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LOCKHEED MARTIN



April 4, 2011

Mr. George Mullen  
Winthrop Management L.P.  
1111 Marcus Avenue  
Lake Success, NY 11042



RE: Vapor Intrusion Sampling Test Results

Dear Mr. Mullen:

Indoor air (IA) samples were collected from the Allstate, Antech and Leased spaces at 1111 Marcus Avenue, on January 22, 2011. IA and sub-slab (SS) soil vapor samples were also collected from the LA Fitness leasehold on January 11, 2011. These samples were collected in response to cracks in the LA Fitness floor slab. The overall goal of this sampling event was to continue to monitor indoor air and sub-slab soil vapor quality. This letter presents all available test results validated after the February 4, 2011 letter sent to you.

Test results for Allstate, Antech, LA Fitness and Leased spaces are provided in Tables 1 and 2. All sample locations are shown on Figures 1 and 2. We have provided these results to the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH). As Winthrop has agreed with Lockheed Martin, for each tenant space sampled, we have included an individual letter, table and figure for your distribution.

The primary constituents of concern potentially related to historical activities at the former Unisys Facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE) and cis-1,2-dichloroethene (DCE) used for degreasing, and Freon 113, although there were other chemicals used at the site. NYSDOH Vapor Intrusion Guidance (October 2006) provides a matrix to evaluate future actions, based in part on the TCE and PCE indoor air guidelines of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 100  $\mu\text{g}/\text{m}^3$ , respectively. The indoor air results for TCE, PCE and carbon tetrachloride (carbon tet) are presented below.

**Allstate – January 22, 2011**

Location ID	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Carbon Tet ( $\mu\text{g}/\text{m}^3$ )
IA-15	ND [ND]	ND [ND]	0.45 [0.41]
IA-16	ND	ND	0.43

**Antech – January 22, 2011**

Location ID	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Carbon Tet ( $\mu\text{g}/\text{m}^3$ )
IA-17	ND	ND	0.40
IA-J9	ND	11	0.47
IA-M11	ND	ND	0.47

**LA Fitness – January 11, 2011**

Location ID	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Carbon Tet ( $\mu\text{g}/\text{m}^3$ )
IA-LAC8	ND	ND	0.55

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**Leased – January 22, 2011**

Location ID	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Carbon Tet ( $\mu\text{g}/\text{m}^3$ )
IA-3M	ND	ND	0.43

Notes: ND = Not detected.

[ ] = Duplicate results are presented in brackets.

In addition to the NYSDOH air guidelines, for comparison purposes, Table 1 provides the results of site-specific ambient air sampling conducted outside the building during this sampling period.

Please feel free to contact Renata Ockerby of the NYSDOH at 1-518-402-7880 (reo02@health.state.ny.us) or Girish Desai of the NYSDEC at 631-444-0243 (gvdesai@gw.dec.state.ny.us) regarding the indoor air results. If you are interested, you can obtain a copy of the NYSDOH October 2006 Final Guidance for Soil Vapor Intrusion from their website at [http://www.health.state.ny.us/environmental/investigations/soil\\_gas/svi\\_guidance/](http://www.health.state.ny.us/environmental/investigations/soil_gas/svi_guidance/). If you have questions about these sample results or the on-going environmental investigations and cleanup at 1111 Marcus, please contact me at 1-817-763-7629 or via e-mail at [robert.s.phillips@lmco.com](mailto:robert.s.phillips@lmco.com).

Sincerely,



R. Stan Phillips

cc: Renata Ockerby/ NYSDOH  
Girish Desai/ NYSDEC  
Scott Morris/ ARCADIS  
Nick Valkenburg/ ARCADIS  
Nadine Weinberg/ ARCADIS



**Table 1. Indoor Air Sample Results - Other Tenant Spaces**  
Former Unisys Facility, Great Neck, New York

Location ID: Date Collected: Area: Units:	NYSDOH Air Guideline Value (1) ug/m3	Ambient Air Values 1/22/11 (2)		IA-3M 01/22/11 Leased ug/m3	IA-15 01/22/11 Allstate ug/m3	IA-16 01/22/11 Allstate ug/m3	IA-17 01/22/11 Antech ug/m3
		Average (3) ug/m3	Maximum (4) ug/m3				
1,1,1-Trichloroethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,1,1,2-Tetrachloroethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,1,2-Trichloroethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,1-Dichloroethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,1-Dichloroethene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,1-Difluoroethane (Freon 152a)	--	0.373	0.79	0.76 U	1.4 [1.1]	1.6	23
1,2,4-Trichlorobenzene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2,4-Trimethylbenzene	--	0.373	0.79	0.76 U	0.77 U [7.7 J]	0.81 U	0.84 U
1,2-Dibromo-3-chloropropane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dibromoethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichlorobenzene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichloroethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichloroethene (cis) (DCE)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichloroethene (total)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichloroethene (trans)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichloropropane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,2-Dichlorotetrafluoroethane (Freon 114)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,3,5-Trimethylbenzene	--	0.373	0.79	0.76 U	0.77 U [2.4 J]	0.81 U	0.84 U
1,3-Butadiene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,3-Dichlorobenzene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,3-Dichloropropene (cis)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,3-Dichloropropene (trans)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
1,4-Dichlorobenzene	--	0.373	0.79	0.76 U	0.77 U [1.3]	0.81 U	0.84 U
1,4-Dioxane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
2-Butanone (Methyl ethyl ketone)	--	3.73	7.9	7.6 U	7.7 U [6.9 U]	8.1 U	8.4 U
3-Chloropropene (Allyl Chloride)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
4-Ethyltoluene	--	0.373	0.79	0.76 U	0.77 U [1.5]	0.81 U	0.84 U
4-Methyl-2-pentanone (MIBK)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Acetone (2-propanone)	--	3.73	7.9	7.6 U	9.8 [8.0]	8.1 U	140
Benzene	--	0.615	0.88	0.76 U	0.77 [0.79]	0.81 U	0.84 U
Bromodichloromethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Bromoform	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Bromomethane (Methyl bromide)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Carbon disulfide	--	3.73	7.9	7.6 U	7.7 U [6.9 U]	8.1 U	8.4 U
Carbon tetrachloride	--	0.26	0.44	0.43	0.45 [0.41]	0.43	0.40
Chlorobenzene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Chlorodifluoromethane (Freon 22)	--	0.373	0.79	1.4	1.1 [1.8]	1.1	3.2
Chloroethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Chloroform	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Chloromethane (Methyl chloride)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Chloropentafluoroethane (Freon 115)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Cyclohexane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Dibromochloromethane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Dichlorodifluoromethane (Freon 12)	--	2.4	2.5	2.3	2.5 [2.5]	2.3	2.3
Ethylbenzene	--	0.373	0.79	0.76 U	0.77 U [2.4 J]	0.81 U	23
Hexachlorobutadiene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Isopropyl Alcohol (2-Propanol)	--	1.1	1.4	1.5 U	5.2 [6.7]	5.4	35
Isopropylbenzene (Cumene)	--	0.373	0.79	0.76 U	0.77 U [0.78]	0.81 U	0.84 U
Methyl Acetate	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Methyl Butyl Ketone (2-Hexanone)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Methyl cyclohexane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Methyl tert-Butyl Ether (MTBE)	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Methylene chloride	60	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
n-Hexane	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Styrene	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Tetrachloroethene (PCE)	100	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Toluene	--	0.7	1.3	0.97	0.78 [1.8]	0.81 U	1.6
Trichloroethene (TCE)	5	0.075	0.16	0.15 U	0.15 U [0.14 U]	0.16 U	0.17 U
Trichlorofluoromethane (Freon 11)	--	1.25	1.3	1.3	1.3 [1.4]	1.2	1.3
Vinyl chloride	--	0.373	0.79	0.76 U	0.77 U [0.69 U]	0.81 U	0.84 U
Xylenes (m&p)	--	0.925	1.5	0.76 U	1.8 [5.0]	0.81 U	92
Xylenes (o)	--	0.373	0.79	0.76 U	0.77 U [2.2 J]	0.81 U	14



**Table 1. Indoor Air Sample Results - Other Tenant Spaces**  
Former Unisys Facility, Great Neck, New York

Location ID: Date Collected: Area: Units:	NYSDOH Air Guideline Value (1) ug/m3	Ambient Air Values 1/22/11 (2)		IA-J9 01/22/11 Antech ug/m3	IA-M11 01/22/11 Antech ug/m3	IA-Q11 01/22/11 Antech ug/m3	IA-LAC8 01/11/11 LA Fitness ug/m3
		Average (3) ug/m3	Maximum (4) ug/m3				
1,1,1-Trichloroethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,1,2,2-Tetrachloroethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,1,2-Trichloroethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,1-Dichloroethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,1-Dichloroethene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,1-Difluoroethane (Freon 152a)	--	0.373	0.79	1.9	2,500 D	18	25
1,2,4-Trichlorobenzene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2,4-Trimethylbenzene	--	0.373	0.79	0.68 U	0.72 U	30	0.75
1,2-Dibromo-3-chloropropane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dibromoethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichlorobenzene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichloroethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichloroethene (cis) (DCE)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichloroethene (total)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichloroethene (trans)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichloropropane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,2-Dichlorotetrafluoroethane (Freon 114)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,3,5-Trimethylbenzene	--	0.373	0.79	0.68 U	0.72 U	8.5	0.68 U
1,3-Butadiene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,3-Dichlorobenzene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,3-Dichloropropene (cis)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,3-Dichloropropene (trans)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
1,4-Dichlorobenzene	--	0.373	0.79	0.68 U	0.72 U	3.1	0.68 U
1,4-Dioxane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
2-Butanone (Methyl ethyl ketone)	--	3.73	7.9	6.8 U	7.2 U	7.4 U	6.8 U
3-Chloropropene (Allyl Chloride)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
4-Ethyltoluene	--	0.373	0.79	0.68 U	0.72 U	4.0	0.68 U
4-Methyl-2-pentanone (MIBK)	--	0.373	0.79	0.68 U	0.95	9.4	0.68 U
Acetone (2-propanone)	--	3.73	7.9	28	140	38	43
Benzene	--	0.615	0.88	0.69	0.73	0.74 U	0.95
Bromodichloromethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Bromoform	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Bromomethane (Methyl bromide)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Carbon disulfide	--	3.73	7.9	6.8 U	7.2 U	7.4 U	6.8 U
Carbon tetrachloride	--	0.26	0.44	0.47	0.47	0.15 U	0.55
Chlorobenzene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Chlorodifluoromethane (Freon 22)	--	0.373	0.79	0.87	10	1.9	0.90
Chloroethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Chloroform	--	0.373	0.79	0.68 U	1.2	0.74 U	9.7
Chloromethane (Methyl chloride)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Chloropentafluoroethane (Freon 115)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Cyclohexane	--	0.373	0.79	0.68 U	1.3	0.74 U	0.68 U
Dibromochloromethane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Dichlorodifluoromethane (Freon 12)	--	2.4	2.5	2.3	2.3	2.3	3.0
Ethylbenzene	--	0.373	0.79	5.5	26	17	1.6
Hexachlorobutadiene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Isopropyl Alcohol (2-Propanol)	--	1.1	1.4	820 D	570 D	13	45 J
Isopropylbenzene (Cumene)	--	0.373	0.79	0.68 U	0.72 U	1.2	0.68 U
Methyl Acetate	--	0.373	0.79	0.68 U	0.83	0.74 U	0.68
Methyl Butyl Ketone (2-Hexanone)	--	0.373	0.79	0.68 U	0.72 U	1.1	0.68 U
Methyl cyclohexane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Methyl tert-Butyl Ether (MTBE)	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Methylene chloride	60	0.373	0.79	0.68 U	1.1	0.74 U	0.68 U
n-Hexane	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Styrene	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Tetrachloroethene (PCE)	100	0.373	0.79	11	0.72 U	0.74 U	0.68 U
Toluene	--	0.7	1.3	1.1	1.6	3.0	3.8
Trichloroethene (TCE)	5	0.075	0.16	0.14 U	0.14 U	0.15 U	0.14 U
Trichlorofluoromethane (Freon 11)	--	1.25	1.3	1.3	1.3	1.2	1.6
Vinyl chloride	--	0.373	0.79	0.68 U	0.72 U	0.74 U	0.68 U
Xylenes (m&p)	--	0.925	1.5	20	99	58	5.4
Xylenes (o)	--	0.373	0.79	3.9	16	12	1.3



