

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077

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

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EMSL Order #: **491800000**  
 EMSL Sample #: **491800000-1**  
 Customer ID: **EMSL50**  
 Customer PO: **NA**

Attn: **Lance Romance**  
**EMSL Analytical-Air Toxics Lab**  
**200 US Route 130 N**  
**Cinnaminson, NJ 08077**

Phone: **800-220-3675**  
 Fax: **856-786-0327**  
 Date Collected: **2/6/2018**  
 Date Received: **2/7/2018**

Project: **Example format for clients**Sample ID: **Barb's Bird Room**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/13/2018	KW	K14736.D	HD4365	250 cc	1
Dilution1	02/14/2018	KW	K14753.D	HD4365	50 cc	5

**Pennsylvania DEP- Table 4. Sub-slab soil gas Statewide health standard vapor intrusion screening values (SVSS)**

Target Compounds	Tox. Basis	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Non-Res. ug/m3	>
Propylene	NC	115-07-1	42.08	ND		ND	N.E.		N.E.	
Freon 12(Dichlorodifluoromethane)	NC	75-71-8	120.90	ND		ND	4000		56000	
Freon 114(1,2-Dichlorotetrafluoroethan	--	76-14-2	170.90	ND		ND	N.E.		N.E.	
Chloromethane	NC	74-87-3	50.49	0.78		1.6	520		8700	
n-Butane	--	106-97-8	58.12	65	D	160	N.E.		N.E.	
Vinyl chloride	C	75-01-4	62.50	ND		ND	30.0		1700	
1,3-Butadiene	C	106-99-0	54.09	ND		ND	31.0		520	
Bromomethane	NC	74-83-9	94.94	ND		ND	200		2800	
Chloroethane	NC	75-00-3	64.52	ND		ND	400000		5600000	
Ethanol	--	64-17-5	46.07	450	DE	850	N.E.		N.E.	
Bromoethene(Vinyl bromide)	C	593-60-2	106.90	ND		ND	29.0		490	
Freon 11(Trichlorofluoromethane)	--	75-69-4	137.40	ND		ND	28000		390000	
Isopropyl alcohol(2-Propanol)	NC	67-63-0	60.10	17		41	8000		110000	
Freon 113(1,1,2-Trichlorotrifluoroethan	NC	76-13-1	187.40	ND		ND	1200000		17000000	
Acetone	NC	67-64-1	58.08	48	D	120	1200000		17000000	
1,1-Dichloroethene	NC	75-35-4	96.94	ND		ND	8000		110000	
Acetonitrile	NC	75-05-8	41.00	ND		ND	2400		34000	
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)	C	107-05-1	76.53	ND		ND	40.0		560	
Carbon disulfide	NC	75-15-0	76.14	ND		ND	28000		390000	
Methylene chloride	C	75-09-2	84.94	ND		ND	24000		340000	
Acrylonitrile	C	107-13-1	53.00	ND		ND	14.0		230	
Methyl-tert-butyl ether(MTBE)	C	1634-04-4	88.15	ND		ND	3600		61000	
trans-1,2-Dichloroethene	--	156-60-5	96.94	ND		ND	2400		34000	
n-Hexane	NC	110-54-3	86.17	0.80		2.8	28000		390000	
1,1-Dichloroethane	C	75-34-3	98.96	ND		ND	590		9800	
Vinyl acetate	NC	108-05-4	86.00	ND		ND	8000		110000	
2-Butanone(MEK)	NC	78-93-3	72.10	1.5		4.4	200000		2800000	
cis-1,2-Dichloroethene	--	156-59-2	96.94	ND		ND	N.E.		N.E.	
Ethyl acetate	NC	141-78-6	88.10	4.4		16	2800		39000	
Chloroform	C	67-66-3	119.40	1.0		5.1	41.0		680	
Tetrahydrofuran	NC	109-99-9	72.11	ND		ND	480		8100	
1,1,1-Trichloroethane	NC	71-55-6	133.40	ND		ND	200000		2800000	
Cyclohexane	NC	110-82-7	84.16	ND		ND	240000		3400000	
2,2,4-Trimethylpentane(Isooctane)	--	540-84-1	114.20	0.85		4.0	N.E.		N.E.	
Carbon tetrachloride	C	56-23-5	153.80	ND		ND	160		2600	
n-Heptane	NC	142-82-5	100.20	ND		ND	N.E.		N.E.	
1,2-Dichloroethane	C	107-06-2	98.96	ND		ND	36.0		610	
Benzene	C	71-43-2	78.11	1.7		5.4	120		2000	
Trichloroethene	C	79-01-6	131.40	ND		ND	80.0		1100	
1,2-Dichloropropane	C	78-87-5	113.00	ND		ND	94.0		1600	
Methyl Methacrylate	NC	80-62-6	100.12	ND		ND	28000		390000	
Bromodichloromethane	C	75-27-4	163.80	ND		ND	25.0		430	

