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Vapor Intrusion Study Report for the Solvent Dock Area

Former Lockheed Martin French Road Facility

August 2007

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Vapor Intrusion Study Report for the Solvent Dock Area

French Road Facility
Utica, New York

Christopher J. Motta, C.P.G.
Project Manager

Lowell W. McBurney, P.E.
Principal in Charge

Prepared for:
Lockheed Martin Corporation

Prepared by:
ARCADIS
482 Congress Street
Suite 501
Portland
Maine 04101
Tel 207.828.0046
Fax 207.828.0062

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1. Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), ARCADIS has prepared this report to present the results of the vapor intrusion study for the former French Road Facility Solvent Dock Area (herein the "Site") located in Utica, New York and to evaluate the results based on the criteria set forth in the *Final – Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH 2006). The vapor intrusion study was required by the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH) to address the vapor intrusion pathway for the Site. The requirement was set forth in an 18 October 2006 letter to Lockheed Martin. The 18 October 2006 letter provided comments on the *Work Plan for the Interim Corrective Measure* (ARCADIS 2006a) including the requirement for delineation of the soil gas plume prior to development and implementation of the interim corrective measure (i.e., vapor depressurization system).

In response to this requirement, ARCADIS prepared a *Supplemental Vapor Intrusion Study* (herein "Study Work Plan") (ARCADIS 2007) dated 14 March 2007 that outlined the program for subslab soil gas and indoor air sampling at the Site, consistent with the discussions during conference calls with the NYSDEC and NYSDOH. The Study Work Plan was approved by the NYSDEC on 22 March 2007 and implemented on 12 April 2007.

This report presents information on the background and site history, the site setting including the results of a previous vapor intrusion study, the sampling approach, and the results and findings of all subslab and indoor air sampling. The summary and conclusions are presented at the end of this report.

2. Background and Site History

The 55-acre property, located in Utica, New York, was initially developed in the early 1950s by General Electric (GE) who constructed an industrial facility that included a 500,000-square foot manufacturing building (Figure 1). Production operations conducted by GE included manufacturing, assembly, and testing of electrical components for the defense and aerospace industries. These production operations were conducted by GE until April 1993, when the facility was acquired by Martin Marietta Corporation (MMC). In March 1995, MMC merged with Lockheed Corporation to form Lockheed Martin Corporation. In March 1996, Lockheed Martin sold the property to Pinnacle Park, Inc., which subsequently sold the property to the Oneida County Industrial Development Agency (OCIDA), the current owner. ConMed

Corporation, a company that manufactures and distributes medical supplies, now occupies the facility and leases it from OCIDA. Although Lockheed Martin no longer owns the property, it has retained responsibility for environmental cleanup activities related to past releases at the Solvent Dock Area which includes the former solvent dock and surrounding area where groundwater is impacted with volatile organic compounds (VOCs).

Historical environmental releases at the Site are associated with a 275-gallon fiberglass overflow retention tank and other underground storage tanks (USTs) that were installed beneath the former solvent dock (part of the loading docks along the eastern section of the building's north wall). The retention tank was designed to contain solvents incidentally spilled and subsequently collected in floor drains at the former solvent dock. Collected waste solvents were periodically sampled, pumped from the retention tank, and disposed by waste haulers. The retention tank remained in service until June 1990, when it was removed. During tank removal, elevated vapor readings were noted, indicating a release. The retention tank was also noted as dented and leaking fluid.

A series of investigations to evaluate the soil and groundwater impacts due to spills and/or leaks associated with the retention tank and other USTs beneath the former solvent dock were subsequently completed, confirming the presence of VOCs in groundwater beneath and downgradient of the former solvent dock.

3. Site Setting

This section presents information on the geology and hydrogeology, the site reconnaissance and building conditions, and a summary of a previous vapor intrusion study completed at the Site.

3.1 Geology and Hydrogeology

Geologic materials (i.e., stratigraphy) encountered during previous investigations in the Solvent Dock Area were generally described as brown silt with fine sand to a maximum depth of approximately 20 feet below land surface (bls), overlying a dense unit composed of silt and fine sand with minor gravel (likely glacial till). This stratigraphy is similar to the regional geology of the Utica area. Groundwater elevation data show that the water table ranges from 5 to 10 feet bls. The general direction of groundwater flow is south-southeast. As such, groundwater moves from the exterior loading dock to beneath the manufacturing building. The Solvent Dock Area is "capped" with asphalt

pavement in the exterior loading area or with the building's concrete foundation and slab.

Several solvent storage tanks were removed from service during the late 1970s and the early 1980s, with the last tank (the overflow retention tank) removed from the Solvent Dock Area in 1990. Due to the detection of organic vapors during the removal of the overflow tank, a series of investigations to evaluate potential soil and groundwater impacts due to spills and/or leaks from the former solvent tanks was completed. These historical investigations determined that groundwater in and around the northeast corner of the main manufacturing building (i.e., the Solvent Dock Area) had been impacted by VOCs. Groundwater samples collected during the past 10 to 15 years from piezometers installed through the building slab have yielded detectable levels of VOCs including 1,1-dichloroethane (1,1-DCA), trichloroethene (TCE), tetrachloroethene (PCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride. Concentrations of total VOCs in these samples have recently been in the range of 500 to 1,000 micrograms per liter (µg/L). Water quality data for wells in the Solvent Dock Area are shown on Figure 2.

3.2 Site Reconnaissance and Building Conditions

Site reconnaissance was conducted by EarthTech, on behalf of Lockheed Martin in March 2005 and February 2006. The focus of the reconnaissance was to select sampling locations, evaluate the building condition, identify chemical usage in the building, and to identify and minimize conditions that may interfere with the planned sampling activities. The building floor was noted to be in good condition and free of cracks and holes (which represent target sampling locations). Therefore, sample locations were identified in areas with potential worker exposure. During the reconnaissance, several rooms in the building were identified as being under positive pressure. These areas are shown on Figure 3.

A copy of the product inventory completed during the reconnaissance is provided in Appendix A. Workers initially indicated that solvent use was limited to citrus degreasers. However, during sampling events and additional inquiries at the ConMed facility, TCE and other chemicals, including petroleum products and methylene chloride, were identified in the eastern portion of the building near molding machines.

3.3 Previous Vapor Intrusion Study

In February 2006, EarthTech collected ten subslab soil gas and indoor air samples and one ambient air sample at the ConMed facility. Sample locations, except ambient air, are shown on Figure 3. The ambient air sample was located outside of the northwest corner of the building approximately 750 feet west of the Solvent Dock Area. Sample results were submitted to the NYSDEC in a letter report dated April 17, 2006 (EarthTech 2006). The sample results showed that both TCE and PCE were detected in subslab soil gas and indoor air at concentrations greater than NYSDOH air guidelines at some locations (Tables 1 and 2). Concentrations of TCE in indoor air ranged from non-detect to 73 micrograms per cubic meter (µg/m^3). PCE was detected in indoor air at concentrations that ranged from 2.8 µg/m^3 to 97 ug/m^3. In subslab soil gas, TCE levels ranged from 2.5 µg/m^3 to 680 µg/m^3 and PCE levels ranged from 5.0 µg/m^3 to 21,000 µg/m^3.

Based on the results of the initial sampling event and in response to the presence (and perhaps use) of TCE in the building, EarthTech conducted a second sampling event at two locations (I1 and I4) (EarthTech 2006). The results of the re-sampling event detected the same concentration of TCE at I1 (41 µg/m^3) and a lower concentration of TCE at I4 (6.7 µg/m^3).

4. Sampling Approach

The 12 April 2007 sampling event conducted by ARCADIS was implemented in accordance with the Study Work Plan (ARCADIS 2007) and the *Vapor Intrusion Work Plan - Revised* (Lockheed Martin 2005). The sampling locations are shown on Figure 3. Sampling logs are provided in Appendix B. The study area consisted of the eastern section of the manufacturing building where groundwater is impacted with VOCs.

Eight co-located subslab soil gas and indoor air sampling locations were initially identified as part of this supplemental study. As requested by NYSDEC and NYSDOH, samples were biased towards the north, south, and west and focused on the portions of the building located outside of the positive pressure rooms and where the groundwater plume is not well defined (beneath the building toward the west). All samples were collected as proposed in the Study Work Plan, with the exception of a subslab soil gas sample at location 6SD. At location 6SD, the thickness of the slab (greater than 16 inches) prevented the collection of any subslab soil gas sample. As a result, only an indoor air sample was collected from this location.

As provided for in the Study Work Plan, the subslab soil gas samples were initially analyzed. The indoor air samples were placed on hold pending receipt and review of the subslab soil gas sample results. A discussion of the subslab sampling results was held with the NYSDEC and NYSDOH on 24 April 2007. During the conference call, it was decided that analysis of five indoor air samples (i.e., AA-2SD, AA-3SD. AA-4SD, AA-6SD, and AA-8SD) would be appropriate for the study.

5. Results and Findings

In this section, the results of the subslab soil gas and indoor air sampling conducted by ARCADIS in April 2007 and EarthTech in February/March 2006 are presented and evaluated according to the criteria set forth in the *Final – Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (herein "Final Guidance"). The results of the April 2007 subslab soil gas and indoor air sampling are presented in Table 3 and Table 4, respectively. The results of the February/March 2006 subslab soil gas and indoor air sampling are presented in Table 1 and Table 2, respectively. Table 5 presents a summary of the data including the frequency of detection and minimum and maximum detected concentration for each constituent. Complete analytical results from the April 2007 sampling event are provided in Appendix C.

5.1 Evaluation of Subslab Soil Gas and Indoor Air Results

Consistent with the Final Guidance, subslab soil gas and indoor air data from all sampling events (i.e., February/March 2006 and April 2007) were evaluated using the following steps.

- First, concentrations detected in indoor air were compared to applicable NYSDOH air guideline values provided in the Final Guidance.

- Second, concentrations detected in indoor air were compared to generic background concentrations referenced by the NYSDOH in the Final Guidance.

- Third, the subslab soil gas data were evaluated using the matrices provided in the Final Guidance.

Each of the evaluation steps is described below.

5.1.1 Comparison to Air Guideline Values

The constituents detected in indoor air were evaluated through a comparison to air guideline values. As developed by NYSDOH, concentrations in indoor air greater than the air guidelines values may need to be addressed if the source of these exceedances is from the subsurface (i.e., groundwater or soil gas). The air guideline values were not designed to address current work place exposures associated with active manufacturing processes for which the Occupational Safety and Health Administration (OSHA) has established permissible exposure limits.

The Final Guidance presents guideline values for three VOCs: methylene chloride, TCE, and PCE. Table 6 presents the comparison of constituents in indoor air to the air guideline values. Methylene chloride was detected in indoor air at concentrations greater than its air guideline value (60 µg/m^3) during the April 2007 sampling event. In all cases, methylene chloride was detected at a higher or similar concentration in indoor air compared to subslab soil gas indicating an indoor source unrelated to groundwater. As noted in the product inventory (Appendix A), methylene chloride is stored in the facility.

TCE was detected in indoor air at concentrations greater than its air guideline value (5 µg/m^3) during the February 2006 sampling event. TCE was generally detected at higher concentrations in subslab soil gas indicating contribution from a source beneath the building, presumably related to groundwater. However, at three locations (EarthTech sampling locations 4, 5, and 8), TCE was detected at higher concentrations in indoor air indicating contribution of an indoor source unrelated to groundwater. Although sample locations were not replicated between the two sampling events, TCE concentrations measured in indoor air were lower during the April 2007 sampling round and were less than NYSDOH air guideline values. As noted in the product inventory (Appendix A), TCE is stored in the facility.

Although PCE was detected in 9 out of 15 indoor air samples, all concentrations were less than the air guideline value (100 µg/m^3).

5.1.2 Comparison to Background Concentrations

The constituents detected in indoor air were compared to the generic background indoor air concentrations reported by the USEPA (2001) as part of the building

assessment and survey evaluation (BASE) database. The BASE database includes indoor air results from approximately 100 commercial and public office buildings. As a result, these values are expected to significantly underestimate background concentrations at active manufacturing facilities where chemicals may be used as part of normal operations. However, because background data from such facilities is not currently available, the 90th percentile value from the BASE database (as recommended by NYSDOH) was used for comparative purposes (Table 6).

A total of 13 constituents including TCE, PCE, and methylene chloride were detected at least once in indoor air samples at concentrations greater than background concentrations. However, as described in Section 5.1.1, air guideline values are available for TCE, PCE, and methylene chloride and these values are used as the more appropriate criteria for comparison. The 10 constituents above background concentrations without air guidelines are as follows:

- 1,2,4-trimethylbenzene
- 1,3,5-trimethylbenzene
- 1,4-dichlorobenzene
- acetone
- 4-ethyltoluene
- ethylbenzene
- methyl ethyl ketone (MEK)
- m&p-xylene
- o-xylene
- toluene

Although these constituents, including TCE, PCE, and methylene chloride were measured at concentrations greater that conservative background levels, they are not expected to cause unacceptable human health impacts at the levels currently measured inside the building. Indeed, the background concentrations used for the above comparisons only indicate the levels typically measured inside commercial buildings and are orders of magnitude lower than health-based concentrations used for occupational settings.

5.1.3 Evaluation of Data Using NYSDOH Matrices

The final step in the data evaluation was to compare the subslab soil gas results to the matrices presented in the Final Guidance. The indoor air data were not considered in conjunction with the subslab soil gas data because, as described in Section 3.2, TCE and other chemicals, including petroleum products and methylene chloride, were identified in the eastern portion of the building near the molding machines. The results indicate that several constituents, including TCE and methylene chloride were present in indoor air due to background sources located within the building (i.e., observed storage of chemicals and their potential use). Therefore, indoor air data are not reliable indicators of the need to monitor or mitigate subslab soil gas.

Matrix 1 is applicable to TCE and carbon tetrachloride. Matrix 2 is applicable to PCE and 1,1,1-trichloroethane (1,1,1-TCA). Table 7 presents a comparison of subslab soil gas results and the matrix recommended action for TCE, PCE, and 1,1,1-TCA. Carbon tetrachloride was not detected in subslab soil gas and therefore, was not considered as part of the data evaluation. The matrices allow for four different options or actions:

- No further action
- Take reasonable and practical actions to identify source(s) and reduce exposures (i.e., concentration is likely associated with background)
- Monitor
- Mitigate

As presented on Table 7, there were 17 subslab soil gas sample results. Figure 4 shows the results of the matrix comparisons for TCE, PCE, and 1,1,1-TCA. As shown on Figure 4 and presented in Table 7, the NYSDOH matrices recommend mitigation at two locations (S1 and S2) based on TCE and/or PCE concentrations. In addition, the NYSDOH matrices recommend monitoring at five locations (S4, S5, S6, S10, and VP-2SD). At all other locations, a no further action decision would be appropriate.

In addition to background sources (i.e., sources unrelated to the subsurface impacts from former operations at the Site), groundwater was evaluated as a potential source of the TCE and PCE detected in subslab soil gas. Both TCE and PCE have high Henry's Law constants (i.e., greater than 10^{-5} atm m^3/mol), therefore, the dissolved phase concentrations measured in groundwater at the Solvent Dock Area could generate the concentrations of TCE and PCE detected in subslab soil gas.

NYSDOH has recently (July 2007) added three VOCs (1,1-dichloroethene, cis-1,2-dichloroethene, and vinyl chloride) to the Final Guidance matrices (although the Final Guidance has not been updated). Therefore, these VOCs are included in the matrix evaluation presented in Table 7. The addition of these VOCs did not change the matrix recommendations based on the original VOCs presented in the Final Guidance.

5.2 Vapor Intrusion Pathway Evaluation

The potential exists for the vapor intrusion pathway (groundwater to soil gas) to be complete for several constituents including TCE and PCE. Dissolved phase concentrations in groundwater are sufficient to produce the concentrations measured in subslab soil gas for these constituents.

Several constituents detected in indoor air may not be related to subsurface conditions, but could be present due to background sources. Background constituents, including TCE, PCE and methylene chloride would not be mitigated by the subsurface depressurization system proposed in the *Work Plan for the Interim Corrective Measure* (ARCADIS 2006a). If deemed necessary or appropriate by the owner, tenant, or regulatory agency, mitigation of background constituents in indoor air should be addressed separately from Lockheed Martin's obligations at the Solvent Dock Site.

6. Summary and Conclusions

NYSDEC and NYSDOH required Lockheed Martin to conduct a vapor intrusion study to address the vapor intrusion pathway at the Solvent Dock Area of the former French Road facility in Utica, New York. Seven subslab soil gas and four indoor air samples were collected and analyzed in April 2007. Previously, ten subslab soil gas and eleven indoor air samples were collected in February/March 2006. The 17 subslab soil gas samples and 15 indoor air samples were evaluated based on the criteria set forth in the *Final – Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH 2006). As part of the study, the groundwater quality data and subslab soil gas results were used to evaluate the vapor intrusion pathway at the Solvent Dock Area. The conclusions of the study are presented below.

- In the northeast portion of the manufacturing building, measured concentrations of TCE and PCE in subslab soil gas warrant mitigation per the *Final – Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH 2006). The vapor intrusion study has delineated subslab soil gas that warrants mitigation.

- Dissolved phase concentrations of several constituents including TCE and PCE present in groundwater are sufficient to produce the concentrations measured in subslab soil gas for these constituents.

- Measured concentrations of TCE and methylene chloride in indoor air exceed the NYSDOH air guideline values. However, the concentrations detected in indoor air are less than available OSHA work place standards.

- Several constituents detected in indoor air do not appear to be related to subsurface conditions, but may be present due to background sources (this conclusion is supported by the observation of chemical storage and/or use in the facility). These conditions would not be mitigated by the subsurface depressurization system proposed in the *Work Plan for the Interim Corrective Measure* (ARCADIS 2006a). If deemed necessary or appropriate by the owner, tenant, or regulatory agency, mitigation of background constituents in indoor air should be addressed separately from Lockheed Martin's obligations at the Solvent Dock Site.

Lockheed Martin will resample subslab soil gas at locations S1 and S2. Pending confirmation of the subslab conditions, Lockheed Martin will seek the concurrence of the regulatory agencies to install the vapor depressurization system contemplated in the *Work Plan for the Interim Corrective Measure* (ARCADIS 2006a) to mitigate the subslab soil gas impacts beneath the northeastern portion of the manufacturing building. Prior to installation, Lockheed Martin will revise the *Work Plan for the Interim Corrective Measure* (ARCADIS 2006a) and submit the revised plan to NYSDEC and NYSDOH for review. The revisions will account for the new information reported herein and the comments offered by NYSDEC/NYSDOH in letter dated 18 October 2006. Upon agency approval, Lockheed Martin will install the vapor depressurization system.

7. References

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Table 1. Concentrations of Volatile Organic Compounds in Subslab Soil Gas Collected in February 2006, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Sample ID:	S1		S2		S3		S4		S5		S6		S7		S8		S9		S10	
Lab ID:	06B07706		06B07698		06B07708		06B07702		06B07712		06B07715		06B07710		06B07705		06B07704		06B07709	
Sample Date:	2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006	
Units:	(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)	
1,1,1-Trichloroethane	33	U	260		67		54		120		6.3		30		77		14		0.7	U
1,1,2,2-Tetrachloroethane	42	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U
1,1-Dichloroethane	25	U	8.4		0.5	U	0.5	U	1.7		6.2		5.1		3.8		3.8		0.5	U
1,1-Dichloroethene	24	U	0.5	U	0.5	U	0.5	U	0.5	U	5.1		0.5	U	0.5	U	7.0		0.5	U
1,2,4-Trimethylbenzene	99	U	6.9		25		24		21		20		13		18		2.2		18	
1,3,5-Trimethylbenzene	99	U	2.2		5.4		6.8		7.3		6.3		4.0		4.5		2.0	U	5.3	
1,3-Dichlorobenzene	36	U	0.8	U	0.8	U	0.8	U	1.1		2.5	U	1.5		0.8	U	0.8	U	0.8	U
1,4-Dichlorobenzene	130	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	5.1		2.5	U
2-Hexanone	25	U	0.5	U	0.5	U	0.5	U	1.7	U	1.7	U	1.7	U	2.2		0.5	U	1.7	U
4-Ethyltoluene	99	U	2.0		5.4		6.6		7.4		6.3		4.2		4.9		2.0	U	5.1	
Acetone	250		250		210		1,400		480		230		500		610		320		74	
Benzene	20	U	23		3.5		53		17		5.1		31		48		9.9		2.1	
Carbon Disulfide	19	U	6.0		3.1		20		10		4.0		25		6.4		1.3		1.4	
Chlorobenzene	28	U	1.1		0.6	U	2.4		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Chloroethane	16	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.5		0.4	U	0.4	U	0.4	U
Chloroform	30	U	7.0		0.6	U	9.8		2.9		12		1.5		0.6	U	0.6	U	1.8	
Chloromethane	15	U	0.6		0.3	U	0.3	U	0.3	U	0.3	U	0.8		0.3	U	1.0		0.3	U
cis-1,2-dichloroethene	24	U	0.5	U	0.5	U	0.5	U	0.5	U	2.8		4.8		0.5	U	0.5	U	0.5	U
Cyclohexane	69	U	32		1.4	U	52		13		3.4		50		46		43		1.4	U
Ethanol	51		140		0.8	U	0.8	U	0.8	U	26		39		51		57		6.1	
Ethyl Acetate	22	U	1.0		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	26	U	18.0		9.0		58		26		35		14		22		2.2		13.0	

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Table 1. Concentrations of Volatile Organic Compounds in Subslab Soil Gas Collected in February 2006, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Sample ID:	S1		S2		S3		S4		S5		S6		S7		S8		S9		S10	
Lab ID:	06B07706		06B07698		06B07708		06B07702		06B07712		06B07715		06B07710		06B07705		06B07704		06B07709	
Sample Date:	2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006	
Units:	(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)	
Freon 11	36	U	1.9		5.7		0.8	U	1.1		3.9		1.5		0.8	U	0.8	U	1.2	
Freon 113	46	U	3.6		4.7		190		270		1.0	U	88		240		11		1.3	
Freon 12	30	U	2.4		190		2.7		2.5		500		2.3		2.0		2.5		2.3	
Hexane	22	U	82		3.1		140		28		8.3		120		79		57		6.7	
Isopropyl Alcohol	15	U	43		95		74		110		11		13		7		110		4.5	
m&p-Xylene	180	U	47		38		99		96		110		50		68		6.4		52	
Methyl Ethyl Ketone	18	U	25		23		52		120		22		17		45		6.1		4.6	
Methyl Isobutyl Ketone	82	U	3.8		1.7	U	1.7	U	9.6		2.9		0.5	U	1.7	U	1.7	U	0.5	U
Methylene Chloride	70	U	8.0		4.4		3.4		2.4		2.8		11.0		2.2		9.8		2.7	
n-Heptane	25	U	65		3.9		96		0.5	U	9.8		0.5	U	58		15		12	
o-Xylene	87	U	17		16		60		48		31		22.0		26.0		3.0		23	
Propylene	11	U	0.3	U	0.3	U	0.3	U	0.3	U	0.7	U	0.3	U	0.3	U	0.3	U	0.3	U
Styrene	86	U	1.8	U	1.8	U	0.6	U	1.8	U	2.1		1.8	U	1.8	U	1.8		1.8	U
Tetrachloroethene	21,000		76		34		660		26		280		95		35		5		260	
Tetrahydrofuran	59	U	6.4		1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Toluene	76	U	70		25		1.6	U	1.6	U	47		68		160		32		40	
Trichloroethene	680		560		7		2.5		4.7		32		30		3.4		21		70	
Vinyl Acetate	22	U	0.5	U	1.7		0.5	U	0.5	U	1.5	U	0.5	U	8.7		0.5	U	0.5	U
Vinyl Chloride	16	U	0.5		0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U