**Table 1. Indoor Air Sample Results - Other Tenant Spaces**  
**Former Unisys Facility, Great Neck, New York**

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**Notes:**

(1) Guideline values referenced from: Guidance for Evaluating Soil Vapor Intrusion in the State of New York. NYSDOH, October 2006.

(2) Ambient air values were collected at locations outside the main facility at 1111 Marcus Avenue, Lake Success, New York.

(3) Average value during the sampling period, calculated using one half the compound quantitation limit for non-detect samples.

(4) Maximum detected concentration or quantitation limit if non-detect during the sampling period.

D = Concentration is based on diluted sample analysis.

J = The associated numerical value is an estimated concentration.

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ug/m3 = Micrograms per cubic meter.

NYSDOH = New York State Department of Health.

-- = Criteria value not available.

[ ] = Duplicate results presented in brackets.

**Table 2. Sub-Slab Soil Vapor Sample Results - Other Tenant Spaces**  
Former Unisys Facility, Great Neck, New York

Location ID: Date Collected: Area: Units:	SS-LAC8 01/11/11 LA Fitness ug/m3
1,1,1-Trichloroethane	5.7
1,1,2,2-Tetrachloroethane	0.72 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	3.6
1,1,2-Trichloroethane	0.72 U
1,1-Dichloroethane	0.72 U
1,1-Dichloroethene	0.72 U
1,1-Difluoroethane (Freon 152a)	13
1,2,4-Trichlorobenzene	0.72 U
1,2,4-Trimethylbenzene	16
1,2-Dibromo-3-chloropropane	0.72 U
1,2-Dibromoethane	0.72 U
1,2-Dichlorobenzene	0.72 U
1,2-Dichloroethane	0.72 U
1,2-Dichloroethene (cis) (DCE)	0.72 U
1,2-Dichloroethene (total)	0.72 U
1,2-Dichloroethene (trans)	0.72 U
1,2-Dichloropropane	0.72 U
1,2-Dichlorotetrafluoroethane (Freon 114)	0.72 U
1,3,5-Trimethylbenzene	7.7
1,3-Butadiene	0.72 U
1,3-Dichlorobenzene	0.72 U
1,3-Dichloropropene (cis)	0.72 U
1,3-Dichloropropene (trans)	0.72 U
1,4-Dichlorobenzene	0.72 U
1,4-Dioxane	0.72 U
2,2-Dichloro-1,1,1-trifluoroethane (Freon 123)	0.72 U
2-Butanone (Methyl ethyl ketone)	7.2 U
3-Chloropropene (Allyl Chloride)	0.72 U
4-Ethyltoluene	1.8
4-Methyl-2-pentanone (MIBK)	0.72 U
Acetone (2-propanone)	42
Benzene	0.72 U
Bromodichloromethane	0.72 U
Bromoform	0.72 U
Bromomethane (Methyl bromide)	0.72 U
Carbon disulfide	7.2 U
Carbon tetrachloride	0.48
Chlorobenzene	0.72 U
Chlorodifluoromethane (Freon 22)	0.98
Chloroethane	0.72 U
Chloroform	17
Chloromethane (Methyl chloride)	0.72 U
Chloropentafluoroethane (Freon 115)	0.72 U
Cyclohexane	0.72 U
Dibromochloromethane	0.72 U
Dichlorodifluoromethane (Freon 12)	2.8
Ethylbenzene	0.72 U
Hexachlorobutadiene	0.72 U
Isopropyl Alcohol (2-Propanol)	37 J
Isopropylbenzene (Cumene)	0.72 U
Methyl Acetate	0.72 U
Methyl Butyl Ketone (2-Hexanone)	1.4
Methyl cyclohexane	0.72 U
Methyl tert-Butyl Ether (MTBE)	0.72 U
Methylene chloride	0.72 U
n-Hexane	0.72 U
Styrene	1.4
Tetrachloroethene (PCE)	26
Toluene	11
Trichloroethene (TCE)	89
Trichlorofluoromethane (Freon 11)	2.6
Vinyl chloride	0.72 U
Xylenes (m&p)	1.8
Xylenes (o)	0.85

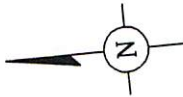
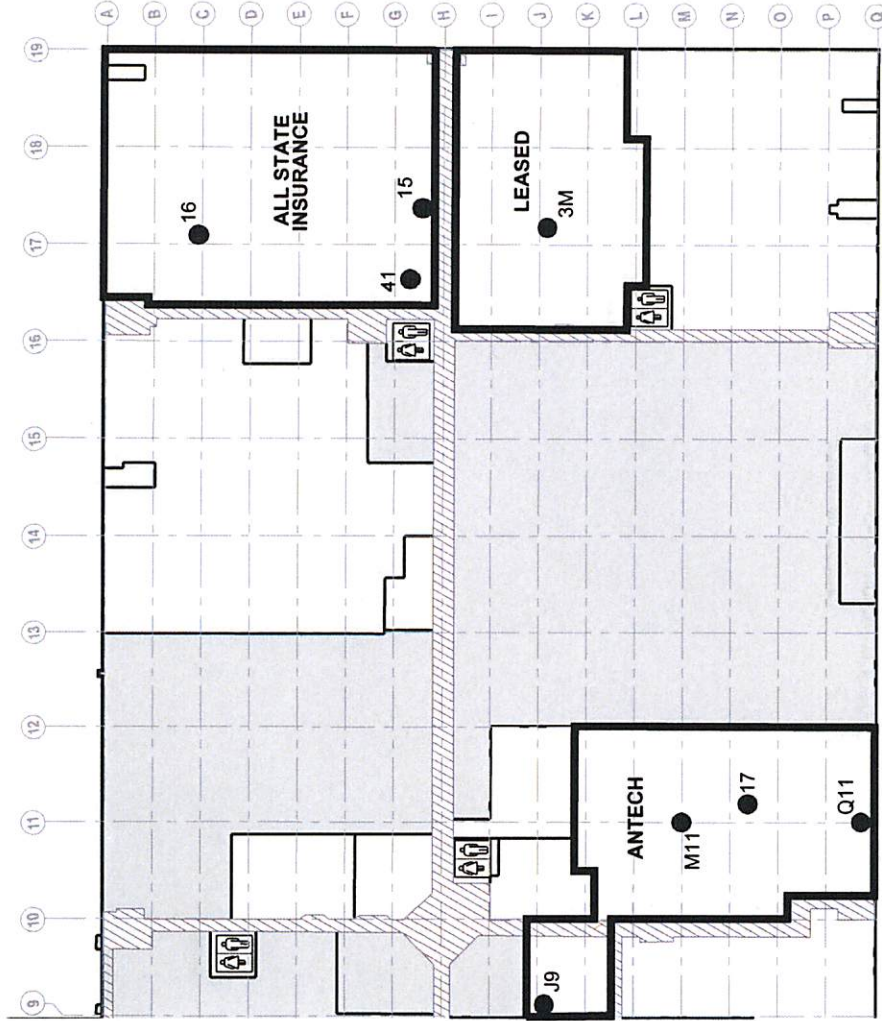
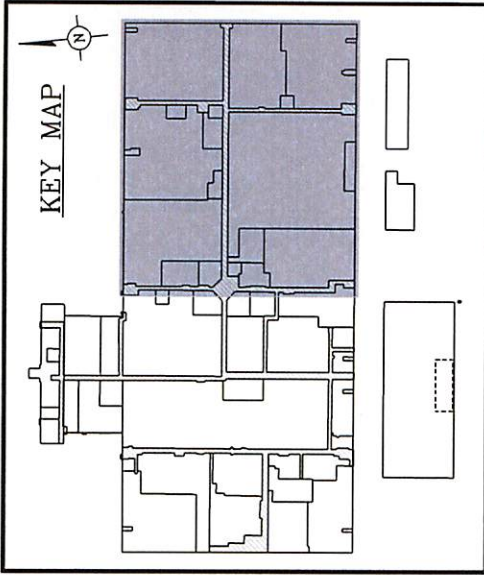
**Notes:**

J = The associated numerical value is an estimated concentration.

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ug/m3 = Micrograms per cubic meter.





**LEGEND:**

Q11 ● SAMPLE LOCATION

**NOTE:**

SAMPLES IDENTIFIED AS IA ARE INDOOR AIR SAMPLE LOCATIONS ONLY. ALL OTHER LOCATIONS ARE PAIRED INDOOR AIR AND SUB-SLAB SOIL GAS SAMPLES.

