

PINELANDS REGIONAL SCHOOL DISTRICT

520 Nugentown Road
P.O. Box 248
Little Egg Harbor, NJ 08087-0248

Telephone (609) 296-3106
FAX (609) 294-9519



MARYANN BANKS, Ed. D.
Interim Superintendent

STEPHEN J. BRENNAN, M.B.A., C.P.A.
*Business Administrator/
Board Secretary*

December 7, 2017

Via E-Mail (opra+request-229-235317ee@requests.opramachine.com)

Re: Open Public Records Act Request

As you know, I am the Business Administrator and Custodian of Records for the Pinelands Regional School District Board of Education (the “Board” or the “District”). I am in receipt of your request for records (the “Request”) pursuant to the Open Public Records Act (“OPRA” or the “Act”) which I received on November 27, 2017. The Request seeks “Copies of the results of all air-quality tests conducted during September and October 2017, that have not already been posted on the public district website, as of 11/19/2017.” Attached you will find all air quality test results for the dates requested.

Thank you for your courtesies. If I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

Stephen J. Brennan, MBA, CPA
Business Administrator/Board Secretary

PINELANDS REGIONAL SCHOOL DISTRICT

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Re: Open Public Records Act Request

As you know, I am the Business Administrator and Custodian of Records for the Pinelands Regional School District Board of Education (the "Board" or the "District"). I am in receipt of your request for records (the "Request") pursuant to the Open Public Records Act ("OPRA" or the "Act") which I received on November 27, 2017. The Request seeks "Copies of the results of all air-quality tests conducted during September and October 2017, that have not already been posted on the public district website, as of 11/19/2017." Attached you will find the information requested.

Thank you for your courtesies. If I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

Stephen J. Brennan, MBA, CPA
Business Administrator/Board Secretary

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491701023**Customer ID: **TTIE54**Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**Fax: **856-840-8815**Project: **17-1224 / Pinelands Regional Jr. High**Date Collected: **10/10/2017**Date Received: **10/12/2017****Laboratory Report- Sample Summary**

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
491701023-0001	Outside	10/10/2017	5:17 PM
491701023-0002	Main Office	10/10/2017	4:50 PM
491701023-0003	Faculty / Cafe	10/10/2017	4:47 PM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report Date:
10/17/2017

Report Revision
R0

Revision Comments
Initial Report

Marjorie Howley, Laboratory Manager
or other approved signatory

Test results meet all NELAP requirements unless otherwise specified.

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-1**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Outside**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2329.D	E0376	307.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.52	0.50		2.6	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	1.0	0.50		2.1	1.0	
n-Butane	106-97-8	58.12	ND	0.50		ND	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	2.8	0.50		5.3	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.4	0.50		3.5	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	2.4	0.50		5.7	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.9	0.50		10	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

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 Customer ID: **TTIE54**
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Attn: **Jim Guilardi**
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1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Outside**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2329.D	E0376	307.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	

Total Target Compound Concentrations:**11****ppbv****29****ug/m3****Surrogate**

4-Bromofluorobenzene

Result**10****Spike****10****Recovery****100%****Qualifier Definitions****ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036



Sample ID: Outside

Page 4 of 5

**EMSL Analytical**

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EMSL Order #: **491701023**
EMSL Sample #: **491701023-1**
Customer ID: **TTIE54**
Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
Fax: **856-840-8815**
Date Collected: **10/10/2017**
Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Outside**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2329.D	E0376	307.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.52	0.50		2.6	2.5	
Chloromethane	74-87-3	50.49	1.0	0.50		2.1	1.0	
Ethanol	64-17-5	46.07	2.8	0.50		5.3	0.94	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.4	0.50		3.5	1.2	
Acetone	67-64-1	58.08	2.4	0.50		5.7	1.2	
Ethyl acetate	141-78-6	88.10	2.9	0.50		10	1.8	
Total Target Compound Concentrations:			11	ppbv		29	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Total TIC Concentrations:			0.0	ppbv		0.0	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs): **11** ppbv **29** ug/m3



NJDEP Certification #: 03036

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-2**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.57	0.50		2.8	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.84	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	17	0.50		40	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	220	0.50	E	420	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	13	0.50		70	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.1	0.50		18	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	8.3	0.50		20	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	1.2	0.50		4.3	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	0.78	0.50		2.3	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	5.4	0.50		20	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

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 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**

Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	0.63	0.50		2.4	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	1.3	1.0		5.6	4.3	
Xylene (Ortho)	95-47-6	106.2	0.82	0.50		3.6	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	2.0	0.50		10	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	0.50		5.3	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	2.4	0.50		12	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			280	ppbv		640	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

10

Spike

10

Recovery

100%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036



Page 3 of 5

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701023**
 EMSL Sample #: **491701023-2**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.57	0.50		2.8	2.5	
Chloromethane	74-87-3	50.49	0.84	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	17	0.50		40	1.2	
Ethanol	64-17-5	46.07	220	0.50	E	420	0.94	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	13	0.50		70	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.1	0.50		18	1.2	
Acetone	67-64-1	58.08	8.3	0.50		20	1.2	
Methylene chloride	75-09-2	84.94	1.2	0.50		4.3	1.7	
2-Butanone(MEK)	78-93-3	72.10	0.78	0.50		2.3	1.5	
Ethyl acetate	141-78-6	88.10	5.4	0.50		20	1.8	
Toluene	108-88-3	92.14	0.63	0.50		2.4	1.9	
Xylene (p,m)	1330-20-7	106.20	1.3	1.0		5.6	4.3	
Xylene (Ortho)	95-47-6	106.20	0.82	0.50		3.6	2.2	
4-Ethyltoluene	622-96-8	120.2	2.0	0.50		10	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	0.50		5.3	2.5	
1,2,4-Trimethylbenzene	95-63-6	120.20	2.4	0.50		12	2.5	
Total Target Compound Concentrations:			280	ppbv		640	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Ethane, 1,1-difluoro-	000075-37-6	66	8.4		JN	23	6.47	
Isobutane	000075-28-5	58	11		JN	26	7.06	
Butane, 2-methyl-	000078-78-4	72	19		JN	55	9.27	
Pentane	000109-66-0	72	34		JN	100	10.09	
unknown hydrocarbon		92	2.5		JN	9.6	22.86	
unknown hydrocarbon		92	1.1		JN	4.2	23.14	
Nonane	000111-84-2	128	5.9		JN	31	23.91	
unknown hydrocarbon		92	1.1		JN	4.3	24.79	
Unknown Substituted Cyclohexane		92	1.1		JN	4.0	25.02	
Unknown Substituted Cyclohexane		92	1.0		JN	3.8	25.64	
unknown hydrocarbon		92	1.9		JN	7.0	25.82	
.alpha.-Pinene	000080-56-8	136	1.3		JN	7.2	25.99	
Decane	000124-18-5	142	4.2		JN	24	26.51	
unknown hydrocarbon		92	3.1		JN	12	26.97	
Unknown Substituted Cyclohexane		92	1.9		JN	7.0	28.23	
Total TIC Concentrations:			100	ppbv		320	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701023**
EMSL Sample #: **491701023-2**
Customer ID: **TTIE54**
Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
Fax: **856-840-8815**
Date Collected: **10/10/2017**
Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs):

380 ppbv

1000 ug/m3



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701023**
 EMSL Sample #: **491701023-3**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Faculty / Cafe**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/17/2017	TP	J2333.D	E0570	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.71	0.50		3.5	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.82	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	4.5	0.50		11	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	45	0.50	E	85	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	2.1	0.50		12	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.2	0.50		5.5	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	4.3	0.50		10	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	4.9	0.50		18	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-3**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Faculty / Cafe**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/17/2017	TP	J2333.D	E0570	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	0.81	0.50		4.0	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.57	0.50		2.8	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	1.4	0.50		6.8	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			67	ppbv		160	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

10

Spike

10

Recovery

100%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-3**
 Customer ID: **TTIE54**
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Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Faculty / Cafe**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/17/2017	TP	J2333.D	E0570	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.71	0.50		3.5	2.5	
Chloromethane	74-87-3	50.49	0.82	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	4.5	0.50		11	1.2	
Ethanol	64-17-5	46.07	45	0.50	E	85	0.94	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	2.1	0.50		12	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.2	0.50		5.5	1.2	
Acetone	67-64-1	58.08	4.3	0.50		10	1.2	
Ethyl acetate	141-78-6	88.10	4.9	0.50		18	1.8	
4-Ethyltoluene	622-96-8	120.2	0.81	0.50		4.0	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.57	0.50		2.8	2.5	
1,2,4-Trimethylbenzene	95-63-6	120.20	1.4	0.50		6.8	2.5	
Total Target Compound Concentrations:			67	ppbv		160	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Ethane, 1,1-difluoro-	000075-37-6	66	3.1		JN	8.4	6.49	
Isobutane	000075-28-5	58	4.5		JN	11	7.08	
Butane, 2-methyl-	000078-78-4	72	5.9		JN	17	9.29	
Pentane	000109-66-0	72	6.8		JN	20	10.11	
Nonane	000111-84-2	128	2.8		JN	15	23.89	
unknown hydrocarbon		92	3.0		JN	11	25.54	
Decane	000124-18-5	142	4.8		JN	28	26.52	
unknown hydrocarbon		92	1.7		JN	6.4	26.97	
unknown hydrocarbon		92	1.8		JN	6.8	28.22	
Undecane	001120-21-4	156	2.6		JN	17	28.88	
Total TIC Concentrations:			37	ppbv		140	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs): **100 ppbv****300 ug/m3**

NJDEP Certification #: 03036

491701023

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us to best analyze your samples, achieve requested TAT and provide you with helpful interpretation information.

Company: TTI Environmental

Contact Person:

Name: Jim Guillard

E-mail: JimG@TTIENV.com

Additional E-mails:

Telephone #: 856-840-8802

Library Search requested:

☒ YES ☐ NO

A library search (aka *Tentatively Identified Compounds*) will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation, the library search is recommended to provide you with all available information for your sample.

Sample Type:

☒ Indoor Air Quality (Home/Office)

☐ Soil Gas/Sub Slab

☐ IAQ (Industrial)

☐ Other:

Sample Description: Outside, Main Office, Faculty/Cafe

PLEASE NOTE: The result forms that we provide will not indicate whether your results have exceeded any Exposure Limit criteria established by any regulatory agency. If you would like that information, please check off below which regulatory comparison forms you would like to receive.

☐ OSHA PELs/NIOSH RELs combined form

☐ Potential Sources of Compounds found in your IAQ sample

☐ EPA RSLs - 5/2016 Blended for THQ=1.0 and THQ=0.1

☒ TVOC (Library Search Required for this format)

☒ NJ DEP 1/2013 - Circle one: Indoor Air Soil Gas

☐ Ohio 4/2013 - Circle one: Residential Commercial

☐ NC DENR 4/2014 - Circle one: Residential Non-residential

☐ Indiana Dept Env Mgmt Screening Levels 3/2016

☐ PA DEP - 11/2016 Indoor Air

☐ Vermont DEP IROCP 4/2012 (soil gas only)

☐ PA DEP- 11/2016: Sub Slab Soil Gas OR Near Source Soil Gas

☐ California OEHHA 2/2012

☐ CA HHSL 11/2004 - Circle on Indoor Air Soil Gas

☐ Other, These are the compounds I want reported:

Additional analyses that can be performed from your canister. Please note: there is an additional charge for any of the tests below.

US EPA TO-3 via GC/FID (choose one below):

ASTM-D5504 via GC/SCD (choose one below): *

☐ C₁-C₆ hydrocarbons

☐ Sulfur Scan (H₂S, COS, MeSH, EtSH, DMS)

☐ Methane only

☐ H₂S only

***Note:** Hold time for sulfur gases is 1 day from collection. Please schedule your sample collection so that samples are received in the lab prior to noon on Friday. Analysis performed out of hold time will have a notation in the report.

We can provide the following CMS tests from your canisters. Please note that these tests are to be used for IAQ/Screening purposes ONLY. EMSL recommends alternate field sampling techniques for these parameters (with the exception of water vapor); please contact your sales rep for the proper media. Please note: there is an additional charge for any of the tests

Draeger CMS Analyzer:

☐ CO ☐ CO₂ ☐ NH₃ ☐ O₂ ☐ Water Vapor

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.

RECEIVED
EMSL
CINNAMINSON, N.J.
2017 OCT 12 A 11:19



October 18, 2017

Mr. Stephen J. Brennan, MBA, CPA
Business Administrator/Board Secretary
Pinelands Regional Board of Education
520 Nugentown Road
Little Egg Harbor, NJ 08087

Re: TTI Project 17-1224
Pinelands Regional High School
Indoor Air Quality Testing

Dear Mr. Brennan,

TTI Environmental, Inc. is pleased to present this report containing results of indoor air monitoring performed at Pinelands Regional Junior High School on 10.10.2017. A list of compounds detected inside the building is summarized below.

Results	CAS	10.05.2017 ug/m3	10.05.2017 ppm	10.10.2017 ug/m3	10.10.2017 ppm	OSHA PEL ppm	OSHA PEL mg/m ³	NIOSH REL ppm	ACGIH TLV ppm
Unknown Hydrocarbons		ND	ND	12.0	0.0031	-	-	-	-
Unknown Substituted Cyclohexane		ND	ND	3.8	0.0011	-	-	-	-
Ethanol	64175	34.0	0.0480	420.0	0.2200	1000	1900	1000	1000
Isopropyl alcohol(2-Propanol)	67630	3.7	0.0015	18.0	0.0071	400	980	400	200
Acetone	67641	14.0	0.0060	20.0	0.0083	1000	2400	250	250
Benzene	71432	8.9	0.0028	ND	ND	1		0.1	10
Chloromethane	74873	1.6	0.0008	1.7	0.0008	25	-	-	50
Methylene chloride	75092	ND	ND	4.3	0.0012	25	-	-	50
1,1-difluoroethane	75376	ND	ND	23.0	0.0084	-	-	-	-
Isobutane	75285	ND	ND	26.0	0.0110	-	-	800	1000
Freon 11(Trichlorofluoromethane)	75694	5.5	0.0010	70.0	0.0130	1000	5600	1000	1000
Freon 12(Dichlorodifluoromethane)	75718	2.5	0.0005	3.5	0.0007	1000	4950	1000	1000
2-methylbutane	78784	ND	ND	55.0	0.0190	-	-	-	600
2-butanone	78933	ND	ND	2.3	0.0008	200	590	200	200
.alpha.-Pinene	80568	ND	ND	7.2	0.0013	-	-	-	20
Naphthalene	91203	11.0	0.0021	ND	ND	10	50	10	10
Xylene (Ortho)	95476	3.5	0.0008	3.6	0.0008	100	435	100	100
1,2,4-Trimethylbenzene	95636	15.0	0.0030	12.0	0.0024	-	-	25	25
Isopropylbenzene (cumene)	98828	19.0	0.0039	ND	ND	50	245	50	50
Ethylbenzene	100414	2.7	0.0006	ND	ND	-	-	-	-
n-Butane	106978	4.1	0.0017	40.0	0.0170	-	-	1000	800
1,3,5-Trimethylbenzene	108678	85.0	0.0170	5.3	0.0011	-	-	25	25
Toluene	108883	3.8	0.0010	2.4	0.0006	200	750	100	20
Pentane	109660	ND	ND	100.0	0.0340	1000	2950	120	600
n-Hexane	110543	28.0	0.0081	ND	ND	500	1800	50	50
Cyclohexane	110827	10.0	0.0029	ND	ND	300	1015	300	300
Nonane	111842	ND	ND	31.0	0.0059	-	-	200	200
Propylene	115071	3.5	0.0020	ND	ND	-	-	-	-
Decane	124185	ND	ND	28.0	0.0048	-	-	-	-
Ethyl acetate	141786	ND	ND	20.0	0.0054	400	1,400	400	400
n-Heptane	142825	35.0	0.0087	ND	ND	500	2000	85	400
2,2,4-Trimethylpentane(Isooctane)	540841	31.0	0.0067	ND	ND	300	-	75	300
4-Ethyltoluene	622968	150.0	0.0310	10.0	0.0020	-	-	-	-
Undecane	1120214	ND	ND	17.0	0.0026	-	-	-	-
Xylene (p,m)	1330207	9.0	0.0021	5.6	0.0013	-	-	150	150

OSHA PEL

NIOSH REL

ACGIH TLV

NJ-IRRAL

NJ-INRAL

Occupational Health & Safety Administration Permissible Exposure Limit

National Institute of Occupational Safety & Health Recommended Exposure Limit

American Conference of Governmental Industrial Hygienists Threshold Limit Values

NJDEP RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013

NJDEP NON-RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013



The table includes the previous results for the High School along with current detectable levels at the Junior High School for comparison. TTI has evaluated the results and can confirm that none of the detected compounds exceeded limits set by OSHA, NIOSH or ACGIH for health considerations.

We appreciate the opportunity to assist with your IAQ concerns. If you should have any questions or require additional information, please feel free to contact me directly.

Sincerely,

TTI ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Patricia B Stock". The signature is fluid and cursive, with the first name "Patricia" and last name "Stock" clearly distinguishable.

Patricia B Stock
Senior EHS Consultant



October 18, 2017

Mr. Stephen J. Brennan, MBA, CPA
Business Administrator/Board Secretary
Pinelands Regional Board of Education
520 Nugentown Road
Little Egg Harbor, NJ 08087

Re: TTI Project 17-1224
Pinelands Regional High School
Indoor Air Quality Testing

Dear Mr. Brennan,

TTI Environmental, Inc. is pleased to present this report containing results of indoor air monitoring performed at Pinelands Regional Junior High School on 10.10.2017. A list of compounds detected inside the building is summarized below.

Results	CAS	10.05.2017 ug/m3	10.05.2017 ppm	10.10.2017 ug/m3	10.10.2017 ppm	OSHA PEL ppm	OSHA PEL mg/m ³	NIOSH REL ppm	ACGIH TLV ppm
Unknown Hydrocarbons		ND	ND	12.0	0.0031	-	-	-	-
Unknown Substituted Cyclohexane		ND	ND	3.8	0.0011	-	-	-	-
Ethanol	64175	34.0	0.0480	420.0	0.2200	1000	1900	1000	1000
Isopropyl alcohol(2-Propanol)	67630	3.7	0.0015	18.0	0.0071	400	980	400	200
Acetone	67641	14.0	0.0060	20.0	0.0083	1000	2400	250	250
Benzene	71432	8.9	0.0028	ND	ND	1		0.1	10
Chloromethane	74873	1.6	0.0008	1.7	0.0008	25	-	-	50
Methylene chloride	75092	ND	ND	4.3	0.0012	25	-	-	50
1,1-difluoroethane	75376	ND	ND	23.0	0.0084	-	-	-	-
Isobutane	75285	ND	ND	26.0	0.0110	-	-	800	1000
Freon 11(Trichlorofluoromethane)	75694	5.5	0.0010	70.0	0.0130	1000	5600	1000	1000
Freon 12(Dichlorodifluoromethane)	75718	2.5	0.0005	3.5	0.0007	1000	4950	1000	1000
2-methylbutane	78784	ND	ND	55.0	0.0190	-	-	-	600
2-butanone	78933	ND	ND	2.3	0.0008	200	590	200	200
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1,2,4-Trimethylbenzene	95636	15.0	0.0030	12.0	0.0024	-	-	25	25
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1,3,5-Trimethylbenzene	108678	85.0	0.0170	5.3	0.0011	-	-	25	25
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n-Hexane	110543	28.0	0.0081	ND	ND	500	1800	50	50
Cyclohexane	110827	10.0	0.0029	ND	ND	300	1015	300	300
Nonane	111842	ND	ND	31.0	0.0059	-	-	200	200
Propylene	115071	3.5	0.0020	ND	ND	-	-	-	-
Decane	124185	ND	ND	28.0	0.0048	-	-	-	-
Ethyl acetate	141786	ND	ND	20.0	0.0054	400	1,400	400	400
n-Heptane	142825	35.0	0.0087	ND	ND	500	2000	85	400
2,2,4-Trimethylpentane(Isooctane)	540841	31.0	0.0067	ND	ND	300	-	75	300
4-Ethyltoluene	622968	150.0	0.0310	10.0	0.0020	-	-	-	-
Undecane	1120214	ND	ND	17.0	0.0026	-	-	-	-
Xylene (p,m)	1330207	9.0	0.0021	5.6	0.0013	-	-	150	150

OSHA PEL

NIOSH REL

ACGIH TLV

NJ-IRRAL

NJ-INRAL

Occupational Health & Safety Administration Permissible Exposure Limit

National Institute of Occupational Safety & Health Recommended Exposure Limit

American Conference of Governmental Industrial Hygienists Threshold Limit Values

NJDEP RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013

NJDEP NON-RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013



The table includes the previous results for the High School along with current detectable levels at the Junior High School for comparison. TTI has evaluated the results and can confirm that none of the detected compounds exceeded limits set by OSHA, NIOSH or ACGIH for health considerations.

We appreciate the opportunity to assist with your IAQ concerns. If you should have any questions or require additional information, please feel free to contact me directly.

Sincerely,

TTI ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Patricia B Stock". The signature is fluid and cursive, with the first name "Patricia" and last name "Stock" clearly distinguishable.

Patricia B Stock
Senior EHS Consultant

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491701023**Customer ID: **TTIE54**Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**Fax: **856-840-8815**Project: **17-1224 / Pinelands Regional Jr. High**Date Collected: **10/10/2017**Date Received: **10/12/2017****Laboratory Report- Sample Summary**

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
491701023-0001	Outside	10/10/2017	5:17 PM
491701023-0002	Main Office	10/10/2017	4:50 PM
491701023-0003	Faculty / Cafe	10/10/2017	4:47 PM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report Date:
10/17/2017

Report Revision
R0

Revision Comments
Initial Report

Marjorie Howley, Laboratory Manager
or other approved signatory

Test results meet all NELAP requirements unless otherwise specified.

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-1**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Outside**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2329.D	E0376	307.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.52	0.50		2.6	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	1.0	0.50		2.1	1.0	
n-Butane	106-97-8	58.12	ND	0.50		ND	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	2.8	0.50		5.3	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.4	0.50		3.5	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	2.4	0.50		5.7	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.9	0.50		10	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-1**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Outside**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2329.D	E0376	307.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	

Total Target Compound Concentrations:**11****ppbv****29****ug/m3****Surrogate**

4-Bromofluorobenzene

Result**10****Spike****10****Recovery****100%****Qualifier Definitions****ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036



**EMSL Analytical**

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EMSL Order #: **491701023**
EMSL Sample #: **491701023-1**
Customer ID: **TTIE54**
Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
Fax: **856-840-8815**
Date Collected: **10/10/2017**
Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Outside**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2329.D	E0376	307.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.52	0.50		2.6	2.5	
Chloromethane	74-87-3	50.49	1.0	0.50		2.1	1.0	
Ethanol	64-17-5	46.07	2.8	0.50		5.3	0.94	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.4	0.50		3.5	1.2	
Acetone	67-64-1	58.08	2.4	0.50		5.7	1.2	
Ethyl acetate	141-78-6	88.10	2.9	0.50		10	1.8	
Total Target Compound Concentrations:			11	ppbv		29	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Total TIC Concentrations:			0.0	ppbv		0.0	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs): **11** ppbv **29** ug/m3



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-2**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.57	0.50		2.8	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.84	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	17	0.50		40	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	220	0.50	E	420	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	13	0.50		70	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.1	0.50		18	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	8.3	0.50		20	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	1.2	0.50		4.3	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	0.78	0.50		2.3	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	5.4	0.50		20	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

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Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701023**
 EMSL Sample #: **491701023-2**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	0.63	0.50		2.4	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	1.3	1.0		5.6	4.3	
Xylene (Ortho)	95-47-6	106.2	0.82	0.50		3.6	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	2.0	0.50		10	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	0.50		5.3	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	2.4	0.50		12	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			280	ppbv		640	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

10

Spike

10

Recovery

100%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-2**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guillard**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.57	0.50		2.8	2.5	
Chloromethane	74-87-3	50.49	0.84	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	17	0.50		40	1.2	
Ethanol	64-17-5	46.07	220	0.50	E	420	0.94	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	13	0.50		70	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.1	0.50		18	1.2	
Acetone	67-64-1	58.08	8.3	0.50		20	1.2	
Methylene chloride	75-09-2	84.94	1.2	0.50		4.3	1.7	
2-Butanone(MEK)	78-93-3	72.10	0.78	0.50		2.3	1.5	
Ethyl acetate	141-78-6	88.10	5.4	0.50		20	1.8	
Toluene	108-88-3	92.14	0.63	0.50		2.4	1.9	
Xylene (p,m)	1330-20-7	106.20	1.3	1.0		5.6	4.3	
Xylene (Ortho)	95-47-6	106.20	0.82	0.50		3.6	2.2	
4-Ethyltoluene	622-96-8	120.2	2.0	0.50		10	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	0.50		5.3	2.5	
1,2,4-Trimethylbenzene	95-63-6	120.20	2.4	0.50		12	2.5	
Total Target Compound Concentrations:			280	ppbv		640	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Ethane, 1,1-difluoro-	000075-37-6	66	8.4		JN	23	6.47	
Isobutane	000075-28-5	58	11		JN	26	7.06	
Butane, 2-methyl-	000078-78-4	72	19		JN	55	9.27	
Pentane	000109-66-0	72	34		JN	100	10.09	
unknown hydrocarbon		92	2.5		JN	9.6	22.86	
unknown hydrocarbon		92	1.1		JN	4.2	23.14	
Nonane	000111-84-2	128	5.9		JN	31	23.91	
unknown hydrocarbon		92	1.1		JN	4.3	24.79	
Unknown Substituted Cyclohexane		92	1.1		JN	4.0	25.02	
Unknown Substituted Cyclohexane		92	1.0		JN	3.8	25.64	
unknown hydrocarbon		92	1.9		JN	7.0	25.82	
.alpha.-Pinene	000080-56-8	136	1.3		JN	7.2	25.99	
Decane	000124-18-5	142	4.2		JN	24	26.51	
unknown hydrocarbon		92	3.1		JN	12	26.97	
Unknown Substituted Cyclohexane		92	1.9		JN	7.0	28.23	
Total TIC Concentrations:			100	ppbv		320	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

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EMSL Order #: **491701023**
EMSL Sample #: **491701023-2**
Customer ID: **TTIE54**
Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
Fax: **856-840-8815**
Date Collected: **10/10/2017**
Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Main Office**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/16/2017	TP	J2331.D	E0412	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs):

380 ppbv

1000 ug/m3



NJDEP Certification #: 03036

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-3**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guilardi**
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1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Faculty / Cafe**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/17/2017	TP	J2333.D	E0570	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.71	0.50		3.5	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.82	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	4.5	0.50		11	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	45	0.50	E	85	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	2.1	0.50		12	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.2	0.50		5.5	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	4.3	0.50		10	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	4.9	0.50		18	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

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EMSL Order #: **491701023**
 EMSL Sample #: **491701023-3**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
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Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Faculty / Cafe**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/17/2017	TP	J2333.D	E0570	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	0.81	0.50		4.0	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.57	0.50		2.8	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	1.4	0.50		6.8	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			67	ppbv		160	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

10

Spike

10

Recovery

100%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701023**
 EMSL Sample #: **491701023-3**
 Customer ID: **TTIE54**
 Customer PO: **23716**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/10/2017**
 Date Received: **10/12/2017**

Project: **17-1224 / Pinelands Regional Jr. High**Sample ID: **Faculty / Cafe**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/17/2017	TP	J2333.D	E0570	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.71	0.50		3.5	2.5	
Chloromethane	74-87-3	50.49	0.82	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	4.5	0.50		11	1.2	
Ethanol	64-17-5	46.07	45	0.50	E	85	0.94	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	2.1	0.50		12	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.2	0.50		5.5	1.2	
Acetone	67-64-1	58.08	4.3	0.50		10	1.2	
Ethyl acetate	141-78-6	88.10	4.9	0.50		18	1.8	
4-Ethyltoluene	622-96-8	120.2	0.81	0.50		4.0	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.57	0.50		2.8	2.5	
1,2,4-Trimethylbenzene	95-63-6	120.20	1.4	0.50		6.8	2.5	
Total Target Compound Concentrations:			67	ppbv		160	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Ethane, 1,1-difluoro-	000075-37-6	66	3.1		JN	8.4	6.49	
Isobutane	000075-28-5	58	4.5		JN	11	7.08	
Butane, 2-methyl-	000078-78-4	72	5.9		JN	17	9.29	
Pentane	000109-66-0	72	6.8		JN	20	10.11	
Nonane	000111-84-2	128	2.8		JN	15	23.89	
unknown hydrocarbon		92	3.0		JN	11	25.54	
Decane	000124-18-5	142	4.8		JN	28	26.52	
unknown hydrocarbon		92	1.7		JN	6.4	26.97	
unknown hydrocarbon		92	1.8		JN	6.8	28.22	
Undecane	001120-21-4	156	2.6		JN	17	28.88	
Total TIC Concentrations:			37	ppbv		140	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs): 100 ppbv

300 ug/m3



NJDEP Certification #: 03036

491701023

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us to best analyze your samples, achieve requested TAT and provide you with helpful interpretation information.

