



Infrastructure, environment, buildings

TRANSMITTAL LETTER

To:

Ms. Victoria Stovall

Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-0436



Copies:

ARCADIS, Inc.
126 N. Jefferson Street
Suite 400
Milwaukee
Wisconsin 53202
Tel 414 276 7742
Fax 414 276 7603

From:
Brian Maillet

Subject:
Former Hoffman's Valet Dry Cleaners, Wauwatosa,
WI, Closure Activities,
BRRTS# 02-41-307576

Date:
10 February 2010

ARCADIS Project No.:
WI000943.0003

ENVIRONMENT

ACTION: 112
Comment: Interim Action

ACTION: 213
SSDS installation

We are sending you:

- Attached
 Shop Drawings
 Prints
 Other:

Under Separate Cover Via _____ the Following Items:

- | | | |
|----------------------------------|---|---|
| <input type="checkbox"/> Plans | <input type="checkbox"/> Specifications | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> Samples | <input type="checkbox"/> Copy of Letter | <input checked="" type="checkbox"/> Reports |

Copies	Date	Drawing No.	Rev.	Description	Action*

Action*

- A Approved
 AN Approved As Noted
 AS As Requested
 Other:

- CR Correct and Resubmit
 F File
 FA For Approval

- Resubmit _____ Copies
 Return _____ Copies
 Review and Comment

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 FedEx Economy

Pamela Mylotta
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-0436

ARCADIS
126 N. Jefferson Street
Suite 400
Milwaukee
Wisconsin 53202
Tel 414.276.7742
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www.arcadis-us.com

Subject:

Scope of Work and Cost Estimate for Closure Activities, 7215 West Center Street,
Wauwatosa, Wisconsin
BRRTS: 02-41-307576

ENVIRONMENT

Dear Ms. Mylotta:

Date:
February 10, 2010

On August 17, 2009, ARCADIS submitted a letter summarizing the results of soil sampling activities completed in May 2009. At the time of the letter, ARCADIS had made multiple attempts to obtain access to complete vapor sampling at the west adjacent (Johnson) property and to complete both soil and vapor sampling at the eastern adjacent (Viruet) property.

Contact:
Brian Maillet
Ed Buc

In October 2009, WDNR was able to contact Juan Viruet, the owner of the eastern adjacent property, and ARCADIS was granted access in November 2009. ARCADIS was also granted access in October 2009 to collect a vapor sample from the Johnson property.

Phone:
414.276.7742

This letter presents the results of the sampling activities at the adjacent properties. The investigation activities completed to date indicate that limited impacts are present on the subject property and adjacent properties. ARCADIS proposes to address the identified impacts through engineering controls, including a subslab depressurization system installed at the subject property that will mitigate the potential vapor intrusion pathway. A scope of work and cost estimate for installing the subslab depressurization system and completing subsequent air sampling are included in this letter. The work plan was prepared in accordance with ch. NR 169 (Dry Cleaner Environmental Response Program [DERP]). Costs associated with this investigation are eligible for reimbursement under the DERP.

Email:
bmaillet@arcadis-us.com
ebuc@arcadis-us.com

Our ref:
WI001109.0003

Investigation Data

Consistent with our previous discussions, this letter simply transmits the collected investigation data for your review to reduce reporting costs. The field activities for

the supplemental investigation were completed in November 2009. These activities included:

- Collection of one subslab soil gas sample (SS-1) on the Johnson property and one subslab soil gas sample (SS-2) on the Viruet property to assess soil vapor conditions.
- Advancement of two Geoprobe borings (GP-111 and GP-112) on the Viruet property to further define potential offsite impacts in the sand seam.

The attached information presents the results of the supplemental investigation. Figure 1 depicts the soil gas sample and boring locations. Table 1 summarizes the soil analytical results. No chlorinated hydrocarbons were detected in soil collected from the Viruet property. In addition, no tetrachloroethene (PCE) or trichloroethene (TCE) were found at levels above the Table 3C Screening Value presented in the United States Environmental Protection Agency's Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway in the vapor sample collected from the Viruet property. Both PCE and TCE were detected above the screening values in the vapor sample collected from the Johnson property. Table 2 summarizes the subslab soil vapor analytical results.

Conclusions and Recommendations

The following are conclusions and recommendations from this investigation:

- Soils impacted with chlorinated hydrocarbons are limited to the subject property.
- Soil vapor impacted with chlorinated hydrocarbons is present beneath the subject property and may have migrated to the western adjacent property.

Previous investigations also found that the extent of groundwater impacts was also limited to the subject property.

The investigation results indicate that active soil or groundwater remediation is not warranted. Engineering and institutional controls, coupled with natural attenuation, should be sufficient to address the identified impacts. ARCADIS has developed a strategy to obtain site closure based on potential exposure pathways:

- A subslab depressurization system installed at the subject property will mitigate potential vapor intrusion into the building on the subject property and adjacent properties.
- Natural attenuation to manage the residual soil and groundwater constituents in place.
- Listing of the subject property on the WDNR Geographic Information System (GIS) of closed sites.

Proposed Scope of Work

A request for closure was submitted in 2005 and outlined the use of natural attenuation and the WDNR GIS database of closed sites. ARCADIS has developed the following scope of work for implementing vapor mitigation and obtaining final closure:

- Install a subslab depressurization system at the subject property.
- Collect two quarterly ambient air samples at the subject property and the Johnson property to evaluate the effectiveness of the system.
- Submittal of a letter report summarizing field activities and results with a recommendation for additional work or site closure.

Additional information regarding each task is provided in the following sections.

Installation of Subslab Depressurization System

To mitigate potential future risk to air quality related to non-dry cleaning operations at the former Hoffman Cleaners facility, ARCADIS will install a subslab depressurization system. The system installed in the former Hoffman Cleaners facility would be considered an 'interim action' under DERP and would also create a vapor capture zone to mitigate potential vapor exposure at the Johnson property. The subslab depressurization system would consist of 4-inch schedule 40 polyvinyl chloride ventilation pipe connected to the existing sump and vented above the finished roof under the power of a vapor ventilation suction fan secured on the outside of the

building. The subslab depressurization system at the facility would begin operating once installed.

Evaluation of System Effectiveness

The effectiveness of the system would be evaluated through the collection of two quarterly rounds of ambient air samples from the Johnson building. It is understood that if vapor levels are below the Table 3C Screening Values previously discussed, the system will be deemed adequate as a control for the adjacent space. Continual operation and maintenance of the subslab depressurization system at the Valet Cleaners facility would be part of site closure.

Reporting

Based on the results of the evaluation of the subslab depressurization system, ARCADIS will prepare a letter report outlining the scope of work completed during this evaluation, the procedures followed in the field, and a summary of the results. If the evaluation findings are favorable, ARCADIS will re-submit for site closure in accordance with NR 726 and will include a revised site closure packet. A scope of work for closure activities, including revision of the GIS packet and well abandonment, will be included in the letter report.

Project Schedule

ARCADIS will begin work immediately following receipt of written authorization to proceed from the WDNR.

Estimated Costs

ARCADIS will conduct the additional scope of work for an estimated cost of \$13,169. Table 3 includes a breakdown of the project costs for the proposed work and the unit rates and estimates of hours to be worked by ARCADIS. In addition, Table 3 also presents unit rates and the estimated number of units (i.e., number of samples for analysis) for the subcontracted services. Included with this proposal are bids from two subcontractors for the installation of a subslab depressurization system.

Closing

ARCADIS appreciates your assistance with this project, and is looking forward to receiving Site closure. If the additional scope of work and associated costs are acceptable, please provide us with authorization to proceed. If you have any questions or require additional information, please contact us at your earliest convenience.

Sincerely,

ARCADIS



Brian J. Maillet
Project Scientist



Edmund A. Buc, PE
Senior Engineer

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	SSL		SSL Groundwater Protection	GP-1	GP-2	GP-101		GP-102		GP-103	
	6-8	4-6		7-11	11-15	4-8	12-16	8-12	12-16	8-12	12-16
Sample Depth (ft bls)	SSL Ingestion	Vapor Inhalation		02/07/02 Hoffman	02/07/02 Hoffman	09/12/02 Hoffman	09/12/02 Hoffman	09/12/02 Hoffman	09/12/02 Hoffman	09/12/02 Hoffman	09/12/02 Hoffman
Property Owner											
VOCs											
cis-1,2-Dichloroethene	156,000	1,300,000	27	53	<10	<25	<25	<25	<25	<25	<25
Ethylbenzene	--	--	2,900	<10	<10	<25	<25	<25	<25	<25	<25
Fluorotrichloromethane	4,690,000	410,000	9,200	NA	NA	<25	<25	<25	<25	<25	<25
Methylene Chloride	8,520	2,700	0.98	21 Q	14 Q	<25	<25	<25	<25	<25	<25
Naphthalene	313,000	68,000	340	NA	NA	50 Q	<25	<25	<25	<25	<25
Tetrachloroethene	1,230	2,100	4.1	51	240	<25	<25	150	<25	400	<25
Xylenes, Total	--	--	4,100	<20	<20	<50	<50	<50	<50	<50	<50

Constituent concentrations are reported in micrograms per kilogram ($\mu\text{g}/\text{kg}$).

Concentration exceeds the Soil Screening Level for the protection of groundwater.

Concentration exceeds the Soil Screening Level for vapor inhalation and ingestion.

Feet below land surface.

Identification.

Not analyzed.

Soil Screening Level.

Analyte detected between the Limit of Detection and the Limit of Quantitation.

Volatile organic compounds.

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	SSL		SSL Groundwater Protection	GP-104		GP-105		MW-1	MW-2	MW-3
	Sample Depth (ft bbls)	SSL Ingestion		Vapor Inhalation	4-6 09/12/02 Hoffman	8-9 09/12/02 Hoffman	8-12 09/12/02 Hoffman	12-16 09/12/02 Hoffman		
VOCs										
cis-1,2-Dichloroethene	156,000	1,300,000		27	<25	<25	<25	<25	<29	<28
Ethylbenzene	--	--		2,900	<25	<25	<25	<25	<29	<28
Fluorotrichloromethane	4,690,000	410,000		9,200	61	<25	<25	<25	<29	<28
Methylene Chloride	8,520	2,700		0.98	<25	<25	<25	<25	72	96
Naphthalene	313,000	68,000		340	<25	<25	<25	<25	<29	<28
Tetrachloroethene	1,230	2,100		4.1	41 Q	45 Q	130	<25	2,800	3,720
Xylenes, Total	--	--		4,100	<50	<50	<50	<50	<58	<56
										<62

Constituent concentrations are reported in micrograms per kilogram ($\mu\text{g}/\text{kg}$).

 Concentration exceeds the Soil Screening Level for the protection of groundwater.

Bold Concentration exceeds the Soil Screening Level for vapor inhalation and ingestion.

ft bbls Feet below land surface.

ID Identification.

NA Not analyzed.

SSL Soil Screening Level.

Q Analyte detected between the Limit of Detection and the Limit of Quantitation.

VOCs Volatile organic compounds.

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID Sample Depth (ft bls) Sample Date	SSL			GP-3			GP-106		GP-107		GP-108	GP-109	GP-110
	Ingestion	Vapor	Groundwater Protection	8-10	10-12	10-12	12-14	14-16	12-14	14-16	14-16	14-16	14-16
				01/08/07 Hoffman	01/08/07 Hoffman	05/01/09 ARC	05/01/09 Johnson	05/01/09 Johnson	05/01/09 Johnson	05/01/09 City	05/01/09 City	05/01/09 City	
VOCs													
cis-1,2-Dichloroethene	156,000	1,300,000	27	<35	<54	<26	<28	<28	<28	<28	<28	<29	<29
Ethylbenzene	--	--	2,900	80	130	<26	<28	<28	<28	<28	<28	<29	<29
Fluorotrichloromethane	4,690,000	410,000	9,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	8,520	2,700	0.98	<69	<110	<53	<56	<56	<56	<56	<56	<57	<57
Naphthalene	313,000	68,000	340	<69	<110	<53	<56	<56	<56	<56	<56	<57	<57
Tetrachloroethene	1,230	2,100	4.1	2,500	5,200	<26	<28	<28	<28	<28	<28	<28	<29
Xylenes, Total	--	--	4,100	320	550	100	<95	<95	<95	<96	<96	<98	

Constituent concentrations are reported in micrograms per kilogram ($\mu\text{g}/\text{kg}$).

 Concentration exceeds the Soil Screening Level for the protection of groundwater.

Bold Concentration exceeds the Soil Screening Level for vapor inhalation and ingestion.

ft bls Feet below land surface.

ID Identification.

NA Not analyzed.

SSL Soil Screening Level.

Q Analyte detected between the Limit of Detection and the Limit of Quantitation.

VOCs Volatile organic compounds.

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	GP-111	GP-111	GP-112	GP-112
Sample Depth (ft bls)	10-12	14-16	10-12	14-16
Sample Date	11/13/09 Viruet	11/13/09 Viruet	11/13/09 Viruet	11/13/09 Viruet
VOCs				
cis-1,2-Dichloroethene	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25
Fluorotrichloromethane	NA	NA	NA	NA
Methylene Chloride	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25
Tetrachloroethene	<25	<25	<25	<25
Xylenes, Total	<50	<50	<50	<50

Constituent concentrations are reported in micrograms per kilogram ($\mu\text{g}/\text{kg}$).

Concentration exceeds the Soil Screening Level for the protection of groundwater.

Bold Concentration exceeds the Soil Screening Level for vapor inhalation and ingestion.

ft bls Feet below land surface.

ID Identification.

NA Not analyzed.

