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SOIL VAPOR INTRUSION INVESTIGATION
DELUXE CORPORATION
FORMER CHECK PRINTING FACILITY
4707 DEY ROAD
LIVERPOOL, NEW YORK
NYSDEC VOLUNTARY CLEANUP
AGREEMENT NUMBER A7-0419-0005

Prepared For

Deluxe Corporation

May 2009

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
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White Plains, NY 10601
(914) 694-5711

# TABLE OF CONTENTS

Pag	ge
INTRODUCTION	1
FIELD ACTIVITIES	1
Installation of Sub-Slab Vapor Points	
Collection of Sub-Slab Vapor Samples	
Indoor Ambient Air Sampling	3
Outdoor Ambient Air Sampling	3
RESULTS OF THE INVESTIGATION	4
Sub-Slab Vapor Samples	4
Indoor Air Sample	
Outdoor Air Sample	
Data Usability Summary Report (DUSR)	
CONCLUSIONS	5
ADDENDIV	

**APPENDIX** 

	LIST OF TABLE (at end of report)
<u>Table</u>	
1	Summary of Indoor and Sub-Slab Air Samples - Collected January 28, 2009 - EPA Method TO-15
	LIST OF FIGURES (at end of report)
<b>Figure</b>	
1	Site Plan
2	Site Plan With Sub-Slab Soil Vapor Sample Point Locations - Samples Collected January 28, 2009
3	Sub-Slab Vapor Construction Diagram

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#### INTRODUCTION

Deluxe Corporation (Deluxe) retained Leggette, Brashears & Graham, Inc. (LBG) to conduct a Soil Vapor Intrusion Investigation at the former Deluxe Check Printing facility located at 4707 Dey Road in Liverpool, New York. The investigation was conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Soil Vapor Investigation Work Plan prepared by LBG dated September 2008. The purpose of the investigation was to determine whether tetrachloroethene (PCE) or any of its daughter products such as trichloroethene (TCE) or vinyl chloride exist within the soil vapor beneath the current building or within the ambient air inside the building. The investigation included the installation of four permanent Sub-Slab Vapor Sampling points, the collection and analysis of sub-slab vapor samples and ambient indoor and outdoor samples, and the interpretation of the laboratory data in accordance with the Decision Matrices listed in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. A Site Plan is shown on figure 1.

### FIELD ACTIVITIES

## **Installation of Sub-Slab Vapor Points**

On December 16 and 17, 2008, LBG personnel installed four permanent sub-slab vapor points beneath the floor of the building. The sub-slab vapor points were labeled SS-1 through SS-4 and their locations are shown on figure 2. Each of the sub-slab vapor points was installed as follows:

- A 6-inch diameter core drill was utilized to remove a section of floor down to the sub-slab aggregate material.
- 2. A tile probe was then utilized to drill a one-half inch diameter hole approximately 2 inches into the sub-slab aggregate material.
- 3. A quarter-inch diameter stainless steel tube was inserted into the hole from its bottom to approximately 3 inches below the top of the floor slab.
- 4. An airtight surface seal composed of hydraulic cement was placed around the tube from approximately 4 inches below the top of the floor slab to the sub-slab aggregate.
- A 5-inch diameter well cover was installed within the slab and finished flush with the floor. A sub-slab vapor point construction diagram is shown on figure 3.

## Collection of Sub-Slab Vapor Samples

On January 28, 2009, LBG collected sub-slab vapor samples from each of the sub-slab vapor sampling points. The sampling was performed in accordance with the Soil Vapor Investigation Work Plan and utilized the protocols described in the NYSDOH Investigation Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. Prior to sample collection each stainless steel tube was purged of 3 volumes of air at a rate of less than 0.2 l/min (liter per minute) using a peristaltic pump and dedicated polyethylene tubing. A laboratory certified 6-liter Summa canister and flow controller were then utilized to collect a sub-slab vapor sample at each of the four locations, SS-1, SS-2, SS-3 and SS-4. The flow controllers were calibrated at the laboratory to fill the Summa canisters during a 30-minute period at a rate of 0.2 l/min. After sample collection, the valve was closed and each canister was placed in a shipping container.

The Summa canisters were shipped under chain-of-custody to Lancaster Laboratories (Lancaster) of Lancaster, Pennsylvania, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. All of the sub-slab vapor samples were analyzed for the

presence of volatile organic compounds (VOCs) by EPA Method TO-15 and results were reported with ASP Category B deliverable package.

## **Indoor Ambient Air Sampling**

Indoor ambient air sampling was conducted concurrently with the sub-slab vapor sampling on January 28, 2009. The indoor air sample was collected in a main hallway of the building. A 6-liter Summa canister was placed approximately 3 feet above the floor and fitted with laboratory calibrated flow controller set to 0.75 l/hr (liter per hour) over an 8-hour time period.

The Summa canister was shipped under chain-of-custody to Lancaster for analysis of VOCs by EPA Method TO-15 and results were reported with Category B deliverables. In addition, a Secondary Ion Mass Spectrometry (SIM) analysis was performed for the following compounds: vinyl chloride, cis-1-2-dichloroethene, 1,1,1-trichloroethane, carbon tetrachloride, trichloroethene and tetrachloroethene. The purpose of the SIM analysis was to obtain a lower analytical detection limit on the aforementioned compounds. At the indoor sample location, an Indoor Air Quality Questionnaire and Building Inventory was completed in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion. The questionnaire is included in the Appendix.

## **Outdoor Ambient Air Sampling**

The outdoor ambient air sample was collected concurrently with the sub-slab vapor sampling and indoor ambient air sampling. The outdoor ambient air sample was collected in the parking lot area adjacent to the building. A 6-liter Summa canister was placed approximately 3 feet above the ground surface and fitted with laboratory calibrated flow controllers set to 0.75 l/hr over an 8-hour time period.

The Summa canister was shipped under chain-of-custody to Lancaster for analysis of VOCs by EPA Method TO-15 and results were reported with Category B deliverables.

## RESULTS OF THE INVESTIGATION

## **Sub-Slab Vapor Samples**

The results of laboratory analysis indicate that there were several of the target analytes of the TO-15 analysis detected in each of the sub-slab vapor samples. The majority of the detections were at such a low concentration that the laboratory could only quantify them as estimated values (listed in the laboratory report as a J value). The target compounds of this investigation were tetrachloroethene (PCE) and its daughter products. PCE was detected in each of the sub-slab vapor samples at concentrations ranging from 1.7 ug/m³ (micrograms per cubic meter) J to 27 ug/m³. Trichloroethene (TCE) was detected in each of the samples at concentrations ranging from 1.1 ug/m³ J to 1.8 ug/m³ J. Vinyl chloride was not detected in any of the sub-slab vapor samples. The highest concentration of a target analyte was dichlorodifluoromethane detected at a concentration of 4,800 ug/m³ in the SS-4 vapor sample. This compound is more commonly known as Freon-12 and is not the focus of this investigation. All of the laboratory results are summarized on table 1 and a copy of the original laboratory report is included in the Appendix. The Category B deliverables are included on a compact disk in the Appendix.

## Indoor Air Sample

The results of laboratory analysis indicate that several of the target analytes of the TO-15 analysis were detected in the indoor air sample. Seven compounds on the target list were analyzed using a SIM analysis in order to achieve a lower detection limit. Out of all of the compounds detected, none were detected at a concentration in excess of NYSDOH Air Guidance Values or the Building Assessment and Survey Evaluation (BASE) – 90th Percentile, EPA 2001 with the exception of acetone detected at 170 ug/m³. There is no NYSDOH Air Guidance Value for acetone and the BASE 90th Percentile concentration is 98.9 ug/m³.

All of the laboratory results are summarized on table 1 and a copy of the original laboratory report is included in the Appendix. The Category B deliverable package is included on a compact disk located in the Appendix.

**Outdoor Air Sample** 

The results of laboratory analysis indicated that several of the target analytes of the

TO-15 analysis were detected in the outdoor air sample; however, neither PCE nor any of its

daughter compounds were detected. All of the laboratory results are summarized on table 1

and a copy of the original laboratory results is included in the Appendix. The Category B de-

liverable package is included on a compact disk in the Appendix.

Data Usability Summary Report (DUSR)

The laboratory data was submitted to Renee Cohen of Premier Environmental Services,

Inc. (Premier) of Merrick, New York. Premier prepared a DUSR for the data. The DUSR is

included in the Appendix.

CONCLUSIONS

Based upon the decision matrices detailed in the NYSDOH Guidance for Evaluating

Soil Vapor Intrusion in the State of New York, October 2006, LBG recommends no further

vapor intrusion investigation or mitigation activities for PCE or any of its daughter products at

the former Deluxe printing facility.

Sou C Busia

LEGGETTE, BRASHEARS & GRAHAM, INC.

Jorma Weber

√ Senior Associate

Reviewed By:

Dan C. Buzea, CPG

Senior Vice President

dmd

May 6, 2009

f \reports\deluxe\2009\vapor intrusion investigation rpt doc

**TABLE** 

DELUXE CORPORATION
FORMER CHECK PRINTING FACILITY
4707 DEY ROAD
LIVERPOOL, NEW YORK
NYSDEC VCP No. A7-0419-0005

NYSDEC VCP No. A7-0419-0005

NYSDEC VCP No. A7-0419-0005

Summary of Indoor & Substab Air Samples - Collected January 28, 2009 - EPA Method TO-15

(All concentrations expressed in micrograms per cubic meter)

	OUTDOOR AIR SAMPLE	INDOOR AIR SAMPLE				FIRST FLOOR SUB-SLAB VAPOR SAMPLES	AB VAPOR SAMPLES	
Compound	Rear Entrance Area	Main Floor	NYSDOH Air Guidance Value	Building Assessment and Survey Evaluation - 90th Percentile, EPA 2001	1-5S	S\$-2	83	SS
Dichlorodifluoromethane	2.5 J	ND	NB	16.5	3.0 J	39.0	8.3	4,800
Chlorodifluoromethane	ND	ND	Ä	NL	4.2	7.1	2.1 J	ND
Freon 114	NB	ND	ZH.	NL	Ng i	8 ;	NO !	N G
Chloromethane	1.0 J	1.5 J	NB	3.7	ND	N G	3.1	ND E
Vinyl Chloride	ND	ND / SIM ND	NB	<1.9	ND	ND	NB	ND
Bromomethane	ŊŊ	ND	NE	<1.7	ND	ND	ND	ND
Chloroethane	NB NB	ND	NE	KI>	ND	ND	ND	ND
Trichlorofluoromethane	1.2 J	ND	NB	18.1	7.6	5.1 J	1.2 J	10
Pentane	1.71	3.1	NB	N.	1.3 J	ND.	ND	1.2.J
11,1-Dichloroethene	ND	ND / SIM ND	AH.	<b>41.4</b>	ND	ND	ND	ND
Freon 113	ND	ND	NE	Z	ND	Ą	ND (IV	<b>B</b>
Acetone	8.5	170	NB	98.9	37	8	34.0	17
2. Chloropene	0.541	3.5	N. I.	4.2	1.1	2.1 )	8	; <b>3</b>
Methylene Chloride	ND S	13	66	0.01	3.3.1	ND 3	1.3	101
Hexane	ND	ND	AE.	XI.	1.1 J	ND	N.	N N
1,1-Dichloroethane	ND	ND	NE	<0.7	ďN	ND	ND	ND
cis-1,2-Dichloroethene	ZD	ND / SIM ND	NB	<1.9	ND	ND	ND	ND
2-Butanone	ND	58		12	6.3	12.0	25	4.4 J
Chlorotom	N N	NO PORTOR OF THE		1.1	i	ND	200	ND
Carbon Tetrachloride	5 8	ND / SIM O 364	X S	20.0 < 3 3	N N	ND ND		\ \frac{1}{2} \ \ \frac{1}{2} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1,2-Dichloroethane	ND	ND	NE	<0.9	N	No la	ND NB	8 8
Benzene	1.2 J	0.79 J	NB	9.4	1.3 J	1.3 J	Z	0.93 J
Isooctane	ND	ND	_NE	NL	ND	ND	ND	ND
Heptane	NB	, ND	NE	N.	ND	ND	<i>₹</i>	ΝL
Trichloroethene	ND	ND.	5	4.2				
ii 13 Dichloropropane	NO	N) N)	NE	<1.6	ND ND	i N	ND	ND.
4. Methly-2-Pentanone	<b>3</b>		NE VE	60	3		3	¥   8
Toluene	2.7.J	1.7.J	NE	43	16	17	7	5 3
Octane	ND	ND	NE	4.5	6.3	10.0	3.2 J	5.9
trans-1,3-Dichloropropene	ND ND	, UD	NE	<1.3	ND	ND	ΝĐ	ND
1,1,2-Trichloroethane	ND		NE	NL	UD	ND	NB	ND
Tetrachloroethene	ND	ND (	100	15.9				
2-Hexanone	ND ND	ND	NE	N.	ND	3.4 J	3.8 J	Ŋ
Chlorobanzana	100	E	NE	\$1.5 \$1.5	¥ 8	N	<b>3</b>	8
Ethylbenzene	ND IS	<b>3</b>	N. O	5.7	1 1 A	<b>20</b>	251	301
m/p-Xvlene	2.2 J	1.2 J	NE I	22.2	15	23	10.0	11
o-Xviene	ND	ND	NH i	7.9	6.3	10	5.0	47
Styrene	ND	ND	NE C	1.9	1.8 J	ND &	N 0	13.1
Cumene	NÐ	ND	NH	N.	ND .	ND	Ą	N .
1,1,2,2-Tetrachloroethane	ND	ND	NB	NL	ND	ND	8.5 J	NO.
4-Ethyltoluene	UN	ND	NE	3.6	ND	ND	ND	ND ND
1,3,5-Trimethylbenzene	ND	ND	NE	3.7	2.8 J	3.2 J	2.3 J	1.6J
1,2,4-Trimethylbenzene	ND	ND	NE NE	9.5	9.1	10	6.4	4.7 J
11,3-Dichiorobenzene	S	N N	NE NE	<2.4	N	S N	ND	ND
1.2-Dichlorobenzene	3 8	ND R	NE	<1.5 <1.5	Y	181		VID -
1,2,4-Trichlorobenzene	S	ND R	NE	8.6>	NB 8	N Co.1	N 3	NB 8
A 16 T A LIGHTON OUTSINGUE	140	AD	NE	/0.0	20	עאו	200	3