Company: TTI Environmental

Contact Person:

Name: Jim Guilard

E-mail: JimG@TTIENV.com

Additional E-mails:

Telephone #: 856-840-8802

Library Search requested:

☒ YES ☐ NO

A library search (aka *Tentatively Identified Compounds*) will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation, the library search is recommended to provide you with all available information for your sample.

Sample Type:

☒ Indoor Air Quality (Home/Office)

☐ Soil Gas/Sub Slab

☐ IAQ (Industrial)

☐ Other:

Sample Description: Outside, Main Office, Faculty/Cafe

PLEASE NOTE: The result forms that we provide will not indicate whether your results have exceeded any Exposure Limit criteria established by any regulatory agency. If you would like that information, please check off below which regulatory comparison forms you would like to receive.

☐ OSHA PELs/NIOSH RELs combined form

☐ Potential Sources of Compounds found in your IAQ sample

☐ EPA RSLs - 5/2016 Blended for THQ=1.0 and THQ=0.1

☒ TVOC (Library Search Required for this format)

☒ NJ DEP 1/2013 - Circle one: Indoor Air Soil Gas

☐ Ohio 4/2013 - Circle one: Residential Commercial

☐ NC DENR 4/2014 - Circle one: Residential Non-residential

☐ Indiana Dept Env Mgmt Screening Levels 3/2016

☐ PA DEP - 11/2016 Indoor Air

☐ Vermont DEP IROCP 4/2012 (soil gas only)

☐ PA DEP- 11/2016: Sub Slab Soil Gas OR Near Source Soil Gas

☐ California OEHHA 2/2012

☐ CA HHSL 11/2004 - Circle on Indoor Air Soil Gas

☐ Other, These are the compounds I want reported:

Additional analyses that can be performed from your canister. Please note: there is an additional charge for any of the tests below.

US EPA TO-3 via GC/FID (choose one below):

ASTM-D5504 via GC/SCD (choose one below): *

☐ C₁-C₆ hydrocarbons

☐ Sulfur Scan (H₂S, COS, MeSH, EtSH, DMS)

☐ Methane only

☐ H₂S only

***Note:** Hold time for sulfur gases is 1 day from collection. Please schedule your sample collection so that samples are received in the lab prior to noon on Friday. Analysis performed out of hold time will have a notation in the report.

We can provide the following CMS tests from your canisters. Please note that these tests are to be used for IAQ/Screening purposes ONLY. EMSL recommends alternate field sampling techniques for these parameters (with the exception of water vapor); please contact your sales rep for the proper media. Please note: there is an additional charge for any of the tests

Draeger CMS Analyzer:

☐ CO ☐ CO₂ ☐ NH₃ ☐ O₂ ☐ Water Vapor

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.

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2017 OCT 12 A 11:19



TTI ENVIRONMENTAL, INC.
Consulting & Contracting

1253 North Church Street, Moorestown, NJ 08057
www.ttienv.com o 856-840-8800 f 856-840-8815

October 6, 2017

Mr. Stephen J. Brennan, MBA, CPA
Business Administrator/Board Secretary
Pinelands Regional Board of Education
520 Nugentown Road
Little Egg Harbor, NJ 08087

Re: TTI Project 17-1224
Pinelands Regional High School
Indoor Air Quality Testing

Dear Mr. Brennan,

TTI Environmental, Inc. is pleased to present this report containing results of indoor air monitoring performed at Pinelands Regional High School on 10.5.2017. A list of compounds detected summarized below along with various health criteria.

Results	CAS	ug/m3	ppm	OSHA PEL ppm	OSHA PEL mg/m ³	NIOSH REL ppm	ACGIH TLV ppm	NJ-IRRAL µg/m ³	NJ-INRAL µg/m ³	SDS
Ethanol	64175	90.0	0.0480	1000	1900	1000	1000	-	-	
Isopropyl alcohol(2-Propanol)	67630	17.0	0.0070	400	980	400	200	-	-	
Acetone	67641	24.0	0.0099	1000	2400	250	250	64000	280000	
Benzene	71432	8.9	0.0028	1		0.1	10	30	200	
Chloromethane	74873	3.6	0.0017	25	-	-	50	190	780	
Freon 11(Trichlorofluoromethane)	75694	24.0	0.0042	1000	5600	1000	1000	-	-	
Freon 12(Dichlorodifluoromethane)	75718	2.5	0.0005	1000	4950	1000	1000	200	880	
Naphthalene	91203	11.0	0.0021	10	50	10	10	-	-	
Xylene (Ortho)	95476	53.0	0.0120	100	435	100	100	-	-	x
1,2,4-Trimethylbenzene	95636	180.0	0.0370	-	-	25	25	-	-	x
Isopropylbenzene (cumene)	98828	19.0	0.0039	50	245	50	50	-	-	
Ethylbenzene	100414	37.0	0.0084	-	-	-	-	100	500	
n-Butane	106978	70.0	0.0290	-	-	1000	800	-	-	
1,3,5-Trimethylbenzene	108678	85.0	0.0170	-	-	25	25	-	-	
Toluene	108883	58.0	0.0150	200	750	100	20	-	-	
n-Hexane	110543	28.0	0.0081	500	1800	50	50	-	-	
Cyclohexane	110827	10.0	0.0029	300	1015	300	300	13000	52000	
Propylene	115071	3.5	0.0020	-	-	-	-	-	-	
n-Heptane	142825	35.0	0.0087	500	2000	85	400	-	-	
2,2,4-Trimethylpentane(Isooctane)	540841	31.0	0.0067	300	-	75	300	-	-	
4-Ethyltoluene	622968	150.0	0.0310	-	-	-	-	-	-	
Xylene (p,m)	1330207	110.0	0.0250	-	-	150	150	-	-	x

OSHA PEL	Occupational Health & Safety Administration Permissible Exposure Limit
NIOSH REL	National Institute of Occupational Safety & Health Recommended Exposure Limit
ACGIH TLV	American Conference of Governmental Industrial Hygienists Threshold Limit Values
NJ-IRRAL	NJDEP RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013
NJ-INRAL	NJDEP NON-RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013



TTI has evaluated the results and can confirm that none of the target compounds exceeded limits for either exposure or notification at both the state and federal levels. When comparing the laboratory results (shaded) to the regulatory requirements, all were well below thresholds of concern. TTI recommends that the building can safely be occupied.

We appreciate the opportunity to assist with your IAQ concerns. If you should have any questions or require additional information, please feel free to contact me directly.

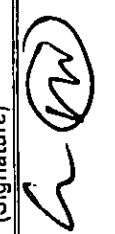
Sincerely,

TTI ENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read "Tim Popp", is written over the printed name.

Timothy Popp
Vice President of Consulting

PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: Pinelands BOE		TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-19-17	
SAMPLER(S): A. Culliton / C. Sims		CLIENT CONTACT:		FACILITY: Pinelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description	Sample Location	Material Description	Sample Location	Material Description	Sample Location
02-A	176 Graphics Lab	Core Base Mastic - Brown only	176 Graphics Lab	Core Base Mastic - Brown only	176 Graphics Lab	Core Base Mastic - Brown only	Whirl Pak
02-B	Nurse's office	↓	Nurse's office	↓	Nurse's office	↓	
03-A	176 Graphics Lab	12" x 12" Brown w/ White Floor Tile and Mastic	176 Graphics Lab	12" x 12" Brown w/ White Floor Tile and Mastic	176 Graphics Lab	12" x 12" Brown w/ White Floor Tile and Mastic	
03-B	Main office - Kitchenette	↓	Main office - Kitchenette	↓	Main office - Kitchenette	↓	
04-A	176 Graphics Lab	2' x 4' Small Fissured Ceiling Tile	176 Graphics Lab	2' x 4' Small Fissured Ceiling Tile	176 Graphics Lab	2' x 4' Small Fissured Ceiling Tile	
04-B	Hallway by Gym	↓	Hallway by Gym	↓	Hallway by Gym	↓	
05-A	175	2' x 4' Large Fissured Ceiling Tile	175	2' x 4' Large Fissured Ceiling Tile	175	2' x 4' Large Fissured Ceiling Tile	
05-B	Hallway by Gym	↓	Hallway by Gym	↓	Hallway by Gym	↓	
07-A	176 Graphics Lab	Duct Caulk #1 (Interior)	176 Graphics Lab	Duct Caulk #1 (Interior)	176 Graphics Lab	Duct Caulk #1 (Interior)	
07-B	173-Auto Shop	↓	173-Auto Shop	↓	173-Auto Shop	↓	
08-A	176 Graphics Lab	12" x 12" Off-White w/ Brown Streak and Mastic	176 Graphics Lab	12" x 12" Off-White w/ Brown Streak and Mastic	176 Graphics Lab	12" x 12" Off-White w/ Brown Streak and Mastic	
08-B	171	↓	171	↓	171	↓	
09-A	170	Drywall and Joint Compound	170	Drywall and Joint Compound	170	Drywall and Joint Compound	
09-B	Main Office B-157	↓	Main Office B-157	↓	Main Office B-157	↓	
09-C	Media Center	↓	Media Center	↓	Media Center	↓	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	PO # 023273	Hour Turnaround Time
	10-20-17	15:05		10-20-17	3pm	24	Stop First Positive
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	NOB MATERIALS:	
						☒ Perform TEM analysis of 1 st sample in each homogeneous group. (Initials) ☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials) ☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials) ☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)	

72

1/5



1253 North Church Street, Moorestown, NJ 08057
856-840-3800 Fax 856-840-8815

E-MAIL: ALL RESULTS AND COC TO: ih-lab@ttienv.com

OrderID: 041730600

PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: Pinelands BOE		TTI PROJECT MANAGER: ☒ Jim Gullardi ☐ Michael Stocku		DATE: 10-19-17	
SAMPLER(S): A. Culliton / C. Sims		CLIENT CONTACT:		FACILITY: Pinelands Regional High School		Sample Container	
Sample #	Date	Time	Sample Location	Material Description	Sample Container		
10-A			176 Graphics Lab	HVAC Black Wrapping	Whirl Pak		
10-B			↓	↓			
11-A			176 Graphics Lab	Mortar A/w Structural Steel			
11-B			↓	↓			
13-A			177	12" x 12" Lt. Brown w/ Grey and Brown Floor Tile and Mastic			
13-B			Hallway at Gym	↓			
18-A			179	Caulk A/w Expansion Joints and Beams			
18-B			D-Wing Hallway	↓			
26-A			Main Office B16B	Carpet Glue			
26-B			Media Center	↓			
31-A			Main Office B15C	Glue Dots A/w Boards			
31-B			166C	↓			
32-A			175	End Cap A/w Fiberglass Pipe Insulation			
32-B			173-Auto Shop	↓			
33-A			D-Wing Hallway	12" x 12" Blue w/ White Struck Floor Tile and Mastic			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	PO # 003773	Hour Turnaround Time
	10-20-17	15:05				24	Stop/First Positive
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time		

NOB MATERIALS:

☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials) AG

☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials) AG

☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials) _____

☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials) _____

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OCT 20 2017
CINNAPPOULI, N.J.

2/5

E-MAIL ALL RESULTS AND COC TO: ih-lab@ttenv.com

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1253 North Church Street, Moorestown, NJ 08057
856-840-8800 Fax 856-840-8815



PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: Pinelands BOE		TTI PROJECT MANAGER: ☒ Jim Gullardi ☐ Michael Stocku		DATE: 10-19-17	
SAMPLER(S): A. Culliton / C. Sims		CLIENT CONTACT:		FACILITY: Pinelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description	Sample Container	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
33-B	D-Wing Hallway	12" X 12" Blue w/ White Streak Floor Tile and Mastic	Whirl Pak				
34-A		12" X 12" Green w/ Dark Green Floor Tile and Mastic					
34-B		↓					
35-A		12" X 12" Burgundy w/ White and Black Floor Tile and Mastic					
35-B		↓					
37-A	D-Wing Hallway	Wrapped Elbows Alw Fiberglass Pipe Insulation					
37-B	Women's Restroom by Gym	↓					
37-C	Men's Restroom by Gym	↓					
38-A	173	Plaster Ceiling					
38-B	Main Entrance Lobby	↓					
38-C	↓						
38-D	Men's Restroom by Gym	↓					
39-A	173 Auto Shop	Textured Plaster Ceiling					
39-B	↓						
39-C	Skylight opening by Gym	↓					
Relinquished by: (Signature)		Received by: (Signature)		Date		Time	
[Signature]				10-20-17		15:05	
Relinquished by: (Signature)		Received by: (Signature)		Date		Time	

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FMSL
CINNAMISON, N.J.
2017 OCT 20 10 30 AM

NOB MATERIALS:
☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials)
☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials)
☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials)
☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)

3/5



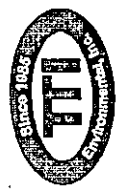
1253 North Church Street, Moorestown, NJ 08057
856-840-8800 Fax 856-840-8815

PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: Pinelands BOE		TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-19-17	
SAMPLER(S): A. Culliton / C. Sims		CLIENT CONTACT:		FACILITY: Pinelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description					
40-A	173 Auto Shop	Vibration Damper Cloth-HVAC					
40-B	Stage-upper Mezzanine	↓					
41-A	Main Entrance Lobby	4" X 6" Terra Cotta Floor Grout					
41-B	↓	↓					
42-A	Main Entrance Lobby	Textured Ceiling Plaster #2					
42-B	↓	↓					
43-A	Main Entrance Lobby	Door/window Caulking					
43-B	Media Center	↓					
50-A	Nurse's Office Exam	1/2" X 1/2" Tan/Brown/White Floor Tile and Mastic					
50-B	↓	↓					
51-A	Nurse's Office	Mudded Elbows A/W Fiberglass Pipe Insulation					
51-B	↓	↓					
52-A	Guidance Office	12" X 12" White w/Green Spect and Mastic					
52-B	Corridor Near Custodial Office	2nd layer					
53-A	Guidance Office	↓ FT-White/Brown					
Relinquished by: (Signature)		Received by: (Signature)		Date		Time	
[Signature]		[Signature]		10-20-17		15:05	
Relinquished by: (Signature)		Received by: (Signature)		Date		Time	
[Signature]		[Signature]					

041730600
E-MAIL ALL RESULTS AND COC TO: ih-lab@ttienv.com

1253 North Church Street, Moorestown, NJ 08057
856-840-8800 Fax 856-840-8815



PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: Pinelands BOE		TTI PROJECT MANAGER: ☒ Jim Guilardi ☐ Michael Stocku		O Jeff Seaman	
SAMPLER(S): A. Guilford / C. Sims		CLIENT CONTACT:		FACILITY: Pinelands Regional High School		DATE: 10-19-17	
Sample #	Sample Location	Material Description				Sample Container	
54-A	Main Office B157	Metal Partition Wall Insulation				Whirl Pak	
54-B	Media Center	↓					
55-A	Men's Restroom by Gym	Mortar A/W Ceramic Tile Core Base only					
55-B	↓	↓				↓	
56-A	Men's Restroom by Gym	2" Grey Ceramic Floor Tile Grout					
56-B	Women's Restroom by Gym	↓					
57-A	Men's Restroom by Gym	2" Grey Ceramic Floor Tile Mortar					
57-B	Women's Restroom by Gym	↓					
60-A	Media Center	5' x 3' Ceiling Tile					
60-B	↓	↓					
61-A		Window Caulk #1 (Interior)				RECEIVED CINNAMINCO, N.J. 2017 OCT 20 3 02	
61-B	172 - CST	Window Caulk #1 (Interior)					
61-C	176 Graphics Lab	↓					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	PO # 025773 24 Hour Turnaround Time ☒ Stop First Positive
		10-20-17	15:05				☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials <u>AG</u>)
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials <u>AG</u>)
							☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials _____)
							☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials _____)

5/5



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
 Phone/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> / xxxxxxxxx@xxxx.xxx

EMSL Order ID: 041730600
 Customer ID: TTIE54
 Customer PO: 023773
 Project ID:

Attn: Jim Guilardi
 TTI Environmental Inc.
 1253 North Church Street
 Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected: 10/19/2017
Received: 10/20/2017
Analyzed: 10/26/2017

Proj: 17-1224 / Pinelands BOE / Pinelands Regional High School

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 02-A

Lab Sample ID: 041730600-0001

Sample Description: 176 Graphics Lab/Cove Base Mastic - Brown

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Brown	0.0%	100%	None Detected	

Client Sample ID: 02-B

Lab Sample ID: 041730600-0002

Sample Description: Nurse's Office/Cove Base Mastic - Brown

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	0%	100%	None Detected	

Client Sample ID: 03-A-Floor Tile

Lab Sample ID: 041730600-0003

Sample Description: 176 Graphics Lab/12x12 Brown w/White Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Brown/White	0%	92%	8% Chrysotile	

Client Sample ID: 03-A-Mastic

Lab Sample ID: 041730600-0003A

Sample Description: 176 Graphics Lab/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Black	0%	95%	5% Chrysotile	

Client Sample ID: 03-B-Floor Tile

Lab Sample ID: 041730600-0004

Sample Description: Main Office - Kitchenette/12x12 Brown w/White Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 03-B-Mastic

Lab Sample ID: 041730600-0004A

Sample Description: Main Office - Kitchenette/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 04-A

Lab Sample ID: 041730600-0005

Sample Description: 176 Graphics Lab/2x4 Small Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Gray/White	90%	10%	None Detected	



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EMSL Order ID: 041730600
 Customer ID: TTIE54
 Customer PO: 023773
 Project ID:

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 04-B **Lab Sample ID:** 041730600-0006

Sample Description: Hallway by Gym/2x4 Small Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 05-A **Lab Sample ID:** 041730600-0007

Sample Description: 175/2x4 Large Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Gray/White	90%	10%	None Detected	

Client Sample ID: 05-B **Lab Sample ID:** 041730600-0008

Sample Description: Hallway by Gym/2x4 Large Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 07-A **Lab Sample ID:** 041730600-0009

Sample Description: 176 Graphics Lab/Door Caulk #1 (Interior)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Gray	20%	80%	None Detected	
TEM Grav. Reduction	10/26/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 07-B **Lab Sample ID:** 041730600-0010

Sample Description: 173-Auto Shop/Door Caulk #1 (Interior)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 08-A-Floor Tile **Lab Sample ID:** 041730600-0011

Sample Description: 176 Graphics Lab/12x12 Off-white w/Brown Streak Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	White	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	White	0.0%	100%	None Detected	

Client Sample ID: 08-A-Mastic **Lab Sample ID:** 041730600-0011A

Sample Description: 176 Graphics Lab/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Black	0%	97%	3% Chrysotile	

Client Sample ID: 08-B-Floor Tile **Lab Sample ID:** 041730600-0012

Sample Description: 171/12x12 Off-white w/Brown Streak Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown/White	0%	100%	None Detected	



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Client Sample ID: 08-B-Mastic

Lab Sample ID: 041730600-0012A

Sample Description: 171/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017					Positive Stop (Not Analyzed)

Client Sample ID: 09-A-Drywall

Lab Sample ID: 041730600-0013

Sample Description: 170/Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Brown/White	15%	85%	None Detected	

Client Sample ID: 09-A-Joint Compound

Lab Sample ID: 041730600-0013A

Sample Description: 170/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	White	0%	100%	None Detected	

Client Sample ID: 09-B-Drywall

Lab Sample ID: 041730600-0014

Sample Description: Main Office B-157/Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	Brown/White	10%	90%	None Detected	

Client Sample ID: 09-B-Joint Compound

Lab Sample ID: 041730600-0014A

Sample Description: Main Office B-157/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/20/2017	White	0%	100%	None Detected	

Client Sample ID: 09-C-Drywall

Lab Sample ID: 041730600-0015

Sample Description: Media Center/Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown/White	20%	80%	None Detected	

Client Sample ID: 09-C-Joint Compound

Lab Sample ID: 041730600-0015A

Sample Description: Media Center/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 10-A

Lab Sample ID: 041730600-0016

Sample Description: 176 Graphics Lab/HVAC Black Wrapping

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Black	3%	97%	None Detected	
TEM Grav. Reduction	10/26/2017	Black	0.0%	100%	None Detected	



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Client Sample ID: 10-B

Lab Sample ID: 041730600-0017

Sample Description: 176 Graphics Lab/HVAC Black Wrapping

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Black	0%	100%	None Detected	

Client Sample ID: 11-A

Lab Sample ID: 041730600-0018

Sample Description: 176 Graphics Lab/Mortar assoc. w/Structural Steel

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Gray/White	0%	100%	None Detected	

Client Sample ID: 11-B

Lab Sample ID: 041730600-0019

Sample Description: 176 Graphics Lab/Mortar assoc. w/Structural Steel

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 13-A-Floor Tile

Lab Sample ID: 041730600-0020

Sample Description: 177/12x12 Lt Brown w/Grey and Brown Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Tan/White	0%	98%	2% Chrysotile	

Client Sample ID: 13-A-Mastic

Lab Sample ID: 041730600-0020A

Sample Description: 177/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Black	0%	97%	3% Chrysotile	

Client Sample ID: 13-B-Floor Tile

Lab Sample ID: 041730600-0021

Sample Description: Hallway at Gym/12x12 Lt Brown w/Grey and Brown Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 13-BA-Mastic

Lab Sample ID: 041730600-0021A

Sample Description: Hallway at Gym/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 18-A

Lab Sample ID: 041730600-0022

Sample Description: 179/Caulk a/w Expansion Joints and Beams

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Brown/White	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Brown/White	0.0%	100%	None Detected	



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Client Sample ID: 18-B

Lab Sample ID: 041730600-0023

Sample Description: D-Wing Hallway/Caulk a/w Expansion Joints and Beams

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 26-A

Lab Sample ID: 041730600-0024

Sample Description: Main Office B168/Carpet Glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 26-B

Lab Sample ID: 041730600-0025

Sample Description: Media Center/Carpet Glue

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 31-A

Lab Sample ID: 041730600-0026

Sample Description: Main Office B156/Glue Dots assoc. w/Boards

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Brown	0.0%	100%	None Detected	

Client Sample ID: 31-B

Lab Sample ID: 041730600-0027

Sample Description: 166/Glue Dots assoc. w/Boards

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	0%	100%	None Detected	

Client Sample ID: 32-A

Lab Sample ID: 041730600-0028

Sample Description: 175/End Cap assoc. w/Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	White/Yellow	10%	88%	2% Chrysotile	

Client Sample ID: 32-B

Lab Sample ID: 041730600-0029

Sample Description: 173-Auto Shop/End Cap assoc. w/Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 33-A-Floor Tile

Lab Sample ID: 041730600-0030

Sample Description: D-Wing Hallway/12x12 Blue w/White Streak Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	White/Blue	0%	98%	2% Chrysotile	



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Client Sample ID: 33-A-Mastic		Lab Sample ID: 041730600-0030A				
Sample Description: D-Wing Hallway/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Black	0%	97%	3% Chrysotile	
Client Sample ID: 33-B-Floor Tile		Lab Sample ID: 041730600-0031				
Sample Description: D-Wing Hallway/12x12 Blue w/White Streak Floor Tile						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017				Positive Stop (Not Analyzed)	
Client Sample ID: 33-B-Mastic		Lab Sample ID: 041730600-0031A				
Sample Description: D-Wing Hallway/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017				Positive Stop (Not Analyzed)	
Client Sample ID: 34-A-Floor Tile		Lab Sample ID: 041730600-0032				
Sample Description: D-Wing Hallway/12x12 Green w/Dark Green Floor Tile						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Green	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Green	0.0%	100%	None Detected	
Client Sample ID: 34-A-Mastic		Lab Sample ID: 041730600-0032A				
Sample Description: D-Wing Hallway/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Black	0%	98%	2% Chrysotile	
Client Sample ID: 34-B-Floor Tile		Lab Sample ID: 041730600-0033				
Sample Description: D-Wing Hallway/12x12 Green w/Dark Green Floor Tile						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Green	0%	100%	None Detected	Recommend TEM
Client Sample ID: 34-B-Mastic		Lab Sample ID: 041730600-0033A				
Sample Description: D-Wing Hallway/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017				Positive Stop (Not Analyzed)	
Client Sample ID: 35-A-Floor Tile		Lab Sample ID: 041730600-0034				
Sample Description: D-Wing Hallway/12x12 Burgundy w/White and Black Floor Tile						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Brown/White/Black	3%	97%	None Detected	
TEM Grav. Reduction	10/26/2017	Brown/White/Black	0.0%	98.5%	1.5% Chrysotile	



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Client Sample ID: 35-A-Mastic

Lab Sample ID: 041730600-0034A

Sample Description: D-Wing Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Black	0%	98%	2% Chrysotile	

Client Sample ID: 35-B-Floor Tile

Lab Sample ID: 041730600-0035

Sample Description: D-Wing Hallway/12x12 Burgundy w/White and Black Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	2%	98%	None Detected	

Client Sample ID: 35-B-Mastic

Lab Sample ID: 041730600-0035A

Sample Description: D-Wing Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 37-A

Lab Sample ID: 041730600-0036

Sample Description: D-Wing Hallway/Wrapped Elbows a/w Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Gray/White	45%	55%	None Detected	

Client Sample ID: 37-B

Lab Sample ID: 041730600-0037

Sample Description: Women's Restroom by Gym/Wrapped Elbows a/w Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/24/2017	Gray/White	40%	60%	None Detected	

Client Sample ID: 37-C

Lab Sample ID: 041730600-0038

Sample Description: Men's Restroom by Gym/Wrapped Elbows a/w Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/Tan/Beige	10%	90%	None Detected	

Client Sample ID: 38-A-Skim Coat

Lab Sample ID: 041730600-0039

Sample Description: 173/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 38-A-Base Coat

Lab Sample ID: 041730600-0039A

Sample Description: 173/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	



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Client Sample ID: 38-B-Skim Coat

Lab Sample ID: 041730600-0040

Sample Description: Main Entrance Lobby/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 38-B-Base Coat

Lab Sample ID: 041730600-0040A

Sample Description: Main Entrance Lobby/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Tan	0%	100%	None Detected	

Client Sample ID: 38-C-Skim Coat

Lab Sample ID: 041730600-0041

Sample Description: Main Entrance Lobby/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 38-C-Base Coat

Lab Sample ID: 041730600-0041A

Sample Description: Main Entrance Lobby/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Tan	0%	100%	None Detected	

Client Sample ID: 38-D-Skim Coat

Lab Sample ID: 041730600-0042

Sample Description: Men's Restroom by Gym/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 38-D-Base Coat

Lab Sample ID: 041730600-0042A

Sample Description: Men's Restroom by Gym/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Tan	0%	100%	None Detected	

Client Sample ID: 39-A

Lab Sample ID: 041730600-0043

Sample Description: 173 Auto Shop/Textured Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	0%	100%	None Detected	

Client Sample ID: 39-B

Lab Sample ID: 041730600-0044

Sample Description: 173 Auto Shop/Textured Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	0%	100%	None Detected	



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Client Sample ID: 39-C

Lab Sample ID: 041730600-0045

Sample Description: Skylight Opening by Gym/Textured Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 40-A

Lab Sample ID: 041730600-0046

Sample Description: 173 Auto Shop/Vibration Damper Cloth - HVAC

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Black	40%	60%	None Detected	

Client Sample ID: 40-B

Lab Sample ID: 041730600-0047

Sample Description: Stage-Upper Mezzanine/Vibration Damper Cloth - HVAC

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	70%	30%	None Detected	

Client Sample ID: 46-A

Lab Sample ID: 041730600-0048

Sample Description: Main Entrance Lobby/4x6 Terra Cloth Floor Grout

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 46-B

Lab Sample ID: 041730600-0049

Sample Description: Main Entrance Lobby/4x6 Terra Cloth Floor Grout

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 48-A-Skim Coat

Lab Sample ID: 041730600-0050

Sample Description: Main Entrance Lobby/Textured Ceiling Plaster #2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 48-A-Base Coat

Lab Sample ID: 041730600-0050A

Sample Description: Main Entrance Lobby/Textured Ceiling Plaster #2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 48-B-Skim Coat

