

Johnson & Hoffman Manufacturing Corporation

Remedial Investigation Report Addendum No. 1

Carle Place, New York

January 2014

Environmental Resources Management 105 Maxess Road, Suite 316 Melville, New York 11747

I, Michael Teetsel, certify that I am currently Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report Addendum was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

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# **Remedial Investigation Report Addendum No. 1**

Johnson & Hoffman Former Manufacturing Corp. 40 Voice Road Carle Place, New York

January 2014

Project No. 0198956

Prepared by:

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# TABLE OF CONTENTS

1.0	INTE	RODUCT	TON	1			
	1.1	SITE H	ISTORY	1			
	1.2	PROJE	СТ ВАСКО	GROUND1			
2.0	AOC	INVEST	IGATION	UPDATES			
	2.1	BACKO	GROUND S	SOIL SAMPLING			
	2.2	AOC 1	- COMPRI	ESSOR/ANNEALING ROOM DRAINAGE SYSTEM4			
	2.3	AOC 2	- FINISHII	NG DEPT. WASTEWATER TRENCH4			
	2.4	AOC 3	- BOILER	ROOM DRY WELLS4			
	2.5	AOC 4	- FORMER	R SCRAP METAL PILES5			
	2.6	AOC 5	- STORMV	VATER DRAINAGE SYSTEM5			
	2.7	AOC 6 - 5,000-GALLON NO. 2 FUEL OIL UST6					
	2.8	AOC 7 2.8.1		PACTED SOIL			
		2.8.2		(AOC 7) Soil Vapor Intrusion Sampling			
			2.8.2.3 2.8.2.4 2.8.2.5	December 2011 and February 2012 SVI Sampling Results9 December 2012 SVI Sampling Results9 March 2013 SVI Sampling Results10			
			2.8.2.6	SVI Sampling Summary11			
		2.8.3	•	stem Conversion to Sub-Slab Depressurization & Next Steps11			
		2.8.4		Soil Vapor Intrusion Sampling			
			2.8.4.1 2.8.4.2	Properties Evaluated12 Soil Gas Sampling to Assess Fun World Property13			
	2.9	AOC 8	- SOUTHE	EAST DRY WELL14			
	2.10	AOC 9	- NORTHI	EAST DRY WELL14			
3.0	GRO	UNDWA	TER CHAI	RACTERIZATION UPDATE15			

	3.1	POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)	.15
	3.2	VOLATILE ORGANIC COMPOUNDS (VOCS)	.16
4.0	FISH	& WILDLIFE IMPACT ANALYSIS UPDATE	.17
5.0	DATA	A USABILITY SUMMARY REPORTS	.18
6.0	QUA	LITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT UPDATE	.20
	6.1	SOIL PATHWAYS UPDATE	.20
	6.2	UPDATED CONCLUSIONS	.20
7.0	SUM	MARY OF RI FINDINGS	.22

#### LIST OF FIGURES

- 1-1 Site Location Map
- **1-2** Facility Plan Showing AOCs
- 2-1 Location of Background Soil Samples
- 2-2 AOC 5 Recharge Basin Soil Sampling Results
- 2-3 October 2010 AOC 7 Endpoint Soil Sample Results and Extent of Excavation
- 2-4 AOC 7 Endpoint Soil Sample Results & Extent of Excavation
- 2-5 Indoor Air/Sub-Slab & Soil Vapor Sampling Locations
- 3-1 Water Table Contour Map 28 February 2011
- 3-2 PCE Concentration vs. Time MW-01
- 3-3 PCE Concentration vs. Time MW-02
- 3-4 PCE Concentration vs. Time MW-05
- 7-1 Facility Plan Showing AOCs Requiring Remediation

# LIST OF TABLES

- 1-1 Summary of June 2012 NYSDEC Comments
- 2-1 Background Soil Sampling Results
- 2-2 AOC 5 Recharge Basin Vertical Delineation Soil Sampling Results
- 2-3 Soil Vapor Intrusion Sampling Results (July 2011 through March 2013)
- 2-4 Fun World Soil Gas Sampling Results
- 2-5 AOC 9 Soil Sampling Results
- 3-1 2012 Groundwater Sampling Results PAHs
- 3-2 2013 Groundwater Sampling Results VOCs

#### LIST OF APPENDICES

APPENDIX A	Pertinent Correspondence
APPENDIX B	Forms & Logs for Vapor Intrusion Sampling
APPENDIX C	Data Usability Summary Reports

#### 1.0 INTRODUCTION

## 1.1 SITE HISTORY

The Johnson & Hoffman (J&H) Manufacturing facility is located at 40 Voice Road, in Carle Place, Nassau County, New York (the "Site"; see Figure 1-1 for location and Figure 1-2 for Facility Plan). The Site consists of a 59,000-square foot, one story building with associated parking and grass areas, on a 4.054-acre parcel. The Site was developed in 1962 on former agricultural land. Since that time, J&H produced small metal parts using processes that include metal stamping, deburring, and washing. A history of the Site ownership is provided below:

- The original Johnson & Hoffman entity operated at the Site from 1962 until 2004.
- In 2004, American Engineered Components, Inc. ("AEC") owned all of the outstanding stock in Johnson & Hoffman Manufacturing Corp. ("J&H pre-bankruptcy"). In 2004, AEC and J&H '04, among others, filed a petition for Chapter 11 Bankruptcy in the U.S. Bankruptcy Court for the District of Delaware. The U.S. Bankruptcy Court via an Order dated April 21, 2004, approved AMI Johnson, LLC, to be the purchaser ("Transferee") of all of the assets of AEC and J&H '04, free and clear of liens, claims, and encumbrances. Subsequently, J&H '04 dissolved and ceased to exist. After the acquisition via the bankruptcy, AMI Johnson, LLC, operated with the assets acquired from AEC and J&H '04 and continued to do business under a newly formed entity with the name of Johnson & Hoffman Manufacturing Corp (J&H postbankruptcy).
- In 2007, Manley Holdings, Inc. secured a tax-exempt bond through the Nassau County Industrial Development Agency (NCIDA) in connection with the acquisition of the Johnson and Hoffman Manufacturing Corporation post-bankruptcy from AMI Johnson, LLC. Manley Holdings Inc., through its wholly owned subsidiary, Jade Holding Corporation created Johnson & Hoffman LLC which is the current lessee and operator of the Site, doing business as (dba) as Johnson & Hoffman Manufacturing. NCIDA is the titled owner of the Site.

# 1.2 PROJECT BACKGROUND

The Site is bounded to the north by Voice Road, on the opposite side of Voice Road directly north is an electrical substation owned by the Long Island Power Authority (LIPA). Located to the south of the Site is the Long Island Rail Road right-of-way. To the east is a small commercial building occupied by a company called Fun World. An AM radio station is situated west of the Site along with a storage yard for trucks and landscaping equipment.

This Site has been the subject of several rounds of environmental investigation between 1996 and 2013. Most of this work has been conducted under New York's Voluntary Cleanup Program (VCP Site No. 000684), and a VCP agreement was signed by Volunteers CAWSL Enterprises, Inc. and AMI Johnson, LLC, and the New York State Department of Environmental Conservation (NYSDEC) in 2004. All work conducted since that time was performed under work plans reviewed and approved by NYSDEC. Since 2010, the project has followed the requirements provided in "DER-10: Technical Guidance for Site Investigation and Remediation" (NYSDEC, May 2010).

Among other things, the VCP agreement required the Volunteers to complete a comprehensive investigation of the Site. The initial report documenting this work was the "Site Investigation Report" (ERM, November 2008). NYSDEC provided comments on this document in a letter dated 24 April 2009 (see Appendix A). Based on these comments, additional investigations were conducted. A report on this additional work and all preceding investigations was submitted entitled "Remedial Investigation Report" (ERM, October 2011).

NYSDEC commented on the October 2011 Remedial Investigation (RI) Report in a letter dated 4 June 2012 (see Appendix A). In response, further sampling was performed and reported herein. Table 1-1 provides a summary of the NYSDEC comments and how they were addressed.

As previously agreed with NYSDEC, this document is an addendum to the October 2011 RI Report. It provides a comprehensive report for those Areas of Concern (AOCs) where additional investigation was conducted subsequent to NYSDEC's 4 June 2012 comment letter. The status of all other AOCs identified in the October 2011 RI Report remain unchanged.

# 2.0 AOC INVESTIGATION UPDATES

Based on the knowledge of past operations and the historical investigations conducted prior to 2002, Areas of Concern (AOCs) were identified at the Site. The following AOCs were defined to allow for differentiation during the Site characterization and reporting process:

- AOC 1: Drainage systems that include: (1) two floor drains located south of the compressor and annealing rooms and the discharge point in dry well<sup>1</sup> SWCB-1; and (2) an isolated former dry well/drain in the compressor room;
- AOC 2: Concrete wastewater trench in the northern section of the Finishing Department;
- AOC 3: Boiler Room dry wells;
- AOC 4: Accumulation of scrap parts and tumbling media on the ground surface in the southwest portion of the Site;
- AOC 5: Storm water drainage system located in the southwest portion of the Site consisting of; (1) two dry wells (SWCB-2 and SWCS-3); and (2) one recharge basin;
- AOC 6: 5,000-gallon No. 2 fuel oil UST;
- AOC 7: PCE-impacted soil near the southeast corner of the building; and
- AOC 8: The SE Drywell was discovered in 2006 and is located on the exterior of the southeast portion of the building. The SE drywell is believed to have received water from the building roof leaders only.

Figure 1-2 shows the AOC locations. We also note the addition of one new, previously unidentified AOC (AOC 9, Northeast Drywell), which is presented below in Section 2.10. An update on the status of each AOC is provided in the following subsection.

# 2.1 BACKGROUND SOIL SAMPLING

Background soil samples were included in the original RI Work Plan because some criteria in the now-superseded TAGM-4046 soil cleanup guidance referenced site background conditions. Two (2) background soil samples (BG-1 and BG-2) were selected in the northern portion of the

<sup>&</sup>lt;sup>1</sup> In this document, the term dry well refers to pre-fabricated concrete rings, generally 8-10 feet in diameter, installed to a depth of 15-20 feet below grade. The bottom of these structures is open to allow water to infiltrate to the underlying soil.

property at a location where no historic manufacturing operations have occurred. The samples were located in the front yard, in an area that has been a maintained lawn since the Site was developed. Land use history in this area was verified through review of historical aerial photographs. The initial samples were collected in March, 2006, using a hand auger and were analyzed for the Target Analyte List and Target Compound List, plus tentative identification and approximate quantification of up to 30 additional non-target organic chemicals (TAL/TCL+30).

The location of samples BG-01 and BG-02 is presented in Figure 2-1. In the March 2006 sampling, BG-01 exhibited total PCBs at 1,800 micrograms per kilogram ( $\mu$ g/kg) in the primary sample, and 7,600  $\mu$ g/kg in the duplicate sample. The PCB concentration in the primary sample exceeded the Commercial Soil Cleanup Objective of 1,000  $\mu$ g/kg, while the results from the duplicate sample exceeded the Commercial SCO, as well as the Protection of Groundwater SCO of 3,200  $\mu$ g/kg. The second background sample, BG-02, was collected approximately 55 feet to the east of BG-01 and did not contain detectable levels of PCBs.

PCBs are not known to have been used at the Site, and none of the other 11 soil samples collected at the Site for PCB analysis exceeded the Commercial Soil Cleanup Objectives (SCO) or the Protection of Groundwater SCO for PCBs. The single PCB exceedance found at BG-01 is interpreted to be a de minimus outlier. To verify this interpretation, a supplemental soil sample was collected at BG-01 at a depth of 0-1 feet (i.e., the depth of the original sample). At the request of NYSDEC, an additional soil sample was also collected at BG-01 from the 0-2 inch interval to assess the potential for direct exposure. The sampling was performed on 23 October 2012; both samples were analyzed for PCBs via EPA Method 8082.

The sample results are shown on Table 2-1. No PCBs were detected in either sample. As a result, the original interpretation regarding the initial detection at BG-01 is confirmed. No further action is recommended for this area.

#### 2.2 AOC 1 - COMPRESSOR/ANNEALING ROOM DRAINAGE SYSTEM

There are no changes to the status of this AOC.

## 2.3 AOC 2 - FINISHING DEPT. WASTEWATER TRENCH

There are no changes to the status of this AOC.

## 2.4 AOC 3 - BOILER ROOM DRY WELLS

There are no changes to the status of this AOC.

# 2.5 AOC 4 - FORMER SCRAP METAL PILES

There are no changes to the status of this AOC.

# 2.6 AOC 5 - STORMWATER DRAINAGE SYSTEM

AOC 5 includes three interconnected drainage structures. From upstream to downstream, this system consists of dry well SWCB-02, dry well SWCB-03 and a recharge basin (see Figure 2-2). Previous soil sampling performed in 2006-2008 in dry wells SWCB-02 and SWCB-03 were successful in delineating the vertical extent of polycyclic aromatic hydrocarbon (PAH) impacts below these structures. The reader is referred to the October 2011 RI Report for a detailed reporting of these findings. Subsequent sampling was performed to complete the delineation of PAH impacts in the recharge basin, as described below.

Soil samples were previously collected at two locations in the recharge basin. Sample location SR-01 was situated at the outfall of the overflow pipe from upstream dry well SWCB-03. Sample SR-02 was located at the opposite end of the basin. The results of the prior sampling found PAH impacted soil at SR-01, but not SR-02. The results at SR-02 demonstrate that the areal extent of the impacted soil is limited. However, the depth of the PAH impacts at SR-01 was not defined; therefore additional sampling was performed to complete the vertical delineation at this location.

On 6 December 2012, additional samples were collected at location SR-01 at depths of 9.0-9.5, 10.0-10.5, 11.0-11.5, and 13.0-13.5 feet below grade. Each sample was analyzed for PAHs via EPA Method 8270C. As presented in Table 2-2, all PAH concentrations from these deeper samples are below the Commercial SCO and the SCOGW. A summary of the results for all soil samples collected to date at SR-01 is presented below:

Sample Location	Depth Interval (feet below base of recharge basin)	PAH Exceedance of SCOC or SCOGW
SR-01	0.0 - 2.0	SCOC & SCOGW
SR-01	2.0 - 4.0	SCOC & SCOGW
SR-01	5.0 - 6.0	SCOC & SCOGW
SR-01	7.0 - 8.0	SCOC & SCOGW
SR-01	9.0 – 9.5	Neither
SR-01	10.0 – 10.5	Neither
SR-01	11.0 - 11.5	Neither
SR-01	13.0 - 13.5	Neither

SCOC = Soil Cleanup Objectives (SCO) for Commercial Land Use SCOGW = SCO for Protection of Groundwater These results demonstrate that PAHs are delineated to a depth of 8 feet below the bottom of the recharge basin. The horizontal extent of PAHs above criteria is limited to within close proximity of sample location SR-01 (see Figure 2-2). Therefore, delineation in the recharge basin is deemed complete and final refinement of the horizontal extent of impacted soil will be completed as excavation endpoint samples.

# 2.7 AOC 6 - 5,000-GALLON NO. 2 FUEL OIL UST

There are no changes to the status of this AOC.

# 2.8 AOC 7 – PCE-IMPACTED SOIL

AOC 7 consists of soil impacted by tetrachloroethene (PCE) located south and southeast of the site building. Pre-remedial characterization of AOC 7 was completed and reported in the October 2011 RI Report. Soil remediation in AOC 7 has been conducted via Interim Remedial Measures (IRMs) and is now complete. A summary of the IRMs is provided below in Section 2.8.1.

# 2.8.1 AOC 7 Interim Remedial Measures

Soil vapor extraction (SVE) was initially selected as the remedial technology, as described in the document entitled "Interim Remedial Measure – Soil Vapor Extraction" (ERM, February 2006). In October 2010, soil samples were collected to assess the progress of the SVE remediation in AOC 7. Two of the ten sampled locations found residual PCE in excess of its SCOGW value (see Figure 2-3). These results were reported to the Department in ERM's letter report dated 8 December 2010. These data demonstrated that the SVE remedy was successful in reducing PCE concentrations to below the applicable criteria throughout most of AOC 7. Soil in a small area outside the building (i.e., in the vicinity of borings IRM-03R and SB-13R) remained non-compliant.

As a result, the IRM was completed by excavating the remaining PCEimpacted soil, as per "Addendum No. 2 to the February 2006 SVE IRM Work Plan" (ERM, May 2011). Documentation of the completion of the AOC 7 IRM was provided in the "Construction Completion Report for AOC 7" (ERM, October 2011). As described in this document, soil samples were collected to document clean excavation endpoints. The sampling exceeded the minimum spacing requirements stated in the NYSDEC DER-10 guidance document. The sampling results are summarized on Figure 2-4, which show the location of the samples demonstrating a clean (i.e., less than the Part 375 Unrestricted Use Soil Cleanup Objectives) excavation perimeter. These samples include the following:

- <u>East Wall</u> VOC levels were below criteria at SB-35 and SB-43 at depths of 1.0 to 1.5 feet and 6.0 to 6.5 feet.
- <u>West Wall</u> VOC levels were below criteria at SB-42 at depths of 1.0 to 1.5 feet and 6.0 to 6.5 feet, as well as SB-32 at depths of 3.0 to 4.0 feet and 5.0 to 6.0 feet.
- <u>North Wall</u> the building foundation wall defined the northern extent of the excavation; data from SB-32, SB-34, SB-13R and SB-35 demonstrate that VOCs were below criteria at these locations at a depth of 6.0 to 6.5 feet.
- <u>South Wall</u> VOC levels were below criteria at SB-36 and SB-43 at depths of 1.0 to 1.5 feet and 6.0 to 6.5 feet.

The center of the excavation (surrounding boring SB-38) required deeper excavation to a depth of 10.0 feet below grade. Four soil samples (SB-46 through SB-49) were collected around SB-38 at a depth of 10.0 to 10.5 feet to document clean endpoints in the inner, deeper portion of the excavation.

Based on the information provided above, the IRM is deemed complete, and no further action is proposed for soil in AOC 7.

# 2.8.2 On-Site (AOC 7) Soil Vapor Intrusion Sampling

Several on-Site sampling events were conducted to evaluate the on-Site building for soil vapor intrusion (SVI). Each round consisted of five (5) co-located and concurrent indoor air and sub-slab soil vapor samples, plus one (1) outdoor air sample (see Figure 2-5 for locations). Prior to each sampling round, the sub-slab depressurization system<sup>2</sup> was turned off for at least 48 hours. All samples were tested for VOCs via EPA Method TO-15. Copies of the sampling log sheets, indoor air quality questionnaire and product inventory for each sampling event are provided in Appendix B. The following sampling events were performed:

- The first SVI sampling event was conducted on 15 July 2011 to provide a baseline set of data documenting indoor air conditions prior to the AOC 7 remedial excavation.
- Two additional rounds were collected on 7 December 2011 and 10 February 2012 following the completion of the excavation.

<sup>&</sup>lt;sup>2</sup> After conclusion of the targeted soil remedy, the SVE system was converted to a subslab depressurization system consisting of a single extraction well (VEW-5) located beneath the southeast corner of the building. See Section 2.8.3 for further detail.

- Sampling was conducted in December, 2012, to assess the need for continued operation of the sub-slab depressurization (SSD) system.
- After the December, 2012, results indicated that mitigation was not required, the SSD system was taken offline in February, 2013. An additional round of sampling was then conducted in March, 2013, to assess the potential for rebound in sub-slab VOC concentrations.

All results were evaluated in accordance with the decision matrices in the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, October 2006).

# 2.8.2.1 Sampling Methodology

The five permanent sub-slab vapor points were installed following Section 2.7.2 of the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Teflon tubing (1/4-inch) was installed approximately three to four inches into the sub-slab material at each location. Glass beads were placed in the annular space around the tubing to a depth of one inch above the end of the tubing. The borehole was then sealed to grade with hydraulic cement. A compression fitting and threaded plug to seal the tubing is provided at the surface.

Immediately prior to sampling, a Helium Tracer Gas Test was performed to verify that no infiltration of indoor air occurs during sampling. This consisted of applying a shroud that covers the top of the seal. The tubing was connected to a portable helium detector. Helium gas was then applied underneath the shroud to enrich the atmosphere in the immediate vicinity of the area where the probe intersects the ground surface. A vapor sample was then collected from the sample point and tested for the presence of high concentrations (>10%) of helium. Once the sample point passed the test, sampling proceeded.

Prior to sampling, at least three volumes were purged from each sampling point and tube, at a flow rate of 0.2 liters per minute (L/min). The samples were collected using certified clean Summa® canisters under a vacuum of at least 25 inches w.c. The sample duration was eight hours to reflect the typical exposure duration for building occupants.

# 2.8.2.2 July 2011 SVI Sampling Results

The results of the July 2011 SVI sampling round are presented in Table 2-3. Three sampling locations (stations 03, 04 and 05) exhibited concentrations of PCE that produced a result of "Mitigate" when applied to the NYSDOH decision matrices. These results represent conditions prior to the removal of suspected residual source material (i.e., PCEimpacted soil that still existed at that time in AOC 7). The presumed source material was excavated in August, 2011, and disposed off-Site, as described above in Section 2.8.1.

# 2.8.2.3 December 2011 and February 2012 SVI Sampling Results

Following the August, 2011, excavation, two additional rounds SVI samples were collected during the heating season on 7 December 2011, and 10 February 2012. During the December, 2011, event, it was discovered that a PCE-based parts cleaner was in use at the facility. This invalidated the PCE indoor air results from this sampling round. However, the sub-slab concentrations from this event remain as a useful data set. A summary of the usable data from these two sampling events is provided in Table 2-3. The following response actions for each sampling location were identified:

- JH-SS/IA-01 (Station 01) = No further action.
- JH-SS/IA-02 (Station 02) = Monitor.
- JH-SS/IA-03 (Station 03) = Monitor.
- JH-SS/IA-04 (Station 04) = Monitor.
- JH-SS/IA-05 (Station 05) = Mitigate.

Station 05 is in the southeast corner of the building and within AOC 7. This is the only location in the "Mitigate" category, as compared to the pre-remedial sampling event when three locations were in the "Mitigate" category. This suggests that the soil excavation was effective in reducing sub-slab concentrations.

## 2.8.2.4 December 2012 SVI Sampling Results

The December, 2012, VI sampling was performed as two separate events on December 3rd and 17th. The December 3rd event was intended to be a complete round; however, three of the Summa Canisters collected that date were lost by the laboratory. To correct this situation and ensure each sample station would have concurrent indoor air and sub-slab soil gas samples, two stations were completely resampled on December 17th. In addition, two outdoor air samples were collected one during each sampling event. This unexpected change in plan was reported to the Department in a phone conversation on 12 December 2012. During this conversation NYSDEC approved re-sampling from the two missing locations. This conversation was subsequently documented in an e-mail dated 17 December 2012.

The December, 2012, SVI sampling results are provided in Table 2-3. The following response actions were identified at each sample station:

- JH-SS/IA-01 (Station 01) = Take reasonable and practical actions to identify source(s) and reduce exposures.<sup>3</sup>
- JH-SS/IA-02 (Station 02) = No further action.
- JH-SS/IA-03 (Station 03) = No further action.
- JH-SS/IA-04 (Station 04) = Monitor.
- JH-SS/IA-05 (Station 05) = Monitor.

These data continued the downward trend in sub-slab soil gas and indoor air concentrations seen in the prior data described above.

# 2.8.2.5 March 2013 SVI Sampling Results

After review of the December, 2012, SVI sampling results, the Department approved temporary inactivation of the sub-slab depressurization (SSD) system on 1 February 2013. The Department requested sampling prior to the end of the heating season to assess for potential rebound of VOCs in soil vapor. The SSD system was inactivated on 4 February 2013, and SVI sampling was conducted on 12 March 2013.

The March 2013 SVI sampling results are provided in Table 2-3. The following response actions were identified at each sample station:

- JH-SS/IA-01 (Station 01) = Take reasonable and practical actions to identify source(s) and reduce exposures.
- JH-SS/IA-02 (Station 02) = Monitor/mitigate.
- JH-SS/IA-03 (Station 03) = Monitor.
- JH-SS/IA-04 (Station 04) = Monitor.
- JH-SS/IA-05 (Station 05) = Mitigate.

The March, 2013, sampling results indicate that the VOC levels at one location did rebound after shutdown of the SSD system. Sub-slab concentrations at Station 05 increased to the point where this location moved into the "Mitigate" category. The other four stations do not require mitigation. Based on these results, the SSD system was reactivated on 10 April 2013 as a conservative measure to protect indoor air quality based on the elevated sub-slab PCE concentration at sample Station 05.

It is noted that the highest concentration of PCE in indoor air is found at Station 02 which is distant from the original source area and near the

<sup>&</sup>lt;sup>3</sup> This response action is specified in the NYSDOH guidance where indoor air concentrations exceed those in the sub-slab soil gas. It refers to the likelihood that a vapor source may be present inside the building which should be identified and removed.

facility machine shop where PCE use has been observed in the recent past. While the chemical inventory did not find evidence of current PCE use in the building, this is an industrial facility and the inventory cannot be considered absolutely definitive. As a result, the possibility of an indoor PCE source cannot be ruled out.

# 2.8.2.6 SVI Sampling Summary

The sub-slab soil gas and indoor air concentrations at the Site have generally been declining over time, with the exception of the last sampling round in March, 2013, where some rebound was observed. A summary of the recent results for PCE (the primary constituent of concern) is provided below (data in  $\mu$ g/m<sup>3</sup>):

Sample	ample Station 1		Station 2		Station 3		Station 4		Station 5	
Date	IA-01	SS-01	IA-02	SS-02	IA-03	SS-03	IA-04	SS-04	IA-05	SS-05
Jul. 2011	6.8	75.9	8.1	171	69.8	997	16	4200	42	1040
Dec. 2011	NA	5.9	NA	235	NA	339	NA	623	NA	698
Feb. 2012	0.65	2.6	2.2	349	2.5	133	2	220	1.4	1480
Dec. 2012	3.7	2.9	0.41	12	1.1	42	0.37	243	0.35	183
Mar. 2013	3.1	8.8	14	167	1.7	359	1.4	216	2.1	3380

This generally downward concentration trend reflects the efficacy of the completed remedial actions in AOC 7, which have substantially removed the vapor source at the Site.

# 2.8.3 SVE System Conversion to Sub-Slab Depressurization & Next Steps

As previously indicated, following the AOC 7 excavation in August, 2011, sub-slab depressurization of a portion of the building has been maintained by extraction of sub-slab vapors at former SVE extraction VEW-5. All other SVE extraction points were turned off or disconnected. Sub-slab vacuum response testing was performed on 16 September 2011 and 7 March 2012 with only VEW-5 operating to determine the extent of subslab depressurization. As shown in Figure 2-5, a measureable vacuum was achieved at all sub-slab monitoring points during the 16 September 2011 test. During the 3 March 2012 test, measurable vacuum was observed in the two points closest to VEW-5 (JH-SS-04 & JH-SS-05). The decrease in response observed during the March, 2012, test is likely due to operation of the building's heating system which can create a vacuum within the building limiting the vacuum influence of the SSD system. Despite the decrease in response, these data indicate successful depressurization of the building slab is occurring where mitigation is required as defined by the vapor intrusion sample results described in the preceding sections.

However, to demonstrate that the March, 2013, rebound of PCE has not affected indoor air, and to confirm the effective operation previously established by the December, 2012, sampling event, an additional round of SVI sampling is proposed for this current heating season (i.e., before 31 March 2014). The sampling will be conducted as outlined in Section 3.11 of the NYSDEC-approved Work Plan dated May 2011. This round of sampling will duplicate the prior SVI sampling events, and consist of five concurrent indoor air/sub-slab vapor samples, and one outdoor air sample. Immediately prior to shutting down the SSD system for this sampling event, the sub-slab vacuum will be measured to assess the current vacuum influence of the SSD system. Following third-party data validation, the sampling results will be presented in a letter report to NYSDEC. These results will be evaluated in order to determine the effectiveness of the SSD system and the need, if any, for further sampling during the 2014-2015 heating season.

# 2.8.4 Off-Site Soil Vapor Intrusion Sampling

# 2.8.4.1 Properties Evaluated

During the course of the RI investigation, four nearby properties were evaluated for soil vapor intrusion. These properties and their current status are summarized below.

## Fun World Building

Fun World is a commercial building that lies immediately east of the J&H eastern property line. Previous sampling documented in the October 2011 RI Report led to a conditional approval from NYSDOH of no further action for this property. Additional soil gas sampling was requested to evaluate potential rebound effects associated with temporary shutdown of the SSD system. This work is reported below in Section 2.8.4.2.

## Country Glen Center (115 Old Country Road, NYSDEC Site No. 130199)

The Country Glen Center is a shopping plaza located southeast of the Site and south of the Long Island Railroad right-of-way. Previous sampling led NYSDOH to conclude that soil vapor intrusion at this site is not related to VOCs from the J&H Manufacturing site. The sampling results documented in the October 2011 RI Report led to an unconditional approval from NYSDOH of no further action for this property by the Volunteers.

## One Old Country Road Building

One Old Country Road is an office building located southwest of the Site and south of the Long Island Railroad right-of-way. Previous sampling documented in the October 2011 RI Report led to an unconditional approval from NYSDOH of no further action for this property.

# Fairhaven Apartments

The Fairhaven Apartments are located southwest of the Site and south of the Long Island Railroad right-of-way. Previous sampling documented in the October 2011 RI Report led to an unconditional approval from NYSDOH of no further action for this property.

# 2.8.4.2 Soil Gas Sampling to Assess Fun World Property

Temporary soil gas sample point JH-OSV-01 was installed to assess rebound of VOC levels adjacent to the Fun World building. This point was installed on 7 December 2011 in proximity to historic soil vapor sample SV-01. (The original SV-01 location was unavailable because access to the Fun World property could not be obtained.)

The new temporary soil vapor point (JH-SOV-01) was installed following Section 2.7.1 of the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York. A temporary vapor point and screen attached to Teflon tubing (1/4-inch) was driven approximately five feet below ground surface using drill rods and a hammer drill. The drill rods were removed and glass beads were placed in the annular space around the screen to a depth slightly above the top of the screen. The borehole was then sealed to grade with a Volclay/cement mix. Immediately prior to sampling, a Helium Tracer Gas Test was performed as described above. Prior to sampling, at least three volumes were purged from each sampling point and tube, at a flow rate of 0.2 liters per minute (L/min). The samples were collected using certified clean Summa® canisters under a vacuum of at least 25 inches w.c. The sample duration was eight hours to reflect the typical exposure duration for building occupants.

Soil gas sample locations SV-01 and JH-OSV-01 are shown in Figure 2-5. The analytical results for JH-OSV-01 are provided on Table 2-4. The results for JH-OSV-01 and SV-01 are summarized below:

					Vinyl
Sample	Date	PCE	TCE	cis-1,2-DCE	Chloride
		(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
SV-01	3/26/2006	1400	40	ND	ND
JH-OSV-01	12/7/2012	40	1.7	ND	ND

Since soil vapor sample SV-01 was collected on 26 March 2006 the concentrations of PCE and TCE have fallen in this area of the Site by at least one order of magnitude. These data clearly show that concentrations have decreased significantly over time and rebound has not occurred.

Based on these results, and in accordance with the Department's 4 June 2012 letter (see Appendix A), no further action regarding vapor intrusion at the Fun World property is warranted.

#### 2.9 AOC 8 – SOUTHEAST DRY WELL

There are no changes to the status of this AOC.

# 2.10 AOC 9 – NORTHEAST DRY WELL

This is a new AOC not previously reported in prior documents. The NYSDEC comment letter dated 4 June 2012 requested additional work to follow-up on low levels of dissolved PAHs detected in well MW-04 that exceeded the extremely low standards for these compounds. In response, confirmation re-sampling of well MW-04 was proposed with analysis for PAHs via EPA Method 8270C using Selective Ion Monitoring (SIM). If these results confirmed the prior data, soil sampling was proposed in the nearest potential source, a storm water dry well located 10 feet southwest of MW-04. This approach was approved by NYSDEC.

The re-sampling of MW-04 did confirm the presence of dissolved PAHs above standards at this location. These results are reported in detail in Section 3.1. As a result, a new AOC was designated as AOC 9 - Northeast Dry Well (see Figure 1-2 for location).

The dry well soil sampling was performed in January, 2013, using a directpush drill rig. The following intervals below the bottom of the dry well were sampled: 0-1 feet, 4-5 feet, 9-10 feet, and 14-15 feet. These samples were analyzed for PAHs via EPA Method 8270C. The results are reported in Table 2-5. Only the uppermost sampling interval (0-1 feet below the base of the dry well) was impacted above the applicable standards. It is, therefore, concluded that vertical extent of the impacted soil has been delineated such that remedial planning can proceed.

#### 3.0 GROUNDWATER CHARACTERIZATION UPDATE

This section documents all groundwater sampling events performed at the Site since the October 2011 RI Report was issued. As previously indicated in Section 2.10, well MW-04 was sampled relative to newly identified AOC 9 (Northeast Dry Well). In addition, one round of VOC sampling was completed for all on-Site wells. All samples were collected using low-flow methods, consistent with previously approved project Work Plans. These results are discussed in the subsections below. Well locations and the most recent water table contour map (February 2011) are provided in Figure 3-1.

# 3.1 POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

PAHs have previously been identified at trace levels in groundwater at the Site. However, the groundwater standards for several PAH constituents are extremely low (e.g.,  $0.002 \ \mu g/L$ , or non-detect in the case of benzo(a)pyrene), therefore exceedances have been found. The highest levels (although still quite low) were found in well MW-04; therefore retesting of this well was performed to verify the previous results. Well MW-04 was sampled twice, initially on 23 October 2012, then again on 6 December 2012. Both samples were analyzed for PAHs by Method 8270 SIM and the results are presented in Table 3-1.

Analysis of the October sample was impacted by Hurricane Sandy. The laboratory lost power and its refrigerators were down for extended period. Consequently, the sample was not maintained at the proper temperature (<4°C) and the resulting data were biased low. As indicated in Table 3-1, the sample was below criteria for all analytes, but due to the low bias, the results were rejected and a new sample was collected.

The December sample also experienced QA/QC issues in the laboratory (extraction outside of holding time). Again, the resulting data were biased low. However, due to the presence of low-level positive detections that exceeded the extremely low standards for certain PAHs (see Table 3-1), the data were acceptable for use. Based on these results, it was concluded that the previously identified presence of PAHs in well MW-04 was confirmed, and that additional follow-up soil sampling of a potential source in a nearby dry well was warranted. See Section 2.10 for a discussion of this work.

No additional investigation is recommended relative to PAHs in Site groundwater. The detected levels in MW-04 remain low and the soil sampling results in the nearby dry well did not indicate the presence of a significant on-going source. Nonetheless, remediation is planned for the small amount of impacted soil found in this dry well.

# 3.2 VOLATILE ORGANIC COMPOUNDS (VOCs)

All on-Site wells were sampled in February,  $2013^4$ , with analysis for VOCs by Method 8260. The results are presented in Table 3-2. One well (MW-01) had a positive detection above criteria. PCE was found in this sample at 13.3 µg/L (standard =  $5.0 \mu g/L$ ). These results are consistent with the last sampling event conducted in September, 2010, and documented in the October 2011 RI Report.

Three on-Site wells have historically been impacted with PCE: MW-01, MW-02 and MW-05. PCE concentration versus time plots for these wells are provided as Figures 3-2, 3-3 and 3-4. Each shows a strong downward trend; two of the three wells have now been in compliance for over five years. Only trace levels of VOCs remain in a single well, and these are expected to continue diminishing over time now that remediation of the VOC source at the J&H Site (AOC 7) has been completed.

<sup>&</sup>lt;sup>4</sup> Four of the five on-Site wells were sampled on 20 February 2013. The fifth well (MW-1) was obscured by dense brush and could not be located. The area was cleared on 25 February 2013 to reveal MW-1, which was sampled later that day. NYSDEC was notified of this change in the planned sampling schedule.

# 4.0 FISH & WILDLIFE IMPACT ANALYSIS UPDATE

There are no changes to the Fish & Wildlife Impact Analysis presented in the October 2011 RI Report.

# 5.0 DATA USABILITY SUMMARY REPORTS

All samples collected during the course of the RI were analyzed by NYSDOH ELAP-certified laboratories. All results were reported with Category B laboratory data deliverables and have undergone a quality review process documented as Data Usability Summary Reports (DUSRs). This process was described in Section 3.8 of the October 2011 RI Report. The DUSRs for all analytical results produced since the October 2011 RI Report are provided in Appendix C. These reports are organized by Sample Delivery Group (SDG) and cover the following sampling events:

- SDG No. JA81332 July 2011 J&H Building SVI Sampling
- SDG No. JA94305 December 2011 J&H Building SVI Sampling
- SDG No. JA99245 February 2012 J&H Building SVI Sampling
- SDG Nos. JB22884 and JB24232 December 2012 samples including:
   J&H Building SVI Sampling
  - Fun World Soil Gas Sampling
- SDG Nos. JB19935 and JB23169 October 2012 samples including:
  - Groundwater Sampling for PAHs in well MW-04
  - Soil Sampling for PCBs at background location BG-01
  - Soil Sampling for PAHs in AOC 5 recharge basin location SR-01
- SDG No. JB31249 March 2013 J&H Building SVI Sampling
- SDG Nos. JB29428 and JB29821 February 2013 Site-Wide Groundwater Sampling for VOCs
- SDB No. JB27538 January 2013 Soil Sampling for PAHs in AOC 9 location DW-01

Electronic Data Deliverables (EDDs) in EQuIS<sup>TM</sup> format were submitted for each SDG noted above in accordance with NYSDEC guidance for data submission (<u>http://www.dec.ny.gov/chemical/62440.html</u>). The EDDs were submitted to NYSDEC e-mail box <u>nyenvdata@gw.dec.state.ny.us</u> and subsequently approved by the Department.

The analytical results for the samples collected during the above sampling events are generally valid and usable, with qualifications as noted in each DUSR. The only exception concerns the usability limitations previously noted in Section 3.1 regarding PAHs in groundwater at well MW-04.

The analytical results presented above in Sections 2.0 and 3.0 take into account all qualifiers identified in the data review process and documented in the DUSRs. Overall there was no significant impact regarding the usability of the data set. With the one exception noted

above, the ERM QA Officer has determined that after thorough review of the data set, all samples collected are valid and should be considered usable.

# 6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT UPDATE

## 6.1 SOIL PATHWAYS UPDATE

The Qualitative Human Health Exposure Assessment for soil presented in Section 5.5.1 of the October 2011 RI Report is amended as follows to reflect new data and changes at the Site since publication of this document:

<u>Future On-Site Construction Worker/Utility Worker Direct Contact with</u> <u>Subsurface Soil within AOC 7 (PCE Impacted Soil)</u>

Soil remediation in AOC 7 has been completed as documented in the "Construction Completion Report" (ERM, October 2011). As such, this exposure pathway is no longer complete.

<u>Current & Future On-Site Commercial Worker Direct Contact with</u> <u>Surface Soil within AOC 9 (Northeast Dry Well)</u>

Since AOC 9 is comprised of a dry well, surficial soils are not present within the AOC. As such, no exposure pathway exists.

<u>Current & Future On-Site Commercial Worker Direct Contact with</u> <u>Subsurface Soil within AOC 9 (Northeast Dry Well)</u>

The presence of PAHs in subsurface soils at AOC 9 does not represent a significant human exposure pathway via direct contact. The subsurface soils are not accessible for direct contact exposures, including incidental ingestion and dermal contact, without the performance of intrusive activities. This exposure pathway is, therefore, incomplete.

<u>Future On-Site Construction Worker/Utility Worker Direct Contact with</u> <u>Surface and Subsurface Soil within AOC 9 (Northeast Dry Well)</u>

The presence of PAHs in subsurface soils in AOC 9 represent a complete pathway for future on-site construction worker and utility worker exposure via the incidental ingestion, dermal contact and inhalation of fugitive dust emissions pathway.

## 6.2 UPDATED CONCLUSIONS

With addition of the above analysis for AOC 9, the conclusions of the Qualitative Human Health Exposure Assessment for soil are amended to indicate potentially complete exposure pathways for the following scenarios:

- AOC 1: Future On-Site Construction Worker/Utility Worker Direct Contact with Subsurface Soil
- AOC 4: Current & Future On-Site Commercial Worker Direct Contact with Surface Soil
- AOC 4: Future On-Site Construction Worker/Utility Worker Direct Contact with Surface Soil
- AOC 5: Current & Future On-Site Commercial Worker Direct Contact with Surface Soil
- AOC 5: Current & Future On-Site Construction Worker/Utility Worker Direct Contact with Surface and Subsurface Soil
- AOC 9: Current & Future On-Site Construction Worker/Utility Worker Direct Contact with Subsurface Soil

Exposure to chemical constituents in groundwater<sup>5</sup> and air<sup>6</sup> represent incomplete exposure pathways for all receptors and exposure timeframes evaluated.

<sup>&</sup>lt;sup>5</sup> A public potable water supply is available at the Site and surrounding area.

<sup>&</sup>lt;sup>6</sup> A sub-slab depressurization system is operating at the Site and is planned to continue operating for the foreseeable future. Neighboring off-Site properties have been evaluated for potential vapor intrusion and no unacceptable impacts attributable to J&H were found.

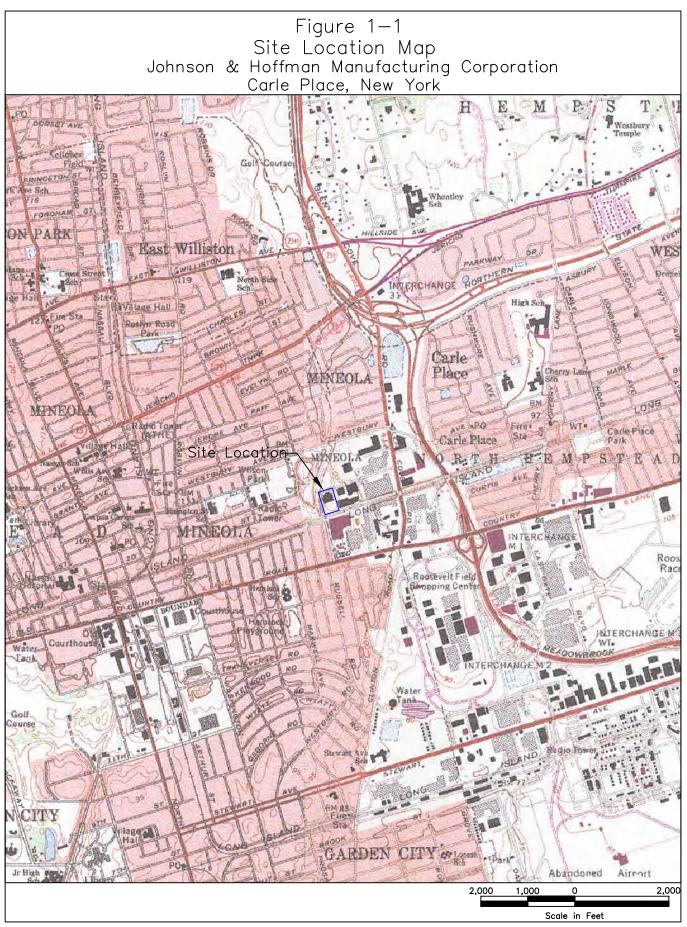
# 7.0 SUMMARY OF RI FINDINGS

Based on the results of the RI presented in the October 2011 RI Report, and this addendum, seven AOCs require remedial action (see Figure 7-1 for location). These are listed below along with the anticipated remedy.

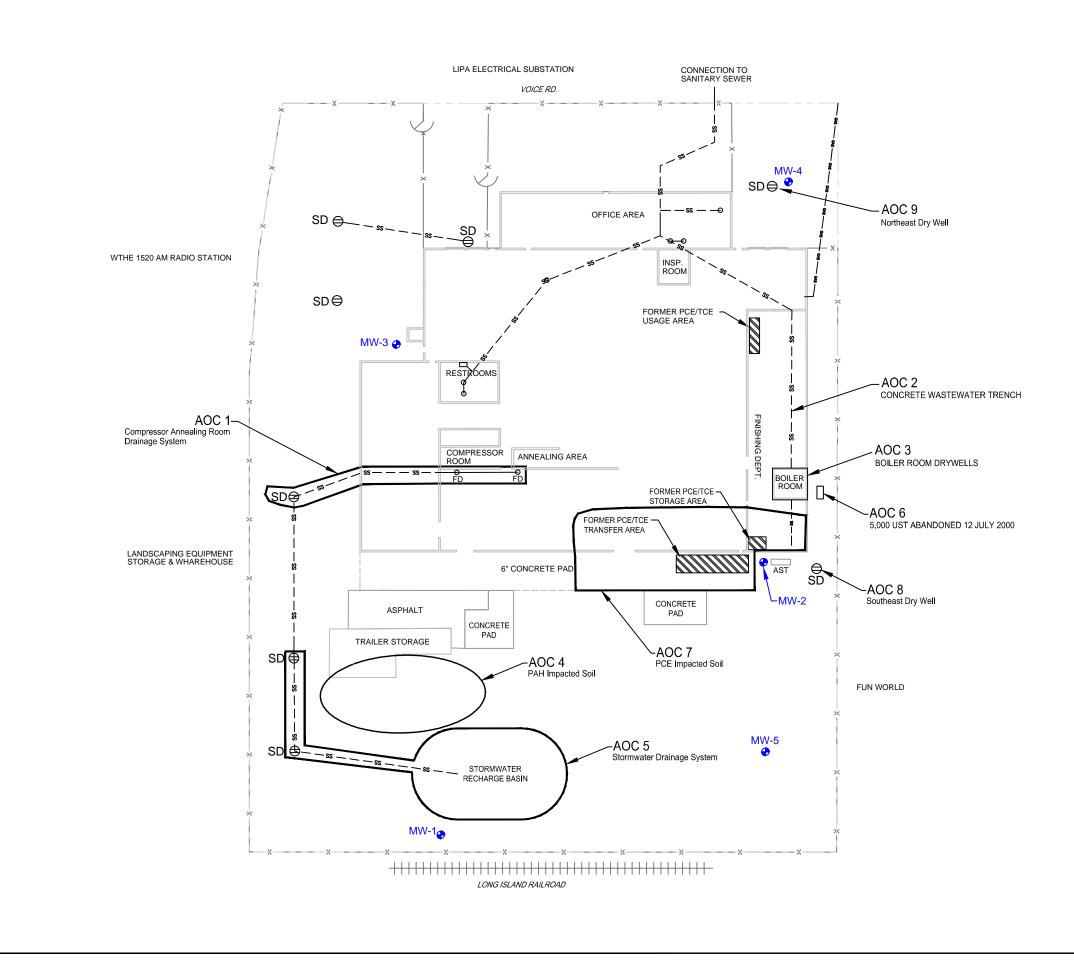
- AOC 1: Compressor/Annealing Room Drainage System A soil remedy consisting of excavation and off-Site disposal is planned for this AOC.
- AOC 4: Former Metal Scrap Piles A soil remedy consisting of excavation and off-Site disposal is planned for this AOC.
- AOC 5: Stormwater Drainage System A soil remedy consisting of excavation and off-Site disposal is planned for this AOC. In addition, impacted soil will be left in place under a deed restriction.
- AOC 7: PCE-Impacted Soil At this time, PCE remains only in soil vapor at levels warranting mitigation, and an SSD system will continue operating as an engineering control to protect indoor quality in the Site building.
- AOC 8: Southeast Dry Well The impacted soil at this location will be left in place under a deed restriction.
- AOC 9: Northeast Dry Well A soil remedy consisting of excavation and off-Site disposal is planned for this AOC.
- Site groundwater The anticipated groundwater remedy is monitored natural attenuation.

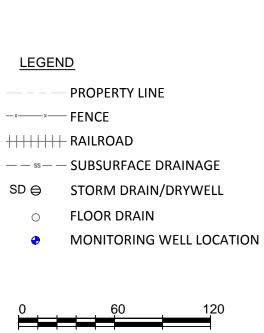
The proposed remedies were documented in a "Remedial Action Work Plan" (ERM, January 2012) previously submitted to the Department. Upon finalization of the RI, this document will be updated to incorporate the new findings.

Figures



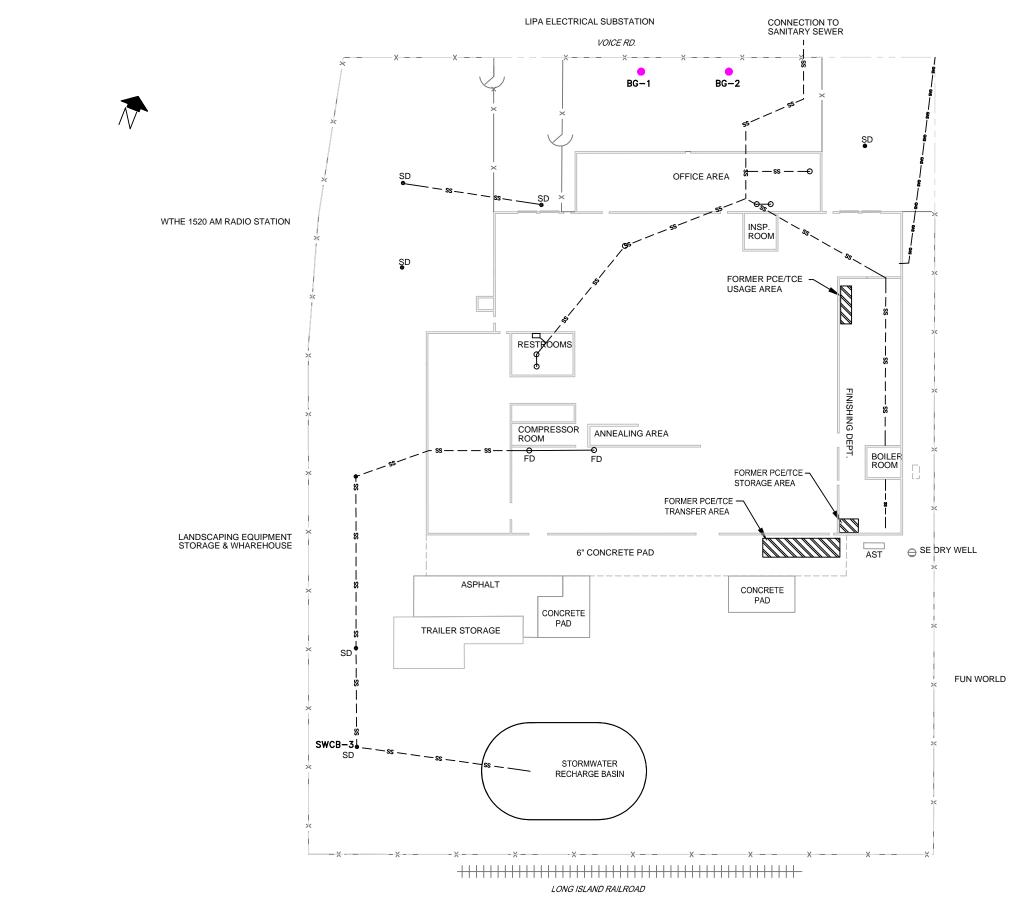
R4904.00.01/12.13.00-SCH/12.22.00-SCH/A101-1A





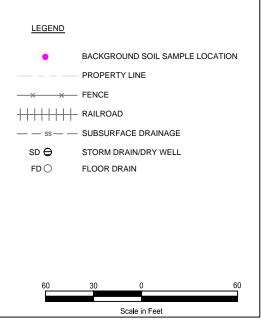
**GRAPHIC SCALE IN FEET** 

TILE							
Facililty Plan Showing AOCs							
PREPARED FOR	2						
JOHN	SON & H	IOFFMAN M	ANUFACT	URING			
	FIGURE						
Env ERM	1-2						
DRAWN BY	SCALE	DATE	JOB NO.	. –			
EMF	GRAPHIC	11/18/13	0198956				

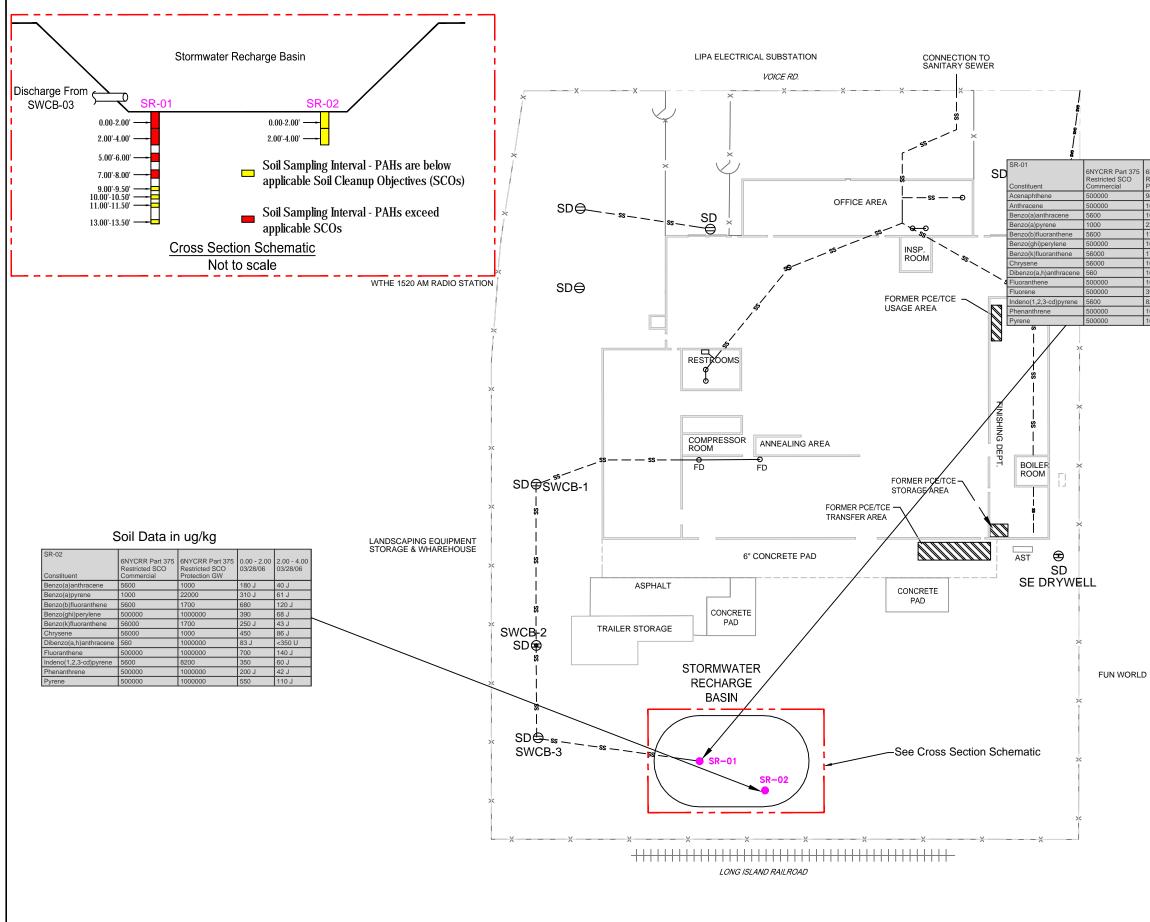


MLB/EMF/8/8/07

# FIGURE 2-1 LOCATION OF BACKGROUND SOIL SAMPLES JOHNSON & HOFFMAN MANUFACTURING CORPORATION CARLE PLACE, NEW YORK



ERM, INC.





# Soil Data in ug/kg

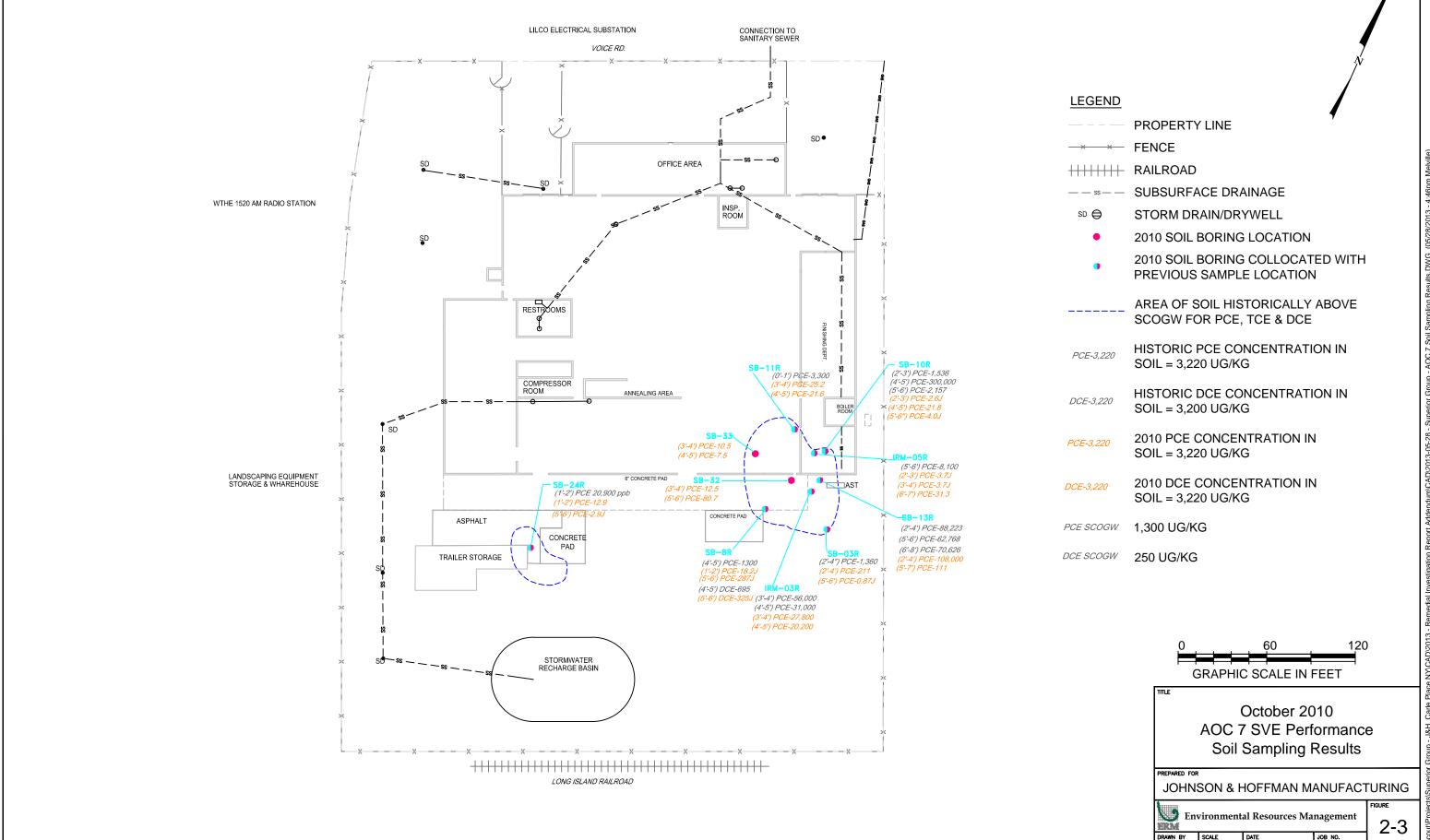
6NYCRR Part 375 Restricted SCO Protection GW	0.00 - 2.00 03/30/06	2.00 - 4.00 03/30/06	5.00 - 6.00 03/29/07	7.00 - 8.00 03/29/07	9.00 - 9.50 12/06/12	10.00 - 10.50 12/06/12	11.00 - 11.50 12/06/12	13.00 - 13.50 12/06/12
98000	770 J	1700 J	53 J	72 J	<33 U	<31 U	<32 U	<41 U
1000000	2300 J	4500 J	210 J	240 J	46.2	<31 U	<32 U	<41 U
1000	[11000] J	[21000]	[1600]	[1100]	296	<31 U	<32 U	38.7 J
22000	[12000] J	[22000]	[1900]	[1100]	366	<31 U	<32 U	41.0
1700	[20000] J	[37000]	[3300]	[1900]	488	<31 U	<32 U	57.6
1000000	9400 J	16000	1100	650	330	<31 U	<32 U	36.4 J
1700	[8100] J	[12000]	[1700]	770	260	<31 U	<32 U	20.0 J
1000	[17000] J	[31000]	[2400]	[1500]	455	<31 U	<32 U	50.2
1000000	[2400] J	[4200] J	270 J	180 J	95.3	<31 U	<32 U	<41 U
1000000	36000 J	68000	4500	3400	859	<31 U	<32 U	80.3
390000	1000 J	2300 J	71 J	96 J	<33 U	<31 U	<32 U	<41 U
8200	[8600] J	[15000]	1100	670	288	<31 U	<32 U	30.5 J
1000000	19000 J	37000	2000	1900	346	<31 U	<32 U	27.4 J
1000000	27000 J	51000	3600	2400	667	<31 U	<32 U	64.3

#### LEGEND

	PROPERTY LINE	
X	FENCE	
	RAILROAD	
— — ss — —	SUBSURFACE DRAIN	NAGE
SD ⊜	STORM DRAIN/DRYV	VELL
FD 🔿	FLOOR DRAIN	
[]	INDICATES EXCEED	
•	SAMPLES COLLECTE BASE OF RECHARGE	
J	ESTIMATED VALUE	
U	UNDETECTED	
0	60	120

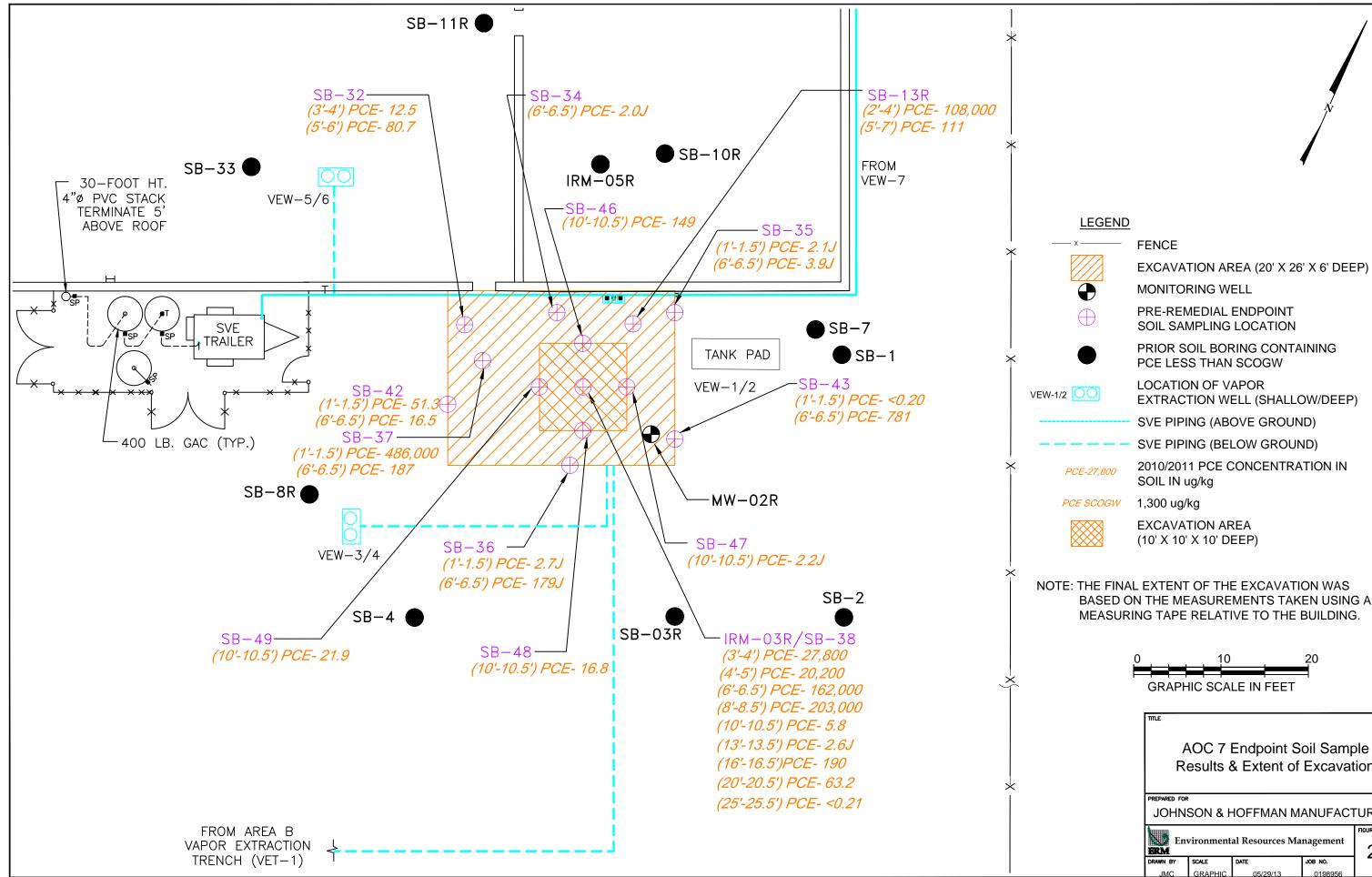
0		60	120	)					
	GRAPHIC SCALE IN FEET								
<sup>™</sup> AOC 5 - Recharge Basin Soil Sampling Results									
	PREPARED FOR JOHNSON & HOFFMAN MANUFACTURING								
ERM Env	Environmental Resources Management								
DRAWN BY EMF	SCALE GRAPHIC	DATE 05/23/13	JOB NO. 0198956						

(05/23/2013 v2.DWG NY/CAD\20



DWG ţ

EME



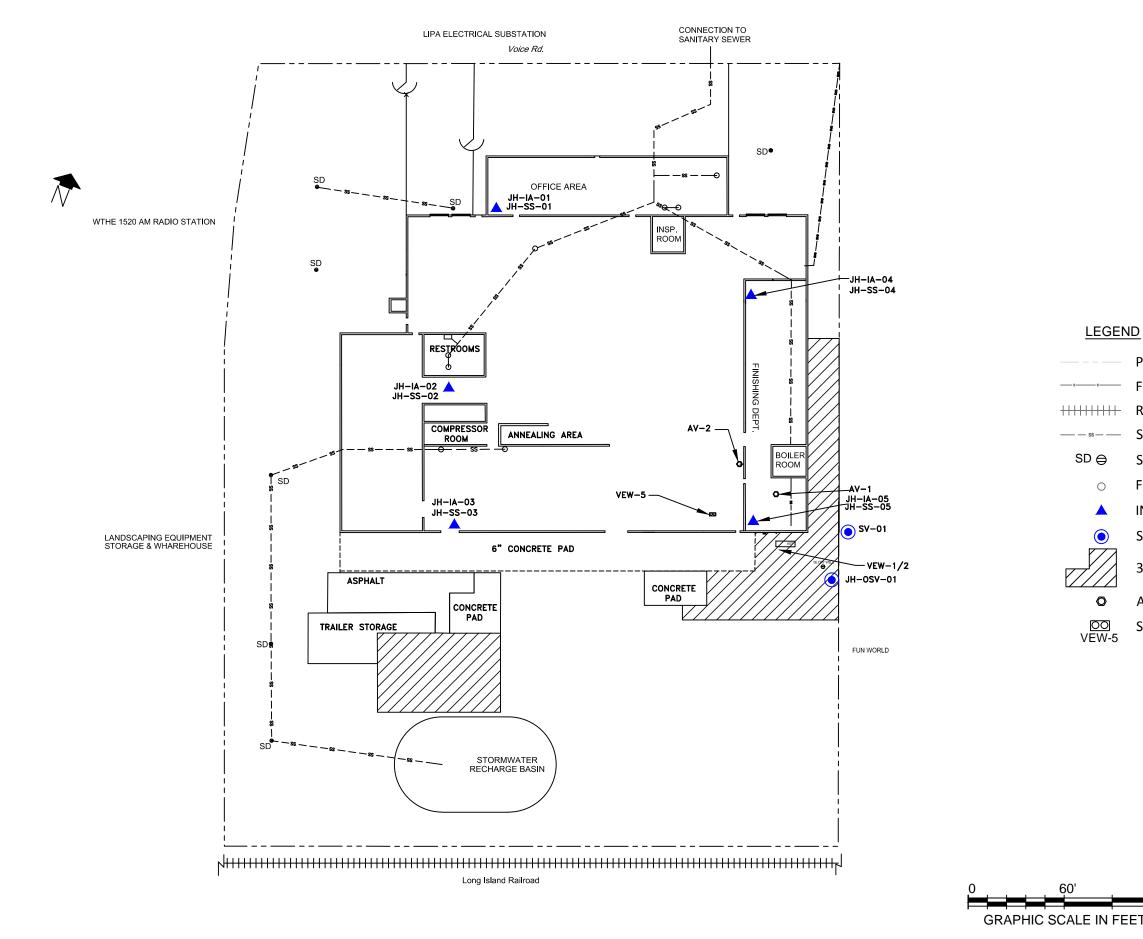




BASED ON THE MEASUREMENTS TAKEN USING A MEASURING TAPE RELATIVE TO THE BUILDING.

> AOC 7 Endpoint Soil Sample Results & Extent of Excavation

PREPARED FOR	PREPARED FOR								
JOHNSC	JOHNSON & HOFFMAN MANUFACTURING								
Envir	Environmental Resources Management								
DRAWN BY SC	- ·								



Vacuum Response at Sub-Slab Monitoring Points

Extraction Point	Pressure (ir	nches W.C.)
	9/16/2011	3/7/2012
VEW-5	-28	-31
JH-SS-01	-0.005	+0.003
JH-SS-02	-0.020	+0.003
JH-SS-03	-0.022	0.000
JH-SS-04	-0.060	-0.023
JS-SS-05	-0.164	-0.129
AV-1	-0.166	NR
AV-2	-0.360	NR

VEW-5 approx.flow rate = 180 cfm on 9/16/11 VEW-5 approx.flow rate = 185 cfm on 3/17/12Negative (-) sign indicates vacuum Positive (+) sign indicates pressure NR = No Reading

PROPERTY LINE

- FENCE
- RAILROAD
- SUBSURFACE DRAINAGE
- STORM DRAIN/DRYWELL
- FLOOR DRAIN

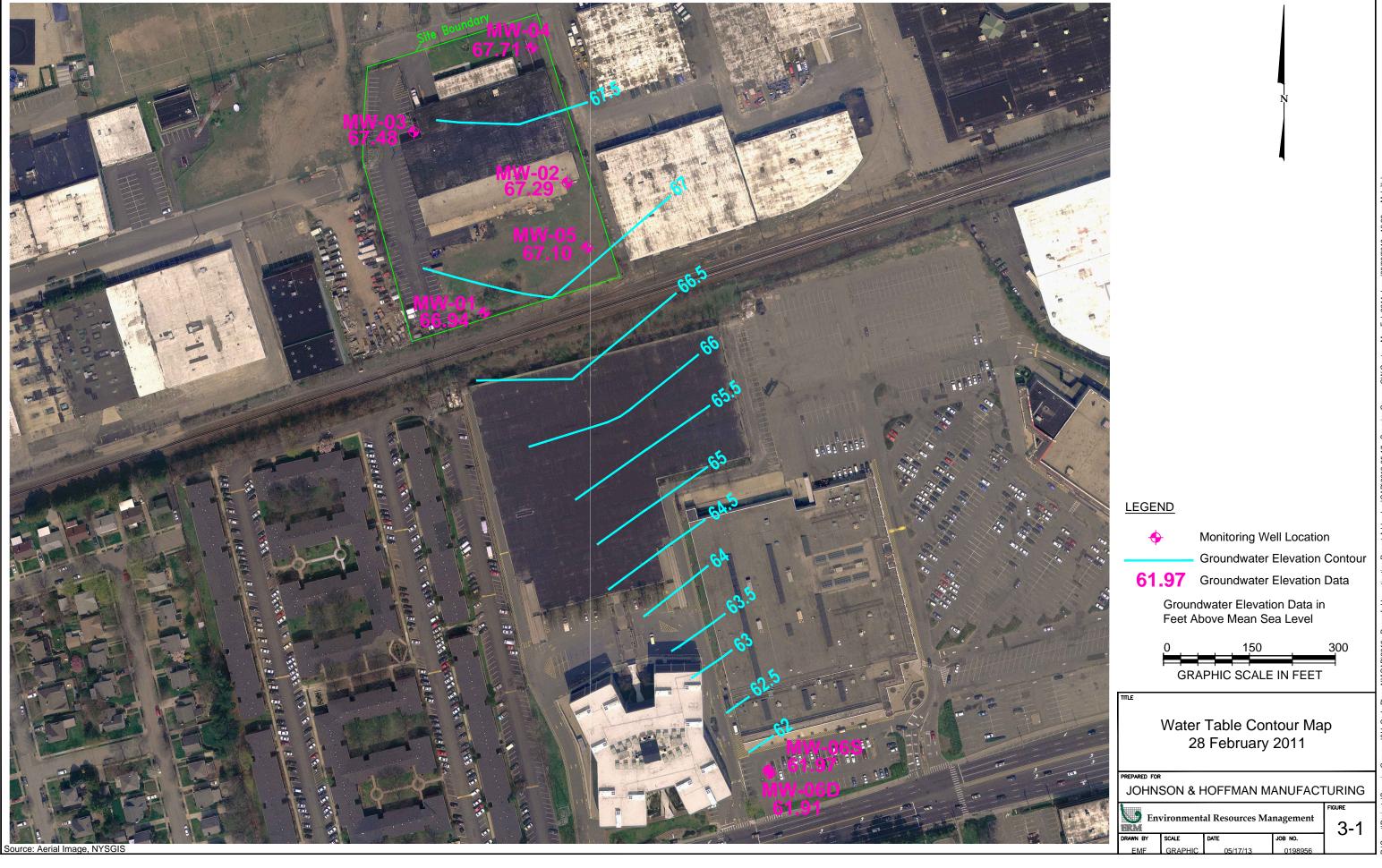
INDOOR AIR/SUB-SLAB SOIL VAPOR SAMPLING LOCATION SOIL VAPOR SAMPLING LOCATION

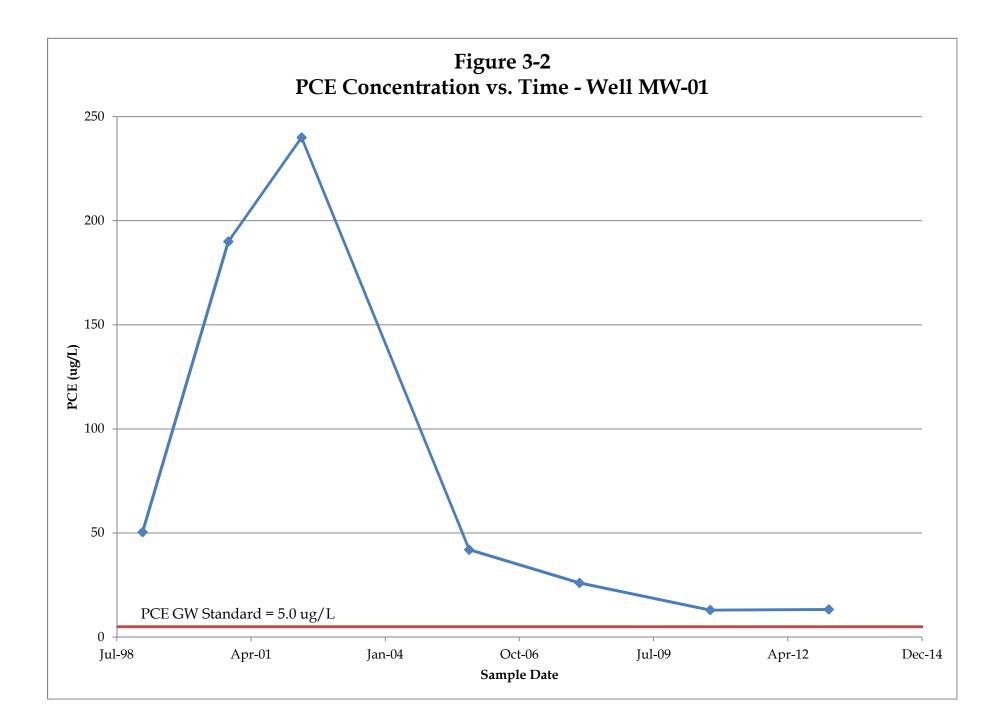
3 INCH ASPHALT CAP WITH 6-MIL POLYETHYLENE LINER

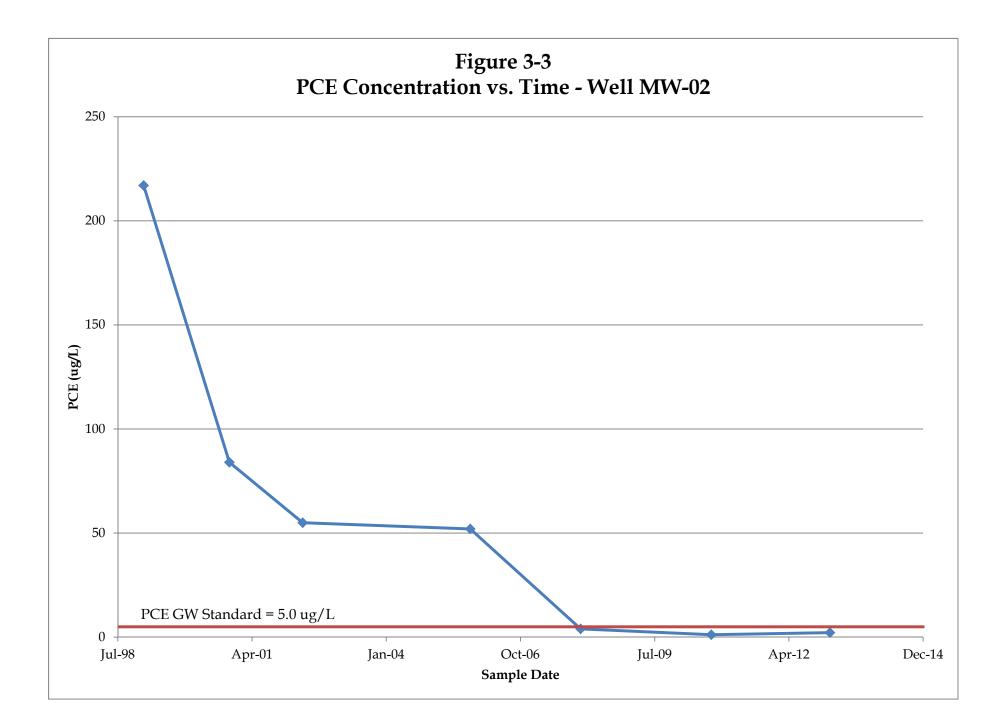
AIR VENT/VACUUM MONITORING POINT (AV)

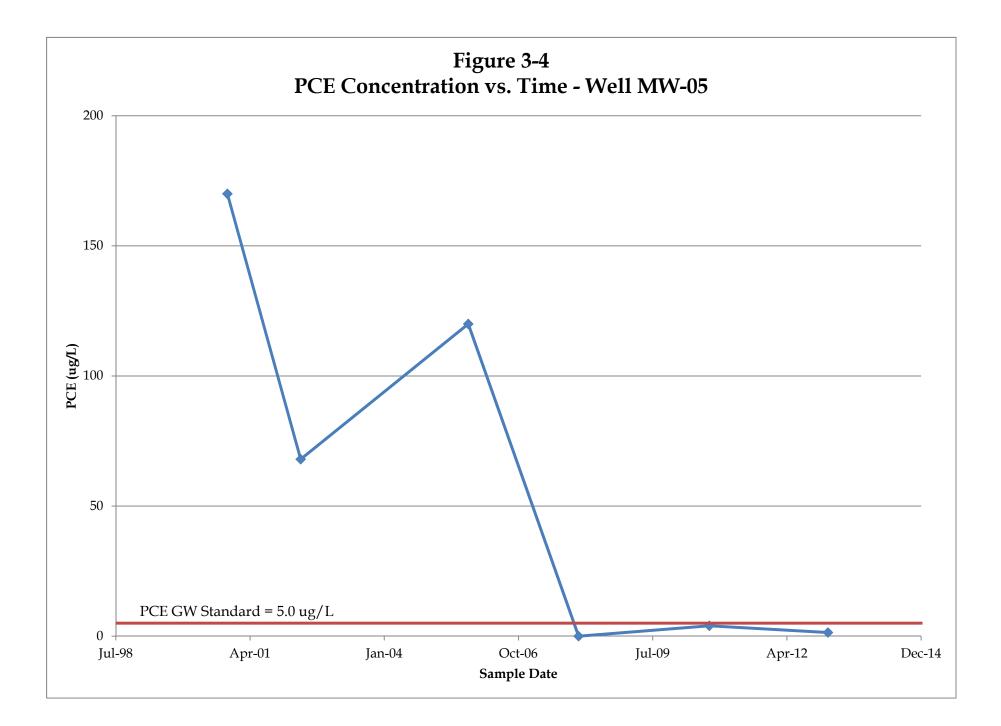
SVE WELL CONVERTED TO AN SSD WELL

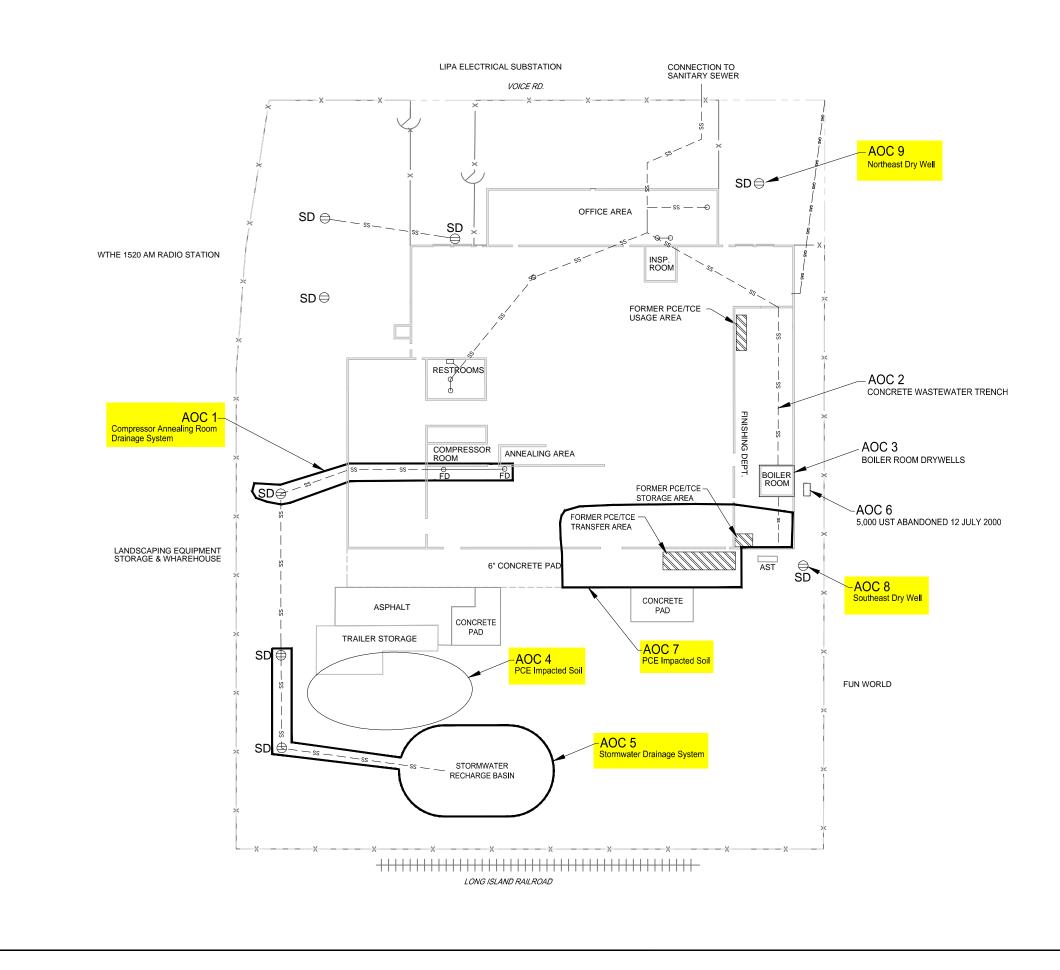
	TITLE								
	Indoor Air/Sub-Slab & Soil Vapor Sampling Locations								
100	PREPARED FOR JOHNSON & HOFFMAN MANUFACTURING								
120'	Environmental Resources Management								
	DRAWN BY MLB/EMF	SCALE GRAPHIC	DATE 05/29/13	JOB NO. 0190962	20				

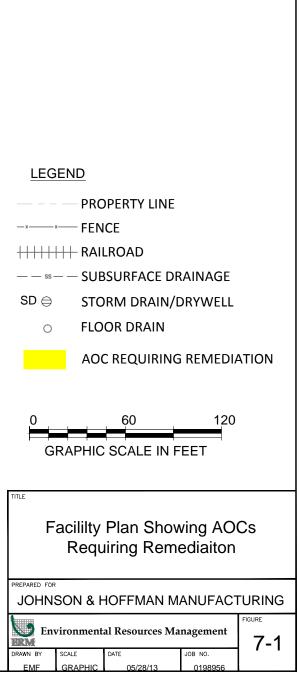












Tables

#### Table 1-1 Summary of June 2012 NYSDEC RI Report Comments Johnson and Hoffman Manufacturing Facility Carle Place, New York

NYSDEC Comment #	Summary of Comment	How/Where Addressed in May 2013 RI Addendum
1	Include the names of Volunteers who entered into the Voluntary Cleanup Agreement and name the current property owner.	See Section 1.1.
2	Provide more detail regarding dissolution of J&H Manufacturing Corpo. in 2004 and the a new corporation with the same name.	See Section 1.1.
3	Clarify if the four 55-gallon drums of soil from the 1997 wastewater trench repair work were removed off-site or returned to the excavation.	See ERM response letter dated 27 August 2012 provided in Appendix A.
4	Add a sub-section that details the IRMs that have been implemented. Update Figure 1-5 to identify which AOCs require remedial actions and which AOCs no longer require remedial action due to IRM actions.	Section 2.8.1 describes the completed IRM for AOC 7. This is the only AOC where an IRM was performed. Figure 7-1 shows the AOCs that still require remedial action.
5	The RIR should include the former PCE/TCE Usage Area as an AOC based on the sub-slab soil vapor sample JH-SS-04 results.	See ERM response letter dated 27 August 2012 provided in Appendix A.
6	Soil Sampling for PCE Delineation: This section should be updated to include the post- excavation soil sampling results. Soil sample SB-11 exceeded the SCOGW for PCE. If additional soil sample was collected from the SB-11 soil boring location, please provide the results.	See ERM response letter dated 27 August 2012 provided in Appendix A regarding boring SB 11. Section 2.8.1 presents the AOC 7 post-remedial soil sampling results.
7	PAHs exceeded the GW Standards in MW-4. The storm drain located near MW-4 should be investigated. To determine if PAHs may be attributed to an off-site source, an off-site investigation at upgradient properties should be done.	See ERM response letter dated 27 August 2012 provided in Appendix A. Follow-up on-Site sampling of both soil and groundwater was performed and is reported in Sections 2.10 and 3.1.
8	The vertical extent of contamination at sample location SR-01 is not defined deeper than 8 feet below the base of the recharge basin.	See Section 2.6. Additional soil sampling was performed at SR-01 and PAHs were found to be below the SCOC and SCOGW at a depth of 9.0 feet below the bottom of the recharge basin.
9	Background soil sample BG-01 exceeds SCOC and SCOGW for total PCBs.	See Section 2.1. Additional soil samples were collected at this location and no PCBs were detected.
10	The RI Report should reflect the results of all soil vapor intrusion sampling events and discuss the modification of the SVE system to a sub-slab depressurization system.	Section 2.8.2 summarizes the results of vapor intrusion sampling conducted since July 2011. Section 2.8.3 specifcally discusses the change from soil vapor extraction to sub-slab depressurization.
11	Prior direction from NYSDOH regarding no further SVI sampling at Fun World was conditional upon no rebound effect occurring with the post-SVE termination sampling event. Please update the RI Report to include these results.	See Section 2.8.4.2.
12	Figure 3-3 should indicate the data in ug/kg and please verify that units of data are indicated on all figures.	Comment acknowledged. Similar figures in this document note the correct units of concentration.
13	In addition to above comments, ERM should verify that all comments provided in a letter dated April 24, 2009 by the Department have been addressed.	See ERM response letter dated 27 August 2012 provided in Appendix A.

