

**Table C-1.
Soil Vapor Results
Bay Shore OU3 IRM
Bay Shore, New York**

Sample ID: Date Collected: Note:	NYSDOH 75% Indoor Air	SV-02 B 9/29/2004 a	SV-02 W 10/14/2004 b	SV-02 Q1 11/9/2004 c	SV-02 BWS 1/7/2005 d	SV-02 Q2 3/4/2005 e	SV-03 B 9/29/2004 a	SV-03 W 10/14/2004 b	SV-03 Q1 11/9/2004 c	SV-03 BWS 1/7/2005 d	SV-03 Q2 3/4/2005 e	Minimum Method Detection Limit for Field Samples
BTEX (ug/m3)												
Benzene	5.7	5.1	3.8	3.8	5.1	3.2	3	6.4	4.8	7	4.1	0.4
Toluene	25	27.9	28.3	17	15.1	17.3	29.8	33.6	16.6	13.9	18.1	0.3
Ethylbenzene	2.8	7.8	6.1	6.1	3	7.4	9.1	6.5	3.6	3.2 U	6.1	0.4
Xylene, m,p-	4.7	19.5	22.1	7.8	9.1	20	22.6	26.9	7.8	5.6	20	0.4
Xylene, o-	3.1	7.8	6.9	2.9 U	3 U	6.5	9.5	8.2	3 U	3.2 U	7.4	0.5
Other VOCs (ug/m3)												
Trichloroethane,1,1,1-	1.4	4.3 U	4.1 U	3.7 U	3.7 U	3.7 U	4.3 U	3.8 U	3.7 U	4 U	3.8 U	0.6
Tetrachloroethane,1,1,2,2-	0.2	5.4 U	5.2 U	4.6 U	4.7 U	4.6 U	5.4 U	4.8 U	4.7 U	5 U	4.8 U	0.5
Trichloroethane,1,1,2-	0.2	4.3 U	4.1 U	3.7 U	3.7 U	3.7 U	4.3 U	3.8 U	3.7 U	4 U	3.8 U	0.5
Dichloroethane,1,1-	0.19	3.2 U	3.1 U	2.7 U	2.8 U	2.7 U	3.2 U	2.8 U	2.8 U	3 U	2.8 U	0.4
Dichloroethene,1,1-	0.19	3.1 U	3 U	2.7 U	2.7 U	2.7 U	3.1 U	2.8 U	2.7 U	2.9 U	2.8 U	0.2
Trichlorobenzene,1,2,4-	0.24	23.7 U	22.3 U	20 U	20 U	20 U	23 U	20.8 U	20 U	21.5 U	20.8 U	1.1
Trimethylbenzene,1,2,4-	4.4	6.4	5.9	3.3 U	3.3 U	5.4	3.8 U	6.4	3.3 U	3.6 U	5.4	0.5
Dibromoethane,1,2-	0.19	6.1 U	5.8 U	5.2 U	5.2 U	5.2 U	6 U	5.4 U	5.2 U	5.6 U	5.4 U	0.3
Dichlorobenzene,1,2-	0.24	4.7 U	4.6 U	4 U	4.1 U	4 U	4.7 U	4.2 U	4.1 U	4.4 U	4.2 U	0.6
Dichloroethane,1,2-	0.19	3.2 U	3.1 U	2.7 U	2.8 U	2.7 U	3.2 U	2.8 U	2.8 U	3 U	2.8 U	0.4
Dichloropropane,1,2-	0.2	3.6 U	3.5 U	3.1 U	3.1 U	3.1 U	3.6 U	3.2 U	3.1 U	3.4 U	3.2 U	0.7
Trimethylbenzene,1,3,5-	1.7	3.9 U	3.7 U	3.3 U	3.3 U	3.3 U	3.8 U	3.4 U	3.3 U	3.6 U	3.4 U	0.4
Butadiene, 1,3-	NE	8	2.1	3.5	4	2	1.7 U	6.2	9.3	6.2	1.7	0.4