Notes:
U - Not detected at the reporting limit
µg/m^3 - Micrograms per cubic meter

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Table 2. Concentrations of Volatile Organic Compounds in Indoor Air and Ambient Air Collected in February and March 2006, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Sample ID	I1		I1-Retest		I3		I4		I4-Retest		I5		I10 (I5 DUP)		I6		I7		I8		I9		OD1	
Lab ID:	06B07713		06B10826		06B07716		06B07701		06B10827		06B07703		06B07700		06B07714		06B07711		06B07707		06B07699		06B07717	
Sample Date:	2/26/2006		3/30/2006		2/26/2006		2/26/2006		3/30/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006		2/26/2006	
Units:	(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)		(µg/m^3)	
1,1,1-Trichloroethane	0.7	U	4.1	U	0.7	U	0.7	U	4.1	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
1,1,2,2-Tetrachloroethane	0.9	U	5.2	U	0.9	U	0.9	U	5.2	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	4.0		0.9	U
1,1-Dichloroethane	0.5	U	3.1	U	0.5	U	0.5	U	3.1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	3.0	U	0.5	U	0.5	U	3.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trimethylbenzene	18		13		13		2.0		11		8.7		9.4		10		11		17		12		2.2	
1,3,5-Trimethylbenzene	4.8		3.7	U	4.0		2.0	U	3.7	U	2.6		2.6		3.0		3.3		4.7		3.6		2.0	U
1,3-Dichlorobenzene	1.0		4.5	U	2.5	U	0.8	U	4.5	U	0.8	U	0.8	U	2.5	U	0.8	U	0.8	U	0.8	U	2.5	U
1,4-Dichlorobenzene	2.5	U	4.5	U	2.5	U	6.5		4.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2-Hexanone	1.7	U	3.1	U	1.8		0.5	U	3.1	U	0.5	U	0.5	U	1.7	U	1.7	U	0.5	U	0.5	U	1.7	U
4-Ethyltoluene	4.3		3.7	U	4.7		2.0	U	3.7	U	2.5		2.8		3.8		3.3		4.2		3.9		0.6	U
Acetone	44		18		22		110		69		50		66		66		130		100		160		160	
Benzene	1.9		2.4	U	1.4		0.4	U	2.6		0.4	U	0.4	U	1.6		1.4		1.7		2.0		0.4	U
Carbon Disulfide	0.4	U	2.4	U	0.4	U	0.4	U	2.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Chlorobenzene	0.6	U	3.5	U	0.6	U	0.6	U	3.5	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Chloroethane	0.4	U	2.0	U	0.4	U	0.4	U	2.0	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Chloroform	0.6	U	3.7	U	0.6	U	0.6	U	3.7	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Chloromethane	1.3		1.9	U	0.9		1.3		1.9	U	1.1		1.2		0.9		1.0		1.1		1.0		1.0	
cis-1,2-dichloroethene	0.5	U	3.0	U	0.5	U	0.5	U	3.0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	17		12		1.4	U	9.4		2.6	U	9.8		9.0		1.4	U	1.4	U	8.7		12		1.4	U
Ethanol	22		55		41		47		69		32		33		28		19		38		46		4.2	
Ethyl Acetate	0.5	U	2.7	U	0.5	U	0.5	U	2.7	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	9.7		6.1		9.9		1.8	U	6.3		4.9		4.7		9.2		9.3		12		13		0.6	U
Freon 11	2.0		4.5	U	3.3		2.5		4.5	U	0.8	U	2.5		2.5		1.3		1.9		0.8	U	0.8	U
Freon 113	1.0	U	5.8	U	1.0	U	1.0	U	5.8	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Freon 12	2.7		3.7	U	5.3		2.8		3.7	U	2.7		2.9		3.3		1.9		2.7		2.1		0.6	U
Hexane	2.3		2.7	U	1.5		0.5	U	3.0		0.5	U	0.5	U	2.4		2.1		2.2		2.6		0.5	U
Isopropyl Alcohol	46		630		180		130		9,900		200		280		290		140		79		100		0.3	U
m&p-Xylene	41		26		37		4.1		28		21		21		32		34		47		50		4.1	
Methyl Ethyl Ketone	2.1		2.2	U	9.6		3.4		6.2		3.2		6.1		5.1		2.0		2.8		4.4		5.0	
Methyl Isobutyl ketone	0.5	U	3.1	U	0.5	U	1.7	U	3.1	U	3.4		4.6		1.8		0.5	U	1.7	U	1.7	U	0.5	U
Methylene Chloride	3.9		20		0.8	U	5.9		27		5.6		5.1		2.1		3.8		9.7		9.7		0.8	U
n-Heptane	6.9		5.5		2.7		6.5		3.1	U	2.0		1.8		3.0		3.3		3.2		4.6		0.5	U
o-Xylene	18		10		13		1.9		10		9.6		9.5		12		16		27		27		1.7	
Propylene	0.3	U	1.3	U	0.7	U	0.3	U	1.3	U	0.3	U	0.3	U	0.7	U	0.3	U	0.3	U	0.3	U	1.6	
Styrene	1.8	U	3.2	U	1.9		1.8	U	3.2	U	1.8	U	1.8	U	2.0		1.8	U	1.8	U	1.8	U	0.6	U

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Table 2. Concentrations of Volatile Organic Compounds in Indoor Air and Ambient Air Collected in February and March 2006, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Sample ID	I1	I1-Retest	I3	I4	I4-Retest	I5	I10 (I5 DUP)	I6	I7	I8	I9	OD1
Lab ID:	06B07713	06B10826	06B07716	06B07701	06B10827	06B07703	06B07700	06B07714	06B07711	06B07707	06B07699	06B07717
Sample Date:	2/26/2006	3/30/2006	2/26/2006	2/26/2006	3/30/2006	2/26/2006	2/26/2006	2/26/2006	2/26/2006	2/26/2006	2/26/2006	2/26/2006
Units:	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
Tetrachloroethene	18	5.1 U	8.5	2.8	5.1 U	10	11.0	9.5	15	97	24	0.9 U
Tetrahydrofuran	1.2 U	2.2 U	1.2 U	1.2 U	2.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Toluene	27	32	23	8.0	33	18	15	27	29	50	53	5.3
Trichloroethene	41	41	0.7 U	73	6.7	23	18	2.8	5.7	6.0	1.9	0.7 U
Vinyl Acetate	0.5 U	2.7 U	2.4	0.5 U	2.7 U	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	1.5 U
Vinyl Chloride	0.4 U	1.9 U	0.4 U	0.4 U	1.9 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Notes:
U - Not detected at the reporting limit
µg/m^3 - Micrograms per cubic meter

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Table 3. Concentrations of Volatile Organic Compounds in Subslab Soil Gas Collected in April 2007, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	Sample ID: / Lab ID: / Date: / Units:	VP-1SD / C0704029-001A / 4/12/2007 / (µg/m^3)	VP-2SD / C0704029-002A / 4/12/2007 / (µg/m^3)	VP-3SD / C0704029-003A / 4/12/2007 / (µg/m^3)	VP-4SD / C0704029-004A / 4/12/2007 / (µg/m^3)	VP-5SD / C0704029-005A / 4/12/2007 / (µg/m^3)	VP-7SD / C0704029-006A / 4/12/2007 / (µg/m^3)	VP-8SD / C0704029-007A / 4/12/2007 / (µg/m^3)
1,1,1-Trichloroethane		3.8	38	0.72 J	11	0.78 J	0.83 U	1.2
1,1,2,2-Tetrachloroethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane		0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,1-Dichloroethane		0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,1-Dichloroethene		0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2,4-Trichlorobenzene		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,2,4-Trimethylbenzene		7	8	3.1	6.6	6.5 J	3.4	3
1,2-Dibromoethane		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,2-Dichloroethane		0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,2-Dichloropropane		0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,3,5-Trimethylbenzene		2.2	2.3	1	2	4.2	1.2	1
1,3-Butadiene		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,4-Dichlorobenzene		2.4	2.3	2.3	2.5	3.9	1.3	9.7
1,4-Dioxane		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2,2,4-Trimethylpentane		1	0.71 U	0.71 U	0.71 U	4.3	0.71 U	0.71 U
4-Ethyltoluene		2.5	2.3	1.1	1.8	4.4	1.4	1.1
Acetone		57	33	64	43	270	390	24
Allyl Chloride		ND U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Benzene		7.8	3.9	4.9	1.2	24	28	2
Benzyl Chloride		0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Bromodichloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Carbon Disulfide		18	2.3	2.4	0.85	9.8	5.6	1.8
Carbon Tetrachloride		0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
Chlorobenzene		0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Chloroethane		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroform		7.7	7.2	0.74 U	25	5.1	0.65 J	3.2
Chloromethane		0.42	0.84	0.31 U	0.8	0.65	0.31	0.55
cis-1,2-Dichloroethene		0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
cis-1,3-Dichloropropene		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Cyclohexane		29	8	47	2.3	66	64	5
Dibromochloromethane		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Ethyl Acetate		0.92 U	0.92 U	5.6	0.92 U	0.92 U	0.92 U	0.92 U
Ethylbenzene		2.6	2.4	0.71	1.5	6.2 J	2.6	0.88

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Table 3. Concentrations of Volatile Organic Compounds in Subslab Soil Gas Collected in April 2007, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	Sample ID: / Lab ID: / Date: / Units:	VP-1SD / C0704029-001A / 4/12/2007 / (µg/m^3)	VP-2SD / C0704029-002A / 4/12/2007 / (µg/m^3)	VP-3SD / C0704029-003A / 4/12/2007 / (µg/m^3)	VP-4SD / C0704029-004A / 4/12/2007 / (µg/m^3)	VP-5SD / C0704029-005A / 4/12/2007 / (µg/m^3)	VP-7SD / C0704029-006A / 4/12/2007 / (µg/m^3)	VP-8SD / C0704029-007A / 4/12/2007 / (µg/m^3)
Freon 11		1.3	2.3	0.97	1.5	1.3	0.86 U	0.97
Freon 113		5.1	85	7.6	450	9.5	2.2	1.2 U
Freon 114		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Freon 12		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Heptane		27	7.2	11	3.6	170	40	7
Hexachloro-1,3-Butadiene		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexane		62	12	59	0.54 U	250	67	7.9
Isopropyl Alcohol		150	44	250	190	170	87	800
m&p-Xylene		8.5	8.4	2.4	5.4	20	7.5	3.3
Methyl Butyl Ketone		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Methyl Ethyl Ketone		0.9 U	0.9 U	100	46	110	41	25
Methyl Isobutyl Ketone		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Methyl Tert-Butyl Ether		0.55	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Methylene Chloride		90	37	210	93	170	42	4,600
o-Xylene		2.7	2.8	0.84	1.9	6.2 J	2.3	1.1
Propylene		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Styrene		0.69	2	0.65	0.65	0.65 U	0.65 U	0.52 J
Tetrachloroethene		1.8	9.5	1 U	40	0.97 J	8.4	5.4
Tetrahydrofuran		2	0.9	1.1	5.5	1.7	0.45 U	0.45 U
Toluene		11	15	6.6	7.2	58	49	5.9
trans-1,2-Dichloroethene		0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
trans-1,3-Dichloropropene		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Trichloroethene		0.76 J	110	0.76 J	45	1.6	0.82 U	36
Vinyl Acetate		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Vinyl Bromide		0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Vinyl Chloride		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U

Notes:
J - Analyte detected at or below quantitation limits
U - Not detected at the reporting limit
µg/m^3 - Micrograms per cubic meter

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Table 4. Concentrations of Volatile Organic Compounds in Indoor Air Collected in April 2007, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	Sample ID: / Lab ID: / Date: / Units:	AA-2SD C0704036-001A 4/12/2007 (µg/m^3)	AA-3SD C0704036-002A 4/12/2007 (µg/m^3)	AA-4SD C0704036-003A 4/12/2007 (µg/m^3)	AA-6SD C0704036-004A 4/12/2007 (µg/m^3)	AA-8SD C0704036-005A 4/12/2007 (µg/m^3)
1,1,1-Trichloroethane		0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,1,2,2-Tetrachloroethane		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1,2-Trichloroethane		0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,1-Dichloroethane		0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,1-Dichloroethene		0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
1,2,4-Trichlorobenzene		1.1 U	1.13 U	1.13 U	1.13 U	1.13 U
1,2,4-Trimethylbenzene		3.2	2.5	2.4	1.2	4.7
1,2-Dibromoethane		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,2-Dichloroethane		0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,2-Dichloropropane		0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
1,3,5-Trimethylbenzene		1.5	1.4	1.0	0.75 U	1.7
1,3-Butadiene		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,4-Dichlorobenzene		1.4	0.86 J	1.5	0.92 U	11.9
1,4-Dioxane		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2,2,4-Trimethylpentane		0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
4-Ethyltoluene		1.7	1.25	1.15	0.75 U	2.65
Acetone		68	76	90	21	92
Allyl Chloride		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Benzene		0.55	0.49	0.49	0.78	0.46 J
Benzyl Chloride		0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Bromodichloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Carbon Disulfide		0.41 J	0.48 U	0.48 U	0.44 J	0.48 U
Carbon Tetrachloride		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Chlorobenzene		0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Chloroethane		0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Chloroform		0.74 U	0.74 U	0.74 U	0.74 U	0.74 U
Chloromethane		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,2-Dichloroethene		0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
cis-1,3-Dichloropropene		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Cyclohexane		8.6	3.5	2.5	46	5.7
Dibromochloromethane		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Ethyl Acetate		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
Ethylbenzene		0.49 J	0.44 J	0.66 U	0.57 J	0.49 J

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Table 4. Concentrations of Volatile Organic Compounds in Indoor Air Collected in April 2007, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	Sample ID: / Lab ID: / Date: / Units:	AA-2SD / C0704036-001A / 4/12/2007 / (µg/m^3)	AA-3SD / C0704036-002A / 4/12/2007 / (µg/m^3)	AA-4SD / C0704036-003A / 4/12/2007 / (µg/m^3)	AA-6SD / C0704036-004A / 4/12/2007 / (µg/m^3)	AA-8SD / C0704036-005A / 4/12/2007 / (µg/m^3)
Freon 11		0.97	0.8 J	0.8 J	0.8 J	1.26
Freon 113		1.2 U	1.2 U	1.2 U	1.2 U	0.9 J
Freon 114		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Freon 12		2.1	2.2	2.2	2.3	2.2
Heptane		5.0	2.4	3.6	0.67	10
Hexachloro-1,3-Butadiene		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexane		0.54 U	0.54 U	0.54 U	1.72	0.54 U
Isopropyl Alcohol		481	499	504	20	1,250
m&p-Xylene		1.2 J	0.93 J	0.88 J	1.19 J	1.15 J
Methyl Butyl Ketone		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methyl Ethyl Ketone		137	270	261	6.9	147
Methyl Isobutyl Ketone		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methyl Tert-Butyl Ether		0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Methylene Chloride		263	242	198	7.5	4,950
o-Xylene		0.49 J	0.66 U	0.66 U	0.49 J	0.44 J
Propylene		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Styrene		1.9	0.91	0.65	9.3	1.3
Tetrachloroethene		1.0 U	1.0 U	1.0	1.0 U	1.0 U
Tetrahydrofuran		0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Toluene		5.2	6.3	4.0	8.4	6.2
trans-1,2-Dichloroethene		0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
trans-1,3-Dichloropropene		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Trichloroethene		0.98	0.60	1.3	0.66	0.71
Vinyl Acetate		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Vinyl Bromide		0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Vinyl Chloride		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U

Notes:
J - Analyte detected at or below quantitation limits
U - Not detected at the reporting limit
µg/m^3 - Micrograms per cubic meter

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Table 5. Summary of Constituents Detected in Subslab Soil Gas and Indoor Air, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	Groundwater Detected (a)	Subslab Soil Gas Data FOD	% Detected	Min	Max	Indoor Air Data FOD	% Detected	Min	Max
1,1,1-Trichloroethane	X	14 / 17	82% X	0.72	260	0 / 15	0% ND	--	--
1,1,2,2-Tetrachloroethane	ND	0 / 17	0% ND	--	--	1 / 15	7% X	4.0	4.0
1,1,2-Trichloroethane	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,1-Dichloroethane	X	6 / 17	35% X	1.7	8.4	0 / 15	0% ND	--	--
1,1-Dichloroethene	ND	2 / 17	12% X	5.1	7	0 / 15	0% ND	--	--
1,2,4-Trichlorobenzene	NA	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,2,4-Trimethylbenzene	NA	16 / 17	94% X	2.2	25	15 / 15	100% X	1.2	18
1,2-Dibromoethane	NA	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,2-Dichlorobenzene	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,2-Dichloroethane	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,2-Dichloropropane	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,3,5-Trimethylbenzene	NA	15 / 17	88% X	1.0	7.3	11 / 15	73% X	1.0	4.8
1,3-Butadiene	NA	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
1,3-Dichlorobenzene	ND	2 / 17	12% X	1.1	1.5	1 / 15	7% X	1.0	1.0
1,4-Dichlorobenzene	ND	8 / 17	47% X	1.3	9.7	5 / 15	33% X	0.86	12
1,4-Dioxane	NA	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
2-Hexanone	NA	1 / 10	10% X	2.2	2.2	1 / 10	10% X	1.8	1.8
2,2,4-Trimethylpentane	NA	2 / 7	29% X	1.0	4.3	0 / 5	0% ND	--	--
4-Ethyltoluene	NA	15 / 17	88% X	1.1	7.4	11 / 15	73% X	1.2	4.7
Acetone	NA	17 / 17	100% X	24	1,400	15 / 15	100% X	18	160
Allyl Chloride	NA	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Benzene	X	16 / 17	94% X	1.2	53	12 / 15	80% X	0.46	2.6
Benzyl Chloride	NA	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Bromodichloromethane	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Bromoform	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Bromomethane	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Carbon Disulfide	NA	16 / 17	94% X	0.85	25	2 / 15	13% X	0.41	0.44
Carbon Tetrachloride	ND	0 / 7	0% ND	--	--	10 / 15	67% X	--	--
Chlorobenzene	ND	2 / 17	12% X	1.1	2.4	0 / 15	0% ND	--	--
Chloroethane	X	1 / 17	6% X	0.5	0.5	0 / 15	0% ND	--	--
Chloroform	ND	12 / 17	71% X	0.65	25	0 / 15	0% ND	--	--
Chloromethane	ND	9 / 17	53% X	0.31	1.0	8 / 15	53% X	0.9	1.3
cis-1,2-Dichloroethene	X	2 / 17	12% X	2.8	4.8	0 / 15	0% ND	--	--
cis-1,3-Dichloropropene	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Cyclohexane	NA	14 / 17	82% X	2.3	66	11 / 15	73% X	2.5	46
Dibromochloromethane	ND	0 / 7	0% ND	--	--	0 / 5	0% ND	--	--
Ethanol	NA	7 / 10	70% X	6.1	140	10 / 10	100% X	19	69
Ethyl Acetate	NA	2 / 17	12% X	1.0	5.6	0 / 15	0% ND	--	--
Ethylbenzene	ND	16 / 17	94% X	0.71	58	13 / 15	87% X	0.44	13

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Table 5. Summary of Constituents Detected in Subslab Soil Gas and Indoor Air, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	Groundwater Detected (a)	Subslab Soil Gas Data FOD	%	Detected	Min	Max	Indoor Air Data FOD	%	Detected	Min	Max
Freon 11	ND	12 / 17	71%	X	0.97	5.7	10 / 15	67%	X	0.80	3.3
Freon 113	NA	14 / 17	82%	X	1.3	450	1 / 15	7%	X	0.86	0.86
Freon 114	NA	0 / 7	0%	ND	--	--	0 / 5	0%	ND	--	--
Freon 12	NA	9 / 17	53%	X	2.0	500	13 / 15	87%	X	1.9	5.3
Heptane	NA	7 / 7	100%	X	3.6	170	5 / 5	100%	X	0.67	10
Hexachloro-1,3-Butadiene	NA	0 / 7	0%	ND	--	--	0 / 5	0%	ND	--	--
Hexane	NA	15 / 17	88%	X	3.1	250	8 / 15	53%	X	1.5	3
Isopropyl Alcohol	NA	16 / 17	94%	X	4.5	800	15 / 15	100%	X	20	9,900
m&p-Xylene	X	16 / 17	94%	X	2.4	110	15 / 15	100%	X	0.88	50
Methyl Butyl Ketone	NA	0 / 7	0%	ND	--	--	0 / 5	0%	ND	--	--
Methyl Ethyl Ketone	NA	14 / 17	82%	X	4.6	120	14 / 15	93%	X	2.0	270
Methyl Isobutyl Ketone	NA	3 / 17	18%	X	2.9	9.6	2 / 15	13%	X	1.8	4.6
Methyl Tert-Butyl Ether	NA	1 / 7	14%	X	0.55	0.55	0 / 5	0%	ND	--	--
Methylene Chloride	ND	16 / 17	94%	X	2.2	4,600	14 / 15	93%	X	2.1	4,950
n-Heptane	NA	7 / 10	70%	X	3.9	96	9 / 10	90%	X	1.8	6.9
o-Xylene	X	16 / 17	94%	X	0.84	60	13 / 15	87%	X	0.44	27
Propylene	NA	0 / 17	0%	ND	0	0	0 / 15	0%	ND	--	--
Styrene	NA	7 / 17	41%	X	0.52	2.1	7 / 15	47%	X	0.65	9.3
Tetrachloroethene	X	16 / 17	94%	X	0.97	21,000	9 / 15	60%	X	1.0	97
Tetrahydrofuran	NA	6 / 17	35%	X	0.9	6.4	0 / 15	0%	ND	--	--
Toluene	X	14 / 17	82%	X	5.9	160	15 / 15	100%	X	4.0	53
trans-1,2-Dichloroethene	X	0 / 7	0%	ND	--	--	0 / 5	0%	ND	--	--
trans-1,3-Dichloropropene	ND	0 / 7	0%	ND	--	--	0 / 5	0%	ND	--	--
Trichloroethene	X	16 / 17	94%	X	0.76	680	14 / 15	93%	X	0.60	73
Vinyl Acetate	NA	2 / 17	12%	X	1.7	8.7	1 / 15	7%	X	2.4	2.4
Vinyl Bromide	NA	0 / 7	0%	ND	--	--	0 / 5	0%	ND	--	--
Vinyl Chloride	X	1 / 17	6%	X	0.50	0.50	0 / 15	0%	ND	--	--