Lab Sample ID: 041730600-0051

Sample Description: Main Entrance Lobby/Textured Ceiling Plaster #2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	



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Client Sample ID: 48-B-Base Coat

Lab Sample ID: 041730600-0051A

Sample Description: Main Entrance Lobby/Textured Ceiling Plaster #2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 49-A

Lab Sample ID: 041730600-0052

Sample Description: Main Entrance Lobby/Door / Window Caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	0%	100%	<1% Chrysotile	
TEM Grav. Reduction	10/26/2017	Brown	0.0%	99.6%	0.39% Chrysotile	

Client Sample ID: 49-B

Lab Sample ID: 041730600-0053

Sample Description: Media Center/Door / Window Caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	0%	100%	<1% Chrysotile	

Client Sample ID: 50-A-Floor Tile

Lab Sample ID: 041730600-0054

Sample Description: Nurse's Office Exam/12x12 Tan / Brown/White Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown/Tan/White	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Brown/Tan/White	0.0%	100%	None Detected	

Client Sample ID: 50-A-Mastic

Lab Sample ID: 041730600-0054A

Sample Description: Nurse's Office Exam/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 50-B-Floor Tile

Lab Sample ID: 041730600-0055

Sample Description: Nurse's Office Exam/12x12 Tan / Brown/White Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown/Tan/White	0%	100%	None Detected	

Client Sample ID: 50-B-Mastic

Lab Sample ID: 041730600-0055A

Sample Description: Nurse's Office Exam/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 51-A

Lab Sample ID: 041730600-0056

Sample Description: Nurse's Office/Mudded Elbows assoc. w/Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	40%	60%	None Detected	



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EMSL Order ID: 041730600

Customer ID: TTIE54

Customer PO: 023773

Project ID:

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 51-B

Lab Sample ID: 041730600-0057

Sample Description: Nurse's Office/Muddled Elbows assoc. w/Fiberglass Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	30%	70%	None Detected	

Client Sample ID: 52-A-Floor Tile

Lab Sample ID: 041730600-0058

Sample Description: Guidance Office/12x12 White w/Green Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	White	0.0%	100%	None Detected	

Client Sample ID: 52-A-Mastic

Lab Sample ID: 041730600-0058A

Sample Description: Guidance Office/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/Black	10%	90%	None Detected	
TEM Grav. Reduction	10/26/2017	Gray/Black	0.0%	100%	None Detected	

Client Sample ID: 52-B-Floor Tile

Lab Sample ID: 041730600-0059

Sample Description: Corridor Near Custodial Office/12x12 White w/Green Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	White	0%	100%	None Detected	

Client Sample ID: 52-B-Mastic

Lab Sample ID: 041730600-0059A

Sample Description: Corridor Near Custodial Office/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown/Black	5%	95%	None Detected	

Client Sample ID: 53-A

Lab Sample ID: 041730600-0060

Sample Description: Guidance Office/Packing around Roof Drain

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Tan/Beige	30%	70%	None Detected	

Client Sample ID: 54-A

Lab Sample ID: 041730600-0061

Sample Description: Main Office B157/Metal Partition Wall Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	90%	10%	None Detected	

Client Sample ID: 54-B

Lab Sample ID: 041730600-0062

Sample Description: Media Center/Metal Partition Wall Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	85%	15%	None Detected	



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EMSL Order ID: 041730600

Customer ID: TTIE54

Customer PO: 023773

Project ID:

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 55-A

Lab Sample ID: 041730600-0063

Sample Description: Men's Restroom by Gym/Mortar assoc. w/Ceramic Tile Cove Base

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 55-B

Lab Sample ID: 041730600-0064

Sample Description: Men's Restroom by Gym/Mortar assoc. w/Ceramic Tile Cove Base

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	0%	100%	None Detected	

Client Sample ID: 56-A

Lab Sample ID: 041730600-0065

Sample Description: Men's Restroom by Gym/2" Grey Ceramic Floor Tile Grout

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 56-B

Lab Sample ID: 041730600-0066

Sample Description: Women's Restroom by Gym/2" Grey Ceramic Floor Tile Grout

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/Beige	0%	100%	None Detected	

Client Sample ID: 57-A

Lab Sample ID: 041730600-0067

Sample Description: Men's Restroom by Gym/2" Grey Ceramic Floor Tile Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 57-B

Lab Sample ID: 041730600-0068

Sample Description: Women's Restroom by Gym/2" Grey Ceramic Floor Tile Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray	0%	100%	None Detected	

Client Sample ID: 60-A

Lab Sample ID: 041730600-0069

Sample Description: Media Center/5x3 Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Gray/White	90%	10%	None Detected	

Client Sample ID: 60-B

Lab Sample ID: 041730600-0070

Sample Description: Media Center/5x3 Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Tan/White	60%	40%	None Detected	



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EMSL Order ID: 041730600
Customer ID: TTIE54
Customer PO: 023773
Project ID:

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 06-A

Lab Sample ID: 041730600-0071

Sample Description: 172-CST/Window Caulk #1 (Interior)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown/Gray	0%	100%	None Detected	
TEM Grav. Reduction	10/26/2017	Brown/Gray	0.0%	100%	None Detected	

Client Sample ID: 06-B

Lab Sample ID: 041730600-0072

Sample Description: 176 Graphics Lab/Window Caulk #1 (Interior)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/25/2017	Brown	0%	100%	None Detected	

Analyst(s):

Andrew Burke PLM (30)
Andrew Castellano PLM (9)
Daniel Fricker PLM (14)
Essie Spencer PLM (17)
Olufunke Akintunde PLM (17)
Ted Young TEM Grav. Reduction (15)

Reviewed and approved by:

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from: 10/25/2017 19:53:48



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PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1724		CLIENT: P. Neelands BOE		TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-25-17	
SAMPLER(S): A. Culliton / K. Smith		CLIENT CONTACT:		FACILITY: P. Neelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description					
01-A	176 - Graphics Lab	12" x 12" White w/ Brown and Grey Floor Tile and Mastic	Whirl Pak				
01-B	↓	↓					
09-D	2nd Floor Hallway at 205	Drywall and Joint Compound					
12-A	172 - CST	Interior Door Seam Caulk #2					
12-B	177	↓					
19-A	247	12" x 12" Peach Floor Tile and Mastic					
19-B	265	↓					
20-A	247	12" x 12" Green Floor Tile and Mastic					
20-B	265	↓					
21-A	169	12" x 12" White w/ Grey Floor Tile and Mastic					
21-B	174 - Woodshop Office	↓					
22-A	255	Yellow Cove Base Mastic (Mastic Only)					
22-B	162	↓					
23-A	161 - Home Economics	Drywall and Joint Compound Alw Vent Hoods					
23-B	↓	↓					
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	PO # 023773	Hour Turnaround Time 24
<i>[Signature]</i>	10-26-17	2:15 PM	<i>[Signature]</i>	10-26-17	2:15 PM	NOB MATERIALS	Stop First Positive
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Perform TEM analysis of 1st sample in each homogeneous group. (Initials)	
<i>[Signature]</i>			<i>[Signature]</i>			For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials) <i>AC</i>	
						For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials) <i>AC</i>	
						Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)	

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PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1724 CLIENT: Pinalands BOE

SAMPLER(S): A. Culliton / K. Smith CLIENT CONTACT:

TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku ☐ Jeff Seaman

FACILITY: Pinalands Regional High School DATE: 10-25-17

Sample #	Sample Location	Material Description	Sample Container
27-A	165 - Music	1' x 1' Acoustical Ceiling Tile	Whirl Pak
28-A	165 - Music	Grout Pats w/ 1' x 1' Acoustical Ceiling Tile	
29-A	165 - Music	Drywall Board w/ 1' x 1' Acoustical	
30-A	165 - Music	12" x 12" Beige w/ Gold Floor Tile and Mastic	
30-B	165 - Music Closet	↓	
36-A	1st Floor D-Wing Hallway	Black Cove Base	
36-B	3rd Floor Hallway	↓	
38-E	3rd Floor Men's Restroom	Plaster Ceiling	
41-A	172 - CST	12" x 12" Lt. Green and White Speck Floor Tile	
41-B	1st Floor Offices by Elevator	↓	
42-A	1st Floor by Café	↓	
42-B	Nurse's Office	Cinder Block Mortar	
43-A	149	↓	
43-B	Auditorium Stage	Firestop	
44-A	Auditorium Stage	↓	
Relinquished by: (Signature)	Date	Time	Date
Received by: (Signature)	Date	Time	Date

NOB MATERIALS: ☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials) ☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials) ☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials) ☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)

PO # 023723 24 Hour Turnaround Time ☒ Stop First Positive



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OrderID: 041731108

PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: Pirelands BOE		TTI PROJECT MANAGER: ☒ Jim Gualardi ☐ Michael Stocku		DATE: 10-25-17	
SAMPLER(S): A. Cullerton / K. Smith		CLIENT CONTACT:		FACILITY: Pirelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description				Sample Container	
44-B	Auditorium Stage	Plaster Wall				Whirl Pak	
52-C	Café Platform	12" x 12" White w/ Green Speck Floor Tile and Mastic					
55-C	3rd Floor Women's Restroom	Ceramic Core Mortar (Mortar Only)					
56-C	3rd Floor Women's Restroom	2" Grey Ceramic Floor Grout					
57-C	3rd Floor Women's Restroom	2" Grey Ceramic Floor Mortar					
58-A	Hallway by Gym	12" x 12" Green w/ Multi-Colored Speck Floor Tile and Mastic					
58-B	Hallway by Main Office	↓					
59-A	Stairwell #2	12" x 12" Pearl w/ Black Streak Floor Tile and Mastic					
59-B	3rd Floor Hallway	↓					
60-A	310	12" x 12" White w/ Brown and Grey Floor Tile and Mastic					
60-B	Cafeteria	↓					
60-A	Cafeteria	2' x 4' Deep Fissured w/ Center Cutout Ceiling Tiles					
60-B	↓	↓					
60-A	Cafeteria	2' x 2' Brown Deep Fissured Ceiling Tile					
60-B	↓	↓					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	PO # 023773 24 Hour Turnaround Time
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	NOB MATERIALS:
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials)
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials)
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	☐ For NOB samples, please stop analysis when the following number of samples have been analyzed: (Initials)
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)



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PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1724		CLIENT: Pirelands BOE		TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-25-17	
SAMPLER(S): A. Culliton / K. Smith		CLIENT CONTACT:		FACILITY: Pirelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description	Sample Container	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
64-A	Cafeteria	1' x 1' Ceiling Tile (Foil Covered)	Whirl Pak				
64-B	↓	↓	↓				
65-A	Cafeteria Platform	Yellow Mastic w/ Tan Stair Treads	↓				
66-A	Cafeteria Rear Entrance Hall	12" x 12" White w/ Black Dots Floor Tile and Mastic	↓				
66-B	↓	↓	↓				
67-A	1st Floor Block 'A' Hallway	12" x 12" Black w/ White Floor Tile and Mastic	↓				
67-B	↓	↓	↓				
68-A	3rd Floor Hallway	12" x 12" Red w/ Tan Floor Tile and Mastic	↓				
68-B	2nd Floor Hallway	↓	↓				
69-A	146	Spray-on Fireproofing	↓				
69-B	139	↓	↓				
70-A	149	"Fire Shield" Type Drywall and Compound	↓				
70-B	145	↓	↓				
70-C	2nd Floor at 255 (Hallway)	↓	↓				
71-A	152	HVAC Duct Seam Caulk	↓				
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	Relinquished by: (Signature)
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	Relinquished by: (Signature)

PO # 023773	Hour Turnaround Time 24	Stop First Positive
NOB MATERIALS		
☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials) ☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials) ☐ For NOB samples, please stop analysis when the following number of samples have been analyzed: (Initials) ☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)		



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PO # 043773

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PLM Sampling Data and Chain of Custody Record

041731108

PROJECT #: 17-1224		CLIENT: Phealands BOE		TTI PROJECT MANAGER: ☒ Jim Gullardi ☐ Michael Stocku ☐ Jeff Seaman	
SAMPLER(S): A. Culliton / K. Smith		CLIENT CONTACT:		FACILITY: Phealands Regional High School	
Sample #		Sample Location		Material Description	
72-A	139			12" x 12" Tan w/ Black and Brown Speck and Mastic	
72-B	↓			Floor Tile	
73-A	2nd Floor Hallway			12" x 12" Grey w/ White Streaks and Mastic	
73-B	↓			Floor Tile	
74-A	2nd Floor Hallway			12" x 12" Red w/ Black and Gold Speck and Mastic	
74-B	↓			Floor Tile	
75-A	Rear Stairwell (off limits)			Slate Window Sill	
75-B	↓				
76-A	Rear Stairwell - (off limits)			12" x 12" Yellow Floor Tile and Mastic	
76-B	↓				
77-A	Rear Stairwell (off limits)			Mastic w/ Vinyl Stairs and Flooring	
77-B	↓				
78-A	Rear Stairwell - (off limits)			Window Caulk # 2 (Brown)	
78-B	↓				
79-A	3rd Floor Hallway			12" x 12" Blue w/ Lt. Blue and Dark Blue Speck	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date

NOB MATERIALS:

☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials AC)

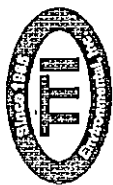
☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials AC)

☐ For NOB samples, please stop analysis when the following number of samples have been analyzed: _____ (Initials _____)

☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials _____)

PO # 023773 24 Hour Turnaround Time ☒ Stop First Positive

5/7



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PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1224		CLIENT: P. Neelands BOE		TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-25-17	
SAMPLER(S): A. Culliton / K. Smith		CLIENT CONTACT:		FACILITY: P. Neelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description				Sample Container	
79-B	3rd Floor Hallway	12" x 1/2" Blue w/ Lt. and Dark Blue Specks				Whirl Pak	
80-A	Electrical Room at Auxiliary Gym	Packing A/W Chilled Water Pumps				↓	
80-B	↓	↓				↓	
80-C	↓	Caulk A/W Expansion Joints				↓	
81-A	Exterior	↓				↓	
81-B	↓	Caulk A/W Door Seams				↓	
82-A	Exterior	↓				↓	
82-B	↓	Window Caulk-Exterior				↓	
83-A	Exterior	↓				↓	
83-B	↓	Brick Mortar				↓	
84-A	Exterior	↓				↓	
84-B	↓	Caulk #1 A/W Window Panes				↓	
85-A	Exterior Roof Skylight	↓				↓	
85-B	↓	Tar				↓	
86-A	Exterior Roof Skylight	↓				↓	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Hour: Turnaround Time	Stop First Positive
						24	☒
NOB MATERIALS: ☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials <u>AC</u>) ☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials <u>AC</u>) ☐ For NOB samples; please stop analysis when the following number of samples have been analyzed: _____ (Initials _____) ☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials _____)							



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PO# 023773 24hr TAT

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04/13/108

PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1724		CLIENT: Pirelands BOE		TTL PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-25-17	
SAMPLER(S): A. Culliton / K. Smith		CLIENT CONTACT:		FACILITY: Pirelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description					
86-B	Exterior Roof Skylight	Tar					
87-A	Exterior Roof Skylight	Caulk #2 (At Brick Walls)					
87-B	↓	↓					
88-A	Exterior Roof Skylight	Flashing					
88-B	↓	↓					
89-A	Exterior at Chimney	Waterproof / Vapor Barrier					
89-B	↓	↓					
90-A	Exterior	Textured Paint					
90-B	↓	↓					
92-A	Exterior Wall Cavities	"Vermiculite" Insulation					
93-A	Exterior Wall Cavities	"Penlite" Insulation					
94-A	Exterior	Plaster w/ Soffits					
94-B	↓	↓					
94-C	↓	↓					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	PO # 023773 24 Hour Turnaround Time ☒ Stop First Positive
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	NOB MATERIALS: ☒ Perform TEM analysis of 1st sample in each homogeneous group. (Initials <u>AC</u>)
Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time	☒ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials <u>AC</u>)
							☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials <u> </u>)
							☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials <u> </u>)



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EMSL Order ID: 041731108
 Customer ID: TTIE54
 Customer PO: 023773
 Project ID:

Attn: Jim Guilardi
 TTI Environmental Inc.
 1253 North Church Street
 Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected:
Received: 10/26/2017
Analyzed: 11/01/2017

Proj: 17-1224 / Pinelands BOE / Pinelands Regional High School

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 01-A-Floor Tile **Lab Sample ID:** 041731108-0001

Sample Description: 176 - Graphics Lab/12"x12" White w/Brown and Gray Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	98%	2% Chrysotile	

Client Sample ID: 01-A-Mastic

Lab Sample ID: 041731108-0001A

Sample Description: 176 - Graphics Lab/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	99.9%	0.12% Chrysotile	

Client Sample ID: 01-B-Floor Tile

Lab Sample ID: 041731108-0002

Sample Description: 176 - Graphics Lab/12"x12" White w/Brown and Gray Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 01-B-Mastic

Lab Sample ID: 041731108-0002A

Sample Description: 176 - Graphics Lab/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	

Client Sample ID: 09-D-Drywall

Lab Sample ID: 041731108-0003

Sample Description: 2nd Floor Hallway at 205/Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown/Gray	12%	88%	None Detected	

Client Sample ID: 09-D-Joint Compound

Lab Sample ID: 041731108-0003A

Sample Description: 2nd Floor Hallway at 205/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 12-A

Lab Sample ID: 041731108-0004

Sample Description: 172 - CST/Interior Door Seam Caulk #2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	White	0.0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 12-B

Lab Sample ID: 041731108-0005

Sample Description: 177/Interior Door Seam Caulk #2

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 19-A-Floor Tile

Lab Sample ID: 041731108-0006

Sample Description: 247/12"x12" Peach Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Peach	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Peach	0.0%	100%	None Detected	

Client Sample ID: 19-A-Mastic

Lab Sample ID: 041731108-0006A

Sample Description: 247/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Brown	0.0%	100%	None Detected	

Client Sample ID: 19-B-Floor Tile

Lab Sample ID: 041731108-0007

Sample Description: 265/12"x12" Peach Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Peach	0%	100%	None Detected	

Client Sample ID: 19-B-Mastic

Lab Sample ID: 041731108-0007A

Sample Description: 265/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown	0%	100%	None Detected	

Client Sample ID: 20-A-Floor Tile

Lab Sample ID: 041731108-0008

Sample Description: 247/12"x12" Green Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Green	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Green	0.0%	100%	None Detected	

Client Sample ID: 20-A-Mastic

Lab Sample ID: 041731108-0008A

Sample Description: 247/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 20-B-Floor Tile

Lab Sample ID: 041731108-0009

Sample Description: 265/12"x12" Green Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Green	0%	100%	None Detected	



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Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 20-B-Mastic

Lab Sample ID: 041731108-0009A

Sample Description: 265/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 21-A-Floor Tile

Lab Sample ID: 041731108-0010

Sample Description: 169/12"x12" White w/Gray Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Gray/White	0.0%	100%	None Detected	

Client Sample ID: 21-A-Mastic

Lab Sample ID: 041731108-0010A

Sample Description: 169/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 21-B-Floor Tile

Lab Sample ID: 041731108-0011

Sample Description: 175 - Woodshop Office/12"x12" White w/Gray Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 21-B-Mastic

Lab Sample ID: 041731108-0011A

Sample Description: 175 - Woodshop Office/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 22-A

Lab Sample ID: 041731108-0012

Sample Description: 255/Yellow Cove Base Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Beige	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Beige	0.0%	100%	None Detected	

Client Sample ID: 22-B

Lab Sample ID: 041731108-0013

Sample Description: 162/Yellow Cove Base Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 23-A-Drywall

Lab Sample ID: 041731108-0014

Sample Description: 161- Home Economics/Drywall A/w Vent Hoods

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown/White	15%	85%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 23-A-Joint Compound

Lab Sample ID: 041731108-0014A

Sample Description: 161- Home Economics/Joint Compound

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 23-B-Drywall

Lab Sample ID: 041731108-0015

Sample Description: 161- Home Economics/Drywall A/w Vent Hoods

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown/White	18%	82%	None Detected	

Client Sample ID: 23-B-Joint Compound

Lab Sample ID: 041731108-0015A

Sample Description: 161- Home Economics/Joint Compound

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 27-A

Lab Sample ID: 041731108-0016

Sample Description: 165-Mastic/1'x1' Acoustical Ceiling Tile

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 28-A

Lab Sample ID: 041731108-0017

Sample Description: 165-Mastic/Glue Dots a/w 1'x1' Acoustical Ceiling Tile

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Brown/Beige	0.0%	100%	None Detected	

Client Sample ID: 29-A

Lab Sample ID: 041731108-0018

Sample Description: 165-Mastic/Drywall Board a/w 1'x1' Acoustical Tile

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown/White	15%	85%	None Detected	

Client Sample ID: 30-A-Floor Tile

Lab Sample ID: 041731108-0019

Sample Description: 165-Mastic/12"x12" Beige w/Gold Floor Tile

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	98%	2% Chrysotile	

Client Sample ID: 30-A-Mastic

Lab Sample ID: 041731108-0019A

Sample Description: 165-Mastic/Mastic

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	98.8%	1.2% Chrysotile	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 30-B-Floor Tile

Lab Sample ID: 041731108-0020

Sample Description: 165-Music Closet/12"x12" Beige w/Gold Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017					Positive Stop (Not Analyzed)

Client Sample ID: 30-B-Mastic

Lab Sample ID: 041731108-0020A

Sample Description: 165-Music Closet/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	

Client Sample ID: 36-A

Lab Sample ID: 041731108-0021

Sample Description: 1st Floor D-Wing Hallway/Black Cove Base

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 36-B

Lab Sample ID: 041731108-0022

Sample Description: 3rd Floor Hallway/Black Cove Base

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	

Client Sample ID: 38-E-Skim Coat

Lab Sample ID: 041731108-0023

Sample Description: 3rd Floor Men's Restroom/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 38-E-Rough Coat

Lab Sample ID: 041731108-0023A

Sample Description: 3rd Floor Men's Restroom/Plaster Ceiling

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 41-A

Lab Sample ID: 041731108-0024

Sample Description: 172-CST/12"x12" Lt. Green and White Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White/Green	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	White/Green	0.0%	100%	None Detected	

Client Sample ID: 41-B

Lab Sample ID: 041731108-0025

Sample Description: 1st Floor Offices by Elevators/12"x12" Lt. Green and White Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White/Green	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 42-A

Lab Sample ID: 041731108-0026

Sample Description: 1st Floor by Café/Cinder Block Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 42-B

Lab Sample ID: 041731108-0027

Sample Description: Nurse's Office/Cinder Block Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 43-A

Lab Sample ID: 041731108-0028

Sample Description: 149/Firestop

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Red	5%	95%	None Detected	
TEM Grav. Reduction	10/29/2017	Red	0.0%	100%	None Detected	

Client Sample ID: 43-B

Lab Sample ID: 041731108-0029

Sample Description: Auditorium Stage/Firestop

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Red	5%	95%	None Detected	

Client Sample ID: 44-A-Skim Coat

Lab Sample ID: 041731108-0030

Sample Description: Auditorium Stage/Plaster Wall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 44-A-Rough Coat

Lab Sample ID: 041731108-0030A

Sample Description: Auditorium Stage/Plaster Wall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 44-B-Skim Coat

Lab Sample ID: 041731108-0031

Sample Description: Auditorium Stage/Plaster Wall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	

Client Sample ID: 44-B-Rough Coat

Lab Sample ID: 041731108-0031A

Sample Description: Auditorium Stage/Plaster Wall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 52-C-Floor Tile

Lab Sample ID: 041731108-0032

Sample Description: Café Platform/12" x 12" White w/Green Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White/Green	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	White/Green	0.0%	100%	None Detected	

Client Sample ID: 52-C-Mastic

Lab Sample ID: 041731108-0032A

Sample Description: Café Platform/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 55-C

Lab Sample ID: 041731108-0033

Sample Description: 3rd Floor Women's Restroom/Ceramic Cove Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray/White	0%	100%	None Detected	

Client Sample ID: 56-C

Lab Sample ID: 041731108-0034

Sample Description: 3rd Floor Women's Restroom/2" Gray Ceramic Floor Grout

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 57-C

Lab Sample ID: 041731108-0035

Sample Description: 3rd Floor Women's Restroom/2" Gray Ceramic Floor Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	0%	100%	None Detected	

Client Sample ID: 58-A-Floor Tile

Lab Sample ID: 041731108-0036

Sample Description: Hallway by Gym/12" x 12" Green w/Multi-colored Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Green	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Various/Green	0.0%	100%	None Detected	

Client Sample ID: 58-A-Mastic

Lab Sample ID: 041731108-0036A

Sample Description: Hallway by Gym/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 58-B-Floor Tile

Lab Sample ID: 041731108-0037

Sample Description: Hallway by Main Office/12" x 12" Green w/Multi-colored Speck Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Green	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 58-B-Mastic

Lab Sample ID: 041731108-0037A

Sample Description: Hallway by Main Office/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black/Yellow	0%	100%	None Detected	

Client Sample ID: 59-A-Floor Tile

Lab Sample ID: 041731108-0038

Sample Description: Stairwell #2/12" x 12" Pearl w/Black Streak Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	98%	2% Chrysotile	

Client Sample ID: 59-A-Mastic

Lab Sample ID: 041731108-0038A

Sample Description: Stairwell #2/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	98%	2% Chrysotile	

Client Sample ID: 59-B-Floor Tile

Lab Sample ID: 041731108-0039

Sample Description: 3rd Floor Hallway/12" x 12" Pearl w/Black Streak Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017					Positive Stop (Not Analyzed)

Client Sample ID: 59-B-Mastic

Lab Sample ID: 041731108-0039A

Sample Description: 3rd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017					Positive Stop (Not Analyzed)

Client Sample ID: 61-A-Floor Tile

Lab Sample ID: 041731108-0040

Sample Description: 3/0/12" x 12" White w/Brown and Gray #2 Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Various	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Various	0.0%	100%	None Detected	

Client Sample ID: 61-A-Mastic

Lab Sample ID: 041731108-0040A

Sample Description: 3/0/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	

Client Sample ID: 61-B-Floor Tile

Lab Sample ID: 041731108-0041

Sample Description: Cafeteria/12" x 12" White w/Brown and Gray #2 Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Various	0%	100%	None Detected	



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EMSL Order ID: 041731108

Customer ID: TTIE54

Customer PO: 023773

Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 61-B-Mastic

Lab Sample ID: 041731108-0041A

Sample Description: Cafeteria/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	

Client Sample ID: 62-A

Lab Sample ID: 041731108-0042

Sample Description: Cafeteria/2' x 4' Deep Fissured w/Center Cutout Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 62-B

Lab Sample ID: 041731108-0043

Sample Description: Cafeteria/2' x 4' Deep Fissured w/Center Cutout Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 63-A

Lab Sample ID: 041731108-0044

Sample Description: Cafeteria/2' x 2' Brown Deep Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	80%	20%	None Detected	

Client Sample ID: 63-B

Lab Sample ID: 041731108-0045

Sample Description: Cafeteria/2' x 2' Brown Deep Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray	80%	20%	None Detected	

Client Sample ID: 64-A

Lab Sample ID: 041731108-0046

Sample Description: Cafeteria/1'x1' Ceiling Tile (Foil Covered)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 64-B

Lab Sample ID: 041731108-0047

Sample Description: Cafeteria/1'x1' Ceiling Tile (Foil Covered)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 65-A

Lab Sample ID: 041731108-0048

Sample Description: Cafeteria Platform/Yellow Mastic a/w Stairtreads

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	



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EMSL Order ID: 041731108

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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 66-A-Floor Tile

Lab Sample ID: 041731108-0049

Sample Description: Cafeteria Rear Entrance Hall/12"x12" White w/Black Dots Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	White	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	White	0.0%	96.5%	3.5% Chrysotile	

Client Sample ID: 66-A-Mastic

Lab Sample ID: 041731108-0049A

Sample Description: Cafeteria Rear Entrance Hall/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 66-B-Floor Tile

Lab Sample ID: 041731108-0050

Sample Description: Cafeteria Rear Entrance Hall/12"x12" White w/Black Dots Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	0%	100%	None Detected	

Client Sample ID: 66-B-Mastic

Lab Sample ID: 041731108-0050A

Sample Description: Cafeteria Rear Entrance Hall/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	

Client Sample ID: 67-A-Floor Tile

Lab Sample ID: 041731108-0051

Sample Description: 1st Floor Block "A" Hallway/12"x12" Black w/White Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	98%	2% Chrysotile	