SSL Soil Screening Level.

Q Analyte detected between the Limit of Detection and the Limit of Quantitation.

VOCs Volatile organic compounds.

Table 2. Summary of Vapor Probe Sampling Analytical Results, Hoffman's Valet Cleaners, Wauwautosa, Wisconsin.

Sample Name	Table 3C		Basement Sump		SG-1		SS-1		SS-2		
	Sample Date	Screening Levels		07/26/06		07/28/06		10/21/09		11/16/09	
				Hoffman		Hoffman		Johnson		Viruet	
Units	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	
Acetone	150,000	350,000	230	550	<500	<1,200	<20	<43	NA	NA	
Carbon disulfide	220,000	700,000	40	120	<50	<160	<20	<64	0.693	2.16	
Cyclohexane	NE	NE	53	180	<20	<69	<20	<69	<0.5	<1.7	
1,2-Dichloroethene (total)	NE	NE	7	28	<20	<79	<20	<79	<0.5	<1.7	
cis-1,2-Dichloroethene	NE	NE	7	28	<20	<79	<20	<79	<0.5	<1.7	
n-Hexane	57,000	200,000	26	110	<50	<180	<20	<70	0.97	3.42	
Isopropyl Alcohol	NE	NE	400	980	<500	<1,200	<500	<1,200	NA	NA	
Methyl Ethyl Ketone	340,000	1,000,000	18	53	<50	<150	<50	<150	NA	NA	
Toluene	110,000	400,00	13	49	<20	<75	<20	<75	0.627	2.36	
Tetrachloroethene	120	810	750	5,100	3,000	20,000	36,000	244,000	12	81	
Trichloroethene	4.1	22	10	54	<20	<110	<20	<110	<0.5	<2.7	

Results are reported in parts per billion by volume (ppbv) and micrograms per cubic meter (µg/m³).

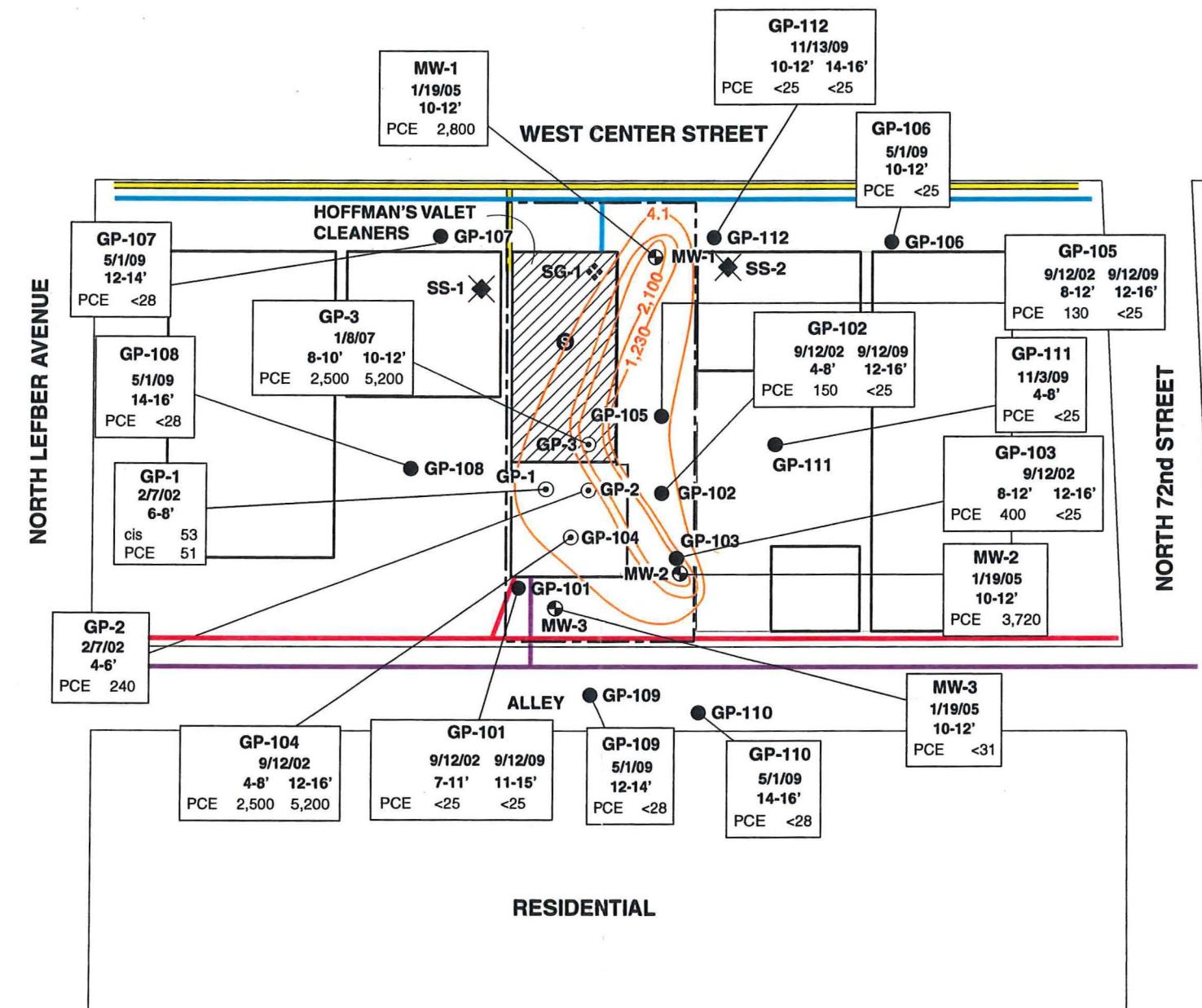
Note: Only analytes detected in vapor samples are presented.

Vapor Probe Samples analyzed for VOCs by EPA Method TO-15.

[] Value is above the Table 3C Screening Value presented in the U.S. EPA's Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway

Table 3. Cost Estimate for Closure Activities, Former Hoffman's Valet Cleaners, Wauwatosa, Wisconsin.

	Number	Unit	Rate	Unit	Totals
Bid Specifications and Contractor Procurement					
Staff Scientist/Engineer II	6	Hours	@	\$84 /Hr	\$504
Project Staff I	8	Hours	@	\$95 /Hr	\$760
Senior Project Staff I	2	Hours	@	\$132 /Hr	\$264
Project Assistant	2	Hours	@	\$68 /Hr	\$136
Senior Drafting	2	Hours	@	\$68 /Hr	\$136
Subtotal for Bid Specifications and Contractor Procurement					\$1,800
Vapor Mitigation					
Sub-slab Depressurization System	1	Lump Sum	@	\$1,975	\$1,975
Staff Scientist/Engineer II	16	Hours	@	\$84 /Hr	\$1,344
Project Staff I	4	Hours	@	\$98 /Hr	\$392
Senior Project Staff I	2	Hours	@	\$132 /Hr	\$264
Subtotal for Vapor Mitigation					\$3,975
Evaluation of Vapor Mitigation System Effectiveness					
VOC Vapor Samples (TO-15 method)	4	Samples	@	\$350 /Sample	\$1,400
Staff Scientist/Engineer II	10	Hours	@	\$84 /Hr	\$840
Project Staff I	6	Hours	@	\$98 /Hr	\$588
Senior Project Staff I	4	Hours	@	\$132 /Hr	\$528
Miscellaneous Expenses (vehicle, shipping, field equipment, etc.)					\$750
Subtotal for Evaluation of Vapor Mitigation System Effectiveness					\$4,106
Reporting					
Project Staff I	24	Hours	@	\$98 /Hr	\$2,352
Senior Project Staff I	4	Hours	@	\$132 /Hr	\$528
Project Assistant	4	Hours	@	\$68 /Hr	\$272
Senior Designer	2	Hours	@	\$68 /Hr	\$136
Subtotal for Reporting					\$3,288
Total Estimated Costs					
\$13,169					



HOFFMANIW0943|WAIWATOSA|GRAPHIC SOURCE EXTENT SOW 3 A

LEGEND

- MONITORING WELL LOCATION
 - GEOPROBE BORING LOCATION
 - INTERIOR BORING LOCATION
 - SUMP LOCATION
 - SOIL/GAS PROBE
 - SUB-SLAB SOIL GAS LOCATION

 EXTENT OF BASEMENT (7-8' in depth)

cis-PCE **cis-1,2-Dichloroethene**
Tetrachloroethene

-4.1 - Extent of PCE soil to groundwater pathway exceedances.

-1,230- Extent of PCE direct contact pathway exceedances in soil

-2,100- Extent of PCE inhalation pathway exceedances in soil

**HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN**

EXTENT OF PCE EXCEEDANCE IN SOIL

ARCADIS

126 North Jefferson Street

Suite 400

Milwaukee

Wisconsin 53202

Tel 414.276.7742

Fax 414.276.7603

MEMO

To: Copies:

Alan, Gross Heating

From:

Brian Maillet

Date: ARCADIS Project No.:
January 6, 2010 WI000943.0004
Subject:

OHM-Butler, Vapor Mitigation System Bid Request

Alan-

Attached is a bid request for installation of a vapor mitigation system at the subject site. The site is an active dry cleaner under the WDNR DERP program. The WDNR is requesting the installation of an active vapor mitigation system within the basement of the building as part of site closure (see site layout basement view on attached figure). Under DERP, we are requesting three bids for this work. Bids will be due by Monday, January 11, 2009. Please call Brian Maillet with ARCADIS at 414-277-6229 to schedule a site visit (if necessary).

Site Location: Valet Cleaners

7215 West Center Street

Wauwatosa, WI 53210

Scope: An active functioning vapor mitigation system will be installed in the basement to carry the concentrated vapors above roof eave of the building.

Work Details:

<http://mail.google.com/a/grossheating.com/?ui=2&ik=8137134322&view=att&th=126059...> 1/12/2010

1. One suction drop pit will be clean drilled to the existing drain tile and/or subsoil to develop the sub-slab (below the basement floor) suction needed to remediate the building.
2. 4 inch schedule 40 PVC ventilation pipe will be utilized in the entire mitigation system.
3. The ventilation pipe will be secured to the internal wall and floor joists of the basement from the drop pit.
4. The clean drilled penetration will be sealed at the ventilation pipe drop.
5. The main drop will be secured at the pit and the wall before it exits through a bored hole to the outside of the building. The location of the external system is the west rear corner of the building.
6. If needed, fire collars will be installed at all breached fire walls.
7. A vapor ventilation suction fan will be secured on the outside of the building.
8. Exhaust pipe will exit the fan and then it will be carried up and above the finished roof and no less than 10 feet away from any fresh air intakes.
9. The exhaust pipe will be carried no less than twelve (12) inches above the finished roof.
10. All ventilation and exhaust pipe will be secured and tagged as part of the remediation system. The pipe and fan will be prepared for any painting the owner may wish to apply to the system.
11. An electric disconnect will be attached to the ventilation fan and gain activation from an appropriate source.
12. Any sump pump crocks will be sealed with silicone caulk for easy access of the sump pump crock. A durable cover will be utilized to seal any crocks. There will be a screw out 4 1/2 inch access port installed for pump monitoring. A silent check valve will be installed to the sump discharge to comply with code, and prevent air dilution that may decrease efficiency of the system. A new 1/2 HP submersible sump pump will be installed if needed.
13. A "U" tube manometer will be applied to the system to evaluate continued function. Other devices are available on request at additional cost.
14. Cold joint and crack sealing with silicone caulk will be conducted to increase suction efficiency.
15. There will be an application of stickers to identify the system, the installer and the system's specifics.
16. Communication tests will be run to assure efficient remediation.
17. All the necessary documents will be produced to include a paid invoice and report of installation.
18. The entire system will be installed in accordance with USEPA specifications.
19. Remediation fans will carry a manufacturer's five (5) year warranty and any sump pump carries a three year warranty.

Total Estimated Cost \$ 1975.00

BIDDER Gross Heating & A/C

Business Address 3260 N. 126th st. Brookfield, WI

Telephone Number 262-783-6000

Signature 

Date 01/13/10

RA INC.
VAPOR EXTRACTION SPECIALISTS
A DIVISION OF PT TECHNOLOGIES

Corporate Office: 12221 West Rockne Avenue Hales Corners, WI 53130

414-546-3691 Facsimile: 414-425-5044 radabt1@wi.rr.com

VAPOR REMEDIATION PROPOSAL / AGREEMENT

Date: 012410

Contact: Cari Bray
ARCADIS
126 N. Jefferson Street, Suite 400
Milwaukee, WI 53202
414-277-6233
cari.bray@arcadis-us.com
WDNR contact

Date of Mitigation: Call for an appointment

Mitigation Location: Milwaukee
Wauwatosa Valet Cleaners
Natalie Berdnikova , Owner
414-774-3250
natalieberdnikova@yahoo.com
7215 West Center Street
Wauwatosa, WI 53210

Phone: _____

Tester/examiner: Unknown

Email: _____ @_____

The building was evaluated and diagnosed for vapor remediation on

PROPOSED radon mitigation

An active functioning system will be installed to carry the concentrated vapors above the eave of the roof of the building.

One suction drop pit will be clean drilled to the existing drain tile and/or subsoil; to develop the sub-slab (below the basement floor) suction needed to remediate the building.

4 inch schedule 40 PVC ventilation pipe will be utilized in the entire radon mitigation system.

The ventilation pipe will be secured to the internal wall and floor joists of the basement from the drop pit.

The clean drilled penetration will be sealed at the ventilation pipe drop.

The main drop will be secured at the pit and the wall before it exits through a bored hole to the outside of the building.