NI - Not Established

NE - Not Established

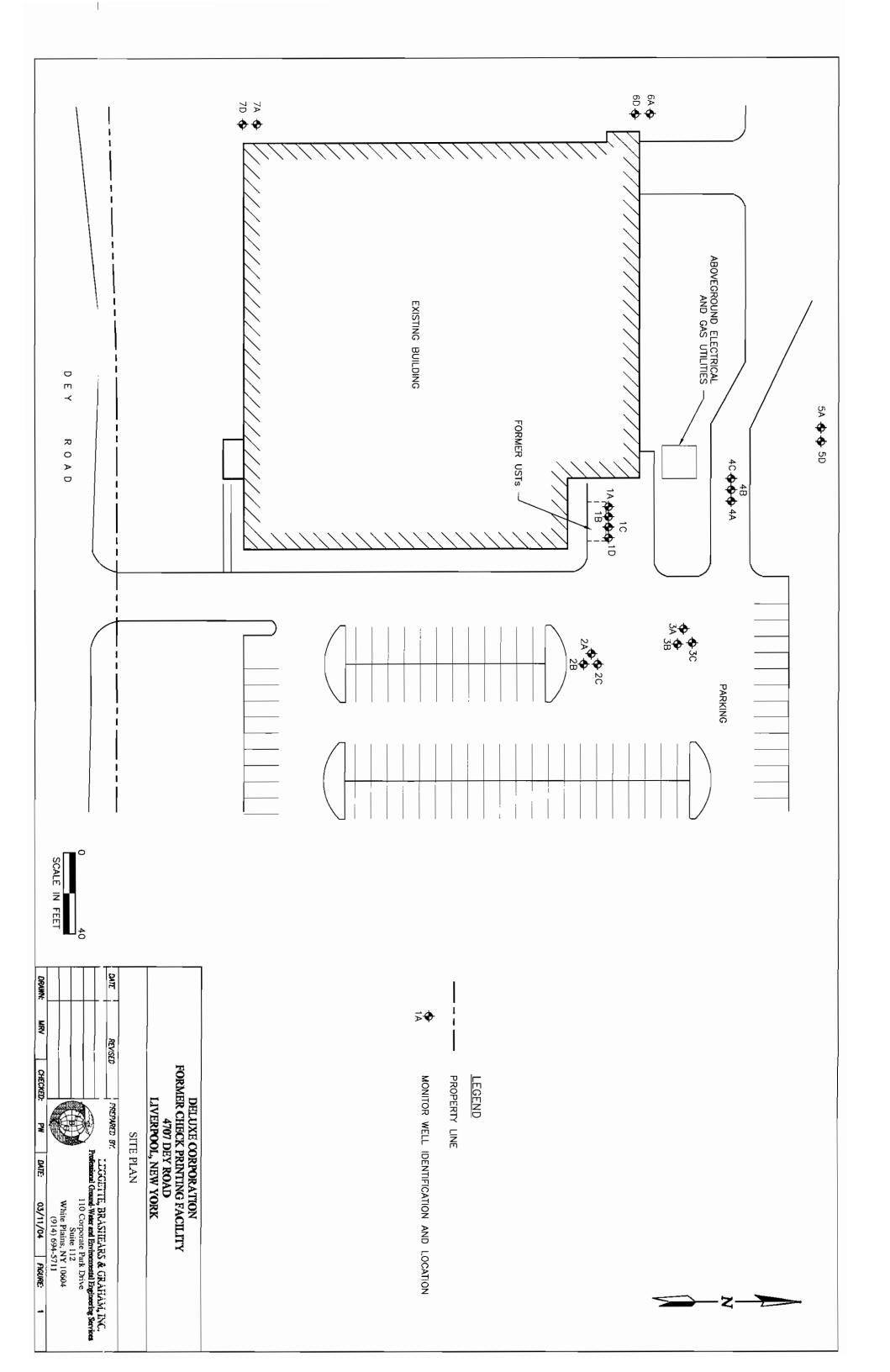
J - indicates an estimated value

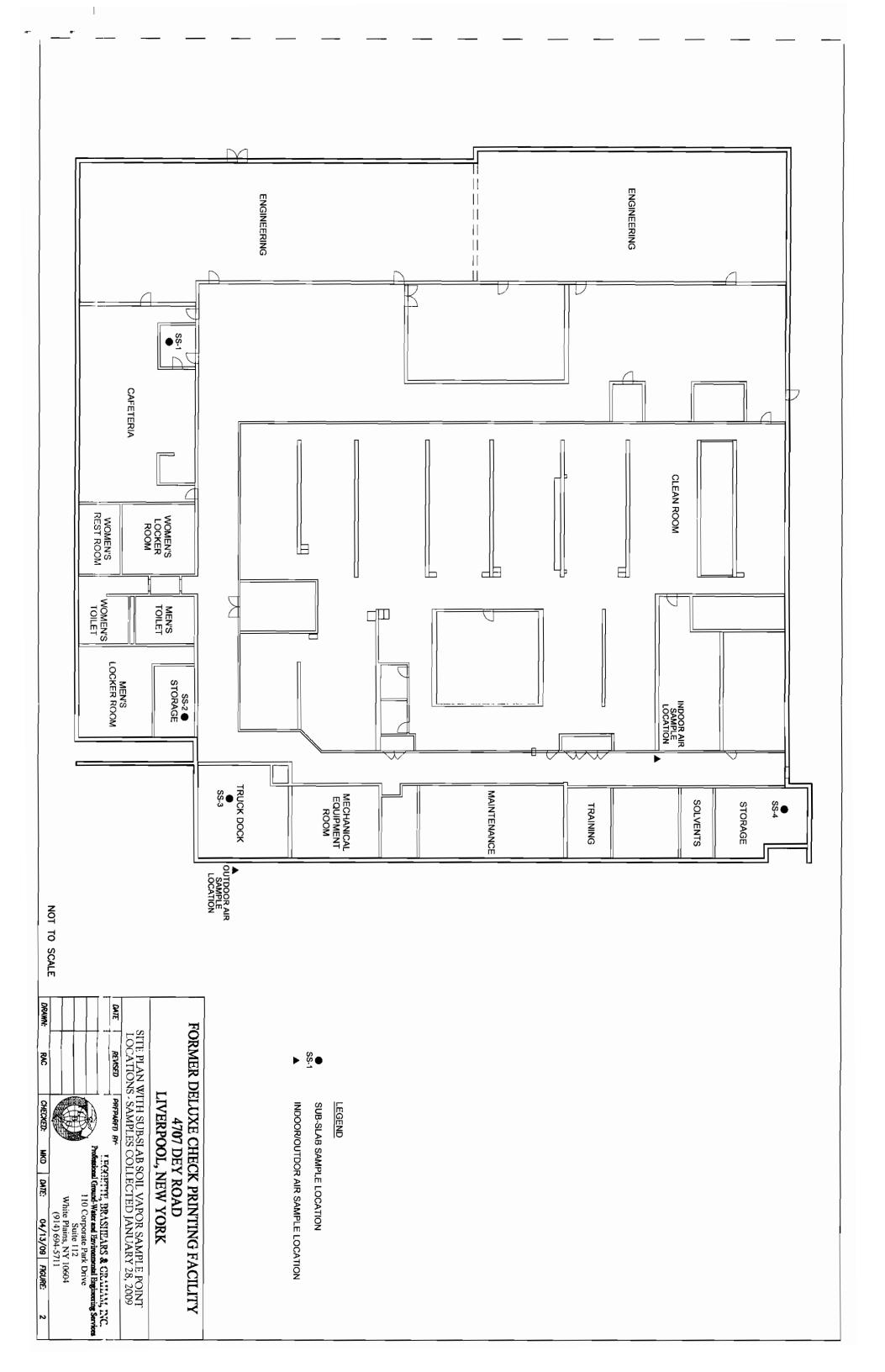
SIM - Selected Ion Monitoring

200, 201 SIM

Value exceeds the NYSDOH Indoor Air Guidance Value

**FIGURES** 





NOT TO SCALE

## DELUXE CORPORATION FORMER CHECK PRINTING FACILITY 4707 DEY ROAD LIVERPOOL, NEW YORK

SUB-SLAB VAPOR CONSTRUCTION DIAGRAM

DATE	REVISED	PREPARED B										
	_	1	LEG	GETTE, B	RASHEARS &	(GRAHA	M, INC.					
			Profession	nal Ground-W	ater and Environm	ental Enginee	ring Services					
		and AND	110 Corporate Park Drive									
		- (((1)) - (((1)	ì		Suite 112							
			•	Wh	ite Plains, NY							
					(914) 694-571	1						
DRAWN:	RAC	CHECKED:	JW	DATE:	09/23/08	FIGURE:	3					

APPENDIX

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

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

Preparer's Name MICAGE K. DE FELICE Date/Time Prepared 9/4/08
Preparer's Affiliation SENIOR HYDROGEOLOGIST Phone No. 914 694 5711
LEGGETE, BRASHERS & GRAHAM, INC
Purpose of Investigation SPILL CLOSURE SOIL VAPOR CONFIRMATION SAUGE
1. OCCUPANT:
Interviewed: 3 / N
Last Name: Tames JAMES
Address: Mainifface Manager @ SITE -
County: OCOCCO
Number of Occupants/persons at this location 100 +/- Age of Occupants VARIOUS 12 485 MILL UP
2. OWNER OR LANDLORD: (Check if same as occupant)
Interviewed: YN
Last Name:First Name:
Address:
County:
Home Phone: Office Phone:
3. BUILDING CHARACTERISTICS  Type of Building: (Circle appropriate response)
Residential School Commercial Multi-use  [Industrial Church Other:

If the property is residential, type? (Circle appropriate response)
Ranch 2-Family 3-Family
Raised Ranch Split Level Colonial
Cape Cod Contemporary Mobile Home
Duplex Apartment House Townhouses/Condos
Modular Log Home Other:
If multiple units, how many?
If the property is commercial, type?
Does it include residences (i.e., multi-use)? Y (N)  If yes, how many? N/A
Does it include residences (i.e., multi-use)? Y (N) If yes, how many? $\frac{N/4}{}$
Other characteristics:
Number of floors / FLOOR Building age
Is the building insulated? Y/N How air tight? Tight/ Average / Not Tight
4. AIRFLOW
Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:
ose an entient tabes of tracer smoke to evaluate antion patterns and quantatively describe.
Airflow between floors  N(A
Airflow near source N/A
Outdoor air infiltration
Outdoor all initiation
ACCORDING TO MAINTER MARIAGE 10/0-15/0 NUTSIDE
ALLOCOING TO MOINTE SEZ MANAGEZ 10%-15% OUTSIDE AIR IL INFRIDUCED TO BUILDINGS LIVE COSTEM - PER RECENT
INAE UPGRADE / TESTING -
Infiltration into air ducts

5. BASEMENT AND CONSTRUC	CTION CHARA	CTERISTICS	(Circle all that ap	oply)				
a. Above grade construction:	wood frame	(concrete)	stone	brick				
b. Basement type:	full	crawlspace	slab	other <u>VA</u>				
c. Basement floor:	concrete	dirt	stone	other <u>A</u>				
d. Basement floor:	uncovered	covered	covered with	NA				
e. Concrete floor:	unsealed	sealed	sealed with					
f. Foundation walls:	poured &	block	stone	other				
g. Foundation walls:	unsealed	sealed	sealed with	UK				
h. The basement is:	wet	damp	dry	moldy N/A				
i. The basement is:	finished	finished unfinished partially finished N/A						
j. Sump present?	Y 🔨	Y 👧						
k. Water in sump? Y/N	/not applicable							
Basement/Lowest level depth below	grade:	_(feet) N/A	-					
Identify potential soil vapor entry p								
ALL FLOOR AREAS	HOLES	OR BR	EXCHES.					
6. HEATING, VENTING and AIR Type of heating system(s) used in the Hot air circulation Space Heaters Electric baseboard		rcle all that app  Hot voice ion Radia		y) Other				
The primary type of fuel used is:								
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kero Solar						
Domestic hot water tank fueled by:	- NA							
Boiler/furnace located in: Base	ment Outd	oors Main	Floor	Other				
and the same of th		low units Oper		None				

Are there air distribution ducts present?



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

	DUCT WORK OBSTEVED T				/ <del>~o</del>	
FAIR	CONDITION					
7. OCCUP.	ANCY					
Is basement/	(lowest level occupied? Full-time) Occas	sionally	Seldom	Almost Ne	ver	
<u>Level</u>	General Use of Each Floor (e.g., familyroo	m, bedro	o <u>m, laundry, w</u>	orkshop, sto	orage)	
Basement				_		11 //
1 <sup>st</sup> Floor	MICHO ELECTROVICISTRO OFFICE SPACE	(47)	1 (CLEAN	1 Room	L UNDER	2 +
I <sup>S</sup> Floor	OFFICE SPACE			-	اب حمد	= 23URE
₿ <sup>rd</sup> Floor				_		
4 <sup>th</sup> Floor				_		
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR Q	<b>UALITY</b>				
a. Is there	an attached garage?		YN			
b. Does th	e garage have a separate heating unit?		Y/N/NA			
	roleum-powered machines or vehicles		Y/N/NA			
	n the garage (e.g., lawnmower, atv, car)		Please specify	-		
d. Has the	building ever had a fire?			?	_ <del>_</del> _	
e. Is a ker	osene or unvented gas space heater present?		Y/N Where	?		
f. Is there	a workshop or hobby/craft area?	Y 🕅	Where & Type	?	<del></del>	
g. Is there	smoking in the building?	Y /(1	How frequentl	y?		
h. Have cl	eaning products been used recently?	Y /🕅	When & Type	?		
i. Have co	smetic products been used recently?	Y /(N)	When & Type	?		
		_				

j. Has painting/staining been done in the last 6 months?	YN Where & When?
k. Is there new carpet, drapes or other textiles?	YN Where & When?
l. Have air fresheners been used recently?	Y (N) When & Type?
m. Is there a kitchen exhaust fan?	Y/N If yes, where vented?
n. Is there a bathroom exhaust fan?	Y / N If yes, where vented?
o. Is there a clothes dryer?	Y / V If yes, is it vented outside? Y / N
p. Has there been a pesticide application?	Y / (N) When & Type?
Are there odors in the building?  If yes, please describe:	Y /(E)
(e.g., chemical manufacturing or laboratory, auto mechanic or a boiler mechanic, pesticide application, cosmetologist	
If yes, what types of solvents are used? METHYLENE CHION	210E, ACETONE, METHYL ALETATE, 150PROPYL ALCOHOL
If yes, are their clothes washed at work?	YTR
Do any of the building occupants regularly use or work at a response)	dry-cleaning service? (Circle appropriate
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service	Unknown
Is there a radon mitigation system for the building/structure Is the system active or passive?  Active/Passive	? Y/NDate of Installation:
9. WATER AND SEWAGE	
Water Supply: Public Water Drilled Well Driven	Well Dug Well Other:
Sewage Disposal: Public Sewer Septic Tank Leach	Field Dry Well Other:
10. RELOCATION INFORMATION (for oil spill residentia  a. Provide reasons why relocation is recommended:	l emergency) N/A
b. Residents choose to: remain in home relocate to frie	ends/family relocate to hotel/motel
c. Responsibility for costs associated with reimbursemen	t explained? Y/N
d. Relocation package provided and explained to residen	its? Y/N

## 11. FLOOR PLANS

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

## Basement:

First Floor:

		ī į					•		'-
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## 12. OUTDOOR PLOT

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

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

1	1	ŧ	PD	$\Omega$	M	CT	IN	VEN	TO	DV	THO	DM	ī

Make & Model of field instrument used:	
--	--

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo " Y/N
POCA	WINDEX	32 oz.	U	SEE ATTACHED MSDS		N
	DX+CLEAN	3202.	U_	SEE AFFACHED MSDS		N
	NON-ALID BATH AND BOWL CLEANER	3202.	U	SEE AFTACHED MSDS		1
$\bigvee$	AMMONIA & ALCOHOL	32 02.	V	AMMONIA + 4LLC HOL (150 PZEP)		N
CHEM.	Meshy Come Calon	<u></u>	0	CIARRO IN CHEMICIL		N
PROP	Mexiconochisticonoc		U.	CLARRO IN CHEMILLE		N
	Differ Co. it : 12 or 1 TAPE		V_	NEGATIVE PRESEURA		N
		-				

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

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



## **MATERIAL SAFETY DATA SHEET**

EMERGENCY TELEPHONE: 1-800-535-5053

#### **SECTION 1 - PRODUCT**

NAME:

CLEANWORKS #5

NON-ACID BATH & BOWL CLEANER (Concentrate)

Product No.:

Product Type:

Bath & Bowl Cleaner

REFILL - CONCENTRATE

HMIS HAZARD RATING	0- LEAST/MÍNIMO	
HEALTH SALUD	2	1- SLIGHT/LIGERO 2- MODERATE/MODERADO
FLAMMABILITY INFLAMABILIDAD	0	3- HIGH/SERIO 4- EXTREME/
REACTIVITY REACTIVIDAD	0	MUY GRAVE
PERSONAL PROTECTION PROTECCIÓN PERSONAL	В	B glasses/lentes gloves/guantes

#### SECTION 2 - HAZARDOUS INGREDIENTS

Quaternary Ammonium Chloride

CAS#68391-01-5

Wt% = 1.42

Ethanolamine

CAS#141-43-5

Wt% = 1.76

#### SECTION 3 - HEALTH HAZARD & FIRST AID

1. Acute Health Effect

Minimal

2. Chronic Health Effects

None

3. Carcinogen

No

4. Primary Entry Routes:

- a) Skin & Eyes: Repeated contact with the skin may be irritating. Can cause severe eye irritation.
- b) Ingestion: May be harmful.
- c) Inhalation: Not considered a hazard.
- 5. First Aid:
  - a) Skin: Remove contaminated clothing-wash skin with soap and water. If irritation persists get medical attention.
  - b) Eyes: Wash eyes with large volumes of water for at least 15 minutes while lifting the upper and lower eyelids and rotating the eyeball. Get immediate medical attention if irritation persists.
  - c) Ingestion: Give large volumes of water. Do not induce vomiting. Get medical attention.
  - d) Inhalation: N/A.

#### **SECTION 4 - PHYSICAL & CHEMICAL CHARACTERISTICS**

1. Physical State

Liquid

2. Color

Red

3. Odor

Floral

4. Solubility in water

Complete

5. Specific Gravity (H20=1.0) 6. pH

1.05 6.5-7.5

7. Freezing Point

8. Flash Point

N/A

9. Vapor Pressure

>200°F N/A

#### **SECTION 5 - FIRE AND EXPLOSION HAZARD**

1. Flash Point

>200°F

2. Extinguishing Media 3. Special Fire Fighting Procedures N/A

N/A

4. Unusual Fire & Explosion Hazard

Fire fighters should observe all

precautions that apply to any fire where chemicals are stored.

#### **SECTION 6 - REACTIVITY DATA**

1. Stability

Stable

Conditions to Avoid

None Known

#### SECTION 7 - SPILL OR LEAK PROCEDURES

- Wear Recommended Personal Protection Equipment.
- 2. If product leaks or spills Flood area with water-mop up dispose to sanitary sewer.
- 3. Abide by Federal, State, and Local regulations.

#### **SECTION 8 - PERSONAL PROTECTION**

- 1. Wear goggles.
- 2. Wear gloves.

#### **SECTION 9 - SPECIAL PRECAUTIONS**

- 1. Store containers tightly closed and in an upright position.
- 2. Do not destroy or deface the label.

#### SECTION 10 - SECTION 313 SUPPLIER NOTIFICATION (SARA)

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

None

#### SECTION 11 - TOXICOLOGICAL INFORMATION

None

#### **SECTION 12 - ECOLOGICAL INFORMATION**

None

#### SECTION 13 - DISPOSAL CONSIDERATIONS

1. See Section 7 above.

#### **SECTION 14 - DOT TRANSPORT INFORMATION**

1. This product is Not Regulated.

#### SECTION 15 - OTHER REGULATORY INFORMATION

All ingredients appear on the TSCA Inventory List.

#### SECTION 16 - OTHER INFORMATION

- 1. N/A = Not Applicable
- 2. PMCC = Pensky Martin Closed Cup

The health hazards given on this Material Safety Data Sheet apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of overexposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

3. Manufactured by: Carroll Company, Garland, TX, 1-800-527-5722

DATE: November 9, 2008

C, N; R31, 34, 50

#### MATERIAL SAFETY DATA SHEET

## I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: OXYCLEAN

Melrose Chemicals Ltd.

SUPPLIER:

2323-46th ave. Lachine, QC CANADA H8T 3C9 Tel: +1 (514) 631-2998 Fax: +1 (514) 631-2997

E-mail: prodsafe@melrosechem.com

PRODUCT USE: Chlorinated cleaner

## II. HAZARDS IDENTIFICATION

Hazard classification of product according to Directive 1999/45/EC: C, corrosive.

Hazards for humans: Causes burns.

Hazards for environment: Strongly alkaline, pH value of water can harm water-organisms.

#### III. COMPOSITION/ INFORMATION ON INGREDIENTS Toxicity EINECS # CAS# % Conc. Chemical Identity: Index # 10 - 30 C; R35 Potassium hydroxide 019-002-00-8 215-181-3 1310-58-3 Sodium hydroxide 5 - 10 C; R35 011-002-00-6 215-185-5 1310-73-2 Sodium hypochlorite,

7681-52-9

10 - 30

solution 12% Cl active 017-011-00-1 231-668-3 Ingredients according to Directive 2004/648/EC

Chlorine based bleaching agents 15 - 30%

#### IV. FIRST AID MEASURES

Contact with skin: Wash exposed area with soap and water and rinse well.

Contact with eyes: Flush with plenty of water. Get medical attention if irritation persists.

Inhalation: Remove to fresh air. Obtain medical attention if irritation persists.

Ingestion: Drink one glass of water immediately. Do not induce vomiting. Call Regional Poison Control

Centre at once or see your local hospital emergency at once.

#### V. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Means of extinction: Not applicable.

Hazardous combustion products: Not applicable. Unusual fire and explosion hazards: None

#### VI. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of spills or leaks: Small amounts - Flush with water. Large amounts - Contain spill and collect into waste container. Flush spill area with water. Personal protective equipment to be used: Protective gloves and safety glasses.

### VII. HANDLING AND STORAGE

Special handling procedures and equipment: Not applicable.

Specific storage requirements: Keep container closed when not in use. Store in a cool and dry location away from acids.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

Respiratory Protection: Use approved air-supplied respirator. Canister type respirators are suitable when concentrations are known to be very low (<1%).

Protective Gloves: Nitril or neoprene. Eye Protection: Safety glasses.

Additional Protective Equipment: Rubber boots, coat and pants; safety shower and an eye wash facility

should be available.

Ventilation: Adequate ventilation to reduce mists below permissible exposure limits recommended.

Handling area may require mechanical ventilation.

#### MATERIAL SAFETY DATA SHEET

IX. PHYSICAL AND CHEMICAL PROPERTIES

Flashpoint and method of determination: Not applicable.

Flammable limits (% in air): LOWER: Not applicable. UPPER: Not applicable.

Auto-Ignition temp.: Not applicable.

Physical State: Liquid Vapour density: Not available.

Coefficient of n-octanol/water distribution: Not determined.

Odour: Chlorine

Specific Gravity: 1.21

Vapour Pressure: Not available.

Evaporation Rate: Not available.

Boiling Point: 10°C

Freezing Point: 0°C

pH: 12.4 (1% solution)

Colour: Light yellow

Solubility in water: Complete Odour threshold: Not available.

## X. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions. Hazardous polymerization will not occur.

Incompatible substances: Avoid reducing agents and strong acids.

Conditions of reactivity: Avoid contamination with reactive substances.

Hazardous decomposition products: Contact with acid generates heat and liberates chlorine gas.

## XI. TOXICOLOGICAL INFORMATION

Probable route of exposure: Liquid on skin and in eyes.

Exposure Limits: LD<sub>50</sub> (Calculated) 3000 mg/kg

Effect of acute and chronic exposure to product: Causes burns.