## TABLE 2-1Background Soil Sample ResultsJ&H Site - Carle Place, NY

			BG-01	BG-01	BG-01
	6NYCRR PART 375	6 NYCRR PART375	JB19935-1	JB19935-2	JB19935-3
	Unrestricted	AND CP-51	10/23/2012	10/23/2012	10/23/2012
CONSTITUENT (ug/kg)	SCO	COMMERCIAL SCO	Primary	Duplicate 1	Primary
Starting Depth (ft)	-	-	0	0	0
Ending Depth (ft)	-	-	0.17	0.17	1
Aroclor 1016			110UJ	120UJ	120UJ
Aroclor 1221			110UJ	120UJ	120UJ
Aroclor 1232			110UJ	120UJ	120UJ
Aroclor 1242			110UJ	120UJ	120UJ
Aroclor 1248			110UJ	120UJ	120UJ
Aroclor 1254			110UJ	120UJ	120UJ
Aroclor 1260			110UJ	120UJ	120UJ
Aroclor-1262			110UJ	120UJ	120UJ
Aroclor-1268			110UJ	120UJ	120UJ
Total PCBs	100	1000	ND	ND	ND

Notes:

Exceedances of the Unrestricted Soil Cleanup Objective (SCO) are indicated with brackets.

U = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

# TABLE 2-2AOC 5 Recharge Basin Vertical Delineation Soil Sample ResultsJ&H Site - Carle Place, NY

			SR-01	SR-01	SR-01	SR-01	SR-01
	6NYCRR PART 375	6 NYCRR PART375	JB23169-1	JB23169-6	JB23169-2	JB23169-3	JB23169-4
	Unrestricted	AND CP-51	12/6/2012	12/6/2012	12/6/2012	12/6/2012	12/6/2012
CONSTITUENT (ug/kg)	SCO	COMMERCIAL SCO	Primary	Duplicate 1	Primary	Primary	Primary
Starting Depth (ft)	-	-	9	9	10	11	13
Ending Depth (ft)	-	-	9.5	9.5	10.5	11.5	13.5
Acenaphthene	20000	500000	33U	41U	31U	32U	41U
Acenaphthylene	100000	500000	33U	41U	31U	32U	41U
Anthracene	100000	500000	46.2	34.7J	31U	32U	41U
Benzo(a)anthracene	1000	5600	296	221	31U	32U	38.7J
Benzo(a)pyrene	1000	1000	366	278	31U	32U	41
Benzo(b)fluoranthene	1000	5600	488	360	31U	32U	57.6
Benzo(ghi)perylene	100000	500000	330	277	31U	32U	36.4J
Benzo(k)fluoranthene	800	56000	260	232	31U	32U	20.0J
Chrysene	1000	56000	455	358	31U	32U	50.2
Dibenzo(a,h)anthracene	330	560	95.3	73.4	31U	32U	41U
Fluoranthene	100000	500000	859	665	31U	32U	80.3
Fluorene	30000	500000	33U	41U	31U	32U	41U
Indeno(1,2,3-cd)pyrene	500	5600	288	238	31U	32U	30.5J
Naphthalene	12000	500000	33U	41U	31U	32U	41U
Phenanthrene	100000	500000	346	240	31U	32U	27.4J
Pyrene	100000	500000	667	494	31U	32U	64.3

Notes:

Exceedances of the Unrestricted Soil Cleanup Objective (SCO) are indicated with brackets.

U = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

	IH-IA-01	IH-SS-01	IH-SS-01	IH-IA-01	IH-SS-01	JH-IA-01	IH-SS-01	IH-IA-01	JH-SS-01
CONSTITUENT (ug/m3)	7/15/2011	7/15/2011	, , , , , , , , , , , , , , , , , , ,	2/10/2012	2/10/2012	12/17/2012	12/17/2012	3/12/2013	3/12/2013
1,1,1-Trichloroethane	0.22U	0.22U	1.1U	1.1U	1.1U	1.1U	1.1U	1.1U	1.1U
1,1,2,2-Tetrachloroethane	0.22U	0.22U 0.27U	1.1U 1.4U	1.1U 1.4U	1.1U 1.4U	1.1U 1.4U	1.1U 1.4U	1.10 1.4U	1.1U 1.4U
1,1,2-Trichloroethane	0.22U	0.22U	1.1U	1.1U	1.1U	1.1U	1.1U	1.1U	1.1U
1,1-Dichloroethane	0.220 0.81U	0.22U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,1-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
1,2,4-Trimethylbenzene	0.98U	0.841	0.98U	0.88]	0.98U	0.691	7.4	7.9	8.8
1,2-Dibromoethane	0.31U	0.31U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U
1,2-Dichlorobenzene	0.24U	0.24U	1.5U	1.00 1.2U	1.5U	1.2U	1.2U	1.00 1.2U	1.00 1.2U
1,2-Dichloroethane	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,2-Dichloropropane	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
1,3,5-Trimethylbenzene	0.98U	0.92U	0.92U	0.98U	0.98U	0.98U	1.8	1.5	2.2
1.3-Butadiene	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U
1,3-Dichlorobenzene	0.60U	0.60U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U
1.4-Dichlorobenzene	0.9	0.60U	1.2U	0.66]	1.2U	1.2U	1.2U	1.2U	1.2U
1.4-Dioxane	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.54J	0.72U
2,2,4-Trimethylpentane	0.93U	0.93U	0.93U	0.61]	0.47]	0.93U	0.93U	0.93U	0.93U
2-Butanone	2.5	3.5	1.5	1.1	1.3	2.4	1.8	3.2	2.9
2-Hexanone	0.82U	0.491	0.82U	0.82U	0.82U	0.9	0.82U	0.82U	0.82U
3-Chloropropene	0.63U	0.4)J	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U
4-Ethyltoluene	0.03U	0.98U	0.98U	0.98U	0.98U	0.98U	1.7	0.79]	1.2
4-Methyl-2-Pentanone	3.4	0.98U	0.98U	0.98U 0.82U	0.98U 0.82U	0.98U	0.82U	0.66]	0.53]
Acetone	23.8	13	9.7	28.3	7.4	21	9.7	19	13
Benzene	0.38]	0.64U	0.64U	1.4	0.64U	1.1	0.61]	0.61J	0.42]
Benzyl chloride	1.0U	1.0U	1U	1.1 1U	1U	1.0U	1.0U	1.0U	1.0U
Bromodichloromethane	0.27U	0.27U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U
Bromoethene	0.27 U	0.27 U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U
Bromoform	0.41U	0.41U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U
Carbon Disulfide	0.410 0.62U	0.93	0.5J	0.62U	0.62U	0.62U	0.62U	0.62U	0.62U
Carbon Tetrachloride	0.25U	0.25U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U
Chlorobenzene	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
Chloroethane	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U
Chloroform	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
Chloromethane	1.3	0.391	0.41U	1.2	0.41U	1.3	0.351	1.2	0.41U
cis-1,2-Dichloroethene	0.79U	0.83	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
cis-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Cyclohexane	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U
Dibromochloromethane	0.34U	0.34U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U
Dichlorodifluoromethane	2.3	2.5	2	2.4	2.2	2.8	2.9	2.2	2.2
Ethanol	127]	4	5.3	121]	6.6	174J	42.2	53.7	27.5
Ethylbenzene	1	0.78]	0.87U	0.61]	0.87U	0.521	1.7	1.6	2.4
Freon 113	0.31U	0.31U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U
Freon 114	0.28U	0.28U	1.5U	1.50 1.4U	1.50 1.4U	1.4U	1.4U	1.60 1.4U	1.50 1.4U
Heptane	0.74J	0.82U	0.82U	0.61J	0.82U	1	0.45J	0.57J	0.53J
Hexachlorobutadiene	0.96U	0.96U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U
Hexane	0.60]	0.39]	0.7U	1	0.7U	0.92	0.53]	0.70U	0.39J
Isopropyl Alcohol	24	1.1	0.49U	25.8	0.81	43	28.3	17	12
Isopropylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
m+p-Xylene	3.9	3.2	0.90U	1.8	0.90U	1.5	6.5	6.1	9.6
Methyl Tertiary Butyl Ether	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
Methylene Chloride	0.87	0.87	0.69U	0.9	0.69U	3.8	1.5	0.9	1
n-Propylbenzene	0.98U	0.98U	0.99U	0.98U	0.99U	0.98U	0.98U	0.98U	0.98U
o-Xylene	1.3	1.2	0.87U	0.65]	0.87U	0.61J	2.6	2.5	3.6
Styrene	0.85U	4.7	0.85U	0.85U	0.85U	0.85U	0.47]	0.85U	0.51J
Tetrachloroethene	6.8	75.9	5.9	0.65	2.6	3.7	2.9	3.1	8.8
Tetrahydrofuran	0.59U	0.56J	0.59U	0.59U	0.59U	0.59U	1.4	1.1	1.2
Toluene	1.9	2.2	1.2	5.7	0.41J	2.8	19	6.4	11
trans-1,2-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.41) 0.79U	0.79U	0.79U	0.4 0.79U	0.79U
trans-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
	0.21U	4.3	0.7	0.21U	0.53	0.21U	0.7	0.21U	0.22
Trichloroethene			···	0.210	0.00				
Trichloroethene Trichlorofluoromethane		18	1.5	16	14	16	17	12	1.3
Trichlorofluoromethane	1.7	1.8 0.51U	1.5 0.51U	1.6 0.51U	1.4 0.51U	1.6 0.51U	1.7 0.51U	1.2 0.51U	1.3 0.51U
		1.8 0.51U NT	1.5 0.51U 0.87U	1.6 0.51U 2.5	1.4 0.51U 0.87U	1.6 0.51U 2.1	1.7 0.51U 9.1	1.2 0.51U 8.3	1.3 0.51U 13

		HI CO 00	HI 66 02		HI CC 00	HI IA 02	HI CO 00		HI CC 00
	JH-IA-02	JH-SS-02 7/15/2011	JH-SS-02	JH-IA-02 2/10/2012	JH-SS-02 2/10/2012	JH-IA-02 12/3/2012	JH-SS-02 12/3/2012	JH-IA-02 3/12/2013	JH-SS-02 3/12/2013
CONSTITUENT (ug/m3) 1,1,1-Trichloroethane	7/15/2011 0.22U	0.22U	12/7/2011 0.76J	1.1U	2/10/2012	12/3/2012 1.1U	12/3/2012 1.1U	1.1U	4.1
1,1,2,2-Tetrachloroethane	0.22U 0.27U	0.22U 0.27U	0.76J 1.4U	1.1U 1.4U	2.6 1.4U	1.1U 1.4U	1.1U 1.4U	1.1U 1.4U	4.1 1.4U
1,1,2-Trichloroethane	0.27U	0.27U 0.22U	1.4U 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U
1.1-Dichloroethane	0.22U 0.81U	0.22U 0.81U	0.93	0.81U	0.81U	0.81U	0.571	0.81U	0.81U
1,1-Dichloroethene	0.79U	0.79U	0.93 0.79U	0.79U	0.79U	0.79U	0.37J	0.79U	0.79U
1,2,4-Trimethylbenzene	0.49]	1.3	0.98U	2.8	0.98U	3.9	3.6	13	17
1,2-Dibromoethane	0.4)J	0.31U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U
1,2-Dichlorobenzene	0.24U	0.24U	1.5U 1.2U	1.5U	1.3U	1.3U	1.3U	1.3U	1.3U
1,2-Dichloroethane	0.240 0.81U	0.240 0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,2-Dichloropropane	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
1,3,5-Trimethylbenzene	0.98U	0.92U	0.92U	0.84J	0.92U	1.3	1.1	3.5	4.4
1,3-Butadiene	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U
1,3-Dichlorobenzene	0.60U	0.60U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dichlorobenzene	154	221	5.5	2.4	2.6	1.2U	1.2U	1.2U	1.2U
1.4-Dioxane	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
2,2,4-Trimethylpentane	0.701	0.93U	0.93U	1.4	0.71	1.2	0.93U	0.611	0.93U
2-Butanone	2.5	2.1	5.6	3.2	1.3	2.9	18	3.2	11
2-Hexanone	0.45]	0.82U	1.2	0.82U	0.82U	0.82U	1.2	0.82U	3.4
3-Chloropropene	0.43J	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U
4-Ethyltoluene	0.98U	0.98U	0.98U	0.48]	0.98U	0.98	0.88]	2	2.2
4-Methyl-2-Pentanone	0.391	0.90U	0.90U	0.40J	0.90U	0.70]	2	0.86	1.2
Acetone	22	13	28.5	211	11	41.6	71.3	72	1.2
Benzene	0.51J	0.64U	0.32J	1.8	0.64U	2	1.2	1.3	0.58J
Benzyl chloride	1.0U	1.0U	1U	1U	1U	1.0U	1.0U	1.0U	1.0U
Bromodichloromethane	0.27U	0.27U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U
Bromoethene	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U
Bromoform	0.41U	0.41U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U
Carbon Disulfide	0.62U	0.62U	0.62U	0.62U	0.62U	0.62U	0.62U	0.62U	0.56J
Carbon Tetrachloride	0.25U	0.6	1.3U	1.3U	1.3U	1.3U	0.63J	1.3U	1.3U
Chlorobenzene	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
Chloroethane	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U
Chloroform	3.6	21	3.9	0.93J	3.5	0.98U	16	0.98U	2.5
Chloromethane	1.6	0.23J	0.27J	1.1	0.23J	0.93	0.39J	1.1	0.41U
cis-1,2-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
cis-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Cyclohexane	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U
Dibromochloromethane	0.34U	0.34U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U
Dichlorodifluoromethane	2.5	2.2	3.4	2.6	4.9	2	2.5	2.2	7.4
Ethanol	47.7	2.3	5.5	177	11	67.1	71	103J	11
Ethylbenzene	0.87	4.8	0.43J	1.8	0.87U	1.7	1.4	4.8	3.2
Freon 113	0.31U	0.31U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U
Freon 114	0.28U	0.28U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U
Heptane	0.53J	0.82U	0.82U	1.8	0.82U	1.1	0.70J	2.3	1.1
Hexachlorobutadiene	0.96U	0.96U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U
Hexane	0.63J	0.70U	0.7U	1.6	0.7U	1.9	0.99	0.95	0.70U
Isopropyl Alcohol	2.3	0.59	1.7	23	1	25.6	28.3	15	4.7
Isopropylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.54J	0.98U
m+p-Xylene	3.3	26	1.2	6.9	0.48J	6.5	5.2	19	15
Methyl Tertiary Butyl Ether	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
Methylene Chloride	0.97	0.69	8.7	0.8	1.4	1.3	1.9	0.73	0.8
n-Propylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
o-Xylene	1.2	11	0.87U	2.7	0.87U	2.6	2.1	6.9	5.6
Styrene	0.85U	0.85U	0.85U	1.2	0.85U	0.72J	0.60J	0.77J	0.68J
Tetrachloroethene	8.1	171	235	2.2	349	0.41	12	14	167
Tetrahydrofuran	0.59U	0.59U	0.59U	0.59U	0.59U	2.1	6.2	1.3	0.38J
Toluene	2.2	1.3	2.5	51.6	0.53J	21	17	23	12
trans-1,2-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
trans-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
	0.21U	15	15	0.23	17	0.21U	3.3	0.21U	13
Trichloroethene			~						
Trichlorofluoromethane	1.6	1.7	2	1.6	2.4	1.2	2	1.2	1.7
	1.6 0.51U NT	1.7 0.51U NT	2 0.51U 1.2	1.6 0.51U 9.6	2.4 0.51U 0.48J	1.2 0.51U 8.7	2 0.51U 7.4	1.2 0.51U 26	0.51U 20

Γ		HI CC 00	THE CO DO	TIT 14 00	HI CC 00	TIT IA 00	TH CC 00	11114 00	THE CO DO
	JH-IA-03	JH-SS-03	JH-SS-03	JH-IA-03	JH-SS-03	JH-IA-03	JH-SS-03	JH-IA-03	JH-SS-03
CONSTITUENT (ug/m3) 1,1,1-Trichloroethane	7/15/2011 0.22U	7/15/2011 0.22U	12/7/2011 1.1U	2/10/2012 1.1U	2/10/2012 1.1U	12/3/2012 1.1U	12/3/2012 1.1U	3/12/2013 1.1U	3/12/2013 1.1U
1,1,2,2-Tetrachloroethane	0.22U 0.27U	0.22U 0.27U	1.1U 1.4U						
1,1,2-Trichloroethane	0.27U	0.27U 0.22U	1.4U 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U
1.1-Dichloroethane	0.22U 0.81U	0.22U 0.81U	0.81U						
1,1-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
1,2,4-Trimethylbenzene	0.69]	0.98U	0.98U	2.3	5.9	0.98U	3.2	1.3	11
1,2-Dibromoethane	0.31U	0.31U	1.5U						
1,2-Dichlorobenzene	0.24U	0.24U	1.5U	1.5U	1.5U	1.5U	1.3U	1.5U	1.5U
1,2-Dichloroethane	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,2-Dichloropropane	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
1.3.5-Trimethylbenzene	0.98U	0.98U	0.98U	0.84J	2.3	0.98U	0.98	0.54]	2.6
1,3-Butadiene	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U
1,3-Dichlorobenzene	0.60U	0.60U	1.2U						
1,4-Dichlorobenzene	1.6	0.72	1.2U	0.66J	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dioxane	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
2,2,4-Trimethylpentane	0.70J	0.93U	0.93U	1.2	0.89]	0.47J	0.93U	0.93U	0.93U
2-Butanone	5	2.9	1	4.4	20	6.8	15	2.4	9.4
2-Hexanone	1.3	0.82U	0.82U	0.82U	0.82U	0.82U	0.78J	0.82U	0.82U
3-Chloropropene	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U
4-Ethyltoluene	0.98U	0.98U	0.98U	0.59J	1.8	0.98U	0.79J	0.98U	1.3
4-Methyl-2-Pentanone	0.66J	0.82U	0.82U	0.49J	0.82U	0.82U	1.1	0.82U	0.82U
Acetone	42.3	15	6.9	177	114	42	40.1	48.9	26.1
Benzene	0.48J	0.89	0.45J	1.9	1.1	1.3	1.2	0.61J	0.64
Benzyl chloride	1.0U	1.0U	1U	1U	1U	1.0U	1.0U	1.0U	1.0U
Bromodichloromethane	0.27U	0.27U	1.3U						
Bromoethene	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U
Bromoform	0.41U	0.41U	2.1U						
Carbon Disulfide	0.62U	0.31J	0.31J	0.62U	0.62U	0.62U	0.62U	0.62U	0.62U
Carbon Tetrachloride	0.25U	0.25U	1.3U						
Chlorobenzene	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
Chloroethane	0.26J	0.45J	0.53U						
Chloroform	0.98U	0.83J	0.49J	1.2	0.83J	0.54J	0.98U	0.98U	0.68J
Chloromethane	3.9	0.31J	0.41U	1.1	0.5	0.87	0.52	1.3	0.41U
cis-1,2-Dichloroethene	0.79U	16	10	0.79U	6.7	0.79U	3.3	0.79U	11
cis-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Cyclohexane	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U
Dibromochloromethane	0.34U	0.34U	1.7U						
Dichlorodifluoromethane	2.3	2 1.6	2.7	2.3 54.1	5.4 104	1.9 53.9	2.3 46	2.4 53.7	3.4 31.5
Ethanol							46		
Ethylbenzene Freon 113	1.3 0.31U	0.87U 0.31U	0.87U 1.5U	1.7 1.5U	1.1 1.5U	0.87U 1.5U	1.7 1.5U	0.42J 1.5U	3 1.5U
Freon 113 Freon 114	0.31U 0.28U	0.31U 0.28U	1.5U 1.4U						
	0.280	0.28U	0.82U	1.40	0.74J	0.82U	0.94	0.49J	0.66J
Heptane Hexachlorobutadiene	0.98 0.96U	0.96U	2.1U						
Hexane	0.74	0.95	0.7U	1.6	0.7	1.1	1.1	0.46J	0.35J
Isopropyl Alcohol	3.2	0.49U	0.49	5.2	22	21	1.1	4.9	8.1
Isopropylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
m+p-Xylene	4.8	0.74J	0.98U	6.1	4.3	0.90U	4.8	1.6	11
Methyl Tertiary Butyl Ether	0.72U	0.74J	0.72U						
Methylene Chloride	3.2	1.3	1.6	0.8	0.83	1	0.87	0.97	0.87
n-Propylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
o-Xylene	1.9	0.90U	0.90U	2.4	1.7	0.90U	1.8	0.69]	4.2
Styrene	0.85U	0.85U	0.47]	1.2	0.55]	0.85U	0.60J	0.85U	0.51J
Tetrachloroethene	69.8	997	339	2.5	133	1.1	42	1.7	359
Tetrahydrofuran	0.91	1.1	0.59U	0.59U	8.3	5.3	15	0.59	5.3
Toluene	1.8	2	0.94	64.4	26	3.7	81	1	38.1
trans-1,2-Dichloroethene	0.79U	0.40J	0.79U						
trans-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Trichloroethene	0.54	70.4	40	0.21	19	0.21U	9.7	0.21U	32
incluoidentene									2.9
Trichlorofluoromethane	1.8	1.7	1.5	1.5	1.9	1.1	1.3	1.3	2.9
	1.8 0.51U	1.7 0.51U	1.5 0.51U	1.5 0.51U	1.9 0.51U	1.1 0.51U	0.51U	0.51U	0.51U

	IH-IA-04	IH-SS-04	JH-SS-04	JH-IA-04	JH-SS-04	JH-IA-04	IH-SS-04	IH-IA-04	JH-SS-04
CONSTITUENT (ug/m3)	7/15/2011	7/15/2011	,	2/10/2012	2/10/2012	12/17/2012	12/17/2012	3/12/2013	3/12/2013
1,1,1-Trichloroethane	0.22U	0.6	1.1U						
1,1,2,2-Tetrachloroethane	0.27U	0.27U	1.4U						
1,1,2-Trichloroethane	0.22U	0.22U	1.1U						
1,1-Dichloroethane	0.81U								
1,1-Dichloroethene	0.79U								
1,2,4-Trimethylbenzene	0.98U	1.2	0.98U	2.6	9.3	0.98U	3.9	1.5	15
1,2-Dibromoethane	0.31U	0.31U	1.5U						
1,2-Dichlorobenzene	0.24U	0.24U	1.2U						
1,2-Dichloroethane	0.81U								
1,2-Dichloropropane	0.92U								
1,3,5-Trimethylbenzene	0.98U	0.98U	0.98U	0.88J	3.5	0.98U	1.5	0.49J	3.1
1,3-Butadiene	0.44U								
1,3-Dichlorobenzene	0.60U	0.60U	1.2U						
1,4-Dichlorobenzene	0.60U	0.6	1.2U	0.59J	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dioxane	0.72U								
2,2,4-Trimethylpentane	0.47J	0.93U	0.93U	1	1	2.5	0.56J	0.93U	0.93U
2-Butanone	1.2	116	2.3	4.1	24	0.59U	2.9	0.86	2.6
2-Hexanone	0.82U	5.7	0.82U	0.82U	0.82U	0.82U	42.9	0.82U	0.82U
3-Chloropropene	0.63U								
4-Ethyltoluene	0.98U	0.98U	0.98U	0.54J	2.9	0.98U	1.1	0.98U	1.6
4-Methyl-2-Pentanone	0.82U	3.1	0.82U	0.41J	0.82U	0.82U	1.1	0.82U	0.82U
Acetone	12	539	11	157	207	7.6	33.7	23	26.8
Benzene	0.61J	6.1	0.86	1.6	1.1	0.7	1.3	0.54J	0.83
Benzyl chloride	1.0U	1.0U	1U	1U	1U	1.0U	1.0U	1.0U	1.0U
Bromodichloromethane	0.27U	0.27U	1.3U						
Bromoethene	0.87U								
Bromoform	0.41U	0.41U	2.1U						
Carbon Disulfide	0.62U	4.4	0.34J	0.62U	0.62U	0.62U	0.62U	0.62U	0.62U
Carbon Tetrachloride	0.25U	0.25U	1.3U	1.3U	1.3U	0.62J	1.3U	1.3U	1.3U
Chlorobenzene	0.92U	0.92U	0.83J	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
Chloroethane	0.53U								
Chloroform	0.98U	3.7	1.6	1.2	1.8	0.78J	1	0.98U	0.83J
Chloromethane	1.1	0.43	0.23J	0.99	0.29J	1.2	0.54	1.1	0.72
cis-1,2-Dichloroethene	0.79U 0.91U	3.6 0.91U	1.7	0.79U	2.9 0.91U	0.79U 0.91U	1.1	0.79U 0.91U	0.91
cis-1,3-Dichloropropene	0.91U 0.69U								
Cyclohexane Dibromochloromethane	0.69U	0.69U 0.34U	0.69U 1.7U	0.690 1.7U	0.690 1.7U	0.69U 1.7U	0.69U 1.7U	0.69U	0.69U 1.7U
Dichlorodifluoromethane	2.1	2.1	2.5	2.1	2.3	3.2	2.8	2.2	2.4
Ethanol	47.3	2.1	3.2	2.1 89.5	2.3	3.2	41.1	36.9	39.9
Ethylbenzene	47.3 0.61J	4.2	0.87U	1.6	1.7	0.87U	3	1.1	7.4
Freon 113	0.81J 0.31U	4.2 0.31U	1.5U	1.6 1.5U	1.7 1.5U	1.5U	1.5U	1.1 1.5U	1.5U
Freon 114	0.31U 0.28U	0.28U	1.50 1.4U	1.3U	1.3U	1.3U	1.3U	1.50 1.4U	1.5U
Heptane	0.20U	3	0.82U	0.98	0.74J	0.82U	1.40	0.40J	0.98
Hexachlorobutadiene	0.96U	0.96U	2.1U						
Hexane	0.42]	4.2	0.7U	1.4	0.56J	25	1.8	0.63J	1.1
Isopropyl Alcohol	3.4	6.1	0.59	11	30.7	4.2	31.2	7.6	112
Isopropylbenzene	0.98U								
m+p-Xylene	2	7.8	0.74J	5.6	6.9	0.96	7.8	4.1	16
Methyl Tertiary Butyl Ether	0.72U								
Methylene Chloride	1.4	0.87	0.94	1.1	0.94	15	3	3.5	1.8
n-Propylbenzene	0.98U								
o-Xylene	0.69J	2.9	0.87U	2.2	2.8	0.87U	3	1.5	6.1
Styrene	0.85U	2	0.85U	1.1	0.98	0.85U	0.68J	0.85U	0.68J
Tetrachloroethene	16	4200	623	2	220	0.37	243	1.4	216
Tetrahydrofuran	0.59U	6.5	0.62	0.59U	12	0.59U	1.6	0.59U	0.8
Toluene	1.8	7.5	1.2	53.1	32	1.2	106	1.3	231
trans-1,2-Dichloroethene	0.79U								
trans-1,3-Dichloropropene	0.91U								
Trichloroethene	0.21U	435	118	0.19J	76.3	0.21U	66.1	0.21U	40
Trichlorofluoromethane	1.5	1.6	1.4	1.6	1.3	5.6	1.8	1.3	1.7
Vinyl chloride	0.51U								
viityi chioride	0.010	0.010	0.510	0.510	0.510	0.510	0.510	0.510	0.510

Γ			THE CO OF						
	JH-IA-05	JH-SS-05	JH-SS-05	JH-IA-05 2/10/2012	JH-SS-05 2/10/2012	JH-IA-05	JH-SS-05	JH-IA-05	JH-SS-05
CONSTITUENT (ug/m3) 1,1,1-Trichloroethane	7/15/2011 0.22U	7/15/2011 0.71	12/7/2011	1.1U	8.2	12/3/2012 1.1U	12/3/2012 1.1U	3/12/2013 1.1U	3/12/2013
1,1,2,2-Tetrachloroethane	0.22U 0.27U	0.71 0.27U	1.1 1.4U	1.1U 1.4U	0.2 1.4U	1.1U 1.4U	1.1U 1.4U	1.1U 1.4U	1.4U
1,1,2-Trichloroethane	0.27U	0.27U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U	1.40 1.1U
1,1-Dichloroethane	0.220 0.81U	0.22U 0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.53]
1.1-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U	0.33J
1,2,4-Trimethylbenzene	19	0.64J	0.74J	1	7.4	2.6	2.4	0.98	12
1,2-Dibromoethane	0.31U	0.31U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U
1,2-Dichlorobenzene	0.24U	0.24U	1.5U	1.3U	1.3U	1.3U	1.3U	1.5U	1.50 1.2U
1,2-Dichloroethane	0.240 0.81U	0.240 0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,2-Dichloropropane	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
1,3,5-Trimethylbenzene	5.9	0.92U	0.92U	0.92U	2.7	0.79[	0.74J	0.92U	2.5
1,3-Butadiene	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U
1.3-Dichlorobenzene	0.60U	0.60U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dichlorobenzene	0.84	0.60U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dioxane	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
2,2,4-Trimethylpentane	0.511	0.93U	0.93U	0.561	0.56]	0.75]	0.93U	0.93U	0.93U
2-Butanone	14	3.8	1.2	1.5	15	2.8	3.2	1.1	2.3
2-Hexanone	0.41]	0.41J	0.82U	0.82U	0.82U	0.82U	0.82U	0.82U	0.82U
3-Chloropropene	0.41J	0.41J	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U
4-Ethyltoluene	2.8	0.98U	0.98U	0.98U	2.5	0.74J	0.691	0.98U	1.2
4-Methyl-2-Pentanone	0.82U	0.90U	0.90U	0.90U	0.82U	0.49]	0.66]	0.90U	0.82U
Acetone	48.2	22	8.8	22	175	14	10	5.2	9.3
Benzene	0.58]	0.38J	0.51J	1.2	0.7	1.3	0.58]	0.35J	0.58]
Benzyl chloride	1.0U	1.0U	1U	1U	1U	1.0U	1.0U	1.0U	1.0U
Bromodichloromethane	0.27U	0.27U	1.3U	1.3U	1.3U	1.0U	1.3U	1.0U	1.3U
Bromoethene	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U
Bromoform	0.41U	0.41U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U
Carbon Disulfide	0.62U	0.81	0.62	0.62U	0.62U	0.62U	0.62U	0.62U	0.59]
Carbon Tetrachloride	0.25U	0.25U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U
Chlorobenzene	0.92U	0.92U	0.44J	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
Chloroethane	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U	0.53U
Chloroform	0.98U	0.54J	0.98U	0.98U	0.59]	0.98U	0.98U	0.98U	0.63]
Chloromethane	1.6	0.83	0.41	0.95	0.27]	0.87	0.41U	1.2	0.41U
cis-1,2-Dichloroethene	0.79U	27	20	0.79U	76.1	0.79U	5.9	0.79U	412
cis-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Cyclohexane	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U	0.69U
Dibromochloromethane	0.34U	0.34U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U
Dichlorodifluoromethane	2.2	2.2	2.8	1.9	2.5	2.1	2.2	2.3	2
Ethanol	29.4	4.9	20.3	17	77.6	22	21.5	2.4	18
Ethylbenzene	1.9	0.87U	0.43J	0.61]	0.96	1.1	1	0.87U	3.6
Freon 113	0.31U	0.31U	1.5U	1.5U	0.92J	1.5U	1.5U	1.5U	1.5U
Freon 114	0.28U	0.28U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U
Heptane	0.61J	0.82U	0.82U	0.45J	0.49J	0.74J	0.53J	0.82U	0.57J
Hexachlorobutadiene	0.96U	0.96U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U
Hexane	0.60J	0.34J	1.1	0.92	0.39J	1.1	0.70U	0.70U	0.99
Isopropyl Alcohol	6.1	1.1	1.5	2.4	23	14	12	0.49U	5.7
Isopropylbenzene	0.74J	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
m+p-Xylene	7.4	1.1	1.2	1.9	3.5	3.9	3.3	0.48J	10
Methyl Tertiary Butyl Ether	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
Methylene Chloride	0.83	0.8	6.9	1	0.69U	1.6	1.3	0.66J	2.2
n-Propylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
o-Xylene	3.4	0.87U	0.87U	0.78J	1.7	1.5	1.3	0.87U	3.8
Styrene	6.8	0.85U	4	3.3	2.1	1.5	1.5	3.4	1.2
Tetrachloroethene	42	1040	698	1.4	1480	0.35	183	2.1	3380
Tetrahydrofuran	0.59U	2	0.59U	0.59U	7.1	2.5	3.2	0.59U	0.83
Toluene	2.4	1.3	1.9	4.5	7.2	12	23	0.45J	71.6
	0.79U	2.5	2.8	0.79U	11	0.79U	0.91	0.79U	20
trans-1,2-Dichloroethene	0.770				0.0111	0.91U	0.91U		0.91U
trans-1,2-Dichloroethene trans-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.910	0.910	0.91U	0.710
		0.91U 28	0.91U 23	0.91U 0.21U	67.2	0.91U 0.21U	7.5	0.910	215
trans-1,3-Dichloropropene	0.91U								
trans-1,3-Dichloropropene Trichloroethene	0.91U 0.75	28	23	0.21U	67.2	0.21U	7.5	0.21	215

	JH-OA-01	JH-OA-01	IH-OA-01	JH-OA-01	JH-OA-01	IH-OA-01
CONSTITUENT (ug/m3)	7/15/2011	12/7/2011	2/10/2012	12/3/2012	12/17/2012	3/12/2013
1,1,1-Trichloroethane	0.22U	1.1U	1.1U	1.1U	1.1U	1.1U
1,1,2,2-Tetrachloroethane	0.27U	1.4U	1.10 1.4U	1.4U	1.4U	1.4U
1,1,2-Trichloroethane	0.22U	1.1U	1.1U	1.1U	1.1U	1.1U
1,1-Dichloroethane	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,1-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
1,2,4-Trimethylbenzene	0.47]	0.49]	0.98U	0.64J	0.54J	0.98U
1,2-Dibromoethane	0.31U	1.5U	1.5U	1.5U	1.5U	1.5U
1,2-Dichlorobenzene	0.24U	1.2U	1.2U	1.2U	1.2U	1.2U
1,2-Dichloroethane	0.81U	0.81U	0.81U	0.81U	0.81U	0.81U
1,2-Dichloropropane	0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
1,3,5-Trimethylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
1,3-Butadiene	0.44U	0.44U	0.44U	0.44U	0.44U	0.44U
1,3-Dichlorobenzene	0.60U	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dichlorobenzene	0.60U	1.2U	1.2U	1.2U	1.2U	1.2U
1,4-Dioxane	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
2,2,4-Trimethylpentane	0.70J	0.51J	0.51J	0.51J	0.47J	0.93U
2-Butanone	1.7	1.3	1.4	1.1	0.68	17
2-Hexanone	0.82U	0.82U	0.82U	0.82U	0.82U	0.82U
3-Chloropropene	0.63U	0.63U	0.63U	0.63U	0.63U	0.63U
4-Ethyltoluene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
4-Methyl-2-Pentanone	0.82U	0.82U	0.82U	0.82U	0.82U	0.82U
Acetone	14	8.6	16	8.8	5.5	16
Benzene	0.35J	1.1	1.3	0.99	1.2	0.35J
Benzyl chloride	1.0U	1U	1U	1.0U	1.0U	1.0U
Bromodichloromethane	0.27U	1.3U	1.3U	1.3U	1.3U	1.3U
Bromoethene	0.87U	0.87U	0.87U	0.87U	0.87U	0.87U
Bromoform Carbon Disulfide	0.41U	2.1U	2.1U 0.62U	2.1U 0.62U	2.1U	2.1U
Carbon Disulfide Carbon Tetrachloride	0.62U 0.25U	0.62U 1.3U	0.62U 1.3U	0.620 1.3U	0.62U 1.3U	0.62U 1.3U
Chlorobenzene	0.25U 0.92U	0.92U	0.92U	0.92U	0.92U	0.92U
Chloroethane	0.920 0.53U	0.92U 0.53U	0.92U 0.53U	0.92U 0.53U	0.92U 0.53U	0.920 0.53U
Chloroform	0.53U 0.98U	0.53U 0.98U	0.53U 0.98U	0.53U 0.98U	0.53U 0.98U	0.53U 0.98U
Chloromethane	1.1	1.3	1.1	0.980	1.2	1.2
cis-1,2-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
cis-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Cyclohexane	0.69U	0.69U	0.69U	0.69U	0.69U	0.910 0.69U
Dibromochloromethane	0.34U	1.7U	1.7U	1.7U	1.7U	1.7U
Dichlorodifluoromethane	2.2	2.6	2.4	2.4	2.8	2.3
Ethanol	5.7	6.8	17	17	6.2	3.2
Ethylbenzene	0.41]	0.87U	0.48J	0.42]	0.65]	0.87U
Freon 113	0.31U	1.5U	1.5U	1.5Ú	1.5U	1.5U
Freon 114	0.28U	1.4U	1.4U	1.4U	1.4U	1.4U
Heptane	0.82U	0.41J	0.41J	0.40J	0.82U	0.82U
Hexachlorobutadiene	0.96U	2.1U	2.1U	2.1U	2.1U	2.1U
Hexane	0.42J	0.85	0.88	1.2	1.4	0.70U
Isopropyl Alcohol	1.9	1.9	2.4	1.8	1.7	0.79
Isopropylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
m+p-Xylene	1.3	1.2	1.3	1.4	2.4	0.87U
Methyl Tertiary Butyl Ether	0.72U	0.72U	0.72U	0.72U	0.72U	0.72U
Methylene Chloride	0.69	2	0.8	5.2	11	0.8
n-Propylbenzene	0.98U	0.98U	0.98U	0.98U	0.98U	0.98U
o-Xylene	0.48J	0.48J	0.48J	0.48J	0.78J	0.87U
Styrene	0.85U	0.85U	0.85U	0.85U	0.85U	0.85U
Tetrachloroethene	6	4.8	0.4	0.33	12	0.56
Tetrahydrofuran	0.59U	0.59U	0.59U	0.59U	0.59U	9.4
Toluene	3.6	3	2.3	2.4	92.7	0.53J
trans-1,2-Dichloroethene	0.79U	0.79U	0.79U	0.79U	0.79U	0.79U
trans-1,3-Dichloropropene	0.91U	0.91U	0.91U	0.91U	0.91U	0.91U
Trichloroethene	0.21U	0.21U	0.21U	0.21U	0.22	0.21U
Trichlorofluoromethane	1.6	1.5	1.5	2	1.7	1.1
Vinyl chloride	0.51U	0.51U	0.51U	0.51U	0.51U	0.51U
Xylene (total)	NT	1.7	1.8	1.9	3.2	0.87U

Notes:

 $\overline{U}$  = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

#### TABLE 2-4Fun World Soil Gas Sampling ResultsJ&H Site - Carle Place, NY

	JH-OSV-01	SV-01
CONSTITUENT (ug/m3)	12/7/2011	3/2/2006
1,1,1-Trichloroethane	0.71J	3.7U
1,1,2,2-Tetrachloroethane	1.4U	4.7U
1,1,2-Trichloroethane	1.1U	3.7U
1,1-Dichloroethane	0.81U	2.8U
1,1-Dichloroethene	0.79U	2.7U
1,2,4-Trichlorobenzene	NT	25UJ
1,2,4-Trimethylbenzene	0.98U	38J
1,2-Dibromoethane	1.5U	5.2U
1,2-Dichlorobenzene	1.2U	4.1UJ
1,2-Dichloroethane	0.81U	2.8U
1,2-Dichloropropane	0.92U	3.2U
1,3,5-Trimethylbenzene	0.98U	16
1,3-Butadiene 1,3-Dichlorobenzene	0.44U 1.2U	7.6U 4.1U
1,3-Dichlorobenzene	1.2U	4.1U 4.1U
1,4-Dioxane	0.72U	4.10 12U
2,2,4-Trimethylpentane	0.93U	NT
2-Butanone	1.1	10U
2-Hexanone	0.82U	14U
3-Chloropropene	0.63U	NT
4-Ethyltoluene	0.98U	29J
4-Methyl-2-Pentanone	0.82U	14U
Acetone	10	16
Benzene	0.64U	2.2U
Benzyl chloride	1U	3.5U
Bromodichloromethane	1.3U	23U
Bromoethene	0.87U	NT
Bromoform	2.1U	35U
Bromomethane	NT	2.6U
Carbon Disulfide	0.62U	11U
Carbon Tetrachloride Chlorobenzene	1.3U 0.92U	4.3U 3.1U
Chloroethane	0.920 0.53U	1.8U
Chloroform	4.8	3.3U
Chloromethane	0.41U	1.4U
cis-1,2-Dichloroethene	0.79U	2.7U
cis-1,3-Dichloropropene	0.91U	3.1U
Cyclohexane	0.69U	12U
Dibromochloromethane	1.7U	29U
Dichlorodifluoromethane	2.8	3.4U
Ethanol	2.8	6.4U
Ethylbenzene	0.87U	4.8
Freon 113	1.5U	5.2UJ
Freon 114	1.4U	4.8U
Heptane	0.82U	14U
Hexachlorobutadiene	2.1U 0.7U	36U 12U
Hexane Isopropyl Alcohol	0.70	8.4U
Isopropyl Alcohol Isopropylbenzene	0.74 0.98U	8.40 17U
m+p-Xylene	0.98U 0.87U	24
Methyl Tertiary Butyl Ether	0.72U	12UJ
Methylene Chloride	0.69U	4.8U
n-Propylbenzene	0.98U	17U
o-Xylene	0.87U	22
Styrene	0.85U	2.9U
Tetrachloroethene	40	1400
Tetrahydrofuran	0.59U	10U
Toluene	3.5	2.8
trans-1,2-Dichloroethene	0.79U	14U
trans-1,3-Dichloropropene	0.91U	3.1UJ
Trichloroethene	1.7	40
Trichlorofluoromethane	1.6	3.8U
Vinyl chloride	0.51U	1.7U
Xylene (total)	0.87U	NT

## TABLE 2-4Fun World Soil Gas Sampling DataJ&H Site - Carle Place, NY

Notes:

 $\overline{U}$  = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

# Table 2-5AOC 9 Soil Sampling ResultsJ&H Site - Carle Place, NY

			DIA7 01		DW/ 01		
			DW-01	DW-01	DW-01	DW-01	DW-01
	6NYCRR PART 375	6NYCRR PART 375	JB27538-2	JB27538-3	JB27538-4	JB27538-6	JB27538-5
	Unrestricted	AND CP-51	1/28/2013	1/28/2013	1/28/2013	1/28/2013	1/28/2013
CONSTITUENT (ug/kg)	SCO	COMMERCIAL SCO	Primary	Primary	Primary	Duplicate 1	Primary
Starting Depth (ft)	-	-	0	4	9	9	14
Ending Depth (ft)	-	-	1	5	10	10	15
Acenaphthene	20000	500000	6200	35U	33U	35U	32U
Acenaphthylene	100000	500000	1020	35U	33U	35U	32U
Anthracene	100000	500000	12000	35U	16.0J	35U	32U
Benzo(a)anthracene	1000	5600	[53300]	26.5J	102J	21.0J	31.9J
Benzo(a)pyrene	1000	1000	[50600]	26.0J	101J	16.4J	32.1
Benzo(b)fluoranthene	1000	5600	[63600]	32.0J	126J	18.6J	40.9
Benzo(ghi)perylene	100000	500000	33200	19.5J	70.8J	15.9J	32.3
Benzo(k)fluoranthene	800	56000	[40600]	27.4J	78.2J	25.4J	23.7J
Chrysene	1000	56000	[69100]	40.3	148J	29.2J	43.5
Dibenzo(a,h)anthracene	330	560	[12100]	35U	27.4J	35UJ	32U
Fluoranthene	100000	500000	[171000]	67.8	326J	45.5J	100
Fluorene	30000	500000	7140	35U	33U	35U	32U
Indeno(1,2,3-cd)pyrene	500	5600	[33300]	18.2J	62.6J	14.5J	26.4J
Naphthalene	12000	500000	916	35U	33U	35U	32U
Phenanthrene	100000	500000	[121000]	31.7J	164J	27.9J	54.3
Pyrene	100000	500000	[125000]	53	232J	42.3	69.6

Notes:

Exceedances of the Unrestricted Soil Cleanup Objective (SCO) are indicated with brackets.

U = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

## Table 3-12012 Groundwater Sampling Results - PAHsJ&H Site - Carle Place, NY

			-		
		MW-04	MW-04	MW-04	MW-04
		JB19935-5	JB19935-6	JB23169-7	JB23169-8
	NYSDEC	10/23/2012	10/23/2012	12/6/2012	12/6/2012
CONSTITUENT (ug/l)	TOGS	Primary	Duplicate 1	Primary	Duplicate 1
Acenaphthene	20	0.10UJ	0.10UJ	0.10UJ	0.10UJ
Acenaphthylene		0.10UJ	0.10UJ	0.10UJ	0.10UJ
Anthracene	50	0.10UJ	0.10UJ	0.10UJ	0.10UJ
Benzo(a)anthracene	0.002	0.10UJ	0.10UJ	[0.121]J	[0.169]J
Benzo(a)pyrene	ND	0.10UJ	0.10UJ	0.167J	0.262J
Benzo(b)fluoranthene	0.002	0.10UJ	0.10UJ	[0.291]J	[0.478]J
Benzo(ghi)perylene		0.10UJ	0.10UJ	0.166J	0.251J
Benzo(k)fluoranthene	0.002	0.10UJ	0.10UJ	[0.132]J	[0.189]J
Chrysene	0.002	0.10UJ	0.10UJ	[0.178]J	[0.287]J
Dibenzo(a,h)anthracene	NT	0.10UJ	0.10UJ	0.10UJ	0.10UJ
Fluoranthene	50	0.123J	0.114J	0.294J	0.469J
Fluorene	50	0.10UJ	0.10UJ	0.10UJ	0.10UJ
Indeno(1,2,3-cd)pyrene	0.002	0.10UJ	0.10UJ	[0.147]J	[0.233]J
Naphthalene	10	0.10UJ	0.10UJ	0.10UJ	0.10UJ
Phenanthrene	50	0.10UJ	0.10UJ	0.10UJ	0.146J
Pyrene	50	0.137J	0.10UJ	0.255J	0.396J

Notes:

Exceedances of the NYSDEC TOGS are indicated with brackets and highlights.

U = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

#### Table 3-22013 Groundwater Sampling Results - VOCsJ&H Site - Carle Place, NY

		N/147-01	MW-02	MAL 02	N (147.02	NAME OF	MALOF
		MW-01		MW-02	MW-03	MW-04	MW-05
	NYSDEC	JB29821-1	JB29428-1	JB29428-5	JB29428-2	JB29428-3	JB29428-4
		2/25/2013	2/20/2013	2/20/2013	2/20/2013	2/20/2013	2/20/2013
CONSTITUENT (ug/l) 1,1,1-Trichloroethane	TOGS	Primary	Primary	Duplicate 1 1.0U	Primary 1.0U	Primary	Primary
1,1,2,2-Tetrachloroethane	5	1.0U 1.0U	1.0U 1.0U	1.0U 1.0U	1.0U	1.0U 1.0U	1.0U 1.0U
1,1,2-Trichloroethane	1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,1,2-Trichloroethane	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,1-Dichloroethene	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,2,3-Trichlorobenzene	5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,2,4-Trichlorobenzene	5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,2-Dibromo-3-chloropropane	0.04	10U	10U	10U	10U	10U	10U
1,2-Dibromoethane	0.004	2.0U	2.0U	2.0U	2.0U	2.0U	2.0U
1,2-Dichlorobenzene	3	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-Dichloroethane	0.6	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
,	0.6	1.0U 1.0U		1.0U 1.0U		1.0U	1.0U
1,2-Dichloropropane 1,3-Dichlorobenzene	3	1.0U	1.0U 1.0U		1.0U		1.0U
1,3-Dichlorobenzene	3	1.0U 1.0U	1.0U 1.0U	1.0U 1.0U	1.0U 1.0U	1.0U 1.0U	1.0U 1.0U
-	3						
1,4-Dioxane	FO	130U	130U	130U	130U	130U	130U
2-Butanone 2-Hexanone	50 50	10UJ 5.0U	10UJ 5.0U	10UJ 5.0U	10UJ 5.0U	10UJ 5.0U	10UJ 5.0U
	50						
4-Methyl-2-Pentanone	50	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Acetone	50	10U	10U	10U	10U	10U	10U
Benzene	1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Bromochloromethane	5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Bromodichloromethane	50	1.0U	1.0U	1.0U	1.0U	1.4	1.0U
Bromoform	50	4.0U	4.0U	4.0U	4.0U	0.86J	4.0U
Bromomethane	5	2.0U	2.0U	2.0U	2.0U	2.0U	2.0U
Carbon Disulfide	60	2.0U	2.0U	2.0U	2.0U	2.0U	2.0U
Carbon Tetrachloride	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Chlorobenzene	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Chloroethane	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Chloroform	7	1.0U	1.0U	1.0U	1.0U	1.1	1.0U
Chloromethane	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
cis-1,2-Dichloroethene	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
cis-1,3-Dichloropropene	0.4	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Cyclohexane	50	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Dibromochloromethane	50	1.0U	1.0U	1.0U	1.0U	1.7	1.0U
Dichlorodifluoromethane	5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Ethylbenzene	5	1.0U	1.0U 5.0U	1.0U	1.0U 5.0U	1.0U	1.0U
Freon 113 Isopropylbenzene	5	5.0U		5.0U		5.0U	5.0U
1 1 2	5	2.0U 1.0U	2.0U 1.0U	2.0U 1.0U	2.0U 1.0U	2.0U 1.0U	2.0U 1.0U
m+p-Xylene Mathyl A catata	3						
Methyl Acetate		5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Methyl Cyclohexane	10	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Methyl Tertiary Butyl Ether	10	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Methylene Chloride o-Xylene	5	2.0U	2.0U	2.0U	2.0U	2.0U	2.0U
,	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Styrene	5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Tetrachloroethene	5	[13.3]	2.2	2.2	1.0U	1.0U	1.4
Toluene	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
trans-1,2-Dichloroethene	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
trans-1,3-Dichloropropene	0.4	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Trichloroethene	5	0.47J	1.0U	1.0U	1.0U	1.0U	1.0U
Trichlorofluoromethane	5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Vinyl chloride	2	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Xylene (total)	5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U

#### Notes:

Exceedances of the NYSDEC TOGS are indicated with brackets and highlights.

U = Not detected at the indicated detection limit.

UJ = Not detected at the indicated detection limit. Detection limit is a quantitative estimate.

#### Appendix A

Pertinent Correspondence

#### New York State Department of Environmental Conservation

Division of Environmental Remediation, Region One Stony Brook University 50 Circle Road, Stony Brook, New York 11790 - 3409 Phone: (631) 444-0240 • FAX: (631) 444-0248 Website: www.dec.state.ny.us



April 24, 2009

Michael Teetsel Environmental Resources Management 520 Broad Hollow road, Suite 210 Melville, New York 11747

Re: Site Investigation Report Johnson & Hoffman Manufacturing Site No. V-00684

Dear Mr. Teetsel:

The New York State Departments of Environmental Conservation (Department) and Health (NYSDOH) have reviewed the Site Investigation Report for the Johnson & Hoffman Manufacturing Site and offer the following comments.

#### **General Comments:**

- 1. Please clarify the direction of groundwater flow as the text indicates it flows towards the southwest while figures indicate the flow is to the southeast.
- 2. Although the buildings further downgradient of the groundwater plume do not appear to be impacted by soil vapor intrusion (SVI) from the Johnson and Hoffman site, additional SVI evaluation off-site is necessary in buildings that are closer to the site.
- 3. The detection limits in groundwater samples were often above groundwater standards (particularly for PAHs). Additional characterization of groundwater is needed to determine if groundwater is impacted. The detection limits of PAH's in groundwater samples should be below the New York State Ambient Groundwater Quality Standards.
- 4. Define the nature and extent of contamination, both areally and vertically in all areas of concerns. At the completion of the site investigation, ERM should submit a final site investigation report. After approval of the final site investigation report by the Department, ERM should prepare and submit a draft remedial action work plan to the Department for review and approval.

#### **Specific Comments:**

- 5. Section 1.3.3 Environmental Due Diligence Review; second to last bullet: It is unlikely that 7,500 mg/kg of petroleum hydrocarbons in a surface soil sample collected from the bottom of the recharge basin is solely attributable to normal vehicular traffic in the parking lot. Drywells SWCB-02 and -03 each drain to the recharge basin, and are contaminated with PAHs above commercial and groundwater comparison values. The area where they discharge is more heavily contaminated than the rest of the recharge basin, indicating the drywells as the source of this contamination. This bullet should be revised to reflect this.
- 6. Section 3.2 Screening Level Soil Gas Survey: All air sampling results should be reported in  $\mu g/m3$ .
- 7. Section 3.3.4 AOC 4: Please clarify in the text of this section (and in the corresponding Figure 3-5) which samples exceeded each select comparison value (SCO commercial or protection of groundwater).
- 8. Section 3.3.7 AOC 7: During the PCE area of impact delineation, all samples should have been consistently analyzed for PCE and all degradation by-products. Since PCE is a contaminant of concern, all future media needs to be analyzed for PCE.
- 9. Section 3.5 Soil Vapor Sampling:
- First paragraph: Please clarify what soil vapor comparison criteria were used.
- Third paragraph: The information gathered does not support this conclusion. Please revise this conclusion as it is still unclear whether the source of the soil vapor contamination is the contaminated groundwater, contaminated soils, or a combination of both.
- 10. Section 3.6.2 Off-site Fun World Building:

Given the operations within the building, the samples being collected 20-30 feet from each other is acceptable. This sampling was not, however, conducted with the SVE system off, and as such, does not account for worst case scenario. Additionally, the sample was collected over a 2-hour period, and may not reflect conditions throughout the day. Please collect additional indoor, outdoor, and subslab samples following the SVI Guidance with a sample duration of 8-hours during normal hours of operation in order to get a more comprehensive survey of conditions during a typical day. The SVE system should be shut off for 24 hours prior to sample collection, and turned back on after sample completion. The data gathered, consequently, are insufficient to evaluate exposure. As such, it is inappropriate to indicate a lack of significant exposure exists for this building at this time. This building will need to be re-evaluated for SVI following the NYSDOH SVI Guidance.

- 11. Country Glen Shopping Center and One Old Country Road: It appears that soil vapor intrusion related to the J & H facility is not occurring in these buildings, and no further evaluation as part of this investigation is necessary.
- 12. There are three additional areas of potential SVI impact near the site that have not yet been evaluated. Fairhaven Apartments lies directly southwest of the Site, closest to AOC 4 and AOC 5. PCE was detected in soil vapor near the SW site boundary. The Stop-N-Shop lies to the 250 feet southeast of the on-site area of PCE soil contamination, and is newly constructed, not yet evaluated for SVI. The building to the north of the Funworld building (which showed elevated levels of PCE and TCE in the subslab soil vapor) also needs to be evaluated for SVI. As you know, soil vapor travels along preferential pathways, and additionally may collect under slabs of building, resulting in concentrations many times higher than those seen in soil vapor. All of these samples should be collected following the NYSDOH SVI Guidance with a sample duration of 24 hours in the apartment samples and 8 hours in businesses during normal hours of operation in order to get a more comprehensive survey of conditions during a typical day. The SVE system should be shut off for 24 hours prior to sample collection, and turned back on after sample completion.
- 13. Section 4.4 On-site indoor air and sub-slab soil gas samples, fourth paragraph: If subslab and indoor air samples were not co-located and collected concurrently as described in the SVI Guidance, then applying the NYSDOH decision matrices may be inappropriate. All future SVI samples (soil vapor, subslab, indoor, and ambient air) must be collected according to the NYSDOH SVI Guidance to be recognized by the NYSDOH as legitimate SVI samples and to be comparable to the NYSDOH decision matrices.
- 14. Table 5-1 is missing.
- 15. Page 55, Conceptual Remedial Action Plan and also Table 6-1: Specific remedies are proposed to address on-site contamination. Endpoint samples must be collected after each soil removal in each area of concern. These samples should be analyzed for all contaminants ever detected at the site with detection limits below the unrestricted soil clean-up objective for comparison purposes. Please note: should contamination remain on-site in soil at levels above unrestricted soil clean-up objectives or in groundwater at levels above groundwater standards, a deed restriction may be required to restrict future use of the property to the appropriate use classification.
- 16. Section 6.1.4, AOC-7: Johnson & Hoffman has requested modification of the SVE system to focus on the more heavily contaminated soils in AOC-7 is acceptable with the following provisions:

Pressure readings should be collected (with the SVE system running) before and after the modification to characterize the SVE system's radius of influence. Pressure readings should be collected under the on-site and the Funworld building before and after as well.

Several rounds of concurrent indoor air and subslab samples should be collected in the on-site building as well as the Funworld building

following the NYSDOH Guidance document: prior to the modification, with no system running, about a week after the modification takes place, and a month after that to ensure that the modified system is effective in mitigating exposures. Should this take place prior to the 2009-2010 heating season, these samples will need to be collected again during this heating season to verify their accuracy.

It is necessary to evaluate the SVI implications of such a change as the SVE system is currently mitigates both the on-site building and the adjacent "Funworld" building. Please submit a revised request of the proposed modifications to the Department for review and approval.

- 17. Section 3.7 Data Usability Summary Report: Many of the Data Usability Summary Reports (DUSRs) and associated results indicate that some soil samples contained so much PAHs and SVOCs that the samples had to be diluted by as much as 80 times in order to be analyzed without doing damage to the analytical instrumentation. As a result of the sample dilutions, the reporting levels were so elevated for all analytes on the sample target compound lists as to be not useful for comparison to soil cleanup objectives.
- 18. Several PAHs reported in the SVOCs groundwater monitoring results (Table 3-9 b) have NYSDOH ambient water guidance values (TOGS 1.1.1) of 0.002 ppb (benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-cd) pyrene). Sample results of 10U or 10UJ likely indicate that these analytes were determined with detection limits in excess of the guidance value and would therefore not be indicative that the value level was achieved.

If you have any questions regarding these comments, please contact me at (631) 444-0243.

Sincerely,

Girish Desar

Girish Desai, P.E. Project Manager

- cc: W. Parish
  - R. Rusinko, Esq., NYSDEC
  - S. Messier
  - J. DeFranco
  - T. LeBarron
  - R. Vernon, Esq., Regional Attorney, NYSDEC
  - R. Warden, Superior Group, Inc.
  - C. Boyle, Esq.

#### New York State Department of Environmental Conservation Division of Environmental Remediation, Region One

Stony Brook University 50 Circle Road, Stony Brook, New York 11790-3409 Phone: (631) 444-0240 • Fax: (631) 444-0248 Website: www.dec.ny.gov



June 4, 2012

Michael Teetsel Environmental Resources Management 40 Marcus Drive Suite 200 Melville, New York 11747

Re: Remedial Investigation Report Johnson & Hoffman Manufacturing Site No. V-00684

Dear Mr. Teetsel:

The New York State Departments of Environmental Conservation (Department) and Health (NYSDOH) have reviewed the Remedial Investigation Report for the Johnson & Hoffman Manufacturing Site and offer the following comments.

1. Site Description should include the names of volunteers who entered into a Voluntary Cleanup Agreement with the Department and name of the current property owner.

2. Section 1.1 states that Johnson and Hoffman Manufacturing Corporation was dissolved in 2004 and a new corporation known as Johnson & Hoffman Manufacturing continued operations from 2004 until present. Please provide more details about both companies with the same name.

3. Section 1.3.3 Due Diligence Report: Please clarify if the four 55-gallon drums of soil from the wastewater trench repair work were removed off-site or returned to the excavation. If returned to the excavation, please provide the soil sampling results.

4. Section 1.5 Areas of Concern (AOC): We recommend adding a sub-section that details the interim remedial measures (IRMs) that have been implemented to address previously identified AOCs. Please update Figure 1-5 to identify which AOCs requires remedial actions and which AOCs no longer require further remedial action due to IRM actions.

5. Section 1.5: The RIR should include the northwestern corner of the Finishing Department (former PCE/TCE Usage area) as an AOC based on the sub-slab soil vapor sample JH-SS-04 results.

6. Section 2.4.2 Soil Sampling Program for PCE Delineation: This section should be updated to include the October 2010 and August/September 2011 post-excavation soil sampling results. One soil sample from a soil boring SB-11 within interior of the building at AOC-7 exceeded the soil clean up objectives (protection of groundwater) for PCE. If additional soil sample was collected

from the SB-11 soil boring location, please provide the results.

7. Section 3.4.4 PAH Groundwater Analytical Results: PAHs exceeding the New York State Groundwater Quality Standards in on-site and off-site (down gradient) monitoring wells. Storm Drain located in the vicinity of monitoring well MW-4 and other storm drains should be investigated. This investigation will assist in finding PAH contamination sources in the vicinity of MW-4 and other parts of the site. To determine on-site groundwater contamination with PAHs may be attributed to an off-site source, ERM should conduct an off-site groundwater investigation at properties located upgradient of the Johnson and Hoffman site.

8. Section 3.3.5 AOC 5: Vertical extent of contamination at sample location SR-01 is not defined 8 feet below base of the recharge basin.

9. Section 3.3.10 Soil sample BG-01 exceeds SCOC and SCOGW for total PCBs.

10. Section 3.6.1 On-Site Building Soil Vapor Intrusion: This section and subsection 4.4 should be updated to reflect the results of all soil vapor intrusion sampling events including February 2012 data, as well as the modification of the SVE system to a sub-slab depressurization system. The data supports a complete exposure pathway exists and requires mitigation. The RIR should be a complete document and do not refer to a separate report for the sampling results.

11. Section 3.6.2 Off-Site SVI (Fun World Building): The NYSDOH response regarding no further SVI sampling at the Fun World was conditional upon no rebound effect occurring with the post-SVE termination sampling event. A soil vapor sample was collected in December 2011 near Fun World to provide the agencies with information on rebound. Please update the section to include the results of December 2011 soil vapor sample (40 ug/m3) and state that the rebound was not demonstrated and hence no further action is warranted.

12. Figure 3-3 should indicate the data in ug/kg and please verify that units of data are indicated on all figures.

13. In addition to above comments, ERM should verify that all comments provided in a letter dated April 24, 2009 by the Department have been addressed.

If you have any questions, please contact me at (631) 444-0243.

Sincerely,

Gurush Desci

Girish Desai, P.E. Project Manager

cc:

W. Parish R. Rusinko, Esq., NYSDEC

S. McLelland, NYSDOH

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27 August 2012

Mr. Girish Desai, P.E. Environmental Engineer 2 Division of Environmental Remediation NYSDEC – Region One Headquarters SUNY@ Stony Brook 50 Circle Road Stony Brook, NY 11790-3409



Subject: Response to Comments on the Remedial Investigation Report Johnson & Hoffman Manufacturing Site No. V-00684

Dear Mr. Desai:

On behalf of Volunteers CAWSL Enterprises, Environmental Resources Management (ERM) has prepared this response to comments received for the Remedial Investigation (RI) Report for the J&H Manufacturing Facility in Carle Place, NY (the Site). The comments from the New York State Department of Environmental Conservation (NYSDEC) letter dated 4 June 2012 are presented in italics followed by our response.

### NYSDEC Comment:

1. Site Description should include the names of volunteers who entered into a Voluntary Cleanup Agreement with the Department and name of the current property owner.

Response:

The Volunteers, CAWSL Enterprises, Inc. and AMI Johnson, LLC entered the Voluntary Cleanup Agreement dated July 6, 2004, with the NYSDEC. The current owner of the property located at 40 Voice Road, Carle Place, NY is Manley Holdings, Inc. and the Nassau County Industrial Development Authority.

This information will be provided in Section 1.1 - Site Description of the revised RIR.

### NYSDEC Comment:

2. Section 1.1 states that Johnson and Hoffman Manufacturing Corporation was dissolved in 2004 and a new corporation known as Johnson & Hoffman Manufacturing

continued operations from 2004 until present. Please provide more details about both companies with the same name.

#### Response:

In 2004, American Engineered Components, Inc. ("AEC") owned all of the outstanding stock in Johnson and Hoffman Manufacturing Corp. ("J&H '04"). In 2004, AEC and J&H '04, among others, filed a petition for Chapter 11 Bankruptcy in the U.S. Bankruptcy Court for the District of Delaware. The U.S. Bankruptcy Court via an Order dated April 21, 2004, approved AMI Johnson LLC to be the purchaser ("Transferee") of all of the assets of AEC and J&H '04, free and clear of liens, claims, and encumbrances. Subsequently, J&H '04 dissolved and ceased to exist. After the acquisition via the bankruptcy, AMI Johnson, LLC operated with the assets acquired from AEC and J&H '04 and continued to do business under a newly formed entity with the name of Johnson and Hoffman Manufacturing Corp.

This information will be provided in Section 1.1 - Site Description of the revised RIR.

#### NYSDEC Comment:

3. Section 1.3.3 Due Diligence Report: Please clarify if the four 55-gallon drums of soil from the wastewater trench repair work were removed off-site or returned to the excavation. If returned to the excavation, please provide the soil sampling results.

#### Response:

The wastewater trench repair work was discussed in ERM's Phase II Site Investigation report dated 27 February 1997, which references off-Site disposal of material. More specifically, Section 2.2 of the Report states that sample NT-2 (3'-5') was collected from the midpoint of the excavation located opposite the north trench sump "and was analyzed for the following compounds to characterize excavated soil for proper disposal":

- Nassau County Department of Health's (NCDH's) Appendix A list of Volatile Organic Compounds (VOCs), as presented in (NCDH's Floor Drain and Dry Well Closure Procedures);
- Toxic Characteristic Leaching Procedures (TCLP) Metals; and
- Total Petroleum Hydrocarbons.

#### NYSDEC Comment:

4. Section 1.5 Areas of Concern (AOC): We recommend adding a sub-section that details the interim remedial measures (IRMs) that have been implemented to address previously

*identified* AOCs. *Please update Figure 1-5 to identify which* AOCs *requires remedial actions and which* AOCs *no longer require further remedial action due to IRM actions.* 

#### Response:

The revised RI Report will include a sub-section detailing the IRMs that have been implemented in AOC 7, and Figure 1-5 will be updated as requested.

#### NYSDEC Comment:

5. Section 1.5: The RIR should include the northwestern corner of the Finishing Department (former PCE/TCE Usage area) as an AOC based on the sub-slab soil vapor sample JH-SS-04 results.

#### Response:

At the beginning of the project, the PCE/TCE usage area was included as part of the AOC 7 investigation. Based on the specific sampling activities that have been performed in the PCE/TCE usage area-over the course of the project, a separate AOC designation does not appear to be warranted as none of data suggests that a separate release has occurred. A summary of this work is provided below:

- The soil gas survey conducted in October 2000 (see RIR Section 3.2) show PCE concentrations in the PCE/TCE usage area to be orders of magnitude below the nearby AOC 7 source areas which included the PCE storage tank outside the southeast corner of the building and a former drum storage area south of the building. The PCE detected in this location was attributed to gas migration from the identified source areas.
- Additional soil gas testing of the PCE/TCE usage area via nearby SVE well VEW-7 was conducted as part of the October 2010 SVE system confirmation sampling program. These results were reported in RIR Section 4.3.2.1 and it was concluded that evidence of a release was not present.
- The most recent soil gas tests in this area were the samples from JH-SS-04 in 2011 and 2012. Three samples were collected:
  - 1. The first sample was collected in July, 2011, prior to the final AOC 7 excavation. PCE was present in this sample at  $4,200 \ \mu g/m^3$ .
  - 2. The second sample was collected in December, 2011, after the excavation was completed. The PCE concentration in this sample dropped to 623  $\mu$ g/m<sup>3</sup>.
  - 3. The third sample was collected in January, 2012. The PCE result in this sample was further reduced to 220  $\mu$ g/m<sup>3</sup>.

Environmental Resources Management

The reduction in PCE concentration between the first and second samples indicates that the initial result can be attributed to gas migration from the soil subsequently removed by the excavation. The continuing reduction indicated by the third sample result shows that conditions are still improving and the low PCE levels that remain in soil gas are not indicative of an on-going source.

It should be noted that the PCE/TCE usage area is within the influence of SVE well VEW-5 which continues to operate for sub-slab depressurization purposes. This well will continue operating until all sampling points inclusive of JH-SS-04 are below the mitigate range as defined by the NYSDOH decision matrices and ERM's October 2011 "AOC 7 Construction Completion Report". VI samples will be collected at JH-SS-04 during the next heating season to further evaluate conditions below the Site building.

Based on the above factors, it is concluded that the sub-slab soil vapor results at JH-SS-04 do not indicate a separate source of contamination and therefore do not warrant redefining the area as a separate AOC.

#### NYSDEC Comment:

6. Section 2.4.2 Soil Sampling Program for PCE Delineation: This section should be updated to include the October 2010 and August/September 2011 post-excavation soil sampling results. One soil sample from a soil boring SB-11 within interior of the building at AOC-7 exceeded the soil clean up objectives (protection of groundwater) for PCE. If additional soil sample was collected from the SB-11 soil boring location, please provide the results.

#### Response:

A discussion of the October 2010 and August/September 2011 soil sampling results will be provided in Section 2.4.2 of the revised RI Report.

Regarding soil boring SB-11, the sample referred to in NYSDEC's comment was a pre-remedial sample collected in November, 2000. The 0-1 foot interval from this boring contained a PCE concentration of  $3,300 \ \mu g/kg$ . ERM collected post-remedial samples from the SB-11 location in October, 2010, (SB-11R). The 0-1 foot interval was not resampled because there were no PID detections from that interval. As indicated in ERM's approved 9 September 2010 AOC 7 Confirmation Soil Sampling Plan, soil samples were collected using the following approved protocol:

• Two 4-foot cores were taken from each boring location.

- Each 4-foot core was broken up into two 2-foot sections and screened with a PID.
- If an elevated PID reading was observed in a 2-foot section, a sample was collected from that section and sent out for lab analysis. If a two foot-section did not have an elevated PID reading, no sample was collected from that interval.
- In the event that there was no elevated PID reading in a 4-foot core, a sample was collected from the center of that core.
- If no PID reading was observed during screening of a boring collocated with a historic boring that exhibited high levels of PCE, then a soil sample was collected from the same interval as the historic detection.

The PID reading from the 0-1 foot interval in SB-11R was non-detect (0.0 parts per million by volume – ppmv); therefore no sample was collected for analysis from this horizon. A copy of the SB-11R boring log is provided as Attachment A. The sample with the highest PID result in 2010 was the 3-4 foot interval and thus selected for analysis. The PCE concentration in this sample was 25.2  $\mu$ g/kg. This same interval was also analyzed in 2000 and contained PCE at 396.3  $\mu$ g/kg. This order of magnitude reduction demonstrates that the SVE remediation was effective at this location and supports the conclusion that post-remedial soil quality at location SB-11/SB-11R is below the PCE SCOGW of 1,300  $\mu$ g/kg.

### NYSDEC Comment:

7. Section 3.4.4 PAH Groundwater Analytical Results: PAHs exceeding the New York State Groundwater Quality Standards in on-site and off-site (down gradient) monitoring wells. Storm Drain located in the vicinity of monitoring well MW-4 and other storm drains should be investigated. This investigation will assist in finding PAH contamination sources in the vicinity of MW-4 and other parts of the site. To determine on-site groundwater contamination with PAHs may be attributed to an off-site source, ERM should conduct an off-site groundwater investigation at properties located upgradient of the Johnson and Hoffman site.

#### Response:

In order to confirm previous groundwater sampling results, monitoring well MW-4 will be resampled and analyzed for PAHs via EPA Method 8270C using Selective Ion Monitoring (SIM). The SIM procedure has the lowest reporting levels (RLs) using published EPA methods in a commercial laboratory environment.

If PAH contamination is still present in well MW-4 above the New York State Groundwater Quality Standards, soil sampling will be performed in the storm

Environmental Resources Management

drain located 10 feet to the southwest of MW-4 as presented in Figure 1-4 of the RI Report. The sample would be collected using a direct-push drill rig from the following intervals below the bottom of the storm drain: 0-1 feet, 4-5 feet, 9-10 feet, and 14-15 feet. Samples will be analyzed for PAHs via EPA Method 8270C. After receipt of the results, they will be provided to the Department in e-mail format and next steps will be discussed.

#### NYSDEC Comment:

8. Section 3.3.5 AOC 5: Vertical extent of contamination at sample location SR-01 is not defined 8 feet below base of the recharge basin.

#### Response:

The overgrowth and steep banks of the recharge basin made access with a drill rig impossible without clearing and construction of a ramp. As a result, ERM utilized a hand auger for sample collection which limited sampling depth to 8 feet below ground surface (bgs). While the planned method for completing the vertical delineation (through use of excavation endpoint samples) would comply with all DER-10 requirements, a change to this approach is proposed to address the Department's concern. An attempt will be made to access the basin with portable equipment (e.g., hand auger, slide hammer with soil coring device, pneumatic or electric hammer drill with soil coring device) in order to collect samples from deeper intervals in an attempt to vertically delineate PAH contamination within the recharge basin. The vertical concentration trend at SR-01 in the recharge basin suggests that the extent of impacted soil does not extend much deeper than 8 feet. The additional samples will be collected at previous soil boring location SR-01 at depths of 9.0-9.5, 10.0-10.5, and 11.0-11.5 feet bgs. Sampling may continue to a greater depth in this fashion, up to the limit of the selected tool. Each sample will be analyzed for PAHs via EPA Method 8270C.

#### NYSDEC Comment:

#### 9. Section 3.3. 10 Soil sample BG-01 exceeds SCOC and SCOGW for total PCBs.

#### Response:

BG-01 is one of two samples collected to assess background conditions at the Site. As a result, these samples were collected from a landscaped, grassy area which is not known to have been used for industrial purposes since the Site was developed in the 1960s. PCBs are not known to have been used at the Site, and none of the other 11 soil samples collected at the Site for PCB analysis exceeded the Commercial Soil Cleanup Objectives (SCO) or the Protection of Groundwater SCO for PCBs. Sample BG-02 is approximately 55 feet to the east of BG-01 and

Mr. Girish Desai Response to RI Report Comments 27 August 2012 Page 7 of 8 Environmental Resources Management

did not contain detectable levels of PCBs. The single PCB exceedence found at BG-01 is interpreted to be a de minimus outlier. To verify this interpretation and confirm the previous sample results, a soil sample will be collected from the original BG-01 location at a depth of 0-1 feet (i.e., the depth of the original sample). The sample will be analyzed for PCBs via EPA Method 8082. After receipt of the results, they will be provided to the Department in e-mail format. If the results are less than the Commercial SCO and Protection of Groundwater SCO, then no further action will be recommended for this area. If results remain above these SCO, the necessary actions will be evaluated.

#### NYSDEC Comment:

10. Section 3.6.1 On-Site Building Soil Vapor Intrusion: This section and subsection 4.4 should be updated to reflect the results of all soil vapor intrusion sampling events including February 2012 data, as well as" the modification of the SVE system to a sub-slab depressurization system. The data supports a complete exposure pathway exists and requires mitigation. The RIR should be a complete document and do not refer to a separate report for the sampling results.

#### Response:

The revised RI report will include the results of all soil vapor intrusion sampling events conducted subsequent to submission of the prior version in October, 2011. This includes the July, 2011, December, 2011, and February, 2012 data. The modification of the SVE system to a sub-slab depressurization system in August, 2011, will also be reported in the revised document.

#### NYSDEC Comment:

11. Section 3.6.2 Off-Site SVI (Fun World Building): The NYSDOH response regarding no further SVI sampling at the Fun World was conditional upon no rebound effect occurring with the post-SVE termination sampling event. A soil vapor sample was collected in December 2011 near Fun World to provide the agencies with information on rebound. Please update the section to include the results of December 2011 soil vapor sample (40 ug/m3) and state that the rebound was not demonstrated and hence no further action is warranted.

#### Response:

The RI report will be updated to include the results of December, 2011, soil vapor sample near Fun World and will state that the rebound was not demonstrated and no further action is warranted.

Environmental Resources Management

#### NYSDEC Comment:

12. Figure 3-3 should indicate the data in ug/kg and please verify that units of data are indicated on all figures.

Response:

The comment is noted, and will be addressed in the revised RIR.

#### NYSDEC Comment:

13. In addition to above comments, ERM should verify that all comments provided in a letter dated April 24, 2009 by the Department have been addressed.

Response:

All comments in the 29 April 2009 letter were addressed in the October, 2011, RI Report. Table 1 summarizes these comments and where/how they have been addressed in the document.

Please review these responses and let us know if you agree with the proposed actions. Once we are in agreement, we will perform the additional sampling proposed, and then submit a revised RI Report. Should you have any questions regarding the responses provided herein, please feel free to contact us at your convenience.

Very truly yours,

John Mohlin, P.E. Project Manager

Michael B. Teetsel, C.P.G. Senior Consultant

 cc: Sharon McLelland, New York State Department of Health Richard A. Warden, CAWSL Enterprises
 Brian Manley, Jade Corporation
 Christopher W. Boyle, Drinker Biddle & Reath, LLP

# TABLE 1Summary of 29 April 2009 NYSDEC RI Report CommentsJ&H Manufacturing FacilityCarle Place, NY

NYSDEC Comment #	Summary of Comment	How/Where Addressed in October 2011 RI Report
1	Clarify groundwater flow direction	This comment was addressed in the last paragraph of section 1.1.3 of the October 2011 RI Report.
2	Request for additional off-Site VI evaluation	See response to Comment 12.
3	Detection limit for PAHs is often above standard; additional investigation is required	See response to Comment 18.
4	and submit draft remedial action work plan for review and approval.	The extent of contamination in all media was defined in Sections 3 and 4 of the October 2011 RI Report. A RAWP was submitted to the Department on 23 January 2012 prior to the Departments approval of the RI Report. Any necessary changes to the RAWP will be addressed upon approval of the RI Report.
5	Section 1.3.3 second to last bullet - identify dry wells SWCB-02 and -03 as the likely source of contamination in the recharge basin	This comment was addressed in the second to last bullet in Section 1.3.3 of the October 2011 RI Report.
6	Section 3.2 Soil Gas Screening Survey - all air results should be reported in micrograms per cubic meter	This comment was addressed in Section 3.2 of the October 2011 RI Report.
7	Section 3.3.4 AOC 4 - clarify whether sample results exceeded Commercial Soil Cleanup Objectives (SCOs) and/or Protection of Groundwater SCOs	This comment was addressed in the table provided in Section 3.3.4 of the October 2011 RI Report.
8	Section 3.3.7 AOC 7 - ensure all soil samples are analyzed for PCE and its degradation products	This was done. In addition, the comment was addressed directly in ERM's 29 May 2009 Response to NYSDEC Comments.
9a	Section 3.5 Soil Vapor Sampling - clarify soil vapor criteria used	This comment was addressed in Section 3.5 of the October 2011 RI Report.
9Ъ	soil vapor impacts	We maintain, as stated in ERM's 29 May 2009 Response to NYSDEC Comments, that the results support that the source of the detected vapors is more likely derived from groundwater than from soil. Further support of this interpretation was provided in Section 3.5 of the October 2011 RI Report.
10	Section 3.6.2 Off-site – Fun World Building - additional VI sampling is warranted	This comment was addressed in Section 2.7.2 of the October 2011 RI Report.
11	Country Glen Shopping Center and One Old Country Road - no further action required	No response needed.
12	Request for VI sampling at off-Site properties (Stop-N-Shop, Fairhaven Apartments, and building to the north of Fun World)	The portion of this comment pertaining to the building north of Fun World was addressed directly in ERM's 29 May 2009 Response to NYSDEC Comments letter. The portion of this comment pertaining to the Stop-N-Shop building and the Fairhaven Apartments was addressed in Sections 2.7.6 (Stop-N-Shop) and 2.7.5 and 3.6.5 (Fairhaven Apartments) of the October 2011 RI Report.
13	All future VI sampling must consist of co-located sub-slab and indoor air samples	No response needed.
14	Table 5-1 is missing	Provided in October 2011 RI Report as Table 5-1.

# TABLE 1Summary of 29 April 2009 NYSDEC RI Report CommentsJ&H Manufacturing FacilityCarle Place, NY

NYSDEC Comment #	Summary of Comment	How/Where Addressed in October 2011 RI Report
15	sampling must include endpoints samples and all site-related compounds.	As directed by the Department, a Conceptual Remedial Action Plan was not included with the October 2011 RI Report. Detailed plans for soil excavation endpoint sampling and a description of how deed restrictions will be used in the proposed remedy were included in the 23 January 2012 RAWP.
16	Section 6.1.4, AOC-7 - conditional approval of the proposed SVE system modifications	As indicated above, at the direction of the Department, Section 6 "Conceptual Remedial Action Plan" was excluded in the October 2011 RI Report.
17	Section 3.7 Data Usability Summary Report - many reporting levels were elevated due to dilution effects	This comment was addressed directly in ERM's 29 May 2009 Response to NYSDEC Comments. We maintain that no further action is required for the NDs above criteria.
18	PAH groundwater sampling results contain non-detects above comparison criteria	This comment was addressed directly in ERM's 29 May 2009 Response to Comments. As indicated in ERM's response, groundwater samples collected during the September 2010 sampling event were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) via EPA Method 8270 SIM to obtain lower RLs. The results were reported in Section 3.4.4 of the October 2011 RI Report.

**Environmental Resources Management** 40 Marcus Drive, Suite 200 Melville, New York 11747 SOIL BORING LOG

**Boring Number** SB-11R

10/6/2010

Date & Time Started:

Project Number

J&H Date & Time Completed: Sampler Hammer Drilling Company Foreman Sampler(s) Drop Laurel Environmental Associates Ltd. E.Lagomarsini Elevation & Datum Completion Depth Rock Depth Drilling Equipment Method Geoprobe 6610DT Bit Size(s) Core Barrel(s) Geologist(s) E.Lagomarsini DEPTH SAMPLES FID/ SOIL DESCRIPTION (ft below Sample PID Recovery Blow (feet) Counts grade) Numbe (ppm) OCATION SURFACE DESCRIPTION: COLOR (Munsell Color Chart): (0-1) f-m sand w/large cobbles and gravel 5 YR 8/2 0.0 ppm 0 0.0 ppm 0.0 ppm (1-2) f-m sand w/large cobbles and gravel (1")top 10 YR 4/8 1 0.0 ppm f-m sand w/large cobbles and gravel (10")bottom 10 YR 4/6 f-m sand w/large cobbles and gravel (1")bottom 10 YR 4/3 (2-3) m-f sand w/gravel (2") top 5 YR 8/2 0.0 ppm m-f sand w/gravel (10")bottom 10 YR 4/6 2 39.6 ppm (3-4) f sand w/silt (10")top 2.5 YR3/2 f sand w/silt (2")bottom 5 YR 5/8 3 39.6 ppm 3'.4' (4-5) f sand w/silt 5 YR 5/8 10.3 ppm 4'-5' 4 (5-6) m-c sand w/gravel and large cobbles 10 YR 4/6 20.4 ppm 5 0.0 ppm 0.0 ppm (6-7) m-c sand w/gravel and large cobbles 7.5 YR 5/8 6 0.0 ppm (7-8) coarse to very coarse sand w/large cobbles 7.5 YR 5/8 0.0 ppm and gravel 7 0.0 ppm 0.0 ppm 8 0.0 ppm 9 Signature: \_\_\_\_\_ Date: Page \_\_\_\_\_ 1 of

sample interval (ft bgs) sample collected

roject Name & Location

1

10/06/10

## Appendix B

Forms & Logs for Vapor Intrusion Sampling

July 2011



#### **ERM Daily Field Report**

Date: 7/13/11

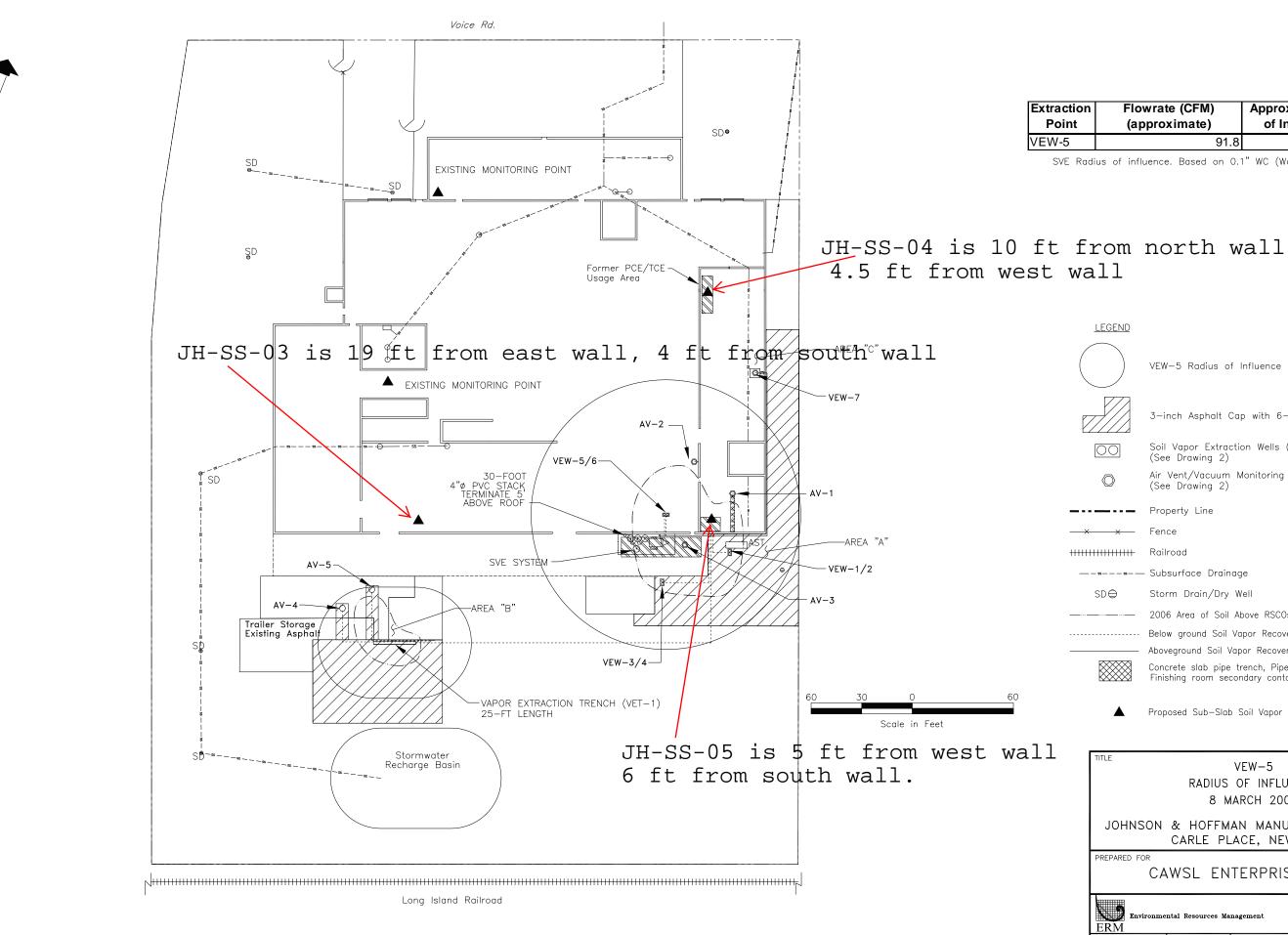
Project Name: <u>J&amp;H IA sampling</u> Project Number: <u>0127194</u> Project Manager: <u>John Mohlin</u> Completed By: <u>J Maddox</u> Location: <u>40 Voice Rd Carle Place</u> Report No.	Temperature Range:78-86 FRain /Snow Amount:NoneWind Speed:9-14 from NWTime Onsite:7:25Time Offsite:14:00Photographs Taken:Yes
Sub Company Onsite Crew Size	<u>Supervisor</u> <u>Task</u>
NAEVA Amelia + Ken	Markout SS at three installation points

Work Activities completed today: (include production rates)

7:25 Maddox on site. Take SVE system data and turn system off at 7:40, 48 hours prior to SS sampling. Met with Rich Tregaskis to inform him of the work plan. 8:00-9:45 NAEVA onsite to markout 10' radius at the three SS sampling installation points. No features found other than rebar. Rebar grid was marked out . 9:45-14:00 Installed SS sampling/monitor points JH-SS-03, JJ-SS-04, and JJ-SS-05. Points are one inch diameter, ten inches deep. Concrete thickness is 5 inches. Quarter inch o.d. Teflon tubing was bedded in glass beads. The top two inches are sealed with hydraulic cement around the compression fitting. The point is plugged with a <sup>1</sup>/4" NPT fitting and a plastic cap covers the point. The points will be marked with paint after the 7/15 sampling event. The points were each purged at a flow rate of 0.2 L/min. and then leak checked by flooding with helium and monitoring for breakthrough with a helium detector attached to the point fitting. No leaks were detected after all fittings were tightened.