Notes:
X - Detected
ND - Not detected
NA - Not analyzed
Y - Yes
N - No
FOD - Frequency of detection
Min - Minimum detected concentration
Max - Maximum detected concentration
(a) - ND based on historical data indicating constituent not present

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Table 6. Comparison of Constituents Detected in Indoor Air to NYSDOH Air Guidelines and Background Concentrations, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	NYSDOH Air Guideline ($\mu g/m^3$)	USEPA BASE Background Value (a) ($\mu g/m^3$)	Sample Type: / Sample ID: / Lab ID: / Date: / Units:	Indoor Air I1 06B07713 2/26/2006 ($\mu g/m^3$)	Indoor Air I1-Retest 06B10826 3/30/2006 ($\mu g/m^3$)	Soil Gas S1 (b) 06B07706 2/26/2006 ($\mu g/m^3$)	Soil Gas S2 (b) 06B07698 2/26/2006 ($\mu g/m^3$)	Indoor Air I3 06B07716 2/26/2006 ($\mu g/m^3$)	Soil Gas S3 (b) 06B07708 2/26/2006 ($\mu g/m^3$)	Indoor Air I4 06B07701 2/26/2006 ($\mu g/m^3$)	Indoor Air I4-Retest 06B10827 3/30/2006 ($\mu g/m^3$)	Soil Gas S4 (b) 06B07702 2/26/2006 ($\mu g/m^3$)	Indoor Air I5 06B07703 2/26/2006 ($\mu g/m^3$)	Indoor Air I10 (I5 DUP) 06B07700 2/26/2006 ($\mu g/m^3$)
1,1,1-Trichloroethane	--	20.6		0.7 U	4.1 U	33 U	260	0.7 U	67	0.7 U	4.1 U	54	0.7 U	0.7 U
1,1,2,2-Tetrachloroethane	--	<1.5		0.9 U	5.2 U	42 U	0.9 U	0.9 U	0.9 U	0.9 U	5.2 U	0.9 U	0.9 U	0.9 U
1,1,2-Trichloroethane	--	<1.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	--	<0.7		0.5 U	3.1 U	25 U	8.4	0.5 U	0.5 U	0.5 U	3.1 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	--	<1.4		0.5 U	3.0 U	24 U	0.5 U	0.5 U	0.5 U	0.5 U	3.0 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	9.5		**18**	**13**	99 U	6.9	**13**	25	2.0	**11**	24	8.7	9.4
1,2-Dibromoethane	--	<1.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	--	<1.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	--	<0.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	--	<1.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	--	3.7		**4.8**	3.7 U	99 U	2.2	**4.0**	5.4	2.0 U	3.7 U	6.8	2.6	2.6
1,3-Butadiene	--	<3.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	--	<2.4		1.0	4.5 U	36 U	0.8 U	2.5 U	0.8 U	0.8 U	4.5 U	0.8 U	0.8 U	0.8 U
1,4-Dichlorobenzene	--	5.5		2.5 U	4.5 U	130 U	2.5 U	2.5 U	2.5 U	**6.5**	4.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	--	--		1.7 U	3.1 U	25 U	0.5 U	1.8	0.5 U	0.5 U	3.1 U	0.5 U	0.5 U	0.5 U
2,2,4-Trimethylpentane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Ethyltoluene	--	3.6		**4.3**	3.7 U	99 U	2.0	**4.7**	5.4	2.0 U	3.7 U	6.6	2.5	2.8
Acetone	--	98.9		44	18	250	250	22	210	**110**	69	1,400	50	66
Allyl Chloride	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	--	9.4		1.9	2.4 U	20 U	23	1.4	3.5	0.4 U	2.6	53	0.4 U	0.4 U
Benzyl Chloride	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	--	<1.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	--	4.2		0.4 U	2.4 U	19 U	6.0	0.4 U	3.1	0.4 U	2.4 U	20	0.4 U	0.4 U
Carbon Tetrachloride	--	<1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	--	<0.9		0.6 U	3.5 U	28 U	1.1	0.6 U	0.6 U	0.6 U	3.5 U	2.4	0.6 U	0.6 U
Chloroethane	--	<1.1		0.4 U	2.0 U	16 U	0.4 U	0.4 U	0.4 U	0.4 U	2.0 U	0.4 U	0.4 U	0.4 U
Chloroform	--	1.1		0.6 U	3.7 U	30 U	7.0	0.6 U	0.6 U	0.6 U	3.7 U	9.8	0.6 U	0.6 U
Chloromethane	--	3.7		1.3	1.9 U	15 U	0.6	0.9	0.3 U	1.3	1.9 U	0.3 U	1.1	1.2
cis-1,2-Dichloroethene	--	<1.9		0.5 U	3.0 U	24 U	0.5 U	0.5 U	0.5 U	0.5 U	3.0 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	--	<2.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	--	--		17	12	69 U	32	1.4 U	1.4 U	9.4	2.6 U	52	9.8	9.0
Dibromochloromethane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethanol	--	210		22	55	51	140	41	0.8 U	47	69	0.8 U	32	33

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Table 6. Comparison of Constituents Detected in Indoor Air to NYSDOH Air Guidelines and Background Concentrations, Vapor Intrusion Study Report, Solvent Dock Area
Former Lockheed Martin French Road Facility, Utica, New York

Constituent	NYSDOH Air Guideline ($\mu g/m^3$)	USEPA BASE Background Value (a) ($\mu g/m^3$)	Sample Type: / Sample ID: / Lab ID: / Date: / Units:	Indoor Air I1 06B07713 2/26/2006 ($\mu g/m^3$)	Indoor Air I1-Retest 06B10826 3/30/2006 ($\mu g/m^3$)	Soil Gas S1 (b) 06B07706 2/26/2006 ($\mu g/m^3$)	Soil Gas S2 (b) 06B07698 2/26/2006 ($\mu g/m^3$)	Indoor Air I3 06B07716 2/26/2006 ($\mu g/m^3$)	Soil Gas S3 (b) 06B07708 2/26/2006 ($\mu g/m^3$)	Indoor Air I4 06B07701 2/26/2006 ($\mu g/m^3$)	Indoor Air I4-Retest 06B10827 3/30/2006 ($\mu g/m^3$)	Soil Gas S4 (b) 06B07702 2/26/2006 ($\mu g/m^3$)	Indoor Air I5 06B07703 2/26/2006 ($\mu g/m^3$)	Indoor Air I10 (I5 DUP) 06B07700 2/26/2006 ($\mu g/m^3$)
Ethyl Acetate	--	5.4		0.5 U	2.7 U	22 U	1.0	0.5 U	0.5 U	0.5 U	2.7 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	--	5.7		**9.7**	**6.1**	26 U	18.0	**9.9**	9.0	1.8 U	**6.3**	58	4.9	4.7
Freon 11	--	18.1		2.0	4.5 U	36 U	1.9	3.3	5.7	2.5	4.5 U	0.8 U	0.8 U	2.5
Freon 113	--	3.5		1.0 U	5.8 U	46 U	3.6	1.0 U	4.7	1.0 U	5.8 U	190	1.0 U	1.0 U
Freon 114	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Freon 12	--	16.5		2.7	3.7 U	30 U	2.4	5.3	190	2.8	3.7 U	2.7	2.7	2.9
Heptane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloro-1,3-butadiene	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexane	--	10.2		2.3	2.7 U	22 U	82	1.5	3.1	0.5 U	3.0	140	0.5 U	0.5 U
Isopropyl Alcohol	--	--		46	630	15 U	43	180	95	130	9,900	74	200	280
m&p-Xylene	--	22.2		**41**	**26**	180 U	47	**37**	38	4.1	**28**	99	21	21
Methyl Butyl Ketone	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl Ethyl Ketone	--	12		2.1	2.2 U	18 U	25	9.6	23	3.4	6.2	52	3.2	6.1
Methyl Isobutyl Ketone	--	--		0.5 U	3.1 U	82 U	3.8	0.5 U	1.7 U	1.7 U	3.1 U	1.7 U	3.4	4.6
Methyl Tert-Butyl Ether	--	11.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	60	10 (c)		3.9	20	70 U	8.0	0.8 U	4.4	5.9	27	3.4	5.6	5.1
n-Heptane	--	--		6.9	5.5	25 U	65	2.7	3.9	6.5	3.1 U	96	2.0	1.8
o-Xylene	--	7.9		**18**	**10**	87 U	17	**13**	16	1.9	**10**	60	**9.6**	**9.5**
Propylene	--	--		0.3 U	1.3 U	11 U	0.3 U	0.7 U	0.3 U	0.3 U	1.3 U	0.3 U	0.3 U	0.3 U
Styrene	--	1.9		1.8 U	3.2 U	86 U	1.8 U	1.9	1.8 U	1.8 U	3.2 U	0.6 U	1.8 U	1.8 U
Tetrachloroethene	100	16 (c)		18	5.1 U	21,000	76	8.5	34	2.8	5.1 U	660	10	11.0
Tetrahydrofuran	--	--		1.2 U	2.2 U	59 U	6.4	1.2 U	1.2 U	1.2 U	2.2 U	1.2 U	1.2 U	1.2 U
Toluene	--	43		27	32	76 U	70	23	25	8.0	33	1.6 U	18	15
trans-1,2-Dichloroethene	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	<1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5	4.2 (c)		41	41	680	560	0.7 U	7	73	6.7	2.5	23	18
Vinyl Acetate	--	--		0.5 U	2.7 U	22 U	0.5 U	2.4	1.7	0.5 U	2.7 U	0.5 U	0.5 U	0.5 U
Vinyl Bromide	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	--	<1.9		0.4 U	1.9 U	16 U	0.5	0.4 U	0.4 U	0.4 U	1.9 U	0.4 U	0.4 U	0.4 U

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Table 6. Comparison of Subslab Soil Gas and Indoor Air Results for COPCs to NYSDOH Air Guidelines and Background Concentrations, Vapor Intrusion Study Report, Solvent Dock Area
Lockheed Martin Corporation, French Road Facility, Utica, NY

Constituent	NYSDOH Air Guideline (µg/m³)	USEPA BASE Background Value (a) (µg/m³)	Sample Type: / Sample ID: / Lab ID: / Date: / Units:	Soil Gas S5 (b) 06B07712 2/26/2006 (µg/m³)	Indoor Air I6 06B07714 2/26/2006 (µg/m³)	Soil Gas S6 (b) 06B07715 2/26/2006 (µg/m³)	Indoor Air I7 06B07711 2/26/2006 (µg/m³)	Soil Gas S7 (b) 06B07710 2/26/2006 (µg/m³)	Indoor Air I8 06B07707 2/26/2006 (µg/m³)	Soil Gas S8 (b) 06B07705 2/26/2006 (µg/m³)	Indoor Air I9 06B07699 2/26/2006 (µg/m³)	Soil Gas S9 (b) 06B07704 2/26/2006 (µg/m³)	Soil Gas S10 (b) 06B07709 2/26/2006 (µg/m³)	Soil Gas VP-1SD (b) C0704029-001A 4/12/2007 (µg/m³)
1,1,1-Trichloroethane	--	20.6		120	0.7 U	6.3	0.7 U	30	0.7 U	77	0.7 U	14	0.7 U	3.8
1,1,2,2-Tetrachloroethane	--	<1.5		0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	4.0	0.9 U	0.9 U	1 U
1,1,2-Trichloroethane	--	<1.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.83 U
1,1-Dichloroethane	--	<0.7		1.7	0.5 U	6.2	0.5 U	5.1	0.5 U	3.8	0.5 U	3.8	0.5 U	0.62 U
1,1-Dichloroethene	--	<1.4		0.5 U	0.5 U	5.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.0	0.5 U	0.6 U
1,2,4-Trichlorobenzene	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U
1,2,4-Trimethylbenzene	--	9.5		21	**10**	20	**11**	13	**17**	18	**12**	2.2	18	7
1,2-Dibromoethane	--	<1.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 U
1,2-Dichlorobenzene	--	<1.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.92 U
1,2-Dichloroethane	--	<0.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.62 U
1,2-Dichloropropane	--	<1.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7 U
1,3,5-Trimethylbenzene	--	3.7		7.3	3.0	6.3	3.3	4.0	**4.7**	4.5	3.6	2.0 U	5.3	2.2
1,3-Butadiene	--	<3.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34 U
1,3-Dichlorobenzene	--	<2.4		1.1	2.5 U	2.5 U	0.8 U	1.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.92 U
1,4-Dichlorobenzene	--	5.5		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.1	2.5 U	2.4
1,4-Dioxane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U
2-Hexanone	--	--		1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.5 U	2.2	0.5 U	0.5 U	1.7 U	NA
2,2,4-Trimethylpentane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
4-Ethyltoluene	--	3.6		7.4	**3.8**	6.3	3.3	4.2	**4.2**	4.9	**3.9**	2.0 U	5.1	2.5
Acetone	--	98.9		480	66	230	**130**	500	**100**	610	**160**	320	74	57
Allyl Chloride	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND U
Benzene	--	9.4		17	1.6	5.1	1.4	31	1.7	48	2.0	9.9	2.1	7.8
Benzyl Chloride	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.88 U
Bromodichloromethane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U
Bromoform	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U
Bromomethane	--	<1.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
Carbon Disulfide	--	4.2		10	0.4 U	4.0	0.4 U	25	0.4 U	6.4	0.4 U	1.3	1.4	18
Carbon Tetrachloride	--	<1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.96 U
Chlorobenzene	--	<0.9		0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U
Chloroethane	--	<1.1		0.4 U	0.4 U	0.4 U	0.4 U	0.5	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroform	--	1.1		2.9	0.6 U	12	0.6 U	1.5	0.6 U	0.6 U	0.6 U	0.6 U	1.8	7.7
Chloromethane	--	3.7		0.3 U	0.9	0.3 U	1.0	0.8	1.1	0.3 U	1.0	1.0	0.3 U	0.42
cis-1,2-Dichloroethene	--	<1.9		0.5 U	0.5 U	2.8	0.5 U	4.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
cis-1,3-Dichloropropene	--	<2.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.69 U
Cyclohexane	--	--		13	1.4 U	3.4	1.4 U	50	8.7	46	12	43	1.4 U	29
Dibromochloromethane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 U
Ethanol	--	210		0.8 U	28	26	19	39	38	51	46	57	6.1	NA

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Table 6. Comparison of Subslab Soil Gas and Indoor Air Results for COPCs to NYSDOH Air Guidelines and Background Concentrations, Vapor Intrusion Study Report, Solvent Dock Area
Lockheed Martin Corporation, French Road Facility, Utica, NY

Constituent	NYSDOH Air Guideline (µg/m^3)	USEPA BASE Background Value (a) (µg/m^3)	Sample Type: / Sample ID: / Lab ID: / Date: / Units:	Soil Gas S5 (b) / 06B07712 / 2/26/2006 / (µg/m^3)	Indoor Air I6 / 06B07714 / 2/26/2006 / (µg/m^3)	Soil Gas S6 (b) / 06B07715 / 2/26/2006 / (µg/m^3)	Indoor Air I7 / 06B07711 / 2/26/2006 / (µg/m^3)	Soil Gas S7 (b) / 06B07710 / 2/26/2006 / (µg/m^3)	Indoor Air I8 / 06B07707 / 2/26/2006 / (µg/m^3)	Soil Gas S8 (b) / 06B07705 / 2/26/2006 / (µg/m^3)	Indoor Air I9 / 06B07699 / 2/26/2006 / (µg/m^3)	Soil Gas S9 (b) / 06B07704 / 2/26/2006 / (µg/m^3)	Soil Gas S10 (b) / 06B07709 / 2/26/2006 / (µg/m^3)	Soil Gas VP-1SD (b) / C0704029-001A / 4/12/2007 / (µg/m^3)
Ethyl Acetate	--	5.4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.92 U
Ethylbenzene	--	5.7		26	**9.2**	35	**9.3**	14	**12**	22	**13**	2.2	13.0	2.6
Freon 11	--	18.1		1.1	2.5	3.9	1.3	1.5	1.9	0.8 U	0.8 U	0.8 U	1.2	1.3
Freon 113	--	3.5		270	1.0 U	1.0 U	1.0 U	88	1.0 U	240	1.0 U	11	1.3	5.1
Freon 114	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U
Freon 12	--	16.5		2.5	3.3	500	1.9	2.3	2.7	2.0	2.1	2.5	2.3	0.75 U
Heptane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27
Hexachloro-1,3-butadiene	--	<6.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U
Hexane	--	10.2		28	2.4	8.3	2.1	120	2.2	79	2.6	57	6.7	62
Isopropyl Alcohol	--	--		110	290	11	140	13	79	7	100	110	4.5	150
m&p-Xylene	--	22.2		96	**32**	110	**34**	50	**47**	68	**50**	6.4	52	8.5
Methyl Butyl Ketone	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 U
Methyl Ethyl Ketone	--	12		120	5.1	22	2.0	17	2.8	45	4.4	6.1	4.6	0.9 U
Methyl Isobutyl Ketone	--	--		9.6	1.8	2.9	0.5 U	0.5 U	1.7 U	1.7 U	1.7 U	1.7 U	0.5 U	1.2 U
Methyl Tert-Butyl Ether	--	11.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.55
Methylene Chloride	60	N/A		2.4	2.1	2.8	3.8	11.0	9.7	2.2	9.7	9.8	2.7	90
n-Heptane	--	--		0.5 U	3.0	9.8	3.3	0.5 U	3.2	58	4.6	15	12	NA
o-Xylene	--	7.9		48	**12**	31	**16**	22.0	**27**	26.0	**27**	3.0	23	2.7
Propylene	--	--		0.3 U	0.7 U	0.7 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.26 U
Styrene	--	1.9		1.8 U	**2.0**	2.1	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8	1.8 U	0.69
Tetrachloroethene	100	N/A		26	9.5	280	15	95	97	35	24	5	260	1.8
Tetrahydrofuran	--	--		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2
Toluene	--	43		1.6 U	27	47	29	68	**50**	160	**53**	32	40	11
trans-1,2-Dichloroethene	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6 U
trans-1,3-Dichloropropene	--	<1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.69 U
Trichloroethene	5	N/A		4.7	2.8	32	5.7	30	6.0	3.4	1.9	21	70	0.76 J
Vinyl Acetate	--	--		0.5 U	1.5 U	1.5 U	0.5 U	0.5 U	0.5 U	8.7	0.5 U	0.5 U	0.5 U	0.54 U
Vinyl Bromide	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.67 U
Vinyl Chloride	--	<1.9		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.39 U

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Table 6. Comparison of Subslab Soil Gas and Indoor Air Results for COPCs to NYSDOH Air Guidelines and Background Concentrations, Vapor Intrusion Study Report, Solvent Dock Area
Lockheed Martin Corporation, French Road Facility, Utica, NY

Constituent	NYSDOH Air Guideline ($\mu g/m^3$)	USEPA BASE Background Value (a) ($\mu g/m^3$)	Sample Type: / Sample ID: / Lab ID: / Date: / Units:	Indoor Air AA-2SD C0704036-001A 4/12/2007 ($\mu g/m^3$)	Indoor Air VP-2SD (b) C0704029-002A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-3SD C0704036-002A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-3SD (b) C0704029-003A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-4SD C0704036-003A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-4SD (b) C0704029-004A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-5SD (b) C0704029-005A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-6SD C0704036-004A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-7SD (b) C0704029-006A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-8SD C0704036-005A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-8SD (b) C0704029-007A 4/12/2007 ($\mu g/m^3$)
1,1,1-Trichloroethane	--	20.6		0.83 U	38	0.83 U	0.72 J	0.83 U	11	0.78 J	0.83 U	0.83 U	0.83 U	1.2
1,1,2,2-Tetrachloroethane	--	<1.5		1.1 U	1 U	1.1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 U
1,1,2-Trichloroethane	--	<1.5		0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,1-Dichloroethane	--	<0.7		0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,1-Dichloroethene	--	<1.4		0.61 U	0.6 U	0.61 U	0.6 U	0.61 U	0.6 U	0.6 U	0.61 U	0.6 U	0.61 U	0.6 U
1,2,4-Trichlorobenzene	--	<6.8		1.1 U	1.1 U	1.13 U	1.1 U	1.13 U	1.1 U	1.1 U	1.13 U	1.1 U	1.13 U	1.1 U
1,2,4-Trimethylbenzene	--	9.5		3.2	8	2.5	3.1	2.4	6.6	6.5 J	1.2	3.4	4.7	3
1,2-Dibromoethane	--	<1.5		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	--	<1.2		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,2-Dichloroethane	--	<0.9		0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,2-Dichloropropane	--	<1.6		0.71 U	0.7 U	0.71 U	0.7 U	0.71 U	0.7 U	0.7 U	0.71 U	0.7 U	0.71 U	0.7 U
1,3,5-Trimethylbenzene	--	3.7		1.5	2.3	1.4	1	1.0	2	4.2	0.75 U	1.2	1.7	1
1,3-Butadiene	--	<3.0		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene	--	<2.4		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,4-Dichlorobenzene	--	5.5		1.4	2.3	0.86 J	2.3	1.5	2.5	3.9	0.92 U	1.3	**11.9**	9.7
1,4-Dioxane	--	--		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Hexanone	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2,4-Trimethylpentane	--	--		0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	4.3	0.71 U	0.71 U	0.71 U	0.71 U
4-Ethyltoluene	--	3.6		1.7	2.3	1.25	1.1	1.15	1.8	4.4	0.75 U	1.4	2.65	1.1
Acetone	--	98.9		68	33	76	64	90	43	270	21	390	92	24
Allyl Chloride	--	--		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Benzene	--	9.4		0.55	3.9	0.49	4.9	0.49	1.2	24	0.78	28	0.46 J	2
Benzyl Chloride	--	<6.8		0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Bromodichloromethane	--	--		1.0 U	1 U	1.0 U	1 U	1.0 U	1 U	1 U	1.0 U	1 U	1.0 U	1 U
Bromoform	--	--		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane	--	<1.7		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Carbon Disulfide	--	4.2		0.41 J	2.3	0.48 U	2.4	0.48 U	0.85	9.8	0.44 J	5.6	0.48 U	1.8
Carbon Tetrachloride	--	<1.3		0.26 U	0.96 U	0.26 U	0.96 U	0.26 U	0.96 U	0.96 U	0.26 U	0.96 U	0.26 U	0.96 U
Chlorobenzene	--	<0.9		0.70 U	0.7 U	0.70 U	0.7 U	0.70 U	0.7 U	0.7 U	0.70 U	0.7 U	0.70 U	0.7 U
Chloroethane	--	<1.1		0.40 U	0.4 U	0.40 U	0.4 U	0.40 U	0.4 U	0.4 U	0.40 U	0.4 U	0.40 U	0.4 U
Chloroform	--	1.1		0.74 U	7.2	0.74 U	0.74 U	0.74 U	25	5.1	0.74 U	0.65 J	0.74 U	3.2
Chloromethane	--	3.7		0.32 U	0.84	0.32 U	0.31 U	0.32 U	0.8	0.65	0.32 U	0.31	0.32 U	0.55
cis-1,2-Dichloroethene	--	<1.9		0.60 U	0.6 U	0.60 U	0.6 U	0.60 U	0.6 U	0.6 U	0.60 U	0.6 U	0.60 U	0.6 U
cis-1,3-Dichloropropene	--	<2.3		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Cyclohexane	--	--		8.6	8	3.5	47	2.5	2.3	66	46	64	5.7	5
Dibromochloromethane	--	--		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Ethanol	--	210		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Lockheed Martin Corporation, French Road Facility, Utica, NY