LOCKHEED MARTIN CORPORATION  
GREAT NECK, NEW YORK

**ALLSTATE, ANTECH, AND LEASED  
VI SAMPLE LOCATIONS**



FIGURE

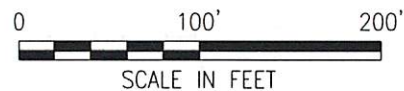
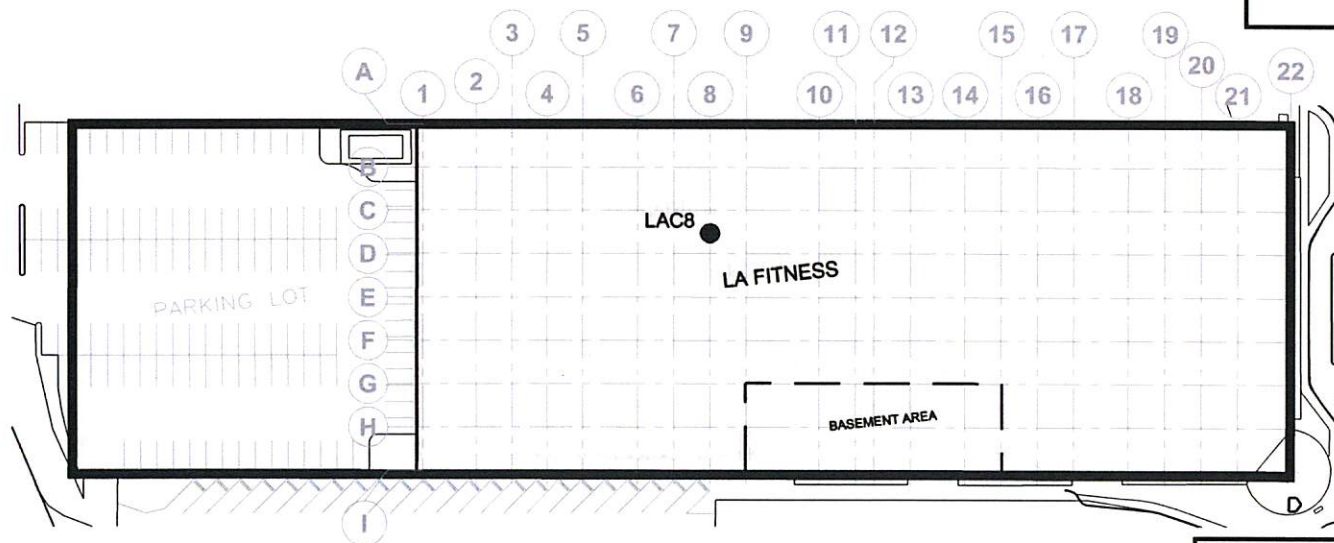
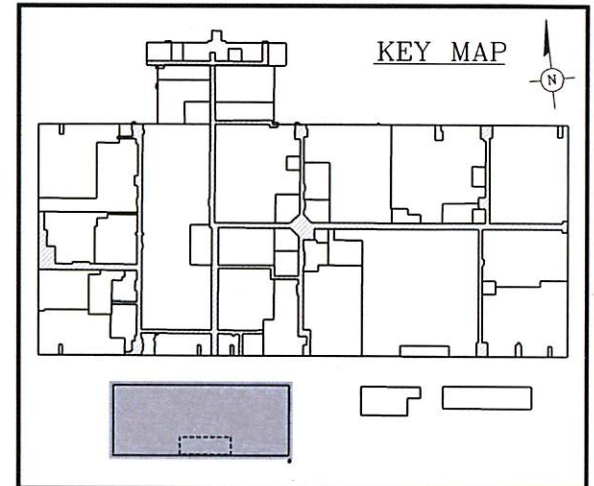
**1**

### LEGEND:

LAC8 ● SAMPLE LOCATION

### NOTES:

1. SAMPLES IDENTIFIED AS IA ARE INDOOR AIR AT THE LOCATION NOTED ON MAP.
2. SAMPLES IDENTIFIED AS SS ARE SUB-SLAB SOIL VAPOR AT THE LOCATION ON THE MAP.



LOCKHEED MARTIN CORPORATION  
 GREAT NECK, NEW YORK

**LA FITNESS  
 VI SAMPLE LOCATIONS**



FIGURE  
**2**



Lockheed Martin Corporation  
2950 N. Hollywood Way, Suite 125  
Burbank, CA 91505  
Telephone 817-763-7629  
Fax 817-762-4884



April 4, 2011

Mr. Bill Nawrath  
Allstate  
C/O Winthrop Management  
1111 Marcus Avenue  
Lake Success, NY 11042

RE: Vapor Intrusion Sampling Test Results

Dear Mr. Nawrath:

Thank you for your cooperation in allowing our contractor, ARCADIS, to collect indoor air samples from your leasehold at 1111 Marcus Avenue. Samples were collected on January 22, 2011. I am pleased to report that the sampling results indicate there is not a current soil vapor intrusion issue at your leasehold.

As you are aware, the primary chemicals of concern related to historical activities at the former Unisys facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE), and cis-1,2-dichloroethene (DCE) used for degreasing, and Freon 113, although there were other chemicals used at the site. These chemicals are present in groundwater located more than 100 feet below ground surface and may also be present in soils located under the slab at 1111 Marcus Avenue. Vapors from soil or groundwater may move into the indoor air through a process referred to as soil vapor intrusion.

Lockheed Martin, in consultation with the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH), has reviewed the results from your leasehold consistent with NYSDOH's October 2006 *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. A copy of this guidance is available on NYSDOH's website at [http://www.health.state.ny.us/environmental/indoors/vapor\\_intrusion/](http://www.health.state.ny.us/environmental/indoors/vapor_intrusion/). The test results indicate that indoor air concentrations of TCE and PCE are below the NYSDOH indoor air guidelines of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 100  $\mu\text{g}/\text{m}^3$ , respectively (see Table 1 and Figure 1, enclosed).

On Table 1, we have identified as "Group A" the chemicals that are potentially associated with the former Unisys Facility, and we have identified as "Group B" the other volatile organic compounds that were detected in the air or soil vapor samples. The indoor air quality of your leasehold is comparable to that of buildings not affected by environmental contamination. The volatile organic chemicals detected in indoor air are at levels usually found in indoor air in an urban area and do not represent a concern.

A more detailed discussion of your results can be provided by contacting Renata Ockerby of the NYSDOH at 1-518-402-7880 ([reo02@health.state.ny.us](mailto:reo02@health.state.ny.us)) or Girish Desai of the NYSDEC at 631-444-0243 ([gdesai@gw.dec.state.ny.us](mailto:gdesai@gw.dec.state.ny.us)). If you have questions about these sample results or the

Mr. Bill Nawrath  
April 4, 2011  
Page 2

on-going environmental investigations and cleanup at the former Unisys Facility, please contact me at 1-817-763-7629 or via e-mail at [robert.s.phillips@lmco.com](mailto:robert.s.phillips@lmco.com).

Again, thank you for allowing us access to your leasehold to evaluate the air quality. We appreciate your assistance in our environmental investigation.

Sincerely,

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

R. Stan Phillips

Enclosures

cc: Renata Ockerby/ NYSDOH  
Girish Desai/ NYSDEC  
Nick Valkenburg/ ARCADIS





**Table 1. Indoor Air Sample Results - Allstate  
Former Unisys Facility, Great Neck, New York**

Location ID: Date Collected: Lab Sample ID:	Typical Indoor Air Background (1)	Units	IA-15 01/22/11 P1100312-001	IA-16 01/22/11 P1100312-002
<b>Group A</b>				
1,1,1-Trichloroethane	20.6	ug/m3	0.77 U [0.69 U]	0.81 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	ug/m3	0.77 U [0.69 U]	0.81 U
1,1,2-Trichloroethane	1.5	ug/m3	0.77 U [0.69 U]	0.81 U
1,1-Dichloroethane	0.7	ug/m3	0.77 U [0.69 U]	0.81 U
1,1-Dichloroethene	1.4	ug/m3	0.77 U [0.69 U]	0.81 U
1,2-Dichloroethane	0.9	ug/m3	0.77 U [0.69 U]	0.81 U
1,2-Dichloroethene (cis) (DCE)	1.9	ug/m3	0.77 U [0.69 U]	0.81 U
1,2-Dichloroethene (total)	--	ug/m3	0.77 U [0.69 U]	0.81 U
1,2-Dichloroethene (trans)	--	ug/m3	0.77 U [0.69 U]	0.81 U
Chloroform	1.1	ug/m3	0.77 U [0.69 U]	0.81 U
Methyl tert-Butyl Ether (MTBE)	11.5	ug/m3	0.77 U [0.69 U]	0.81 U
Tetrachloroethene (PCE)	15.9	ug/m3	0.77 U [0.69 U]	0.81 U
Toluene	43	ug/m3	0.78 [1.8]	0.81 U
Trichloroethene (TCE)	4.2	ug/m3	0.15 U [0.14 U]	0.16 U
Trichlorofluoromethane (Freon 11)	18.1	ug/m3	1.3 [1.4]	1.2
Vinyl chloride	1.9	ug/m3	0.77 U [0.69 U]	0.81 U
<b>Detected Group B</b>				
1,1-Difluoroethane (Freon 152a)	--	ug/m3	1.4 [1.1]	1.6
1,2,4-Trimethylbenzene	9.5	ug/m3	0.77 UJ [7.7 J]	0.81 U
1,3,5-Trimethylbenzene	3.7	ug/m3	0.77 UJ [2.4 J]	0.81 U
1,4-Dichlorobenzene	5.5	ug/m3	0.77 U [1.3]	0.81 U
4-Ethyltoluene	3.6	ug/m3	0.77 U [1.5]	0.81 U
Acetone (2-propanone)	98.9	ug/m3	9.8 [8.0]	8.1 U
Benzene	9.4	ug/m3	0.77 [0.79]	0.81 U
Carbon tetrachloride	1.3	ug/m3	0.45 [0.41]	0.43
Chlorodifluoromethane (Freon 22)	--	ug/m3	1.1 [1.8]	1.1
Dichlorodifluoromethane (Freon 12)	16.5	ug/m3	2.5 [2.5]	2.3
Ethylbenzene	5.7	ug/m3	0.77 UJ [2.4 J]	0.81 U
Isopropyl Alcohol (2-Propanol)	250	ug/m3	5.2 [6.7]	5.4
Isopropylbenzene (Cumene)	--	ug/m3	0.77 U [0.78]	0.81 U
Xylenes (m&p)	22.2	ug/m3	1.8 [5.0]	0.81 U
Xylenes (o)	7.9	ug/m3	0.77 UJ [2.2 J]	0.81 U

**Notes:**

Group A = Constituents associated with historical activities at the Former Unisys Site and present in groundwater.

Group B = Other volatile organic compounds detected in indoor air or sub-slab soil vapor.