14:00 Maddox off site

<u>Sub Company</u> NAEVA	<u>Equipment Used</u> GPR	<u>Make</u>	Model	<u>Hours Used</u> 2
Name of Visitor Onsite None	Representing		Purpose	Duration Onsite
	re There Any <b>Accidents</b> ach Accident or Incident			



Extraction	Flowrate (CFM)	Approximate Radius
Point	(approximate)	of Influence (ft.)
/EW-5	91.8	80

SVE Radius of influence. Based on 0.1" WC (Water Column)

<u>LEGEND</u>

	VEW-5 Radius of Influence (March 8, 2006)
	3-inch Asphalt Cap with 6-mil Polyethylene Liner
00	Soil Vapor Extraction Wells (VEW) (See Drawing 2)
$\bigcirc$	Air Vent/Vacuum Monitoring Point (AV) (See Drawing 2)
	Property Line
××	Fence
+++++++++++++++++++++++++++++++++++++++	Railroad
	– Subsurface Drainage
SD⊖	Storm Drain/Dry Well
	2006 Area of Soil Above RSCOs for PCE, TCE & DCE
	Below ground Soil Vapor Recovery Line
	Aboveground Soil Vapor Recovery Line
	Concrete slab pipe trench, Pipe trench not penetrating Finishing room secondary containment
<b></b>	Proposed Sub-Slab Soil Vapor Sampling Location
TITLE	VEW-5 RADIUS OF INFLUENCE 8 MARCH 2006
JOHNS	ON & HOFFMAN MANUFACTURING CORP. CARLE PLACE, NEW YORK
PREPARED FO	DR

CAWSL	ENTERPRISES	, INC.	
		SCALE	ſ

Environmental Resources Management			scale GRAPHIC	
ERM			DATE	J - Z
DRAWN:	JOB NO .:	FILE NAME:	7 10 4 14 4	
JM	0040773.01	0040773-01-002R2JM	3/21/11	

9 ERM	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901		· ·	Project Name; Location;	Cr27194 MOHLIN A THETSEL
ple Location: ess: Meter Used: del, Serial #)	JOHNSON + HOFFI TO VOLLF R MINI RAE 2000	WAN D CARLS S/N RB01	PLACE NY 89	Collector(s);	
IMA Canister F			COR AIR (slab-on-grade, 1st floor)	· · · ·	NDOOR AIR (slab-on-grade, 1st floor)
iple ID:	JH- IA-01	Sample ID:	-1A-02	Sample ID:	JH - JA - 03
ister Serial No.:	A168	Canister Serial No.:	A634	Canister Serial No.:	A 074
w Controlier Id	FC260	Flow Controller Id No:	FC 254	Flow Controller id No	FC360
t Date/Time:	7/15/11 3018	Start Date/Time;	7/15/11 0014	Start Date/Time:	7/15/11 0820
rt Pressure: hes Hg)	>30	Start Pressure: (inches Hg)	> 30	Start Pressure: (inches Hg)	30
o Date/Time:	4/15/11 1617	Stop Date/Time:	7/15/11 1657	Stop Date/Time:	7/15/11 1815
p Pressure; hes Hg)	-6.5	Stop Pressure: (inches Hg)	-6.5	Stop Pressure: (inch Hg)	- 6.5"
er Sampling In		, ,			
Reading (ppm)	ď	PID Reading (ppm)	ø	PID Reading (ppm)	Ø
y/Level ~	CAFETERIA	Story/Level	>	Story/Level	->
m	CAFFFERIA	Room	REST ROOMS	Room	BLACK HOLS'
Temp (°F)	700	Air Temp (oF)	REST ROOMS	Air Temp (oF)	74°
ometric Pressu	·······	Barometric Pressure ("Hg or mb)		Barometric Pressure ("Hg or mb)	
ormb)					

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					5
	Environmental Resources Management 40 Marcus Drive, Suite 200				0/27194
	Melville, NY 11747			Project Name:	I
	Phone: (631) 756-8900			Location:	NA NAKINI
ERM	Fax: (631) 756-8901			Project Manager: PIC:	MOHLIN TEPSEL
Sample Location:	1+4			Collector(s);	
Address;	<u> </u>			Jax	
PID Meter Used:	LAND DAG DAGA SC	0 8 . 80			
(Model, Serial #) SUMMA Canister F	MINI RAE 2000 S(N	KBU34	<del> </del>		
Sample ID:	VDOOR AIR (slab-on-grade, 1st floor)	Sampie ID:	OOR AIR (slab-on-grade, 1st floor)		INDOOR AiR (slab-on-grade, 1st floor)
Sample ID.	JH-IA-04		H-1A-05	Sample ID:	
	Our to of				
Canister Serial No.;	<b>A   </b>	Canister Serial No.:	A +17 -	Canister Serial No.;	
	A897		A 460		
Flow Controller Id	(6.00	Flow Controller Id No:		Flow Controller Id N	):
No:	FC183		F-C479		
Start Date/Time:		Start Date/Time:	. 1	Start Date/Time:	
	4/15/11 0816		4/15/1 081	5	
Start Pressure:		Start Pressure; (inches		Start Pressure:	
(inches Hg)	>30	Hg)	- 30	(inches Hg)	
Stop Date/Time;		Stop Date/Time:	11 11	Stop Date/Time:	
	7/15/11 1644		7/15/11 162	2	
Stop Pressure:		Stop Pressure: (inches		Stop Pressure: (inch	es
(inches Hg)	6.5	Hg)	6	Hg)	
Other Serveller a last					
Other Sampling Inf PID Reading (ppm)		PID Reading (ppm)		DID Reading (nom)	
i ib noccing (ppin)	BELINX P GROUND	T ID I Ceading (bbin)	6	PID Reading (ppm)	
Story/Level	Nora F	Story/Level	7	Story/Level	
	GROUND		->	Clury/Level	
Room		Room		Room	
	CLEANING ROOM		STAGING ROOM	Koom	
Air Tome (PE)		Air Temp (oF)		Als Taura (aT)	·
Air Temp (°F)	74	Au reinp (or )	74	Air Temp (oF)	
Barometric Pressure	¥	Barometric Pressure			
("Hg or mb)	30.00 - 30.04 -	("Hg or mb)		Barometric Pressure ("Hg or mb)	
	<u> </u>			Street of the second	
Comments:					
					· · · · · ·
	$\frac{1}{1}$				······································
Signature:	pennox				
L	+		<del></del>		
	v				

th**an** Ann

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SUMMA Canister Record:	1441 MINIRAE 2000 S/1 Subsurface -55-01	Sample ID:	Subsurface	PIC: Collect	tor{s): JMX	TEETSEL
ID Meter Used; Model, Serial #) UMMA Canister Record: ample ID: JH	Subsurface	Sample ID:	Subsurface			
ample ID: JH		Sample ID:	Subsurface			
JH	-55-01	Sample ID:				Subsurface
anister Serial No.:		1	H-55-02	Sampl	e ID: J	H-55-03
	A 333	Canister Serial No.:	A644	Caniste	er Serial No.:	A-305
w Controller id No:	FC 436	Flow Controller Id No:	Fc257	Flow C	ontroller Id No;	FC056
rt Date/Time: 6	7/15/11 OB18	Start Date/Time:	7/15/11	CBIA Start D	ate/Time:	7/15/11 0B20
art Pressure: (inches )	>30	Start Pressure: (inches Hg)	730	Start P (inches	ressure: ; Hg)	30
op Date/Time:	7/15/11 1641	Stop Date/Time:	7/15/11	1655 Stop D	ate/Time;	7 15/11 1632
op Pressure: (inches )	-6	Stop Pressure: (inches Hg)	-6	Stop P Hg)	ressure: (inches	- 6.5
ner Sampling Informatio	n:	PID Reading (ppm)			- 1/11 - 7>	
	ø	in bir obdaling (ppiny	ø	FIDING	ading (ppm)	32 ppm
oth of Vapor Probe	Jax-10th NA	Depth of Vapor Probe	Int 102 NA RESTROOMS	Depth	of Vapor Probe	104
ation	CAFETERIA	Location	RESTROOMS	Locatio	ก	BLACK HOLE'
Temperature	74	Air Temperature	74	Air Ten	nperature	14
ometric pressure, *	30.08-30.04	Barometric pressure, " Hg		Baromi Hg	etric pressure, "	->
iceable Odor?	NO	Noticeable Odor?	Yes	Notices	able Odor?	Yes
plicate Sample?	NO	Duplicate Sample?	NO	Duplica	ite Sample?	حلم
ke Tubing used?	TEFLON	Intake Tubing used?	TEFLON	Intake 1	Tubing used?	7BFLON
mments:		I			]	· · · · · · · · · · · · · · · · · · ·

	Environmental Resources Management 40 Marcus Drive, Suite 200	1,0,0,000 <b></b>	, , , , , , , , , , , , , , , , , , ,	Project <i>#</i> : Project Name:	0127194
	Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Location: Project Manager: PIC;	MONLIN
Sample Location: Address:	HtL			Collector(s):	
PID Meter Used; (Model, Serial #)	MINI RAE 2000	5/~ R808	7	JMX	
SUMMA Canister Reco	ord: Subsurface		Subsurface		Subsurface
Sample ID:	JH-SS-04	Sample ID: JH - S	5-05	Sample ID;	
Canister Serial No.:	A 832	Canister Serial No.;	A 4 82	Canister Serial No.:	
Flow Controller Id No:	FC114	Flow Controller Id No:	FC355	Flow Controller Id No:	
Start Date/Time:	715/11 0816	Start Date/Time:	7115/11 08	Start Date/Time:	
Start Pressure; (inches Hg)	-27	Start Pressure: (inches Hg)	- 30	Start Pressure: (inches Hg)	
Stop Date/Time:	715/11 1819	Stop Date/Time:	9/15/11 164	Stop Date/Time:	
Stop Pressure: (inches Hg)	-3	Stop Pressure: (inches Hg)	-6	Stop Pressure: (inches Hg)	
Other Sampling Inform PID Reading (ppm)	nation:				
	370	PID Reading (ppm)	96	PID Reading (ppm)	
Depth of Vapor Probe	104	Depth of Vapor Probe	10 "	Depth of Vapor Probe	
Location	CLEANING ROOM	Location	STREEING ROOM	Location	
Air Temperature	74	Air Temperature	74	Air Temperature	
Barometric pressure, " Hg	30.03 - 30.04	Barometric pressure, " Hg		Barometric pressure, * Hg	
Noticeable Odor?	45	Noticeable Odor?	Jun 465	Noticeable Odor?	
Duplicate Sample?	NO	Duplicate Sample?	NO	Duplicate Sample?	
Intake Tubing used?	TEFLON	Intake Tubing used?	TEFLON	Intake Tubing used?	
Comments:					
u .					
1					
Signature:	mlox				
L					

	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747		Project #: 0127194	
ERM	Phone: (631) 756-8900 Fax: (631) 756-8901		Location: Project Manager: MOHLIN PIC: TEPTS 64	
Sample Location: Address:	JIH			
PID Meter Used: (Model, Serial #)	MIJIRAS 2000	SIN R 8087		
SUMMA Canister Rec	ord: Outdoor Air	Outdoor Air	Outdoor Air	
Sample ID: JH - C	A-01	Sample ID:	Sample ID:	
Canister Seríal No.;	A125	Canister Serial No.:	Canister Serial No.:	
Flow Controller Id No:	FC, 288	Flow Controller Id No:	Flow Controller Id No:	
Start Date/Time:	7/15/11 0823	Start Date/Time:	Start Date/Time:	
Start Pressure: (inches Hg)	>30	Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	
Stop Date/Time:	7/15/11 11032	Stop Date/Firne:	Stop Date/Time:	
Stop Pressure: (inches Hg)	- 6.5	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	
Other Sampling Infor	nation;		-	
PID Reading (ppm)	ø	PID Reading (ppm)	PID Reading (ppm)	
_ocation	IN SUE COMPOUND	Location	. Location	
Air Temperature	740	Air Temperature	Air Temperature	
Barometric pressure, " Hg	3a09 - 30.04 465	Barometric pressure, " Hg	Barometric pressure, " Hg	
Noticeable Odor?	465	Noticeable Odor?	Noticeable Odor?	
Duplicate Sample?	NO	Duplicate Sample?	Duplicate Sample?	
Intake Tubing used?	No	Intake Tubing used?	Intake Tubing used?	
Comments:				
			· · · · · · · · · · · · · · · · · · ·	
	1			
Signature:	Xalando			

December 2011

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NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
<b>CENTER FOR ENVIRONMENTAL HEALTH</b>

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Engene Gabay Date/Time Prepared 12/5/11/11:00 AM
Preparer's Affiliation ERM Phone No. 631 756-8900
Purpose of Investigation Ongoing Vapor Intrusion Investigation
1. OCCUPANT: Facility Manager
Interviewed: Y / N
Last Name: Trevaskis First Name: Rich
Last Name: Trevaskis First Name: <u>Rich</u> Address: <u>40 Voice Rd.</u> , <u>Carle Place</u> , <u>NY 11514</u>
County: Nassan
Home Phone: 5 Office Phone: 576 742 - 3333
Number of Occupants/persons at this location Age of Occupants
2. OWNER OR LANDLORD: (Check if same as occupant)
Interviewed: Y / N
Last Name:First Name:
Address:
County:
Home Phone: Office Phone:
3. BUILDING CHARACTERISTICS Type of Building: (Circle appropriate response)
ResidentialSchoolCommercial/Multi-useIndustrialChurchOther:

If the property is resident	tial, type? (Circle ap	propriate resp	onse)	
Ranch Raised Ranch Cape Cod Duplex	2-Family Split Level Contemporary Apartment Hou	Colo Mot	umily onial oile Home onhouses/Condos	
Modular	Log Home	Othe	er:	
If multiple units, how man	ny?			
If the property is commer	·cial, type?			
Business Type(s) Me	tal Stampin	g	<u> </u>	
Does it include residen	v		If yes, how many?	
Other characteristics:				
Number of floors		Building age	<u> </u>	
Is the building insulated	d?Ø/Ø nor Walls	How air tigh	t? Tight / Average / Not	Tight
4. AIRFLOW	-			
TT I CONTRACT	•			
Use air current tubes or the	racer smoke to evan	uate alrhow j	patterns and quantative	y describe:
Airflow between floors				
Airflow near source				
				••
Outdoor air infiltration				
······································				
Infiltration into air ducts				
	· · · · · · · · · · · · · · · · · · ·			

#### 5. a. Above grade construction: wood frame concrete brick stone b. Basement type: full crawlspace slab other c. Basement floor: concrete dirt stone other d. Basement floor: uncovered covered with covered e. Concrete floor: unsealed sealed sealed with f. Foundation walls: poured block stone other g. Foundation walls: unsealed sealed sealed with h. The basement is: wet damp dry moldy i. The basement is: finished unfinished partially finished j. Sump present? Y/N

Basement/Lowest level depth below grade: \_\_\_\_\_(feet) Mentify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Y / N / not applicable

#### 6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply - note primary)

Hot air circulation Space Heaters Electric baseboard

k. Water in sump?

Heat pump Stream radiation Wood stove

Hot water baseboard Radiant floor Outdoor wood boiler

Other

The primary type of fuel used is:

Natural Gas Electric Wood

Backno Fuel Oil Propane Coal

Kerosene Solar

Domestic hot water tank fueled by: Nat Gas / Electric

Boiler/furnace located in:	Basement	Outdoors (	Main Floor	Other
Air conditioning:	Central Air	Window umits	Open Windows	None
		office	Main area	

#### BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

Are there air distribution ducts present?

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

 $(Y)_N$ 

Modine hot air blowers space heaters	(ceiling mounted)
7. OCCUPANCY	
<u>.Is-basement/lowest-level-occupied? Full-time Occa</u> <u>Level General Use of Each Floor (e.g., familyroo</u>	•
Basement <u>None</u>	
1 <sup>st</sup> Floor <u>Always</u> Occupied by 1 2 <sup>nd</sup> Floor <u>None</u>	
3 <sup>rd</sup> Floor 4 <sup>th</sup> Floor	
8. FACTORS THAT MAY INFLUENCE INDOOR AIR Q	UALITY
a. Is there an attached garage?	Y 🔊
b. Does the garage have a separate heating unit?	Y / NA
<b>X</b> c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	(P/N/NA Propane fork bit Please specify
d. Has the building ever had a fire?	Y / 🕅 When?

\*e. Is a kerosene or unvented gas space heater present?

- f. Is there a workshop or hobby/craft area?
- g. Is there smoking in the building?
- h. Have cleaning products been used recently?
- i. Have cosmetic products been used recently?

Propane anealing Line

	Y/N/NA
	Propane fork Lifs
	Y / 🕅 When?
	Y / N Where?
€ / N	Where & Type? <u>entire bldg</u>
Y /	How frequently?
Ø/ N	When & Type?
Y (N)	When & Type?

j. Has painting/staining been done in the last 6 months?	Y/N	Where & When?
k. Is there new carpet, drapes or other textiles?	Y / N	Where & When?
l. Have air fresheners been used recently?	Y / N	When & Type?
m. Is there a kitchen exhaust fan?	Y / N	If yes, where vented?
n. Is there a bathroom exhaust fan?	Y/N	If yes, where vented?
o. Is there a clothes dryer?	Y / N	If yes, is it vented outside? Y / N
p. Has there been a pesticide application?	Ø∕ N	When & Type? <u>+ + + + + + + + + + + + + + + + + + +</u>
Are there odors in the building? If yes, please describe: <u>Yes/oil lube sme</u>	Y/N 11 For	stamping machines
<b>Control Do any of the building occupants nse solvents at work?</b> (e.g., chemical manufacturing or laboratory, auto mechanic or a boiler mechanic, pesticide application, cosmetologist	Y /N auto body	) ito chlorinater shop, painting, fuel oil delivery,
If yes, what types of solvents are used?		
If yes, what types of solvents are used?	Y / N	
If yes, are their clothes washed at work? <b>Do any of the building occupants regularly use or work at a</b> response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service	Y / N 1 dry-clez	No Unknown
If yes, are their clothes washed at work? <b>Do any of the building occupants regularly use or work at a</b> response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less)	Y / N 1 dry-clez	No Unknown
If yes, are their clothes washed at work? <b>Do any of the building occupants regularly use or work at a</b> response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure	Y / N 1 dry-clez	No Unknown
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE	Y / N 1 dry-clez	No Unknown
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drive	Y / N n dry-clez re?Y ∭	No Unknown Date of Installation:
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drive Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residention)	Y/N n dry-clez re? Y ( n Well n Field al emerg	No Unknown Date of Installation: Dug Well Other: Dry Well Other:
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drive Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residenti a. Provide reasons why relocation is recommended:	Y/N n dry-clez re? Y ( n Well n Field al emerg	No Unknown Date of Installation: Dug Well Other: Dry Well Other:
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drive Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residention)	Y/N n dry-clez re? Y () n Well n Field al emerg //A	No Unknown Date of Installation: Dug Well Other: Dry Well Other: gency)
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drive Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residenti a. Provide reasons why relocation is recommended:	Y/N <b>dry-cles</b> <b>re?</b> $Y \bigwedge$ n Well n Field <b>al emerg</b> $\cancel{MA}$ iends/fam	No Unknown Date of Installation: Dug Well Other: Dry Well Other: ency) ily relocate to hotel/motel

#### Product Inventory Form Johnson and Hoffman Manufacturing 40 Voice Road, Carle Place, NY 12/5/2011

Chemical Manufacturer	Chemical Name	Use
Almco	408	Abrasive Compound
Starrett	Lubricant	Aerosol Lubricant
Mechanical Finishing	MFC 112	Burnishing Compound
Almco	2350	Burnishing Compound
Clorox Co.	Bleach	Cleaner
Johnson & Johnson	Windex	Cleaner
Johnson & Johnson	Gojo Purell Hand Sanitized	
Reckitt Benekiser	Lysol	Cleaner
Oakite	Renovator	Cleaning Compound
	Simple Green & Simple	
Sunshine Makers	Green d Pro5	Cleaning Solution
Clorox Co.	Pine Sol	Cleaning Solution
Crest Ultasonics	Chem Crest 918 (911)	Degreasing Soap
Almco	15	Descaling & Cleaning Compound
Azolla	ZS320	Drawing Oil
Fuch	Tuf Draw 1403-M50	Drawing Oil
Fuch	Renodraw 207W	Drawing Oil
Tower/Fuchs	933	Drawing Oil / Ecocut
GE Osmonics	Ultraflux-B	Filter Cleaner
United Unibrite	50R	Finishing Compound
Mobil	DTE 24	Gear Oil
Elmers	Krazy Glue	Glue
Target	Anti Seize Paste	Lubricant
Mobil	Gear 626	Machine Oil
Radiator Specialty Co.	Brake Cleaner	Non Chlorinated Brake Cleaner
Tergitol	15-S-9	Nonionic Sufactant
Safety Kleen	Premium Gold Solvent	Parts Washer
Macdermid	Clepo 160-T	Plating Solution
Macdermid	Clepo 163-TW	Plating Solution
Macdermid	881-A	Plating Solution
Mechanical Finishing	MFC-3	Rust Inhibitor
PPG	Rustarest 52315	Rust Inhibitor
Rosler	ZF113	Rust Inhibitor
Matchless	RI 7139	Rust Preventative
Armakleen	M-Auto	Rust Remover
Oakite	33	Rust Remover
Matchless	Sc-07L	Soak Cleaner
Matchless	SC-120L	Soak Cleaner
Matchless	SC-356L	Soak Cleaner
PPG	Gillete 71	Soap Paste
United Unibrite	Burnek 22	Soap Powder
United Unibrite	222 Roll Gleam	Soap Powder
Clarkson & Ford	Prime Lard Oil	Stamping/Forming Oil
Clarkson & Ford	XLN	Stamping/Forming Oil
Clarkson & Ford	Mineral Laard 40%	Stamping/Forming Oil
Lamson Oil	6912	Vanishing Oil
		Various Paints used Around Building
Sherwin Williams/Krylon		Various Paints used Around Buildin

#### 11. FLOOR PLANS

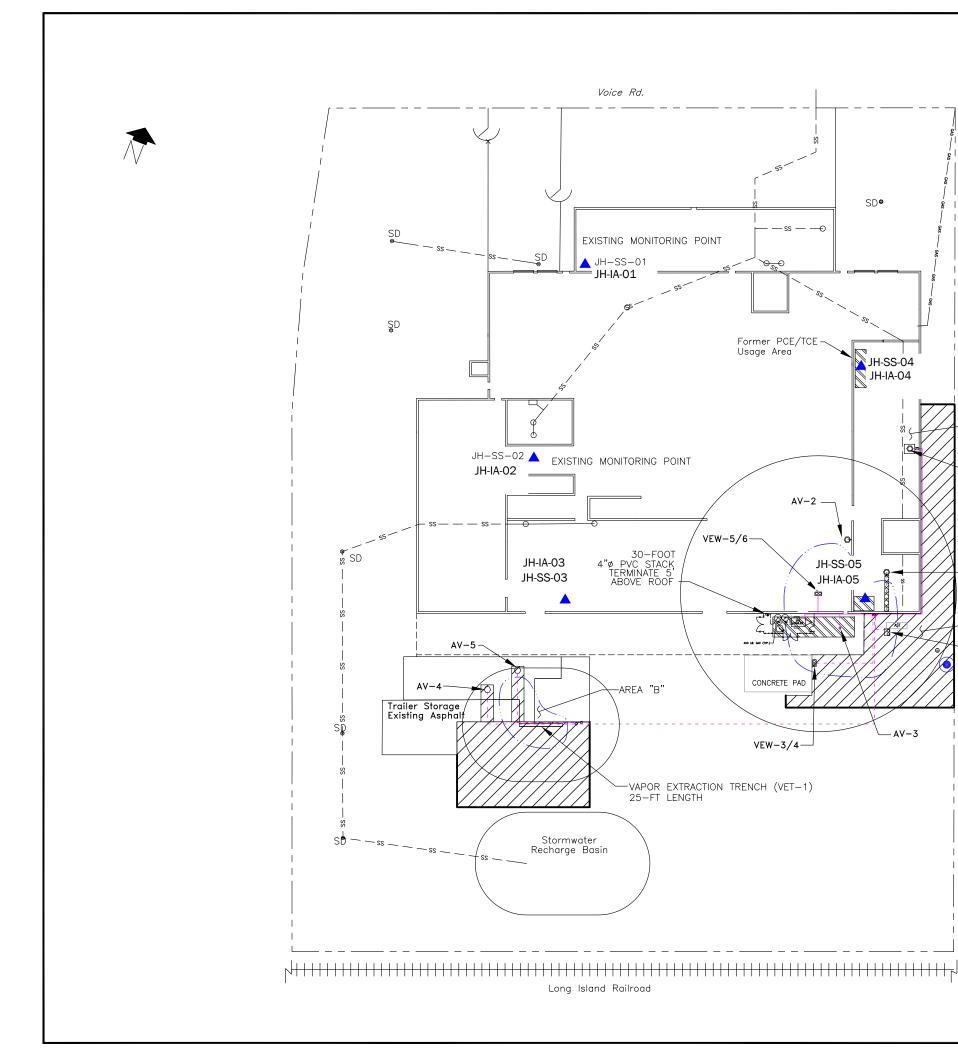
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

#### **Basement:**

 No	B	as	em	ner	ht	,				 													
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#### **First Floor:**

Se	e	Ne	xt	Pa	ige															
 						 	 		 		 	,	 	 	 	 	 	 		 
 						 	 	 	 				 		 	 	 	 	 1	 





SD⊖

JH-SS-04 JH-IA-04

- AV-3

-area "c"

-area "a"

- VEW-1/2

VEW-7

- AV-1

— ss — —Ə

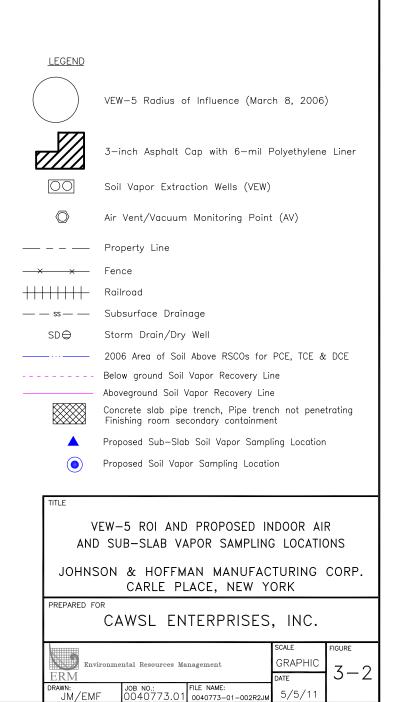
AV-2 -

JH-SS-05

JH-IA-05

Extraction	Flowrate (CFM)	Approximate Radius
Point	(approximate)	of Influence (ft.)
/EW-5	91.8	80

SVE Radius of influence (March 8, 2006). Based on 0.1" WC (Water Column)





#### **ERM Daily Field Report**

Date: 12/05/11

Project Name: <u>J&amp;H IA/SS/OA/OSV sampling</u>	Temperature Range: <u>48 - 53 F</u>
Project Number: 0127194	Rain / Snow Amount: <u>None</u>
Project Manager: John Mohlin	Wind Speed: To 7 mph from S
Completed By: J Maddox	Time Onsite: <u>7:15</u>
Location: 40 Voice Rd Carle Place	Time Offsite:15:10
Report No 1	Photographs Taken: <u>No</u>
Sub Company Onsite Crew Size	<u>Supervisor</u> <u>Task</u>
NAEVA Frank + Ken	Markout JH-OSV-01 installation point
	_

Work Activities completed today: (include production rates) 7:15 Maddox on site. Met with Rich Trevaskis to inform him of the work plan. Set up Summa canister pairs of IA and SS at 5 locations indoors, and one OA at west end of treatment trailer. 8:00-9:30 Gene Gabay and NAEVA onsite to markout 10' radius at OSV-01 installation point. Point is 30.5' SSE of SE corner of building and 5.5 W of wire fence. 9:30 Gene installed temporary sampling point JH-OSV-01 to depth of 5' bgs. Vapor point bedded in glass beads and the bore hole grouted to grade with Volclay/cement mix. The point was purged at a flow rate of 0.2 L/min. and then leak checked by flooding with helium and monitoring for breakthrough with a helium detector attached to the point fitting. 50 ppm He detected though grout appears well bedded. 10:20 Start TO-15 sampling of JH-OSV-01. 10:45 Maddox off site after assuring pressure rise on samples. Gabay conducting chemical inventory.

13:40 Maddox onsite. Observe that pressure gauges have barely risen. Regulators are 24 hour, not 8 hour. Sampling aborted. Informed John Mohlin, contacted Accutest for new sample ware with 8 hour regulators.

15:20 Maddox offsite with labware.

Sub Company	Equipment Used	Make	Model	Hours Used
NAEVA	GPR			2
Name of Visitor Onsite	Representing		Purpose	Duration Onsite
None	1 0		-	
Wor	e There Any Accidents	or Incide	nte Onsita? NO	

If Yes Attach Accident or Incident Report and Take Photographs.



#### **ERM Daily Field Report**

Date: 12/07/11

Project Name:J&H IA/SS/OA/OSV samplingProject Number:0127194Project Manager:John MohlinCompleted By:J MaddoxLocation:40 Voice Rd Carle PlaceReport No.2	Temperature Range:48 - 53 FRain /Snow Amount:Continuous 1.21"Wind Speed:To 12 mph from NWTime Onsite:7:05Time Offsite:18:30Photographs Taken:No			
Sub Company Onsite     Crew Size       None	Supervisor Task			

Work Activities completed today: (include production rates)

7:05 Maddox on site. Met with Rich Trevaskis to inform him of the work plan. Set up Summa canister pairs of IA and SS at 5 locations indoors, one OA at west end of

treatment trailer, and soil vapor sample OSV-01 (see 12/5 report for details).

<u>Sampling is TO-15 for 8 hour interval during facility cold weather heating conditions.</u> Observed sample draw on pressure gauges.

10:00 Maddox offsite.

14:05 Maddox onsite. Periodically checked pressure gauges on the 12 samples. Ended sampling at minimum pressures of -5" Hg. PID readings taken at each sample point. See sample log for details. Closed up SS sample points as completed. Note that two spare Summas are being kept on site for Q SVE emissions sampling next week. 18:30 Maddox offsite with the 12 samples. Sample pick up arranged with Accutest for

Friday 12/9.

Sub Company	Equipment Used	Make	Model	Hours Used
None				
Name of Visitor Onsite	<b>Representing</b>		<u>Purpose</u>	Duration Onsite
None				

<u>Were There Any Accidents or Incidents Onsite? NO</u> If Yes Attach Accident or Incident Report and Take Photographs.

ERM F	20 Broadhollow Rd, Suite 210 L( (r lelville, NY 11747 hone: (631) 756-8900 ax: (631) 756-8901	<u> </u>		Project Name: Location: Project Manager: PIC: Collector(s):	Carle Place, NY John Mohin Mike Teetsel
inple Location: Idress: D Meter Used: Iodel, Serial #)	HO MARC VOICE MINIRAE 2000 # 1	10-0134	65 [PINE RENTAL]		
JMMA Canister Reco	ord: DOR AIR (slab-on-grade, 1st floor)	s	SUBSTRUCTURE SOIL GAS		OUTDOOR AIR
ample ID: JH-1A-	· · · · · · · · · · · · · · · · · · ·	Sample ID: JH-SS-01	A 984 (JMX)	Sample ID:	
anister Serial No.:	A 279	Canister Serial No.:	A984	Canister Serial No.:	×
tow Controller Id	FC 482	Flow Controller Id No:	FC292	Start Date/Time:	
itart Pressure:	12/7/11 07:20	Start Pressure: (Inches	12/7/11 07:28	Start Pressure: (inches Hg)	/
inches Hg) Stop Date/Time:	-30	Hg) Stop Date/Time:	7-30	Stop Date/Time:	
Stop Pressure: inches Hg)	2744 19:33	Stop Pressure: (inches Hg)	12/7/1 16:09	Stop Pressure; (inch Hg)	ies
Other Sampling Infor	Thation				/
PID Reading (ppm)	Ø	PID Reading (ppm) Room & as purged	Ø	PID Reading (ppm)	
Story/Level	1	Basement or Crawl Space?	NA	Depth of Vapor Pro	
Room	CARGTOLIA	Floor Slab Thickness (inches) [if present]		Distance from Build	
Indoor Air Temp (°F) Intake Height Above	73	Potential Vapor Entry Points Observed? Ground Surface	73	Ground Level (ft.)	
Fioor Level (ft.)	5'	Condition (Crawi Space Only) Noticeable Odor?	TILED FLOOR NO	Distance to learest Roadway (it.)	
Barometric Pressure ("Hg or mb)	NO	Percent O <sub>2</sub> /CO <sub>2</sub> /CH <sub>4</sub>	NA	Noticeatile Odor?	
Duplicate Sample?	<b>N</b> D	Duplicate Sample?	20 60	Durticate Sample?	
Comments:			) 		
	13 ett 0ff (4:33		9" e 14:33 5.5 E 15:38		
		Ø	7-42 [6]09		
· · · · · · · · · · · · · · · · · · ·					
Signature;	The week			· · · ·	

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	Environmental Resources Management 520 Broadhollow Rd, Suite 210 <u>Melville, NY 11747</u> Phone: (631) 756-8900 Fax: (631) 756-8901			Project #: Project Name: Location: Project Manager: PIC: Collector(s):	0127194 J&H Manufacturing Carle Place, NY John Mohlin Mike Teetsel MASACX
Address: PID Meter Used: (Model, Seriel #) SUMMA Canister Re	HO VOICE PD HINI RAE # 1 cord:	10-01346	5		
	DOOR AIR (slab-on-grade, 1st floor)		SUBSTRUCTURE SOIL GAS		OUTDOOR AIR
	1-12-02		-55-02	Sample ID:	/
Canister Serial No.: Flow Controller Id No:	Aggs	Canister Serial No.: Flow Controller Id No:	A314	Canister Serial No.: Flow Controller Id No	
ND: Start Date/Time:	FC455 12/7/11 07:39	Start Date/Time:	FC.338 12/7/11 07:39	Start Date/Time:	
Start Pressure: (inches Hg)	- 30	Start Pressure: (inches Hg)	> 30	Start Pressure: (inches Hg)	
Stop Date/Time:	12/7/11 16:15	Stop Date/Time:	12/7/11 (7:22	Stop Date/Time:	s
(inches Hg)	- 4	Hg)	5	Hg)	
Other Sampling Info	rmation:	PID Reading (ppm)		PID Reading (ppm)	/
PID Reading (ppm)	0.2 ppm	Room & as purged Basement or Crawl	O.1ppm	Depth of Vapor Prob	•
	[	Space?	NA		
Room	Rist Room	Floor Slab Thickness (inches) [if present]		Distance from Buildin	
Indoor Air Temp (°F)	79	Potential Vapor Entry Points Observed? Ground Surface	No	Intake Height Above Ground Level (ft.) Intake Tubing used?	
Intake Height Above Floor Level (fl.) Noticeable Odor?	5'	Condition (Crawl Space Only) Noticeable Odor?	-	Distance to nearest	
	E-		MACHINE OIL	Roadway (ft.)	
Barometric Pressure ("Hg or mb)		Percent O <sub>2</sub> /CO <sub>2</sub> /CH <sub>4</sub>	ре	Noticeable Odor?	
Duplicate Sample?	مرا	Duplicate Sample?	NO	Øuplicate Sample?	
Comments:	9@ 14:55 5.5@ 15:39		13,0 11.35 9.50 15:39		
(UKF)	- 4 e 16:15		.5 17:22 OFF		
N	(Julion				
Signature:					

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	vironmental Resources Management <del>o Broadhollow Rd, Suite 210</del> elville, NY 11747 None: (631) 756-8900 IX: (631) 756-8901	χεου S	Project #: Project Name: Location: Project Manager: PIC: Collector(s):	0127194 J&H Manufacturing Carle Place, NY John Mohlin Mike Teetsel	
le Location:	J+H				IMGHOOX
ISST .	40 VOICE RD MINI RAE 2000		171165		
Neter Used: el, Serial <u>#</u> )		7-110-0	1 5469		
MA Canister Reco	rd: DOR AIR (slab-on-grade, 1st floor)	5	SUBSTRUCTURE SOIL GAS		OUTDOOR AIR
ple ID:		Sample ID:	(( ))	Sample ID:	
3 4 1	-1A-03		-55-03	Canister Serial No.	
ster Serial No.:	A864	Canister Serial No.:	A018	Flow Controller Id I	No:
/ Controller 1d	FC 453	Flow Controller Id No:	FC187	Start Date/Time:	/
t Date/Time:	12/7/11 07:53	Start Date/Time:	12/1/11 07:48	Start Pressure:	/
t Pressure: hes Hg)	30"	Start Pressure: (inches Hg)	>30"	(inches Hg) Stop Date/⊤ime:	
p Date/Time:	12/9/11 15:51	Stop Date/Time:	12/7/11 16:30	Stop Pressure: (in	ches
p Pressure: thes Hg)	_·U	Stop Pressure: (inches Hg)	- 4	Hg)	/
ner Sampling Info	mation:			PID Reading (ppr	n)
) Reading (ppm)	O.1 ppm	PID Reading (ppm) Room & as purged	Ø	Depth of Vapor P	
pry/Level	(	Basement or Crawl Space?		Distance from Bu	
man	BLACK HOLE	Floor Slab Thickness (inches) [if present] Potential Vapor Entry		Intake Height Ag	ove
door Air Temp (°F)	73	Points Observed?	No	Ground Level (rt. Intake Tubing us	
take Height Above oor Level (ft.)	5'	Condition (Crawl Space Only) Noticeable Odor?	NA	Distance to near	est
oticeable Odor?	2	Percent O <sub>2</sub> /CO <sub>2</sub> /CH <sub>4</sub>	MACHING OIL	Roadway (fl.) Notigeable Odor	?
arometric Pressure Hg or mb)		Duplicate Sample?	NG	Duplicate Samp	le?
uplicate Sample?	NO		GN		
Comments:	8 100 1437 4 4 C 15:51		108° e 14:37 6 e (351 2 4 e 16:30		
		<b></b>			
Signature:	Juntaax		·		
undiature.	×				

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JH-	4-04		-55-04		/
er Serial No.:	A242	Canister Serial No.:	A254	Canister Serial No.:	
Controller 1d	FC236	Flow Controller Id No:	FC 475	Flow Controller Id No	07
Date/Time:	12/1/11 07:59	Start Date/Time:	12/7/11 07:55	Start Date/Time:	
Pressure: is Hg)	29 "	Start Pressure: (inches Hg)	>30	Start Pressure; (inches Hg)	
Date/Time:	02/7/11 5:35	Stop Date/Time:	12/7/11 18:15	Stop Date/Time:	
Pressure: as Hg)	-2	Stop Pressure: (inches Hg)	-5	Stop Pressure: (inc) Hg)	les
Sampling Infor	mation:				
(eading (ppm)	ø	PID Reading (ppm) Room & as purged	$\phi$	PID Reading (ppm)	
Level	1	Basement or Crawl Space?	NO	Depth of Vapor Pro	be
n	Russ noon Mx	Floor Slab Thickness (inches) [if present]		Distance from Build	ling
or Air Temp (°F)	470	Potential Vapor Entry Points Observed?	No	Intake Height Aboy Ground Level (ft.)	e
e Height Äbove Level (ft.)	5'	Ground Surface Condition (Crawl Space Only)		Intake Tubing used	?
ceable Odor?	MACHINGRY /OIL	Noticeable Odor?	~~~	Distance to nearest Roadway (fl.)	t
metric Pressure or mb)	1	Percent O <sub>2</sub> /CO <sub>2</sub> /CH <sub>4</sub>		Noticeable Odor?	
icate Sample?	ри	Duplicate Sample?	No.	Duplicate Sample?	5
iments:	<i>F</i> % (cf d)		1211 - 12141	ť	
	5 @ 14:41		13" e 14:41		

Environmental Resources Mana <del>520 Broadhollow Rd, Suite 210</del> Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901	gement 40 (MARGUS	Project #: 0127194 Project Name: J&H Manufacturing Location: Carle Place, NY Project Manager: John Mohlin PIC: Mike Teetsel		
ress:	Ph	Collector(s):	MHDBOX	
	NO # 110-(	013465		
MA Canister Record: INDOOR AIR (slab-on-grade, 1st floor)		SUBSTRUCTURE SOIL GAS	0	UTDOOR AIR
nple ID:	Sample ID:		Sample ID:	
JH-1A-05		- 55-05	Canister Serial No.:	/
ister Serial No.:	Canister Serial No.:	A168		/
v Controller Id FC379	Flow Controller Id No:	FC 464	Flow Controller Id No:	
1 Date/Time: 12/7/11 DO'.0	Start Date/Time:	12/7/4 00:05	Start Date/Time:	
rt Pressure: hes Hg) 30"	Start Pressure: (inches Hg)	> 30	Start Pressure: (inches Hg)	
p Date/Time: 12/1/11	Stop Date/Time:	12/7/11 16:48	Stop Date/Time:	
pp Pressure: ches Hg)	Stop Pressure: (inches Hg)	- 4.5	Stop Pressure: (inches Hg)	
ner Sampling Information:		()		
P Reading (ppm) 0.4 ppm	PID Reading (ppm) Room & as purged	Ø	PID Reading (ppm)	/
ry/Level	Basement or Crawl Space?	NO	Depth of Vapor Probe	/
om Smaing	P. C. C. Floor Slab Thickness (If Ches) [if present]	Margan Control	Distance from Building	
	Potential Vapor Entry Points Observed?	(No	Intake Height Above Ground Level (fL)	
ake Height Above for Level (ft.)	Ground Surface Condition (Crawl Space Only)	-	Intake Tubing used?	
ticeable Odor?	Noticeable Odor?		Distance to nearest Roadway (ft.)	
arometric Pressure	Percent O <sub>2</sub> /CO <sub>2</sub> /CH <sub>4</sub>		Noticeable Odor?	
uplicate Sample?	Duplicate Sample?	ND	Duplicate Sample?	
omments:				
5.5C 1	5:33	65 C 15:33		
OFF -4 1	01.05	4.50 16:48 64	F)	
		C		
<u> </u>				
Signature:				

Environmental Resources Management	o marcus	Project #: 0127194 Project Name: J&H Manufacturing
Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901		Location: Carle Place, NY Project Manager: John Mohlin
		PIC: Mike Teetsel
		Conjector(s):
TO Vace 14		
dei. Serial #) MINUNE LEUI	0 # 110-013465	
MMA Canister Record: INDOOR AIR (slab-on-grade, 1st floor)	SUBSTRUCTURE SOIL GAS	OUTDOOR A!R
nple ID:	Sample ID:	Sample ID:
	JH. 05G -01	JH-OA-01
nister Serial No.:	Canister Serial No.: 17 224	Canister Serial No.:
v Controller Id	Flow Controller Id No: FC 437	Flow Controller Id No: FC 480
rt Date/Time:	Start Date/Time:	19 Start Date/Time: 12/7/11 DBIS
art Pressure: ches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg) 30
op Date/Time:	Stop Date/Time: 12/77/// 16:5	9 Stop Date/Time: 12/7/11 16:53
op Pressure: ches Hg)	Stop Pressure: (inches Hg) - 4.5	Stop Pressure: (inches Hg) -4
her Sampling Information:		
D Reading (ppm)	PID Reading (ppm) Room & as purged	PID Reading (ppm)
ory/Levei	Basgmentor Crewi Spacet Tomp 590	TEMP +554 63
poom	Floor Stab Thickness (Inches) [if present]	Distance from Building
door Air Temp (°F)	Potential Vapor Entry Points Chaseder? DEPTHOF PROBE -5'	Ground Level (ft.) 51
itake Height Above loor Level (ft.)	Ground Surface Condition Crawl Space Only	NO
oticeable Odor?	Noticeable Odor? No	Distance to nearest Roadway (fl.)
arometric Pressure Ig or mb)	Percent O_/CO_/CH4	Noticeable Odor?
uplicate Sample?	Duplicate Sample?	Duplicate Sample?
omments:		
17-056-01 WA	S INSTAULAN 12/5/11 ARTE	RUTIL THY SUPVER POINT LS
305'SSFAC SE	COBNER OF BLOG AND S.S'WE	ST OF WIRE FENCE. TUBING
WAS PUECED AT 0.2 L	MIN AND HELLING LEAK THE	T CONDUTED HE= 500mm.
12/5 62404	S INSTALLED 12/5/11 AFTE CORNER OF BLDG, AND 5.5' WE MIN AND HELLUM LEAK TE ABORTED. 12/7/11, TUBING P	JOGED ANN THE SAMPLED AS ABE
12/5 Sompling was	MONCON, ICI (111, MONON 1	AND ST DOW () . IF A F. J
K. An	110.14:49	10 C14149
Signature:	- Ria (S'42	JA 15.45

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February 2012

This form must be completed for each residence involved in indoor air testing.

Preparer's Name <u>Eugene Gabay</u> Date/Time Prepared <u>2/9/12</u>
Preparer's Affiliation <u>ERM</u> Phone No. <u>516-250-6155</u> /631-756-8900
Purpose of Investigation Ongoing Vapor Intrusion Investigation
1. OCCUPANT: Facility Manager
Interviewed: $\delta / N$
Last Name: Trevaskis First Name:
Address: 40 Voice Rd. Carle Place, NY 11514
County: NUSSqu
Home Phone: <u>NIA</u> Office Phone: <u>516-742-3333</u>
Number of Occupants/persons at this location Age of Occupants
2. OWNER OR LANDLORD: (Check if same as occupant)
Interviewed: Y / N
Last Name: First Name:
Address:
County:
Home Phone: Office Phone:

## **3. BUILDING CHARACTERISTICS**

Type of Building: (Circle appropriate response)

ResidentialSchoolCommercial/Multi-useIndustrialChurchOther:

11:00 E. Gabay arrives on-site and speaks to Rich Trevaskis to inquire about the use of chlorinated solvents inside the building during the last sampling round conducted in December 2011 which caused PCE detections in indoor air at levels higher than what was detected in the sub-slab. He said they have since removed all material containing chlorinated solvents from the building and wasn't sure why the chlorinated material was being used during the last event. He said he believes they may have gotten the wrong shipment from the manufacturer. He explained that employees have been informed that no chlorinated compounds can be used on  $^2$ site so we should have no further issue.

If the property is residential, type? (Circle appropriate response)

Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment Hou Log Home	ise Townh	-	
If multiple units, how many	/?			
If the property is commerci	al, type?			
Business Type(s) <u>Me</u>	tal Stam	ping		
Does it include residence		v	If yes, how many?	
Other characteristics:			•	
Number of floors		Building age	·	
Is the building insulated? Cciling Ensulated Not	Ø1Ø √alls	How air tight?	Tight / Average / Not Tight	
4. AIRFLOW				
Use air current tubes or tra	cer smoke to eval	uate airflow pa	tterus and qualitatively describe:	
Airflow between floors				
Airflow near source	· 			
Outdoor air infiltration				
Infiltration into air ducts				

5.	BASEMENT AND CONSTRUC	TION CHARA	CTERISTICS	(Circle all that a	oply)
	a. Above grade construction:	wood frame	concrete	stone	brick
	b. Basement type:	full	crawlspace	slab	other
	c. Basement floor:	concrete	dirt	stone	other
	d. Basement floor:	uncovered	covered	covered with	·
	e. Concrete floor:	unsealed	sealed	sealed with	
	f. Foundation walls:	poured	block	stone	other
	g. Foundation walls:	unsealed	sealed	sealed with	
	h. The basement is:	wet	damp	dry	moldy
	i. The basement is:	finished	unfinished	partially finis	ned
	j. Sump present?	Y/N			
	k. Water in sump? Y / N	/ not applicable			
Ba	sement/Lowest level depth below	grade:	_(feet)		
Id	entify potential soil vapor entry po	oints and appro	ximate size (e.g	g., cracks, utility	ports, drains)
_					
_					
6.	HEATING, VENTING and AIR	CONDITION	NG (Circle all 1	that apply)	
	HEATING, VENTING and AIR /pe of heating system(s) used in th		× ·		
	·		cle all that app		y)
	ype of heating system(s) used in the	is building: (cir	cle all that app Hot	ly – note primar	y) Other
Ту	The of heating system(s) used in the Hot air circulation Space Heaters	<b>is building: (cir</b> Heat pump Stream radiati Wood stove	cle all that app Hot ion Radi Outd	<b>Iy – note primar</b> water baseboard ant floor	
Ту	Type of heating system(s) used in the Hot air circulation Space Heaters Electric baseboard	<b>is building: (cir</b> Heat pump Stream radiati	cle all that app Hot ion Radi Outd	<b>Iy – note primar</b> water baseboard ant floor loor wood boiler	

Domestic hot water tank fueled by: <u>Nat Gas/Electr; c</u>								
Boiler/furnace located in:	Basement	Outdoors Main Floor	Other					
Air conditioning:	Central Air	Window units Open Windows	None					
		office Main Avea						

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Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

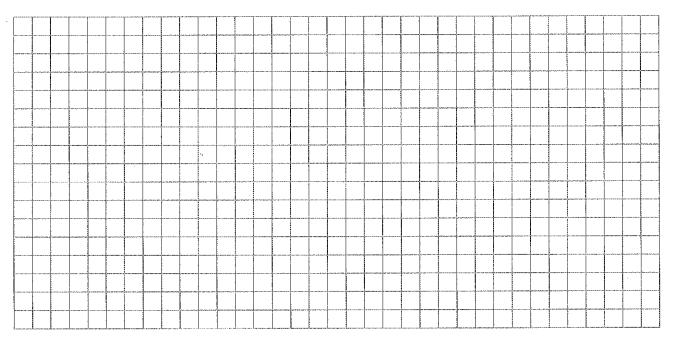
Modine hot air blowers & Space heaters	(ceiling mounted)
& Space heaters	<i>v</i>
· · · · · · · · · · · · · · · · · · ·	
7. OCCUPANCY	
Is basement/lowest level occupied? Full-time Occ	casionally Seldom Almost Never
Level General Use of Each Floor (e.g., familyro	oom, bedroom, laundry, workshop, storage)
Basement None	
1st Floor Always Occupied by	employees
2 <sup>nd</sup> Floor None	• <i>•</i>
3 <sup>rd</sup> Floor	······
4 <sup>th</sup> Floor	
8. FACTORS THAT MAY INFLUENCE INDOOR AIR	
a. Is there an attached garage?	Y / 🖸
b. Does the garage have a separate heating unit?	Y / Ø/ NA
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	Ø/N/NA Propane for Klifts Please specify
d. Has the building ever had a fire?	Y / 🔊 When?
e. Is a kerosene or unvented gas space heater present?	Y / N Where?
f. Is there a workshop or hobby/craft area?	YN Where & Type? <u>Corfire bldg</u> .
g. Is there smoking in the building?	Y / 🕅 How frequently?
h. Have cleaning products been used recently?	Ø∕ / N When & Type?
i. Have cosmetic products been used recently?	Y / When & Type?
Propane aneuling line	

5		
j. Has painting/staining been done in the last 6 months?	Y / N	Where & When?
k. Is there new carpet, drapes or other textiles?	Y / N	Where & When?
l. Have air fresheners been used recently?	Y / N	When & Type?
m. Is there a kitchen exhaust fan?	Y/N	If yes, where vented?
n. Is there a bathroom exhaust fan?	Y / N	If yes, where vented?
o. Is there a clothes dryer?	Y / N	If yes, is it vented outside? Y / N
p. Has there been a pesticide application?	Y/N	When & Type?
Are there odors in the building? If yes, please describe: <u>Ues</u> oil <u>ube</u> <u>sme</u> <b>Do any of the building occupauts use solvents at work?</b> (e.g., chemical manufacturing or laboratory, auto mechanic or a boiler mechanic, pesticide application, cosmetologist	Y /₽	
If yes, what types of solvents are used?		
If yes, what types of solvents are used? If yes, are their clothes washed at work?	Y/N	
If yes, what types of solvents are used? If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a	Y/N	
If yes, what types of solvents are used? If yes, are their clothes washed at work? <b>Do any of the building occupants regularly use or work at a</b> response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur	Y / N <b>dry-cle</b> a	nning service? (Circle appropriate No Unknown
If yes, what types of solvents are used? If yes, are their clothes washed at work? <b>Do any of the building occupants regularly use or work at a</b> response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive	Y / N <b>dry-cle</b> a	nning service? (Circle appropriate No Unknown
If yes, what types of solvents are used? If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE	Y / N <b>dry-cle</b> a	nning service? (Circle appropriate No Unknown
If yes, what types of solvents are used? If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE	Y/N <b>dry-cle</b> e?Y/ð n Well	nning service? (Circle appropriate No Unknown Date of Installation:
If yes, what types of solvents are used? If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drives	Y/N <b>dry-cles</b> e? Y/X n Well a Field al emerg	Image service? (Circle appropriate         No         Unknown         Date of Installation:         Dug Well       Other:         Dry Well       Other:
If yes, what types of solvents are used? If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Drives Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residenti	Y/N <b>dry-cle</b> e? Y/X n Well n Field al emerg <u>V/A</u>	Image: ming service? (Circle appropriate   No   Unknown   Date of Installation:   Dug Well   Other:   Dry Well   Other:

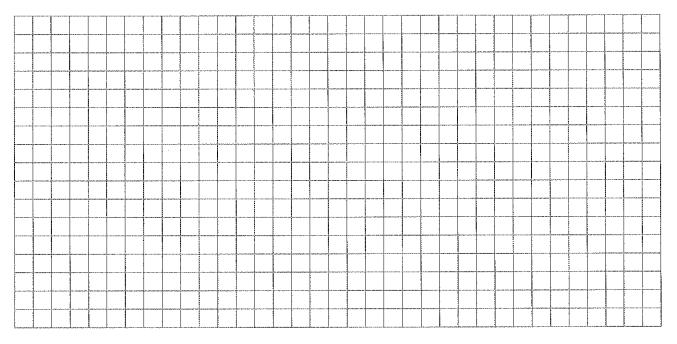
## 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

## **Basement:**



# **First Floor:**

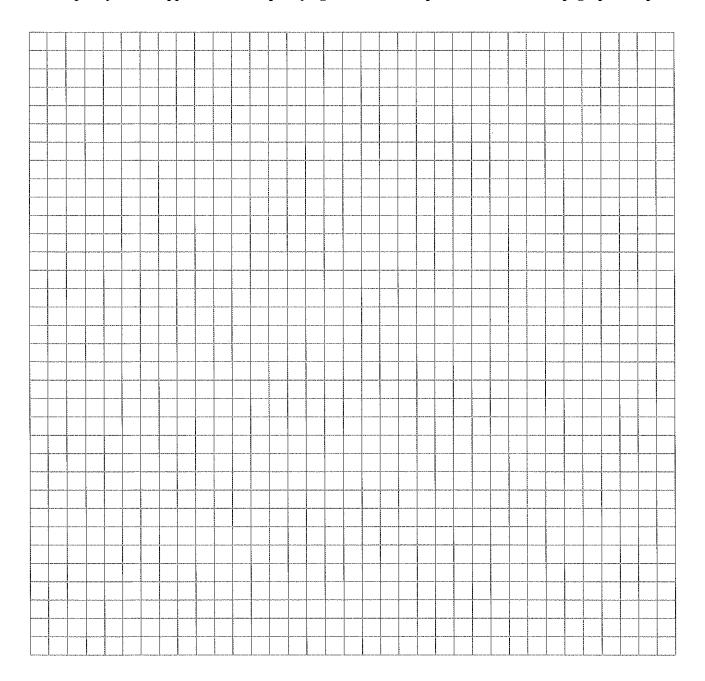


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#### **12. OUTDOOR PLOT**

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



## **13. PRODUCT INVENTORY FORM**

Make & Model of field instrument used:

List specific products found in the residence that have the potential to affect indoor air quality.

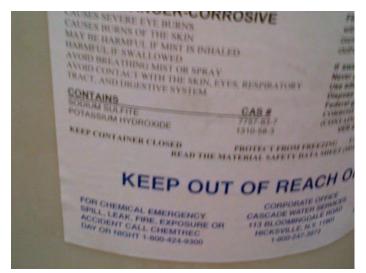
Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
	See ploto Log					
	· · · · · · · · · · · · · · · · · · ·					
					~	
		-				
	· · · · · · · · · · · · · · · · · · ·					*

\* Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)

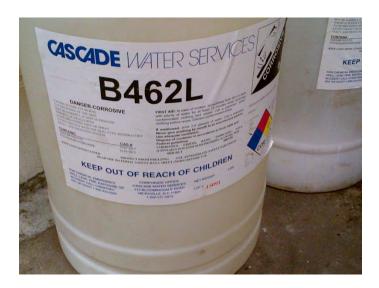
\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

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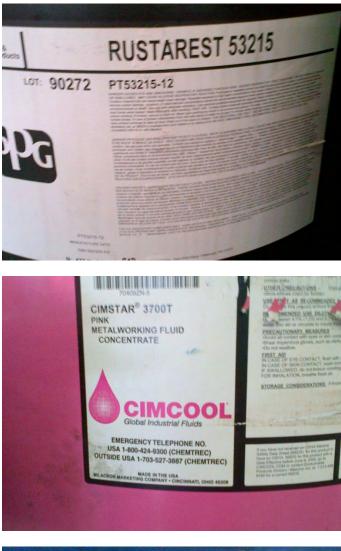


Page 1 of 17



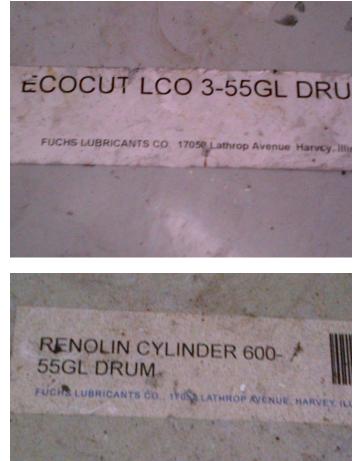










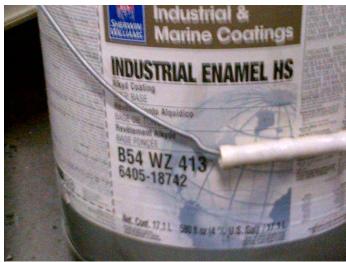










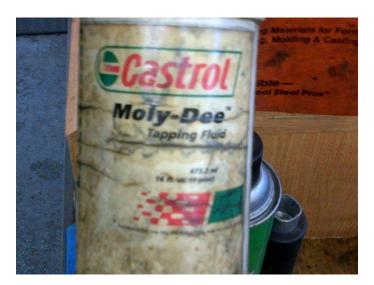
































**a**5 20:00 67 WHT DO 11 PT IDE ANTI SEIZE - SV GRADE A/S 12 Number : 19470 ng Slip Number : 4314105 Line# : 1 W-1183792 f the basement and first floor of the bailding. In his publiclon sources and FID meter readings. If



































ERM	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Project #: Project Name: Location: Project Manager:	
Sample Location: Address: PID Meter Used: (Model, Serial #)	40 NOICE RD CO	kie plae	ξ	PIC: Collector(s):	Janopser
SUMMA Canister Re	Subsurface		Subsurface		Subsurface
Sample ID;	J#-55-03		+-55-02	•	-55-01
Canister Serial No.:	A1031	Canister Serial No.;	A 1035	Canister Serial No.:	A 199
Flow Controller Id No:		Flow Controller Id No:	FG138	Flow Controller id No:	FC, 192
Start Date/Time:	2/10/12 07:29	Start Date/Time:	2/10/12 07:19	Start Date/Time:	2/10/12 07:15
Start Pressure: (inche Hg)		Start Pressure; (inches Hg)	36"	Start Pressure; (inches Hg)	30
Stop Date/Time:	2/10/12 10:07	Stop Date/Time:	2/10/12 15:42	Stop Date/Time:	2/10/12 16:04
Stop Pressure; (inche Hg)	5 4	Stop Pressure: (inches Hg)	5	Stop Pressure: (inches Hg)	4.5
Other Sampling Info	rmation:			,	···· <b>/</b>
PID Reading (ppm)		PID Reading (ppm)		PID Reading (ppm)	
Depth of Vapor Probe	2	Depth of Vapor Probe		Depth of Vapor Probe	
Location		Location	RESTROOM	Location	CAPETERIA
Air Temperature	68	Air Temperature	66	Air Temperature	68
Barometric pressure, Hg	4	Barometric pressure, " Hg		Barometric pressure, * Hg	
Noticeable Odor?	403	Noticeable Odor?	YES	Noticeable Odor?	K/O
Duplicate Sample?	ho	Duplicate Sample?	No	Duplîcate Sample?	No
Intake Tubing used?	405	Intake Tubing used?	YES	Intake Tubing used?	YES
Comments;	1E OFF SINCE 1/RL, 00/105 - 29.5"	1a	05:09-29"	• 	でい、2 2 9 "
			·		
Signature:	mblax	<u></u>			

ERM	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Project #: Project Name: Location: Project Manager: PIC:		
Sample Location: Address:				Collector(s):		
PID Meter Used:	sed:					
(Model, Serial #) SUMMA Canister Re	cord:		- n. ,			
	Subsurface	Subsurface		Subsurface		
	Sample ID: JH-\$5-04		Sample ID: JH-85-05		Sample ID:	
Canister Serial No.:	A-1033	Caníster Serial No.:	A 1032,	Canister Serial No.:		
Flow Controller Id No	FC 499	Flow Controller Id No:	FC.524	Flow Controller Id No:		
Start Date/Time:	2/10/12 07:39	Start Date/Time:	2/10/12 07:45	Start Date/Time:		
Start Pressure: (inche Hg)	364	Start Pressure: (inches Hg)	28"	Start Pressure: (inches Hg)		
Stop Date/Time:	2/10/12 15:46	Stop Date/Time:	2/10/12 16:00	Stop Date/Time;	·	
Stop Pressure: (Inche Hg)	5	Stop Pressure: (inches Hg)	4	Stop Pressure: (inches Hg)		
Other Sampling Info	prmation:		•			
PID Reading (ppm)		PID Reading (ppm)		PID Reading (ppm)		
Depth of Vapor Prob	9	Depth of Vapor Probe		Depth of Vapor Probe		
Location		Location		Location		
Air Temperature	700	Air Temperature	66°	Air Temperature		
Barometric pressure, Hg	n	Barometric pressure, " Hg		Barometric pressure, " Hg		
Noticeable Odor?	465	Noticeable Odor?	463	Noticeable Odor?		
Duplicate Sample?	NO	Duplicate Sample?	NO	Duplicate Sample?		
Intake Tubing used?	(GS	Intake Tubing used?	Y63	Intake Tubing used?		
Comments:	E OFF SINCE	Varti	2.			
	0814-29"	Ø.	08518 - 27"			
		<u> </u>				
	·····					
			· · · · · · · · · · · · · · · · · · ·			
	14 _ ( ) ) )					
Signature:	Kongrex					
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	ι.					

ERM Sample Location	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Project #: Project Name: Location: Project Manager: PIC: Collector(s):		
Address:	ample Location: JIH Idress: HO VOILE DR				J MADOOX	
PID Meter Used: (Model, Serial #)						
SUMMA Canister Record:						
		_l	OOR AIR (slab-on-grade, 1st floor)	iNDOOR AIR (slab-on-grade, 1st floor)		
Sample ID: JH - IA - 03		Sample ID: JH - 1A-02		Sample ID: JH-1A-01		
Canister Serial No.:	A1034	Canister Serial No.:	ALOHS	Canister Serial No.;	A 1040	
Flow Controller Id No:	FC. 405	Flow Controller 1d No:	FC 493	Flow Controller Id No:	FC 407	
Start Date/Time:	2/10/12 07:32	Start Date/Time:	2/10/12 07:23	Start Date/Time:	2/10/12 07:11	
Start Pressure: (inches Hg)	29.'	Start Pressure: (inches Hg)	× 30 4	Start Pressure: (inches Hg)	30"	
Stop Date/Time:	2/10/12 15:41	Stop Date/Time:	2/10/12 16:20		2/10/12 15:44	
Stop Pressure: (inches Hg)	3.5	Stop Pressure: (inches Hg)	S i	Stop Pressure: (inches Hg)	3.5	
Other Sampling Info	ormation:					
PID Reading (ppm)		PID Reading (ppm)		PID Reading (ppm)		
Story/Level	1	Story/Level	1	Story/Level	l .	
Room		Room		Room		
Air Temp (°F)	68	Air Temp (oF)	68	Air Temp (oF)	68 °	
Barometric Pressure ("Hg or mb)		Barometric Pressure ("Hg or mb)		Barometric Pressure ("Hg or mb)		
Comments:						
SUE OFF SUNCE [121/12 08:03 = 2:04 08:08 = 304 09:11 - 27.5"						
Signature:	phin rox			······································		

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ERM Sample Location: Address: PID Meter Used:	to voics-RD				J madex			
	(Model, Serial #) SUMMA Canister Record: 1							
INDOOR AIR (siab-on-grade, 1st floor) INDOOR AIR (slab-on-grade, 1st floor)				INI	DOOR AIR (slab-on-grade, 1st floor)			
Sample ID:	Sample ID: JH-1A-04		Sample ID: JH - 1A-05		Sample ID:			
Canister Serial No.: Flow Controller Id	A1030	Canister Serial No.: Flow Controller Id No:	A 1050	Canister Serial No.: Flow Controller Id No:				
No:	FC. 462		FC481					
Start Date/Time:	2/10/12 07:35	Start Date/Time:	2/10/12 07:46	Start Date/Time:				
Start Pressure; (inches Hg)	304	Start Pressure: (inches Hg)	< 30%	Start Pressure: (inches Hg)				
Stop Date/Time:	2/10/12 14:02	Stop Date/Time:	2/10/12 16:34	Stop Date/Time:				
Stop Pressure: (inches Hg)	4.5	Stop Pressure: (inches Hg)	5	Stop Pressure: (inches Hg)				
Other Sampling Inf	ormation:	I						
PID Reading (ppm)		PID Reading (ppm)		PID Reading (ppm)	/			
Story/Level	1	Story/Level	Ľ	Story/Level	/			
Room		Room	· · · · · · · · · · · · · · · · · · ·	Room				
Air Temp (°F)	700	Air Temp (oF)	66	Air Temp (oF)				
Barometric Pressure ("Hg or mb)	<u>,</u>	Barometric Pressure ("Hg or mb)		Barometric Pressure ("Hg or mb)				
Comments:		<u> </u>	· · ·	1	J			
$\leq$	WE OFF SINCE	1/2/12						
	NE OFF SINCE 108:15-29"		00:17 - < 30"					
		· · ·						
					THEN WERE THE CONTRACTOR			
Signature:								
	V. The second se							

5	Environmental Resources Management 40 Marcus Drive, Suite 200 Metville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Project# Project Name: Location: Project Manager: JOHN MCHUN PIC: MULE EESTEL		
EKM	1 dz. (001) / 00-0001				EEGEL	
Sample Location:	6			Collector(s):	JAADOX.	
Address:	40 Vace RD CARLE PLACE					
PID Meter Used: (Model, Serial #)						
SUMMA Canister Rec						
	Outdoor Air Outdoor Air			Outdoor Air		
Sample ID: JH- OA	-01	Sample ID:		Sample ID:		
Canister Serial No.: A 1036 Flow Controller Id No:	A 1036 FC456 2/10/12 07:02	Canister Serial No.: Flow Controller Id No:		Canister Serial No.: Flow Controller Id No:		
FC 456	FC4S6					
Start Date/Time: 21.01.2 01.02		Start Date/Time:		Start Date/Time:		
Start Pressure; (inche: Hg)	30" 15:35	Start Pressure; (inches Hg)		Start Pressure: (inches Hg)		
Stop Date/Time:	2/10/2	Stop Date/Time:		Stop Date/Time:		
Stop Pressure: (inche: Hg)	2/10/2	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		
Other Sampling Info	imation:	I				
PID Reading (ppm)	ATOP CORDON LESSEL #1	PID Reading (ppm)	/	PID Reading (ppm)		
Location		Location		Location		
Air Temperature	320	Air Temperature		Air Temperature		
Barometric pressure, Hg		Barometric pressure, " Hg		Barometric pressure, " Hg		
Noticeable Odor?	tes	Noticeable Odor?		Noticeable Odor?		
Duplicate Sample?	NO	Duplicate Sample?		Duplicate Sample?		
Intake Tubing used?	NO	Intake Tubing used?		Intake Tubing used?		
Comments:		J		1	1	
1	une osen of Swee	: 121				
SVE HAS BEEN OFF SINCE 1/21/12 08:00-28.5"						
Signature:	Ner- NOX					

December 2012

	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900			-	H VAPOR
ERM	Fax: (631) 756-8901			Location: Project Manager PIC MA Lui G	DEW MOHLW
Sample Location: Address:		AFSCIA,		Collector(s):	
PID Motor Used:	40 VALERO CARLE MINI RAT 2000	SN 03710	CPINE)		<u> </u>
(Model, Serial#) SUMMA Canister Re	Them half warmen	40 03410	CITIVE/		
IN Sample ID:	DOOR AIR (slab-on-grade, 1st floor)	INDOOR AIR (sta Sample ID:	b-on-grade, 1st fleor)	Sample ID:	DOOR AIR (slab-on-grade, 1st floor) -
-H.	1A- 01	JH -1.A -	02	JH-1	A-03
Canister Serial No.;	A 875	Canister Seria) No.:	1221	Canister Serial No.:	A196
Flow Controller Id No:	FC418		= C - 133	Flow Controller Id No:	FC 365
Stert Date/Time:	12/3/12 0733		2/3/12 0741	Start Date/Time:	12/3/12 0753
Start Pressure: (inches Hg)	>30-	Slari Pressure: (inches Hg)	>30"	Start Pressure; (inches Hg)	>30
Stop Date/Time:	12/3/12 1628	Stop Date/Time:	13/12 1627	Stop Date/Time:	12/3/12 1623
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	4 "	Stop Pressure: (inches Hg)	4.5"
Other Sampling Info					
PID Reading (ppm)	φ	PID Reading (ppm)	ø	PID Reading (ppm)	ø
Slory/Level	. (	Story/Level		Story/Level	1
Room	CAFETSRIA		ios restrooms	Room .	(NSIDE REAR WEDT DOOR
Air Temp (°F)	68°	Air Temp (oF)	64°	Air Temp (oF)	63°
Barometric Pressure ("Hg of mb)		Barometric Pressure ("Hg or mb)	<	Barometric Pressure ("Hg or mb)	<i>←</i>
Comments:					····
	SAMPLE TUBING	10/12 14:0 INTAKE AT	10 r_5' ags	<u>.</u> .	
	1	· · · ·			· · · · · · · · · · · · · · · · · · ·
	Kontoo X				
Signature:					
	ι.		· ·		

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ERM Sample Location:	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901		<u> </u>	Froject #: Project Name: Location: Project Manager: PIC: Collector(s):	O JMADDOX
Address:	40 VOICE RD CARLE	PLACE	· · · · · · · · ·		
PID Mater Used:	10 01112 19 11122	10-2			
(Model, Serial #) SUMMA Canister R/	ecord:			-	
IN	DOOR AIR (slab-on-grade, 1st floor)	IND	DOR AIR (slab-on-grade, 1st floor)	INI	DOOR AIR (slab-on-grade, 1st floor)
9ample ID: JH	-14-04	JH 1A -	05	Sample ID:	· ·
Canisler Serial No.:	A218	Canister Serial No.:	A 642	Canister Serial No.;	
Flow Controller Id No:	FC 347	Flow Controller (d No:	A 642 FC 529	Flow Controller Id No:	
Start Date/Time:	12/3/12 0500	Starl Dale/Time:	12/3/12 0811	Start Date/Time:	
Start Pressure; (inches Hg)	>30"	Start Pressure: (inches Hg)	>30	Start Pressure: (inches Hg)	
Stop Date/Time:	12/3/12 1612	Stop Date/Time:	12/3/12 1647	Stop Date/Time:	
Stop Pressure; (inches Hg)	4.5	Stop Pressure: (Inches Hg)	ца	Stop Pressure: (inches Hg)	
Other Sampling Inf					
PID Reading (ppm)	\$	PID Reading (ppm)	¢	PID Reading (ppm)	
Story/Level	1	Story/Level	1	Story/Level	/
Room	CLEANING ROOM		STAGING ROOM	Air Temp (oF)	
Air Temp (°F)	10°	Air Temp (oF)	720	Baromelyko Pressúre	
("Hg or mb)	30.17-30.22	("Hg or mb)	<u> </u>	("Hg ornb)	
	SNE OFF 11/3 SAMPLE TUBING	2/12 (1) (NET)	4:00 \$5'AGS		
Signature:	fentaox	· ·	<b>_</b>		

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	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900		Project# Project Name: Location:
ERM	Fax: (631) 756-8901		Location: Project Manager: MOHLAN PIC: ROCCO
Sample Location:	JHH		Collector(s): MA DboX
Address:	40 Vac&RD		
PID Meter Used:	practiv	·	
(Model, Serial #) SUMMA Canister Rec	j		
	Outdoor Air	Outdoor Air	Outdoor Air
Sample ID: JH	-0A-0(	Sample ID:	Sample ID:
Canister Serial No.;	ABIH	Cartister Serial No.:	Canisler Serial No.:
Flow Confroller Id No:	FC 455	Flow Controller Id No:	Flow Controller Id No: Start Date/Time;
Start Date/Time:	12/3/12 085	Start Date/Time:	Start Pressure:
Start Pressure: (inches Hg)	>30	Stan Pressura: (increas Hg) Stop Date/Time:	Stop Date/Time:
Stop Date/Time:	12/3/12 1657	Stop Pressure: (jnchas	Stop Pessure:
Stop Pressure: (incher Hg)	5"	H0)	(indes Hg)
Other Sampling Info	rmation:		
PID Reading (ppm)	\$	PID Reading (ppm)	PID Reading (ppm)
Location	WEST END OF TREATMENT TRAILER ATOP CORBON	Location	
Air Temperature	50		Air Temperature
Barometric pressure, Hg	30.17-30.22	Baromelnie pressure, * Hg	Barometric pressure, • Hg
Noticeable Odor?	No	Noticeable Odor?	Noficeable Odor?
Duplicale Sample?	N0	Duplicate Sample?	Duplicate Sample?
Intake Tobing used?	NO	Imake Tubing used	Intake Tubing used?
Comments:			
	SUE OFF 1	1/30/12 14:00	
	SAMAC TURIN	SGINLET AT S'NG	۹
	<u> </u>		
· .	·		· · · · · · · · · · · · · · · · · · ·
	·		
		·	
	· · · · · · · · · · · · · · · · · · ·		
Signature:	10milia/		
N	N N		

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	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900			Project #: Project Name:	
ERM	Findle: (631) 756-8900 Fax: (631) 756-8901			Location: Project Manager N PIC:	CO CO
Sample Location:	Jtri			Collector(s):	Jamasoox
PID Meter Used;	40 VOICE RD CARLE PL	ACE	· · · · · · · · · · · · · · · · · · ·		
(Model, Serial #) SUMMA Canister Rec	ard:				
	Subsurface		Subsurface		Subsurfaçe
Sample ID: JH	-55-04	Sample ID:	55-05	Sample (D:	· · · ·
Canister Serial No.;	ABI3	Canister Serial No.:	A310	Canister Sørial No.:	
Flow Controller Id No:	FC 139	Flow Controller Id No:	FG283	Flow Controller Id No;	/
Start Date/Time; Start Pressure;	12/3/12 0758	Start Date/Time:	12/3/12 0809	Slari Dale/Time;	
(inches Hg)	30" 1529	Start Pressure: (inches Hg) Stop Date/Time:	× 30	Start Pressure: (inches Hg) Stop Date/Time;	
Stop Pressure: (inches	12/3/2	Stop Pressure: (inches	12/3/12 1647	Stop Date/Time:	/
Hg)	3.5	Hg)	4	(inches Hg)	
Other Sampling Infor	malion:				
PID Reading (ppm)	37.5	PID Reading (ppm)	Ø	PID Reading (ppm)	
Depth of Vapor Probe		Depth of Vapor Probe		Depth of Vapor Probe	1
Location Air Temperature	CLEANINGROOM	Location	STAGING ROOM	Location	/
Barometric pressure, "	700	Air Temperaturə	720	Air Temperature	/
Hg		Barometric pressure, " Hg		Barometric pressure," Hg	
Noticaable Odor?	Yes	Noliceable Odor?	ૉન્ડ	Noticeable Odg?	
Duplicate Sample?	No	Duplicate Sample?	40 	Duplicate stample?	
Inlake Tubing used?	163	Intake Tubing used?	YES	Intake Tubing used?	
Comments:				<u> </u>	
	SVE off 11/30	12 14	00		
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J

F BERNER	Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Location: Project Manager:	Moture
Sample Location; Address:	4 JtH 40 VOICE PD	CARIE	Race	PIC: J K( Collector(s):	MADOX
PID Meter Used: (Model, Serial #)					
SUMMA Canister Recor	rd: Subsurface		Subsurface		Subsurface
Sample ID: J+( - S	5-01	Sample ID:	H-55-02	Sample ID:	- 55 -03
	· · · · · · · · · · · · · · · · · · ·		H-23-02		
Canister Serial No.;	A1035	Canister Serial No.;	A1024	Canister Serial No.;·	A 1020
Flow Controller Id No:	FC 436	Flow Controller Id No:	FC431	Flow Controller Id No:	FC 354
Start Date/Time:	12/3/12 0732	Start Date/Time:	12/3/12 0738	Ślari Dala/∏me;	12/3/12 0752
Start Pressure: (Inches Hg)	>304	Start Pressure: (inches Hg)	>30"	Start Pressure: (Inches Hg)	>30
Stop Date/Time:	12/3/12 1608	Stop Date/Time:	12/3/12 1644	Stop Date/Time;	12/3/12 102
Stop Pressure: (inches Hg)	4.5	Stop Pressure: (inches Hg)	5	Stop Pressure: (inches Hg)	4.5
Other Sampling Inform	ation:		- · ·	·	·
PID Reading (ppm)	ø	PID Reading (ppm)	ø	PID Reading (ppm)	ø
Dep(h of Vapor Proba		Depth of Vapor Probe		Depth of Vapor Proba	
	CAFETSCIA	Location	ASTROOM HALLWAY	Location .	INSIDE REAR WES
Air Temperature	68°	Air Temperature	640	Air Temperatura	63°
Barometric pressure, " Hg		Barometric pressure, " Hg		Barometric pressure, " Hg	
Noticeable Odor?	No	Noticeable Odor?	TLS .	Noficeable Odor?	<u>т</u>
Duplicate Sample?	No	Duplicate Sample?	No	Duplicate Sample?	NO
Intake Tubing used?	YES	Intake Tubing used?	yes.	Intake Tubing used?	163
Comments:			······································	l	
·	SVE OFF	11/35/12	14300		
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Signature:	tunitor				

	ACCUTEST,	CE	OF C	OTSU	DY			لىز س	FED-EX Tracking # Lab Quote #	<u>+</u>		Boulls Order Confr 1	26/2012	n i	PAGE	1 of 2		
<u>þ</u>			Client / R	AIT Sampling Fleid Data Sileet	5								Weather Parameters	arameters 🖗		Rec	Requested Analysis	Ánalysis
	Company Narge			-	Project Na	1 8	T				Tamp Start:	Tamperature (Fahrenhelt) Start:	renheit)	Maximum:				
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1	Project Contact	ALL OF FILM	ren.		Project #	ci #	j				Slar			Maximum:		teiJ.c		
14	Phone # T.T.	Eax#			Clier	Client Purchase Order #	Order #				Slop:	Ž		Minimum:		podino		
<u></u>											ЧЮ	Other weather comment:	mment:			eA 2		
<u> </u>	) //		Air Type	Sampling Equipment Info	aulpment	Info 📃	<sup>SO</sup>	Start Sampling Information	ng Informa	tion		S	top Sampl	Stop Sampling Information	tion	1-0_		
	Lab Samole #	Field ID / Point of Collection	Indoor(I) Soil Vap(SV) Amhian(A)		Canister Size Con	Flow Controller Serial #	Dafe		Canister Ir Pressure -	Interior Temp Sai (F) J	Sampler Init.	Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp Sarr (F) In	Sampler Lit. Standard T		
		HO-SS-H	S		<u> </u>	5	21/8/21	5	22 22 24	ţ	N X	12/3/12	1529	3	111	/ Xw		
<b></b>	<i>ب</i> ر	14-57-01	NS.	1.7.4		E	-	0137	8	20			1607,	4	6			
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<b>L</b>		14-TA-03	<b>%</b> %	A196	$\mathbb{R}$	23 23 23		673	230	63		ļ	1493	4.5	65			
L		JH-1A-02	9M	A22.1		3455		र्वम	200	64			129.	¥	64			
	-	10-11-H	IA.	ABAS	R	ેનલે		0753	<25 7	68			1628	1-	2			
		JH-SS-02	21	AIO24	ドー	FC43		0739	R	64			lety	<i>ي</i> ر.	64		_	
I	· .	24-1A-05	I A	RUC	R R R	<b>ESSG</b>	-	2011	730	72	ų × 10		102	4	2		_	
	r r	CH SO-05	S	A3,0	<u> </u>	R			23		$\geq$	≯	1647	Comments / Remarks		- ≯		3. 
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	2 Dey 1 Day		Date:			<u> </u>	Futi T1 Other:		7									
17	Other		Samp	Sample Custody must be docurptinged below each time samples change possession,	t be docurpé	njed below	each Ume sa	amples chan	je possešai	ion/including co	- 5	ier delivery.	1 7 7			The second second second		
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ERM	Environmental Resources Management 40 Marcus Drive, Suffe 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Project #: Project Neme: Location: Project Managore PIC:
Sample Location: Address: "ID Meter Used; Model, Serial #)	40 Vace RD	CARLE ?	LACE	Collector(s): EG
SUMMA Canister Ro	ecord: 	IND	COR AIR (slab-on-grade, 1st floor)	INDOOR AIR (slab-on-grade, 1st floor)
iample ID: JH- \F	· · · · · · · · · · · · · · · · · · ·	Sample ID:	- 1A- 04-1	Sample ID:
Canister Serial No.:	A 070	Canister Serial No.:	A672	Canister Serial No.:
flow Controller Id lo:	FC246	Flow Controller Id No:	FC 471	Flow Controller fd No:
Start Date/Time:	12/17/12 07:13	Start Date/Time:	12(17(12 07:22	Start Date/Time. Start Pressure:
nant Pressure: Inches Hg) Stop Date/Time:	>30	Hg)	29	(inches Hg) Stop Date/Time:
Stop Pressure:	12/17/12 15:52	Stop Pressure: (inches	12/17/12/5:29	Stop Pressure:
(inches Hg)	5	Hg)	5	(inches Hg)
Other Sampling Ind	formation:	PID Reading (ppm)	/ /	PID Reading (ppm) /
	φ		$\varphi$	
Story/Level	1	Story/Level	1	Story/Level
Room	CAPETERIA		CLEANING ROOM	Air Terop (/F)
Air Temp (°F) Barometric Pressun	70*	Air Temp (oF)	670	Bacometric Pressure
Darometro Fressun ("Hg or mb)	e 	("Hg or mb)	_	("Hg or mb)
Comments:				
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Signature: 🔶		v		

	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900		Project #. Project Name: Location:
ERM	Fax: (631) 756-8901		Project Managar. <b>FG</b> PIC: FK
Sample Location:	J+++		Collector(s):
Address:	HOVOCE GD CARLS	PUTATE	JMXEG-
PID Meter Used:	40 VOICE RD CARLE RAE MINIFAE 200	KR091	
(Model, Serial <u>#)</u> SUMMA Canister Re			
	Outdoor Air	Outdoor Air	Outdoor Air
Sample ID:	(- 0A-01	Sample ID:	Sample ID;
Canister Serial No.:	NG27	Canister Serial No.:	Canister Señal No.:
Flow Controlfer Id No.	FCIIO	Flow Controller Id No:	Flow Controller Id No:
Slart Date/Time:	12/17/12 07:29	Start Date/Time:	Start Date/Time:
Start Pressore: (inches Hg)	29"	Start Pressure: (inches Hg)	Start Pressure (inches Hg)
Slop Dale/Time:	12/17/12 14:57	Stop Dale/Time:	Stop Date/Time:
Stop Pressure: (Inche Hg)		Stop Pressure: (inches Hg)	Stop Proseure: (Inches Hg)
Other Sampling Info	inmation:		
PID Reading (ppm)	\$	PID Reading (ppm)	PID Reading (ppm)
Location	ATOP CARBON VESTEL #1 WEST OF TRAILER	Location	Location
Air Temperature	44	Atr Temperature	Alt Temperature
Barometric pressure, Hg	P	Barometric pressure, " Hg	Barometric pressure, " Hg
Noticeable Odor?	No	Noliceable Odor?	Noticeable Odor?
Duplicale Sample?	NO	Duplicate Sample?	Duplicate Sample?
Intake Tubing used?	40	Intake Tubing used?	Intake Tubing used?
Comments:			
7060	toment system off 12	113/12	
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	RESAMPLE	- OF 12/3/12 EVEN	T
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Signature:	pulo?e	< Y.	

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	Environmental Resources Management W Marcus Drive, Suite 200		Project#: Project Name:
	Aelville, NY 11747		
	Phone: (631) 756-8900 Fax: (631) 756-8901		Location: Project Manager, EG PIC: ER
	· · ·	· · · · · · · · · · · · · · · · · · ·	PIC: 255
mple Location:	J+H		- (mx
iress:	40 VOICE RD CARL	E luce	
) Meter Used: odel, S <u>erial #</u> )			
MMA Canister Reco	rð:		Subsurface
4	Subsurface	Subsurface	Sample ID:
mple ID:	S-01	Sample ID: JH - SS-04	
nistar Serial No.:	A841	Canterior Serial No.: A 234	Canister Serial No.:
w Controller Id No:	FC146	Flow Controller Id No: FC 520	Flow Controller Id No:
art Date/Time:	12/17/12 07:12	Start Dale/Time: 12/17/12 07:26	Sterl Date/Time:
art Pressure; iches Hg)	> 304	Starl Pressure: (Inches 30"	Start Pressure: (inches Hg)
op Date/Time:	12/17/12 15:53	Step Date/Time: [2/17/12/15/30	Stop Date/Time:
op Pressure: (inches 3)	11	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)
	4	9	
ther Sampling Inform	nation:		/
D Reading (ppm)	ø	PID Reading (ppm)	PID Reading (ppm)
	Ŷ		Depth of Vapor Probe
epth of Vapor Probe		Depth of Vapor Proba	
		Location CLEANING ROOM	Location
ocallon	CAFETSRIA	CLANINGIO	
ir Temperature		Air Temperature	Air Temperature /
	Flo		
aromatric pressure, "		Barometric pressure, "	Barometric pressure, "
lg .		Hg	
loticeable Odor?		Noticeable Odor? YES	Noticeable Odor?
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oplicate Sample?	No	Dupficate Sample?	Dupilcate Sample?
ntake Tubing used?	YES	Intake Tubing used?	Intake Tubing used?
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*ing #	Lab Job #	Temperature (Estremeter)	- ) + +   Slatt 7: 34 Maximum: 44	Stop   547.57 Minimum: U.2	seure (inches of Hg)	Start: 771,2 Maximum: 2, 9, C1 [	2	Other weather comment:	📓 Stop Sampling Information		To Jux 12/17/21 553 5	67 1 1 15:29 5 67 4	071         15:53 4 70 EG ×	$0 \begin{bmatrix} 67 \\ 1 \end{bmatrix} \begin{bmatrix} 15:30 \\ 4 \end{bmatrix} \begin{bmatrix} 4 \\ 5 \end{bmatrix} \begin{bmatrix} 6 \\ 4 \end{bmatrix}$	3 44 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					4 there	72 No charge	samples change possession, including courter delivery.		Date Time: Received By: 4	
FED-EX1	Lab Quote #		John ason + Harffrond	CE RD	CARLE PLACE		Client Purchase Order #		ant Info 📑 🧹 Start Sampling Information	Time (24hr I Alte clock)	14/1/2 07:13>	FC44 1 07.22 29	FCH46 = 1.07, n > 30	FCS20 07:26 30	Fairo 1 07:29 29		 · · · · ·	All NJDEP TO-15 is mandatory Full T1	Comm B Comm B	ad T2	other: NYAY DE	imented below sach time samples change pos	Natimeturaneed by:	Relinquiched By: 4	Custody Seal #
CHAIN OF CUSTODY	Air Sampling Field Data Sheet	Client / Reporting Information	-		またた				Air Type Sampling Equipment Info	Indoor()) Soil Vap(SV) Canister Size Ambian(A) · Serial # / 61 or 1	1 ACTO 6L		SV ABHI	 - <u>+</u> -	A A627 V			ness days)	Approvad By:	Date:		Samp		Date Time: Received By: 3	Date Time: Received By: 5
			Company Name ERAN	COT STR STOREND OR STE 200	City CLAULS NY State	S OXOGON	,	Sampler(s) Name(s)		i   ab Samble #   Field ID / Point of Collection		10-M-H7		HO- 55-HO	14-04-01			Standard - 15 Days	TZ hr SDay	Y.	1 Day			tolinquished by:	dinquished by:

## NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Purpose of Investigation_(	Ongoing Vapor	Intrusion In	vestiga	tion
1. OCCUPANT: Exec	cutive Vice Pre	sident		
Interviewed:  N Last Name: <u>Ben TÌV</u> Address: <u>40 Voice</u>	Tom	Reigot		
Last Name: <u>Bentiv</u>	egna First N	ame: <u>Ae pry</u>	· ·	
Address: 40 Voice	e boad, (an	e Place, NY 1	1514	
County: Nassau				
Home Phone:	Office Phor	ne: <u>516 - 742 - 3</u>	333	
Number of Occupants/per	sons at this location	Age of Occupants		
Interviewed: Y/N	<b>ORD:</b> (Check if same as	((())) (()) (()) (()) (()) (()) (()) (		
Interviewed: Y/N Last Name:	First N	ame:		
Interviewed: Y/N Last Name: Address:	First N	ame:		
Interviewed: Y/N Last Name:	First N	ame:		
Interviewed: Y/N Last Name: Address: County:	First N	ame:		
Interviewed: Y / N Last Name: Address: County: Home Phone:	First N	ame:		

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:

If multiple units, how many? \_\_\_\_\_

If the property is commercial, type?