Irritating: No

Sensitisation to product: No Carcinogenicity: Data not available. Reproductive toxicity: Data not available. Toxic for reproduction: Data not available.

Mutagenicity: Data not available.

Name of toxicologically synergistic product(s): Data not available.

#### XII. ECOLOGICAL CONSIDERATIONS

Environmental toxicity information: Strongly alkaline, pH value of water can harm water-organisms.

### XIII. DISPOSAL CONSIDERATIONS

For the product: EC disposal code No:

20 01 39 (detergent containg dangerous substances).

For the packaging: EC disposal code №: 15 01 02 (plastic packaging). Can be recycled.

#### XIV. TRANSPORT INFORMATION

## CARRIAGE BY ROAD (CROSSING BORDERS) ADR/RID:

ADR/RID Class: 8 C5

Hazard identification Number: 80
UN Number: 3266
Packing group: III
Label: 8

UN proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium

hydroxide)

#### TRANSPORT BY SEA IMDG:

IMDG Class: 8
UN Number: 3266
Packing group: III
EMS Number: F-A, S-B
Label: 8

Marine pollutant: No

Page No. 3 of 3

#### MATERIAL SAFETY DATA SHEET

UN proper shipping name:

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium

hydroxide)

TRANSPORT BY AIR ICAO-TI and IATA-DGR:

ICAO/IATA Class:

8

UN Number: Packing group: 3266 III

Label:

8

UN proper shipping name:

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium

hydroxide)

## XV. REGULATORY INFORMATION

Inventory Status: TSCA (USA), CEPA (Canada, DSL), EINECS (EU), China, TCCL (Korea, KECI), RA

6969 (Philippines, PICCS), NICNAS (Australia, AICS), IEC (Japan).

WHMIS CLASSIFICATION: Class D-2b; Class E

**(T)** 



Danger sy

Danger symbol: C, corrosive

Risk phrases: 31 Contact with acids liberates toxic gas.

34 Causes burns.

Safety phrases: 26 In case of contact with eyes rinse immediately with plenty of water and seek medical

advise.

36/37/39 Wear suitable protective clothing and eye/face protection.

46 If swallowed seek medical advise immediately and show this container or label.

## XVI. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by the Canadian Controlled Products Regulations.

This Material Safety Data Sheet is in conformation with Directive 1907/2006 (REACH) and local legislation.

R-Sentences of ingredients in paragraph II:

31 Contact with acids liberates toxic gas.

34 Causes burns.

35 Causes severe burns.

50 Very toxic to aquatic organisms.

Replaces: M.S.D. dated: November 9, 2005 Version: 8

Changes to the MSDS in this revision: sections 1, 2, 3, 8, 15, 16

Français Español Bahasa Indonesia

Nederlands Deutsch Bahasa Malayu

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



## WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name

: WINDEX® ORIGINAL GLASS CLEANER

Use of the

: Hard Surface Cleaner

Substance/Preparation

Company

: S.C. Johnson & Son, Inc.

1525 Howe Street

Racine WI 53403-2236

Emergency telephone

: 24 Hour Transport & Medical Emergency Phone (866) 231-

5406

24 Hour International Emergency Phone (952) 852-4647

#### 2. HAZARDS IDENTIFICATION

**Emergency Overview** 

Appearance / Odor

: blue / liquid / characteristic

**Immediate Concerns** 

: Avoid contact with skin, eyes and clothing.

**Potential Health Effects** 

Routes of exposure

: Eye, Skin, Inhalation, Ingestion.

Eyes

: None known.

Skin

: None known.

Inhalation

: None known.

Ingestion

: None known.

Aggravated Medical

Condition

: None known.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	60.00 - 100.00
Isopropanol	67-63-0	1.00 - 5.00
Ethyleneglycol Monohexylether	112-25-4	0.10 - 1.00

### 4. FIRST AID MEASURES

Eye contact

: Rinse with plenty of water. Get medical attention if irritation

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



## WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

develops and persists.

Skin contact

: Wash off with soap and water. Get medical attention if irritation

develops and persists.

Inhalation

: Remove to fresh air.

Ingestion

Never give anything by mouth to an unconscious person. Get

medical attention immediately.

#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing

media

: Alcohol foam, carbon dioxide, dry chemical, water fog

Specific hazards during fire

fighting

: Container may melt and leak in heat of fire.

Further information

: Although this product has a flash point below 200 Deg F, it is an aqueous solution containing an alcohol and does not sustain combustion. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-

contained breathing apparatus.

Flash point

: 130 °F

Method: Tag Closed Cup (TCC)

Flash point

: 54 °C

Method: Tag Closed Cup (TCC)

Lower explosion limit

: Note: no data available

Upper explosion limit

: Note: no data available

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

: Remove all sources of ignition.

Methods for cleaning up

Soak up with inert absorbent material.

Sweep up and shovel into suitable containers for disposal.

Dike large spills.

#### 7. HANDLING AND STORAGE

#### Handling

Advice on safe handling

: KEEP OUT OF REACH OF CHILDREN AND PETS.

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



## WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

Use only as directed.

Advice on protection

against fire and explosion

: Keep away from heat and sources of ignition.

Storage

Requirements for storage areas and containers

: Keep container closed when not in use.

Keep in a dry, cool and well-ventilated place.

Do not freeze.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Occupational Exposure Limits**

Components	CAS-No.	mg/m3	ppm	Basis
Isopropanol	67-63-0	-	400 ppm	ACGIH STEL
isopropanol	67-63-0	<u> </u>	200 ppm	ACGIH TWA
Isopropanol	67-63-0	980 mg/m3	400 ppm	OSHA TWA

#### Personal protective equipment

## Respiratory protection

Industrial setting : No personal respiratory protective equipment normally

required.

Household setting : No personal respiratory protective equipment normally

required.

Hand protection

Industrial setting : not required under normal use

Household setting : not required under normal use

Eye protection

Industrial setting : No special requirements.

Household setting : No special requirements.

Hygiene measures : Use only with adequate ventilation. Wash thoroughly after

handling. Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory

protection. Wear suitable protective clothing.

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



## WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form

: liquid

Color

: blue

Odor

: characteristic

pΗ

: 10.5 - 11.0

Melting point

: no data available

Boiling point

: no data available

Freezing point

: no data available

Flash point

130 °F

Method: Tag Closed Cup (TCC)

Flash point

: 54 °C

Method: Tag Closed Cup (TCC)

Evaporation rate

: no data available

Autoignition temperature

: no data available

Lower explosion limit

: no data available

Upper explosion limit

: no data available

Vapour pressure

: similar to water

Water solubility

: completely soluble

Partition coefficient; n-

octanol/water

no data available

Specific Gravity

: 1.0 estimated

#### 10. STABILITY AND REACTIVITY

Conditions to avoid

: None known.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition

products

When exposed to fire, produces normal products of

combustion.

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



## WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

Hazardous reactions

: Stable

#### 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

LD50

Dose: estimated > 5,000 mg/kg

Acute inhalation toxicity

: LC50 rat

Dose: > 2.5 mg/i

Acute dermal toxicity

: LD50 rabbit

Dose: estimated > 2,000 mg/kg

Chronic effects

Carcinogenicity

: no data available

Mutagenicity

: no data available

Reproductive effects

: no data available

Teratogenicity

: no data available

Sensitisation

: Not known to be a sensitizer.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects** 

: Not Available

#### 13. DISPOSAL CONSIDERATIONS

Industrial setting

 Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding

disposal.

Household setting

Consumer may discard empty container in trash, or recycle

where facilities exist.

## 14. TRANSPORT INFORMATION

Land transport

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



## WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

U.S. DOT and Canadian TDG Surface Transportation:

NA number

1993

Proper shipping name

Combustible Liquid, N.O.S.

Class:

Combustible liquid

Packaging group:

Note:

SC Johnson ships this product as "Non-Regulated" per DOT

exception for Combustible Liquids. (49 CFR 173.150)

Sea transport

IMDG:

**UN-Number:** 

None. None.

Packaging group: Proper shipping name

not regulated

Class:

None.

Air transport

ICAO/IATA:

Class:

None.

Packaging group:

None.

Proper shipping name

not regulated

UN/ID No.:

None.

## 15. REGULATORY INFORMATION

#### Global Chemical Inventories

Notification status

: All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA)

Chemical Substance Inventory.

All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental

Protection Act (CEPA).

California Prop. 65

: This product is not subject to the reporting requirements under

California's Proposition 65.

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products

Regulations.

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



sion 1.		Print Date 01/22/2009	
ision Date 01/16/2009		MSDS Number 350000004274	
OTHER INFORMATIO	N		
HMIS Ratings			
Health	0		
Flammability	2		
Reactivity	0		
NFPA Ratings			
Health	0		
Fire	2		
Reactivity	0		
Special			
It does not constitute a contained herein. Actu evaluate all available	a warranty, expressed or imual conditions of use are bey	n sources considered to be technically plied, as to the accuracy of the informaty and the seller's control. User is responduct for any particular use and to complyulations.	
		2.5.1.2	
Prepared by:	SC Johnson Global S Regulatory Affairs (G	Safety Assessment &	
Prepared by:			



# Analysis Report

2425 New Holland Pike PO Box 12425 Lancaster PA 17605 2425 +717-656-2300 Fax 717-656-2681+ www.lancasterlabs.com

#### ANALYTICAL RESULTS

Prepared for:

Leggette Brashears & Graham 110 Corporate Park Drive Suite 112 White Plains NY 10604

914-694-5711

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

#### **SAMPLE GROUP**

The sample group for this submittal is 1130262. Samples arrived at the laboratory on Saturday, January 31, 2009. The PO# for this group is DELUXE.

Client Description	Lancaster Labs Number
Indoor Air Sample	5589387
Outdoor Air Sampling	5589388
SS-1 Soil Vapor Air sample	5589389
SS-2 Soil Vapor Air sample	5589390
SS-3 Soil Vapor Air sample	5589391
SS-4 Soil Vapor Air sample	5589392

#### **METHODOLOGY**

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

ELECTRONIC COPY TO

Leggette Brashears & Graham

Attn: Michael De Felice

1 COPY TO Data Package Group



2425 New Holland Pale, PO Box 12425 Lancaster PA 17605-2425 \*717 656-2300 Fax 717-656-2681\* www.lancasterlabs.com

Questions? Contact your Client Services Representative Richard C Entz at (717) 656-2300

Respectfully Submitted,

Chad A Moline Group Leader



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 \*717-656-2300 Fax 717-656-2681 \* www.lancasterlabs.com

Page 1 of 3

Lancaster Laboratories Sample No. AQ5589387 Group No. 1130262

Indoor Air Sample SUMMA Canister #145

Deluxe

Collected:01/28/2009 08:42 by BH

through 01/28/2009 15:35 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

INDR- SDG#: DXE01-01

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05298	VOCs in air by EPA TO-15					
07202	Dichlorodifluoromethane	75-71-8	N.D.	0.99	ug/m3	1
07203	Chlorodifluoromethane	75-45-6	N.D.	0.71	ug/m3	1
07204	Freon 114	76-14-2	N.D.	1.4	ug/m3	1
07205	Chloromethane	74-87-3	1.5 J	0.41	ug/m3	1
07206	Vinyl Chloride	75-01-4	N.D.	0.51	ug/m3	1
07207	1,3-Butadiene	106-99-0	N.D.	1.1	ug/m3	1
07208	Bromomethane	74-83-9	N.D.	0.78	ug/m3	1
07209	Chloroethane	75-00-3	N.D.	0.53	ug/m3	1
07210	Dichlorofluoromethane	75-43-4	N.D.	0.84	ug/m3	1
07212	Trichlorofluoromethane	75-69-4	N.D.	1.1	ug/m3	1
07213	Pentane	109-66-0	3.1	0.59	ug/m3	1
07215	1,1-Dichloroethene	75-35-4	N.D.	0.79	ug/m3	1
07216	Freon 113	76-13-1	N.D.	3.8	ug/m3	1
07217	Acetone	67-64-1	170	12	ug/m3	10
07219	Carbon Disulfide	75-15-0	3.5	0.62	ug/m3	1
07221	3-Chloropropene	107-05-1	N.D.	0.63	ug/m3	1
07222	Methylene Chloride	75-09-2	13	0.69	ug/m3	1
07224	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	ug/m3	1
07225	Methyl t-Butyl Ether	1634-04-4	N.D.	0.72	ug/m3	1
07226	Hexane	110-54-3	N.D.	0.70	ug/m3	1
07227	1,1-Dichloroethane	75-34-3	N.D.	0.81	ug/m3	1
07230	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	ug/m3	1
07231	2-Butanone	78-93-3	58	1.5	ug/m3	1
07234	Chloroform	67-66-3	N.D.	0.98	ug/m3	1
07235	1,1,1-Trichloroethane	71-55-6	N.D.	1.1	ug/m3	1
07236	Carbon Tetrachloride	56-23-5	N.D.	1.3	ug/m3	1
07237	1,2-Dichloroethane	107-06-2	N.D.	0.81	ug/m3	1
07238	Benzene	71-43-2	0.79 J	0.64	ug/m3	1
07239	Isooctane	540-84-1	N.D.	0.93	ug/m3	1
07240	Heptane	142-82-5	N.D.	0.82	ug/m3	1
07241	Trichloroethene	79-01-6	N.D.	1.1	ug/m3	1
07243	1,2-Dichloropropane	78-87-5	N.D.	0.92	ug/m3	1
07245	Dibromomethane	74-95-3	N.D.	1.4	ug/m3	1
07247	Bromodichloromethane	75-27-4	N.D.	1.3	ug/m3	1
07248	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.91	ug/m3	1
07249	4-Methyl-2-Pentanone	108-10-1	N.D.	2.0	ug/m3	1
07250	Toluene	108-88-3	1,7 J	0.75	ug/m3	1
07251	Octane	111-65-9	N.D.	0.93	ug/m3	1
-		-				_



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 \*717-656-2300 Fax 717-656-2681 \* www.lancasterlabs.com

Page 2 of 3

Lancaster Laboratories Sample No. AQ5589387

Group No. 1130262

Indoor Air Sample SUMMA Canister #145

Deluxe

Collected:01/28/2009 08:42 by BH

through 01/28/2009 15:35

Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

As Received

INDR-SDG#: DXE01-01

CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07252	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.91	ug/m3	ı
07254	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	ug/m3	1
07255	Tetrachloroethene	127-18-4	N.D.	1.4	ug/m3	1
07256	2-Hexanone	591-78-6	N.D.	2.0	ug/m3	1
07257	Dibromochloromethane	124-48-1	N.D.	1.7	ug/m3	1
07258	1,2-Dibromoethane	106-93-4	N.D.	1.5	ug/m3	1
07259	Chlorobenzene	108-90-7	N.D.	0.92	ug/m3	1
07260	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.4	ug/m3	1
07261	Ethylbenzene	100-41-4	N.D.	0.87	ug/m3	1
07262	m/p-Xylene	179601-23-1	1.2 J	0.87	ug/m3	1
07263	o-Xylene	95-47-6	N.D.	0.87	ug/m3	1
07264	Styrene	100-42-5	N.D.	0.85	ug/m3	1
07265	Bromoform	75-25-2	N.D.	2.1	ug/m3	1
07266	Cumene	98-82-8	N.D.	0.98	ug/m3	1
07267	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.4	ug/m3	1
07268	1,2,3-Trichloropropane	96-18-4	N.D.	1.2	ug/m3	1
07269	Bromobenzene	108-86-1	N.D.	1.3	ug/m3	1
07270	4-Ethyltoluene	622-96-8	N.D.	0.98	ug/m3	1
07271	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.98	ug/m3	1
07273	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.98	ug/m3	1
07274	1,3-Dichlorobenzene	541-73-1	N.D.	1.2	ug/m3	1
07275	1,4-Dichlorobenzene	106-46-7	N.D.	1.2	ug/m3	1
07277	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	ug/m3	1
07278	Hexachloroethane	67-72-1	N.D.	1.9	ug/m3	1
07345	TO-15 by SIM					
07349	Vinyl Chloride	75-01-4	N.D.	0.0230	ug/m3	1
07358	1,1-Dichloroethene	75-35-4	N.D.	0.0238	ug/m3	1
07372	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0555	ug/m3	1
07373	1,1,1-Trichloroethane	71-55-6	0.312	0.0709	ug/m3	1
07377	Trichloroethene	79-01-6	0.436	0.107	ug/m3	1
07379	Tetrachloroethene	127-18-4	0.229 J	0.129	ug/m3	1
10140	Carbon Tetrachloride	56-23-5	0.364	0.126	ug/m3	1
	Carbon Tetrachloride recovery	windows for LCS	and LCSD are ad	visory only.		