Constituent	NYSDOH Air Guideline ($\mu g/m^3$)	USEPA BASE Background Value (a) ($\mu g/m^3$)	Sample Type: / Sample ID: / Lab ID: / Date: / Units:	Indoor Air AA-2SD C0704036-001A 4/12/2007 ($\mu g/m^3$)	Indoor Air VP-2SD (b) C0704029-002A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-3SD C0704036-002A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-3SD (b) C0704029-003A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-4SD C0704036-003A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-4SD (b) C0704029-004A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-5SD (b) C0704029-005A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-6SD C0704036-004A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-7SD (b) C0704029-006A 4/12/2007 ($\mu g/m^3$)	Indoor Air AA-8SD C0704036-005A 4/12/2007 ($\mu g/m^3$)	Soil Gas VP-8SD (b) C0704029-007A 4/12/2007 ($\mu g/m^3$)
Ethyl Acetate	--	5.4		0.92 U	0.92 U	0.92 U	5.6	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
Ethylbenzene	--	5.7		0.49 J	2.4	0.44 J	0.71	0.66 U	1.5	6.2 J	0.57 J	2.6	0.49 J	0.88
Freon 11	--	18.1		0.97	2.3	0.8 J	0.97	0.8 J	1.5	1.3	0.8 J	0.86 U	1.26	0.97
Freon 113	--	3.5		1.2 U	85	1.2 U	7.6	1.2 U	450	9.5	1.2 U	2.2	0.9 J	1.2 U
Freon 114	--	<6.8		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Freon 12	--	16.5		2.1	0.75 U	2.2	0.75 U	2.2	0.75 U	0.75 U	2.3	0.75 U	2.2	0.75 U
Heptane	--	--		5.0	7.2	2.4	11	3.6	3.6	170	0.67	40	10	7
Hexachloro-1,3-butadiene	--	<6.8		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexane	--	10.2		0.54 U	12	0.54 U	59	0.54 U	0.54 U	250	1.72	67	0.54 U	7.9
Isopropyl Alcohol	--	--		481	44	499	250	504	190	170	20	87	1,250	800
m&p-Xylene	--	22.2		1.2 J	8.4	0.93 J	2.4	0.88 J	5.4	20	1.19 J	7.5	1.15 J	3.3
Methyl Butyl Ketone	--	--		1.3 U	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U
Methyl Ethyl Ketone	--	12		**137**	0.9 U	**270**	100	**261**	46	110	6.9	41	**147**	25
Methyl Isobutyl Ketone	--	--		1.3 U	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U	1.2 U	1.3 U	1.2 U	1.3 U	1.2 U
Methyl Tert-Butyl Ether	--	11.5		0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Methylene Chloride	60	N/A		263	37	242	210	198	93	170	7.5	42	4,950	4,600
n-Heptane	--	--		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	--	7.9		0.49 J	2.8	0.66 U	0.84	0.66 U	1.9	6.2 J	0.49 J	2.3	0.44 J	1.1
Propylene	--	--		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Styrene	--	1.9		1.9	2	0.91	0.65	0.65	0.65	0.65 U	**9.3**	0.65 U	1.3	0.52 J
Tetrachloroethene	100	N/A		1.0 U	9.5	1.0 U	1 U	1.0	40	0.97 J	1.0 U	8.4	1.0 U	5.4
Tetrahydrofuran	--	--		0.45 U	0.9	0.45 U	1.1	0.45 U	5.5	1.7	0.45 U	0.45 U	0.45 U	0.45 U
Toluene	--	43		5.2	15	6.3	6.6	4.0	7.2	58	8.4	49	6.2	5.9
trans-1,2-Dichloroethene	--	--		0.60 U	0.6 U	0.60 U	0.6 U	0.60 U	0.6 U	0.6 U	0.60 U	0.6 U	0.60 U	0.6 U
trans-1,3-Dichloropropene	--	<1.3		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Trichloroethene	5	N/A		0.98	110	0.60	0.76 J	1.3	45	1.6	0.66	0.82 U	0.71	36
Vinyl Acetate	--	--		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Vinyl Bromide	--	--		0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Vinyl Chloride	--	<1.9		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U

Notes:
(a) 90% percentile background value (USEPA 2001. Building Assessment and Survey Evaluation (BASE))
(b) Subslab soil gas results for use in comparison to indoor air values only; subslab soil gas not compared to Air Guideline or background values

Indoor air cells exceeding the NYSDOH air guideline are shaded gray
Indoor air cells exceeding the NYSDOH background value are boldfaced
-- - Value not available
J - Analyte detected at or below quantitation limits
NA - Not analyzed
NYSDOH - New York State Department of Health
U - Not detected at the reporting limit
USEPA - U.S. Environmental Protection Agency
• g/m^3 - Micrograms per cubic meter

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Table 7. Evaluation of Potential Mitigation and Monitoring Actions Using NYSDOH Matrices, Vapor Intrusion Study Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	Sample ID: / Lab ID: / Date: / Units:		
	Sample ID:	S1	
	Lab ID:	06B07706	Matrix Result
	Date:	2/26/2006	Subslab Only
	Units:	(µg/m^3)	
1,1,1-Trichloroethane		*17*	No Further Action
Tetrachloroethene		21,000	Mitigate
Trichloroethene		680	Mitigate
1,1-Dichloroethene		*12*	No Further Action
cis-1,2-Dichloroethene		*12*	No Further Action
Vinyl chloride		*8*	No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		
	Sample ID:	S2	
	Lab ID:	06B07698	Matrix Result
	Date:	2/26/2006	Subslab Only
	Units:	(µg/m^3)	
1,1,1-Trichloroethane		260	Monitor
Tetrachloroethene		76	No Further Action
Trichloroethene		560	Mitigate
1,1-Dichloroethene		*0.3*	No Further Action
cis-1,2-Dichloroethene		*0.3*	No Further Action
Vinyl chloride		0.5	No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		
	Sample ID:	S3	
	Lab ID:	06B07708	Matrix Result
	Date:	2/26/2006	Subslab Only
	Units:	(µg/m^3)	
1,1,1-Trichloroethane		67	No Further Action
Tetrachloroethene		34	No Further Action
Trichloroethene		7	No Further Action
1,1-Dichloroethene		*0.3*	No Further Action
cis-1,2-Dichloroethene		*0.3*	No Further Action
Vinyl chloride		*0.2*	No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		
	Sample ID:	S4	
	Lab ID:	06B07702	Matrix Result
	Date:	2/26/2006	Subslab Only
	Units:	(µg/m^3)	
1,1,1-Trichloroethane		54	No Further Action
Tetrachloroethene		660	Monitor
Trichloroethene		2.5	No Further Action
1,1-Dichloroethene		*0.3*	No Further Action
cis-1,2-Dichloroethene		*0.3*	No Further Action
Vinyl chloride		*0.2*	No Further Action

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Table 7. Evaluation of Potential Mitigation and Monitoring Actions Using NYSDOH Matrices, Vapor Intrusion Study Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	Sample ID: Lab ID: Date: Units:	S5 06B07712 2/26/2006 (µg/m^3)	Matrix Result Subslab Only
1,1,1-Trichloroethane		120	Monitor
Tetrachloroethene		26	No Further Action
Trichloroethene		4.7	No Further Action
1,1-Dichloroethene		*0.3*	No Further Action
cis-1,2-Dichloroethene		*0.3*	No Further Action
Vinyl chloride		*0.2*	No Further Action

Constituent	Sample ID: Lab ID: Date: Units:	S6 06B07715 2/26/2006 (µg/m^3)	Matrix Result Subslab Only
1,1,1-Trichloroethane		6.3	No Further Action
Tetrachloroethene		280	Monitor
Trichloroethene		32	No Further Action
1,1-Dichloroethene		5.1	No Further Action
cis-1,2-Dichloroethene		2.8	No Further Action
Vinyl chloride		*0.2*	No Further Action

Constituent	Sample ID: Lab ID: Date: Units:	S7 06B07710 2/26/2006 (µg/m^3)	Matrix Result Subslab Only
1,1,1-Trichloroethane		30	No Further Action
Tetrachloroethene		95	No Further Action
Trichloroethene		30	No Further Action
1,1-Dichloroethene		*0.3*	No Further Action
cis-1,2-Dichloroethene		4.8	No Further Action
Vinyl chloride		*0.2*	No Further Action

Constituent	Sample ID: Lab ID: Date: Units:	S8 06B07705 2/26/2006 (µg/m^3)	Matrix Result Subslab Only
1,1,1-Trichloroethane		77	No Further Action
Tetrachloroethene		35	No Further Action
Trichloroethene		3.4	No Further Action
1,1-Dichloroethene		*0.3*	No Further Action
cis-1,2-Dichloroethene		*0.3*	No Further Action
Vinyl chloride		*0.2*	No Further Action

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Table 7. Evaluation of Potential Mitigation and Monitoring Actions Using NYSDOH Matrices, Vapor Intrusion Study Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	Sample ID: / Lab ID: / Date: / Units:		Matrix Result Subslab Only
	S9 / 06B07704 / 2/26/2006 / ($\mu g/m^3$)		
1,1,1-Trichloroethane	14		No Further Action
Tetrachloroethene	5		No Further Action
Trichloroethene	21		No Further Action
1,1-Dichloroethene	7		No Further Action
cis-1,2-Dichloroethene	*0.3*		No Further Action
Vinyl chloride	*0.2*		No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		Matrix Result Subslab Only
	S10 / 06B07709 / 2/26/2006 / ($\mu g/m^3$)		
1,1,1-Trichloroethane	*0.4*		No Further Action
Tetrachloroethene	260		Monitor
Trichloroethene	70		Monitor
1,1-Dichloroethene	*0.3*		No Further Action
cis-1,2-Dichloroethene	*0.3*		No Further Action
Vinyl chloride	*0.2*		No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		Matrix Result Subslab Only
	VP-1SD / C0704029-001A / 4/12/2007 / ($\mu g/m^3$)		
1,1,1-Trichloroethane	3.8		No Further Action
Tetrachloroethane	1.8		No Further Action
Trichloroethene	0.76	J	No Further Action
1,1-Dichloroethene	*0.3*		No Further Action
cis-1,2-Dichloroethene	*0.3*		No Further Action
Vinyl chloride	*0.2*		No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		Matrix Result Subslab Only
	VP-2SD / C0704029-002A / 4/12/2007 / ($\mu g/m^3$)		
1,1,1-Trichloroethane	38		No Further Action
Tetrachloroethane	9.5		No Further Action
Trichloroethene	110		Monitor
1,1-Dichloroethene	*0.3*		No Further Action
cis-1,2-Dichloroethene	*0.3*		No Further Action
Vinyl chloride	*0.2*		No Further Action

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Table 7. Evaluation of Potential Mitigation and Monitoring Actions Using NYSDOH Matrices, Vapor Intrusion Study Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	Sample ID: / Lab ID: / Date: / Units:		Matrix Result Subslab Only
	VP-3SD / C0704029-003A / 4/12/2007 / (µg/m^3)		
1,1,1-Trichloroethane	0.72	J	No Further Action
Tetrachloroethane	*0.5*		No Further Action
Trichloroethene	0.76	J	No Further Action
1,1-Dichloroethene	*0.3*		No Further Action
cis-1,2-Dichloroethene	*0.3*		No Further Action
Vinyl chloride	*0.2*		No Further Action

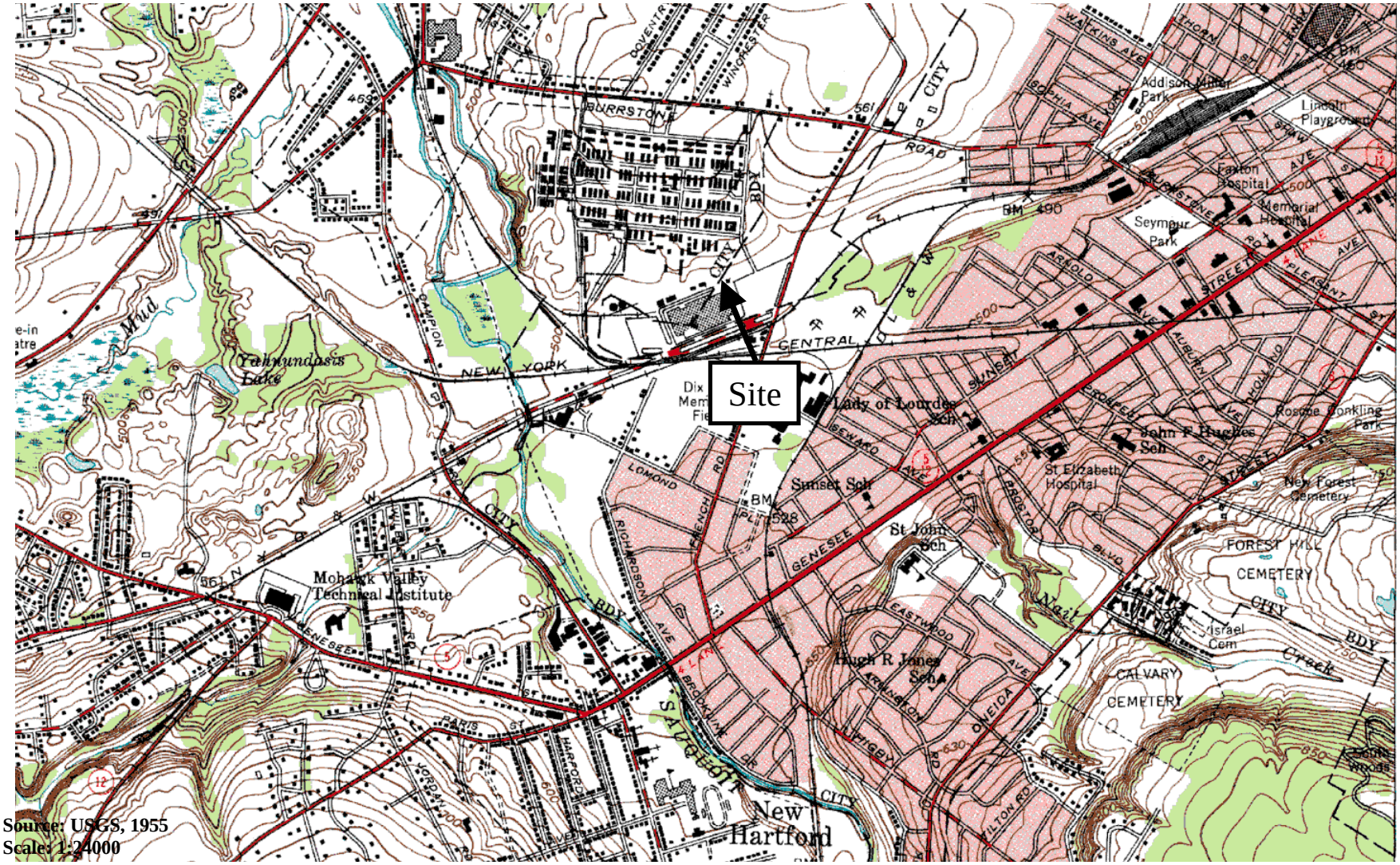
Constituent	Sample ID: / Lab ID: / Date: / Units:	Matrix Result Subslab Only
	VP-4SD / C0704029-004A / 4/12/2007 / (µg/m^3)	
1,1,1-Trichloroethane	11	No Further Action
Tetrachloroethane	40	No Further Action
Trichloroethene	45	No Further Action
1,1-Dichloroethene	*0.3*	No Further Action
cis-1,2-Dichloroethene	*0.3*	No Further Action
Vinyl chloride	*0.2*	No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:		Matrix Result Subslab Only
	VP-5SD / C0704029-005A / 4/12/2007 / (µg/m^3)		
1,1,1-Trichloroethane	0.78	J	No Further Action
Tetrachloroethane	0.97	J	No Further Action
Trichloroethene	1.6		No Further Action
1,1-Dichloroethene	*0.3*		No Further Action
cis-1,2-Dichloroethene	*0.3*		No Further Action
Vinyl chloride	*0.2*		No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:	Matrix Result Subslab Only
	VP-7SD / C0704029-006A / 4/12/2007 / (µg/m^3)	
1,1,1-Trichloroethane	*0.4*	No Further Action
Tetrachloroethane	8.4	No Further Action
Trichloroethene	*0.4*	No Further Action
1,1-Dichloroethene	*0.3*	No Further Action
cis-1,2-Dichloroethene	*0.3*	No Further Action
Vinyl chloride	*0.2*	No Further Action

Constituent	Sample ID: / Lab ID: / Date: / Units:	Matrix Result Subslab Only
	VP-8SD / C0704029-007A / 4/12/2007 / (µg/m^3)	
1,1,1-Trichloroethane	1.2	No Further Action
Tetrachloroethane	5.4	No Further Action
Trichloroethene	36	No Further Action
1,1-Dichloroethene	*0.3*	No Further Action
cis-1,2-Dichloroethene	*0.3*	No Further Action
Vinyl chloride	*0.2*	No Further Action

Notes:
Non-detected compounds are italicized and presented at 1/2 the detection limit
J - Analyte detected at or below quantitation limits
NYSDOH - New York State Department of Health
µg/m^3 - Micrograms per cubic meter



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482 CONGRESS ST. SUITE 501
PORTLAND, ME 04101
PHONE: 207.828.0046 FAX: 207.828.0062

FORMER LOCKHEED MARTIN FRENCH ROAD FACILITY
SITE LOCATION

VAPOR INTRUSION STUDY REPORT
SOLVENT DOCK AREA
UTICA, NEW YORK

PROJECT MANAGER C. Motta	DRAWING NUMBER
CHECKED BY J. Bonsteel	PROJECT NUMBER AY000265.0015
DATE DRAWN July 27, 2005	FIGURE NUMBER 1

MW-6	Feb-95
Tetrachloroethene	ND
Trichloroethene	ND
cis-1,2-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
1,2-Dichloroethene (Total)	ND
Vinyl Chloride	ND
1,1,2,2-Tetrachloroethane	–
1,1,1-Trichloroethane	–
1,1-Dichloroethane	ND
Chloroethane	ND
Chloroform	–
Methylene Chloride (Dichloromethane)	–
Benzene	–
Toluene	–
Ethylbenzene	–
Xylene (Total)	–
Chlorobenzene	–
1,2-Dichlorobenzene	ND

PZ-2	Feb-95	Jun-96	Aug-96	Nov-96	Feb-97	Jun-97	Aug-97	Nov-97	Feb-98	May-98	Sep-98	Nov-98	Feb-99	May-99	Sep-99	Dec-99	Mar-00	Jun-00	Sep-00
Tetrachloroethene	44	<10	<5	<1	<.8	–	12	6	52	1.3	<0.4	0.78	1.3	1.0	<0.2	0.24	<0.20	13	0.20
Trichloroethene	55	<10	<5	<1	1.2	–	6	--	13	1.2	<0.4	0.53	1.2	1.4	0.28	1.2	<0.20	0.51	< 0.20
cis-1,2-Dichloroethene	187	28	<5	15	12	16	9	--	20	14	2	0.96	2	1.6	1.8	2.0	6.0	1.4	2.5
trans-1,2-Dichloroethene	ND	–	–	–	--	–	--	--	--	1.2	<0.4	<0.2	<0.2	0.22	0.2	<0.20	<0.20	<.20	<.20
1,2-Dichloroethene (Total)	187	–	–	–	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	ND	14	<5	11	11	17	7	4.3	7.3	14	<2	0.75 J	2.2	1.3	1.7	1.9	2.0	<1.0	1.6
1,1,2,2-Tetrachloroethane	–	–	–	–	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	–	–	–	–	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	ND	<10	<5	<1	<.8	–	--	--	0.44	0.28	<0.4	<0.2	0.21	1.1	<0.2	<0.20	<0.20	<.20	<.20
Chloroethane	ND	–	–	–	--	–	--	--	--	0.8	<2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	–	–	–	–	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	–	<50	<25	<5	4.1	–	--	--	0.68	--	--	--	--	--	--	--	--	--	--
Benzene	–	<10	<5	6	1.1	–	--	--	<0.4	<0.4	<0.4	1.1	1.2	1.4	0.61	<0.20	<0.20	<.20	0.49
Toluene	–	–	–	–	--	–	--	--	--	<0.4	<0.4	1.9	<0.2	<0.2	<0.2	<0.20	<0.20	7	0.29
Ethylbenzene	–	–	–	–	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (Total)	–	–	–	–	--	–	--	--	--	<0.4	<0.4	11.4	1.12	1.3	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	–	–	–	–	--	–	--	--	<0.8	<0.4	1.9	9.2	2.8	6	4.5	0.48	1.1	<.20	2.7
1,2-Dichlorobenzene	176	–	–	–	--	–	--	--	<0.4	22	36	7.6	11	15	20	6.7	4.9	0.98	7

PZ-01	Feb-95
Tetrachloroethene	ND
Trichloroethene	ND
cis-1,2-Dichloroethene	23
trans-1,2-Dichloroethene	ND
1,2-Dichloroethene (Total)	23
Vinyl Chloride	ND
1,1,2,2-Tetrachloroethane	–
1,1,1-Trichloroethane	–
1,1-Dichloroethane	ND
Chloroethane	42
Chloroform	–
Methylene Chloride (Dichloromethane)	–
Benzene	–
Toluene	–
Ethylbenzene	–
Xylene (Total)	–
Chlorobenzene	–
1,2-Dichlorobenzene	43