Business Type(s) Metal Stamping

Does it include residences (i.e., multi-use)? Y / N

If yes, how many? \_\_\_\_\_

How air tight? Tight / Average / Not Tight

Other characteristics:

Number of floors

Building age

Is the building insulated? Y / N Ceiling Inculated not Walls

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

					þ13 <i>)</i>
	a. Above grade construction:	wood frame	concrete	stone	brick
	b. Basement type:	full	crawlspace	slab	other
	c. Basement floor:	concrete	dirt	stone	other
	d. Basement floor:	uncovered	covered	covered with _	
	e. Concrete floor:	unsealed	sealed	sealed with	
	f. Foundation walls:	poured	block	stone	other
	g. Foundation walls:	unsealed	sealed	sealed with	,
	h. The basement is:	wet	damp	dry	moldy
	i. The basement is:	finished	unfinished	partially finishe	ed
	j. Sump present?	Y/N			
	k. Water in sump? Y/N/	not applicable			
Ba	sement/Lowest level depth below g	rade:	(feet)		
Ide	entify potential soil vapor entry poi	ints and approx	imate size (e.g.,	cracks, utility p	oorts, drains)
-					

## 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply - note primary)

Propane

Coal

Hot air circulation Space Heaters Electric baseboard

Heat pump Stream radiation Wood stove

Hot water baseboard Radiant floor Outdoor wood boiler

Main area

Other

The primary type of fuel used is:

Natural Gas

Electric

Wood

вat. (Fuel Oil

office

Kerosene Solar

Domestic hot water tank fueled by: Nat Gas / Electric Boiler/furnace located in: Main Floor Basement Outdoors Other Central Air Window units Open Windows

None

1

Air conditioning:

# 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

Are there air distribution ducts present? Y/N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

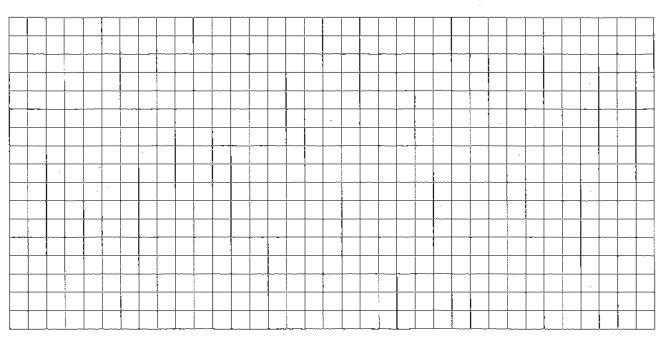
Modine Hot air blowers	(ceiling mounted)
and space heaters	
	·
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
7. OCCUPANCY	
Is basement/lowest level occupied? Full-time Occ	asionally Seldom Almost Never
Level <u>General Use of Each Floor (e.g., familyro</u>	om, bedro <u>om, laun</u> dry, workshop, storage)
Basement None	
1st Floor <u>Always occupied by</u>	einployees
2 <sup>nd</sup> Floor None	
3 <sup>rd</sup> Floor	
4 <sup>th</sup> Floor	· · · ·
8. FACTORS THAT MAY INFLUENCE INDOOR AIR	QUALITY
a. Is there an attached garage?	Y/W
b. Does the garage have a separate heating unit?	YININA
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	Q/N/NA Please specify <u>Propane</u>
d. Has the building ever had a fire?	Y / Ø When?
e. Is a kerosene or unvented gas space heater present?	Y/N Where?
f. Is there a workshop or hobby/craft area?	Ø/N Where & Type? <u>entire 6/dy</u>
g. Is there smoking in the building?	Y / 🔗 How frequently?
h. Have cleaning products been used recently?	Ø/N When & Type?
i. Have cosmetic products been used recently?	Y / 🔗 When & Type?

	-	2
j. Has painting/staining been done in the last 6 months?	Y/N <sup>2</sup>	Where & When? Jaint Cans
k. Is there new carpet, drapes or other textiles?	Y /	Where & When?
l. Have air fresheners been used recently?	Y/N	When & Type?
m. Is there a kitchen exhaust fan?	Y/N	If yes, where vented?
n. Is there a bathroom exhaust fan?	Y/N	If yes, where vented?
o. Is there a clothes dryer?	Y/N	If yes, is it vented outside? Y / N
p. Has there been a pesticide application?	Y/N	When & Type?
Are there odors in the building? If yes, please describe: <u>Yes oil lube smell</u> Starage. Also eyes were irritated du	Y/N Icom	Stamping Muchines a Walk Horough.
<b>Do any of the building occupants use solvents at work?</b> (e.g., chemical manufacturing or laboratory, auto mechanic or a boiler mechanic, pesticide application, cosmetologist	Y/N/	
If yes, what types of solvents are used?		
If yes, are their clothes washed at work?	Y/N drv-clea	aning service? (Circle appropriate
	dry-clea	No Unknywn e.y.
If yes, are their clothes washed at work? <b>Do any of the building occupants regularly use or work at a</b> response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure	dry-clea	No Unknywn e.y.
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive 9. WATER AND SEWAGE	dry-clea	No Unknywn e.y.
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive 9. WATER AND SEWAGE	dry-clea C e? Y/N n Well	No Unknown C.Y. Date of Installation:
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Driver	dry-clea C e? Y/N n Well Field	No Unknywn
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Driver Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residential	dry-clea C e? Y/N n Well Field	No Unknywn
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Driver Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residential	dry-clea c e? Y/N n Well Field al emerg <u>N J</u>	No Unknywn Date of Installation: Dug Well Other: Dry Well Other: gency)
If yes, are their clothes washed at work? Do any of the building occupants regularly use or work at a response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive 9. WATER AND SEWAGE Water Supply: Public Water Drilled Well Driver Sewage Disposal: Public Sewer Septic Tank Leach 10. RELOCATION INFORMATION (for oil spill residentia a. Provide reasons why relocation is recommended:	dry-clea dry-clea dry-clea (C) (C) dry-clea (C) (C) (C) (C) (C) (C) (C) (C)	No Unknywn Date of Installation: Dug Well Other: Dry Well Other: ency) ily relocate to hotel/motel

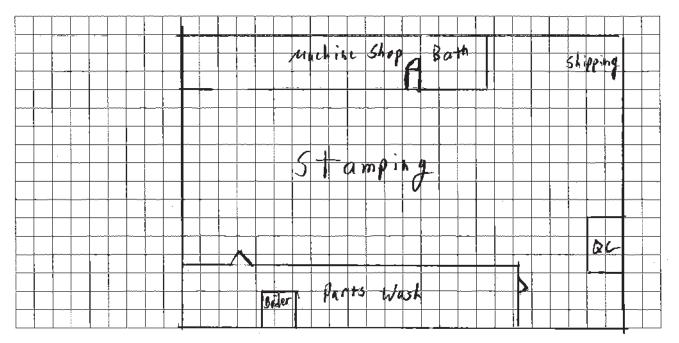
## 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

#### Basement:



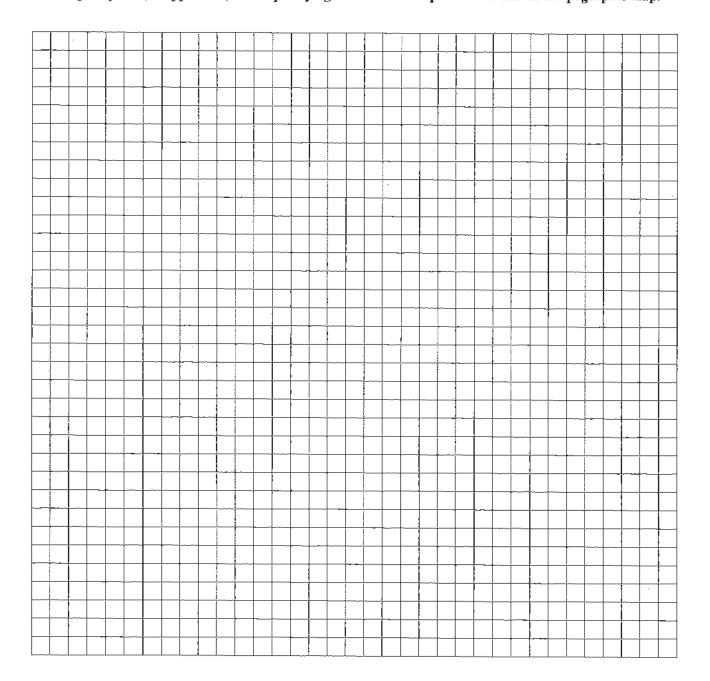
## First Floor:



#### **12. OUTDOOR PLOT**

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Make & Model of field instrument used: \_\_\_\_\_

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
SE blply	Renoform SV0 64		good	790% Mineral Spirits		N
SE blog	Tut Draw 1403 MSD		gard	<60% Min Spirit Stotriette	no lanie -	N
SE blog	Reiloform 207W		good i	Sp Mineral Oil 45th Ver Oil		N
	ZF 113	Prum	M .			Y
Wash Roan	Renovator	Orum	good			Y
through out	Mineral Spirits	Igal		Jation de 1 to to to	H	Y
Machine Shop Machine	Aero Broil	spray Can	900d	Petroleum Nistilutes, trimth, ) and Alcohol and EHEr	stata C	Y
	Isocut fluid	1401	1000	Petroleum Distilates light Distilates, Paraffinic distilates & Enhibiter Blend		Y
Chat	CRC 3-36 Lihe-up	Can	good	distilutes & Enhibitor Blend	?	Y
Shop Methine	Stripping Paint	Can	900 d	Non-chlorinated		Y
Slipp Machine	Confuct Cleaner	Cang	9000	Non-chlorinuted		Y
shop	WO-40	Can	good	petroleum distilatis		Y
Muchine	UVex	Can	good			Y
chop	Gerstner finish how	r Bottle	9001	Unknown		Y
through Bldg Harobys	Air Tool Oil	-		throughour bldg.		Υ
Blog	Pay Lube	16 Ture	oper/pool	grease		Y

\* Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D) \*\* Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.







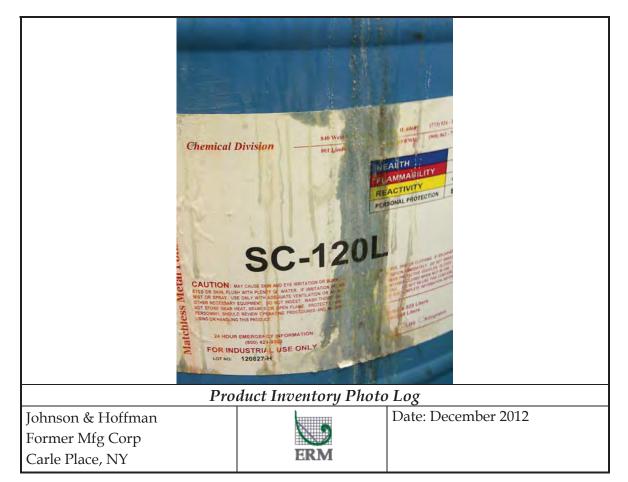


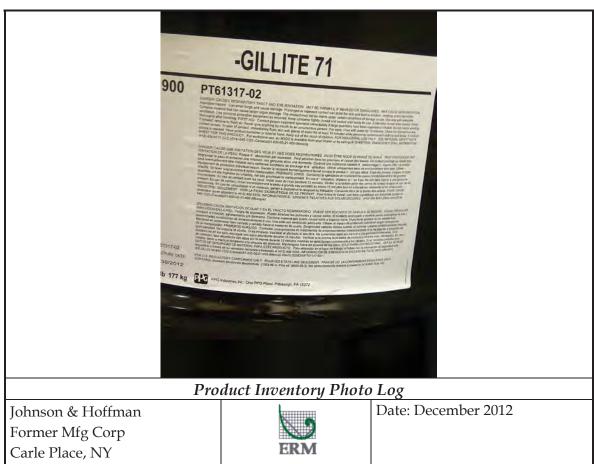
	RYLON DUSTRIAL STRIPING PAINT PEINTURE POU ARQUAGE DUSTRIAL DUSTRIAL DUSTRIAL DUSTRIAL DUSTRIAL DUSTRIAL DUSTRIAL DUSTRIAL DUSTRIAL	
Pro	duct Inventory Photo	Log
Johnson & Hoffman Former Mfg Corp Carle Place, NY	ERM	Date: December 2012



	<text></text>					
Product Inventory Photo Log						
Johnson & Hoffman Former Mfg Corp Carle Place, NY	ERM	Date: December 2012				









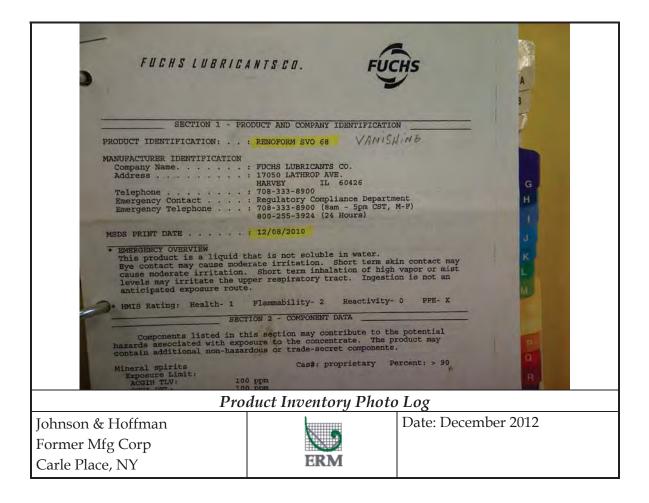
<section-header></section-header>							
Pro	duct Inventory Photo	o Log					
Johnson & Hoffman Former Mfg Corp Carle Place, NY	ERM	Date: December 2012					

	duct Inventory Photo	
Johnson & Hoffman Former Mfg Corp Carle Place, NY	ERM	Date: December 2012



Product Inventory Photo Log						
Johnson & Hoffman Former Mfg Corp Carle Place, NY	ERM	Date: December 2012				





March 2013

Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901				Project #: Project Name: J# Location: Project Manager: PIC:	0181213 H
ple Location:			· · · · · · · · · · · · · · · · · · ·	Collector(s):	Jrx
es6; '	40 VOICE RD CARLE PV	Ars			
Vieter Used; iel, Serial #)	MINI RAE 2000				
MA Canister Record					
	Subsurface		Subsurface	· .	Subsurface
JH -	SS-01	Sample ID;	5-02	Sample 1D: JH -	55- <i>0</i> 3
iter Serial No.:	ALONS	Canister Serjal No.:	A 758	Canister Serial No.:	Aloze
Controller Id No:	FC353	Flow Controller id No:"	FC 373	Flow Controller Id No:	FC420
Date/Time:	3/12/13 0714	Start Date/Time:	3/12/13 0728	Start Date/Time;	3/12/13 0739
ate/Π(me;	23.5	Stan Pressure: (incres Hg) Stop Date/Time:	< 30	Start Pressure; (inches Hg) Stop Date/Time:	30
Pressure: (inches	31.21.3 (309	Stop Pressure: (inches	3/12/13 1554	Stop Pressure;	3/12/13/623
	4	Hg)	4.	(inches Hg)	4.5
Sampling Informates adding (ppm)	· · · · ·	PID Reading (ppm)	-	PID Reading (ppm)	
of Vapor Probe	0.6	Depth of Vapor Probe	્રેટ્સર્મ 8	Depth of Vapor Probe	ø -
		Location			-
mperature	CAFETTRIA	Air Temperatura	RESTROOM	Air Temperature	"BLACK HOLE' SHOP
etric pressure,	· <b>&amp;</b> & ~ (4)	Barometric pressure, "	11-72	Barometric pressure,	70
able Odor?	30,0	Hg Noticeable Odor?	30.0	Hg Noticeable Odor?	30.0
ate Sample?	No No	Duplicate Sample?	ĨOS	Duplicate Sample?	463
Tubing used?	~~~ {B	Intake Tubing used?	~0	Intake Tubing used?	No
1			Yes	· · · ·	YES

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d<sup>a</sup>

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	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900			Location:	0181213 HUSOU (barnen)
ERM	Fax: (631) 756-8901	•	<b></b>	Project Manager: PIC:	
Sample Location:	11.10			Collector(s):	dex
ND Meter Used;	45 VOICE-RD CARLE	PIACE			
Model, Serial #) SUMMA Canister Rec	MINI RAE 2000				· · · · · · · · · · · · · · · · · · ·
	Subsurface		Subsurface		Subsurface
Sample ID: JH	-SS-04	Sample ID:	-55-05	Sample ID;	
Canister Serial No.:	A135	Canister Serial No.:	A659	Canister Serial No.:	
Flow Controller Id No;	FC379	Flow Controller Id No:	FC360	Flow Controller Id No:	
Start Date/Time:	3/12/13 0750	S(art Date/Time:	3/12/13 0803	Slart Date/Time:	
Start Pressure: (inches Hg)	<30	Start Pressure: (inches Hg)	29.5	Start Pressure: (Inches Hg)	/
Stop Dale/Time:	3/12/13 1619	Stop Date/Time:	3/12/13 1540	Stop Date/Time:	
Slop Pressure: (inches Hg)	4-5	Stop Pressure: (inches Hg)	3.5	Stop Pressure; (inches Hg)	
Other Sampling Infor PID Reading (ppm)	· · · · · · · · · · · · · · · · · · ·	PID Reading (ppm)		PID Reading (ppm)	
Depth of Vapor Probe	10.4	Depth of Vapor Probe	101	Depth of Vapor Probe	
Londian		Location		Location	/
Air Temperature	CLEANING ROUM	Air Temperature	STOCK Room	Air Temperature	/
Berometric pressure, '	74-76	Barometric pressure, "	CAR + + + + + + + + + + + + + + + + + + +	Barometric pressure, "	
Noticeable Odor?	30.0	Hg Noticeable Odor?	30-0	Hg Noticeable Oybr?	· · · ·
	763		403	Duplicate Sample?	
Duplicate Sample?	No	Duplicate Sample?	No	Intake/Tubing used?	
Inlake Tubing used?	165	Intake Tubing used?	YCS	maker toung useu?	
Comments:				$\nu_{\pm}$ ,	
-	· · ·				
	· · ·				
-					
					<u> </u>
Signature: _					
Signature:	····				

·**··**· ···

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ERM	Environmental Resources Management 40 Marcus Drive, Suile 200 Melville, NY 11747 Phone: (631) 756-6900 Fax: (631) 756-6901		Project #: Project Name: JHH Location: Project Manager: PIC:								
Sample Location:				Collector(s):	<nx< td=""></nx<>						
Address:	40 VACE RO CARLE	PLACE	· · · ·								
PID Meter Used: (Model, Serial #)	MINI RATE 2000		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·						
SUMMA Canister R											
Sample ID:	IDOOR AIR (slab-on-grade, 1st ficor)	Bample ID:	DOR AIR (slab-on-grade, 1st floor)	Sample ID:	DOOR AIR (slab-on-grade, 1st floor)						
	14-01	J64-	(A-02	JH-1A-	•3						
Canister Serial No.:	A371	Canister Serial No.:	A7359	Canister Senal No.:	A263						
Flow Controller Id No:	Fc St2	Flow Controller Id No:	FC462	Flow Controller Id No:	FC 252						
Slart Date/Time:	3/12/13 0717	Start Date/Time:	3/12/13 0729	Start Date/Trme:	3/12/13 0742						
Start Preseure: (inches Hg)	25 (0=44)	Start Pressure: (inches Hg)	< 30	Start Pressure: (inches Hg)	< 3.0						
Stop Date/Time:	3/12/13 / 1310	Stop Date/Time:	3/12/13 1557	Stop Date/Time:	3/12/13 1639						
Stop Pressure; (inches Hg)	3.5	Stop Pressure; (inches Hg)	4.5	Stop Pressure: (inches Hg)	4.5						
Other Sampling Inf	ormation:		-	-	· · · · · · · · · · · · · · · · · · ·						
PID Reading (ppm)	ø	PID Reading (ppm)	ø	PID Reading (ppm)	ø						
Story/Level	1	Story/Level	. (	Story/Level	ł						
Room	CAFETSKIA	Room	REST Room	Room	' BLACK HELE' SHOP						
Air Temp (°F)	68-69	Air Temp (oF)	71	Air Temp (oF)	70						
Barometric Pressure ("Holocimb)	30.0	("Hg or mb)	30.0	("Hg or mb)	30.0						
Comments:				· · ·	· ·						
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	Environmental Resources Management 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901			Project#: Project Name: J+H Location:							
EKM	Fax. (631) 130-6901			Project Manager: PIC: Collector(s):							
Sample Location:	el 11 - 2 - 2 - 2	-			-brx						
PID Meter Used:	40 VOICE RD CHELE	PLACE									
(Model, Serial #) SUMMA Canister R	MINI RAE 2000				·						
	NDOOR AIR (slab-on-grade, 151 floor)	IND	OOR AIR (slab-on-grade, 1st floor)	II	IDCOR AIR (slab-on-grade, 1st floor)						
Sample ID:	JH-1A-04	Sample ID:	17-12-05	Sample ID;							
Canister Serial No.;	A200	Canister Serial No.:	A-164	Canister Serial No.:							
Flow Controller (d No:	FC 133	Flow Controller Id No:	FC245	Flow Controller Id No:							
Start Date/Time: Start Pressure:	3/12/13 0753	Start Date/Time:	3/12/13 0805	Start Datar   Ime:							
(inches Hg) Stop Date/Time:	30	Hg) Stop Date/Time:	50	(inches Hg) Slop Dale/Time:							
Stop Pressure:	3/12/13 1531	Stop Pressure: (inches Hg)	3/13/1628	Stop Pressure: (inches Hg)	· /						
(Inches Hg)	2,5	ng)	4.0	(inclusing)	L /						
Other Sampling Int PID Reading (ppm)		PID Reading (ppm)	1	PiD Reading (ppm)							
	1,2		¢								
Story/Level	1	Story/Level	l.	Slory/Level							
Room	CLENNING ROOM	Room	STOCKPOOM	Room							
Air Temp (°F) Barometric Pressur	74-73	Air Temp (oF) Barometric Pressure	67	Air Temp (oF)							
("Hg or mb)	30.0	("Hg or mb)	30.0	Balometric Pressure (7Hg or mb)							
Comments:		· · ·-	··	/	· · · · · · · · · · · · · · · · · · ·						
	·										
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Signatæ; ]	Kulher										

	Environmentel Resources Menagement 40 Marcus Drive, Suite 200 Melville, NY 11747 Phone: (631) 756-8900 Fax: (631) 756-8901		Project #: 0181213 Project Name: J++( Location: Project Manager:							
	Tax. (001) 150-5901		PIC:							
ple Location:			Collector(s):							
-55	40 VOICE RD CARLE P	ACE								
Neter Used: al, Senial #)	MWI RATE 2000									
MA Canister Re		· · · · · · · · · · · · · · · · · · ·								
	Outdoor Air	Outdoor Air	Outdoor Air							
ple ID: 1	JH-0A-01	Sampie ID:	Sample ID:							
ter Serial No.:	A280	Canister Serial No.:	Canister Serial No.:							
Controller Id No	FC143	Flow Controller Id No:	Flow Controller Id No:							
Date/Time:	3/12/13 0310	Start Date/Time:	Start Date/Time:							
Pressure: as Hg)	< 30" (\$=10")	Slart Pressure: (Inches Hg)	Start Pressure: (inches Hg)							
Date/Time: Pressure: (inche	3/12/13 1610	Stop Dale/Time: Stop Pressure: (inches	Stop Date/Time:							
-	15'' (p = 10'')	aug Pressure. (Incres Hg)	(inches Hg)							
r Sampling Info	ormalion:		IPID Pageing (nom)							
Reading (ppm) tion	Ø.	PID Reading (ppm)	PID Reading (ppm)							
emperature	Sw Corner of Blog	Air Temperature	Air Temperature							
metric pressure,	53°	Barometric pressure, "	Barometric pressure, "							
ceable Odor?		Hg Noūceable Odor?	Hg Noticeable Odor?							
	Yag									
licate Sample?	No	Duplicale Sample?	Duplicate Sample?							
ke Tubing used?	NO	Intake Tubing used?	Intake Tubing used?							
iments:										
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Relinquénes by Laborind (M. 400 / Arrow 27/27) Relinquénes by: Date Time: 3 Ralinquished by: Date Time: 5		UH-12-04 JH-55-05 JH-1A-04	JH-55-02 JH-12-02 JH-12-03	Late Sample # Field ID / Point of Collection (AAY) $JH = SS = O(JH = IA = O($	City MEWILLE NY Project Contact Excitation of the Carbon of the Carbon Phone 3 FSC B300 Sampler(s) NAMES) WADDOX	
1/2 /2	Approved By: Date:	SV ACS3		Indoor(I) Soil Vap(SV) Ambient(A)	Air Type Sampling Equipment Info	HAIN OF CUSTODY Air Sampling Field Data Sheet Client / Reporting Information
Relinquistration 2 Relinquistration 4 Custopity Spail 8 Custopity Spail 8	All NUDEP TO-15 is manda Comm A Comm B Comm B Full T1 Prull T1 Other: WASP Ecc	FC343 0753 20 FC340 0753 20 FC245 V 0803 20	0729 0733	Flow Time c controller Date clock $(24hr Price Cock)$ FCS 12 Jan Date clock $(24hr Price Cock)$ FCS 12 Jan Date clock $(24hr Price Cock)$ FCS 12 Date clock $(24hr Price Cock)$ FCS 12 Date clock $(24hr Price Cock)$	RILE PLACE CI BI J J Start Sampling	Treel 1 Vor CE DU
16 318		$ \begin{array}{c c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $		r Interior e Temp Sampler - (F) Init. Date	Sigle Slop Signer P	Tracking # Rotting Cooling
121 74 2 Received By: 1 MMD		1978 7.5 7.6 1978 7.5 7.3 1970 5.5 66 1008 4.0 67 V	1-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	1510 2,5 69 Jack	Maximum: Maximum: Maximum: Minimum: Minimum:	or Paraméters
and						Pr 2

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Ralinquished by: 5	Relinquished by: 3	Relinduished by Laboratory;		_			Standard - 15 Days 10 Day											Lab Sample #		Sampler(s) Name	252 18 Burn	Project Contact	3MNN3W	5	y Name		
		and are		1 Day	3 Day 2 Day	5 Day	5 Days 10 Day									10- 40- HL	JH-SS-01	Field ID / Point of Collection	1	and the second	6 <del>69</del> ,00	Projocifoniati E-N & , GABAY & FRATING	INS NY	MARCUS DR	5AM		ACCUTEST. CH
Dale Time:	Date Time:	Dally Thme://		<u> </u>	_	_	<u>م</u>	urharound lyne (Business days)													Fax #	RATION	()	Circle 7			Air Sampling Field Data Sheet
	_	12:10	Sampl		Date:		Approved By:					-				₽	S S	Indoor(I) Soil Vap(SV) Ambienl(A)	Air Type				ليد. بمر سرب			Client / Re	Field
Received By: 5	Received By		Sample Custody must be documented below each time samples change possession, including courier delivery.													H280	AIOISI	Canister Serial #	Sampling Equipment Info							Client / Reporting Information	USTO
		wh	at be docyn						:							4	10	Canister Size 6L or 1L	Equipmen		G	Pro			4	9	ĐΥ
		X	nented belo		<u>.</u>					<b>.</b>			811-11-11-1	-		 FC143	F-C3573	Flow Controller Serial #	it Info		Client Purchase Order		317AD	NI 2			
			ow each time	other: W	Full T1	Comm B										<	3/12/13	Date			e Order #	1817	32476 3		104NSON + HOFFMAN		
Custody/Seal #	Relinguished By:	Rolling Ushed By:	samples cha	WASI & EV												0/8/0	11/20	Time (24hr clock)	Start Sampling Information				3	B	+ 75		
14,316,318	By:	Jun -	inge possas	Economic any		_		andatons En	Tale Teliverable Information							30	29,5	Canister Pressure ("Hg)	ling Inform				JN	-	FFMAN		FED-EX Tracking # Lab Quolc #
318	/	$\mathbf{x}$	slon, inclu	J.Tr'0			-									K	$\mathscr{B}$	In <b>∳s⊒f</b> or ⊤emp (F)	halion					해태당			ig ₽
			ding courie	<u>.</u>			in at			<u>.</u>			: :			 4	X	Sampler			dore		Å	Slop	Slart:		<u> </u>
	Dale Time:	Date Time: 31:54/~2	r delivery.													21212	31213	Date		Other weather comment	19.6	Ś	Atmoshpheric Pressure (Inches of Hg)		Slart: 52		to Job #
		12.20														1610	153	Time (24hr clock)	itop Samp	mment			asure (Inche		renheit)	Weather Parameters	6 000 #
	Received By: 4	Received By: <sup>1</sup>							Comments / Remarks							5*	<i>∓</i> -7	Canister Pressure ("Hg)	Stop Sampling Information					Minimum:	Maximum;	arameters	- I I
		Jon W							Remarks				-			5)	60		alion		29.1	N'05	א ק	び	55		PAGE $2$ of $2$
	, in a	- Call						100 A	×.	┞	╞	-	-	╞	$\left  \right $	XmJ	)~~~	Init: Standard	То-	-15 R	apo <b>r</b> tir	ng List				Req	ول کا
		<u>,</u>														-										Requested Analysis	42
								1000																		alysis	

#### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Date/Time Prepared 3/12/13
Preparer's Affiliation Phone No. 516 807 29.3
Purpose of Investigation ONCOLNCS VANDE INTRUSION
1. OCCUPANT:
Interviewed: (Y)N PLANT MANAGER SINCE 11/12
Last Name: ARMWA First Name: DREW
Address: 40 VALE PD CARLE PLACE NY 11 SIY
County: NASSAU
Home Phone: Office Phone: _516 742 3333 ×206
Number of Occupants/persons at this location Age of Occupants
2. OWNER OR LANDLORD: (Check if same as occupant) Interviewed: Y / N
Last Name: First Name:
Address:
County:
Home Phone: Office Phone:
3. BUILDING CHARACTERISTICS
3. BUILDING CHARACTERISTICS Type of Building: (Circle appropriate response)

If the property is residential	L, type? (Circle app	propriate respon	se)	
Ranch	2-Family	3-Fam		
Raised Ranch	Split Level	Coloni	-	
Cape Cod	Contemporary		e Home	
Duplex	Apartment Hou		ouses/Condos	
Modular	Log Home	Other:		
If multiple units, how many	?			
If the property is commercia	al, type?	·	· .	
Business Type(s)	NI STAMPING			
Does it include residence	s (i.e., multi-use)?	Y/N	If yes, how many?	<u> </u>
Other characteristics:				
Number of floors		Building age_		
Is the building insulated?		How air tight?	Tight / Average (Not '	Tight )
CZILING YU 4. AIRFLOW	, wous No			
Use air current tubes or trac	cer smoke to evalu	uate airflow pa	tterns and qualitatively	y describe:
Airflow between floors				
Airnow between noors				
·				
Airflow near source		<i></i>		
		· · ·		
		······		
		· · · ·	· ·	
		<b>_</b>	· · · ·	
	<i></i>			· ·
			N	
Outdoor air infiltration				
				·
74				
Infiltration into air ducts				
			· .	
		-		

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# 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

-'- - -

a. Above grade construction:	wood frame	concrete	stone	brick		
b. Basement type:	full	crawlspace	slab	other		
c. Basement floor:	concrete	dirt	stone	other		
d. Basement floor:	uncovered	covered	covered with			
e. Concrete floor:	unsealed	sealed	sealed with			
£ Foundation walls:	poured	block	stone	other		
g. Foundation walls:	unsealed	sealed	sealed with			
h. The basement is:	wet	damp	dry	moldy		
i. The basement is:	finished	unfinished	partially finish	ned		
j. Sump present?	Y/N					
k. Water in sump? Y / N	/ not applicable					
Basement/Lowest level depth below	grade:	(feet)				
Identify potential soil vapor entry p		simate size (e.g.		ports, drains)		
6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)						
Type of heating system(s) used in th	is building: (cir	cle all that appl	y – uote primar	<b>'y</b> )		
Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiati Wood stove	on Radia	vater baseboard int floor oor wood boiler	Other		
The primary type of fuel used is: BACKY						
Natural Gas Electric Wood	Fuel Oil Propane Coal	Keros Solar				
Domestic hot water tank fueled by: <u>NAT GAS + ELECTRC</u>						
Boiler/furnace located in: Base	ment Outdo	oors Main	Floor	Other		
Air conditioning: Cents	ral Air Wind		Windows	None		

Are there air distribution ducts present? Y/N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

- CZILING	MOUNT HOWE HOT AIR BLOWERS			·
- SPACE WE	Alles			
	· · · · · ·			
	<u> </u>			
7. OCCUP	ANCY			-
Is basement/	lowest level occupied? Full-time Occ	asionally	Seldom	Almost Never
<u>Level</u>	<u>General Use of Each Floor (e.g., familyro</u>	om, bedro	om, laundry, w	orkshop, storage)
Basement	Na			
1 <sup>st</sup> Floor	SHOP FLOOR OCCUPIED BY SHIFT WI	Pakels		
2 <sup>nd</sup> Floor	NA			
3 <sup>rd</sup> Floor				
4 <sup>th</sup> Floor				
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR	OUALITY	7	
	an attached garage?		Y(N)	
b. Does the	e garage have a separate heating unit?		Y/N NA	·. ·
	oleum-powered machines or vehicles a the garage (e.g., lawnmower, atv, car)	. (	Y/N/NA Please specify_	PROGNE
d. Has the	building ever had a fire?		Y N When?	
e. Is a kero	sene or unvented gas space heater present?		Y N Where	?
f. Is there a	workshop or hobby/craft area?	🕢 N	Where & Type	? SHOP FLOOR
g. Is there	smoking in the building?	YN	How frequently	r?
h. Have cle	aning products been used recently?	Y N	When & Type?	SDAP-DAILY
i. Have cos	metic products been used recently?	Y (Ŋ	When & Type?	
		$\sim$		

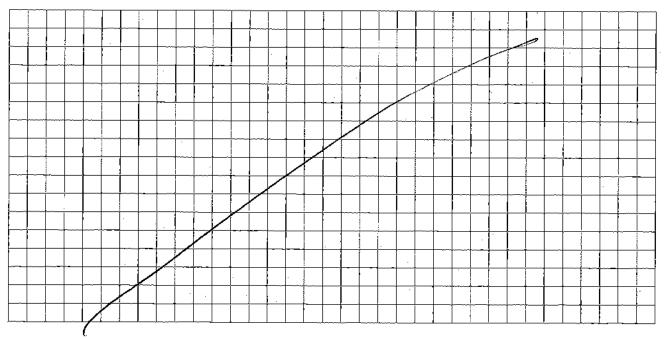
	5	bec		ALATEX PAINT COST WOLL OF DIANT
j. Has painting/st	aining been done in the last 6 month	s? (7) w	here & When?	EAST WALL OF POWT FLOOR, SHIPPING AND MTDFOB. 2013
k. Is there new ca	rpet, drapes or other textiles?			,
l. Have air freshe	ners heen used recently?	Y (N) W	hen & Type? _	
m. Is there a kitcl	hen exhaust fan?	Y N If	yes, where ver	nted?
n. Is there a bath	room exhaust fan?	Y/N If	yes, where ver	nted?
o. Is there a cloth	es dryer?	Y N If	yes, is it vente	d outside? Y / N
p. Has there been	a pesticide application?	∽ Y/Ń W	hen & Type?_	
Are there odors i If yes, please des	n the hailding? cribe: Ou from Highwire	(V)N 52mysee		
e.g., chemical manu	ing occupants use solvents at work? facturing or laboratory, auto mechanic ticide application, cosmetologist	(Y) N or auto body sho	op, painting, f	ùel oil delivery,
If yes, what types	of solvents are used?			
If yes, are their clo	othes washed at work?	Y/N		
esponse) Yes, use dry Yes, use dry Yes, work a s there a radon mi	ing occupants regularly use or work -cleaning regularly (weekly) -cleaning infrequently (monthly or les t a dry-cleaning service tigation system for the building/stru	s) (N	o) nknown	
s the system active	e or passive? Active/Passive			
). WATER AND S	EWAGE		-	
Water Supply:	Public Water Drilled Well I	Driven Well D	ug Well	Other:
Sewage Disposal:	Public Sewer Septic Tank I	each Field D	ry Well	Other:
10. RELOCATION	INFORMATION (for oil spill resid	lential emergene	:y)	
	ons why relocation is recommended	: NA		
a. Provide reas				
	oose to: remain in home relocate	to friends/family	relocate	to hotel/motel
b. Residents ch	oose to: remain in home relocate	-		to hotel/motel

-----

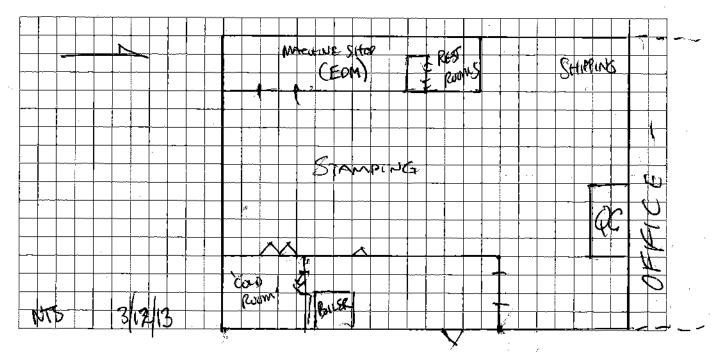
#### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

#### **Basement:**



#### First Floor:



#### **12. OUTDOOR PLOT**

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

3/12/13 INVENTORY CONTINUED PERMATEX THREAD LOCK 1.69 07 METHARRY MONONCR ·EDM PURETOKIEVE GLYCOL pinerun BENZYL HADROPEROKUE COM RELEMENTE PENKTONY 500 ml OL FLOSLAP SHOW. GA WHUBE BO OK. DI METHER BENZel Annonuncettoria Low Bour CLEAKE ØΤ 2007 CLR SEL-SKUD 12 8 101 POPL TAPPINE FUS 100-016 PETROLEUR 0571110753 ١N ¢7 14,02 Now-Ethor GUNK NANGERMIC GREASE 6 62 DYCITEM UNYOUT FLUID BUTHICACETATE ETTHWAL I-BUTHALE BOZ NIMOLELLISE ISPROPAND, PROPYE AGETATE MOBILE VINCARA DUL #2 de DIACKTONE ALLOHUL SSZIAL "Fean" OL Eldert 1LIBE 4000 SELLOWER RENDFORM SYN 55WAL cheep 011 TUA ORAW 55 MINISTER MACHINEOIL 45 DISPLAKERS RENaporen 2070 40% minora ail KARD VANISHING DIL RENDFORM SVO XIN DRAWING DI 933 OL TUF DRAW 1403 2006 ATOLLA RENTOLIN AW120 V 7 55 Prk GILLITE 71 horp CULAROM + BY BOLLER ZFILB RUSTINGIRA 55 ano SCIZOL BURNASHING COMPOUND SS FINICHING AERHULE PAINT SEAN 2 (2 MOTHELOGELETH OKEL) ETHNOL TREMETHEL RENTANEDIOL ISOBUTIONS Stripping Room

. . . . . . . . . . . . .

#### **13. PRODUCT INVENTORY FORM**

Make & Model of field instrument used: \_\_\_\_\_NA

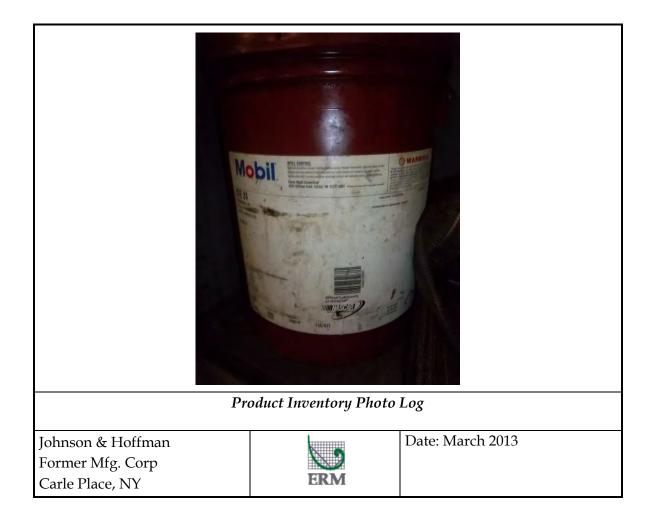
List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition <sup>*</sup>	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
Dark	Hermanc oil	SCAL	and	MOBILE DIE 24 ASO	NA	ν l
1	Ecocot	ssjø	5000	Eom	- -	1
HOP FLICE	ACRELIC SPORY PAINT	1602	6000	(LOCKED) KKEN		
u Loom. CAB	F442012	QT	has		· · ·	
4	CICARLUBE	D.	(Loop	SAR 86-85-90		-
ų	LATER PAINT	GAC	Geog	CTHELEVE GLYCOL		
ALSO IN	(NOUSTRITI MENTE HENRICHTON SL	an	400	POLYMER, MI NERAZ SPIRITS, 124 TRIMCTORY RELAGENCE 2-DORNE	011F71V10 @	THE Rould
144-	ONOST ACRULC	LAM	G.000	2-BUTUNIO MARCE, ACTALEUM D. BUTUNIO MARCE, ACTALEUM MISTILLATE,		111100000
	3-BOL	CAR	4000	NAPTHA		ļ
	NO-SAND PSUT-DECO	QT	avon	ISDERGENNOL, TOLUENE, STARLENE CUYLO	L	
	CITEPSTRIP	RT	C1000	N METHER 2 PTRROLIDONE,		
	DENCON	CAL	Goon	VEETHANSE		
	KLEAN-KUTTER VARNISH REMOVER	GAC		NETHICUS CHORDE, ACTON, TUNKE		
	BONDEX NOOD BIGACH	1202	606p	OXAUC ACIO		
$\mathbf{V}$	GASOLING .	SCAL	Gow	Smul Anang		
pom	Karosane (m) (E	moty				
1	Aton Compression of	-50	p: T			
V	Strv 440 un	561	V			
Enn	STARLET LUGE	17.02	6000	HEAVY AL IPHOTIC SOLVENT	- V	

\* Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D) \*\* Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

BTSA\Sections\SIS\Oil Spills\Guidance Docs\Aiproto4.doe

8







Product Inventory Photo Log

Johnson & Hoffman Former Mfg. Corp Carle Place, NY	ERM	Date: March 2013
Carle Place, NY	ERM	



Johnson & Hoffman Former Mfg. Corp Carle Place, NY

ERM



Product Inventory Photo Log

Johnson & Hoffman		Date: March 2013
Former Mfg. Corp		
Carle Place, NY	ERM	



<image/> <image/>					
Johnson & Hoffman		Date: March 2013			
Former Mfg. Corp Carle Place, NY	ERM				





Product Inventory Photo Log

Johnson & Hoffman
Former Mfg. Corp
Carle Place, NY



Date: March 2013



Johnson & Hoffman
Former Mfg. Corp
Carle Place, NY

ERM



Johnson & Hoffman		Date: March 2013
Former Mfg. Corp		
Carle Place, NY	ERM	



Johnson & Hoffman Former Mfg. Corp Carle Place, NY

ERM

Pro	oduct Inventory Photo	Log
Johnson & Hoffman Former Mfg. Corp Carle Place, NY	ERM	Date: March 2013



Johnson & Hoffman
Former Mfg. Corp
Carle Place, NY





Product Inventory Photo Log

Johnson & Hoffman Former Mfg. Corp Carle Place, NY	ERM	Date: March 2013
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Product Inventory Photo Log

Johnson & Hoffman Former Mfg. Corp Carle Place, NY

ERM

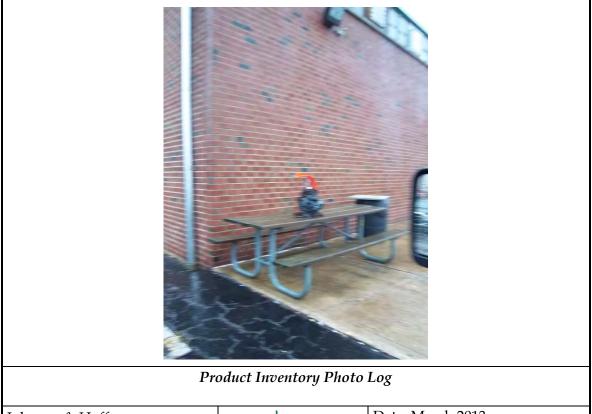


Product Inventory Photo Log

Johnson & Hoffman
Former Mfg. Corp
Carle Place, NY



Date: March 2013



Johnson & Hoffman	
Former Mfg. Corp	
Carle Place, NY	

ERM

# Appendix C

Data Usability Summary Reports



# VOLATILE ORGANIC COMPOUNDS

Compendium Method TO-15 - Level IV Review

Client: <u>ERM, Melville, NY</u>

## Site: J&H Manufacturing Site - Carle Place, New York

## SDG #s: JA81332

Laboratory: Accutest Laboratories – Dayton, New Jersey

Date: August 5, 2011

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	JH-IA-01	JA81332-1	Air
2	JH-SS-01	JA81332-2	Air
3	JH-IA-02	JA81332-3	Air
4	JH-SS-02	JA81332-4	Air
5	JH-SS-03	JA81332-5	Air
6	JH-IA-03	JA81332-6	Air
7	JH-IA-04	JA81332-7	Air
8	JH-SS-04	JA81332-8	Air
9	JH-IA-05	JA81332-9	Air
10	JH-SS-05	JA81332-10	Air
11	JH-OA-01	JA81332-11	Air

The samples were analyzed following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (*GC/MS*)". The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC ASP, the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15 and the reviewer's professional judgment.

<u>Chains-of-Custody (COCs)</u> – No discrepancies were identified.

<u>Data completeness</u>, <u>Deliverables and Analysis Data Sheets (Form I)</u> – No discrepancies were identified.

<u>Canister Receipt/Log-in sheet (Leak Checks)</u> – A review of the final canister pressures by the laboratory upon sample receipt indicated no discrepancies.

Canister Certification Blanks/Spikes/Pressure Differences - No discrepancies were identified.

Holding Times - No discrepancies were identified.

Surrogates - All Surrogate percent recoveries (%R) were within QC limits.

Blank Spike/ Blank Spike Duplicate Sample (BS/BSD) - The BS/BSD exhibited %R and RPD within QC criteria.

Laboratory Duplicate - No discrepancies were observed.

<u>Method Blank</u> - The method blank contained no contamination.

GC/MS Tuning - No discrepancies were identified.

Initial Calibration - The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibration exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

<u>Detection Limits/Compound Identification</u> – The standard initial sample volume utilized by the laboratory for samples was 400 ml. The reporting limit (RL) for all compounds is 0.20 ppbv. RLs reported in  $\mu$ g/m<sup>3</sup> are dependent on the molecular weight of each compound and vary significantly.

The table below includes samples that required reanalysis at a dilution due to target compound concentrations exceeding the calibration range of the instrument in the initial analysis. Results for both analyses are reported on the same Form I. The laboratory has footnoted which results are from the second analysis. All other compounds are reported from the initial analysis. No qualification of the sample data is required. All other criteria were met.

Sample	Compounds Reported from Second Analysis
JH-SS-02	p-Dichlorobenzene
JH-SS-03	Tetrachloroethene
JH-SS-04	Acetone, Tetrachloroethene, Trichloroethene
JH-SS-05	Tetrachloroethene

Ethanol was reported in sample JH-IA-01 with an E qualifier. This indicates that the concentration of Ethanol in sample JH-IA-01 was above the calibration range of the instrument. The sample was not reanalyzed by the laboratory for Ethanol as this compound is suspected to be a contaminant possibly present since it is routinely added to the gas cylinders supplied by the commercial standard suppliers. Ethanol is not of concern at the site. The value is considered estimated and has been qualified J. The value is still useable as an estimated positive detect.

<u>Field Duplicate Sample Precision</u> – No Field Duplicate Sample was collected.

Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:											
Run #1 Run #2	File ID W32868	DF 1.D	Analyzed 07/22/11	<b>Ву</b> ҮМН	Prep n/a	Date	Prej n/a	p B	atch	Analytical VW1343	Batch
Run #1 Run #2	Initial V 400 ml	/olume									
VOA specia	al List								1.1		
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		10.0	0.20	0.036	ppbv		23.8	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	3	ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene		0.12	0.20	0.046		J	0.38	0.64	ug/m3
75-27-4	163.8	Bromodichlo	romethane	ND	0.040	0.030	ppbv	1	ND	0.27	ug/m3
75-25-2	252.8	Bromoform	a vice à frited and a	ND	0.040	0.037	ppbv		ND	0.41	ug/m
593-60-2	106.9	Bromoethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benzyl Chlor		ND	0.20	0.041	ppbv		ND	1.0	ug/m
75-15-0	76.14	Carbon disuli		ND	0.20	0.032	ppbv		ND	0.62	ug/m
108-90-7	112.6	Chlorobenzer		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform		ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chlorometha	ne	0.65	0.20	0.037	ppbv		1.3	0.41	ug/m3
107-05-1	76.53	3-Chloroprop		ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrac		ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16	Cyclohexane		ND	0.20	0.034	ppby		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloro	ethane	ND	0.20	0.028	ppby		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloro		ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromo		ND	0.040	0.027	ppbv		ND	0.31	ug/m3
107-06-2	98.96	1,2-Dichloro		ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloro		ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodiflu	oromethane	0.47	0.20	0.038	ppbv		2.3	0.99	ug/m
124-48-1	208.3	Dibromochlo		ND	0.040	0.027	ppbv		ND	0.34	ug/m3
156-60-5	96.94		hloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichl		ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5		cis-1,3-Dichl		ND	0.20	0.043	ppbv		ND	0.91	ug/mä
541-73-1	147	m-Dichlorob		ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147	o-Dichlorobe		ND	0.040	0.027	ppbv		ND	0.24	ug/m3
106-46-7	147	p-Dichlorobe		0.15	0.10	0.025	ppbv		0.90	0.60	ug/m3
10061-02-6			hloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Ethanol	And the second	67.6	0.50	0.095	ppbv 3	E	127	0.94	ug/m3
100-41-4	106.2	Ethylbenzene		0.23	0.20	0.031	ppbv		1.0	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B \ = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 



Client Sam Lab Sampl Matrix: Method: Project:											
VOA specia	al List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units	
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppby		ND	0.98	ug/m3	
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppby		ND	0.31	ug/m3	
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppbv		ND	0.28	ug/m3	
142-82-5	100.2	Heptane	0.18	0.20	0.033	ppbv	J	0.74	0.82	ug/m3	
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppbv		ND	0.96	ug/m3	
110-54-3	86.17	Hexane	0.17	0.20	0.044	ppbv	J	0.60	0.70	ug/m3	
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3	
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3	
67-63-0	60.1	Isopropyl Alcohol	9.7	0.20	0.059	ppbv		24	0.49	ug/m3	
75-09-2	84.94	Methylene chloride	0.25	0.20	0.027	ppbv		0.87	0.69	ug/m3	
78-93-3	72.11	Methyl ethyl ketone	0.85	0.20	0.048	ppbv		2.5	0.59	ug/m3	
108-10-1	100.2	Methyl Isobutyl Ketone	0.83	0.20	0.036	ppbv		3.4	0.82	ug/m3	
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3	
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3	
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3	
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppbv		ND	0.22	ug/m3	
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3	
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppby		ND	0.22	ug/m3	
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3	
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3	
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3	
127-18-4	165.8	Tetrachloroethylene	1.0	0.040	0.028	ppbv		6.8	0.27	ug/m3	
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3	
108-88-3	92.14	Toluene	0.51	0.20	0.040	ppbv		1.9	0.75	ug/m3	
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3	
75-69-4	137.4	Trichlorofluoromethane	0.31	0.040	0.042	ppbv		1.7	0.22	ug/m3	
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3	
	106.2	m,p-Xylene	0.89	0.20	0.031	ppbv		3.9	0.87	ug/m3	
95-47-6	106.2	o-Xylene	0.30	0.20	0.031	ppbv		1.3	0.87	ug/m3	
1330-20-7	106.2	Xylenes (total)	1.2	0.20	0.031	ppbv		5.2	0.87	ug/m3	
CAS No.	Surro	gate Recoveries Run	#1 Run	#2 I	imits						
460-00-4	4-Bro	mofluorobenzene 89%	á	6	5-128%						

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:											
Run #1 Run #2	File ID W32870	DF ).D 1	Analyzed 07/22/11	By YMH	Prep n/a	Date	Pr n/a		Batch	Analytical VW1343	Batch
Run #1 Run #2	Initial V 400 ml	/olume									
VOA specie	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		5.3	0.20	0.036	ppbv		13	0.48	ug/m:
106-99-0	54.09	1,3-Butadier	ne	ND	0.20	0.024	ppby		ND	0.44	ug/m3
71-43-2	78.11	Benzene		ND	0.20	0.046	ppby		ND	0.64	ug/m
75-27-4	163.8	Bromodichl	oromethane	ND	0.040	0.030	ppby		ND	0.27	ug/m
75-25-2	252.8	Bromoform		ND	0.040	0.037	ppbv		ND	0.41	ug/m
593-60-2	106.9	Bromoethen	e	ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benzyl Chlo	oride	ND	0.20	0.041	ppbv		ND	1.0	ug/m
75-15-0	76.14	Carbon disu	lfide	0.30	0.20	0.032	ppbv		0.93	0.62	ug/m
108-90-7	112.6	Chlorobenze	ene	ND	0.20	0.027	ppbv		ND	0.92	ug/m
75-00-3	64.52	Chloroethan	ie	ND	0.20	0.039	ppbv		ND	0.53	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.028	ppbv		ND	0.98	ug/m
74-87-3	50.49	Chlorometh	ane	0.19	0.20	0.037	ppbv	J	0.39	0.41	ug/m
107-05-1	76.53	3-Chloropro	opene	ND	0.20	0.041	ppbv		ND	0.63	ug/m
56-23-5	153.8	Carbon tetra	achloride	ND	0.040	0.040	ppbv		ND	0.25	ug/m
110-82-7	84.16	Cyclohexan	e	ND	0.20	0.034	ppbv		ND	0.69	ug/m
75-34-3	98.96	1,1-Dichlor	oethane	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94	1,1-Dichlor		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9	1,2-Dibrom		ND	0.040	0.027	ppbv		ND	0.31	ug/m
107-06-2	98.96	1,2-Dichlor		ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113	1,2-Dichlor	opropane	ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12	1,4-Dioxana		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		luoromethane	0.50	0.20	0.038	ppbv		2.5	0.99	ug/m
124-48-1	208.3	Dibromochl		ND	0.040	0.027	ppbv		ND	0.34	ug/m
156-60-5	96.94		ichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		loroethylene	0.21	0.20	0.038	ppbv		0.83	0.79	ug/m
10061-01-5	111		loropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147	m-Dichloro		ND	0.10	0.037	ppbv		ND	0.60	ug/m
95-50-1	147	o-Dichlorob		ND	0.040	0.027	ppbv		ND	0.24	ug/m
106-46-7	147	p-Dichlorob		ND	0.10	0.025	ppbv		ND	0.60	ug/m
10061-02-6			ichloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Ethanol		2.1	0.50	0.095	ppbv	5	4.0	0.94	ug/m
100-41-4	106.2	Ethylbenzer	ie	0.18	0.20	0.031	ppbv	J	0.78	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Method: TO-15		Lab Sample ID:JA81332-2Date Sampled:07/11Matrix:AIR - Soil Vapor Comp.Summa ID:A33Date Received:07/12Method:TO-15Percent Solids:n/a							/19			
VOA specia	al List											
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units		
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3		
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppby		ND	0.31	ug/m3		
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppbv		ND	0.28	ug/m3		
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3		
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppbv		ND	0.96	ug/m3		
110-54-3	86.17	Hexane	0.11	0.20	0.044	ppbv	J	0.39	0.70	ug/m3		
591-78-6	100	2-Hexanone	0.12	0.20	0.043	ppbv	J	0.49	0.82	ug/m3		
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3		
67-63-0	60.1	Isopropyl Alcohol	0.44	0.20	0.059	ppbv		1.1	0.49	ug/m3		
75-09-2	84.94	Methylene chloride	0.25	0.20	0.027	ppbv		0.87	0.69	ug/m3		
78-93-3	72.11	Methyl ethyl ketone	1.2	0.20	0.048	ppbv		3.5	0.59	ug/m3		
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3		
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3		
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3		
100-42-5	104.1	Styrene	1.1	0.20	0.027	ppbv		4.7	0.85	ug/m3		
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppby		ND	0.22	ug/m3		
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3		
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppby		ND	0.22	ug/m3		
95-63-6	120.2	1,2,4-Trimethylbenzene	0.17	0.20	0.024	ppby	J	0.84	0.98	ug/m3		
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppby		ND	0.98	ug/m3		
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3		
127-18-4	165.8	Tetrachloroethylene	11.2	0.040	0.028	ppbv		75.9	0.27	ug/m3		
109-99-9	72.11	Tetrahydrofuran	0.19	0.20	0.047	ppby	J	0.56	0.59	ug/m3		
108-88-3	92.14	Toluene	0.59	0.20	0.040	ppbv	1	2.2	0.75	ug/m3		
79-01-6	131.4	Trichloroethylene	0.80	0.040	0.033	ppbv		4.3	0.21	ug/m3		
75-69-4	137.4	Trichlorofluoromethane	0.32	0.040	0.042	ppbv		1.8	0.22	ug/m3		
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3		
10.10.0	106.2	m,p-Xylene	0.73	0.20	0.031	ppbv		3.2	0.87	ug/m3		
95-47-6	106.2	o-Xylene	0.27	0.20	0.031	ppbv		1.2	0.87	ug/m3		
1330-20-7	106.2	Xylenes (total)	1.0	0.20	0.031	ppbv		4.3	0.87	ug/m3		
CAS No.	Surro	gate Recoveries Rur	1#1 Run	#2 L	imits							
460-00-4	4-Bron	mofluorobenzene 87%	6	6	5-128%							

Report of Analysis

ND = Not detected MDL - Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2

Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-IA-02 JA81332-3 AIR - Indoor TO-15 Johnson & H	Air Comp. St offman, Carle Plac	Dat A634Dat Per	ed: 07	7/15 7/19 'a					
Run #1 Run #2	File ID W32871	.D 1	Analyzed 07/22/11	By YMH	Prep n/a	Date	Pro n/a		Batch	Analytical VW1343	Batch
Run #1 Run #2	Initial V 400 ml	/olume									
VOA speci	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		9.3	0.20	0.036	ppbv		22	0.48	ug/m3
106-99-0	54.09	1,3-Butadie	ne	ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene		0.16	0.20	0.046	ppby	J	0.51	0.64	ug/m3
75-27-4	163.8	Bromodichl	oromethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bromoform		ND	0.040	0.037	ppbv		ND	0.41	ug/m:
593-60-2	106.9	Bromoethen	ie	ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benzyl Chlo	oride	ND	0.20	0.041	ppbv		ND	1.0	ug/m:
75-15-0	76.14	Carbon disu	ılfide	ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenz		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethar		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform		0.74	0.20	0.028	ppby		3.6	0.98	ug/m:
74-87-3	50.49	Chlorometh		0.76	0.20	0.037	ppbv		1.6	0.41	ug/m3
107-05-1	76.53	3-Chloropro		ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetra		ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16	Cyclohexan		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichlor		ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94	1,1-Dichlor		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9	1,2-Dibrom		ND	0.040	0.027	ppbv		ND	0.31	ug/m3
107-06-2	98.96	1,2-Dichlor		ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichlor	and the second	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxan		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		luoromethane	0.50	0.20	0.038	ppbv		2.5	0.99	ug/m
124-48-1	208.3		loromethane	ND	0.040	0.027	ppbv		ND	0.34	ug/m.
156-60-5	96.94		ichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		hloroethylene	ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5			hloropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147	m-Dichloro		ND	0.10	0.037	ppbv		ND	0.60	ug/m:
95-50-1	147	o-Dichlorot		ND	0.040	0.027	ppbv		ND	0.24	ug/m:
106-46-7	147	p-Dichlorot		25.6	0.10	0.025	ppbv		154	0.60	ug/m
10061-02-6			ichloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Ethanol	A 11 1 1 1 1 1 1 1 1 1 1	25.3	0.50	0.095	ppbv		47.7	0.94	ug/m
100-41-4	106.2	Ethylbenzer	ne	0.20	0.20	0.031	ppbv		0.87	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam) Lab Sample Matrix: Method: Project:		JH-IA-02 JA81332-3 AIR - Indoor Air Comp. TO-15 Johnson & Hoffman, Carle P	81332-3 Date Sampled: 07/15/11 R - Indoor Air Comp. Summa ID: A634Date Received: 07/19/11							
VOA specia	al List		1.44							
CAS No.	MW	Compound	Result	RĽ	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	Ō.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppbv		ND	0.31	ug/m3
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppbv		ND	0.28	ug/m3
142-82-5	100.2	Heptane	0.13	0.20	0.033	ppbv	J	0.53	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppbv		ND	0.96	ug/m3
110-54-3	86.17	Hexane	0.18	0.20	0.044	ppbv	J	0.63	0.70	ug/m3
591-78-6	100	2-Hexanone	0.11	0.20	0.043	ppbv	J	0.45	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv	с.,	ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.94	0.20	0.059	ppbv		2.3	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.28	0.20	0.027	ppbv		0.97	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.84	0.20	0.048	ppbv		2.5	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.096	0.20	0.036	ppby	J	0.39	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	2	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppbv		ND	0.22	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppby		ND	0.22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.10	0.20	0.024	ppby	J	0.49	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv	~	ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.15	0.20	0.028	ppbv	J	0.70	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.2	0.040	0.028	ppbv	~	8.1	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.59	0.20	0.040	ppbv		2.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.29	0.040	0.042	ppby		1.6	0.22	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m.p-Xylene	0.75	0.20	0.031	ppbv		3.3	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.28	0.20	0.031	ppbv		1.2	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	1.0	0.20	0.031	ppbv		4.3	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run	#1 Run	#2 L	.imits					
460-00-4	4-Bro	mofluorobenzene 93%		6	5-128%					

Report of Analysis

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B \,=\, Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound



Page 2 of 2

Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:		TO-1	332-4 - Soil Vapor C	min da	umma ID: ze, NY	A64Dat	e Sampl e Receiv cent Sol	red: 07	7/15 7/19 a			
Run #1	File ID W32872		DF 1	Analyzed 07/22/11	By YMH	n/a	Date	n/a	20	Batch	Analytical VW1343	Batch
Run #2	W32889	J.D	1	07/25/11	YMH	n/a		n/a			VW1344	_
Run #1 Run #2	Initial V 400 ml 200 ml	/olum	e									
VOA specia	al List											
CAS No.	MW	Con	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Ace	tone		5.4	0.20	0.036	ppbv		13	0.48	ug/m3
106-99-0	54.09	1,3-	Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz	zene		ND	0.20	0.046	ppbv		ND	0.64	ug/m3
75-27-4	163.8	Bron	nodichlorome	thane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bron	noform		ND	0.040	0.037	ppbv		ND	0.41	ug/ma
593-60-2	106.9	Bron	noethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126	Benz	zyl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14		oon disulfide		ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlo	orobenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chlo	proethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chlo	proform		4.2	0.20	0.028	ppbv		21	0.98	ug/m3
74-87-3	50.49	Chlo	promethane		0.11	0.20	0.037	ppbv	J	0.23	0.41	ug/m3
107-05-1	76.53	3-Cl	hloropropene		ND	0.20	0.041	ppby		ND	0.63	ug/m3
56-23-5	153.8	Carl	oon tetrachlor	ide	0.096	0.040	0.040	ppbv		0.60	0.25	ug/m
110-82-7	84.16	Cyc	lohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98,96	1,1-	Dichloroethar	ie	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94		Dichloroethyl		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9		Dibromoethar		ND	0.040	0.027	ppbv		ND	0.31	ug/m3
107-06-2	98.96	1.0.5	Dichloroethar		ND	0.20	0.043	ppbv		ND	0.81	ug/m:
78-87-5	113		Dichloroprop	ane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9		nlorodifluoron		0.44	0.20	0.038	ppbv		2.2	0.99	ug/m3
124-48-1	208.3		romochlorom		ND	0.040	0.027	ppby		ND	0.34	ug/m
156-60-5	96.94		s-1,2-Dichlor		ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94		1,2-Dichloroe		ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5			1,3-Dichlorop		ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147		lichlorobenzei		ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147		ichlorobenzen		ND	0.040	0.027	ppbv		ND	0.24	ug/m
106-46-7	147		ichlorobenzen		36.7 a	0.20	0.050	ppbv		221 a	1.2	ug/m
10061-02-6			s-1,3-Dichlor	opropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Etha			1.2	0.50	0.095	ppbv		2.3	0.94	ug/m
100-41-4	106.2	Ethy	lbenzene		1.1	0.20	0.031	ppbv		4.8	0.87	ug/m:

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Client Sample ID:       JH-SS-02         Lab Sample ID:       JA81332-4         Date Sampled:       07/15/11         Matrix:       AIR - Soil Vapor Comp.       Summa ID:       A644Date Received:       07/19/11         Method:       TO-15       Percent Solids:       n/a         Project:       Johnson & Hoffman, Carle Place, NY											
VOA specia	al List										
CAS No.	MW	Compound	Res	ult	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND		0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND		0.040	0.034	ppby		ND	0.31	ug/m3
76-14-2	170.9	Freon 114	ND		0.040	0.031	ppbv		ND	0.28	ug/m3
142-82-5	100.2	Heptane	ND		0.20	0.033	ppby		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND		0.090	0.046	ppbv		ND	0.96	ug/m3
110-54-3	86.17	Hexane	ND		0.20	0.044	ppby		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	ND		0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND		0.20	0.031	ppby		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.24	1	0.20	0.059	ppbv		0.59	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.20	)	0.20	0.027	ppbv		0.69	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.72	2	0.20	0.048	ppbv		2.1	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND		0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND		0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND		0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND		0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND		0.040	0.022	ppbv		ND	0.22	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethan	e ND		0.040	0.030	ppbv		ND	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND		0.040	0.030	ppbv		ND	0.22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.2		0.20	0.024	ppbv		1.3	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND		0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND		0.20	0.028	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	25.2	2	0.040	0.028	ppbv		171	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND		0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.3		0.20	0.040	ppbv		1.3	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	2.8		0.040		ppbv		15	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.3	1	0.040		ppbv		1.7	0.22	ug/m3
75-01-4	62.5	Vinyl chloride	ND		0.20	0.032	ppby		ND	0.51	ug/m3
	106.2	m,p-Xylene	6.1		0.20	0.031	ppbv		26	0.87	ug/m3
95-47-6	106.2	o-Xylene	2.5		0.20	0.031	ppbv		11	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	8.6		0.20	0.031	ppbv		37	0.87	ug/m3
CAS No.	Surro	gate Recoveries R	.un# 1	Run# 2		Limits					
460-00-4	4-Bron	nofluorobenzene 9	0%	92%	0	65-128%					

Report of Analysis

Page 2 of 2

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:	e ID:	TO-1	332-5 Soil Vapor (		umma ID: :e, NY	A30Dat	e Sampl e Receiv cent Soli	ed: 07	7/15/ 7/19/ a			
a contra	File ID		DF	Analyzed	By		Date			atch	Analytical	Batch
Run #1 Run #2	W32873		1	07/22/11	YMH	n/a		n/a			VW1343	
Kun #2	W32890	. <b>D</b>	1	07/25/11	YMH	n/a		n/a	-		VW1344	
Run #1 Run #2	Initial V 400 ml 50.0 ml	/olum	e									1
VOA specia												
		0			Deret	DI	MDI				. DI	
CAS No.	MW	Con	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet			6.4	0.20	0.036	ppbv		15	0.48	ug/m3
106-99-0	54.09	1,3-	Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz	zene		0.28	0.20	0.046	ppbv		0.89	0.64	ug/m3
75-27-4	163.8	Bron	nodichlorome	ethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bron	noform		ND	0.040	0.037	ppbv		ND	0.41	ug/m3
593-60-2	106.9	Bron	noethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126	Benz	zyl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14		on disulfide		0.10	0.20	0.032	ppbv	J	0.31	0.62	ug/m3
108-90-7	112.6	Chlo	orobenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52		proethane		0.17	0.20	0.039	ppbv	J	0.45	0.53	ug/m3
67-66-3	119.4		proform		0.17	0.20	0.028	ppbv	J	0.83	0.98	ug/m3
74-87-3	50.49		promethane		0.15	0.20	0.037	ppbv	J	0.31	0.41	ug/m3
107-05-1	76.53		loropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8		oon tetrachlor	ide	ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16		lohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96		Dichloroethar		ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94		Dichloroethyl		ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9		Dibromoethar		ND	0.040	0.027	ppbv		ND	0.31	ug/m3
107-06-2	98.96		Dichloroethar		ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113		Dichloroprop	ane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9		lorodifluoror		0.41	0.20	0.038	ppbv		2.0	0.99	ug/m3
124-48-1	208.3		romochlorom		ND	0.040	0.027	ppby	4	ND	0.34	ug/m3
156-60-5	96.94		s-1,2-Dichlor		0.10	0.20	0.033	ppbv	J	0.40	0.79	ug/m3
156-59-2	96.94		,2-Dichloroe		4.0	0.20	0.038	ppbv		16	0.79	ug/m3
10061-01-5			,3-Dichlorop		ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147		ichlorobenze		ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147		ichlorobenzen		ND	0.040	0.027	ppbv		ND	0.24	ug/m3
106-46-7	147		ichlorobenzen		0.12	0.10	0.025	ppbv		0.72	0.60	ug/m3
10061-02-6			s-1,3-Dichlor	opropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Etha			0.83	0.50	0.095	ppbv		1.6	0.94	ug/m3
100-41-4	106.2	Ethy	lbenzene		ND	0.20	0.031	ppbv		ND	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sample Matrix: Method: Project:		JH-SS-03 JA81332-5 AIR - Soil Vapor Comp. TO-15 Johnson & Hoffman, Ca		ID: A30£D P	ate Sampl ate Receiv ercent Sol	ved: 0'	7/15/ 7/19/ 'a			
VOA specia	al List									
CAS No.	MW	Compound	Resu	lt RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.04	0 0.034	ppby		ND	0.31	ug/m3
76-14-2	170.9	Freon 114	ND	0.04		ppbv		ND	0.28	ug/m3
142-82-5	100.2	Heptane	ND	0.20		ppby		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.09	0 0.046	ppbv		ND	0.96	ug/m3
110-54-3	86.17	Hexane	0.27	0.20		ppby		0.95	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20		ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20		ppbv		ND	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.37	0.20		ppbv		1.3	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.0	0.20		ppbv		2.9	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone		0.20		ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether		0.20		ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20		ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20		ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.04		ppbv		ND	0.22	ug/m3
79-34-5	167,9	1,1,2,2-Tetrachloroetha		0.04		ppbv		ND	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.04		ppbv		ND	0.22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene		0.20		ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene		0.20		ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane		0.20		ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	147 a			ppbv		997 a	2.2	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.36	0.20		ppbv		1.1	0.59	ug/m3
108-88-3	92.14	Toluene	0.52	0.20		ppbv		2.0	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	13.1	0.04		ppbv		70.4	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane		0.04		ppbv		1.7	0.22	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20		ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.17	0.20		ppbv	1	0.74	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20		ppbv	1	ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.17	0.20		ppbv	J	0.74	0.87	ug/m3
CAS No.	Surro	gate Recoveries	Run#1 F	Run# 2	Limits					
460-00-4	4-Bron	nofluorobenzene	87% 8	6%	65-128%					

Report of Analysis

Page 2 of 2

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

14 of 360 ACCUTEST. JA61332



Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:		JA81332-6 AIR - Indoor Air Comp. Summa ID: TO-15 Johnson & Hoffman, Carle Place, NY				Date Sampled: A074Date Received: Percent Solids:			/11 /11		
Run #1 Run #2	File ID W32874	DF 4.D 1	Analyzed 07/22/11	<b>Ву</b> ҮМН	Prep n/a	Date	Pro n/a		Batch	Analytical VW1343	Batch
Run #1 Run #2	Initial 400 ml	Volume									
VOA speci	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		17.8	0.20	0.036	ppbv		42.3	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene		0.15	0.20	0.046	ppbv	J	0.48	0.64	ug/m3
75-27-4	163.8	Bromodichloro	omethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bromoform	1111011-072	ND	0.040	0.037	ppbv		ND	0.41	ug/m3
593-60-2	106.9	Bromoethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benzyl Chlorid	fe	ND	0.20	0.041	ppbv		ND	1.0	ug/m
75-15-0	76.14	Carbon disulfi		ND	0.20	0.032	ppbv		ND	0.62	ug/m
108-90-7	112.6	Chlorobenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m
75-00-3	64.52	Chloroethane		0.097	0.20	0.039	ppbv	J	0.26	0.53	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.028	ppbv	2	ND	0.98	ug/m
74-87-3	50.49	Chloromethan	e	1.9	0.20	0.037	ppbv		3.9	0.41	ug/m3
107-05-1	76.53	3-Chloroprope		ND	0.20	0.041	ppbv		ND	0.63	ug/m
56-23-5	153.8	Carbon tetrach		ND	0.040	0.040	ppbv		ND	0.25	ug/m
110-82-7	84.16	Cyclohexane	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroet	thane	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94	1,1-Dichloroet		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9	1,2-Dibromoe		ND	0.040	0.027	ppbv		ND	0.31	ug/m
107-06-2	98.96	1,2-Dichloroet		ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113	1,2-Dichlorop		ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluc	romethane	0.46	0.20	0.038	ppbv		2.3	0.99	ug/m
124-48-1	208.3	Dibromochlor		ND	0.040	0.027	ppbv		ND	0.34	ug/m
156-60-5	96.94	trans-1,2-Dich	loroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichlo		ND	0.20	0.038	ppbv		ND	0.79	ug/m
10061-01-5	111	cis-1,3-Dichlo	ropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m:
541-73-1	147	m-Dichlorober		ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147	o-Dichloroben	zene	ND	0.040	0.027	ppbv		ND	0.24	ug/m:
106-46-7	147	p-Dichloroben	zene	0.26	0.10	0.025	ppbv		1.6	0.60	ug/m
10061-02-6	111	trans-1,3-Dich	loropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Ethanol	an an ear an ear an	11.9	0.50	0.095	ppbv		22.4	0.94	ug/m3
100-41-4	106.2	Ethylbenzene		0.29	0.20	0.031	ppbv		1.3	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sampl Matrix: Method: Project:		JH-IA-03 JA81332-6 AIR - Indoor Air Comp. TO-15 Johnson & Hoffman, Carle J	Summa ID: Place, NY	A074Da	te Sampl te Receiv rcent Sol	red: 07	7/15/ 7/19/ a			
VOA specia	al List		1	14						
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppby		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppbv		ND	0.31	ug/m3
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppby		ND	0.28	ug/m3
142-82-5	100.2	Heptane	0.24	0.20	0.033	ppbv		0.98	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppby		ND	0.96	ug/m3
110-54-3	86.17	Hexane	0.21	0.20	0.044	ppbv		0.74	0.70	ug/m3
591-78-6	100	2-Hexanone	0.31	0.20	0.043	ppby		1.3	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppby		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.3	0.20	0.059	ppbv		3.2	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.92	0.20	0.027	ppby		3.2	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.7	0.20	0.048	ppbv		5.0	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.16	0.20	0.036	ppbv	J	0.66	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	1	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppby		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppby		ND	0.22	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppby		ND	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppbv		ND	0.22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.14	0.20	0.024	ppbv	J	0.69	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv	3	ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.15	0.20	0.028	ppbv	J	0.70	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	10.3	0.040	0.028	ppbv	2	69.8	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.31	0.20	0.047	ppbv		0.91	0.59	ug/m3
108-88-3	92.14	Toluene	0.48	0.20	0.040	ppbv		1.8	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.10	0.040	0.033	ppbv		0.54	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.32	0.040		ppbv		1.8	0.22	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	1.1	0.20	0.031	ppbv		4.8	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.43	0.20	0.031	ppbv		1.9	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	1.5	0.20	0.031	ppbv		6.5	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run	1#1 Run	#2 1	Limits					
460-00-4	4-Bro	mofluorobenzene 91%	6	(	65-128%					

**Report of Analysis** 

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



2.6

Page 2 of 2

Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:		JH-IA-04 JA81332-7 AIR - Indoor A TO-15 Johnson & Hoff	ir Comp. St fman, Carle Plac	ımma ID: :e, NY	A897Dat	e Sampl e Receiv cent Sol	red: 07	7/15, 7/19, 'a			
Run #1 Run #2	File ID W32875	DF i.D 1	Analyzed 07/22/11	By YMH	Prep n/a	Date	Pr n/a		latch	Analytical VW1343	Batch
Run #1 Run #2	Initial V 400 ml	/olume									
VOA specia	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		5.0	0.20	0.036	ppbv		12	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene		0.19	0.20	0.046	ppbv	J	0.61	0.64	ug/m3
75-27-4	163.8	Bromodichloro	omethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bromoform		ND	0.040	0.037	ppbv		ND	0.41	ug/m3
593-60-2	106.9	Bromoethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benzyl Chlorid	ie	ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfi		ND	0.20	0.032	ppbv		ND	0.62	ug/mä
108-90-7	112.6	Chlorobenzene	3	ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform		ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethan	e	0.51	0.20	0.037	ppbv		1.1	0.41	ug/m3
107-05-1	76.53	3-Chloroprope	ne	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrach	ıloride	ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16	Cyclohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroet	hane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroet	hylene	ND	0.20	0.046	ppbv		ND	0.79	ug/m:
106-93-4	187.9	1,2-Dibromoe	thane	ND	0.040	0.027	ppbv		ND	0.31	ug/m:
107-06-2	98.96	1,2-Dichloroet	thane	ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichlorop	ropane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluc		0.43	0.20	0.038	ppbv		2.1	0.99	ug/m3
124-48-1	208.3	Dibromochlor	FULL VARIATES CO. In and A	ND	0.040	0.027	ppbv		ND	0.34	ug/m3
156-60-5	96.94	trans-1,2-Dich		ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichlo		ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5		cis-1,3-Dichlo		ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorober		ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147	o-Dichloroben		ND	0.040	0.027	ppbv		ND	0.24	ug/m3
106-46-7	147	p-Dichloroben		ND	0.10	0.025	ppbv		ND	0.60	ug/m3
10061-02-6		trans-1,3-Dich	loropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Ethanol		25.1	0.50	0.095	ppbv		47.3	0.94	ug/m3
100-41-4	106.2	Ethylbenzene		0.14	0.20	0.031	ppbv	J	0.61	0.87	ug/mä

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \mbox{ Indicates analyte found in associated method blank}$ 



Client Sam Lab Sampl Matrix: Method: Project:	: AIR - Indoor Air Comp. d: TO-15 f: Johnson & Hoffman, Car		p. Summa ID: A897Date Received: 0 Percent Solids: n.					/11 /11		
VOA specia	al List						1			
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppbv		ND	0.31	ug/m3
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppbv		ND	0.28	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppbv		ND	0.96	ug/m3
110-54-3	86.17	Hexane	0.12	0.20	0.044	ppbv	J	0.42	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv	τ	ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.4	0.20	0.059	ppbv		3.4	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.39	0.20	0.027	ppbv		1.4	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.39	0.20	0.048	ppbv		1.2	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppby		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppbv		ND	0.22	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppbv		ND	0.22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.10	0.20	0.028	ppbv	J	0.47	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	2.3	0.040	0.028	ppbv		16	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/ma
108-88-3	92.14	Toluene	0.48	0.20	0.040	ppby		1.8	0.75	ug/m
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.27	0.040	0.042	ppbv		1.5	0.22	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.46	0.20	0.031	ppbv		2.0	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.16	0.20	0.031	ppbv	J	0.69	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.62	0.20	0.031	ppbv	1	2.7	0.87	ug/m3
CAS No.	Surro	gate Recoveries Rui	n#1 Run	#2 L	imits					
460-00-4	4-Bro	mofluorobenzene 859	6	6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2



Report of Analysis

Page 1 of 2

2.8

Client Sam Lab Sampl Matrix: Method: Project:		JA81332-8 AIR - Soil Vapor Comp. Summa ID: TO-15 Johnson & Hoffman, Carle Place, NY					e Sampl Receiv cent Soli	/11 /11				
Run #1	File ID W3287	6.D	DF 1	Analyzed 07/23/11	By YMH	Prep n/a	Date	Pro n/a		latch	Analytical VW1343	Batch
Run #2	W32891	1.D	30.6	07/25/11	YMH	n/a		n/a	l.		VW1344	
Run #1 Run #2	Initial 400 ml 200 ml	Volum	e									
VOA specia	al List											
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet	one		227 a	12	2.2	ppbv		539 <sup>a</sup>	29	ug/m3
106-99-0	54.09	1,3-1	Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz	zene		1.9	0.20	0.046	ppbv		6.1	0.64	ug/m3
75-27-4	163.8	Bron	nodichlorome	thane	ND	0.040	0.030	ppbv		ND	0.27	ug/mä
75-25-2	252.8	Bron	noform		ND	0.040	0.037	ppbv		ND	0.41	ug/m3
593-60-2	106.9		noethene		ND	0.20	0.037	ppbv		ND	0.87	ug/mä
100-44-7	126	Benz	yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carb	oon disulfide		1.4	0.20	0.032	ppbv		4.4	0.62	ug/m3
108-90-7	112.6		orobenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/mä
75-00-3	64.52		oroethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4		oroform		0.75	0.20	0.028	ppbv		3.7	0.98	ug/m3
74-87-3	50.49		oromethane		0.21	0.20	0.037	ppbv		0.43	0.41	ug/m3
107-05-1	76.53		iloropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8		oon tetrachlor	ide	ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16		ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96		Dichloroethar		ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94		Dichloroethyl		ND	0.20	0.046	ppbv		ND	0.79	ug/m:
106-93-4	187.9		Dibromoetha		ND	0.040	0.027	ppbv		ND	0.31	ug/m
107-06-2	98.96		Dichloroethar		ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113		Dichloroprop	ane	ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12		Dioxane	11141311	ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		lorodifluoror		0.43	0.20	0.038	ppbv		2.1	0.99	ug/m:
124-48-1	208.3		omochlorom		ND	0.040	0.027	ppbv		ND	0.34	ug/m
156-60-5	96.94		s-1,2-Dichlor		ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		,2-Dichloroe		0.92	0.20	0.038	ppbv		3.6	0.79	ug/m3
10061-01-5			,3-Dichlorop		ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147		ichlorobenze		ND	0.10	0.037	ppbv		ND	0.60	ug/m
95-50-1	147		chlorobenzen		ND	0.040	0.027	ppbv		ND	0.24	ug/m
106-46-7	147		chlorobenzen		0.10	0.10	0.025	ppby		0.60	0.60	ug/m
10061-02-6			s-1,3-Dichlor	opropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Etha			4.8	0.50	0.095	ppbv		9.0	0.94	ug/m
100-41-4	106.2	Ethy	Ibenzene		0.96	0.20	0.031	ppbv		4.2	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

	10d: TO-15		Percent Solids: n/a							
VOA specia	1 List			7.4		Sec. 1	- 17			
CAS No.	MW	Compound	I	Result	RL	MDL	Units (	Q Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	r	ND	0.20	0.024	ppbv	ND	0.98	ug/m3
76-13-1	187.4	Freon 113	r	ND	0.040	0.034	ppbv	ND	0.31	ug/m3
76-14-2	170.9	Freon 114	ľ	ND	0.040	0.031	ppby	ND	0.28	ug/m3
142-82-5	100.2	Heptane	(	).74	0.20	0.033	ppbv	3.0	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	r	VD	0.090	0.046	ppbv	ND	0.96	ug/m3
110-54-3	86.17	Hexane	1	1.2	0.20	0.044	ppby	4.2	0.70	ug/m3
591-78-6	100	2-Hexanone	- d	1.4	0.20	0.043	ppbv	5.7	0.82	ug/m3
98-82-8	120	Isopropylbenzene	T	ND	0.20	0.031	ppbv	ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	2	2.5	0.20	0.059	ppbv	6.1	0.49	ug/m3
75-09-2	84.94	Methylene chloride		).25	0.20	0.027	ppbv	0.87	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone		39.5	0.20	0.048	ppbv	116	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone		).75	0.20	0.036	ppbv	3.1	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether		ND	0.20	0.027	ppbv	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene		ND	0.20	0.030	ppby	ND	0.98	ug/m3
100-42-5	104.1	Styrene	(	0.47	0.20	0.027	ppbv	2.0	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane		0.11	0.040		ppbv	0.60	0.22	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroetha		ND	0.040		ppbv	ND	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane		ND	0.040	0.030	ppbv	ND	0.22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene		0.25	0.20	0.024	ppbv	1.2	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene		ND	0.20	0.028	ppbv	ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane		ND	0.20	0.028	ppbv	ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene		620 a	2.4	1.7	ppbv	4200 a	16	ug/m3
109-99-9	72.11	Tetrahydrofuran		2.2	0.20	0.047	ppbv	6.5	0.59	ug/m3
108-88-3	92.14	Toluene		2.0	0.20	0.040	ppby	7.5	0.75	ug/m3
79-01-6	131.4	Trichloroethylene		30.9 a	2.4	2.0	ppbv	435 a	13	ug/m3
75-69-4	137.4	Trichlorofluoromethane		0.28	0.040		ppbv	1.6	0.22	ug/m3
75-01-4	62.5	Vinyl chloride		ND	0.20	0.032	ppbv	ND	0.51	ug/m3
10 FF 5	106.2	m,p-Xylene		1.8	0.20	0.031	ppbv	7.8	0.87	ug/m3
95-47-6	106.2	o-Xylene		0.66	0.20	0.031	ppbv	2.9	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)		2.4	0.20	0.031	ppbv	10	0.87	ug/m3
CAS No.	Surro	gate Recoveries	Run# 1	Run#	2	Limits				
460-00-4	4-Bron	nofluorobenzene 9	1%	82%		65-128%				