Client Sample ID: 67-A-Mastic

Lab Sample ID: 041731108-0051A

Sample Description: 1st Floor Block "A" Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	99.4%	0.64% Chrysotile	

Client Sample ID: 67-B-Floor Tile

Lab Sample ID: 041731108-0052

Sample Description: 1st Floor Block "A" Hallway/12"x12" Black w/White Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 67-B-Mastic

Lab Sample ID: 041731108-0052A

Sample Description: 1st Floor Block "A" Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 68-A-Floor Tile

Lab Sample ID: 041731108-0053

Sample Description: 3rd Floor Hallway/12"x12" Red w/Tan Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Red	0%	98%	2% Chrysotile	

Client Sample ID: 68-A-Mastic

Lab Sample ID: 041731108-0053A

Sample Description: 3rd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	99.5%	0.50% Chrysotile	

Client Sample ID: 68-B-Floor Tile

Lab Sample ID: 041731108-0054

Sample Description: 2nd Floor Hallway/12"x12" Red w/Tan Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 68-B-Mastic

Lab Sample ID: 041731108-0054A

Sample Description: 2nd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	

Client Sample ID: 69-A

Lab Sample ID: 041731108-0055

Sample Description: 146/Spray - on Fireproofing

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Beige	35%	65%	None Detected	

Client Sample ID: 69-B

Lab Sample ID: 041731108-0056

Sample Description: 139/Spray - on Fireproofing

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Beige	40%	60%	None Detected	

Client Sample ID: 70-A-Drywall

Lab Sample ID: 041731108-0057

Sample Description: 149/Fire Shield Type Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown/White	18%	82%	None Detected	

Client Sample ID: 70-A-Joint Compound

Lab Sample ID: 041731108-0057A

Sample Description: 149/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	White	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 70-B-Drywall

Lab Sample ID: 041731108-0058

Sample Description: 145/Fire Shield Type Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/26/2017	Brown/White	15%	85%	None Detected	

Client Sample ID: 70-B-Joint Compound

Lab Sample ID: 041731108-0058A

Sample Description: 145/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	11/01/2017	White	0%	100%	None Detected	

Client Sample ID: 70-C-Drywall

Lab Sample ID: 041731108-0059

Sample Description: 2nd Floor at 255 (Hallway)/Fire Shield Type Drywall

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown/White	15%	85%	None Detected	

Client Sample ID: 70-C-Joint Compound

Lab Sample ID: 041731108-0059A

Sample Description: 2nd Floor at 255 (Hallway)/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	11/01/2017	White	0%	100%	None Detected	

Client Sample ID: 71-A

Lab Sample ID: 041731108-0060

Sample Description: 152/HVAC Duct Seam Caulk

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 72-A-Floor Tile

Lab Sample ID: 041731108-0061

Sample Description: 139/12"x12" Tan w/Black and Brown Speck

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown/Tan/Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Brown/Tan/Black	0.0%	100%	None Detected	

Client Sample ID: 72-A-Mastic

Lab Sample ID: 041731108-0061A

Sample Description: 139/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	100%	None Detected	

Client Sample ID: 72-B-Floor Tile

Lab Sample ID: 041731108-0062

Sample Description: 139/12"x12" Tan w/Black and Brown Speck

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown/Tan/Black	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 72-B-Mastic

Lab Sample ID: 041731108-0062A

Sample Description: 139/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	

Client Sample ID: 73-A-Floor Tile

Lab Sample ID: 041731108-0063

Sample Description: 2nd Floor Hallway/12"x12" Gray w/White Streaks Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/White	0%	98%	2% Chrysotile	

Client Sample ID: 73-A-Mastic

Lab Sample ID: 041731108-0063A

Sample Description: 2nd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	95%	5% Chrysotile	

Client Sample ID: 73-B-Floor Tile

Lab Sample ID: 041731108-0064

Sample Description: 2nd Floor Hallway/12"x12" Gray w/White Streaks Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 73-B-Mastic

Lab Sample ID: 041731108-0064A

Sample Description: 2nd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 74-A-Floor Tile

Lab Sample ID: 041731108-0065

Sample Description: 2nd Floor Hallway/12"x12" Red w/Black and Gold Speck

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Red/Gold	0%	97%	3% Chrysotile	

Client Sample ID: 74-A-Mastic

Lab Sample ID: 041731108-0065A

Sample Description: 2nd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	97%	3% Chrysotile	

Client Sample ID: 74-B-Floor Tile

Lab Sample ID: 041731108-0066

Sample Description: 2nd Floor Hallway/12"x12" Red w/Black and Gold Speck

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 74-B-Mastic		Lab Sample ID: 041731108-0066A				
Sample Description: 2nd Floor Hallway/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017					Positive Stop (Not Analyzed)
Client Sample ID: 75-A		Lab Sample ID: 041731108-0067				
Sample Description: Rear Stairwell-(Off Limits)/Slate Window Sill						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	
Client Sample ID: 75-B		Lab Sample ID: 041731108-0068				
Sample Description: Rear Stairwell-(Off Limits)/Slate Window Sill						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	
Client Sample ID: 76-A-Floor Tile		Lab Sample ID: 041731108-0069				
Sample Description: Rear Stairwell-(Off Limits)/12"x12" Yellow Floor Tile						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Yellow	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow	0.0%	100%	None Detected	
Client Sample ID: 76-A-Mastic		Lab Sample ID: 041731108-0069A				
Sample Description: Rear Stairwell-(Off Limits)/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Black	0.0%	100%	None Detected	
Client Sample ID: 76-B-Floor Tile		Lab Sample ID: 041731108-0070				
Sample Description: Rear Stairwell-(Off Limits)/12"x12" Yellow Floor Tile						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Yellow	0%	100%	None Detected	
Client Sample ID: 76-B-Mastic		Lab Sample ID: 041731108-0070A				
Sample Description: Rear Stairwell-(Off Limits)/Mastic						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Yellow	0%	100%	None Detected	
Client Sample ID: 77-A		Lab Sample ID: 041731108-0071				
Sample Description: Rear Stairwell-(Off Limits)/Mastic a/w Vinyl Stairs and Flooring						
TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Yellow/Green	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Yellow/Green	0.0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 77-B

Lab Sample ID: 041731108-0072

Sample Description: Rear Stairwell-(Off Limits)/Mastic a/w Vinyl Stairs and Flooring

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Yellow/Green	0%	100%	None Detected	

Client Sample ID: 78-A

Lab Sample ID: 041731108-0073

Sample Description: Rear Stairwell-(Off Limits)/Window Caulk #2 (Brown)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Brown	0.0%	100%	None Detected	

Client Sample ID: 78-B

Lab Sample ID: 041731108-0074

Sample Description: Rear Stairwell-(Off Limits)/Window Caulk #2 (Brown)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown	0%	100%	None Detected	

Client Sample ID: 79-A-Floor Tile

Lab Sample ID: 041731108-0075

Sample Description: 3rd Floor Hallway/12"x12" Blue w/Lt. Blue and Blue Speck

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Blue	0%	98%	2% Chrysotile	

Client Sample ID: 79-A-Mastic

Lab Sample ID: 041731108-0075A

Sample Description: 3rd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	96%	4% Chrysotile	

Client Sample ID: 79-B-Floor Tile

Lab Sample ID: 041731108-0076

Sample Description: 3rd Floor Hallway/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 79-B-Mastic

Lab Sample ID: 041731108-0076A

Sample Description: 3rd Floor Hallway/12"x12" Blue w/Lt. Blue and Blue Speck

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 80-A

Lab Sample ID: 041731108-0077

Sample Description: Electrical Room at Auxillary Gym/Packing a/w Chilled Water Pumps

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	10%	90%	None Detected	



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Client Sample ID: 80-B

Lab Sample ID: 041731108-0078

Sample Description: Electrical Room at Auxillary Gym/Packing a/w Chilled Water Pumps

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	White	10%	90%	None Detected	

Client Sample ID: 80-C

Lab Sample ID: 041731108-0079

Sample Description: Electrical Room at Auxillary Gym/Packing a/w Chilled Water Pumps

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	White	60%	40%	None Detected	

Client Sample ID: 81-A

Lab Sample ID: 041731108-0080

Sample Description: Exterior/Caulking a/w Expansion Joint

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Brown	2.1%	97.9%	None Detected	

Client Sample ID: 81-B

Lab Sample ID: 041731108-0081

Sample Description: Exterior/Caulking a/w Expansion Joint

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown	0%	100%	None Detected	

Client Sample ID: 82-A

Lab Sample ID: 041731108-0082

Sample Description: Exterior/Caulk a/w Door Seams

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Gray/Black	0.39%	99.6%	None Detected	

Client Sample ID: 82-B

Lab Sample ID: 041731108-0083

Sample Description: Exterior/Caulk a/w Door Seams

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/Black	0%	100%	None Detected	

Client Sample ID: 83-A

Lab Sample ID: 041731108-0084

Sample Description: Exterior/Window Caulk - Exterior

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 83-B

Lab Sample ID: 041731108-0085

Sample Description: Exterior/Window Caulk - Exterior

TEST	Analyzed	Color	Non-Asbestos		Asbestos	Comment
	Date		Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray	0%	100%	None Detected	



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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 84-A

Lab Sample ID: 041731108-0086

Sample Description: Exterior/Brick Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Tan	0%	100%	None Detected	

Client Sample ID: 84-B

Lab Sample ID: 041731108-0087

Sample Description: Exterior/Brick Mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Tan	0%	100%	None Detected	

Client Sample ID: 85-A

Lab Sample ID: 041731108-0088

Sample Description: Exterior Roof Skylight/Caulk #1 a/w Window Panes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/Black	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	Gray/Black	0.0%	100%	None Detected	

Client Sample ID: 85-B

Lab Sample ID: 041731108-0089

Sample Description: Exterior Roof Skylight/Caulk #1 a/w Window Panes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/Black	0%	100%	None Detected	

Client Sample ID: 86-A

Lab Sample ID: 041731108-0090

Sample Description: Exterior Roof Skylight/Tar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	94%	6% Chrysotile	

Client Sample ID: 86-B

Lab Sample ID: 041731108-0091

Sample Description: Exterior Roof Skylight/Tar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017					Positive Stop (Not Analyzed)

Client Sample ID: 87-A

Lab Sample ID: 041731108-0092

Sample Description: Exterior Roof Skylight/Caulk #2 (At Brick Walls)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/Black	40%	60%	None Detected	
TEM Grav. Reduction	10/29/2017	Gray/Black	0.0%	100%	None Detected	

Client Sample ID: 87-B

Lab Sample ID: 041731108-0093

Sample Description: Exterior Roof Skylight/Caulk #2 (At Brick Walls)

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray/Black	30%	70%	None Detected	



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EMSL Order ID: 041731108

Customer ID: TTIE54

Customer PO: 023773

Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 88-A-Flashing **Lab Sample ID:** 041731108-0094

Sample Description: Exterior Roof Skylight/Flashing

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black/Silver	55%	40%	5% Chrysotile	

Client Sample ID: 88-A-Rubber Membrane **Lab Sample ID:** 041731108-0094A

Sample Description: Exterior Roof Skylight/Rubber Membrane

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	15%	85%	None Detected	
TEM Grav. Reduction	10/29/2017	White	0.0%	99.7%	0.31% Chrysotile	

Client Sample ID: 88-A-Mastic **Lab Sample ID:** 041731108-0094B

Sample Description: Exterior Roof Skylight/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	0%	100%	None Detected	
TEM Grav. Reduction	10/29/2017	White	0.0%	99.4%	0.56% Chrysotile	

Client Sample ID: 88-B-Flashing **Lab Sample ID:** 041731108-0095

Sample Description: Exterior Roof Skylight/Flashing

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	

Client Sample ID: 88-B-Rubber Membrane **Lab Sample ID:** 041731108-0095A

Sample Description: Exterior Roof Skylight/Rubber Membrane

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	10%	90%	None Detected	

Client Sample ID: 88-B-Mastic **Lab Sample ID:** 041731108-0095B

Sample Description: Exterior Roof Skylight/Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	0%	100%	None Detected	

Client Sample ID: 89-A **Lab Sample ID:** 041731108-0096

Sample Description: Exterior at Chimney/Waterproof/Vapor Barrier

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Black	25%	60%	15% Chrysotile	

Client Sample ID: 89-B **Lab Sample ID:** 041731108-0097

Sample Description: Exterior at Chimney/Waterproof/Vapor Barrier

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017				Positive Stop (Not Analyzed)	



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EMSL Order ID: 041731108

Customer ID: TTIE54

Customer PO: 023773

Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 90-A

Lab Sample ID: 041731108-0098

Sample Description: Exterior/Textured Paint

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown/White	20%	80%	None Detected	

Client Sample ID: 90-B

Lab Sample ID: 041731108-0099

Sample Description: Exterior/Textured Paint

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown/White	20%	80%	None Detected	

Client Sample ID: 92-A

Lab Sample ID: 041731108-0100

Sample Description: Exterior Wall Cavities/"Vermiculite" Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Brown	0%	100%	None Detected	Vermiculite is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep or TEM Qualitative

Client Sample ID: 92-A

Lab Sample ID: 041731108-0100A

Sample Description: Exterior Wall Cavities/"Vermiculite" Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Tan	0%	100%	None Detected	Sample was milled prior to analysis

Client Sample ID: 93-A

Lab Sample ID: 041731108-0101

Sample Description: Exterior Wall Cavities/"Perlite" Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	0%	100%	None Detected	

Client Sample ID: 94-A-Skim Coat

Lab Sample ID: 041731108-0102

Sample Description: Exterior/Plaster a/w Soffits

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	0%	100%	None Detected	

Client Sample ID: 94-A-Base Coat

Lab Sample ID: 041731108-0102A

Sample Description: Exterior/Plaster a/w Soffits

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Tan	0%	100%	None Detected	

Client Sample ID: 94-B-Skim Coat

Lab Sample ID: 041731108-0103

Sample Description: Exterior/Plaster a/w Soffits

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	0%	100%	None Detected	



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EMSL Order ID: 041731108
Customer ID: TTIE54
Customer PO: 023773
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 94-B-Base Coat

Lab Sample ID: 041731108-0103A

Sample Description: Exterior/Plaster a/w Soffits

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Tan	10%	90%	None Detected	

Client Sample ID: 94-C-Skim Coat

Lab Sample ID: 041731108-0104

Sample Description: Exterior/Plaster a/w Soffits

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	White	0%	100%	None Detected	

Client Sample ID: 94-C-Base Coat

Lab Sample ID: 041731108-0104A

Sample Description: Exterior/Plaster a/w Soffits

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	10/27/2017	Gray	3%	97%	None Detected	

Analyst(s):

Andrew Burke PLM (8)
Benjamin Verghese PLM (3)
Christina Maiorana PLM (23)
Juli Patel PLM (2)
Nancy Stalter PLM (31)
Samantha Rundstorm-Cruz PLM (1)
Sarah Richey TEM Grav. Reduction (39)
Seri Smith PLM (20)
Will DiBella PLM (51)

Reviewed and approved by:

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Report amended: 11/01/2017 18:26:26 Replaces initial report from: 10/27/2017 15:42:02 Reason Code: Client-Additional Analysis

1253 North Church Street, Moores
856-840-8800 Fax 856-840-8815

PLM Sampling Data and Chain of Custody Record

[illegible]



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EMSL Order ID: 041731500
Customer ID: TTIE54
Customer PO: 023827
Project ID:

Attn: Jim Guilardi
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected: 10/31/2017
Received: 10/31/2017
Analyzed: 11/02/2017

Proj: 17-1224 / Pinelands Regional BOE / Pinelands Regional High School

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 04-C

Lab Sample ID: 041731500-0001

Sample Description: 3rd Floor Hallway/2x4 Small Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 04-D

Lab Sample ID: 041731500-0002

Sample Description: 2nd Floor Hallway/2x4 Small Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 05-C

Lab Sample ID: 041731500-0003

Sample Description: 2nd Floor Hallway/2x4 Large Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Gray/White	80%	20%	None Detected	

Client Sample ID: 05-D

Lab Sample ID: 041731500-0004

Sample Description: 3rd Floor Hallway/2x4 Large Fissured Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Gray/White	90%	10%	None Detected	

Client Sample ID: 95-A

Lab Sample ID: 041731500-0005

Sample Description: Exterior - Rear of Block A/Caulk assoc. w/Unit Vent Air Intake

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Gray	0%	100%	None Detected	
TEM Grav. Reduction	11/02/2017	Gray	0.0%	100%	None Detected	

Client Sample ID: 95-B

Lab Sample ID: 041731500-0006

Sample Description: Exterior - Rear of Block A/Caulk assoc. w/Unit Vent Air Intake

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Gray	0%	100%	None Detected	

Client Sample ID: 96-A

Lab Sample ID: 041731500-0007

Sample Description: Attendance Office Display Case/Sheet Flooring

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017	Tan	0%	80%	20% Chrysotile	



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EMSL Order ID: 041731500
Customer ID: TTIE54
Customer PO: 023827
Project ID:

Summary Test Report for Asbestos Analysis in Accordance with N.J.A.C. 8:60 and 12:120 via EPA 600/R-93/116

Client Sample ID: 96-B

Lab Sample ID: 041731500-0008

Sample Description: Attendance Office Display Case/Sheet Flooring

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	11/01/2017					Positive Stop (Not Analyzed)

Client Sample ID: 97-A

Lab Sample ID: 041731500-0009

Sample Description: 3rd Floor Teacher's Room/Caulk assoc w/Metal Wall Partition Window

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
TEM Grav. Reduction	11/01/2017	Gray	0.0%	100%	None Detected	

Analyst(s):

Daniel Fricker PLM (4)
Edward Zambrano PLM (3)
Sandy Burany, Ph.D TEM Grav. Reduction (1)
Ted Young TEM Grav. Reduction (1)

Reviewed and approved by:

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from: 11/01/2017 15:50:29



October 30, 2017

Mr. Stephen J. Brennan, MBA, CPA
Business Administrator/Board Secretary
Pinelands Regional Board of Education
520 Nugentown Road
Little Egg Harbor, NJ 08087

Re: TTI Project 17-1224
Pinelands Regional High School
Indoor Air Quality Testing

Dear Mr. Brennan,

TTI Environmental, Inc. is pleased to present this report containing results of indoor air monitoring performed at Pinelands Regional High School on 10.19.2017. A list of compounds detected inside the building is summarized below.

		10.19.2017 results		10.05.2017 results					
Results	CAS	ug/m3	ppm	ug/m3	ppm	OSHA PEL ppm	OSHA PEL mg/m ³	NIOSH REL ppm	ACGIH TLV ppm
Ethanol	64175	19.0	0.0099	90.0	0.0480	1000	1900	1000	1000
Isopropyl alcohol(2-Propanol)	67630	12.0	0.0048	17.0	0.0070	400	980	400	200
Acetone	67641	180.0	0.0770	24.0	0.0099	1000	2400	250	250
Benzene	71432	ND	ND	8.9	0.0028	1	-	0.1	10
Chloromethane	74873	1.9	0.0009	3.6	0.0017	25	-	-	50
Freon 11(Trichlorofluoromethane)	75694	4.8	0.0009	24.0	0.0042	1000	5600	1000	1000
Freon 12(Dichlorodifluoromethane)	75718	13.0	0.0250	2.5	0.0005	1000	4950	1000	1000
Naphthalene	91203	ND	ND	11.0	0.0021	10	50	10	10
Xylene (Ortho)	95476	7.7	0.0018	53.0	0.0120	100	435	100	100
1,2,4-Trimethylbenzene	95636	38.0	0.0078	180.0	0.0370	-	-	25	25
Isopropylbenzene (cumene)	98828	2.7	0.0005	19.0	0.0039	50	245	50	50
Ethylbenzene	100414	5.7	0.0013	37.0	0.0084	-	-	-	-
Styrene	100425	8.0	0.0019	ND	ND	100	420	50	20
n-Butane	106978	37.0	0.0150	70.0	0.0290	-	-	1000	800
1,3,5-Trimethylbenzene	108678	13.0	0.0026	85.0	0.0170	-	-	25	25
Toluene	108883	6.0	0.0016	58.0	0.0150	200	750	100	20
n-Hexane	110543	11.0	0.0031	28.0	0.0081	500	1800	50	50
Cyclohexane	110827	4.9	0.0014	10.0	0.0029	300	1015	300	300
Propylene	115071	ND	ND	3.5	0.0020	-	-	-	-
n-Heptane	142825	25.0	0.0061	35.0	0.0087	500	2000	85	400
Ethyl acetate	141786	9.0	0.0025	ND	ND	400	1400	400	400
2,2,4-Trimethylpentane(Isooctane)	540841	ND	ND	31.0	0.0067	300	-	75	300
4-Ethyltoluene	622968	28.0	0.0056	150.0	0.0310	-	-	-	-
Xylene (p,m)	1330207	17.0	0.0040	110.0	0.0250	-	-	150	150

OSHA PEL	Occupational Health & Safety Administration Permissible Exposure Limit
NIOSH REL	National Institute of Occupational Safety & Health Recommended Exposure Limit
ACGIH TLV	American Conference of Governmental Industrial Hygienists Threshold Limit Values
NJ-IRRAL	NJDEP RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013
NJ-INRAL	NJDEP NON-RESIDENTIAL VAPOR INTRUSION SCREENING LEVELS, March 2013



The table includes the previous results (10.05.2017) for the High School along with current detectable levels for comparison. TTI has evaluated the results and can confirm that none of the detected compounds exceeded limits set by OSHA, NIOSH or ACGIH for health considerations.

We appreciate the opportunity to assist with your IAQ concerns. If you should have any questions or require additional information, please feel free to contact me directly.

Sincerely,

TTI ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Patricia B Stock". The signature is fluid and cursive, with the first name "Patricia" and last name "Stock" clearly distinguishable.

Patricia B Stock
Senior EHS Consultant

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491701061**Customer ID: **TTIE54**Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**Fax: **856-840-8815**Project: **17-1224 / Pinelands Regional HS**Date Collected: **10/19/2017**Date Received: **10/20/2017****Laboratory Report- Sample Summary**

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
491701061-0001	Media	10/19/2017	10:47 AM
491701061-0002	164	10/19/2017	10:42 AM
491701061-0003	Annex - 40	10/19/2017	10:33 AM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report Date:
10/25/2017

Report Revision
R0

Revision Comments
Initial Report

Marjorie Howley, Laboratory Manager
or other approved signatory

Test results meet all NELAP requirements unless otherwise specified.

**EMSL Analytical**

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EMSL Order #: **491701061**
 EMSL Sample #: **491701061-1**
 Customer ID: **TTIE54**
 Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/19/2017**
 Date Received: **10/20/2017**

Project: **17-1224 / Pinelands Regional HS**

Sample ID: Media

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/24/2017	TP	J2408.D	E0314	312.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	2.5	0.50		13	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.83	0.50		1.7	1.0	
n-Butane	106-97-8	58.12	2.0	0.50		4.7	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	17	0.50		32	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	0.85	0.50		4.8	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	4.8	0.50		12	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	4.7	0.50		11	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	2.0	0.50		7.1	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.5	0.50		9.0	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	1.4	0.50		4.9	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701061**
 EMSL Sample #: **491701061-1**
 Customer ID: **TTIE54**
 Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/19/2017**
 Date Received: **10/20/2017**

Project: **17-1224 / Pinelands Regional HS**

Sample ID: **Media**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/24/2017	TP	J2408.D	E0314	312.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	1.1	0.50		4.3	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.95	0.50		4.1	2.2	
Xylene (p,m)	1330-20-7	106.2	3.1	1.0		14	4.3	
Xylene (Ortho)	95-47-6	106.2	1.1	0.50		5.0	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	1.8	0.50		8.7	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.79	0.50		3.9	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	2.7	0.50		13	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			50	ppbv		150	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

11

Spike

10

Recovery

110%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701061**
 EMSL Sample #: **491701061-2**
 Customer ID: **TTIE54**
 Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/19/2017**
 Date Received: **10/20/2017**

Project: **17-1224 / Pinelands Regional HS**Sample ID: **164**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/24/2017	TP	J2410.D	E0450	312.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	ND	0.50		ND	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.92	0.50		1.9	1.0	
n-Butane	106-97-8	58.12	ND	0.50		ND	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	6.3	0.50		12	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	4.0	0.50		10	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	4.4	0.50		11	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	3.1	0.50		11	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	1.5	0.50		5.3	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	1.4	0.50		4.8	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	0.80	0.50		3.3	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701061**
 EMSL Sample #: **491701061-2**
 Customer ID: **TTIE54**
 Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/19/2017**
 Date Received: **10/20/2017**

Project: **17-1224 / Pinelands Regional HS**Sample ID: **164**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/24/2017	TP	J2410.D	E0450	312.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	1.6	0.50		6.0	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	1.3	0.50		5.7	2.2	
Xylene (p,m)	1330-20-7	106.2	4.0	1.0		17	4.3	
Xylene (Ortho)	95-47-6	106.2	1.8	0.50		7.7	2.2	
Styrene	100-42-5	104.1	1.9	0.50		8.0	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	0.54	0.50		2.7	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	5.6	0.50		28	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	2.6	0.50		13	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	7.8	0.50		38	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			50	ppbv		190	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

11

Spike

10

Recovery

110%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701061**
 EMSL Sample #: **491701061-3**
 Customer ID: **TTIE54**
 Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/19/2017**
 Date Received: **10/20/2017**

Project: **17-1224 / Pinelands Regional HS**Sample ID: **Annex - 40**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/24/2017	TP	J2416.D	E15548	250 cc	1
Dilution1	10/25/2017	TP	J2426.D	E15548	25 cc	10

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	ND	0.50		ND	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.70	0.50		1.4	1.0	
n-Butane	106-97-8	58.12	15	0.50		37	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	9.9	0.50		19	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	3.0	0.50		7.3	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	77	5.0	D	180	12	<i>Reported Dilution #1</i>
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	1.4	0.50		4.9	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	6.1	0.50		25	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701061**
 EMSL Sample #: **491701061-3**
 Customer ID: **TTIE54**
 Customer PO: **23770**

Attn: **J. Cimino**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/19/2017**
 Date Received: **10/20/2017**

Project: **17-1224 / Pinelands Regional HS**Sample ID: **Annex - 40**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/24/2017	TP	J2416.D	E15548	250 cc	1
Dilution1	10/25/2017	TP	J2426.D	E15548	25 cc	10

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			110	ppbv		270	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

9.6

Spike

10

Recovery

96%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036



External Chain of Custody/ Field Test Data Sheet

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Ph. (800) 220-3675
Fax (856) 786-0327

EMSL Order Number (Lab Use Only):

491701061

Report To Contact Name: <u>J. m. Guillard</u>	Bill To Company: <u>S I M E</u>	Sampled By (Sign): <u>[Signature]</u>
Company Name: <u>TTI Environmental, Inc.</u>	Attention To: <u>[Blank]</u>	Sampled By (Name): <u>A. Celli Ten</u>
Address 1: <u>1253 N. Church St.</u>	Address 1: <u>[Blank]</u>	Total # of Samples: <u>[Blank]</u>
Address 2: <u>Morestown, NJ 08657</u>	Address 2: <u>[Blank]</u>	Date Shipped: <u>[Blank]</u>
Phone No.: <u>856-840-8400</u> Fax: <u>[Blank]</u>	Phone No.: <u>[Blank]</u> Fax: <u>[Blank]</u>	Sample Collection Zip Code: <u>08657</u>

Email Results To: Jim C. @TTIENV.com	Project Name: 17-1224	Pinebluffs Reg. Dist. HS	Purchase Order: 023770
--------------------------------------	-----------------------	--------------------------	------------------------

Turnaround Time (in Business Days):	☐ 10 Day Standard	Reporting Format:	☐ Results Only (Standard Lab Report)	Analysis	Matrix
☐ 5 Day	☐ 4 Day	☒ 3 Day	☐ Full Deliverables (Surcharge may apply)		
☐ 2 Day	☐ 1 Day	☐ Other	☐ Other	☐ IGC	☐ Air

[illegible]

Comments:	Lab Canister Certification Analyst Signature (TO-15):	00 J
-----------	--	---------

Relinquished by:	Date/ Time	Received by:	Date/ Time	Seal #/Intact	Reason for Exchange (circle appropriate)
<i>[Signature]</i>	10/12/17/1655	<i>[Signature]</i>	10-17-17 1745		Shipping Courier Receiving Sampling <u>Other</u> <i>PR</i>
<i>[Signature]</i>	10-2-17 15:05	<i>[Signature]</i>	10-17 3pm		Shipping Courier Receiving Sampling Other:
<i>[Signature]</i> <u>WR</u>	10-20-17 3pm	<i>[Signature]</i> <i>Antex</i>	10/23/17/0806		Shipping Courier Receiving Sampling <u>Other</u> <i>AS</i>
					Shipping Courier Receiving Sampling Other:
					Shipping Courier Receiving Sampling Other:

491701061

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us to best analyze your samples, achieve requested TAT and provide you with helpful interpretation information.