(1) Background is defined as the 90th percentile values from the U.S. Environmental Protection

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

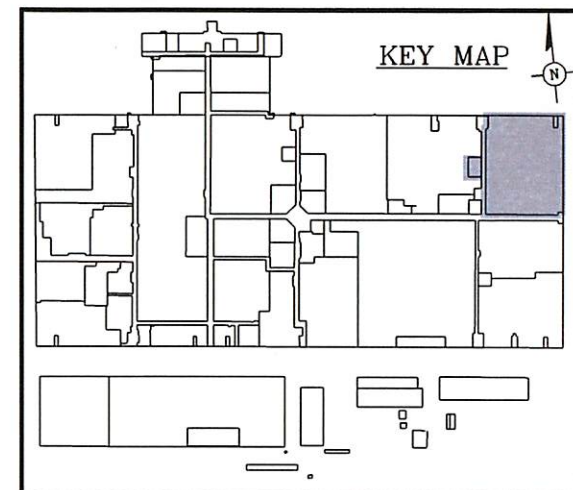
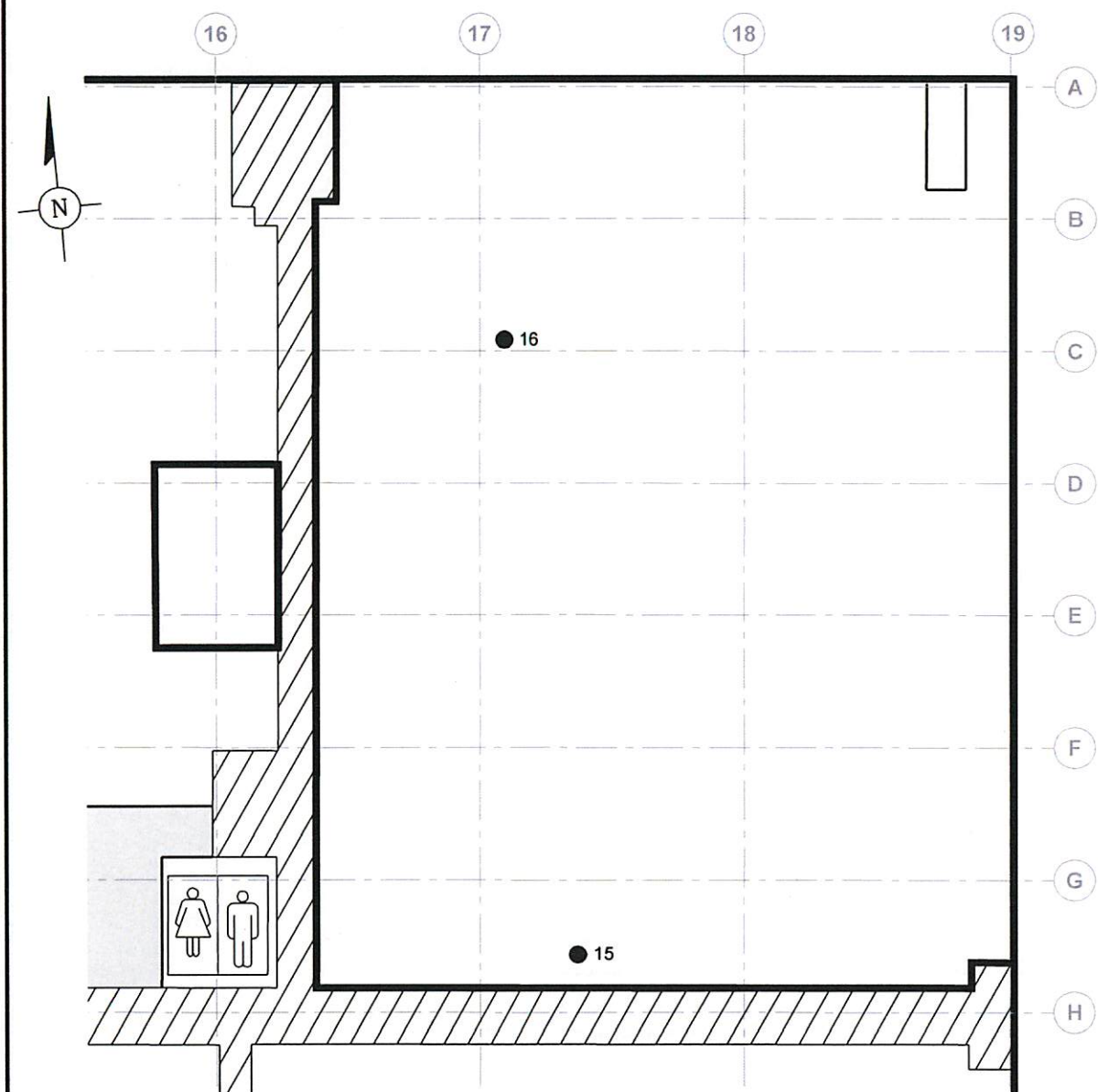
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ug/m3 = Micrograms per cubic meter.

-- = Criteria value not available.

[ ] = Duplicate results presented in brackets.

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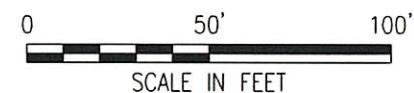


#### LEGEND:

16 ● SAMPLE LOCATION

#### NOTE:

SAMPLES IDENTIFIED AS IA ARE INDOOR AIR AND SS ARE SUB-SLAB AT THE LOCATION NOTED ON MAP.



LOCKHEED MARTIN CORPORATION  
 GREAT NECK, NEW YORK

ALLSTATE INSURANCE  
 VI SAMPLE LOCATIONS



FIGURE  
 1



Lockheed Martin Corporation  
2950 N. Hollywood Way, Suite 125  
Burbank, CA 91505  
Telephone 817-763-7629  
Fax 817-762-4884



April 4, 2011

Mr. Mike Napolitano  
Antech  
C/O Winthrop Management  
1111 Marcus Avenue  
Lake Success, NY 11042

RE: Vapor Intrusion Sampling Test Results

Dear Mr. Napolitano:

Thank you for your cooperation in allowing our contractor, ARCADIS, to collect indoor air and sub-slab soil vapor samples from your leaseholds at 1111 Marcus Avenue. Samples were collected on January 22, 2011. I am pleased to report that the sampling results indicate there is not a current soil vapor intrusion issue at your leaseholds.

As you are aware, the primary chemicals of concern related to historical activities at the former Unisys facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE), and cis-1,2-dichloroethene (DCE) used for degreasing, and Freon 113, although there were other chemicals used at the site. These chemicals are present in groundwater located more than 100 feet below ground surface and may also be present in soils located under the slab at 1111 Marcus Avenue. Vapors from soil or groundwater may move into the indoor air through a process referred to as soil vapor intrusion.

Lockheed Martin, in consultation with the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH), has reviewed the results from your leaseholds consistent with NYSDOH's October 2006 *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. A copy of this guidance is available on NYSDOH's website at [http://www.health.state.ny.us/environmental/indoors/vapor\\_intrusion/](http://www.health.state.ny.us/environmental/indoors/vapor_intrusion/). The test results indicate that indoor air concentrations of TCE and PCE are below the NYSDOH indoor air guidelines of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 100  $\mu\text{g}/\text{m}^3$ , respectively (see Table 1 and Figure 1, enclosed).

On Table 1, we have identified as "Group A" the chemicals that are potentially associated with the former Unisys Facility, and we have identified as "Group B" the other volatile organic compounds that were detected in the air or soil vapor samples. The indoor air quality of your leaseholds is comparable to that of buildings not affected by environmental contamination. The volatile organic chemicals detected in indoor air are at levels usually found in indoor air in an urban area and do not represent a concern. Acetone, chloroform, ethylbenzene, 4-ethyltoluene, isopropyl alcohol, 4-Methyl-2-pentanone (MIBK), trimethylbenzenes, and xylenes were detected in indoor air above background levels typically found in indoor air. These constituents have consistently been seen in indoor air, likely associated with laboratory activities. With the exception of chloroform, these chemicals are not associated with the former Unisys Facility. As noted above, the likely sources of these chemicals are products being used in Antech spaces as a part of normal laboratory

Mr. Mike Napolitano  
April 4, 2011  
Page 2

activities. Although chloroform was detected in indoor air slightly above typical background levels in one sample, this result is most likely associated with chlorinated water use in the laboratory. The enclosed fact sheet from NYSDOH provides some information on reducing exposures to volatile chemicals associated with household products. A more detailed discussion of your results can be provided by contacting Renata Ockerby of the NYSDOH at 1-518-402-7880 ([reo02@health.state.ny.us](mailto:reo02@health.state.ny.us)) or Girish Desai of the NYSDEC at 631-444-0243 ([gvdesai@gw.dec.state.ny.us](mailto:gvdesai@gw.dec.state.ny.us)). If you have questions about these sample results or the on-going environmental investigations and cleanup at the former Unisys Facility, please contact me at 1-817-763-7629 or via e-mail at [robert.s.phillips@lmco.com](mailto:robert.s.phillips@lmco.com).

Again, thank you for allowing us access to your leaseholds to evaluate the air quality. We appreciate your assistance in our environmental investigation.

Sincerely,



R. Stan Phillips

Enclosures

cc: Renata Ockerby/ NYSDOH  
Girish Desai/ NYSDEC  
Nick Valkenburg/ ARCADIS



Table 1. Indoor Air and Sub-slab Soil Vapor Sample Results - Antech  
Former Unisys Facility, Great Neck, New York