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JA81332-9 Date Sampled: AIR - Indoor Air Comp. Summa ID: A46@Date Received: TO-15 Percent Solids: Johnson & Hoffman, Carle Place, NY						7/15. 7/19. a			
Run #1 Run #2	File ID W32878	DF .D 1	Analyzed 07/23/11	Ву ҮМН	Prep n/a	Date	Pre n/a	-	Batch	Analytical VW1343	Batch
Run #1 Run #2	Initial V 400 ml	/olume									
VOA specia	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		20.3	0.20	0.036	ppbv		48.2	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene		0.18	0.20	0.046	ppbv	J	0.58	0.64	ug/m3
75-27-4	163.8	Bromodichloro	methane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bromoform		ND	0.040	0.037	ppbv		ND	0.41	ug/m3
593-60-2	106.9	Bromoethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chlorid	e	ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfid		ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform		ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane		0.76	0.20	0.037	ppby		1.6	0.41	ug/m3
107-05-1	76.53	3-Chloroproper	ie	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachl	oride	ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16	Cyclohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroeth	nane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroeth		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9	1,2-Dibromoet	hane	ND	0.040	0.027	ppbv		ND	0.31	ug/m
107-06-2	98.96	1,2-Dichloroeth	nane	ND	0.20	0.043	ppbv		ND	0.81	ug/m:
78-87-5	113	1.2-Dichloropr	opane	ND	0.20	0.038	ppbv		ND	0.92	ug/m:
123-91-1	88.12	1,4-Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9	Dichlorodifluor		0.44	0.20	0.038	ppbv		2.2	0.99	ug/m:
124-48-1	208.3	Dibromochloro		ND	0.040	0.027	ppbv		ND	0.34	ug/m:
156-60-5	96.94	trans-1,2-Dichl		ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichlor		ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5		cis-1,3-Dichlor		ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichloroben		ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147	o-Dichlorobenz		ND	0.040	0.027	ppbv		ND	0,24	ug/m3
106-46-7	147	p-Dichlorobenz		0.14	0.10	0.025	ppbv		0.84	0.60	ug/m
10061-02-6		trans-1,3-Dichl	oropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Ethanol		15.6	0.50	0.095	ppbv		29.4	0.94	ug/m3
100-41-4	106.2	Ethylbenzene		0.44	0.20	0.031	ppbv		1.9	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sample ID: Lab Sample ID: Matrix: Method: Project: VOA special List		JH-IA-05 JA81332-9 AIR - Indoor Air Comp. TO-15 Johnson & Hoffman, Carle J	A81332-9 Date Sampled: 07/15/11 MR - Indoor Air Comp. Summa ID: A46@Date Received: 07/19/11										
VOA specia	al List		1			1							
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units			
622-96-8	120.2	4-Ethyltoluene	0.57	0.20	0.024	ppbv		2.8	0.98	ug/m3			
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppbv		ND	0.31	ug/m3			
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppbv		ND	0.28	ug/m3			
142-82-5	100.2	Heptane	0.15	0.20	0.033	ppbv	J	0.61	0.82	ug/m3			
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppbv		ND	0.96	ug/m3			
110-54-3	86.17	Hexane	0.17	0.20	0.044	ppbv	J	0.60	0.70	ug/m3			
591-78-6	100	2-Hexanone	0.10	0.20	0.043	ppbv	J	0.41	0.82	ug/m3			
98-82-8	120	Isopropylbenzene	0.15	0.20	0.031	ppby	J	0.74	0.98	ug/m3			
67-63-0	60.1	Isopropyl Alcohol	2.5	0.20	0.059	ppbv		6.1	0.49	ug/m3			
75-09-2	84.94	Methylene chloride	0.24	0.20	0.027	ppbv		0.83	0.69	ug/m3			
78-93-3	72.11	Methyl ethyl ketone	4.7	0.20	0.048	ppbv		14	0.59	ug/m3			
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppby		ND	0.82	ug/m3			
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3			
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3			
100-42-5	104.1	Styrene	1.6	0.20	0.027	ppby		6.8	0.85	ug/m3			
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppby		ND	0.22	ug/m3			
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppby		ND	0.27	ug/m3			
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppbv		ND	0.22	ug/m3			
95-63-6	120.2	1,2,4-Trimethylbenzene	3.8	0.20	0.024	ppby		19	0.98	ug/m3			
108-67-8	120.2	1,3,5-Trimethylbenzene	1.2	0.20	0.028	ppbv		5.9	0.98	ug/m3			
540-84-1	114.2	2,2,4-Trimethylpentane	0.11	0.20	0.028	ppbv	J	0.51	0.93	ug/m3			
127-18-4	165.8	Tetrachloroethylene	6.2	0.040	0.028	ppbv	1	42	0.27	ug/m3			
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3			
108-88-3	92.14	Toluene	0.63	0.20	0.040	ppbv		2.4	0.75	ug/m3			
79-01-6	131.4	Trichloroethylene	0.14	0.040	0.033	ppby		0.75	0.21	ug/m3			
75-69-4	137.4	Trichlorofluoromethane	0.27	0.040	0.042	ppbv		1.5	0.22	ug/m3			
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppby		ND	0.51	ug/m3			
	106.2	m,p-Xylene	1.7	0.20	0.031	ppbv		7.4	0.87	ug/m3			
95-47-6	106.2	o-Xylene	0.78	0.20	0.031	ppbv		3.4	0.87	ug/m3			
1330-20-7	106.2	Xylenes (total)	2.5	0.20	0.031	ppbv		11	0.87	ug/m3			
CAS No.	Surro	gate Recoveries Rur	#1 Run	#2 L	imits								
460-00-4	4-Bron	mofluorobenzene 89%	5	6	5-128%								

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2

Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-SS-05 JA81332-10 AIR - Soil Vapor Comp. TO-15 Johnson & Hoffman, Carle F			JA81332-10 Date Sampled: AIR - Soil Vapor Comp. Summa ID: A482Date Received:							
ALC: NO	File ID		DF	Analyzed	By		Date		-	Batch	Analytical	Batch
Run #1	W32879		1	07/23/11	YMH	n/a		n/a			VW1343	
Run #2	W32892	2.0	1	07/25/11	YMH	n/a		n/a	_		VW1344	_
Run #1 Run #2	Initial 400 ml 40.0 ml		e			1						
VOA specia												
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet	one		9.2	0.20	0.036	ppbv		22	0.48	ug/m3
106-99-0	54.09	1,3-1	Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz	zene		0.12	0.20	0.046	ppbv	J	0.38	0.64	ug/m3
75-27-4	163.8	Bron	nodichlorom	ethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bron	noform		ND	0.040	0.037	ppbv		ND	0.41	ug/m
593-60-2	106.9	Bron	noethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benz	yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14		on disulfide		0.26	0.20	0.032	ppbv		0.81	0.62	ug/m
108-90-7	112.6	Chlo	robenzene		ND	0.20	0.027	ppby		ND	0.92	ug/m
75-00-3	64.52	Chlo	oroethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m
67-66-3	119.4	Chlo	oroform		0.11	0.20	0.028	ppby	J	0.54	0.98	ug/m
74-87-3	50.49	Chlo	oromethane		0.40	0.20	0.037	ppbv		0.83	0.41	ug/m
107-05-1	76.53		iloropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m:
56-23-5	153.8		on tetrachlor	ide	ND	0.040	0.040	ppbv		ND	0.25	ug/m
110-82-7	84.16		lohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m
75-34-3	98.96		Dichloroetha	ne	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94		Dichloroethy		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9		Dibromoetha		ND	0.040	0.027	ppbv		ND	0.31	ug/m
107-06-2	98.96		Dichloroetha		ND	0.20	0.043	ppby		ND	0.81	ug/m
78-87-5	113		Dichloroprop		ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		lorodifluoro	nethane	0.44	0.20	0.038	ppbv		2.2	0.99	ug/m
124-48-1	208.3		omochlorom		ND	0.040	0.027	ppbv		ND	0.34	ug/m
156-60-5	96.94		s-1,2-Dichlor		0.63	0.20	0.033	ppbv		2.5	0.79	ug/m
156-59-2	96.94		,2-Dichloroe		6.7	0.20	0.038	ppbv		27	0.79	ug/m
10061-01-5			.3-Dichlorop		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		ichlorobenze		ND	0.10	0.037	ppbv		ND	0.60	ug/m
95-50-1	147		chlorobenzer		ND	0.040	0.027	ppbv		ND	0.24	ug/m
106-46-7	147		chlorobenzer		ND	0.10	0.025	ppbv		ND	0.60	ug/m
10061-02-6			s-1,3-Dichlor		ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Etha		1991	2.6	0.50	0.095	ppbv		4.9	0.94	ug/m
100-41-4	106.2		lbenzene		ND	0.20	0.031	ppbv		ND	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



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Client Sample ID: Lab Sample ID: Matrix: Method: Project: VOA special List		H-SS-05 A81332-10 Date Sampled: 07/15/11 AIR - Soil Vapor Comp. Summa ID: A482Date Received: 07/19/11 FO-15 Percent Solids: n/a Johnson & Hoffman, Carle Place, NY											
VOA specia	al List	· · · · · · · · · · · · · · · · · · ·											
CAS No.	MW	Compound	Resul	t RL	MDL	Units	Q	Result	RL	Units			
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3			
76-13-1	187.4	Freon 113	ND	0.04	0 0.034	ppbv		ND	0.31	ug/m3			
76-14-2	170.9	Freon 114	ND	0.04	0 0.031	ppbv		ND	0.28	ug/m3			
142-82-5	100.2	Heptane	ND	0.20		ppbv		ND	0.82	ug/m3			
87-68-3	260.8	Hexachlorobutadiene	ND	0.09	0 0.046	ppbv		ND	0.96	ug/m3			
110-54-3	86.17	Hexane	0.096	0.20	0.044	ppbv	J	0.34	0.70	ug/m3			
591-78-6	100	2-Hexanone	0.10	0.20	0.043	ppbv	J	0.41	0.82	ug/m3			
98-82-8	120	Isopropylbenzene	ND	0.20		ppbv		ND	0.98	ug/m3			
67-63-0	60.1	Isopropyl Alcohol	0.44	0.20		ppbv		1.1	0.49	ug/m3			
75-09-2	84.94	Methylene chloride	0.23	0.20		ppbv		0.80	0.69	ug/m3			
78-93-3	72.11	Methyl ethyl ketone	1.3	0.20		ppbv		3.8	0.59	ug/m3			
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20		ppbv		ND	0.82	ug/m3			
1634-04-4	88.15	Methyl Tert Butyl Ether		0.20		ppbv		ND	0.72	ug/m3			
103-65-1	120	n-Propylbenzene	ND	0.20		ppbv		ND	0.98	ug/m3			
100-42-5	104.1	Styrene	ND	0.20		ppbv		ND	0.85	ug/m3			
71-55-6	133.4	1,1,1-Trichloroethane	0.13	0.04		ppbv		0.71	0.22	ug/m3			
79-34-5	167.9	1,1,2,2-Tetrachloroetha		0.04		ppby		ND	0.27	ug/m3			
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.04		ppbv		ND	0.22	ug/m3			
95-63-6	120.2	1,2,4-Trimethylbenzene		0.20		ppbv	J	0.64	0.98	ug/m3			
108-67-8	120.2	1,3,5-Trimethylbenzene		0.20		ppbv		ND	0.98	ug/m3			
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20		ppbv		ND	0.93	ug/m3			
127-18-4	165.8	Tetrachloroethylene	153 a	0.40		ppbv		1040 a	2.7	ug/m3			
109-99-9	72.11	Tetrahydrofuran	0.67	0.20		ppbv		2.0	0.59	ug/m3			
108-88-3	92.14	Toluene	0.34	0.20		ppbv		1.3	0.75	ug/m3			
79-01-6	131.4	Trichloroethylene	5.2	0.04		ppby		28	0.21	ug/m3			
75-69-4	137.4	Trichlorofluoromethane	0.28	0.04		ppby		1.6	0.22	ug/m3			
75-01-4	62.5	Vinyl chloride	ND	0.20		ppby		ND	0.51	ug/m3			
	106.2	m,p-Xylene	0.25	0.20		ppby		1.1	0.87	ug/m3			
95-47-6	106.2	o-Xylene	ND	0.20		ppby		ND	0.87	ug/m3			
1330-20-7	106.2	Xylenes (total)	0.25	0.20		ppbv		1.1	0.87	ug/m3			
CAS No.	Surro	gate Recoveries I	Run#1 R	un# 2	Limits								
460-00-4	4-Bron	nofluorobenzene 9	92% 9	6%	65-128%								

Report of Analysis

(a) Result is from Run# 2

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Page 2 of 2

Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-OA-01 JA81332-11 Date Sampled: 07/15/11 AIR - Ambient Air Comp. Summa ID: A125ate Received: 07/19/11 TO-15 Percent Solids: n/a Johnson & Hoffman, Carle Place, NY									
Run #1 Run #2	File ID W3288		Analyzed 07/23/11	Ву ҮМН	Prep n/a	Date	Pre n/a		latch	Analytical VW1343	Batch
Run #1 Run #2	Initial 400 ml	Volume									
VOA specia	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone		5.7	0.20	0.036	ppbv		14	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene		0.11	0.20	0.046	ppbv	J	0.35	0.64	ug/m3
75-27-4	163.8	Bromodichloron	nethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3
75-25-2	252.8	Bromoform		ND	0.040	0.037	ppbv		ND	0.41	ug/m3
593-60-2	106.9	Bromoethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfid		ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform		ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane		0.51	0.20	0.037	ppbv		1.1	0.41	ug/m3
107-05-1	76.53	3-Chloropropen	e	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachl		ND	0.040	0.040	ppbv		ND	0.25	ug/m3
110-82-7	84.16	Cyclohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroeth	ane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroeth		ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoeth		ND	0.040	0.027	ppbv		ND	0.31	ug/m3
107-06-2	98.96	1,2-Dichloroeth		ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropro		ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluor	omethane	0.44	0.20	0.038	ppbv		2.2	0.99	ug/m3
124-48-1	208.3	Dibromochloro		ND	0.040	0.027	ppbv		ND	0.34	ug/m3
156-60-5	96.94	trans-1,2-Dichle	oroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichlor	pethylene	ND	0.20	0.038	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichlor	opropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichloroben	zene	ND	0.10	0.037	ppbv		ND	0.60	ug/m3
95-50-1	147	o-Dichlorobenz		ND	0.040	0.027	ppbv		ND	0.24	ug/m3
106-46-7	147	p-Dichlorobenz	ene	ND	0.10	0.025	ppbv		ND	0.60	ug/m3
10061-02-6	111	trans-1,3-Dichle	oropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Ethanol	a star with the	3.0	0.50	0.095	ppbv		5.7	0.94	ug/m3
100-41-4	106.2	Ethylbenzene		0.094	0.20	0.031	ppbv	J	0.41	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $\mathbf{B}=\mathbf{Indicates}$  analyte found in associated method blank



Client Sam Lab Sampl Matrix: Method: Project:		H-OA-01 A81332-11 Date Sampled: 07/15/11 AIR - Ambient Air Comp. Summa ID: A1Date Received: 07/19/11 FO-15 Percent Solids: n/a ohnson & Hoffman, Carle Place, NY										
VOA specia	al List											
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units		
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3		
76-13-1	187.4	Freon 113	ND	0.040	0.034	ppbv		ND	0.31	ug/m3		
76-14-2	170.9	Freon 114	ND	0.040	0.031	ppby		ND	0.28	ug/m3		
142-82-5	100.2	Heptane	ND	0.20	0.033	ppby		ND	0.82	ug/m3		
87-68-3	260.8	Hexachlorobutadiene	ND	0.090	0.046	ppbv		ND	0.96	ug/m3		
110-54-3	86.17	Hexane	0.12	0.20	0.044	ppby	J	0.42	0.70	ug/m3		
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppby		ND	0.82	ug/m3		
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppby		ND	0.98	ug/m3		
67-63-0	60.1	Isopropyl Alcohol	0.76	0.20	0.059	ppbv		1.9	0.49	ug/m3		
75-09-2	84.94	Methylene chloride	0.20	0.20	0.027	ppby		0.69	0.69	ug/m3		
78-93-3	72.11	Methyl ethyl ketone	0.56	0.20	0.048	ppbv		1.7	0.59	ug/m3		
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3		
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3		
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3		
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3		
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.040	0.022	ppbv		ND	0.22	ug/m3		
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.040	0.030	ppbv		ND	0.27	ug/m3		
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.040	0.030	ppbv		ND	0.22	ug/m3		
95-63-6	120.2	1,2.4-Trimethylbenzene	0.095	0.20	0.024	ppbv	J	0.47	0.98	ug/m3		
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv	Υ.	ND	0.98	ug/m3		
540-84-1	114.2	2,2,4-Trimethylpentane	0.15	0.20	0.028	ppbv	J	0.70	0.93	ug/m3		
127-18-4	165.8	Tetrachloroethylene	0.89	0.040	0.028	ppbv		6.0	0.27	ug/m3		
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3		
108-88-3	92.14	Toluene	0.95	0.20	0.040	ppby		3.6	0.75	ug/m3		
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3		
75-69-4	137.4	Trichlorofluoromethane	0.29	0.040	0.042	ppbv		1.6	0.22	ug/m3		
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3		
	106.2	m,p-Xylene	0.30	0.20	0.031	ppbv		1.3	0.87	ug/m3		
95-47-6	106.2	o-Xylene	0.11	0.20	0.031	ppbv	J	0.48	0.87	ug/m3		
1330-20-7	106.2	Xylenes (total)	0.41	0.20	0.031	ppbv	-	1.8	0.87	ug/m3		
CAS No.	Surro	gate Recoveries Run	#1 Run#	2 L	imits							
460-00-4	4-Bron	mofluorobenzene 88%		6	5-128%							

Report of Analysis

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2



## VOLATILE ORGANIC COMPOUNDS

Compendium Method TO-15 - Level IV Review

Client: <u>ERM, Melville, NY</u>

## Site: J&H Manufacturing Site - Carle Place, New York

## SDG #s: JA94305

Laboratory: <u>Accutest Laboratories – Dayton, New Jersey</u>

Date: March 20, 2012

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	JH-IA-01	JA94305-1	Air
2	JH-SS-01	JA94305-2	Air
3	JH-IA-02	JA94305-3	Air
4	JH-SS-02	JA94305-4	Air
5	JH-IA-03	JA94305-5	Air
6	JH-SS-03	JA94305-6	Air
7	JH-IA-04	JA94305-7	Air
8	JH-SS-04	JA94305-8	Air
9	JH-IA-05	JA94305-9	Air
10	JH-SS-05	JA94305-10	Air
11	JH-OSV-01	JA94305-11	Air
12	JH-OA-01	JA94305-12	Air

The samples were analyzed following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (*GC/MS*)". The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC ASP, the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15 and the reviewer's professional judgment.

<u>Chains-of-Custody (COCs)</u> – All five (5) indoor air (IA) samples contained in the above referenced SDG (JH-IA-01, JH-IA-02, JH-IA-03, JH-IA-04, and JH-IA-05) are not included in this review due to a possible issue with the building's indoor air during sample collection. This issue has no affect on the validity or usability of any other samples. No other discrepancies were identified.

<u>Data completeness</u>, <u>Deliverables and Analysis Data Sheets (Form I)</u> – No discrepancies other than the previously mentioned were identified.

<u>Canister Receipt/Log-in sheet (Leak Checks)</u> – A review of the final canister pressures by the laboratory upon sample receipt indicated no discrepancies.

Canister Certification Blanks/Spikes/Pressure Differences - No discrepancies were identified.

Holding Times - No discrepancies were identified.

Surrogates - All Surrogate percent recoveries (%R) were within QC limits.

<u>Blank Spike/Blank Spike Duplicate Sample (BS/BSD)</u> - The BS/BSD exhibited %R and RPD within QC criteria except the BS/BSD applicable to EDS 11 and EDS 12 where the %R for Hexachlorobutadiene was slightly above QC criteria 143% (QC limits 70-130%). No qualification of the sample data is required as Hexachlorobutadiene was not positively identified in either sample.

<u>Laboratory Duplicate</u> – A laboratory duplicate analysis was performed on one of the IA samples not being reviewed. Batch QC was also provided. Neither has any bearing on the quality of the samples being reviewed. No other discrepancies were observed.

Method Blank - The method blank contained no contamination.

GC/MS Tuning - No discrepancies were identified.

Initial Calibration - The initial calibration exhibited acceptable %RSD and mean RRF values.

<u>Continuing Calibration</u> - The continuing calibration exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

<u>Detection Limits/Compound Identification</u> – The standard initial sample volume utilized by the laboratory for samples was 400 ml. The reporting limit (RL) for all compounds is 0.20 ppbv. RLs reported in  $\mu$ g/m<sup>3</sup> are dependent on the molecular weight of each compound and vary significantly.

The table below includes samples that required reanalysis at a dilution due to target compound concentrations exceeding the calibration range of the instrument in the initial analysis. The sample volume used for the secondary analysis is also listed. Results for both analyses are reported on the same Form I. The laboratory has footnoted which results are from the second analysis. All other compounds are reported from the initial analysis. No qualification of the sample data is required. All other criteria were met.

Sample	Compounds Reported from Secondary Analysis	Initial Volume from Secondary Analysis
JH-SS-03	Tetrachloroethene	50 ml
JH-SS-04	Tetrachloroethene	25 ml
JH-SS-05	Tetrachloroethene	50 ml

<u>Field Duplicate Sample Precision</u> – No Field Duplicate Sample was collected.

				Rep	ort of A	nalys	is					Pag	ge 1 of 2
Client Sam Lab Sampl Matrix: Method: Project:		JA9430 AIR - 5 TO-15	)5-2 Soil Vapor	Comp. Sum an, Carle Plac		984	D	ate San ate Rec er cent S	eive	d: 12/	09/		
Run #1 Run #2	File ID 3W2526	50.D	DF 1	Analyzed 12/13/11	By YXC	Prep n/a	Date	Pro n/a	-	atch		nalytical 3W1000	Batch
Run #1 Run #2	Initial V 400 ml	Volume	1										
VOA specia	al List												
CAS No.	MW	Comp	oound		Result	RL	MDL	Units	Q	Result	5	RL	Units
67-64-1 106-99-0 71-43-2 75-27-4 75-25-2 593-60-2 100-44-7 75-15-0 108-90-7 75-00-3 67-66-3 74-87-3 107-05-1 56-23-5 110-82-7 75-34-3 75-25 4	58.08 54.09 78.11 163.8 252.8 106.9 126 76.14 112.6 64.52 119.4 50.49 76.53 153.8 84.16 98.96	Benze Brom Brom Brom Benzy Carbo Chlor Chlor Chlor Chlor 3-Chl Carbo Cyclo 1,1-D	utadiene ene odichlorom oform oethene /l Chloride obenzene oethane oethane oform omethane oropropene on tetrachlo ohexane bichloroetha	e vride me	4.1 ND ND ND ND 0.16 ND ND ND ND ND ND ND ND ND ND	0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20	0.036 0.024 0.046 0.030 0.037 0.037 0.041 0.032 0.027 0.039 0.028 0.028 0.037 0.041 0.040 0.034 0.028 0.028	ppbv ppbv ppbv ppbv ppbv ppbv ppbv ppbv	1	9.7 ND ND ND ND 0.50 ND ND ND ND ND ND ND ND ND		0.48 0.44 1.3 2.1 0.87 1.0 0.62 0.92 0.53 0.98 0.41 0.63 1.3 0.69 0.81 0.79	ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3 ug/m3
$\begin{array}{c} 75\text{-}35\text{-}4\\ 106\text{-}93\text{-}4\\ 107\text{-}06\text{-}2\\ 78\text{-}87\text{-}5\\ 123\text{-}91\text{-}1\\ 75\text{-}71\text{-}8\\ 124\text{-}48\text{-}1\\ 156\text{-}60\text{-}5\\ 156\text{-}59\text{-}2\\ 10061\text{-}01\text{-}5\\ 541\text{-}73\text{-}1\\ 95\text{-}50\text{-}1\\ 106\text{-}46\text{-}7\\ 10061\text{-}02\text{-}6\\ 64\text{-}17\text{-}5\\ 100\text{-}41\text{-}4\\ \end{array}$	147 147 147	1,2-D 1,2-D 1,2-D Dichl Dibro trans- cis-1, cis-1, m-Dic p-Dic trans- Ethar	2-Dichloro 3-Dichloro chlorobenze hlorobenze chlorobenze 1,3-Dichlo	ane ane pane omethane nethane roethylene ethylene propene ene ene me	ND ND ND 0,41 ND ND ND ND ND ND ND ND ND ND ND 2,8 ND	0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20	0.046 0.027 0.043 0.038 0.056 0.038 0.027 0.033 0.038 0.043 0.043 0.043 0.043 0.027 0.025 0.025 0.039 0.095 0.031	ppbv ppbv ppbv ppbv ppbv ppbv ppbv ppbv		ND ND ND ND 2.0 ND ND ND ND ND ND ND ND ND ND ND ND ND		0.79 1.5 0.81 0.92 0.72 0.99 1.7 0.79 0.79 0.79 0.91 1.2 1.2 1.2 1.2 0.91 0.94 0.87	ug/ml ug/ml ug/ml ug/ml ug/ml ug/ml ug/ml ug/m ug/m ug/m ug/m ug/m ug/m ug/ml ug/ml ug/ml ug/ml

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sample Matrix: Method: Project:		JH-SS-01 JA94305-2 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl				Date Sampled: 12/07/11 Date Received: 12/09/11 Percent Solids: n/a					
VOA specia	al List			-							
CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units		
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv	ND	0.98	ug/m3		
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv	ND	1.5	ug/m3		
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv	ND	1.4	ug/m3		
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv	ND	0.82	ug/m3		
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv	ND	2.1	ug/m3		
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv	ND	0.70	ug/m3		
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv	ND	0.82	ug/m3		
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv	ND	0.98	ug/m3		
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.059	ppbv	ND	0.49	ug/m3		
75-09-2	84.94	Methylene chloride	ND	0.20	0.027	ppby	ND	0.69	ug/m3		
78-93-3	72.11	Methyl ethyl ketone	0.50	0.20	0.048	ppbv	1.5	0.59	ug/m3		
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv	ND	0.82	ug/m3		
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	ND	0.72	ug/m3		
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv	ND	0.98	ug/m3		
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv	ND	0.85	ug/m3		
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv	ND	1.1	ug/m3		
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv	ND	1.4	ug/m3		
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv	ND	1.1	ug/m3		
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv	ND	0.98	ug/m3		
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv	ND	0.98	ug/m3		
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv	ND	0.93	ug/m3		
127-18-4	165.8	Tetrachloroethylene	0.87	0.040	0.028	ppbv	5.9	0.27	ug/m3		
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv	ND	0.59	ug/m3		
108-88-3	92.14	Toluene	0.32	0.20	0.040	ppbv	1.2	0.75	ug/m3		
79-01-6	131.4	Trichloroethylene	0.13	0.040	0.033	ppbv	0.70	0.21	ug/m3		
75-69-4	137.4	Trichlorofluoromethane	0.27	0.20	0.042	ppbv	1.5	1.1	ug/m3		
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv	ND	0.51	ug/m3		
10 01-1	106.2	m,p-Xylene	ND	0.20	0.031	ppbv	ND	0.87	ug/m3		
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv	ND	0.87	ug/m3		
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.031	ppbv	ND	0.87	ug/m3		
CAS No.	Surro	gate Recoveries Runa	#1 Run	#2 L	imits.						
460-00-4	4-Bro	mofluorobenzene 92%		6	5-128%						

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



**Report of Analysis** Page 1 of 2 Client Sample ID: JH-SS-02 Lab Sample ID: JA94305-4 Date Sampled: 12/07/11 Matrix: AIR - Soil Vapor Comp. Summa ID: A314 Date Received: 12/09/11 Method: **TO-15** Percent Solids: n/a Johnson & Hoffman, Carle Place, NY Project: File ID DF Analyzed Prep Date Prep Batch Analytical Batch By Run #1 3W25308.D 1 12/15/11 YXC n/a n/a V3W1002 Run #2 Initial Volume Run #1 400 ml Run #2 **VOA** special List CAS No. MW Compound Result RL MDL Units Q Result RL Units 67-64-1 58.08 Acetone 12.0 0.20 0.036 ppbv 28.5 0.48 ug/m3 1.3-Butadiene ND ug/m3 106-99-0 54.09 ND 0.20 0.024 ppbv 0.44 71-43-2 78.11 Benzene 0.10 0.20 0.046 0.32 0.64 ug/m3 ppbv J 75-27-4 163.8 Bromodichloromethane ND 0.20 0.030 ND 1.3 ug/m3 ppbv Bromoform ND ug/m3 75-25-2 252.8 ND 0.20 0.037 ppbv 2.1 593-60-2 106.9 Bromoethene ND 0.20 0.037 ppbv ND 0.87 ug/m3 **Benzyl** Chloride 0.20 ug/m3 100-44-7 126 ND 0.041 ppbv ND 1.0 Carbon disulfide 0.20 ND 0.62 ug/m3 75-15-0 76.14 ND 0.032 ppbv 108-90-7 Chlorobenzene 112.6 ND 0.20 0.027 ppbv ND 0.92 ug/m3 75-00-3 64.52 Chloroethane ND 0.20 0.039 ND 0.53 ug/m3 ppbv 67-66-3 119.4 Chloroform 0.80 0.20 0.028 3.9 0.98 ug/m3 ppbv 0.41 74-87-3 50.49 Chloromethane 0.13 0.20 0.037 0.27 ug/m3 ppbv J 107-05-1 76.53 **3-Chloropropene** ND 0.20 0.041 ppbv ND 0.63 ug/m3 Carbon tetrachloride 0.040 ND ug/m3 56-23-5 153.8 ND 0.20 ppbv 1.3 84.16 Cyclohexane 0.20 0.034 ND 0.69 ug/m3 110-82-7 ND ppbv 98.96 1,1-Dichloroethane 0.20 0.93 0.81 ug/m3 75-34-3 0.23 0.028 ppbv ppbv 75-35-4 96.94 1,1-Dichloroethylene ND 0.20 0.046 ND 0.79 ug/m3 106-93-4 187.9 1.2-Dibromoethane ND 0.20 0.027 ND 1.5 ug/m3 ppbv ug/m3 107-06-2 98.96 1.2-Dichloroethane 0.20 0.043 ND 0.81 ND ppbv ND 0.92 ug/m3 78-87-5 113 1,2-Dichloropropane ND 0.20 0.038 ppby 1.4-Dioxane ND 0.20 0.056 ND 0.72 ug/m3 123-91-1 88.12 ppbv 120.9 Dichlorodifluoromethane 75-71-8 0.68 0.20 0.038 3.4 0.99ug/m3 ppbv 124-48-1 208.3 Dibromochloromethane ND 0.20 0.027 ND 1.7 ug/m3 ppbv 156-60-5 96.94 trans-1,2-Dichloroethylene ND 0.20 0.033 ppbv ND 0.79 ug/m3 156-59-2 96.94 cis-1,2-Dichloroethylene ND 0.20 0.038 ND 0.79 ug/m3 ppbv 10061-01-5 111 cis-1,3-Dichloropropene ND 0.20 0.043 ppbv ND 0.91 ug/m3 541-73-1 147 m-Dichlorobenzene ND 0.20 0.037 ppbv ND 1.2 ug/m3 95-50-1 147 o-Dichlorobenzene ND 0.20 0.027 ppbv ND 1.2 ug/m3 147 p-Dichlorobenzene 0.92 0.20 0.025 5.5 1.2 ug/m3 106-46-7 ppbv ND 0.91 10061-02-6 trans-1,3-Dichloropropene ND 0.20 0.039 ug/m3 111 ppbv ppbv 64-17-5 46.07 Ethanol 2.9 0.50 0.095 5.5 0.94 ug/m3 100-41-4 106.2 Ethylbenzene 0.10 0.20 0.43 0.87 ug/m3 0.031 ppbv J

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sample Matrix: Method: Project:		JH-SS-02 JA94305-4 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	Date Sampled: 12/07/11 Date Received: 12/09/11 Percent Solids: n/a							
VOA specia	al List									
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	0.30	0.20	0.043	ppbv		1.2	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.69	0.20	0.059	ppbv		1.7	0.49	ug/m3
75-09-2	84.94	Methylene chloride	2.5	0.20	0.027	ppbv		8.7	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.9	0.20	0.048	ppbv		5.6	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.14	0.20	0.022	ppbv	J	0.76	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv	2	ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	34.6	0.040	0.028	ppbv		235	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.67	0.20	0.040	ppbv		2.5	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	2.7	0.040	0.033	ppbv		15	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.36	0.20	0.042	ppbv		2.0	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.28	0.20	0.031	ppbv		1.2	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.28	0.20	0.031	ppbv		1.2	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run	#1 Run	#2 L	imits					
460-00-4	4-Bro	mofluorobenzene 97%		6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sample Matrix: Method: Project:	e ID:	TO-15	05-6 Indoor Air	Comp. Sum nan, Carle Plac		348	Date Received:				12/07/11 12/09/11 n/a			
	File ID	1	DF	Analyzed	By	Prep	Date	Pre	ep B	atch	An	alytical	Batch	
Run #1 Run #2	3W2531 3W2531		1 1	12/15/11 12/15/11	YXC YXC	n/a n/a		n/a n/a				W1002 W1002		
								_	_					
Run #1	Initial V 400 ml	olume												
Run #2	50.0 ml													
Kull #2	50.0 III	-											_	
VOA specia	al List													
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	ŀ	RL	Units	
67-64-1	58.08	Aceto	one		2.9	0.20	0.036	ppbv		6.9		0.48	ug/m	
106-99-0	54.09	0.0 500.53	Butadiene		ND	0.20	0.024	ppbv		ND		0.44	ug/m	
71-43-2	78.11	Benz			0.14	0.20	0.046	ppbv	J	0.45		0.64	ug/m	
75-27-4	163.8		odichloron	nethane	ND	0.20	0.030	ppbv	3	ND		1.3	ug/m	
75-25-2	252.8		oform		ND	0.20	0.037	ppbv		ND		2.1	ug/m	
593-60-2	106.9		noethene		ND	0.20	0.037	ppbv		ND		0.87	ug/m	
100-44-7	126		yl Chloride		ND	0.20	0.041	ppbv		ND		1.0	ug/m	
75-15-0	76.14		on disulfide		0.10	0.20	0.032	ppbv	J	0.31		0.62	ug/m	
108-90-7	112.6		robenzene		ND	0.20	0.027	ppbv		ND		0.92	ug/m	
75-00-3	64.52		roethane		ND	0.20	0.039	ppbv		ND		0.53	ug/m	
67-66-3	119.4		roform		0.10	0.20	0.028	ppbv	J	0.49		0.98	ug/m	
74-87-3	50.49		romethane		ND	0.20	0.037	ppbv	3	ND		0.41	ug/m	
107-05-1	76.53		loropropen	P	ND	0.20	0.041	ppbv		ND		0.63	ug/m	
56-23-5	153.8		on tetrachlo		ND	0.20	0.040	ppbv		ND		1.3	ug/m	
110-82-7	84.16		ohexane		ND	0.20	0.034	ppbv		ND		0.69	ug/m	
75-34-3	98.96		Dichloroeth	ane	ND	0.20	0.028	ppbv		ND		0.81	ug/m	
75-35-4	96.94		Dichloroeth		ND	0.20	0.046	ppbv		ND		0.79	ug/m	
106-93-4	187.9		Dibromoeth		ND	0.20	0.027	ppbv		ND		1.5	ug/m	
107-06-2	98.96		Dichloroeth		ND	0.20	0.043	ppbv		ND		0.81	ug/m	
78-87-5	113		Dichloropro		ND	0.20	0.038	ppbv		ND		0.92	ug/m	
123-91-1	88.12		Dioxane	•	ND	0.20	0.056	ppbv		ND		0.72	ug/m	
75-71-8	120.9	Dich	lorodifluor	omethane	0.55	0.20	0.038	ppbv		2.7		0.99	ug/m	
124-48-1	208.3		omochloror		ND	0.20	0.027	ppbv		ND		1.7	ug/m	
156-60-5	96.94			roethylene	ND	0.20	0.033	ppbv		ND		0.79	ug/m	
156-59-2	96.94		,2-Dichloro		2.6	0.20	0.038	ppbv		10		0.79	ug/m	
10061-01-5	111		,3-Dichloro		ND	0.20	0.043	ppbv		ND		0.91	ug/m	
541-73-1	147		ichlorobenz		ND	0.20	0.037	ppbv		ND		1.2	ug/n	
95-50-1	147	o-Di	chlorobenze	ene	ND	0.20	0.027	ppbv		ND		1.2	ug/n	
106-46-7	147	p-Di	chlorobenze	ene	ND	0.20	0.025	ppbv		ND		1.2	ug/n	
10061-02-6	111	trans	-1,3-Dichlo	propropene	ND	0.20	0.039	ppbv		ND		0.91	ug/n	
64-17-5	46.07	Etha			3.2	0.50	0.095	ppbv		6.0		0.94	ug/m	
100-41-4	106.2	Ethy	lbenzene		ND	0.20	0.031	ppbv		ND		0.87	ug/n	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

16 of 665 ACCUTEST. JA94305 LAI

Client Sam Lab Sample Matrix: Method: Project:		: JH-SS-03 JA94305-6 Date Sampled: 12/07/11 AIR - Indoor Air Comp. Summa ID: A848 Date Received: 12/09/11 TO-15 Per cent Solids: n/a Johnson & Hoffman, Carle Place, NY								
VOA specia	al List		5.00						-	
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.20	0.20	0.059	ppbv		0.49	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.47	0.20	0.027	ppbv		1.6	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.35	0.20	0.048	ppbv		1.0	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.11	0.20	0.027	ppbv	J	0.47	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppby		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	50.0 a	0.32	0.23	ppby		339 a	2.2	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m
108-88-3	92.14	Toluene	0.25	0.20	0.040	ppbv		0.94	0.75	ug/m
79-01-6	131.4	Trichloroethylene	7.4	0.040	0.033	ppbv		40	0.21	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.26	0.20	0.042	ppbv		1.5	1.1	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m
13-01-4	106.2	m,p-Xylene	ND	0.20	0.032	ppbv		ND	0.87	ug/m
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m
1330-20-7	106.2	Xylenes (total)	ND	1	0.031	ppbv		ND	0.87	ug/m
						hhna		110	0.01	ug/ III.
CAS No.	Surro	gate Recoveries Run	#1 Run#	2 L	imits					
460-00-4	4-Bro	mofluorobenzene 95%	92%	6	5-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sampl Matrix: Method: Project:		TO-15	305-8 - Soil Vapor Comp. Summa ID: A254				D	ate San ate Rec ercent S	d: 12/0				
1.1.2.1	File ID		DF	Analyzed	Ву	-	Date		-	atch		alytical	Batch
Run #1	3W253		1	12/15/11 12/15/11	YXC	n/a		n/a				W1002	
Run #2	3W253	19.D	1	12/13/11	YXC	n/a		n/a			və	W1002	
Run #1 Run #2	Initial V 400 ml 25.0 ml		e										
VOA speci	al List												
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result		RL	Units
67-64-1	58.08	Acet	one		4.6	0.20	0.036	ppbv		11		0.48	ug/m3
106-99-0	54.09		Butadiene		ND	0.20	0.024	ppbv		ND		0.44	ug/m
71-43-2	78.11	Benz			0.27	0.20	0.046	ppbv		0.86		0.64	ug/m:
75-27-4	163.8		nodichloron	ethane	ND	0.20	0.030	ppbv		ND		1.3	ug/m
75-25-2	252.8		ioform		ND	0.20	0.037	ppbv		ND		2.1	ug/m
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND		0.87	ug/m
100-44-7	126		yl Chloride		ND	0.20	0.041	ppbv		ND		1.0	ug/m
75-15-0	76.14		on disulfide	6	0.11	0.20	0.032	ppbv	J	0.34		0.62	ug/m
108-90-7	112,6		robenzene		0.18	0.20	0.027	ppbv	Ĵ	0.83		0.92	ug/m:
75-00-3	64.52		roethane		ND	0.20	0.039	ppbv		ND		0.53	ug/m
67-66-3	119.4		roform		0.32	0.20	0.028	ppbv		1.6		0.98	ug/m
74-87-3	50.49	Chlo	romethane		0.11	0.20	0.037	ppbv	J	0.23		0.41	ug/m
107-05-1	76.53	3-Ch	loropropend	3	ND	0.20	0.041	ppbv		ND		0.63	ug/m
56-23-5	153.8		on tetrachlo		ND	0.20	0.040	ppbv		ND		1.3	ug/m
110-82-7	84.16	Cycl	ohexane		ND	0.20	0.034	ppbv		ND		0.69	ug/m
75-34-3	98.96	1,1-I	Dichloroetha	ane	ND	0.20	0.028	ppbv		ND		0.81	ug/m
75-35-4	96.94	1,1-I	Dichloroeth	ylene	ND	0.20	0.046	ppbv		ND		0.79	ug/m
106-93-4	187.9		Dibromoeth		ND	0.20	0.027	ppbv		ND		1.5	ug/m
107-06-2	98.96		Dichloroetha		ND	0.20	0.043	ppbv		ND		0.81	ug/m
78-87-5	113		Dichloropro	pane	ND	0.20	0.038	ppbv		ND		0.92	ug/m
123-91-1	88.12	1,4-I	Dioxane		ND	0.20	0.056	ppbv		ND		0.72	ug/m
75-71-8	120.9		lorodifluoro		0.51	0.20	0.038	ppbv		2.5		0.99	ug/m
124-48-1	208.3		omochloror		ND	0.20	0.027	ppbv		ND		1.7	ug/m
156-60-5	96.94		-1,2-Dichlo		ND	0.20	0.033	ppbv		ND		0.79	ug/m
156-59-2	96.94		,2-Dichloro		0.43	0.20	0.038	ppbv		1.7		0.79	ug/m
10061-01-5			,3-Dichloro		ND	0.20	0.043	ppbv		ND		0.91	ug/m
541-73-1	147		ichlorobenz		ND	0.20	0.037	ppbv		ND		1.2	ug/m
95-50-1	147		chlorobenze		ND	0.20	0.027	ppbv		ND		1.2	ug/m
106-46-7	147		chlorobenze		ND	0.20	0.025	ppbv		ND		1.2	ug/m
10061-02-0			-1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND		0.91	ug/m
64-17-5	46.07	Etha			1.7	0.50	0.095	ppbv		3.2		0.94	ug/m
100-41-4	106.2	Ethy	Ibenzene		ND	0.20	0.031	ppbv		ND		0.87	ug/m

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



-1

Client Samj Lab Sample Matrix: Method: Project:	De ID:JA94305-8Date Sampled:12/07/11AIR - Soil Vapor Comp.Summa ID:A254Date Received:12/09/11TO-15Percent Solids:n/aJohnson & Hoffman, Carle Place, NYPercent Solids:n/a								
VOA specia	al List								
CAS No.	MW	Compound	Result	RL	MDL	Units (	Q Resul	t RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv	ND	0.98	s ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv	ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv	ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv	ND	0.82	2 ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv	ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv	ND	0.70	) ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv	ND	0.82	e ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv	ND	0.98	
67-63-0	60.1	Isopropyl Alcohol	0.24	0.20	0.059	ppbv	0.59	0.49	
75-09-2	84.94	Methylene chloride	0.27	0.20	0.027	ppbv	0.94	0.69	
78-93-3	72.11	Methyl ethyl ketone	0.78	0.20	0.048	ppbv	2.3	0.59	
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv	ND	0.82	
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	ND	0.72	
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv	ND	0.9	
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv	ND	0.8	
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv	ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv	ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv	ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv	ND	0.9	
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv	ND	0.9	
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv	ND	0.9	
127-18-4	165.8	Tetrachloroethylene	91.8 a	0.64	0.45	ppbv	623 a	4.3	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.21	0.20	0.047	ppbv	0.62	0.5	
108-88-3	92.14	Toluene	0.32	0.20	0.040	ppbv	1.2	0.7	
79-01-6	131.4	Trichloroethylene	22.0	0.040	0.033	ppbv	118	0.2	
75-69-4	137.4	Trichlorofluoromethane	0.25	0.20	0.042	ppbv	1.4	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv	ND	0.5	0
	106.2	m,p-Xylene	0.17	0.20	0.031	ppbv ]		0.8	
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv	ND	0.8	
1330-20-7	106.2	Xylenes (total)	0.17	0.20	0.031	ppbv		0.8	
CAS No.	Surro	gate Recoveries Run <sup>‡</sup>	1 Run	#2 L	imits				
460-00-4	4-Bron	nofluorobenzene 95%	90%	6	5-128%				

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sampl Matrix: Method: Project:	e ID:	JH-SS-05 JA94305-10 Date San AIR - Soil Vapor Comp. Summa ID: A168 Date Re TO-15 Per cent Johnson & Hoffman, Carle Place, NY								d: 12/0	07/11 09/11	
A CONTRACTOR	File ID	50.	DF	Analyzed	Ву	Prep	Date	Pre	ep B	atch	Analytical	Batch
Run #1	3W2531		1	12/15/11	YXC	n/a		n/a			V3W1002	
Run #2	3W2531	.8.D	1	12/15/11	YXC	n/a	<u> </u>	n/a		_	V3W1002	1
Run #1 Run #2	Initial V 400 ml 50.0 ml		,									
VOA specia	al List											
CAS No.	MW	Comj	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Aceto	me		3.7	0.20	0.036	ppbv		8.8	0.48	ug/m3
106-99-0	54.09		utadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benze			0.16	0.20	0.046	ppbv	J	0.51	0.64	ug/m3
75-27-4	163.8		odichlorom	ethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m
75-25-2	252.8		oform		ND	0.20	0.037	ppbv		ND	2.1	ug/m3
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126		yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14		on disulfide		0.20	0.20	0.032	ppbv		0.62	0.62	ug/m3
108-90-7	112.6		obenzene		0.096	0.20	0.027	ppbv	J	0.44	0.92	ug/m3
75-00-3	64.52		oethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4		oform		ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	50.49		romethane		0.20	0.20	0.037	ppbv		0.41	0.41	ug/m3
107-05-1	76.53		loropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8		on tetrachlor	ride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cycle	ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96		Dichloroetha	ne	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94		Dichloroethy		ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9		Dibromoetha		ND	0.20	0.027	ppbv		ND	1.5	ug/m:
107-06-2	98.96	1,2-L	Dichloroetha	ne	ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113	1,2-L	Dichloroprop	ane	ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m:
75-71-8	120.9		lorodifluoro		0.57	0.20	0.038	ppbv		2.8	0.99	ug/m
124-48-1	208.3	Dibro	omochlorom	ethane	ND	0.20	0.027	ppbv		ND	1.7	ug/m
156-60-5	96.94	trans	-1,2-Dichlor	oethylene	0.70	0.20	0.033	ppbv		2.8	0.79	ug/m
156-59-2	96.94		2-Dichloroe		5.1	0.20	0.038	ppbv		20	0.79	ug/m:
10061-01-5	111		3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		chlorobenze		ND	0.20	0.037	ppbv		ND	1.2	ug/m
95-50-1	147	o-Die	chlorobenzer	ne	ND	0.20	0.027	ppbv		ND	1.2	ug/m
106-46-7	147		chlorobenzei		ND	0.20	0.025	ppbv		ND	1.2	ug/m
10061-02-6	5 111	trans	-1,3-Dichlor	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Ethan			10.8	0.50	0.095	ppbv		20.3	0.94	ug/m
100-41-4	106.2	Ethyl	lbenzene		0.10	0.20	0.031	ppbv	J	0.43	0.87	ug/m

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 1 of 2

10

Client Samj Lab Sample Matrix: Method: Project:	ab Sample ID:JA94305-10Date Sampled: 12/07/11atrix:AIR - Soil Vapor Comp. Summa ID: A168Date Received: 12/09/11ethod:TO-15Per cent Solids: n/aoject:Johnson & Hoffman, Carle Place, NY								
VOA specia	al List								
CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv	ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv	ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv	ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv	ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv	ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.30	0.20	0.044	ppbv	1.1	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv	ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv	ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.61	0.20	0.059	ppbv	1.5	0.49	ug/m3
75-09-2	84.94	Methylene chloride	2.0	0.20	0.027	ppbv	6.9	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.40	0.20	0.048	ppbv	1.2	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv	ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv	ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.94	0.20	0.027	ppbv	4.0	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.21	0.20	0.022	ppbv	1.1	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv	ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv	ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.15	0.20	0.024	ppbv J	0.74	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.024	ppbv j	ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv	ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	103 a	0.20	0.028	ppbv	698 a	2.2	ug/m3
109-99-9	72.11		ND	0.32	0.23	ppbv	ND	0.59	ug/m3
	92.14	Tetrahydrofuran Toluene	0.50	0.20	0.047	ppbv	1.9	0.35	ug/m3
108-88-3 79-01-6	131.4	Trichloroethylene	4.2	0.20	0.040	ppbv	23	0.13	ug/m3
75-69-4	131.4	Trichlorofluoromethane	11317-1121-71777	0.040			2.4	1.1	ug/m3
			0.42 ND	0.20	0.042 0.032	ppbv	ND	0.51	
75-01-4	62.5	Vinyl chloride				ppbv			ug/m3
05 47 0	106.2	m,p-Xylene	0.27	0.20	0.031	ppbv	1.2 ND	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppby	ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.27	0.20	0.031	ppbv	1.2	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 L	imits				
460-00-4	4-Bron	mofluorobenzene 92%	92%	6	5-128%				

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



10

Report of Analysis

Page 1 of 2

Client Samj Lab Sample Matrix: Method: Project:		JH-OSV-01 JA94305-11 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pla	Date Sampled: 12/07/11 Date Received: 12/09/11 Percent Solids: n/a							
Run #1 Run #2	File ID 3W2533				o Date	Prep B n/a	atch	Analytical Batch V3W1003		
Run #1	Initial V 400 ml	Volume								
Run #2										
VOA specia	al List									
CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units	
67-64-1	58.08	Acetone	4.3	0.20	0.036	ppbv	10	0.48	ug/m3	
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.024	ppbv	ND	0.44	ug/m3	
71-43-2	78.11	Benzene	ND	0.20	0.046	ppbv	ND	0.64	ug/m3	
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.030	ppbv	ND	1.3	ug/m3	
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv	ND	2.1	ug/m	
593-60-2	106.9	Bromoethene	ND	0.20	0.037	ppbv	ND	0.87	ug/m	
100-44-7	126	Benzyl Chloride	ND	0.20	0.041	ppbv	ND	1.0	ug/m	
75-15-0	76.14	Carbon disulfide	ND	0.20	0.032	ppbv	ND	0.62	ug/m:	
108-90-7	112.6	Chlorobenzene	ND	0.20	0.027	ppbv	ND	0.92	ug/m3	
75-00-3	64.52	Chloroethane	ND	0.20	0.039	ppbv	ND	0.53	ug/m.	
67-66-3	119.4	Chloroform	0.99	0.20	0.028	ppbv	4.8	0.98	ug/m:	
74-87-3	50.49	Chloromethane	ND	0.20	0.037	ppbv	ND	0.41	ug/m3	
107-05-1	76.53	3-Chloropropene	ND	0.20	0.041	ppbv	ND	0.63	ug/m3	
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.040	ppbv	ND	1.3	ug/m3	
110-82-7	84.16	Cyclohexane	ND	0.20	0.034	ppbv	ND	0.69	ug/m	
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.028	ppbv	ND	0.81	ug/m	
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.046	ppbv	ND	0.79	ug/m	
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.027	ppbv	ND	1.5	ug/m	
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.043	ppbv	ND	0.81	ug/m	
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.038	ppbv	ND	0.92	ug/m	
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.056	ppbv	ND	0.72	ug/m	
75-71-8	120.9	Dichlorodifluoromethane	0.57	0.20	0.038	ppbv	2.8	0.99	ug/m	
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.027	ppbv	ND	1.7	ug/m	
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.033	ppbv	ND	0.79	ug/m	
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.038	ppbv	ND	0.79	ug/m	
10061-01-5		cis-1,3-Dichloropropene	ND	0.20	0.043	ppbv	ND	0.91	ug/m	
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.037	ppbv	ND	1.2	ug/m3	
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.027	ppbv	ND	1.2	ug/m	
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.025	ppbv	ND	1.2	ug/m	
10061-02-6		trans-1,3-Dichloropropene	ND	0.20	0.039	ppbv	ND	0.91	ug/m	
64-17-5	46.07	Ethanol	1.5	0.50	0.095	ppbv	2.8	0.94	ug/m	
100-41-4	106.2	Ethylbenzene	ND	0.20	0.031	ppbv	ND	0.87	ug/m	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Client Sam Lab Sampl Matrix: Method: Project:		JH-OSV-01 JA94305-11 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl		Percent Solids: n/a						
VOA specia	al List								-	
CAS No.	MW	Compound	Result	RL	MDL	Units (	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.30	0.20	0.059	ppbv		0.74	0.49	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.027	ppbv		ND	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.37	0.20	0.048	ppbv		1.1	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.13	0.20	0.022		J	0.71	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	5.9	0.040	0.028	ppbv		40	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.93	0.20	0.040	ppbv		3.5	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.32	0.040	0.033	ppbv		1.7	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.29	0.20	0.042	ppbv		1.6	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.031	ppbv		ND	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 L	imits					
460-00-4	4-Broi	nofluorobenzene 94%		6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

113

Page 2 of 2

Report of Analysis Page 1 of 2 Client Sample ID: JH-OA-01 Date Sampled: 12/07/11 Lab Sample ID: JA94305-12 AIR - Soil Vapor Comp. Summa ID: A475 Date Received: 12/09/11 Matrix: **TO-15** Percent Solids: n/a Method: Johnson & Hoffman, Carle Place, NY Project: Prep Date **Analytical Batch** File ID DF Analyzed By **Prep Batch** 3W25336.D 12/15/11 YXC V3W1003 Run #1 1 n/a n/a Run #2 **Initial Volume** 400 ml Run #1 Run #2 **VOA** special List RL Result RL MDL Units Q Result Units CAS No. MW Compound 67-64-1 0.20 0.036 ppbv 8.6 0.48 ug/m3 58.08 Acetone 3.6 1,3-Butadiene ND 0.20 0.024 ND 0.44 ug/m3 106-99-0 54.09 ppbv 0.20 1.1 0.64 ug/m3 71-43-2 78.11 Benzene 0.34 0.046 ppbv ND ug/m3 75-27-4 163.8 Bromodichloromethane ND 0.20 0.030 ppbv 1.3 ug/m3 ND 75-25-2 252.8 Bromoform ND 0.20 0.037 ppbv 2.1 ND 0.87 ug/m3 593-60-2 106.9 Bromoethene ND 0.20 0.037 ppbv 100-44-7 126 **Benzyl** Chloride ND 0.20 0.041 ppbv ND 1.0 ug/m3 75-15-0 76.14 Carbon disulfide ND 0.20 0.032 ppbv ND 0.62 ug/m3 ug/m3 108-90-7 112.6 Chlorobenzene ND 0.20 0.027 ppbv ND 0.92 ug/m3 75-00-3 64.52 Chloroethane ND 0.20 0.039 ppbv ND 0.53 67-66-3 119.4 Chloroform ND 0.20 0.028 ppbv ND 0.98 ug/m3 74-87-3 50.49 Chloromethane 0.610.20 0.037 ppbv 1.3 0.41 ug/m3 107-05-1 76.53 3-Chloropropene ND 0.20 0.041 ppbv ND 0.63 ug/m3 56-23-5 153.8 Carbon tetrachloride ND 0.20 0.040 ppbv ND 1.3 ug/m3 110-82-7 84.16 Cyclohexane ND 0.20 0.034 ppbv ND 0.69 ug/m3 ND ug/m3 75-34-3 98.96 1,1-Dichloroethane ND 0.20 0.028 ppbv 0.81 ND ug/m3 75-35-4 96.94 1,1-Dichloroethylene ND 0.20 0.046 ppbv 0.79 ND 106-93-4 187.9 1,2-Dibromoethane ND 0.20 0.027 ppbv 1.5 ug/m3 107-06-2 98.96 1,2-Dichloroethane ND 0.20 0.043 ppbv ND 0.81 ug/m3 1,2-Dichloropropane ND 0.20 0.038 ppbv ND 0.92 ug/m3 78-87-5 113 1,4-Dioxane 0.20 0.056 ND 0.72 ug/m3 123-91-1 88.12 ND ppbv 75-71-8 120.9 Dichlorodifluoromethane 0.53 0.20 0.038 ppbv 2.60.99 ug/m3 124-48-1 208.3 Dibromochloromethane ND 0.20 0.027 ppbv ND 1.7 ug/m3 0.20 0.033 ND 0.79 ug/m3 156-60-5 96.94 trans-1,2-Dichloroethylene ND ppbv ND 0.79 ug/m3 156-59-2 96.94 cis-1,2-Dichloroethylene ND 0.20 0.038 ppbv ND 0.20 0.043 ND 0.91 ug/m3 10061-01-5 111 cis-1,3-Dichloropropene ppbv ND 0.20 0.037 ND 1.2 ug/m3 147 m-Dichlorobenzene ppbv 541-73-1 ND 1.2 ug/m3 o-Dichlorobenzene ND 0.20 0.027 95-50-1 147 ppbv p-Dichlorobenzene 106-46-7 147 ND 0.20 0.025 ppbv ND 1.2 ug/m3 ND 0.91 ug/m3 10061-02-6 111 trans-1,3-Dichloropropene ND 0.20 0.039 ppbv 6.8 0.94 ug/m3 64-17-5 46.07 Ethanol 3.6 0.50 0.095 ppbv

ND

0.20

ND = Not detected MDL - Method Detection Limit

Ethylbenzene

RL = Reporting Limit

106.2

100-41-4

E = Indicates value exceeds calibration range

J = Indicates an estimated value

ppbv

0.031

B = Indicates analyte found in associated method blank

ND

0.87

N = Indicates presumptive evidence of a compound

ug/m3

Client Sam Lab Sample Matrix: Method: Project:		JH-OA-01 JA94305-12 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl		475	D	ate San ate Rec er cent S	eive	d: 12/09		
VOA specia	al List									
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.10	0.20	0.033	ppbv	J	0.41	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.24	0.20	0.044	ppbv		0.85	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.76	0.20	0.059	ppbv		1.9	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.58	0.20	0.027	ppbv		2.0	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.45	0.20	0.048	ppbv		1.3	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.10	0.20	0.024	ppbv	J	0.49	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv	Ŭ	ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.11	0.20	0.028	ppbv	J	0.51	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.71	0.040	0.028	ppbv		4.8	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.79	0.20	0.040	ppbv		3.0	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.26	0.20	0.042	ppbv		1.5	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.28	0.20	0.031	ppbv		1.2	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.11	0.20	0.031	ppbv	J	0.48	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.39	0.20	0.031	ppbv	-	1.7	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 L	imits					
460-00-4	4-Bro	mofluorobenzene 95%	RUND SH	6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

3,12



# VOLATILE ORGANIC COMPOUNDS

Compendium Method TO-15 - Level IV Review

Client: <u>ERM, Melville, NY</u>

## Site: J&H Manufacturing Site - Carle Place, New York

## SDG #s: JA99245

Laboratory: Accutest Laboratories – Dayton, New Jersey

Date: March 22, 2012

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	JH-SS-03	JA99245-1	Air
2	JH-SS-02	JA99245-2	Air
3	JH-SS-01	JA99245-3	Air
4	JH-SS-04	JA99245-4	Air
5	JH-SS-05	JA99245-5	Air
6	JH-IA-03	JA99245-6	Air
7	JH-IA-02	JA99245-7	Air
8	JH-IA-01	JA99245-8	Air
9	JH-IA-04	JA99245-9	Air
10	JH-IA-05	JA99245-10	Air
11	JH-OA-01	JA99245-11	Air

The samples were analyzed following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (*GC/MS*)". The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC ASP, the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15 and the reviewer's professional judgment.

Chains-of-Custody (COCs) - No discrepancies were identified.

<u>Data completeness</u>, <u>Deliverables and Analysis Data Sheets (Form I)</u> – No discrepancies were identified.

<u>Canister Receipt/Log-in sheet (Leak Checks)</u> – A review of the final canister pressures by the laboratory upon sample receipt indicated no discrepancies.

Canister Certification Blanks/Spikes/Pressure Differences - No discrepancies were identified.

Holding Times - No discrepancies were identified.

Surrogates - All Surrogate percent recoveries (%R) were within QC limits.

Blank Spike/ Blank Spike Duplicate Sample (BS/BSD) - The BS/BSD exhibited %R and RPD within QC criteria.

Laboratory Duplicate - No discrepancies were observed.

<u>Method Blank</u> - The method blank contained no contamination.

GC/MS Tuning - No discrepancies were identified.

Initial Calibration - The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibration exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

<u>Detection Limits/Compound Identification</u> – The standard initial sample volume utilized by the laboratory for samples was 400 ml. The reporting limit (RL) for all compounds is 0.20 ppbv. RLs reported in  $\mu$ g/m<sup>3</sup> are dependent on the molecular weight of each compound and vary significantly.

The table below includes samples that required reanalysis at a dilution due to target compound concentrations exceeding the calibration range of the instrument in the initial analysis. Results for both analyses are reported on the same Form I. The laboratory has footnoted which results are from the second analysis. All other compounds are reported from the initial analysis. No qualification of the sample data is required. All other criteria were met.

Sample	Compounds Reported from Second Analysis
JH-IA-02	Acetone, Ethanol
JH-SS-02	Tetrachloroethene
JH-IA-03	Acetone
JH-SS-03	Acetone, Ethanol
JH-IA-04	Acetone, Ethanol
JH-SS-04	Acetone, Ethanol, Tetrachloroethene
JH-SS-05	Acetone, Ethanol, Tetrachloroethene

Ethanol was reported in sample JH-IA-01 with an E qualifier. This indicates that the concentration of Ethanol in sample JH-IA-01 was above the calibration range of the instrument. The sample was not reanalyzed by the laboratory for Ethanol as this compound is suspected to be a contaminant possibly present since it is routinely added to the gas cylinders supplied by the commercial standard suppliers. Ethanol is not of concern at the site. The value is considered estimated and has been qualified J. The value is still useable as an estimated positive detect.

<u>Field Duplicate Sample Precision</u> – No Field Duplicate Sample was collected.

Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project: Eile ID		JH-IA-01 JA99245-8 AIR - Indoor Air Comp. Summa ID: A1040 TO-15 Johnson & Hoffman, Carle Place, NY					D D Pe	1	7				
Run #1 Run #2	File ID 3W2625	56.D	DF 1	Analyzed 02/15/12	By YXC	Prep n/a	Date	Pro n/a	•	atch	Anal V3W		Batch
Run #1 Run #2	Initial V 400 ml	Volume	,										
VOA specia	al List												
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	F	RL.	Units
67-64-1	58.08	Aceto	one		11.9	0.20	0.036	ppbv		28.3	0	).48	ug/m3
106-99-0	54.09		utadiene		ND	0.20	0.024	ppby		ND		).44	ug/m3
71-43-2	78.11	Benzo			0.44	0.20	0.046	ppby		1.4		).64	ug/m3
75-27-4	163.8		odichlorome	thane	ND	0.20	0.030	ppbv		ND		.3	ug/m3
75-25-2	252.8		oform	(internet)	ND	0.20	0.037	ppbv		ND		2.1	ug/m3
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND	(	0.87	ug/m3
100-44-7	126		yl Chloride		ND	0.20	0.041	ppbv		ND	j	0.1	ug/m3
75-15-0	76.14		on disulfide		ND	0.20	0.032	ppbv		ND		0.62	ug/m3
108-90-7	112.6		robenzene		ND	0.20	0.027	ppbv		ND	(	0.92	ug/m3
75-00-3	64.52		roethane		ND	0.20	0.039	ppby		ND	(	0.53	ug/m3
67-66-3	119.4		roform		ND	0.20	0.028	ppbv		ND	(	0.98	ug/m3
74-87-3	50.49		romethane		0.56	0.20	0.037	ppbv		1.2	(	0.41	ug/m3
107-05-1	76.53	3-Ch	loropropene		ND	0.20	0.041	ppby		ND	(	0.63	ug/m3
56-23-5	153.8		on tetrachlor	ide	ND	0.20	0.040	ppbv		ND		1.3	ug/m3
110-82-7	84.16	Cycle	ohexane		ND	0.20	0.034	ppbv		ND	(	0.69	ug/m3
75-34-3	98.96	1,1-I	Dichloroetha	ne	ND	0.20	0.028	ppbv		ND		0.81	ug/m3
75-35-4	96.94		Dichloroethy		ND	0.20	0.046	ppbv		ND		0.79	ug/m3
106-93-4	187.9	1,2-I	Dibromoetha	ne	ND	0.20	0.027	ppbv		ND		1.5	ug/mä
107-06-2	98.96		Dichloroetha		ND	0.20	0.043	ppbv		ND		0.81	ug/m3
78-87-5	113		Dichloroprop	ane	ND	0.20	0.038	ppbv		ND		0.92	ug/m3
123-91-1	88.12	1,4-I	Dioxane		ND	0.20	0.056	ppbv		ND		0.72	ug/m3
75-71-8	120.9		lorodifluoro		0.48	0.20	0.038	ppbv		2.4		0.99	ug/m3
124-48-1	208.3		omochlorom		ND	0.20	0.027	ppbv		ND		1.7	ug/m3
156-60-5	96.94		-1,2-Dichlor		ND	0.20	0.033	ppbv		ND		0.79	ug/m
156-59-2	96.94		,2-Dichloroe		ND	0.20	0.038	ppbv		ND		0.79	ug/m
10061-01-5			,3-Dichlorop		ND	0.20	0.043	ppbv		ND		0.91	ug/m3
541-73-1	147		ichlorobenze		ND	0.20	0.037	ppbv		ND		1.2	ug/m3
95-50-1	147		chlorobenzer		ND	0.20	0.027	ppbv		ND		1.2	ug/m
106-46-7	147		chlorobenzer		0.11	0.20	0.025	ppbv	J	0.66		1.2	ug/m
10061-02-6			-1,3-Dichlor	opropene	ND	0.20	0.039	ppbv	1	ND	-	0.91	ug/m3
64-17-5	46.07	Etha			64.3	0.50	0.095	ppby			~	0.94	ug/m
100-41-4	106.2	Ethy	lbenzene		0.14	0.20	0.031	ppbv	J	0.61		0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Client Sam Lab Sampl Matrix: Method: Project:		JH-IA-01 JA99245-8 AIR - Indoor Air Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	nma ID:A ace, NY	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a						
VOA specia	al List				1	1.1	7	1.1		
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.15	0.20	0.033	ppbv	J	0.61	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppby		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.29	0.20	0.044	ppbv		1.0	0.70	ug/m:
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppby		ND	0.98	ug/m
67-63-0	60.1	Isopropyl Alcohol	10.5	0.20	0.059	ppbv		25.8	0.49	ug/m
75-09-2	84.94	Methylene chloride	0.26	0.20	0.027	ppbv		0.90	0.69	ug/m
78-93-3	72.11	Methyl ethyl ketone	0.38	0.20	0.048	ppbv		1.1	0.59	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	0.18	0.20	0.024	ppbv	J	0.88	0.98	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppby		ND	0.98	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	0.13	0.20	0.028	ppbv	J	0.61	0.93	ug/m
127-18-4	165.8	Tetrachloroethylene	0.096	0.040	0.028	ppbv	2	0.65	0.27	ug/m
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m
108-88-3	92.14	Toluene	1.5	0.20	0.040	ppby		5.7	0.75	ug/m
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppby		ND	0.21	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.28	0.20	0.042	ppbv		1.6	1.1	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m
	106.2	m,p-Xylene	0.42	0.20	0.031	ppbv		1.8	0.87	ug/m
95-47-6	106.2	o-Xylene	0.15	0.20	0.031	ppbv	J	0.65	0.87	ug/m
1330-20-7	106.2	Xylenes (total)	0.57	0.20	0.031	ppbv	-	2.5	0.87	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 L	imits					
460-00-4	4-Broi	mofluorobenzene 99%		6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



				Rep	ort of A	Analys	is			_	Pag	ge 1 of 2	
Client Sam Lab Sampl Matrix: Method: Project:	e ID:	<b>TO-15</b>	45-7 Indoor Air (	Comp. Sum an, Carle Pla	ma ID:A ce, NY	1049	D	ate San ate Rec er cent S	d: 02/	10/12 13/12			
	File ID		DF	Analyzed	Ву	Prep	Date	Pre	ep B	atch	Analytical Batch		
Run #1	3W2627		1	02/16/12	YXC	n/a		n/a			V3W1034		
Run #2	3W2627	'2.D	1	02/16/12	YXC	n/a	_	n/a			V3W1034		
Run #1 Run #2	Initial V 400 ml 80.0 ml	/olume	•										
VOA specia	al List											1.1	
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units	
67-64-1	58.08	Acet	one		88.8 a	1.0	0.18	ppbv		211 <sup>a</sup>	2.4	ug/m	
106-99-0	54.09		Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m	
71-43-2	78.11				0.55	0.20	0.046	ppbv		1.8	0.64	ug/m	
75-27-4	163.8	Benzene Bromodichloromethane			ND	0.20	0.030	ppbv		ND	1.3	ug/m	
75-25-2	252.8	Bromoform			ND	0.20	0.037	ppby		ND	2.1	ug/m	
593-60-2	106.9	Bromoethene			ND	0.20	0.037	ppbv		ND	0.87	ug/m	
100-44-7	126	Benzyl Chloride			ND	0.20	0.041	ppby		ND	1.0	ug/m	
75-15-0	76.14		on disulfide		ND	0.20	0.032	ppby		ND	0.62	ug/m	
108-90-7	112.6		robenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m	
75-00-3	64.52		roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m	
67-66-3	119.4		roform		0.19	0.20	0.028	ppbv	J	0.93	0.98	ug/m	
74-87-3	50.49	- CCC 131	romethane		0.55	0.20	0.037	ppbv		1.1	0.41	ug/m	
107-05-1	76.53		loropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m	
56-23-5	153.8		on tetrachlo		ND	0.20	0.040	ppbv		ND	1.3	ug/m	
110-82-7	84.16		ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m	
75-34-3	98.96		Dichloroetha	ne	ND	0.20	0.028	ppbv		ND	0.81	ug/m	
75-35-4	96.94	1,1-I	Dichloroethy	lene	ND	0.20	0.046	ppbv		ND	0.79	ug/m	
106-93-4	187.9	1,2-I	Dibromoetha	ine	ND	0.20	0.027	ppbv		ND	1.5	ug/m	
107-06-2	98.96	1,2-I	Dichloroetha	ine	ND	0.20	0.043	ppbv		ND	0.81	ug/m	
78-87-5	113	1,2-I	Dichloroproj	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m	
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m	
75-71-8	120.9		lorodifluoro		0.52	0.20	0.038	ppbv		2.6	0.99	ug/m	
124-48-1	208.3		omochloron		ND	0.20	0.027	ppbv		ND	1.7	ug/m	
156-60-5	96.94		-1,2-Dichlo		ND	0.20	0.033	ppbv		ND	0.79	ug/m	
156-59-2	96.94		,2-Dichloro		ND	0.20	0.038	ppbv		ND	0.79	ug/m	
10061-01-5			,3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m	
541-73-1	147		ichlorobenze		ND	0.20	0.037	ppbv		ND	1.2	ug/m	
95-50-1	147		chlorobenze		ND	0.20	0.027	ppbv		ND	1.2	ug/m	
106-46-7	147		chlorobenze		0.40	0.20	0.025	ppbv		2.4	1.2	ug/m	
10061-02-6			-1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m	
64-17-5	46.07	Etha			93.7 a	2.5	0.47	ppbv		177 a	4.7	ug/m	
100-41-4	106.2	Ethy	Ibenzene		0.41	0.20	0.031	ppbv		1.8	0.87	ug/m	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-IA-02 JA99245-7 AIR - Indoor Air Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a							
VOA specia	l List		1.2.4		1	1	7			
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.097	0.20	0.024	ppbv	J	0.48	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.44	0.20	0.033	ppbv		1.8	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.44	0.20	0.044	ppby		1.6	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	9.4	0.20	0.059	ppby		23	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.23	0.20	0.027	ppbv		0.80	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.1	0.20	0.048	ppbv		3.2	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.10	0.20	0.036	ppbv	J	0.41	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.28	0.20	0.027	ppbv		1.2	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.57	0.20	0.024	ppbv		2.8	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.17	0.20	0.028	ppbv	J	0.84	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.30	0.20	0.028	ppbv	3	1.4	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.33	0.040	0.028	ppbv		2.2	0.27	ug/mä
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/ma
109-99-9	92.14	Toluene	13.7	0.20	0.040	ppbv		51.6	0.75	ug/m
79-01-6	131.4	Trichloroethylene	0.042	0.040	0.033	ppbv		0.23	0.21	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.28	0.20	0.042	ppbv		1.6	1.1	ug/m
	62.5	Vinyl chloride	ND	0.20	0.042	ppbv		ND	0.51	ug/m
75-01-4			1.6	0.20	0.032			6.9	0.87	ug/m
95-47-6	106.2 106.2	m,p-Xylene o-Xylene	0.62	0.20	0.031	ppbv ppbv		2.7	0.87	ug/m.
			2.2	0.20	0.031			9.6	0.87	ug/m
1330-20-7	106.2	Xylenes (total)	6.6			ppbv		5.0	0.07	ug/m
CAS No.	Surro	gate Recoveries Run#	#1 Run	#2 L	imits					
460-00-4	4-Bro	mofluorobenzene 106%	6 1039	% 6	5-128%					

Report of Analysis

(a) Result is from Run# 2

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2

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Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		TO-15	45-6 Indoor Air	D	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a								
1000	File ID			Analyzed	Ву	Prep Date				atch	Analytical	Batch	
Run #1	3W2627		1	02/16/12	YXC n/a			n/a			V3W1034		
Run #2	3W2627	79.D	1	02/16/12	YXC	n/a	_	n/a			V3W1035	-	
Constant.	Initial	Volume	a						_				
Run #1	400 ml												
Run #2	100 ml	1											
VOA specia	al List												
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units	
67-64-1	58.08	Acet	one		74.6 <sup>a</sup>	0.80	0.15	ppbv		177 a	1.9	ug/m3	
106-99-0	54.09		Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3	
71-43-2	78.11	Benz			0.59	0.20	0.046	ppbv		1.9	0.64	ug/m:	
75-27-4	163.8	Bron	odichlorom	ethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m	
75-25-2	252.8	Bron	oform		ND	0.20	0.037	ppbv		ND	2.1	ug/m	
593-60-2	106.9	Bron	oethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m	
100-44-7	126	Benz	yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m	
75-15-0	76.14	Carb	on disulfide		ND	0.20	0.032	ppby		ND	0.62	ug/m	
108-90-7	112.6	Chlo	robenzene		ND	0.20	0.027	ppby		ND	0.92	ug/m	
75-00-3	64.52	Chlo	roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m	
67-66-3	119.4	Chlo	roform		0.24	0.20	0.028	ppbv		1.2	0.98	ug/m	
74-87-3	50.49	Chlo	romethane		0.51	0.20	0.037	ppbv		1.1	0.41	ug/m	
107-05-1	76.53	3-Ch	loropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m	
56-23-5	153.8	Carb	on tetrachlo	ride	ND	0.20	0.040	ppbv		ND	1.3	ug/m	
110-82-7	84.16	Cycl	ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m	
75-34-3	98.96		Dichloroetha		ND	0.20	0.028	ppbv		ND	0.81	ug/m	
75-35-4	96.94	1,1-I	Dichloroethy	lene	ND	0.20	0.046	ppbv		ND	0.79	ug/m	
106-93-4	187.9		Dibromoetha		ND	0.20	0.027	ppbv		ND	1.5	ug/m	
107-06-2	98.96	1,2-I	Dichloroetha	ine	ND	0.20	0.043	ppbv		ND	0.81	ug/m	
78-87-5	113	1,2-1	Dichloropro	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m	
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m	
75-71-8	120.9		lorodifluoro		0.46	0.20	0.038	ppbv		2.3	0.99	ug/m	
124-48-1	208.3		omochloron		ND	0.20	0.027	ppbv		ND	1.7	ug/m	
156-60-5	96.94		-1,2-Dichlo		ND	0.20	0.033	ppbv		ND	0.79	ug/m	
156-59-2	96.94		,2-Dichloro		ND	0.20	0.038	ppbv		ND	0.79	ug/m	
10061-01-5			,3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m	
541-73-1	147		ichlorobenz		ND	0.20	0.037	ppbv		ND	1.2	ug/m	
95-50-1	147		chlorobenze		ND	0.20	0.027	ppbv	ų.	ND	1.2	ug/m	
106-46-7	147		chlorobenze		0.11	0.20	0.025	ppbv	J	0.66	1.2	ug/m	
10061-02-6			-1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m	
64-17-5	46.07	Etha			28.7	0.50	0.095	ppbv		54.1	0.94	ug/m	
100-41-4	106.2	Ethy	Ibenzene		0.39	0.20	0.031	ppbv		1.7	0.87	ug/m	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $J\,=\,Indicates\,\,an\,\,estimated\,\,value$ 

B = Indicates analyte found in associated method blank



Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-IA-03 JA99245-6 AIR - Indoor Air Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a							
VOA specia	l List				1.27			199		
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.12	0.20	0.024	ppbv	J	0.59	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppby		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.35	0.20	0.033	ppby		1.4	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppby		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.46	0.20	0.044	ppby		1.6	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	2.1	0.20	0.059	ppby		5.2	0.49	ug/m3
75-09*2	84.94	Methylene chloride	0.23	0.20	0.027	ppbv		0.80	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.5	0.20	0.048	ppbv		4.4	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.12	0.20	0.036	ppbv	J	0.49	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	Č.	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.29	0.20	0.027	ppbv		1.2	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppby		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.46	0.20	0.024	ppbv		2.3	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.17	0.20	0.028	ppby	J	0.84	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.25	0.20	0.028	ppbv	~	1.2	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.37	0.040	0.028	ppbv		2.5	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	17.1	0.20	0.040	ppbv		64.4	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.040	0.040	0.033	ppbv		0.21	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.27	0.20	0.042	ppbv		1.5	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	1.4	0.20	0.031	ppbv		6.1	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.55	0.20	0.031	ppbv		2.4	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	2.0	0.20	0.031	ppbv		8.7	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run#	#1 Run	#2 L	imits					
460-00-4	4-Brou	mofluorobenzene 104%	6 1059	% 6	5-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2



Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		<b>TO-15</b>	45-9 Indoor Air	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a								
	File ID			Analyzed	Ву					atch	Analytical	Batch
Run #1 Run #2	3W2625 3W2628		1	02/15/12 02/16/12	YXC YXC	п/а п/а		n/a n/a			V3W1034 V3W1035	
Run #6	0002020	NU.D	-	our rui ru	ine	ii a					10111000	
Run #1	Initial V 400 ml	Volumo	•									
Run #2	80.0 ml											
VOA specia	al List											
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet	one		65.9 <sup>a</sup>	1.0	0.18	ppbv		157 a	2.4	ug/m3
106-99-0	54.09	, 1,3-E	Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz	ene		0.51	0.20	0.046	ppbv		1.6	0.64	ug/m3
75-27-4	163.8	Bron	nodichloron	nethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bron	oform		ND	0.20	0.037	ppbv		ND	2.1	ug/m:
593-60-2	106.9	Bron	ioethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m:
100-44-7	126	Benz	yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m:
75-15-0	76.14	Carb	on disulfide	3	ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlo	robenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chlo	roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chlo	roform		0.24	0.20	0.028	ppbv		1.2	0.98	ug/m
74-87-3	50.49	Chlo	romethane		0.48	0.20	0.037	ppbv		0.99	0.41	ug/m3
107-05-1	76.53	3-Ch	loropropen	e	ND	0.20	0.041	ppbv		ND	0.63	ug/m
56-23-5	153.8	Carb	on tetrachle	oride	ND	0.20	0.040	ppby		ND	1.3	ug/m
110-82-7	84.16	Cycl	ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m:
75-34-3	98.96		Dichloroeth		ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94		Dichloroeth		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9		Dibromoeth		ND	0.20	0.027	ppbv		ND	1.5	ug/m
107-06-2	98.96		Dichloroeth		ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113	1,2-1	Dichloropro	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m:
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		lorodifluor		0.43	0.20	0.038	ppbv		2.1	0.99	ug/m
124-48-1	208.3		omochloro		ND	0.20	0.027	ppbv		ND	1.7	ug/m
156-60-5	96.94		-1,2-Dichle		ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		,2-Dichloro		ND	0.20	0.038	ppbv		ND	0.79	ug/m
10061-01-5			,3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		ichlorobenz		ND	0.20	0.037	ppbv		ND	1.2	ug/m
95-50-1	147		chlorobenz		ND	0.20	0.027	ppbv		ND	1.2	ug/m
106-46-7	147		chlorobenz		0.098	0.20	0.025	ppbv	1	0.59	1.2	ug/m
10061-02-6			-1,3-Dichle	propropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Etha			47.5 a	2.5	0.47	ppbv		89.5 a		ug/m
100-41-4	106.2	Ethy	lbenzene		0.36	0.20	0.031	ppbv		1.6	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-IA-04 JA99245-9 AIR - Indoor Air Comp. Sur TO-15 Johnson & Hoffman, Carle Pi	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a							
VOA specia	al List				17		7	2.7	12.2	
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.11	0.20	0.024	ppbv	J	0.54	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppby		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.24	0.20	0.033	ppbv		0.98	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.39	0.20	0.044	ppbv		1.4	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	4.4	0.20	0.059	ppbv		11	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.31	0.20	0.027	ppbv		1.1	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.4	0.20	0.048	ppbv		4.1	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.10	0.20	0.036	ppbv	J	0.41	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv	~	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.27	0.20	0.027	ppby		1.1	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.52	0.20	0.024	ppbv		2.6	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.18	0.20	0.028	ppbv	J	0.88	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.22	0.20	0.028	ppbv		1.0	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.30	0.040	0.028	ppbv		2.0	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	14.1	0.20	0.040	ppbv		53.1	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.035	0.040	0.033	ppbv	J	0.19	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.29	0.20	0.042	ppbv		1.6	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	1.3	0.20	0.031	ppbv		5.6	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.50	0.20	0.031	ppbv		2.2	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	1.8	0.20	0.031	ppbv		7.8	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 L	imits					
460-00-4	4-Brou	mofluorobenzene 101%	5 1049	% 6	5-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $J = Indicates \ an \ estimated \ value$ 

B = Indicates analyte found in associated method blank



Report of Analysis

Page 1 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		<b>TO-15</b>		Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a								
Run #1 Run #2	File ID 3W262	58.D	DF Analyzed By Prep Date Prep 1 02/15/12 YXC n/a n/a			atch	Analytical V3W1034	Batch				
Run #1 Run #2	Initial 400 ml	Volume										
VOA specia	al List											
CAS No.	MW	Comp	oound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Aceto	ne		9.4	0.20	0.036	ppbv		22	0.48	ug/m:
106-99-0	54.09		utadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m
71-43-2	78.11	Benze			0.39	0.20	0.046	ppbv		1.2	0.64	ug/m
75-27-4	163.8		odichlorom	ethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m
75-25-2	252.8	Brom		culture	ND	0.20	0.037	ppbv		ND	2.1	ug/m
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126		1 Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m
75-15-0	76.14		on disulfide		ND	0.20	0.032	ppbv		ND	0.62	ug/m
108-90-7	112.6		obenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m
75-00-3	64.52		oethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m
67-66-3	119.4		oform		ND	0.20	0.028	ppbv		ND	0.98	ug/m
74-87-3	50.49		omethane		0.46	0.20	0.037	ppbv		0.95	0.41	ug/m
107-05-1	76.53		oropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m
56-23-5	153.8		on tetrachlo		ND	0.20	0.040	ppbv		ND	1.3	ug/m
110-82-7	84.16		hexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m
75-34-3	98.96		ichloroetha	ine	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94		ichloroethy		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9		ibromoetha		ND	0.20	0.027	ppbv		ND	1.5	ug/m
107-06-2	98.96		ichloroetha		ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113		ichloropro		ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12		lioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		orodifluoro		0.39	0.20	0.038	ppbv		1.9	0.99	ug/m
124-48-1	208.3		mochloron		ND	0.20	0.027	ppbv		ND	1.7	ug/m
156-60-5	96.94		1,2-Dichlo		ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94	cis-1,	2-Dichloro	ethylene	ND	0.20	0.038	ppbv		ND	0.79	ug/m
10061-01-5	111		3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		chlorobenz		ND	0.20	0.037	ppbv		ND	1.2	ug/m
95-50-1	147		hlorobenze		ND	0.20	0.027	ppbv		ND	1.2	ug/m
106-46-7	147	p-Dic	hlorobenze	ne	ND	0.20	0.025	ppbv		ND	1.2	ug/n
10061-02-6			1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07				8.9	0.50	0.095	ppbv		17	0.94	ug/n
100-41-4	106.2	Ethyl	benzene		0.14	0.20	0.031	ppbv	J	0.61	0.87	ug/n

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sample Lab Sample Matrix: Method: Project:		JH-IA-05 JA99245-10 AIR - Indoor Air Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	nma ID:A ace, NY	1050	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a					
VOA specia	al List		1		1.2		ï			
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.11	0.20	0.033	ppbv	J	0.45	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.26	0.20	0.044	ppbv		0.92	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.98	0.20	0.059	ppbv		2.4	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.29	0.20	0.027	ppbv		1.0	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.51	0.20	0.048	ppbv		1.5	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppby		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppby		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.77	0.20	0.027	ppbv		3.3	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.21	0.20	0.024	ppbv		1.0	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.12	0.20	0.028	ppbv	Ĵ.	0.56	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.20	0.040	0.028	ppbv	Č.	1.4	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	1.2	0.20	0.040	ppbv		4.5	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppby		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.27	0.20	0.042	ppbv		1.5	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppby		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.44	0.20	0.031	ppbv		1.9	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.18	0.20	0.031	ppbv	J	0.78	0.87	ug/ma
1330-20-7	106.2	Xylenes (total)	0.62	0.20	0.031	ppbv		2.7	0.87	ug/mä
CAS No.	Surro	gate Recoveries Run#	#1 Run	#2 L	imits					
460-00-4	4-Bron	mofluorobenzene 100%	6	6	5-128%					

Report of Analysis

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N = Indicates presumptive evidence of a compound



Page 2 of 2



Report of Analysis Page 1 of 2 JH-SS-01 Client Sample ID: Date Sampled: 02/10/12 Lab Sample ID: IA99245-3 AIR - Soil Vapor Comp. Summa ID: A199 Date Received: 02/13/12 Matrix: Method: **TO-15** Percent Solids: n/a Project: Johnson & Hoffman, Carle Place, NY File ID DF Prep Date Prep Batch Analytical Batch Analyzed By YXC V3W1034 Run #1 3W26261.D 1 02/15/12 n/a n/a Run #2 Initial Volume Run #1 400 ml Run #2 VOA special List MW Compound Result RL MDL Units Q Result RL Units CAS No. 58.08 0.20 0.036 7.4 0.4867-64-1 Acetone 3.1 ppbv ug/m3 ug/m3 106-99-0 54.09 1.3-Butadiene ND 0.20 0.024 ND ppbv 0.44Benzene ND 0.20 0.046 ND 0.64 ug/m3 71-43-2 78.11 ppbv 75-27-4 163.8 Bromodichloromethane ND 0.20 0.030 ppbv ND 1.3 ug/m3 75-25-2 252.8 Bromoform ND 0.20 0.037 ppbv ND 2.1ug/m3 ND 593-60-2 106.9 Bromoethene ND 0.20 0.037 ppbv 0.87ug/m3 100-44-7 126 Benzyl Chloride ND 0.20 0.041 ND 1.0 ug/m3 ppbv Carbon disulfide 0.20 ND 0.62 75-15-0 76.14 ND 0.032 ppbv ug/m3 Chlorobenzene 0.20 0.027 ND 0.92 ug/m3 108-90-7 112.6 ND ppby 75-00-3 64.52 Chloroethane ND 0.20 0.039 ND 0.53 ug/m3 ppbv ND 0.98 67-66-3 Chloroform ND 0.200.028 ug/m3 119.4 ppbv 74-87-3 50.49 Chloromethane ND 0.20 0.037 ppby ND 0.41 ug/m3 ND 0.20 ND 0.63 ug/m3 107-05-1 76.53 3-Chloropropene 0.041 ppbv ND 0.20 0.040 ND 1.3 56-23-5 153.8 Carbon tetrachloride ug/m3 ppbv ND Cyclohexane ND 0.20 0.034 0.69 ug/m3 110-82-7 84.16 ppbv 98.96 1.1-Dichloroethane ND 0.20 0.028 ND 0.81 ug/m3 75-34-3 ppbv 96.94 1.1-Dichloroethylene ND 0.20 0.046 ND 0.79 ug/m3 75-35-4 ppbv ug/m3 0.20 ND 106-93-4 187.9 1,2-Dibromoethane ND 0.027 1.5 ppbv 107-06-2 98.96 1.2-Dichloroethane ND 0.200.043 ppby ND 0.81 ug/m3 ND 0.20 0.038 ND 0.92 ug/m3 78-87-5 113 1,2-Dichloropropane ppbv 1,4-Dioxane ND 0.20 0.056 ND 0.72 ug/m3 123-91-1 88.12 ppbv 2.2 0.9975-71-8 120.9 Dichlorodifluoromethane 0.440.20 0.038 ug/m3 ppby 124-48-1 208.3 Dibromochloromethane ND 0.20 0.027 ppbv ND 1.7 ug/m3 ug/m3 156-60-5 96.94 trans-1,2-Dichloroethylene ND 0.20 0.033 ppbv ND 0.79156-59-2 96.94 cis-1,2-Dichloroethylene ND 0.20 0.038 ND 0.79ug/m3 ppbv 10061-01-5 111 cis-1,3-Dichloropropene ND 0.20 0.043 ppby ND 0.91 ug/m3 0.20 0.037 ND 1.2 ug/m3 541-73-1 147 m-Dichlorobenzene ND ppbv 147 ND 0.20 0.027 ND 1.2 ug/m3 95-50-1 o-Dichlorobenzene ppbv ND 147 p-Dichlorobenzene ND 0.20 0.025 1.2 ug/m3 106-46-7 ppby ppbv 10061-02-6 111 trans-1,3-Dichloropropene ND 0.20 0.039 ND 0.91 ug/m3 64-17-5 46.07 Ethanol 3.5 0.50 0.095 ppbv 6.6 0.94 ug/m3 0.20 ND 0.87 ug/m3 100-41-4 106.2 Ethylbenzene ND 0.031ppbv