Company: TTI Environmental, Inc.

Contact Person:

Name: Jim Guilardo

E-mail: Jim.G@TTIENV.com

Additional E-mails:

Telephone #: 856-840-2883

Library Search requested: ☐ YES ☒ NO

A library search (aka *Tentatively Identified Compounds*) will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation, the library search is recommended to provide you with all available information for your sample.

Sample Type:

☐ Indoor Air Quality (Home/Office)

☐ Soil Gas/Sub Slab

☐ IAQ (Industrial)

☐ Other:

Sample Description: ① Media ② 164 ③ ANNEX-40

PLEASE NOTE: The result forms that we provide will not indicate whether your results have exceeded any Exposure Limit criteria established by any regulatory agency. If you would like that information, please check off below which regulatory comparison forms you would like to receive.

☐ OSHA PELs/NIOSH RELs *combined form*

☐ Potential Sources of Compounds found in your IAQ sample

☐ EPA RSLs - 5/2016 Blended for THQ=1.0 and THQ=0.1

☐ TVOC (Library Search Required for this format)

☐ NJ DEP 1/2013 - Circle one: Indoor Air Soil Gas

☐ Ohio 4/2013 - Circle one: Residential Commercial

☐ NC DENR 4/2014 - Circle one: Residential Non-residential

☐ Indiana Dept Env Mgmt Screening Levels 3/2016

☐ PA DEP - 11/2016 Indoor Air

☐ Vermont DEP IROCP 4/2012 (soil gas only)

☐ PA DEP - 11/2016: Sub Slab Soil Gas OR Near Source Soil Gas

☐ California OEHHA 2/2012

☐ CA HHSL 11/2004 - Circle on Indoor Air Soil Gas

☐ Other, These are the compounds I want reported:

Additional analyses that can be performed from your canister. Please note: there is an additional charge for any of the tests below.

US EPA TO-3 via GC/FID (choose one below):

ASTM-D5504 via GC/SCD (choose one below): *

☐ C₁-C₆ hydrocarbons

☐ Sulfur Scan (H₂S, COS, MeSH, EtSH, DMS)

☐ Methane only

☐ H₂S only

***Note:** Hold time for sulfur gases is 1 day from collection. Please schedule your sample collection so that samples are received in the lab prior to noon on Friday. Analysis performed out of hold time will have a notation in the report.

We can provide the following CMS tests from your canisters. Please note that these tests are to be used for IAQ/Screening purposes ONLY. EMSL recommends alternate field sampling techniques for these parameters (with the exception of water vapor); please contact your sales rep for the proper media. Please note: there is an additional charge for any of the tests

Draeger CMS Analyzer:

☐ CO ☐ CO₂ ☐ NH₃ ☐ O₂ ☐ Water Vapor

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / xxxxxxxxx@xxxx.xxx

EMSL Order: 041726820

Customer ID: EPIC62

Customer PO: 17-1052

Project ID:

Attention: Jim Eberts
Epic Environmental Services, LLC
1930 Brown Road
Newfield, NJ 08344

Phone: (856) 205-1077
Fax: (856) 205-0413
Received Date: 09/11/2017 2:30 PM
Analysis Date: 09/11/2017
Collected Date: 09/11/2017

Project: Pinelands BOE - Asbestos Roof Removal Monitoring

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures		Analytical Sensitivity (S/cc)	Asbestos Concentration	
						≥0.5μ	< 5μ		(S/mm ²)	(S/cc)
PCA-01	Room 177	600.00	0.1280	0	None Detected			0.0050	<7.80	<0.0050
041726820-0001										
PCA-02	Hall by Auditorium	600.00	0.1280	0	None Detected			0.0050	<7.80	<0.0050
041726820-0002										

Analyst(s)

Debbie Little (2)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. Samples received in good condition unless otherwise noted. The test results meet the requirements of NELAC unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 09/11/2017 17:04:36



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / xxxxxxxxx@xxxx.xxx

EMSL Order: 041729687

Customer ID: TTIE54

Customer PO: 023642

Project ID:

Attention: Jim Guilardi
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Received Date: 10/11/2017 7:20 PM
Analysis Date: 10/11/2017
Collected Date: 10/11/2017

Project: 17-1224 / Pinelands Regional / Pinelands Regional HS

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures		Analytical Sensitivity (S/cc)	Asbestos Concentration	
						≥0.5μ	< 5μ ≥5μ		(S/mm ²)	(S/cc)
63	176 - By Entrance	1250.00	0.0635	0	None Detected			0.0049	<16.00	<0.0049
041729687-0001										
64	176 - Center of Room	1240.00	0.0635	0	None Detected			0.0049	<16.00	<0.0049
041729687-0002										
65	176 - Dark Room	1240.00	0.0635	0	None Detected			0.0049	<16.00	<0.0049
041729687-0003										
66	176 - Lab	1230.00	0.0635	0	None Detected			0.0049	<16.00	<0.0049
041729687-0004										
67	176 - Office	1220.00	0.0635	0	None Detected			0.0050	<16.00	<0.0050
041729687-0005										

Analyst(s)

Debbie Little (5)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. Samples received in good condition unless otherwise noted. The test results meet the requirements of NELAC unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 10/11/2017 22:54:47

RECEIVED
EMSL
CHINA MINSON, N.J.

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us best analyze your samples, achieve requested TAT and provide you with helpful interpretation information.

Company:	TTI Environmental
Contact Person:	
Name:	Jim Guelfardi
E-mail:	Jim.G@TTIENV.COM
Additional E-mails:	
Telephone #:	856-840-8800

Library Search requested:

☒ YES ☐ NO

A library search (aka Tentatively Identified Compounds) will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation, the library search is recommended to provide you with all available information for your sample.

Sample Type:

☒ Indoor Air Quality (Home/Office)☐ Soil Gas/Sub Slab☐ IAQ (Industrial)☐ Other:

Sample Description: Room 164 and Upper level (media)

PLEASE NOTE: The result forms that we provide will not indicate whether your results have exceeded any Exposure Limit criteria established by any regulatory agency. If you would like that information, please check off below which regulatory comparison forms you would like to receive.

☐ OSHA PELs/NIOSH RELs combined form☐ Potential Sources of Compounds found in your IAQ sample☐ EPA RSLs - 5/2016 Blended for THQ=1.0 and THQ=0.1☒ TVOC (Library Search Required for this format)☒ NJ DEP 1/2013 - Circle one: Indoor Air

Soil Gas

☐ Ohio 4/2013 - Circle one: Residential Commercial☐ NC DENR 4/2014 - Circle one: Residential

Non-residential

☐ Indiana Dept Env Mgmt Screening Levels 3/2016☐ PA DEP - 11/2016

Indoor Air

☐ Vermont DEP IROCP 4/2012 (soil gas only)☐ PA DEP- 11/2016: Sub Slab Soil Gas OR Near Source Soil Gas☐ California OEHHA 2/2012☐ CA HSL 11/2004 - Circle one Indoor Air

Soil Gas

☐ Other, These are the compounds I want reported:

Additional analyses that can be performed from your canister. Please note: there is an additional charge for any of the tests below.

US EPA TO-3 via GC/FID (choose one below):

ASTM-D5504 via GC/SCD (choose one below):

☐ C₁-C₈ hydrocarbons☐ Sulfur Scan (H₂S, COS, MeSH, EtSH, DMS)☐ Methane only☐ H₂S only

***Note:** Hold time for sulfur gases is 1 day from collection. Please schedule your sample collection so that samples are received in the lab prior to noon on Friday. Analysis performed out of hold time will have a notation in the report.

We can provide the following CMS tests from your canisters. Please note that these tests are to be used for IAQ/Screening purposes ONLY. EMSL recommends alternate field sampling techniques for these parameters (with the exception of water vapor); please contact your sales rep for the proper media. Please note: there is an additional charge for any of the tests

Dräger CMS Analyzer:

☐ CO ☐ CO₂ ☐ NH₃ ☐ O₂ ☐ Water Vapor

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.



EMSL Analytical - Industrial Hygiene

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 /

<http://www.EMSL.com>

IndustrialHygienelab@emsl.com

EMSL Order: 281703466

CustomerID: EPIC62

CustomerPO:

ProjectID:

Attn: **Jim Eberts**
Epic Environmental Services, LLC
1930 Brown Road
Newfield, NJ 08344

Phone: (856) 205-1077
Fax: (856) 205-0413
Received: 09/11/17 2:40 PM
Analysis Date: 9/12/2017
Collected: 9/11/2017

Project: **Pinelands BOE - Asbestos Roof Removal Monitoring**

Test Report: Total Dust Analysis (Gravimetric) of Air Samples via NIOSH 0500, Issue 2, 8/15/94

Sample	Location	Volume (L)	Sample Weight (mg)	Concentration (mg/m ³)	Reporting Limit (mg/m ³)	Notes
PLD-01 281703466-0001	Room 177	120	<0.050	<0.42	0.42	
PLD-02 281703466-0002	Hall by Auditorium	120	<0.050	<0.42	0.42	
PLD-03 281703466-0003	Field Blank		<0.050	N/A	N/A	Field Blank

Notes: Discernable field blank submitted with samples.
Results are not field blank corrected.

Analyst(s)

Katherine Foster (3)

Scott Van Etten, CIH, Laboratory Manager
or other approved signatory

The laboratory is not responsible for data reported in mg/m³, which is dependent on volume collected by non-laboratory personnel. Reporting limits for samples without volumes, such as Field Blanks, are 0.05 mg. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical - Industrial Hygiene Cinnaminson, NJ

Initial report from 09/12/2017 09:40:10

TEM Sampling Summary

September 9, 2017

<u>Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
Room 176 041726713-0001	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Room 177/178 041726713-0002	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Room 179 041726713-0003	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Hallway by Room 179 041726713-0004	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Room 172 041726713-0005	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Hallway by Main Entrance 041726713-0006	AHERA 40 CFR, Part 763 Subpart E	< 7.00 S/mm ²

September 11, 2017

<u>Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
Room 177 041726820-0001	AHERA 40 CFR, Part 763 Subpart E	< 7.80 S/mm ²
Hallway by Auditorium 041726820-0002	AHERA 40 CFR, Part 763 Subpart E	< 7.80 S/mm ²

Total Dust Monitoring

September 11, 2017

Sample Location	Sample Results
Room 177	< 0.42 mg/m ³
Hallway by Auditorium	< 0.42 mg/m ³

Bulk Sampling Summary Roofing Debris

September 8, 2017

<u>Sample Name / Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
RD-01 Debris - Roof 041726632-001	PLM - Standard Prep	<1 % Chrysotile
RD-02 Debris - Roof 041726632-002	PLM - Standard Prep	10 % Chrysotile
RD-03 Room 176-Above Ceiling 041726632-003	PLM - Standard Prep	<1% Chrysotile

September 8, 2017

<u>Sample Name / Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
PD-01 Chair - Room 179 041726714-001	PLM - Standard Prep	None Detected
RD-02 Table, Room 178 041726714-002	PLM - Standard Prep	None Detected

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077
 Tel/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> / cinnaslab@EMSL.com

EMSL Order: 041726713
 Customer ID: EPIC62
 Customer PO: 17-1052
 Project ID:

Attention: Jim Eberts
 Epic Environmental Services, LLC
 1930 Brown Road
 Newfield, NJ 08344

Phone: (856) 205-1077
Fax: (856) 205-0413
Received Date: 09/09/2017 11:25 AM
Analysis Date: 09/09/2017
Collected Date: 09/09/2017

Project: Pinelands BOE - Asbestos Roof Removal Monitoring

**Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by
 EPA 40 CFR Part 763 Appendix A to Subpart E**

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5μ < 5μ ≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm ²)	(S/cc)
P-01	Room 176	1200.00	0.0768	0	None Detected		0.0042	<13.00	<0.0042
041726713-0001									
P-02	Room 177/178	1200.00	0.0768	0	None Detected		0.0042	<13.00	<0.0042
041726713-0002									
P-03	Room 179	1200.00	0.0768	0	None Detected		0.0042	<13.00	<0.0042
041726713-0003									
P-04	Hall by Rm 179	1200.00	0.0768	0	None Detected		0.0042	<13.00	<0.0042
041726713-0004									
P-05	Room 162	1200.00	0.0768	0	None Detected		0.0042	<13.00	<0.0042
041726713-0005									
P-06	Hall Near Main Entrance	600.00	0.1410	0	None Detected		0.0046	<7.10	<0.0046
041726713-0006									

Analyst(s)

Steven Quinn (6)

Benjamin Ellis, Laboratory Manager
 or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. Samples received in good condition unless otherwise noted. The test results meet the requirements of NELAC unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 09/09/2017 13:53:04



EMSL ANALYTICAL, INC.

Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

041726713

Westmont, NJ
107 Haddon Avenue
Westmont, NJ 08108
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company: Epic Environmental Services, LLC		EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments*	
Street: 1930 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Pinelands BOE - Asbestos Roof Removal Monitoring			
Please Provide Results: Email		Purchase Order: 17-1052 State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
☐ 3 Hour ☒ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week			
*For TEM Air 3 hour/6 hours, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air ☐ NIOSH 7400 ☐ w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) ☐ PLM EPA 600/R-93/116 (<1%) ☐ PLM EPA NOB (<1%) Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%) Point Count w/ Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%) ☐ NYS 198.1 (friable in NY) ☐ NYS 198.6 NOB (non-friable-NY) ☐ NIOSH 9002 (<1%)		TEM - Air ☐ 4-4.5hr TAT (AHERA only) ☒ AHERA 40 CFR, Part 763 ☐ NIOSH 7402 ☐ EPA Level II ☐ ISO 10312 TEM - Bulk ☐ TEM EPA NOB ☐ NYS NOB 108.4 (non-friable-NY) ☐ Chatfield SOP ☐ TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers > 10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking	
TEM - Dust ☐ Microvac - ASTM D-5755 ☐ Wipe - ASTM D6460 ☐ Carpet Sonication (EPA 600/J-95367) Soil/Rock/Vermiculite ☐ PLM CARB 435 - A (0.25% sensitivity) ☐ PLM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - C (0.01% sensitivity) ☐ EPA Protocol (Semi-Quantitative) ☐ EPA Protocol (Quantitative) Other:		RECEIVED EMSL CINNAMINSON, NJ 17 SEP 2011:28	
☐ Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: James Eberts		Samplers Signature: <i>James Eberts</i>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	DATE SAMPLED
P-01	Room 176	1,200L	9/9/17 0754-0954 10Lpm 120min
P-02	Room 177/178	1,200L	0755-0955 10Lpm 120min
P-03	Room 179	1,200L	0756-0956 10Lpm 120min
P-04	Hall by Rm 179	1,200L	0757-0957 10Lpm 120min
P-05	Room 162	1,200L	0758-0958 10Lpm 120min
P-06	Hall near Main Entrance	1,200L	0759-0959 10Lpm 120min
P-07	Field Blank	N/A	Hold
End of Samples			
Client Sample # (s): P-01 -> P-07		Total # of Samples: 7	
Relinquished (Client): <i>James Eberts</i>		Date: 9/8/17	Time: 12:17
Received (Lab): <i>[Signature]</i>		Date: 9-9-17	Time: 11:50a
Comments/Special Instructions:			

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077
Tel/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com / cinnaslab@EMSL.com>

EMSL Order: 041726820
Customer ID: EPIC62
Customer PO: 17-1052
Project ID:

Attention: Jim Eberts
Epic Environmental Services, LLC
1930 Brown Road
Newfield, NJ 08344

Phone: (856) 205-1077
Fax: (856) 205-0413
Received Date: 09/11/2017 2:30 PM
Analysis Date: 09/11/2017
Collected Date: 09/11/2017

Project: Pinelands BOE - Asbestos Roof Removal Monitoring

**Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by
EPA 40 CFR Part 763 Appendix A to Subpart E**

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5μ < 5μ ≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration	
								(S/mm ²)	(S/cc)
PCA-01	Room 177	600.00	0.1280	0	None Detected		0.0050	<7.80	<0.0050
041726820-0001									
PCA-02	Hall by Auditorium	600.00	0.1280	0	None Detected		0.0050	<7.80	<0.0050
041726820-0002									

Analyst(s)

Debbie Little (2)


Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. Samples received in good condition unless otherwise noted. The test results meet the requirements of NELAC unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 09/11/2017 17:04:36

ASB_TEMAHARA_0004 Printed: 9/11/2017 5:04:39PM

Page 1 of 1

Get Date 11/30/17



Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

041726820

Westmont, NJ
107 Haddon Avenue
Westmont, NJ 09108
PHONE: (856) 858-4800
FAX: (856) 858-4060

Company: Epic Environmental Services, LLC		EMSL Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments*	
Street: 1930 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Pinelands BOE - Asbestos Roof Removal Monitoring			
Please Provide Results: Email		Purchase Order: 17-1052 State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
☒ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week			
*For TEM Air 3 hour/24 hour, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air ☐ NIOSH 7400 ☐ w/ OSHA 8hr, TWA PLM - Bulk (reporting limit) ☐ PLM EPA 800/R-93/116 (<1%) ☐ PLM EPA NOB (<1%) Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%) Point Count w/ Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%) ☐ NYS 188.1 (friable in NY) ☐ NYS 198.6 NOB (non-friable-NY) ☐ NIOSH 8002 (<1%)		TEM - Air ☐ 4-4.5hr TAT (AHERA only) ☒ AHERA 40 CFR, Part 763 ☐ NIOSH 7402 ☐ EPA Level II ☐ ISO 10312 TEM - Bulk ☐ TEM EPA NOB ☐ NYS NOB 198.4 (non-friable-NY) ☐ Chatfield SOP ☐ TEM Mass Analysis-EPA 800 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking	
TEM - Dual ☐ Microvac - ASTM D 5755 ☐ Wipe - ASTM D8490 ☐ Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite ☐ PLM CARB 435 - A (0.25% sensitivity) ☐ PLM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - C (0.01% sensitivity) ☐ EPA Protocol (Semi-Quantitative) ☐ EPA Protocol (Quantitative)		Other: ☐	
☐ Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: James Eberts		Samplers Signature: <i>James Eberts</i>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	DATE SAMPLED
PLA-01	Room 177	600L	11/11/17 1158-1258 10LPM 60min
PLA-02	Hall by Auditorium	600L	1202-1302 10LPM 60min
PLA-03	Field Blank	N/A	Hold
	End of Sampler		
Client Sample # (s): PLA-01 → 03		Total # of Samples: 3	
Relinquished (Client): <i>James Eberts</i>	Date: 9/11/17	Time: 1432	
Received (Lab): <i>[Signature]</i>	Date: 9-11-17	Time: 2:40pm	
Comments/Special Instructions:			

RECEIVED
EMSL
CINNAMINSON, NJ
11/30/17 PM 2:32

**EMSL Analytical - Industrial Hygiene**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 /

<http://www.EMSL.com>IndustrialHygienelab@emsl.com

EMSL Order: 281703466

CustomerID: EPIC62

CustomerPO:

ProjectID:

Attn: **Jim Eberts**
Epic Environmental Services, LLC
1930 Brown Road
Newfield, NJ 08344

Phone: (856) 205-1077
Fax: (856) 205-0413
Received: 09/11/17 2:40 PM
Analysis Date: 9/12/2017
Collected: 9/11/2017

Project: **Pinelands BOE - Asbestos Roof Removal Monitoring****Test Report: Total Dust Analysis (Gravimetric) of Air Samples via NIOSH 0500, Issue 2, 8/15/94**

Sample	Location	Volume (L)	Sample Weight (mg)	Concentration (mg/m ³)	Reporting Limit (mg/m ³)	Notes
PLD-01 281703466-0001	Room 177	120	<0.050	<0.42	0.42	
PLD-02 281703466-0002	Hall by Auditorium	120	<0.050	<0.42	0.42	
PLD-03 281703466-0003	Field Blank		<0.050	N/A	N/A	Field Blank

Notes: Discernable field blank submitted with samples.
Results are not field blank corrected.

Analyst(s)

Katherine Foster (3)

Scott Van Etten, CIH, Laboratory Manager
or other approved signatory

The laboratory is not responsible for data reported in mg/m³, which is dependent on volume collected by non-laboratory personnel. Reporting limits for samples without volumes, such as Field Blanks, are 0.05 mg. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical - Industrial Hygiene Cinnaminson, NJ

Initial report from 09/12/2017 09:40:10


 EMSL Analytical, Inc.
 an environmental laboratory

Asbestos Lab Services Chain of Custody
EMSL Order Number (Lab Use Only):

281703466

 Westmont, NJ
 107 Haddon Avenue
 Westmont, NJ 08108
 PHONE: (856) 858-4800
 FAX: (856) 858-4960

Company: Epic Environmental Services, LLC		EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments**	
Street: 1930 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Pinelands BOE - Asbestos Roof Removal Monitoring			
Please Provide Results: Email		Purchase Order: 17-1052 State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
☐ 3 Hour ☐ 6 Hour ☒ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week			
*For TEM Air 3 hours, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air ☐ NIOSH 7400 ☐ w/ OSHA 9hr. TWA PLM - Bulk (reporting limit) ☐ PLM EPA 800/R-93/116 (<1%) ☐ PLM EPA NOB (<1%) Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%) Point Count w/ Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%) ☐ NYS 198.1 (friable in NY) ☐ NYS 198.6 NOB (non-friable-NY) ☐ NIOSH 9002 (<1%)		TEM - Air ☐ 4-4.5hr TAT (AHERA only) ☐ AHERA 40 CFR, Part 763 ☐ NIOSH 7402 ☐ EPA Level II ☐ ISO 10312 TEM - Bulk ☐ TEM EPA NOB ☐ NYS NOB 198.4 (non-friable-NY) ☐ Chatfield SOP ☐ TEM Mass Analysis-EPA 800 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking	
		TEM - Dual ☐ Microvac - ASTM D-5755 ☐ Wipe - ASTM D8480 ☐ Carpet Sonication (EPA 800/J-93/167) Soil/Rock/Vermiculite ☐ PLM CARB 435 - A (0.25% sensitivity) ☐ PLM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - C (0.01% sensitivity) ☐ EPA Protocol (Semi-Quantitative) ☐ EPA Protocol (Quantitative)	
		Other: <u>NIOSH 0500</u>	
☐ Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: James Eberts		Samplers Signature: <i>James Eberts</i>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	DATE/SAMPLED
PLD-01	Room 177	120L	9/11/17 11:58 - 12:58 2 LPM 60 min
PLD-02	Hall by Auditorium	120L	12:02 - 13:02 2 LPM 60 min
PLD-03	Field Blank	N/A	N/A
	End of Sampler		
Client Sample # (s): PLD-01 → 03		Total # of Samples: 3	
Relinquished (Client): <i>Jan 8. A</i>		Date: 9/11/17	Time: 1437
Received (Lab): <i>(W)</i>		Date: 9-11-17	Time: 2:50pm
Comments/Special Instructions:			

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

http://www.EMSL.com / cinnaslab@EMSL.com

EMSL Order: 041726632

Customer ID: EPIC62

Customer PO:

Project ID:

Attention: Jim Eberts

Epic Environmental Services, LLC

1930 Brown Road

Newfield, NJ 08344

Phone: (856) 205-1077

Fax: (856) 205-0413

Received Date: 09/08/2017 3:15 PM

Analysis Date: 09/08/2017

Collected Date:

Project: Pinelands HS

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
RD-01 041726632-0001	Location 1 - Roof Debris	Various Non-Fibrous Heterogeneous	20% Cellulose 10% Glass	70% Non-fibrous (Other)	<1% Chrysotile
RD-02 041726632-0002	Location 2 - Roof Debris	Various Fibrous Heterogeneous	15% Cellulose 10% Glass	65% Non-fibrous (Other)	10% Chrysotile
RD-03 041726632-0003	Roof Debris Ceiling Tile	Various Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile

Analyst(s)

Steven Quinn (1)

Samantha Rundstorm-Cruz (2)

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 09/08/2017 17:41:10

EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

041726632

PHONE:

FAX:

Company Name: <u>Epic Env. Sys.</u>		EMSL Customer ID: <u>EPTC 62</u>	
Street:		City:	State/Province:
Zip/Postal Code:	Country:	Telephone #:	Fax #:
Report To (Name):		Please Provide Results: ☐ Fax ☐ Email	
Email Address:		Purchase Order:	
Project Name/Number: <u>Pinelands HS</u>		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: <u>NJ</u>		CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt	
EMSL-Bill to: ☐ Same ☐ Different - If Bill to is Different note instructions in Comments**			
Third Party Billing requires written authorization from third party			
Turnaround Time (TAT) Options* - Please Check			
☒ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air ☐ Check if samples are from NY ☐ NIOSH 7400 ☐ w/ OSHA 8hr. TWA		TEM - Air ☐ 4-4.5hr TAT (AHERA only) ☐ AHERA 40 CFR, Part 763 ☐ NIOSH 7402 ☐ EPA Level II ☐ ISO 10312	
PLM - Bulk (reporting limit) ☒ PLM EPA 600/R-93/116 (<1%) ☐ PLM EPA NOB (<1%) Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%) Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%) ☐ NYS 198.1 (friable in NY) ☐ NYS 198.6 NOB (non-friable-NY) ☐ NYS 198.8 SOF-V ☐ NIOSH 9002 (<1%)		TEM - Bulk ☐ TEM EPA NOB ☐ NYS NOB 198.4 (non-friable-NY) ☐ Chatfield SOP ☐ TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking	
TEM - Dust ☐ Microvac - ASTM D 5755 ☐ Wipe - ASTM D6480 ☐ Carpet Sonication (EPA 600/J-93-017)		Soil/Rock/Vermiculite ☐ PLM EPA 600/R-93/116 with milling prep ☐ PLM EPA 600/R-93/116 with milling prep ☐ TEM EPA 600/R-93/116 with milling prep ☐ TEM Qualitative via Filtration Prep ☐ TEM Qualitative via Drop Mount Prep ☐ Cincinnati Method: EPA 600/R-04/004 - PM/TEM (BC only)	
☐ Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm	
Samplers Name: <u>James Eberts</u>		Samplers Signature: <u>James Eberts</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
RD-01	Roof Debris, Location 1	N/A	9/8/17 N/A
RD-02	Roof Debris, Location 2		L ↓
RD-03	Roof Debris, Ceiling Tile		L ↓
	End of Samples		
Client Sample # (s): <u>RD-01 → 03</u>		Total # of Samples: <u>3</u>	
Relinquished (Client): <u>James H.</u>		Date: <u>9/8/17</u>	Time: <u>15:12</u>
Received (Lab): <u>[Signature]</u>		Date: <u>9-8-17</u>	Time: <u>15:15</u>
Comments/Special Instructions:			

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

http://www.EMSL.com / cinnaslab@EMSL.com

EMSL Order: 041726714

Customer ID: EPIC62

Customer PO: 17-1052

Project ID:

Attention: Jim Eberts

Epic Environmental Services, LLC

1930 Brown Road

Newfield, NJ 08344

Phone: (856) 205-1077

Fax: (856) 205-0413

Received Date: 09/09/2017 11:25 AM

Analysis Date: 09/09/2017

Collected Date: 09/09/2017

Project: Pinelands BOE - Asbestos Roof Removal Monitoring

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
PD-01 041726714-0001	Chair-Rm 179	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
PD-02 041726714-0002	Table-Rm 178	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Benjamin Verghese (2)

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 09/09/2017 14:32:28



Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

041726714

Westmont, NJ
107 Haddon Avenue
Westmont, NJ 08108
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company: Epic Environmental Services, LLC		EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party	
Street: 1930 Brown Road			
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Pinelands BOE - Asbestos Roof Removal Monitoring			
Please Provide Results: Email		Purchase Order: 17-1052 State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
☐ 3 Hour ☒ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week *For TEM Air 3 hour/5% hours, please call ahead to schedule. There is a premium charge for 3-hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air ☐ NIOSH 7400 ☐ w/ CSHA 8hr. TWA PLM - Bulk (reporting limit) ☒ PLM EPA 800/R-93/116 (<1%) ☐ PLM EPA NOB (<1%) Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%) Point Count w/ Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%) ☐ NYS 188.1 (triable in NY) ☐ NYS 188.6 NOB (non-triable-NY) ☐ NIOSH 8002 (<1%)		TEM - Air ☐ 4-4.5hr TAT (AHERA only) ☐ AHERA 40 CFR, Part 763 ☐ NIOSH 7402 ☐ EPA Level II ☐ ISO 10312 TEM - Bulk ☐ TEM EPA NOB ☐ NYS NOB 188.4 (non-triable-NY) ☐ Chatfield SOP ☐ TEM Mass Analysis-EPA 800 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking	
TEM - Dual ☐ Microwave - ASTM D 5755 ☐ Wipe - ASTM D6490 ☐ Carpet Sonication (EPA 800/J-93/1) Soil/Rock/Vermiculite ☐ PLM CARB 435 - A (0.25% sensitivity) ☐ PLM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - B (0.1% sensitivity) ☐ TEM CARB 435 - C (0.01% sensitivity) ☐ EPA Protocol (Semi-Quantitative) ☐ EPA Protocol (Quantitative)		Other: ☐	
☐ Check For Positive Step - Clearly Identify Homogenous Group			
Samplers Name: James Eberts		Samplers Signature: <i>James Eberts</i>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	DATE SAMPLED
PD-01	Chair - Rm 179	N/A	9/8/17
PD-02	Table - Rm 178	1	1
	End of Samples		
Client Sample # (s): PD-01 → PD-02		Total # of Samples: 2	
Relinquished (Client): <i>James Eberts</i>		Date: 9/8/17	Time: 11:25
Received (Lab): <i>[Signature]</i>		Date: 9-9-17	Time: 11:25a
Comments/Special Instructions:			

RECEIVED
EMSL
CINNAMINSON, NJ



1253 North Church Street, Moorestown, NJ 08059
856-840-8800 Fax 856-840-8815

SAMPLING DATA AND CHAIN OF CUSTODY RECORD

PCM

TEM

(Circle One)

PRES

DURINGS

POST

20.023642

PROJECT # 17-1224

CLIENT: Ave/Andres Leg. H.S.