MW-9 (4-14')	Feb-93	Nov-94	May-98	May-99	Jun-00	Jul-01	May-02	Sep-04
Tetrachloroethene	<1	<1	--	--	–	--	--	–
Trichloroethene	<1	<1	--	--	–	--	--	–
cis-1,2-Dichloroethene	--	<1	0.29	1.1	0.22	0.29	0.52	2
trans-1,2-Dichloroethene	--	<1	--	--	–	--	--	–
1,2-Dichloroethene (Total)	<1	<1	--	--	–	--	--	–
Vinyl Chloride	<1	3	9.8	2.1	1.1	2.7	4.4	1.4
1,1,2,2-Tetrachloroethane	<1	<1	--	--	–	--	--	–
1,1,1-Trichloroethane	<1	<1	--	--	–	--	--	–
1,1-Dichloroethane	<1	<1	<0.20	1.0	<.20	0.32	0.22	0.9
Chloroethane	<1	<1	--	--	–	--	--	0.62
Chloroform	<1	<1	--	--	–	--	--	–
Methylene Chloride (Dichloromethane)	<1	<1	--	--	–	--	--	–
Benzene	<1	<1	--	--	–	--	--	–
Toluene	<1	<1	--	--	–	--	--	–
Ethylbenzene	<1	<1	--	--	–	--	--	–
Xylene (Total)	<3	<1	--	--	–	--	--	–
Chlorobenzene	<1	<1	--	--	–	--	--	–
1,2-Dichlorobenzene	<5	<1	--	--	–	--	--	–

PZ-4	Feb-95	Aug-96	Nov-97	May-98	May-99	Jun-00	Jul-01	May-02	Sep-04
Tetrachloroethene	ND	--	–	4.4	2.8	1.9	0.69	1.8	0.22 J
Trichloroethene	ND	--	–	0.43	1.2	<.40	<0.2	<0.2	<0.2
cis-1,2-Dichloroethene	84	<1	8.1	4.9	3.4	3	1.6	9.2	1.3
trans-1,2-Dichloroethene	ND	--	–	--	--	--	--	--	--
1,2-Dichloroethene (Total)	84	--	–	--	--	--	--	--	--
Vinyl Chloride	ND	--	–	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	--	--	–	--	--	--	--	--	--
1,1,1-Trichloroethane	--	--	–	0.76	1.4	0.55	<0.2	0.68	< 0.2
1,1-Dichloroethane	ND	--	–	1.2	1.4	1	0.52	1.6	0.52
Chloroethane	ND	--	–	--	--	--	--	--	--
Chloroform	--	12	–	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	--	--	–	--	--	--	--	--	--
Benzene	--	--	–	--	--	--	--	--	--
Toluene	--	--	–	--	--	42	<0.2	0.93	< 0.2
Ethylbenzene	--	--	–	--	--	--	--	--	--
Xylene (Total)	--	--	–	--	--	--	--	0.28	< 0.4
Chlorobenzene	--	--	–	--	--	--	--	--	--
1,2-Dichlorobenzene	ND	--	–	--	--	--	--	--	--

MW-5 (4-14')	Dec-91	Feb-93	Nov-94
Tetrachloroethene	<1	<1	<1
Trichloroethene	<1	<1	<1
cis-1,2-Dichloroethene	–	–	<1
trans-1,2-Dichloroethene	–	–	<1
1,2-Dichloroethene (Total)	<1	1	<1
Vinyl Chloride	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1
1,1-Dichloroethane	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	1	<1
Methylene Chloride (Dichloromethane)	<1	<1	<1
Benzene	<1	<1	<1
Toluene	<1	<1	<1
Ethylbenzene	<1	<1	<1
Xylene (Total)	<3	<3	<1
Chlorobenzene	<1	<1	<1
1,2-Dichlorobenzene	<5	<5	<1

LEGEND

○ MW-F GROUNDWATER MONITORING WELL

◉ PW-1 EXTRACTION WELL

○ OW-1 OVERBURDEN OBSERVATION WELL

⌖ BR-1 BEDROCK MONITORING WELL

NOTE:

DASHES INDICATE NOT ANALYZED OR DATA MISSING.

ALL UNITS IN UG/L

MW-4 (4-14')	Dec-91	Feb-93	Nov-94	Aug-96	Nov-97	May-98	May-99	Jun-00	Jul-01	May-02	Sep-04
Tetrachloroethene	<1	<1	<1	--	–	--	–	--	–	--	–
Trichloroethene	<1	<1	<1	--	–	<0.20	1.1	<.20	<0.2	<0.2	<0.2
cis-1,2-Dichloroethene	–	--	<1	--	–	1	3.6	<.20	1.2	1.1	7.4
trans-1,2-Dichloroethene	–	--	<1	--	–	--	–	--	–	--	–
1,2-Dichloroethene (Total)	<1	<1	<1	--	–	--	–	--	–	--	–
Vinyl Chloride	<1	2	<1	4	3.5	3.5	4.1	2.7	3.5	4	6.4
1,1,2,2-Tetrachloroethane	<1	<1	<1	--	–	--	–	--	–	--	–
1,1,1-Trichloroethane	<1	<1	<1	--	–	--	–	--	–	--	–
1,1-Dichloroethane	<1	3	<1	--	–	<0.20	1.3	<.20	<0.2	<0.2	1.2
Chloroethane	<1	<1	<1	--	–	--	–	--	–	--	7.4
Chloroform	4	<1	<1	--	–	--	–	--	–	--	–
Methylene Chloride (Dichloromethane)	<1	<1	<1	--	–	--	–	--	–	--	–
Benzene	<1	<1	<1	--	–	--	–	--	–	--	–
Toluene	<1	<1	<1	--	–	--	–	--	–	--	–
Ethylbenzene	<1	<1	<1	--	–	--	–	--	–	--	–
Xylene (Total)	<3	<3	<1	--	–	--	–	--	–	--	–
Chlorobenzene	<1	<1	<1	--	–	--	–	--	–	--	–
1,2-Dichlorobenzene	<5	<5	<1	--	–	--	–	--	–	--	–

MW-3 (3-13')	Dec-91	Feb-93	Nov-94	Aug-96	Nov-97	May-98	May-99	Jun-00	Jul-01	May-02	Sep-04
Tetrachloroethene	5	<2	4	<10	37	73	<20	<8	11	48	57
Trichloroethene	2	<2	2	--	--	300	260	110	--	430	240
cis-1,2-Dichloroethene	--	--	6	270	360	430	440	510	400	340	140
trans-1,2-Dichloroethene	--	--	<1	<10	19	20	<20	<8.0	<4	< 4	4.7
1,2-Dichloroethene (Total)	5	5	6	--	--	--	--	--	--	--	--
Vinyl Chloride	<1	--	ND	94	19	26	<100	8.6 J	4.7 J	< 20	14 J
1,1,2,2-Tetrachloroethane	<1	<2	ND	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	<1	<2	1	--	--	--	--	--	--	--	--
1,1-Dichloroethane	40	47	25	99	35	30	100	9.9	9.8	6.9	10
Chloroethane	280	200	15	--	--	--	--	--	--	--	--
Chloroform	<1	<2	<1	--	--	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	1	<2	<1	--	--	--	--	--	--	--	--
Benzene	<1	<2	<1	--	--	<0.20	0.71	<4.0	<2	<4	< 0.46
Toluene	<1	<2	<1	--	--	--	--	--	--	--	--
Ethylbenzene	<1	<2	<1	--	--	--	--	--	--	--	--
Xylene (Total)	<3	--	<1	--	--	--	--	--	--	--	--
Chlorobenzene	<1	<2	<1	--	--	0.36	0.49	<8.0	<4	<4	< 0.46
1,2-Dichlorobenzene	<5	<5	<1	--	--	--	--	--	--	--	--

MW-10 (4-14')	Feb-93	Nov-94	Jun-00	Sep-00	Dec-00	Mar-01	Jun-01	Oct-01	Jan-02	May-02	Aug-02	Nov-02	Apr-03	Jul-03	Oct-03	Feb-04	Mar-04	Jun-04
Tetrachloroethene	<10	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	13	<50	<0.4	< 4	<2	<2	<2	2.4	<2	2.9	6.2	3.6	<0.2	4.2	6.2	4.5	< 0.40	11
cis-1,2-Dichloroethene	--	940	2.1	540	140	140	140	220	160	210	300	140	3.7	130	210	82	7.3	140
trans-1,2-Dichloroethene	--	65	<0.4	24	7.4	12	7.5	14	9.8	10	17	9.2	0.39	7.5	11	4.4	0.64	10
1,2-Dichloroethene (Total)	1100	1005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	300	490	1.5 J	180	37	36	43	63	36	44	98	30	2.2	30	66	21	3	34
1,1,2,2-Tetrachloroethane	<10	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	96	<50	<0.4	< 4	<2	2.4	<2	<1.6	<2	<2	<2	<2	<0.2	<2.0	<2.0	<0.40	< 0.40	<2.0
1,1-Dichloroethane	74	<50	25	47	40	51	43	42	50	86	40	50	12	32	27	27	12	29
Chloroethane	<10	<50	<2.0	< 20	2.3	<10	<10	<8	<10	<10	<10	<2	<2	<2.0	<2.0	<0.40	< 0.40	<2.0
Chloroform	<100	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	<10	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	<10	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	<1	<50	--	--	--	2.7	<2	<1.6	<2	<2	<2	<2	<0.2	<1.6	<0.36	<0.20	<0.20	<0.36
Ethylbenzene	<10	<50	<0.4	<0.4	<2	<2	<2	<1.6	<2	<2	<2	<2	<1	<1.5	<0.29	< 0.20	< 0.20	<0.29
Xylene (Total)	<30	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	<10	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<50	<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MW-8 (5-15')	Feb-93	Nov-94	May-98	May-99	Jun-00	Jul-01	May-02	Sep-04
Tetrachloroethene	<1	1	0.35	3.5	0.77	3.3	1.6	0.78
Trichloroethene	1	2	0.43	4.6	0.7	4.2	2.1	1.1
cis-1,2-Dichloroethene	--	<1	<0.20	7.4	0.44	1.6	0.37 J	0.37 J
trans-1,2-Dichloroethene	--	<1	--	--	–	--	--	–
1,2-Dichloroethene (Total)	<1	<1	--	--	–	--	--	–
Vinyl Chloride	<1	<1	--	--	–	--	--	–
1,1,2,2-Tetrachloroethane	<1	<1	--	--	–	--	--	–
1,1,1-Trichloroethane	<1	<1	--	--	–	--	--	–
1,1-Dichloroethane	<1	<1	--	--	–	--	--	–
Chloroethane	<1	<1	--	--	–	--	--	–
Chloroform	2	<1	--	--	–	--	--	–
Methylene Chloride (Dichloromethane)	<1	<1	--	--	–	--	--	–
Benzene	<1	<1	--	--	–	--	--	–
Toluene	<1	<1	<0.20	0.24	<.20	<0.5	< 0.2	< 0.2
Ethylbenzene	<1	<1	--	--	–	--	--	–
Xylene (Total)	<3	<1	<0.20	1.93	<.20	<0.8	< 0.2	< 0.2
Chlorobenzene	<1	<1	--	--	–	--	--	–
1,2-Dichlorobenzene	<5	<1	<0.40	0.48	<.40	<0.2	< 0.4	< 0.4

MW-11 (5-25')	Feb-93	Nov-94
Tetrachloroethene	<1	<1
Trichloroethene	<1	<1
cis-1,2-Dichloroethene	--	<1
trans-1,2-Dichloroethene	--	<1
1,2-Dichloroethene (Total)	<1	<1
Vinyl Chloride	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1
1,1,1-Trichloroethane	<1	<1
1,1-Dichloroethane	<1	<1
Chloroethane	<1	<1
Chloroform	<1	<1
Methylene Chloride (Dichloromethane)	<1	<5
Benzene	<1	<1
Toluene	<1	<1
Ethylbenzene	<1	<1
Xylene (Total)	<3	<1
Chlorobenzene	<1	<1
1,2-Dichlorobenzene	<5	<1

MW-2 (2-17')	Dec-91	Feb-93	Nov-94	Aug-96	Nov-97	May-98	May-99	Jun-00	Jul-01	May-02	Sep-04
Tetrachloroethene	<1	<10	<5	<10	25	48	<10	<2	<1	< 0.8	< 2
Trichloroethene	<1	<10	<5	<10	47	63	68	<2	--	1.8	< 1
cis-1,2-Dichloroethene	--	--	17	250	210	140	170	94	110	33	36
trans-1,2-Dichloroethene	--	--	<5	17	--	17	<10	4.3	5.4	2.9	3.4
1,2-Dichloroethene (Total)	2	<10	17	--	--	--	--	--	--	--	--
Vinyl Chloride	7	<10	34	76	93	64	84	98	35	33	78
1,1,2,2-Tetrachloroethane	<1	<10	<5	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	<1	<10	<5	--	--	2.5	<10	<2	<1	< 0.4	< 1
1,1-Dichloroethane	30	54	50	36	--	55	81	47	28	16	14
Chloroethane	130	340	33	--	--	2.1	<50	<10	<5	< 2	< 1
Chloroform	<1	<10	<5	--	--	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	<1	<10	<25	--	--	--	--	--	--	--	--
Benzene	<1	<10	<5	--	--	<0.20	0.74	<.20	<0.05	< 0.4	< 0.20
Toluene	15	19	<5	--	--	--	--	--	--	--	--
Ethylbenzene	<1	<10	<5	--	--	--	--	--	--	--	--
Xylene (Total)	<3	<30	<5	--	--	--	--	--	--	--	--
Chlorobenzene	<1	<10	<5	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<5	<50	<5	--	--	--	--	--	--	--	--

PZ-7	Aug-96
Tetrachloroethene	–
Trichloroethene	1
cis-1,2-Dichloroethene	3
trans-1,2-Dichloroethene	–
1,2-Dichloroethene (Total)	–
Vinyl Chloride	–
1,1,2,2-Tetrachloroethane	–
1,1,1-Trichloroethane	1
1,1-Dichloroethane	4
Chloroethane	–
Chloroform	2
Methylene Chloride (Dichloromethane)	–
Benzene	–
Toluene	–
Ethylbenzene	–
Xylene (Total)	–
Chlorobenzene	–
1,2-Dichlorobenzene	4

MW-7 (6-21')	Feb-93	Nov-94	Jan-98	May-98	May-99	Jun-00
Tetrachloroethene	<1	<1	1.1	0.48	0.84	0.25
Trichloroethene	<1	<1	3.9	1.6	1.8	1.1
cis-1,2-Dichloroethene	–	<1	<0.2	--	–	–
trans-1,2-Dichloroethene	–	<1	<0.2	--	–	–
1,2-Dichloroethene (Total)	<1	<1	–	--	–	–
Vinyl Chloride	<1	<1	<1.0	--	–	–
1,1,2,2-Tetrachloroethane	<1	<1	<0.2	--	–	–
1,1,1-Trichloroethane	<1	<1	0.76	--	–	–
1,1-Dichloroethane	<1	<1	<0.2	--	–	–
Chloroethane	<1	<1	<1.0	--	–	–
Chloroform	<1	<1	<0.2	--	–	–
Methylene Chloride (Dichloromethane)	<1	<1	<0.2	--	–	–
Benzene	<1	<1	<0.2	--	–	–
Toluene	<1	<1	<0.2	--	–	–
Ethylbenzene	<1	<1	<0.2	--	–	–
Xylene (Total)	<3	<1	<0.2	--	–	–
Chlorobenzene	<1	<1	<0.2	--	–	–
1,2-Dichlorobenzene	<5	<1	<0.2	--	–	–

PZ-6	Feb-95
Tetrachloroethene	212
Trichloroethene	ND
cis-1,2-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
1,2-Dichloroethene (Total)	ND
Vinyl Chloride	ND
1,1,2,2-Tetrachloroethane	–
1,1,1-Trichloroethane	–
1,1-Dichloroethane	ND
Chloroethane	ND
Chloroform	–
Methylene Chloride (Dichloromethane)	–
Benzene	–
Toluene	–
Ethylbenzene	–
Xylene (Total)	–
Chlorobenzene	–
1,2-Dichlorobenzene	ND

MW-1	Aug-91	Dec-91	Feb-93	Nov-94	Jun-96	Aug-96	Nov-96	Feb-97	Jun-97	Aug-97	Nov-97	Feb-98	May-98	Sep-98	Nov-98	Feb-99	May-99	Sep-99	Dec-99	Mar-00	Jun-00	Sep-00	Dec-00	Mar-01	Jun-01	Oct-01	Jan-02	May-02	Aug-02	Nov-02	Mar-03	Jul-03	Oct-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Mar-06
Tetrachloroethene	68.8	<1	ND	34	4200	4300	11000	2300	5000	7300	1100	1100	2200	2900	820	1800	1600	1200	2200	1200	2400	1200	1000	810	1200	600	1000	590	470	730	260	160	170	230	79	100	83	62	50
Trichloroethene	7.19	1	2	<10	<500	<200	<500	120	--	370	730	240	380	590	290	270	360	570	830	470	510	360	380	290	400	360	650	340	310	310	150	200	220	55	75	92	51	30	33
cis-1,2-Dichloroethene	--	--	--	120	<500	260	<500	110	--	240	390	160	220	390	220	110	180	290	360	180	180	200	210	120	160	180	180	120	150	99	64	140	170	54	100	92	79	39	46
trans-1,2-Dichloroethene	--	--	--	15	<500	<200	<500	<32	--	--	--	5.5	22	<20	<16	<16	<16	<16	<20	<20	<20	< 20	<20	<10	<10	<10	<10	<10	<8	<8	<4	14	9.6	< 5	2.6	2.2	< 1.6	1.4	1.1
1,2-Dichloroethene (Total)	25.6	16	31	135	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	180	83	40	190	--	--	--	--	--	--	--	--	18	<100	<80	<80	<80	<80	<100	<100	<100	<100	<100	--	<10	<50	<50	<50	<40	<40	<20	8.2 J	10 J	< 25	5.3	5.2 J	3.3 J	2.0 J	2.4
1,1,2,2-Tetrachloroethane	–	<1	<1	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	–	<1	<1	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	159	84	53	97	<500	<200	<500	<32	--	--	--	27	35	<20	22	<16	87	20	21	<20	<20	<20	<20	54	20	17	21	12	20	<8	6.1	17	20	< 5	10	7.2	9.6	6.6	8.1
Chloroethane	53.7	21	6	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform	–	<1	<1	<10	<500	<200	<500	73	--	--	--	<4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	–	1	<1	<50	<2500	<1000	<2500	62	--	--	--	6.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	–	<1	<1	<10	<500	<500	<500	<2	--	--	--	0.24	<4	<20	<4	<16	<16	0.48	0.36	<10	<10	<10	<10	<10	<10	<10	<10	<10	<8	<8	<3	<1.5	<0.46	< 0.58	<0.20	< 0.23	< 0.20	< 0.20	< 0.40
Toluene	ND	<1	<1	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	–	<1	<1	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (Total)	–	<3	<3	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	–	<1	<1	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	–	<5	<5	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

PZ-5	Jun-96	Aug-96	Nov-96	Feb-97	Aug-97	Nov-97	Feb-98	Sep-98	Nov-98	Feb-99	Sep-99	Jul-01	Oct-01	Jan-02	May-02	Aug-02	Nov-02	Mar-03	Jul-03	Oct-03	Feb-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Mar-06
Tetrachloroethene	200	85	120	340	46	5.9	13	110	200	300	42	81	160	--	250	35	350	180	200	220	200	240	290	150	220	87	180 D
Trichloroethene	150	28	23	69	22	--	<2	46	28	46	32	38	130	--	200	26	280	88	100	100	330	260	150	220	160	80	260 D
cis-1,2-Dichloroethene	46	5	12	85	20	--	3.3	100	130	110	32	280	140	--	190	76	260	280	350	180	430	500	420	380	340	390	290 D
trans-1,2-Dichloroethene	<10	<5	<5	--	–	--	2.1	<2	<2	<4	0.82	2	2.4	--	<5	1.8	4.7	<4	4.4	6	5.4	5.4	11	6.6	< 4.0	5.5	6.6 D
1,2-Dichloroethene (Total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	<10	<5	<5	--	–	3.7	<10	100	50	26	<2.0	29	17	--	16 J	12	42	53	60	100	41	65	57	61	40	100	83 D
1,1,2,2-Tetrachloroethane	<10	<5	<5	20		--	<2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	--	--	--	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	<10	<5	<5	--	–	--	<2	<2	2.2	<4	<0.40	1.3	<1.6	--	<5	<1	<4	<4	<4.0	6	<4.0	<4.0	8.2	< 4.0	< 4.0	< 4.0	< 1.6
Chloroethane	--	--	--	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform	<10	13	<5	6.7	–	--	<2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride (Dichloromethane)	<50	<25	<25	--	–	--	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	<10	16	<5	<2	–	--	<2	<2	<2	<4	<0.2	<0.2	<1.6	<4	<5	<1	<2	<3	<3.0	<0.23	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 1.6
Toluene	<10	<5	8	<2	–	--	<2	<4	<2	<4	<0.2	<0.3	<1.6	<4	<5	<1	<2	<3.1	<3.1	<0.36	< 0.71	< 0.71	15	< 0.71	< 0.71	< 0.71	< 1.6
Ethylbenzene	--	--	--	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (Total)	--	--	--	--	–	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	<10	<5	<5	--	–	--	8.7	<2	<2	<4	<0.2	<0.2	<1.6	<4	<5	<1	<2	<1.2	<1.2	<0.23	<0.46	<0.46	9.3	< 0.46	< 0.46	< 0.46	< 1.6
1,2-Dichlorobenzene	<10	<5	<5	--	–	--	260	11	<4	<4	<0.4	<0.2	<1.6	<4	<5	<1	<2	<1.5	<1.5	<0.4	<0.62	<0.62	7.2	< 0.62	< 0.62	< 0.62	< 2.0

MW-12	Nov-94
Tetrachloroethene	<1
Trichloroethene	<1
cis-1,2-Dichloroethene	<1
trans-1,2-Dichloroethene	<1
1,2-Dichloroethene (Total)	<1
Vinyl Chloride	<1
1,1,2,2-Tetrachloroethane	<1
1,1,1-Trichloroethane	<1
1,1-Dichloroethane	<1
Chloroethane	<1
Chloroform	1
Methylene Chloride (Dichloromethane)	<5
Benzene	<1
Toluene	<1
Ethylbenzene	<1
Xylene (Total)	<1
Chlorobenzene	<1
1,2-Dichlorobenzene	<1

0' 40' 80' 120'