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



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Page 3 of 3

Lancaster Laboratories Sample No. AQ5589387 Group No. 1130262

Indoor Air Sample SUMMA Canister #145

Deluxe

INDR-

by BH Account Number: 11827 Collected:01/28/2009 08:42

through 01/28/2009 15:35 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

SDG#: DXE01-01

Discard: 03/15/2009

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05298	VOCs in air by EPA TO-15	EPA TO-15	ı	02/03/2009 12:55	Fanella S Zamcho	1
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/03/2009 13:38	Fanella S Zamcho	10
07345	TO-15 by SIM	EPA TO-15 using SIM	1	02/06/2009 14:48	Jonathan K Nardelli	1



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Page 1 of 2

Lancaster Laboratories Sample No. AQ5589388 Group No. 1130262

Outdoor Air Sampling SUMMA Canister #063

Deluxe

Collected:01/28/2009 08:55 by BH

through 01/28/2009 16:55 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

OUTDR SDG#: DXE01-02

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

CAT			As Receive	As Received ad Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05298	VOCs in air by EPA TO-15					
07202	Dichlorodifluoromethane	75-71-8	2.5 J	0.99	ug/m3	1
07203	Chlorodifluoromethane	75-45-6	N.D.	0.71	ug/m3	1
07204	Freon 114	76-14-2	N.D.	1.4	ug/m3	1
07205	Chloromethane	74-87-3	1.0 J	0.41	ug/m3	1
07206	Vinyl Chloride	75-01-4	N.D.	0.51	ug/m3	1
07207	1,3-Butadiene	106-99-0	N.D.	1.1	ug/m3	1
07208	Bromomethane	74-83-9	N.D.	0.78	ug/m3	1
07209	Chloroethane	75-00-3	N.D.	0.53	ug/m3	1
07210	Dichlorofluoromethane	75-43-4	N.D.	0.84	ug/m3	1
07212	Trichlorofluoromethane	75-69-4	1.2 J	1.1	ug/m3	1
07213	Pentane	109-66-0	1.7 J	0.59	ug/m3	1
07215	1,1-Dichloroethene	75-35-4	N.D.	0.79	ug/m3	1
07216	Freon 113	76-13-1	N.D.	3,8	ug/m3	1
07217	Acetone	67-64-1	8.5	1.2	ug/m3	1
07219	Carbon Disulfide	75-15-0	0.94 J	0.62	ug/m3	1
07221	3-Chloropropene	107-05-1	N.D.	0.63	ug/m3	1
07222	Methylene Chloride	75-09-2	N.D.	0.69	ug/m3	1
07224	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	ug/m3	1
07225	Methyl t-Butyl Ether	1634-04-4	N.D.	0.72	ug/m3	1
07226	Hexane	110-54-3	N.D.	0.70	ug/m3	1
07227	1,1-Dichloroethane	75-34-3	N.D.	0.81	ug/m3	1
07230	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	ug/m3	1
07231	2-Butanone	78-93-3	N.D.	1.5	ug/m3	1
07234	Chloroform	67-66-3	N.D.	0.98	ug/m3	1
07235	1,1,1-Trichloroethane	71-55-6	N.D.	1.1	ug/m3	1
07236	Carbon Tetrachloride	56-23-5	N.D.	1.3	ug/m3	1
07237	1,2-Dichloroethane	107-06-2	N.D.	0.81	ug/m3	1
07238	Benzene	71-43-2	1.2 J	0.64	ug/m3	1
07239	Isooctane	540-84-1	N.D.	0.93	ug/m3	1
07240	Heptane	142-82-5	N.D.	0.82	ug/m3	1
07241	Trichloroethene	79-01-6	N.D.	1.1	ug/m3	1
07243	1,2-Dichloropropane	78-87-5	N.D.	0.92	ug/m3	1
07245	Dibromomethane	74-95-3	N.D.	1.4	ug/m3	1
07247	Bromodichloromethane	75-27-4	N.D.	1.3	ug/m3	1
07248	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.91	ug/m3	1
07249	4-Methyl-2-Pentanone	108-10-1	N.D.	2.0	ug/m3	1
07250	Toluene	108-88-3	2.7 J	0.75	ug/m3	1
07251	Octane	111-65-9	N.D.	0.93	ug/m3	1



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Page 2 of 2

Lancaster Laboratories Sample No. AQ5589388 Group No. 1130262

Outdoor Air Sampling SUMMA Canister #063

Deluxe

Collected:01/28/2009 08:55 by BH

through 01/28/2009 16:55 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

DISCAIG. 03/13/2003

BH Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

OUTDR SDG#	: DX	E01-	-02
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				As Received			
CAT			As Received	Method		Dilution	
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor	
07252	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.91	ug/m3	1	
07254	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	ug/m3	1	
07255	Tetrachloroethene	127-18-4	N.D.	1.4	ug/m3	1	
07256	2-Hexanone	591-78-6	N.D.	2.0	ug/m3	1	
07257	Dibromochloromethane	124-48-1	N.D.	1.7	ug/m3	1	
07258	1,2-Dibromoethane	106-93-4	N.D.	1.5	ug/m3	1	
07259	Chlorobenzene	108-90-7	N.D.	0.92	ug/m3	1	
07260	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.4	ug/m3	1	
07261	Ethylbenzene	100-41-4	N.D.	0.87	ug/m3	1	
07262	m/p-Xylene	179601-23-1	2.2 J	0.87	ug/m3	1	
07263	o-Xylene	95-47-6	N.D.	0.87	ug/m3	1	
07264	Styrene	100-42-5	N.D.	0.85	ug/m3	1	
07265	Bromoform	75-25-2	N.D.	2.1	ug/m3	1	
07266	Cumene	98-82-8	N.D.	0.98	ug/m3	1	
07267	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.4	ug/m3	1	
07268	1,2,3-Trichloropropane	96-18-4	N.D.	1.2	ug/m3	1	
07269	Bromobenzene	108-86-1	N.D.	1.3	ug/m3	1	
07270	4-Ethyltoluene	622-96-8	N.D.	0.98	ug/m3	1	
07271	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.98	ug/m3	1	
07273	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.98	ug/m3	1	
07274	1,3-Dichlorobenzene	541-73-1	N.D.	1.2	ug/m3	1	
07275	1,4-Dichlorobenzene	106-46-7	N.D.	1.2	ug/m3	1	
07277	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	ug/m3	1	
07278	Hexachloroethane	67-72-1	N.D.	1.9	ug/m3	1	

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/03/2009 14:21	Fanella S Zamcho	1



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Page 1 of 2

Lancaster Laboratories Sample No. AQ5589389 Group No. 1130262

SS-1 Soil Vapor Air sample SUMMA Canister #915

Deluxe

Collected: 01/28/2009 10:39 by BH A

through 01/28/2009 11:09 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

SS1-- SDG#: DXE01-03

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
05298	VOCs in air by EPA TO-15			rimit		
07202	Dichlorodifluoromethane	75-71-8	3.0 J	0.99	ug/m3	1
07203	Chlorodifluoromethane	75-45-6	4.2	0.71	ug/m3	1
07204	Freon 114	76-14-2	N.D.	1.4	ug/m3	1
07205	Chloromethane	74-87-3	N.D.	0.41	ug/m3	1
07206	Vinyl Chloride	75-01-4	N.D.	0.51	ug/m3	1
07207	1,3-Butadiene	106-99-0	N.D.	1.1	ug/m3	1
07208	Bromomethane	74-83-9	N.D.	0.78	ug/m3	1
07209	Chloroethane	75-00-3	N.D.	0.53	ug/m3	1
07210	Dichlorofluoromethane	75-43-4	N.D.	0.84	ug/m3	1
07212	Trichlorofluoromethane	75-69-4	7.6	1.1	ug/m3	1
07213	Pentane	109-66-0	1.3 J	0.59	ug/m3	1
07215	1,1-Dichloroethene	75-35-4	N.D.	0.79	ug/m3	1
07216	Freon 113	76-13-1	N.D.	3.8	ug/m3	1
07217	Acetone	67-64-1	37	1.2	ug/m3	1
07219	Carbon Disulfide	75-15-0	1.1 J	0.62	ug/m3	1
07221	3-Chloropropene	107-05-1	N.D.	0.63	ug/m3	1
07222	Methylene Chloride	75-09-2	3.3 J	0.69	ug/m3	1
07224	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	ug/m3	1
07225	Methyl t-Butyl Ether	1634-04-4	N.D.	0.72	ug/m3	1
07226	Hexane	110-54-3	1.1 J	0.70	ug/m3	1
07227	1,1-Dichloroethane	75-34-3	N.D.	0.81	ug/m3	1
07230	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	ug/m3	1
07231	2-Butanone	78-93-3	6.3	1.5	ug/m3	1
07234	Chloroform	67-66-3	N.D.	0.98	ug/m3	1
07235	1,1,1-Trichloroethane	71-55-6	N.D.	1.1	ug/m3	1
07236	Carbon Tetrachloride	56-23-5	N.D.	1.3	ug/m3	1
07237	1,2-Dichloroethane	107-06-2	N.D.	0.81	ug/m3	1
07238	Benzene	71-43-2	1.3 J	0.64	ug/m3	1
07239	Isooctane	540-84-1	N.D.	0.93	ug/m3	1
07240	Heptane	142-82-5	N.D.	0.82	ug/m3	1
07241	Trichloroethene	79-01-6	1.7 J	1.1	ug/m3	1
07243	1,2-Dichloropropane	78-87-5	N.D.	0.92	ug/m3	1
07245	Dibromomethane	74-95-3	N.D.	1.4	ug/m3	1
07247	Bromodichloromethane	75-27-4	N.D.	1.3	ug/m3	1
07248	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.91	ug/m3	1
07249	4-Methyl-2-Pentanone	108-10-1	N.D.	2.0	ug/m3	1
07250	Toluene	108-88-3	16	0.75	ug/m3	1
07251	Octane	111-65-9	6.3	0.93	ug/m3	1



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Page 2 of 2

Lancaster Laboratories Sample No. AQ5589389

Group No. 1130262

SS-1 Soil Vapor Air sample SUMMA Canister #915

Collected:01/28/2009 10:39 by BH

through 01/28/2009 11:09 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

SS1-- SDG#: DXE01-03

				As Received		
CAT		As Receiv		Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07252	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.91	ug/m3	1
07254	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	ug/m3	1
07255	Tetrachloroethene	127-18-4	3.8 J	1.4	ug/m3	1
07256	2-Hexanone	591-78-6	N.D.	2.0	ug/m3	1
07257	Dibromochloromethane	124-48-1	N.D.	1.7	ug/m3	1
07258	1,2-Dibromoethane	106-93-4	N.D.	1.5	ug/m3	1
07259	Chlorobenzene	108-90-7	N.D.	0.92	ug/m3	1
07260	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.4	ug/m3	1
07261	Ethylbenzene	100-41-4	4.3 J	0.87	ug/m3	1
07262	m/p-Xylene	179601-23-1	15	0.87	ug/m3	1
07263	o-Xylene	95-47-6	6.3	0.87	ug/m3	1
07264	Styrene	100-42-5	1.8 J	0.85	ug/m3	1
07265	Bromoform	75-25-2	N.D.	2.1	ug/m3	1
07266	Cumene	98-82-8	N.D.	0.98	ug/m3	1
07267	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.4	ug/m3	1
07268	1,2,3-Trichloropropane	96-18-4	N.D.	1.2	ug/m3	1
07269	Bromobenzene	108-86-1	N.D.	1.3	ug/m3	1
07270	4-Ethyltoluene	622-96-8	N.D.	0.98	ug/m3	1
07271	1,3,5-Trimethylbenzene	108-67-8	2.8 J	0.98	ug/m3	1
07273	1,2,4-Trimethylbenzene	95-63-6	9.1	0.98	ug/m3	1
07274	1,3-Dichlorobenzene	541-73-1	N.D.	1.2	ug/m3	1
07275	1,4-Dichlorobenzene	106-46-7	4.0 J	1.2	ug/m3	1
07277	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	ug/m3	1
07278	Hexachloroethane	67-72-1	N.D.	1.9	ug/m3	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	<b>Factor</b>
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/03/2009 15:47	Fanella S Zamcho	1



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Page 1 of 2

Lancaster Laboratories Sample No. AQ5589390

Group No. 1130262

SS-2 Soil Vapor Air sample SUMMA Canister #1049

Deluxe

Collected:01/28/2009 10:28 by BH

through 01/28/2009 10:58 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

SS2-- SDG#: DXE01-04

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05298	VOCs in air by EPA TO-15					
07202	Dichlorodifluoromethane	75-71-8	39	0.99	ug/m3	1
07203	Chlorodifluoromethane	75-45-6	7.1	0.71	ug/m3	1
07204	Freon 114	76-14-2	N.D.	1.4	ug/m3	1
07205	Chloromethane	74-87-3	N.D.	0.41	ug/m3	1
07206	Vinyl Chloride	75-01-4	N.D.	0.51	ug/m3	1
07207	1,3-Butadiene	106-99-0	N.D.	1.1	ug/m3	1
07208	Bromomethane	74-83-9	N.D.	0.78	ug/m3	1
07209	Chloroethane	75-00-3	N.D.	0.53	ug/m3	1
07210	Dichlorofluoromethane	75-43-4	N.D.	0.84	ug/m3	1
07212	Trichlorofluoromethane	75-69-4	5.1 J	1.1	ug/m3	1
07213	Pentane	109-66-0	N.D.	0.59	ug/m3	1
07215	1,1-Dichloroethene	75-35-4	N.D.	0.79	ug/m3	1
07216	Freon 113	76-13-1	N.D.	3.8	ug/m3	1
07217	Acetone	67-64-1	40	1.2	ug/m3	1
07219	Carbon Disulfide	75-15-0	2.1 J	0.62	ug/m3	1
07221	3-Chloropropene	107-05-1	N.D.	0.63	ug/m3	1
07222	Methylene Chloride	75-09-2	N.D.	0.69	ug/m3	1
07224	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	ug/m3	1
07225	Methyl t-Butyl Ether	1634-04-4	1.9 J	0.72	ug/m3	1
07226	Hexane	110-54-3	N.D.	0.70	ug/m3	1
07227	1,1-Dichloroethane	75-34-3	N.D.	0.81	ug/m3	1
07230	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	ug/m3	1
07231	2-Butanone	78-93-3	12	1.5	ug/m3	1
07234	Chloroform	67-66-3	N.D.	0.98	ug/m3	1
07235	1,1,1-Trichloroethane	71-55-6	2.5 J	1.1	ug/m3	1
07236	Carbon Tetrachloride	56-23-5	N.D.	1.3	ug/m3	1
07237	1,2-Dichloroethane	107-06-2	N.D.	0.81	ug/m3	1
07238	Benzene	71-43-2	1.3 J	0.64	ug/m3	1
07239	Isooctane	540-84-1	N.D.	0.93	ug/m3	1
07240	Heptane	142-82-5	N.D.	0.82	ug/m3	1
07241	Trichloroethene	79-01-6	1.8 J	1.1	ug/m3	1
07243	1,2-Dichloropropane	78-87-5	N.D.	0.92	ug/m3	1
07245	Dibromomethane	74-95-3	N.D.	1.4	ug/m3	1
07247	Bromodichloromethane	75-27-4	N.D.	1.3	ug/m3	1
07248	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.91	ug/m3	1
07249	4-Methyl-2-Pentanone	108-10-1	N.D.	2.0	ug/m3	1
07250	Toluene	108-88-3	17	0.75	ug/m3	1
07251	Octane	111-65-9	10	0.93	ug/m3	ı
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Page 2 of 2

Lancaster Laboratories Sample No. AQ5589390

Group No. 1130262

SS-2 Soil Vapor Air sample SUMMA Canister #1049

Collected:01/28/2009 10:28 by BH

through 01/28/2009 10:58

Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

SS2-- SDG#: DXE01-04

552	SDG#: DXEU1-04				As Received		
CAT			As Rece	ived	Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
07252	trans-1,3-Dichloropropene	10061-02-6	N.D.		0.91	ug/m3	1
07254	1,1,2-Trichloroethane	79-00-5	N.D.		1.1	ug/m3	1
07255	Tetrachloroethene	127-18-4	3.1	J	1.4	ug/m3	1
07256	2-Hexanone	591-78-6	3.4	J	2.0	ug/m3	1
07257	Dibromochloromethane	124-48-1	N.D.		1.7	ug/m3	1
07258	1,2-Dibromoethane	106-93-4	N.D.		1.5	ug/m3	1
07259	Chlorobenzene	108-90-7	N.D.		0.92	ug/m3	1
07260	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		1.4	ug/m3	1
07261	Ethylbenzene	100-41-4	8.1		0.87	ug/m3	1
07262	m/p-Xylene	179601-23-1	23		0.87	ug/m3	1
07263	o-Xylene	95-47-6	10		0.87	ug/m3	1
07264	Styrene	100-42-5	N.D.		0.85	ug/m3	1
07265	Bromoform	75-25-2	2.4	J	2.1	ug/m3	1
07266	Cumene	98-82-8	N.D.		0.98	ug/m3	1
07267	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1.4	ug/m3	1
07268	1,2,3-Trichloropropane	96-18-4	N.D.		1.2	ug/m3	1
07269	Bromobenzene	108-86-1	N.D.		1.3	ug/m3	1
07270	4-Ethyltoluene	622-96-8	N.D.		0.98	ug/m3	1
07271	1,3,5-Trimethylbenzene	108-67-8	3.2	J	0.98	ug/m3	1
07273	1,2,4-Trimethylbenzene	95-63-6	10		0.98	ug/m3	1
07274	1,3-Dichlorobenzene	541-73-1	N.D.		1.2	ug/m3	1
07275	1,4-Dichlorobenzene	106-46-7	5.8	J	1.2	ug/m3	1
07277	1,2-Dichlorobenzene	95-50-1	1.8	J	1.2	ug/m3	1
07278	Hexachloroethane	67-72-1	N.D.		1.9	ug/m3	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT				Analysis		D1lut1on
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/03/2009 17:13	Fanella S Zamcho	1



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Page 1 of 2

Lancaster Laboratories Sample No. AQ5589391 Group No. 1130262

SS-3 Soil Vapor Air sample SUMMA Canister #917

Collected:01/28/2009 11:34 by BH Account Number: 11827

through 01/28/2009 12:04 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

SS3-- SDG#: DXE01-05

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05298	VOCs in air by EPA TO-15					
07202	Dichlorodifluoromethane	75-71-8	8.3	0.99	ug/m3	1
07203	Chlorodifluoromethane	75-45-6	2.1 J	0.71	ug/m3	1
07204	Freon 114	76-14-2	N.D.	1.4	ug/m3	1
07205	Chloromethane	74-87-3	N.D.	0.41	ug/m3	1
07206	Vinyl Chloride	75-01-4	N.D.	0.51	ug/m3	1
07207	1,3-Butadiene	106-99-0	N.D.	1.1	ug/m3	1
07208	Bromomethane	74-83-9	N.D.	0.78	ug/m3	1
07209	Chloroethane	75-00-3	N.D.	0.53	ug/m3	1
07210	Dichlorofluoromethane	75-43-4	N.D.	0.84	ug/m3	1
07212	Trichlorofluoromethane	75-69-4	1.2 J	1.1	ug/m3	1
07213	Pentane	109-66-0	N.D.	0.59	ug/m3	1
07215	1,1-Dichloroethene	75-35-4	N.D.	0.79	ug/m3	1
07216	Freon 113	76-13-1	N.D.	3.8	ug/m3	1
07217	Acetone	67-64-1	34	1.2	ug/m3	1
07219	Carbon Disulfide	75-15-0	N.D.	0.62	ug/m3	1
07221	3-Chloropropene	107-05-1	N.D.	0.63	ug/m3	1
07222	Methylene Chloride	75-09-2	1.3 J	0.69	ug/m3	1
07224	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	ug/m3	1
07225	Methyl t-Butyl Ether	1634-04-4	N.D.	0.72	ug/m3	1
07226	Hexane	110-54-3	N.D.	0.70	ug/m3	1
07227	1,1-Dichloroethane	75-34-3	N.D.	0.81	ug/m3	1
07230	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	ug/m3	1
07231	2-Butanone	78-93-3	25	1.5	ug/m3	1
07234	Chloroform	67-66-3	N.D.	0.98	ug/m3	1
07235	1,1,1-Trichloroethane	71-55-6	2.1 J	1.1	ug/m3	1
07236	Carbon Tetrachloride	56-23-5	N.D.	1.3	ug/m3	1
07237	1,2-Dichloroethane	107-06-2	N.D.	0.81	ug/m3	1
07238	Benzene	71-43-2	N.D.	0.64	uq/m3	1
07239	Isooctane	540-84-1	N.D.	0.93	ug/m3	1
07240	Heptane	142-82-5	N.D.	0.82	ug/m3	1
07241	Trichloroethene	79-01-6	1.1 J	1.1	ug/m3	1
07243	1,2-Dichloropropane	78-87-5	N.D.	0.92	ug/m3	1
07245	Dibromomethane	74-95-3	N.D.	1.4	ug/m3	1
07247	Bromodichloromethane	75-27-4	N.D.	1.3	ug/m3	1
07248	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.91	ug/m3	1
07240	4-Methyl-2-Pentanone	108-10-1	N.D.	2.0	ug/m3	1
07250	Toluene	108-10-1	7.0	0.75	ug/m3 ug/m3	1
07250	Octane	111-65-9	3.2 J	0.93	ug/m3 ug/m3	1
0/231	Octane	111-02-3	3.2 0	U.33	ug/m3	1