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



	ethod: TO-15 oject: Johnson & Hoffman, Carle			199	D	ate San ate Rec er cent S	eive	d: 02/13		
VOA specia	al List		125	1.1	1.1		7	1.0	-	
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppby		ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppby		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.33	0.20	0.059	ppbv		0.81	0.49	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.027	ppbv		ND	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.45	0.20	0.048	ppbv		1.3	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/ma
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.10	0.20	0.028	ppbv	J	0.47	0.93	ug/m
127-18-4	165.8	Tetrachloroethylene	0.38	0.040	0.028	ppby		2.6	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m:
108-88-3	92.14	Toluene	0.11	0.20	0.040	ppbv	J	0.41	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.099	0.040	0.033	ppbv	2	0.53	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.25	0.20	0.042	ppbv		1.4	1.1	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m
12.25.3	106.2	m,p-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv		ND	0.87	ug/m
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.031	ppbv		ND	0.87	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 L	imits.					
460-00-4	4-Bron	mofluorobenzene 95%		6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Report of Analysis

Page 1 of 2

Client Samp Lab Sample Matrix: Method: Project:		TO-15	45-2 Soil Vapor	Comp. Sum an, Carle Plac		1035	D	ate Sam ate Rec ercent S	eive	d: 02/	10/12 13/12	
1.5.5	File ID	125	DF	Analyzed	Ву	Prep	Date			atch	Analytical	Batch
Run #1	3W2626		1	02/16/12	YXC	n/a		n/a			V3W1034	
Run #2	3W2626	65.D	1	02/16/12	YXC	n/a		n/a			V3W1034	
Run #1 Run #2	Initial V 400 ml 60.0 ml											
VOA specia	al List											
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet	one		4.7	0.20	0.036	ppbv		11	0.48	ug/m3
106-99-0	54.09		Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz			ND	0.20	0.046	ppbv		ND	0.64	ug/m3
75-27-4	163.8		odichlorom	ethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	252.8		oform	2 CR CR 15	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126		yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14		on disulfide		ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6		robenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chlo	roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chlo	roform		0.72	0.20	0.028	ppbv		3.5	0.98	ug/m3
74-87-3	50.49	Chlo	romethane		0.11	0.20	0.037	ppbv	J	0.23	0.41	ug/m:
107-05-1	76.53	3-Ch	loropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8		on tetrachlo		ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cycl	ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/mä
75-34-3	98.96	1,1-I	Dichloroetha	ne	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-I	Dichloroethy	/lene	ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-I	Dibromoetha	ine	ND	0.20	0.027	ppbv		ND	1.5	ug/m3
107-06-2	98.96		Dichloroetha		ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-1	Dichloropro	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m:
123-91-1	88.12	1,4-1	Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		lorodifluoro		1.0	0.20	0.038	ppbv		4.9	0.99	ug/m:
124-48-1	208.3		omochloron		ND	0.20	0.027	ppbv		ND	1.7	ug/m
156-60-5	96.94		-1,2-Dichlo		ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		,2-Dichloro		ND	0.20	0.038	ppbv		ND	0.79	ug/m
10061-01-5			,3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		ichlorobenz		ND	0.20	0.037	ppbv		ND	1.2	ug/m
95-50-1	147		chlorobenze		ND	0.20	0.027	ppbv		ND	1.2	ug/m
106-46-7	147		chlorobenze		0.44	0.20	0.025	ppbv		2.6	1.2	ug/m
10061-02-6			-1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07				5.7	0.50	0.095	ppbv		11	0.94	ug/m
100-41-4	106.2	Ethy	lbenzene		ND	0.20	0.031	ppbv		ND	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Client Samj Lab Sample Matrix: Method: Project:		JH-SS-02 JA99245-2 AIR - Soil Vapor Comp. Su TO-15 Johnson & Hoffman, Carle Pl	mma ID:A lace, NY	1035	D	ate San ate Rec er cent S	eive	d: 02/13		
VOA specia	al List			1.0						
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m
67-63-0	60.1	Isopropyl Alcohol	0.41	0.20	0.059	ppby		1.0	0.49	ug/m
75-09-2	84.94	Methylene chloride	0.39	0.20	0.027	ppby		1.4	0.69	ug/m
78-93-3	72.11	Methyl ethyl ketone	0.45	0.20	0.048	ppby		1.3	0.59	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	0.48	0.20	0.022	ppbv		2.6	1.1	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	0.15	0.20	0.028	ppbv	J	0.70	0.93	ug/m
127-18-4	165.8	Tetrachloroethylene	51.5 a	0.27	0.19	ppby		349 a	1.8	ug/m
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m
108-88-3	92.14	Toluene	0.14	0.20	0.040	ppbv	J	0.53	0.75	ug/m
79-01-6	131.4	Trichloroethylene	3.2	0.040	0.033	ppbv	3	17	0.21	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.42	0.20	0.042	ppbv		2.4	1.1	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m
10-01-4	106.2	m,p-Xylene	0.11	0.20	0.032	ppbv	Ĵ	0.48	0.87	ug/m
95-47-6	106.2	o-Xylene	ND	0.20	0.031	ppbv	3	ND	0.87	ug/m
1330-20-7	106.2	Xylenes (total)	0.11	0.20	0.031	ppbv	J	0.48	0.87	ug/m
1330-20-7	100.2	Aytenes (total)	0.11	0.20	0.031	hhoa	J	0.40	0.07	ug/m
CAS No.	Surro	gate Recoveries Runs	#1 Run	#2 L	imits					
460-00-4	4-Brou	nofluorobenzene 93%	97%	6	5-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Client Sample ID: JH-SS-03 02/10/12 JA99245-1 Date Sampled: Lab Sample ID: Matrix: AIR - Soil Vapor Comp. Summa ID: A1031 Date Received: 02/13/12 Method: **TO-15** Percent Solids: n/a Project: Johnson & Hoffman, Carle Place, NY **Analytical Batch** File ID DF Prep Date Prep Batch Analyzed By V3W1034 Run #1 3W26262.D 02/16/12 YXC n/a n/a 1 02/16/12 YXC V3W1034 Run #2 3W26263.D 1 n/a n/a Initial Volume Run #1 400 ml 80.0 ml Run #2 **VOA** special List RL MDL RL Units MW Result Units Q Result CAS No. Compound 67-64-1 58.08 Acetone 48.0 a 1.0 0.18 ppbv 114 2.4 ug/m3 ND 106-99-0 54.09 1,3-Butadiene ND 0.20 0.024 ppbv 0.44ug/m3 ug/m3 Benzene 0.046 1.1 0.6471-43-2 78.11 0.33 0.20 ppbv 75-27-4 163.8 Bromodichloromethane ND 0.20 0.030 ppbv ND 1.3 ug/m3 ppbv 75-25-2 252.8 Bromoform ND 0.20 0.037 ND 2.1 ug/m3 593-60-2 106.9 Bromoethene ND 0.20 0.037 ppbv ND 0.87ug/m3 ND **Benzyl** Chloride ND 0.20 0.041 1.0ug/m3 100-44-7 126 ppbv 75-15-0 76.14 Carbon disulfide ND 0.20 0.032 ppby ND 0.62 ug/m3 ND 108-90-7 112.6 Chlorobenzene ND 0.20 0.027 ppbv 0.92ug/m3 ND Chloroethane ND 0.20 0.039 0.53 ug/m3 75-00-3 64.52 ppby 0.028 0.83 0.9867-66-3 119.4 Chloroform 0.17 0.20 ppbv J ug/m3 Chloromethane 0.20 0.037 0.500.41ug/m3 74-87-3 50.49 0.24 ppbv 76.53 ND 0.20 0.041 ND 0.63 ug/m3 107-05-1 3-Chloropropene ppbv ND 0.20 0.040 1.3 153.8 Carbon tetrachloride ND ug/m3 56-23-5 ppby 110-82-7 84.16 Cyclohexane ND 0.200.034 ppbv ND 0.69ug/m3 ug/m3 0.028 ND 75-34-3 98.96 1.1-Dichloroethane ND 0.20 ppbv 0.8196.94 ND 0.79 ug/m3 1,1-Dichloroethylene ND 0.20 0.046 ppbv 75-35-4 ND 1,2-Dibromoethane 0.027 ug/m3 106-93-4 187.9ND 0.20ppbv 1.5 107-06-2 98.96 1.2-Dichloroethane ND 0.20 0.043 ppbv ND 0.81ug/m3 1,2-Dichloropropane ND 0.20 0.038 ppbv ND 0.92ug/m3 78-87-5 113 ND 0.20 0.056 0.72 ug/m3 123-91-1 88.12 1,4-Dioxane ND ppby 5.4 75-71-8 120.9 Dichlorodifluoromethane 1.1 0.20 0.038ppbv 0.99ug/m3 ug/m3 124-48-1 208.3 Dibromochloromethane ND 0.20 0.027 ppby ND 1.7 156-60-5 96.94 trans-1,2-Dichloroethylene ND 0.20 0.033 ND 0.79ug/m3 ppby 0.20 0.038 6.7 0.79 ug/m3 156-59-2 96.94 cis-1,2-Dichloroethylene 1.7 ppby cis-1,3-Dichloropropene ND 0.20 0.043 ppbv ND 0.91 ug/m3 10061-01-5 111 ND 147 m-Dichlorobenzene ND 0.20 0.037 ppbv 1.2 ug/m3 541-73-1 ND 147 ND 0.20 0.027 1.2 ug/m3 95-50-1 o-Dichlorobenzene ppbv ND 1.2 106-46-7 147 p-Dichlorobenzene ND 0.20 0.025 ppbv ug/m3 ug/m3 0.039 ND 0.91 10061-02-6 111 trans-1,3-Dichloropropene ND 0.20ppbv

55.0 a

0.26

2.5

0.20

ND = Not detected MDL - Method Detection Limit

Ethylbenzene

Ethanol

RL = Reporting Limit

46.07

106.2

64-17-5

100-41-4

E = Indicates value exceeds calibration range

J = Indicates an estimated value

0.47

0.031

ppbv

ppbv

B = Indicates analyte found in associated method blank

104 a

1.1

N = Indicates presumptive evidence of a compound



ug/m3

ug/m3

4.7

0.87

2

Page 1 of 2

Client Sample Lab Sample Matrix: Method: Project:		JH-SS-03 JA99245-1 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	nma ID: A ace, NY	1031	D	ate San ate Rec ercent S	eive	d: 02/13		
VOA specia	al List		12				7	10		
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.36	0.20	0.024	ppby		1.8	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.18	0.20	0.033	ppby	J	0.74	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.20	0.20	0.044	ppbv		0.70	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	8.9	0.20	0.059	ppby		22	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.24	0.20	0.027	ppbv		0.83	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	6.9	0.20	0.048	ppbv		20	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.13	0.20	0.027	ppbv	J	0.55	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppby		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	1.2	0.20	0.024	ppbv		5.9	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.47	0.20	0.028	ppby		2.3	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.19	0.20	0.028	ppbv	J	0.89	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	19.6	0.040	0.028	ppbv	2	133	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	2.8	0.20	0.047	ppbv		8.3	0.59	ug/m3
108-88-3	92.14	Toluene	6.8	0.20	0.040	ppbv		26	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	3.6	0.040	0.033	ppbv		19	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.34	0.20	0.042	ppbv		1.9	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
10.01-4	106.2	m,p-Xylene	1.0	0.20	0.031	ppbv		4.3	0.87	ug/m
95-47-6	106.2	o-Xylene	0.40	0.20	0.031	ppbv		1.7	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	1.4	0.20	0.031	ppbv		6.1	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 1	limits					
460-00-4	4-Brou	mofluorobenzene 100%	5 1019	% (	65-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Page 1 of 2

Client Sample Lab Sample Matrix: Method: Project:		TO-15	45-4 Soil Vapor	Comp. Sum an, Carle Plac		1033	D	ate San ate Rec ercent S	eive	d: 02/	10/12 13/12	
ALC: NO.	File ID		DF	Analyzed	By		Date	Pre	ep B	atch	Analytical	Batch
Run #1	3W2620		1	02/16/12	YXC	n/a		n/a			V3W1034	
Run #2	3W2623	78.D	1	02/16/12	YXC	n/a		n/a			V3W1035	-
Run #1 Run #2	Initial V 400 ml 40.0 ml		•									
VOA specia	al List											
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet	one		87.1 ª	2.0	0.36	ppbv		207 a	4.8	ug/m3
106-99-0	54.09		Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz			0.34	0.20	0.046	ppbv		1.1	0.64	ug/m
75-27-4	163.8		odichlorom	ethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m
75-25-2	252.8		oform	100000	ND	0.20	0.037	ppbv		ND	2.1	ug/m
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126		yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m
75-15-0	76.14		on disulfide		ND	0.20	0.032	ppbv		ND	0.62	ug/m
108-90-7	112.6		robenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m
75-00-3	64.52		roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m
67-66-3	119.4		roform		0.37	0.20	0.028	ppbv		1.8	0.98	ug/m
74-87-3	50.49		romethane		0.14	0.20	0.037	ppbv	J	0.29	0.41	ug/m
107-05-1	76.53	3-Ch	loropropene		ND	0.20	0.041	ppbv		ND	0.63	ug/m
56-23-5	153.8	Carb	on tetrachlo	ride	ND	0.20	0.040	ppbv		ND	1.3	ug/m
110-82-7	84.16	Cycle	ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m
75-34-3	98.96	1,1-I	Dichloroetha	ne	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94	1,1-I	Dichloroethy	lene	ND	0.20	0.046	ppby		ND	0.79	ug/m
106-93-4	187.9		Dibromoetha		ND	0.20	0.027	ppbv		ND	1.5	ug/m
107-06-2	98.96	1,2-I	Dichloroetha	ne	ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113		Dichloroprop	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		lorodifluoro		0.46	0.20	0.038	ppbv		2.3	0.99	ug/m
124-48-1	208.3		omochloron		ND	0.20	0.027	ppbv		ND	1.7	ug/m
156-60-5	96.94		-1,2-Dichlo		ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		,2-Dichloro		0.73	0.20	0.038	ppbv		2.9	0.79	ug/m
10061-01-5			,3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		ichlorobenze		ND	0.20	0.037	ppbv		ND	1.2	ug/m
95-50-1	147		chlorobenze		ND	0.20	0.027	ppbv		ND	1.2	ug/m
106-46-7	147		chlorobenze		ND	0.20	0.025	ppbv		ND	1.2	ug/m
10061-02-6			-1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07	Etha			113 a	5.0	0.95	ppbv		213 a	9.4	ug/m
100-41-4	106.2	Ethy	lbenzene		0.40	0.20	0.031	ppbv		1.7	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Samj Lab Sample Matrix: Method: Project:		JH-SS-04 JA99245-4 AIR - Soil Vapor Comp. TO-15 Johnson & Hoffman, Carl		ID: A10 NY	)33	D	Date Sampled: 02/10/12 Date Received: 02/13/12 Percent Solids: n/a				
VOA specia	al List			÷							
CAS No.	MW	Compound	R	esult	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.	59	0.20	0.024	ppbv		2.9	0.98	ug/m3
76-13-1	187.4	Freon 113	N	D	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	N	D	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.	18	0.20	0.033	ppbv	J	0.74	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	N	D	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.	16	0.20	0.044	ppbv	J	0.56	0.70	ug/m3
591-78-6	100	2-Hexanone	N	D	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	N	D	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	12	2.5	0.20	0.059	ppbv		30.7	0.49	ug/m3
75-09-2	84.94	Methylene chloride		27	0.20	0.027	ppbv		0.94	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	8.	3	0.20	0.048	ppbv		24	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone		D	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	N	D	0.20	0.027	ppby		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	N	D	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.	23	0.20	0.027	ppbv		0.98	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane		D	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethan		D	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane		D	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene		9	0.20	0.024	ppbv		9.3	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene		72	0.20	0.028	ppbv		3.5	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane		22	0.20	0.028	ppbv		1.0	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene		2.4 a	0.40	0.28	ppbv		220 a	2.7	ug/m3
109-99-9	72.11	Tetrahydrofuran		2	0.20	0.047	ppbv		12	0.59	ug/m3
108-88-3	92.14	Toluene		.6	0.20	0.040	ppbv		32	0.75	ug/m3
79-01-6	131.4	Trichloroethylene		4.2	0.040		ppbv		76.3	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane		.24	0.20	0.042	ppbv		1.3	1.1	ug/m3
75-01-4	62.5	Vinyl chloride		D	0.20	0.032	ppbv		ND	0.51	ug/m3
28.87.2	106.2	m,p-Xylene		.6	0.20	0.031	ppby		6.9	0.87	ug/m3
95-47-6	106.2	o-Xylene		.64	0.20	0.031	ppby		2.8	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)		.2	0.20	0.031	ppbv		9.6	0.87	ug/m3
CAS No.	Surro	gate Recoveries R	un# 1	Run#	2	Limits					
460-00-4	4-Broi	nofluorobenzene 1	02%	107%		65-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Client Sam Lab Sampl- Matrix: Method: Project:	e ID:	<b>TO-15</b>	45-5 Soil Vapor	Comp. Sum an, Carle Plac	ma ID: A xe, NY	1032	D	ate San ate Rec ercent S	eive	d: 02/	10/12 13/12	
	File ID	1.1	DF	Analyzed	By	Prep	Date	Pre	ep B	atch	Analytical	Batch
Run #1	3W2626	8.D	1	02/16/12	YXC	п/а		n/a			V3W1034	
Run #2	3W2626	9.D	1	02/16/12	YXC	n/a		n/a	1		V3W1034	_
Run #1	Initial V 400 ml	/olume	•									
Run #2	40.0 ml											
VOA specia	al List									_		
					<b>D</b>		MDI		~	Dent	DI	Units
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acete	one		73.5 <sup>a</sup>	2.0	0.36	ppbv		175 a	4.8	ug/m3
106-99-0	54.09		Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz			0.22	0.20	0.046	ppbv		0.70	0.64	ug/m3
75-27-4	163.8		odichlorom	tethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	252.8		oform		ND	0.20	0.037	ppbv		ND	2.1	ug/m3
593-60-2	106.9		oethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126	Benz	yl Chloride		ND	0.20	0.041	ppby		ND	1.0	ug/m3
75-15-0	76.14		on disulfide		ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlo	robenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chlo	roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chlo	roform		0.12	0.20	0.028	ppby	J	0.59	0.98	ug/m3
74-87-3	50.49	Chlo	romethane		0.13	0.20	0.037	ppby	J	0.27	0.41	ug/m3
107-05-1	76.53		loropropene	e	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
56-23-5	153.8		on tetrachlo		ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cycl	ohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-I	Dichloroetha	ane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-I	Dichloroeth	ylene	ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-I	Dibromoeth	ane	ND	0.20	0.027	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-I	Dichloroetha	ane	ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-I	Dichloropro	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-1	Dioxane	789 H. I.	ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dich	lorodifluoro	omethane	0.50	0.20	0.038	ppbv		2.5	0.99	ug/m3
124-48-1	208.3	Dibr	omochloror	nethane	ND	0.20	0.027	ppbv		ND	1.7	ug/m3
156-60-5	96.94		-1,2-Dichlo		2.8	0.20	0.033	ppbv		11	0.79	ug/m3
156-59-2	96.94	cis-1	,2-Dichloro	oethylene	19.2	0.20	0.038	ppbv		76.1	0.79	ug/m3
10061-01-5	111	cis-1	,3-Dichloro	propene	ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147	m-D	ichlorobenz	ene	ND	0.20	0.037	ppbv		ND	1.2	ug/m3
95-50-1	147		chlorobenze		ND	0.20	0.027	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Di	chlorobenze	ene	ND	0.20	0.025	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans	-1,3-Dichlo	propropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Etha	nol	1. A. M. A. M. M. M.	41.2 a	5.0	0.95	ppbv		77.6 *		ug/m3
100-41-4	106.2	Ethy	lbenzene		0.22	0.20	0.031	ppbv		0.96	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 1 of 2

Cn.

Client Samj Lab Sample Matrix: Method: Project:		JH-SS-05 JA99245-5 AIR - Soil Vapor Comp. Su TO-15 Johnson & Hoffman, Carle P	mma ID: A lace, NY	1032	D	ate San ate Rec ercent S	eive	d: 02/13/		
VOA specia	l List				1		1			
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.50	0.20	0.024	ppbv		2.5	0.98	ug/m3
76-13-1	187.4	Freon 113	0.12	0.20	0.034	ppbv	J	0.92	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.12	0.20	0.033	ppbv	J	0.49	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv	Τ.	ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.11	0.20	0.044	ppby	J	0.39	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	9.5	0.20	0.059	ppbv		23	0.49	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.027	ppbv		ND	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	5.1	0.20	0.048	ppbv		15	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.50	0.20	0.027	ppbv		2.1	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	1.5	0.20	0.022	ppby		8.2	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppby		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppby		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	1.5	0.20	0.024	ppbv		7.4	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.55	0.20	0.028	ppbv		2.7	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.12	0.20	0.028	ppbv	J	0.56	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	218 a	0.40	0.28	ppbv	4	1480 a	2.7	ug/m3
109-99-9	72.11	Tetrahydrofuran	2.4	0.20	0.047	ppbv		7.1	0.59	ug/m3
108-88-3	92.14	Toluene	1.9	0.20	0.040	ppbv		7.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	12.5	0.040		ppbv		67.2	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.29	0.20	0.042	ppbv		1.6	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppby		ND	0.51	ug/m3
10-01-4	106.2	m,p-Xylene	0.81	0.20	0.031	ppbv		3.5	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.38	0.20	0.031	ppbv		1.7	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	1.2	0.20	0.031	ppbv		5.2	0.87	ug/m3
CAS No.	Surro	gate Recoveries Run	#1 Run	# 2	Limits					
460-00-4	4-Brou	nofluorobenzene 1019	% 98%	5	65-128%					

Report of Analysis

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



**Report of Analysis** 

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:		TO-15	245-11 Ambient Ai 5	r Comp. Su an, Carle Plac	nma ID: :e, NY	A1036	D	ate Sam ate Rec ercent S	eive	d: 02/	10/12 13/12	
Run #1 Run #2	File ID 3W262	59.D	DF 1	Analyzed 02/15/12	Ву ҮХС	Prep n/a	Date	Pre n/a	~	atch	Analytical V3W1034	Batch
Run #1 Run #2	Initial 7 400 ml	Volum	e									
VOA specia	al List											
CAS No.	MW	Com	pound		Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acet	one		6.6	0.20	0.036	ppbv		16	0.48	ug/m3
106-99-0	54.09	1.3-1	Butadiene		ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benz			0.40	0.20	0.046	ppbv		1.3	0.64	ug/m
75-27-4	163.8	Bron	nodichlorom	ethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m
75-25-2	252.8	Bron	noform		ND	0.20	0.037	ppbv		ND	2.1	ug/m
593-60-2	106.9	Bron	noethene		ND	0.20	0.037	ppbv		ND	0.87	ug/m
100-44-7	126	Benz	yl Chloride		ND	0.20	0.041	ppbv		ND	1.0	ug/m
75-15-0	76.14	Carb	on disulfide		ND	0.20	0.032	ppbv		ND	0.62	ug/m
108-90-7	112.6	Chlo	robenzene		ND	0.20	0.027	ppbv		ND	0.92	ug/m
75-00-3	64.52	Chlo	roethane		ND	0.20	0.039	ppbv		ND	0.53	ug/m
67-66-3	119.4	Chlo	roform		ND	0.20	0.028	ppbv		ND	0.98	ug/m
74-87-3	50.49	Chlo	romethane		0.51	0.20	0.037	ppbv		1.1	0.41	ug/m
107-05-1	76.53	3-Ch	loropropene	6	ND	0.20	0.041	ppbv		ND	0.63	ug/m
56-23-5	153.8	Cart	on tetrachlo	ride	ND	0.20	0.040	ppby		ND	1.3	ug/m
110-82-7	84.16	Cycl	lohexane		ND	0.20	0.034	ppbv		ND	0.69	ug/m
75-34-3	98.96	1,1-	Dichloroetha	ne	ND	0.20	0.028	ppbv		ND	0.81	ug/m
75-35-4	96.94		Dichloroethy		ND	0.20	0.046	ppbv		ND	0.79	ug/m
106-93-4	187.9		Dibromoetha		ND	0.20	0.027	ppbv		ND	1.5	ug/m
107-06-2	98.96		Dichloroetha		ND	0.20	0.043	ppbv		ND	0.81	ug/m
78-87-5	113		Dichloroprop	pane	ND	0.20	0.038	ppbv		ND	0.92	ug/m
123-91-1	88.12		Dioxane		ND	0.20	0.056	ppbv		ND	0.72	ug/m
75-71-8	120.9		ılorodifluoro		0.48	0.20	0.038	ppbv		2.4	0.99	ug/m
124-48-1	208.3		romochloron		ND	0.20	0.027	ppbv		ND	1.7	ug/m
156-60-5	96.94		s-1,2-Dichlo		ND	0.20	0.033	ppbv		ND	0.79	ug/m
156-59-2	96.94		1,2-Dichloro		ND	0.20	0.038	ppbv		ND	0.79	ug/m
10061-01-5			1,3-Dichloro		ND	0.20	0.043	ppbv		ND	0.91	ug/m
541-73-1	147		ichlorobenz		ND	0.20	0.037	ppbv		ND	1.2	ug/m
95-50-1	147		ichlorobenze		ND	0.20	0.027	ppbv		ND	1.2	ug/m
106-46-7	147		ichlorobenze		ND	0.20	0.025	ppbv		ND	1.2	ug/m
10061-02-6			s-1,3-Dichlo	ropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m
64-17-5	46.07				9.2	0.50	0.095	ppbv		17	0.94	ug/m
100-41-4	106.2	Ethy	lbenzene		0.11	0.20	0.031	ppbv	J	0.48	0.87	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range



Client Samj Lab Sample Matrix: Method: Project:		JH-OA-01 JA99245-11 AIR - Ambient Air Comp. TO-15 Johnson & Hoffman, Carle	Summa ID: Place, NY	A1036	D	ate San ate Rec ercent S	eive	d: 02/13		
VOA specia	al List					8 / J.				
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppby		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.10	0.20	0.033	ppbv	J	0.41	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.25	0.20	0.044	ppbv		0.88	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.031	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.96	0.20	0.059	ppbv		2.4	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.23	0.20	0.027	ppbv		0.80	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.47	0.20	0.048	ppby		1.4	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.024	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.11	0.20	0.028	ppbv	J	0.51	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.059	0.040	0.028	ppbv		0.40	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.047	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.60	0.20	0.040	ppbv		2.3	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.26	0.20	0.042	ppbv		1.5	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.30	0.20	0.031	ppbv		1.3	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.11	0.20	0.031	ppby	J	0.48	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.41	0.20	0.031	ppbv		1.8	0.87	ug/m3
CAS No.	Surro	gate Recoveries Ru	n#1 Run	#2 L	imits					
460-00-4	4-Bro	mofluorobenzene 999	6	6	5-128%					

Report of Analysis

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





### VOLATILE ORGANIC COMPOUNDS

Compendium Method TO-15 - Level IV Review

Client: ERM, Melville, NY

#### Site: J&H Manufacturing Site - Carle Place, New York

#### SDG #s: JB22884 and JB24232

Laboratory: <u>Accutest Laboratories – Dayton, New Jersey</u>

Date: January 18, 2013

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	JH-SS-03	JB22884-1	Air
2	JH-IA-03	JB22884-2	Air
3	JH-IA-02	JB22884-3	Air
4	JH-SS-02	JB22884-5	Air
5	JH-IA-05	JB22884-6	Air
6	JH-SS-05	JB22884-7	Air
7	JH-OA-01	JB22884-8	Air
8	JH-IA-01	JB24232-1	Air
9	JH-IA-04	JB24232-2	Air
10	JH-SS-01	JB24232-3	Air
11	JH-SS-04	JB24232-4	Air
12	JH-OA-01	JB24232-5	Air

The samples were analyzed following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (*GC/MS*)". The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC ASP, the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15 and the reviewer's professional judgment.

<u>Chains-of-Custody (COCs)</u> – Samples JH-IA-01, JH-IA-04, JH-SS-01, and JH-SS-04 were initially collected on 12/3/2012. This analysis was cancelled and the samples were recollected on 12/17/2012. No qualification of the sample data is required. No other discrepancies were identified.

Data completeness, Deliverables and Analysis Data Sheets (Form I) – The sample identification for sample EDS ID 12 has been manually corrected from JH-0A-01 to JH-OA-01. No other discrepancies were identified.

<u>Canister Receipt/Log-in sheet (Leak Checks)</u> – A review of the final canister pressures by the laboratory upon sample receipt indicated no discrepancies.

Canister Certification Blanks/Spikes/Pressure Differences - No discrepancies were identified.

Holding Times - No discrepancies were identified.

Surrogates - All Surrogate percent recoveries (%R) were within QC limits.

<u>Blank Spike/ Blank Spike Duplicate Sample (BS/BSD)</u> - The BS/BSD exhibited %R and relative percent difference (RPD) within QC criteria.

<u>Laboratory Duplicate</u> – The RPD for heptane was slightly above QC criteria in the laboratory duplicate analyzed on sample JH-IA-01. No qualification of the sample data is required as the concentrations were both less than twice the reporting limit (RL). No other discrepancies were observed.

<u>Method Blank</u> - The method blank contained no contamination.

<u>GC/MS Tuning</u> - No discrepancies were identified.

Initial Calibration - The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibration exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

<u>Detection Limits/Compound Identification</u> – The standard initial sample volume utilized by the laboratory for samples was 400 ml. The reporting limit (RL) for all compounds is 0.20 ppbv. RLs reported in  $\mu$ g/m<sup>3</sup> are dependent on the molecular weight of each compound and vary significantly.

Ethanol was reported in sample JH-IA-01 with an E qualifier. This indicates that the concentration of Ethanol in sample JH-IA-01 was above the calibration range of the instrument. The sample was not reanalyzed by the laboratory for Ethanol as this compound is suspected to be a contaminant possibly present since it is routinely added to the gas cylinders supplied by the commercial standard suppliers. Ethanol is not of concern at the site. The value is considered estimated and has been qualified J. The value is still useable as an estimated positive detect.

<u>Field Duplicate Sample Precision</u> – No Field Duplicate Sample was collected.

<b>Report of Analysis</b> Pa											
Client San Lab Samp Matrix: Method: Project:	-	JH-SS-03 JB22884-1 AIR - Soil Vapor Cou TO-15 Johnson & Hoffman,	-		020		Date Samp Date Recei Percent So	ved: 12	/03/12 /04/12 a		
Run #1 Run #2	File ID W39402		Analyzed 12/07/12	By YMH	Pre n/a	p Date	Prep n/a	Batch	Analytic VW1592		1
Run #1 Run #2	Initial V 400 ml	Volume									
VOA spec	ial List										
CAS No.	MW	Compound		Result	RL	MDL	Units Q	Result	RL	MDL	Units
67-64-1 106-99-0	58.08 54.09	Acetone 1,3-Butadiene		16.9 ND	0.20 0.20	0.069 0.026		40.1 ND	0.48 0.44	0.16 0.058	ug/mä ug/mä
71-43-2	78.11	Benzene		0.38	0.20	0.029		1.2	0.64	0.093	ug/m
75-27-4	163.8	Bromodichlorometh	ane	ND	0.20	0.031		ND	1.3	0.21	ug/m
75-25-2	252.8	Bromoform		ND	0.20	0.029		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoethene		ND	0.20	0.027	ppbv	ND	0.87	0.12	ug/m
100-44-7	126	Benzyl Chloride		ND	0.20	0.048	ppbv	ND	1.0	0.25	ug/m
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024	ppbv	ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040		ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane		ND	0.20	0.035		ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.026		ND	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane		0.25	0.20	0.055		0.52	0.41	0.11	ug/m
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035		ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachloride		ND	0.20	0.020		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane		ND	0.20	0.050		ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroethane	_	ND	0.20	0.019		ND	0.81	0.077	ug/m
75-35-4 106-93-4	96.94	1,1-Dichloroethylen	e	ND	0.20 0.20	0.023		ND ND	0.79 1.5	0.091	ug/m
100-95-4	187.9 98.96	1,2-Dibromoethane 1,2-Dichloroethane		ND ND	0.20	0.029 0.027	ppbv ppbv	ND ND	0.81	0.22 0.11	ug/m
78-87-5	38.30 113	1,2-Dichloropropan	n	ND	0.20	0.027		ND	0.81	0.11	ug/m ug/m
123-91-1	88.12	1,2-Dichloropropane		ND	0.20	0.034	ppbv	ND	0.92	0.10	ug/m
75-71-8	120.9	Dichlorodifluorome	thane	0.47	0.20	0.12		2.3	0.72	0.43	ug/m
124-48-1	208.3	Dibromochlorometh		ND	0.20	0.024		ND	1.7	0.12	ug/m
156-60-5	96.94	trans-1,2-Dichloroet		ND	0.20	0.000		ND	0.79	0.00	ug/m
156-59-2	96.94	cis-1,2-Dichloroethy		0.82	0.20	0.027		3.3	0.79	0.099	ug/m
10061-01-5		cis-1,3-Dichloropro		ND	0.20	0.033		ND	0.91	0.15	ug/m
541-73-1	147	m-Dichlorobenzene		ND	0.20	0.028		ND	1.2	0.17	ug/m
95-50-1	147	o-Dichlorobenzene		ND	0.20	0.039		ND	1.2	0.23	ug/m
106-46-7	147	p-Dichlorobenzene		ND	0.20	0.060		ND	1.2	0.36	ug/m
10061-02-6		trans-1,3-Dichlorop	ropene	ND	0.20	0.024		ND	0.91	0.11	ug/m
64-17-5	46.07	Ethanol	-	24.4	0.50	0.17	ppbv	46.0	0.94	0.32	ug/m
100-41-4	106.2	Ethylbenzene		0.38	0.20	0.029		1.7	0.87	0.13	ug/m

**MDL** - Method Detection Limit ND = Not detected

**RL** = **Reporting Limit** 

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank



**E** = Indicates value exceeds calibration range

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-SS-03 JB22884-1 AIR - Soil Vapor Comp. Sun TO-15 Johnson & Hoffman, Carle Pla		l <b>020</b>		Date Sa Date Ro Percent	lecei	ved: 12/0	03/12 04/12		4.1 <b>4</b>
VOA specia	al List										_
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.16	0.20	0.028		J	0.79	0.98	0.14	ug/m3
76-13-1	187.4		ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023			ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.23	0.20	0.028	11		0.94	0.82	0.11	ug/m3
87-68-3	260.8		ND	0.20	0.030			ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.32	0.20	0.050			1.1	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	0.19	0.20	0.051		J	0.78	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	6.9	0.20	0.065	ppbv		17	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.25	0.20	0.055	ppbv		0.87	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	5.1	0.20	0.042	ppbv		15	0.59	0.12	ug/m3
108-10-1	100.2		0.26	0.20	0.084			1.1	0.82	0.34	ug/m3
1634-04-4	88.15		ND	0.20	0.045			ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m3
100-42-5	104.1		0.14	0.20	0.025		J	0.60	0.85	0.11	ug/m3
71-55-6	133.4	5	ND	0.20	0.024			ND	1.1	0.13	ug/m3
79-34-5	167.9		ND	0.20	0.034			ND	1.4	0.23	ug/m3
79-00-5	133.4		ND	0.20	0.035			ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.65	0.20	0.029			3.2	0.98	0.14	ug/m3
108-67-8	120.2		0.20	0.20	0.044			0.98	0.98	0.22	ug/m3
540-84-1	114.2		ND	0.20	0.031			ND	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	6.2	0.040				42	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	5.0	0.20	0.074			15	0.59	0.22	ug/m3
108-88-3	92.14		21.5	0.20	0.032			81.0	0.75	0.12	ug/m3
79-01-6	131.4		1.8	0.040				9.7	0.21	0.12	ug/m3
75-69-4	137.4		0.23	0.20	0.028			1.3	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	0
10 02 -	106.2	5	1.1	0.20	0.058			4.8	0.87	0.25	ug/m3
95-47-6	106.2		0.41	0.20	0.037			1.8	0.87	0.16	ug/m3
1330-20-7	106.2	5	1.5	0.20	0.037			6.5	0.87	0.10	ug/m3
CAS No.	Surro	gate Recoveries Run#	#1 Run#	#2 I	Limits						
460-00-4	4-Broi	mofluorobenzene 95%		б	65-128%	<b>ó</b>					

**Report of Analysis** 

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound



15 of 745 ACCUTEST

<b>Report of Analysis</b> P												2
Client Sample ID: Lab Sample ID: Matrix: Method: Project: File ID		JH-IA-03 JB22884-2 AIR - Indoor Air Cor TO-15 Johnson & Hoffman,	-	na ID:A1 e, NY	96		Date S Date R Percen	lecei	ved: 12	2/03/12 2/04/12 a		
Run #1 Run #2	File ID W39380		Analyzed 12/06/12	By YMH	Pre n/a	p Date		Prep 1/a	Batch	Analytic VW1591		1
Run #1 Run #2	Initial V 400 ml	Volume										
VOA speci	al List											
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Unit
67-64-1	58.08	Acetone		17.7	0.20	0.069	ppbv		42.0	0.48	0.16	ug/m
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026			ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene		0.42	0.20	0.029			1.3	0.64	0.093	ug/n
75-27-4	163.8	Bromodichlorometha	ane	ND	0.20	0.031			ND	1.3	0.21	ug/n
75-25-2	252.8	Bromoform		ND	0.20	0.029			ND	2.1	0.30	ug/n
593-60-2	106.9	Bromoethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/n
100-44-7	126	Benzyl Chloride		ND	0.20	0.048			ND	1.0	0.25	ug/n
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/n
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/n
75-00-3	64.52	Chloroethane		ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/n
67-66-3	119.4	Chloroform		0.11	0.20	0.026		J	0.54	0.98	0.13	ug/n
74-87-3	50.49	Chloromethane		0.42	0.20	0.055			0.87	0.41	0.11	ug/n
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035			ND	0.63	0.11	ug/n
56-23-5	153.8	Carbon tetrachloride	9	ND	0.20	0.020			ND	1.3	0.13	ug/n
110-82-7	84.16	Cyclohexane		ND	0.20	0.050			ND	0.69	0.17	ug/n
75-34-3	98.96	1,1-Dichloroethane		ND	0.20	0.019			ND	0.81	0.077	ug/n
75-35-4	96.94	1,1-Dichloroethylen	e	ND	0.20	0.023			ND	0.79	0.091	ug/n
106-93-4	187.9	1,2-Dibromoethane		ND	0.20	0.029	ppbv		ND	1.5	0.22	ug/n
107-06-2	98.96	1,2-Dichloroethane		ND	0.20	0.027			ND	0.81	0.11	ug/n
78-87-5	113	1,2-Dichloropropane	e	ND	0.20	0.034			ND	0.92	0.16	ug/n
123-91-1	88.12	1,4-Dioxane	1	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/n
75-71-8	120.9	Dichlorodifluoromet		0.38	0.20	0.024			1.9	0.99	0.12	ug/n
124-48-1	208.3	Dibromochlorometh		ND	0.20	0.035			ND	1.7	0.30	ug/n
156-60-5	96.94 06.04	trans-1,2-Dichloroet	0	ND	0.20	0.027			ND ND	0.79	0.11	ug/n
156-59-2	96.94	cis-1,2-Dichloroethy		ND ND	0.20	0.025			ND	0.79	0.099	ug/n
10061-01-5 541-73-1	5 111 147	cis-1,3-Dichloroprop m-Dichlorobenzene	Jelle	ND ND	0.20 0.20	0.033			ND ND	0.91	0.15	ug/n
95-50-1	147	o-Dichlorobenzene		ND	0.20	0.028 0.039			ND	1.2 1.2	0.17 0.23	ug/n ug/n
95-50-1 106-46-7	147	p-Dichlorobenzene		ND	0.20	0.039			ND	1.2	0.23	ug/n
100-40-7		trans-1,3-Dichlorop	mana	ND	0.20	0.000			ND	0.91	0.30	ug/n
64-17-5	46.07	Ethanol	opene	28.6	0.20	0.024	ppbv		53.9	0.91	0.11	ug/n
	40.07	Luianvi										

ND = Not detected MDL - Method Detection Limit

**RL** = **Reporting Limit** 

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

 $N = \ Indicates \ presumptive \ evidence \ of \ a \ compound$ 



**E** = Indicates value exceeds calibration range

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Client Sample ID: Lab Sample ID: Matrix: Method: Project: VOA special List		JH-IA-03 JB22884-2 AIR - Indoor Air Comp. Sun TO-15 Johnson & Hoffman, Carle Pla		196		Date Sa Date Ro Percent	eceiv	ved: 12/04			4.2 4
VOA specia	al List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028			ND	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023			ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.028			ND	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030			ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.32	0.20	0.050	ppbv		1.1	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	8.6	0.20	0.065	ppbv		21	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.30	0.20	0.055	11		1.0	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.3	0.20	0.042			6.8	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084			ND	0.82	0.34	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.025			ND	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024			ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20				ND	1.4	0.23	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035			ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.029			ND	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044			ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.10	0.20	0.031		J	0.47	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.16	0.040				1.1	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	1.8	0.20	0.074			5.3	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	0.97	0.20	0.032			3.7	0.75	0.12	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040				ND	0.21	0.19	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.20	0.20	0.028			1.1	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.058			ND	0.87	0.25	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.037			ND	0.87	0.16	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.037			ND	0.87	0.16	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run#	¥2 I	Limits						
460-00-4	4-Bror	mofluorobenzene 98%		6	65-128%	ó					

**Report of Analysis** 

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





<b>Report of Analysis</b> P											f <b>2</b>
Client San Lab Samp Matrix: Method: Project:	-	JH-IA-02 JB22884-3 AIR - Indoor Air Com TO-15 Johnson & Hoffman, (	-	na ID:A2 e, NY	21		Date Samp Date Recei Percent So	ved: 12	2/03/12 2/04/12 ′a		
Run #1 Run #2	File ID W39381		Analyzed 2/06/12	By YMH	Pre n/a	p Date	Prep n/a	Batch	Analytic VW1591		1
Run #1 Run #2	Initial V 400 ml	7olume									
VOA speci	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone		17.5	0.20	0.069	ppbv	41.6	0.48	0.16	ug/m
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026		ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene		0.63	0.20	0.029		2.0	0.64	0.093	
75-27-4	163.8	Bromodichlorometha	ne	ND	0.20	0.031		ND	1.3	0.21	ug/n
75-25-2	252.8	Bromoform		ND	0.20	0.029		ND	2.1	0.30	ug/n
593-60-2	106.9	Bromoethene		ND	0.20	0.027		ND	0.87	0.12	ug/n
100-44-7	126	Benzyl Chloride		ND	0.20	0.048		ND	1.0	0.25	ug/n
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024		ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040	ppbv	ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane		ND	0.20	0.035	ppbv	ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.026	ppbv	ND	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane		0.45	0.20	0.055	ppbv	0.93	0.41	0.11	ug/n
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035		ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachloride		ND	0.20	0.020		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane		ND	0.20	0.050		ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroethane		ND	0.20	0.019	11	ND	0.81	0.077	ug/m
75-35-4	96.94	1,1-Dichloroethylene		ND	0.20	0.023	11	ND	0.79	0.091	ug/m
106-93-4	187.9	1,2-Dibromoethane		ND	0.20	0.029	ppbv	ND	1.5	0.22	ug/n
107-06-2	98.96	1,2-Dichloroethane		ND	0.20	0.027		ND	0.81	0.11	ug/m
78-87-5	113	1,2-Dichloropropane		ND	0.20	0.034		ND	0.92	0.16	ug/m
123-91-1	88.12	1,4-Dioxane		ND	0.20	0.12	ppbv	ND	0.72	0.43	ug/n
75-71-8	120.9	Dichlorodifluorometh		0.40	0.20	0.024		2.0	0.99	0.12	ug/n
124-48-1	208.3	Dibromochlorometha		ND ND	0.20	0.035		ND	1.7	0.30	ug/n
156-60-5	96.94 06.04	trans-1,2-Dichloroeth	0	ND	0.20	0.027	11	ND ND	0.79	0.11	ug/n
156-59-2	96.94	cis-1,2-Dichloroethyl		ND ND	0.20 0.20	0.025		ND ND	0.79	0.099	ug/n
10061-01-5 541-73-1	5 111 147	cis-1,3-Dichloroprop m-Dichlorobenzene	CHE	ND	0.20	0.033 0.028		ND	0.91 1.2	0.15 0.17	ug/n ug/n
95-50-1	147	o-Dichlorobenzene		ND	0.20	0.028		ND	1.2	0.17	ug/n
95-50-1 106-46-7	147	p-Dichlorobenzene		ND	0.20	0.039		ND	1.2	0.23	ug/n
100-40-7		trans-1,3-Dichloropro	nene	ND	0.20	0.000		ND	0.91	0.30	ug/n
64-17-5	46.07	Ethanol	hene	35.6	0.20	0.024	ppbv	67.1	0.91	0.11	ug/n

**MDL** - Method Detection Limit ND = Not detected

**RL** = **Reporting Limit** 

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank



**E** = Indicates value exceeds calibration range

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Client Samj Lab Sample Matrix: Method: Project:	-	JH-IA-02 JB22884-3 AIR - Indoor Air Comp. Sum TO-15 Johnson & Hoffman, Carle Pla		21		Date Sa Date Ro Percent	ecei	ved: 12/0			4.3 4
VOA specia	al List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.20	0.20	0.028			0.98	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023			ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.27	0.20	0.028			1.1	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030			ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.55	0.20	0.050			1.9	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	10.4	0.20	0.065	ppbv		25.6	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.37	0.20	0.055	ppbv		1.3	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.98	0.20	0.042			2.9	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.17	0.20	0.084	ppbv	J	0.70	0.82	0.34	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
100-42-5	104.1	Styrene	0.17	0.20	0.025	ppbv	J	0.72	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034			ND	1.4	0.23	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035			ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.79	0.20	0.029			3.9	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.26	0.20	0.044			1.3	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.25	0.20	0.031			1.2	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.061	0.040				0.41	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.72	0.20	0.074			2.1	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	5.5	0.20	0.032			21	0.75	0.12	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040				ND	0.21	0.19	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.22	0.20	0.028			1.2	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	ug/m3
	106.2	m,p-Xylene	1.5	0.20	0.058			6.5	0.87	0.25	ug/m3
95-47-6	106.2	o-Xylene	0.59	0.20	0.037			2.6	0.87	0.16	ug/m3
1330-20-7	106.2	Xylenes (total)	2.0	0.20	0.037			8.7	0.87	0.16	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run#	#2 I	Limits						
460-00-4	4-Bron	mofluorobenzene 102%		6	65-128%	, D					

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank





<b>Report of Analysis</b> P												f <b>2</b>
Client San Lab Samp Matrix: Method: Project:		JH-SS-02 JB22884-5 AIR - Soil Vapor ( TO-15 Johnson & Hoffma	•		024		Date Sa Date R Percen	ecei	ved: 12	2/03/12 2/04/12 ′a		
Run #1 Run #2	File ID W39406	DF 3.D 1	Analyzed 12/07/12	By YMH	Pre n/a	p Date		Prep 1/a	Batch	Analytic VW1592		1
Run #1 Run #2	Initial V 400 ml	Volume										
VOA spec	ial List											
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1 106-99-0	58.08 54.09	Acetone 1,3-Butadiene		30.0 ND	0.20 0.20	0.069 0.026			71.3 ND	0.48 0.44	0.16 0.058	ug/m3 ug/m3
71-43-2 75-27-4	78.11 163.8	Benzene Bromodichlorome	ethane	0.36 ND	0.20 0.20	0.029 0.031	ppbv		1.2 ND	0.64 1.3	0.093 0.21	
75-25-2 593-60-2	252.8 106.9	Bromoform Bromoethene		ND ND	0.20 0.20	0.029 0.027	ppbv		ND ND	2.1 0.87	0.30 0.12	ug/m ug/m
100-44-7 75-15-0	126 76.14	Benzyl Chloride Carbon disulfide		ND ND	0.20 0.20	0.048 0.024	ppbv		ND ND	1.0 0.62	0.25 0.075	ug/m: ug/m:
108-90-7 75-00-3	112.6 64.52	Chlorobenzene Chloroethane		ND ND	0.20 0.20	0.040	ppbv		ND ND	0.92 0.53	0.18 0.092	ug/m ug/m
67-66-3 74-87-3 107-05-1	119.4 50.49 76.53	Chloroform Chloromethane		3.3 0.19 ND	0.20 0.20 0.20	0.026 0.055 0.035	ppbv	J	16 0.39 ND	0.98 0.41 0.63	0.13 0.11 0.11	ug/m ug/m
56-23-5 110-82-7	70.53 153.8 84.16	3-Chloropropene Carbon tetrachlor Cyclohexane	ide	0.10 ND	0.20 0.20 0.20	0.035 0.020 0.050	ppbv	J	ND 0.63 ND	0.03 1.3 0.69	0.11 0.13 0.17	ug/m3 ug/m3 ug/m3
75-34-3 75-35-4	98.96 96.94	1,1-Dichloroethar 1,1-Dichloroethyl		0.14 ND	0.20 0.20 0.20	0.019 0.023	ppbv	J	0.57 ND	0.81 0.79	0.077 0.091	ug/m ug/m
106-93-4 107-06-2	187.9 98.96	1,2-Dibromoethar 1,2-Dichloroethar	ne	ND ND	0.20 0.20	0.029 0.027	ppbv		ND ND	1.5 0.81	0.22 0.11	ug/m3
78-87-5 123-91-1	113 88.12	1,2-Dichloropropa 1,4-Dioxane	ane	ND ND	0.20 0.20	0.034 0.12			ND ND	0.92 0.72	0.16 0.43	ug/m ug/m
75-71-8 124-48-1	120.9 208.3	Dichlorodifluoron Dibromochlorome		0.51 ND	0.20 0.20	0.024 0.035			2.5 ND	0.99 1.7	0.12 0.30	ug/m ug/m
156-60-5 156-59-2	96.94 96.94	trans-1,2-Dichlore	thylene	ND ND	0.20	0.027	ppbv		ND ND	0.79 0.79	0.11 0.099	ug/m ug/m
10061-01-5 541-73-1 95-50-1	5 111 147 147	cis-1,3-Dichlorop m-Dichlorobenzer o-Dichlorobenzen	ne	ND ND ND	0.20 0.20 0.20	0.033 0.028 0.039	ppbv		ND ND ND	0.91 1.2 1.2	0.15 0.17 0.23	ug/m3 ug/m3 ug/m3
106-46-7 10061-02-0	147 6 111	p-Dichlorobenzen trans-1,3-Dichlor	e	ND ND	0.20 0.20	0.060 0.024	ppbv ppbv		ND ND	1.2 1.2 0.91	0.36 0.11	ug/m ug/m
64-17-5 100-41-4	46.07 106.2	Ethanol Ethylbenzene		37.7 0.33	0.50 0.20	0.17 0.029	ppbv ppbv		71.0 1.4	0.94 0.87	0.32 0.13	ug/m3 ug/m3

**MDL** - Method Detection Limit ND = Not detected

**RL** = **Reporting Limit** 

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank



**E** = Indicates value exceeds calibration range

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Client Samj Lab Sample Matrix: Method: Project:	-	JH-SS-02 JB22884-5 AIR - Soil Vapor Comp. Sun TO-15 Johnson & Hoffman, Carle Pla		1024		Date Sa Date R Percen	ecei	ved: 12/0	03/12 04/12		4.4
VOA specia	al List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.18	0.20	0.028		J	0.88	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.17	0.20	0.028		J	0.70	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	11		ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.28	0.20	0.050			0.99	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	0.30	0.20	0.051			1.2	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	11.5	0.20	0.065			28.3	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.55	0.20	0.055			1.9	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	6.1	0.20	0.042	ppbv		18	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.49	0.20	0.084			2.0	0.82	0.34	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m3
100-42-5	104.1	Styrene	0.14	0.20	0.025	ppbv	J	0.60	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035			ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.73	0.20	0.029			3.6	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.22	0.20	0.044			1.1	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031			ND	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.8	0.040	0.024			12	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	2.1	0.20	0.074	ppbv		6.2	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	4.4	0.20	0.032			17	0.75	0.12	ug/m3
79-01-6	131.4	Trichloroethylene	0.62	0.040	0.036			3.3	0.21	0.19	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.36	0.20	0.028	ppbv		2.0	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	ug/m3
	106.2	m,p-Xylene	1.2	0.20	0.058			5.2	0.87	0.25	ug/m3
95-47-6	106.2	o-Xylene	0.48	0.20	0.037			2.1	0.87	0.16	ug/m3
1330-20-7	106.2	Xylenes (total)	1.7	0.20	0.037			7.4	0.87	0.16	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run#	#2 I	Limits						
460-00-4	4-Bror	mofluorobenzene 101%	ı	6	<b>5-128</b> %	6					

**Report of Analysis** 

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound



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<b>Report of Analysis</b> P											2
Client San Lab Samp Matrix: Method: Project:	-	JH-IA-05 JB22884-6 AIR - Indoor Air TO-15 Johnson & Hoffn	•	na ID:A6 e, NY	42		Date Samp Date Recei Percent So	ved: 12	/03/12 /04/12 1		
Run #1 Run #2	File ID W39384	DF 4.D 1	Analyzed 12/07/12	By YMH	Pre n/a	p Date	Prep n/a	Batch	Analytic VW1591		1
Run #1 Run #2	Initial 400 ml	Volume									
VOA spec	ial List										
CAS No.	MW	Compound		Result	RL	MDL	Units Q	Result	RL	MDL	Units
67-64-1 106-99-0	58.08 54.09	Acetone 1,3-Butadiene		6.1 ND	0.20 0.20	0.069 0.026		14 ND	0.48 0.44	0.16 0.058	ug/m: ug/m:
71-43-2 75-27-4	78.11 163.8	Benzene Bromodichloron	nethane	0.41 ND	0.20 0.20	0.029 0.031	ppbv	1.3 ND	0.64 1.3	0.093 0.21	ug/m ug/m
75-25-2 593-60-2	252.8 106.9	Bromoform Bromoethene		ND ND	0.20 0.20	0.029 0.027	ppbv	ND ND	2.1 0.87	0.30 0.12	ug/m ug/m
100-44-7 75-15-0	126 76.14	Benzyl Chloride Carbon disulfide		ND ND	0.20 0.20	0.048 0.024	ppbv	ND ND	1.0 0.62	0.25 0.075	ug/m ug/m
108-90-7 75-00-3	112.6 64.52	Chlorobenzene Chloroethane		ND ND	0.20	0.040	ppbv	ND ND	0.92	0.18 0.092	ug/m ug/m
67-66-3 74-87-3 107-05-1	119.4 50.49 76.53	Chloroform Chloromethane 3-Chloropropen	0	ND 0.42 ND	0.20 0.20 0.20	0.026 0.055 0.035	ppbv	ND 0.87 ND	0.98 0.41 0.63	0.13 0.11 0.11	ug/m ug/m ug/m
56-23-5 110-82-7	153.8 84.16	Carbon tetrachlo Cyclohexane		ND ND	0.20 0.20 0.20	0.033 0.020 0.050	ppbv	ND ND	1.3 0.69	0.11 0.13 0.17	ug/m ug/m ug/m
75-34-3 75-35-4	98.96 96.94	1,1-Dichloroeth 1,1-Dichloroeth		ND ND	0.20 0.20	0.019 0.023	ppbv	ND ND	0.81 0.79	0.077 0.091	ug/m ug/m
106-93-4 107-06-2	187.9 98.96	1,2-Dibromoeth 1,2-Dichloroeth	ane	ND ND	0.20 0.20	0.029 0.027	ppbv	ND ND	1.5 0.81	0.22 0.11	ug/m ug/m
78-87-5 123-91-1	113 88.12	1,2-Dichloropro 1,4-Dioxane	-	ND ND	0.20 0.20	0.034 0.12	ppbv	ND ND	0.92 0.72	0.16 0.43	ug/m ug/m
75-71-8 124-48-1	120.9 208.3	Dichlorodifluoro Dibromochloror	nethane	0.42 ND	0.20 0.20	0.024 0.035	ppbv	2.1 ND	0.99 1.7	0.12 0.30	ug/m ug/m
156-60-5 156-59-2 10061-01-5	96.94 96.94 5 111	trans-1,2-Dichlo cis-1,2-Dichloro cis-1,3-Dichloro	ethylene	ND ND ND	0.20 0.20 0.20	0.027 0.025 0.033	ppbv	ND ND ND	0.79 0.79 0.91	0.11 0.099 0.15	ug/m ug/m ug/m
541-73-1 95-50-1	147 147 147	m-Dichlorobenz	ene	ND ND ND	0.20 0.20 0.20	0.033 0.028 0.039	ppbv	ND ND ND	1.2 1.2	0.13 0.17 0.23	ug/m ug/m ug/m
106-46-7 10061-02-6	147 6 111	p-Dichlorobenze trans-1,3-Dichlo	ene	ND ND	0.20 0.20	0.060 0.024	ppbv ppbv	ND ND	1.2 0.91	0.36 0.11	ug/m ug/m
64-17-5 100-41-4	46.07 106.2	Ethanol Ethylbenzene		11.7 0.25	0.50 0.20	0.17 0.029	ppbv ppbv	22.0 1.1	0.94 0.87	0.32 0.13	ug/m: ug/m:

ND = Not detected MDL - Method Detection Limit

**RL** = **Reporting Limit** 

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank



**E** = Indicates value exceeds calibration range

Client Sam Lab Sample Matrix: Method: Project:		JH-IA-05 JB22884-6 AIR - Indoor Air Comp. Sun TO-15 Johnson & Hoffman, Carle Pla		342		Date Sa Date R Percen	Receiv	ved: 12/0	03/12 04/12		4.5 4
VOA specia	al List										_
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	0	0.15	0.20	0.028		J	0.74	0.98	0.14	ug/m3
76-13-1	187.4		ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9		ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2		0.18	0.20	0.028		J	0.74	0.82	0.11	ug/m3
87-68-3	260.8		ND	0.20	0.030			ND	2.1	0.32	ug/m3
110-54-3	86.17		0.31	0.20	0.050			1.1	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	5.6	0.20	0.065			14	0.49	0.16	ug/m3
75-09-2	84.94	5	0.45	0.20	0.055	ppbv		1.6	0.69	0.19	ug/m3
78-93-3	72.11	5 5	0.96	0.20	0.042			2.8	0.59	0.12	ug/m3
108-10-1	100.2		0.12	0.20		ppbv	J	0.49	0.82	0.34	ug/m3
1634-04-4	88.15	5 5	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m3
100-42-5	104.1	5	0.36	0.20	0.025			1.5	0.85	0.11	ug/m3
71-55-6	133.4		ND	0.20	0.024			ND	1.1	0.13	ug/m3
79-34-5	167.9		ND	0.20	0.034			ND	1.4	0.23	ug/m3
79-00-5	133.4		ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
95-63-6	120.2	<b>j</b>	0.53	0.20	0.029	ppbv		2.6	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.16	0.20	0.044	ppbv	J	0.79	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.16	0.20	0.031	ppbv	J	0.75	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.052	0.040				0.35	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.84	0.20	0.074	ppbv		2.5	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	3.2	0.20	0.032	ppbv		12	0.75	0.12	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040		ppbv		ND	0.21	0.19	ug/m3
75-69-4	137.4		0.22	0.20	0.028	ppbv		1.2	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	
	106.2	0	0.90	0.20	0.058			3.9	0.87	0.25	ug/m3
95-47-6	106.2		0.34	0.20	0.037			1.5	0.87	0.16	ug/m3
1330-20-7	106.2	5	1.2	0.20	0.037			5.2	0.87	0.16	ug/m3
CAS No.	Surro	gate Recoveries Run#	#1 Run#	#2 I	Limits						
460-00-4	4-Broi	mofluorobenzene 100%	>	в	65-12 <b>8</b> %	6					

**Report of Analysis** 

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





<b>Report of Analysis</b> P											age 1 of	2
Client Sample ID: Lab Sample ID: Matrix: Method: Project: File ID		JH-SS-05 JB22884-7 AIR - Soil Vapor Com TO-15 Johnson & Hoffman, C	-		10		Date Sa Date R Percen	ecei	ved: 12	/03/12 /04/12 a		
Run #1 Run #2	File ID W39407		nalyzed 2/07/12	By YMH	Pre n/a	p Date		Prep ∕a	Batch	Analytic VW1592		1
Run #1 Run #2	Initial V 400 ml	Volume										
VOA speci	ial List											
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1 106-99-0	58.08 54.09	Acetone 1,3-Butadiene		4.4 ND	0.20 0.20	0.069 0.026			10 ND	0.48 0.44	0.16 0.058	ug/m3 ug/m3
71-43-2	78.11	Benzene		0.18	0.20	0.029		J	0.58	0.64	0.093	ug/m
75-27-4	163.8	Bromodichloromethar	ie	ND	0.20	0.031			ND	1.3	0.21	ug/m
75-25-2	252.8	Bromoform		ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/m
100-44-7	126	Benzyl Chloride		ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/m
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040			ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane		ND	0.20	0.035			ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.026			ND	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane		ND	0.20	0.055			ND	0.41	0.11	ug/m
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachloride		ND	0.20	0.020			ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane		ND	0.20	0.050			ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroethane		ND	0.20	0.019			ND	0.81	0.077	ug/m
75-35-4	96.94	1,1-Dichloroethylene		ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m
106-93-4	187.9	1,2-Dibromoethane		ND	0.20	0.029	ppbv		ND	1.5	0.22	ug/m
107-06-2	98.96	1,2-Dichloroethane		ND ND	0.20	0.027			ND ND	0.81	0.11	ug/m
78-87-5 123-91-1	113 88.12	1,2-Dichloropropane 1,4-Dioxane		ND ND	0.20 0.20	0.034 0.12	ppbv ppbv		ND ND	0.92 0.72	0.16 0.43	ug/m
75-71-8	<b>88.12</b> 120.9	Dichlorodifluorometh	ana	ND 0.44	0.20	0.12			ND 2.2	0.72	0.43 0.12	ug/m ug/m
124-48-1	208.3	Dibromochlorometha		0.44 ND	0.20	0.024			ND	0.99 1.7	0.12	ug/m
156-60-5	208.3 96.94	trans-1,2-Dichloroeth		0.23	0.20	0.033			0.91	0.79	0.30	ug/m
156-59-2	96.94	cis-1,2-Dichloroethyl	,	1.5	0.20	0.027			5.9	0.79	0.099	ug/m
10061-01-5		cis-1,3-Dichloroprope		ND	0.20	0.023			ND	0.91	0.000	ug/m
541-73-1	147	m-Dichlorobenzene		ND	0.20	0.028			ND	1.2	0.17	ug/m
95-50-1	147	o-Dichlorobenzene		ND	0.20	0.039			ND	1.2	0.23	ug/m
106-46-7	147	p-Dichlorobenzene		ND	0.20	0.060			ND	1.2	0.36	ug/m
10061-02-6		trans-1,3-Dichloropro	pene	ND	0.20	0.024			ND	0.91	0.11	ug/m
64-17-5	46.07	Ethanol	-	11.4	0.50	0.17	ppbv		21.5	0.94	0.32	ug/m
100-41-4	106.2	Ethylbenzene		0.24	0.20	0.029			1.0	0.87	0.13	ug/m

**MDL** - Method Detection Limit ND = Not detected

**RL** = **Reporting Limit** 

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank



**E** = Indicates value exceeds calibration range

Client Samj Lab Sample Matrix: Method: Project:		JH-SS-05 JB22884-7 AIR - Soil Vapor Comp. Sun TO-15 Johnson & Hoffman, Carle Pla		310		Date Sa Date R Percen	lecei	ved: 12/0			4.6
VOA specia	ıl List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.14	0.20	0.028		J	0.69	0.98	0.14	ug/m3
76-13-1	187.4		ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9		ND	0.20	0.023			ND	1.4	0.16	ug/m3
142-82-5	100.2		0.13	0.20	0.028	ppbv	J	0.53	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	11		ND	2.1	0.32	ug/m3
110-54-3	86.17		ND	0.20	0.050			ND	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	5.0	0.20	0.065			12	0.49	0.16	ug/m3
75-09-2	84.94	5	0.37	0.20	0.055	11		1.3	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.1	0.20	0.042			3.2	0.59	0.12	ug/m3
108-10-1	100.2		0.16	0.20	0.084		J	0.66	0.82	0.34	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m3
100-42-5	104.1	5	0.36	0.20				1.5	0.85	0.11	ug/m3
71-55-6	133.4		ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9		ND	0.20		ppbv		ND	1.4	0.23	ug/m3
79-00-5	133.4		ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.49	0.20	0.029			2.4	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.15	0.20	0.044	ppbv	J	0.74	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	27.0	0.040				183	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	1.1	0.20	0.074	ppbv		3.2	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	6.2	0.20	0.032			23	0.75	0.12	ug/m3
79-01-6	131.4	Trichloroethylene	1.4	0.040		ppbv		7.5	0.21	0.19	ug/m3
75-69-4	137.4		0.24	0.20	0.028	ppbv		1.3	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	
	106.2	5	0.76	0.20	0.058			3.3	0.87	0.25	ug/m3
95-47-6	106.2		0.30	0.20	0.037			1.3	0.87	0.16	ug/m3
1330-20-7	106.2		1.1	0.20	0.037			4.8	0.87	0.16	ug/m3
CAS No.	Surrog	gate Recoveries Run#	1 Run#	#2 I	Limits						
460-00-4	4-Bror	mofluorobenzene 97%		6	65-128%	6					

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





			Repo	ort of A	nalys	sis			Р	age 1 of	2
Client Sam Lab Sampl Matrix: Method: Project:	-	JH-OA-01Date Sampled:12/03/12JB22884-8Date Sampled:12/03/12AIR - Ambient Air Comp.Summa ID:A814Date Received:12/04/12TO-15Percent Solids:n/aJohnson & Hoffman, Carle Place, NYSumma ID:A814Summa ID:									
Run #1 Run #2	File ID W39386		Analyzed 2/07/12	By YMH	Pre n/a	p Date	Prep n/a	Batch	Analytic VW1591		1
Run #1 Run #2	Initial V 400 ml	Volume									
VOA speci	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units Q	Result	RL	MDL	Units
67-64-1 106-99-0	58.08 54.09	Acetone 1,3-Butadiene		3.7 ND	0.20 0.20	0.069 0.026		8.8 ND	0.48 0.44	0.16 0.058	ug/m3 ug/m3
71-43-2 75-27-4	78.11 163.8	Benzene Bromodichlorometha	ne	0.31 ND	0.20 0.20	0.029	ppbv	0.99 ND	0.64 1.3	0.093 0.21	ug/m
75-25-2 593-60-2 100-44-7	252.8 106.9 126	Bromoform Bromoethene Benzyl Chloride		ND ND ND	0.20 0.20 0.20	0.029 0.027 0.048	ppbv	ND ND ND	2.1 0.87 1.0	0.30 0.12 0.25	ug/m ug/m ug/m
75-15-0 108-90-7	76.14 112.6	Carbon disulfide Chlorobenzene		ND ND	0.20 0.20 0.20	0.048	ppbv	ND ND ND	0.62 0.92	0.25 0.075 0.18	ug/ma ug/ma ug/ma
75-00-3 67-66-3	64.52 119.4	Chloroethane Chloroform		ND ND	0.20 0.20	0.035 0.026	ppbv	ND ND	0.53 0.98	0.092 0.13	ug/m ug/m
74-87-3 107-05-1	50.49 76.53	Chloromethane 3-Chloropropene		0.45 ND	0.20 0.20	0.055 0.035	ppbv	0.93 ND	0.41 0.63	0.11 0.11	ug/m ug/m
56-23-5 110-82-7 75-34-3	153.8 84.16 98.96	Carbon tetrachloride Cyclohexane		ND ND	0.20 0.20 0.20	0.020 0.050	ppbv	ND ND	1.3 0.69	0.13 0.17	ug/m ug/m
75-34-3 75-35-4 106-93-4	98.90 96.94 187.9	1,1-Dichloroethane 1,1-Dichloroethylene 1,2-Dibromoethane	•	ND ND ND	0.20 0.20 0.20	0.019 0.023 0.029	ppbv	ND ND ND	0.81 0.79 1.5	0.077 0.091 0.22	ug/m ug/m ug/m
107-06-2 78-87-5	98.96 113	1,2-Dichloroethane 1,2-Dichloropropane		ND ND	0.20 0.20 0.20	0.027 0.034	ppbv	ND ND	0.81 0.92	0.11 0.16	ug/m ug/m
123-91-1 75-71-8	88.12 120.9	1,4-Dioxane Dichlorodifluorometl	nane	ND 0.48	0.20 0.20	0.12 0.024	ppbv ppbv	ND 2.4	0.72 0.99	0.43 0.12	ug/m ug/m
124-48-1 156-60-5	208.3 96.94	Dibromochlorometha trans-1,2-Dichloroeth	ıylene	ND ND	0.20 0.20	0.035 0.027	ppbv	ND ND	1.7 0.79	0.30 0.11	ug/m ug/m
156-59-2 10061-01-5 541 73 1		cis-1,2-Dichloroethyl cis-1,3-Dichloroprop		ND ND ND	0.20 0.20 0.20	0.025	ppbv	ND ND	0.79 0.91 1.2	0.099 0.15 0.17	ug/m ug/m
541-73-1 95-50-1 106-46-7	147 147 147	m-Dichlorobenzene o-Dichlorobenzene p-Dichlorobenzene		ND ND ND	0.20 0.20 0.20	0.028 0.039 0.060	ppbv	ND ND ND	1.2 1.2 1.2	0.17 0.23 0.36	ug/m ug/m ug/m
10061-02-6 64-17-5	5 111 46.07	trans-1,3-Dichloropro Ethanol	opene	ND 9.1	0.20 0.50	0.024 0.17	ppbv ppbv	ND 17	0.91 0.94	0.11 0.32	ug/m ug/m
100-41-4	106.2	Ethylbenzene		0.097	0.20	0.029	ppbv J	0.42	0.87	0.13	ug/m

ND = Not detected MDL - Method Detection Limit

**RL** = **Reporting Limit** 

J = Indicates an estimated value

**B** = Indicates analyte found in associated method blank





**E** = Indicates value exceeds calibration range

Client Sample ID:       JH-OA-01         Lab Sample ID:       JB22884-8         Matrix:       AIR - Ambient Air Comp. Summa ID: A814       Date Sampled: 12/03/12         Method:       TO-15         Project:       Johnson & Hoffman, Carle Place, NY					4.7 4						
VOA specia	al List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	5	ND	0.20	0.028			ND	0.98	0.14	ug/m3
76-13-1	187.4		ND	0.20	0.028			ND	1.5	0.21	ug/m3
76-14-2	170.9		ND	0.20	0.023			ND	1.4	0.16	ug/m3
142-82-5	100.2	1	0.098	0.20	0.028		J	0.40	0.82	0.11	ug/m3
87-68-3	260.8		ND	0.20	0.030			ND	2.1	0.32	ug/m3
110-54-3	86.17		0.35	0.20	0.050			1.2	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.73	0.20	0.065			1.8	0.49	0.16	ug/m3
75-09-2	84.94		1.5	0.20	0.055			5.2	0.69	0.19	ug/m3
78-93-3	72.11	5 5	0.36	0.20	0.042			1.1	0.59	0.12	ug/m3
108-10-1	100.2	5 5	ND	0.20	0.084			ND	0.82	0.34	ug/m3
1634-04-4	88.15		ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m3
100-42-5	104.1	5	ND	0.20	0.025			ND	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9		ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m3
79-00-5	133.4		ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
95-63-6	120.2		0.13	0.20	0.029		J	0.64	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.11	0.20		ppbv	J	0.51	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.049					0.33	0.27	0.16	ug/m3
109-99-9	72.11		ND	0.20	0.074			ND	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	0.64	0.20	0.032	ppbv		2.4	0.75	0.12	ug/m3
79-01-6	131.4		ND					ND	0.21	0.19	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.35	0.20	0.028	ppbv		2.0	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	
	106.2	m,p-Xylene	0.32	0.20	0.058			1.4	0.87	0.25	ug/m3
95-47-6	106.2	o-Xylene	0.11	0.20	0.037	ppbv	J	0.48	0.87	0.16	ug/m3
1330-20-7	106.2	Xylenes (total)	0.43	0.20	0.037			1.9	0.87	0.16	ug/m3
CAS No.	Surro	gate Recoveries Run#	#1 Run#	#2 I	Limits						
460-00-4	4-Broi	mofluorobenzene 99%		6	<b>65-128</b> %	6					

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2

Accutest LabLink@705779 21:11 03-Jan-2013

			Repo	ort of A	nalysis		Page 1 of 2		
Client San Lab Sam Matrix: Method: Project:	ole ID: JB2 AIF TO	JH-IA-01 JB24232-1 AIR - Indoor Air Comp. Summa ID: A070 TO-15 Johnson & Hoffman, Carle Place, NY				Date Sampled:12/17/12Date Received:12/18/12Percent Solids:n/a			
Run #1 Run #2	<b>File ID</b> 3W31607.D	<b>DF</b> 1	<b>Analyzed</b> 12/19/12	By YXC	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	h Analytical Batch V3W1228		
Run #1 Run #2	<b>Initial Volu</b> 400 ml	me							

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units
67-64-1	58.08	Acetone	9.0	0.20	0.069	ppbv	21	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.026	ppbv	ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.33	0.20	0.029	ppbv	1.1	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv	ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv	ND	2.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv	ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv	ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv	ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv	ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv	ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.026	ppbv	ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.63	0.20	0.055	ppbv	1.3	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv	ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv	ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv	ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv	ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv	ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029	ppbv	ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv	ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv	ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv	ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.57	0.20	0.024	ppbv	2.8	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.035	ppbv	ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv	ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv	ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.033	ppbv	ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv	ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.039	ppbv	ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.060	ppbv	ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.024	ppbv	ND	0.91	ug/m3
64-17-5	46.07	Ethanol	92.4	0.50	0.17	ppbv <b>J</b> 🗾	174	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.12	0.20	0.029	ppbv J	0.52	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



E = Indicates value exceeds calibration range

Client Sample ID:	JH-IA-01		
Lab Sample ID:	JB24232-1	Date Sampled:	12/17/12
Matrix:	AIR - Indoor Air Comp. Summa ID: A070	Date Received:	12/18/12
Method:	TO-15	Percent Solids:	n/a
Project:	Johnson & Hoffman, Carle Place, NY		
0			

# **Report of Analysis**

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.25	0.20	0.028	ppbv		1.0	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.26	0.20	0.050	ppbv		0.92	0.70	ug/m3
591-78-6	100	2-Hexanone	0.22	0.20	0.051	ppbv		0.90	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	17.5	0.20	0.065	ppbv		43.0	0.49	ug/m3
75-09-2	84.94	Methylene chloride	1.1	0.20	0.055	ppbv		3.8	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.83	0.20	0.042	ppbv		2.4	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.025	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.14	0.20	0.029	ppbv	J	0.69	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.55	0.040	0.024	ppbv		3.7	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.074	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.73	0.20	0.032	ppbv		2.8	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036	ppbv		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.29	0.20	0.028	ppbv		1.6	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.34	0.20	0.058	ppbv		1.5	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.14	0.20	0.037	ppbv	J	0.61	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.48	0.20	0.037	ppbv		2.1	0.87	ug/m3
CAS No.	Surrog	gate Recoveries Run#	1 Run#	#2 L	imits					
460-00-4	4-Bron	nofluorobenzene 89%		6	5-128%					

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound

Page 2 of 2

4.1 **4** 



Accutest LabLink@705779 21:11 03-Jan-2013

			Repo	ort of A	nalysis		Page 1 of 2
Client Sar Lab Samp Matrix: Method: Project:	ole ID: JB AI TC	-IA-04 24232-2 R - Indoor Air 9-15 1nson & Hoffr	<sup>-</sup> Comp. Summ nan, Carle Place	a ID: A6 e, NY	72	Date Sampled: Date Received: Percent Solids:	/-0/
Run #1 Run #2	<b>File ID</b> 3W31609.I	<b>DF</b> D 1	<b>Analyzed</b> 12/19/12	By YXC	<b>Prep Date</b> n/a	<b>Prep Batc</b> n/a	h Analytical Batch V3W1228
Run #1 Run #2	<b>Initial Volu</b> 400 ml	ıme					

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	3.2	0.20	0.069	ppbv		7.6	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.026	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.22	0.20	0.029	ppbv		0.70	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv		ND	2.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	0.16	0.20	0.026	ppbv	J	0.78	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.60	0.20	0.055	ppbv		1.2	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.098	0.20	0.020	ppbv	J	0.62	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.65	0.20	0.024	ppbv		3.2	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.035	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.033	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.039	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.060	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.024	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Ethanol	15.9	0.50	0.17	ppbv		30.0	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.029	ppbv		ND	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





E = Indicates value exceeds calibration range

Client Sample ID:	JH-IA-04		
Lab Sample ID:	JB24232-2	Date Sampled:	12/17/12
Matrix:	AIR - Indoor Air Comp. Summa ID: A672	Date Received:	12/18/12
Method:	TO-15	Percent Solids:	n/a
Project:	Johnson & Hoffman, Carle Place, NY		
-			

# **Report of Analysis**

#### VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv	ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv	ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv	ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.028	ppbv	ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv	ND	2.1	ug/m3
110-54-3	86.17	Hexane	7.2	0.20	0.050	ppbv	25	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv	ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv	ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.7	0.20	0.065	ppbv	4.2	0.49	ug/m3
75-09-2	84.94	Methylene chloride	4.3	0.20	0.055	ppbv	15	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	0.042	ppbv	ND	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv	ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv	ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv	ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.025	ppbv	ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv	ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv	ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv	ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.029	ppbv	ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044	ppbv	ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.54	0.20	0.031	ppbv	2.5	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.054	0.040	0.024	ppbv	0.37	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.074	ppbv	ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.31	0.20	0.032	ppbv	1.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036	ppbv	ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.99	0.20	0.028	ppbv	5.6	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv	ND	0.51	ug/m3
	106.2	m,p-Xylene	0.22	0.20	0.058	ppbv	0.96	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.037	ppbv	ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.22	0.20	0.037	ppbv	0.96	0.87	ug/m3
CAS No.	Surrog	gate Recoveries Run#	1 Run#	#2 L	imits				
460-00-4	4-Bron	nofluorobenzene 87%		6	5-128%				

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound

4.2

4



Accutest LabLink@705779 21:11 03-Jan-2013

<b>au</b> ( <b>a</b>					v		0
	mple ID: JH-S					_ ~ ~	
Lab Sam	ple ID: JB242	232-3				Date Sampled:	12/17/12
Matrix:	AIR -	Soil Vapo	r Comp. Sumn	na ID: A84	41	Date Received:	12/18/12
Method:	TO-1	5	-			Percent Solids:	n/a
Project:	Johns	on & Hoffi	man, Carle Place	e, NY			
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W31610.D	1	12/19/12	YXC	n/a	n/a	V3W1228
Run #2							
	Initial Volum	e					
Run #1	400 ml						
D #2							

**Report of Analysis** 

Run #2

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	4.1	0.20	0.069	ppbv		9.7	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.026	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.19	0.20	0.029	ppbv	J	0.61	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv		ND	2.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.026	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.17	0.20	0.055	ppbv	J	0.35	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv		ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.59	0.20	0.024	ppbv		2.9	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.035	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.033	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.039	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.060	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.024	ppbv		ND	0.91	ug/m3
64-17-5	46.07	Ethanol	22.4	0.50	0.17	ppbv		42.2	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.39	0.20	0.029	ppbv		1.7	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound



Page 1 of 2

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Client Sample ID:	JH-SS-01		
Lab Sample ID:	JB24232-3	Date Sampled:	12/17/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A841	Date Received:	12/18/12
Method:	TO-15	Percent Solids:	n/a
Project:	Johnson & Hoffman, Carle Place, NY		

# **Report of Analysis**

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.35	0.20	0.028	ppbv		1.7	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.11	0.20	0.028	ppbv	J	0.45	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.15	0.20	0.050	ppbv	J	0.53	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	11.5	0.20	0.065	ppbv		28.3	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.44	0.20	0.055	ppbv		1.5	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.62	0.20	0.042	ppbv		1.8	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.11	0.20	0.025	ppbv	J	0.47	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	1.5	0.20	0.029	ppbv		7.4	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.37	0.20	0.044	ppbv		1.8	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.43	0.040	0.024	ppbv		2.9	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.46	0.20	0.074	ppbv		1.4	0.59	ug/m3
108-88-3	92.14	Toluene	5.1	0.20	0.032	ppbv		19	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.13	0.040	0.036	ppbv		0.70	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.31	0.20	0.028	ppbv		1.7	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	1.5	0.20	0.058	ppbv		6.5	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.59	0.20	0.037	ppbv		2.6	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	2.1	0.20	0.037	ppbv		9.1	0.87	ug/m3
CAS No.	Surrog	gate Recoveries Run#	1 Run#	#2 L	imits					
460-00-4	4-Bron	nofluorobenzene 91%		6	5-128%					

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

 $N= \ Indicates \ presumptive \ evidence \ of \ a \ compound$ 

4.3

4



			Repo	ort of A	nalysis		Page 1 of 2
Client San Lab Samj Matrix: Method: Project:	ple ID: JB24 AIR TO-2	232-4 - Soil Vapor 5	r Comp. Summ nan, Carle Place	na ID: A2 e, NY	34	Date Sampled: Date Received: Percent Solids:	
Run #1 Run #2	<b>File ID</b> 3W31611.D	<b>DF</b> 1	<b>Analyzed</b> 12/19/12	By YXC	<b>Prep Date</b> n/a	<b>Prep Batc</b> n/a	h Analytical Batch V3W1228
Run #1 Run #2	<b>Initial Volum</b> 400 ml	ne					

#### VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units
67-64-1	58.08	Acetone	14.2	0.20	0.069	ppbv	33.7	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.026	ppbv	ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.41	0.20	0.029	ppbv	1.3	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv	ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv	ND	2.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv	ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv	ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv	ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv	ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv	ND	0.53	ug/m3
67-66-3	119.4	Chloroform	0.21	0.20	0.026	ppbv	1.0	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.26	0.20	0.055	ppbv	0.54	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv	ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv	ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv	ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv	ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv	ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029	ppbv	ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv	ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv	ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv	ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.57	0.20	0.024	ppbv	2.8	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.035	ppbv	ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv	ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.29	0.20	0.025	ppbv	1.1	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.033	ppbv	ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv	ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.039	ppbv	ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.060	ppbv	ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.024	ppbv	ND	0.91	ug/m3
64-17-5	46.07	Ethanol	21.8	0.50	0.17	ppbv	41.1	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.69	0.20	0.029	ppbv	3.0	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





E = Indicates value exceeds calibration range

J = Indicates an estimated value

Client Sample ID:	JH-SS-04		
Lab Sample ID:	JB24232-4	Date Sampled:	12/17/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A234	Date Received:	12/18/12
Method:	TO-15	Percent Solids:	n/a
Project:	Johnson & Hoffman, Carle Place, NY		
-			

# **Report of Analysis**

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	0.22	0.20	0.028	ppbv		1.1	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	4.5	0.20	0.028	ppbv		18	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.51	0.20	0.050	ppbv		1.8	0.70	ug/m3
591-78-6	100	2-Hexanone	10.5	0.20	0.051	ppbv		42.9	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	12.7	0.20	0.065	ppbv		31.2	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.85	0.20	0.055	ppbv		3.0	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.98	0.20	0.042	ppbv		2.9	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.26	0.20	0.084	ppbv		1.1	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	0.16	0.20	0.025	ppbv	J	0.68	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.80	0.20	0.029	ppbv		3.9	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.30	0.20	0.044	ppbv		1.5	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.12	0.20	0.031	ppbv	J	0.56	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	35.8	0.040	0.024	ppbv		243	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.54	0.20	0.074	ppbv		1.6	0.59	ug/m3
108-88-3	92.14	Toluene	28.2	0.20	0.032	ppbv		106	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	12.3	0.040	0.036	ppbv		66.1	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.32	0.20	0.028	ppbv		1.8	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	1.8	0.20	0.058	ppbv		7.8	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.68	0.20	0.037	ppbv		3.0	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	2.5	0.20	0.037	ppbv		11	0.87	ug/m3
CAS No.	Surrog	gate Recoveries Run#	1 Run#	#2 L	imits					
460-00-4	4-Bron	nofluorobenzene 92%		6	5-128%					

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$ 

N = Indicates presumptive evidence of a compound

4.4

4



		OA	Repo	ort of A	nalysis		Page 1 of 2
Client Sa Lab Samj Matrix: Method: Project:	ple ID: JB2 AIR TO		Air Comp. Sum	nma ID: A	Date Sampled: Date Received: Percent Solids:	, - 0,	
Run #1 Run #2	<b>File ID</b> 3W31612.D	<b>DF</b> 1	<b>Analyzed</b> 12/19/12	By YXC	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch V3W1228
Run #1 Run #2	<b>Initial Volu</b> 400 ml	me					

**VOA special List** 

CAS No.	MW	Compound	Result	RL	MDL	Units Q	Result	RL	Units
67-64-1	58.08	Acetone	2.3	0.20	0.069	ppbv	5.5	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.026	ppbv	ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.37	0.20	0.029	ppbv	1.2	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv	ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv	ND	2.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv	ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv	ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv	ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv	ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv	ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.026	ppbv	ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.58	0.20	0.055	ppbv	1.2	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv	ND	0.63	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv	ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv	ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv	ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv	ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029	ppbv	ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv	ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv	ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv	ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.56	0.20	0.024	ppbv	2.8	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.035	ppbv	ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv	ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv	ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.033	ppbv	ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv	ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.039	ppbv	ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.060	ppbv	ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.024	ppbv	ND	0.91	ug/m3
64-17-5	46.07	Ethanol	3.3	0.50	0.17	ppbv	6.2	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.15	0.20	0.029	ppbv J	0.65	0.87	ug/m3

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



E = Indicates value exceeds calibration range

	OA Report of Analysi	is		Page 2 of
Client Sample ID:				
-	JB24232-5	Date Sampled:	12/17/12	
Matrix:	AIR - Ambient Air Comp. Summa ID: A627	Date Received:	12/18/12	
Method:	TO-15	<b>Percent Solids:</b>	n/a	
Project:	Johnson & Hoffman, Carle Place, NY			

VOA special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.028	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.41	0.20	0.050	ppbv		1.4	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.69	0.20	0.065	ppbv		1.7	0.49	ug/m3
75-09-2	84.94	Methylene chloride	3.3	0.20	0.055	ppbv		11	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.23	0.20	0.042	ppbv		0.68	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.025	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.11	0.20	0.029	ppbv .	J	0.54	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.10	0.20	0.031	ppbv .	J	0.47	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.8	0.040	0.024	ppbv		12	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.074	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	24.6	0.20	0.032	ppbv		92.7	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.041	0.040	0.036	ppbv		0.22	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.30	0.20	0.028	ppbv		1.7	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
	106.2	m,p-Xylene	0.55	0.20	0.058	ppbv		2.4	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.18	0.20	0.037	ppbv .	J	0.78	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.73	0.20	0.037	ppbv		3.2	0.87	ug/m3
CAS No.	Surrog	gate Recoveries Ru	n#1 Run	#2 L	imits					
460-00-4	4-Bron	nofluorobenzene 89%	ó	6	5-128%					

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



4.5 **4** 





### DATA USABILITY SUMMARY REPORT (DUSR)

#### Client: ERM, Melville, NY

#### Site: <u>J&H Manufacturing Site – Carle Place, New York</u>

#### SDG #s: JB19935 and JB23169

Laboratory: <u>Accutest Laboratories – Dayton, New Jersey</u>

#### Date: February 15, 2013

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
01	BG-01 (0"-2")	JB19935-1	Soil
02	DUP102312A (BG-01 (0"-2"))	JB19935-2	Soil
03	BG-01 (0'-1')	JB19935-3	Soil
03MS	BG-01 (0'-1') MS	JB19935-3S	Soil
03MSD	BG-01 (0'-1') MSD	JB19935-3D	Soil
04	FB102312A	JB19935-4	Field Blank Soil
05	MW-04	JB19935-5	Aqueous
05 MS	MW-04 MS	JB19935-5S	Aqueous
05 MSD	MW-04 MSD	JB19935-5D	Aqueous
06	MW-04 (filtered)	JB19935-5F	Aqueous
07	DUP102312 (MW-04)	JB19935-6	Aqueous
08	FB102312	JB19935-7	Field Blank Water
09	SR-01 (9-9.5)	JB23169-1	Soil
09 MS	SR-01 (9-9.5) MS	JB23169-1S	Soil
09 MSD	SR-01 (9-9.5) MSD	JB23169-1D	Soil
10	SR-01 (10-10.5)	JB23169-2	Soil
11	SR-01 (11-11.5)	JB23169-3	Soil
12	SR-01 (13-13.5)	JB23169-4	Soil
13	FB120612	JB23169-5	Field Blank Soil
14	DUP120612 (SR-01 (9-9.5))	JB23169-6	Soil
15	MW-04	JB23169-7	Aqueous
15 MS	MW-04 MS	JB23169-7S	Aqueous
15 MSD	MW-04 MSD	JB23169-7D	Aqueous
16	DUP120612A (MW-04)	JB23169-8	Aqueous
17	FB120612A	JB23169-9	Field Blank Water

All samples in Accutest Job Number JB19935 were collected on 10/23/2012 and submitted to the laboratory under proper chain-of-custody (COC) procedures. The laboratory was without power from 10/29/2012 to 11/05/2012 due a storm. Refrigerator storage temperatures are recorded electronically by the laboratory. No temperature was recorded on 10/29/2012 or 10/31/2012 however temperatures were manually recorded on all other says and reached a maximum of 8.5°C for the refrigerator (R-31) that all samples in this Job Number were stored. Conservatively all results for all samples are considered possibly biased low and have been qualified J/UJ. The data are still valid and usable for project objectives. It should be noted that all aqueous samples were recollected (Accutest Job Number JB23169). The soil samples were not recollected.