FACILITY: H.S. Hallway

PROJECT MANAGER: Gullardi O Stocku O Seaman

SAMPLER(S): J. Degea

CLIENT CONTACT: Bob P. G

SAMPLING DATE: 10/3/17

SAMPLE #	PUMP #	SAMPLE LOCATION	TIMES				FLOW RATE				TOTAL VOLUME	FIBER COUNT (fibers/field)	FIBER DENSITY (fibers/m ²)	FIBER CONCENTRATION (fibers/cc)
			START	STOP	TOTAL	INITIAL	FINAL	AVERAGE						
01	31	HALLWAY by EXT 30.	8:45	10:45	120	10	10	10		1200				
02	35	HALLWAY by ROOM 175	8:46	10:46	120	10	10	10		1200				
03	40	HALLWAY by FRONT STAGE	8:47	10:47	120	10	10	10		1200				
04	41	HALLWAY by CUSTODIAN	8:49	10:49	120	10	10	10		1200				
05	50	HALLWAY by 164	8:49	10:49	120	10	10	10		1200				
06	61	HALLWAY by STAGE/STORAGE	10:45	12:49	122	10	10	10		1220				
07	22	HALLWAY by DEFIBRILLATOR	10:46	12:50	124	10	10	10		1240				
08	19	HALLWAY by OFFICE	10:49	12:52	125	10	10	10		1250				
09	18	HALLWAY by OFFICE	10:49	12:54	127	10	10	10		1270				
10	17	HALLWAY by CUSTODIAN	10:49	12:56	128	10	10	10		1280				
11	3	HALLWAY by RM. 169	11:28	12:49	149	10	10	10		1490				
12	4	HALLWAY by RM. 171	11:30	12:49	149	10	10	10		1490				
13	8	RESTROOM RM 176	12:03	14:14	71	10	10	10		710				

RECEIVED
EMSL
OCT 3 2017
CINNAMINSON, N.J.

Relinquished by: (Signature)

Date: 10/3/17

Time: 5:25 pm

Received by: (Signature)

Date: 10/3/17

Time: 5:25 pm

Comments: e-mail all results and COC to: in-lab@ttienv.com

Analyst: (Signature)

Date: 10/3/17

Time: 5:25 pm

Received by: (Signature)

Date: 10/3/17

Time: 5:25 pm

Comments: e-mail all results and COC to: in-lab@ttienv.com

2016

Relinquished by: (Signature)

Date: 10/3/17

Time: 5:25 pm

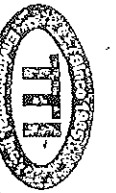
Received by: (Signature)

Date: 10/3/17

Comments: e-mail all results and COC to: in-lab@ttienv.com

FOR TEM ANALYSIS ONLY. DO NOT ANALYZE BLANKS.

20214



1253 North Church Street, Moorestown, NJ 08057
856-840-8800 Fax 856-840-8815

ChR.

041728916

SAMPLING DATA AND CHAIN OF CUSTODY RECORD

PCM TEM (Circle One) PRES DURINGS POST

TTI PROJECT MANAGER: ☒ Gullardi ☐ Stocku ☐ Seaman

SAMPLING DATE: 10/31/17

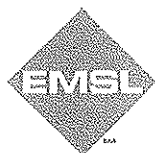
PROJECT #: 10-023642
CLIENT: Melnd's Reg. HS.
CLIENT CONTACT: J. Orgera

FACILITY: HS. HALLWAYS

SAMPLE #	PUMP #	SAMPLE LOCATION	TIMES			FLOW RATE			TOTAL VOLUME	FIBER COUNT (fibers/field)	FIBER DENSITY (1/mm ²)	FIBER CONCENTRATION (fibers/cc)
			START	STOP	TOTAL	INITIAL	FINAL	AVERAGE				
14	50	RM. 177 - ART Graphics	12:04	1:15	71	10	10	10	710			
15	41	HALLWAY by RM. 176	12:25	1:38	71	10	10	10	710			
16	40	RM. 179	12:31	1:38	67	10	10	10	670			
17	35	HALLWAY by RM. 179	12:33	1:40	67	10	10	10	670			
18	31	RM. 167	12:37	1:41	64	10	10	10	640			
19		Blank										
20		Blank										

RECEIVED
E.M.S.L.
CINNAMINSON, N.J.
2017 OCT - 3 P 8:25

Relinquished by: (Signature)	Date: 10/31/17	Time:	Received by: (Signature)	Date:	Time:	Comments:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	e-mail all results and COC to: jh-lab@ttienv.com
Analyst: (Signature)	Date:	Time:	Rotameter #: TTE 4	PO #:	023642	
			Filter Manufacturer: ZETON	Turn Around Time:	6 hr	
			Lot #: 48040	FOR TEM ANALYSIS ONLY. DO NOT ANALYZE BLANKS		

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077
 Tel/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> / cinnaslab@EMSL.com

EMSL Order: 041728916

Customer ID: TTIE54

Customer PO: 023642

Project ID:

Attention: Jim Guilardi

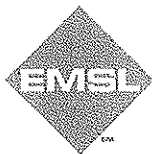
TTI Environmental Inc.
 1253 North Church Street
 Moorestown, NJ 08057

Phone: (856) 840-8800**Fax:** (856) 840-8815**Received Date:** 10/03/2017 5:25 PM**Analysis Date:** 10/03/2017**Collected Date:** 10/03/2017**Project:** 17-1224 / Pinelands Reg HS / HS Hallways & Classrooms

**Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by
 EPA 40 CFR Part 763 Appendix A to Subpart E**

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5μ < 5μ ≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm ²)	(S/cc)
01	Hallway by Exit 30	1200.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728916-0001									
02	Hallway by Room 175	1200.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728916-0002									
03	Hallway by Front Stage	1200.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728916-0003									
04	Hallway by Custodial Elec Svc	1200.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728916-0004									
05	Hallway by 164	1200.00			Overloaded				N/A
041728916-0005									
>10% particulate loading									
06	Hallway near Student Svcs Ofc	1220.00	0.0635	0	None Detected		0.0050	<16.00	<0.0050
041728916-0006									
07	Hallway by Defibrillator	1240.00	0.0635	0	None Detected		0.0049	<16.00	<0.0049
041728916-0007									
08	Hallway by Attendance Ofc	1250.00	0.0635	0	None Detected		0.0049	<16.00	<0.0049
041728916-0008									
09	Hallway by Cafeteria Entrance	1270.00	0.0635	0	None Detected		0.0048	<16.00	<0.0048
041728916-0009									
10	Hallway by Head Custodian Ofc	1280.00	0.0635	0	None Detected		0.0047	<16.00	<0.0047
041728916-0010									
11	Hallway by Rm 169	1490.00	0.0635	0	None Detected		0.0041	<16.00	<0.0041
041728916-0011									
12	Hallway by Rm 171	1480.00	0.0635	0	Chrysotile	0 1	0.0041	16.00	0.0041
041728916-0012									
13	Print Shop Rm 176	710.00	0.1140	0	None Detected		0.0047	<8.70	<0.0047
041728916-0013									
14	Rm 177-Art Graphics	710.00	0.1140	0	None Detected		0.0047	<8.70	<0.0047
041728916-0014									

Initial report from: 10/03/2017 23:19:23

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077
Tel/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> / cinnaslab@EMSL.com

EMSL Order: 041728916
Customer ID: TTIE54
Customer PO: 023642
Project ID:

Attention: Jim Guilardi
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Received Date: 10/03/2017 5:25 PM
Analysis Date: 10/03/2017
Collected Date: 10/03/2017

Project: 17-1224 / Pinelands Reg HS / HS Hallways & Classrooms

**Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by
EPA 40 CFR Part 763 Appendix A to Subpart E**

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures		Analytical Sensitivity (S/cc)	Asbestos Concentration	
						≥0.5μ	< 5μ ≥5μ		(S/mm ²)	(S/cc)
15	Hallway by Rm 176	710.00	0.1140	0	None Detected			0.0047	<8.70	<0.0047
041728916-0015										
16	Rm 179	670.00	0.1270	0	None Detected			0.0045	<7.90	<0.0045
041728916-0016										
17	Hallway by Rm 179	670.00	0.1270	0	None Detected			0.0045	<7.90	<0.0045
041728916-0017										
18	Rm 167	640.00	0.1270	0	None Detected			0.0047	<7.90	<0.0047
041728916-0018										

Analyst(s)

Debbie Little (8)

Wayne Froehlich (10)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. Samples received in good condition unless otherwise noted. The test results meet the requirements of NELAC unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from: 10/03/2017 23:19:23



1253 North Church Street, Moorestown, NJ 08057
856-640-8800 Fax 856-840-8815

041724983

SAMPLING DATA AND CHAIN OF CUSTODY RECORD

PCM TEM (Circle One) PRES DURINGS POST

PO. 023649

TTI PROJECT MANAGER: *X* Gullardi O Stocku O Seaman

PROJECT #: 17-1244 CLIENT: *Pinelands Fed. H.S.* TTI PROJECT MANAGER: *X* Gullardi O Stocku O Seaman
SAMPLER(S): *68922* CLIENT CONTACT: *Bob P. Gullardi* FACILITY: *Pinelands H.S.* SAMPLING DATE: *10/4/17*

SAMPLE #	PUMP #	SAMPLE LOCATION	TIMES				FLOW RATE				TOTAL VOLUME	FIBER COUNT (fibers/field)	FIBER DENSITY (fibers/m ³)	FIBER CONCENTRATION (fibers/cc)
			START	STOP	TOTAL	INITIAL	FINAL	AVERAGE						
21	35	IN ROOM 171	7:45	9:50		10	10	10						
22	41	IN ROOM 169	7:45	9:54		10	10	10						
23	31	IN ROOM 165	7:48	10:04		10	10	10						
24	61	IN ROOM 125	7:50	9:59		10	10	10						
25	40	IN ROOM 166	7:55	10:02		10	10	10						
26	22	IN ROOM 164	7:58	9:46		10	10	10						
27	8	IN AUDITORIUM	7:59	10:00		10	10	10						
28	50	IN ATRIUM	8:03	10:10		10	10	10						
29	19	BY HAND FL. RM 250	8:10	10:13		10	10	10						
30	4	3RD FL. HALL BY ELEC. RM	8:14	10:15		10	10	10						
31	17	IN CAFETERIA	8:18	10:22		10	10	10						
32	18	HALL BY B156	8:20	10:20		10	10	10						
33	3	IN GYM	8:24	10:28		10	10	10						

RECEIVED
EMSL
CINNAMINSON, N.J.
2017 OCT - 4 P 12:23

Relinquished by: (Signature)	Date: <i>10/4/17</i>	Time: <i>12:20 PM</i>	Received by: (Signature)	Date: <i>10/4/17</i>	Time: <i>12:20 PM</i>
Relinquished by: (Signature)	Date: <i>10/4/17</i>	Time: <i>12:20 PM</i>	Received by: (Signature)	Date: <i>10/4/17</i>	Time: <i>12:20 PM</i>
Analyst: (Signature)	Date: <i>10/4/17</i>	Time: <i>12:20 PM</i>	Rotameter #: <i>TT14</i>	Filter Manufacturer: <i>2EFOB</i>	Lot #: <i>48040</i>

Comments:
e-mail all results and COC to:
jth-lab@ttienv.com

PO # *023649*
Turn Around Time: *3hr*
FOR TEM ANALYSIS ONLY. DO NOT ANALYZE BLANKS

2016

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077
 Tel/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> / cinnaslab@EMSL.com

EMSL Order: 041728983
 Customer ID: TTIE54
 Customer PO: 023642
 Project ID:

Attention: Jim Guilardi
 TTI Environmental Inc.
 1253 North Church Street
 Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Received Date: 10/04/2017 12:20 PM
Analysis Date: 10/04/2017
Collected Date: 10/04/2017

Project: 17-1244 / Pinelands Reg. H.S.

**Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by
 EPA 40 CFR Part 763 Appendix A to Subpart E**

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Ash	Asbestos Type(s)	#Structures ≥0.5μ < 5μ ≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm ²)	(S/cc)
21	In Room 171	1250.00	0.0635	0	None Detected		0.0049	<16.00	<0.0049
041728983-0001									
22	In Room 169	1280.00	0.0635	0	None Detected		0.0047	<16.00	<0.0047
041728983-0002									
23	In Room 165	1360.00	0.0635	0	None Detected		0.0045	<16.00	<0.0045
041728983-0003									
24	In Room 175	1290.00	0.0635	0	None Detected		0.0047	<16.00	<0.0047
041728983-0004									
25	In Room 166	1270.00	0.0635	0	None Detected		0.0048	<16.00	<0.0048
041728983-0005									
26	In Room 164	1080.00	0.0762	0	None Detected		0.0047	<13.00	<0.0047
041728983-0006									
27	In Auditorium	1280.00	0.0762	0	None Detected		0.0039	<13.00	<0.0039
041728983-0007									
28	In Atrium	1070.00	0.0762	0	None Detected		0.0047	<13.00	<0.0047
041728983-0008									
29	By Hall and 2nd Fl. Rm 250	1200.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728983-0009									
30	3rd Fl Hall by Elct. Rm	1210.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728983-0010									
31	In Cafeteria	1300.00	0.0635	0	None Detected		0.0047	<16.00	<0.0047
041728983-0011									
32	Hall by B156	1200.00	0.0762	0	None Detected		0.0042	<13.00	<0.0042
041728983-0012									
33	In Gym	1240.00	0.0635	0	None Detected		0.0049	<16.00	<0.0049
041728983-0013									

Initial report from: 10/04/2017 15:47:43

ASB_TEMAHERA_0004 Printed: 10/4/2017 3:47:47PM

TEM Sampling Summary

September 9, 2017

<u>Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
Room 176 041726713-0001	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Room 177/178 041726713-0002	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Room 179 041726713-0003	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Hallway by Room 179 041726713-0004	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Room 172 041726713-0005	AHERA 40 CFR, Part 763 Subpart E	<13.00 S/mm ²
Hallway by Main Entrance 041726713-0006	AHERA 40 CFR, Part 763 Subpart E	< 7.00 S/mm ²

HEALTH

Epic Environmental Services, LLC
Tele: 856.205.1077

SAFETY

1930 Brown Road
www.epic-env.com

ENVIRONMENT

Newfield, New Jersey 08344
Fax: 856.205.0413

Bulk Sampling Summary Roofing Debris

September 8, 2017

<u>Sample Name / Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
RD-01 Debris - Roof 041726632-001	PLM - Standard Prep	<1 % Chrysotile
RD-02 Debris - Roof 041726632-002	PLM - Standard Prep	10 % Chrysotile
RD-03 Room 176-Above Ceiling 041726632-003	PLM - Standard Prep	<1% Chrysotile

September 8, 2017

<u>Sample Name / Sample Location</u>	<u>Analysis Performed</u>	<u>Result</u>
PD-01 Chair – Room 179 041726714-001	PLM - Standard Prep	None Detected
RD-02 Table, Room 178 041726714-002	PLM - Standard Prep	None Detected



USEPA TO-15

External Chain of Custody/ Field Test Data Sheet

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Ph. (800) 220-3878
Fax (856) 786-0327

EMSL ANALYTICAL, INC.
LABORATORY/TESTING DIVISION

EMSL Order Number (Lab Use Only):

491700999

Report To Contact Name: Jim Gailardi	Bill To Company: Same	Sampled By (Sign):
Company Name: TTI Environmental Inc.	Attention To:	Sampled By (Name): A. Cullen
Address 1: 1253 N Church St.	Address 1:	Total # of Samples: 2
Address 2: Morristown, NJ	Address 2:	Date Shipped:
Phone No.: 609-314-1683	Phone No.:	Sample Collection Zip Code: 08087
Fax:	Fax:	Purchase Order: 023650

EMSL Sample Identifier

Email Results To: jmg@ttienv.com

Turnaround Time (in Business Days): ☐ 5 Day ☐ 4 Day ☒ 3 Day ☐ 2 Day ☐ 1 Day

Reporting Format: ☒ Results Only (Standard Lab Report)
☐ Full Deliverables (Surcharge may apply)
☐ Other

Field Use - All Information Required

Sampling Start Information

Barometric Pres. ("Hg): 30.5

Interior Temp. (F): 68.0

Canister Pressure ("Hg): 30.9

Time (24 hr clock): 10:37

Start Date: 10-3-17

Stop Date: 10-3-17

Time (24 hr clock): 10:49

Canister Pressure ("Hg): 30.2

Interior Temp. (F): 68.0

Barometric Pres. ("Hg): 30.5

Time (24 hr clock): 10:49

Stop Date: 10-3-17

Time (24 hr clock): 10:49

Canister Pressure ("Hg): 30.2

Interior Temp. (F): 68.0

Barometric Pres. ("Hg): 30.5

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Time (24 hr clock): 10:49

Canister Pressure ("Hg): 30.2

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Barometric Pres. ("Hg): 30.5

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Interior Temp. (F): 68.0

Barometric Pres. ("Hg):

491700999

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us to best analyze your samples, achieve requested TAT and provide you with helpful interpretation information.

Company:	TTI Environmental, Inc.
Contact Person:	
Name:	Jim Cutilardi
E-mail:	Jim G @ TTIENV.COM
Additional E-mails:	
Telephone #:	609-314-1683

Library Search requested:

☒ YES ☐ NO

A library search (aka Tentatively Identified Compounds) will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation, the library search is recommended to provide you with all available information for your sample.

Sample Type:

- ☒ Indoor Air Quality (Home/Office)
☐ IAQ (Industrial)
☐ Other:

☐ Soil Gas/Sub SlabSample Description: Room 16th and upper level (media)

PLEASE NOTE: The result forms that we provide will not indicate whether your results have exceeded any Exposure Limit criteria established by any regulatory agency. If you would like that information, please check off below which regulatory comparison forms you would like to receive.

- | | |
|---|--|
| ☐ OSHA PELs/NIOSH RELs combined form | ☐ Potential Sources of Compounds found in your IAQ sample |
| ☐ EPA RSLs - 5/2016 Blended for THQ=1.0 and THQ=0.1 | ☒ TVOC (Library Search Required for this format) |
| ☒ NJ DEP 1/2013 - Circle one: Indoor Air Soil Gas | ☐ Ohio 4/2013 - Circle one: Residential Commercial |
| ☐ NC DENR 4/2014 - Circle one: Residential Non-residential | ☐ Indiana Dept Env Mgmt Screening Levels 3/2016 |
| ☐ PA DEP - 11/2016 Indoor Air | ☐ Vermont DEP IROCP 4/2012 (soil gas only) |
| ☐ PA DEP- 11/2016: Sub Slab Soil Gas OR Near Source Soil Gas | ☐ California OEHHA 2/2012 |
| ☐ CA HSL 11/2004 - Circle on Indoor Air Soil Gas | ☐ Other, These are the compounds I want reported: |

Additional analyses that can be performed from your canister. Please note: there is an additional charge for any of the tests below.

US EPA TO-3 via GC/FID (choose one below):

ASTM-D5504 via GC/SCD (choose one below): *

- ☐ C₁-C₈ hydrocarbons
☐ Methane only

- ☐ Sulfur Scan (H₂S, COS, MeSH, EtSH, DMS)
☐ H₂S only

***Note:** Hold time for sulfur gases is 1 day from collection. Please schedule your sample collection so that samples are received in the lab prior to noon on Friday. Analysis performed out of hold time will have a notation in the report.

We can provide the following CMS tests from your canisters. Please note that these tests are to be used for IAQ/Screening purposes ONLY. EMSL recommends alternate field sampling techniques for these parameters (with the exception of water vapor); please contact your sales rep for the proper media. Please note: there is an additional charge for any of the tests

Dräger CMS Analyzer:

- ☐ CO ☐ CO₂ ☐ NH₃ ☐ O₂ ☐ Water Vapor

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.

RECEIVED
 EMSL
 CINCINNATI, OH, N.J.
 2017 OCT - 3 P 6:46

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: 491700999

EMSL Sample #: 491700999-1

Customer ID: TTIE54

Customer PO: 23650

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: 17-1224 Pinelands Regional

Sample ID: Room 164

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/05/2017	MTH	P0921.D	E0263	290 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
Propylene	115-07-1	42.08	ND		ND	3100		13000	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	ND		ND	100		440	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.90	ND		ND	N.E.		N.E.	
Chloromethane	74-87-3	50.49	0.78		1.6	94.0		390	
n-Butane	106-97-8	58.12	1.7		4.1	N.E.		N.E.	
Vinyl chloride	75-01-4	62.50	ND		ND	0.170		2.80	
1,3-Butadiene	106-99-0	54.09	ND		ND	0.0940		0.410	
Bromomethane	74-83-9	94.94	ND		ND	5.20		22.0	
Chloroethane	75-00-3	64.52	ND		ND	10000		44000	
Ethanol	64-17-5	46.07	18		34	N.E.		N.E.	
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	0.0880		0.380	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	0.98		5.5	N.E.		N.E.	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.5		3.7	210		880	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.40	ND		ND	31000		130000	
Acetone	67-64-1	58.08	6.0		14	32000		140000	
1,1-Dichloroethene	75-35-4	96.94	ND		ND	210		880	
Acetonitrile	75-05-8	41.00	ND		ND	63.0		260	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	N.E.		N.E.	
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	N.E.		N.E.	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	0.470		2.00	
Carbon disulfide	75-15-0	76.14	ND		ND	730		3100	
Methylene chloride	75-09-2	84.94	ND		ND	100		1200	
Acrylonitrile	107-13-1	53.00	ND		ND	0.0410		0.180	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	11.0		47.0	
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	N.E.		N.E.	
n-Hexane	110-54-3	86.17	ND		ND	730		3100	
1,1-Dichloroethane	75-34-3	98.96	ND		ND	1.80		7.70	
Vinyl acetate	108-05-4	86.00	ND		ND	210		880	
2-Butanone(MEK)	78-93-3	72.10	ND		ND	5200		22000	
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	N.E.		N.E.	
Ethyl acetate	141-78-6	88.10	ND		ND	73.0		310	
Chloroform	67-66-3	119.40	ND		ND	0.120		0.530	
Tetrahydrofuran	109-99-9	72.11	ND		ND	2100		8800	
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	5200		22000	
Cyclohexane	110-82-7	84.16	ND		ND	6300		26000	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	ND		ND	N.E.		N.E.	
Carbon tetrachloride	56-23-5	153.80	ND		ND	0.470		2.00	
n-Heptane	142-82-5	100.20	ND		ND	N.E.		N.E.	
1,2-Dichloroethane	107-06-2	98.96	ND		ND	0.110		0.470	
Benzene	71-43-2	78.11	ND		ND	0.360		1.60	
Trichloroethene	79-01-6	131.40	ND		ND	0.480		3.00	
1,2-Dichloropropane	78-87-5	113.00	ND		ND	0.280		1.20	
Methyl Methacrylate	80-62-6	100.12	ND		ND	730		3100	
Bromodichloromethane	75-27-4	163.80	ND		ND	0.0760		0.330	
1,4-Dioxane	123-91-1	88.12	ND		ND	0.560		2.50	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	3100		13000	

**EMSL Analytical**

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 Phone/Fax: (856)858-4800 / (856)858-4571
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EMSL Order #: 491700999
 EMSL Sample #: 491700999-1
 Customer ID: TTIE54
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Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: **17-1224 Pinelands Regional**

Sample ID: **Room 164**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/05/2017	MTH	P0921.D	E0263	290 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
cis-1,3-Dichloropropene**	10061-01-5	111.00	ND		ND	N.E.		N.E.	
Toluene	108-88-3	92.14	1.0		3.8	5200		22000	
trans-1,3-Dichloropropene**	10061-02-6	111.00	ND		ND	N.E.		N.E.	
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	0.180		0.770	
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	31.0		130	
Tetrachloroethene	127-18-4	165.80	ND		ND	11.0		47.0	
Dibromochloromethane	124-48-1	208.30	ND		ND	N.E.		N.E.	
1,2-Dibromoethane	106-93-4	187.80	ND		ND	0.00470		0.0200	
Chlorobenzene	108-90-7	112.60	ND		ND	52.0		220	
Ethylbenzene	100-41-4	106.20	0.63		2.7	1.10		4.90	
Xylene (p,m)	1330-20-7	106.20	2.1		9.0	100		440	
Xylene (Ortho)	95-47-6	106.20	0.80		3.5	100		440	
Styrene	100-42-5	104.10	ND		ND	1000		4400	
Isopropylbenzene (cumene)	98-82-8	120.19	ND		ND	420		1800	
Bromoform	75-25-2	252.80	ND		ND	2.60		11.0	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	0.0480		0.210	
4-Ethyltoluene	622-96-8	120.20	2.1		10	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	0.98		4.8	N.E.		N.E.	
2-Chlorotoluene	95-49-8	126.60	ND		ND	N.E.		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	3.0		15	7.30		31.0	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	ND		ND	0.260		1.10	
Benzyl chloride	100-44-7	126.00	ND		ND	0.0570		0.250	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	210		880	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	2.10		8.80	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	0.130		0.560	
Naphthalene	91-20-3	128.17	ND		ND	0.0830		0.360	

**The concentrations of each isomer should be added if multiple isomers are present and compared to the total screening level.