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**Pennsylvania DEP- Table 4. Sub-slab soil gas Statewide health standard vapor intrusion screening values (SVSS)**

Target Compounds	Tox. Basis	CAS#	MW	Result ppbv	Q	Result ug/m3	Residential ug/m3	>	Non-Res. ug/m3	>
1,4-Dioxane	C	123-91-1	88.12	ND		ND	120		2000	
4-Methyl-2-pentanone(MIBK)	NC	108-10-1	100.20	ND		ND	120000		1700000	
cis-1,3-Dichloropropene**	C	10061-01-5	111.00	ND		ND	N.E.		N.E.	
Toluene	NC	108-88-3	92.14	3.7		14	200000		2800000	
trans-1,3-Dichloropropene**	C	10061-02-6	111.00	ND		ND	N.E.		N.E.	
1,1,2-Trichloroethane	C	79-00-5	133.40	ND		ND	8.00		110	
2-Hexanone(MBK)	NC	591-78-6	100.10	ND		ND	1200		17000	
Tetrachloroethene	C	127-18-4	165.80	3.0		20	1600		22000	
Dibromochloromethane	--	124-48-1	208.30	ND		ND	35.0		580	
1,2-Dibromoethane	C	106-93-4	187.80	ND		ND	1.60		26.0	
Chlorobenzene	NC	108-90-7	112.60	ND		ND	2000		28000	
Ethylbenzene	C	100-41-4	106.20	0.63		2.7	370		6300	
Xylene (p,m)	NC	1330-20-7	106.20	1.9		8.3	4000		56000	
Xylene (Ortho)	NC	95-47-6	106.20	0.74		3.2	4000		56000	
Styrene	NC	100-42-5	104.10	ND		ND	40000		560000	
Isopropylbenzene (cumene)	NC	98-82-8	120.19	ND		ND	16000		220000	
Bromoform	C	75-25-2	252.80	ND		ND	850		14000	
1,1,2,2-Tetrachloroethane	C	79-34-5	167.90	ND		ND	16.0		270	
4-Ethyltoluene	--	622-96-8	120.20	1.3		6.4	N.E.		N.E.	
1,3,5-Trimethylbenzene	NC	108-67-8	120.20	ND		ND	280		3900	
2-Chlorotoluene	--	95-49-8	126.60	ND		ND	N.E.		N.E.	
1,2,4-Trimethylbenzene	NC	95-63-6	120.20	1.7		8.2	280		3900	
1,3-Dichlorobenzene	--	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	C	106-46-7	147.00	ND		ND	85.0		1400	
Benzyl chloride	C	100-44-7	126.00	ND		ND	19.0		320	
1,2-Dichlorobenzene	NC	95-50-1	147.00	ND		ND	8000		110000	
1,2,4-Trichlorobenzene	NC	120-82-1	181.50	ND		ND	80.0		1100	
Hexachloro-1,3-butadiene	C	87-68-3	260.80	ND		ND	N.E.		N.E.	
Naphthalene	C	91-20-3	128.17	ND		ND	28.0		460	

\*\*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  
 Screening Values-Sub Slab

Agency Definitions

PADEP= Pennsylvania Department of Environmental Protection

Reference

Land Recycling Program Technical Guidance Manual for Vapor Intrusion into Buildings from Groundwater and Soil under Act 2 (Doc# 261-0300-101), Nov.19, Toxicity Class (EPA Regional Screening Levels (RSL) Table, Nov 2017)

Carcinogenic (C) Exceedence

Value exceeds the theoretical risk that 1 additional case of cancer will occur in a population of 1 million than statistically expected. This is a theoretical risk and not an actual epidemiological one.

NonCarcinogenic (NC) Exceedence

Value exceeds the theoretical risk that 1 in a population of 100,000 will experience deleterious health effects. This is a theoretical risk and not an actual epidemiological one.

Compound Exposure Definitions

NE= No Limit Established  
 LFC= Lowest Feasible Concentration  
 NS= No Screening Value

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.