Location ID: Date Collected: Lab Sample ID:	Typical Indoor Air Background (1)	Units	IA-17 01/22/11 P1100311-003	IA-J9 01/22/11 P1100311-001	IA-M11 01/22/11 P1100311-002	IA-Q11 01/22/11 P1100311-004
<b>Group A</b>						
1,1,1-Trichloroethane	20.6	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	--	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,1,2-Trichloroethane	1.5	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,1-Dichloroethane	0.7	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,1-Dichloroethene	1.4	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,2-Dichloroethane	0.9	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,2-Dichloroethene (cis) (DCE)	1.9	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,2-Dichloroethene (total)	--	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
1,2-Dichloroethene (trans)	--	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
Chloroform	1.1	ug/m3	0.84 U	0.68 U	1.2	0.74 U
Methyl tert-Butyl Ether (MTBE)	11.5	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
Tetrachloroethene (PCE)	15.9	ug/m3	0.84 U	11	0.72 U	0.74 U
Toluene	43	ug/m3	1.6	1.1	1.6	3.0
Trichloroethene (TCE)	4.2	ug/m3	0.17 U	0.14 U	0.14 U	0.15 U
Trichlorofluoromethane (Freon 11)	18.1	ug/m3	1.3	1.3	1.3	1.2
Vinyl chloride	1.9	ug/m3	0.84 U	0.68 U	0.72 U	0.74 U
<b>Detected Group B</b>						
1,1-Difluoroethane (Freon 152a)	--	ug/m3	23	1.9	2,500 D	18
1,2,4-Trimethylbenzene	9.5	ug/m3	0.84 U	0.68 U	0.72 U	30
1,3,5-Trimethylbenzene	3.7	ug/m3	0.84 U	0.68 U	0.72 U	8.5
1,4-Dichlorobenzene	5.5	ug/m3	0.84 U	0.68 U	0.72 U	3.1
4-Ethyltoluene	3.6	ug/m3	0.84 U	0.68 U	0.72 U	4.0
4-Methyl-2-pentanone (MIBK)	6	ug/m3	0.84 U	0.68 U	0.95	9.4
Acetone (2-propanone)	98.9	ug/m3	140	28	140	38
Benzene	9.4	ug/m3	0.84 U	0.69	0.73	0.74 U
Carbon tetrachloride	1.3	ug/m3	0.40	0.47	0.47	0.15 U
Chlorodifluoromethane (Freon 22)	--	ug/m3	3.2	0.87	10	1.9
Cyclohexane	--	ug/m3	0.84 U	0.68 U	1.3	0.74 U
Dichlorodifluoromethane (Freon 12)	16.5	ug/m3	2.3	2.3	2.3	2.3
Ethylbenzene	5.7	ug/m3	23	5.5	26	17
Isopropyl Alcohol (2-Propanol)	250	ug/m3	35	820 D	570 D	13
Isopropylbenzene (Cumene)	--	ug/m3	0.84 U	0.68 U	0.72 U	1.2
Methyl Acetate	--	ug/m3	0.84 U	0.68 U	0.83	0.74 U
Methyl Butyl Ketone (2-Hexanone)	--	ug/m3	0.84 U	0.68 U	0.72 U	1.1
Methylene chloride	10	ug/m3	0.84 U	0.68 U	1.1	0.74 U
Xylenes (m&p)	22.2	ug/m3	92	20	99	58
Xylenes (o)	7.9	ug/m3	14	3.9	16	12

**Notes:**

Group A = Constituents associated with historical activities at the Former Unisys Site and present in groundwater.

Group B = Other volatile organic compounds detected in indoor air or sub-slab soil vapor.

(1) Background is defined as the 90th percentile values from the U.S. Environmental Protection Agency.

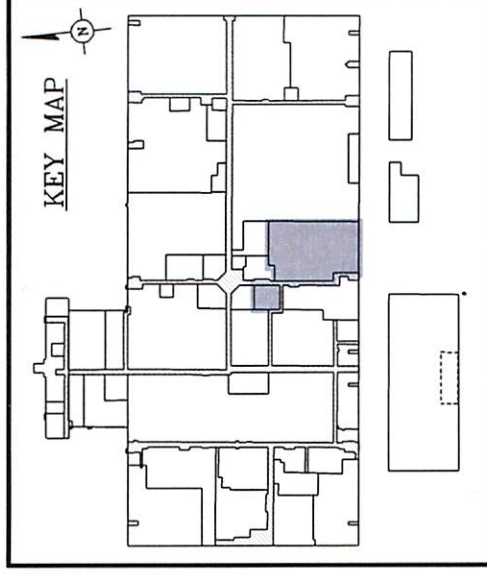
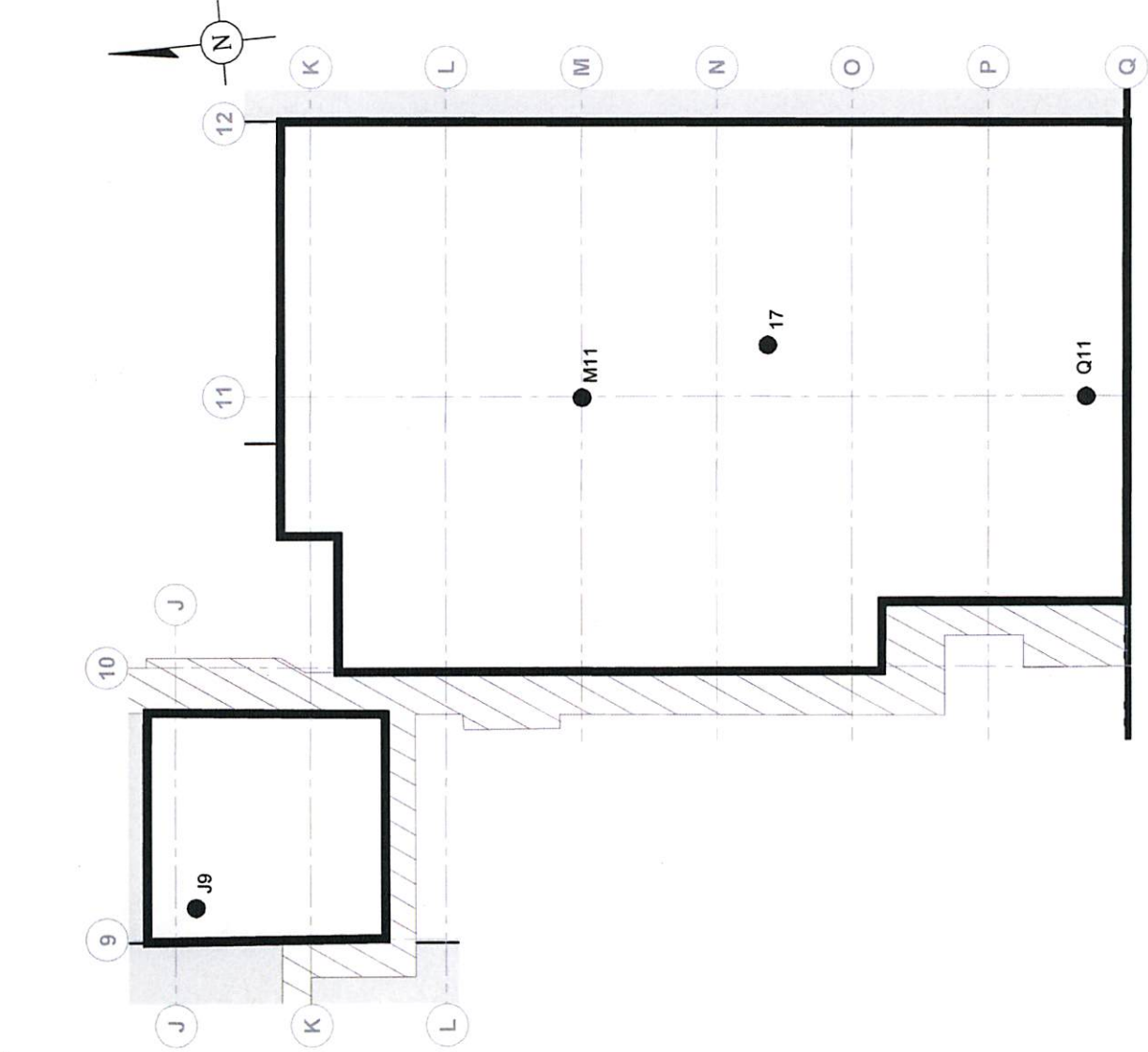
D = Concentration is based on a diluted sample analysis.

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ug/m3 = Micrograms per cubic meter.

-- = Criteria value not available.





**LEGEND:**

17 ● SAMPLE LOCATION

**NOTE:**

SAMPLES IDENTIFIED AS IA ARE  
 INDOOR AIR AND SS ARE SUB-SLAB  
 AT THE LOCATION NOTED ON MAP.



LOCKHEED MARTIN CORPORATION  
 GREAT NECK, NEW YORK

**ANTECH**  
 VI SAMPLE LOCATIONS



# Volatile Organic Compounds (VOCs) in Commonly Used Products

People spend most of their time indoors – at home, school and work. This makes the quality of the indoor air you breathe important. This fact sheet focuses on certain kinds of chemicals called *volatile organic compounds* or VOCs that are found in many products that we commonly use. It is designed to help you think about what VOCs may be present in your indoor air and steps you can take to reduce them.

## What are VOCs?

VOCs are chemicals that easily enter the air as gases from some solids or liquids. They are ingredients in many commonly used products and are in the air of just about every indoor setting. The table to the right shows some examples of products that contain VOCs.

## How do VOCs get into indoor air?

Products containing VOCs can release these chemicals when they are used and when they are stored. Many times you'll notice an odor when using these products. Product labels often list VOC ingredients and recommend that they should be used in well ventilated areas. *Ventilation* means bringing in fresh, outdoor air to mix with indoor air.

When you use a product containing VOCs indoors, the levels of these chemicals in the air increase, then decrease over time after you stop using them. The amount of time the chemical stays in the air depends on how quickly fresh air enters the room and the amount of the chemical used. Levels of VOCs will decrease faster if you open windows or doors, or use exhaust fans.

Building materials and furnishings, such as new carpets or furniture, slowly release VOCs over time. It may be necessary to ventilate areas with new carpeting or furniture for longer time periods because VOC levels can build up again after the windows are closed. If possible, unroll new carpets or store furniture outside your home (in a shed or detached garage) to minimize odors before bringing them in the home. If that's not possible, open windows, close doors and try to stay out of rooms until odors are reduced.

If VOC containing products are used outdoors near your home, you may want to close windows and nearby vents to prevent chemicals from coming inside.

**Products used at home or work can release VOCs into the air when used and stored.**



Examples of Household Products	Possible VOC Ingredients
Fuel containers or devices using gasoline, kerosene, fuel oil and products with petroleum distillates: paint thinner, oil-based stains and paint, aerosol or liquid insect pest products, mineral spirits, furniture polishes	BTEX (benzene, toluene, ethylbenzene, xylene), hexane, cyclohexane, 1,2,4-trimethylbenzene
Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray	Acetone, ethyl alcohol, isopropyl alcohol, methacrylates (methyl or ethyl), ethyl acetate
Dry cleaned clothes, spot removers, fabric/leather cleaners	Tetrachloroethene (perchloroethene (PERC), trichloroethene (TCE))
Citrus (orange) oil or pine oil cleaners, solvents and some odor masking products	d-limonene (citrus odor), a-pinene (pine odor), isoprene
PVC cement and primer, various adhesives, contact cement, model cement	Tetrahydrofuran, cyclohexane, methyl ethyl ketone (MEK), toluene, acetone, hexane, 1,1,1-trichloroethane, methyl-iso-butyl ketone (MIBK)
Paint stripper, adhesive (glue) removers	Methylene chloride, toluene, older products may contain carbon tetrachloride
Degreasers, aerosol penetrating oils, brake cleaner, carburetor cleaner, commercial solvents, electronics cleaners, spray lubricants	Methylene chloride, PERC, TCE, toluene, xylenes, methyl ethyl ketone, 1,1,1-trichloroethane
Moth balls, moth flakes, deodorizers, air fresheners	1,4-dichlorobenzene, naphthalene
Refrigerant from air conditioners, freezers, refrigerators, dehumidifiers	Freons (trichlorofluoromethane, dichlorodifluoromethane)
Aerosol spray products for some paints, cosmetics, automotive products, leather treatments, pesticides	Heptane, butane, pentane
Upholstered furniture, carpets, plywood, pressed wood products	Formaldehyde



VOCs can also get into indoor air from contaminated soils and groundwater under buildings. The chemicals enter buildings through cracks and openings in basements or slabs. When nearby soil or groundwater is contaminated, you might be asked for permission to investigate indoor air at your property. More information can be found at [www.nyhealth.gov/environmental/indoors/vapor\\_intrusion/](http://www.nyhealth.gov/environmental/indoors/vapor_intrusion/).