The rear portion of the building is slab on grade and will need to be interconnected with the main system to ventilate the sub-soil below that slab.

If needed, fire collars will be installed at all breached fire walls.

A vapor ventilation suction fan will be secured on the outside of the building, sized on site for efficient sub-slab depressurization.

Exhaust pipe will exit the fan and then it will be carried up and above the finished roof and no less than 10 feet away from any fresh air intakes.

The exhaust pipe will be carried no less than twelve (12) inches above the finished roof.

All ventilation and exhaust pipe will be secured and tagged as part of the remediation system. The pipe and fan will be prepared for any painting the owner may wish to apply to the system.

An electric disconnect will be attached to the ventilation fan and gain activation from an appropriate source. All wiring will have proper permits drawn, and will be wired by the company's state of Wisconsin licensed master electrician.

A "U" tube manometer will be applied to the system to evaluate continued function. Other devices are available on request at additional cost.

Cold joint and crack sealing with silicone caulk will be conducted to increase suction efficiency.

There will be an application of stickers to identify the system, the installer and the system's specifics.

Communication tests will be run to assure efficient remediation.

The building will be retested to insure the safety of the occupants. The responsible party will be pre-determined by the client.

All the necessary documents will be produced to include a paid invoice and report of installation.

The entire system will be installed in accordance with USEPA specifications.

Remediation fans carry a manufacturer's five (5) year warranty. Maintenance programs are available upon request.

Work to be completed for the sum of three-thousand, four- hundred dollars (\$3,400.00)

Payment will immediately follow the installation of the remediation system unless other arrangements are made

Submitted by RA INC Representative/owner Thomas J. Heine date: 012410

In the event that any of the terms of this contract are breached, including and not limited to the fee for parts and labor; RA INC will be entitled to collect collection fees, attorney fees and interest set at 18% per annum.

No changes may be made in stated installation specifications without written contract and associated charges above the proposed estimate of cost. **If any changes are made to the home in the form of remodeling or natural damage, RA INC can not be held liable for the damage to the system. Client will inform RA INC of the same.** RA INC holds the right to make adjustments to proposed costs, if upon viewing and analyzing the work site, the contractor determines that additional material and labor would be necessary to assure the proficiency and safety of the system. Client will be informed at that time, and required to approve all of the same.

If at any time following the installation, damage repairs, fan replacement or sump pump replacements are needed, they will be performed at a customary service fee. Always request an estimate if this becomes necessary.

This Vapor Remediation Proposal may be withdrawn, if not accepted in 15 days from the date of the proposal, by RA INC. I am satisfied with the above price, conditions and specifications of installation, and fully accept the same. I will make payments as described above.

Signature _____

Date: _____

Print name _____



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Certificate of Analysis Number:

09101155

<u>Report To:</u> Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400 Milwaukee WI 53202- ph: (414) 276-7742 fax:	<u>Project Name:</u> WI00943 <u>Site:</u> Wauatosa, WI <u>Site Address:</u> <u>PO Number:</u> LTO#WI1103.208 <u>State:</u> Wisconsin <u>State Cert. No.:</u> <u>Date Reported:</u>
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This Report Contains A Total Of 14 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

11/8/2009

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Arcadis U.S., Inc

Certificate of Analysis Number:

09101155

Report To: Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400 Milwaukee WI 53202- ph: (414) 276-7742 fax:	Project Name: WI00943 Site: Wauatosa, WI Site Address: PO Number: LTO#WI1103.208 State: Wisconsin State Cert. No.: Date Reported:
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I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSIS AND EXCEPTIONS:

No exceptions noted.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Joann Marroquin

Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

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11/8/2009

Date



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Arcadis U.S., Inc

Certificate of Analysis Number:

09101155

Report To: Arcadis U.S., Inc
Brian Maillet
126 North Jefferson St. Suite 400

Project Name: WI00943
Site: Wauatosa, WI
Site Address:

Milwaukee
WI
53202-
ph: (414) 276-7742 fax: (414) 276-7603

PO Number: LTO#WI1103.208
State: Wisconsin
State Cert. No.:

Fax To:

Date Reported:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
SS-1	09101155-01	Air	10/21/2009 10:08:00 AM	10/23/2009 9:00:00 AM		<input type="checkbox"/>

11/8/2009

Joann Marroquin
Senior Project Manager

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer

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11/8/2009 1:17:20 PM



HOUSTON LABORATORY
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Arcadis U.S., Inc

Certificate of Analysis Number:

09101155

<u>Report To:</u> Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400 Milwaukee WI 53202- ph: (414) 276-7742 fax: (414) 276-7603	<u>Project Name:</u> WI00943 <u>Site:</u> Wauatosa, WI <u>Site Address:</u> <u>PO Number:</u> LTO#WI1103.208 <u>State:</u> Wisconsin <u>State Cert. No.:</u> <u>Date Reported:</u>
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Client Sample ID: SS-1

SPL Sample ID: 09101155-01A

Analyte	ppbv		ug/m3	
	Result	PQL	Result	PQL
1,1,1-Trichloroethane	ND	20	ND	110
1,1,2,2-Tetrachloroethane	ND	20	ND	140
1,1,2-Trichloroethane	ND	20	ND	110
1,1,2-Trichlorotrifluoroethane	ND	20	ND	150
1,1-Dichloroethane	ND	20	ND	81
1,1-Dichloroethene	ND	20	ND	79
1,2,4-Trichlorobenzene	ND	20	ND	150
1,2,4-Trimethylbenzene	ND	20	ND	98
1,2-Dibromoethane	ND	20	ND	150
1,2-Dichlorobenzene	ND	20	ND	120
1,2-Dichloroethane	ND	20	ND	81
1,2-Dichloropropane	ND	20	ND	92
1,2-Dichlortetrafluoroethane	ND	20	ND	140
1,3,5-Trimethylbenzene	ND	20	ND	98
1,3-Butadiene	ND	40	ND	88
1,3-Dichlorobenzene	ND	20	ND	120
1,4-Dichlorobenzene	ND	20	ND	120
1,4-Dioxane	ND	20	ND	72
2,2,4-Trimethylpentane	ND	20	ND	93
2-Butanone	ND	20	ND	59
2-Hexanone	ND	20	ND	82
2-Propanol	ND	40	ND	98
4-Ethyltoluene	ND	40	ND	200
4-Methyl-2-pentanone	ND	20	ND	82
Acetone	ND	20	ND	47
Acrylonitrile	ND	20	ND	43



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Certificate of Analysis Number:

09101155

<u>Report To:</u>	<u>Project Name:</u> WI00943
Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400	<u>Site:</u> Waukesha, WI
Milwaukee WI 53202-	<u>Site Address:</u>
ph: (414) 276-7742	<u>PO Number:</u> LTO#WI1103.208
fax: (414) 276-7603	<u>State:</u> Wisconsin
	<u>State Cert. No.:</u>
	<u>Date Reported:</u>

Client Sample ID: SS-1

SPL Sample ID: 09101155-01A

Analyte	ppbv		ug/m3	
	Result	PQL	Result	PQL
Allyl chloride	ND	40	ND	130
Benzene	ND	20	ND	64
Benzyl chloride	ND	20	ND	100
Bromodichloromethane	ND	20	ND	130
Bromoform	ND	20	ND	210
Bromomethane	ND	20	ND	78
Carbon disulfide	ND	20	ND	62
Carbon tetrachloride	ND	20	ND	130
Chlorobenzene	ND	20	ND	92
Chloroethane	ND	20	ND	53
Chloroform	ND	20	ND	98
Chloromethane	ND	20	ND	41
cis-1,2-Dichloroethene	ND	20	ND	79
cis-1,3-Dichloropropene	ND	20	ND	91
Cyclohexane	ND	20	ND	69
Dibromochloromethane	ND	20	ND	170
Dichlorodifluoromethane	ND	20	ND	99
Diisopropyl Ether	ND	40	ND	170
Ethyl Acetate	ND	20	ND	72
Ethyl tert-butyl Ether	ND	40	ND	170
Ethylbenzene	ND	20	ND	87
Heptane	ND	20	ND	82
Hexachloro-1,3-butadiene	ND	20	ND	210
Hexane	ND	20	ND	70
m,p-Xylene	ND	20	ND	87
Methyl tert-butyl ether	ND	20	ND	72
Methylene chloride	ND	20	ND	69



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--	---

Client Sample ID: SS-1

SPL Sample ID: 09101155-01A

Analyte	ppbv		ug/m3	
	Result	PQL	Result	PQL
o-Xylene	ND	20	ND	87
Propylene	ND	20	ND	34
Styrene	ND	20	ND	85
t-Butyl Alcohol	ND	40	ND	120
tert-Amyl Methyl Ether	ND	40	ND	170
Tetrachloroethene	36000	2000	244000	14000
Tetrahydrofuran	ND	20	ND	59
Toluene	ND	20	ND	75
trans-1,2-Dichloroethene	ND	20	ND	79
trans-1,3-Dichloropropene	ND	20	ND	91
Trichloroethene	ND	20	ND	110
Trichlorofluoromethane	ND	20	ND	110
Vinyl acetate	ND	20	ND	70
Vinyl Bromide	ND	20	ND	87
Vinyl chloride	ND	20	ND	51
Xylenes, Total	ND	20	ND	87



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
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Client Sample ID: SS-1

Collected: 10/21/2009 10:08 SPL Sample ID: 09101155-01

Site: Wauatosa, WI

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
EPA TO-15 AIR ANALYSIS							
1,1,1-Trichloroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,1,2,2-Tetrachloroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,1,2-Trichloroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,1,2-Trichlorotrifluoroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,1-Dichloroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,1-Dichloroethene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2,4-Trichlorobenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2,4-Trimethylbenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2-Dibromoethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2-Dichlorobenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2-Dichloroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2-Dichloropropane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,2-Dichlorotetrafluoroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
1,3,5-Trimethylbenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,3-Butadiene	ND		40	40	10/23/09 17:48	CLJ	5259841
1,3-Dichlorobenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,4-Dichlorobenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
1,4-Dioxane	ND		20	40	10/23/09 17:48	CLJ	5259841
2,2,4-Trimethylpentane	ND		20	40	10/23/09 17:48	CLJ	5259841
2-Butanone	ND		20	40	10/23/09 17:48	CLJ	5259841
2-Hexanone	ND		20	40	10/23/09 17:48	CLJ	5259841
2-Propanol	ND		40	40	10/23/09 17:48	CLJ	5259841
4-Ethyltoluene	ND		40	40	10/23/09 17:48	CLJ	5259841
4-Methyl-2-pentanone	ND		20	40	10/23/09 17:48	CLJ	5259841
Acetone	ND		20	40	10/23/09 17:48	CLJ	5259841
Acrylonitrile	ND		20	40	10/23/09 17:48	CLJ	5259841
Allyl chloride	ND		40	40	10/23/09 17:48	CLJ	5259841
Benzene	ND		20	40	10/23/09 17:48	CLJ	5259841
Benzyl chloride	ND		20	40	10/23/09 17:48	CLJ	5259841
Bromodichloromethane	ND		20	40	10/23/09 17:48	CLJ	5259841
Bromoform	ND		20	40	10/23/09 17:48	CLJ	5259841
Bromomethane	ND		20	40	10/23/09 17:48	CLJ	5259841
Carbon disulfide	ND		20	40	10/23/09 17:48	CLJ	5259841
Carbon tetrachloride	ND		20	40	10/23/09 17:48	CLJ	5259841
Chlorobenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
Chloroethane	ND		20	40	10/23/09 17:48	CLJ	5259841
Chloroform	ND		20	40	10/23/09 17:48	CLJ	5259841
Chloromethane	ND		20	40	10/23/09 17:48	CLJ	5259841
cis-1,2-Dichloroethene	ND		20	40	10/23/09 17:48	CLJ	5259841

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: SS-1

Collected: 10/21/2009 10:08 SPL Sample ID: 09101155-01

Site: Wauatosa, WI

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
cis-1,3-Dichloropropene	ND		20	40	10/23/09 17:48	CLJ	5259841
Cyclohexane	ND		20	40	10/23/09 17:48	CLJ	5259841
Dibromochloromethane	ND		20	40	10/23/09 17:48	CLJ	5259841
Dichlorodifluoromethane	ND		20	40	10/23/09 17:48	CLJ	5259841
Diisopropyl Ether	ND		40	40	10/23/09 17:48	CLJ	5259841
Ethyl Acetate	ND		20	40	10/23/09 17:48	CLJ	5259841
Ethyl tert-butyl Ether	ND		40	40	10/23/09 17:48	CLJ	5259841
Ethylbenzene	ND		20	40	10/23/09 17:48	CLJ	5259841
Heptane	ND		20	40	10/23/09 17:48	CLJ	5259841
Hexachloro-1,3-butadiene	ND		20	40	10/23/09 17:48	CLJ	5259841
Hexane	ND		20	40	10/23/09 17:48	CLJ	5259841
m,p-Xylene	ND		20	40	10/23/09 17:48	CLJ	5259841
Methyl tert-butyl ether	ND		20	40	10/23/09 17:48	CLJ	5259841
Methylene chloride	ND		20	40	10/23/09 17:48	CLJ	5259841
o-Xylene	ND		20	40	10/23/09 17:48	CLJ	5259841
Propylene	ND		20	40	10/23/09 17:48	CLJ	5259841
Styrene	ND		20	40	10/23/09 17:48	CLJ	5259841
t-Butyl Alcohol	ND		40	40	10/23/09 17:48	CLJ	5259841
tert-Amyl Methyl Ether	ND		40	40	10/23/09 17:48	CLJ	5259841
Tetrachloroethene	36000		2000	4000	10/24/09 20:40	CLJ	5260112
Tetrahydrofuran	ND		20	40	10/23/09 17:48	CLJ	5259841
Toluene	ND		20	40	10/23/09 17:48	CLJ	5259841
trans-1,2-Dichloroethene	ND		20	40	10/23/09 17:48	CLJ	5259841
trans-1,3-Dichloropropene	ND		20	40	10/23/09 17:48	CLJ	5259841
Trichloroethene	ND		20	40	10/23/09 17:48	CLJ	5259841
Trichlorofluoromethane	ND		20	40	10/23/09 17:48	CLJ	5259841
Vinyl acetate	ND		20	40	10/23/09 17:48	CLJ	5259841
Vinyl Bromide	ND		20	40	10/23/09 17:48	CLJ	5259841
Vinyl chloride	ND		20	40	10/23/09 17:48	CLJ	5259841
Xylenes, Total	ND		20	40	10/23/09 17:48	CLJ	5259841