REV. ISSUED DATE DESCRIPTION

KEYPLAN

SEAL

SEAL

ARCADIS

482 CONGRESS ST.
Suite 501
PORTLAND, ME 04101
Tel: 207.828.0046 Fax: 207.828.0062
www.arcadis-us.com

PROJECT TITLE

FORMER LOCKHEED MARTIN FRENCH ROAD FACILITY
VAPOR INTRUSION STUDY REPORT
SOLVENT DOCK AREA

PROJECT MANAGER C. MOTTA

DEPARTMENT MANAGER R. GAN

LEAD DESIGN PROF. J. BONSTEEL

CHECKED BY N. WEINBERG

SHEET TITLE

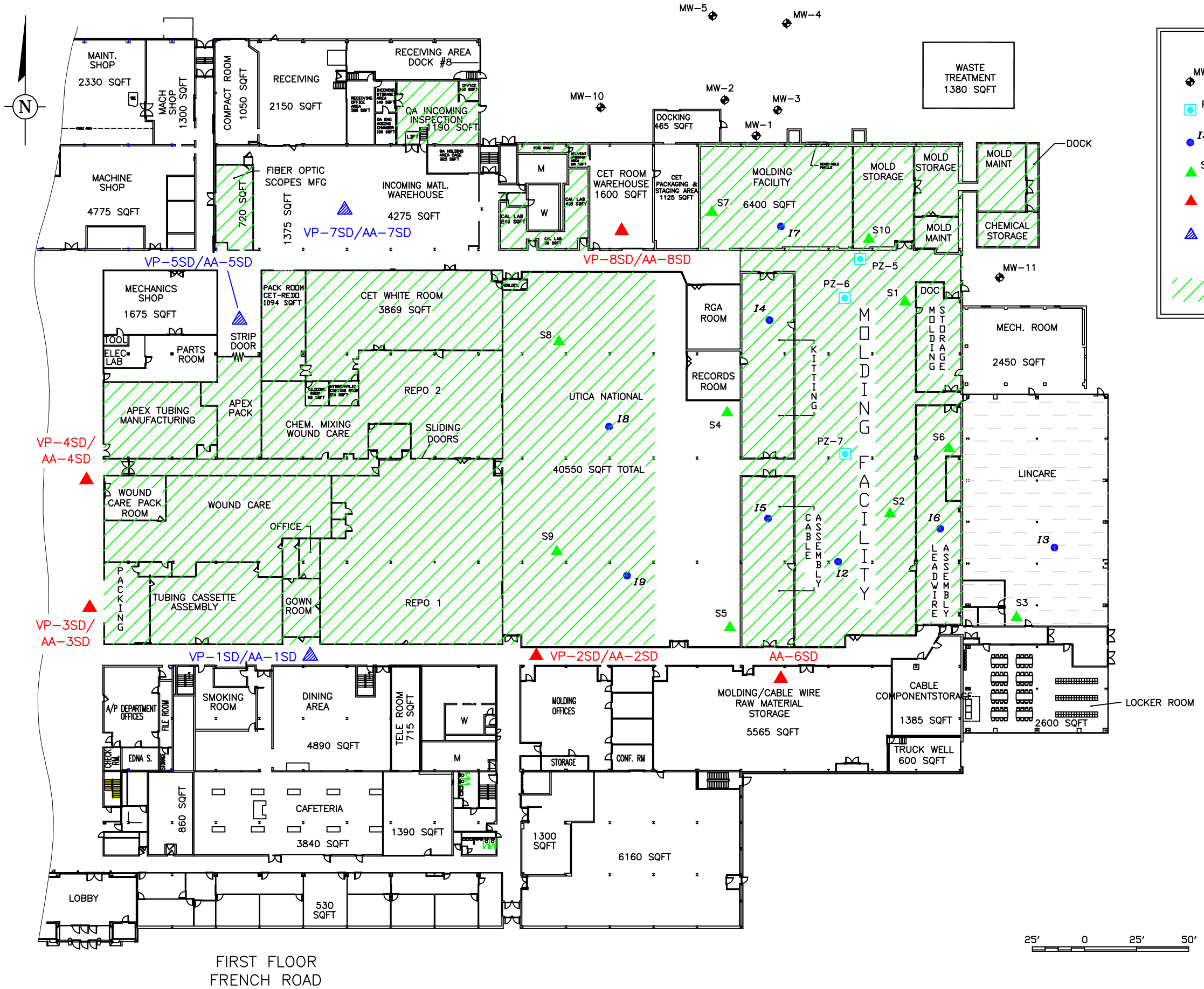
HISTORICAL GROUNDWATER
SAMPLING RESULTS

TASK/PHASE NUMBER

DRAWN BY M. WACKSMAN

PROJECT NUMBER AY000265.0015

DRAWING NUMBER 2



FIRST FLOOR
FRENCH ROAD

LEGEND

- MW-1 — MONITORING WELL
- PZ-7 — PIEZOMETER
- I3 — EARTH TECH INDOOR AIR SAMPLE LOCATION
- S3 — EARTH TECH SUBSLAB AIR SAMPLE LOCATION
- ARCADIS MARCH 2007 SUBSLAB AIR SAMPLE LOCATION
- ARCADIS MARCH 2007 SUBSLAB/INDOOR AIR SAMPLE LOCATION – ONLY SUBSLAB SAMPLE ANALYZED
- AREAS UNDER POSITIVE PRESSURE

Project Director: C. MOTTA	Area Manager: R. GAN
Task Manager: J. BONSTEEL	Technical Review: J. BONSTEEL
Drawing Date: 12-18-06	Drawn By: FJF

ARCADIS
482 CONGRESS ST. SUTIE 501
PORTLAND, ME 04101
Tel: 207.828.0046 Fax: 207.828.0062
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FORMER LOCKHEED MARTIN FRENCH ROAD FACILITY

SUBSLAB / INDOOR AIR SAMPLE LOCATIONS

VAPOR INTRUSION STUDY REPORT - SOLVENT DOCK AREA

UTICA, NEW YORK

Project Number	Figure
AY0002650015	3

LEGEND

- MW-1 — EXISTING MONITORING WELL
- PZ-7 — PIEZOMETER
- I3 — EARTH TECH INDOOR AIR SAMPLE LOCATION
- S3 — EARTH TECH SUBSLAB AIR SAMPLE LOCATION
- ▲ — ARCADIS MARCH 2007 SUBSLAB/INDOOR AIR SAMPLE LOCATION
- AREAS UNDER POSITIVE PRESSURE

NYSDOH MATRIX DECISIONS

BASED ON SUBSLAB ONLY

- NO FURTHER ACTION
- MONITOR
- MITIGATE

Project Director: C. MOTTA	Area Manager: R. GAN
Task Manager: J. BONSTEEL	Technical Review: N. WEINBERG
Drawing Date: 6-26-2007	Drawn By: M. WACKSMAN

ARCADIS
482 CONGRESS ST. SUITE 501
PORTLAND, ME 04101
Tel: 207.828.0046 Fax: 207.828.0062
www.arcadis-us.com

FORMER LOCKHEED MARTIN FACILITY

SUBSLAB / INDOOR AIR SAMPLE LOCATIONS & NYSDOH MATRIX RESULTS

VAPOR INTRUSION STUDY REPORT - SOLVENT DOCK AREA

UTICA, NEW YORK

Project Number	Figure
AY0002650015	4

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Appendix A

Product Inventory

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APPENDIX A
PRODUCT INVENTORY

ConMed Facility
525 French Road
Utica, NY

Location	Product Description	Chemical Ingredients	Size	Condition
Mold Storage	waste hydraulic oil	petroleum	6 - 55 gal	good
Storage Room (near	lim603080 - pail kit	silicon	12-80 lb	New
solvent dock)	Synpro	polymer	2-25lb	New
Material Storage/Mix	Cyro-Acrylic Molding-Cyrolite - large boxes	proprietary	4 boxes	New
	Slide Mold Cleaner with Rust Preventer	*TCE (50-65%)*	*2-10 oz*	*Fair*
	Stoner Non-Flammable Cleaner Degreaser	*TCE (90-100%)*	*2-10 oz*	*Fair*
"Currently Vacant Room"	Lexan - 45lb bags GE Plastics	Polycarbonate resin	8 bags	New
Aisle *	ColorRite-Polymer-Unichem Vinyl Compound	proprietary		
(east of "currently vacant"	94-532Blue-497 - in Boxes	proprietary	5-1500lb	New
room)	Liquid Silicon rubber (Rhodia) - in pails	Silicon	17-43lb	New
Mechanical Room	FTS-321- Chiller Liquid	Unknown	1-55gal	In Use
	FTS-933- Chiller Liquid	Unknown	2-55gal	In Use
	Boiler Treatment Chemicals	*Unknown*	*5-55 gal*	*Fair*
	Paint	*Petroleum distillates*	*1-gal*	*Fair*
	Waste Refrigerant	*Ethylene Glycol*	*1-55 gal*	*Fair*
Chemical Storage**	waste hydraulic oil	petroleum	8-55gal	good
	New hydraulic oil	petroleum	8-55gal	New
	Cyclohexanone	Cyclohexanone	1-55 gal	good
	Cyclohexanone	Cyclohexanone	1-55 gal	New
	Isopropyl alcohol	Isopropyl alcohol (99%)	9-55gal	New
	Methylene Chloride	Methylene Chloride	1-1gal	New
	Methylene Chloride	Methylene Chloride	12-1gal	good
	Propane gas cylinders	Propane	2-16oz	New
	Zep Degreaser	*Proprietary*	*2-30 gal*	*Empty*
Mold Maintenance	Latex paint	Latex paint	1-1gal	Used
	white lithium grease	petroleum	1-3oz	In Use
	Citrus Power - bulk mold cleaner		5-5 gal	New
	Used Oil	*Petroleum*	*1-55 gal*	*Fair*
	Dynaclean	*Proprietary*	*2-55 gal*	*New*
	Xylene	*Xylene*	*1-1 gal*	*Fair*
	Xenit Citrus Degreaser	*Petroleum Distillates*	*8-10 oz*	*Fair*
	Simple Green	*Proprietary*	*1-1 gal*	*Good*
Molding Facility	*Slide Mold Cleaner with Rust Preventer*	*TCE (50-65%)*	*2-10 oz*	*Fair*
	Stoner Non-Flammable Cleaner Degreaser	*TCE (90-100%)*	*3-10 oz*	*Fair*
	Xenit Citrus Degreaser	*Petroleum Distillates*	*4-10 oz*	*Fair*

Notes

1. Observations made on March 25, 2005, except those noted in italics, which were made during February and March 2006.
2. Aisle *- This area is full of large boxes and bins of proprietary resin and resin ingredients. All are odorless, and in a solid state. Examples of two types of materials stored in the aisle are tabulated above.
3. Chemical Storage**- In addition to the above list, a chemical storage cabinet blocked by 55-gallon drums could not be inventoried.

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Appendix B

Indoor Air and Subslab Soil Gas Sample Logs

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Soil Gas Sampling Log

Project Name UNL Solvent Project No. AY000265.15 Page 1 of 1

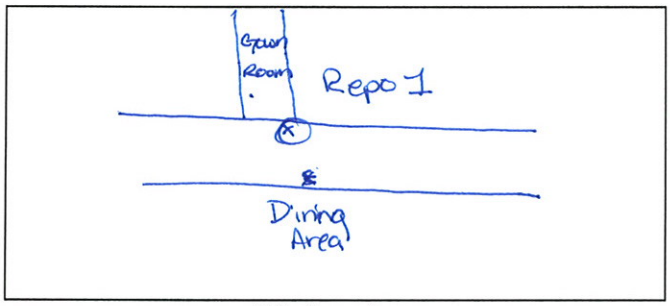
Site Location Utica, NY Date 4/12/07

Sample No. AA-1SD Replicate No. —

Weather (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	—
Canister ID:	233
Regulator ID:	152
Vol. Purged:	—
Vacuum at Start:	30
Vacuum at Finish:	14



Site Location

Apparent Moisture Content: None

Sample Depth: ~5' off ground

Sample Method: 8hrs ambient air canister.

Sample Device: TO-15 canister

Remarks: 3

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable

mg/L Miligrams per lite COC Chain of Custody

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Soil Gas Sampling Log

Project Name LMC Solvent   Project No. AY000265.15   Page 1 of 1

Site Location Utica, NY   Date 4/12/07

Sample No. VP-15D   Replicate No. —

Weather (indoor)   Sampling Time: Begin —   End 1030

Field Parameters

Measuring Point: —

Tubing Diameter: 1/4"

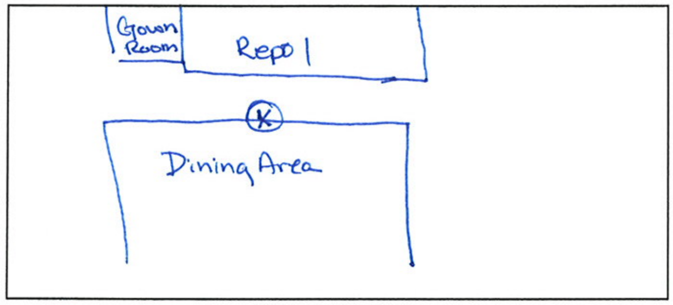
Canister ID: 496

Regulator ID: 143

Vol. Purged: 300mL

Vacuum at Start: 30

Vacuum at Finish: 1



Site Location

Apparent Moisture Content: NONE

Sample Depth: 4" ~~[illegible]~~ bgs

Sample Method: tubing to canister // tested ~~through~~ helium through Centek dome.

Sample Device: TO-15 canister

Remarks: No leak detected sample directly from tubing.

Constituents Sampled: TO-15   Sampling Personnel: KW

gpm   Gallons per minu N/A Not Applicable

mg/L   Miligrams per lite COC Chain of Custody

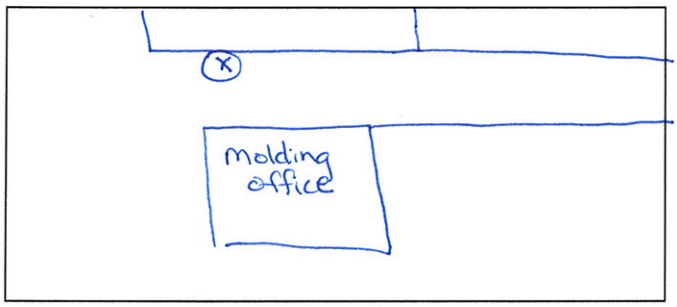
ARCADIS

Soil Gas Sampling Log

Project Name LMC Solvent Project No. A4000265.15 Page 1 of 1
Site Location Utica, NY Date 4/12/07
Sample No. AA-2SD Replicate No. —
Weather (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point: —
Tubing Diameter: —
Canister ID: 356
Regulator ID: 456
Vol. Purged: —
Vacuum at Start: 30
Vacuum at Finish: 4



Site Location

Apparent Moisture Content: None

Sample Depth: ~ 3½' off ground.

Sample Method: 8hr ambient air canister.

Sample Device: TO-15 canister

Remarks:

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

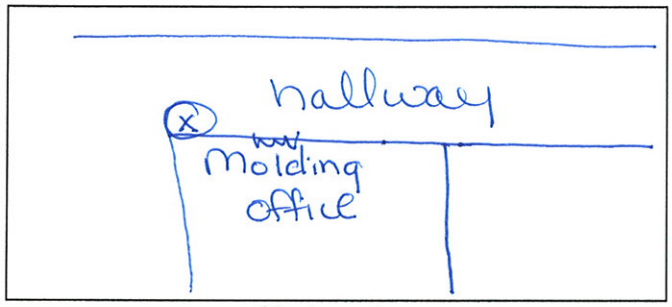
ARCADIS

Soil Gas Sampling Log

Project Name LMC-Solvent Project No. A40002665.15 Page 1 of 1
Site Location Utica, NY Date 4/12/07
Sample No. VP-25D Replicate No. —
Weather (indoor) Sampling Time: Begin — End 1100

Field Parameters

Measuring Point:	—
Tubing Diameter:	1/4"
Canister ID:	243
Regulator ID:	345
Vol. Purged:	300mL
Vacuum at Start:	30
Vacuum at Finish:	1



Site Location

Apparent Moisture Content: None

Sample Depth: 6" bgs

Sample Method: tubing ~~was~~ clamped to canister after helium test.

Sample Device: TO-15 canister.

Remarks: Move location twice due to metal sheet just below concrete surface. Helium leak detected; reconnect tubing tested again, ok, sample directly from tubing.

Constituents Sampled: TO-15 Sampling Personnel: KD

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

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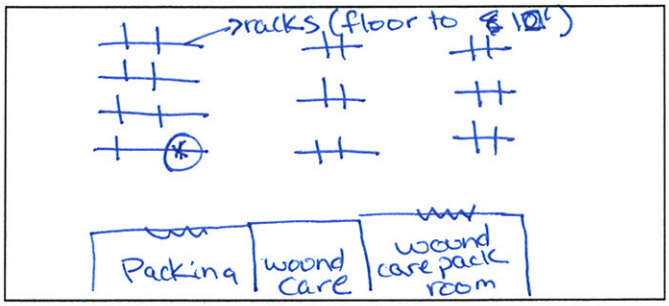
Soil Gas Sampling Log

Project Name: UMC Solvent Project No.: AY000265.15 Page: 1 of 1
Site Location: Utica, NY Date: 4/12/07
Sample No.: AA-3SD Replicate No.: —
Weather: (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	—
Canister ID:	326
Regulator ID:	388
Vol. Purged:	—
Vacuum at Start:	30
Vacuum at Finish:	4
Apparent Moisture Content:	None
Sample Depth:	~3½' off ground
Sample Method:	8hr ambient air air canister.
Sample Device:	TO-15 canister.



Site Location

Remarks:

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

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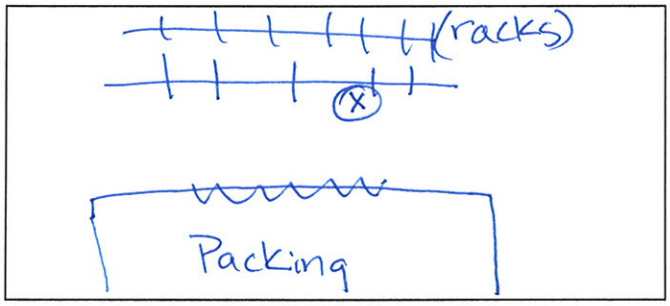
Soil Gas Sampling Log

Project Name CMC-Solvent Project No. AY000205.05 Page 1 of 1
Site Location Utica, NY Date 4/12/07
Sample No. VP-35D Replicate No. —
Weather (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	1/4"
Canister ID:	92
Regulator ID:	173
Vol. Purged:	300mL
Vacuum at Start:	29
Vacuum at Finish:	1
Apparent Moisture Content:	None
Sample Depth:	~6" bgs
Sample Method:	Tubing clamped to canister after helium test.
Sample Device:	To15 canister



Site Location

Remarks: No helium leak detected sampled directly from tubing.

Constituents Sampled: TO-15 Sampling Personnel: MW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

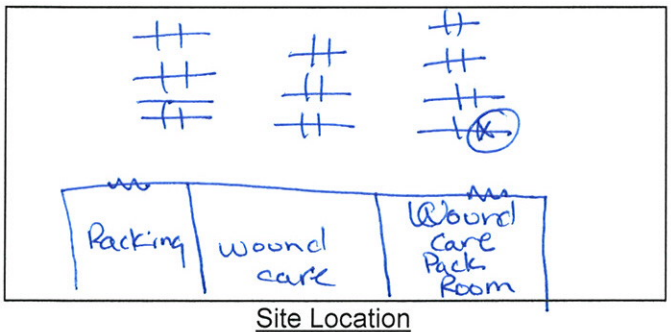
ARCADIS

Soil Gas Sampling Log

Project Name: LMC Solvent Project No.: AY000265.15 Page: 1 of 1
Site Location: Utica, NY Date: 4/12/07
Sample No.: AA-4SD Replicate No.: —
Weather: (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	—
Canister ID:	141
Regulator ID:	279
Vol. Purged:	—
Vacuum at Start:	30
Vacuum at Finish:	2
Apparent Moisture Content:	None
Sample Depth:	~4½' off ground
Sample Method:	8hr ambient air canister.
Sample Device:	TO-15 canister



Site Location

Remarks:

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

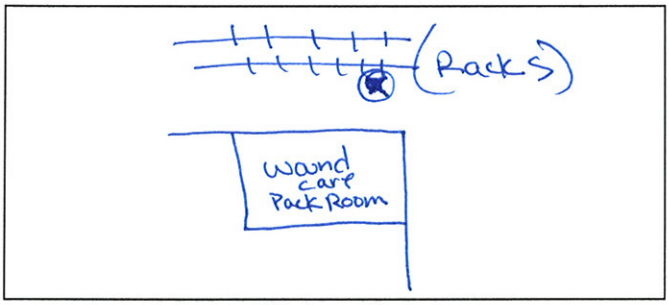
ARCADIS

Soil Gas Sampling Log

Project Name: LMC-Solvent Project No.: A4000266.15 Page: 1 of 1
Site Location: Utica, NY Date: 4/12/07
Sample No.: VP-4SP Replicate No.: —
Weather: (indoor) Sampling Time: Begin — End 1130

Field Parameters

Measuring Point:	—
Tubing Diameter:	1/4"
Canister ID:	200
Regulator ID:	302
Vol. Purged:	300mL
Vacuum at Start:	30
Vacuum at Finish:	1
Apparent Moisture Content:	None
Sample Depth:	8" bgs
Sample Method:	Tubing clamped to canister after helium test conducted.
Sample Device:	TO-15 canister.



Site Location

Remarks: No helium leak detected, sampled directly from tubing.