The laboratory reports non-detects with an ND on the Report of Analysis Summaries (Form Is). In the review, qualification of non-detect data will be listed as UJ. The Form Is will only be qualified with a "J" next to the ND.

The sample ID for EDS ID 15, 15MS and 15MSD has been edited from how it appeared on the COC. A zero has been added after the dash (MW-04). The Form I has been manually corrected.

# SEMIVOLATILE ORGANIC COMPOUNDS USEPA SW-846 8270D

The analytical method, the NYSDEC ASP, the USEPA CLP National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-22, Revision 3, October 2006: Validating Semivolatile Organic Compounds by SW-846 Method 8270, and the reviewer's professional judgment were used in evaluating the data in this summary report.

Note(s) – Sample MW-04 collected on 10/23/2012 was collected in duplicate. One set (EDS ID 06) was filtered in the field.

Only Polyaromatic Hydrocarbons (PAHs) were analyzed for.

All aqueous samples were analyzed in Selective Ion Monitoring (SIM) mode.

<u>Holding Times (HT)</u> – All holding times were met for all samples except for EDS ID 13, 15, 16, and 17 which were extracted one day outside HT due to a scheduling error. All results are considered possibly biased low and have been qualified J/UJ. The results are still valid and usable for project objectives. All analysis holding times were met.

Surrogates - All surrogate percent recovery (%R) were within QC criteria.

<u>MS/MSD</u> - An MS/MSD was collected on EDS ID 05, EDS ID 09, and EDS ID 15. The laboratory also provided batch QC from samples not from this project to fulfill method requirements. No qualification is performed from the batch QC. All %R and relative percent differences (RPDs) met QC criteria except for benzo(a)anthracene in EDS ID 05 which recovered high in the MSD. Qualification is not based on MS/MSD results alone. No qualification of the sample data is required as benzo(a)anthracene was not positively identified in EDS ID 05.

Blank Spike Samples (BSS) – All %R met QC criteria.

<u>Method Blank (MB)</u> - The method blank applicable to all samples in Accutest Job Number JB19923 contained several target compounds (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) at concentrations slightly above the reporting limit (RL). No qualification of the sample data is required as none of the positively

2

identified compounds were detected in any associated sample. Several system artifacts were reported in the MB applicable to all soil samples in JB23169. These were not detected in any associated sample therefore no qualification of the sample data is required. All other method blanks exhibited no target compounds.

<u>Field Blank (FB)</u> - The field blanks exhibited no target compounds.

<u>GC/MS Tuning</u> - All of the DFTPP tunes met QC criteria.

<u>Initial Calibration (ICAL)</u> - The ICAL exhibited acceptable %RSD and mean relative response factor (RRF) values.

Continuing Calibration (CCV) – The CCVs exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All IS area responses and retention time (RT) criteria were met.

<u>Blind Field Duplicate</u> – Three blind field duplicate samples were collected with this data set. EDS ID 07 (DUP102312) was collected on sample EDS ID 05 (MW-04), EDS ID 14 (DUP120612) was collected on EDS ID 09 (SR-01 (9-9.5)), and EDS ID 16 (DUP120612A) was collected on EDS ID 15 (MW-04). Pyrene was positively identified in EDS ID 05 but not in EDS ID 07. Phenanthrene was positively identified in EDS ID 16 but not in EDS ID 15. No qualification of the sample data is required as the concentrations of Pyrene and Phenanthrene detected were less than 2x the RL. All other compounds compared well.

<u>Compound Quantitation</u> – No issues were observed.

# **POLYCHLORINATED BIPHENYL COMPOUNDS** USEPA SW-846 8082

The analytical method, the NYSDEC ASP, the USEPA CLP National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-45, Revision 1, October 2006: Validating PCB Compounds by SW-846 Method 8082A, and the reviewer's professional judgment were used in evaluating the data in this summary report.

<u>Note</u> – The analysis of all soil samples was performed at Accutest's laboratory in Marlborough, Massachusetts. No qualification is required as proper chain-of-custody procedures were followed.

Holding Times (HT) – All holding times were met for all samples.

Surrogates - All surrogate %R were within QC criteria.

Blank Spike Samples (BSS) – All %R met QC criteria.

<u>Matrix Spike (MS)/Matrix Spike Duplicate (MSD)</u> - An MS/MSD was collected on EDS ID 03. All %R and RPD were within QC criteria.

<u>Method Blank (MB)</u> - The method blank applicable to the sample exhibited no target compounds.

Field Blank (FB) - The field blank exhibited no target compounds.

<u>Calibration</u> - The initial and continuing calibrations met QC criteria except for the percent deviation (%D) for Tetrachloro-m-xylene (TCX) in the opening calibration check. No qualification of the sample data is required as the %R for TCX was within QC criteria for all samples.

<u>Blind Field Duplicate</u> – One blind field duplicate sample was collected with this data set. EDS ID 02 (DUP102312A) was collected on sample EDS ID 01 (BG-01 (0"-2")). No target compounds were positively identified in either sample.

<u>Compound Quantitation</u> – No issues other than the previously noted storage temperatures were observed.

			Repo	rt of Ana	alysis			Page 1 of
Client Samj Lab Sample Matrix: Method: Project:	2 ID: JB1993 SO - So SW846	5-1 bil 8082 SW	846 3546 an, Carle Place	, NY		Date	All you have a management of the second sec second second sec	0/23/12 0/23/12 3.1
Run #1 <sup>a</sup> Run #2	File ID BK18596.D	DF 1	Analyzed 11/08/12	By AMA	Prep D 11/06/1		Prep Batch M:OP30931	Analytical Batch M:GBK681
Run #1 Run #2	Initial Weight 15.8 g	Final Vo 10.0 ml	lume					
PCB List								
CAS No.	Compound		Result	RL	MDL	Units	Q	
12674-11-2	Aroclor 1016		ND	110	16	ug/kg	J	
11104-28-2	Aroclor 1221		ND	110	21	ug/kg	1	
11141-16-5	Aroclor 1232		ND	110	17	ug/kg		
53469-21-9	Aroclor 1242 Aroclor 1248		ND ND	110	18 16	ug/kg	4.1	
12672-29-6 11097-69-1	Aroclor 1248 Aroclor 1254		ND	110 110	26	ug/kg		
11097-69-1	Aroclor 1254 Aroclor 1260		ND	110	18	ug/kg ug/kg		
37324-23-5	Aroclor 1262		ND	110	31	ug/kg	J 14	
11100-14-4	Aroclor 1262		ND	110	16	ug/kg	V	
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its		
877-09-8	Tetrachloro-m	-xylene	95%		30-1	150%		
877-09-8	Tetrachloro-m		70%		30-1	50%		
2051-24-3	Decachlorobip		106%			150%		
2051-24-3	Decachlorobip	henyl	72%		30-1	150%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit

E = Indicates value exceeds calibration range

RL = Reporting Limit

- J = Indicates an estimated value
- $\mathbf{B} = \mathbf{Indicates}$  analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



			Repo	rt of Ana	alysis			Page 1 of
Client Sample Lab Sample Matrix: Method: Project:	e ID: JB1993 SO - So SW846	5-2 pil 8082 SW	846 3546 n, Carle Place	, NY		Date		1/23/12 1/23/12 1.1
Run #1 <sup>a</sup> Run #2	File ID BK18594.D	DF 1	Analyzed 11/08/12	By AMA	Prep D 11/06/1		Prep Batch M:OP30931	Analytical Batch M:GBK681
Run #1 Run #2	Initial Weight 15.2 g	Final Vo 10.0 ml	lume					
PCB List								
CAS No.	Compound		Result	RL	MDL	Units	Q	
12674-11-2	Aroclor 1016		ND	120	18	ug/kg	J	
11104-28-2	Aroclor 1221		ND	120	23	ug/kg	1	
11141-16-5	Aroclor 1232		ND	120	18	ug/kg		
53469-21-9	Aroclor 1242		ND	120	20	ug/kg		
12672-29-6	Aroclor 1248 Aroclor 1254		ND ND	120 120	17	ug/kg	- 10	
11097-69-1 11096-82-5	Aroclor 1254 Aroclor 1260		ND	120	29 20	ug/kg ug/kg		
37324-23-5	Aroclor 1262		ND	120	34	ug/kg	- 1	
11100-14-4			ND	120	17	ug/kg	V	
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its		
877-09-8	Tetrachloro-m	-xylene	90%		30-1	150%		
877-09-8	Tetrachloro-m	-xylene	65%		30-1	150%		
2051-24-3	Decachlorobip		101%		30-1	150%		
2051-24-3	Decachlorobip	henyl	67%		30-1	150%		

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

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E = Indicates value exceeds calibration range

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

10 of 25 ACCUTEST JB19935

N

			Repo	rt of An	alysis			Page 1 of		
Client Sam Lab Sample Matrix: Method: Project:	e ID: JB1993 SO - So SW846	5-3 pil 8082 SW	846 3546 m, Carle Place	, NY	Date Sampled: 10/23/12 Date Received: 10/23/12 Percent Solids: 84.5					
Run #1 <sup>a</sup> Run #2	File ID BK18593.D	DF 1	Analyzed 11/08/12	By AMA	Prep D 11/06/1		Prep Batch M:OP30931	Analytical Batch M:GBK681		
Run #1 Run #2	Initial Weight 15.2 g	Final Vo 10.0 ml	lume							
PCB List										
CAS No.	Compound		Result	RL	MDL	Units	Q			
12674-11-2	Aroclor 1016		ND	120	18	ug/kg	5			
11104-28-2	Aroclor 1221 Aroclor 1232		ND ND	120 120	23 18	ug/kg	- 12			
11141-16-5 53469-21-9			ND	120	19	ug/kg ug/kg				
12672-29-6			ND	120	17	ug/kg				
11097-69-1			ND	120	28	ug/kg				
11096-82-5			ND	120	20	ug/kg	5.11.1			
37324-23-5			ND	120	34	ug/kg				
11100-14-4			ND	120	17	ug/kg	V			
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	iits				
877-09-8	Tetrachloro-m		97%			150%				
877-09-8	Tetrachloro-m		72%			150%				
2051-24-3	Decachlorobip		110%			150%				
2051-24-3	Decachlorobip	henyl	72%		30-1	150%				

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

ND = Not detected MDL - Method Detection Limit

E = Indicates value exceeds calibration range

RL = Reporting Limit

J = Indicates an estimated value

 $\mathbf{B} = \mathbf{Indicates}$  analyte found in associated method blank

N = Indicates presumptive evidence of a compound

11 of 25

34

			Repo	rt of Ana	alysis			Page 1 of		
Client Sample Lab Sample Matrix: Method: Project:	D: JB1993 AQ - Fi SW846	5-4 eld Blank S 8082A S	Soil W846 3510C an, Carle Place	, NY	Date Sampled: 10/23/12 Date Received: 10/23/12 Percent Solids: n/a NY					
Run #1 <sup>a</sup> Run #2	File ID EF114603.D	DF 1	Analyzed 11/08/12	By LP	Prep D 10/25/1		Prep Batch OP60850	Analytical Batch GEF4612		
Run #1 Run #2	Initial Volume 950 ml	Final Vo 10.0 ml	lume							
PCB List										
CAS No.	Compound		Result	RL	MDL	Units	Q			
12674-11-2	Aroclor 1016		ND	0.53	0.13	ug/l	J			
11104-28-2	Aroclor 1221		ND	0.53	0.29	ug/l	1			
11141-16-5	Aroclor 1232		ND	0.53	0.41	ug/l				
53469-21-9	Aroclor 1242		ND	0.53	0.091	ug/l				
12672-29-6	Aroclor 1248		ND	0.53	0.15	ug/l				
11097-69-1	Aroclor 1254		ND	0.53	0.15	ug/l				
11096-82-5			ND	0.53	0.22	ug/l				
11100-14-4	Aroclor 1268		ND	0.53	0.14	ug/l	1			
37324-23-5	Aroclor 1262		ND	0.53	0.063	ug/l	V			
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Lim	its				
877-09-8	Tetrachloro-m-	xylene	84%		27-1	44%				
877-09-8	Tetrachloro-m-		100%		27-1	44%				
2051-24-3	Decachlorobip		116%		10-1	39%				
2051-24-3	Decachlorobip		112%		10-1	39%				

(a) Storage temperature exceeded 6 degrees C due to power outage from the tropical cyclone of Oct. 29th and 30th, 2012.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



			Repo	rt of Ana	alysis			Page 1 of		
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB1993 AQ - G SW846	35-5 Ground Wate S 8270D BY	SIM SW846	Da			Received: 10	ed: 10/23/12 ids: n/a Batch Analytical Batch		
Run #1 <sup>a</sup> Run #2	File ID 3M32030.D	DF 1	Analyzed 11/08/12	By ALS	Prep D 10/28/1		Prep Batch OP60910			
Run #1 Run #2	Initial Volume 1000 ml	Final Vo 1.0 ml	lume							
BN PAH L	ist									
CAS No.	Compound		Result	RL	MDL	Units	Q			
83-32-9	Acenaphthene		ND	0.10	0.020	ug/l	5			
208-96-8	Acenaphthyler		ND	0.10	0.024	ug/l	7			
120-12-7	Anthracene		ND	0.10	0.020	ug/l				
56-55-3	Benzo(a)anthr	acene	ND	0.10	0.012	ug/l				
50-32-8	Benzo(a)pyren		ND	0.10	0.012	ug/l				
205-99-2	Benzo(b)fluor		ND	0.10	0.010	ug/l				
191-24-2	Benzo(g,h,i)p		ND	0.10	0.016	ug/l				
207-08-9	Benzo(k)fluor	anthene	ND	0.10	0.015	ug/l				
218-01-9	Chrysene		ND	0.10	0.012	ug/l				
53-70-3	Dibenzo(a,h)a	nthracene	ND	0.10	0.017	ug/l				
206-44-0	Fluoranthene		0.123	0.10	0.013	ug/l				
86-73-7	Fluorene		ND	0.10	0.017	ug/I				
193-39-5	Indeno(1,2,3-	cd)pyrene	ND	0.10	0.014	ug/l				
91-20-3	Naphthalene		ND	0.10	0.036	ug/l				
85-01-8	Phenanthrene		ND	0.10	0.021	ug/l	11			
129-00-0	Pyrene		0.137	0.10	0.015	ug/l	V			
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its				
4165-60-0	60-0 Nitrobenzene-d5 94%				23-131%					
321-60-8	2-Fluorobiphe	enyl	83%		24-1	20%				
1718-51-0	Terphenyl-d14		59%		10-1	25%				

(a) Storage temperature exceeded 6 degrees C due to power outage from the tropical cyclone of Oct. 29th and 30th, 2012.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound
- E = Indicates value exceeds calibration range

13 of 25

		Repo	rt of Ana	lysis			Page 1 of		
Client Sam Lab Sampl Matrix: Method: Project:		Y SIM SW846		Date Sampled: 10/23/12 Date Received: 10/23/12 Percent Solids: n/a					
Run #1 <sup>a</sup> Run #2	File ID DF 3M32031.D 1	Analyzed 11/08/12	By ALS	Prep D: 10/28/1		Prep Batch OP60910	Analytical Batch E3M1478		
Run #1 Run #2	Initial Volume Final V 1000 ml 1.0 ml	/olume							
BN PAH L	ist								
CAS No.	Compound	Result	RL	MDL	Units	Q			
83-32-9	Acenaphthene	ND	0.10	0.020	ug/l	T			
208-96-8	Acenaphthylene	ND	0.10	0.024	ug/l	7			
120-12-7	Anthracene	ND	0.10	0.020	ug/l				
56-55-3	Benzo(a)anthracene	ND	0.10	0.012	ug/l				
50-32-8	Benzo(a)pyrene	ND	0.10	0.012	ug/l				
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.010	ug/l				
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.016	ug/l				
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.015	ug/l				
218-01-9	Chrysene	ND	0.10	0.012	ug/l				
53-70-3	Dibenzo(a,h)anthracene		0.10	0.017	ug/l				
206-44-0	Fluoranthene	0.114	0.10	0.013	ug/l				
86-73-7	Fluorene	ND	0.10	0.017	ug/l				
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.014	ug/l				
91-20-3	Naphthalene	ND	0.10	0.036	ug/l				
85-01-8	Phenanthrene	ND	0.10	0.021	ug/l	1			
129-00-0	Pyrene	ND	0.10	0.015	ug/l	V			
CAS No.	Surrogate Recoveries	Run# 1	Run#2	Lim	its				
4165-60-0	Nitrobenzene-d5	92%		23-1	31%				
321-60-8	2-Fluorobiphenyl	77%							
1718-51-0	Terphenyl-d14	61%		24-120% 10-125%					

(a) Storage temperature exceeded 6 degrees C due to power outage from the tropical cyclone of Oct. 29th and 30th, 2012.

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



7

E = Indicates value exceeds calibration range

			Repo	rt of Ana	lysis			Page 1 of 1			
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB1993 AQ - Q SW840	35-5F Groundwater 5 8270D BY	SIM SW846	Filtered SIM SW846 3510C n, Carle Place, NY			Date Sampled: 10/23/12 Date Received: 10/23/12 Percent Solids: n/a				
Run #1 <sup>a</sup> Run #2	File ID 3M32033.D	DF 1	Analyzed 11/08/12	By ALS	Prep D 10/28/1		Prep Batch OP60910	Analytical Batch E3M1478			
Run #1 Run #2	Initial Volume 1000 ml	Final Vo 1.0 ml	lume								
BN PAH L	ist										
CAS No.	Compound		Result	RL	MDL	Units	Q				
83-32-9	Acenaphthene		ND	0.10	0.020	ug/l	J				
208-96-8	Acenaphthyle	ne	ND	0.10	0.024	ug/l					
120-12-7	Anthracene		ND	0.10	0.020	ug/l					
56-55-3	Benzo(a)anthr	acene	ND	0.10	0.012	ug/l					
50-32-8	Benzo(a)pyrei	ne	ND	0.10	0.012	ug/l					
205-99-2	Benzo(b)fluor	anthene	ND	0.10	0.010	ug/l					
191-24-2	Benzo(g,h,i)p	erylene	ND	0.10	0.016	ug/l					
207-08-9	Benzo(k)fluor	anthene	ND	0.10	0.015	ug/l					
218-01-9	Chrysene		ND	0.10	0.012	ug/l					
53-70-3	Dibenzo(a,h)a	nthracene	ND	0.10	0.017	ug/l					
206-44-0	Fluoranthene		0.126	0.10	0.013	ug/l					
86-73-7	Fluorene		ND	0.10	0.017	ug/l					
193-39-5	Indeno(1,2,3-	cd)pyrene	ND	0.10	0.014	ug/l					
91-20-3	Naphthalene		ND	0.10	0.036	ug/l					
85-01-8	Phenanthrene		ND	0.10	0.021	ug/l					
129-00-0	Pyrene		0.103	0.10	0.015	ug/l	V				
CAS No.	Surrogate Re	ecoveries	Run# 1	Run# 2	Lim	its					
4165-60-0	Nitrobenzene		85%			31%					
321-60-8	2-Fluorobiphe	enyl	80%		24-1	20%					
1718-51-0	Terphenyl-d1	4	55%		10-1	25%					

(a) Storage temperature exceeded 6 degrees C due to power outage from the tropical cyclone of Oct. 29th and 30th, 2012.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

14 of 25 ACCUTEST.

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# 4.6

E = Indicates value exceeds calibration range

4

			Repo	rt of Ana	alysis			Page 1 of	
Client Sam Lab Samp Matrix: Method: Project:	le ID: JB1993 AQ - F SW846	SIM SW846	r SW846 3510C arle Place, NY			te Sampled: 10/23/12 te Received: 10/23/12 r cent Solids: n/a			
Run #1 <sup>a</sup> Run #2	File ID 3M32032.D	DF 1	Analyzed 11/08/12	By ALS	Prep D: 10/28/1		Prep Batch OP60910	Analytical Batch E3M1478	
Run #1 Run #2	Initial Volume 950 ml	Final Vo 1.0 ml	olume					Ĩ	
BN PAH I	List								
CAS No.	Compound		Result	RL	MDL	Units	Q		
83-32-9	Acenaphthene		ND	0.11	0.021	ug/l	T		
208-96-8	Acenaphthyler		ND	0.11	0.025	ug/l	1		
120-12-7	Anthracene		ND	0.11	0.021	ug/l			
56-55-3	Benzo(a)anthra	acene	ND	0.11	0.012	ug/l			
50-32-8	Benzo(a)pyren	ie	ND	0.11	0.013	ug/l			
205-99-2	Benzo(b)fluora	anthene	ND	0.11	0.011	ug/l			
191-24-2	Benzo(g,h,i)pe		ND	0.11	0.016	ug/l			
207-08-9	Benzo(k)fluora	anthene	ND	0.11	0.016	ug/l	1		
218-01-9	Chrysene		ND	0.11	0.012	ug/l			
53-70-3	Dibenzo(a,h)a	nthracene	ND	0.11	0.017	ug/l			
206-44-0	Fluoranthene		ND	0.11	0.014	ug/l			
86-73-7	Fluorene	100 A 100 A 100 A	ND	0.11	0.018	ug/l			
193-39-5	Indeno(1,2,3-	cd)pyrene	ND	0.11	0.015	ug/l			
91-20-3	Naphthalene		ND	0.11	0.037	ug/l			
85-01-8	Phenanthrene		ND	0.11	0.022	ug/l	N		
129-00-0	Ругепе		ND	0.11	0.016	uġ/l	~		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its			
4165-60-0	Nitrobenzene-	d5	90%			31%			
321-60-8	2-Fluorobiphe		83%			20%			
1718-51-0	Terphenyl-d14	4	97%		10-1	25%			

(a) Storage temperature exceeded 6 degrees C due to power outage from the tropical cyclone of Oct. 29th and 30th, 2012.

 $\begin{array}{ll} ND = Not \mbox{ detected } & MDL - Method \mbox{ Detection Limit} \\ RL = Reporting \mbox{ Limit} \end{array}$ 

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range

JB19935

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Client Sam								August -
Lab Samp Matrix:	SO - So	il	V040 05500			Date	Received: 12	2/06/12 2/06/12
Method: Project:	SW846 Johnson		W846 3550C n, Carle Place	, NY		Perc	ent Solids: 95	9.0
D. 11	File ID	DF	Analyzed	By	Prep D		Prep Batch	Analytical Batch
Run #1 Run #2	3E46422.D	1	12/19/12	OYA	12/18/1	2	OP62124	E3E2018
	Initial Weight	Final Vo	lume					
Run #1 Run #2	32.1 g	1.0 ml						
BN PAH I	list							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	33	9.5	ug/kg		
208-96-8	Acenaphthylen	e	ND	33	10	ug/kg		
120-12-7	Anthracene		46.2	33	11	ug/kg		
56-55-3	Benzo(a)anthra	icene	296	33	11	ug/kg		
50-32-8	Benzo(a)pyrene	e	366	33	10	ug/kg		
205-99-2	Benzo(b)fluora	nthene	488	33	11	ug/kg		
191-24-2	Benzo(g,h,i)pe	rylene	330	33	12	ug/kg		
207-08-9	Benzo(k)fluora	nthene	260	33	12	ug/kg		
218-01-9	Chrysene		455	33	11	ug/kg		
53-70-3	Dibenzo(a,h)ar	nthracene	95.3	33	11	ug/kg		
206-44-0	Fluoranthene		859	33	14	ug/kg		
86-73-7	Fluorene		ND	33	11	ug/kg		
193-39-5	Indeno(1,2,3-c	d)pyrene	288	33	11	ug/kg		
91-20-3	Naphthalene		ND	33	9.0	ug/kg		
85-01-8	Phenanthrene		346	33	15	ug/kg		
129-00-0	Pyrene		667	33	13	ug/kg		
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	its		
367-12-4	2-Fluoropheno	1	70%		21-1	16%		
4165-62-2			76%		19-1	17%		
118-79-6	2,4,6-Tribrom		96%			36%		
4165-60-0			67%			22%		
321-60-8	2-Fluorobipher		76%			17%		
1718-51-0	Terphenyl-d14		94%		31-1	29%		

ND = Not detected MDL - Method Detection Limit

- $\begin{array}{l} RL = Reporting \ Limit \\ E = \ Indicates \ value \ exceeds \ calibration \ range \end{array}$
- J = Indicates an estimated value
- $\mathbf{B}=\mathbf{Indicates}$  analyte found in associated method blank
  - N = Indicates presumptive evidence of a compound

9 of 425 ACCUTEST JB23169

			Repo	rt of Ana	alysis			Page 1 of		
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB2316 SO - So SW846	9-6 bil 8270D S	W846 3550C an, Carle Place	, NY	Date Sampled: 12/06/12 Date Received: 12/06/12 Per cent Solids: 81.6					
Run #1 Run #2	File ID 3E46426.D	DF 1	Analyzed 12/19/12	Ву ОҮА	Prep D 12/18/1		Prep Batch OP62124	Analytical Batch E3E2018		
Run #1 Run #2	Initial Weight 30.0 g	Final Vo 1.0 ml	olume							
BN PAH L	ist									
CAS No.	Compound		Result	RL	MDL	Units	Q			
83-32-9	Acenaphthene		ND	41	12	ug/kg				
208-96-8	Acenaphthylen	ie	ND	41	13	ug/kg				
120-12-7	Anthracene		34.7	41	14	ug/kg	J			
56-55-3	Benzo(a)anthra	acene	221	41	13	ug/kg				
50-32-8	Benzo(a)pyren	e	278	41	12	ug/kg				
205-99-2	Benzo(b)fluora		360	41	14	ug/kg				
191-24-2	Benzo(g,h,i)pe		277	41	15	ug/kg				
207-08-9	Benzo(k)fluora	anthene	232	41	15	ug/kg				
218-01-9	Chrysene		358	41	14	ug/kg				
53-70-3	Dibenzo(a,h)a	nthracene	73.4	41	14	ug/kg				
206-44-0	Fluoranthene		665	41	18	ug/kg				
86-73-7	Fluorene	120.1	ND	41	13	ug/kg				
193-39-5	Indeno(1,2,3-0	cd)pyrene	238	41	14	ug/kg				
91-20-3	Naphthalene		ND	41	11	ug/kg				
85-01-8	Phenanthrene		240	41	19	ug/kg				
129-00-0	Pyrene		494	41	16	ug/kg				
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its				
4165-60-0	Nitrobenzene-	d5	61%		21-1	22%				
321-60-8	2-Fluorobiphe		59%		30-1	17%				
1718-51-0	Terphenyl-d14	85%		31-1	29%					

MDL - Method Detection Limit ND = Not detected

E = Indicates value exceeds calibration range

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

14 of 425 ACCUTEST JB23169

Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB2316 SO - So SW846	il 8270D SV	V846 3550С n, Carle Place	, NY		Date		2/06/12 2/06/12 5.1
Run #1 Run #2	File ID 3E46423.D	DF 1	Analyzed 12/19/12	By OYA	Prep D 12/18/1		Prep Batch OP62124	Analytical Batch E3E2018
Run #1 Run #2	Initial Weight 33.1 g	Final Vo 1.0 ml	lume					
BN PAH L	ist		-					
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	31	9.1	ug/kg		
208-96-8	Acenaphthylene		ND	31	10	ug/kg		
120-12-7	Anthracene		ND	31	11	ug/kg		
56-55-3	Benzo(a)anthra	icene	ND	31	10	ug/kg		
50-32-8	Benzo(a)pyren	e	ND	31	9.6	ug/kg		
205-99-2	Benzo(b)fluora	inthene	ND	31	11	ug/kg		
191-24-2	Benzo(g,h,i)pe	rylene	ND	31	12	ug/kg		
207-08-9	Benzo(k)fluora	inthene	ND	31	12	ug/kg		
218-01-9	Chrysene		ND	31	11	ug/kg		
53-70-3	Dibenzo(a,h)ar	nthracene	ND	31	11	ug/kg		
206-44-0	Fluoranthene		ND	31	14	ug/kg		
86-73-7	Fluorene		ND	31	10	ug/kg		
193-39-5	Indeno(1,2,3-c	d)pyrene	ND	31	11	ug/kg		
91-20-3	Naphthalene		ND	31	8.6	ug/kg		
85-01-8	Phenanthrene		ND	31	14	ug/kg		
129-00-0	Pyrene		ND	31	12	ug/kg		
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	its		
4165-60-0	Nitrobenzene-	d5	60%		21-1	22%		
321-60-8	2-Fluorobipher	nyl	63%		30-1	17%		
1718-51-0	Terphenyl-d14				31-1	29%		

**Report of Analysis** 

Page 1 of 1

5

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

J = Indicates an estimated value

 $\mathbf{B}$  = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range



	Report of Analysis							
Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB2316 SO - So SW846	W846 3550C n, Carle Place	, NY		Date	Received: 12	2/06/12 2/06/12 3.7	
Run #1 Run #2	File ID 3E46424.D	DF 1	Analyzed 12/19/12	Ву ОҮА	Prep D 12/18/1		Prep Batch OP62124	Analytical Batch E3E2018
Run #1 Run #2	Initial Weight 32.6 g	Final Vo 1.0 ml	lume					
BN PAH L	ist							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	32	9.2	ug/kg		
208-96-8	Acenaphthylen	ie	ND	32	10	ug/kg		
120-12-7	Anthracene		ND	32	11	ug/kg		
56-55-3	Benzo(a)anthra		ND	32	10	ug/kg		
50-32-8	Benzo(a)pyren		ND	32	9.7	ug/kg		
205-99-2	Benzo(b)fluora		ND	32	11	ug/kg		
191-24-2	Benzo(g,h,i)pe		ND	32	12	ug/kg		
207-08-9	Benzo(k)fluora	anthene	ND	32	12	ug/kg		
218-01-9	Chrysene	0.555	ND	32	11	ug/kg		
53-70-3	Dibenzo(a,h)a	nthracene	ND	32	11	ug/kg		
206-44-0	Fluoranthene		ND	32	14	ug/kg		
86-73-7	Fluorene		ND	32	10	ug/kg		
193-39-5	Indeno(1,2,3-c	ca)pyrene	ND	32	11	ug/kg		
91-20-3	Naphthalene Phenanthrene		ND ND	32 32	8.7 14	ug/kg		
85-01-8 129-00-0	Phenanthrene Pyrene		ND	32	14 12	ug/kg ug/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	uits		
4165-60-0	Nitrobenzene-	d5	68%		21-1	122%		
321-60-8	2-Fluorobiphe		77%			117%		
1718-51-0	Terphenyl-d14		93%			129%		

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ND = Not detected MDL - Method Detection Limit

- RL = Reporting Limit E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



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			Repo	rt of An	alysis		Page 1 of		
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB2316 SO - So SW846	V846 3550С п, Carle Place	Date Sampled: Date Received: 846 3550C Percent Solids: , Carle Place, NY						
Run #1 Run #2	File ID 3E46425.D	DF 1	Analyzed 12/19/12	By OYA	Prep D 12/18/1		Prep Batch OP62124	Analytical Batch E3E2018	
Run #1 Run #2	Initial Weight 30.0 g	Final Vo 1.0 ml	lume						
BN PAH L	ist								
CAS No.	Compound		Result	RL	MDL	Units	Q		
83-32-9 208-96-8	Acenaphthene Acenaphthylen	e	ND ND	41 41	12 13	ug/kg ug/kg			
120-12-7 56-55-3 50-32-8	Anthracene Benzo(a)anthra Benzo(a)pyren		ND 38.7 41.0	41 41 41	14 13 13	ug/kg ug/kg ug/kg	J		
205-99-2 191-24-2	Benzo(b)fluora Benzo(g,h,i)pe	inthene rylene	57.6 36.4	41 41	14 15	ug/kg ug/kg	î		
207-08-9 218-01-9 53-70-3	Benzo(k)fluora Chrysene Dibenzo(a,h)a		20.0 50.2 ND	41 41 41	16 14 14	ug/kg ug/kg ug/kg	J		
206-44-0 86-73-7	Fluoranthene Fluorene		80.3 ND	41 41	18 14	ug/kg ug/kg	53		
193-39-5 91-20-3 85-01-8	Indeno(1,2,3-c Naphthalene Phenanthrene	cd)pyrene	30.5 ND 27.4	41 41 41	14 11 19	ug/kg ug/kg ug/kg	l		
129-00-0	Pyrene		64.3	41 41	16	ug/kg ug/kg	J		
CAS No.	Surrogate Rec	coveries	Run# 1 62%	Run#2					
4165-60-0 321-60-8 1718-51-0		Nitrobenzene-d5 2-Fluorobiphenyl Terphenyl-d14			30-1	122% 117% 129%			

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range



			Repo	rt of Ana	alysis			Page 1 of		
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB23169 AQ - Fi SW846	9-5 eld Blank S 8270D SV	Soil W846 3510C n, Carle Place	, NY		Carl Color Her Color States and States	/06/12 /06/12 a			
Run #1 <sup>a</sup> Run #2	File ID P69481.D	DF 1	Analyzed 12/21/12	By NAP	Prep D 12/14/1		Prep Batch OP62043	Analytical Batch EP2973		
Run #1 Run #2	Initial Volume 930 ml	Final Vo 1.0 ml	lume							
BN PAH L	list									
CAS No.	Compound		Result	RL	MDL	Units	Q			
83-32-9	Acenaphthene		ND	1.1	0.28	ug/l	J			
208-96-8	Acenaphthylen	e	ND	1.1	0.25	ug/l	1			
120-12-7	Anthracene		ND	1.1	0.31	ug/l				
56-55-3	Benzo(a)anthra	cene	ND	1.1	0.24	ug/l				
50-32-8	Benzo(a)pyrene	9	ND	1.1	0.24	ug/l				
205-99-2	Benzo(b)fluora	nthene	ND	1.1	0.49	ug/l				
191-24-2	Benzo(g,h,i)pe		ND	1.1	0.35	ug/l				
207-08-9	Benzo(k)fluora	nthene	ND	1.1	0.55	ug/l				
218-01-9	Chrysene		ND	1.1	0.31	ug/l				
53-70-3	Dibenzo(a,h)ar	thracene	ND	1.1	0.41	ug/l				
206-44-0	Fluoranthene		ND	1.1	0.34	ug/l				
86-73-7	Fluorene		ND	1.1	0.30	ug/l				
193-39-5	Indeno(1,2,3-c	d)pyrene	ND	1.1	0.40	ug/l				
91-20-3	Naphthalene		ND	1.1	0.28	ug/l				
85-01-8	Phenanthrene		ND	1.1	0.31	ug/l				
129-00-0	Pyrene		ND	1.1	0.29	ug/l	V.			
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Lim	its				
4165-60-0	Nitrobenzene-o		88%			129%				
321-60-8	2-Fluorobipher		71%			17%				
1718-51-0	Terphenyl-d14		76%		14-1	132%				

(a) Sample extracted outside the holding time due to scheduling error.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range



4.5

			Repo	rt of Ana	alysis			Page 1 of	
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB2316 AQ - G SW846	9-7 round Wate 8270D BY	r SIM SW846 n, Carle Place			Date	e Sampled: 12/06/12 e Received: 12/06/12 cent Solids: n/a		
Run #1 <sup>a</sup> Run #2	File ID 4M38225.D	DF 1	Analyzed 12/21/12	By NAP	Prep D 12/14/1		Prep Batch OP62043A	Analytical Batch E4M1575	
Run #1 Run #2	Initial Volume 960 ml	Final Vol 1.0 ml	ume				•		
BN PAH L	list								
CAS No.	Compound		Result	RL	MDL	Units	Q		
83-32-9	Acenaphthene		ND	0.10	0.021	ug/l	J		
208-96-8	Acenaphthylen	е	ND	0.10	0.025	ug/l	-		
120-12-7	Anthracene		ND	0.10	0.021	ug/l			
56-55-3	Benzo(a)anthra	icene	0.121	0.10	0.012	ug/l			
50-32-8	Benzo(a)pyren		0.167	0.10	0.013	ug/l			
205-99-2	Benzo(b)fluora		0.291	0.10	0.011	ug/l			
191-24-2	Benzo(g,h,i)pe	rylene	0.166	0.10	0.016	ug/l			
207-08-9	Benzo(k)fluora		0.132	0.10	0.015	ug/l			
218-01-9	Chrysene		0.178	0.10	0.012	ug/l			
53-70-3	Dibenzo(a,h)ar	nthracene	ND	0.10	0.017	ug/l			
206-44-0	Fluoranthene		0.294	0.10	0.014	ug/l			
86-73-7	Fluorene		ND	0.10	0.018	ug/l			
193-39-5	Indeno(1,2,3-c	d)pyrene	0.147	0.10	0.015	ug/l			
91-20-3	Naphthalene		ND	0.10	0.037	ug/l			
85-01-8	Phenanthrene		ND	0.10	0.022	ug/l	1.2		
129-00-0	Pyrene		0.255	0.10	0.016	ug/l	V		
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	its		-	
4165-60-0	Nitrobenzene-	15	60%		23-1	31%			
321-60-8	2-Fluorobipher		58%	24-120%					
1718-51-0		Terphenyl-d14 94%				25%			

(a) Sample extracted outside the holding time due to scheduling error.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

 $\mathbf{E}$  = Indicates value exceeds calibration range

15 of 425 ACCUTEST

			Repo	rt of Ana	lysis			Page 1 of
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB2310 AQ - 0 SW840	Ground Wate 5 8270D BY	r SIM SW846 n, Carle Place		1	Date	Received:	12/06/12 12/06/12 n/a
Run #1 <sup>a</sup> Run #2	File ID 4M38226.D	DF 1	Analyzed 12/21/12	By NAP	Prep D 12/14/1		Prep Batch OP62043A	
Run #1 Run #2	Initial Volume 1000 ml	Final Vol 1.0 ml	lume					
BN PAH L	ist							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	0.10	0.020	ug/l	T	
208-96-8	Acenaphthyle	ne	ND	0.10	0.024	ug/l	7	
120-12-7	Anthracene		ND	0.10	0.020	ug/l		
56-55-3	Benzo(a)anthr	acene	0.169	0.10	0.012	ug/l		
50-32-8	Benzo(a)pyren	ne	0.262	0.10	0.012	ug/l		
205-99-2	Benzo(b)fluor	anthene	0.478	0.10	0.010	ug/l		
191-24-2	Benzo(g,h,i)p	erylene	0.251	0.10	0.016	ug/l		
207-08-9	Benzo(k)fluor		0.189	0.10	0.015	ug/l		
218-01-9	Chrysene		0.287	0.10	0.012	ug/l		
53-70-3	Dibenzo(a,h)a	inthracene	ND	0.10	0.017	ug/l		
206-44-0	Fluoranthene		0.469	0.10	0.013	ug/l		
86-73-7	Fluorene		ND	0.10	0.017	ug/l		
193-39-5	Indeno(1,2,3-	cd)pyrene	0.233	0.10	0.014	ug/l		
91-20-3	Naphthalene		ND	0.10	0.036	ug/l		
85-01-8	Phenanthrene		0.146	0.10	0.021	ug/l	12	
129-00-0	Pyrene		0.396	0.10	0.015	ug/l	V	
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its		
4165-60-0	Nitrobenzene		74%			31%		
321-60-8	2-Fluorobiphe		70%			20%		
1718-51-0	Terphenyl-d1	4	85%		10-1	25%		

(a) Sample extracted outside the holding time due to scheduling error.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range

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			Repo	rt of Ana	alysis			Page 1 of
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB2316 AQ - Fi SW846	9-9 ield Blank V 8270D BY	Vater SIM SW846 n, Carle Place			Date	In the second	2/06/12 2/06/12 a
Run #1 <sup>a</sup> Run #2	File ID 4M38227.D	DF 1	Analyzed 12/21/12	By NAP	Prep D 12/14/1		Prep Batch OP62043A	Analytical Batch E4M1575
Run #1 Run #2	Initial Volume 930 ml	Final Vo 1.0 ml	lume					
BN PAH L	ist							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	0.11	0.022	ug/l	J	
208-96-8	Acenaphthylen	e	ND	0.11	0.025	ug/l	T	
120-12-7	Anthracene		ND	0.11	0.022	ug/l		
56-55-3	Benzo(a)anthra	cene	ND	0.11	0.012	ug/l		
50-32-8	Benzo(a)pyren		ND	0.11	0.013	ug/l		
205-99-2	Benzo(b)fluora		ND	0.11	0.011	ug/l		
191-24-2	Benzo(g,h,i)pe		ND	0.11	0.017	ug/l		
207-08-9	Benzo(k)fluora		ND	0.11	0.016	ug/l		
218-01-9	Chrysene		ND	0.11	0.013	ug/l		
53-70-3	Dibenzo(a,h)a	nthracene	ND	0.11	0.018	ug/l		
206-44-0	Fluoranthene		ND	0.11	0.014	ug/l		
86-73-7	Fluorene		ND	0.11	0.018	ug/l		
193-39-5	Indeno(1,2,3-c	d)pyrene	ND	0.11	0.015	ug/l		
91-20-3	Naphthalene		ND	0.11	0.038	ug/l		
85-01-8	Phenanthrene		ND	0.11	0.022	ug/l	1	
129-00-0	Pyrene		ND	0.11	0.016	ug/l	V	
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	its		
4165-60-0	Nitrobenzene-	15	74%		23-1	31%		
321-60-8	2-Fluorobiphe		68%			20%		
1718-51-0	Terphenyl-d14		98%		10.1	25%		

(a) Sample extracted outside the holding time due to scheduling error.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound
- E = Indicates value exceeds calibration range



4.9



# VOLATILE ORGANIC COMPOUNDS

Compendium Method TO-15 - Level IV Review

Client: ERM, Melville, NY

## Site: J&H Manufacturing Site - Carle Place, New York

#### SDG #s: JB31249

Laboratory: <u>Accutest Laboratories – Dayton, New Jersey</u>

Date: April 12, 2013

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
01	JH-IA-01	JB31249-1	Air
02	JH-SS-02	JB31249-2	Air
03	JH-IA-02	JB31249-3	Air
04	JH-SS-03	JB31249-4	Air
05	JH-IA-03	JB31249-5	Air
06	JH-SS-04	JB31249-6	Air
07	JH-IA-04	JB31249-7	Air
08	JH-SS-05	JB31249-8	Air
09	JH-IA-05	JB31249-9	Air
10	JH-SS-01	JB31249-10	Air
11	JH-OA-01	JB31249-11	Air

The samples were analyzed following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (*GC/MS*)". The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC ASP, the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15 and the reviewer's professional judgment.

<u>Chain-of-Custody (COC)</u> – No discrepancies were identified.

<u>Data completeness</u>, <u>Deliverables and Analysis Data Sheets (Form I)</u> – The sample identification for sample EDS ID 11 has been manually corrected from JH-0A-01 to JH-OA-01. The laboratory was notified and made the edits in their LIMS system. No report was reproduced. No other discrepancies were identified.

<u>Canister Receipt/Log-in sheet (Leak Checks)</u> – A review of the final canister pressures by the laboratory upon sample receipt indicated no discrepancies.

Canister Certification Blanks/Spikes/Pressure Differences - No discrepancies were identified.

Holding Times - No discrepancies were identified.

Surrogates - All Surrogate percent recoveries (%R) were within QC limits.

<u>Blank Spike/ Blank Spike Duplicate Sample (BS/BSD)</u> - The BS/BSD exhibited %R and relative percent difference (RPD) within QC criteria.

<u>Laboratory Duplicate</u> – The laboratory provided laboratory duplicate analysis from samples not from this data set (batch QC). No qualification of the sample data is required for batch QC. No discrepancies were observed.

<u>Method Blank</u> - The method blank contained no contamination.

<u>GC/MS Tuning</u> - No discrepancies were identified.

Initial Calibration - The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibration exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

<u>Detection Limits/Compound Identification</u> – The standard initial sample volume utilized by the laboratory for samples was 400 ml. The reporting limit (RL) for all compounds is 0.20 ppbv. RLs reported in  $\mu$ g/m<sup>3</sup> are dependent on the molecular weight of each compound and vary significantly.

Sample JH-SS-03 was reanalyzed using 200 ml of sample as the concentration of tetrachloroethene (PCE) was above the calibration range in the initial analysis. The laboratory has reported the PCE result from the diluted analysis. All other results are reported from the initial analysis. The dilution was justified. No qualification of the sample data is required.

Sample JH-SS-04 was reanalyzed using 150 ml of sample as the concentration of toluene was above the calibration range in the initial analysis. The laboratory has reported the toluene result from the diluted analysis. All other results are reported from the initial analysis. The dilution was justified. No qualification of the sample data is required.

Sample JH-SS-05 was reanalyzed using 50 ml of sample as the concentration of PCE and cis-1,2-dichloroethene were above the calibration range in the initial analysis. The sample was reanalyzed a second time as the concentration of PCE was still above the calibration range in the diluted analysis. The laboratory has reported the PCE and cis-1,2-dichloroethene results from the respective diluted analysis. All other results are reported from the initial analysis. The dilutions were justified. No qualification of the sample data is required.

Ethanol was reported in sample JH-IA-02 with an E qualifier. This indicates that the concentration of Ethanol in sample JH-IA-02 was above the calibration range of the instrument. The sample was not reanalyzed by the laboratory for Ethanol as this compound is suspected to be a contaminant possibly present since it is routinely added to the gas cylinders supplied by the commercial standard suppliers. Ethanol is not of concern at the site. The value is considered estimated and has been qualified J. The value is still useable as an estimated positive detect.

<u>Field Duplicate Sample Precision</u> – No Field Duplicate Sample was collected.

Client Sam Lab Sampl Matrix: Method: Project:	e ID:	JH-IA-01 JB31249-1 AIR - Indoor Air Comp. TO-15 Johnson & Hoffman, Ca		na ID: A3 :e, NY	71	1	Date Sa Date R Percent	ecei	ved: 03/	/12/13 /13/13 a		
Run #1 Run #2	File ID 3W3278		alyzed 16/13	Ву ҮМН	Pre n/a	p Date		Prep a/a	Batch	Analytic V3W127		1
Run #1 Run #2	Initial V 400 ml	<i>l</i> olume										
VOA speci	al List											
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone		8.2	0.20	0.069	ppbv		19	0.48	0.16	ug/n
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/n
71-43-2	78.11	Benzene		0.19	0.20	0.029	ppbv	J	0.61	0.64	0.093	ug/n
75-27-4	163.8	Bromodichloromethane		ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/n
75-25-2	252.8	Bromoform		ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/n
593-60-2	106.9	Bromoethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/n
100-44-7	126	Benzyl Chloride		ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/n
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024			ND	0.62	0.075	ug/n
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/n
75-00-3	64.52	Chloroethane		ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/n
67-66-3	119.4	Chloroform		ND	0.20	0.026	ppbv		ND	0.98	0.13	ug/n
74-87-3	50.49	Chloromethane		0.59	0.20	0.055	ppbv		1.2	0.41	0.11	ug/n
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/n
56-23-5	153.8	Carbon tetrachloride		ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/n
110-82-7	84.16	Cyclohexane		ND	0.20	0.050			ND	0.69	0.17	ug/n
75-34-3	98.96	1,1-Dichloroethane		ND	0.20	0.019			ND	0.81	0.077	ug/n
75-35-4	96.94	1,1-Dichloroethylene		ND	0.20	0.023			ND	0.79	0.091	ug/n
106-93-4	187.9	1,2-Dibromoethane		ND	0.20	0.029			ND	1.5	0.22	ug/n
107-06-2	98.96	1,2-Dichloroethane		ND	0.20	0.027			ND	0.81	0.11	ug/n
78-87-5	113	1,2-Dichloropropane		ND	0.20	0.034			ND	0.92	0.16	ug/n
123-91-1	88.12	1,4-Dioxane		0.15	0.20	0.12	ppbv	J	0.54	0.72	0.43	ug/n
75-71-8	120.9	Dichlorodifluorometha	ne	0.45	0.20	0.024	ppbv	21	2.2	0.99	0.12	ug/n
124-48-1	208.3	Dibromochloromethane		ND	0.20	0.035	ppbv		ND	1.7	0.30	ug/n
156-60-5	96.94	trans-1,2-Dichloroethyl	lene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/n
156-59-2	96.94	cis-1,2-Dichloroethyler	ne	ND	0.20	0.025	ppbv		ND	0.79	0.099	
10061-01-5	i 111	cis-1,3-Dichloropropen	le	ND	0.20	0.033	ppbv		ND	0.91	0.15	ug/n
541-73-1	147	m-Dichlorobenzene		ND	0.20	0.028	ppbv		ND	1.2	0.17	ug/n
95-50-1	147	o-Dichlorobenzene		ND	0.20	0.039	ppbv		ND	1.2	0.23	ug/r
106-46-7	147	p-Dichlorobenzene		ND	0.20	0.060	ppbv		ND	1.2	0.36	ug/r
10061-02-6		trans-1,3-Dichloroprop	ene	ND	0.20	0.024	ppbv		ND	0.91	0.11	ug/n
64-17-5	46.07	Ethanol		28.5	0.50	0.17	ppbv		53.7	0.94	0.32	ug/r
100-41-4	106.2	Ethylbenzene		0.36	0.20	0.029	ppbv		1.6	0.87	0.13	ug/r

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



		Re	port of A	Analysi	is				P	age 2 of	2
Client Samp Lab Sample Matrix: Method: Project:		JH-IA-01 JB31249-1 AIR - Indoor Air Comp. Su TO-15 Johnson & Hoffman, Carle P	mma ID:A3 lace, NY	371		Date S Date R Percen	ecei	ved: 03/	12/13 13/13		
VOA specia	al List			1.							-
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.16	0.20	0.028	ppby	J	0.79	0.98	0.14	ug/m
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m
42-82-5	100.2	Heptane	0.14	0.20	0.028	ppbv	J	0.57	0.82	0.11	ug/m
37-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv	3	ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane	ND	0.20	0.050	ppbv		ND	0.70	0.18	ug/m
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol	7.0	0.20	0.065	ppbv		17	0.49	0.16	ug/n
75-09-2	84.94	Methylene chloride	0.26	0.20	0.055	ppbv		0.90	0.69	0.19	ug/n
78-93-3	72.11	Methyl ethyl ketone	1.1	0.20	0.042	ppbv		3.2	0.59	0.12	ug/n
108-10-1	100.2	Methyl Isobutyl Ketone	0.16	0.20	0.084	ppbv	J	0.66	0.82	0.34	ug/n
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/n
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	ND	0.20	0.025	ppbv		ND	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024			ND	1.1	0.13	ug/n
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034			ND	1.4	0.23	ug/n
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m
95-63-6	120.2		1.6	0.20	0.029	ppbv		7.9	0.98	0.14	ug/n
108-67-8	120.2		0.31	0.20	0.044			1.5	0.98	0.22	ug/n
540-84-1	114.2		ND	0.20	0.031			ND	0.93	0.14	ug/n
127-18-4	165.8	Tetrachloroethylene	0.45	0.040	0.024			3.1	0.27	0.16	ug/n
109-99-9	72.11	Tetrahydrofuran	0.38	0.20	0.074			1.1	0.59	0.22	ug/n
108-88-3	92.14	Toluene	1.7	0.20	0.032			6.4	0.75	0.12	ug/n
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036			ND	0.21	0.19	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.22	0.20	0.028	ppbv		1.2	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/n
10 01 1	106.2		1.4	0.20		ppbv		6.1	0.87	0.25	ug/n
95-47-6	106.2		0.57	0.20		ppbv		2.5	0.87	0.16	ug/n
1330-20-7	106.2		1.9	0.20		ppbv		8.3	0.87	0.16	ug/n
CAS No.	Surro	gate Recoveries Run	#1 Run	#2 I	imits						
460-00-4	4-Bro	mofluorobenzene 96%		6	5-1289	6					

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Samj Lab Sample Matrix: Method: Project:	e ID:	JH-SS-02 JB31249-2 AIR - Soil Vapor Comp. TO-15 Johnson & Hoffman, Car		A758		Date Sa Date R Percen	ecei	ved: 03	/12/13 /13/13 a		
Run #1 Run #2	File ID 3W3278		lyzed By 6/13 YMI		p Date		rep /a	Batch	Analytic V3W127		
Run #1 Run #2	Initial V 400 ml	7olume									
VOA specia	al List										1
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	6.1	0.20	0.069	ppbv		14	0.48	0.16	ug/m
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene	0.18	0.20	0.029	ppbv	J	0.58	0.64	0.093	ug/m
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/m
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/m
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/m
75-15-0	76.14	Carbon disulfide	0.18	0.20	0.024	ppbv	J	0.56	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform	0.52	0.20	0.026	ppbv		2.5	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane	ND	0.20	0.055	ppbv		ND	0.41	0.11	ug/m
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv		ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv		ND	0.81	0.077	ug/m
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029			ND	1.5	0.22	ug/m
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv		ND	0.81	0.11	ug/m
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv		ND	0.92	0.16	ug/m
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/m
75-71-8	120.9	Dichlorodifluoromethan		0.20	0.024	ppbv		7.4	0.99	0.12	ug/m
124-48-1	208.3	Dibromochloromethane		0.20	0.035	ppbv		ND	1.7	0.30	ug/m
156-60-5	96.94	trans-1,2-Dichloroethyle		0.20	0.027	ppbv		ND	0.79	0.11	ug/m
156-59-2	96.94	cis-1,2-Dichloroethylen		0.20	0.025	ppbv		ND	0.79	0.099	
10061-01-5	111 147	cis-1,3-Dichloropropene m-Dichlorobenzene	ND ND	0.20 0.20	0.033 0.028			ND ND	0.91	0.15 0.17	ug/m
541-73-1 95-50-1	147	o-Dichlorobenzene	ND	0.20	0.028			ND	1.2 1.2	0.17	ug/m ug/m
95-50-1 106-46-7	147	p-Dichlorobenzene	ND	0.20	0.059	ppbv		ND	1.2	0.25	
10061-02-6	The same and	trans-1,3-Dichloroprope	and the second se	0.20	0.000	ppbv	_	ND	0.91	0.30	ug/m ug/m
64-17-5	46.07	Ethanol	5.6	0.20	0.024	ppbv		11	0.94	0.32	ug/m
100-41-4	106.2	Ethylbenzene	0.74	0.30		ppbv		3.2	0.34	0.32	ug/m

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JB31249-2 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	1	Date Sa Date R Percen							
VOA specia	l List		-						- 61		_
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.44	0.20	0.028	ppbv		2.2	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/mä
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.27	0.20	0.028	ppbv		1.1	0.82	0.11	ug/m
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane	ND	0.20	0.050	ppbv		ND	0.70	0.18	ug/m.
591-78-6	100	2-Hexanone	0.82	0.20	0.051	ppbv		3.4	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m:
67-63-0	60.1	Isopropyl Alcohol	1.9	0.20	0.065	ppbv		4.7	0.49	0.16	ug/m.
75-09-2	84.94	Methylene chloride	0.23	0.20	0.055	ppbv		0.80	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone	3.6	0.20	0.042	ppbv		11	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	0.29	0.20	0.084	ppbv		1.2	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	0.16	0.20	0.025	ppbv	J	0.68	0.85	0.11	ug/m.
71-55-6	133.4	1,1,1-Trichloroethane	0.76	0.20	0.024	ppbv	3	4.1	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m.
95-63-6	120.2	1,2,4-Trimethylbenzene	3.5	0.20	0.029	ppbv		17	0.98	0.14	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	0.89	0.20	0.044	ppbv		4.4	0.98	0.22	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	0.14	ug/m
127-18-4	165.8	Tetrachloroethylene	24.6	0.040	0.024	ppbv		167	0.27	0.16	ug/m
109-99-9	72.11	Tetrahydrofuran	0.13	0.20	0.074	ppbv	J	0.38	0.59	0.22	ug/m
108-88-3	92.14	Toluene	3.1	0.20	0.032	ppbv	1	12	0.75	0.12	ug/m
79-01-6	131.4	Trichloroethylene	2.5	0.040	0.032	ppbv		13	0.21	0.12	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.31	0.20	0.028			1.7	1.1	0.15	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51		ug/m
10-01-4	106.2	m,p-Xylene	3.4	0.20	0.058			15	0.87	0.25	ug/m
95-47-6	106.2	o-Xylene	1.3	0.20	0.037			5.6	0.87	0.25	ug/m
1330-20-7	106.2		4.7	0.20	0.037			20	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 1	imits						

ND = Not detectedMDL - Method Detection Limit RL = Reporting Limit

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B = Indicates analyte found in associated method blank



Client Sam Lab Sampl Matrix: Method: Project:	e ID:	D: JH-IA-02 JB31249-3 Date Sampled: 03/12/13 AIR - Indoor Air Comp. Summa ID: A759 Date Received: 03/13/13 TO-15 Percent Solids: n/a Johnson & Hoffman, Carle Place, NY							/13/13	1	
Run #1 Run #2	File ID 3W3278		nalyzed 3/16/13	Ву ҮМН	Pre n/a	p Date	Prep n/a	Batch	Analytic V3W127		
Run #1 Run #2	Initial V 400 ml	lume									
VOA specia	al List						1.1		714		-
CAS No.	MW	Compound		Result	RL	MDL	Units Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone		30.3	0.20	0.069	ppbv	72.0	0.48	0.16	ug/m
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026	ppbv	ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene		0.41	0.20	0.029	ppbv	1.3	0.64	0.093	ug/m
75-27-4	163.8	Bromodichlorometha	ne	ND	0.20	0.031	ppbv	ND	1.3	0.21	ug/m
75-25-2	252.8	Bromoform		ND	0.20	0.029	ppbv	ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoethene		ND	0.20	0.027	ppbv	ND	0.87	0.12	ug/m
100-44-7	126	Benzyl Chloride		ND	0.20	0.048	ppbv	ND	1.0	0.25	ug/m
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024	ppbv	ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040	ppbv	ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane		ND	0.20	0.035	ppbv	ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.026	ppbv	ND	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane		0.51	0.20	0.055	ppbv	1.1	0.41	0.11	ug/m
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035	ppbv	ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachloride		ND	0.20	0.020	ppbv	ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane		ND	0.20	0.050	ppbv	ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroethane		ND	0.20	0.019	ppbv	ND	0.81	0.077	ug/m
75-35-4	96.94	1,1-Dichloroethylene	9	ND	0.20	0.023	ppbv	ND	0.79	0.091	ug/m
106-93-4	187.9	1,2-Dibromoethane		ND	0.20	0.029		ND	1.5	0.22	ug/m
107-06-2	98.96	1,2-Dichloroethane		ND	0.20	0.027	ppbv	ND	0.81	0.11	ug/m
78-87-5	113	1,2-Dichloropropane		ND	0.20	0.034	ppbv	ND	0.92	0.16	ug/m
123-91-1	88.12	1,4-Dioxane	975	ND	0.20	0.12	ppbv	ND	0.72	0.43	ug/m
75-71-8	120.9	Dichlorodifluorometh		0.44	0.20	0.024	ppbv	2.2	0.99	0.12	ug/m
124-48-1	208.3	Dibromochlorometha		ND	0.20	0.035	ppbv	ND	1.7	0.30	ug/m
156-60-5	96.94	trans-1,2-Dichloroeth		ND	0.20	0.027	ppbv	ND	0.79	0.11	ug/m
156-59-2	96.94	cis-1,2-Dichloroethyl		ND	0.20	0.025	ppbv	ND	0.79	0.099	ug/m
10061-01-5		cis-1,3-Dichloroprop	ene	ND	0.20	0.033	ppbv	ND	0.91	0.15	ug/m
541-73-1 95-50-1	147	m-Dichlorobenzene		ND ND	0.20	0.028	ppbv	ND ND	1.2	0.17	ug/m
95-50-1 106-46-7	147 147	o-Dichlorobenzene p-Dichlorobenzene		ND	0.20 0.20	0.039	ppbv	ND	1.2 1.2	0.23 0.36	ug/m
100-40-7	and the second sec	trans-1,3-Dichloropro	onono	ND	0.20	0.000	ppbv ppbv	ND	0.91	0.30	ug/m
64-17-5	46.07	Ethanol	opene	54.9	0.20	0.024	ppbvJE	103	0.91	0.32	ug/m ug/m
V1-11-J	10.07	Lananoi		01.0	0.50	0.11	hhn A 🖰 🖢	105	0.54	0.54	ug/m

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Sam Lab Sample Matrix: Method: Project:		JH-IA-02 JB31249-3 AIR - Indoor Air Comp. Sun TO-15 Johnson & Hoffman, Carle Pl		759		Date Sa Date R Percen	ecei	ved: 03/	12/13 13/13		
VOA specia	al List				1						
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.41	0.20	0.028	ppbv		2.0	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.57	0.20	0.028	ppbv		2.3	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.27	0.20	0.050	ppbv		0.95	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	0.11	0.20	0.033	ppbv	J	0.54	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	6.3	0.20	0.065	ppbv	6	15	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.21	0.20	0.055	ppbv		0.73	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.1	0.20	0.042	ppbv		3.2	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.21	0.20	0.084	ppbv		0.86	0.82	0.34	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
100-42-5	104.1	Styrene	0.18	0.20	0.025	ppbv	J	0.77	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv	Λ.	ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	2.7	0.20	0.029	ppbv		13	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.71	0.20	0.044			3.5	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.13	0.20	0.031	ppbv	J	0.61	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	2.0	0.040	0.024	ppbv		14	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.43	0.20	0.074	ppbv		1.3	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	6.2	0.20	0.032	ppbv		23	0.75	0.12	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040		ppbv		ND	0.21	0.19	ug/mä
75-69-4	137.4	Trichlorofluoromethane	0.21	0.20	0.028	ppbv		1.2	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m
	106.2	m,p-Xylene	4.3	0.20	0.058	ppbv		19	0.87	0.25	ug/m
95-47-6	106.2	o-Xylene	1.6	0.20	0.037			6.9	0.87	0.16	ug/m
1330-20-7	106.2	Xylenes (total)	6.0	0.20	0.037	ppbv		26	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 I	imits						
460-00-4	4-Bro	mofluorobenzene 100%		6	5-128%	6					

**Report of Analysis** 

Page 2 of 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



				Rep	ort of A	nalys	is				Р	age 1 of	2
Client Sam Lab Sample Matrix: Method: Project:	e ID:	TO-15	9-4 Soil Vapor C	Comp. Sumi n, Carle Plac		028		Date Sa Date R Percent	ecei	ved: 03.	/12/13 /13/13		
Run #1 Run #2	File ID 3W3279 3W3279		DF 1 1	Analyzed 03/16/13 03/18/13	By YMH YMH	Pre n/a n/a	p Date	n	Prep 1/a 1/a	Batch	Analytic V3W127 V3W127	0	
			-			- FR 77							
Run #1 Run #2	Initial V 400 ml 200 ml	'olume											
VOA specia	al List								-				
CAS No.	MW	Comp	ound		Result	RL	MDL	Units	Q	Result	RL	MDL	Unit
67-64-1	58.08	Aceto	ne		11.0	0.20	0.069	ppby		26.1	0.48	0.16	ug/n
106-99-0	54.09		utadiene		ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/r
71-43-2	78.11	Benze			0.20	0.20	0.029	ppbv		0.64	0.64	0.093	ug/r
75-27-4	163.8		odichlorome	ethane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/r
75-25-2	252.8	Brome			ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/r
593-60-2	106.9		oethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/I
100-44-7	126		1 Chloride		ND	0.20	0.048			ND	1.0	0.25	ug/r
75-15-0	76.14		n disulfide		ND	0.20	0.024			ND	0.62	0.075	ug/r
108-90-7	112.6		obenzene		ND	0.20	0.040			ND	0.92	0.18	ug/r
75-00-3	64.52		oethane		ND	0.20	0.035			ND	0.53	0.092	ug/r
67-66-3	119.4	Chlore			0.14	0.20	0.026		J	0.68	0.98	0.13	ug/r
74-87-3	50.49		omethane		ND	0.20	0.055		-	ND	0.41	0.11	ug/r
107-05-1	76.53		oropropene		ND	0.20	0.035			ND	0.63	0.11	ug/r
56-23-5	153.8		n tetrachlor	ide	ND	0.20	0.020			ND	1.3	0.13	ug/n
110-82-7	84.16		hexane		ND	0.20	0.050			ND	0.69	0.17	ug/r
75-34-3	98.96		ichloroetha	ne	ND	0.20	0.019			ND	0.81	0.077	ug/r
75-35-4	96.94		ichloroethy		ND	0.20	0.023			ND	0.79	0.091	ug/r
106-93-4	187.9		ibromoetha		ND	0.20	0.029			ND	1.5	0.22	ug/r
107-06-2	98.96		ichloroetha		ND	0.20	0.027			ND	0.81	0.11	ug/r
78-87-5	113		ichloroprop		ND	0.20	0.034	ppbv		ND	0.92	0.16	ug/r
123-91-1	88.12		ioxane		ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/r
75-71-8	120.9		orodifluoro	nethane	0.68	0.20	0.024			3.4	0.99	0.12	ug/r
124-48-1	208.3		mochlorom		ND	0.20	0.035			ND	1.7	0.30	ug/r
156-60-5	96.94	trans-	1,2-Dichlor	oethylene	ND	0.20	0.027			ND	0.79	0.11	ug/r
156-59-2	96.94	cis-1,	2-Dichloroe	thylene	2.8	0.20	0.025			11	0.79	0.099	ug/ı
10061-01-5			3-Dichlorop		ND	0.20	0.033			ND	0.91	0.15	ug/r
541-73-1	147		chlorobenze		ND	0.20		ppbv		ND	1.2	0.17	ug/r
95-50-1	147	o-Dic	hlorobenzer	ie	ND	0.20		ppbv		ND	1.2	0.23	ug/ı
106-46-7	147	p-Dic	hlorobenzer	ie	ND	0.20	0.060			ND	1.2	0.36	ug/I
10061-02-6	6 111	trans-	1,3-Dichlor	opropene	ND	0.20	0.024			ND	0.91	0.11	ug/r
64-17-5	46.07	Ethan		ALCEL !!	16.7	0.50	0.17	ppbv		31.5	0.94	0.32	ug/ı
100-41-4	106.2	Ethyll	benzene		0.69	0.20	0.029			3.0	0.87	0.13	ug/r

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B = Indicates analyte found in associated method blank



Client Samp Lab Sample Matrix: Method: Project:		JH-SS-03 JB31249-4 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl	nma ID:A1 ace, NY	028	10	Date Sa Date R Percen	ecei	ved: 03/	12/13 13/13		
VOA specia	l List			1							
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.26	0.20	0.028	ppbv		1.3	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.16	0.20	0.028	ppbv	J	0.66	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.10	0.20	0.050	ppbv	J	0.35	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	3.3	0.20	0.065	ppbv		8.1	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.25	0.20	0.055	ppbv		0.87	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	3.2	0.20	0.042	ppbv		9.4	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/mä
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
100-42-5	104.1	Styrene	0.12	0.20	0.025	ppbv	J	0.51	0.85	0.11	ug/mä
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	2.3	0.20	0.029	ppbv		11	0.98	0.14	ug/m:
108-67-8	120.2	1,3,5-Trimethylbenzene	0.53	0.20	0.044	ppbv		2.6	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	0.14	ug/m:
127-18-4	165.8	Tetrachloroethylene	52.9	0.080	0.049	ppbv		359	0.54	0.33	ug/m
109-99-9	72.11	Tetrahydrofuran	1.8	0.20	0.074	ppbv		5.3	0.59	0.22	ug/m
108-88-3	92.14	Toluene	10.1	0.20	0.032	ppbv		38.1	0.75	0.12	ug/m:
79-01-6	131.4	Trichloroethylene	6.0	0.040	0.036	ppbv		32	0.21	0.19	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.52	0.20	0.028	ppbv		2.9	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m
	106.2	m,p-Xylene	2.5	0.20	0.058	ppbv		11	0.87	0.25	ug/m:
95-47-6	106.2	o-Xylene	0.96	0.20	0.037			4.2	0.87	0.16	ug/m
1330-20-7	106.2	Xylenes (total)	3.5	0.20	0.037	ppbv		15	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	¥2 I	Limits						
460-00-4	4-Bron	nofluorobenzene 97%	96%	e	5-128%	6					
(a) Result is	from R	un# 2									

# **Report of Analysis**

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $\mathbf{B} =$  Indicates analyte found in associated method blank  $\mathbf{N} =$  Indicates presumptive evidence of a compound



Page 2 of 2

Client San Lab Samp Matrix: Method: Project:	le ID:	JH-IA-03 JB31249-5 AIR - Indoor Ai TO-15 Johnson & Hoff		na ID: A2 e, NY	63		Date Sa Date R Percen	ecei	ved: 03	/12/13 /13/13 1		
Run #1 Run #2	File ID 3W3280	DF 07.D 1	Analyzed 03/19/13	Ву ҮМН	Pre n/a	p Date		Prep 1/a	Batch	Analytic V3W127		
Run #1 Run #2	Initial V 400 ml	/olume										
VOA spec	ial List					1	10	7			1.1	
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Unit
67-64-1	58.08	Acetone		20.6	0.20	0.069	ppbv		48.9	0.48	0.16	ug/m
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/n
71-43-2	78.11	Benzene		0.19	0.20	0.029		J	0.61	0.64	0.093	ug/r
75-27-4	163.8	Bromodichloro	methane	ND	0.20	0.031			ND	1.3	0.21	ug/r
75-25-2	252.8	Bromoform		ND	0.20	0.029			ND	2.1	0.30	ug/r
593-60-2	106.9	Bromoethene		ND	0.20	0.027			ND	0.87	0.12	ug/r
100-44-7	126	Benzyl Chlorid	le	ND	0.20	0.048			ND	1.0	0.25	ug/r
75-15-0	76.14	Carbon disulfic		ND	0.20	0.024			ND	0.62	0.075	ug/r
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040			ND	0.92	0.18	ug/r
75-00-3	64.52	Chloroethane		ND	0.20	0.035			ND	0.53	0.092	ug/r
67-66-3	119.4	Chloroform		ND	0.20	0.026	ppbv		ND	0.98	0.13	ug/r
74-87-3	50.49	Chloromethane		0.65	0.20	0.055	ppbv		1.3	0.41	0.11	ug/r
107-05-1	76.53	3-Chloroprope	ne	ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/r
56-23-5	153.8	Carbon tetrach	loride	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/1
110-82-7	84.16	Cyclohexane		ND	0.20	0.050	ppbv		ND	0.69	0.17	ug/1
75-34-3	98.96	1,1-Dichloroet		ND	0.20	0.019	ppbv		ND	0.81	0.077	ug/1
75-35-4	96.94	1,1-Dichloroet	hylene	ND	0.20	0.023			ND	0.79	0.091	ug/I
106-93-4	187.9	1,2-Dibromoet	hane	ND	0.20	0.029	ppbv		ND	1.5	0.22	ug/1
107-06-2	98.96	1,2-Dichloroet		ND	0.20		ppbv		ND	0.81	0.11	ug/I
78-87-5	113	1,2-Dichlorop	ropane	ND	0.20		ppbv		ND	0.92	0.16	ug/r
123-91-1	88.12	1,4-Dioxane	1.0.0	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/ı
75-71-8	120.9	Dichlorodifluo		0.49	0.20	0.024			2.4	0.99	0.12	ug/i
124-48-1	208.3	Dibromochloro		ND	0.20	0.035			ND	1.7	0.30	ug/i
156-60-5	96.94	trans-1,2-Dich	· · · · · · · · · · · · · · · · · · ·	ND	0.20	0.027			ND	0.79	0.11	ug/1
156-59-2	96.94	cis-1,2-Dichlor		ND	0.20	0.025			ND	0.79	0.099	· · · ·
10061-01-		cis-1,3-Dichlo		ND	0.20	0.033			ND	0.91	0.15	ug/i
541-73-1	147	m-Dichlorober		ND	0.20	0.028			ND	1.2	0.17	ug/ı
95-50-1	147	o-Dichloroben		ND	0.20	0.039			ND	1.2	0.23	ug/1
106-46-7	147	p-Dichloroben		ND	0.20	0.060	the state and addressed	_	ND	1.2	0.36	ug/1
10061-02-		trans-1,3-Dich	toropropene	ND	0.20	0.024	ppbv		ND	0.91	0.11	ug/I
64-17-5	46.07	Ethanol		28.5	0.50	0.17	ppbv	×	53.7	0.94	0.32	ug/1
100-41-4	106.2	Ethylbenzene		0.096	0.20	0.029	ppbv	1	0.42	0.87	0.13	ug/

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



C,

Client Samp Lab Sample Matrix: Method: Project:		JH-IA-03 JB31249-5 AIR - Indoor Air Comp. Su TO-15 Johnson & Hoffman, Carle P	mma ID:A3 lace, NY	263		Date Sa Date R Percent	ecei	ved: 03/1	12/13 13/13		
VOA specia	ıl List		175.12						- 17		
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv		ND	0.98	0.14	ug/m
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m.
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m.
142-82-5	100.2	Heptane	0.12	0.20	0.028	ppbv	J	0.49	0.82	0.11	ug/m
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane	0.13	0.20	0.050	ppbv	J	0.46	0.70	0.18	ug/m
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol	2.0	0.20	0.065	ppbv		4.9	0.49	0.16	ug/m
75-09-2	84.94	Methylene chloride	0.28	0.20	0.055	ppbv		0.97	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone	0.81	0.20	0.042	ppbv		2.4	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	ND	0.20	0.025	ppbv		ND	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	0.26	0.20	0.029	ppbv		1.3	0.98	0.14	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	0.11	0.20	0.044	ppbv	J	0.54	0.98	0.22	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv	~	ND	0.93	0.14	ug/m
127-18-4	165.8	Tetrachloroethylene	0.25	0.040	0.024	ppbv		1.7	0.27	0.16	ug/m
109-99-9	72.11	Tetrahydrofuran	0.20	0.20	0.074	ppbv		0.59	0.59	0.22	ug/m
108-88-3	92.14	Toluene	0.27	0.20	0.032	ppbv		1.0	0.75	0.12	ug/m
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036	ppbv		ND	0.21	0.19	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.23	0.20	0.028	ppbv		1.3	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m
	106.2	m,p-Xylene	0.37	0.20	0.058			1.6	0.87	0.25	ug/m
95-47-6	106.2		0.16	0.20		ppbv	J	0.69	0.87	0.16	ug/m
1330-20-7	106.2		0.52	0.20		ppbv	τ.	2.3	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Run	#1 Run	#2 1	imits						
460-00-4	4-Bro	mofluorobenzene 91%		6	5-128%	6					

**Report of Analysis** 

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Page 2 of 2

Client Sam Lab Sampl Matrix: Method: Project:		TO-15	9-6 oil Vapor	Comp. Sumr an, Carle Plac	na ID: A1 xe, NY	35		Date Sa Date R Percen	ecei	ved: 03	/12/13 /13/13 1		
Santa	File ID		DF	Analyzed	Ву		p Date			Batch	Analytic		C)
Run #1 Run #2	3W3280 3W3282		1	03/19/13 03/19/13	YMH YMH	n/a n/a			l/a l/a		V3W127 V3W127		
	Initial V	/olume			2011				-				ī
Run #1	400 ml												
Run #2	150 ml												1
VOA speci	al List												
CAS No.	MW	Comp	ound		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetor	ie		11.3	0.20	0.069	ppbv		26.8	0.48	0.16	ug/m
106-99-0	54.09		tadiene		ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/m
71-43-2	78.11	Benzer			0.26	0.20	0.029	ppbv		0.83	0.64	0.093	ug/m
75-27-4	163.8	Bromo	dichloron	nethane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/m
75-25-2	252.8	Bromo			ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromo	ethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/m
100-44-7	126	Benzyl	Chloride		ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/m
75-15-0	76.14		n disulfide		ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m
108-90-7	112.6	Chloro	benzene		ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/m
75-00-3	64.52	Chloro	oethane		ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/m
67-66-3	119.4	Chloro	oform		0.17	0.20	0.026	ppbv	J	0.83	0.98	0.13	ug/m
74-87-3	50.49	Chloro	methane		0.35	0.20	0.055	ppbv		0.72	0.41	0.11	ug/m
107-05-1	76.53	3-Chlo	ropropene	e	ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/m
56-23-5	153.8		n tetrachlo	oride	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclob			ND	0.20	0.050	ppbv		ND	0.69	0.17	ug/m
75-34-3	98.96		chloroetha		ND	0.20	0.019	ppbv		ND	0.81	0.077	ug/m
75-35-4	96.94		chloroethy		ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m
106-93-4	187.9	the second se	bromoeth		ND	0.20	0.029			ND	1.5	0.22	ug/m
107-06-2	98.96		chloroetha		ND	0.20	0.027	ppbv		ND	0.81	0.11	ug/m
78-87-5	113		chloropro	pane	ND	0.20	0.034	ppbv		ND	0.92	0.16	ug/m
123-91-1	88.12	1,4-Di			ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/m
75-71-8	120.9		rodifluoro		0.48	0.20	0.024	ppbv		2.4	0.99	0.12	ug/m
124-48-1	208.3		mochloron		ND	0.20	0.035	ppbv		ND	1.7	0.30	ug/m
156-60-5	96.94			roethylene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/m
156-59-2	96.94		2-Dichloro		0.23	0.20	0.025	ppbv		0.91	0.79	0.099	
10061-01-5			B-Dichloro		ND	0.20	0.033	ppbv		ND	0.91	0.15	ug/m
541-73-1	147		hlorobenz		ND	0.20	0.028	ppbv		ND	1.2	0.17	ug/m
95-50-1	147		ilorobenze		ND	0.20	0.039	ppbv		ND	1.2	0.23	ug/m
106-46-7	147		lorobenze		ND	0.20	0.060	ppbv		ND	1.2	0.36	ug/m
10061-02-6 64-17-5				oropropene	ND	0.20	0.024	ppbv		ND	0.91	0.11	ug/m
04-17-0	46.07	Ethano	31		21.2 1.7	0.50 0.20	0.17 0.029	ppbv ppbv		39.9 7.4	0.94 0.87	0.32 0.13	ug/m ug/m

ND = Not detected MDL - Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Samj Lab Sample Matrix: Method: Project:		JH-SS-04 JB31249-6 AIR - Soil Vapor Comp. Sur TO-15 Johnson & Hoffman, Carle Pl		35	ų,	Date Sa Date R Percen	ecei	ved: 03/1	12/13 13/13		
VOA specia	l List			10	1.1			1.00	×		
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.32	0.20	0.028	ppbv		1.6	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.24	0.20	0.028	ppbv		0.98	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030			ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.30	0.20	0.050			1.1	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m3
67-63-0	60.1	Isopropyl Alcohol	4.8	0.20	0.065	ppbv		12	0.49	0.16	ug/m3
75-09-2 78-93-3	84.94 72.11	Methylene chloride Methyl ethyl ketone	0.53 0.89	0.20 0.20	0.055 0.042	ppbv ppbv		1.8 2.6	0.69 0.59	0.19 0.12	ug/m3 ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.042			ND	0.35	0.12	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.82	0.16	ug/m3
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
100-42-5	104.1	Styrene	0.16	0.20	0.025	ppbv	J	0.68	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	3.1	0.20	0.029	ppbv		15	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.63	0.20	0.044	ppbv		3.1	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	0.14	ug/m3
127-18-4	165.8	Tetrachloroethylene	31.9	0.040	0.024	ppbv		216	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.27	0.20	0.074			0.80	0.59	0.22	ug/m3
108-88-3	92.14	Toluene	61.3	0.53	0.086			231	2.0	0.32	ug/m3
79-01-6	131.4	Trichloroethylene	7.5	0.040				40	0.21	0.19	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.31	0.20	0.028			1.7	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	
		m,p-Xylene	3.6	0.20	0.058	ppbv		16	0.87	0.25	ug/m3
95-47-6	106.2		1.4	0.20	0.037			6.1	0.87	0.16	ug/m3
1330-20-7	106.2	Xylenes (total)	4.9	0.20	0.037	ррру		21	0.87	0.16	ug/m3
CAS No.	Surro	gate Recoveries Run#	1 Run	¥2 I	imits						
460-00-4	4-Bro	mofluorobenzene 98%	98%	e	65-128%	6					
(a) Result is	from R	un# 2									

**Report of Analysis** 

 $\begin{array}{ll} ND = Not \ detected & MDL - Method \ Detection \ Limit \\ RL = Reporting \ Limit \end{array}$ 

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2

Matrix: Method: Project:	e ID:	JH-IA-04 JB31249-7 AIR - Indoor Air ( TO-15 Johnson & Hoffma		na ID:A2 e, NY	00	1	Date Sa Date R Percen	ecei	ved: 03	/12/13 /13/13 1		
Run #1 Run #2	File ID 3W3280	DF 9.D 1	Analyzed 03/19/13	By YMH	Pre n/a	p Date		Prep 1/a	Batch	Analytic V3W127		
Run #1 Run #2	Initial V 400 ml	Jolume										
VOA speci	al List											
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone		9.7	0.20	0.069	ppby		23	0.48	0.16	ug/m
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene		0.17	0.20	0.029	ppbv	I	0.54	0.64	0.093	ug/m
75-27-4	163.8	Bromodichlorom	ethane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/m
75-25-2	252.8	Bromoform		ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/m
100-44-7	126	Benzyl Chloride		ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/m
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane		ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform		ND	0.20	0.026	ppbv		ND	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane		0.54	0.20	0.055	ppbv		1.1	0.41	0.11	ug/m
107-05-1	76.53	3-Chloropropene		ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachlor	ide	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane		ND	0.20	0.050	ppbv		ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroetha		ND	0.20	0.019			ND	0.81	0.077	ug/n
75-35-4	96.94	1,1-Dichloroethy		ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m
106-93-4	187.9	1,2-Dibromoetha	ne	ND	0.20		ppbv		ND	1.5	0.22	ug/m
107-06-2	98.96	1,2-Dichloroetha		ND	0.20	0.027			ND	0.81	0.11	ug/m
78-87-5	113	1,2-Dichloroprop	ane	ND	0.20		ppbv		ND	0.92	0.16	ug/m
123-91-1	88.12	1,4-Dioxane	1.2.1	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/m
75-71-8	120.9	Dichlorodifluoro		0.44	0.20	0.024			2.2	0.99	0.12	ug/m
124-48-1	208.3	Dibromochlorom		ND	0.20	0.035			ND	1.7	0.30	ug/m
156-60-5	96.94	trans-1,2-Dichlor		ND	0.20	0.027			ND	0.79	0.11	ug/m
156-59-2	96.94	cis-1,2-Dichloroe		ND	0.20	0.025			ND	0.79	0.099	-
10061-01-5		cis-1,3-Dichlorop		ND	0.20	0.033			ND	0.91	0.15	ug/n
541-73-1	147	m-Dichlorobenze		ND	0.20	0.028			ND	1.2	0.17	ug/m
95-50-1	147	o-Dichlorobenzer		ND	0.20	0.039			ND	1.2	0.23	ug/n
106-46-7	147	p-Dichlorobenzer		ND	0.20	0.060		_	ND	1.2	0.36	ug/n
10061-02-6		trans-1,3-Dichlor	opropene	ND 10.6	0.20	0.024	ppbv		ND 26.0	0.91	0.11	ug/n
64-17-5 100-41-4	46.07 106.2	Ethanol Ethylbenzene		19.6 0.25	0.50 0.20	0.17 0.029	ppbv		36.9 1.1	0.94 0.87	0.32 0.13	ug/n ug/n

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



4.7 4

Client Samj Lab Sample Matrix: Method: Project:		JH-IA-04 JB31249-7 AIR - Indoor Air Comp. Sur TO-15 Johnson & Hoffman, Carle Pl		200		Date S Date R Percen	ecei	ved: 03/	12/13 13/13		1
VOA specia	l List		100		177						_
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppby		ND	0.98	0.14	ug/m
76-13-1	187.4	Freon 113	ND	0.20	0.028			ND	1.5	0.21	ug/m
76-14-2	170.9	Freon 114	ND	0.20	0.023			ND	1.4	0.16	ug/m
42-82-5	100.2	Heptane	0.097	0.20	0.028		I	0.40	0.82	0.11	ug/m
37-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030		1	ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane	0.18	0.20	0.050		J	0.63	0.70	0.18	ug/m
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol	3.1	0.20	0.065			7.6	0.49	0.16	ug/m
75-09-2	84.94	Methylene chloride	1.0	0.20	0.055			3.5	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone	0.29	0.20	0.042			0.86	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084			ND	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045			ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20		ppbv		ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	ND	0.20	0.025			ND	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20		ppbv		ND	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20		ppbv		ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035			ND	1.1	0.19	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	0.31	0.20	0.029			1.5	0.98	0.14	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	0.099	0.20		ppbv	J	0.49	0.98	0.22	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031			ND	0.93	0.14	ug/n
127-18-4	165.8	Tetrachloroethylene	0.21	0.040				1.4	0.27	0.16	ug/m
109-99-9	72.11	Tetrahydrofuran	ND	0.20		ppbv		ND	0.59	0.22	ug/m
108-88-3	92.14	Toluene	0.35	0.20		ppbv		1.3	0.75	0.12	ug/m
79-01-6	131.4	Trichloroethylene	ND	0.040		ppbv		ND	0.21	0.19	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.24	0.20		ppbv		1.3	1.1	0.16	ug/n
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	up/m
	106.2		0.94	0.20	0.058	ppbv		4.1	0.87	0.25	ug/n
95-47-6	106.2		0.35	0.20	0.037	ppbv		1.5	0.87	0.16	ug/n
1330-20-7	106.2		1.3	0.20	0.037			5.6	0.87	0.16	ug/n
CAS No.	Surro	gate Recoveries Run	#1 Run	#2 1	imits						
460-00-4	4-Bro	mofluorobenzene 94%		e	65-1289	6					

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





				кер	ort of A	nalys	15				Р	age 1 of	2
Client Sam Lab Sampl Matrix: Method: Project:	le ID:	TO-15	19-8 Soil Vapor	Comp. Sum an, Carle Plac		53	3	Date Sa Date R Percen	ecei	ved: 03	/12/13 /13/13 1		
	File ID	i alt	DF	Analyzed	Ву		p Date			Batch	Analytic		
Run #1	3W3281		1	03/19/13	YMH	n/a			/a		V3W127		
Run #2	3W3282		1	03/19/13	YMH	n/a			ı/a		V3W127		
Run #3	3W3281	1.D	1	03/19/13	YMH	n/a		n	i/a		V3W127	/1	
	Initial V	/olume											-
Run #1	400 ml												
Run #2	20.0 ml												
Run #3	50.0 ml					-							
VOA speci	al List												
CAS No.	MW	Comp	oound		Result	RL	MDL	Units	Q	Result	RL	MDL	Unit
67-64-1	58.08	Aceto	ne		3.9	0.20	0.069	ppbv		9.3	0.48	0.16	ug/n
106-99-0	54.09	1,3-B	utadiene		ND	0.20	0.026			ND	0.44	0.058	ug/n
71-43-2	78.11	Benze	ene		0.18	0.20	0.029	ppbv	J	0.58	0.64	0.093	ug/n
75-27-4	163.8	Brom	odichlorom	ethane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/n
75-25-2	252.8	Brom	oform		ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/n
593-60-2	106.9	Brom	oethene		ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/n
100-44-7	126	Benzy	l Chloride		ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/n
75-15-0	76.14	Carbo	on disulfide		0.19	0.20	0.024	ppbv	J	0.59	0.62	0.075	ug/n
108-90-7	112.6	Chlor	obenzene		ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/n
75-00-3	64.52	Chlor	oethane		ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/n
67-66-3	119.4		oform		0.13	0.20	0.026	ppbv	J	0.63	0.98	0.13	ug/n
74-87-3	50.49	Chlor	omethane		ND	0.20	0.055	ppbv		ND	0.41	0.11	ug/n
107-05-1	76.53		oropropene		ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/n
56-23-5	153.8		on tetrachlo	ride	ND	0.20	0.020			ND	1.3	0.13	ug/n
110-82-7	84.16		hexane		ND	0.20	0.050			ND	0.69	0.17	ug/n
75-34-3	98.96		ichloroetha		0.13	0.20	0.019	ppbv	J	0.53	0.81	0.077	
75-35-4	96.94		ichloroethy		ND	0.20	0.023	ppbv		ND	0.79	0.091	
106-93-4	187.9		ibromoetha		ND	0.20	0.029			ND	1.5	0.22	ug/n
107-06-2	98.96		ichloroetha		ND	0.20	0.027			ND	0.81	0.11	ug/n
78-87-5	113		ichloropro	pane	ND	0.20	0.034			ND	0.92	0.16	ug/n
123-91-1	88.12		lioxane	1.16.0 6	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/n
75-71-8	120.9		orodifluoro		0.41	0.20	0.024			2.0	0.99	0.12	ug/n
124-48-1	208.3		mochloron		ND	0.20	0.035	~ ~		ND	1.7	0.30	ug/n
156-60-5	96.94		1,2-Dichlo		5.0	0.20	0.027			20	0.79	0.11	ug/n
156-59-2	96.94		2-Dichloro		104	1.6	0.20	ppbv		412 4	6.3	0.79	ug/n
10061-01-5			3-Dichloro		ND	0.20	0.033			ND	0.91	0.15	ug/n
541-73-1	147		chlorobenz		ND	0.20	0.028			ND	1.2	0.17	ug/n
95-50-1	147		hlorobenze		ND	0.20	0.039			ND	1.2	0.23	ug/n
106-46-7	147		hlorobenze		ND	0.20		ppbv		ND	1.2	0.36	ug/n
10061-02-0	6 111	trans-	1,3-Dichlo	ropropene	ND	0.20	0.024	ppbv		ND	0.91	0.11	ug/n