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Page 2 of 2

Lancaster Laboratories Sample No. AQ5589391 Group No. 1130262

SS-3 Soil Vapor Air sample SUMMA Canister #917

Deluxe

Collected:01/28/2009 11:34 by BH

through 01/28/2009 12:04 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

SS3-- SDG#: DXE01-05

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

553	SDG#: DXEUI-US			As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07252	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.91	ug/m3	1
07254	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	ug/m3	1
07255	Tetrachloroethene	127-18-4	27	1.4	ug/m3	1
07256	2-Hexanone	591-78-6	3.8 J	2.0	ug/m3	1
07257	Dibromochloromethane	124-48-1	N.D.	1.7	ug/m3	1
07258	1,2-Dibromoethane	106-93-4	N.D.	1.5	ug/m3	1
07259	Chlorobenzene	108-90-7	N.D.	0.92	ug/m3	1
07260	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.4	ug/m3	1
07261	Ethylbenzene	100-41-4	2.5 J	0.87	ug/m3	1
07262	m/p-Xylene	179601-23-1	10	0.87	ug/m3	1
07263	o-Xylene	95-47-6	5.0	0.87	ug/m3	1
07264	Styrene	100-42-5	N.D.	0.85	ug/m3	1
07265	Bromoform	75-25-2	N.D.	2.1	ug/m3	1
07266	Cumene	98-82-8	N.D.	0.98	ug/m3	1
07267	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.4	ug/m3	1
07268	1,2,3-Trichloropropane	96-18-4	N.D.	1.2	ug/m3	1
07269	Bromobenzene	108-86-1	N.D.	1.3	ug/m3	1
07270	4-Ethyltoluene	622-96-8	N.D.	0.98	ug/m3	1
07271	1,3,5-Trimethylbenzene	108-67-8	2.3 J	0.98	ug/m3	1
07273	1,2,4-Trimethylbenzene	95-63-6	6.4	0.98	ug/m3	ı
07274	1,3-Dichlorobenzene	541-73-1	N.D.	1.2	ug/m3	1
07275	1,4-Dichlorobenzene	106-46-7	1.5 J	1.2	ug/m3	1
07277	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	ug/m3	1
07278	Hexachloroethane	67-72-1	N.D.	1.9	ug/m3	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT			•	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/03/2009 18:40	Fanella S Zamcho	1



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Page 1 of 2

Lancaster Laboratories Sample No. AQ5589392 Group No. 1130262

SS-4 Soil Vapor Air sample SUMMA Canister #958

Deluxe

Collected:01/28/2009 11:26 by BH

through 01/28/2009 11:56 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

SS4-- SDG#: DXE01-06\*

Account Number: 11827

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
05298	VOCs in air by EPA TO-15					
07202	Dichlorodifluoromethane	75-71-8	4,800	200	ug/m3	200
07203	Chlorodifluoromethane	75-45-6	N.D.	0.71	ug/m3	1
07204	Freon 114	76-14-2	N.D.	1.4	ug/m3	1
07205	Chloromethane	74-87-3	N.D.	0.41	ug/m3	1
07206	Vinyl Chloride	75-01-4	N.D.	0.51	ug/m3	1
07207	1,3-Butadiene	106-99-0	N.D.	1.1	ug/m3	1
07208	Bromomethane	74-83-9	N.D.	0.78	ug/m3	1
07209	Chloroethane	75-00-3	N.D.	0.53	ug/m3	1
07210	Dichlorofluoromethane	75-43-4	N.D.	0.84	ug/m3	1
07212	Trichlorofluoromethane	75-69-4	10	1.1	ug/m3	1
07213	Pentane	109-66-0	1.2 J	0.59	ug/m3	1
07215	1,1-Dichloroethene	75-35-4	N.D.	0.79	ug/m3	1
07216	Freon 113	76-13-1	N.D.	3.8	ug/m3	1
07217	Acetone	67-64-1	17	1.2	ug/m3	1
07219	Carbon Disulfide	75-15-0	N.D.	0.62	ug/m3	1
07221	3-Chloropropene	107-05-1	N.D.	0.63	ug/m3	1
07222	Methylene Chloride	75-09-2	1.9 J	0.69	ug/m3	1
07224	trans-1,2-Dichloroethene	156-60-5	N.D.	0.79	ug/m3	1
07225	Methyl t-Butyl Ether	1634-04-4	1.0 J	0.72	ug/m3	1
07226	Hexane	110-54-3	N.D.	0.70	ug/m3	1
07227	1,1-Dichloroethane	75-34-3	N.D.	0.81	ug/m3	1
07230	cis-1,2-Dichloroethene	156-59-2	N.D.	0.79	ug/m3	1
07231	2-Butanone	78-93-3	4.4 J	1.5	ug/m3	1
07234	Chloroform	67-66-3	N.D.	0.98	ug/m3	1
07235	1,1,1-Trichloroethane	71-55-6	6.1	1.1	ug/m3	1
07236	Carbon Tetrachloride	56-23-5	N.D.	1.3	ug/m3	1
07237	1,2-Dichloroethane	107-06-2	N.D.	0.81	ug/m3	1
07238	Benzene	71-43-2	0.93 J	0.64	ug/m3	1
07239	Isooctane	540-84-1	N.D.	0.93	ug/m3	1
07240	Heptane	142-82-5	N.D.	0.82	ug/m3	1
07241	Trichloroethene	79-01-6	1.2 J	1.1	ug/m3	1
07243	1,2-Dichloropropane	78-87-5	N.D.	0.92	ug/m3	1
07245	Dibromomethane	74-95-3	N.D.	1.4	ug/m3	1
07247	Bromodichloromethane	75-27-4	N.D.	1.3	ug/m3	1
07248	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.91	ug/m3	1
07249	4-Methyl-2-Pentanone	108-10-1	N.D.	2.0	ug/m3	1
07250	Toluene	108-88-3	10	0.75	ug/m3	1
07251	Octane	111-65-9	5.9	0.93	ug/m3	1



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Page 2 of 2

Lancaster Laboratories Sample No. AQ5589392 Group No. 1130262

SS-4 Soil Vapor Air sample SUMMA Canister #958

Deluxe

by BH Account Number: 11827 Collected:01/28/2009 11:26

through 01/28/2009 11:56 Submitted: 01/31/2009 09:40 Reported: 02/12/2009 at 15:01

Discard: 03/15/2009

Leggette Brashears & Graham 110 Corporate Park Drive

Suite 112

White Plains NY 10604

As Received

SS4-- SDG#: DXE01-06\*

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07252	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.91	ug/m3	1
07254	1,1,2-Trichloroethane	79-00-5	N.D.	1.1	ug/m3	1
07255	Tetrachloroethene	127-18-4	1.7 J	1.4	ug/m3	1
07256	2-Hexanone	591-78-6	N.D.	2.0	ug/m3	1
07257	Dibromochloromethane	124-48-1	N.D.	1.7	ug/m3	1
07258	1,2-Dibromoethane	106-93-4	N.D.	1.5	ug/m3	ı
07259	Chlorobenzene	108-90-7	N.D.	0.92	ug/m3	1
07260	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.4	ug/m3	1
07261	Ethylbenzene	100-41-4	3.9 J	0.87	ug/m3	1
07262	m/p-Xylene	179601-23-1	11	0.87	ug/m3	1
07263	o-Xylene	95-47-6	4.7	0.87	ug/m3	1
07264	Styrene	100-42-5	1.3 J	0.85	ug/m3	1
07265	Bromoform	75-25-2	N.D.	2.1	ug/m3	1
07266	Cumene	98-82-8	N.D.	0.98	ug/m3	1
07267	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.4	ug/m3	1
07268	1,2,3-Trichloropropane	96-18-4	N.D.	1.2	ug/m3	1
07269	Bromobenzene	108-86-1	N.D.	1.3	ug/m3	1
07270	4-Ethyltoluene	622-96-8	N.D.	0.98	ug/m3	1
07271	1,3,5-Trimethylbenzene	108-67-8	1.6 J	0.98	ug/m3	1
07273	1,2,4-Trimethylbenzene	95-63-6	4.7 J	0.98	ug/m3	1
07274	1,3-Dichlorobenzene	541-73-1	N.D.	1.2	ug/m3	1
07275	1,4-Dichlorobenzene	106-46-7	2.2 J	1.2	ug/m3	1
07277	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	ug/m3	1
07278	Hexachloroethane	67-72-1	N.D.	1.9	ug/m3	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/03/2009 20:06	Fanella S Zamcho	1
05298	VOCs in air by EPA TO-15	EPA TO-15	1	02/04/2009 11:41	Fanella S Zamcho	200



Group Number: 1130262

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Page 1 of 2

### Quality Control Summary

Client Name: Leggette Brashears & Graham

Reported: 02/12/09 at 03:01 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the

### Laboratory Compliance Quality Control

	Blank	Blank	Report	LCS	LCSD	LCS/LCSD		
Analysis Name	Result	MDL	Units	%REC	*REC	<u>Limite</u>	RPD	RPD Max
	_							
Batch number: A0903330AB		umber(s):					_	
Dichlorodifluoromethane	N.D.	0.99	ug/m3	106	103	54-122	3	25
Chlorodifluoromethane	N.D.	0.71	ug/m3					
Freon 114	N.D.	1.4	ug/m3	102	101	58-125	1	25
Chloromethane	N.D.	0.41	ug/m3	95	95	50-127	0	25
Vinyl Chloride	N.D.	0.51	ug/m3	101	96	70-130	5	25
1,3-Butadiene	N.D.	1.1	ug/m3					
Bromomethane	N.D.	0.78	ug/m3	99	98	70-130	1	25
Chloroethane	N.D.	0.53	ug/m3	87	84	57-131	3	25
Dichlorofluoromethane	N.D.	0.84	ug/m3					
Trichlorofluoromethane	N.D.	1.1	ug/m3	103	100	70-130	3	25
Pentane	N.D.	0.59	ug/m3					
1,1-Dichloroethene	N.D.	0.79	ug/m3	90	87	56-127	4	25
Freon 113	N.D.	3.8	ug/m3	86	81	61-135	6	25
Acetone	N.D.	1.2	ug/m3					
Carbon Disulfide	N.D.	0.62	ug/m3					
3-Chloropropene	N.D.	0.63	ug/m3					
Methylene Chloride	N.D.	0.69	ug/m3	75	70	70-130	7	25
trans-1,2-Dichloroethene	N.D.	0.79	ug/m3					
Methyl t-Butyl Ether	N.D.	0.72	ug/m3					
Hexane	N.D.	0.70	ug/m3					
1,1-Dichloroethane	N.D.	0.81	ug/m3	87	84	56-128	4	25
cis-1,2-Dichloroethene	N.D.	0.79	ug/m3	88	82	52-125	7	25
2-Butanone	N.D.	1.5	ug/m3					
Chloroform	N.D.	0.98	ug/m3	88	84	70-130	5	25
1,1,1-Trichloroethane	N.D.	1.1	ug/m3	88	86	70-130	2	25
Carbon Tetrachloride	N.D.	1.3	ug/m3	85	82	70-130	3	25
1,2-Dichloroethane	N.D.	0.81	ug/m3	90	88	70-130	1	25
Benzene	N.D.	0.64	ug/m3	76	76	70-130	1	25
Isooctane	N.D.	0.93	ug/m3					
Heptane	N.D.	0.82	ug/m3					
Trichloroethene	N.D.	1.1	ug/m3	89	89	70-130	0	25
1,2-Dichloropropane	N.D.	0.92	ug/m3	80	80	70-130	1	25
Dibromomethane	N.D.	1.4	ug/m3					
Bromodichloromethane	N.D.	1.3	ug/m3					
cis-1,3-Dichloropropene	N.D.	0.91	ug/m3	82	84	48-132	2	25
4-Methyl-2-Pentanone	N.D.	2.0	ug/m3					
Toluene	N.D.	0.75	ug/m3	82	78	70-130	5	25
Octane	N.D.	0.93	ug/m3					
trans-1,3-Dichloropropene	N.D.	0.91	ug/m3	92	87	53-147	5	25
1,1,2-Trichloroethane	N.D.	1.1	ug/m3	89	85	54-132	5	25
Tetrachloroethene	N.D.	1.4	ug/m3	84	82	70-130	3	25
2-Hexanone	N.D.	2.0	ug/m3					
Dibromochloromethane	N.D.	1.7	ug/m3					
1,2-Dibromoethane	N.D.	1.5	ug/m3	95	92	53-158	4	25
Chlorobenzene	N.D.	0.92	ug/m3	85	80	70-130	6	25
1,1,1,2-Tetrachloroethane	N.D.	1.4	ug/m3				_	-
-,-,-,			~g,					

### \*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



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Page 2 of 2

### Quality Control Summary

Client Name: Leggette Brashears & Graham Group Number: 1130262

Reported: 02/12/09 at 03:01 PM

### Laboratory Compliance Quality Control

	Blank	Blank	Report	LCS	LCSD	LCS/LCSD		
Analysis Name	<u>Result</u>	MDL	<u>Units</u>	%REC	%REC	<u>Limits</u>	RPD	RPD Max
Ethylbenzene	N.D.	0.87	ug/m3	80	79	70-130	2	25
m/p-Xylene	N.D.	0.87	ug/m3	79	79	70-130	0	25
o-Xylene	N.D.	0.87	ug/m3	86	82	70-130	5	25
Styrene	N.D.	0.85	ug/m3	87	83	58-169	4	25
Bromoform	N.D.	2.1	ug/m3					
Cumene	N.D.	0.98	ug/m3					
1,1,2,2-Tetrachloroethane	N.D.	1.4	ug/m3	75	71	43-171	5	25
1,2,3-Trichloropropane	N.D.	1.2	ug/m3					
Bromobenzene	N.D.	1.3	ug/m3					
4-Ethyltoluene	N.D.	0.98	ug/m3					
1,3,5-Trimethylbenzene	N.D.	0.98	ug/m3	86	77	49-157	10	25
1,2,4-Trimethylbenzene	N.D.	0.98	ug/m3	93	82	44-164	12	25
1,3-Dichlorobenzene	N.D.	1.2	ug/m3	92	86	46-170	7	25
1,4-Dichlorobenzene	N.D.	1.2	ug/m3	89	BO	39-169	11	25
1,2-Dichlorobenzene	N.D.	1.2	ug/m3	98	88	46-171	11	25
Hexachloroethane	N.D.	1.9	ug/m3					
Batch number: A0903330AC	Sample n	umber(s):	5589392					
Dichlorodifluoromethane	N.D.	0.99	ug/m3	106	103	54-122	3	25
Batch number: C0903630AA	Sample n	umber(s):	5589387					
Vinyl Chloride	N.D.	0.0230	ug/m3	82	85	70-130	3	25
1,1-Dichloroethene	N.D.	0.0238	ug/m3	84	91	70-130	7	25
cis-1,2-Dichloroethene	N.D.	0.0555	ug/m3	85	92	70-130	8	25
1,1,1-Trichloroethane	N.D.	0.0709	ug/m3	90	96	70-130	6	25
Trichloroethene	N.D.	0.107	ug/m3	97	94	49-173	4	25
Tetrachloroethene	N.D.	0.129	ug/m3	97	141	45-164	37*	25
Carbon Tetrachloride	N.D.	0.126	ug/m3	55*	59*	70-130	6	25

### \*- Outside of specification

<sup>(1)</sup> The result for one or both determinations was less than five times the LOQ.

<sup>(2)</sup> The unspiked result was more than four times the spike added.

# Analysis Request/ Environmental Services Chain of Custody

Laboratories

For Lancaster Laboratories use only Acct. # 1/827 Group# 1/3/22/2. Sample # 5589387-92 COC # 191211

Please print. Instructions on reverse side correspond with circled numbers.

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Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766 Copies: White and yellow should accompany samples to Lancaster Laboratories. The plink copy should be retained by the client.

2102.03

# Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	พาย	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ī	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight Basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

### **Organic Qualifiers**

### **Inorganic Qualifiers**

Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quatitated on a diluted sample	N	Spike amount not within control limits
E	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
Р	Concentration difference between primary and	*	Duplicate analysis not within control limits
	confirmation columns >25%	+	Correlation coefficient for MSA < 0.995
U	Compound was not detected		
X,Y,Z	Defined in case narrative		

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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DATA USABILITY SUMMARY REPORT (DUSR)

FORMER DELUXE CHECK PRINTING FACILITY

VOLATILE ORGANIC ANALYSES IN AMBIENT AIR SAMPLES EPA Method TO-15

LANCASTER LABORATORIES LANCASTER, PA

SDG NUMBER: DXE01

April, 2009

Prepared for Leggette, Brashears & Graham, Inc White Plains, New York

RECEIVED

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

### NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses – EPA Method TO-15

EPA Method TO-15 - Selective Ion Monitoring (SIM)

SITE: Former Deluxe Check Printing Facility

CONTRACT LAB: Lancaster Laboratories

Lancaster, PA

LABORATORY REPORT NO.: DXE01

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: April, 2009

MATRIX: Soil Vapor/Ambient Air

The samples in this data set were analyzed in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Trace Organic Compounds in Ambient Air (January, 1999). The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review. Also utilized for this review is the Region II SOP document based on the USEPA CLP SOW-VCAA01.0 (December 1991). This document is for the Validation of Air Samples-Volatile Organic Analysis of Ambient Air in Canister by Method TO-15 (SOP # HW-31, Rev. 4-10/06). In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for one (1) Indoor Air sample, one (1) Outdoor Air sample and four (4) sub-surface soil vapor samples. All of the samples in this data set were collected January 28, 2009. The samples were received at the laboratory on January 31, 2009. The samples were analyzed for Volatile Organic Analytes via EPA Method TO-15, as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A copy of definitions that may be used to qualify data results is located in Appendix A of this report. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C. Appendix D of this report includes a copy of the QC summary report pages from the data report. These pages are not notated or qualified.

### ORGANIC DATA ASSESSMENT

### 7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

The method states that the GC/MS be calibrated at a minimum of five (5) concentrations that span the range of interest. An analytical sequence includes a time frame of twenty-four (24) hours. After each 24 hour period anew analytical sequence is commenced with the analysis of an instrument performance standard and a daily calibration standard. The calculated %RSD of each target analyte must be less than 30% with at most two exceptions up to a limit of 40%. Based on the Region II validation Guidance documents any target analytes with a %RSD greater than 30% have been qualified "UJ/J" estimated.

A review of the individual relative response factor (RRF) is performed. The RRF of each target analyzed must be greater than 0.050. If the RRF is less than 0.050 the data is qualified. Positive detects are qualified "J" estimated. Non-detects are qualified "R" unusable.

One (1) initial calibration analysis is associated with these TO-15 analyses. The laboratory performed an initial multi level calibration using the standards on February 2, 2009 (Inst. 04224). The mean response and the %RSD were reported for each of the target compounds. The %RSD and mean response for each of the target compounds met QC criteria in this initial calibration curve analysis.

Some of the samples were analyzed on February 2, 2009 with the initial calibration curve analysis. In addition two (2) continuing calibration standard analyses are associated with this data set. These were analyzed on February 3, 2009 and February 4, 2009. Percent (%) drift has been calculated for each of the target compounds. The %Drift between the initial and daily standards should be within +/-30%. All target analytes met QC criteria in each of the continuing calibration standards associated with this data set with the exception of 1,2,4-Trichlorobenzene (55%) on February 4, 2009. This continuing calibration standard is associated with the dilution analysis of sample SS-4. The dilution analysis was required for the target analyte Dichlorodifluoromethane.