The > column is used to flag exceedences as marked

Exposure Limit Definitions

RSL= Regional Screening Level (Target Hazard Quotient (THQ) =0.1 if available, otherwise THQ = 1)

Agency Definitions

United States Environmental Protection Agency

Reference

EPA Regional Screening Levels (RSLs), May 2016

Compound Exposure Definitions

NE= No Limit Established

LFC= Lowest Feasible Concentration

NS= No Screening Value

Regional Screening Level Definition

Target Hazard Quotients (THQ)=0.1 is used for screening when multiple contaminants of concern are



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

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EMSL Order #: 491700999

EMSL Sample #: 491700999-1

Customer ID: TTIE54

Customer PO: 23650

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: 17-1224 Pinelands Regional

Sample ID: Room 164

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/05/2017	MTH	P0921.D	E0263	290 cc	1

NIOSH and OSHA Exposure Limit Comparisons

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	NIOSH REL ug/m3	>	OSHA PEL ug/m3	>
Propylene	115-07-1	42.08	ND		ND	N.E.		N.E.	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	ND		ND	4900000		4900000	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.90	ND		ND	7000000		7000000	
Chloromethane	74-87-3	50.49	0.78		1.6	LFC		210000	
n-Butane	106-97-8	58.12	1.7		4.1	1900000		1900000	
Vinyl chloride	75-01-4	62.50	ND		ND	LFC		2600	
1,3-Butadiene	106-99-0	54.09	ND		ND	LFC		2200	
Bromomethane	74-83-9	94.94	ND		ND	LFC		78000	
Chloroethane	75-00-3	64.52	ND		ND	LFC		2600000	
Ethanol	64-17-5	46.07	18		34	1900000		1900000	
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	LFC		N.E.	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	0.98		5.5	5600000		5600000	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.5		3.7	980000		980000	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.40	ND		ND	7700000		7700000	
Acetone	67-64-1	58.08	6.0		14	590000		2400000	
1,1-Dichloroethene	75-35-4	96.94	ND		ND	790000		790000	
Acetonitrile	75-05-8	41.00	ND		ND	34000		67000	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	300000		300000	
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	880000		880000	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	3100		3100	
Carbon disulfide	75-15-0	76.14	ND		ND	3100		62000	
Methylene chloride	75-09-2	84.94	ND		ND	LFC		87000	
Acrylonitrile	107-13-1	53.00	ND		ND	2200		4300	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	N.E.		N.E.	
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	790000		790000	
n-Hexane	110-54-3	86.17	ND		ND	180000		1800000	
1,1-Dichloroethane	75-34-3	98.96	ND		ND	400000		400000	
Vinyl acetate	108-05-4	86.00	ND		ND	14000		N.E.	
2-Butanone(MEK)	78-93-3	72.10	ND		ND	590000		590000	
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	790000		790000	
Ethyl acetate	141-78-6	88.10	ND		ND	1400000		1400000	
Chloroform	67-66-3	119.40	ND		ND	9800		240000	
Tetrahydrofuran	109-99-9	72.11	ND		ND	590000		590000	
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	1900000		1900000	
Cyclohexane	110-82-7	84.16	ND		ND	1000000		1000000	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	ND		ND	N.E.		N.E.	
Carbon tetrachloride	56-23-5	153.80	ND		ND	13000		63000	
n-Heptane	142-82-5	100.20	ND		ND	350000		2000000	
1,2-Dichloroethane	107-06-2	98.96	ND		ND	4000		200000	
Benzene	71-43-2	78.11	ND		ND	320		3200	
Trichloroethene	79-01-6	131.40	ND		ND	130000		540000	
1,2-Dichloropropane	78-87-5	113.00	ND		ND	LFC		350000	
Methyl Methacrylate	80-62-6	100.12	ND		ND	410000		410000	
Bromodichloromethane	75-27-4	163.80	ND		ND	N.E.		N.E.	
1,4-Dioxane	123-91-1	88.12	ND		ND	3600		360000	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	200000		410000	

**EMSL Analytical**

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EMSL Order #: **491700999**
 EMSL Sample #: **491700999-1**
 Customer ID: **TTIE54**
 Customer PO: **23650**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: **17-1224 Pinelands Regional**

Sample ID: **Room 164**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/05/2017	MTH	P0921.D	E0263	290 cc	1

NIOSH and OSHA Exposure Limit Comparisons

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	NIOSH REL ug/m3	>	OSHA PEL ug/m3	>
cis-1,3-Dichloropropene**	10061-01-5	111.00	ND		ND	4500		N.E.	
Toluene	108-88-3	92.14	1.0		3.8	380000		750000	
trans-1,3-Dichloropropene**	10061-02-6	111.00	ND		ND	4500		N.E.	
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	55000		55000	
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	4100		410000	
Tetrachloroethene	127-18-4	165.80	ND		ND	LFC		680000	
Dibromochloromethane	124-48-1	208.30	ND		ND	N.E.		N.E.	
1,2-Dibromoethane	106-93-4	187.80	ND		ND	350		150000	
Chlorobenzene	108-90-7	112.60	ND		ND	N.E.		350000	
Ethylbenzene	100-41-4	106.20	0.63		2.7	430000		430000	
Xylene (p,m)	1330-20-7	106.20	2.1		9.0	430000		430000	
Xylene (Ortho)	95-47-6	106.20	0.80		3.5	430000		430000	
Styrene	100-42-5	104.10	ND		ND	210000		430000	
Isopropylbenzene (cumene)	98-82-8	120.19	ND		ND	250000		250000	
Bromoform	75-25-2	252.80	ND		ND	5200		5200	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	6900		34000	
4-Ethyltoluene	622-96-8	120.20	2.1		10	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	0.98		4.8	120000		120000	
2-Chlorotoluene	95-49-8	126.60	ND		ND	260000		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	3.0		15	120000		120000	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	ND		ND	LFC		450000	
Benzyl chloride	100-44-7	126.00	ND		ND	5200		5200	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	300000		300000	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	37000		N.E.	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	210		N.E.	
Naphthalene	91-20-3	128.17	ND		ND	52000		52000	

**The concentrations of each isomer should be added if multiple isomers are present and compared to the total screening level.

The > column is used to flag exceedences as marked

Exposure Limit Definitions

REL= Recommended Exposure Limit, PEL= Permissible Exposure Limit

Agency Definitions

NIOSH= The National Institute for Occupational Safety and Health

Reference

Occupational Safety and Health Administration (OSHA) General Industry Air Contaminants Standard (29 CFR 1910.1000)

Compound Exposure Definitions

NE= No Limit Established

LFC= Lowest Feasible Concentration

NS= No Screening Value



NJDEP Certification #: 03036

**EMSL Analytical**

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Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: 491700999

EMSL Sample #: 491700999-2

Customer ID: TTIE54

Customer PO: 23650

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: 856-840-8800

Fax: 856-840-8815

Date Collected: 10/3/2017

Date Received: 10/4/2017

Project: 17-1224 Pinelands Regional

Sample ID: Upperlevel - Media

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/05/2017	MTH	P0922.D	E0657	280 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
Propylene	115-07-1	42.08	2.0		3.5	3100		13000	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.50		2.5	100		440	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.90	ND		ND	N.E.		N.E.	
Chloromethane	74-87-3	50.49	1.7		3.6	94.0		390	
n-Butane	106-97-8	58.12	29		70	N.E.		N.E.	
Vinyl chloride	75-01-4	62.50	ND		ND	0.170		2.80	
1,3-Butadiene	106-99-0	54.09	ND		ND	0.0940		0.410	
Bromomethane	74-83-9	94.94	ND		ND	5.20		22.0	
Chloroethane	75-00-3	64.52	ND		ND	10000		44000	
Ethanol	64-17-5	46.07	48	E	90	N.E.		N.E.	
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	0.0880		0.380	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	4.2		24	N.E.		N.E.	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.0		17	210		880	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.40	ND		ND	31000		130000	
Acetone	67-64-1	58.08	9.9		24	32000		140000	
1,1-Dichloroethene	75-35-4	96.94	ND		ND	210		880	
Acetonitrile	75-05-8	41.00	ND		ND	63.0		260	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	N.E.		N.E.	
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	N.E.		N.E.	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	0.470		2.00	
Carbon disulfide	75-15-0	76.14	ND		ND	730		3100	
Methylene chloride	75-09-2	84.94	ND		ND	100		1200	
Acrylonitrile	107-13-1	53.00	ND		ND	0.0410		0.180	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	11.0		47.0	
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	N.E.		N.E.	
n-Hexane	110-54-3	86.17	8.1		28	730		3100	
1,1-Dichloroethane	75-34-3	98.96	ND		ND	1.80		7.70	
Vinyl acetate	108-05-4	86.00	ND		ND	210		880	
2-Butanone(MEK)	78-93-3	72.10	ND		ND	5200		22000	
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	N.E.		N.E.	
Ethyl acetate	141-78-6	88.10	ND		ND	73.0		310	
Chloroform	67-66-3	119.40	ND		ND	0.120		0.530	
Tetrahydrofuran	109-99-9	72.11	ND		ND	2100		8800	
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	5200		22000	
Cyclohexane	110-82-7	84.16	2.9		10	6300		26000	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	6.7		31	N.E.		N.E.	
Carbon tetrachloride	56-23-5	153.80	ND		ND	0.470		2.00	
n-Heptane	142-82-5	100.20	8.7		35	N.E.		N.E.	
1,2-Dichloroethane	107-06-2	98.96	ND		ND	0.110		0.470	
Benzene	71-43-2	78.11	2.8		8.9	0.360		1.60	
Trichloroethene	79-01-6	131.40	ND		ND	0.480		3.00	
1,2-Dichloropropane	78-87-5	113.00	ND		ND	0.280		1.20	
Methyl Methacrylate	80-62-6	100.12	ND		ND	730		3100	
Bromodichloromethane	75-27-4	163.80	ND		ND	0.0760		0.330	
1,4-Dioxane	123-91-1	88.12	ND		ND	0.560		2.50	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	3100		13000	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491700999**
 EMSL Sample #: **491700999-2**
 Customer ID: **TTIE54**
 Customer PO: **23650**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: **17-1224 Pinelands Regional**Sample ID: **Upperlevel - Media**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/05/2017	MTH	P0922.D	E0657	280 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
cis-1,3-Dichloropropene**	10061-01-5	111.00	ND		ND	N.E.		N.E.	
Toluene	108-88-3	92.14	15		58	5200		22000	
trans-1,3-Dichloropropene**	10061-02-6	111.00	ND		ND	N.E.		N.E.	
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	0.180		0.770	
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	31.0		130	
Tetrachloroethene	127-18-4	165.80	ND		ND	11.0		47.0	
Dibromochloromethane	124-48-1	208.30	ND		ND	N.E.		N.E.	
1,2-Dibromoethane	106-93-4	187.80	ND		ND	0.00470		0.0200	
Chlorobenzene	108-90-7	112.60	ND		ND	52.0		220	
Ethylbenzene	100-41-4	106.20	8.4		37	1.10		4.90	
Xylene (p,m)	1330-20-7	106.20	25		110	100		440	
Xylene (Ortho)	95-47-6	106.20	12		53	100		440	
Styrene	100-42-5	104.10	ND		ND	1000		4400	
Isopropylbenzene (cumene)	98-82-8	120.19	3.9		19	420		1800	
Bromoform	75-25-2	252.80	ND		ND	2.60		11.0	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	0.0480		0.210	
4-Ethyltoluene	622-96-8	120.20	31		150	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	17		85	N.E.		N.E.	
2-Chlorotoluene	95-49-8	126.60	ND		ND	N.E.		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	37		180	7.30		31.0	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	ND		ND	0.260		1.10	
Benzyl chloride	100-44-7	126.00	ND		ND	0.0570		0.250	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	210		880	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	2.10		8.80	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	0.130		0.560	
Naphthalene	91-20-3	128.17	2.1		11	0.0830		0.360	

**The concentrations of each isomer should be added if multiple isomers are present and compared to the total screening level.

The > column is used to flag exceedences as marked

Exposure Limit Definitions

RSL= Regional Screening Level (Target Hazard Quotient (THQ)=0.1 if available, otherwise THQ = 1)

Agency Definitions

United States Environmental Protection Agency

Reference

EPA Regional Screening Levels (RSLs), May 2016

Compound Exposure Definitions

NE= No Limit Established

LFC= Lowest Feasible Concentration

NS= No Screening Value

Regional Screening Level Definition

Target Hazard Quotients (THQ)=0.1 is used for screening when multiple contaminants of concern are



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491700999**EMSL Sample #: **491700999-2**Customer ID: **TTIE54**Customer PO: **23650**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: **17-1224 Pinelands Regional**Sample ID: **Upperlevel - Media**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	10/05/2017	MTH	P0922.D	E0657	280 cc	1

NIOSH and OSHA Exposure Limit Comparisons

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	NIOSH REL ug/m3	>	OSHA PEL ug/m3	>
Propylene	115-07-1	42.08	2.0		3.5	N.E.		N.E.	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.50		2.5	4900000		4900000	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.90	ND		ND	7000000		7000000	
Chloromethane	74-87-3	50.49	1.7		3.6	LFC		210000	
n-Butane	106-97-8	58.12	29		70	1900000		1900000	
Vinyl chloride	75-01-4	62.50	ND		ND	LFC		2600	
1,3-Butadiene	106-99-0	54.09	ND		ND	LFC		2200	
Bromomethane	74-83-9	94.94	ND		ND	LFC		78000	
Chloroethane	75-00-3	64.52	ND		ND	LFC		2600000	
Ethanol	64-17-5	46.07	48	E	90	1900000		1900000	
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	LFC		N.E.	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	4.2		24	5600000		5600000	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.0		17	980000		980000	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.40	ND		ND	7700000		7700000	
Acetone	67-64-1	58.08	9.9		24	590000		2400000	
1,1-Dichloroethene	75-35-4	96.94	ND		ND	790000		790000	
Acetonitrile	75-05-8	41.00	ND		ND	34000		67000	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	300000		300000	
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	880000		880000	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	3100		3100	
Carbon disulfide	75-15-0	76.14	ND		ND	3100		62000	
Methylene chloride	75-09-2	84.94	ND		ND	LFC		87000	
Acrylonitrile	107-13-1	53.00	ND		ND	2200		4300	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	N.E.		N.E.	
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	790000		790000	
n-Hexane	110-54-3	86.17	8.1		28	180000		1800000	
1,1-Dichloroethane	75-34-3	98.96	ND		ND	400000		400000	
Vinyl acetate	108-05-4	86.00	ND		ND	14000		N.E.	
2-Butanone(MEK)	78-93-3	72.10	ND		ND	590000		590000	
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	790000		790000	
Ethyl acetate	141-78-6	88.10	ND		ND	1400000		1400000	
Chloroform	67-66-3	119.40	ND		ND	9800		240000	
Tetrahydrofuran	109-99-9	72.11	ND		ND	590000		590000	
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	1900000		1900000	
Cyclohexane	110-82-7	84.16	2.9		10	1000000		1000000	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	6.7		31	N.E.		N.E.	
Carbon tetrachloride	56-23-5	153.80	ND		ND	13000		63000	
n-Heptane	142-82-5	100.20	8.7		35	350000		2000000	
1,2-Dichloroethane	107-06-2	98.96	ND		ND	4000		200000	
Benzene	71-43-2	78.11	2.8		8.9	320		3200	
Trichloroethene	79-01-6	131.40	ND		ND	130000		540000	
1,2-Dichloropropane	78-87-5	113.00	ND		ND	LFC		350000	
Methyl Methacrylate	80-62-6	100.12	ND		ND	410000		410000	
Bromodichloromethane	75-27-4	163.80	ND		ND	N.E.		N.E.	
1,4-Dioxane	123-91-1	88.12	ND		ND	3600		360000	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	200000		410000	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491700999**
 EMSL Sample #: **491700999-2**
 Customer ID: **TTIE54**
 Customer PO: **23650**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/3/2017**
 Date Received: **10/4/2017**

Project: **17-1224 Pinelands Regional**

Sample ID: **Upperlevel - Media**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/05/2017	MTH	P0922.D	E0657	280 cc	1

NIOSH and OSHA Exposure Limit Comparisons

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	NIOSH REL ug/m3	>	OSHA PEL ug/m3	>
cis-1,3-Dichloropropene**	10061-01-5	111.00	ND		ND	4500		N.E.	
Toluene	108-88-3	92.14	15		58	380000		750000	
trans-1,3-Dichloropropene**	10061-02-6	111.00	ND		ND	4500		N.E.	
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	55000		55000	
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	4100		410000	
Tetrachloroethene	127-18-4	165.80	ND		ND	LFC		680000	
Dibromochloromethane	124-48-1	208.30	ND		ND	N.E.		N.E.	
1,2-Dibromoethane	106-93-4	187.80	ND		ND	350		150000	
Chlorobenzene	108-90-7	112.60	ND		ND	N.E.		350000	
Ethylbenzene	100-41-4	106.20	8.4		37	430000		430000	
Xylene (p,m)	1330-20-7	106.20	25		110	430000		430000	
Xylene (Ortho)	95-47-6	106.20	12		53	430000		430000	
Styrene	100-42-5	104.10	ND		ND	210000		430000	
Isopropylbenzene (cumene)	98-82-8	120.19	3.9		19	250000		250000	
Bromoform	75-25-2	252.80	ND		ND	5200		5200	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	6900		34000	
4-Ethyltoluene	622-96-8	120.20	31		150	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	17		85	120000		120000	
2-Chlorotoluene	95-49-8	126.60	ND		ND	260000		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	37		180	120000		120000	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	ND		ND	LFC		450000	
Benzyl chloride	100-44-7	126.00	ND		ND	5200		5200	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	300000		300000	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	37000		N.E.	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	210		N.E.	
Naphthalene	91-20-3	128.17	2.1		11	52000		52000	

**The concentrations of each isomer should be added if multiple isomers are present and compared to the total screening level.

The > column is used to flag exceedences as marked

Exposure Limit Definitions

REL= Recommended Exposure Limit, PEL= Permissible Exposure Limit

Agency Definitions

NIOSH= The National Institute for Occupational Safety and Health

Reference

Occupational Safety and Health Administration (OSHA) General Industry Air Contaminants Standard (29 CFR 1910.1000)

Compound Exposure Definitions

NE= No Limit Established

LFC= Lowest Feasible Concentration

NS= No Screening Value



NJDEP Certification #: 03036

PO# 023771
24 hr TAT

1253 North Church Street, Moorestown, NJ 08057
856-840-8800 Fax 856-840-8815



041730605

E-MAIL ALL RESULTS AND COC TO: ih-lab@ttienrv.com

PLM Sampling Data and Chain of Custody Record

PROJECT #: 17-1724		CLIENT: Pinelands Regional BoE		TTI PROJECT MANAGER: ☒ Jim Guillard ☐ Michael Stocku		DATE: 10-18-17	
SAMPLER(S): A. Culliton		CLIENT CONTACT: C. Sims		FACILITY: Pinelands Regional High School		Sample Container	
Sample #	Sample Location	Material Description	Sample Container				
101817-01	Playground by ANNEX	Wood Chips - Top Layer	Whirl Pak				
101817-02	↓	↓					
101817-03	↓	↓					
101817-04	Playground by ANNEX	Wood Chips - Bottom Layer					
101817-05	↓	↓					
101817-06	↓	↓					
101817-07	Playground by ANNEX	Debris in Wood Chips					
RECEIVED TIMOTHY J. CANNAMON, N.J. 2017 OCT 20 10:30 AM							
7							
Relinquished by: (Signature)		Date		Time		Relinquished by: (Signature)	
[Signature]		10-20-17		15:05		[Signature]	
Relinquished by: (Signature)		Date		Time		Relinquished by: (Signature)	
[Signature]		10-20-17		3pm		[Signature]	
PO # 023771		Hour Turnaround Time		Stop First Positive			
NOB MATERIALS:							
☐ Perform TEM analysis of 1 st sample in each homogeneous group. (Initials)							
☐ For NOB samples with insufficient material for TEM analysis, please perform composite analysis using material from other samples in the same homogeneous group. (Initials)							
☐ For NOB samples, please stop analysis when the following number of samples have been analyzed. (Initials)							
☐ Perform Composite Analysis on positive sheetrock/joint compound samples. (Initials)							

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order: 041730605

Customer ID: TTIE54

Customer PO: 023771

Project ID:

Attention: Jim Guillard

TTI Environmental Inc.

1253 North Church Street

Moorestown, NJ 08057

Phone: (856) 840-8800

Fax: (856) 840-8815

Received Date: 10/20/2017 3:00 PM

Analysis Date: 10/25/2017

Collected Date: 10/18/2017

Project: 17-1224 / Pinelands Regional BOE / Pinelands Regional High School

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
101817-01 041730605-0001	Playground by ANNEX - Wood Chips - Top Layer	Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
101817-02 041730605-0002	Playground by ANNEX - Wood Chips - Top Layer	Tan/Beige Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
101817-03 041730605-0003	Playground by ANNEX - Wood Chips - Top Layer	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
101817-04 041730605-0004	Playground by ANNEX - Woods Chips - Bottom Layer	Brown/Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
101817-05 041730605-0005	Playground by ANNEX - Woods Chips - Bottom Layer	Brown/Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
101817-06 041730605-0006	Playground by ANNEX - Woods Chips - Bottom Layer	Brown/Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
101817-07 041730605-0007	Playground by ANNEX - Denris in Wood Chips	Brown/Gray/Black Fibrous Homogeneous	55% Cellulose 10% Glass	30% Non-fibrous (Other)	5% Chrysotile

Analyst(s)

Essie Spencer (5)

Quynh Vu (2)


Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036. PA ID# 68-00367

Initial report from: 10/25/2017 14:17:19

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491701014**Customer ID: **TTIE54**Customer PO: **23691**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**Fax: **856-840-8815**Project: **17-1224 / Pinelands Regional High School**Date Collected: **10/9/2017**Date Received: **10/10/2017****Laboratory Report- Sample Summary**

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
491701014-0001	Room 164	10/9/2017	2:37 PM
491701014-0002	Upper Level Media	10/9/2017	2:48 PM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report Date:
10/11/2017

Report Revision
R0

Revision Comments
Initial Report

Marjorie Howley, Laboratory Manager
or other approved signatory

Test results meet all NELAP requirements unless otherwise specified.

**EMSL Analytical**

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Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701014**
 EMSL Sample #: **491701014-1**
 Customer ID: **TTIE54**
 Customer PO: **23691**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/9/2017**
 Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Room 164**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2266.D	E0513	280 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	ND	0.50		ND	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	ND	0.50		ND	1.0	
n-Butane	106-97-8	58.12	1.1	0.50		2.6	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	25	0.50		47	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	0.97	0.50		5.5	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	5.6	0.50		14	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	8.5	0.50		20	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.67	0.50		2.4	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	8.8	0.50		32	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	0.64	0.50		3.0	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

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Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/9/2017**
 Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**

Sample ID: **Room 164**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2266.D	E0513	280 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	2.7	0.50		10	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.86	0.50		3.7	2.2	
Xylene (p,m)	1330-20-7	106.2	2.9	1.0		13	4.3	
Xylene (Ortho)	95-47-6	106.2	1.3	0.50		5.4	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	3.0	0.50		15	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.4	0.50		6.9	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	4.5	0.50		22	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			68	ppbv		200	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

11

Spike

10

Recovery

110%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

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EMSL Order #: **491701014**
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 Customer ID: **TTIE54**
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Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/9/2017**
 Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Room 164**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2266.D	E0513	280 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
n-Butane	106-97-8	58.12	1.1	0.50		2.6	1.2	
Ethanol	64-17-5	46.07	25	0.50		47	0.94	
Freon 11 (Trichlorofluoromethane)	75-69-4	137.40	0.97	0.50		5.5	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	5.6	0.50		14	1.2	
Acetone	67-64-1	58.08	8.5	0.50		20	1.2	
n-Hexane	110-54-3	86.17	0.67	0.50		2.4	1.8	
Ethyl acetate	141-78-6	88.10	8.8	0.50		32	1.8	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	0.64	0.50		3.0	2.3	
Toluene	108-88-3	92.14	2.7	0.50		10	1.9	
Ethylbenzene	100-41-4	106.20	0.86	0.50		3.7	2.2	
Xylene (p,m)	1330-20-7	106.20	2.9	1.0		13	4.3	
Xylene (Ortho)	95-47-6	106.20	1.3	0.50		5.4	2.2	
4-Ethyltoluene	622-96-8	120.2	3.0	0.50		15	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.4	0.50		6.9	2.5	
1,2,4-Trimethylbenzene	95-63-6	120.20	4.5	0.50		22	2.5	
Total Target Compound Concentrations:			68	ppbv		200	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Butane, 2-methyl-	000078-78-4	72	1.4		JN	4.0	9.29	
Pentane	000109-66-0	72	25		JN	75	10.11	
unknown		92	1.2		JN	4.6	17.6	
unknown		92	2.3		JN	8.6	20.97	
unknown hydrocarbon		92	3.0		JN	11	22.88	
Nonane	000111-84-2	128	4.7		JN	25	23.93	
unknown hydrocarbon		92	2.3		JN	8.6	24.81	
unknown		92	1.4		JN	5.2	25.04	
unknown hydrocarbon		92	3.0		JN	11	25.84	
Decane	000124-18-5	142	8.2		JN	47	26.53	
unknown hydrocarbon		92	4.4		JN	17	27.02	
Unknown Substituted Benzene		92	1.3		JN	4.9	27.84	
Unknown Substituted Cyclohexane		92	2.9		JN	11	28.25	
Undecane	001120-21-4	156	2.2		JN	14	28.92	
Unknown Substituted Benzene		92	1.8		JN	6.8	29.09	
Unknown Substituted Benzene		92	1.2		JN	4.6	29.21	
Unknown Substituted Benzene		92	1.9		JN	7.3	29.32	
Unknown Substituted Benzene		92	2.1		JN	7.9	29.45	
unknown		92	1.7		JN	6.5	29.71	
Total TIC Concentrations:			72	ppbv		280	ug/m3	

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Date Collected: **10/9/2017**
Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Room 164**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2266.D	E0513	280 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs): **140 ppbv****480 ug/m3**

NJDEP Certification #: 03036

**EMSL Analytical**

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EMSL Order #: **491701014**
 EMSL Sample #: **491701014-2**
 Customer ID: **TTIE54**
 Customer PO: **23691**

Attn: **Jim Guilardi**
TTI Environmental Inc.
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Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/9/2017**
 Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Upper Level Media**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2267.D	E0610	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.55	0.50		2.7	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	ND	0.50		ND	1.0	
n-Butane	106-97-8	58.12	7.6	0.50		18	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	25	0.50		46	0.94	
Bromoethane(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	1.3	0.50		7.2	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	5.1	0.50		12	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	7.9	0.50		19	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	1.1	0.50		3.8	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.1	0.50		7.5	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

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EMSL Order #: **491701014**
 EMSL Sample #: **491701014-2**
 Customer ID: **TTIE54**
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Phone: **856-840-8800**
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 Date Collected: **10/9/2017**
 Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Upper Level Media**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2267.D	E0610	302.5 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	0.67	0.50		2.5	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.58	0.50		2.5	2.2	
Xylene (p,m)	1330-20-7	106.2	1.9	1.0		8.2	4.3	
Xylene (Ortho)	95-47-6	106.2	0.71	0.50		3.1	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	1.5	0.50		7.5	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.69	0.50		3.4	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	2.4	0.50		12	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			59	ppbv		160	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

10

Spike

10

Recovery

100%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701014**
 EMSL Sample #: **491701014-2**
 Customer ID: **TTIE54**
 Customer PO: **23691**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
 Fax: **856-840-8815**
 Date Collected: **10/9/2017**
 Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Upper Level Media**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2267.D	E0610	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.55	0.50		2.7	2.5	
n-Butane	106-97-8	58.12	7.6	0.50		18	1.2	
Ethanol	64-17-5	46.07	25	0.50		46	0.94	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	1.3	0.50		7.2	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	5.1	0.50		12	1.2	
Acetone	67-64-1	58.08	7.9	0.50		19	1.2	
n-Hexane	110-54-3	86.17	1.1	0.50		3.8	1.8	
Ethyl acetate	141-78-6	88.10	2.1	0.50		7.5	1.8	
Toluene	108-88-3	92.14	0.67	0.50		2.5	1.9	
Ethylbenzene	100-41-4	106.20	0.58	0.50		2.5	2.2	
Xylene (p,m)	1330-20-7	106.20	1.9	1.0		8.2	4.3	
Xylene (Ortho)	95-47-6	106.20	0.71	0.50		3.1	2.2	
4-Ethyltoluene	622-96-8	120.2	1.5	0.50		7.5	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	0.69	0.50		3.4	2.5	
1,2,4-Trimethylbenzene	95-63-6	120.20	2.4	0.50		12	2.5	
Total Target Compound Concentrations:			59	ppbv		160	ug/m3	

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv		Q	Result ug/m3	Retention Time	Comments
Difluorochloromethane	000075-45-6	86	5.5		JN	19	6.56	
Pentane	000109-66-0	72	37		JN	110	10.13	
unknown hydrocarbon		92	1.7		JN	6.4	20.97	
unknown hydrocarbon		92	2.0		JN	7.3	22.89	
Nonane	000111-84-2	128	3.3		JN	17	23.93	
unknown hydrocarbon		92	1.4		JN	5.4	24.82	
unknown hydrocarbon		92	1.9		JN	7.0	25.84	
Decane	000124-18-5	142	6.5		JN	38	26.54	
unknown hydrocarbon		92	3.1		JN	12	27.02	
Unknown Substituted Cyclohexane		92	1.9		JN	7.2	28.26	
D-Limonene	005989-27-5	136	1.1		JN	6.0	28.54	
Undecane	001120-21-4	156	4.5		JN	29	28.92	
unknown		92	1.1		JN	4.1	29.32	
Total TIC Concentrations:			71	ppbv		270	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491701014**
EMSL Sample #: **491701014-2**
Customer ID: **TTIE54**
Customer PO: **23691**

Attn: **Jim Guilardi**
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: **856-840-8800**
Fax: **856-840-8815**
Date Collected: **10/9/2017**
Date Received: **10/10/2017**

