinyl Chloride	25.56	26.06	25.56	25.9	102	101	70-130	1	25

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: PA Dept. of Env. Protection
Reported: 04/22/2016 17:06

Group Number: 1648311

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: E1611130AA	Sample number(s): 8322833-8322838								
1,1-Dichloroethane	40.47	42.15	40.47	42.72	104	106	67-124	1	25
1,2-Dichloroethane	40.47	42.59	40.47	44.17	105	109	70-130	4	25
1,1-Dichloroethene	39.65	38.94	39.65	40	98	101	61-128	3	25
cis-1,2-Dichloroethene	39.65	42.32	39.65	42.94	107	108	65-121	1	25
trans-1,2-Dichloroethene	39.65	42.14	39.65	42.58	106	107	66-121	1	25
Tetrachloroethene	67.82	67.12	67.82	66.15	99	98	70-130	1	25
1,1,1-Trichloroethane	54.56	53.27	54.56	54.09	98	99	70-130	2	25
1,1,2-Trichloroethane	54.56	57.43	54.56	56.55	105	104	59-131	2	25
Trichloroethene	53.74	53.07	53.74	54.63	99	102	70-130	3	25
Vinyl Chloride	25.56	26.5	25.56	27.32	104	107	70-130	3	25

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Summa Canister Field Test Data/Chain of Custody

eurofins | Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 6195 Group # 1648311 Sample # 8322830-8 Bottle Order (SCR) # _____

Client Information

Client: PA DEP - SERO

Account #:

Project Name/#: Mockanixon I-290

Project Manager: D. Armstrong

P.O. #:

Sampler: D. Armstrong / E. Davis

Quote #:

Name of state where samples were collected: PA

Turnaround Time Requested (TAT) (circle one)

Standard Rush (specify) _____

Data Package Required? Yes No

EDD Required? Yes No

	Temperature (F)		Pressure ("Hg)	
	Start	Stop	Start	Stop
Ambient				
Maximum				
Minimum				

Analyses Requested

☐ MTBE ☐ BTEX

Sample Identification	Start Date/Time (24-hour clock)	Stop Date/Time (24-hour clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Flow Reg. ID	Can ID	Can Size (L)	Controller Flowrate (mL/min)	EPA TO - 15	EPA 18	EPA 25 (select range below)	Helium as tracer	O2/CO2	Library Search	
65 Brennan - Basement	3/31/16 - 1040	4/1/16 1042	-29	-10.5	65	65	399368	1295	6	3.5	X						
65 Brennan - First Floor	3/31/16 1037	4/1/16 1041	-30	-9.5	70	70	342357	1339	6	3.5	X						
65 Brennan - Ambient	3/31/16 1053	4/1/16 1040	-30	-12	67	67	710626	1341	6	3.5	X						
77 Brennan - First Floor	4/5/16 1020	4/6/16 0955	-29	-9	68	68	337701	888	6	3.5	X						
84 Brennan - Basement	4/5/16 1000	4/6/16 0942	-29	-11	60	60	303934	540	6	3.5	X						
84 Brennan - Basement Dup	4/5/16 1000	4/6/16 0942	-20	0	60	60	710531	876	6	3.5	X						
84 Brennan - First Floor	4/5/16 0955	4/6/16 0940	-29.5	-11	67	67	399388	1342	6	3.5	X						
77 Brennan - Basement	4/5/16 1015	4/6/16 0957	-30	-18	62	62	415324	1151	6	3.5	X						
—	—	—	—	—	—	—	710584	1196	6	3.5	—						
Trip Blank								1201	6		X						

Instructions/QC Requirements & Comments

Can 876 - Lost pressure @ start - Tightened regulator - registered 0 at end.

Can ID 1196 - not used - do not analyze

EPA 25 (check one) ☐ C1 - C4 ☐ C2 - C10 ☐ C1 - C10 ☐ C4 - C10 (GRO) ☐ C2 - C4

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
15:24	3/29/16	PM	3/30/16		4/7/16		
Relinquished by:	Date/Time: 1310	Received by: PM	Date/Time: 4/1/16 13:10	Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time: 4/7/16 10:45	Received by:	Date/Time: 4/7/16 1049	Relinquished by:	Date/Time:	Received by:	Date/Time: 4/7/16 1515

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 142081

Group Number(s): 1648311

Client: PADEP

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	04/07/2016 15:15
Number of Packages:	4	Number of Projects:	1
State/Province of Origin:	PA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	N/A	VOA Vial Headspace ≥ 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	1
Samples Intact:	Yes	Trip Blank Type:	See Below
Missing Samples:	No	Air Quality Samples Present:	Yes
Extra Samples:	No	Air Quality Flow Controllers Present:	Yes
Discrepancy in Container Qty on COC:	No	Flow Controller Quantity:	9
		Air Quality Returns:	Yes
		Summa Canisters:	1196

Trip Blank Type(s): 6L Summa Canister

Unpacked by Patrick Engle (3472) at 17:24 on 04/07/2016

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.