Qualifiers:	ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits J - Estimated Value between MDL and PQL E - Estimated Value exceeds calibration curve TNTC - Too numerous to count	>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference
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Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

WI00943

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09101155
Lab Batch ID: R287081

Method Blank

Samples in Analytical Batch:

RunID: AIR 1_091023A-5257361	Units: ppbv	<u>Lab Sample ID</u>	<u>Client Sample ID</u>
Analysis Date: 10/23/2009 8:48	Analyst: CLJ	09101155-01A	SS-1

Analyte	Result	Rep Limit
1,1,1-Trichloroethane	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,1,2-Trichloroethane	ND	0.50
1,1,2-Trichlorotrifluoroethane	ND	0.50
1,1-Dichloroethane	ND	0.50
1,1-Dichloroethene	ND	0.50
1,2,4-Trichlorobenzene	ND	0.50
1,2,4-Trimethylbenzene	ND	0.50
1,2-Dibromoethane	ND	0.50
1,2-Dichlorobenzene	ND	0.50
1,2-Dichloroethane	ND	0.50
1,2-Dichloropropane	ND	0.50
1,2-Dichlortetrafluoroethane	ND	0.50
1,3,5-Trimethylbenzene	ND	0.50
1,3-Butadiene	ND	1.0
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,4-Dioxane	ND	0.50
2,2,4-Trimethylpentane	ND	0.50
2-Butanone	ND	0.50
2-Hexanone	ND	0.50
2-Propanol	ND	1.0
4-Ethyltoluene	ND	1.0
4-Methyl-2-pentanone	ND	0.50
Acetone	ND	0.50
Acrylonitrile	ND	0.50
Allyl chloride	ND	1.0
Benzene	ND	0.50
Benzyl chloride	ND	0.50
Bromodichloromethane	ND	0.50
Bromoform	ND	0.50
Bromomethane	ND	0.50
Carbon disulfide	ND	0.50
Carbon tetrachloride	ND	0.50
Chlorobenzene	ND	0.50
Chloroethane	ND	0.50
Chloroform	ND	0.50
Chloromethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
cis-1,3-Dichloropropene	ND	0.50
Cyclohexane	ND	0.50
Dibromochloromethane	ND	0.50
Dichlorodifluoromethane	ND	0.50
Diisopropyl Ether	ND	1.0
Ethyl Acetate	ND	0.50
Ethyl tert-butyl Ether	ND	1.0

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

WI00943

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09101155
Lab Batch ID: R287081

Method Blank

RunID: AIR 1_091023A-5257361 Units: ppbv

Analysis Date: 10/23/2009 8:48 Analyst: CLJ

Analyte	Result	Rep Limit
Ethylbenzene	ND	0.50
Heptane	ND	0.50
Hexachloro-1,3-butadiene	ND	0.50
Hexane	ND	0.50
m,p-Xylene	ND	0.50
Methyl tert-butyl ether	ND	0.50
Methylene chloride	ND	0.50
o-Xylene	ND	0.50
Propylene	ND	0.50
Styrene	ND	0.50
t-Butyl Alcohol	ND	1.0
tert-Amyl Methyl Ether	ND	1.0
Tetrahydrofuran	ND	0.50
Toluene	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
trans-1,3-Dichloropropene	ND	0.50
Trichloroethene	ND	0.50
Trichlorofluoromethane	ND	0.50
Vinyl acetate	ND	0.50
Vinyl Bromide	ND	0.50
Vinyl chloride	ND	0.50
Xylenes, Total	ND	0.50

Laboratory Control Sample (LCS)

RunID: AIR 1_091023A-5256632 Units: ppbv
Analysis Date: 10/23/2009 6:52 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1-Trichloroethane	10.00	9.039	90.39	47	149
1,1,2,2-Tetrachloroethane	10.00	10.03	100.3	58	128
1,1,2-Trichloroethane	10.00	9.688	96.88	70	130
1,1,2-Trichlorotrifluoroethane	10.00	8.974	89.74	60	120
1,1-Dichloroethane	10.00	9.338	93.38	65	119
1,1-Dichloroethene	10.00	8.736	87.36	70	130
1,2,4-Trichlorobenzene	10.00	9.732	97.32	45	146
1,2,4-Trimethylbenzene	10.00	11.24	112.4	70	137

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09101155 Page 7

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

11/8/2009 1:17:28 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

WI00943

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09101155
Lab Batch ID: R287081

Laboratory Control Sample (LCS)

RunID: AIR 1_091023A-5256632 Units: ppbv
Analysis Date: 10/23/2009 6:52 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2-Dibromoethane	10.00	9.661	96.61	46	127
1,2-Dichlorobenzene	10.00	9.752	97.52	48	129
1,2-Dichloroethane	10.00	9.156	91.56	49	137
1,2-Dichloropropane	10.00	9.438	94.38	70	130
1,2-Dichlorotetrafluoroethane	10.00	8.977	89.77	62	118
1,3,5-Trimethylbenzene	10.00	10.70	107.0	70	130
1,3-Butadiene	20.00	18.55	92.75	55	131
1,3-Dichlorobenzene	10.00	9.823	98.23	50	126
1,4-Dichlorobenzene	10.00	10.50	105.0	63	128
1,4-Dioxane	10.00	9.672	96.72	66	123
2,2,4-Trimethylpentane	10.00	9.446	94.46	70	130
2-Butanone	10.00	10.85	108.5	57	129
2-Hexanone	10.00	10.14	101.4	70	134
2-Propanol	10.00	8.022	80.22	52	142
4-Ethyltoluene	20.00	23.52	117.6	79	134
4-Methyl-2-pentanone	10.00	10.09	100.9	75	134
Acetone	10.00	9.776	97.76	57	128
Acrylonitrile	10.00	9.307	93.07	70	130
Allyl chloride	20.00	19.17	95.83	56	135
Benzene	10.00	9.831	98.31	70	130
Benzyl chloride	10.00	9.191	91.91	46	147
Bromodichloromethane	10.00	9.171	91.71	41	129
Bromoform	10.00	10.24	102.4	37	139
Bromomethane	10.00	8.522	85.22	48	112
Carbon disulfide	10.00	8.760	87.60	37	139
Carbon tetrachloride	10.00	9.139	91.39	48	159
Chlorobenzene	10.00	9.512	95.12	70	130
Chloroethane	10.00	8.903	89.03	70	130
Chloroform	10.00	8.880	88.80	56	127
Chloromethane	10.00	8.789	87.89	43	146
cis-1,2-Dichloroethene	10.00	9.570	95.70	70	130
cis-1,3-Dichloropropene	10.00	10.18	101.8	63	146
Cyclohexane	10.00	10.01	100.1	70	130
Dibromochloromethane	10.00	9.467	94.67	33	138

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09101155 Page 8


Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

W100943

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09101155
Lab Batch ID: R287081

Laboratory Control Sample (LCS)

RunID: AIR 1_091023A-5256632 Units: ppbv
 Analysis Date: 10/23/2009 6:52 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Dichlorodifluoromethane	10.00	9.032	90.32	54	125
Diisopropyl Ether	10.00	10.68	106.8	70	130
Ethyl Acetate	10.00	10.17	101.7	70	130
Ethyl tert-butyl Ether	10.00	11.07	110.7	65	132
Ethylbenzene	10.00	11.02	110.2	70	138
Heptane	10.00	9.795	97.95	70	130
Hexachloro-1,3-butadiene	10.00	10.28	102.8	28	166
Hexane	10.00	9.484	94.84	70	130
m,p-Xylene	20.00	21.25	106.3	58	133
Methyl tert-butyl ether	10.00	11.36	113.6	55	148
Methylene chloride	10.00	8.351	83.51	58	120
o-Xylene	10.00	10.82	108.2	73	146
Propylene	10.00	11.25	112.5	65	155
Styrene	10.00	11.26	112.6	66	149
t-Butyl Alcohol	10.00	8.881	88.81	51	130
tert-Amyl Methyl Ether	10.00	10.77	107.7	61	133
Tetrahydrofuran	10.00	11.00	110.0	67	133
Toluene	10.00	10.42	104.2	70	135
trans-1,2-Dichloroethene	10.00	9.718	97.18	70	130
trans-1,3-Dichloropropene	10.00	9.873	98.73	38	139
Trichloroethene	10.00	9.475	94.75	70	130
Trichlorofluoromethane	10.00	8.671	86.71	37	143
Vinyl acetate	10.00	9.343	93.43	64	129
Vinyl Bromide	10.00	9.308	93.08	70	130
Vinyl chloride	10.00	8.852	88.52	70	130
Xylenes,Total	30.00	32.07	106.9	58	133

Sample Duplicate

Original Sample: 09101035-01
 RunID: AIR 1_091023A-5264228 Units: ppbv
 Analysis Date: 10/23/2009 10:17 Analyst: CLJ

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09101155 Page 9



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

WI00943

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09101155
Lab Batch ID: R287081

	Analyte	Sample Result	DUP Result	RPD	RPD Limit
	1,1,1-Trichloroethane	ND	ND	0	30
	1,1,2,2-Tetrachloroethane	ND	ND	0	30
	1,1,2-Trichloroethane	ND	ND	0	30
	1,1,2-Trichlorotrifluoroethane	ND	ND	0	30
	1,1-Dichloroethane	ND	ND	0	30
	1,1-Dichloroethene	ND	ND	0	30
	1,2,4-Trichlorobenzene	ND	ND	0	30
	1,2,4-Trimethylbenzene	ND	ND	0	30
	1,2-Dibromoethane	ND	ND	0	30
	1,2-Dichlorobenzene	ND	ND	0	30
	1,2-Dichloroethane	ND	ND	0	30
	1,2-Dichloropropane	ND	ND	0	30
	1,2-Dichlortetrafluoroethane	ND	ND	0	30
	1,3,5-Trimethylbenzene	ND	ND	0	30
	1,3-Butadiene	ND	ND	0	30
	1,3-Dichlorobenzene	ND	ND	0	30
	1,4-Dichlorobenzene	ND	ND	0	30
	1,4-Dioxane	ND	ND	0	30
	2,2,4-Trimethylpentane	1220000	1498000	20.6	30
	2-Butanone	ND	ND	0	30
	2-Hexanone	ND	ND	0	30
	2-Propanol	ND	ND	0	30
	4-Ethyltoluene	ND	ND	0	30
	4-Methyl-2-pentanone	ND	ND	0	30
	Acetone	288000	317000	9.52	30
	Acrylonitrile	44400	51500	14.8	30
	Allyl chloride	110000	118500	7.69	30
	Benzene	ND	ND	0	30
	Benzyl chloride	ND	ND	0	30
	Bromodichloromethane	ND	ND	0	30
	Bromoform	ND	ND	0	30
	Bromomethane	ND	ND	0	30
	Carbon disulfide	ND	ND	0	30
	Carbon tetrachloride	ND	ND	0	30
	Chlorobenzene	ND	ND	0	30
	Chloroethane	ND	ND	0	30
	Chloroform	ND	ND	0	30
	Chloromethane	ND	ND	0	30
	cis-1,2-Dichloroethene	ND	ND	0	30
	cis-1,3-Dichloropropene	ND	ND	0	30

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

WI00943

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09101155
Lab Batch ID: R287081

Sample Duplicate

Original Sample: 09101035-01
RunID: AIR 1_091023A-5264228 Units: ppbv
Analysis Date: 10/23/2009 10:17 Analyst: CLJ

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Cyclohexane	ND	ND	0	30
Dibromochloromethane	ND	ND	0	30
Dichlorodifluoromethane	ND	ND	0	30
Diisopropyl Ether	ND	ND	0	30
Ethyl Acetate	ND	ND	0	30
Ethyl tert-butyl Ether	ND	ND	0	30
Ethylbenzene	ND	ND	0	30
Heptane	ND	ND	0	30
Hexachloro-1,3-butadiene	ND	ND	0	30
Hexane	212000	233900	10.0	30
m,p-Xylene	ND	ND	0	30
Methyl tert-butyl ether	ND	ND	0	30
Methylene chloride	ND	ND	0	30
o-Xylene	ND	ND	0	30
Propylene	ND	ND	0	30
Styrene	ND	ND	0	30
t-Butyl Alcohol	ND	ND	0	30
tert-Amyl Methyl Ether	ND	ND	0	30
Tetrahydrofuran	ND	ND	0	30
Toluene	ND	ND	0	30
trans-1,2-Dichloroethene	ND	ND	0	30
trans-1,3-Dichloropropene	ND	ND	0	30
Trichloroethene	ND	ND	0	30
Trichlorofluoromethane	ND	ND	0	30
Vinyl acetate	639000	703500	9.60	30
Vinyl Bromide	ND	ND	0	30
Vinyl chloride	ND	ND	0	30
Xylenes, Total	ND	ND	0	30