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

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Soil Gas Sampling Log

Project Name: LMC Sol | Project No.: A4000265.15 | Page: 1 of 1

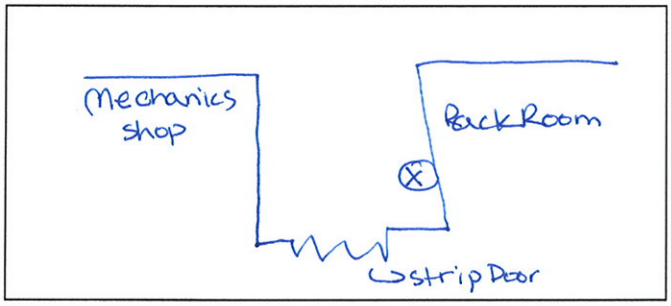
Site Location: Utica, NY | Date: 4/12/07

Sample No.: AA-[redacted]55D | Replicate No.: —

Weather: Cindoor | Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	—
Canister ID:	[redacted]274
Regulator ID:	[redacted]446
Vol. Purged:	—
Vacuum at Start:	30
Vacuum at Finish:	10
Apparent Moisture Content:	Nonf
Sample Depth:	~4½ off ground
Sample Method:	8 hr ambient air canister.
Sample Device:	TO-15 canister



Site Location

Remarks: → Note: Sample stayed on (10) for 1½ hrs → stopped sample

Constituents Sampled: TO-15 | Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

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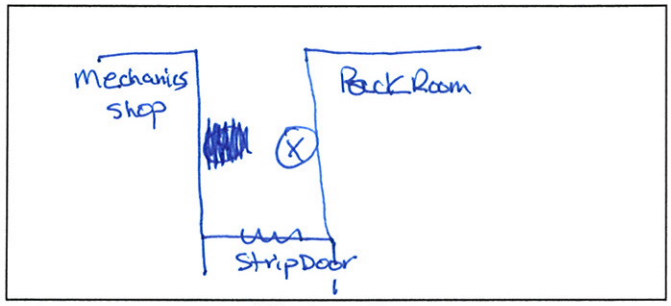
Soil Gas Sampling Log

Project Name LMC - solvent Project No. AY000265.15 Page 1 of 1
Site Location Utica, NY Date 4/12/07
Sample No. ~~VP-550~~ VP-550 Replicate No. —
Weather (indoor) Sampling Time: Begin — End 1200

Field Parameters

Measuring Point: —
Tubing Diameter: 1/4"
Canister ID: 196
Regulator ID: 406
Vol. Purged: 300mL
Vacuum at Start: 30
Vacuum at Finish: 1



Site Location

Apparent Moisture Content: None

Sample Depth: 6" bgs.

Sample Method: ~~Grab~~ / ~~Batch~~ Tubing clamped to canister after helium test conducted.

Sample Device: TO-15 canister.

Remarks: No helium leaks detected sampled directly from tubing.

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

ARCADIS

Soil Gas Sampling Log

Project Name: LMC- Solvent Project No.: AY000265.15 Page: 1 of 1

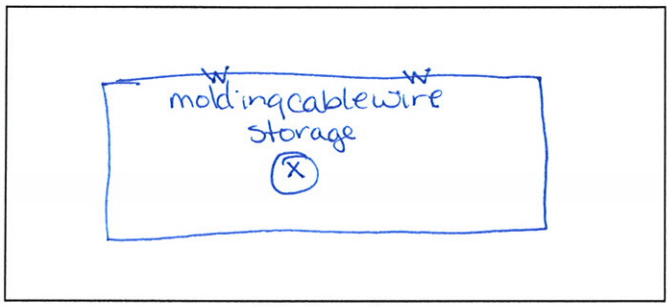
Site Location: Utica, NY Date: 4/12/07

Sample No.: AA-[illegible]SD Replicate No.: —

Weather: (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	[illegible]
Canister ID:	[illegible]464
Regulator ID:	[illegible]126
Vol. Purged:	—
Vacuum at Start:	[illegible]30
Vacuum at Finish:	[illegible]1
Apparent Moisture Content:	None
Sample Depth:	~4' off ground
Sample Method:	8hr ambient air canister.
Sample Device:	TO-15 canister



Site Location

Remarks:

Constituents Sampled: TO-15 Sampling Personnel: KCD

gpm Gallons per minu N/A Not Applicable

mg/L Miligrams per lite COC Chain of Custody

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Soil Gas Sampling Log

Project Name Lmk-Street Project No. AY000265.15 Page 1 of 1

Site Location Utica, NY Date 4/12/07

Sample No. ~~[illegible]~~ VP-6SD Replicate No. —

Weather (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:

Tubing Diameter:

Canister ID:

Regulator ID:

Vol. Purged:

Vacuum at Start:

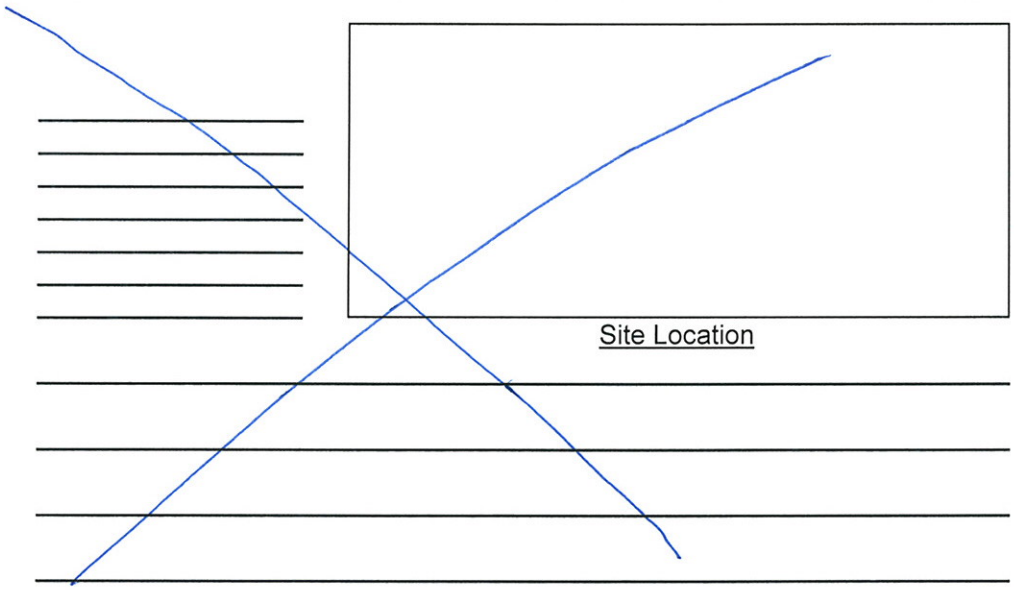
Vacuum at Finish:

Apparent Moisture Content:

Sample Depth:

Sample Method:

Sample Device:



Remarks: ~~Third~~ Move 3 different locations all concrete greater than 16" bgs. Call JB don't sample just take ambient air sample AA-6SD.

Constituents Sampled: TO-15 Sampling Personnel: KRD

gpm Gallons per minu N/A Not Applicable

mg/L Miligrams per lite COC Chain of Custody

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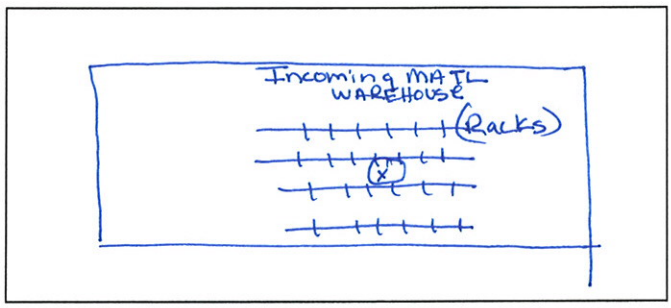
Soil Gas Sampling Log

Project Name LMC Solvent Project No. AY000265.15 Page 1 of 1
Site Location Utica, NY Date 4/12/07
Sample No. AA-75D Replicate No. —
Weather (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point: —
Tubing Diameter: —
Canister ID: 86
Regulator ID: 100
Vol. Purged: —
Vacuum at Start: 30
Vacuum at Finish: 4
Apparent Moisture Content:



Site Location

Sample Depth: ~ 4½' off ground
Sample Method: 8hr Ambient Air canister.
Sample Device: TO-15 canister.

Remarks:

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

ARCADIS

Soil Gas Sampling Log

Project Name LMC-Solvent Project No. A40000265.15 Page 1 of 1

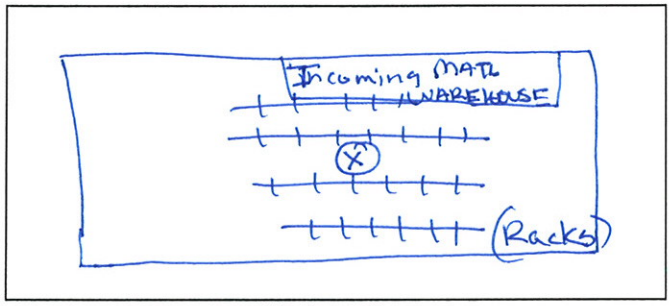
Site Location Utica, NY Date

Sample No. VP-7SD Replicate No. DUP-1SD

Weather (indoor) Sampling Time: Begin — End 1230

Field Parameters

	VP-7SD	DUP-1SD
Measuring Point:		
Tubing Diameter:	1/4"	1/4"
Canister ID:	138	168
Regulator ID:	270	376
Vol. Purged:	300mL	—
Vacuum at Start:	30	28
Vacuum at Finish:	1	1
Apparent Moisture Content:		



Site Location

Sample Depth: 8" bgs

Sample Method: Tubing clamped to canister after helium test conducted.

Sample Device: TO-15 canister

Remarks: No helium leak detected sampled directly from tubing. Sample DUP-1SD at sample time as VP-7SD.

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable

mg/L Miligrams per lite COC Chain of Custody

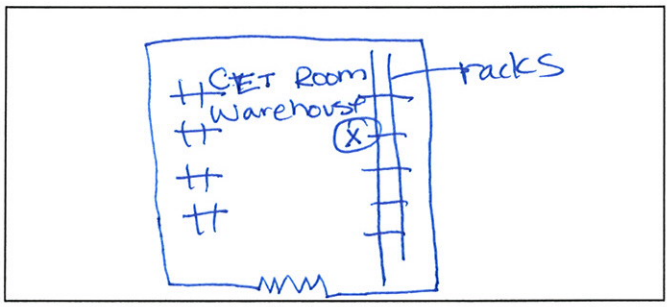
ARCADIS

Soil Gas Sampling Log

Project Name: Unc Solvent Project No.: AF000265.15 Page: 1 of 1
Site Location: Utica, NY Date: 4/12/07
Sample No.: AA-85D Replicate No.: —
Weather: (indoor) Sampling Time: Begin — End —

Field Parameters

Measuring Point:	—
Tubing Diameter:	—
Canister ID:	229
Regulator ID:	308
Vol. Purged:	—
Vacuum at Start:	28
Vacuum at Finish:	1
Apparent Moisture Content:	None
Sample Depth:	~5' off ground
Sample Method:	8hr Ambient air canister.
Sample Device:	TO-15 canister.



Site Location

Remarks:

Constituents Sampled: TO-15 Sampling Personnel: KEO

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

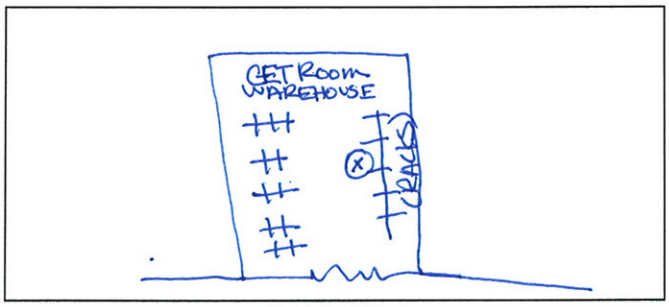
ARCADIS

Soil Gas Sampling Log

Project Name: LMC-Solvent Project No.: A4000265.15 Page: 1 of 1
Site Location: Utica, NY Date: 4/12/07
Sample No.: VP-8SD Replicate No.: —
Weather: (indoor) Sampling Time: Begin — End 1300

Field Parameters

Measuring Point:	—
Tubing Diameter:	1/4"
Canister ID:	358
Regulator ID:	113
Vol. Purged:	300mL
Vacuum at Start:	28
Vacuum at Finish:	2



Site Location

Apparent Moisture Content: None

Sample Depth: 8" bgs.

Sample Method: Tubing clamped to canister after helium test conducted.

Sample Device: TO-15 Canister.

Remarks: No leaks detected sampled directly from tubing.

Constituents Sampled: TO-15 Sampling Personnel: KW

gpm Gallons per minu N/A Not Applicable
mg/L Miligrams per lite COC Chain of Custody