Dichlorobenzene,1,3-	0.24	4.7 U	4.6 U	4 U	4.1 U	4 U	4.7 U	4.2 U	4.1 U	4.4 U	4.2 U	0.7
Dichlorobenzene,1,4-	0.54	4.7 U	4.6 U	4 U	4.1 U	4 U	4.7 U	4.2 U	4.1 U	4.4 U	4.2 U	0.7
Dioxane,1,4-	NE	11.5 U	10.8 U	9.7 U	9.7 U	9.7 U	11.2 U	10.1 U	9.7 U	10.4 U	10.1 U	0.4
Dichloroethene, cis-1,2-	0.2	3.1 U	3 U	2.7 U	2.7 U	2.7 U	3.1 U	2.8 U	2.7 U	2.9 U	2.8 U	0.4
Dichloropropene, cis-1,3	0.2	3.6 U	3.5 U	3 U	3.1 U	3 U	3.5 U	3.2 U	3.1 U	3.3 U	3.2 U	0.2
Trans-1,2-dichloroethene	NE	3.1 U	3 U	2.7 U	2.7 U	2.7 U	3.1 U	2.8 U	2.7 U	2.9 U	2.8 U	0.6
Dichloropropene, trans-1,3	0.18	3.6 U	3.5 U	3 U	3.1 U	3 U	3.5 U	3.2 U	3.1 U	3.3 U	3.2 U	0.5
Butanone,2-	7.5	20.9	11.2	7.1	5.6	2.6	5	12.4	5.3	5.3	4.7	0.5
Hexanone,2-	NE	13.1 U	12.3 U	11.1 U	11.1 U	11.1 U	12.7 U	11.5 U	11.1 U	11.9 U	11.5 U	0.9
Propanol,2-	NE	7.9 U	7.4 U	6.6 U	6.6 U	6.6 U	7.6 U	6.9 U	6.6 U	7.1 U	6.9 U	0.4
Ethyltoluene, p-	NE	6.9	6.9	3.3 U	3.3 U	6.9	7.9	7.4	3.3 U	3.6 U	7.4	0.5
Methyl-2-pentanone,4-	0.7	3.2 U	3.1 U	2.7 U	2.8 U	2.7 U	3.2 U	2.9 U	2.8 U	3 U	2.9 U	0.5
Acetone	46	100	135.7	38.1	22.1	28.6	85.7	102.3	40.5	23.8	59.5	0.5
Benzyl chloride	NE	4.1 U	3.9 U	3.5 U	3.5 U	3.5 U	4 U	3.6 U	3.5 U	3.8 U	3.6 U	0.6
Bromodichloromethane	NE	5.3 U	5.1 U	4.5 U	4.6 U	4.5 U	5.2 U	4.7 U	4.6 U	4.9 U	4.7 U	0.8
Bromoform	NE	8.2 U	7.9 U	6.9 U	7 U	6.9 U	8.1 U	7.2 U	7 U	7.5 U	7.2 U	1.2
Bromomethane	0.24	3.1 U	3 U	2.6 U	2.6 U	2.6 U	3 U	2.7 U	2.6 U	2.8 U	2.7 U	0.6
Carbon disulfide	NE	2.5 U	11.5	2.1 U	2.8	2.1 U	2.4 U	2.2 U	4.7	3.4	2.2 U	0.3
Carbon tetrachloride	0.68	5 U	4.8 U	4.2 U	4.3 U	4.2 U	4.9 U	4.4 U	4.3 U	4.6 U	4.4 U	0.3
Chlorobenzene	0.19	3.6 U	3.5 U	3.1 U	3.1 U	3.1 U	3.6 U	3.2 U	3.1 U	3.4 U	3.2 U	0.2
Chloroethane	0.2	2.1 U	2 U	1.8 U	1.8 U	1.8 U	2.1 U	1.8 U	1.8 U	1.9 U	1.8 U	0.3
Chloroform	0.54	3.9 U	3.7 U	3.3 U	3.3 U	3.3 U	3.8 U	68.3	22.9	17.1	6.3	0.4
Chloromethane	2	6.6 U	6.2 U	5.6 U	5.6 U	5.6 U	6.4 U	5.8 U	5.6 U	6 U	5.8 U	0.3