One (1) sample in the data set was analyzed using Selective Ion Monitoring (SIM). An initial calibration curve analysis on Instrument 09464 was performed on January 23, 2009. The average RRF and %RSD for each of the target analytes met OC criteria.

One (1) continuing calibration standard analysis is associated with this sample analysis. The sample was analyzed on February 5, 2009 (File ID: cb0007a.d). The average RRF and % Driftfor each of the target analytes met QC criteria in this continuing calibration standard analysis.

### 8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

GC/MS instrument performance must be checked prior to sample analysis. The method specifies that the BFB Instrument Performance Check be analyzed initially and once per twenty-four (24) hour period of operation. All instrument tuning criteria were met for these sample analyses.

### ORGANIC DATA ASSESSMENT

### 9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. EPA Method TO-15 recommends that the internal standard area count must not vary by more than +/- 40% from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±20 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. This QC review policy has been applied to these ambient air analyses.

All samples were fortified with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5. All internal standard area criteria were met for the samples in this data set.

### 10. COMPOUND IDENTIFICATION:

The samples in this data set were analyzed using EPA Method TO-15. Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm$  0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

The COC documents associated with this data set indicated that one (1) sample was to be analyzed via EPA Method TO-15 using Selective Ion Monitoring (SIM). A subset of target analytes was reported using this methodology.

The samples in this data set were reported in ug/m3. Sample dilution analyses were performed when the concentration of target analytes exceeded the calibration range.

Sample Indoor Air was initially analyzed without dilution. The concentration of Acetone exceeded the calibration range of the GC/MS. This target analyte sample was reanalyzed using a 1:10 dilution. All analytes with the exception of Acetone were reported from the initial sample analysis. Acetone was reported from the 1:10 dilution analysis (170 ug/m3).

Soil Vapor sample SS-4 was initially analyzed without dilution. The concentration of Dichlorodifluoromethane exceeded the calibration range of the GC/MS. This target analyte sample was reanalyzed using a 1:200 dilution. All analytes with the exception of Dichlorodifluoromethane were reported from the initial sample analysis. Dichlorodifluoromethane was reported from the 1:200 dilution analysis (4800 ug/m3).

### ORGANIC DATA ASSESSMENT

### 11. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Analytes reported above the reporting limit are listed and compared below. Data was not qualified based on the RPD of field duplicate sample analyses.

Field duplicate samples are not associated with this data set.

### 12. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. Based on this information, this data set is acceptable for use, with the noted data qualifiers.

Qualified data result pages are located in Appendix B of this report.

TABLE 1

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
Indoor Air Sample	5589387-INDR
Outdoor Air Sample	5589388-OUTDR
SS-1 Soil Vapor	5589389-SS1
SS-2 Soil Vapor	5589390-SS2
SS-3 Soil Vapor	5589391-SS3
SS-4 Soil Vapor	5589392-SS4

APPENDIX A

### DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.
- K The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
- L The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.
- UL The analyte was not detected, and the reported quantitation limit is probably higher than reported.

APPENDIX B



FORM 01 VOLATILE ORGANICS IN AIR SAMPLE DATA SHEET

SDG No.: DXE01

Sample Media: CANISTER Lab Sample ID: 5589387

Canister ID: 145 Lab File ID: cb00075.d

Pressure Received: 27.6 psia Date Collected: 01/28/09

Final Pressure: 13.8 psia Date Received: 01/31/09

Nominal Volume: 250 cc Analyzed Date: 02/06/09

Injection Volume: 500 cc Analyzed Time: 14:48

Instrument ID: 09464 Dilution Factor: 1

Concentration Units: ug/m3 Limit: MDL

			-	٦
CAS NO.	COMPOUND	CONCENTRATION	Q	
75-01-4	Vinyl Chloride	0.0230	Ü	7
75-35-4	1,1-Dichloroethene	0.0238	Ü	1
156-59-2	cis-1,2-Dichloroethene	0.0555	Ū	1
71-55-6	1,1,1-Trichloroethane	0.312		1
56-23-5	Carbon Tetrachloride	0.364		1-
79-01-6	Trichloroethene	0.436		1
127-18-4	Tetrachloroethene	0.229	J	1.

### Abbreviations:

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.

APPENDIX C

# Analysis Request/ Environmental Services Chain of Custody

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Laboratories

Acct # 11927 Groups # 130262 Sample # 5589387-92 COC # 191211

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	FSC: SCR#:		Preservation Codes	©	Acct. #.

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### APPENDIX D



FORM 03 VOLATILE ORGANICS IN AIR LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 04224

LCS File ID: ab00010.d

LCSD File ID: ab00011.d

Batch:

A0903330A LCS Injected: 02/02/09

LCSD Injected: 02/02/09

Method:

EPA TO-14 LCS Client ID: LCSA76 LCSD Client ID: LCSDA76

Dilution Factor: 1

	SPIKE	LCS CONC.	LCSD	LCS	LCSD			RPD	IN
			CONC.				ļ		
COMPOUND	LEVEL	(ug/m3)	(ug/m3)	*REC	*REC	RANGE	%RPD	MAX	SPEC
Dichlorodifluoromethane	51.92	55.15	53.44	106	103	54 - 122	3	25	YES
Freon 114	72.00	73.53	72.75		101	58 - 125	1	25	
Chloromethane	21.48	20.41	20.47	95	95	50 - 127	0	25	YES
Vinyl Chloride	26.58	26.86	25.64	101	96	70-130	5	25	
Bromomethane	40.38	40.13	39.64	99	98	70-130	1	25	YES
Chloroethane	27.44	23.81	23.11	87	84	57 – 131	3	25	YES
Trichlorofluoromethane	58.43	60.24	58.56	103	100	70 - 130	3	25	YES
1,1-Dichloroethene	40.84	36.92	35.38	90	87	56-127	4	25	YES
Freon 113	78.94	67.94	64.14	86	81	61 - 135	6	25	YES
Methylene Chloride	36.13	27.17	25.42	75	70	70-130	7	25	YES
1,1-Dichloroethane	41.69	36.18	34.90	87	84	56-128	4	25	
cis-1,2-Dichloroethene	40.44	35.67	33.25	88	82	52 - 125	7	25	YES
Chloroform	50.29	. 44.17	42.05	88	84	70-130	5	25	YES
1,1,1-Trichloroethane	56.20	49.46	48.26	88	86	70-130	2	25	YES
Carbon Tetrachloride	67.94	57.78	56.00	85	82	70-130	3	25	YES
Benzene	34.02	26.00	25.71	76	76	70-130	. 1		YES
1,2-Dichloroethane	40.88	36.71	36.16	90	88	70-130	1	25	YES
Trichloroethene	54.81	48.86	48.92	89	89	70-130	0	25	YES
1,2-Dichloropropane	47.60	38.27	37.92	80	80	70-130	1	25	YES
cis-1,3-Dichloropropene	44.93	36.94	37.82	82	84	48-132	2	25	YES
Toluene	38.82	32.00	30.41	82	78	70-130	5		YES
trans-1,3-Dichloropropene	47.66	43.70	41.51	92	87	53-147	5		YES
1,1,2-Trichloroethane	56.20	50.24	47.99	89	85	54-132	5		YES
Tetrachloroethene	69.86	58.97	57.31	84	82	70 - 130	3		YES
1,2-Dibromoethane	79.14	75.28	72.61	95	92	53-158	4		YES
Chlorobenzene	47.42	40.10	37.89	85	80	70-130	6		YES
Ethylbenzene	44.73	35.79	35.12	80	79	70-130	2		YES
m/p-Xylene	89.45	70.69	70.74	79	79	70-130	0		YES
o-Xylene	44.73	38.34	36.55	86	82	70 - 130	5		YES
Styrene	43.87	38.05	36.60	87	83	58-169	4		YES
1,1,2,2-Tetrachloroethane	70.71	53.00	50.45	75	71	43-171	5	25	YES
1,3,5-Trimethylbenzene	50.63	43.32	39.20	86	77	49-157	10		YES
1,2,4-Trimethylbenzene	49.65	45.94	40.72	93	82	44 - 164	12		YES
1,3-Dichlorobenzene	60.72	55.83	52.28	92	86	46-170	7		YES
1,4-Dichlorobenzene	63.73	56.99	51.07	89	80	39-169	11		YES
1,2-Dichlorobenzene	60.72	59.40	53.30	98	88	46-171	11		YES
1,2,4-Trichlorobenzene	76.44	91.75	73.01	120	96	32 - 200	23	25	YES

CO	MM	EN	T	S	:
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-DXEG1 0028



FORM 03

VOLATILE ORGANICS IN AIR

LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 04224

LCS File ID: ab00010.d

LCSD File ID: ab00011.d

Batch:

A0903330A

LCS Injected: 02/02/09

LCSD Injected: 02/02/09

Method:

EPA TO-14

LCS Client ID: LCSA76

LCSD Client ID: LCSDA76

Dilution Factor: 1

	SPIKE	LCS CONC.	LCSD	LCS	LCSD			RPD	IN
			CONC.						
COMPOUND	LEVEL	(ug/m3)	(ug/m3)	*REC	%REC	RANGE	*RPD	MAX	SPEC
Hexachlorobutadiene	107.72	98.84	89.96	92	84	32 – 200	9	25	YES

COMMENTS:

DXE01: 0829



FORM 04 VOLATILE ORGANICS IN AIR METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKA76

Analyzed Date: 02/02/09

Lab File ID: ab00009.d

Analyzed Time: 15:44

Instrument ID: 04224

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB	LAB	CANISTER	DATE	TIME
SAMPLE ID	FILE ID	ID	ANALYZED	ANALYZED
LCSA76	ab00010.d	N/A	02/02/09	16:27
LCSDA76	ab00011.d	N/A	02/02/09	17:09

COMMEN	T	S	:
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FORM 01 VOLATILE ORGANICS IN AIR SAMPLE DATA SHEET

### SDG No.;

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA76

Canister ID:

N/A

Lab File ID:

ab00009.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/02/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

15:44

Instrument ID:

04224

Dilution Factor: 1

Limit: MDL Concentration Units: ug/m3

Concentration	i ourra: nd/wa	TIMIC: MDD	
CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.34	U
75-71-8	Dichlorodifluoromethane	0.99	Ü
75-45-6	Chlorodifluoromethane	0.71	U
76-14-2	Freon 114	1.4	U
74-87-3	Chloromethane	0.41	υ
75-01-4	Vinyl Chloride	0.51	υ
106-99-0	1,3-Butadiene	1.1	Ü
74-83-9	Bromomethane	0.78	υ
75-00-3	Chloroethane	2.6	Ų
75-43-4	Dichlorofluoromethane	0.84	U
75-69-4	Trichlorofluoromethane	1.1	ט
109-66-0	Pentane	0.59	Ü
107-02-8	Acrolein	2.3	υ
75-35-4	1,1-Dichloroethene	0.79	Ü
76-13-1	Freon 113	3.8	U
67-64-1	Acetone	1.2	U
74-88-4	Methyl Iodide	1.2	Ü
75-15-0	Carbon Disulfide	0.62	U
75-05-8	Acetonitrile	0.84	ט
107-05-1	3-Chloropropene	3.1	U
75-09-2	Methylene Chloride	0.69	U
75-65-0	tert-Butyl Alcohol	0.61	Ü
107-13-1	Acrylonitrile	1.1	Ü
156-60-5	trans-1,2-Dichloroethene	0.79	Ü

### Abbreviations:

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA76

Canister ID:

N/A

Lab File ID:

ab00009.d

Pressure Received: N/A

Date Collected:

Final Pressure: N/A

Date Received:

02/02/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

15:44

Instrument ID:

04224

Dilution Factor: 1

Limit: MDL Concentration Units: ug/m3

001100110110101	· 01.1 co. ug/s	#2.112.01 1.10.2	
CAS NO.	COMPOUND	CONCENTRATION	Q
1634-04-4	Methyl t-Butyl Ether	0.72	Ü
110-54-3	Hexane	0.70	Ü
75-34-3	1,1-Dichloroethane	0.81	ַ
108-05-4	Vinyl Acetate	0.70	Ü
156-59-2	cis-1,2-Dichloroethene	0.79	Ü
78-93-3	2-Butanone	1.5	<del>U</del>
141-78-6	Ethyl Acetate	3.6	<del>-</del> 0
96-33-3	Methyl Acrylate	0.70	Ü
67-66-3	Chloroform	0.98	Ü
71-55-6	1,1,1-Trichloroethane	1.1	Ü
56-23-5	Carbon Tetrachloride	1.3	Ü
71-43-2	Benzene	0.64	U
107-06-2	1,2-Dichloroethane	0.81	Ū
540-84-1	Isooctane	0.93	U .
142-82-5	Heptane	0.82	U
79-01-6	Trichloroethene	1.1	U
140-88-5	Ethyl Acrylate	0.82	U
78-87-5	1,2-Dichloropropane	0.92	υ
74-95-3	Dibromomethane	1.4	Ü
123-91-1	1,4-Dioxane	0.72	ט
80-62-6	Methyl Methacrylate	0.82	U
75-27-4	Bromodichloromethane	1.3	Ü
10061-01-5	cis-1,3-Dichloropropene	0.91	Ü
108-10-1	4-Methyl-2-Pentanone	2.0	U

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- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



### SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA76

Canister ID:

N/A

Lab File ID:

ab00009.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/02/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

15:44

Instrument ID:

04224

Dilution Factor: 1

Limit: MDL

Concentration Units: ug/m3

Concentration	1 0111C3: ug/M3	222 07 1102	
CAS NO.	COMPOUND	CONCENTRATION	Q
108-88-3	Toluene	0.75	Ü
111-65-9	Octane	0.93	Ü
10061-02-6	trans-1,3-Dichloropropene	0.91	ΰ
97-63-2	Ethyl Methacrylate	0.93	υ
79-00-5	1,1,2-Trichloroethane	1.1	U
127-18-4	Tetrachloroethene	1.4	Ū
591~78-6	2-Hexanone	2.0	Ü
124-48-1	Dibromochloromethane	1.7	Ü
106-93-4	1,2-Dibromoethane	1.5	Ü
108-90-7	Chlorobenzene	0.92	Ü
630-20-6	1,1,1,2-Tetrachloroethane	1.4	υ
100-41-4	Ethylbenzene	0.87	Ü
179601-23-1	m/p-Xylene	0.87	U
95-47-6	o-Xylene	0.87	ט
100-42-5 .	Styrene	0.85	Ü
75-25-2	Bromoform	2.1	υ
98-82-8	Cumene	0.98	ΰ
108-86-1	Bromobenzene	1.3	υ
79-34-5	1,1,2,2-Tetrachloroethane	1.4	ט
96-18-4	1,2,3-Trichloropropane	1.2	Ü
622-96-8	4-Ethyltoluene	0.98	Ü
108-67-8	1,3,5-Trimethylbenzene	0.98	υ
98-83-9	Alpha Methyl Styrene	0.97	Ü
95-63-6	1,2,4-Trimethylbenzene	0.98	υ

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- ${\tt E}$  = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA76

Canister ID:

N/A

Lab File ID:

ab00009.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/02/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

15:44

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3

Limit: MDL

CONCENTRATION COMPOUND Q CAS NO. 1.2 υ 541-73-1 1,3-Dichlorobenzene 106-46-7 1.2 Ū 1,4-Dichlorobenzene 1.2 υ 95-50-1 1,2-Dichlorobenzene 1.9 υ 67-72-1 Hexachloroethane U 120-82-1 1,2,4-Trichlorobenzene 87-68-3 Hexachlorobutadiene Ū

- ${\tt U}$  = The compound is less than the limit being reported.
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- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



FORM 04 VOLATILE ORGANICS IN AIR METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKA77

Analyzed Date: 02/03/09

Lab File ID: ab00033.d

Analyzed Time: 11:12

Instrument ID: 04224

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB	LAB	CANISTER	DATE	TIME
SAMPLE ID	FILE ID	ID	ANALYZED	ANALYZED
5589387	ab00034.d	145	02/03/09	12:55
5589387DL	ab00035.d	145	02/03/09	13:38
5589388	ab00036.d	63	02/03/09	14:21
5589389	ab0003B.d	915	02/03/09	15:47
5589390	ab00040.d	1049	02/03/09	17:13
5589391	ab00042.d	917	02/03/09	18:40
5589392	ab000044.d	958	02/03/09	20:06
5590183	ab00046.d	N/A	02/03/09	21:31
5590183DL	ab00047.d	N/A	02/03/09	22:14

COMMENTS:		



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA77

Canister ID:

N/A

Lab File ID:

ab00033.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received: Analyzed Date:

02/03/09

Nominal Volume:

250 cc

Injection Volume:

250 cc

Analyzed Time:

11:12

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.34	Ü
75-71-8	Dichlorodifluoromethane	0.99	U
75-45-6	Chlorodifluoromethane	0.71	U
76-14-2	Freon 114	1.4	Ü
74-87-3	Chloromethane	0.41	U
75-01-4	Vinyl Chloride	0.51	Ü
106-99-0	1,3-Butadiene	1.1	Ü
74-83-9	Bromomethane	. 0.78	U
75-00-3	Chloroethane	2.6	Ü
75-43-4	Dichlorofluoromethane	0.84	U
75-69-4	Trichlorofluoromethane	1.1	U
109-66-0	Pentane	0.59	Ü
107-02-8	Acrolein	2.3	U
75-35-4	1,1-Dichloroethene	0.79	Ü
76-13-1	Freon 113	3.8	U
67-64-1	Acetone	1.2	U
74-88-4	Methyl Iodide	1.2	U
75-15-0	Carbon Disulfide	0.62	U
75-05-8	Acetonitrile	0.84	Ų
107-05-1	3-Chloropropene	3.1	ט
75-09-2	Methylene Chloride	0.69	Ü
75-65-0	tert-Butyl Alcohol	0.61	IJ
107-13-1	Acrylonitrile	1.1	U
156-60-5	trans-1,2-Dichloroethene	0.79	U

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- B The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



#### SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA77

Canister ID:

N/A

Lab File ID:

ab00033.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/03/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume: 250 cc

Analyzed Time:

11:12

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3

Limit: MDL

Unites: ag/mo	Dinte. Mon	
COMPOUND	CONCENTRATION	Q
Methyl t-Butyl Ether	0.72	Ü
Нехале	0.70	U
1,1-Dichloroethane	0.81	Ü
Vinyl Acetate	0.70	Ü
cis-1,2-Dichloroethene	0.79	Ü
2-Butanone	1.5	Ü
Ethyl Acetate	3.6	Ü
Methyl Acrylate	0.70	Ü
Chloroform	0.98	บ
1,1,1-Trichloroethane	1.1	ט
Carbon Tetrachloride	1.3	Ū
Benzene	0.64	Ü
1,2-Dichloroethane	0.81	υ
Isooctane	0.93	Ü
Heptane	0.82	Ü
Trichloroethene	1.1	Ü
Ethyl Acrylate	0.82	U
1,2-Dichloropropane	0.92	υ
Dibromomethane	1.4	Ü
1,4-Dioxane	0.72	Ū
Methyl Methacrylate	0.82	υ
Bromodichloromethane	1.3	ט
cis-1,3-Dichloropropene	. 0.91	U
4-Methyl-2-Pentanone	2.0	U
	COMPOUND  Methyl t-Butyl Ether  Hexane  1,1-Dichloroethane  Vinyl Acetate  cis-1,2-Dichloroethene  2-Butanone  Ethyl Acetate  Methyl Acrylate  Chloroform  1,1,1-Trichloroethane  Carbon Tetrachloride  Benzene  1,2-Dichloroethane  Isooctane  Heptane  Trichloroethene  Ethyl Acrylate  1,2-Dichloropropane  Dibromomethane  1,4-Dioxane  Methyl Methacrylate  Bromodichloromethane  cis-1,3-Dichloropropene	COMPOUND         CONCENTRATION           Methyl t-Butyl Ether         0.72           Hexane         0.70           1,1-Dichloroethane         0.81           Vinyl Acetate         0.70           cis-1,2-Dichloroethene         0.79           2-Butanone         1.5           Ethyl Acetate         3.6           Methyl Acrylate         0.70           Chloroform         0.98           1,1,1-Trichloroethane         1.1           Carbon Tetrachloride         1.3           Benzene         0.64           1,2-Dichloroethane         0.81           Isooctane         0.93           Heptane         0.82           Trichloroethene         1.1           Ethyl Acrylate         0.82           1,2-Dichloropropane         0.92           Dibromomethane         1.4           1,4-Dioxane         0.72           Methyl Methacrylate         0.82           Bromodichloromethane         1.3           cis-1,3-Dichloropropene         0.91

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA77

Canister ID:

N/A

Lab File ID:

ab00033.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received: Analyzed Date:

02/03/09

Nominal Volume:

250 cc

Injection Volume:

250 cc

Analyzed Time:

11:12

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3

Limit: MDL CAS NO. COMPOUND CONCENTRATION Q 108-88-3 Toluene 0.75 Ū 111-65-9 Octane 0.93 U trans-1,3-Dichloropropene 10061-02-6 0.91 97-63-2 Ethyl Methacrylate 0.93 Ü 79-00-5 1.1 1,1,2-Trichloroethane U 127-18-4 Tetrachloroethene U 1.4 2.0 591-78-6 2-Hexanone U 124-48-1 Dibromochloromethane 1.7 U 106-93-4 1,2-Dibromoethane 1.5 U 108-90-7 Chlorobenzene 0.92 U 630-20-6 1,1,1,2-Tetrachloroethane 1.4 U 100-41-4 Ethylbenzene 0.87 U 179601-23-1 m/p-Xylene 0.87 Ü 95-47-6 o-Xylene 0.87 Ū 100-42-5 Styrene 0.85 U 75-25-2 Bromoform 2.1 Ü 98-82-8 Cumene 0.98 υ 108-86-1 Bromobenzene 1.3 U 79-34-5 1,1,2,2-Tetrachloroethane 1.4 U 96-18-4 1,2,3-Trichloropropane 1.2 U 622-96-8 4-Ethyltoluene 0.98 Ü 108-67-8 1,3,5-Trimethylbenzene 0.98 U 98-83-9 Alpha Methyl Styrene 0.97 U 95-63-6 1,2,4-Trimethylbenzene 0.98 U

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- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



FORM 01

VOLATILE ORGANICS IN AIR

SAMPLE DATA SHEET

SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA77

Canister ID:

N/A

Lab File ID:

ab00033.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/03/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

11:12

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3

Limit: MDL

1			
CAS NO.	COMPOUND	CONCENTRATION	Q
541-73-1	1,3-Dichlorobenzene	1.2	Ū
106-46-7	1,4-Dichlorobenzene	1.2	Ü
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	1.9	U
1:20-82-1	1,2,4-Trichlorobenzene	3.7	Ü
87-68-3	Hexachlorobutadiene	5.3	ט

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



FORM 04

VOLATILE ORGANICS IN AIR METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKA78

Analyzed Date: 02/04/09

Lab File ID: ab00052.d

Analyzed Time: 10:58

Instrument ID: 04224

COMMENITO.

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB	LAB	CANISTER	DATE	TIME
SAMPLE ID	FILE ID	ID	ANALY2ED	ANALYZED
5589392DL	ab00053.d	958	02/04/09	11:41

COMMENTS:	•	



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID: VBLKA78

Canister ID:

N/A

Lab File ID:

ab00052.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/04/09

Nominal Volume:

250 cc

Injection Volume:

250 cc

Analyzed Time:

10:58

Instrument ID:

04224

Dilution Factor: 1

Limit: MDL

Analyzed Date:

Concentration Units: ug/m3

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.34	บ
75-71-8	Dichlorodifluoromethane	0.99	U
75-45-6	Chlorodifluoromethane	0.71	บ
76-14-2	Freon 114	1.4	IJ
7487-3	Chloromethane	0.41	Ū
75-01-4	Vinyl Chloride	0.51	U
106-99-0	1,3-Butadiene	1.1	U
74-83-9	Bromomethane	0.78	ט
75-00-3	Chloroethane	2.6	ט
75-43-4	Dichlorofluoromethane	0.84	Ü
75-69-4	Trichlorofluoromethane	1.1	Ü
109-66-0	Pentane	0.59	U
107-02-8	Acrolein	2.3	Ü
75-35-4	1,1-Dichloroethene	0.79	ט
76-13-1	Freon 113	3.8	Ü
67-64-1	Acetone	1.2	Ü
74-88-4	Methyl Iodide	1.2	υ
75-15-0	Carbon Disulfide	0.62	<u>ט</u>
75-05-B	Acetonitrile	0.84	Ü
107-05-1	3-Chloropropene	3.1	Ü
75-09-2	Methylene Chloride	0.69	ΰ
75-65-0	tert-Butyl Alcohol	0.61	υ
107-13-1	Acrylonitrile	1.1	U
156-60-5	trans-1,2-Dichloroethene	0.79	Ü

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- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA78

Canister ID:

N/A

Lab File ID:

ab00052.d

Pressure Received: N/A

Date Collected:

Final Pressure:

Date Received:

02/04/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

10:58

Instrument ID:

04224

Dilution Factor: 1

Concentration	Units: ug/m3	Limit: MDL	
CAS NO.	COMPOUND	CONCENTRATION	Q
1634-04-4	Methyl t-Butyl Ether	0.72	Ü
110-54-3	Hexane	0.70	IJ
75-34-3	1,1-Dichloroethane	0.81	U ·
108-05-4	Vinyl Acetate	, 0.70	U
156-59-2	cis-1,2-Dichloroethene	0.79	ט
78-93-3	2-Butanone	1.5	U
141-78-6	Ethyl Acetate	3.6	Ü
96-33-3	Methyl Acrylate	0.70	υ
67-66-3	Chloroform	0.98	Ü
71-55-6	1,1,1-Trichloroethane	1.1	U
56-23-5	Carbon Tetrachloride	1.3	Ū
71-43-2	Benzene	0.64	U
107-06-2	1,2-Dichloroethane	0.81	ט
540-84-1	Isooctane	0.93	υ
142-82-5	Heptane	0.82	Ü
79-01-6	Trichloroethene	1.1	Ü
140-88-5	Ethyl Acrylate	0.82	Ü
78-87-5	1,2-Dichloropropane	0.92	บ
74-95-3	Dibromomethane	1.4	Ü
123-91-1	1,4-Dioxane	0.72	U
80-62-6	Methyl Methacrylate	0.82	Ü
75-27-4	Bromodichloromethane	1.3	U
10061-01-5	cis-1,3-Dichloropropene	0.91	U
108-10-1	4-Methyl-2-Pentanone	2.0	ט

U = The compound is less than the limit being reported.

B = The compound was found in blank with a result greater than the limit being reported.

E = The compound exceeded the calibration limit.

D = Analysis of diluted sample.

J = The result is between the MDL and LOQ.



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA78

Canister ID:

N/A

Lab File ID:

ab00052.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/04/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

10:58

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3

Limit: MDL

CONCENTRATION COMPOUND CAS NO. Q 0.75 108-88-3 U Toluene 0.93 Ü 111-65-9 Octane trans-1,3-Dichloropropene 0.91 10061-02-6 U 0.93 U 97-63-2 Ethyl Methacrylate 1,1,2-Trichloroethane 79-00-5 1.1 U Ü 1.4 127-18-4 Tetrachloroethene 2.0 U 591-78-6 2-Hexanone 124-48-1 Dibromochloromethane 1.7 U 106-93-4 1,2-Dibromoethane 1.5 U 0.92 108-90-7 Chlorobenzene Ü 630-20-6 1,1,1,2-Tetrachloroethane 1.4 Ū 100-41-4 Ethylbenzene 0.87 U 179601-23-1 0.87 U m/p-Xylene 95-47-6 o-Xylene 0.87 U 100-42-5 Styrene 0.85 U 75-25-2 Bromoform 2.1 Ü 98-82-8 0.98 Ū Cumene υ 108-86-1 Bromobenzene 1.3 1.4 υ 79-34-5 1,1,2,2-Tetrachloroethane 96-18-4 1,2,3-Trichloropropane 1.2 U 622-96-8 0.98 U 4-Ethyltoluene 108-67-8 0.98 1,3,5-Trimethylbenzene U 98~83-9 0.97 Ū Alpha Methyl Styrene 0.98 95-63-6 1,2,4-Trimethylbenzene U

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKA78

Canister ID:

N/A

Lab File ID:

ab00052.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/04/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

10:58

Instrument ID:

04224

Dilution Factor: 1

Concentration Units: ug/m3

Limit: MDL

CONCENTRATION COMPOUND CAS NO. 1.2 Ü 541-73-1 1,3-Dichlorobenzene 106-46-7 1.2 U 1,4-Dichlorobenzene 1.2 บ 1,2-Dichlorobenzene 95-50-1 1.9 U 67-72-1 Hexachloroethane 1,2,4-Trichlorobenzene 3.7 120-82-1 Ū Hexachlorobutadiene 5.3 Ü B7-68-3

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Lab File ID: ab00000.d

Instrument ID: 04224

BFB Injection Date: 02/02/09

BFB Injection Time: 08:18

m/e	ION ABUNDANCE CRITERIA		ELATIVE UNDANCE
50	8.0% - 40.0% of mass 95	23.5	
75	30.0% - 66.0% of mass 95	46.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0% - 9.0% of mass 95	6.9	
173	< 2.0% of mass 174	0.0	(0.0)
174	> 50.0% of mass 95	119.4	
175	4.0% - 9.0% of mass 174	9.2	(7.7)
176	93.0% - 101.0% of mass 174	119.7	(100.3)
177	5.0% - 9.0% of mass 176	8.0	(6.7)

LAB	LAB	DATE	TIME
SAMPLE ID	FILE ID	ANALYZED	ANALYZED
VSTD025	ab00003.d	02/02/09	11:07
VSTD010	ab00004.d	02/02/09	11:50
VSTD005	ab00005.d	02/02/09	12:32
VSTD002	ab00006.d	02/02/09	13:15
VSTD001	ab00007_d	02/02/09	13:58
VBLKA76	ab00009.d	02/02/09	15:44
LCSA76	ab00010.d	02/02/09	16:27
LCSDA76	ab00011.d	02/02/09	17:09
VMDL00.2	ab00012.d	02/02/09	17:52
VMDL00.5	ab00013.d	02/02/09	18:34



SDG No.:

Lab File ID: ab0003a.d

BFB Injection Date: 02/03/09

Instrument ID: 04224

BFB Injection Time: 08:53

m/e	ION ABUNDANCE CRITERIA .	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	26.2
75	30.0% - 66.0% of mass 95	49.2
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	7.4
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	112.1
175	4.0% - 9.0% of mass 174	8.6 (7.7)
176	93.0% - 101.0% of mass 174	108.8 (97.1)
177	5.0% - 9.0% of mass 176	7.2 (6.6)

LAB	LAB	DATE	TIME
SAMPLE ID	FILE ID	ANALYZED	ANALYZED
VSTD010	ab00032.d	02/03/09	10:29
VBLKA77	ab00033.d	02/03/09	11:12
5589387	ab00034.d	02/03/09	12:55
5589387DL	ab00035.d	02/03/09	13:38
5589388	ab00036.d	02/03/09	14:21
5589389	ab00038.d	02/03/09	15:47
5589390	ab00040.d	02/03/09	17:13
5589391	ab00042.d	02/03/09	18:40
5589392	ab00044.d	02/03/09	20:06
5590183	ab00046.d	02/03/09	21:31
5590183DL	ab00047.d	02/03/09	22:14



SDG No.:

Lab File ID: ab0005z.d

Instrument ID: 04224

BFB Injection Date: 02/04/09

BFB Injection Time: 09:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	8.0% - 40.0% of mass 95	25.1		
75	30.0% - 66.0% of mass 95	47.5		
95	Base peak, 100% relative abundance	100.0		
96	5.0% - 9.0% of mass 95	7.2		
173	< 2.0% of mass 174	0.0 (0.0)		
174	> 50.0% of mass 95	113.8		
175	4.0% - 9.0% of mass 174 .	8.6 (7.6)		
176	93.0% - 101.0% of mass 174	113.5 (99.7)		
177	5.0% - 9.0% of mass 176	7.6 (6.7)		

LAB ·			TIME	
SAMPLE ID	FILE ID	ANALYZED	ANALYZED	
VSTD010	ab00051.d	02/04/09	09:51	
VBLKA78	ab00052.d	02/04/09	10:58	
5589392DL	ab00053.d	02/04/09	11:41	



SDG No.:

Lab File ID: ab00032.d

Calibration Date: 02/03/09

Instrument ID: 04224

Calibration Time: 10:29

			ACTUAL	TRUE	•
COMPOUND	RRF	RRF 10	CONC.	CONC.	%DRIFT
Propene	0.391	0.330	8.510	10.1	-16
Dichlorodifluoromethane	1.957	1.677	8.997	10.5	-14
Chlorodifluoromethane	1.274	1.076	8.781	10.4	-16
Freon 114	1.959	1.622	8.776	10.6	-17
Chloromethane	0.501	0.418	8.765	10.5	-17
Vinyl Chloride	0.498	0.414	8.809	10.6	-17
1,3-Butadiene	0.349	0.286	8.580	10.5	-18
Bromomethane	0.749	0.619	8.758	10.6	-17
Chloroethane	0.246	0.204	8.791	10.6	-17
Dichlorofluoromethane	1.275	1.029	8.310	10.3	-19
Trichlorofluoromethane	1.882	1.569	8.757	10.5	-17
Pentane	0.828	0.642	8.135	10.5	-23
Acrolein	0.155	0.130	8.886	10.6	-16
1,1-Dichloroethene	1.132	0.916	8.578	10.6	-19
Freon 113	0.991	0.790	8.449	10.6	-20
Acetone	1.021	0.796	8.264	10.6	-22
Methyl Iodide	2.632	2.083	8.308	10.5	-21
Carbon Disulfide	1.779	1.465	8.565	10.4	-18
Acetonitrile	0.212	0.173	8.600	10.5	-18
3-Chloropropene	0.222	0.180	8.507	10.5	-19
Methylene Chloride	0.554	0.435	8.242	10.5	-22
tert-Butyl Alcohol	1.099	0.907	8.495	10.3	-18
Acrylonitrile	0.301	0.244	8.608	10.6	-19
trans-1,2-Dichloroethene	0.817	0.647	8.399	10.6	-21
Methyl t-Butyl Ether	1.314	1.035	8.353	10.6	-21
Hexane	0.643	0.502	8.277	10.6	-22
1,1-Dichloroethane	0.938	0.724	8.172	10.6	-23
Vinyl Acetate	2.096	1.682	8.505	10.6	-20
cis-1,2-Dichloroethene	0.762	0.612	8.444	10.5	-20
2-Butanone	0.196	0.161	8.738	10.6	-18
Ethyl Acetate	0.080	0.067	8.819	10.6	-17
Methyl Acrylate	0.748	0.605	8.495	10.5	-19
Chloroform	1.316	1.053	8.483	10.6	-20
1,1,1-Trichloroethane	1.322	1.059	8.410	10.5	-20
Carbon Tetrachloride	1.462	1.150	8.261	10.5	-21
Benzene	0.478	0.363	7.899	10.4	-24
l,2-Dichloroethane	0.344	0.272	8.388	10.6	-21
Isooctane	0.802	0.629	8.318	10.6	-22
leptane	0.316	0.249	8.282	10.5	<u>-21</u>

<sup>\*</sup> Maximum &DRIFT = 30%. Three may exceed Maximum &DRIFT of 30% but must be less than 40%.

\* Average RRF for all compounds must be greater than 0.010.



SDG No.:

Lab File ID: ab00032.d

Calibration Date: 02/03/09

Instrument ID: 04224

Calibration Time: 10:29

			ACTUAL	TRUE	
COMPOUND	RRF	RRF 10	CONC.	CONC.	%DRIFT
Trichloroethene	0.399	0.308	8.099	10.5	-23
Ethyl Acrylate	0.386	0.315	8.645	10.6	-18
1,2-Dichloropropane	0.171	0.129	7.973	10.6	-25
Dibromomethane	0.409	0.324	8.328	10.5	-21
1,4-Dioxane	0.098	0.071	7.821	10.8	-28
Methyl Methacrylate	0.158	0.122	8.229	10.6	-22
Bromodichloromethane	0.475	0.375	8.369	10.6	-21
cis-1,3-Dichloropropene	0.279	0.218	8.268	10.6	-22
4-Methyl-2-Pentanone	0.445	0.346	8.244	10.6	-22
Toluene	0.886	0.715	8.553	10.6	-19
Octane	0.619	0.499	8.463	10.5	-19
trans-1,3-Dichloropropene	0.449	0.371	8.761	10.6	-17
Ethyl Methacrylate	0.373	0.299	8.408	10.5	-20
1,1,2-Trichloroethane	0.345	0.289	8.798	10.5	-16
Tetrachloroethene	0.729	0.603	8.674	10.5	-17
2-Hexanone	0.644	. 0.515	8.469	10.6	-20
Dibromochloromethane	0.656	0.537	8.674	10.6	-18
1,2-Dibromoethane	0.608	0.499	8.608	10.5	-18
Chlorobenzene	0.695	0.565	8.618	10.6	-19
1,1,1,2-Tetrachloroethane	0.391	0.307	8.255	10.5	-21
Ethylbenzene	0.931	0.739	8.416	10.6	-21
m/p-Xylene	0.712	0.570	8.485	10.6	-20
o-Xylene	0.630	0.513	8.629	10.6	-19
Styrene	0.524	0.428	8.581	10.5	-18
Bromoform	0.730	0.588	8.540	10.6	-19
Cumene	0.892	0.727	8.635	10.6	-19
Bromobenzene	0.369	0.300	8.541	10.5	-19
1,1,2,2-Tetrachloroethane	0.448	0.354	8.364	10.6	-21
1,2,3-Trichloropropane	0.132	0.108	8.638	10.5	-18
4-Ethyltoluene	0.805	0.643	8.539	10.7	-20
1,3,5-Trimethylbenzene	0.639	0.513	8.514	10.6	-20
Alpha Methyl Styrene	0.288	0.227	8.295	10.5	-21
1,2,4-Trimethylbenzene	0.588	0.466	8.313	10.5	-21
1,3-Dichlorobenzene	0.542	0.423	8.109	10.4	-22
1,4-Dichlorobenzene	0.559	0.466	8.333	10	-17
1,2-Dichlorobenzene	0.482	0.400	8.206	9.9	-17
Hexachloroethane	0.599	0.510	8.952	10.5	-15
1,2,4-Trichlorobenzene	0.634	0.507	8.479	10.6	-20
Hexachlorobutadiene	0.750	0.623	8.723	10.5	-17

<sup>\*</sup> Maximum %DRIFT = 30%. Three may exceed Maximum %DRIFT of 30% but must be less than 104.7 Average RRF for all compounds must be greater than 0.010.