ARCADIS

Appendix C

Analytical Laboratory Results

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-1SD
Lab Order:	C0704029	**Tag Number:**	496,143
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	3.8	0.83		ug/m3	1	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	7.0	0.75		ug/m3	1	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	2.2	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	2.4	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	1.0	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	2.5	0.75		ug/m3	1	4/16/2007
Acetone	57	29		ug/m3	40	4/18/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	7.8	4.9		ug/m3	10	4/16/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	18	4.7		ug/m3	10	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	7.7	0.74		ug/m3	1	4/16/2007
Chloromethane	0.42	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	29	5.2		ug/m3	10	4/16/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	ND	0.92		ug/m3	1	4/16/2007
Ethylbenzene	2.6	0.66		ug/m3	1	4/16/2007
Freon 11	1.3	0.86		ug/m3	1	4/16/2007
Freon 113	5.1	1.2		ug/m3	1	4/16/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-1SD
Lab Order:	C0704029	**Tag Number:**	496,143
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	27	6.2		ug/m3	10	4/16/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	62	5.4		ug/m3	10	4/16/2007
Isopropyl alcohol	150	30		ug/m3	80	4/18/2007
m&p-Xylene	8.5	1.3		ug/m3	1	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	ND	0.90		ug/m3	1	4/16/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	0.55	0.55		ug/m3	1	4/16/2007
Methylene chloride	90	21		ug/m3	40	4/18/2007
o-Xylene	2.7	0.66		ug/m3	1	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	0.69	0.65		ug/m3	1	4/16/2007
Tetrachloroethylene	1.8	1.0		ug/m3	1	4/16/2007
Tetrahydrofuran	2.0	0.45		ug/m3	1	4/16/2007
Toluene	11	5.7		ug/m3	10	4/16/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	0.76	0.82	J	ug/m3	1	4/16/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-2SD
Lab Order:	C0704029	**Tag Number:**	243,345
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	38	8.3		ug/m3	10	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	8.0	0.75		ug/m3	1	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	2.3	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	2.3	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	ND	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	2.3	0.75		ug/m3	1	4/16/2007
Acetone	33	7.2		ug/m3	10	4/16/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	3.9	0.49		ug/m3	1	4/16/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	2.3	0.47		ug/m3	1	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	7.2	0.74		ug/m3	1	4/16/2007
Chloromethane	0.84	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	8.0	5.2		ug/m3	10	4/16/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	ND	0.92		ug/m3	1	4/16/2007
Ethylbenzene	2.4	0.66		ug/m3	1	4/16/2007
Freon 11	2.3	0.86		ug/m3	1	4/16/2007
Freon 113	85	12		ug/m3	10	4/16/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-2SD
Lab Order:	C0704029	**Tag Number:**	243,345
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	7.2	0.62		ug/m3	1	4/16/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	12	5.4		ug/m3	10	4/16/2007
Isopropyl alcohol	44	15		ug/m3	40	4/18/2007
m&p-Xylene	8.4	1.3		ug/m3	1	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	ND	0.90		ug/m3	1	4/16/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	ND	0.55		ug/m3	1	4/16/2007
Methylene chloride	37	5.3		ug/m3	10	4/16/2007
o-Xylene	2.8	0.66		ug/m3	1	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	2.0	0.65		ug/m3	1	4/16/2007
Tetrachloroethylene	9.5	1.0		ug/m3	1	4/16/2007
Tetrahydrofuran	0.90	0.45		ug/m3	1	4/16/2007
Toluene	15	5.7		ug/m3	10	4/16/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	110	8.2		ug/m3	10	4/16/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-3SD
Lab Order:	C0704029	**Tag Number:**	92,173
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	0.72	0.83	J	ug/m3	1	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	3.1	0.75		ug/m3	1	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	1.0	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	2.3	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	ND	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	1.1	0.75		ug/m3	1	4/16/2007
Acetone	64	29		ug/m3	40	4/18/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	4.9	0.49		ug/m3	1	4/16/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	2.4	0.47		ug/m3	1	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	ND	0.74		ug/m3	1	4/16/2007
Chloromethane	ND	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	47	5.2		ug/m3	10	4/16/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	5.6	0.92		ug/m3	1	4/16/2007
Ethylbenzene	0.71	0.66		ug/m3	1	4/16/2007
Freon 11	0.97	0.86		ug/m3	1	4/16/2007
Freon 113	7.6	1.2		ug/m3	1	4/16/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-3SD
Lab Order:	C0704029	**Tag Number:**	92,173
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	11	6.2		ug/m3	10	4/16/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	59	5.4		ug/m3	10	4/16/2007
Isopropyl alcohol	250	30		ug/m3	80	4/18/2007
m&p-Xylene	2.4	1.3		ug/m3	1	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	100	36		ug/m3	40	4/18/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	ND	0.55		ug/m3	1	4/16/2007
Methylene chloride	210	21		ug/m3	40	4/18/2007
o-Xylene	0.84	0.66		ug/m3	1	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	0.65	0.65		ug/m3	1	4/16/2007
Tetrachloroethylene	ND	1.0		ug/m3	1	4/16/2007
Tetrahydrofuran	1.1	0.45		ug/m3	1	4/16/2007
Toluene	6.6	0.57		ug/m3	1	4/16/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	0.76	0.82	J	ug/m3	1	4/16/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-4SD
Lab Order:	C0704029	**Tag Number:**	200,302
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	11	0.83		ug/m3	1	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	6.6	0.75		ug/m3	1	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	2.0	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	2.5	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	ND	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	1.8	0.75		ug/m3	1	4/16/2007
Acetone	43	29		ug/m3	40	4/18/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	1.2	0.49		ug/m3	1	4/16/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	0.85	0.47		ug/m3	1	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	25	7.4		ug/m3	10	4/16/2007
Chloromethane	0.80	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	2.3	0.52		ug/m3	1	4/16/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	ND	0.92		ug/m3	1	4/16/2007
Ethylbenzene	1.5	0.66		ug/m3	1	4/16/2007
Freon 11	1.5	0.86		ug/m3	1	4/16/2007
Freon 113	450	47		ug/m3	40	4/18/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-4SD
Lab Order:	C0704029	**Tag Number:**	200,302
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	3.6	0.62		ug/m3	1	4/16/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	ND	0.54		ug/m3	1	4/16/2007
Isopropyl alcohol	190	15		ug/m3	40	4/18/2007
m&p-Xylene	5.4	1.3		ug/m3	1	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	46	9.0		ug/m3	10	4/16/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	ND	0.55		ug/m3	1	4/16/2007
Methylene chloride	93	21		ug/m3	40	4/18/2007
o-Xylene	1.9	0.66		ug/m3	1	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	0.65	0.65		ug/m3	1	4/16/2007
Tetrachloroethylene	40	10		ug/m3	10	4/16/2007
Tetrahydrofuran	5.5	0.45		ug/m3	1	4/16/2007
Toluene	7.2	0.57		ug/m3	1	4/16/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	45	8.2		ug/m3	10	4/16/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-5SD
Lab Order:	C0704029	**Tag Number:**	196,406
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	0.78	0.83	J	ug/m3	1	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	6.5	7.5	J	ug/m3	10	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	4.2	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	3.9	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	4.3	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	4.4	0.75		ug/m3	1	4/16/2007
Acetone	270	58		ug/m3	80	4/18/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	24	4.9		ug/m3	10	4/16/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	9.8	4.7		ug/m3	10	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	5.1	0.74		ug/m3	1	4/16/2007
Chloromethane	0.65	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	66	5.2		ug/m3	10	4/16/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	ND	0.92		ug/m3	1	4/16/2007
Ethylbenzene	6.2	6.6	J	ug/m3	10	4/16/2007
Freon 11	1.3	0.86		ug/m3	1	4/16/2007
Freon 113	9.5	1.2		ug/m3	1	4/16/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated.
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-5SD
Lab Order:	C0704029	**Tag Number:**	196,406
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	170	25		ug/m3	40	4/18/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	250	21		ug/m3	40	4/18/2007
Isopropyl alcohol	170	30		ug/m3	80	4/18/2007
m&p-Xylene	20	13		ug/m3	10	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	110	36		ug/m3	40	4/18/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	ND	0.55		ug/m3	1	4/16/2007
Methylene chloride	170	21		ug/m3	40	4/18/2007
o-Xylene	6.2	6.6	J	ug/m3	10	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	ND	0.65		ug/m3	1	4/16/2007
Tetrachloroethylene	0.97	1.0	J	ug/m3	1	4/16/2007
Tetrahydrofuran	1.7	0.45		ug/m3	1	4/16/2007
Toluene	58	5.7		ug/m3	10	4/16/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	1.6	0.82		ug/m3	1	4/16/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-7SD
Lab Order:	C0704029	**Tag Number:**	138,270
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-006A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	3.4	0.75		ug/m3	1	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	1.2	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	1.3	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	ND	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	1.4	0.75		ug/m3	1	4/16/2007
Acetone	390	58		ug/m3	80	4/18/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	28	4.9		ug/m3	10	4/18/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	5.6	0.47		ug/m3	1	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	0.65	0.74	J	ug/m3	1	4/16/2007
Chloromethane	0.31	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	64	21		ug/m3	40	4/18/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	ND	0.92		ug/m3	1	4/16/2007
Ethylbenzene	2.6	0.66		ug/m3	1	4/16/2007
Freon 11	ND	0.86		ug/m3	1	4/16/2007
Freon 113	2.2	1.2		ug/m3	1	4/16/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-7SD
Lab Order:	C0704029	**Tag Number:**	138,270
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-006A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	40	6.2		ug/m3	10	4/18/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	67	21		ug/m3	40	4/18/2007
Isopropyl alcohol	87	15		ug/m3	40	4/18/2007
m&p-Xylene	7.5	1.3		ug/m3	1	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	41	9.0		ug/m3	10	4/18/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	ND	0.55		ug/m3	1	4/16/2007
Methylene chloride	42	5.3		ug/m3	10	4/18/2007
o-Xylene	2.3	0.66		ug/m3	1	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	ND	0.65		ug/m3	1	4/16/2007
Tetrachloroethylene	8.4	1.0		ug/m3	1	4/16/2007
Tetrahydrofuran	ND	0.45		ug/m3	1	4/16/2007
Toluene	49	5.7		ug/m3	10	4/18/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	ND	0.82		ug/m3	1	4/16/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-8SD
Lab Order:	C0704029	**Tag Number:**	358,113
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-007A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	1.2	0.83		ug/m3	1	4/16/2007
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	4/16/2007
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	4/16/2007
1,1-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,1-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	4/16/2007
1,2,4-Trimethylbenzene	3.0	0.75		ug/m3	1	4/16/2007
1,2-Dibromoethane	ND	1.2		ug/m3	1	4/16/2007
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,2-Dichloroethane	ND	0.62		ug/m3	1	4/16/2007
1,2-Dichloropropane	ND	0.70		ug/m3	1	4/16/2007
1,3,5-Trimethylbenzene	1.0	0.75		ug/m3	1	4/16/2007
1,3-butadiene	ND	0.34		ug/m3	1	4/16/2007
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	4/16/2007
1,4-Dichlorobenzene	9.7	0.92		ug/m3	1	4/16/2007
1,4-Dioxane	ND	1.1		ug/m3	1	4/16/2007
2,2,4-trimethylpentane	ND	0.71		ug/m3	1	4/16/2007
4-ethyltoluene	1.1	0.75		ug/m3	1	4/16/2007
Acetone	24	7.2		ug/m3	10	4/18/2007
Allyl chloride	ND	0.48		ug/m3	1	4/16/2007
Benzene	2.0	0.49		ug/m3	1	4/16/2007
Benzyl chloride	ND	0.88		ug/m3	1	4/16/2007
Bromodichloromethane	ND	1.0		ug/m3	1	4/16/2007
Bromoform	ND	1.6		ug/m3	1	4/16/2007
Bromomethane	ND	0.59		ug/m3	1	4/16/2007
Carbon disulfide	1.8	0.47		ug/m3	1	4/16/2007
Carbon tetrachloride	ND	0.96		ug/m3	1	4/16/2007
Chlorobenzene	ND	0.70		ug/m3	1	4/16/2007
Chloroethane	ND	0.40		ug/m3	1	4/16/2007
Chloroform	3.2	0.74		ug/m3	1	4/16/2007
Chloromethane	0.55	0.31		ug/m3	1	4/16/2007
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Cyclohexane	5.0	0.52		ug/m3	1	4/16/2007
Dibromochloromethane	ND	1.3		ug/m3	1	4/16/2007
Ethyl acetate	ND	0.92		ug/m3	1	4/16/2007
Ethylbenzene	0.88	0.66		ug/m3	1	4/16/2007
Freon 11	0.97	0.86		ug/m3	1	4/16/2007
Freon 113	ND	1.2		ug/m3	1	4/16/2007
Freon 114	ND	1.1		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *19-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	VP-8SD
Lab Order:	C0704029	**Tag Number:**	358,113
Project:	Utica LML-Solvent dock	**Collection Date:**	4/12/2007
Lab ID:	C0704029-007A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	ND	0.75		ug/m3	1	4/16/2007
Heptane	7.0	0.62		ug/m3	1	4/16/2007
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	4/16/2007
Hexane	7.9	5.4		ug/m3	10	4/18/2007
Isopropyl alcohol	800	60		ug/m3	160	4/19/2007
m&p-Xylene	3.3	1.3		ug/m3	1	4/16/2007
Methyl Butyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl Ethyl Ketone	25	9.0		ug/m3	10	4/18/2007
Methyl Isobutyl Ketone	ND	1.2		ug/m3	1	4/16/2007
Methyl tert-butyl ether	ND	0.55		ug/m3	1	4/16/2007
Methylene chloride	4600	670		ug/m3	1280	4/19/2007
o-Xylene	1.1	0.66		ug/m3	1	4/16/2007
Propylene	ND	0.26		ug/m3	1	4/16/2007
Styrene	0.52	0.65	J	ug/m3	1	4/16/2007
Tetrachloroethylene	5.4	1.0		ug/m3	1	4/16/2007
Tetrahydrofuran	ND	0.45		ug/m3	1	4/16/2007
Toluene	5.9	0.57		ug/m3	1	4/16/2007
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	4/16/2007
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	4/16/2007
Trichloroethene	36	8.2		ug/m3	10	4/18/2007
Vinyl acetate	ND	0.54		ug/m3	1	4/16/2007
Vinyl Bromide	ND	0.67		ug/m3	1	4/16/2007
Vinyl chloride	ND	0.39		ug/m3	1	4/16/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-2SD
Lab Order:	C0704036	**Tag Number:**	356,456
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	4/25/2007
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,1-Dichloroethene	ND	0.605		ug/m3	1	4/25/2007
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	4/25/2007
1,2,4-Trimethylbenzene	3.20	0.749		ug/m3	1	4/25/2007
1,2-Dibromoethane	ND	1.17		ug/m3	1	4/25/2007
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,2-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,2-Dichloropropane	ND	0.705		ug/m3	1	4/25/2007
1,3,5-Trimethylbenzene	1.50	0.750		ug/m3	1	4/25/2007
1,3-butadiene	ND	0.337		ug/m3	1	4/25/2007
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,4-Dichlorobenzene	1.35	0.917		ug/m3	1	4/25/2007
1,4-Dioxane	ND	1.10		ug/m3	1	4/25/2007
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	4/25/2007
4-ethyltoluene	1.70	0.750		ug/m3	1	4/25/2007
Acetone	67.6	29.0		ug/m3	40	4/25/2007
Allyl chloride	ND	0.477		ug/m3	1	4/25/2007
Benzene	0.552	0.487		ug/m3	1	4/25/2007
Benzyl chloride	ND	0.877		ug/m3	1	4/25/2007
Bromodichloromethane	ND	1.02		ug/m3	1	4/25/2007
Bromoform	ND	1.58		ug/m3	1	4/25/2007
Bromomethane	ND	0.592		ug/m3	1	4/25/2007
Carbon disulfide	0.411	0.475	J	ug/m3	1	4/25/2007
Carbon tetrachloride	ND	0.256		ug/m3	1	4/25/2007
Chlorobenzene	ND	0.702		ug/m3	1	4/25/2007
Chloroethane	ND	0.402		ug/m3	1	4/25/2007
Chloroform	ND	0.744		ug/m3	1	4/25/2007
Chloromethane	ND	0.315		ug/m3	1	4/25/2007
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Cyclohexane	8.64	0.525		ug/m3	1	4/25/2007
Dibromochloromethane	ND	1.30		ug/m3	1	4/25/2007
Ethyl acetate	ND	0.916		ug/m3	1	4/25/2007
Ethylbenzene	0.485	0.662	J	ug/m3	1	4/25/2007
Freon 11	0.971	0.857		ug/m3	1	4/25/2007
Freon 113	ND	1.17		ug/m3	1	4/25/2007
Freon 114	ND	1.07		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-2SD
Lab Order:	C0704036	**Tag Number:**	356,456
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
Freon 12	2.06	0.754		ug/m3	1	4/25/2007
Heptane	4.96	0.625		ug/m3	1	4/25/2007
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	4/25/2007
Hexane	ND	0.537		ug/m3	1	4/25/2007
Isopropyl alcohol	481	33.7		ug/m3	90	4/25/2007
m&p-Xylene	1.19	1.32	J	ug/m3	1	4/25/2007
Methyl Butyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl Ethyl Ketone	137	36.0		ug/m3	40	4/25/2007
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl tert-butyl ether	ND	0.550		ug/m3	1	4/25/2007
Methylene chloride	263	21.2		ug/m3	40	4/25/2007
o-Xylene	0.485	0.662	J	ug/m3	1	4/25/2007
Propylene	ND	0.262		ug/m3	1	4/25/2007
Styrene	1.86	0.649		ug/m3	1	4/25/2007
Tetrachloroethylene	ND	1.03		ug/m3	1	4/25/2007
Tetrahydrofuran	ND	0.450		ug/m3	1	4/25/2007
Toluene	5.21	0.575		ug/m3	1	4/25/2007
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Trichloroethene	0.983	0.218		ug/m3	1	4/25/2007
Vinyl acetate	ND	0.537		ug/m3	1	4/25/2007
Vinyl Bromide	ND	0.667		ug/m3	1	4/25/2007
Vinyl chloride	ND	0.390		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-3SD
Lab Order:	C0704036	**Tag Number:**	326,388
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	4/25/2007
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,1-Dichloroethene	ND	0.605		ug/m3	1	4/25/2007
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	4/25/2007
1,2,4-Trimethylbenzene	2.50	0.749		ug/m3	1	4/25/2007
1,2-Dibromoethane	ND	1.17		ug/m3	1	4/25/2007
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,2-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,2-Dichloropropane	ND	0.705		ug/m3	1	4/25/2007
1,3,5-Trimethylbenzene	1.40	0.750		ug/m3	1	4/25/2007
1,3-butadiene	ND	0.337		ug/m3	1	4/25/2007
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,4-Dichlorobenzene	0.856	0.917	J	ug/m3	1	4/25/2007
1,4-Dioxane	ND	1.10		ug/m3	1	4/25/2007
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	4/25/2007
4-ethyltoluene	1.25	0.750		ug/m3	1	4/25/2007
Acetone	76.3	29.0		ug/m3	40	4/25/2007
Allyl chloride	ND	0.477		ug/m3	1	4/25/2007
Benzene	0.487	0.487		ug/m3	1	4/25/2007
Benzyl chloride	ND	0.877		ug/m3	1	4/25/2007
Bromodichloromethane	ND	1.02		ug/m3	1	4/25/2007
Bromoform	ND	1.58		ug/m3	1	4/25/2007
Bromomethane	ND	0.592		ug/m3	1	4/25/2007
Carbon disulfide	ND	0.475		ug/m3	1	4/25/2007
Carbon tetrachloride	ND	0.256		ug/m3	1	4/25/2007
Chlorobenzene	ND	0.702		ug/m3	1	4/25/2007
Chloroethane	ND	0.402		ug/m3	1	4/25/2007
Chloroform	ND	0.744		ug/m3	1	4/25/2007
Chloromethane	ND	0.315		ug/m3	1	4/25/2007
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Cyclohexane	3.50	0.525		ug/m3	1	4/25/2007
Dibromochloromethane	ND	1.30		ug/m3	1	4/25/2007
Ethyl acetate	ND	0.916		ug/m3	1	4/25/2007
Ethylbenzene	0.441	0.662	J	ug/m3	1	4/25/2007
Freon 11	0.800	0.857	J	ug/m3	1	4/25/2007
Freon 113	ND	1.17		ug/m3	1	4/25/2007
Freon 114	ND	1.07		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-3SD
Lab Order:	C0704036	**Tag Number:**	326,388
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
Freon 12	2.21	0.754		ug/m3	1	4/25/2007
Heptane	2.37	0.625		ug/m3	1	4/25/2007
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	4/25/2007
Hexane	ND	0.537		ug/m3	1	4/25/2007
Isopropyl alcohol	499	33.7		ug/m3	90	4/25/2007
m&p-Xylene	0.927	1.32	J	ug/m3	1	4/25/2007
Methyl Butyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl Ethyl Ketone	270	36.0		ug/m3	40	4/25/2007
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl tert-butyl ether	ND	0.550		ug/m3	1	4/25/2007
Methylene chloride	242	21.2		ug/m3	40	4/25/2007
o-Xylene	ND	0.662		ug/m3	1	4/25/2007
Propylene	ND	0.262		ug/m3	1	4/25/2007
Styrene	0.909	0.649		ug/m3	1	4/25/2007
Tetrachloroethylene	ND	1.03		ug/m3	1	4/25/2007
Tetrahydrofuran	ND	0.450		ug/m3	1	4/25/2007
Toluene	6.28	0.575		ug/m3	1	4/25/2007
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Trichloroethene	0.601	0.218		ug/m3	1	4/25/2007
Vinyl acetate	ND	0.537		ug/m3	1	4/25/2007
Vinyl Bromide	ND	0.667		ug/m3	1	4/25/2007
Vinyl chloride	ND	0.390		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-4SD
Lab Order:	C0704036	**Tag Number:**	141,279
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	4/25/2007
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,1-Dichloroethene	ND	0.605		ug/m3	1	4/25/2007
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	4/25/2007
1,2,4-Trimethylbenzene	2.40	0.749		ug/m3	1	4/25/2007
1,2-Dibromoethane	ND	1.17		ug/m3	1	4/25/2007
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,2-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,2-Dichloropropane	ND	0.705		ug/m3	1	4/25/2007
1,3,5-Trimethylbenzene	0.999	0.750		ug/m3	1	4/25/2007
1,3-butadiene	ND	0.337		ug/m3	1	4/25/2007
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,4-Dichlorobenzene	1.47	0.917		ug/m3	1	4/25/2007
1,4-Dioxane	ND	1.10		ug/m3	1	4/25/2007
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	4/25/2007
4-ethyltoluene	1.15	0.750		ug/m3	1	4/25/2007
Acetone	89.8	29.0		ug/m3	40	4/25/2007
Allyl chloride	ND	0.477		ug/m3	1	4/25/2007
Benzene	0.487	0.487		ug/m3	1	4/25/2007
Benzyl chloride	ND	0.877		ug/m3	1	4/25/2007
Bromodichloromethane	ND	1.02		ug/m3	1	4/25/2007
Bromoform	ND	1.58		ug/m3	1	4/25/2007
Bromomethane	ND	0.592		ug/m3	1	4/25/2007
Carbon disulfide	ND	0.475		ug/m3	1	4/25/2007
Carbon tetrachloride	ND	0.256		ug/m3	1	4/25/2007
Chlorobenzene	ND	0.702		ug/m3	1	4/25/2007
Chloroethane	ND	0.402		ug/m3	1	4/25/2007
Chloroform	ND	0.744		ug/m3	1	4/25/2007
Chloromethane	ND	0.315		ug/m3	1	4/25/2007
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Cyclohexane	2.48	0.525		ug/m3	1	4/25/2007
Dibromochloromethane	ND	1.30		ug/m3	1	4/25/2007
Ethyl acetate	ND	0.916		ug/m3	1	4/25/2007
Ethylbenzene	ND	0.662		ug/m3	1	4/25/2007
Freon 11	0.800	0.857	J	ug/m3	1	4/25/2007
Freon 113	ND	1.17		ug/m3	1	4/25/2007
Freon 114	ND	1.07		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-4SD
Lab Order:	C0704036	**Tag Number:**	141,279
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
Freon 12	2.16	0.754		ug/m3	1	4/25/2007
Heptane	3.62	0.625		ug/m3	1	4/25/2007
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	4/25/2007
Hexane	ND	0.537		ug/m3	1	4/25/2007
Isopropyl alcohol	504	33.7		ug/m3	90	4/25/2007
m&p-Xylene	0.883	1.32	J	ug/m3	1	4/25/2007
Methyl Butyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl Ethyl Ketone	261	36.0		ug/m3	40	4/25/2007
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl tert-butyl ether	ND	0.550		ug/m3	1	4/25/2007
Methylene chloride	198	21.2		ug/m3	40	4/25/2007
o-Xylene	ND	0.662		ug/m3	1	4/25/2007
Propylene	ND	0.262		ug/m3	1	4/25/2007
Styrene	0.649	0.649		ug/m3	1	4/25/2007
Tetrachloroethylene	1.03	1.03		ug/m3	1	4/25/2007
Tetrahydrofuran	ND	0.450		ug/m3	1	4/25/2007
Toluene	4.02	0.575		ug/m3	1	4/25/2007
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Trichloroethene	1.26	0.218		ug/m3	1	4/25/2007
Vinyl acetate	ND	0.537		ug/m3	1	4/25/2007
Vinyl Bromide	ND	0.667		ug/m3	1	4/25/2007
Vinyl chloride	ND	0.390		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-6SD
Lab Order:	C0704036	**Tag Number:**	274,446
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	4/25/2007
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,1-Dichloroethene	ND	0.605		ug/m3	1	4/25/2007
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	4/25/2007
1,2,4-Trimethylbenzene	1.20	0.749		ug/m3	1	4/25/2007
1,2-Dibromoethane	ND	1.17		ug/m3	1	4/25/2007
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,2-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,2-Dichloropropane	ND	0.705		ug/m3	1	4/25/2007
1,3,5-Trimethylbenzene	ND	0.750		ug/m3	1	4/25/2007
1,3-butadiene	ND	0.337		ug/m3	1	4/25/2007
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,4-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,4-Dioxane	ND	1.10		ug/m3	1	4/25/2007
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	4/25/2007
4-ethyltoluene	ND	0.750		ug/m3	1	4/25/2007
Acetone	20.5	7.24		ug/m3	10	4/25/2007
Allyl chloride	ND	0.477		ug/m3	1	4/25/2007
Benzene	0.779	0.487		ug/m3	1	4/25/2007
Benzyl chloride	ND	0.877		ug/m3	1	4/25/2007
Bromodichloromethane	ND	1.02		ug/m3	1	4/25/2007
Bromoform	ND	1.58		ug/m3	1	4/25/2007
Bromomethane	ND	0.592		ug/m3	1	4/25/2007
Carbon disulfide	0.443	0.475	J	ug/m3	1	4/25/2007
Carbon tetrachloride	ND	0.256		ug/m3	1	4/25/2007
Chlorobenzene	ND	0.702		ug/m3	1	4/25/2007
Chloroethane	ND	0.402		ug/m3	1	4/25/2007
Chloroform	ND	0.744		ug/m3	1	4/25/2007
Chloromethane	ND	0.315		ug/m3	1	4/25/2007
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Cyclohexane	45.5	5.25		ug/m3	10	4/25/2007
Dibromochloromethane	ND	1.30		ug/m3	1	4/25/2007
Ethyl acetate	ND	0.916		ug/m3	1	4/25/2007
Ethylbenzene	0.574	0.662	J	ug/m3	1	4/25/2007
Freon 11	0.800	0.857	J	ug/m3	1	4/25/2007
Freon 113	ND	1.17		ug/m3	1	4/25/2007
Freon 114	ND	1.07		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-6SD
Lab Order:	C0704036	**Tag Number:**	274,446
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
Freon 12	2.26	0.754		ug/m3	1	4/25/2007
Heptane	0.666	0.625		ug/m3	1	4/25/2007
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	4/25/2007
Hexane	1.72	0.537		ug/m3	1	4/25/2007
Isopropyl alcohol	20.2	3.75		ug/m3	10	4/25/2007
m&p-Xylene	1.19	1.32	J	ug/m3	1	4/25/2007
Methyl Butyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl Ethyl Ketone	6.86	0.899		ug/m3	1	4/25/2007
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl tert-butyl ether	ND	0.550		ug/m3	1	4/25/2007
Methylene chloride	7.52	0.530		ug/m3	1	4/25/2007
o-Xylene	0.485	0.662	J	ug/m3	1	4/25/2007
Propylene	ND	0.262		ug/m3	1	4/25/2007
Styrene	9.27	0.649		ug/m3	1	4/25/2007
Tetrachloroethylene	ND	1.03		ug/m3	1	4/25/2007
Tetrahydrofuran	ND	0.450		ug/m3	1	4/25/2007
Toluene	8.43	5.75		ug/m3	10	4/25/2007
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Trichloroethene	0.655	0.218		ug/m3	1	4/25/2007
Vinyl acetate	ND	0.537		ug/m3	1	4/25/2007
Vinyl Bromide	ND	0.667		ug/m3	1	4/25/2007
Vinyl chloride	ND	0.390		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-8SD
Lab Order:	C0704036	**Tag Number:**	229,308
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	4/25/2007
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	4/25/2007
1,1-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,1-Dichloroethene	ND	0.605		ug/m3	1	4/25/2007
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	4/25/2007
1,2,4-Trimethylbenzene	4.65	0.749		ug/m3	1	4/25/2007
1,2-Dibromoethane	ND	1.17		ug/m3	1	4/25/2007
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,2-Dichloroethane	ND	0.617		ug/m3	1	4/25/2007
1,2-Dichloropropane	ND	0.705		ug/m3	1	4/25/2007
1,3,5-Trimethylbenzene	1.70	0.750		ug/m3	1	4/25/2007
1,3-butadiene	ND	0.337		ug/m3	1	4/25/2007
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	4/25/2007
1,4-Dichlorobenzene	11.9	0.917		ug/m3	1	4/25/2007
1,4-Dioxane	ND	1.10		ug/m3	1	4/25/2007
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	4/25/2007
4-ethyltoluene	2.65	0.750		ug/m3	1	4/25/2007
Acetone	91.7	14.5		ug/m3	20	4/25/2007
Allyl chloride	ND	0.477		ug/m3	1	4/25/2007
Benzene	0.455	0.487	J	ug/m3	1	4/25/2007
Benzyl chloride	ND	0.877		ug/m3	1	4/25/2007
Bromodichloromethane	ND	1.02		ug/m3	1	4/25/2007
Bromoform	ND	1.58		ug/m3	1	4/25/2007
Bromomethane	ND	0.592		ug/m3	1	4/25/2007
Carbon disulfide	ND	0.475		ug/m3	1	4/25/2007
Carbon tetrachloride	ND	0.256		ug/m3	1	4/25/2007
Chlorobenzene	ND	0.702		ug/m3	1	4/25/2007
Chloroethane	ND	0.402		ug/m3	1	4/25/2007
Chloroform	ND	0.744		ug/m3	1	4/25/2007
Chloromethane	ND	0.315		ug/m3	1	4/25/2007
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Cyclohexane	5.67	0.525		ug/m3	1	4/25/2007
Dibromochloromethane	ND	1.30		ug/m3	1	4/25/2007
Ethyl acetate	ND	0.916		ug/m3	1	4/25/2007
Ethylbenzene	0.485	0.662	J	ug/m3	1	4/25/2007
Freon 11	1.26	0.857		ug/m3	1	4/25/2007
Freon 113	0.857	1.17	J	ug/m3	1	4/25/2007
Freon 114	ND	1.07		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *26-Apr-07*

CLIENT:	Arcadis	**Client Sample ID:**	AA-8SD
Lab Order:	C0704036	**Tag Number:**	229,308
Project:	LMC Utica Solvent Dock	**Collection Date:**	4/12/2007
Lab ID:	C0704036-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT&TCE BY METHOD TO1		**TO-15**				Analyst: **RJP**
Freon 12	2.21	0.754		ug/m3	1	4/25/2007
Heptane	10.1	0.625		ug/m3	1	4/25/2007
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	4/25/2007
Hexane	ND	0.537		ug/m3	1	4/25/2007
Isopropyl alcohol	1250	305		ug/m3	810	4/25/2007
m&p-Xylene	1.15	1.32	J	ug/m3	1	4/25/2007
Methyl Butyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl Ethyl Ketone	147	18.0		ug/m3	20	4/25/2007
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	4/25/2007
Methyl tert-butyl ether	ND	0.550		ug/m3	1	4/25/2007
Methylene chloride	4950	431		ug/m3	810	4/25/2007
o-Xylene	0.441	0.662	J	ug/m3	1	4/25/2007
Propylene	ND	0.262		ug/m3	1	4/25/2007
Styrene	1.30	0.649		ug/m3	1	4/25/2007
Tetrachloroethylene	ND	1.03		ug/m3	1	4/25/2007
Tetrahydrofuran	ND	0.450		ug/m3	1	4/25/2007
Toluene	6.24	0.575		ug/m3	1	4/25/2007
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	4/25/2007
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	4/25/2007
Trichloroethene	0.710	0.218		ug/m3	1	4/25/2007
Vinyl acetate	ND	0.537		ug/m3	1	4/25/2007
Vinyl Bromide	ND	0.667		ug/m3	1	4/25/2007
Vinyl chloride	ND	0.390		ug/m3	1	4/25/2007

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		