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Cyclohexane	2.9	2.7 U	10.7	2.3 U	11	2.3 U	2.7 U	7.6	3.2	11.4	2.4 U	0.4
Dibromochloromethane	NE	6.7 U	6.5 U	5.7 U	5.8 U	5.7 U	6.6 U	5.9 U	5.8 U	6.2 U	5.9 U	0.7
Ethanol	610	14.7	7.7	9.8 J	5.1 U	5.1 U	16.6	20.8	7.6 J	9.1	5.3	0.4
Trichlorofluoromethane	5.5	4.4 U	4.3 U	3.8 U	3.8 U	3.8 U	4.4 U	3.9 U	3.8 U	4.1 U	3.9 U	0.4
Trichloro-1,2,2-trifluoroethane, 1,1,2-	1.1	6.1 U	5.8 U	5.1 U	5.2 U	5.1 U	6 U	5.4 U	5.2 U	5.6 U	5.4 U	0.7
Cryofluorane	0.21	5.5 U	5.3 U	4.7 U	4.8 U	4.7 U	5.5 U	4.9 U	4.8 U	5.1 U	4.9 U	0.5
Dichlorodifluoromethane	5.6	3.9 U	3.8 U	3.3 U	3.4 U	3.3 U	3.9 U	3.5 U	3.4 U	3.6 U	3.5 U	0.5
Heptane, n-	7.7	3.4	3.5	2.7 U	5.7	2.7 U	3.2 U	3.8	2.8 U	3.9	2.9 U	1.1
Hexachlorobutadiene	0.25	34.1 U	32 U	28.8 U	28.8 U	28.8 U	33 U	29.8 U	28.8 U	30.9 U	29.8 U	2.1
Hexane, n-	6.5	11.3	7.4	2.5	2.4 U	2.4 U	7.8	7.8	4.2	2.6 U	2.5 U	0.3
Methyl tert-butyl ether	6.7	2.8 U	2.7 U	2.4 U	2.4 U	2.4 U	2.8 U	4	2.4 U	2.6 U	2.5 U	0.5
Methylene chloride	6.3	2.7 U	2.6 UJ	2.3 U	2.4 U	2.3 U	2.7 U	2.4 UJ	2.4 U	2.6 U	2.5 U	0.4
Naphthalene	NE	16.8 U	15.7 U	14.1 U	14.1 U	14.1 U	16.2 U	14.7 U	14.1 U	15.2 U	14.7 U	1.0
Styrene	0.68	3.4 U	3.2 U	2.9 U	2.9 U	2.9 U	3.3 U	3 U	2.9 U	3.1 U	3 U	0.1
Tetrachloroethene	1.2	7.5	28.5	4.5 U	5.2	4.5 U	5.3 U	29.2	5.3	4.9 U	4.7 U	0.7
Tetrahydrofuran	0.32	2.3 U	2.2 U	9.1	2 U	2 U	2.3 U	2.1 U	4.4	2.2 U	2.1 U	0.4
Trichloroethene	0.23	4.2 U	4.1 U	3.6 U	3.7 U	3.6 U	4.2 U	3.8 U	3.7 U	3.9 U	3.8 U	0.5
Vinyl chloride	0.2	2 U	1.9 U	1.7 U	1.7 U	1.7 U	2 U	1.8 U	1.7 U	1.9 U	1.8 U	0.3
2,2,4-Trimethylpentane	2.6	3.7 U	3.5 U	3.1 U	3.2 U	3.1 U	3.6 U	3.4	3.2 U	3.4 U	3.3 U	0.5
Allyl chloride	NE	10 U	9.4 U	8.5 U	8.5 U	8.5 U	9.7 U	8.8 U	8.5 U	9.1 U	8.8 U	0.7
Isopropyl benzene	0.39	3.9 U	3.7 U	3.3 U	3.3 U	3.3 U	3.8 U	3.4 U	3.3 U	3.6 U	3.4 U	0.3
Propylbenzene, n-	0.69	3.9 U	3.7 U	3.3 U	3.3 U	3.3 UJ	3.8 U	3.4 U	3.3 U	3.6 U	3.4 UJ	0.3

Notes:

a - Baseline sampling for ChemOx system

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

b - One week after ChemOx system startup

VOCs - Volatile Organic Compounds

c - Baseline/Pre-O₂ injection system startup

ug/m³ - micrograms per cubic meter

d - After Brightwaters yard O₂ injection system startup

NE - Not Established

e - Quarterly sampling event

NA - Not Analyzed

NYSDOH 75 % - New York Department of Health upper quartile value from Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in NYS, 1997-2003, Revised 11-16-04 (Indoor air values shown here and used as a basis for comparison)

U - Not detected at or above the limit shown

Bold indicates compound was detected in sample

Gray shading indicates detected value exceeds NYDOH 75 %