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Arcadis U.S., Inc

WI00943

Analysis:	EPA TO-15 Air Analysis	WorkOrder:	09101155
Method:	TO-15	Lab Batch ID:	R287311

Method Blank		Samples in Analytical Batch:	
RunID:	AIR 1_091024A-5260109	Units:	ppbv
Analysis Date:	10/24/2009 14:49	Analyst:	CLJ
		<u>Lab Sample ID</u>	<u>Client Sample ID</u>
		09101155-01A	SS-1

Analyte	Result	Rep Limit
Tetrachloroethene	ND	0.50

Laboratory Control Sample (LCS)

RunID:	AIR 1_091024A-5260110	Units:	ppbv
Analysis Date:	10/24/2009 17:02	Analyst:	CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Tetrachloroethene	10.00	9.594	95.94	63	134

Sample Duplicate

Original Sample:	09101157-25		
RunID:	AIR 1_091024A-5260213	Units:	ppbv
Analysis Date:	10/24/2009 18:16	Analyst:	CLJ

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Tetrachloroethene	ND	ND	0	30

Qualifiers: ND/U - Not Detected at the Reporting Limit

B - Analyte Detected In The Associated Method Blank

J - Estimated Value Between MDL And PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Sample Receipt Checklist
And
Chain of Custody



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	09101155	Received By:	T_B
Date and Time Received:	10/23/2009 9:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	21.7°C	Chilled by:	Not Chilled

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input checked="" type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:	<input type="text"/>
Client Instructions:	<input type="text"/>



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Certificate of Analysis Number:

09110554

<u>Report To:</u>	<u>Project Name:</u> Hoffman Cleaners/ WI000943.0004.0000
Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400	<u>Site:</u> Wauwatosa, WI
Milwaukee WI 53202-	<u>Site Address:</u>
ph: (414) 276-7742 fax:	<u>PO Number:</u> LTO#WI1103.208
	<u>State:</u> Wisconsin
	<u>State Cert. No.:</u>
	<u>Date Reported:</u> 12/6/2009

This Report Contains A Total Of 13 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

12/6/2009

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Certificate of Analysis Number:

09110554

<u>Report To:</u> Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400	<u>Project Name:</u> Hoffman Cleaners/ WI000943.0004.0000 <u>Site:</u> Wauwatosa, WI <u>Site Address:</u>
Milwaukee WI 53202- ph: (414) 276-7742 fax: (414) 276-7603	<u>PO Number:</u> LTO#WI1103.208 <u>State:</u> Wisconsin <u>State Cert. No.:</u> <u>Date Reported:</u> 12/6/2009

Client Sample ID: SS-2

SPL Sample ID: 09110554-01A

Analyte	ppbv		ug/m3	
	Result	PQL	Result	PQL
1,1,1-Trichloroethane	ND	0.5	ND	2.7
1,1,2,2-Tetrachloroethane	ND	0.5	ND	3.4
1,1,2-Trichloroethane	ND	0.5	ND	2.7
1,1,2-Trichlorotrifluoroethane	ND	0.5	ND	3.8
1,1-Dichloroethane	ND	0.5	ND	2.0
1,1-Dichloroethene	ND	0.5	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5	ND	3.7
1,2,4-Trimethylbenzene	1.13	0.5	5.57	2.5
1,2-Dibromoethane	ND	0.5	ND	3.8
1,2-Dichlorobenzene	ND	0.5	ND	3.0
1,2-Dichloroethane	ND	0.5	ND	2.0
1,2-Dichloropropane	ND	0.5	ND	2.3
1,2-Dichlorotetrafluoroethane	ND	0.5	ND	3.5
1,3,5-Trimethylbenzene	ND	0.5	ND	2.5
1,3-Butadiene	ND	1	ND	2.2
1,3-Dichlorobenzene	ND	0.5	ND	3.0
1,4-Dichlorobenzene	ND	0.5	ND	3.0
1,4-Dioxane	ND	0.5	ND	1.8
2,2,4-Trimethylpentane	ND	0.5	ND	2.3
2-Butanone	0.522	0.5	1.54	1.5
2-Hexanone	ND	0.5	ND	2.0
2-Propanol	1.25	1	3.07	2.5
4-Ethyltoluene	ND	1	ND	4.9
4-Methyl-2-pentanone	ND	0.5	ND	2.0
Acetone	8.62	0.5	20.5	1.2
Acrylonitrile	ND	0.5	ND	1.1



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Certificate of Analysis Number:
09110554

<u>Report To:</u>	<u>Project Name:</u> Hoffman Cleaners/ WI000943.0004.0000
Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400	<u>Site:</u> Wauwatosa, WI
Milwaukee WI 53202-	<u>Site Address:</u>
ph: (414) 276-7742 fax: (414) 276-7603	<u>PO Number:</u> LTO#WI1103.208
	<u>State:</u> Wisconsin
	<u>State Cert. No.:</u>
	<u>Date Reported:</u> 12/6/2009

Client Sample ID: SS-2

SPL Sample ID: 09110554-01A

Analyte	ppbv		ug/m3	
	Result	PQL	Result	PQL
Allyl chloride	ND	1	ND	3.1
Benzene	ND	0.5	ND	1.6
Benzyl chloride	ND	0.5	ND	2.6
Bromodichloromethane	ND	0.5	ND	3.3
Bromoform	ND	0.5	ND	5.2
Bromomethane	ND	0.5	ND	1.9
Carbon disulfide	0.693	0.5	2.16	1.6
Carbon tetrachloride	ND	0.5	ND	3.1
Chlorobenzene	ND	0.5	ND	2.3
Chloroethane	ND	0.5	ND	1.3
Chloroform	ND	0.5	ND	2.4
Chloromethane	ND	0.5	ND	1.0
cis-1,2-Dichloroethene	ND	0.5	ND	2.0
cis-1,3-Dichloropropene	ND	0.5	ND	2.3
Cyclohexane	ND	0.5	ND	1.7
Dibromochloromethane	ND	0.5	ND	4.3
Dichlorodifluoromethane	0.56	0.5	2.77	2.5
Diisopropyl Ether	ND	1	ND	4.2
Ethyl Acetate	ND	0.5	ND	1.8
Ethyl tert-butyl Ether	ND	1	ND	4.2
Ethylbenzene	ND	0.5	ND	2.2
Heptane	ND	0.5	ND	2.0
Hexachloro-1,3-butadiene	ND	0.5	ND	5.3
Hexane	0.97	0.5	3.42	1.8
m,p-Xylene	0.857	0.5	3.72	2.2
Methyl tert-butyl ether	ND	0.5	ND	1.8
Methylene chloride	ND	0.5	ND	1.7



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Certificate of Analysis Number:

09110554

<u>Report To:</u> Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400 Milwaukee WI 53202- ph: (414) 276-7742 fax: (414) 276-7603	<u>Project Name:</u> Hoffman Cleaners/ WI000943.0004.0000 <u>Site:</u> Wauwatosa, WI <u>Site Address:</u> <u>PO Number:</u> LTO#WI1103.208 <u>State:</u> Wisconsin <u>State Cert. No.:</u> <u>Date Reported:</u> 12/6/2009
--	--

Client Sample ID: SS-2

SPL Sample ID: 09110554-01A

Analyte	ppbv		ug/m3	
	Result	PQL	Result	PQL
o-Xylene	ND	0.5	ND	2.2
Propylene	ND	0.5	ND	0.86
Styrene	ND	0.5	ND	2.1
t-Butyl Alcohol	ND	1	ND	3.0
tert-Amyl Methyl Ether	ND	1	ND	4.2
Tetrachloroethene	11.9	0.5	80.8	3.4
Tetrahydrofuran	ND	0.5	ND	1.5
Toluene	0.627	0.5	2.36	1.9
trans-1,2-Dichloroethene	ND	0.5	ND	2.0
trans-1,3-Dichloropropene	ND	0.5	ND	2.3
Trichloroethene	ND	0.5	ND	2.7
Trichlorofluoromethane	ND	0.5	ND	2.8
Vinyl acetate	ND	0.5	ND	1.8
Vinyl Bromide	ND	0.5	ND	2.2
Vinyl chloride	ND	0.5	ND	1.3
Xylenes, Total	0.857	0.5	5.604	2.2



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Arcadis U.S., Inc

Certificate of Analysis Number:

09110554

<u>Report To:</u>	<u>Project Name:</u>	Hoffman Cleaners/ WI000943.0004.0000
Arcadis U.S., Inc Brian Maillet 126 North Jefferson St. Suite 400	<u>Site:</u>	Wauwatosa, WI
Milwaukee WI 53202-	<u>Site Address:</u>	
ph: (414) 276-7742 fax:	<u>PO Number:</u>	LTO#WI1103.208
	<u>State:</u>	Wisconsin
	<u>State Cert. No.:</u>	
	<u>Date Reported:</u>	12/6/2009

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSIS AND EXCEPTIONS:

No exceptions noted.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Joann Marroquin

Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

09110554 Page 1

12/6/2009

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Certificate of Analysis Number:

09110554

Report To: Arcadis U.S., Inc Project Name: Hoffman Cleaners/ WI000943.0004.0000
Brian Maillet Site: Wauwatosa, WI
126 North Jefferson St. Suite 400 Site Address:

Milwaukee PO Number: LTO#WI1103.208
WI State: Wisconsin
53202- State Cert. No.:
ph: (414) 276-7742 fax: (414) 276-7603 Date Reported: 12/6/2009

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
SS-2	09110554-01	Air	11/12/2009 9:15:00 AM	11/13/2009 9:00:00 AM		<input type="checkbox"/>

A handwritten signature in black ink that reads "Joann Marroquin".

12/6/2009

Joann Marroquin
Senior Project Manager

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: SS-2

Collected: 11/12/2009 9:15

SPL Sample ID: 09110554-01

Site: Wauwatosa, WI

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
EPA TO-15 AIR ANALYSIS							
1,1,1-Trichloroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,1,2,2-Tetrachloroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,1,2-Trichloroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,1,2-Trichlorotrifluoroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,1-Dichloroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,1-Dichloroethene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,2,4-Trichlorobenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,2,4-Trimethylbenzene	1.13		0.5	1	11/13/09 18:08	CLJ	5292544
1,2-Dibromoethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,2-Dichlorobenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,2-Dichloroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,2-Dichloropropane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,2-Dichlortetrafluoroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,3,5-Trimethylbenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,3-Butadiene	ND		1	1	11/13/09 18:08	CLJ	5292544
1,3-Dichlorobenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,4-Dichlorobenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
1,4-Dioxane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
2,2,4-Trimethylpentane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
2-Butanone	0.522		0.5	1	11/13/09 18:08	CLJ	5292544
2-Hexanone	ND		0.5	1	11/13/09 18:08	CLJ	5292544
2-Propanol	1.25		1	1	11/13/09 18:08	CLJ	5292544
4-Ethyltoluene	ND		1	1	11/13/09 18:08	CLJ	5292544
4-Methyl-2-pentanone	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Acetone	8.62		0.5	1	11/13/09 18:08	CLJ	5292544
Acrylonitrile	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Allyl chloride	ND		1	1	11/13/09 18:08	CLJ	5292544
Benzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Benzyl chloride	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Bromodichloromethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Bromoform	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Bromomethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Carbon disulfide	0.693		0.5	1	11/13/09 18:08	CLJ	5292544
Carbon tetrachloride	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Chlorobenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Chloroethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Chloroform	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Chloromethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
cis-1,2-Dichloroethene	ND		0.5	1	11/13/09 18:08	CLJ	5292544

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: SS-2

Collected: 11/12/2009 9:15

SPL Sample ID: 09110554-01

Site: Wauwatosa, WI

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
cis-1,3-Dichloropropene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Cyclohexane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Dibromochloromethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Dichlorodifluoromethane	0.56		0.5	1	11/13/09 18:08	CLJ	5292544
Diisopropyl Ether	ND		1	1	11/13/09 18:08	CLJ	5292544
Ethyl Acetate	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Ethyl tert-butyl Ether	ND		1	1	11/13/09 18:08	CLJ	5292544
Ethylbenzene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Heptane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Hexachloro-1,3-butadiene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Hexane	0.97		0.5	1	11/13/09 18:08	CLJ	5292544
m,p-Xylene	0.857		0.5	1	11/13/09 18:08	CLJ	5292544
Methyl tert-butyl ether	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Methylene chloride	ND		0.5	1	11/13/09 18:08	CLJ	5292544
o-Xylene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Propylene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Styrene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
t-Butyl Alcohol	ND		1	1	11/13/09 18:08	CLJ	5292544
tert-Amyl Methyl Ether	ND		1	1	11/13/09 18:08	CLJ	5292544
Tetrachloroethene	11.9		0.5	1	11/13/09 18:08	CLJ	5292544
Tetrahydrofuran	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Toluene	0.627		0.5	1	11/13/09 18:08	CLJ	5292544
trans-1,2-Dichloroethene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
trans-1,3-Dichloropropene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Trichloroethene	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Trichlorofluoromethane	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Vinyl acetate	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Vinyl Bromide	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Vinyl chloride	ND		0.5	1	11/13/09 18:08	CLJ	5292544
Xylenes, Total	0.857		0.5	1	11/13/09 18:08	CLJ	5292544