### Should I be surprised if VOCs are in the air I breathe?

No. Because they are commonly used, some VOCs are almost always found in indoor air. The New York State Department of Health (DOH) and other agencies have studied typical levels of VOCs that may be present in indoor and outdoor air. Sometimes these levels are called “background levels”.

The term “background levels” can be confusing because they can vary depending on where an air sample was collected and whether VOCs were used or stored. For example, a study of VOCs in urban areas might find higher levels than another study in rural areas. Some studies look at office environments, others examine residences. Please keep in mind study findings may or may not make sense for your setting.

More information about levels of VOCs collected by DOH is available in Appendix C of the guidance for evaluating vapor intrusion at [www.nyhealth.gov/environmental/investigations/soil\\_gas/svi\\_guidance](http://www.nyhealth.gov/environmental/investigations/soil_gas/svi_guidance).

### How can VOCs affect human health?

Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*. No matter how dangerous a substance or activity is, it cannot harm you without exposure.

Whether or not a person will have health effects after breathing in VOCs depends on:

1. The *toxicity* of the chemical (the amount of harm that can be caused by contact with the chemical).
2. How much of the chemical is in the air.
3. How long and how often the air is breathed.

Differences in age, health condition, gender and exposure to other chemicals also can affect whether or not a person will have health effects.

Short-term exposure to high levels of some VOCs can cause headaches, dizziness, light-headedness, drowsiness, nausea, and eye and respiratory irritation. These effects usually go away after the exposure stops. In laboratory animals, long-

term exposure to high levels of some VOCs has caused cancer and affected the liver, kidney and nervous system. In general, we recommend minimizing exposure to chemicals, if possible.

### How can I reduce the levels of VOCs indoors?

- Find out if products used or stored in your home contain VOCs. Information about the chemicals in many household products are listed on the front of this fact sheet and a larger list is on the National Institute of Health's website at [hpd.nlm.nih.gov/products.htm](http://hpd.nlm.nih.gov/products.htm).
- If you must store products containing VOCs, do so in tightly sealed, original containers in a secure and well-ventilated area. If possible store products in places where people do not spend much time, such as a garage or outdoor shed. Better yet, buy these products in amounts that are used quickly.
- Dispose of unneeded products containing VOCs. Many of these products are considered *household hazardous wastes* and should be disposed of at special facilities or during special household hazardous waste collection programs in your area. Contact your town or visit the New York State Department of Environmental Conservation's website at [www.dec.ny.gov/chemical/8485.html](http://www.dec.ny.gov/chemical/8485.html) for more information about disposing of these products.
- Use products containing VOCs in well-ventilated areas or outdoors. Open windows and doors or use an exhaust fan to increase ventilation. Repeated or prolonged ventilation may be necessary for reducing levels from building materials (new carpeting or furniture) that release VOCs slowly over time.
- Carefully read labels and follow directions for use.

### Where can I find out more?

- **New York State Department of Health**  
(800) 458-1158  
[www.nyhealth.gov/environmental/](http://www.nyhealth.gov/environmental/)
- **Indoor Air Quality and Your Home** from the New York State Energy Research and Development Authority [www.nyserda.org/publications/iaq.pdf](http://www.nyserda.org/publications/iaq.pdf)
- **The Inside Story: A Guide to Indoor Air Quality**  
[www.epa.gov/iaq/pubs/insidest.html](http://www.epa.gov/iaq/pubs/insidest.html)
- **New York State Department of Environmental Conservation** website for information about household hazardous waste disposal  
[www.dec.ny.gov/chemical/8485.html](http://www.dec.ny.gov/chemical/8485.html)
- **National Institute of Health's** website for information about chemicals found in many household products.  
[hpd.nlm.nih.gov/products.htm](http://hpd.nlm.nih.gov/products.htm)



December 2007



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April 4, 2011

Ms. Stephanie Jones  
LA Fitness  
C/O Winthrop Management  
1111 Marcus Avenue  
Lake Success, NY 11042

RE: Vapor Intrusion Sampling Test Results

Dear Ms. Jones:

Thank you for your cooperation in allowing our contractor, ARCADIS, to collect an indoor air sample and a sub-slab soil vapor sample from your leasehold at 1111 Marcus Avenue on January 11, 2011. These samples were taken in response to a large crack that developed in the concrete floor slab. I am pleased to report that the sampling results indicate there is not a current soil vapor intrusion issue at your leasehold and the presence of the floor crack did not in any way compromise indoor air quality.

As you are aware, the primary chemicals of concern related to historical activities at the former Unisys facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE), and cis-1,2-dichloroethene (DCE) used for degreasing, and Freon 113, although there were other chemicals used at the site. These chemicals are present in groundwater located more than 100 feet below ground surface and may also be present in soils located under the slab at 1111 Marcus Avenue. Vapors from soil or groundwater may move into the indoor air through a process referred to as soil vapor intrusion.

Lockheed Martin, in consultation with the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH), has reviewed the results from your leaseholds consistent with NYSDOH's October 2006 *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. A copy of this guidance is available on NYSDOH's website at [http://www.health.state.ny.us/environmental/indoors/vapor\\_intrusion/](http://www.health.state.ny.us/environmental/indoors/vapor_intrusion/). The test results indicate that indoor air concentrations of TCE and PCE are below the NYSDOH indoor air guidelines of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 100  $\mu\text{g}/\text{m}^3$ , respectively (see Table 1 and Figure 1, enclosed).

On Table 1, we have identified as "Group A" the chemicals that are potentially associated with the former Unisys Facility, and we have identified as "Group B" the other volatile organic compounds that were detected in the air or soil vapor samples. The indoor air quality of your leaseholds is comparable to that of buildings not affected by environmental contamination. The volatile organic chemicals detected in indoor air are at levels usually found in indoor air in an urban area and do not represent a concern. Although chloroform was detected in indoor air slightly above typical background levels in the sample, this result is most likely associated with chemicals used to chlorinate the swimming pool. The enclosed fact sheet from NYSDOH provides some information on reducing exposures to volatile chemicals associated with household products. A more detailed

Ms. Stephanie Jones  
April 4, 2011  
Page 2

discussion of your results can be provided by contacting Renata Ockerby of the NYSDOH at 1-518-402-7880 ([reo02@health.state.ny.us](mailto:reo02@health.state.ny.us)) or Girish Desai of the NYSDEC at 631-444-0243 ([gvdesai@gw.dec.state.ny.us](mailto:gvdesai@gw.dec.state.ny.us)). If you have questions about these sample results or the on-going environmental investigations and cleanup at the former Unisys Facility, please contact me at 1-817-763-7629 or via e-mail at [robert.s.phillips@lmco.com](mailto:robert.s.phillips@lmco.com).

Again, thank you for allowing us access to your leaseholds to evaluate the air quality. We appreciate your assistance in our environmental investigation.

Sincerely,

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

R. Stan Phillips

Enclosures

cc: Renata Ockerby/ NYSDOH  
Girish Desai/ NYSDEC  
Nick Valkenburg/ ARCADIS

**Table 1. Indoor Air Sample Results - LA Fitness**  
Former Unisys Facility, Great Neck, New York

Location ID: Date Collected: Lab Sample ID:	Typical Indoor Air Background	Units	IA-LAC8 01/11/11 P1100114-001	SS-LAC8 01/11/11 P1100114-002
<b>Group A</b>				
1,1,1-Trichloroethane	20.6	ug/m3	0.68 U	5.7
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	ug/m3	0.68 U	3.6
1,1,2-Trichloroethane	1.5	ug/m3	0.68 U	0.72 U
1,1-Dichloroethane	0.7	ug/m3	0.68 U	0.72 U
1,1-Dichloroethene	1.4	ug/m3	0.68 U	0.72 U
1,2-Dichloroethane	0.9	ug/m3	0.68 U	0.72 U
1,2-Dichloroethene (cis) (DCE)	1.9	ug/m3	0.68 U	0.72 U
1,2-Dichloroethene (total)	--	ug/m3	0.68 U	0.72 U
1,2-Dichloroethene (trans)	--	ug/m3	0.68 U	0.72 U
Chloroform	1.1	ug/m3	9.7	17
Methyl tert-Butyl Ether (MTBE)	11.5	ug/m3	0.68 U	0.72 U
Tetrachloroethene (PCE)	15.9	ug/m3	0.68 U	26
Toluene	43	ug/m3	3.8	11
Trichloroethene (TCE)	4.2	ug/m3	0.14 U	89
Trichlorofluoromethane (Freon 11)	18.1	ug/m3	1.6	2.6
Vinyl chloride	1.9	ug/m3	0.68 U	0.72 U
<b>Detected Group B</b>				
1,1-Difluoroethane (Freon 152a)	--	ug/m3	25	13
1,2,4-Trimethylbenzene	9.5	ug/m3	0.75	16
1,3,5-Trimethylbenzene	3.7	ug/m3	0.68 U	7.7
4-Ethyltoluene	3.6	ug/m3	0.68 U	1.8
Acetone (2-propanone)	98.9	ug/m3	43	42
Benzene	9.4	ug/m3	0.95	0.72 U
Carbon tetrachloride	1.3	ug/m3	0.55	0.48
Chlorodifluoromethane (Freon 22)	--	ug/m3	0.90	0.98
Dichlorodifluoromethane (Freon 12)	16.5	ug/m3	3.0	2.8
Ethylbenzene	5.7	ug/m3	1.6	0.72 U
Isopropyl Alcohol (2-Propanol)	250	ug/m3	45 J	37 J
Methyl Acetate	--	ug/m3	0.68	0.72 U
Methyl Butyl Ketone (2-Hexanone)	--	ug/m3	0.68 U	1.4
Styrene	1.9	ug/m3	0.68 U	1.4
Xylenes (m&p)	22.2	ug/m3	5.4	1.8
Xylenes (o)	7.9	ug/m3	1.3	0.85

**Notes:**

Group A = Constituents associated with historical activities at the Former Unisys Site and present in groundwater.