SDG No.:

Lab File ID: ab00051.d

Calibration Date: 02/04/09

Instrument ID: 04224

Calibration Time: 09:51

			ACTUAL	TRUE	
COMPOUND	RRF	RRF 10	CONC.	CONC.	%DRIFT
Propene	0.391	0.326	8.402	10.1	-17
Dichlorodifluoromethane	1.957	1.639	8.798	10.5	-16
Chlorodifluoromethane	1.274	1.061	8.662	10.4	-17
Freon 114	1.959	1.562	8,451	10.6	-20
Chloromethane	0.501	0.409	8.573	10.5	-18
Vinyl Chloride	0.498	0.417	8.870	10.6	-16
1,3-Butadiene	0.349	0.279	8.396	10.5	~20
Bromomethane	0.749	0.625	8.849	10.6	-17
Chloroethane	0.246	0.211	9.092	10.6	-14
Dichlorofluoromethane	1.275	1.034	8.357	10.3	-19
Trichlorofluoromethane	1.882	1.520	8.482	10.5	-19
Pentane	0.828	0.644	8.169	10.5	-22
Acrolein	0.155	0.135	9.213	10.6	-13
1,1-Dichloroethene	1.132	0.912	8.548	10.6	-19
Freon 113	0.991	0.777	8.307	10.6	-22
Acetone	1.021	0.815	8.461	10.6	-20
Methyl Iodide	2.632	2.063	8.229	10.5	-22
Carbon Disulfide	1.779	1.424	8.326	10.4	-20
Acetonitrile	0.212	0.153	7.589	10.5	-28
3-Chloropropene	0.222	0.184	8.707	10.5	-17
Methylene Chloride	0.554	0.439	8.310	10.5	-21
tert-Butyl Alcohol	1.099	0.894	8.377	10.3	-19
Acrylonitrile	0.301	0.239	8.403	10.6	-21
trans-1, 2-Dichloroethene	0.B17	0.658	8.540	10.6	-19
Methyl t-Butyl Ether	1.314	1.042	8.411	10.6	~21
Hexane	0.643	0.506	8.339	10.6	-21
1,1-Dichloroethane	0.938	0.730	8.243	10.6	-22
Vinyl Acetate	2.096	1.693	8.563	10.6	-19
cis-1,2-Dichloroethene	0.762	0.600	8.268	10.5	· -21
2-Butanone	0.196	0.163	8.830	10.6	- <u>1</u> 7
Ethyl Acetate	0.080	0.068	8.985	10.6	<u>-1</u> 5
Methyl Acrylate	0.748	0.607	8.523	10.5	-19
Chloroform	1.316	1.041	8.389	10.6	-21
1,1,1-Trichloroethane	1.322	1.045	8.303	10.5	-21
Carbon Tetrachloride	1.462	1.144	8.219	10.5	-22
Benzene	0.478	0.385	8.372	10.4	-20
1,2-Dichloroethane	0.344	0.290	8.932	10.6	-16
Isooctane	0.802	0.674	8.907	10.6	-16
Heptane	0.316	0.264	8.790	10.5	-16

<sup>&#</sup>x27; Maximum %DRIFT = 30%. Three may exceed Maximum %DRIFT of 30% but must be less than 40%.33.33 Average RRF for all compounds must be greater than 0.010.



SDG No.:

Lab File ID: ab00051.d

Calibration Date: 02/04/09

Instrument ID: 04224

Calibration Time: 09:51

	<del></del>	<del></del>	ACTUAL	TRUE	
COMPOUND	RRF	RRF 10	CONC.	CONC.	<b>%DRIFT</b>
Trichloroethene	0.399	0.317	8.346	10.5	-21
Ethyl Acrylate	0.386	0.311	8.545	10.6	-19
1,2-Dichloropropane	0.171	0.138	8.508	10.6	-20
Dibromomethane	0.409	0.335	8.610	10.5	-18
1,4-Dioxane	0.098	0.072	7.938	10.8	-27
Methyl Methacrylate	0.158	0.127	8.554	10.6	-19
Bromodichloromethane	0.475	0.383	8.548	10.6	-19
cis-1,3-Dichloropropene	0.279	0.234	8.873	10.6	-16
4-Methyl-2-Pentanone	0.445	0.362	8.614	10.6	-19
Toluene	0.886	0.783	9.364	10.6	-12
Octane	0.619	0.544	9.219	10.5	-12
trans-1,3-Dichloropropene	0.449	0.403	9.516	10.6	-10
Ethyl Methacrylate	0.373	0.333	9.353	10.5	-11
1,1,2-Trichloroethane	0.345	0.311	9.462	10.5	-10
Tetrachloroethene	0.729	0.652	9.380	10.5	-11
2-Hexanone	0.644	0.540	8.890	10.6	-16
Dibromochloromethane	0.656	0.577	9.324	10.6	-12
1,2-Dibromoethane	0.608	0.531	9.167	10.5	-13
Chlorobenzene	0.695	0.605	9.226	10.6	-13
1,1,1,2-Tetrachloroethane	0.391	0.346	9.302	10.5	-11
Ethylbenzene	0.931	0.812	9.247	10.6	-13
m/p-Xylene	0.712	0.613	9.116	10.6	-14
o-Xylene	0.630	0.554	9.316	10.6	-12
Styrene	0.524	0.459	9.202	10.5	-12
Bromoform	0.730	0.621	9.013	10.6	-15
Cumene	0.892	0.781	9.276	10.6	-12
Bromobenzene	0.369	0.314	8.947	10.5	-15
1, 1, 2, 2-Tetrachloroethane	0.448	0.394	9.310	10.6	-12
1,2,3-Trichloropropane	0.132	0.117	9.365	10.5	-11
4-Ethyltoluene	0.805	0.753	10.010	10.7	-6
1,3,5-Trimethylbenzene	0.639	0.640	10.616	10.6	0
Alpha Methyl Styrene	0.288	0.286	10.423	10.5	-1
1, 2, 4-Trimethylbenzene	0.588	0.630	11.241	10.5	7
1,3-Dichlorobenzene	0.542	0.559	10.713	10.4	3
1,4-Dichlorobenzene	0.559	0.598	10.694	10	7
1,2-Dichlorobenzene	0.482	0.564	11.579	9.9	17
Hexachloroethane	0.599	0.615	10.785	10.5	3
1,2,4-Trichlorobenzene	0.634	0.985	16.462	10.6	55 '
Hexachlorobutadiene	0.750	0.824	11.534	10.5	10

Maximum %DRIFT = 30%. Three may exceed Maximum %DRIFT of 30% but must be less than 405.4. Average RRF for all compounds must be greater than 0.010.



SDG No.:

Lab Sample ID: VSTD010

Analyzed Date: 02/02/09

Lab File ID: ab00004.d

Analyzed Time: 11:50

Instrument ID: 04224

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	243845	14.83	620813	16.90	371009	22.55
UPPER LIMIT	341383	15.33	869138	17.40	519413	23.05
LOWER LIMIT	146307	14.33	372488	16.40	222605	22.05
LAB SAMPLE ID VBLKA76	234997	14.83	622507	16.89	375317	22.54
VBLKA76	234997	14.83	622507	16.89	375317	22.54
LCSA76	217464	14.83	601669	16.89	341310	22.54
LCSDA76	224541	14.82	587106	16.89	350561	22.54
/MDL00.2	219603	14.82	601291	16.88	359138	22.53
/MDL00.5	238500	14.82	625716	16.88	383479	22.53

# \* = Outside of the QC Limits.

R.T.:

Upper limit: +40% of the internal standard area. AREA:

Lower Limit: -40% of the internal standard area. Upper limit: +0.5 of the internal standard R.T.

Lower limit: -0.5 of the internal standard R.T.

DXEGT 8836

FORM VIII VOA

Page 1 of 1



SDG No.:

Lab Sample ID: VSTD010

Analyzed Date: 02/03/09

Lab File ID: ab00032.d

Analyzed Time: 10:29

Instrument ID: 04224

	Bromochlor	omethane	1,4-Difluo	robenzene	Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	253831	14.87	662341	16.93	379405	22.57
UPPER LIMIT	355363	15.37	927277	17.43	531167	23.07
LOWER LIMIT	152299	14.37	397405	16.43	227643	. 22.07
LAB SAMPLE ID						
VBLKA77	245574	14.86	641548	16.92	362484	22.57
5589387	221332	14.88	574843	16.94	339899	22.57
5589387DL	211286	14.87	557475	16.93	329324	22.57
5589388	201998	14.87	517184	16.93	304071	22.57
5589389	210277	14.87	549080	16.93	322272	22.58
5589390	. 203796	14.87	534485	16.93	305105	22.57
5589391	209426	14.86	549549	16.93	323230	22.57
5589392	207229	14.85	552317	16.91	338062	22.56
5590183	203506	14.84	547285	16.91	323389	22.56
5590183DL	204073	14.85	534315	16.90	325045	22.55

# \* = Outside of the QC Limits.

R.T.:

AREA: Upper limit: +40% of the internal standard area.

Lower Limit: -40% of the internal standard area. Upper limit: +0.5 of the internal standard R.T.

Lower limit: -0.5 of the internal standard R.T.

DXEG1 6837

FORM VIII VOA

Page 1 of 1



SDG No.:

Lab Sample ID: VSTD010

Analyzed Date: 02/04/09

Lab File ID: ab00051.d

Analyzed Time: 09:51

Instrument ID: 04224

	Bromochloromethane		1,4-Difluo	robenzene	Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
4 HOUR STANDARD	255488	14.82	636842	16.88	338918	22.53
PPER LIMIT	357683	15.32	891579	17.38	474485	23.03
LOWER LIMIT	153293	14.32	382105	16.38	203351	22.03
LAB SAMPLE ID			,			
BLKA78	256313	14.80	671974	16.87	372036	22.52
589392DL	211468	14.80	583871	16.87	366232	22.53

### \* = Outside of the QC Limits.

R.T.:

AREA: Upper limit: +40% of the internal standard area.

> Lower Limit: -40% of the internal standard area. Upper limit: +0.5 of the internal standard R.T.

Lower limit: -0.5 of the internal standard R.T.

DXE61 0038



FORM 03 VOLATILE ORGANICS IN AIR LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID:

09464

LCS File ID: cb00073.d

LCSD File ID:

cb00074.d

Batch:

C0903630A

LCS Injected: 02/05/09

LCSD Injected: 02/05/09

Method:

EPA TO-15 using LCS Client ID: LCSC27

LCSD Client ID: LCSDC27

SIM

Dilution Factor: 1

	SPIKE	LCS CONC.	LCSD CONC.	LCS	LCSD			RPD	IN
COMPOUND	LEVEL	(ug/m3)	(ug/m3)	%REC	*REC	RANGE	%RPD	MAX	SPEC
Vinyl Chloride	1.29	1.06	1.09	82	85	70 - 130	3	25	YES
1,1-Dichloroethene	2.02	1.70	1.83	84	91	70-130	7	25	YES
cis-1,2-Dichloroethene	2.02	1.72	1.86	85	92	70-130	8	25	YES
1,1,1-Trichloroethane	2.81	2.52	2.69	90	96	70-130	6	25	YES
Trichloroethene	2.74	2.66	2.57	97	94	49-173	4	-, 25	YES
Tetrachloroethene	3.49	3.38	4.93	97 ,	141,	45-164	37 *	25	NO
Carbon Tetrachloride	3.29	1.81	1.92	55 <b>*</b> Q	59+0	70 - 120	6	25	NO

COMMENTS:

2) JAM and med as pass faul criteria.

BYEG: 8432



VOLATILE ORGANICS IN AIR

METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKC27

Analyzed Date: 02/05/09

Lab File ID: cb00072.d

Analyzed Time: 19:07

Instrument ID: 09464

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB	LAB	CANISTER	DATE	TIME
SAMPLE ID	FILE ID	ID	ANALYZED	ANALYZED
LCSC27	cb00073.d	N/A	02/05/09	19:52
LCSDC27	cb00074.d	N/A	02/05/09	20:28
5589387	cb00075.d	145	02/06/09	14:48

COMMENTS:	

DXE81 8433



SDG No.:

Sample Media:

TEDLAR

Lab Sample ID:

VBLKC27

Canister ID:

N/A

Lab File ID:

cb00072.d

Pressure Received: N/A

Date Collected:

Final Pressure:

N/A

Date Received:

02/05/09

Nominal Volume:

250 cc

Analyzed Date:

Injection Volume:

250 cc

Analyzed Time:

Instrument ID:

09464

Dilution Factor: 1

Concentration	Concentration Units: ug/m3		Limit: MDL			
CAS NO.	COMPOUND	CONCENTRATION	Q			
75-01-4	Vinyl Chloride	0.0230	υ			
75-35-4	1,1-Dichloroethene	0.0238	U			
156~59-2	cis-1,2-Dichloroethene	0.0555	U			
71-55-6	1,1,1-Trichloroethane	0.0709	Ü			
56-23 <b>-</b> 5	Carbon Tetrachloride	0.126	Ū			
79-01-6	Trichloroethene	0.107	Ū			
127-18-4	Tetrachloroethene	0.129	U			

- U =The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



SDG No.:

Lab File ID:

ca00450.d

----

BFB Injection Date: 01/23/09

Instrument ID: 09464

BFB Injection Time: 14:36

		% RELATIVE
m/e	ION ABUNDANCE CRITERIA	ABUNDANCE
50	8.0% - 40.0% of mass 95	19.7
75	30.0% - 66.0% of mass 95	60.4
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.7
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	92.9
175	4.0% - 9.0% of mass 174	7.7 (8.3)
176	93.0% - 101.0% of mass 174	91.5 (98.5)
177	5.0% - 9.0% of mass 176	5.8 (6.4)

LAB	LAB	DATE	TIME
SAMPLE ID	FILE ID	ANALYZED	ANALYZED
VSTD1.0	ca00454.d	01/23/09	17:23
VSTDO.5	ca00455.d	01/23/09	18:00
VSTDO.25	ca00456.d	01/23/09	18:37
VSTDO.10	ca00457.d	01/23/09	19:13
VSTDO.05	ca00458.d	01/23/09	19:50



SDG No.:

Lab File ID: cb00070.d

BFB Injection Date: 02/05/09

Instrument ID: 09464

BFB Injection Time: 16:53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	20.5
75	30.0% - 66.0% of mass 95	61.1
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.8
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	96.2
175	4.0% - 9.0% of mass 174	5.6 (5.9)
176	93.0% - 101.0% of mass 174	93.0 (96.7)
177	5.0% - 9.0% of mass 176	6.2 (6.6)
	·	

LAB	LAB	DATE	TIME
SAMPLE ID	. FILE ID	ANALYZED	ANALYZED
VSTD0.5	cb0007a.d	02/05/09	18:16
VBLKC27	cb00072.d	02/05/09	19:07
LCSC27	cb00073.d	02/05/09	19:52
LCSDC27	cb00074.d	02/05/09	20:28
5589387	cb00075.d	02/06/09	14:48



FORM 06 VOLATILE ORGANICS IN AIR INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464

Calibration Start Date: 01/23/09

Calibration End Date: 01/23/09

Calibration Start Time: 17:23

Calibration End Time: 19:50

LAB FILE IDs:

RRF .05 = .

RRF .1 =

RRF .25 = ca00456.dRRF .5 = ca00455.dRRF 1 = ca00454.d

ca00458.d ca00457.d

COMPOUND	RRF 0.05	RRF 0.1	RRF 0.25	RRF 0.5	RRF 1	RRF	% RSD	CAL. METHOD
"Vinyl Chloride	0.858	0.750	0.721	0.720	0.678	0.745	9	AVG
1,1-Dichloroethene	1.891	1.709	1.599	1.596	1.551	1.669	8	AVG
zis-1,2-Dichloroethene	1.340	1.314	1.224	1.289	1.247	1.283	4	AVG
1,1,1-Trichloroethane	3.681	3.448	3.293	3.410	3.405	3.447	4	AVG
Carbon Tetrachloride	4.890	4.483	4.206	4.319	4.346	4.449	6	AVG
Trichloroethene	0.663	0.567	0.520	0:487	0.471	0.542	14	AVG
Petrachloroethene	0.649	0.591	0.554	0.552	0.527	0.575	8	AVG

Average %RSD: 8

DXE01 8449

Maximum %RSD = 30%. Three may exceed Maximum %RSD of 30% but must be less than 40%. Average RRF for all compounds must be greater than 0.010.



SDG No.

Lab File ID: cb0007a.d

Calibration Date: 02/05/09

Instrument ID: 09464

Calibration Time: 18:16

Init. Calib. Date(s): 02/03/09

COMPOUND	RRF	RRF 0.5	ACTUAL CONC.	TRUE CONC.	%DRIFT
Vinyl Chloride	0.745	0.699	0.469	0.5	-6
1,1-Dichloroethene	1.669	1.559	0.467	0.5	-7
cis-1,2-Dichloroethene	1.283	1.206	0.446	0.475	-6
1,1,1-Trichloroethane	3.447	3.410	0.495	0.5	-1
Carbon Tetrachloride	4.449	4.323	0.462	0.475	-3
Trichloroethene	0.542	0.475	0.439	0.5	-12
Tetrachloroethene	0.575	0.578	0.503	0.5	1

Maximum %DRIFT = 30%. Three may exceed Maximum %DRIFT of 30% but must be less than 70%.

Average RRF for all compounds must be greater than 0.010.



SDG No.:

Lab Sample ID: VSTD0.5

Analyzed Date: 02/05/09

Lab File ID: cb0007a.d

Analyzed Time: 18:16

Instrument ID: 09464

	Bromochloromethane		1,4-Difluo	robenzene	Chlorobenzene-d5		
	Area	R.T.	Area	R.T.	Area	R.T.	
24 HOUR STANDARD	33757	6.91	128856	8.60	167239	14.46	
UPPER LIMIT	47260	7.41	180398	9.10	234135	14.96	
LOWER LIMIT	20254	6.41	77314	8.10	100343	13.96	
VBLKC27	33704	6.91	124428	8.60	118040	14.46	
CSC27	33637	6.91	124275	8.60	161957	14.46	
CSDC27	31286	6.91	124427	8.60	114338	14.46	
5589387	44246	6.92	157813	8.60	142082	14.46	

### \* = Outside of the QC Limits.

Upper limit: +40% of the internal standard area. AREA:

Lower Limit: -40% of the internal standard area.

Upper limit: +0.5 of the internal standard R.T. R.T.:

Lower limit: -0.5 of the internal standard R.T.

DXEGT 8436