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Samj Lab Sample Matrix: Method: Project:		JH-SS-05 JB31249-8 AIR - Soil Vapor Comp. TO-15 Johnson & Hoffman, Ca			53		Date Sa Date R Percen	ecei	ved: 03/1	2/13 3/13		
VOA specia	l List					21				1.1		_
CAS No.	MW	Compound		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol		9.3	0.50	0.17	ppbv		18	0.94	0.32	ug/m
100-41-4	106.2	Ethylbenzene		0.84	0.20	0.029	ppbv		3.6	0.87	0.13	ug/m
622-96-8	120.2	4-Ethyltoluene		0.25	0.20	0.028	ppbv		1.2	0.98	0.14	ug/m
76-13-1	187.4	Freon 113		ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m
76-14-2	170.9	Freon 114		ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m
142-82-5	100.2	Heptane		0.14	0.20	0.028	ppbv	J	0.57	0.82	0.11	ug/m
87-68-3	260.8	Hexachlorobutadiene		ND	0.20	0.030			ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane		0.28	0.20	0.050			0.99	0.70	0.18	ug/m
591-78-6	100	2-Hexanone		ND	0.20	0.051			ND	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene		ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol		2.3	0.20	0.065	ppbv		5.7	0.49	0.16	ug/m
75-09-2	84.94	Methylene chloride		0.62	0.20	0.055	ppbv		2.2	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone		0.78	0.20	0.042			2.3	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ć .	ND	0.20	0.084			ND	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ethe		ND	0.20	0.045			ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene		ND	0.20	0.034			ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene		0.29	0.20	0.025			1.2	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane		0.91	0.20	0.023			5.0	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroetha	no	ND	0.20	0.024			ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	uic	ND	0.20	0.034			ND	1.1	0.23	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzen		2.4	0.20	0.029			12	0.98	0.13	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzen		0.50	0.20	0.025			2.5	0.98	0.14	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane		ND	0.20	0.044			ND	0.93	0.14	ug/m
127-18-4	165.8	Tetrachloroethylene		498	0.20	0.49	ppbv		3380	5.4	3.3	ug/m
109-99-9	72.11	Tetrahydrofuran		0.28	0.20	0.45			0.83	0.59	0.22	ug/m
109-99-9	92.14	Toluene		19.0	0.20	0.074			71.6	0.35		
	92.14			40.0		0.032			215	0.75	0.12 0.19	ug/m
79-01-6	131.4	Trichloroethylene Trichlorofluoromethane		0.22	0.040	0.036	ppby		1.2		0.19	ug/m
75-69-4			5							1.1		ug/m
75-01-4	62.5	Vinyl chloride		ND	0.20	0.022			ND	0.51	0.056	
05 47 0	106.2			2.3	0.20		ppbv		10	0.87	0.25	ug/m
95-47-6	106.2			0.88	0.20	0.037			3.8	0.87	0.16	ug/m
1330-20-7	106.2	Xylenes (total)		3.2	0.20	0.037	ppbv		14	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries	Run# 1	Run	#2 I	Run#3	Li	nits				
460-00-4	4-Bro	mofluorobenzene	103%	90%		92%	65	-128	%			

Report of Analysis

Page 2 of 2

(a) Result is from Run# 3

(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Client Sam Lab Sampl Matrix: Method: Project:	· · · · · · · · · · · · · · · · · · ·	JH-IA-05 JB31249-9 AIR - Indoor Air TO-15 Johnson & Hoffn			64	0	Date Sam Date Rec Percent S	eived: 03	2/12/13 2/13/13 a		
Run #1 Run #2	File ID 3W3281	DF 2.D 1	Analyzed 03/19/13	Ву ҮМН	Pre n/a	p Date	Pre n/a	p Batch	Analytic V3W127		n
Run #1 Run #2	Initial \ 400 ml	/olume									
VOA speci	al List										
CAS No.	MW	Compound		Result	RL	MDL	Units Q	) Result	RL	MDL	Unit
67-64-1	58.08	Acetone		2.2	0.20	0.069	nnby	5.2	0.48	0.16	ug/n
106-99-0	54.09	1,3-Butadiene		ND	0.20	0.026	ppbv	ND	0.44	0.058	ug/n
71-43-2	78.11	Benzene		0.11	0.20	0.029	ppbv J		0.64	0.093	ug/r
75-27-4	163.8	Bromodichloror	nethane	ND	0.20	0.031	ppbv	ND	1.3	0.21	ug/r
75-25-2	252.8	Bromoform	0.000	ND	0.20	0.029	ppbv	ND	2.1	0.30	ug/r
593-60-2	106.9	Bromoethene		ND	0.20	0.027		ND	0.87	0.12	ug/r
100-44-7	126	Benzyl Chloride		ND	0.20	0.048		ND	1.0	0.25	ug/r
75-15-0	76.14	Carbon disulfide		ND	0.20	0.024		ND	0.62	0.075	ug/r
108-90-7	112.6	Chlorobenzene		ND	0.20	0.040	ppbv	ND	0.92	0.18	ug/r
75-00-3	64.52	Chloroethane		ND	0.20	0.035	ppbv	ND	0.53	0.092	ug/r
67-66-3	119.4	Chloroform		ND	0.20	0.026	ppbv	ND	0.98	0.13	ug/r
74-87-3	50.49	Chloromethane		0.56	0.20	0.055	ppbv	1.2	0.41	0.11	ug/r
107-05-1	76.53	3-Chloropropen	e	ND	0.20	0.035		ND	0.63	0.11	ug/1
56-23-5	153.8	Carbon tetrachle		ND	0.20	0.020		ND	1.3	0.13	ug/r
110-82-7	84.16	Cyclohexane		ND	0.20	0.050		ND	0.69	0.17	ug/r
75-34-3	98.96	1,1-Dichloroeth	ane	ND	0.20	0.019		ND	0.81	0.077	ug/i
75-35-4	96.94	1,1-Dichloroeth		ND	0.20	0.023		ND	0.79	0.091	ug/i
106-93-4	187.9	1,2-Dibromoeth		ND	0.20	0.029		ND	1.5	0.22	ug/I
107-06-2	98.96	1,2-Dichloroeth		ND	0.20	0.027	ppby	ND	0.81	0.11	ug/i
78-87-5	113	1,2-Dichloropro		ND	0.20	0.034		ND	0.92	0.16	ug/I
123-91-1	88.12	1,4-Dioxane	2007 ( C. 197	ND	0.20	0.12	ppbv	ND	0.72	0.43	ug/i
75-71-8	120.9	Dichlorodifluor	omethane	0.47	0.20	0.024	ppbv	2.3	0.99	0.12	ug/I
124-48-1	208.3	Dibromochloro		ND	0.20	0.035		ND	1.7	0.30	ug/i
156-60-5	96.94	trans-1,2-Dichle		ND	0.20	0.027	ppbv	ND	0.79	0.11	ug/i
156-59-2	96.94	cis-1,2-Dichloro		ND	0.20	0.025	ppbv	ND	0.79	0.099	ug/I
10061-01-5		cis-1,3-Dichloro		ND	0.20	0.033		ND	0.91	0.15	ug/i
541-73-1	147	m-Dichlorobenz		ND	0.20	0.028		ND	1.2	0.17	ug/ı
95-50-1	147	o-Dichlorobenz		ND	0.20	0.039		ND	1.2	0.23	ug/1
106-46-7	147	p-Dichlorobenz		ND	0.20	0.060		ND	1.2	0.36	ug/i
10061-02-0		trans-1,3-Dichle		ND	0.20	0.024		ND	0.91	0.11	ug/
64-17-5	46.07	Ethanol		1.3	0.50	0.17	ppbv	2.4	0.94	0.32	ug/i
100-41-4	106.2	Ethylbenzene		ND	0.20		ppbv	ND	0.87	0.13	ug/

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



4.9

Client Samp Lab Sample Matrix: Method: Project:		JH-IA-05 JB31249-9 AIR - Indoor Air Comp. Sun TO-15 Johnson & Hoffman, Carle Pl		164		Date S Date R Percen	ecei	ved: 03/	12/13 13/13		
VOA specia	l List		-		сж.						
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppby		ND	0.98	0.14	ug/m
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m
42-82-5	100.2	Heptane	ND	0.20	0.028	ppbv		ND	0.82	0.11	ug/m
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane	ND	0.20	0.050	ppby		ND	0.70	0.18	ug/m
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.033			ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	0.16	ug/m
75-09-2	84.94	Methylene chloride	0.19	0.20	0.055	ppbv	I	0.66	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone	0.36	0.20	0.042	ppbv		1.1	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	0.80	0.20	0.025	ppbv		3.4	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034	ppbv		ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	0.20	0.20	0.029	ppbv		0.98	0.98	0.14	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044			ND	0.98	0.22	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031			ND	0.93	0.14	ug/m
127-18-4	165.8	Tetrachloroethylene	0.31	0.040				2.1	0.27	0.16	ug/m
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.074			ND	0.59	0.22	ug/m
108-88-3	92.14	Toluene	0.12	0.20	0.032		J	0.45	0.75	0.12	ug/m
79-01-6	131.4	Trichloroethylene	0.040	0.040			3	0.21	0.21	0.19	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.22	0.20	0.028			1.2	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppby		ND	0.51	0.056	ug/m
	106.2	m,p-Xylene	0.11	0.20		ppbv	I	0.48	0.87	0.25	ug/m
95-47-6	106.2		ND	0.20	0.037		1	ND	0.87	0.16	ug/m
1330-20-7	106.2		0.11	0.20	0.037		J	0.48	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 I	imits						
460-00-4	4-Bro	mofluorobenzene 95%		6	5-128%	6					

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



				кер	ort of A	malys	IS				Р	age 1 of	2
	Method: TO-15 Project: Johnson & Hoffman, Carl				na ID: A1 xe, NY	015	1	Date Sa Date R Percen	ecei	ved: 03.	/12/13 /13/13 1		
Run #1 Run #2	File ID 3W3281		DF 1	Analyzed 03/19/13	By Prep Dat YMH n/a		p Date	Prep Batch n/a			Analytical Batch V3W1271		
Run #1 Run #2	Initial V 400 ml	Volume											
VOA speci	ial List												
CAS No.	MW	Compou	und		Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone			5.4	0.20	0.069	ppby		13	0.48	0.16	ug/m
106-99-0	54.09	1,3-Buta			ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene			0.13	0.20	0.029	ppbv	J	0.42	0.64	0.093	ug/m
75-27-4	163.8		ichlorome	thane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/m
75-25-2	252.8	Bromofo			ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoe			ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/m
100-44-7	126	Benzyl (			ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/m
75-15-0	76.14		disulfide		ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorob	enzene		ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/n
75-00-3	64.52	Chloroe	thane		ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/m
67-66-3	119.4	Chlorof	orm		ND	0.20	0.026	ppbv		ND	0.98	0.13	ug/m
74-87-3	50.49	Chloron	nethane		ND	0.20	0.055	ppbv		ND	0.41	0.11	ug/m
107-05-1	76.53		opropene		ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/m
56-23-5	153.8		tetrachlor	ide	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohe			ND	0.20	0.050	ppbv		ND	0.69	0.17	ug/m
75-34-3	98.96		hloroetha		ND	0.20	0.019	ppbv		ND	0.81	0.077	ug/m
75-35-4	96.94		hloroethy		ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m
106-93-4	187.9		romoetha		ND	0.20	0.029	ppbv		ND	1.5	0.22	ug/m
107-06-2	98.96	and the second	hloroetha		ND	0.20	0.027			ND	0.81	0.11	ug/n
78-87-5	113		hloroprop	ane	ND	0.20	0.034			ND	0.92	0.16	ug/n
123-91-1	88.12	1,4-Dio		and a second	ND 0.45	0.20	0.12	ppbv		ND	0.72	0.43	ug/m
75-71-8	120.9		odifluoroi		0.45 ND	0.20	0.024			2.2	0.99	0.12	ug/m
124-48-1	208.3		ochlorom		ND	0.20	0.035	ppbv		ND	1.7	0.30	ug/m
156-60-5	96.94			oethylene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/m
156-59-2	96.94		Dichloroe	-	ND	0.20	0.025	ppbv		ND	0.79	0.099	ug/n
10061-01-			Dichlorop		ND	0.20	0.033	ppbv		ND	0.91	0.15	ug/m
541-73-1	147 147		lorobenze orobenzer		ND ND	0.20 0.20	0.028	ppbv		ND ND	1.2 1.2	0.17 0.23	ug/n
95-50-1 106-46-7	147		orobenzer		ND	0.20	0.059			ND	1.2	0.25	ug/n
100-40-7			3-Dichlor		ND	0.20	0.080		_	ND	0.91	0.30	ug/n ug/n
64-17-5	46.07	Ethanol		opropene	14.6	0.20	0.024	ppbv		27.5	0.91	0.32	ug/n
100-41-4	106.2	Ethylbe			0.55	0.20	0.029			2.4	0.94	0.32	ug/n
100-41-4	100.2	Entyme	nzene		0.55	0.20	0.029	hhna		2.4	0.07	0.15	ug/n

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	fethod: TO-15			1015	Date Sampled: 03/12/13 Date Received: 03/13/13 Percent Solids: n/a						
VOA specia	al List		- 13				i.				_
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	0.24	0.20	0.028	ppbv		1.2	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m3
142-82-5	100.2	Heptane	0.13	0.20	0.028	ppbv	J	0.53	0.82	0.11	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv	е.	ND	2.1	0.32	ug/m3
110-54-3	86.17	Hexane	0.11	0.20	0.050		I	0.39	0.70	0.18	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.051			ND	0.82	0.21	ug/m3
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol	4.8	0.20	0.065	ppbv		12	0.49	0.16	ug/m
75-09-2	84.94	Methylene chloride	0.29	0.20	0.055	ppbv		1.0	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone	1.0	0.20	0.042			2.9	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	0.13	0.20	0.084		J	0.53	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv	3	ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.034			ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	0.12	0.20	0.025	ppbv	J	0.51	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024		1	ND	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034			ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035			ND	1.1	0.19	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	1.8	0.20	0.029	ppbv		8.8	0.98	0.14	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	0.44	0.20	0.044	ppbv		2.2	0.98	0.22	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031			ND	0.93	0.14	ug/m
127-18-4	165.8	Tetrachloroethylene	1.3	0.040	0.024			8.8	0.33	0.16	ug/m
109-99-9	72.11	Tetrahydrofuran	0.39	0.20	0.074			1.2	0.59	0.22	ug/m
108-88-3	92.14	Toluene	2.8	0.20	0.032			11	0.75	0.12	ug/m
79-01-6	131.4	Trichloroethylene	0.041	0.040	0.036			0.22	0.21	0.12	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.24	0.20	0.028			1.3	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022			ND	0.51	0.056	ug/m
	106.2	m,p-Xylene	2.2	0.20	0.058			9.6	0.87	0.050	ug/m
95-47-6	106.2	o-Xylene	0.84	0.20	0.037			3.6	0.87	0.25	ug/m
1330-20-7	106.2	Xylenes (total)	3.0	0.20	0.037			13	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Run#	1 Run	#2 I	imits						
460-00-4	- 1984	nofluorobenzene 96%		5-128%	á						

**Report of Analysis** 

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2

Client Sam Lab Samp Matrix: Method: Project:		JH-ØA-01 JB31249-11 AIR - Ambient Air Comp. St TO-15 Johnson & Hoffman, Carle Pla	umma ID: <i>4</i> ace, NY	<b>\280</b>		Date Sa Date R Percent	ecei	ved: 03.	/12/13 /13/13 a		
Run #1 Run #2	File ID 3W3281	DF Analyzed 14.D 1 03/19/13				Date Prep Batch n/a		Analytic V3W127	,		
Run #1 Run #2	Initial V 400 ml	Jolume									
VOA spec	ial List										
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	6.7	0.20	0.069	ppbv		16	0.48	0.16	ug/m
106-99-0	54.09	1.3-Butadiene	ND	0.20	0.026	ppbv		ND	0.44	0.058	ug/m
71-43-2	78.11	Benzene	0.11	0.20	0.029	ppbv	J	0.35	0.64	0.093	ug/m
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.031	ppbv		ND	1.3	0.21	ug/m
75-25-2	252.8	Bromoform	ND	0.20	0.029	ppbv		ND	2.1	0.30	ug/m
593-60-2	106.9	Bromoethene	ND	0.20	0.027	ppbv		ND	0.87	0.12	ug/m
100-44-7	126	Benzyl Chloride	ND	0.20	0.048	ppbv		ND	1.0	0.25	ug/m
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m
108-90-7	112.6	Chlorobenzene	ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/m
75-00-3	64.52	Chloroethane	ND	0.20	0.035	ppbv		ND	0.53	0.092	ug/m
67-66-3	119.4	Chloroform	ND	0.20	0.026	ppbv		ND	0.98	0.13	ug/m
74-87-3	50.49	Chloromethane	0.57	0.20	0.055	ppbv		1.2	0.41	0.11	ug/m
107-05-1	76.53	3-Chloropropene	ND	0.20	0.035	ppbv		ND	0.63	0.11	ug/m
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/m
110-82-7	84.16	Cyclohexane	ND	0.20	0.050	ppbv		ND	0.69	0.17	ug/m
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.019	ppbv		ND	0.81	0.077	ug/m
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.029	ppbv		ND	1.5	0.22	ug/m
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.027	ppbv		ND	0.81	0.11	ug/m
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.034	ppbv		ND	0.92	0.16	ug/m
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/m
75-71-8	120.9	Dichlorodifluoromethane	0.46	0.20	0.024	ppbv		2.3	0.99	0.12	ug/m
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.035	ppbv		ND	1.7	0.30	ug/m
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/m
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	0.099	
10061-01-		cis-1,3-Dichloropropene	ND	0.20	0.033	ppbv		ND	0.91	0.15	ug/m
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv		ND	1.2	0.17	ug/m
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.039	ppbv		ND	1.2	0.23	ug/m
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.060	ppbv	_	ND	1.2	0.36	ug/m
10061-02-0		trans-1,3-Dichloropropene	ND 17	0.20	0.024	ppbv		ND	0.91	0.11	ug/m
64-17-5	46.07	Ethanol Ethylhonzono	1.7 ND	0.50 0.20	0.17	ppbv		3.2 ND	0.94	0.32	ug/m
100-41-4	106.2	Ethylbenzene	ND	0.20	0.029	hbpA		ND	0.87	0.13	ug/n

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $\mathbf{B} = \mathbf{Indicates}$  analyte found in associated method blank



Client Sample ID: Lab Sample ID: Matrix: Method: Project:		JH-0A-01 JB31249-11 AIR - Ambient Air Comp. TO-15 Johnson & Hoffman, Carle	Summa ID: A280 Place, NY		Date Sampled: 03/12/13 Date Received: 03/13/13 Percent Solids: n/a						
VOA specia	l List			1	5.47						
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv		ND	0.98	0.14	ug/m
76-13-1	187.4	Freon 113	ND	0.20	0.028	ppbv		ND	1.5	0.21	ug/m
76-14-2	170.9	Freon 114	ND	0.20	0.023	ppbv		ND	1.4	0.16	ug/m
142-82-5	100.2	Heptane	ND	0.20	0.028	ppbv		ND	0.82	0.11	ug/m
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.030	ppbv		ND	2.1	0.32	ug/m
110-54-3	86.17	Hexane	ND	0.20	0.050	ppbv		ND	0.70	0.18	ug/m
591-78-6	100	2-Hexanone	ND	0.20	0.051	ppbv		ND	0.82	0.21	ug/m
98-82-8	120	Isopropylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m
67-63-0	60.1	Isopropyl Alcohol	0.32	0.20	0.065	ppbv		0.79	0.49	0.16	ug/m
75-09-2	84.94	Methylene chloride	0.23	0.20	0.055	ppbv		0.80	0.69	0.19	ug/m
78-93-3	72.11	Methyl ethyl ketone	5.6	0.20	0.042	ppbv		17	0.59	0.12	ug/m
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.084	ppbv		ND	0.82	0.34	ug/m
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m
103-65-1	120	n-Propylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m
100-42-5	104.1	Styrene	ND	0.20	0.025	ppbv		ND	0.85	0.11	ug/m
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024			ND	1.1	0.13	ug/m
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.034			ND	1.4	0.23	ug/m
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.029	ppbv		ND	0.98	0.14	ug/m
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.044	ppbv		ND	0.98	0.22	ug/m
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.031	ppbv		ND	0.93	0.14	ug/m
127-18-4	165.8	Tetrachloroethylene	0.083	0.040	0.024	ppbv		0.56	0.27	0.16	ug/m
109-99-9	72.11	Tetrahydrofuran	3.2	0.20	0.074	ppbv		9.4	0.59	0.22	ug/m
108-88-3	92.14	Toluene	0.14	0.20	0.032	ppbv	J	0.53	0.75	0.12	ug/m
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036	ppbv		ND	0.21	0.19	ug/m
75-69-4	137.4	Trichlorofluoromethane	0.20	0.20	0.028			1.1	1.1	0.16	ug/m
75-01-4	62.5	Vinyl chloride	ND	0.20		ppbv		ND	0.51	0.056	
	106.2		ND	0.20	0.058	ppbv		ND	0.87	0.25	ug/m
95-47-6	106.2		ND	0.20	0.037			ND	0.87	0.16	ug/m
1330-20-7	106.2		ND	0.20	0.037			ND	0.87	0.16	ug/m
CAS No.	Surro	gate Recoveries Ru	n#1 Run	#2 1	imits						
460-00-4	4-Bro	mofluorobenzene 899	%	F	5-128%	6					

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound





# DATA USABILITY SUMMARY REPORT (DUSR)

Client: ERM, Melville, NY

# Site: <u>J&H Manufacturing Site - Carle Place</u>, New York

SDG #s: JB29428 and JB29821

Laboratory: <u>Accutest Laboratories – Dayton, New Jersey</u>

Date: March 28, 2013

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
01	MW-02	JB29428-1	Ground Water
02	MW-03	JB29428-2	Ground Water
03	MW-04	JB29428-3	Ground Water
04	MW-05	JB29428-4	Ground Water
04MS	MW-05 MS	JB29428-4S	Water Matrix Spike
04MSD	MW-05 MSD	JB29428-4D	Water Dup/MSD
05	DUP022013 (MW-02)	JB29428-5	Ground Water
06	FB022013	JB29428-6	Field Blank Water
07	TB022013	JB29428-7	Trip Blank Water
08	MW-01	JB29821-1	Ground Water
09	FB022513	JB29821-2	Field Blank Water
10	TB022513	JB29821-3	Trip Blank Water

The laboratory reports non-detects with an ND on the Report of Analysis Summaries (Form Is). In the review, qualification of non-detect data will be listed as UJ. The Form Is will only be qualified with a "J" next to the ND.

# **VOLATILE ORGANIC COMPOUNDS** USEPA SW-846 8260B

The analytical method, the NYSDEC ASP, the USEPA CLP National Functional Guidelines for Organic Data Review (October 1999), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B, and the reviewer's professional judgment were used in evaluating the data in this summary report.

Holding Times - All HT criteria were met.

Surrogates - All surrogate recoveries met QC criteria.

<u>MS/MSD</u> – One MS/MSD set was collected on EDS ID 04. This MS/MSD exhibited acceptable %R and RPDs. The laboratory also provided batch QC to fulfill method requirements. The batch QC is not used to qualify the sample data.

<u>Blank Spike Samples (BSS)</u> - The BSS samples exhibited acceptable %R values except for chloroethane, chloromethane, and trichloroethene which recovered above QC criteria in the BSS applicable to all samples in Accutest Job Number JB29428. These compounds may possibly be biased high in samples in Accutest Job Number JB29428. No qualification of the sample data was required as these compounds were not positively identified in any samples in Accutest Job Number JB29428.

<u>Method Blank (MB)</u> - The method blanks applicable to the samples exhibited no target compounds.

<u>Trip, Field Blank</u> – Two field blanks and two trip blanks were collected with the samples in this data set. All exhibited no target compounds.

<u>GC/MS Tuning</u> - All of the BFB tunes met QC criteria.

<u>Initial Calibration</u> - The initial calibration exhibited acceptable %RSD and mean RRF values except the following. Calibrations applicable to QC samples only have not been listed.

ICAL	Compound	%RSD/RRF	Qualifier	Affected Samples
V2A5397-ICC5397	2-Butanone	RRF = 0.048	UJ	01 to 07
V2B4684-ICC4684	2-Butanone	RRF = 0.047	UJ	08 to 10

It is the reviewer's professional opinion that the poor responses from 2-Butanone are common since 2-Butanone is typically a poor responder. Low RRFs for 2-Butanone do not require rejection for non-detects, however the associated non-detects are still considered estimated and qualified UJ.

<u>Continuing Calibration</u> - The continuing calibrations exhibited acceptable %D and RRF values except the following. Calibrations applicable to QC samples only have not been listed.

CCAL	Compound	%D/RRF	Qualifier	Affected Samples			
V2B4763-CC4684	2-Butanone	RRF = 0.045	UJ	08 to 10			

It is the reviewer's professional opinion that the poor responses from 2-butanone are common since 2-Butanone is typically a poor responder. Low RRFs for 2-Butanone do not require rejection for non-detects, however the associated non-detects are still considered estimated and qualified UJ.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

<u>Blind Field Duplicates</u> – One blind field duplicate sample, EDS ID 05 (DUP022013), was collected from EDS ID 01 (MW-02). A comparison of the sample data indicates that results compare well.

<u>Compound Quantitation</u> – No deficiencies were reported with the samples from this data set.

		Repo	rt of A	nalysis			Page 1 of
Client Sam Lab Sample Matrix: Method: Project:		Carle Place	e, NY		Date		2/25/13 2/26/13 a
Run #1 Run #2		Analyzed 03/01/13			Prep Batch n/a	Analytical Batch V2B4763	
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	List (SOM0 1.1)						
CAS No.	Compound	Result	RL	MDL	Units	Q	
67-64-1	Acetone	ND	10	3.3	ug/l		
71-43-2	Benzene	ND	1.0	0.24	ug/l		
74-97-5	Bromochloromethane	ND	5.0	0.30	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l		
75-25-2	Bromoform	ND	4.0	0.21	ug/l		
74-83-9	Bromomethane	ND	2.0	0.22	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	5	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l		
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l		
75-00-3	Chloroethane	ND	1.0	0.26	ug/l		
67-66-3	Chloroform	ND	1.0	0.20	ug/l		
74-87-3	Chloromethane	ND	1.0	0.21	ug/l		
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l		
96-12-8	1,2-Dibromo-3-chloropropar	ie ND	10	0.54	ug/l		
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l		
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l		
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l		
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l		
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l		
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l		
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l		
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l		
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l		
10061-01-5		ND	1.0	0.21	ug/l		
10061-02-6		ND	1.0	0.19	ug/l		
123-91-1	1,4-Dioxane	ND	130	75	ug/l		
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l		
76-13-1	Freon 113	ND	5.0	0.53	ug/l		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



	Method: SW846 8260B		NY		Date	Sampled: Received: ent Solids:	02/25/13 02/26/13 n/a
VOA TCL I	.ist (SOM0 1.1)	100					
CAS No.	Compound	Result	RL	MDL	Units	Q	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l		
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l		
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l		
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l		
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH	O ND	5.0	0.83	ug/l		
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l		
100-42-5	Styrene	ND	5.0	0.21	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l		
127-18-4	Tetrachloroethene	13.3	1.0	0.28	ug/l		
108-88-3	Toluene	ND	1.0	0.23	ug/l		
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.28	ug/l		
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l		
79-01-6	Trichloroethene	0.47	1.0	0.22	ug/l	J	
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l		
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l		
	m,p-Xylene	ND	1.0	0.42	ug/l		
95-47-6	o-Xylene	ND	1.0	0.24	ug/l		
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l		
CAS No.	Surrogate Recoveries	Run# 1	Run#2	Lin	nits		
1868-53-7	Dibromofluoromethane	101%			121%		
17060-07-0	1,2-Dichloroethane-D4	102%			127%		
2037-26-5	Toluene-D8	102%			122%		
460-00-4	4-Bromofluorobenzene	97%		78-	116%		

Report of Analysis

Page 2 of 2

 $\begin{array}{ll} ND = Not \; detected & MDL - Method \; Detection \; Limit \\ RL = Reporting \; Limit \\ E = Indicates \; value \; exceeds \; calibration \; range \end{array}$ 

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

		Repo	rt of A	nalysis			Page 1 of 2
Client Sam Lab Sampl Matrix: Method: Project:			e, NY		Date		2/20/13 2/21/13 a
Run #1 Run #2	File ID DF 2A132185.D 1	Analyzed 02/27/13	By CC	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2A5639
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	List (SOM0 1.1)				1		
CAS No.	Compound	Result	RL	MDL	Units	Q	
67-64-1 71-43-2	Acetone Benzene	ND ND	10 1.0	3.3 0.24	ug/l ug/l		
74-97-5	Bromochloromethane	ND	5.0	0.30	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l		
75-25-2	Bromoform	ND	4.0	0.21	ug/l		
74-83-9	Bromomethane	ND	2.0	0.22	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	5	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l		
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l		
75-00-3	Chloroethane	ND	1.0	0.26	ug/l		
67-66-3	Chloroform	ND	1.0	0.20	ug/l		
74-87-3	Chloromethane	ND	1.0	0.21	ug/l		
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l		
96-12-8	1,2-Dibromo-3-chloroprop		10	0.54	ug/l		
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l		
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l		
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l		
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l		
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l		
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l		
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/1		
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l		
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/1		
156-59-2 156-60-5	cis-1,2-Dichloroethene	ND ND	1.0 1.0	0.19 0.21	ug/l		
156-60-5 78-87-5	trans-1,2-Dichloroethene 1,2-Dichloropropane	ND	1.0	0.21	ug/l ug/l		
10061-01-5		ND	1.0	0.48	ug/l		
10061-01-5			1.0	0.21	ug/l		
123-91-1	1,4-Dioxane	ND	130	75	ug/1		
123-91-1	Ethylbenzene	ND	1.0	0.23	ug/l		
76-13-1	Freon 113	ND	5.0	0.23	ug/l		

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Client Samp Lab Sample Matrix: Method:		MW-02 JB29428-1 AQ - Ground Water SW846 8260B		202		Date	Sampled: Received: ent Solids:	02/20/13 02/21/13 n/a
Project:		Johnson & Hoffman, C	arle Place,	NY				
VOA TCL I	List (SC	OM0 1.1)						
CAS No.	Comp	ound	Result	RL	MDL	Units	Q	
591-78-6	2-Hex	anone	ND	5.0	1.1	ug/l		
98-82-8	Isopro	pylbenzene	ND	2.0	0.45	ug/l		
79-20-9		Acetate	ND	5.0	1.2	ug/l		
108-87-2	Methy	lcyclohexane	ND	5.0	0.26	ug/l		
1634-04-4	Methy	I Tert Butyl Ether	ND	1.0	0.16	ug/l		
108-10-1	4-Met	hyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l		
75-09-2	Methy	lene chloride	ND	2.0	0.70	ug/l		
100-42-5	Styren	e	ND	5.0	0.21	ug/I		
79-34-5	1,1,2,	2-Tetrachloroethane	ND	1.0	0.21	ug/l		
127-18-4	Tetrac	hloroethene	2.2	1.0	0.28	ug/l		
108-88-3	Tolue	ne	ND	1.0	0.23	ug/l		
87-61-6	1,2,3-	Trichlorobenzene	ND	5.0	0.28	ug/l		
120-82-1	1,2,4-	Trichlorobenzene	ND	5.0	0.20	ug/l		
71-55-6	1,1,1-	Trichloroethane	ND	1.0	0.24	ug/l		
79-00-5	1,1,2-	Trichloroethane	ND	1.0	0.29	ug/l		
79-01-6	Trichl	oroethene	ND	1.0	0.22	ug/l		
75-69-4	Trichl	orofluoromethane	ND	5.0	0.27	ug/l		
75-01-4	Vinyl	chloride	ND	1.0	0.21	ug/l		
	m,p-X	(ylene	ND	1.0	0.42	ug/l		
95-47-6	o-Xyl	ene	ND	1.0	0.24	ug/l		
1330-20-7	Xylen	e (total)	ND	1.0	0.24	ug/l		
CAS No.	Surro	gate Recoveries	Run#1	Run# 2	Lin	iits		
1868-53-7		mofluoromethane	96%		81-	121%		
17060-07-0		ichloroethane-D4	98%			127%		
2037-26-5	1.1.1.1.1.1.1.1	ne-D8	97%			122%		
460-00-4	4-Bro	mofluorobenzene	100%		78-	116%		

**Report of Analysis** 

/13

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Page 2 of 2

			Repo	rt of A	nalysis			Page 1 of
Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB2942 AQ - Q SW840		Carle Place	e, NY		Date		2/20/13 2/21/13 /a
Run #1 Run #2	File ID 2A132182.D		Analyzed 02/27/13			Prep Batch n/a	Analytical Batch V2A5639	
Run #1 Run #2	Purge Volume 5.0 ml	5						
VOA TCL	List (SOM0 1.1	1)						
CAS No.	Compound		Result	RL	MDL	Units	Q	
67-64-1	Acetone		ND	10	3.3	ug/l		
71-43-2	Benzene		ND	1.0	0.24	ug/l		
74-97-5	Bromochloro	methane	ND	5.0	0.30	ug/l		
75-27-4	Bromodichlor		ND	1.0	0.21	ug/l		
75-25-2	Bromoform		ND	4.0	0.21	ug/l		
74-83-9	Bromomethan	ie	ND	2.0	0.22	ug/l		
78-93-3	2-Butanone (M		ND	10	2.4	ug/l	J	
75-15-0	Carbon disulf		ND	2.0	0.19	ug/l		
56-23-5	Carbon tetrac	hloride	ND	1.0	0.22	ug/l		
108-90-7	Chlorobenzen	ie	ND	1.0	0.23	ug/l		
75-00-3	Chloroethane		ND	1.0	0.26	ug/l		
67-66-3	Chloroform		ND	1.0	0.20	ug/l		
74-87-3	Chloromethan	ne	ND	1.0	0.21	ug/l		
110-82-7	Cyclohexane		ND	5.0	0.35	ug/l		
96-12-8	1,2-Dibromo-	-3-chloropropa	ne ND	10	0.54	ug/l		
124-48-1	Dibromochlo	romethane	ND	1.0	0.14	ug/l		
106-93-4	1,2-Dibromo	ethane	ND	2.0	0.20	ug/l		
95-50-1	1,2-Dichlorol	benzene	ND	1.0	0.22	ug/l		
541-73-1	1,3-Dichlorol		ND	1.0	0.22	ug/l		
106-46-7	1,4-Dichlorol		ND	1.0	0.30	ug/l		
75-71-8	Dichlorodiflu		ND	5.0	0.27	ug/l		
75-34-3	1,1-Dichloro		ND	1.0	0.11	ug/l		
107-06-2	1,2-Dichloro		ND	1.0	0.26	ug/l		
75-35-4	1,1-Dichloro		ND	1.0	0.19	ug/l		
156-59-2	cis-1,2-Dichl		ND	1.0	0.19	ug/l		
156-60-5	trans-1,2-Dic		ND	1.0	0.21	ug/l		
78-87-5	1,2-Dichloro		ND	1.0	0.48	ug/l		
10061-01-5			ND	1.0	0.21	ug/l		
10061-02-6		hloropropene	ND	1.0	0.19	ug/l		
123-91-1	1,4-Dioxane		ND	130	75	ug/l		
100-41-4	Ethylbenzene		ND	1.0	0.23	ug/l		
76-13-1	Freon 113		ND	5.0	0.53	ug/l		

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4.5

Client Samp Lab Sample Matrix: Method: Project:		DUP022013 JB29428-5 AQ - Ground Water SW846 8260B Johnson & Hoffman, C	arle Place,	NY		Date	Sampled: Received: ent Solids:	02/20/13 02/21/13 n/a
VOA TCL I	List (SC	OM0 1.1)				107		
CAS No.	Comp	ound	Result	RL	MDL	Units	Q	
591-78-6	2-Hex	anone	ND	5.0	1.1	ug/l		
98-82-8	Isopro	pylbenzene	ND	2.0	0.45	ug/l		
79-20-9		Acetate	ND	5.0	1.2	ug/l		
108-87-2		lcyclohexane	ND	5.0	0.26	ug/l		
1634-04-4	Methy	I Tert Butyl Ether	ND	1.0	0.16	ug/l		
108-10-1		hyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l		
75-09-2	Methy	lene chloride	ND	2.0	0.70	ug/l		
100-42-5	Styrer		ND	5.0	0.21	ug/l		
79-34-5	1,1,2,	2-Tetrachloroethane	ND	1.0	0.21	ug/l		
127-18-4	Tetrac	chloroethene	2.2	1.0	0.28	ug/l		
108-88-3	Tolue	ne	ND	1.0	0.23	ug/l		
87-61-6	1,2,3-	Trichlorobenzene	ND	5.0	0.28	ug/l		
120-82-1	1,2,4-	Trichlorobenzene	ND	5.0	0.20	ug/l		
71-55-6	1,1,1-	Trichloroethane	ND	1.0	0.24	ug/l		
79-00-5	1,1,2-	Trichloroethane	ND	1.0	0.29	ug/l		
79-01-6	Trichl	oroethene	ND	1.0	0.22	ug/l		
75-69-4	Trichl	orofluoromethane	ND	5.0	0.27	ug/l		
75-01-4	Vinyl	chloride	ND	1.0	0.21	ug/l		
	m,p-X	<b>Kylene</b>	ND	1.0	0.42	ug/l		
95-47-6	o-Xyl	ene	ND	1.0	0.24	ug/l		
1330-20-7	Xylen	e (total)	ND	1.0	0.24	ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run#2	Lim	its		
1868-53-7		mofluoromethane	97%			121%		
17060-07-0		ichloroethane-D4	99%			127%		
2037-26-5		ne-D8	97%		80-1	122%		
460-00-4	4-Bro	mofluorobenzene	100%		78-1	116%		

**Report of Analysis** 

MDL - Method Detection Limit

ND = Not detected RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Page 2 of 2

'n

106-93-4

95-50-1

541-73-1

106-46-7

75-71-8

75-34-3

107-06-2

156-59-2

156-60-5

78-87-5

10061-01-5

10061-02-6

123-91-1

100-41-4

75-35-4

#### Accutest LabLink@718386 02:19 14-Mar-2013

	D: JB29428-2 AQ - Grou SW846 82	ind Water						
	3 - Contractor -	60B Hoffman, C	Carle Place	, NY		Date	the second se	/20/13 /21/13 a
Run #1 2A Run #2	ile ID I A132186.D I		nalyzed 2/27/13	By CC	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2A5639
	urge Volume 0 ml							
VOA TCL Lis	st (SOM0 1.1)							
CAS No. C	Compound		Result	RL	MDL	Units	Q	
	Acetone		ND	10	3.3	ug/l		
	Benzene		ND	1.0	0.24	ug/l		
7	Bromochlorometh		ND	5.0	0.30	ug/l		
	Bromodichloromo	ethane	ND	1.0	0.21	ug/l		
	Bromoform		ND	4.0	0.21	ug/l		
7.7.5570	Bromomethane		ND	2.0	0.22	ug/l	2	
	2-Butanone (MEI	()	ND	10	2.4	ug/l	J	
	Carbon disulfide		ND	2.0	0.19	ug/l		
	Carbon tetrachlor	ide	ND	1.0	0.22	ug/l		
	Chlorobenzene		ND	1.0	0.23	ug/l		
	Chloroethane Chloroform		ND ND	1.0 1.0	0.26 0.20	ug/l		
17.0 D.C. T	Chloromethane		ND	1.0	0.20	ug/l		
	Cyclohexane		ND	5.0	0.21	ug/l ug/l		
	.ycionexane 1,2-Dibromo-3-cl	loropropaga		10	0.55	ug/1 ug/1		
	Dibromochlorom		ND	1.0	0.14	ug/1 ug/1		

2.0

1.0

1.0

1.0

5.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

130

1.0

ND

76-13-1 Freon 113 ND 5.0 MDL - Method Detection Limit ND = Not detected

J = Indicates an estimated value

ug/l

0.20

0.22

0.22

0.30

0.27

0.11

0.26

0.19

0.19

0.21

0.48

0.21

0.19

0.23

0.53

75

RL = Reporting Limit

E = Indicates value exceeds calibration range

1,2-Dibromoethane

1,2-Dichlorobenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,1-Dichloroethane

1,2-Dichloroethane

1,1-Dichloroethene

cis-1,2-Dichloroethene

1,2-Dichloropropane

1,4-Dioxane

Ethylbenzene

trans-1,2-Dichloroethene

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

Dichlorodifluoromethane

B = Indicates analyte found in associated method blank



Client Samp Lab Sample Matrix: Method: Project:		Carle Place,	NY		Date	Sampled: Received: ent Solids:	02/20/13 02/21/13 n/a	
VOA TCL I	list (SOM0 1.1)							
CAS No.	Compound	Result	RL	MDL	Units	Q		
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l			
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l			
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l			
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l			
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l			
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l			
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l			
100-42-5	Styrene	ND	5.0	0.21	ug/l			
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l			
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l			
108-88-3	Toluene	ND	1.0	0.23	ug/l			
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.28	ug/l			
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l			
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l			
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l			
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l			
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l			
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l			
	m,p-Xylene	ND	1.0	0.42	ug/l			
95-47-6	o-Xylene	ND	1.0	0.24	ug/l			
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l			
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lin	iits			
1868-53-7	Dibromofluoromethane	98%			121%			
17060-07-0	1,2-Dichloroethane-D4	99%			127%			
2037-26-5	Toluene-D8	96%		80-	122%			
460-00-4	4-Bromofluorobenzene	100%		78-	116%			

**Report of Analysis** 

Page 2 of 2

N

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blankN = Indicates presumptive evidence of a compound



			Repo	ort of A	nalysis				Page 1 of
Client Sample Lab Sample Matrix: Method: Project:	e ID: JB29 AQ - SW8	-04 428-3 Ground Water 46 8260B son & Hoffman,	, Carle Place	e, NY		Date	e Sample Receive cent Solie	d: 02	2/20/13 2/21/13 /a
Run #1 Run #2	File ID 2A132187.D	DF 1	Analyzed 02/27/13	By CC	Prep D n/a	ate	Prep E n/a	Batch	Analytical Batch V2A5639
Run #1 Run #2	Purge Volum 5.0 ml	ie							
VOA TCL	List (SOM0 1	.1)							
CAS No.	Compound		Result	RL	MDL	Units	Q		
67-64-1	Acetone		ND	10	3.3	ug/l			
71-43-2	Benzene		ND	1.0	0.24	ug/l			
74-97-5	Bromochlor		ND	5.0	0.30	ug/l			
75-27-4	Bromodichle	oromethane	1.4	1.0	0.21	ug/l			
75-25-2	Bromoform		0.86	4.0	0.21	ug/l	J		
74-83-9	Bromometha	ane	ND	2.0	0.22	ug/l			
78-93-3	2-Butanone	(MEK)	ND	10	2.4	ug/l	5		
75-15-0	Carbon disu	lfide	ND	2.0	0.19	ug/l			
56-23-5	Carbon tetra	achloride	ND	1.0	0.22	ug/l			
108-90-7	Chlorobenzo	ene	ND	1.0	0.23	ug/l			
75-00-3	Chloroethan	le	ND	1.0	0.26	ug/l			
67-66-3	Chloroform		1.1	1.0	0.20	ug/l			
74-87-3	Chlorometh	ane	ND	1.0	0.21	ug/l			
110-82-7	Cyclohexan	e	ND	5.0	0.35	ug/l			
96-12-8	1,2-Dibrom	o-3-chloropropa	ne ND	10	0.54	ug/l			
124-48-1	Dibromochl	oromethane	1.7	1.0	0.14	ug/l			
106-93-4	1,2-Dibrom	oethane	ND	2.0	0.20	ug/l			
95-50-1	1,2-Dichlor		ND	1.0	0.22	ug/l			
541-73-1	1,3-Dichlor	obenzene	ND	1.0	0.22	ug/l			
106-46-7	1,4-Dichlor		ND	1.0	0.30	ug/l			
75-71-8		luoromethane	ND	5.0	0.27	ug/l			
75-34-3	1,1-Dichlor		ND	1.0	0.11	ug/l			
107-06-2	1,2-Dichlor		ND	1.0	0.26	ug/l			
75-35-4	1,1-Dichlor		ND	1.0	0.19	ug/l			
156-59-2	cis-1,2-Dicl		ND	1.0	0.19	ug/l			
156-60-5		ichloroethene	ND	1.0	0.21	ug/l			
78-87-5	1,2-Dichlor		ND	1.0	0.48	ug/l			
10061-01-5		hloropropene	ND	1.0	0.21	ug/l			
10061-02-6		ichloropropene	ND	1.0	0.19	ug/l			
123-91-1	1,4-Dioxan		ND	130	75	ug/l			
100-41-4	Ethylbenzer	ne	ND	1.0	0.23	ug/l			
76-13-1	Freon 113		ND	5.0	0.53	ug/l			

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



	ethod: SW846 8260B		arle Place,	NY		Date	Sampled: Received: ent Solids:	02/20/13 02/21/13 n/a
VOA TCL I	List (SC	OM0 1.1)		0		1.1		
CAS No.	Comp	ound	Result	RL	MDL	Units	Q	
591-78-6	2-Hex	anone	ND	5.0	1.1	ug/l		
98-82-8	Isopro	pylbenzene	ND	2.0	0.45	ug/l		
79-20-9		Acetate	ND	5.0	1.2	ug/l		
108-87-2	Methy	lcyclohexane	ND	5.0	0.26	ug/l		
1634-04-4	Methy	I Tert Butyl Ether	ND	1.0	0.16	ug/l		
108-10-1		hyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l		
75-09-2	Methy	lene chloride	ND	2.0	0.70	ug/l		
100-42-5	Styre	ie	ND	5.0	0.21	ug/l		
79-34-5		2-Tetrachloroethane	ND	1.0	0.21	ug/l		
127-18-4	Tetrad	chloroethene	ND	1.0	0.28	ug/l		
108-88-3	Tolue	ne	ND	1.0	0.23	ug/l		
87-61-6	1,2,3	Trichlorobenzene	ND	5.0	0.28	ug/l		
120-82-1	1,2,4-	Trichlorobenzene	ND	5.0	0.20	ug/l		
71-55-6	1,1,1	Trichloroethane	ND	1.0	0.24	ug/l		
79-00-5	1,1,2	Trichloroethane	ND	1.0	0.29	ug/l		
79-01-6	Trich	loroethene	ND	1.0	0.22	ug/l		
75-69-4	Trich	lorofluoromethane	ND	5.0	0.27	ug/l		
75-01-4	Vinyl	chloride	ND	1.0	0.21	ug/l		
	m,p->	Kylene	ND	1.0	0.42	ug/l		
95-47-6	o-Xyl	ene	ND	1.0	0.24	ug/l		
1330-20-7	Xylen	e (total)	ND	1.0	0.24	ug/l		
CAS No.	Surro	gate Recoveries	Run#1	Run#2	Lin	nits		
1868-53-7		mofluoromethane	98%		81-	121%		
17060-07-0		ichloroethane-D4	98%			127%		
2037-26-5		ne-D8	96%			122%		
460-00-4	4-Bro	mofluorobenzene	100%		78-	116%		

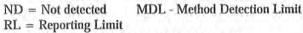
**Report of Analysis** 

Page 2 of 2

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B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

J = Indicates an estimated value



- E = Indicates value exceeds calibration range



	Report of Analysis										
Client Sam Lab Sampl Matrix: Method: Project:	<ul> <li>Second Control (1997) 100 (1997)</li> </ul>	Carle Place	e, NY		Date		2/20/13 2/21/13 a				
Run #1 Run #2		Analyzed 02/27/13	By CC	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2A5639				
Run #1 Run #2	Purge Volume 5.0 ml										
VOA TCL	List (SOM0 1.1)				22						
CAS No.	Compound	Result	RL	MDL	Units	Q					
67-64-1 71-43-2	Acetone Benzene	ND ND	10 1.0	3.3 0.24	ug/l ug/l						
74-97-5 75-27-4	Bromochloromethane Bromodichloromethane	ND ND	5.0 1.0	0.30 0.21	ug/l ug/l						
75-25-2	Bromoform	ND	4.0	0.21	ug/l						
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	+					
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	J					
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l						
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l						
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l						
75-00-3	Chloroethane	ND	1.0	0.26	ug/l						
67-66-3	Chloroform	ND	1.0	0.20	ug/l						
74-87-3	Chloromethane	ND	1.0	0.21	ug/l						
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l						
96-12-8	1,2-Dibromo-3-chloropropar		10	0.54	ug/l						
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l						
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l						
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/1						
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l						
106-46-7 75-71-8	1,4-Dichlorobenzene Dichlorodifluoromethane	ND ND	1.0 5.0	0.30 0.27	ug/l ug/l						
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l						
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l						
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/1						
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l						
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.13	ug/l						
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l						
10061-01-5		ND	1.0	0.21	ug/l						
10061-02-6		ND	1.0	0.19	ug/l						
123-91-1	1,4-Dioxane	ND	130	75	ug/l						
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l						
76-13-1	Freon 113	ND	5.0	0.53	ug/l						

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B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Client Samp Lab Sample		MW-05 JB29428-4					Sampled:	02/20/13
Matrix:		AQ - Ground Water				100 C 100	Received:	02/21/13
Method:		SW846 8260B	Hensen of	5.665		Perc	ent Solids:	n/a
Project:		Johnson & Hoffman, C	arle Place,	NY				
VOA TCL I	List (SC	OM0 1.1)			1.1			
CAS No.	Comp	ound	Result	RL	MDL	Units	Q	
591-78-6	2-Hex	anone	ND	5.0	1.1	ug/l		
98-82-8	Isopro	pylbenzene	ND	2.0	0.45	ug/l		
79-20-9	Methy	Acetate	ND	5.0	1.2	ug/l		
108-87-2		lcyclohexane	ND	5.0	0.26	ug/l		
1634-04-4	Methy	I Tert Butyl Ether	ND	1.0	0.16	ug/l		
108-10-1	4-Met	hyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l		
75-09-2			ND	2.0	0.70	ug/l		
100-42-5			ND	5.0	0.21	ug/l		
79-34-5			ND	1.0	0.21	ug/l		
127-18-4	Tetra	chloroethene	1.4	1.0	0.28	ug/l		
108-88-3	Tolue	ne	ND	1.0	0.23	ug/l		
87-61-6	1,2,3-	Trichlorobenzene	ND	5.0	0.28	ug/l		
120-82-1	1,2,4-	Trichlorobenzene	ND	5.0	0.20	ug/l		
71-55-6	1,1,1-	Trichloroethane	ND	1.0	0.24	ug/l		
79-00-5	1,1,2-	Trichloroethane	ND	1.0	0.29	ug/l		
79-01-6	Trich	loroethene	ND	1.0	0.22	ug/l		
75-69-4	Trich	lorofluoromethane	ND	5.0	0.27	ug/l		
75-01-4	Vinyl	chloride	ND	1.0	0.21	ug/l		
	m,p->	Kylene	ND	1.0	0.42	ug/l		
95-47-6	o-Xyl	ene	ND	1.0	0.24	ug/l		
1330-20-7	Xylen	ie (total)	ND	1.0	0.24	ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Lim	its		
			97%	81-121%				
17060-07-0 1,2-Dichloroethane-D4			99%	74-127%				
2037-26-5 Toluene-D8		97%	80-122%					
460-00-4	4-Bro	mofluorobenzene	100%		78-1	116%		

Report of Analysis

Page 2 of 2

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	Report of Analysis									
Client Samp Lab Sample Matrix: Method: Project:			e, NY		Date	Collection in the contract of the contract	2/20/13 2/21/13 a			
Run #1 Run #2	File ID DF 2A132183.D 1	Analyzed 02/27/13	By CC	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2A5639			
Run #1 Run #2	Purge Volume 5.0 ml									
VOA TCL	List (SOM0 1.1)									
CAS No.	Compound	Result	RL	MDL	Units	Q				
67-64-1 71-43-2	Acetone Benzene	ND ND	10 1.0	3.3 0.24	ug/l ug/l					
74-97-5 75-27-4	Bromochloromethane Bromodichloromethane	ND ND	5.0 1.0	0.30	ug/l					
75-25-2	Bromoform	ND	4.0	0.21	ug/l ug/l					
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	-				
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	5				
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l					
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l					
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l					
75-00-3	Chloroethane	ND	1.0	0.26	ug/l					
67-66-3	Chloroform	ND	1.0	0.20	ug/l					
74-87-3	Chloromethane	ND	1.0	0.21	ug/l					
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l					
96-12-8	1,2-Dibromo-3-chloropro		10	0.54	ug/l					
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l					
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l					
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l					
541-73-1 106-46-7	1,3-Dichlorobenzene	ND ND	1.0	0.22 0.30	ug/l					
	1,4-Dichlorobenzene Dichlorodifluoromethane		1.0 5.0	0.30	ug/l					
75-71-8 75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l ug/l					
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l					
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l					
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l					
156-60-5	trans-1,2-Dichloroethene		1.0	0.21	ug/l					
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l					
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l					
10061-01-5	trans-1,3-Dichloroproper		1.0	0.19	ug/l					
123-91-1	1,4-Dioxane	ND	130	75	ug/l					
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l					
76-13-1	Freon 113	ND	5.0	0.53	ug/l					

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J = Indicates an estimated value

 $\mathbf{B}$  = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Client Samp Lab Sample Matrix: Method: Project:		FB022013 JB29428-6 AQ - Field Blank Water SW846 8260B Johnson & Hoffman, Carle Place, NY				b: JB29428-6 Date Samp AQ - Field Blank Water Date Receir SW846 8260B Percent So				Received:	02/20/13 02/21/13 n/a
VOA TCL I	List (SC	ОМО 1.1)				5.5	-				
CAS No.	Comp	ound	Result	RL	MDL	Units	Q				
591-78-6	2-Hex	anone	ND	5.0	1.1	ug/l					
98-82-8	Isopro	pylbenzene	ND	2.0	0.45	ug/l					
79-20-9		Acetate	ND	5.0	1.2	ug/l					
108-87-2		lcyclohexane	ND	5.0	0.26	ug/l					
1634-04-4	Methy	I Tert Butyl Ether	ND	1.0	0.16	ug/l					
108-10-1	4-Met	hyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l					
75-09-2	Methylene chloride		ND	2.0	0.70	ug/l					
100-42-5	Styrene		ND	5.0	0.21	ug/l					
79-34-5	1,1,2,2-Tetrachloroethane		ND	1.0	0.21	ug/l					
127-18-4	Tetra	chloroethene	ND	1.0	0.28	ug/l					
108-88-3	Tolue	ne	ND	1.0	0.23	ug/l					
87-61-6	1,2,3	Trichlorobenzene	ND	5.0	0.28	ug/l					
120-82-1	1,2,4	Trichlorobenzene	ND	5.0	0.20	ug/l					
71-55-6		Trichloroethane	ND	1.0	0.24	ug/l					
79-00-5	1,1,2	Trichloroethane	ND	1.0	0.29	ug/l					
79-01-6		loroethene	ND	1.0	0.22	ug/l					
75-69-4	Trich	lorofluoromethane	ND	5.0	0.27	ug/l					
75-01-4		chloride	ND	1.0	0.21	ug/l					
		Kylene	ND	1.0	0.42	ug/l					
95-47-6	o-Xyl		ND	1.0	0.24	ug/l					
1330-20-7		ie (total)	ND	1.0	0.24	ug/l					
CAS No.	Surro	ogate Recoveries	Run#1	Run# 2	Lim	its					
1868-53-7	Dibro	mofluoromethane	97%			121%					
17060-07-0		ichloroethane-D4	99%			127%					
2037-26-5	Tolue	ne-D8	95%			122%					
460-00-4	4-Bro	mofluorobenzene	100%		78-1	116%					

**Report of Analysis** 

Page 2 of 2

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RL = Reporting Limit E = Indicates value exceeds calibration range

MDL - Method Detection Limit

ND = Not detected

J = Indicates an estimated value

 $\ddot{B}$  = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



			Repo	ort of A	nalysis			Page 1 of
Client Sam Lab Sample Matrix: Method: Project:	e ID: JB29821- AQ - Fie SW846 8	-2 ld Blank Wa		e, NY		Date		2/25/13 2/26/13 ⁄a
Run #1 Run #2	File ID 2B105154.D		Analyzed 03/01/13	By DR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2B4763
Run #1 Run #2	Purge Volume 5.0 ml							
VOA TCL	List (SOM0 1.1)							
CAS No.	Compound		Result	RL	MDL	Units	Q	
67-64-1	Acetone		ND	10	3.3	ug/l		
71-43-2	Benzene		ND	1.0	0.24	ug/l		
74-97-5	Bromochlorome	thane	ND	5.0	0.30	ug/l		
75-27-4	Bromodichloron		ND	1.0	0.21	ug/l		
75-25-2	Bromoform	liculture	ND	4.0	0.21	ug/l		
74-83-9	Bromomethane		ND	2.0	0.22	ug/l		
78-93-3	2-Butanone (ME	EK)	ND	10	2.4	ug/l	5	
75-15-0	Carbon disulfide		ND	2.0	0.19	ug/l		
56-23-5	Carbon tetrachlo		ND	1.0	0.22	ug/l		
108-90-7	Chlorobenzene		ND	1.0	0.23	ug/l		
75-00-3	Chloroethane		ND	1.0	0.26	ug/l		
67-66-3	Chloroform		ND	1.0	0.20	ug/l		
74-87-3	Chloromethane		ND	1.0	0.21	ug/l		
110-82-7	Cyclohexane		ND	5.0	0.35	ug/l		
96-12-8	1,2-Dibromo-3-	chloropropa		10	0.54	ug/l		
124-48-1	Dibromochloror		ND	1.0	0.14	ug/l		
106-93-4	1,2-Dibromoeth	ane	ND	2.0	0.20	ug/l		
95-50-1	1,2-Dichlorober		ND	1.0	0.22	ug/l		
541-73-1	1,3-Dichlorober		ND	1.0	0.22	ug/l		
106-46-7	1,4-Dichlorober		ND	1.0	0.30	ug/l		
75-71-8	Dichlorodifluor		ND	5.0	0.27	ug/l		
75-34-3	1,1-Dichloroeth		ND	1.0	0.11	ug/l		
107-06-2	1,2-Dichloroeth		ND	1.0	0.26	ug/l		
75-35-4	1,1-Dichloroeth		ND	1.0	0.19	ug/l		
156-59-2	cis-1,2-Dichloro		ND	1.0	0.19	ug/l		
156-60-5	trans-1,2-Dichlo		ND	1.0	0.21	ug/l		
78-87-5	1,2-Dichloropro		ND	1.0	0.48	ug/l		
10061-01-5			ND	1.0	0.21	ug/l		
10061-02-6		oropropene	ND	1.0	0.19	ug/l		
123-91-1	1,4-Dioxane		ND	130	75	ug/l		
100-41-4	Ethylbenzene		ND	1.0	0.23	ug/l		
76-13-1	Freon 113		ND	5.0	0.53	ug/l		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Client Samp Lab Sample Matrix: Method: Project:			NY		Date	Sampled: Received: ent Solids:	02/25/13 02/26/13 п/а
VOA TCL I	.ist (SOM0 1.1)						
CAS No.	Compound	Result	RL	MDL	Units	Q	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l		
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l		
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l		
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l		
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l		
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l		
100-42-5	Styrene	ND	5.0	0.21	ug/I		
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l		
108-88-3	Toluene	ND	1.0	0.23	ug/l		
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.28	ug/l		
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l		
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l		
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l		
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l		
	m,p-Xylene	ND	1.0	0.42	ug/l		
95-47-6	o-Xylene	ND	1.0	0.24	ug/l		
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	nits		
1868-53-7	Dibromofluoromethane	102%			121%		
17060-07-0	1,2-Dichloroethane-D4			74-127%			
2037-26-5	Toluene-D8	100%		80-1	122%		
		and the second se		ALC: 1	a second second		

95%

Report of Analysis

Page 2 of 2

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ND = Not detected MDL - Method Detection Limit RL = Reporting LimitE = Indicates value exceeds calibration range

460-00-4

4-Bromofluorobenzene

J = Indicates an estimated value

78-116%

B = Indicates analyte found in associated method blank



			Repo	rt of Ai	nalysis			Page 1 of
Client Sam Lab Sample Matrix: Method: Project:	e ID: JB29428-7 AQ - Trip SW846 82	7 Blank Wate		e, NY		Date		2/20/13 2/21/13 a
Run #1 Run #2			nalyzed 2/27/13	By CC	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2A5639
Run #1 Run #2	Purge Volume 5.0 ml							
VOA TCL	List (SOM0 1.1)							
CAS No.	Compound		Result	RL	MDL	Units	Q	
67-64-1	Acetone		ND	10	3.3	ug/l		
71-43-2	Benzene		ND	1.0	0.24	ug/l		
74-97-5	Bromochlorometh	hane	ND	5.0	0.30	ug/l		
75-27-4	Bromodichlorom	ethane	ND	1.0	0.21	ug/l		
75-25-2	Bromoform		ND	4.0	0.21	ug/l		
74-83-9	Bromomethane		ND	2.0	0.22	ug/l		
78-93-3	2-Butanone (MEI	K)	ND	10	2.4	ug/l	5	
75-15-0	Carbon disulfide		ND	2.0	0.19	ug/l	17	
56-23-5	Carbon tetrachlor	ride	ND	1.0	0.22	ug/l		
108-90-7	Chlorobenzene		ND	1.0	0.23	ug/l		
75-00-3	Chloroethane		ND	1.0	0.26	ug/l		
67-66-3	Chloroform		ND	1.0	0.20	ug/l		
74-87-3	Chloromethane		ND	1.0	0.21	ug/l		
110-82-7	Cyclohexane		ND	5.0	0.35	ug/l		
96-12-8	1,2-Dibromo-3-c			10	0.54	ug/l		
124-48-1	Dibromochlorom		ND	1.0	0.14	ug/l		
106-93-4	1,2-Dibromoetha		ND	2.0	0.20	ug/l		
95-50-1	1,2-Dichlorobenz		ND	1.0	0.22	ug/l		
541-73-1	1,3-Dichlorobenz		ND	1.0	0.22	ug/l		
106-46-7	1,4-Dichlorobenz		ND	1.0	0.30	ug/l		
75-71-8	Dichlorodifluoro		ND	5.0	0.27	ug/l		
75-34-3	1,1-Dichloroetha		ND	1.0	0.11	ug/l		
107-06-2	1,2-Dichloroetha		ND	1.0	0.26	ug/l		
75-35-4	1,1-Dichloroethe		ND	1.0	0.19	ug/l		
156-59-2	cis-1,2-Dichloroe		ND	1.0	0.19	ug/l		
156-60-5	trans-1,2-Dichlor		ND ND	1.0 1.0	0.21 0.48	ug/l		
78-87-5 10061-01-5	1,2-Dichloroprop cis-1,3-Dichlorop		ND	1.0	0.48	ug/l ug/l		
10061-01-5	A. M. Markett, M. M. M. M. M. M. Markett, M.		ND	1.0	0.21	ug/l		
123-91-1	1,4-Dioxane	opropene	ND	130	75	ug/l		
100-41-4	Ethylbenzene		ND	1.0	0.23	ug/l		
76-13-1	Freon 113		ND	5.0	0.53	ug/l		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



.7 4

#### Accutest LabLink@718386 02:19 14-Mar-2013

			1000	e parent					_
Client Samp Lab Sample Matrix: Method: Project:		TB022013 JB29428-7 AQ - Trip Blank Water SW846 8260B Johnson & Hoffman, C	arle Place,	NY		Date	Sampled: Received: ent Solids:	02/20/13 02/21/13 n/a	
VOA TCL I	.ist (SO	M0 1.1)					1		
CAS No.	Comp	ound	Result	RL	MDL	Units	Q		
591-78-6	2-Hexa	mone	ND	5.0	1.1	ug/l			
98-82-8	Isopropylbenzene		ND	2.0	0.45	ug/l			
79-20-9	Methy	Acetate	ND	5.0	1.2	ug/l			
108-87-2	Methy	lcyclohexane	ND	5.0	0.26	ug/l			
1634-04-4	Methy	Tert Butyl Ether	ND	1.0	0.16	ug/l			
108-10-1	4-Meth	yl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l			
75-09-2	Methy	lene chloride	ND	2.0	0.70	ug/l			
100-42-5	Styren	e	ND	5.0	0.21	ug/l			
79-34-5	1,1,2,2	2-Tetrachloroethane	ND	1.0	0.21	ug/l			
127-18-4		hloroethene	ND	1.0	0.28	ug/l			
108-88-3	Toluer	e	ND	1.0	0.23	ug/l			
87-61-6	1,2,3-	Frichlorobenzene	ND	5.0	0.28	ug/l			
120-82-1		Frichlorobenzene	ND	5.0	0.20	ug/l			
71-55-6		Frichloroethane	ND	1.0	0.24	ug/l			
79-00-5		Frichloroethane	ND	1.0	0.29	ug/l			
79-01-6		proethene	ND	1.0	0.22	ug/l			
75-69-4		orofluoromethane	ND	5.0	0.27	ug/l			
75-01-4	Vinyl	chloride	ND	1.0	0.21	ug/l			
00.03	m,p-X		ND	1.0	0.42	ug/l			
95-47-6	o-Xyle		ND	1.0	0.24	ug/l			
1330-20-7		e (total)	ND	1.0	0.24	ug/l			
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Lin	lits			
1868-53-7	Dibro	nofluoromethane	97%		81-3	121%			
17060-07-0	1,2-Di	chloroethane-D4	99%		74-1	127%			
2037-26-5	Toluer		96%		80-3	122%			
460-00-4	4-Bron	nofluorobenzene	99%		78-	116%			

Report of Analysis

Page 2 of 2

N = Indicates presumptive evidence of a compound

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



ND = Not detected MDL - Method Detection Limit RL = Reporting Limit

E = Indicates value exceeds calibration range

1.7 4

Accutest LabLink@718386 02:20 14-Mar-2013

		Repo	ort of A	nalysis			Page 1 of	
Client Sam Lab Sample Matrix: Method: Project:						Received: 02	02/25/13 02/26/13 п/а	
Run #1 Run #2	File ID DF 2B105153.D 1	Analyzed 03/01/13	By DR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch V2B4763	
Run #1 Run #2	Purge Volume 5.0 ml							
VOA TCL	List (SOM0 1.1)							
CAS No.	Compound	Result	RL	MDL	Units	Q		
67-64-1	Acetone	ND	10	3.3	ug/l			
71-43-2	Benzene	ND	1.0	0.24	ug/l			
74-97-5	Bromochloromethane	ND	5.0	0.30	ug/l			
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l			
75-25-2	Bromoform	ND	4.0	0.21	ug/l			
74-83-9	Bromomethane	ND	2.0	0.22	ug/l			
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	J		
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	1.2		
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l			
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l			
75-00-3	Chloroethane	ND	1.0	0.26	ug/l			
67-66-3	Chloroform	ND	1.0	0.20	ug/l			
74-87-3	Chloromethane	ND	1.0	0.21	ug/l			
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l			
96-12-8	1,2-Dibromo-3-chloroprop		10	0.54	ug/l			
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l			
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l			
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l			
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l			
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l			
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l			
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l			
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l			
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l			
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l			
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l			
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l			
10061-01-5	<ol> <li>I. J. M. M.</li></ol>	ND	1.0	0.21	ug/1			
10061-02-6		ND ND	1.0	0.19 75	ug/l			
123-91-1	1,4-Dioxane Ethylbonzone	ND	130		ug/l			
100-41-4	Ethylbenzene Freon 113	ND	1.0	0.23	ug/l			
76-13-1	FIGUR 115	ND	5.0	0.53	ug/l			

ND = Not detected MDL - Method Detection Limit

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



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Accutest LabLink@718386 02:20 14-Mar-2013

	a theory					-			2052
Client Samp		TB022513 JB29821-3				Dete	Commissio	02/25/13	
Lab Sample	ID:	AQ - Trip Blank Water					Sampled: Received:	02/25/13	
		SW846 8260B					ent Solids:	n/a	
Project: Johnson & Hoffman,			arle Place,	NY		reic	ent sonus.	11/ a	
VOA TCL I	List (SC	OM0 1.1)							-
CAS No.	Comp	ound	Result	RL	MDL	Units	Q		
591-78-6	2-Hex	anone	ND	5.0	1.1	ug/l			
98-82-8		pylbenzene	ND	2.0	0.45	ug/l			
79-20-9		1 Acetate	ND	5.0	1.2	ug/l			
108-87-2		lcyclohexane	ND	5.0	0.26	ug/l			
1634-04-4		1 Tert Butyl Ether	ND	1.0	0.16	ug/l			
108-10-1		hyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l			
75-09-2	Methylene chloride		ND	2.0	0.70	ug/l			
100-42-5	Styren		ND	5.0	0.21	ug/l			
79-34-5		2-Tetrachloroethane	ND	1.0	0.21	ug/l			
127-18-4		hloroethene	ND	1.0	0.28	ug/l			
108-88-3	Toluer		ND	1.0	0.23	ug/l			
87-61-6	1,2,3-	Trichlorobenzene	ND	5.0	0.28	ug/l			
120-82-1	1,2,4-	Trichlorobenzene	ND	5.0	0.20	ug/l			
71-55-6	1,1,1-	Trichloroethane	ND	1.0	0.24	ug/l			
79-00-5	1,1,2-	Trichloroethane	ND	1.0	0.29	ug/l			
79-01-6	Trichl	oroethene	ND	1.0	0.22	ug/l			
75-69-4	Trichl	orofluoromethane	ND	5.0	0.27	ug/l			
75-01-4	Vinyl	chloride	ND	1.0	0.21	ug/l			
	m,p-X	lylene	ND	1.0	0.42	ug/l			
95-47-6	o-Xyle	ene	ND	1.0	0.24	ug/l			
1330-20-7	Xylen	e (total)	ND	1.0	0.24	ug/l			
CAS No.	Surro	gate Recoveries	Run#1	Run# 2	Lin	its			
1868-53-7	Dibro	mofluoromethane	99%		81-3	121%			
17060-07-0	1,2-D	ichloroethane-D4	100%		74-3	127%			
2037-26-5	Toluer		101%		80-	122%			
460-00-4	4-Bro	mofluorobenzene	96%		78-	116%			

**Report of Analysis** 

Page 2 of 2

RL = Reporting Limit E = Indicates value exceeds calibration range

MDL - Method Detection Limit

ND = Not detected

J = Indicates an estimated value

 $\mathbf{B}$  = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound





# DATA USABILITY SUMMARY REPORT (DUSR)

Client: ERM, Melville, NY

# Site: <u>J&H Manufacturing Site – Carle Place, New York</u>

SDG #s: JB27538

Laboratory: Accutest Laboratories – Dayton, New Jersey

Date: March 15, 2013

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
01	FB012813	JB27538-1	Field Blank Soil
02	DW-01(0'-1')	JB27538-2	Soil
02 MS	DW-01(0'-1') MS	JB27538-2S	Soil Matrix Spike
02MSD	DW-01(0'-1') MSD	JB27538-2D	Soil Dup/MSD
03	DW-01(4'-5')	JB27538-3	Soil
04	DW-01(9'-10')	JB27538-4	Soil
05	DW-01(14'-15')	JB27538-5	Soil
06	DUP012813 (DW-01(9'-10'))	JB27538-6	Soil

# SEMIVOLATILE ORGANIC COMPOUNDS USEPA SW-846 8270D

The analytical method, the NYSDEC ASP, the USEPA CLP National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-22, Revision 3, October 2006: Validating Semivolatile Organic Compounds by SW-846 Method 8270, and the reviewer's professional judgment were used in evaluating the data in this summary report.

Note(s) – Only Polyaromatic Hydrocarbons (PAHs) were analyzed for.

Holding Times (HT) – All holding times were met for all samples.

<u>Surrogates</u> - All surrogate percent recovery (%R) were within QC criteria except in the second diluted analysis for EDS ID 02 where all surrogate compounds were diluted out due to the required dilution. No qualification of the sample data is required when surrogates are diluted out.

<u>MS/MSD</u> - An MS/MSD was collected on EDS ID 02. Most %R were outside QC criteria due to the elevated presence of target compounds in the undiluted sample. All relative percent differences (RPDs) met QC criteria except for chrysene. Qualification is not based on MS/MSD results alone. No qualification of the sample data is required as the poor %R and RPD are attributable to the target compound presence in the unspiked sample.

Blank Spike Samples (BSS) – All %R met QC criteria.

Method Blank (MB) - The method blanks exhibited no target compounds.

<u>Field Blank (FB)</u> - The field blank exhibited no target compounds.

<u>GC/MS Tuning</u> - All of the DFTPP tunes met QC criteria.

<u>Initial Calibration (ICAL)</u> - The ICAL exhibited acceptable %RSD and mean relative response factor (RRF) values.

Continuing Calibration (CCV) – The CCVs exhibited acceptable %D and RRF values.

Internal Standard (IS) Area Performance - All IS area responses and retention time (RT) criteria were met.

<u>Blind Field Duplicate</u> – One blind field duplicate sample was collected with this data set. EDS ID 06 (DUP012813) was collected on sample EDS ID 04 (DW-01(9'-10')). A comparison of the sample data indicates that results did not compare well. As a result both sets of data are considered possibly biased and therefore estimated and have been qualified J/UJ for those compounds that did not compare well. In all instances the reported concentration in the sample was higher than in the blind field duplicate. The data, while estimated, is still valid and useable for project objectives.

<u>Compound Quantitation</u> – EDS ID 02 was initially analyzed undiluted. The sample was then reanalyzed at a 20-x dilution due to several target compounds exceeding the calibration range of the instrument. The sample still required an additional analysis to obtain results within calibration range. The laboratory has reported only the final results on the Form I for each compound. The dilutions were justified and the sample data are valid and useable for project objectives. No other issues were observed.

			Repor	t of Ana	alysis			Page 1 of
Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB2753 SO - So SW846	8-2 511 8270D SV	W846 3550C m, Carle Place,	NY		Dat	e Received: 0	1/28/13 1/29/13 4.3
	File ID	DF	Analyzed	Ву	Prep Da		Prep Batch	Analytical Batch
Run #1	P70675.D	1	02/08/13	NAP	02/07/13		OP63407	EP3024
Run #2	P70694.D	20	02/11/13	NAP	02/07/13		OP63407	EP3025
Run #3	P70706.D	100	02/11/13	NAP	02/07/13	3	OP63407	EP3025
	Initial Weight	Final Vo	lume					
Run #1	31.3 g	1.0 ml						
Run #2	31.3 g	1.0 ml						
Run #3	31.3 g	1.0 ml						
BN PAH L	ist							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		6200 a	680	200	ug/kg		
208-96-8	Acenaphthylen	e	1020	34	11	ug/kg		
120-12-7	Anthracene		12000 a	680	240	ug/kg		
56-55-3	Benzo(a)anthra	icene	53300 a	680	220	ug/kg		
50-32-8	Benzo(a)pyren	e	50600 a	680	210	ug/kg		
205-99-2	Benzo(b)fluora		63600 a	680	230	ug/kg		
191-24-2	Benzo(g,h,i)pe	rylene	33200 a	680	250	ug/kg		
207-08-9	Benzo(k)fluora	inthene	40600 a	680	250	ug/kg		
218-01-9	Chrysene		69100 <sup>b</sup>	3400	1100	ug/kg		
53-70-3	Dibenzo(a,h)a	nthracene	12100 a	680	230	ug/kg		
206-44-0	Fluoranthene		171000 <sup>b</sup>	3400	1500	ug/kg		
86-73-7	Fluorene		7140 <sup>a</sup>	680	220	ug/kg		
193-39-5	Indeno(1,2,3-c	d)pyrene	33300 <sup>a</sup>	680	240	ug/kg		
91-20-3	Naphthalene	-12/21 - 12	916	34	9.2	ug/kg		
85-01-8	Phenanthrene		121000 b	3400	1500	ug/kg	5.0	
129-00-0	Pyrene		125000 <sup>b</sup>	3400	1300	ug/kg	5	
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Run#	#3	Limits	
4165-60-0	Nitrobenzene-	45	65%	60%	0% c		21-122%	
321-60-8	2-Fluorobipher		65%	61%	0% c		30-117%	
1718-51-0	Terphenyl-d14		86%	76%	0% c		31-129%	
(a) Result i	s from Run# 2							

(a) Result is from Run# 2

(b) Result is from Run# 3

(c) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



			Repo	rt of Ana		Page 1 of		
Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB2753 SO - So SW846	8-3 bil 8270D SV	W846 3550C m, Carle Place	, NY		Date	Received: 01	1/28/13 1/29/13 5.6
Run #1 Run #2	File ID F20324.D	DF 1	Analyzed 02/08/13	By NAP	Prep D 02/07/1		Prep Batch OP63407	Analytical Batch EF5064
Run #1 Run #2	Initial Weight 30.2 g	Final Vo 1.0 ml	lume					
BN PAH L	ist							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	35	10	ug/kg		
208-96-8	Acenaphthyler	ie	ND	35	11	ug/kg		
120-12-7	Anthracene		ND	35	12	ug/kg		
56-55-3	Benzo(a)anthra	acene	26.5	35	11	ug/kg	J	
50-32-8	Benzo(a)pyren	e	26.0	35	11	ug/kg	J	
205-99-2	Benzo(b)fluora	anthene	32.0	35	12	ug/kg	J	
191-24-2	Benzo(g,h,i)po	erylene	19.5	35	13	ug/kg	J	
207-08-9	Benzo(k)fluora	anthene	27.4	35	13	ug/kg	J	
218-01-9	Chrysene		40.3	35	12	ug/kg		
53-70-3	Dibenzo(a,h)a	nthracene	ND	35	12	ug/kg		
206-44-0	Fluoranthene		67.8	35	15	ug/kg		
86-73-7	Fluorene		ND	35	11	ug/kg		
193-39-5	Indeno(1,2,3-0	cd)pyrene	18.2	35	12	ug/kg	J	
91-20-3	Naphthalene		ND	35	9.5	ug/kg		
85-01-8	Phenanthrene		31.7	35	16	ug/kg	J	
129-00-0	Pyrene		53.0	35	13	ug/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its		
4165-60-0	Nitrobenzene-		62%	62%				
321-60-8						17%		
1718-51-0	Terphenyl-d14	1	89%		31-1	29%		

 $\begin{array}{ll} ND = Not \ detected & MDL - Method \ Detection \ Limit \\ RL = Reporting \ Limit \\ E = Indicates \ value \ exceeds \ calibration \ range \end{array}$ 

J = Indicates an estimated value

 $\mathbf{B} = \mathbf{Indicates}$  analyte found in associated method blank



			Repo		Page 1 of			
Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB2753 SO - So SW846	8-4 bil 8270D S	W846 3550C an, Carle Place		Date Date Perc	1/28/13 1/29/13 5.5		
Run #1 Run #2	File ID F20321.D	DF 1	Analyzed 02/08/13	By NAP	Prep D 02/07/1		Prep Batch OP63407	Analytical Batch EF5064
Run #1 Run #2	Initial Weight 31.9 g	Final Vo 1.0 ml	olume					
BN PAH L	ist							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	33	9.5	ug/kg		
208-96-8	Acenaphthylen	e	ND	33	11	ug/kg		
120-12-7	Anthracene		16.0	33	11	ug/kg	J	
56-55-3	Benzo(a)anthra		102	33	11	ug/kg		
50-32-8	Benzo(a)pyren		101	33	10	ug/kg		
205-99-2	Benzo(b)fluora		126	33	11	ug/kg		
191-24-2	Benzo(g,h,i)pe		70.8	33	12	ug/kg		
207-08-9	Benzo(k)fluora	inthene	78.2	33	12	ug/kg	1	
218-01-9	Chrysene	Sec. al	148	33	11	ug/kg		
53-70-3	Dibenzo(a,h)a	nthracene	27.4	33	11	ug/kg	J	
206-44-0	Fluoranthene		326	33	14	ug/kg	5	
86-73-7	Fluorene	n	ND	33	11	ug/kg	-	
193-39-5	Indeno(1,2,3-c	a)pyrene	62.6	33	11	ug/kg	J	
91-20-3 85-01-8	Naphthalene Phenanthrene		ND 164	33 33	9.0 15	ug/kg	-	
85-01-8 129-00-0	Phenanthrene Pyrene		232	33	13	ug/kg ug/kg	Ŧ	
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	its		
4165-60-0	Nitrobenzene-				21-122%			
321-60-8	2-Fluorobipher			66% 30-117%				
1718-51-0	Terphenyl-d14		87%		31-1	129%		

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



			Repo	ort of Ana	alysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	le ID: JB2753 SO - So SW846	8-6 bil 8270D SV	W846 3550C m, Carle Place	e, NY		Date	Received:	01/28/13 01/29/13 94.0
Run #1 Run #2	File ID F20323.D	DF 1	Analyzed 02/08/13	By NAP	Prep D 02/07/1		Prep Batch OP63407	Analytical Batch EF5064
Run #1 Run #2	Initial Weight 30.1 g	Final Vo 1.0 ml	lume					
BN PAH I	List							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9	Acenaphthene		ND	35	10	ug/kg		
208-96-8	Acenaphthylen	le	ND	35	11	ug/kg		
120-12-7	Anthracene		ND	35	12	ug/kg		
56-55-3	Benzo(a)anthra		21.0	35	12	ug/kg	J	
50-32-8	Benzo(a)pyren		16.4	35	11	ug/kg	J	
205-99-2	Benzo(b)fluora		18.6	35	12	ug/kg	J	
191-24-2	Benzo(g,h,i)pe		15.9	35	13	ug/kg	J	
207-08-9	Benzo(k)fluora	anthene	25.4	35	13	ug/kg	J	
218-01-9	Chrysene	Russer	29.2	35	12	ug/kg	J	
53-70-3	Dibenzo(a,h)a	nthracene	ND	35	12	ug/kg	5	
206-44-0	Fluoranthene		45.5	35	16	ug/kg	J	
86-73-7	Fluorene		ND	35	12	ug/kg	1	
193-39-5	Indeno(1,2,3-0	cd)pyrene	14.5	35	12	ug/kg	1	
91-20-3	Naphthalene		ND	35	9.6	ug/kg	1.9	
85-01-8	Phenanthrene		27.9	35	16	ug/kg	J	
129-00-0	Pyrene		42.3	35	14	ug/kg		
CAS No.	Surrogate Ree	coveries	Run# 1	Run# 2	Lin	nits		
4165-60-0			67%		21-122%			
321-60-8	2-Fluorobiphe		77%	30-117%				
1718-51-0	Terphenyl-d14		97%		31-	129%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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			Repo	rt of Ana	alysis			Page 1 of 1
Client Sam Lab Sampl Matrix: Method: Project:	le ID: JB2753 SO - S SW840	oil 5 8270D - SN	W846 3550C n, Carle Place	e, NY		Date	Received: (	01/28/13 01/29/13 95.9
Run #1 Run #2	File ID 2P20024.D	DF 1	Analyzed 02/11/13	By ALS	Prep E 02/07/		Prep Batch OP63407	Analytical Batch E2P884
Run #1 Run #2	Initial Weight 32.1 g	Final Vo 1.0 ml	lume					
BN PAH L	list							
CAS No.	Compound		Result	RL	MDL	Units	Q	
83-32-9 208-96-8 120-12-7	Acenaphthene Acenaphthyle Anthracene		ND ND ND	32 32 32	9.4 10 11	ug/kg ug/kg ug/kg		
56-55-3 50-32-8 205-99-2	Benzo(a)anthr Benzo(a)pyrer Benzo(b)fluor	ne	31.9 32.1 40.9	32 32 32 32	11 9.9 11	ug/kg ug/kg ug/kg	1	
191-24-2 207-08-9 218-01-9	Benzo(g,h,i)p Benzo(k)fluor Chrysene	erylene	32.3 23.7 43.5	32 32 32	12 12 11	ug/kg ug/kg ug/kg	I	
218-01-9 53-70-3 206-44-0 86-73-7	Dibenzo(a,h)a Fluoranthene Fluorene	inthracene	43.5 ND 100 ND	32 32 32 32	11 14 11	ug/kg ug/kg ug/kg		
193-39-5 91-20-3 85-01-8	Indeno(1,2,3- Naphthalene Phenanthrene	2.729.77.72	26.4 ND 54.3	32 32 32 32	11 11 8.9 15	ug/kg ug/kg	J	
85-01-8 129-00-0	Prenanthrene Pyrene		69.6	32	12	ug/kg ug/kg		
CAS No.	Surrogate Re	ecoveries	Run# 1	Run# 2	Lin	nits		
4165-60-0 321-60-8 1718-51-0	Nitrobenzene 2-Fluorobiphe Terphenyl-d1	enyl	83% 80% 92%		30-	122% 117% 129%		

MDL - Method Detection Limit ND = Not detected RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound





			Repo		Page 1 of 1				
Client Sam Lab Sampl Matrix: Method: Project:	e ID: JB275 AQ - J SW84	38-1 Field Blank S 6 8270D S	Soil W846 3510C m, Carle Place	, NY		e Sampled: 01/28/13 e Received: 01/29/13 cent Solids: n/a			
Run #1 Run #2	File ID M91333.D	DF 1	Analyzed 02/05/13	By OYA	Prep D 01/31/1		Prep Batch OP63254	Analytical Batch EM3700	
Run #1 Run #2	Initial Volumo 1000 ml	e Final Vo 1.0 ml	lume						
BN PAH L	ist								
CAS No.	Compound		Result	RL	MDL	Units	Q		
83-32-9	Acenaphthene	e	ND	1.0	0.26	ug/l			
208-96-8	Acenaphthyle	ene	ND	1.0	0.23	ug/l			
120-12-7	Anthracene		ND	1.0	0.29	ug/l			
56-55-3	Benzo(a)anth	racene	ND	1.0	0.23	ug/l			
50-32-8	Benzo(a)pyre		ND	1.0	0.23	ug/l			
205-99-2	Benzo(b)fluor		ND	1.0	0.46	ug/l			
191-24-2	Benzo(g,h,i)p		ND	1.0	0.32	ug/l			
207-08-9	Benzo(k)fluor	ranthene	ND	1.0	0.51	ug/l			
218-01-9	Chrysene		ND	1.0	0.29	ug/l			
53-70-3	Dibenzo(a,h)		ND	1.0	0.38	ug/l			
206-44-0	Fluoranthene		ND	1.0	0.32	ug/l			
86-73-7	Fluorene	1.2.1.1.1.	ND	1.0	0.28	ug/l			
193-39-5	Indeno(1,2,3	-cd)pyrene	ND	1.0	0.37	ug/l			
91-20-3	Naphthalene		ND	1.0	0.26	ug/l			
85-01-8	Phenanthrene		ND	1.0	0.29	ug/l			
129-00-0	Pyrene		ND	1.0	0.27	ug/l			
CAS No.	Surrogate R	ecoveries	Run# 1	Run# 2	Lin	its			
4165-60-0	Nitrobenzene	-d5	95%		38-	129%			
321-60-8	2-Fluorobiph	enyl	92%		42-	117%			
1718-51-0		Terphenyl-d14 95%				132%			

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