Group B = Other volatile organic compounds detected in indoor air or sub-slab soil vapor.

(1) Background is defined as the 90th percentile values from the U.S. Environmental Protection

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

ug/m3 = Micrograms per cubic meter.

-- = Criteria value not available.

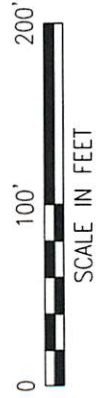
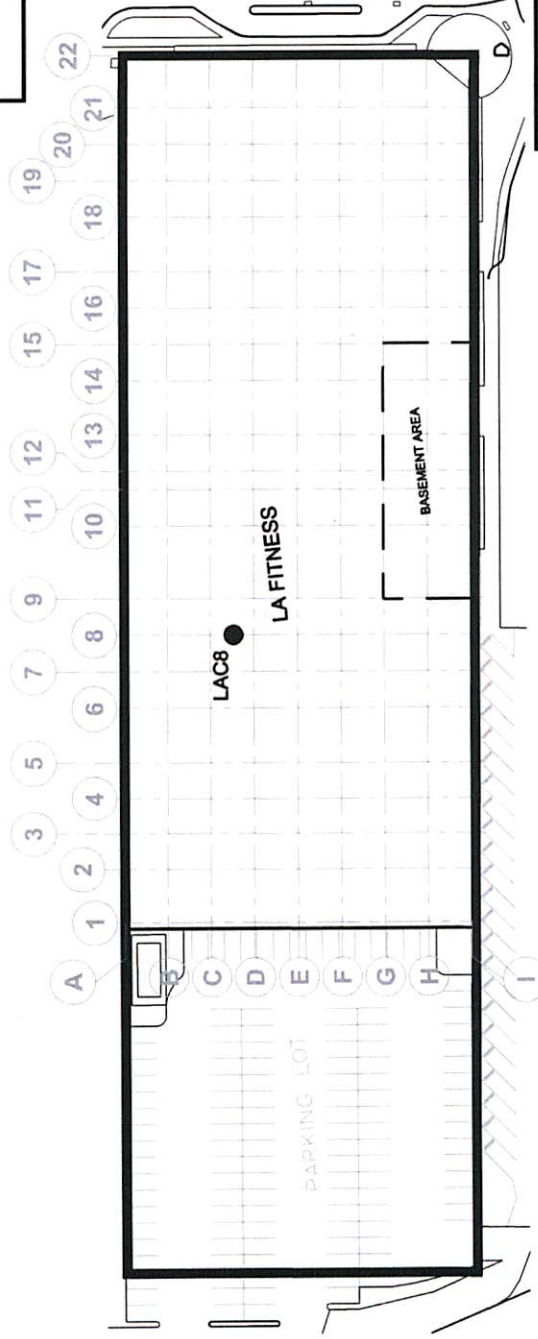
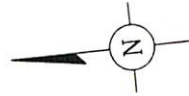
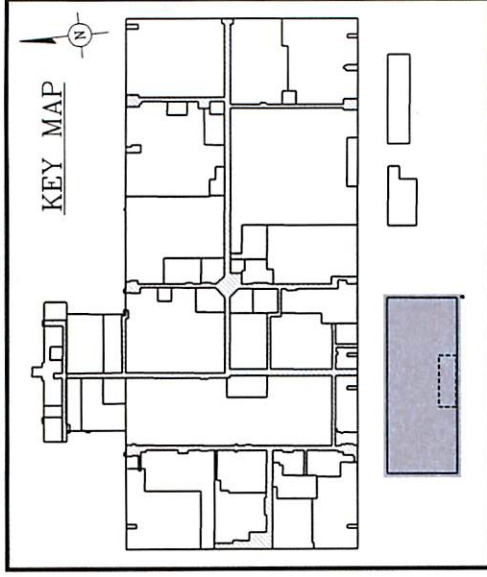


# LEGEND:

LAC8 ● SAMPLE LOCATION

# NOTES:

1. SAMPLES IDENTIFIED AS IA ARE INDOOR AIR AT THE LOCATION NOTED ON MAP.
2. SAMPLES IDENTIFIED AS SS ARE SUB-SLAB SOIL VAPOR AT THE LOCATION ON THE MAP.



LOCKHEED MARTIN CORPORATION  
 GREAT NECK, NEW YORK

LA FITNESS  
 VI SAMPLE LOCATIONS



FIGURE

1

# Volatile Organic Compounds (VOCs) in Commonly Used Products

People spend most of their time indoors – at home, school and work. This makes the quality of the indoor air you breathe important. This fact sheet focuses on certain kinds of chemicals called *volatile organic compounds* or VOCs that are found in many products that we commonly use. It is designed to help you think about what VOCs may be present in your indoor air and steps you can take to reduce them.

## What are VOCs?

VOCs are chemicals that easily enter the air as gases from some solids or liquids. They are ingredients in many commonly used products and are in the air of just about every indoor setting. The table to the right shows some examples of products that contain VOCs.

## How do VOCs get into indoor air?

Products containing VOCs can release these chemicals when they are used and when they are stored. Many times you'll notice an odor when using these products. Product labels often list VOC ingredients and recommend that they should be used in well ventilated areas. *Ventilation* means bringing in fresh, outdoor air to mix with indoor air.

When you use a product containing VOCs indoors, the levels of these chemicals in the air increase, then decrease over time after you stop using them. The amount of time the chemical stays in the air depends on how quickly fresh air enters the room and the amount of the chemical used. Levels of VOCs will decrease faster if you open windows or doors, or use exhaust fans.

Building materials and furnishings, such as new carpets or furniture, slowly release VOCs over time. It may be necessary to ventilate areas with new carpeting or furniture for longer time periods because VOC levels can build up again after the windows are closed. If possible, unroll new carpets or store furniture outside your home (in a shed or detached garage) to minimize odors before bringing them in the home. If that's not possible, open windows, close doors and try to stay out of rooms until odors are reduced.

If VOC containing products are used outdoors near your home, you may want to close windows and nearby vents to prevent chemicals from coming inside.

Products used at home or work can release VOCs into the air when used and stored.



Examples of Household Products	Possible VOC Ingredients
Fuel containers or devices using gasoline, kerosene, fuel oil and products with petroleum distillates: paint thinner, oil-based stains and paint, aerosol or liquid insect pest products, mineral spirits, furniture polishes	BTEX (benzene, toluene, ethylbenzene, xylene), hexane, cyclohexane, 1,2,4-trimethylbenzene
Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray	Acetone, ethyl alcohol, isopropyl alcohol, methacrylates (methyl or ethyl), ethyl acetate
Dry cleaned clothes, spot removers, fabric/leather cleaners	Tetrachloroethene (perchloroethene (PERC), trichloroethene (TCE))
Citrus (orange) oil or pine oil cleaners, solvents and some odor masking products	d-limonene (citrus odor), a-pinene (pine odor), isoprene
PVC cement and primer, various adhesives, contact cement, model cement	Tetrahydrofuran, cyclohexane, methyl ethyl ketone (MEK), toluene, acetone, hexane, 1,1,1-trichloroethane, methyl-iso-butyl ketone (MIBK)
Paint stripper, adhesive (glue) removers	Methylene chloride, toluene, older products may contain carbon tetrachloride
Degreasers, aerosol penetrating oils, brake cleaner, carburetor cleaner, commercial solvents, electronics cleaners, spray lubricants	Methylene chloride, PERC, TCE, toluene, xylenes, methyl ethyl ketone, 1,1,1-trichloroethane
Moth balls, moth flakes, deodorizers, air fresheners	1,4-dichlorobenzene, naphthalene
Refrigerant from air conditioners, freezers, refrigerators, dehumidifiers	Freons (trichlorofluoromethane, dichlorodifluoromethane)
Aerosol spray products for some paints, cosmetics, automotive products, leather treatments, pesticides	Heptane, butane, pentane
Upholstered furniture, carpets, plywood, pressed wood products	Formaldehyde



VOCs can also get into indoor air from contaminated soils and groundwater under buildings. The chemicals enter buildings through cracks and openings in basements or slabs. When nearby soil or groundwater is contaminated, you might be asked for permission to investigate indoor air at your property. More information can be found at [www.nyhealth.gov/environmental/indoors/vapor\\_intrusion/](http://www.nyhealth.gov/environmental/indoors/vapor_intrusion/).

### Should I be surprised if VOCs are in the air I breathe?

No. Because they are commonly used, some VOCs are almost always found in indoor air. The New York State Department of Health (DOH) and other agencies have studied typical levels of VOCs that may be present in indoor and outdoor air. Sometimes these levels are called “background levels”.

The term “background levels” can be confusing because they can vary depending on where an air sample was collected and whether VOCs were used or stored. For example, a study of VOCs in urban areas might find higher levels than another study in rural areas. Some studies look at office environments, others examine residences. Please keep in mind study findings may or may not make sense for your setting.

More information about levels of VOCs collected by DOH is available in Appendix C of the guidance for evaluating vapor intrusion at [www.nyhealth.gov/environmental/investigations/soil\\_gas/svi\\_guidance](http://www.nyhealth.gov/environmental/investigations/soil_gas/svi_guidance).

### How can VOCs affect human health?

Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*. No matter how dangerous a substance or activity is, it cannot harm you without exposure.

Whether or not a person will have health effects after breathing in VOCs depends on:

1. The *toxicity* of the chemical (the amount of harm that can be caused by contact with the chemical).
2. How much of the chemical is in the air.
3. How long and how often the air is breathed.

Differences in age, health condition, gender and exposure to other chemicals also can affect whether or not a person will have health effects.

Short-term exposure to high levels of some VOCs can cause headaches, dizziness, light-headedness, drowsiness, nausea, and eye and respiratory irritation. These effects usually go away after the exposure stops. In laboratory animals, long-

term exposure to high levels of some VOCs has caused cancer and affected the liver, kidney and nervous system. In general, we recommend minimizing exposure to chemicals, if possible.

### How can I reduce the levels of VOCs indoors?

- Find out if products used or stored in your home contain VOCs. Information about the chemicals in many household products are listed on the front of this fact sheet and a larger list is on the National Institute of Health's website at [hpd.nlm.nih.gov/products.htm](http://hpd.nlm.nih.gov/products.htm).
- If you must store products containing VOCs, do so in tightly sealed, original containers in a secure and well-ventilated area. If possible store products in places where people do not spend much time, such as a garage or outdoor shed. Better yet, buy these products in amounts that are used quickly.
- Dispose of unneeded products containing VOCs. Many of these products are considered *household hazardous wastes* and should be disposed of at special facilities or during special household hazardous waste collection programs in your area. Contact your town or visit the New York State Department of Environmental Conservation's website at [www.dec.ny.gov/chemical/8485.html](http://www.dec.ny.gov/chemical/8485.html) for more information about disposing of these products.
- Use products containing VOCs in well-ventilated areas or outdoors. Open windows and doors or use an exhaust fan to increase ventilation. Repeated or prolonged ventilation may be necessary for reducing levels from building materials (new carpeting or furniture) that release VOCs slowly over time.
- Carefully read labels and follow directions for use.