Project: **17-1224 / Pinelands Regional High School**Sample ID: **Upper Level Media**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	10/10/2017	TP	J2267.D	E0610	302.5 cc	1

Total Volatile Organic Compounds (TVOC) Summary

Total Volatile Organic Compounds (TVOCs): **130 ppbv** **430 ug/m3**



NJDEP Certification #: 03036



EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Ph. (800) 220-3675
Fax (856) 786-0327

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491700917**
 EMSL Sample #: **491700917-1**
 Customer ID: **AHER50**
 Customer PO: **Not Available**

Attn: **John Smoyer**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **9/8/2017**
 Date Received: **9/8/2017**

Project: **Pinelands Regional H.S.**Sample ID: **7284701-Stage Right**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/11/2017	KW	P0700.D	E0386	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.52	0.50		2.6	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.71	0.50		1.5	1.0	
n-Butane	106-97-8	58.12	0.70	0.50		1.7	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	5.0	0.50		9.4	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.0	0.50		4.9	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	5.4	0.50		13	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	28	0.50		100	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	ND	0.50		ND	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	29	0.50		100	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	0.93	0.50		3.8	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491700917**
 EMSL Sample #: **491700917-1**
 Customer ID: **AHER50**
 Customer PO: **Not Available**

Attn: **John Smoyer**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **9/8/2017**
 Date Received: **9/8/2017**

Project: **Pinelands Regional H.S.**Sample ID: **7284701-Stage Right**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/11/2017	KW	P0700.D	E0386	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	7.5	0.50		28	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	1.2	0.50		5.4	2.2	
Xylene (p,m)	1330-20-7	106.2	6.2	1.0		27	4.3	
Xylene (Ortho)	95-47-6	106.2	2.0	0.50		8.6	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	2.7	0.50		13	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	1.2	0.50		5.9	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	4.1	0.50		20	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			100	ppbv		340	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

10

Spike

10

Recovery

100%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

Attn: **John Smoyer**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

Phone: 609-652-1833
Fax: 609-652-1140
Date Collected: 9/8/2017
Date Received: 9/8/2017

Project: **Pinelands Regional H.S.**

Sample ID: 7284701-Stage Right

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/11/2017	KW	P0700.D	E0386	250 cc	1

Tentatively Identified Compound Results Summary

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv	Q	Result ug/m3	Retention Time	Comments
Pentane	000109-66-0	72	49	JN	140	8.82	
Pentane, 2-methyl-	000107-83-5	86	9.7	JN	34	12.45	
Acetic acid, methyl ester	000079-20-9	74	63	JN	190	12.63	
Pentane, 3-methyl-	000096-14-0	86	13	JN	46	13.40	
Pentane, 2,2-dimethyl-	000590-35-2	100	7.0	JN	29	15.41	
Pentane, 2,4-dimethyl-	000108-08-7	100	7.1	JN	29	15.67	
Unknown hydrocarbon		92	2.7	JN	10	16.22	
Cyclopentane, methyl-	000096-37-7	84	9.4	JN	32	16.52	
Unknown hydrocarbon		92	3.2	JN	12	17.18	
Hexane, 2-methyl-	000591-76-4	100	15	JN	63	17.55	
Hexane, 3-methyl-	000589-34-4	100	9.0	JN	37	18.00	
Benzene, 1-chloro-4-(trifluorometh	000098-56-6	180	45	JN	330	25.12	
Nonane	000111-84-2	128	6.5	JN	34	25.24	
Unknown hydrocarbon		92	2.9	JN	11	26.04	
2-Heptanone	000110-43-0	114	2.8	JN	13	26.15	
Unknown hydrocarbon		92	2.7	JN	10	26.94	
Decane	000124-18-5	142	15	JN	87	27.56	
Decane, 4-methyl-	002847-72-5	156	4.0	JN	25	28.00	
Unknown		92	4.9	JN	18	29.01	
Undecane	001120-21-4	156	8.4	JN	54	29.62	
Total TIC Concentrations:			280	ppbv	1200	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036



External Chain of Custody/ Field Test Data Sheet

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Ph. (800) 220-3675
Fax (856) 786-0327

EMSL Order Number (Lab Use Only):

491700917

Report To Contact Name: JOHN SMYER		Bill To Company: (SAME)		Sampled By (Sign): John Smyer	
Company Name: AHERA CONSULTANTS INC		Attention To:		Sampled By (Name): JOHN SMYER	
Address 1: PO BOX 385		Address 1:		Total # of Samples: 1	
Address 2: OCEANVILLE, NJ 08231		Address 2:		Date Shipped: 9/8/2017	
Phone No.: 609.652.1133	Fax: 609.652.1140	Phone No.: 17-2847-	Fax:	Sample Collection Zip Code: 08087	

Email Results To: AMERA@COMCAST.NET **Project Name:** PINELANDS REGIONAL H.S. **Purchase Order:**

Turnaround Time (in Business Days):						Reporting Format:						Analysis		Matrix	
☐ 5 Day	☐ 4 Day	☒ 3 Day	☐ 2 Day	☐ 1 Day	☐ Other	☐ 10 Day Standard	☐ Full Deliverables (Surcharge may apply)	☐ Other							

[illegible]

Comments:		Lab Canister Certification Analyst Signature (TO-15):
-----------	--	--

Relinquished by:	Date/ Time	Received by:	Date/ Time	Seal #/Intact	Reason for Exchange (circle appropriate)
<i>[Signature]</i>	9/8/17/0651	<i>[Signature]</i>			Shipping Courier Receiving Sampling <u>Other</u> PKC
<i>[Signature]</i>	9/8/17/	<i>[Signature]</i> Lwi	9/8/17 535pm		Shipping Courier Receiving Sampling Other:
<i>[Signature]</i>	9/8/17 535pm	<i>[Signature]</i> Mard	9/14/17/0752		Shipping Courier Receiving Sampling Other:
					Shipping Courier Receiving Sampling Other:
					Shipping Courier Receiving Sampling Other:

5 of 6



**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491700811**EMSL Sample #: **491700811-3**Customer ID: **AHER50**Customer PO: **Not Available**

Attn: **Domenic D'Errico**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **8/10/2017**
 Date Received: **8/10/2017**

Project: **Pinelands Junior HS**Sample ID: **Cafeteria**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	08/12/2017	TP	J1595.D	E15641	250 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
Propylene	115-07-1	42.08	ND		ND	3100		13000	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.73		3.6	100		440	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.90	ND		ND	N.E.		N.E.	
Chloromethane	74-87-3	50.49	ND		ND	94.0		390	
n-Butane	106-97-8	58.12	3.4		8.1	N.E.		N.E.	
Vinyl chloride	75-01-4	62.50	ND		ND	0.170		2.80	
1,3-Butadiene	106-99-0	54.09	ND		ND	0.0940		0.410	
Bromomethane	74-83-9	94.94	ND		ND	5.20		22.0	
Chloroethane	75-00-3	64.52	ND		ND	10000		44000	
Ethanol	64-17-5	46.07	20		37	N.E.		N.E.	
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	0.0880		0.380	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	8.5		48	N.E.		N.E.	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.5		6.2	210		880	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.40	ND		ND	31000		130000	
Acetone	67-64-1	58.08	8.8		21	32000		140000	
1,1-Dichloroethene	75-35-4	96.94	ND		ND	210		880	
Acetonitrile	75-05-8	41.00	ND		ND	63.0		260	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	N.E.		N.E.	
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	N.E.		N.E.	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	0.470		2.00	
Carbon disulfide	75-15-0	76.14	ND		ND	730		3100	
Methylene chloride	75-09-2	84.94	1.2		4.1	100		1200	
Acrylonitrile	107-13-1	53.00	ND		ND	0.0410		0.180	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	11.0		47.0	
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	N.E.		N.E.	
n-Hexane	110-54-3	86.17	ND		ND	730		3100	
1,1-Dichloroethane	75-34-3	98.96	ND		ND	1.80		7.70	
Vinyl acetate	108-05-4	86.00	ND		ND	210		880	
2-Butanone(MEK)	78-93-3	72.10	1.9		5.7	5200		22000	
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	N.E.		N.E.	
Ethyl acetate	141-78-6	88.10	2.0		7.3	73.0		310	
Chloroform	67-66-3	119.40	ND		ND	0.120		0.530	
Tetrahydrofuran	109-99-9	72.11	ND		ND	2100		8800	
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	5200		22000	
Cyclohexane	110-82-7	84.16	ND		ND	6300		26000	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	ND		ND	N.E.		N.E.	
Carbon tetrachloride	56-23-5	153.80	ND		ND	0.470		2.00	
n-Heptane	142-82-5	100.20	ND		ND	N.E.		N.E.	
1,2-Dichloroethane	107-06-2	98.96	ND		ND	0.110		0.470	
Benzene	71-43-2	78.11	ND		ND	0.360		1.60	
Trichloroethene	79-01-6	131.40	ND		ND	0.480		3.00	
1,2-Dichloropropane	78-87-5	113.00	ND		ND	0.280		1.20	
Methyl Methacrylate	80-62-6	100.12	ND		ND	730		3100	
Bromodichloromethane	75-27-4	163.80	ND		ND	0.0760		0.330	
1,4-Dioxane	123-91-1	88.12	ND		ND	0.560		2.50	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	3100		13000	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491700811**
 EMSL Sample #: **491700811-3**
 Customer ID: **AHER50**
 Customer PO: **Not Available**

Attn: **Domenic D'Errico**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **8/10/2017**
 Date Received: **8/10/2017**

Project: **Pinelands Junior HS**Sample ID: **Cafeteria**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	08/12/2017	TP	J1595.D	E15641	250 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
cis-1,3-Dichloropropene**	10061-01-5	111.00	ND		ND	N.E.		N.E.	
Toluene	108-88-3	92.14	ND		ND	5200		22000	
trans-1,3-Dichloropropene**	10061-02-6	111.00	ND		ND	N.E.		N.E.	
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	0.180		0.770	
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	31.0		130	
Tetrachloroethene	127-18-4	165.80	ND		ND	11.0		47.0	
Dibromochloromethane	124-48-1	208.30	ND		ND	N.E.		N.E.	
1,2-Dibromoethane	106-93-4	187.80	ND		ND	0.00470		0.0200	
Chlorobenzene	108-90-7	112.60	ND		ND	52.0		220	
Ethylbenzene	100-41-4	106.20	ND		ND	1.10		4.90	
Xylene (p,m)	1330-20-7	106.20	ND		ND	100		440	
Xylene (Ortho)	95-47-6	106.20	ND		ND	100		440	
Styrene	100-42-5	104.10	ND		ND	1000		4400	
Isopropylbenzene (cumene)	98-82-8	120.19	ND		ND	420		1800	
Bromoform	75-25-2	252.80	ND		ND	2.60		11.0	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	0.0480		0.210	
4-Ethyltoluene	622-96-8	120.20	0.84		4.1	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	0.54		2.7	N.E.		N.E.	
2-Chlorotoluene	95-49-8	126.60	ND		ND	N.E.		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	1.4		6.6	7.30		31.0	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	ND		ND	0.260		1.10	
Benzyl chloride	100-44-7	126.00	ND		ND	0.0570		0.250	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	210		880	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	2.10		8.80	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	0.130		0.560	
Naphthalene	91-20-3	128.17	ND		ND	0.0830		0.360	

**The concentrations of each isomer should be added if multiple isomers are present and compared to the total screening level.

The > column is used to flag exceedences as marked

Exposure Limit Definitions

RSL= Regional Screening Level {Target Hazard Quotient (THQ)=0.1 if available, otherwise THQ = 1}

Agency Definitions

United States Environmental Protection Agency

Reference

EPA Regional Screening Levels (RSLs), May 2016

Compound Exposure Definitions

NE= No Limit Established

LFC= Lowest Feasible Concentration

NS= No Screening Value

Regional Screening Level Definition

Target Hazard Quotients (THQ)=0.1 is used for screening when multiple contaminants of concern are



NJDEP Certification #: 03036

**EMSL Analytical**

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Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491700811**EMSL Sample #: **491700811-3**Customer ID: **AHER50**Customer PO: **Not Available**

Attn: **Domenic D'Errico**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **8/10/2017**
 Date Received: **8/10/2017**

Project: **Pinelands Junior HS**Sample ID: **Cafeteria**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	08/12/2017	TP	J1595.D	E15641	250 cc	1

Possible Background Sources of Contaminants

Target Compounds	CAS#	Result ppbv	Q	Result ug/m3	Use and Possible Sources
Freon 12(Dichlorodifluoromethane)	75-71-8	0.73		3.6	Refrigerant (CFCs) and cleaning solvent. Was phased out as a refrigerant in 1996. ¹
n-Butane	106-97-8	3.4		8.1	Aerosol spray products for some paints, cosmetics, automotive products, leather treatments, pesticides. ²
Ethanol	64-17-5	20		37	Hand sanitizers, disinfecting wipes. Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray. ²
Freon 11(Trichlorofluoromethane)	75-69-4	8.5		48	Refrigerant from air conditioners, freezers, refrigerators, dehumidifiers. ²
Isopropyl alcohol(2-Propanol)	67-63-0	2.5		6.2	Eye Glass Cleaners. Disinfecting wipes. Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray. ²
Acetone	67-64-1	8.8		21	Rubber cement, cleaning fluids, scented candles and nail polish remover. ¹
Methylene chloride	75-09-2	1.2		4.1	Methylene chloride is used as an industrial solvent and as a paint stripper. It may also be found in some aerosol and pesticide products and is used in the manufacture of photographic film. ⁴ Hairspray, paint stripper, rug cleaners, insecticides and furniture polish. ¹
2-Butanone(MEK)	78-93-3	1.9		5.7	2-Butanone is produced in large quantities. Nearly half of its use is in paints and other coatings because it will quickly evaporate into the air and it dissolves many substances. ⁴ Can occur from automobile exhaust, printing inks, fragrance/flavoring agent in candy and perfume, paint, glue, cleaning agents and cigarette smoke. ¹
Ethyl acetate	141-78-6	2.0		7.3	Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray. ²
4-Ethyltoluene	622-96-8	0.84		4.1	Used in commercial products, building products, or wood office furnishings. Flat water thinned interior paints and tinting bases. Scatter rugs, bathmats, and sets. ¹¹
1,3,5-Trimethylbenzene	108-67-8	0.54		2.7	1,3,5-Trimethylbenzene is used in dyes, solvents, paint thinners and plastics. 1,3,5-Trimethylbenzene is emitted into the air by emissions from gasoline-powered vehicles, waste treatment plants and coal-fired power stations. Occurs in petroleum and coal tar. ¹⁰
1,2,4-Trimethylbenzene	95-63-6	1.4		6.6	Gasoline additive and automobile exhaust. ¹

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Sources References

(1) NJDEP "Common Household Sources of Background Indoor Air Contamination". June 26, 2012

(2) NYSDOH "Volatile Organic Compounds (VOCs) in Commonly Used Products", 2007

(3) EPA, Air & Radiation, TTN Web - Technology Transfer Network/Air Toxics Web site, various years.

(4) Agency for Toxic Substances and Disease Registry (ATSDR). U.S. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 1998.

(5) OFFICE OF POLLUTION PREVENTION AND TOXICS, U.S. ENVIRONMENTAL PROTECTION AGENCY, August 1994, EPA 749-F-94-012a

(6) U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, OH. 1985.

(7) World Health Organization,

(8) Product Safety Assessment, Revised: November 19, 2010 The Dow Chemical Company

(9) California Office of Environmental Health Hazard Assessment, PROPOSED ACTION LEVEL FOR 2-CHLOROTOLUENE

(10) Delaware Health and Social Services, Division of Public Health, Revised: 01/2010

(11) USEPA, Envirofacts Master Chemical Integrator (EMCI), Scorecard, 4/10/2009



**EMSL Analytical**

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EMSL Order #: **491700811**
EMSL Sample #: **491700811-3**
Customer ID: **AHER50**
Customer PO: **Not Available**

Attn: **Domenic D'Errico**
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PO Box 385
Oceanville, NJ 08231-0385

Phone: **609-652-1833**
Fax: **609-652-1140**
Date Collected: **8/10/2017**
Date Received: **8/10/2017**

Project: **Pinelands Junior HS**

Sample ID: Cafeteria

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	08/12/2017	TP	J1595.D	E15641	250 cc	1

Possible Background Sources of Contaminants

Target Compounds	CAS#	Result ppbv	Q	Result ug/m3	Use and Possible Sources
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Phone/Fax: (856)858-4800 / (856)858-4571

<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491700811**EMSL Sample #: **491700811-1**Customer ID: **AHER50**Customer PO: **Not Available**

Attn: **Domenic D'Errico**
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PO Box 385
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Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **8/10/2017**
 Date Received: **8/10/2017**

Project: **Pinelands Junior HS**Sample ID: **Locker Room**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	08/12/2017	TP	J1594.D	E12305	250 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
Propylene	115-07-1	42.08	ND		ND	3100		13000	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	0.55		2.7	100		440	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.90	ND		ND	N.E.		N.E.	
Chloromethane	74-87-3	50.49	ND		ND	94.0		390	
n-Butane	106-97-8	58.12	4.6		11	N.E.		N.E.	
Vinyl chloride	75-01-4	62.50	ND		ND	0.170		2.80	
1,3-Butadiene	106-99-0	54.09	ND		ND	0.0940		0.410	
Bromomethane	74-83-9	94.94	ND		ND	5.20		22.0	
Chloroethane	75-00-3	64.52	ND		ND	10000		44000	
Ethanol	64-17-5	46.07	36		68	N.E.		N.E.	
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	0.0880		0.380	
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	4.3		24	N.E.		N.E.	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	1.7		4.3	210		880	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.40	ND		ND	31000		130000	
Acetone	67-64-1	58.08	15		35	32000		140000	
1,1-Dichloroethene	75-35-4	96.94	ND		ND	210		880	
Acetonitrile	75-05-8	41.00	ND		ND	63.0		260	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	N.E.		N.E.	
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	N.E.		N.E.	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	0.470		2.00	
Carbon disulfide	75-15-0	76.14	ND		ND	730		3100	
Methylene chloride	75-09-2	84.94	0.85		2.9	100		1200	
Acrylonitrile	107-13-1	53.00	ND		ND	0.0410		0.180	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	11.0		47.0	
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	N.E.		N.E.	
n-Hexane	110-54-3	86.17	ND		ND	730		3100	
1,1-Dichloroethane	75-34-3	98.96	ND		ND	1.80		7.70	
Vinyl acetate	108-05-4	86.00	ND		ND	210		880	
2-Butanone(MEK)	78-93-3	72.10	6.3		19	5200		22000	
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	N.E.		N.E.	
Ethyl acetate	141-78-6	88.10	0.99		3.6	73.0		310	
Chloroform	67-66-3	119.40	ND		ND	0.120		0.530	
Tetrahydrofuran	109-99-9	72.11	2.3		6.7	2100		8800	
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	5200		22000	
Cyclohexane	110-82-7	84.16	ND		ND	6300		26000	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	ND		ND	N.E.		N.E.	
Carbon tetrachloride	56-23-5	153.80	ND		ND	0.470		2.00	
n-Heptane	142-82-5	100.20	ND		ND	N.E.		N.E.	
1,2-Dichloroethane	107-06-2	98.96	ND		ND	0.110		0.470	
Benzene	71-43-2	78.11	ND		ND	0.360		1.60	
Trichloroethene	79-01-6	131.40	ND		ND	0.480		3.00	
1,2-Dichloropropane	78-87-5	113.00	ND		ND	0.280		1.20	
Methyl Methacrylate	80-62-6	100.12	ND		ND	730		3100	
Bromodichloromethane	75-27-4	163.80	ND		ND	0.0760		0.330	
1,4-Dioxane	123-91-1	88.12	ND		ND	0.560		2.50	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	3100		13000	

**EMSL Analytical**

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<http://www.EMSL.com> to15lab@EMSL.comEMSL Order #: **491700811**EMSL Sample #: **491700811-1**Customer ID: **AHER50**Customer PO: **Not Available**Attn: **Domenic D'Errico**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385Phone: **609-652-1833**
Fax: **609-652-1140**
Date Collected: **8/10/2017**
Date Received: **8/10/2017**Project: **Pinelands Junior HS**Sample ID: **Locker Room**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	08/12/2017	TP	J1594.D	E12305	250 cc	1

USEPA Generic Air Screening Level Summary Table

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Industrial ug/m3	>
cis-1,3-Dichloropropene**	10061-01-5	111.00	ND		ND	N.E.		N.E.	
Toluene	108-88-3	92.14	ND		ND	5200		22000	
trans-1,3-Dichloropropene**	10061-02-6	111.00	ND		ND	N.E.		N.E.	
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	0.180		0.770	
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	31.0		130	
Tetrachloroethene	127-18-4	165.80	ND		ND	11.0		47.0	
Dibromochloromethane	124-48-1	208.30	ND		ND	N.E.		N.E.	
1,2-Dibromoethane	106-93-4	187.80	ND		ND	0.00470		0.0200	
Chlorobenzene	108-90-7	112.60	ND		ND	52.0		220	
Ethylbenzene	100-41-4	106.20	ND		ND	1.10		4.90	
Xylene (p,m)	1330-20-7	106.20	ND		ND	100		440	
Xylene (Ortho)	95-47-6	106.20	ND		ND	100		440	
Styrene	100-42-5	104.10	ND		ND	1000		4400	
Isopropylbenzene (cumene)	98-82-8	120.19	ND		ND	420		1800	
Bromoform	75-25-2	252.80	ND		ND	2.60		11.0	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	0.0480		0.210	
4-Ethyltoluene	622-96-8	120.20	0.95		4.7	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	0.59		2.9	N.E.		N.E.	
2-Chlorotoluene	95-49-8	126.60	ND		ND	N.E.		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	1.5		7.4	7.30		31.0	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	ND		ND	0.260		1.10	
Benzyl chloride	100-44-7	126.00	ND		ND	0.0570		0.250	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	210		880	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	2.10		8.80	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	0.130		0.560	
Naphthalene	91-20-3	128.17	ND		ND	0.0830		0.360	

**The concentrations of each isomer should be added if multiple isomers are present and compared to the total screening level.

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Target Hazard Quotients (THQ)=0.1 is used for screening when multiple contaminants of concern are



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EMSL Order #: **491700811**
 EMSL Sample #: **491700811-1**
 Customer ID: **AHER50**
 Customer PO: **Not Available**

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Oceanville, NJ 08231-0385

Phone: **609-652-1833**
 Fax: **609-652-1140**
 Date Collected: **8/10/2017**
 Date Received: **8/10/2017**

Project: **Pinelands Junior HS**Sample ID: **Locker Room**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	08/12/2017	TP	J1594.D	E12305	250 cc	1

Possible Background Sources of Contaminants

Target Compounds	CAS#	Result ppbv	Q	Result ug/m3	Use and Possible Sources
Freon 12(Dichlorodifluoromethane)	75-71-8	0.55		2.7	Refrigerant (CFCs) and cleaning solvent. Was phased out as a refrigerant in 1996. ¹
n-Butane	106-97-8	4.6		11	Aerosol spray products for some paints, cosmetics, automotive products, leather treatments, pesticides. ²
Ethanol	64-17-5	36		68	Hand sanitizers, disinfecting wipes. Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray. ²
Freon 11(Trichlorofluoromethane)	75-69-4	4.3		24	Refrigerant from air conditioners, freezers, refrigerators, dehumidifiers. ²
Isopropyl alcohol(2-Propanol)	67-63-0	1.7		4.3	Eye Glass Cleaners. Disinfecting wipes. Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray. ²
Acetone	67-64-1	15		35	Rubber cement, cleaning fluids, scented candles and nail polish remover. ¹
Methylene chloride	75-09-2	0.85		2.9	Methylene chloride is used as an industrial solvent and as a paint stripper. It may also be found in some aerosol and pesticide products and is used in the manufacture of photographic film. ⁴ Hairspray, paint stripper, rug cleaners, insecticides and furniture polish. ¹
2-Butanone(MEK)	78-93-3	6.3		19	2-Butanone is produced in large quantities. Nearly half of its use is in paints and other coatings because it will quickly evaporate into the air and it dissolves many substances. ⁴ Can occur from automobile exhaust, printing inks, fragrance/flavoring agent in candy and perfume, paint, glue, cleaning agents and cigarette smoke. ¹
Ethyl acetate	141-78-6	0.99		3.6	Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray. ²
Tetrahydrofuran	109-99-9	2.3		6.7	PVC cement and primer, various adhesives, contact cement, model cement. ²
4-Ethyltoluene	622-96-8	0.95		4.7	Used in commercial products, building products, or wood office furnishings. Flat water thinned interior paints and tinting bases. Scatter rugs, bathmats, and sets. ¹¹
1,3,5-Trimethylbenzene	108-67-8	0.59		2.9	1,3,5-Trimethylbenzene is used in dyes, solvents, paint thinners and plastics. 1,3,5-Trimethylbenzene is emitted into the air by emissions from gasoline-powered vehicles, waste treatment plants and coal-fired power stations.
1,2,4-Trimethylbenzene	95-63-6	1.5		7.4	Occurs in petroleum and coal tar. ¹⁰ Gasoline additive and automobile exhaust. ¹

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Sources References

(1) NJDEP "Common Household Sources of Background Indoor Air Contamination". June 26, 2012

(2) NYSDOH "Volatile Organic Compounds (VOCs) in Commonly Used Products", 2007

(3) EPA, Air & Radiation, TTN Web - Technology Transfer Network/Air Toxics Web site, various years.

(4) Agency for Toxic Substances and Disease Registry (ATSDR). U.S. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 1998.

(5) OFFICE OF POLLUTION PREVENTION AND TOXICS, U.S. ENVIRONMENTAL PROTECTION AGENCY, August 1994, EPA 749-F-94-012a

**EMSL Analytical**

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EMSL Order #: **491700811**
EMSL Sample #: **491700811-1**
Customer ID: **AHER50**
Customer PO: **Not Available**

Attn: **Domenic D'Errico**
Ahera Consultants, Inc.
PO Box 385
Oceanville, NJ 08231-0385

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Initial	08/12/2017	TP	J1594.D	E12305	250 cc	1

Possible Background Sources of Contaminants

Target Compounds	CAS#	Result ppbv	Q	Result ug/m3	Use and Possible Sources
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(6) U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, OH. 1985.

(7) World Health Organization,

(8) Product Safety Assessment, Revised: November 19, 2010 The Dow Chemical Company

(9) California Office of Environmental Health Hazard Assessment, PROPOSED ACTION LEVEL FOR 2-CHLOROTOLUENE

(10) Delaware Health and Social Services, Division of Public Health, Revised: 01/2010

(11) USEPA, Envirofacts Master Chemical Integrator (EMCI), Scorecard, 4/10/2009



NJDEP Certification #: 03036

IAQ Investigation Log		
Test ID:	Pinelands MS	Outdoors
Model Number:	7545	
Serial Number:	T75450953002	
Test ID:	3	
Test Abbreviation:	Test 003	
Start Date:	8/10/2017	
Start Time:	10:18:30	
Duration (dd:hh:mm:ss):	0:00:01:31	
Log Interval (mm:ss):	0:05	
Number of points:	4	
Notes:	Test 003	

Statistics	Channel:	CO2 - Carbon Dioxide	T - Temperature	H - Humidity	CO - Carbon Monoxide
	Units:	ppm	deg F	%rh	ppm
	Average:	389	80.4	62.4	0
	Minimum:	380	78.6	60	0
	Time of Minimum:	10:19:12	10:19:12	10:19:12	10:18:53
	Date of Minimum:	8/10/2017	8/10/2017	8/10/2017	8/10/2017
	Maximum:	408	83.9	64.3	0
	Time of Maximum:	10:20:01	10:20:01	10:18:35	10:18:35
	Date of Maximum:	8/10/2017	8/10/2017	8/10/2017	8/10/2017

Calibration	Meter:	2/7/2017			
Calibration	Sensor:	CO2 - Carbon Dioxide	T-Temperature	H-Humidity	CO - Carbon Monoxide
	Cal. Date	2/7/2017	2/7/2017	2/7/2017	2/7/2017

Date	Time	CO2 - Carbon Dioxide	T-Temperature	H-Humidity	CO - Carbon Monoxide
MM/DD/YYYY	hh:mm:ss	ppm	deg F	%rh	ppm
8/10/2017	10:18:35	386	79.3	64.3	0
8/10/2017	10:18:53	384	79.7	63	0
8/10/2017	10:19:12	380	78.6	60	0
8/10/2017	10:20:01	408	83.9	62.2	0