Qualifiers:	ND/U - Not Detected at the Reporting Limit	>MCL - Result Over Maximum Contamination Limit(MCL)
	B/V - Analyte detected in the associated Method Blank	D - Surrogate Recovery Unreportable due to Dilution
	* - Surrogate Recovery Outside Advisable QC Limits	MI - Matrix Interference
	J - Estimated Value between MDL and PQL	
	E - Estimated Value exceeds calibration curve	
	TNTC - Too numerous to count	

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Hoffman Cleaners/ WI000943.0004.00001

Analysis:	EPA TO-15 Air Analysis	WorkOrder:	09110554
Method:	TO-15	Lab Batch ID:	R289301

Method Blank		Samples in Analytical Batch:	
RunID:	AIR 1_091113A-5292539	Units:	ppbv
Analysis Date:	11/13/2009 11:26	Analyst:	CLJ
		<u>Lab Sample ID</u>	<u>Client Sample ID</u>
		09110554-01A	SS-2

Analyte	Result	Rep Limit
1,1,1-Trichloroethane	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,1,2-Trichloroethane	ND	0.50
1,1,2-Trichlorotrifluoroethane	ND	0.50
1,1-Dichloroethane	ND	0.50
1,1-Dichloroethene	ND	0.50
1,2,4-Trichlorobenzene	ND	0.50
1,2,4-Trimethylbenzene	ND	0.50
1,2-Dibromoethane	ND	0.50
1,2-Dichlorobenzene	ND	0.50
1,2-Dichloroethane	ND	0.50
1,2-Dichloropropane	ND	0.50
1,2-Dichlorotetrafluoroethane	ND	0.50
1,3,5-Trimethylbenzene	ND	0.50
1,3-Butadiene	ND	1.0
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,4-Dioxane	ND	0.50
2,2,4-Trimethylpentane	ND	0.50
2-Butanone	ND	0.50
2-Hexanone	ND	0.50
2-Propanol	ND	1.0
4-Ethyltoluene	ND	1.0
4-Methyl-2-pentanone	ND	0.50
Acetone	ND	0.50
Acrylonitrile	ND	0.50
Allyl chloride	ND	1.0
Benzene	ND	0.50
Benzyl chloride	ND	0.50
Bromodichloromethane	ND	0.50
Bromoform	ND	0.50
Bromomethane	ND	0.50
Carbon disulfide	ND	0.50
Carbon tetrachloride	ND	0.50
Chlorobenzene	ND	0.50
Chloroethane	ND	0.50
Chloroform	ND	0.50
Chloromethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
cis-1,3-Dichloropropene	ND	0.50
Cyclohexane	ND	0.50
Dibromochloromethane	ND	0.50
Dichlorodifluoromethane	ND	0.50
Diisopropyl Ether	ND	1.0
Ethyl Acetate	ND	0.50
Ethyl tert-butyl Ether	ND	1.0

Qualifiers: ND/U - Not Detected at the Reporting Limit

B - Analyte Detected In The Associated Method Blank

J - Estimated Value Between MDL And PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

09110554 Page 6

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

12/6/2009 9:05:53 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Hoffman Cleaners/ WI000943.0004.00001

Analysis: EPA TO-15 Air Analysis

WorkOrder: 09110554

Method: TO-15

Lab Batch ID: R289301

Method Blank

RunID: AIR 1_091113A-5292539 Units: ppbv

Analysis Date: 11/13/2009 11:26 Analyst: CLJ

Analyte	Result	Rep Limit
Ethylbenzene	ND	0.50
Heptane	ND	0.50
Hexachloro-1,3-butadiene	ND	0.50
Hexane	ND	0.50
m,p-Xylene	ND	0.50
Methyl tert-butyl ether	ND	0.50
Methylene chloride	ND	0.50
o-Xylene	ND	0.50
Propylene	ND	0.50
Styrene	ND	0.50
t-Butyl Alcohol	ND	1.0
tert-Amyl Methyl Ether	ND	1.0
Tetrachloroethene	ND	0.50
Tetrahydrofuran	ND	0.50
Toluene	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
trans-1,3-Dichloropropene	ND	0.50
Trichloroethene	ND	0.50
Trichlorofluoromethane	ND	0.50
Vinyl acetate	ND	0.50
Vinyl Bromide	ND	0.50
Vinyl chloride	ND	0.50
Xylenes, Total	ND	0.50

Laboratory Control Sample (LCS)

RunID: AIR 1_091113A-5292537 Units: ppbv

Analysis Date: 11/13/2009 8:51 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1-Trichloroethane	10.00	8.419	84.19	47	149
1,1,2,2-Tetrachloroethane	10.00	10.09	100.9	58	128
1,1,2-Trichloroethane	10.00	9.474	94.74	70	130
1,1,2-Trichlorotrifluoroethane	10.00	8.709	87.09	60	120
1,1-Dichloroethane	10.00	9.751	97.51	65	119
1,1-Dichloroethene	10.00	8.575	85.75	70	130
1,2,4-Trichlorobenzene	10.00	9.200	92.00	45	146
1,2,4-Trimethylbenzene	10.00	10.71	107.1	70	137

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Hoffman Cleaners/ WI000943.0004.00001

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09110554
Lab Batch ID: R289301

Laboratory Control Sample (LCS)

RunID: AIR 1_091113A-5292537 Units: ppbv
Analysis Date: 11/13/2009 8:51 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2-Dibromoethane	10.00	9.262	92.62	46	127
1,2-Dichlorobenzene	10.00	9.699	96.99	48	129
1,2-Dichloroethane	10.00	9.167	91.67	49	137
1,2-Dichloropropane	10.00	9.762	97.62	70	130
1,2-Dichlortetrafluoroethane	10.00	8.746	87.46	62	118
1,3,5-Trimethylbenzene	10.00	10.15	101.5	70	130
1,3-Butadiene	20.00	19.71	98.55	55	131
1,3-Dichlorobenzene	10.00	9.501	95.01	50	126
1,4-Dichlorobenzene	10.00	9.983	99.83	63	128
1,4-Dioxane	10.00	9.421	94.21	66	123
2,2,4-Trimethylpentane	10.00	9.783	97.83	70	130
2-Butanone	10.00	11.61	116.1	57	129
2-Hexanone	10.00	10.86	108.6	70	134
2-Propanol	10.00	7.615	76.15	52	142
4-Ethyltoluene	20.00	22.10	110.5	79	134
4-Methyl-2-pentanone	10.00	10.52	105.2	75	134
Acetone	10.00	9.832	98.32	57	128
Acrylonitrile	10.00	9.474	94.74	70	130
Allyl chloride	20.00	21.28	106.4	56	135
Benzene	10.00	10.01	100.1	70	130
Benzyl chloride	10.00	8.022	80.22	46	147
Bromodichloromethane	10.00	8.939	89.39	41	129
Bromoform	10.00	9.010	90.10	37	139
Bromomethane	10.00	8.387	83.87	48	112
Carbon disulfide	10.00	9.145	91.45	37	139
Carbon tetrachloride	10.00	8.535	85.35	48	159
Chlorobenzene	10.00	9.410	94.10	70	130
Chloroethane	10.00	8.761	87.61	70	130
Chloroform	10.00	8.951	89.51	56	127
Chloromethane	10.00	9.431	94.31	43	146
cis-1,2-Dichloroethene	10.00	9.925	99.25	70	130
cis-1,3-Dichloropropene	10.00	10.31	103.1	63	146
Cyclohexane	10.00	10.48	104.8	70	130
Dibromochloromethane	10.00	8.709	87.09	33	138

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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12/6/2009 9:05:53 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Hoffman Cleaners/ WI000943.0004.00001

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09110554
Lab Batch ID: R289301

Laboratory Control Sample (LCS)

RunID: AIR 1_091113A-5292537 Units: ppbv
Analysis Date: 11/13/2009 8:51 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Dichlorodifluoromethane	10.00	8.918	89.18	54	125
Diisopropyl Ether	10.00	11.02	110.2	70	130
Ethyl Acetate	10.00	10.35	103.5	70	130
Ethyl tert-butyl Ether	10.00	10.63	106.3	65	132
Ethylbenzene	10.00	10.72	107.2	70	138
Heptane	10.00	10.66	106.6	70	130
Hexachloro-1,3-butadiene	10.00	9.112	91.12	28	166
Hexane	10.00	9.845	98.45	70	130
m,p-Xylene	20.00	20.81	104.1	58	133
Methyl tert-butyl ether	10.00	10.56	105.6	55	148
Methylene chloride	10.00	8.234	82.34	58	120
o-Xylene	10.00	10.64	106.4	73	146
Propylene	10.00	12.13	121.3	65	155
Styrene	10.00	11.28	112.8	66	149
t-Butyl Alcohol	10.00	8.495	84.95	51	130
tert-Amyl Methyl Ether	10.00	9.987	99.87	61	133
Tetrachloroethene	10.00	8.512	85.12	63	134
Tetrahydrofuran	10.00	10.85	108.5	67	133
Toluene	10.00	10.14	101.4	70	135
trans-1,2-Dichloroethene	10.00	10.16	101.6	70	130
trans-1,3-Dichloropropene	10.00	10.19	101.9	38	139
Trichloroethene	10.00	8.901	89.01	70	130
Trichlorofluoromethane	10.00	8.525	85.25	37	143
Vinyl acetate	10.00	8.702	87.02	64	129
Vinyl Bromide	10.00	9.095	90.95	70	130
Vinyl chloride	10.00	9.029	90.29	70	130
Xylenes, Total	30.00	31.45	104.8	58	133

Sample Duplicate

Original Sample: 09110348-01
RunID: AIR 1_091113A-5292554 Units: ppbv
Analysis Date: 11/13/2009 12:01 Analyst: CLJ

Qualifiers:	ND/U - Not Detected at the Reporting Limit	MI - Matrix Interference
B - Analyte Detected In The Associated Method Blank	D - Recovery Unreportable due to Dilution	
J - Estimated Value Between MDL And PQL	* - Recovery Outside Advisable QC Limits	
E - Estimated Value exceeds calibration curve		
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.		
TNTC - Too numerous to count		

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc
Hoffman Cleaners/ WI000943.0004.00001

Analysis:	EPA TO-15 Air Analysis	WorkOrder:	09110554
Method:	TO-15	Lab Batch ID:	R289301

	Analyte	Sample Result	DUP Result	RPD	RPD Limit
	1,1,1-Trichloroethane	ND	ND	0	30
	1,1,2,2-Tetrachloroethane	ND	ND	0	30
	1,1,2-Trichloroethane	ND	ND	0	30
	1,1,2-Trichlorotrifluoroethane	ND	ND	0	30
	1,1-Dichloroethane	ND	ND	0	30
	1,1-Dichloroethene	ND	ND	0	30
	1,2,4-Trichlorobenzene	ND	ND	0	30
	1,2,4-Trimethylbenzene	ND	ND	0	30
	1,2-Dibromoethane	ND	ND	0	30
	1,2-Dichlorobenzene	ND	ND	0	30
	1,2-Dichloroethane	ND	ND	0	30
	1,2-Dichloropropane	ND	ND	0	30
	1,2-Dichlortetrafluoroethane	ND	ND	0	30
	1,3,5-Trimethylbenzene	ND	ND	0	30
	1,3-Butadiene	ND	ND	0	30
	1,3-Dichlorobenzene	ND	ND	0	30
	1,4-Dichlorobenzene	ND	ND	0	30
	1,4-Dioxane	ND	ND	0	30
	2,2,4-Trimethylpentane	ND	ND	0	30
	2-Butanone	ND	ND	0	30
	2-Hexanone	ND	ND	0	30
	2-Propanol	151	151.6	0.550	30
	4-Ethyltoluene	ND	ND	0	30
	4-Methyl-2-pentanone	ND	ND	0	30
	Acetone	42	43.41	3.36	30
	Acrylonitrile	ND	ND	0	30
	Allyl chloride	ND	ND	0	30
	Benzene	ND	ND	0	30
	Benzyl chloride	ND	ND	0	30
	Bromodichloromethane	ND	ND	0	30
	Bromoform	ND	ND	0	30
	Bromomethane	ND	ND	0	30
	Carbon disulfide	ND	ND	0	30
	Carbon tetrachloride	ND	ND	0	30
	Chlorobenzene	ND	ND	0	30
	Chloroethane	ND	ND	0	30
	Chloroform	ND	ND	0	30
	Chloromethane	ND	ND	0	30
	cis-1,2-Dichloroethene	ND	ND	0	30
	cis-1,3-Dichloropropene	ND	ND	0	30

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09110554 Page 10

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

12/6/2009 9:05:53 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Arcadis U.S., Inc

Hoffman Cleaners/ WI000943.0004.00001

Analysis: EPA TO-15 Air Analysis
Method: TO-15

WorkOrder: 09110554
Lab Batch ID: R289301

Sample Duplicate

Original Sample: 09110348-01
RunID: AIR 1_091113A-5292554 Units: ppbv
Analysis Date: 11/13/2009 12:01 Analyst: CLJ

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Cyclohexane	ND	ND	0	30
Dibromochloromethane	ND	ND	0	30
Dichlorodifluoromethane	ND	ND	0	30
Diisopropyl Ether	ND	ND	0	30
Ethyl Acetate	ND	ND	0	30
Ethyl tert-butyl Ether	ND	ND	0	30
Ethylbenzene	ND	ND	0	30
Heptane	ND	ND	0	30
Hexachloro-1,3-butadiene	ND	ND	0	30
Hexane	ND	ND	0	30
m,p-Xylene	ND	ND	0	30
Methyl tert-butyl ether	ND	ND	0	30
Methylene chloride	ND	ND	0	30
o-Xylene	ND	ND	0	30
Propylene	ND	ND	0	30
Styrene	ND	ND	0	30
t-Butyl Alcohol	ND	ND	0	30
tert-Amyl Methyl Ether	ND	ND	0	30
Tetrachloroethene	ND	ND	0	30
Tetrahydrofuran	ND	ND	0	30
Toluene	ND	ND	0	30
trans-1,2-Dichloroethene	ND	ND	0	30
trans-1,3-Dichloropropene	ND	ND	0	30
Trichloroethene	ND	ND	0	30
Trichlorofluoromethane	ND	ND	0	30
Vinyl acetate	ND	ND	0	30
Vinyl Bromide	ND	ND	0	30
Vinyl chloride	ND	ND	0	30
Xylenes,Total	ND	ND	0	30

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte Detected In The Associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated Value Between MDL And PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09110554 Page 11

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

12/6/2009 9:05:53 PM

Sample Receipt Checklist
And
Chain of Custody



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	09110554	Received By:	AMV
Date and Time Received:	11/13/2009 9:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	21.7°C	Chilled by:	Not Chilled

- | | | | |
|---|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input checked="" type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:



SPL, Inc.