### Where can I find out more?

- **New York State Department of Health**  
(800) 458-1158  
[www.nyhealth.gov/environmental/](http://www.nyhealth.gov/environmental/)
- **Indoor Air Quality and Your Home** from the New York State Energy Research and Development Authority [www.nysed.org/publications/iaq.pdf](http://www.nysed.org/publications/iaq.pdf)
- **The Inside Story: A Guide to Indoor Air Quality**  
[www.epa.gov/iaq/pubs/insidest.html](http://www.epa.gov/iaq/pubs/insidest.html)
- **New York State Department of Environmental Conservation** website for information about household hazardous waste disposal  
[www.dec.ny.gov/chemical/8485.html](http://www.dec.ny.gov/chemical/8485.html)
- **National Institute of Health's** website for information about chemicals found in many household products.  
[hpd.nlm.nih.gov/products.htm](http://hpd.nlm.nih.gov/products.htm)



December 2007



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2950 N. Hollywood Way, Suite 125  
Burbank, CA 91505  
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Fax 817-762-4884



April 4, 2011

Mr. Pat Conti  
NY Mercantile Exchange  
C/O Winthrop Management  
1111 Marcus Avenue  
Lake Success, NY 11042

RE: Vapor Intrusion Sampling Test Results

Dear Mr. Conti:

Thank you for your cooperation in allowing our contractor, ARCADIS, to collect indoor air samples from your leasehold at 1111 Marcus Avenue. The samples were collected on January 22, 2011. I am pleased to report that the sampling results indicate there is not a current soil vapor intrusion issue at your leasehold.

As you are aware, the primary chemicals of concern related to historical activities at the former Unisys facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE), and cis-1,2-dichloroethene (DCE) used for degreasing, and Freon 113, although there were other chemicals used at the site. These chemicals are present in groundwater located more than 100 feet below ground surface and may also be present in soils located under the slab at 1111 Marcus Avenue. Vapors from soil or groundwater may move into the indoor air through a process referred to as soil vapor intrusion.

Lockheed Martin, in consultation with the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH), has reviewed the results from your leasehold consistent with NYSDOH's October 2006 *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. A copy of this guidance is available on NYSDOH's website at [http://www.health.state.ny.us/environmental/indoors/vapor\\_intrusion/](http://www.health.state.ny.us/environmental/indoors/vapor_intrusion/). The test results indicate that indoor air concentrations of TCE and PCE are below the NYSDOH indoor air guidelines of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 100  $\mu\text{g}/\text{m}^3$ , respectively (see Table 1 and Figure 1, enclosed).

On Table 1, we have identified as "Group A" the chemicals that are potentially associated with the former Unisys Facility, and we have identified as "Group B" the other volatile organic compounds that were detected in the air samples. The indoor air quality of your leasehold is comparable to that of buildings not affected by environmental contamination. The volatile organic chemicals detected in indoor air are at levels usually found in indoor air in an urban area and do not represent a concern.

A more detailed discussion of your results can be provided by contacting Renata Ockerby of the NYSDOH at 1-518-402-7880 ([reo02@health.state.ny.us](mailto:reo02@health.state.ny.us)) or Girish Desai of the NYSDEC at 631-444-0243 ([gvdesai@gw.dec.state.ny.us](mailto:gvdesai@gw.dec.state.ny.us)). If you have questions about these sample results or the

Mr. Pat Conti  
April 4, 2011  
Page 2

on-going environmental investigations and cleanup at the former Unisys Facility, please contact me at 1-817-763-7629 or via e-mail at [robert.s.phillips@lmco.com](mailto:robert.s.phillips@lmco.com).

Again, thank you for allowing us access to your leasehold to evaluate the air quality. We appreciate your assistance in our environmental investigation.

Sincerely,

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

R. Stan Phillips

Enclosures

cc: Renata Ockerby/ NYSDOH  
Girish Desai/ NYSDEC  
Nick Valkenburg/ ARCADIS



**Table 1. Indoor Air Sample Results - Leased  
Former Unisys Facility, Great Neck, New York**

Location ID: Date Collected: Lab Sample ID:	Typical Indoor Air Background (1)	Units	IA-3M 01/22/11 P1100312-003
<b>Group A</b>			
1,1,1-Trichloroethane	20.6	ug/m3	0.76 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	ug/m3	0.76 U
1,1,2-Trichloroethane	1.5	ug/m3	0.76 U
1,1-Dichloroethane	0.7	ug/m3	0.76 U
1,1-Dichloroethene	1.4	ug/m3	0.76 U
1,2-Dichloroethane	0.9	ug/m3	0.76 U
1,2-Dichloroethene (cis) (DCE)	1.9	ug/m3	0.76 U
1,2-Dichloroethene (total)	--	ug/m3	0.76 U
1,2-Dichloroethene (trans)	--	ug/m3	0.76 U
Chloroform	1.1	ug/m3	0.76 U
Methyl tert-Butyl Ether (MTBE)	11.5	ug/m3	0.76 U
Tetrachloroethene (PCE)	15.9	ug/m3	0.76 U
Toluene	43	ug/m3	0.97
Trichloroethene (TCE)	4.2	ug/m3	0.15 U
Trichlorofluoromethane (Freon 11)	18.1	ug/m3	1.3
Vinyl chloride	1.9	ug/m3	0.76 U
<b>Detected Group B</b>			
Carbon tetrachloride	1.3	ug/m3	0.43
Chlorodifluoromethane (Freon 22)	--	ug/m3	1.4
Dichlorodifluoromethane (Freon 12)	16.5	ug/m3	2.3

**Notes:**

Group A = Constituents associated with historical activities at the Former Unisys Site and present in groundwater.

Group B = Other volatile organic compounds detected in indoor air or sub-slab soil vapor.

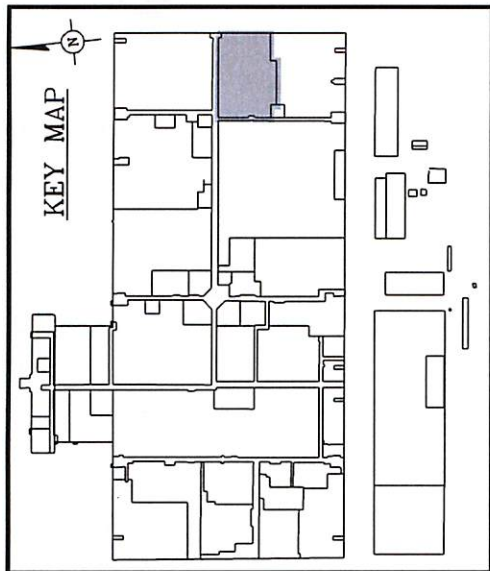
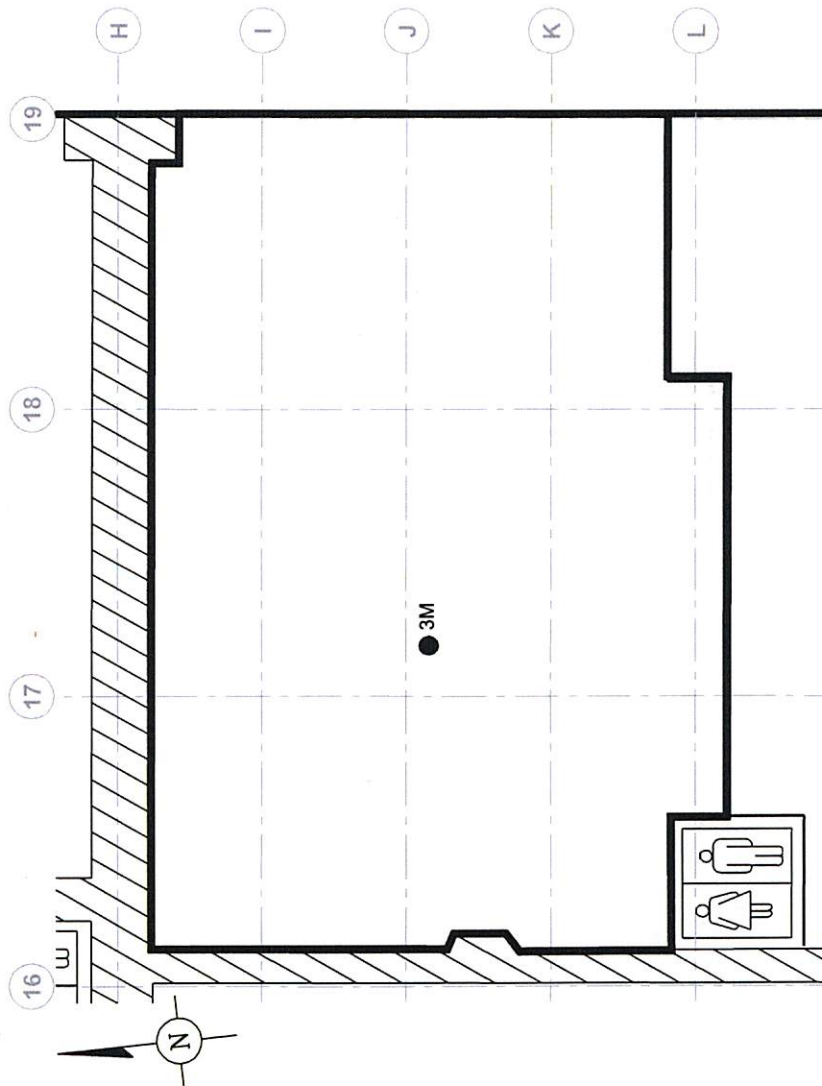
(1) Background is defined as the 90th percentile values from the U.S. Environmental Protection

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ug/m3 = Micrograms per cubic meter.

-- = Criteria value not available.



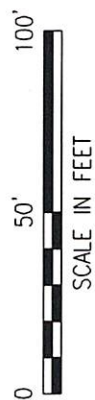


**LEGEND:**

3M ● SAMPLE LOCATION

**NOTE:**

SAMPLES IDENTIFIED AS IA ARE  
 INDOOR AIR AND SS ARE SUB-SLAB  
 AT THE LOCATION NOTED ON MAP.



LOCKHEED MARTIN CORPORATION  
 GREAT NECK, NEW YORK

**LEASED  
 VI SAMPLE LOCATIONS**