Analysis Request & Chain of Custody Record

Company Name:

ARCADIS

Address:

120 N JEFFERSON ST. #400

City:

Milwaukee

State:

WI

Zip: 53202

Phone:

414-276-7742

Fax:

414-276-7603

Client Contact:

Brian Maillet

Email:

Brian.Maillet@arcadis-us.com

Project Name/No.:

Hoffman Cleaners/WI00943.0004.00001

Site Name:

Hoffman Cleaners

Site Location:

Wauwatosa, WI

Collected by: (Sig.)

Cari & Bray

P.O.#:

Canister	Serial #'s Flow Reg.	Client Sample Id:	Date	Time	Sample Container Type	C=Canister/T=Tedlar Bag	Sample Container Size (Insert the size of sample container, ie. 1L = 1 Liter)	Requested TAT							
								<input type="checkbox"/> 24hr	<input type="checkbox"/> 48hr	<input type="checkbox"/> 72hr	<input type="checkbox"/> 5 Day				
0323	NA	SS-2	11/12/09	0915	C	6	T0-15	<input checked="" type="checkbox"/> Standard		<input type="checkbox"/> Contract	<input type="checkbox"/> Other				
QC Requirements										<input checked="" type="checkbox"/> stand. qc	<input type="checkbox"/> level III	<input type="checkbox"/> level IV			
<input type="checkbox"/> TX TRRP		<input type="checkbox"/> LA RECAP													
Report Results										<input type="checkbox"/> Fax	<input type="checkbox"/> Email	<input type="checkbox"/> pdf			
Analyses Requested								Canister Pressure / Vacuum							
					Initial	Final	Lab								

Client Comments:

1. Relinquished by:

Cari & Bray

date:

11/12/09

time:

1700

2. Received by:

3. Relinquished by:

date:

time:

4. Received by:

5. Relinquished by:

date:

11/13/09

time:

6. Received by Laboratory:

9:00 AMANDA KURKMAIR

LAB
USE
ONLY

Shipper Name: Arbill #: Opened By: Temp (F): Condition: Custody Seal's Intact? PM Review (Initials):

21.7°C

Y N None Present

Lab Comments:

November 19, 2009

Brian Maillet
ARCADIS G & M
126 N JEFFERSON ST
SUITE 400
Milwaukee, WI 53202

RE: Project: WI000944.0004.00001 HOFFMAN CL
Pace Project No.: 4025387

Dear Brian Maillet:

Enclosed are the analytical results for sample(s) received by the laboratory on November 13, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

cc: Ed Buc, ARCADIS G & M

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WI000944.0004.00001 HOFFMAN CL
Pace Project No.: 4025387

Green Bay Certification IDs

California Certification #: 09268CA
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11887

New York Certification #: 11888
North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
1241 Bellevue Street Green Bay, WI 54302

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4025387001	GP-111 (10-12)	Solid	11/12/09 11:00	11/13/09 11:30
4025387002	GP-111 (14-16)	Solid	11/12/09 11:00	11/13/09 11:30
4025387003	GP-112 (10-12)	Solid	11/12/09 12:15	11/13/09 11:30
4025387004	GP-112 (14-16)	Solid	11/12/09 12:15	11/13/09 11:30
4025387005	MEOH BLANK	Solid	11/12/09 00:00	11/13/09 11:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4025387001	GP-111 (10-12)	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
4025387002	GP-111 (14-16)	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
4025387003	GP-112 (10-12)	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
4025387004	GP-112 (14-16)	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
4025387005	MEOH BLANK	EPA 8260	JJB	64	PASI-G

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Method: EPA 8260

Description: 8260 MSV Med Level Normal List

Client: ARCADIS G & M

Date: November 19, 2009

General Information:

5 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 5035/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Method: ASTM D2974-87

Description: Percent Moisture

Client: ARCADIS G & M

Date: November 19, 2009

General Information:

4 samples were analyzed for ASTM D2974-87. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-111 (10-12) Lab ID: 4025387001 Collected: 11/12/09 11:00 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	108-86-1	W	
Bromoform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	74-97-5	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-27-4	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-25-2	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	74-83-9	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	11/16/09 13:01	11/17/09 10:09	104-51-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	135-98-8	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	108-90-7	W	
Chloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-00-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	11/16/09 13:01	11/17/09 10:09	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	11/16/09 13:01	11/17/09 10:09	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	11/16/09 13:01	11/17/09 10:09	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	100-42-5	W	

Date: 11/19/2009 03:46 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-111 (10-12) Lab ID: 4025387001 Collected: 11/12/09 11:00 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	11/16/09 13:01	11/17/09 10:09	1330-20-7	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:09	95-47-6	W	
Dibromofluoromethane (S)	114 %	70-150		1	11/16/09 13:01	11/17/09 10:09	1868-53-7		
Toluene-d8 (S)	115 %	70-155		1	11/16/09 13:01	11/17/09 10:09	2037-26-5		
4-Bromofluorobenzene (S)	101 %	70-147		1	11/16/09 13:01	11/17/09 10:09	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	4.0 %	0.10	0.10	1			11/18/09 08:17		

Date: 11/19/2009 03:46 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-111 (14-16) Lab ID: 4025387002 Collected: 11/12/09 11:00 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List									
Benzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	108-86-1	W	
Bromoform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	74-97-5	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-27-4	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-25-2	W	
Bromoform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	74-83-9	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	108-90-7	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	11/16/09 13:01	11/17/09 10:32	104-51-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	135-98-8	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	106-43-4	W	
Chloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-00-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	11/16/09 13:01	11/17/09 10:32	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	11/16/09 13:01	11/17/09 10:32	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	11/16/09 13:01	11/17/09 10:32	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	100-42-5	W	

Date: 11/19/2009 03:46 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-111 (14-16) Lab ID: 4025387002 Collected: 11/12/09 11:00 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	11/16/09 13:01	11/17/09 10:32	1330-20-7	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:32	95-47-6	W	
Dibromofluoromethane (S)	103 %	70-150		1	11/16/09 13:01	11/17/09 10:32	1868-53-7		
Toluene-d8 (S)	104 %	70-155		1	11/16/09 13:01	11/17/09 10:32	2037-26-5		
4-Bromofluorobenzene (S)	89 %	70-147		1	11/16/09 13:01	11/17/09 10:32	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	15.9 %	0.10	0.10	1			11/18/09 08:17		

ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-112 (10-12) Lab ID: 4025387003 Collected: 11/12/09 12:15 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	108-86-1	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	74-97-5	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-27-4	W	
Bromoform	<25.9 ug/kg	60.0	25.9	1	11/16/09 13:01	11/17/09 10:55	75-25-2	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	74-83-9	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	11/16/09 13:01	11/17/09 10:55	104-51-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	135-98-8	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	108-90-7	W	
Chloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-00-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	11/16/09 13:01	11/17/09 10:55	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	11/16/09 13:01	11/17/09 10:55	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	11/16/09 13:01	11/17/09 10:55	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	100-42-5	W	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-112 (10-12) Lab ID: 4025387003 Collected: 11/12/09 12:15 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	11/16/09 13:01	11/17/09 10:55	1330-20-7	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 10:55	95-47-6	W	
Dibromofluoromethane (S)	110 %	70-150		1	11/16/09 13:01	11/17/09 10:55	1868-53-7		
Toluene-d8 (S)	113 %	70-155		1	11/16/09 13:01	11/17/09 10:55	2037-26-5		
4-Bromofluorobenzene (S)	99 %	70-147		1	11/16/09 13:01	11/17/09 10:55	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	7.0 %		0.10	0.10	1		11/18/09 08:17		

ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-112 (14-16) Lab ID: 4025387004 Collected: 11/12/09 12:15 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	71-43-2	W	
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	108-86-1	W	
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	74-97-5	W	
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-27-4	W	
Bromoform	<25.9 ug/kg	60.0	25.9	1	11/16/09 13:01	11/17/09 11:19	75-25-2	W	
Bromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	74-83-9	W	
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	11/16/09 13:01	11/17/09 11:19	104-51-8	W	
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	135-98-8	W	
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	98-06-6	W	
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	56-23-5	W	
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	108-90-7	W	
Chloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-00-3	W	
Chloroform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	67-66-3	W	
Chloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	74-87-3	W	
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	95-49-8	W	
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	106-43-4	W	
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	11/16/09 13:01	11/17/09 11:19	96-12-8	W	
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	124-48-1	W	
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	106-93-4	W	
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	74-95-3	W	
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	11/16/09 13:01	11/17/09 11:19	95-50-1	W	
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	541-73-1	W	
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	106-46-7	W	
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-71-8	W	
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-34-3	W	
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	107-06-2	W	
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-35-4	W	
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	156-59-2	W	
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	156-60-5	W	
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	78-87-5	W	
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	142-28-9	W	
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	594-20-7	W	
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	563-58-6	W	
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	10061-01-5	W	
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	10061-02-6	W	
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	108-20-3	W	
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	100-41-4	W	
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	11/16/09 13:01	11/17/09 11:19	87-68-3	W	
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	98-82-8	W	
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	99-87-6	W	
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-09-2	W	
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	1634-04-4	W	
Naphthalene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	91-20-3	W	
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	103-65-1	W	
Styrene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	100-42-5	W	

Date: 11/19/2009 03:46 PM

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: GP-112 (14-16) Lab ID: 4025387004 Collected: 11/12/09 12:15 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	630-20-6	W	
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	79-34-5	W	
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	127-18-4	W	
Toluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	108-88-3	W	
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	87-61-6	W	
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	120-82-1	W	
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	71-55-6	W	
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	79-00-5	W	
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	79-01-6	W	
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-69-4	W	
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	96-18-4	W	
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	95-63-6	W	
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	108-67-8	W	
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	75-01-4	W	
m&p-Xylene	<50.0 ug/kg	120	50.0	1	11/16/09 13:01	11/17/09 11:19	1330-20-7	W	
o-Xylene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 11:19	95-47-6	W	
Dibromofluoromethane (S)	107 %	70-150		1	11/16/09 13:01	11/17/09 11:19	1868-53-7		
Toluene-d8 (S)	108 %	70-155		1	11/16/09 13:01	11/17/09 11:19	2037-26-5		
4-Bromofluorobenzene (S)	94 %	70-147		1	11/16/09 13:01	11/17/09 11:19	460-00-4		
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	15.0 %	0.10	0.10	1			11/18/09 08:17		

ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: MEOH BLANK Lab ID: 4025387005 Collected: 11/12/09 00:00 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	71-43-2		W
Bromobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	108-86-1		W
Bromoform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	74-97-5		W
Bromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-27-4		W
Bromodichloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-25-2		W
Bromoform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	74-83-9		W
n-Butylbenzene	<40.4 ug/kg	60.0	40.4	1	11/16/09 13:01	11/17/09 09:23	104-51-8		W
sec-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	135-98-8		W
tert-Butylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	98-06-6		W
Carbon tetrachloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	56-23-5		W
Chlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	108-90-7		W
Chloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-00-3		W
Chloroform	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	67-66-3		W
Chloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	74-87-3		W
2-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	95-49-8		W
4-Chlorotoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	106-43-4		W
1,2-Dibromo-3-chloropropane	<82.3 ug/kg	250	82.3	1	11/16/09 13:01	11/17/09 09:23	96-12-8		W
Dibromochloromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	124-48-1		W
1,2-Dibromoethane (EDB)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	106-93-4		W
Dibromomethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	74-95-3		W
1,2-Dichlorobenzene	<44.4 ug/kg	60.0	44.4	1	11/16/09 13:01	11/17/09 09:23	95-50-1		W
1,3-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	541-73-1		W
1,4-Dichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	106-46-7		W
Dichlorodifluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-71-8		W
1,1-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-34-3		W
1,2-Dichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	107-06-2		W
1,1-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-35-4		W
cis-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	156-59-2		W
trans-1,2-Dichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	156-60-5		W
1,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	78-87-5		W
1,3-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	142-28-9		W
2,2-Dichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	594-20-7		W
1,1-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	563-58-6		W
cis-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	10061-01-5		W
trans-1,3-Dichloropropene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	10061-02-6		W
Diisopropyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	108-20-3		W
Ethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	100-41-4		W
Hexachloro-1,3-butadiene	<26.4 ug/kg	60.0	26.4	1	11/16/09 13:01	11/17/09 09:23	87-68-3		W
Isopropylbenzene (Cumene)	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	98-82-8		W
p-Isopropyltoluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	99-87-6		W
Methylene Chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-09-2		W
Methyl-tert-butyl ether	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	1634-04-4		W
Naphthalene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	91-20-3		W
n-Propylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	103-65-1		W
Styrene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	100-42-5		W

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ANALYTICAL RESULTS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Sample: MEOH BLANK Lab ID: 4025387005 Collected: 11/12/09 00:00 Received: 11/13/09 11:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	630-20-6		W
1,1,2,2-Tetrachloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	79-34-5		W
Tetrachloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	127-18-4		W
Toluene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	108-88-3		W
1,2,3-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	87-61-6		W
1,2,4-Trichlorobenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	120-82-1		W
1,1,1-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	71-55-6		W
1,1,2-Trichloroethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	79-00-5		W
Trichloroethene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	79-01-6		W
Trichlorofluoromethane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-69-4		W
1,2,3-Trichloropropane	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	96-18-4		W
1,2,4-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	95-63-6		W
1,3,5-Trimethylbenzene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	108-67-8		W
Vinyl chloride	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	75-01-4		W
m&p-Xylene	<50.0 ug/kg	120	50.0	1	11/16/09 13:01	11/17/09 09:23	1330-20-7		W
o-Xylene	<25.0 ug/kg	60.0	25.0	1	11/16/09 13:01	11/17/09 09:23	95-47-6		W
Dibromofluoromethane (S)	105 %	70-150		1	11/16/09 13:01	11/17/09 09:23	1868-53-7		
Toluene-d8 (S)	104 %	70-155		1	11/16/09 13:01	11/17/09 09:23	2037-26-5		
4-Bromofluorobenzene (S)	94 %	70-147		1	11/16/09 13:01	11/17/09 09:23	460-00-4		

QUALITY CONTROL DATA

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

QC Batch:	MSV/6147	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples:	4025387001, 4025387002, 4025387003, 4025387004, 4025387005		

METHOD BLANK: 235683 Matrix: Solid

Associated Lab Samples: 4025387001, 4025387002, 4025387003, 4025387004, 4025387005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,1,1-Trichloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,1,2-Trichloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,1-Dichloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,1-Dichloroethene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,1-Dichloropropene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2,3-Trichlorobenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2,3-Trichloropropane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2,4-Trichlorobenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2-Dibromo-3-chloropropane	ug/kg	<82.3	250	11/16/09 16:46	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2-Dichlorobenzene	ug/kg	<44.4	60.0	11/16/09 16:46	
1,2-Dichloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,2-Dichloropropane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,3-Dichlorobenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
1,3-Dichloropropane	ug/kg	<25.0	60.0	11/16/09 16:46	
1,4-Dichlorobenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
2,2-Dichloropropane	ug/kg	<25.0	60.0	11/16/09 16:46	
2-Chlorotoluene	ug/kg	<25.0	60.0	11/16/09 16:46	
4-Chlorotoluene	ug/kg	<25.0	60.0	11/16/09 16:46	
Benzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Bromobenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Bromochloromethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Bromodichloromethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Bromoform	ug/kg	<25.9	60.0	11/16/09 16:46	
Bromomethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Carbon tetrachloride	ug/kg	<25.0	60.0	11/16/09 16:46	
Chlorobenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Chloroethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Chloroform	ug/kg	<25.0	60.0	11/16/09 16:46	
Chloromethane	ug/kg	<25.0	60.0	11/16/09 16:46	
cis-1,2-Dichloroethene	ug/kg	<25.0	60.0	11/16/09 16:46	
cis-1,3-Dichloropropene	ug/kg	<25.0	60.0	11/16/09 16:46	
Dibromochloromethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Dibromomethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Dichlorodifluoromethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Diisopropyl ether	ug/kg	<25.0	60.0	11/16/09 16:46	
Ethylbenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Hexachloro-1,3-butadiene	ug/kg	92.0	60.0	11/16/09 16:46	
Isopropylbenzene (Cumene)	ug/kg	<25.0	60.0	11/16/09 16:46	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

METHOD BLANK: 235683 Matrix: Solid
Associated Lab Samples: 4025387001, 4025387002, 4025387003, 4025387004, 4025387005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/kg	<50.0	120	11/16/09 16:46	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	11/16/09 16:46	
Methylene Chloride	ug/kg	<25.0	60.0	11/16/09 16:46	
n-Butylbenzene	ug/kg	<40.4	60.0	11/16/09 16:46	
n-Propylbenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Naphthalene	ug/kg	<25.0	60.0	11/16/09 16:46	
o-Xylene	ug/kg	<25.0	60.0	11/16/09 16:46	
p-Isopropyltoluene	ug/kg	<25.0	60.0	11/16/09 16:46	
sec-Butylbenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Styrene	ug/kg	<25.0	60.0	11/16/09 16:46	
tert-Butylbenzene	ug/kg	<25.0	60.0	11/16/09 16:46	
Tetrachloroethene	ug/kg	<25.0	60.0	11/16/09 16:46	
Toluene	ug/kg	<25.0	60.0	11/16/09 16:46	
trans-1,2-Dichloroethene	ug/kg	<25.0	60.0	11/16/09 16:46	
trans-1,3-Dichloropropene	ug/kg	<25.0	60.0	11/16/09 16:46	
Trichloroethene	ug/kg	<25.0	60.0	11/16/09 16:46	
Trichlorofluoromethane	ug/kg	<25.0	60.0	11/16/09 16:46	
Vinyl chloride	ug/kg	<25.0	60.0	11/16/09 16:46	
4-Bromofluorobenzene (S)	%	102	70-147	11/16/09 16:46	
Dibromofluoromethane (S)	%	107	70-150	11/16/09 16:46	
Toluene-d8 (S)	%	112	70-155	11/16/09 16:46	

LABORATORY CONTROL SAMPLE & LCSD: 235684 235685

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2460	2490	98	100	68-140	1	20	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2670	2660	107	106	67-131	.3	20	
1,1,2-Trichloroethane	ug/kg	2500	2530	2540	101	102	70-130	.6	20	
1,1-Dichloroethane	ug/kg	2500	2570	2570	103	103	70-130	.03	20	
1,1-Dichloroethene	ug/kg	2500	2560	2630	102	105	70-133	3	20	
1,2-Dichloroethane	ug/kg	2500	2540	2500	102	100	70-132	2	20	
1,2-Dichloropropene	ug/kg	2500	2480	2520	99	101	70-130	2	20	
Benzene	ug/kg	2500	2690	2680	108	107	70-130	.3	20	
Bromodichloromethane	ug/kg	2500	2380	2450	95	98	70-130	3	20	
Bromoform	ug/kg	2500	2600	2630	104	105	70-130	1	20	
Bromomethane	ug/kg	2500	2570	2550	103	102	65-153	.9	20	
Carbon tetrachloride	ug/kg	2500	2560	2580	102	103	70-142	.9	20	
Chlorobenzene	ug/kg	2500	2550	2590	102	104	70-130	2	20	
Chloroethane	ug/kg	2500	2730	2730	109	109	70-178	.3	20	
Chloroform	ug/kg	2500	2500	2530	100	101	70-130	1	20	
Chloromethane	ug/kg	2500	2480	2540	99	102	53-143	2	20	
cis-1,2-Dichloroethene	ug/kg	2500	2630	2620	105	105	70-130	.5	20	
cis-1,3-Dichloropropene	ug/kg	2500	2580	2690	103	108	70-130	4	20	
Dibromochloromethane	ug/kg	2500	2380	2410	95	96	70-130	1	20	
Ethylbenzene	ug/kg	2500	2960	3070	118	123	70-130	4	20	

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QUALITY CONTROL DATA

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

LABORATORY CONTROL SAMPLE & LCSD:		235685									
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
m&p-Xylene	ug/kg	5000	5460	5620	109	112	70-130	3	20		
Methylene Chloride	ug/kg	2500	2530	2500	101	100	70-134	1	20		
o-Xylene	ug/kg	2500	2630	2660	105	107	70-130	1	20		
Styrene	ug/kg	2500	2390	2420	96	97	70-130	1	20		
Tetrachloroethene	ug/kg	2500	2530	2580	101	103	70-130	2	20		
Toluene	ug/kg	2500	2870	2930	115	117	70-130	2	20		
trans-1,2-Dichloroethene	ug/kg	2500	2580	2540	103	102	67-130	2	20		
trans-1,3-Dichloropropene	ug/kg	2500	2320	2340	93	93	70-130	.8	20		
Trichloroethene	ug/kg	2500	2570	2650	103	106	70-130	3	20		
Vinyl chloride	ug/kg	2500	2550	2550	102	102	70-130	.2	20		
4-Bromofluorobenzene (S)	%				105	104	70-147				
Dibromofluoromethane (S)	%				109	108	70-150				
Toluene-d8 (S)	%				113	114	70-155				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		235686 235687									
Parameter	Units	MS Spike Result	MSD Spike Conc.	MS Spike Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<61.9	3120	3120	3160	2930	101	94	52-153	7	20
1,1,2,2-Tetrachloroethane	ug/kg	<61.9	3120	3120	3430	3230	110	103	61-139	6	20
1,1,2-Trichloroethane	ug/kg	<61.9	3120	3120	3290	3030	106	97	66-133	8	20
1,1-Dichloroethane	ug/kg	<61.9	3120	3120	3200	2960	102	95	62-139	8	20
1,1-Dichloroethene	ug/kg	<61.9	3120	3120	3060	2840	98	91	55-146	7	20
1,2-Dichloroethane	ug/kg	<30.9	3120	3120	3210	2910	103	93	56-153	10	20
1,2-Dichloropropane	ug/kg	<61.9	3120	3120	3240	2940	104	94	66-136	10	20
Benzene	ug/kg	<30.9	3120	3120	3350	3140	107	100	68-130	6	20
Bromodichloromethane	ug/kg	<61.9	3120	3120	3110	2840	100	91	51-154	9	20
Bromoform	ug/kg	<61.9	3120	3120	3340	2990	107	96	50-146	11	20
Bromomethane	ug/kg	<61.9	3120	3120	2820	2700	90	86	44-158	5	20
Carbon tetrachloride	ug/kg	<61.9	3120	3120	3280	3040	105	97	49-162	8	20
Chlorobenzene	ug/kg	<61.9	3120	3120	3270	2950	105	94	68-138	10	20
Chloroethane	ug/kg	<61.9	3120	3120	3250	3270	104	105	49-163	.8	20
Chloroform	ug/kg	<30.9	3120	3120	3200	2980	102	95	59-140	7	20
Chloromethane	ug/kg	<61.9	3120	3120	2650	2510	85	80	45-130	5	20
cis-1,2-Dichloroethene	ug/kg	<61.9	3120	3120	3260	3010	104	96	57-138	8	20
cis-1,3-Dichloropropene	ug/kg	<61.9	3120	3120	3400	3120	109	100	58-143	9	20
Dibromochloromethane	ug/kg	<61.9	3120	3120	3090	2820	99	90	50-144	9	20
Ethylbenzene	ug/kg	<30.9	3120	3120	3860	3530	123	112	69-139	9	20
m&p-Xylene	ug/kg	65.8	6250	6250	7080	6440	112	102	70-141	9	20
Methylene Chloride	ug/kg	<61.9	3120	3120	3110	2760	99	89	66-133	12	20
o-Xylene	ug/kg	83.4	3120	3120	3450	3140	108	98	68-141	9	20
Styrene	ug/kg	<61.9	3120	3120	3060	2750	98	88	62-135	11	20
Tetrachloroethene	ug/kg	<61.9	3120	3120	3300	2980	105	95	64-142	10	20
Toluene	ug/kg	70.5	3120	3120	3780	3530	119	111	70-133	7	20
trans-1,2-Dichloroethene	ug/kg	<61.9	3120	3120	3160	2780	101	89	54-140	13	20
trans-1,3-Dichloropropene	ug/kg	<61.9	3120	3120	3000	2720	96	87	46-151	10	20
Trichloroethene	ug/kg	<61.9	3120	3120	3340	3050	107	98	64-143	9	20

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QUALITY CONTROL DATA

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			235686		235687							
Parameter	Units	4025349008 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Vinyl chloride	ug/kg	<61.9	3120	3120	2670	2450	85	79	48-130	8	20	
4-Bromofluorobenzene (S)	%						108	96	70-147			
Dibromofluoromethane (S)	%						110	101	70-150			
Toluene-d8 (S)	%						117	106	70-155			

QUALITY CONTROL DATA

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

QC Batch:	PMST/3337	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 4025387001, 4025387002, 4025387003, 4025387004			

SAMPLE DUPLICATE: 236236

Parameter	Units	4025387001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.0	3.9	3	10	

QUALIFIERS

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

W Non-detect results are reported on a wet weight basis.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WI000944.0004.00001 HOFFMAN CL

Pace Project No.: 4025387

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4025387001	GP-111 (10-12)	EPA 5035/5030B	MSV/6147	EPA 8260	MSV/6148
4025387002	GP-111 (14-16)	EPA 5035/5030B	MSV/6147	EPA 8260	MSV/6148
4025387003	GP-112 (10-12)	EPA 5035/5030B	MSV/6147	EPA 8260	MSV/6148
4025387004	GP-112 (14-16)	EPA 5035/5030B	MSV/6147	EPA 8260	MSV/6148
4025387005	MEOH BLANK	EPA 5035/5030B	MSV/6147	EPA 8260	MSV/6148
4025387001	GP-111 (10-12)	ASTM D2974-87	PMST/3337		
4025387002	GP-111 (14-16)	ASTM D2974-87	PMST/3337		
4025387003	GP-112 (10-12)	ASTM D2974-87	PMST/3337		
4025387004	GP-112 (14-16)	ASTM D2974-87	PMST/3337		